



TRITON - Web Security Help

Websense® Web Security Solutions

v7.7

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1

Getting Started

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To learn to use Websense Web Security solutions and find answers to your questions, browse this guide or use select one of the following topics as a launch point.

| First steps | Initial solutions |
|---|--|
| <ul style="list-style-type: none">• Working in TRITON - Web Security• Your subscription• The Web Security Dashboard | <ul style="list-style-type: none">• Installation and subscription issues• Master Database issues• Troubleshooting tips and tools |
| Start filtering | Filtering solutions |
| <ul style="list-style-type: none">• Filtering categories and protocols• Adding a client• Working with policies• Assigning a policy to clients | <ul style="list-style-type: none">• Filtering issues• User configuration and identification issues• Block message issues |
| Using reports | Reporting solutions |
| <ul style="list-style-type: none">• Presentation reports• Investigative reports• Real-Time Monitor• Using the Toolbox to verify filtering behavior | <ul style="list-style-type: none">• Log, status message, and alert issues• Log Server and Log Database issues• Investigative report and presentation report issues |
| Advanced tools | Other solutions |
| <ul style="list-style-type: none">• Exceptions to Filtering Policies• Redefining filtering for specific sites• Delegated Administration and Reporting | <ul style="list-style-type: none">• Delegated administration issues• Interoperability issues• Troubleshooting tips and tools |

Overview

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Working in conjunction with integration devices—including proxy servers, firewalls, routers, and caching appliances—Websense Web Security provides the engine and configuration tools to develop, monitor, and enforce Internet access policies.

Together, a series of Websense components (described in [Websense Web Security product components, page 364](#)) provide Internet filtering, user identification, alerting, reporting, and troubleshooting capabilities.

An overview of the new features included in this Websense software version can be found in the [Release Notes](#), available from the [Websense Technical Library](#).

After installation, Websense software applies the **Default** policy to monitor Internet usage without blocking requests. This policy governs Internet access for all clients in the network until you define your own policies and assign them to clients. Even after you have created your custom filtering settings, the Default policy is applied any time a client is not governed by any other policy. See [The Default policy, page 92](#), for more information.

The process of creating filters, adding clients, defining policies, and applying policies to clients is described in:

- ◆ [Internet Usage Filters, page 49](#)
- ◆ [Clients, page 73](#)
- ◆ [Internet Filtering Policies, page 91](#)

A single, browser-based tool—the TRITON™ Unified Security Center—provides a central, graphical interface to the general configuration, policy management, and reporting functions of your Websense Web Security, Data Security, and Email Security solutions. See [Working in TRITON - Web Security, page 18](#), for more information.

You can define levels of access to the TRITON Unified Security Center to allow certain administrators to manage one or more TRITON modules. Within the Web Security module, you can further refine access permissions to allow administrators to configure Internet filtering behavior, manage filtering policies, perform reporting tasks, and more. See [Delegated Administration and Reporting, page 333](#), for more information.

Working in TRITON - Web Security

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Related topics:

- ◆ [Navigating in TRITON - Web Security, page 20](#)
- ◆ [The Web Security Dashboard, page 33](#)

The TRITON Unified Security Center is the central configuration interface used to manage Websense Web Security, Email Security, and Data Security software. It includes a Web Security module (called TRITON - Web Security) used to customize

filtering behavior, monitor Internet usage, generate Internet usage reports, and manage configuration and settings for Websense Web Security.



Important

Internet Explorer 8 Compatibility View is **not** supported with the TRITON console. If you experience odd behavior or page layouts in Internet Explorer 8, make sure that Compatibility View button (between the URL and the Refresh button in the browser address bar) is not selected.

At installation, the TRITON Unified Security Center is set up to give full access to all modules to a single administrator account: **admin**. The password for this account is set during installation.

When you log on using the admin account, or any other administrator account with Web Security permissions, Status > Dashboard page for the Web Security module is displayed.

- ◆ If this is your first time logging on to TRITON - Web Security, you are offered the option of launching a Quick Start tutorial. If you are new to Websense software, or new to this version of Websense software, completing a Quick Start tutorial is highly recommended.
- ◆ On first logon, when an administrator navigates away from the dashboard, the **Save and Deploy** button activates. This allows initial default dashboard settings to be saved for that administrator account. (Once the initial defaults are saved, navigating away from the dashboard activates the Save and Deploy button only when charts are added, removed, or edited.)
- ◆ If you are using an account with permissions to access multiple TRITON modules, use the TRITON toolbar to switch between modules. See [Navigating in TRITON - Web Security](#), page 20.
- ◆ If you are using delegated administration, and have created administrative roles, you may be prompted to select a role to manage. See [Delegated Administration and Reporting](#), page 333.

At logon, TRITON - Web Security connects to the default (base) Policy Server specified during installation. To manage another Policy Server, select its IP address from the Policy Server drop-down list in the Web Security toolbar.

A TRITON console session ends 30 minutes after the last action taken in the user interface (clicking from page to page, entering information, caching changes, or saving changes). A warning message is displayed 5 minutes before the session ends.

- ◆ If there are uncached changes on the page or cached changes pending, the changes are lost when the session ends. Remember to click **OK** to cache changes, and **Save and Deploy** to record and implement those changes.
- ◆ If TRITON - Web Security is open in multiple tabs of the same browser window, all instances share the same session. If the session times out in one tab, it times out in all tabs.

- ◆ If TRITON - Web Security is open in multiple browser windows on the same computer, the instances share the same session **if**:
 - You are using Microsoft Internet Explorer and use the Ctrl-N shortcut to open a new instance of TRITON - Web Security.
 - You are using Mozilla Firefox.

If the session times out in one window, it times out in all windows.

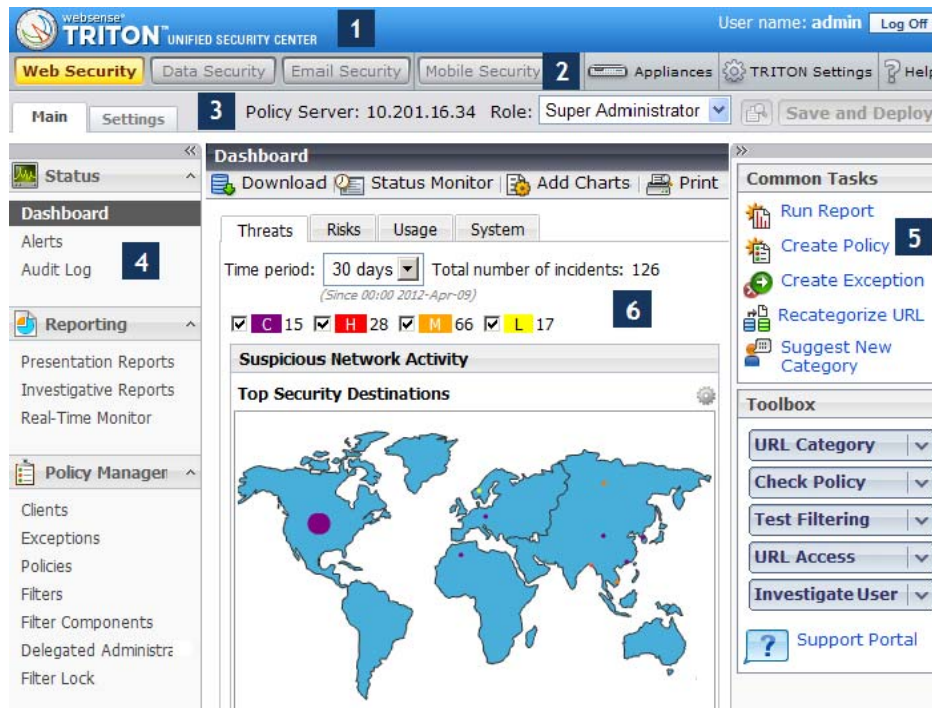
- ◆ In the following instances, you can open multiple TRITON - Web Security instances that do not share a session. In these situations, if one window times out, the others are not affected.
 - Launch multiple Internet Explorer windows independently of one another.
 - Use the File > New Session command to open a new Internet Explorer 8 window.
 - Use Internet Explorer to open one connection to TRITON - Web Security, and then use Firefox to open another connection.

If you close the browser without logging off of the TRITON Unified Security Center, or if the remote machine from which you are accessing a TRITON module shuts down unexpectedly, you may be temporarily locked out. Websense software typically detects this issue within about 2 minutes and end the interrupted session, allowing you to log on again.

Navigating in TRITON - Web Security

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The TRITON - Web Security interface can be divided into 6 main areas:



1. Banner
2. TRITON toolbar
3. Web Security toolbar
4. Left navigation pane
5. Right shortcut pane
6. Content pane

This guide describes the options available to the **admin** account. Delegated administrators may see a subset of the features described. See [Delegated Administration and Reporting](#), page 333, for more information.

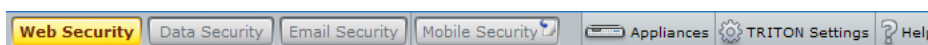
The banner



The banner, located at the top of the browser page, shows:

- ◆ The **user name** associated with your administrative logon account
- ◆ A **Log Off** button, for when you're ready to end your administrative session

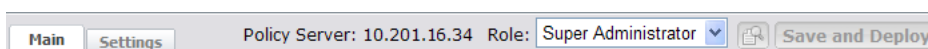
The TRITON toolbar



The TRITON toolbar, located under the banner, allows you to:

- ◆ Move between modules of the TRITON Unified Security Center.
- ◆ Connect to Appliance Manager for any V-Series **Appliances** deployed in your network.
- ◆ Configure global **TRITON Settings** that affect all installed modules.
- ◆ Access **Help**, tutorials, product information, and Websense Technical Support resources.

The Web Security toolbar



The Web Security toolbar, located under the TRITON toolbar, is used to:

- ◆ Switch between the **Main** and **Settings** tabs of the left navigation pane.
- ◆ See which Policy Server you are currently connected to, and switch between Policy Server instances, if applicable (see [Working with Policy Server](#), page 370).

- ◆ View your administrative **Role**, switch between roles, or release policy permissions for the current role.



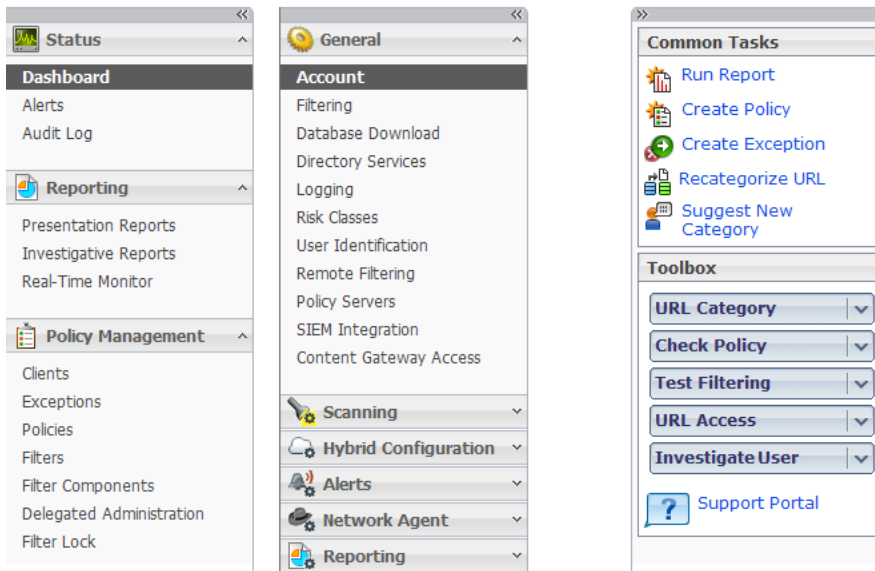
Tip

If you have policy management and reporting permissions, but only reporting features are displayed, another administrator may be logged on to the role. Only one administrator at a time can access policy management features for each role.

- ◆ **View Pending Changes** (via the small magnifying glass icon) and **Save and Deploy** pending changes. If there are no cached changes waiting to be saved, these buttons are disabled.

See [Reviewing, saving, and discarding changes](#), page 23, for more information.

The left and right navigation panes



The left navigation pane has two tabs: **Main** and **Settings**. Use the **Main** tab to access status, reporting, and policy management features and functions. Use the **Settings** tab to manage your Websense account and perform global system administration tasks. (Note that the Settings tab displays different options depending on your subscription level.)

The right shortcut pane contains links to useful tools and common administrative tasks.

- ◆ **Common Tasks** provides shortcuts to frequently-performed administrative tasks. Click an item in the list to jump to the page where the task is performed.
- ◆ The **Toolbox** contains quick lookup tools that you can use to verify your filtering setup. See [Using the Toolbox to verify filtering behavior](#), page 291, for more information.

Both the left and right navigation panes can be minimized by clicking the double arrow (<< or >>) icon at the top of the pane. Click the reverse icon (>> or <<) to view the pane.

Mouse over a shortcut icon on the minimized left navigation pane to see a menu of related features without maximizing the pane.

Reviewing, saving, and discarding changes

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When you make a change in TRITON - Web Security, you must typically click **OK** at the bottom of the page to cache the change, then click **Save and Deploy** to save the change to the Policy Database, which causes the change to take effect.

- ◆ Some fields or sections in TRITON - Web Security have their own **Save** or **Save Now** buttons. Changes to these features are saved and implemented immediately, rather than first being cached and later being saved.
- ◆ Some types of changes require you to click OK on both a subordinate page and a main page to cache changes.



Important

Avoid double- or triple-clicking the OK button. Multiple, rapid clicks to the same button can cause display problems in Mozilla Firefox that can be solved only by exiting and reopening the browser.

Use the **View Pending Changes** page to review cached changes. Changes to a single area of functionality are typically grouped into a single entry in the cache list. For example, if you add 6 clients and delete 2 clients, the cache list indicates only that changes were made to Clients. Changes to a single Settings page, on the other hand, may result in multiple entries in the cache list. This occurs when a single Settings page is used to configure multiple Websense software functions.

- ◆ To save all of the cached changes, click **Save All Changes**.
- ◆ To abandon all of the cached changes, click **Cancel All Changes**.

After choosing Save All Changes or Cancel All Changes, you are returned to the last page you selected. There is no undo for either Save All Changes or Cancel All Changes.

Use the Audit Log to review the details of changes made in TRITON - Web Security. See [Viewing and exporting the audit log, page 384](#), for more information.

Your subscription

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Websense subscriptions are issued on a per-client (user or IP address) basis.

Before you can begin filtering, you must enter a valid subscription key (see [Configuring your account information, page 25](#)). This lets you download the Master Database (see [The Websense Master Database, page 27](#)), which enables Websense software to filter clients.

After the first successful database download, TRITON - Web Security displays the number of clients your subscription includes and your subscription type (Web Filter, Web Security, Web Security Gateway, or Web Security Gateway Anywhere). Until this first download occurs, placeholder data is displayed.

Websense software maintains a subscription table of clients filtered each day. The subscription table is cleared each night. The first time a client makes an Internet request after the table has been cleared, its IP address is entered in the table.

When the number of clients listed in the table reaches the subscribed maximum, any previously-unlisted client that requests Internet access exceeds the subscription. If this occurs, the client exceeding the subscription level is either blocked entirely from the Internet or given unfiltered Internet access, depending on a setting that you configure. Likewise, when a subscription expires, all clients are either entirely blocked or unfiltered, depending on this setting.

To configure filtering behavior when a subscription is exceeded or expires, see [Configuring your account information, page 25](#).

To configure Websense software to send email warnings when the subscription approaches or exceeds its limit, see [Configuring system alerts, page 391](#).

Managing your account through the MyWebsense Portal

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Websense, Inc., maintains a customer portal at mywebsense.com that you can use to access product updates, patches and hotfixes, product news, evaluations, and technical support resources for your Websense software.

When you create an account, the account is associated with your Websense subscription key or keys. This helps to ensure your access to information, alerts, and patches relevant to your Websense product and version.

Multiple members of your organization can create MyWebsense accounts associated with the same subscription key.

Configuring your account information

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Related topics:

- ◆ [Your subscription, page 24](#)
- ◆ [Configuring database downloads, page 29](#)
- ◆ [Working with protocols, page 272](#)

Use the **Settings > General > Account** page to enter or review subscription information, and to determine how Websense software responds when the subscription expires, or the subscription level is exceeded.

Also use the page to direct Websense software to send category and protocol usage data to Websense, Inc., anonymously. This information may be used to help optimize the Websense Master Database to make filtering more efficient (see [The Websense Master Database, page 27](#)) and to contribute to the Websense Security Labs ThreatSeeker® Network (see [websense.com/content/Threatseeker.aspx](https://www.websense.com/content/Threatseeker.aspx)).

After installing Websense software, or any time you receive a new subscription key, use the **Subscription key** field to enter the key, and then click **Apply**. A check is done to verify the key syntax, and then Filtering Service attempts to download the Master Database.

- ◆ If a key is displayed, but the Subscription key field is disabled, you are connected to a secondary Policy Server. This means that the Policy Server instance gets its key information from the primary Policy Server whose IP address appears below the number of subscribed users.
- ◆ Use the **Settings > General > Policy Servers** page to manage subscription keys in multiple Policy Server environments (see [Working in a multiple Policy Server environment, page 373](#)).
- ◆ If the key syntax is correct, but the Master Database download fails because the key is invalid or expired, a health alert message is displayed on the Status > Alerts page. By default, the message also appears on the System tab of the Status > Dashboard page.

After the first successful Master Database download, the Account page displays the following information:

| | |
|--------------------------|--|
| Key expires | End date for your current subscription. After this date, you must renew the subscription to continue downloading the Master Database and filtering your network. |
| Subscribed users | <i>Web Security Gateway Anywhere</i> : Sum of users filtered by on-premises components, hybrid filtering, and remote filtering software |
| Subscribed network users | Number of in-network users that can be filtered. |

| | |
|-------------------------|---|
| Subscribed remote users | Number of users that can be filtered outside the network (requires optional remote filtering components). |
| Primary Policy Server | IP address of the Policy Server instance from which this Policy Server receives subscription key information. Appears only when viewing information for a secondary Policy Server. |

1. Select **Block users when subscription expires or is exceeded** to:

- Block all Internet access for all users when the subscription expires.
- Block all Internet access for users who exceed the number of subscribed users.

If this option is not selected, users have unfiltered Internet access in these situations.

2. Mark **Send category and protocol data to Websense, Inc.** to have Websense software collect usage data about Websense-defined categories and protocols, and submit it anonymously to Websense, Inc.

This usage data helps Websense, Inc., to continually enhance the filtering capabilities of Websense software.

3. Under WebCatcher, mark **Send URL information to Websense** to help Websense, Inc., improve URL categorization and security effectiveness. See [What is WebCatcher?](#), page 30, for more information about this tool.

- To submit uncategorized URLs to be evaluated for categorization, mark **Send uncategorized URLs to improve URL categorization**.
- To send in security-related URLs to help track malicious Web site activity, mark **Send security URLs to improve security effectiveness**.
- To keep a local copy of the information sent to Websense, Inc., for your review, mark **Save a copy of the data being sent to Websense**.

When this option is enabled, WebCatcher saves the data as unencrypted XML files in the **Websense\Web Security\bin** directory on the Log Server machine. These files are date and time stamped.

- Select the **Country of origin** for your organization. This should be the country where the majority of Internet activity is being logged.
- Specify a **Maximum upload file size**. When the maximum size is reached, collected WebCatcher data is sent automatically and a new file is started.
- Use the **Daily start time** field to indicate a time each day when WebCatcher should send the data it has collected if the maximum file size has not been reached.

4. (*Websense Web Security Gateway Anywhere*) To activate or update the connection between the on-premises and hybrid portions of your Web security solution:

- Enter the **Contact email address** for your Web security administrators. This is typically a group email alias that is monitored frequently. Alerts about hybrid filtering issues are sent to this address. Failing to respond appropriately to an alert could lead to temporary disconnection of your hybrid service.

- Enter the **Country** and **Time zone** in which the administrators are located. Users are not filtered by the hybrid service until this information has been provided and validated. For more information, see [Configure Hybrid Filtering](#), page 209.
- 5. When you are finished making changes, click **OK**. Changes are not implemented until you click **Save and Deploy**.

The Websense Master Database

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Real-time database updates](#), page 28
- ◆ [Real-Time Security Updates™](#), page 28
- ◆ [Configuring database downloads](#), page 29
- ◆ [Review Master Database download status](#), page 377
- ◆ [Resuming Master Database downloads](#), page 377

The Websense Master Database houses the category and protocol definitions that provide the basis for filtering Internet content (see [Filtering categories and protocols](#), page 50).

- ◆ **Categories** are used to group Web sites (identified by URL and IP address) with similar content.
- ◆ **Protocol** definitions group Internet communications protocols used for similar purposes, like transferring files, or sending instant messages.

A limited version of the filtering database is installed during Websense software installation, but it is a good idea to download the full Master Database as soon as possible to enable comprehensive Internet filtering capabilities. To download the Master Database for the first time, enter your subscription key in TRITON - Web Security. You can do this in either of 2 places:

- ◆ When prompted at first logon
- ◆ On the **Settings > General > Account** page (see [Configuring your account information](#), page 25)

If Websense software must go through a proxy to perform the download, also use the **Settings > General > Database Download** page to configure proxy settings (see [Configuring database downloads](#), page 29).

The process of downloading the full database may take a few minutes or more than 60 minutes, depending on factors such as Internet connection speed, bandwidth, available memory, and free disk space.

After the initial download, Websense software downloads database changes on a schedule that you establish (see [Configuring database downloads](#), page 29). Because the Master Database is updated frequently, by default, database downloads are scheduled to happen daily.

If the Master Database is more than 14 days old, Websense software does not filter Internet requests.

To initiate a database download at any time, or to view the status of the last database download, the date of the last download, or the current database version number, go to **System** tab of the Web Security Dashboard and click **Database Download** in the toolbar at the top of the content pane.

Real-time database updates

In addition to scheduled downloads, Websense software performs emergency updates to the database as needed. A real-time update might be used, for example, to recategorize a site that was temporarily miscategorized. These updates ensure that sites and protocols are filtered appropriately.

Websense software checks for database updates every hour.

The most recent updates are listed on the **Status > Alerts** page (see [Reviewing current system status](#), page 396).

Real-Time Security Updates™

In addition to receiving the standard real-time database updates, users of Websense Web Security, Web Security Gateway, and Web Security Gateway Anywhere can enable Real-Time Security Updates to receive security-related updates to the Master Database as soon as they are published by Websense, Inc.

Real-Time Security Updates provide an added layer of protection against Internet-based security threats. Installing these updates as soon as they are published reduces vulnerability to new phishing (identify fraud) scams, rogue applications, and malicious code infecting mainstream Web sites or applications.

Filtering Service checks for security updates every 5 minutes, but because the updates are much smaller than full database updates, they tend not to disrupt normal network activity.

Use the **Settings > General > Database Download** page to enable Real-Time Security Updates (see [Configuring database downloads](#), page 29).

Configuring database downloads

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Related topics:

- ◆ [Configuring your account information, page 25](#)
- ◆ [The Websense Master Database, page 27](#)
- ◆ [Review Master Database download status, page 377](#)

Use the **Settings > General > Database Download** page to establish the schedule for automatic Master Database downloads. Also, provide important information about any proxy server or firewall Websense software must pass through to download the database.

1. (*Websense Web Security, Web Security Gateway, and Web Security Gateway Anywhere*) Select **Enable real-time security updates** (default) to have Websense software check for security updates to the Master Database every 5 minutes. When a security update is detected, it is downloaded immediately.
2. Real-time security updates rapidly protect your network from vulnerability to threats like new phishing (identity fraud) scams, rogue applications, and malicious code infecting a mainstream Web site or application.
3. Select the **Download days** for automatic downloads.
 - All download days are selected when Real-Time Security Updates are enabled. Downloads are automatically performed every day to assure that the most up-to-date standard database is available for the security updates.
 - You must download the Master Database at least once every 14 days for Websense software to continue filtering uninterrupted.
 - If you deselect all download days, Websense software automatically attempts a download when the database is 7 days old.
4. Next to **Download between**, select a start time and end time between which Filtering Service attempts to download Master Database updates. By default, download occurs between 21:00 (9 p.m.) and 06:00 (6 a.m.), according to the time on the Filtering Service machine.
 - Websense software selects a random time during this period to contact the Master Database server. To configure alerts for download failures, see [Configuring system alerts, page 391](#).
 - Any time Filtering Service is restarted, it checks for available Master Database updates. The update may begin immediately, rather than waiting for the defined period.



Note

After downloading the Master Database, or updates to it, CPU usage can reach 90% while the database is loaded into local memory.

5. Select **Use proxy server or firewall** if Websense software must access the Internet through a proxy server or a proxying firewall to download the Master Database. Then provide:
 - The **IPv4 address or hostname** of the proxy server or firewall.
 - The **Port** through which the database download must pass (8080, by default).
6. If the proxy server or firewall configured above requires authentication to reach the Internet, select **Use authentication**, and then enter the **User name** and **Password** that Websense software should use to gain Internet access.

**Note**

If Use authentication is selected, the proxy server or firewall must be configured to accept clear text or basic authentication to enable Master Database downloads.

By default, the user name and password are encoded to match the character set for the Policy Server machine's locale. This encoding can be configured manually via the **Settings > General > Directory Services** page (see [Advanced directory settings](#), page 81).

What is WebCatcher?

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WebCatcher is an optional feature that collects unrecognized and security-related URLs, and submits them to Websense Security Labs. Uncategorized URLs are reviewed for categorization, and security-related URLs are analyzed for what they can reveal about active Internet threats. (Full URL logging is not required for WebCatcher processing.) The results of the analysis are used to update the Master Database, resulting in improved filtering.

**Note**

In an environment with multiple Web Security Log Server instances, WebCatcher is enabled only once, on the **Settings > General > Accounts** page in TRITON - Web Security.

The information sent to Websense Security Labs contains only URLs and does not include user information. For example:

```
<URL HREF="http://www.ack.com/uncategorized/" CATEGORY="153"
IP_ADDR="200.102.53.105" NUM_HITS="1" />
```

The IP address in the example reflects the address of the machine hosting the URL, not the requestor's IP address.

**Note**

Intranet sites are not sent by WebCatcher. This includes all sites with IP addresses in the 10.xxx.xxx.xxx, 172.16.xxx.xxx, and 192.168.xxx.xxx ranges.

WebCatcher data is sent to Websense, Inc., via HTTP post. You may need to create roles or make other changes on your proxy server or firewall to permit the outgoing HTTP traffic.

WebSense Technical Support

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Technical information about Websense software and services is available 24 hours a day at support.websense.com, including:

- ◆ the searchable Websense Knowledge Base (made up of a Solution Center, Technical Library, and customer forums)
- ◆ Webinars and show-me videos
- ◆ product documents and in-depth technical papers
- ◆ answers to frequently asked questions

For additional questions, click the **Contact Support** tab at the top of the page.

The contact page includes information for finding solutions, opening an online support case, and calling Websense Technical Support.

For faster phone response, please use your **Support Account ID**, which you can find in the Profile section at MyWebsense.

For telephone requests, please have ready:

- ◆ Websense subscription key
- ◆ Access to the management console for your solutions (for example, the TRITON console, Appliance Manager, Content Gateway Manager)
- ◆ Access to the machine running reporting tools and the database server (Microsoft SQL Server or SQL Server Express)
- ◆ Familiarity with your network's architecture, or access to a specialist

2

The Web Security Dashboard

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The **Threats** tab of the **Status > Dashboard** page appears first when you log on to TRITON - Web Security. It shows information about suspicious activity that may be related to advanced malware threats in your network.

- ◆ The type of information and level of detail depends on your subscription level. Web Security Gateway or Web Security Gateway Anywhere is required, for example, to display information about outbound threats and to provide detailed forensic data about the threats. See [Threats dashboard, page 35](#).
- ◆ Unlike other Web Security Dashboard tabs, you cannot add elements to, nor remove elements from, the Threats dashboard.

Dashboard elements are visible to Super Administrators and those delegated administrators with permission to view reports on the Web Security Dashboard (see [Editing roles, page 347](#)).

- ◆ Delegated administrator access to the Risks, Usage, and System dashboards is configured separately from Threats dashboard access.
- ◆ Delegated administrators with Threats dashboard access can also be granted permission to view forensics details associated with advanced malware threats. See [Reviewing threat-related forensic data, page 41](#).

The first time an administrator logs on to TRITON - Web Security, then navigates away from the dashboard, the **Save and Deploy** button activates. This happens regardless of whether or not any changes were made in order to save default dashboard settings for the administrator account.


After these initial defaults are saved, navigating away from the dashboard activates the Save and Deploy button only when charts are added, removed, or edited.

The dashboard includes 3 additional tabs:

- ◆ **Risks** shows information about blocked and permitted requests for URLs that fall into the Security Risk class. The amount of information depends on your subscription level. Web Security, Web Security Gateway, or Web Security Gateway Anywhere is required to see information about requests in some security-specific categories. See [Risks dashboard, page 42](#).
- ◆ **Usage** shows information about traffic patterns in your network, including bandwidth information and filtering summaries. See [Usage dashboard, page 43](#).

- ◆ **System** shows alert messages, status information, and graphical charts that show the current state of your Web security software, focusing on Internet filtering activity in your network. See [System dashboard](#), page 43.

The Risks, Usage, and System dashboards can each display up to 12 elements (charts, status summaries, or counters) at a time. Most dashboard charts can be customized to change their time period (today, last 7 days, last 30 days, and so on) or display format (stacked column, stacked area, multi-series line, and so on). You can include multiple versions of the same chart on a tab (for example, showing different time periods).

- ◆ Dashboard elements are updated every 2 minutes.
All elements on a tab are also updated when any element on the tab is modified. For example, if the time period for one chart is changed, data is refreshed in all of the elements on the page.
- ◆ The available set of dashboard elements depends on your subscription type. Hybrid filtering charts, for example, are available only for Web Security Gateway Anywhere.
- ◆ To add an element to the tab, click **Add Charts**, then see [Adding elements to a dashboard tab](#), page 44, for instructions.
- ◆ To remove an element from the tab, click the Options icon () in the element title bar, then select **Remove**.
- ◆ Clicking a pie, bar, or line chart typically opens an investigative report with more details. Some security-related charts link instead to the Threats dashboard.

Up to 4 buttons appear in the dashboard toolbar:

- ◆ **Database Download**, available to Super Administrators only, shows Master Database download status and provides the option to initiate or interrupt a download. See [Review Master Database download status](#), page 377).
- ◆ **Status Monitor** releases the current administrator's policy permissions and enters a monitoring mode that allows access to the following pages without timing out:
 - Status > Dashboard
 - Status > Alerts
 - Reporting > Real-Time MonitorSee [Web Security Status Monitor mode](#), page 47.
- ◆ **Add Charts** allows administrators to customize their view of the selected dashboard tab by adding elements to the page. See [Adding elements to a dashboard tab](#), page 44.
- ◆ **Print** opens a secondary window with a printer-friendly version of the charts displayed on the page. Use browser options to print the page.

Threats dashboard

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Related topics:

- ◆ [The Web Security Dashboard, page 33](#)
- ◆ [Investigate threat event details, page 37](#)
- ◆ [How severity is assigned to suspicious activity, page 39](#)
- ◆ [Reviewing threat incident details, page 39](#)
- ◆ [Reviewing threat-related forensic data, page 41](#)

Use the **Threats** tab of the Web Security Dashboard to monitor and investigate suspicious activity in your network.

- ◆ Web Security Gateway or Web Security Gateway Anywhere is required to display information about outbound threats and to provide detailed forensic data about the threats.
- ◆ You cannot add elements to, nor remove elements from, the Threats dashboard.

The initial view of the Threats dashboard shows:

- ◆ **Top Security Destinations** shows the top countries to which suspicious traffic is being sent, or in which sites associated with suspicious activity are hosted.
- ◆ **Security Events by Type** shows the number of blocked requests, permitted requests, or both for sites (destinations) in the top security categories associated with malware threats.
- ◆ **Suspicious Event Summary** lists information about threat-related events in your network.

A **Status** control in the top, right corner of the tab indicates whether Threats data is being updated automatically.

- ◆ If the status is **Running**, click **Pause** to prevent data from being updated while you examine current results.
- ◆ If the status is **Paused**, click **Start** to update the dashboard with any new data collected while updates were halted.

Additional controls at the top of the tab let you restrict the information in the charts and summary table to the specified:

- ◆ Time period (Today, 7 days, 30 days, and so on)
 - Date details under the drop-down list shows the start date and time used to calculate the selected period.
 - Configure the maximum time period available on the Settings > Reporting > Dashboard page (see [Configuring Dashboard reporting data, page 430](#)).

With Microsoft SQL Server Express, the maximum time period is 30 days, and cannot be changed.

- ◆ Severities (Critical, High, Medium, or Low)
Click the **Severity Mapping** link for more information about the categories associated with each severity level.
- ◆ Action (All, Permitted, or Blocked)
- ◆ Direction (All, Inbound, or Outbound)

You can also use the Top Event Destinations map and Security Events by Category chart to further refine the information that appears in the summary table at the bottom of the page.

- ◆ Click a dot on the map to display only traffic associated with that country in the Suspicious Event Summary table.
The size of the dot reflects the number of incidents associated with that country. Hover over a dot to see a tooltip showing the country name. (Hovering over a blue area without a dot displays the name of the continent.)
- ◆ Click a category in the chart to display only traffic associated with that category in the table.
Each category is represented by a different color in the chart; hover over a bar or segment in the chart to see a tooltip showing the category name.

By default:

- ◆ The Top Event Destinations map shows the top 20 countries from which suspicious activity originates, or to which suspicious traffic is being sent.
- ◆ The Security Events By Category chart shows the top 5 categories associated with suspicious activity in the network, displayed in stacked column format.

To modify the information in the map or the chart:



- ◆ Click the **Options** icon, then select **Edit**.
- ◆ Use the **Top** list (both elements) or **Chart type** list (Security Events by Category chart) to update the display.

Changing the “top” value or chart type does not affect the information displayed in the summary table.

The Suspicious Event Summary table offers a variety of options to help you identify specific events to investigate.

- ◆ Use the Search box to find events for a user name, IP address, or hostname (if available; requires Content Gateway).
To stop filtering the table based on the term in the Search box, click **Clear**.
- ◆ Each of the filters (time, severity, action, direction, country, category) currently applied to the summary table is listed. Clear the check box next to a filter to remove it and expand the information shown in the table.
- ◆ Click a user name, IP address or hostname (if available) to see a detailed report. See [Investigate threat event details, page 37](#).

The Suspicious Event Summary can be customized to show or hide any of the following columns. The columns displayed by default are marked with an asterisk (*).

| Column | Description |
|---------------|--|
| Severity* | Indicated by an “S” icon with a blue background (). Shows the severity (Critical, High, Medium, or Low) assigned to the event. |
| Forensics* | Indicated by a magnifying glass icon (). Indicates whether the event included an attempt to send files. Web Security Gateway or Gateway Anywhere only. |
| User* | The user name (if any) associated with the activity. |
| IP address | The IP address of the machine on which the activity occurred. |
| Device* | The name of the machine on which the activity occurred. Web Security Gateway or Gateway Anywhere only. |
| Category* | The Master Database category assigned to the activity. |
| Last Attempt* | The timestamp of the most recent event sharing all of the characteristics displayed in the row. |
| Country* | Indicated by the abbreviation “CC” (for country code). Shows the 2-letter country code for the event destination (target). If more than one destination is associated with an event, “Multiple” is displayed. |
| Direction | Whether the suspicious activity involved inbound or outbound traffic. Outbound threat detection requires Web Security Gateway or Gateway Anywhere. |
| Incidents* | The number of incidents sharing all of the characteristics displayed in the row except for “Last Attempt.” |

To add columns to the chart, or to remove columns, click the **Customize** link above the table. Mark or clear the check box next to a column name to add or remove the column from the table.

To export the contents of the table to a CSV file, click **Export to CSV**. Select the time period for which to export event data, then click **Export**.

Investigate threat event details

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Use the **Dashboard > Threats > Event Details** page to research suspicious activity incidents. The page can show incidents related to:

- ◆ A specific user name, IP address, or device, selected from the Suspicious Event Summary table on the Threats dashboard. (Device name information is provided by Content Gateway, and is not available when other integrations are used.)

- ◆ A specific severity level, selected by clicking the TRITON - Web Security link in a suspicious activity alert email notification (see [Configuring suspicious activity alerts](#), page 395).

At the top of the page, a table lists each incident associated with the selected user, IP address, hostname, or severity level. The table shows 10 rows of data per page.

- ◆ Use the Search field to narrow results to a specific incident or group of related incidents. Click **Clear** to remove the search filter.
- ◆ Refer to the information on the top, right portion of the page to see the time period covered in the table, and when the table was last updated.
- ◆ Click **Customize** in the toolbar at the top of the content pane to change the columns shown in the table. The detail table has the same column options as the summary table on the Threats dashboard.
- ◆ Click a row in the table to update the bottom portion of the page with additional details about the selected incident, its associated threats, and the detection methods used (see [Reviewing threat incident details](#), page 39).

The incident details section includes a link to Websense ACEInsight. Use this link to view current information about the URL and threats associated with the incident.

- ◆ If there are more than 10 incidents, use the paging controls at the bottom of the table to navigate through the data.

In Web Security Gateway and Gateway Anywhere environments, files associated with attempts to either infect your network or send sensitive data out of your network may be captured. File-related data is referred to collectively as **forensic data**, and it is stored in a special database, called the **forensics repository**.

- ◆ Forensics capture and storage is enabled by default.
- ◆ Configure forensics capture and storage on the Settings > Reporting > Dashboard page (see [Configuring Dashboard reporting data](#), page 430).

When forensics capture is enabled and there are files (like spreadsheets, documents, or compressed files) associated with an incident, an icon appears in the Forensics column of the Event Details table. When you select an incident that includes forensics data, information about the file or files associated with the incident is displayed in the Forensic Data section of the page (see [Reviewing threat-related forensic data](#), page 41).



Warning

Use caution when opening a file associated with a threat incident. If the file is infected with malware, it could infect the machine you use to investigate the incident.

Note also that captured files could contain highly sensitive data.

To export event information to a CSV file, click **Export** in the toolbar at the top of the content pane. All threat-related events logged in the selected **time period** are

exported; not just those for the user, IP address, hostname, or severity level currently displayed on the page.

How severity is assigned to suspicious activity

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The Websense Master Database assigns a severity level to threat-related events based on the category assigned to the request.

- ◆ Severity levels are mapped to categories in the Websense Master Database, and may change when the Master Database is updated.
- ◆ Websense Web Filter and Websense Web Security subscriptions do not include some or all categories with High and Critical severity levels. These categories may appear on the Threats dashboard, but not be available for filtering.

Click the **Severity Mapping** link near the top of the Threats dashboard for a current list of the categories that have an associated severity ranking. The list indicates any categories that are not available for filtering with your subscription.

Reviewing threat incident details

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When an administrator selects an incident in the table at the top of the Threats > Event Details page, the area below the table is populated with all available details about the incident. The available details may vary based on:

- ◆ What type of incident occurred. For example:
 - A outbound request for a URL that is assigned to a blocked category by the Master Database is unlikely to include a threat name, intent, or type, because the request is blocked before Content Gateway analysis occurs.
 - A request that does not include an attempted file transfer does not include forensic data.
- ◆ The integration providing Internet request information to Filtering Service. For example:
 - Only Content Gateway passes hostname, threat name, threat intent, threat type, and scanning category information.
 - Not all integrations pass protocol, method, or content type information.
- ◆ Whether any file transfer attempts were associated with the incident. (Only Content Gateway provides this type of forensic data.) See [Reviewing threat-related forensic data](#), page 41.

The following incident details may be displayed on the page:

| Field | Description |
|------------------------|---|
| Severity | Critical, High, Medium, or Low. See How severity is assigned to suspicious activity , page 39. |
| Category | The Master Database or custom category assigned to the destination URL. |
| Threat Name | The name associated with the malicious software, bot traffic, or other threat activity (if applicable). |
| Threat Intent | What the threat would attempt to do (log keystrokes, open a back door into the network, and so on). |
| Platform | The operating system targeted by the threat (Windows, Android, and so on). |
| Threat Type | The classification of the malicious software (Trojan, worm, advanced persistent threat, and so on). |
| Action | The action assigned to the request (Permit or Block). |
| Reason | The reason the permit or block action was applied (for example, the category assigned to the URL). |
| Incident Time | The date and time the incident occurred. |
| ACEInsight Link | A link to ACEInsight.com to enable further research on the URL or threat. |
| User | The user requesting the URL (if a user is identified). |
| Source IP Address | The IP address from which the request originated. |
| Device | The name of the machine from which the request originated (requires Content Gateway; when a hostname is not available, the source IP address is repeated). |
| Destination IP Address | The IP address of the requested URL. |
| Port | The port used to communicate with the requested URL. |
| Protocol | The protocol used to request the URL. |
| Direction | Whether the incident involved an inbound or outbound connection. |
| Method | Whether the request was a GET or a POST. |
| Content Type | The value reported in the “Content-Type” field of the HTTP header associated with the request (for example, text/html, image/gif, or application/javascript). |
| Bytes Sent | The number of bytes sent out from the source machine. |
| Bytes Received | The number of bytes returned by the target (destination) URL. If the request was blocked, this is 0. |
| Country | The country hosting the destination URL. |
| Full URL | The full URL (domain, path, CGI string, and file) of the target site. |

| Field | Description |
|-------------------|--|
| Active Policy | The policy used to filter the request. |
| Database Category | The category assigned to the request by the Websense Master Database. |
| Scanning Category | The category assigned to the request by Content Gateway analysis (may match the Master Database category). |
| Role | The delegated administration role responsible for the policy used to filter the request. |

Reviewing threat-related forensic data

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When an administrator selects an incident on the Threats > Event Details page that includes forensic data, the Forensic Data area below the table is populated with details about the attempted file transfer. Forensic details include:

| Field | Description |
|---------------------------|---|
| Source | The user or IP address making the request. |
| Destination | The IP address of the target machine. |
| Data Security Incident ID | The Websense Data Security ID number associated with the incident. Can be used to further investigate the incident in TRITON - Data Security (requires Web Security Gateway Anywhere or a Websense Data Security solution). |
| Files | <p>The name and size of the file or files associated with the incident. The file name is a link that can be used to open the actual file.</p> <p>WARNING: Use caution when opening a captured file. The file might contain malware that could infect the machine used for investigation. The file could also contain sensitive data.</p> |
| Parameters and Body | <p>Shows CGI parameters and HTML body details for the HTTP request used to send or retrieve the file.</p> <p>The number of parameters and the details included in the body of the request may vary widely from incident to incident.</p> |

Risks dashboard

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Related topics:

- ◆ [System dashboard](#), page 43
- ◆ [Threats dashboard](#), page 35
- ◆ [Usage dashboard](#), page 43
- ◆ [Adding elements to a dashboard tab](#), page 44

Use the **Risks** tab of the Web Security Dashboard to monitor permitted and blocked requests for URLs in the Security Risk class. By default, the following charts are displayed:

- ◆ **30-Day Risk Trends** shows blocked request trends for specific security and legal liability categories over a 30-day period that includes today. When you click a spark line:
 - For security-related categories (like Malicious), the Threats dashboard is displayed to allow further investigation.
 - For other categories (like Adult), an investigative report with more detailed information is displayed.
- ◆ **Clients with Security Risks** shows which computers have accessed Security Risk sites. You may want to check these machines to make sure they are not infected with any viruses or spyware.
- ◆ **Top Security Risk Categories** shows which Security Risk categories have received the most requests to help you determine whether filtering policies are providing the right protection for your network.
- ◆ **Risk Classes** shows how many requests to each risk class have been permitted and blocked (see [Risk classes](#), page 54) to help you evaluate whether the current policies are effective.
- ◆ **Top Uncategorized** shows which URLs not categorized by the Websense Master Database have been accessed most. Go to **Common Tasks > Recategorize URL** to assign a URL to a category for filtering.
- ◆ *(Web Security Gateway and Gateway Anywhere)* **Analytics: Security Risks** shows how many requests were assigned to new categories by Content Gateway analysis because the content had been changed or the site was compromised.

Click any chart on the page to open an investigative report with more detailed information.

Usage dashboard

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [System dashboard, page 43](#)
- ◆ [Risks dashboard, page 42](#)
- ◆ [Threats dashboard, page 35](#)
- ◆ [Adding elements to a dashboard tab, page 44](#)

Use the **Usage** tab of the Web Security dashboard to monitor general Internet activity trends for your organization. By default, the following charts are displayed:

- ◆ **Top Blocked Users** shows which users have requested the most blocked sites.
- ◆ **Top Requested Categories** shows the categories that are being accessed most to provide a high-level overview of potential security, bandwidth, or productivity concerns. Click the chart to see an investigative report with more detailed information.
- ◆ **Enforcement Summary** provides an overview of recently permitted requests, blocked requests for sites in the Security Risk class, and other blocked requests.
- ◆ (Web Security Gateway and Gateway Anywhere) **Web 2.0 Categories** shows the top categories assigned to requested Web 2.0 URLs, measured by requests.
- ◆ (Web Security Gateway and Gateway Anywhere) **Web 2.0 URL Bandwidth** shows the Web 2.0 URLs using the most bandwidth.
- ◆ (Web Security Gateway and Gateway Anywhere) **Analytics: Top Categories** shows the top categories to which requested URLs were assigned after scanning determined that they no longer fit their original category.

Click any chart or element except the 30-Day Activity Summary to open an investigative report with more detailed information.

System dashboard

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Threats dashboard, page 35](#)
- ◆ [Risks dashboard, page 42](#)
- ◆ [Usage dashboard, page 43](#)
- ◆ [Adding elements to a dashboard tab, page 44](#)

Use the **System** tab of the Web Security Dashboard to monitor the status of your Web security deployment. By default, the following dashboard elements are displayed:

- ◆ **Health Alert Summary** shows alert and status messages for Web security components. If an error or warning appears in the summary, click the alert message to open the Alerts page, where more detailed information is available (see [Reviewing current system status](#), page 396).

Information in the Health Alert Summary is updated every 30 seconds.

- ◆ **User Activity: Zoom Trend** shows the volume of filtered Internet requests processed into the Log Database in the selected time period.
 - Click and drag the cursor to select a section of the chart for closer examination. This can be done multiple times to select increasingly narrower time periods for review.
 - At maximum zoom, a data point is shown for each 10 minute period (for example, 12:00:00, 12:10:00, 12:20:00).

In the chart default (macro) view is shown, each data point may be based on sampling of multiple 10-minute interval data points within the selected area of the chart. As a result, the numbers shown in the macro view may not correlate exactly to the numbers shown when the chart is zoomed in.
 - Click **Zoom Out** to return to the previous level of focus.
 - Click **Reset Chart** to return to the default level of detail.
- ◆ **Protocol Bandwidth Use** shows which protocols are using the most bandwidth in your network.
- ◆ **Filtering Service Status** shows the status of each Filtering Service associated with the current Policy Server.

Click the Filtering Service IP address to see more information about that Filtering Service instance, including its Network Agent and Content Gateway connections. See [Review Filtering Service details](#), page 376.
- ◆ (Web Security Gateway Anywhere) **Hybrid Bandwidth Summary** shows the bandwidth consumed by Internet requests from users filtered by the hybrid service.
- ◆ (Web Security Gateway Anywhere) **Hybrid Requests** shows how many requests by users from your organization were permitted and blocked by the hybrid service.

Adding elements to a dashboard tab

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Status > Dashboard > Add Chart** page to add elements to the Risk, Usage, or System dashboard.

Note that you can neither add elements to nor remove elements from the Threats dashboard.

To start, use the **Add elements to tab** drop-down list to select a tab, then select the element that you want to add from the **Dashboard Elements** list.

- ◆ You can add an element to any tab.
- ◆ Each tab can show a maximum of 12 elements.
- ◆ Elements currently displayed on the selected tab are marked by a blue circle icon.
- ◆ You can add multiple copies of the same element to a tab (for example, each might show a different time period).

When you select an element in the list, a sample is displayed in the **Preview** pane. You can use the preview pane to make changes to the chart **Name** and, if applicable, **Chart type**, **Time period**, and **Top** value (for example, top 1-5 categories, or top 16-20 users).

- ◆ **Chart type:** Many charts can be displayed as a multi-series bar, column, or line chart, or as a stacked area or column chart. Some can be displayed as bar, line, or pie charts. Which types are available depends on the data being displayed.
- ◆ **Time period:** Most charts can display a variable time period: Today (the period since midnight of the current day), the last 7 days, or last 30 days. If the maximum time period for dashboard charts is extended, charts may also be able to show the last 180 or 365 days.
 - With Microsoft SQL Server Express, the maximum time period for dashboard charts is 30 days, and cannot be changed.
 - Using the default maximum time period (30 days) may improve dashboard performance.

See [Configuring Dashboard reporting data, page 430](#), for information about extending the time period for dashboard charts.
- ◆ **Top:** Charts displaying information about the top users, categories, URLs, and so on can display up to 5 values. Select whether to show the top 5 values, 6-10 values, 11-15 values, or 16-20 values.

When you are finished making changes, click **Add**. The dashboard tab is updated immediately.

If you have been editing a chart and would like to start over, click **Restore Defaults** to reset the chart to its default time period, type, and top value (if any).

Two dashboard elements do not appear on any tab by default, but are available to be added:

- ◆ **30-Day Value Estimates** provide a way to estimate of time and bandwidth savings afforded by Websense software over a 30-day period that includes today. Mouse over the **Time** or **Bandwidth** item (under Saved) for an explanation of how the estimate was calculated (see [Time and bandwidth saved, page 46](#)). The calculation can be customized on the Add Charts page.
- ◆ **Activity Today** provides examples of how Websense filtering has protected your network today. Depending on your subscription type, this may show information about Malicious, Adult, and Spyware sites blocked, and about sites scanned or scanned and recategorized by Content Gateway.

This element also shows the total number of Internet requests handled so far today, the total number of requests blocked, and the number of real-time database updates processed.

Time and bandwidth saved

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Web security solutions can help minimize the time and bandwidth lost to unproductive Internet activity.

Value Estimates are not displayed by default, but can be added to the Web Security Dashboard to present an estimate of these time and bandwidth savings. These values are calculated as follows:

- ◆ Time saved: multiply the **typical time taken per visit** by the **sites blocked**. Initially, Websense software uses a default value as the average number of seconds that a user spends viewing a requested Web site. The sites blocked value represents the total number of requests blocked during the available time period (up to the maximum time period configured on the Settings > Reporting > Dashboard page).
- ◆ Bandwidth saved: multiply the **typical bandwidth per visit** by the number of **sites blocked**. Initially, Websense software uses a default value as the average number of bytes consumed by the average Web site. The sites blocked value represents the total number of requests blocked during the available time period (up to the maximum time period configured on the Settings > Reporting > Dashboard page).

Hover the mouse over a counter to see how value is currently being calculate. To change the numbers used in the calculation, click **Add Charts** and select the **Value Estimates** chart in the list, then enter new average time and bandwidth measurements to use as the basis for the calculation:

| Option | Description |
|---|---|
| Average seconds saved per blocked page | Enter the average number of seconds that your organization estimates a user spends viewing individual pages. Websense software multiplies this value by the number of pages blocked to determine the time savings shown. |
| Average bandwidth [KB] saved per blocked page | Enter an average size, in kilobytes (KB), for pages viewed. Websense software multiplies this value by the number of pages blocked to determine the bandwidth savings shown. |

When you are finished making changes, click **OK** to return the dashboard.

Web Security Status Monitor mode

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

For security purposes, a TRITON - Web Security session ends after 30 minutes of inactivity. You can, however, enter a Status Monitor mode that lets you monitor filtering and alerting data without timing out.

- ◆ You must log off of other TRITON modules to enter Status Monitor mode in TRITON - Web Security.
- ◆ In Status Monitor mode, information on the Status > Dashboard, Status > Alerts, and Reporting > Real-Time Monitor pages continues to update normally until you close the browser or log off.

To initiate Status Monitor mode, first save or discard any pending changes, then:

- ◆ Select **Status Monitor** mode from the **Role** drop-down list in the Web Security toolbar.
- ◆ Click the **Status Monitor** button in the toolbar at the top of the Status > Dashboard or Status > Alerts. page.

To stop monitoring Web Security status, log off of TRITON - Web Security or close the browser.

3

Internet Usage Filters

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering categories and protocols, page 50](#)
- ◆ [Working with filters, page 60](#)
- ◆ [Configuring Websense filtering settings, page 68](#)
- ◆ [Internet Filtering Policies, page 91](#)
- ◆ [Refine Filtering Policies, page 255](#)

Policies govern user Internet access. A policy is a schedule that tells Websense software how and when to filter access to Web sites and Internet applications. At their simplest, policies consist of:

- ◆ **Category filters**, used to apply actions (permit, block) to Web site categories
- ◆ **Protocol filters**, used to apply actions to Internet applications and non-HTTP protocols



Note

In Websense Web Security Gateway Anywhere environments, hybrid filtering does not enforce protocol filters.

- ◆ A schedule that determines when each filter is enforced

Policy-based filtering lets you assign varying levels of Internet access to clients (for example, users, groups, or IP addresses in your network). First, create filters to define precise Internet access restrictions, and then use the filters to construct a policy.

In a first-time installation, Websense software creates a **Default** policy and uses it to begin monitoring Internet requests as soon as a subscription key is entered (see [The Default policy](#), page 92). Initially, the Default policy permits all requests.

**Note**

When you upgrade from an earlier Websense software version, existing policy settings are preserved. After upgrading, review your policies to ensure that they are still appropriate.

To apply different filtering restrictions to different clients, start by defining category filters. You might define:

- ◆ One category filter that blocks access to all Web sites except those in the Business and Economy, Education, and News and Media categories
- ◆ A second category filter that permits all Web sites except those that represent a security risk and those containing adult material
- ◆ A third category filter that monitors access to Web sites without blocking them (see [Creating a category filter](#), page 61)

To accompany these category filters, you might define:

- ◆ One protocol filter that blocks access to Instant Messaging and Chat, P2P File Sharing, Proxy Avoidance, and Streaming Media protocol groups.
- ◆ A second protocol filter that permits all non-HTTP protocols except those associated with security risks and proxy avoidance
- ◆ A third protocol filter that permits all non-HTTP protocols (see [Creating a protocol filter](#), page 64)

Once you have defined a set of filters that correspond to your organization's Internet access regulations, you can add them to policies and apply them to clients (see [Internet Filtering Policies](#), page 91).

Filtering categories and protocols

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Websense Master Database organizes similar Web sites (identified by URLs and IP addresses) into **categories**. Each category has a descriptive name, like Adult Material, Gambling, or Peer-to-Peer File Sharing. You can also create your own, custom categories to group sites of particular interest to your organization (see [Creating a custom category](#), page 265). Together, the Master Database categories and user-defined categories form the basis for Internet filtering.

Websense, Inc., does not make value judgments about categories or sites in the Master Database. Categories are designed to create useful groupings of the sites of concern to subscribing customers. They are not intended to characterize any site or group of sites

or the persons or interests who publish them, and they should not be construed as such. Likewise, the labels attached to Websense categories are convenient shorthand and are not intended to convey, nor should they be construed as conveying, any opinion or attitude, approving or otherwise, toward the subject matter or the sites so classified.

The up-to-date list of Master Database categories is available at:

websense.com/global/en/ProductsServices/MasterDatabase/URLCategories.php

To suggest that a site be added to the Master Database, or that a site be moved from one category to another, click **Suggest New Category** in the right shortcut pane of TRITON - Web Security. You are prompted to log on to MyWebsense, then taken to the Site Lookup Tool, which allows you to verify the current category assigned to a site and request a new category.

When you create a **category filter** in TRITON - Web Security, you choose which categories to block and which to permit.

In addition to housing URL categories, the Websense Master Database includes protocol groups used to manage non-HTTP Internet traffic. Each protocol group defines similar types of Internet protocols (like FTP or IRC) and applications (like MSN Messenger or BitTorrent). The definitions are verified and updated as frequently as nightly.

As with categories, you can define custom protocols for use in Internet filtering.

The up-to-date list of Master Database protocols is available at:

websense.com/global/en/ProductsServices/MasterDatabase/ProtocolCategories.php

When you create a **protocol filter**, you choose which protocols to block and which to permit.



Note

In Websense Web Filter and Web Security deployments, Network Agent must be installed to enable protocol-based filtering.

With Websense Web Security Gateway and Gateway Anywhere, it is possible to filter non-HTTP protocols that tunnel over HTTP ports without using Network Agent. See [Tunneled protocol detection, page 192](#), for more information.

Websense Web Security Gateway Anywhere hybrid filtering does not enforce protocol filters.

Some Websense-defined protocols allow blocking of outbound Internet traffic destined for an external server—for example, a specific instant messaging server.

Only Websense-defined protocols with dynamically-assigned port numbers can be blocked as outbound traffic.

New Master Database categories and protocols

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When new categories and protocols are added to the Master Database, each is assigned a default filtering action, like **Permit** or **Block** (see [Filtering actions](#), page 57).

- ◆ The default action is applied in all active category and protocol filters (see [Working with filters](#), page 60). To change the way the category or protocol is filtered, you can:
 - Edit each active filter individually. Use this option if you want to give different groups of clients different levels of access to the category or protocol.
 - Edit the attributes of the category or protocol to apply the same action in all filters. See [Making global category filtering changes](#), page 264, and [Making global protocol filtering changes](#), page 276.
- ◆ The default action is based on feedback regarding whether or not the sites or protocols in question are generally considered business-appropriate.

You can configure Websense software to generate a system alert and notify you whenever new categories or protocols are added to the Master Database. See [Alerting](#), page 388, for more information.

Special categories

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The Master Database contains special categories to help you manage specific types of Internet usage. The following categories are available in all editions of Websense software:

- ◆ The **Special Events** category is used to classify sites considered hot topics to help you manage event-related surges in Internet traffic. For example, the official World Cup site might generally appear in the Sports category, but be moved to the Special Events category during the World Cup Finals.

Updates to the Special Events category are added to the Master Database during scheduled downloads. Sites are added to this category for a short period of time, after which they are either moved to another category or deleted from the Master Database.

- ◆ The **Productivity** category focuses on preventing time-wasting behavior.
 - Advertisements
 - Freeware and Software Download
 - Instant Messaging
 - Message Boards and Forums

- Online Brokerage and Trading
- Pay-to-Surf
- ◆ The **Bandwidth** category focuses on saving network bandwidth.
 - Educational Video
 - Entertainment Video
 - Internet Radio and TV
 - Internet Telephony
 - Peer-to-Peer File Sharing
 - Personal Network Storage and Backup
 - Streaming Media
 - Surveillance
 - Viral Video

Websense Web Security, Web Security Gateway, and Web Security Gateway Anywhere include additional security categories:

- ◆ **Security** focuses on Internet sites containing malicious code, which can bypass virus-detection software programs.
 - Advanced Malware Command and Control (requires Content Gateway)
 - Advanced Malware Payloads (requires Content Gateway)
 - Bot Networks
 - Custom-Encrypted Uploads (requires Content Gateway)
 - Files Containing Passwords (requires Content Gateway)
 - Keyloggers
 - Malicious Embedded iFrame
 - Malicious Embedded Link
 - Malicious Web Sites
 - Phishing and Other Frauds
 - Potentially Exploited Documents (requires Content Gateway)
 - Potentially Unwanted Software
 - Spyware
 - Suspicious Embedded Link
- ◆ **Extended Protection** focuses on potentially malicious Web sites.
 - **Dynamic DNS** includes sites that mask their identity using Dynamic DNS services, often associated with advanced persistent threats.
 - **Elevated Exposure** contains sites that camouflage their true nature or identity, or that include elements suggesting latent malign intent.
 - **Emerging Exploits** holds sites found to be hosting known and potential exploit code.
 - **Potentially Damaging Content** includes sites likely to contain little or no useful content.

The Extended Protection group filters potentially malicious Web sites based on *reputation*. Site reputation is based on early signs of potential malicious activity. An attacker might target a URL containing a common misspelling, for example, or otherwise similar to a legitimate URL. Such a site could be used to distribute malware to users before traditional filters can be updated to reflect these sites as malicious.

When Websense security researchers detect that a site includes a potential threat, the site is added to the Extended Protection category until researchers are 100% confident of the site's final categorization.

Risk classes

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Related topics:

- ◆ [Assigning categories to risk classes, page 408](#)
- ◆ [Presentation reports, page 135](#)
- ◆ [Investigative reports, page 156](#)

The Websense Master Database groups categories into **risk classes**. Risk classes suggest possible types or levels of vulnerability posed by sites in the group of categories.

Risk classes are used primarily in reporting. The Web Security Dashboard includes graphs where Internet activity is displayed by risk class, and you can generate presentation or investigative reports organized by risk class.

Risk classes may also be helpful in creating category filters. Initially, for example, the Basic Security category filter blocks all of the default categories in the Security Risk class. You might use the risk class groupings as a guideline when you create your own category filters, to help decide whether a category should be permitted, blocked, or restricted in some way.

Websense software includes 5 risk classes, listed below. By default, Websense software groups the following categories into each risk class.

- ◆ A category can appear in multiple risk classes, or not be assigned to any risk class.
- ◆ The groupings may be changed periodically in the Master Database. When you receive notice that a new category has been added to the Master Database, it is a good idea to check its default risk class assignment.

Legal Liability

Adult Material (includes Adult Content, Lingerie and Swimsuit, Nudity, Sex)

Bandwidth > Peer-to-Peer File Sharing

Gambling

Illegal or Questionable

Legal Liability

- Information Technology > Hacking and Proxy Avoidance
- Militancy and Extremist
- Racism and Hate
- Tasteless
- Violence
- Weapons

Network Bandwidth Loss

- Bandwidth (includes Educational Video, Entertainment Video, Internet Radio and TV, Internet Telephony, Peer-to-Peer File Sharing, Personal Network Storage and Backup, Streaming Media, Surveillance, Viral Video)
- Entertainment > MP3 and Audio Download Services
- Productivity > Advertisements, Freeware and Software Download
- Social Web Controls - Facebook > Facebook Video Upload
- Social Web Controls - YouTube > YouTube Video Upload

Business Usage

- Bandwidth > Educational Video
- Business and Economy (includes Financial Data and Services, Hosted Business Applications)
- Education > Educational Materials, Reference Materials
- Government (includes Military)
- Social Web Controls - LinkedIn (includes LinkedIn Connections, LinkedIn Jobs, LinkedIn, Mail, LinkedIn Updates)
- Information Technology (includes Computer Security, Search Engines and Portals, URL Translation Sites, and Web Collaboration)
- Travel
- Vehicles

Security Risk

- Bandwidth > Peer-to-Peer File Sharing
- Extended Protection (includes Dynamic DNS, Elevated Exposure, Emerging Exploits, Potentially Damaging Content) [*Websense Web Security*]
- Information Technology > Hacking, Proxy Avoidance, Web and Email Spam
- Parked Domain

Security Risk

Productivity > Freeware and Software Download

Security (includes Bot Networks, Keyloggers, Malicious Embedded iFrame, Malicious Embedded Link, Malicious Web Sites, Phishing and Other Frauds, Potentially Unwanted Software, Spyware, Suspicious Embedded Link) [*Websense Web Security*]

With Web Security Gateway and Gateway Anywhere, Advanced Malware Command and Control, Advanced Malware Payloads, Custom-Encrypted Uploads, Files Containing Passwords, and Potentially Exploited Documents are also included.

Productivity Loss

Abortion (includes Pro-Choice, Pro-Life)

Adult Material > Sex Education

Advocacy Groups

Bandwidth > Entertainment Video, Internet Radio and TV, Peer-to-Peer File Sharing, Streaming Media, Surveillance, Viral Video

Drugs (includes Abused Drugs, Marijuana, Prescribed Medications, Supplements and Unregulated Compounds)

Education (includes Cultural Institutions, Educational Institutions)

Entertainment (includes MP3 and Audio Download Services)

Gambling

Games

Government > Political Organizations

Health

Information Technology > Web and Email Spam, Web Hosting

Internet Communication (includes General Email, Organizational Email, Text and Media Messaging, Web Chat)

Job Search

News and Media (includes Alternative Journals)

Parked Domain

Productivity (includes Freeware and Software Download, Instant Messaging, Message Boards and Forums, Online Brokerage and Trading, Pay-to-Surf)

Religion (includes Non-Traditional Religions and Occult and Folklore, Traditional Religions)

Shopping (includes Internet Auctions, Real Estate)

Social Organizations (includes Professional and Worker Organizations, Service and Philanthropic Organizations, Social and Affiliation Organizations)

Social Web Controls - Facebook (includes Facebook Apps, Facebook Chat, Facebook Commenting, Facebook Events, Facebook Friends, Facebook Games, Facebook Groups, Facebook Mail, Facebook Photo Upload, Facebook Posting, Facebook Questions, Facebook Video Upload)

Social Web Controls - LinkedIn (includes LinkedIn Connections, LinkedIn Jobs, LinkedIn Mail, LinkedIn Updates)

Social Web Controls - Twitter (includes Twitter Follow, Twitter Mail, Twitter Posting)

Productivity Loss

Social Web Controls - Various (includes Craigslist Posting, WordPress Commenting, WordPress Posting)

Social Web Controls - YouTube (includes YouTube Commenting, YouTube Sharing, YouTube Video Upload)

Society and Lifestyles (includes Alcohol and Tobacco, Blogs and Personal Sites, Gay or Lesbian or Bisexual Interest, Hobbies, Personals and Dating, Restaurants and Dining, Social Networking)

Special Events

Sports (includes Sport Hunting and Gun Clubs)

Travel

Vehicles

Super Administrators can change the categories assigned to each risk class on the **Settings > General > Risk Class** page (see [Assigning categories to risk classes](#), page 408).

Security protocol groups

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In addition to the Security and Extended Protection categories, Websense Web Security includes two protocol groups intended to help detect and protect against spyware and malicious code or content transmitted over the Internet.

- ◆ The **Malicious Traffic** protocol group includes the **Bot Networks** protocol, aimed at blocking command-and-control traffic generated by a bot attempting to connect with a botnet for malicious purposes.
- ◆ The **Malicious Traffic (Cannot block)** protocol group is used to identify traffic that may be associated with malicious software.
 - **Email-Borne Worms** tracks outbound SMTP traffic that may be generated by an email-based worm attack.
 - **Other** tracks inbound and outbound traffic suspected of connection with malicious applications.

The Malicious Traffic protocol group is blocked by default, and can be configured within your protocol filters (see [Editing a protocol filter](#), page 64). The Malicious Traffic (Cannot block) protocols can be logged for reporting, but no other filtering action can be applied.

Filtering actions

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Category and protocol filters assign an **action** to each category or protocol. This is the action that Websense filtering software takes in response to a client's Internet request. The actions that apply to both categories and protocols are:

- ◆ **Block** the request. Users receive a block page or block message, and are not able to view the site or use the Internet application.
- ◆ **Permit** the request. Users can view the site or use the Internet application.
- ◆ Evaluate current **Bandwidth** usage before blocking or permitting the request. When this action is enabled, and bandwidth usage reaches a specified threshold, further Internet requests for a specific category or protocol are blocked. See [Using Bandwidth Optimizer to manage bandwidth](#), page 279.

Additional actions can be applied only to categories.

- ◆ **Confirm**—Users receive a block page, asking them to confirm that the site is being accessed for business purposes. If a user clicks **Continue**, she can view the site.

Clicking Continue starts a timer. During the configured time period (60 seconds by default), the user can visit other sites in Confirm categories without receiving another block page. Once the time period ends, browsing to any other Confirm site results in another block page.

The default time can be changed on the **Settings > General > Filtering** page.

- ◆ **Quota**—Users receive a block page, asking them whether to use quota time to view the site. If a user clicks **Use Quota Time**, he can view the site.

Clicking Use Quota Time starts two timers: a quota session timer and a total quota allocation timer.

- If the user requests additional quota sites during a default **session** period (10 minutes by default), he can visit those sites without receiving another block page.
- **Total** quota time is allocated on a daily basis. Once it is used up, each client must wait until the next day to access sites in quota categories. The default daily quota allocation (60 minutes by default) is set on the **Settings > General > Filtering** page. Daily quota allocations can also be granted to clients on an individual basis. See [Using quota time to limit Internet access](#), page 59, for more information.



Important

In multiple Filtering Service deployments, Websense State Server is required for correct application of the Confirm and Quota actions. See [Policy Server, Filtering Service, and State Server](#), page 379, for more information.

- ◆ **Block Keywords:** When you define keywords and enable keyword blocking, users requesting a site whose URL contains a blocked keyword are not allowed to access the site. See [Filtering based on keyword](#), page 266.
- ◆ **Block File Types:** When file type blocking is enabled, users attempting to download a file whose type is blocked receive a block page, and the file is not downloaded. See [Managing traffic based on file type](#), page 282.

Using quota time to limit Internet access

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When a user clicks Use Quota Time, she can view sites in any quota category until the quota session ends. The default quota session time (configured via the **Settings > General > Filtering** page) is 10 minutes.

Once the quota session ends, a request for a quota site results in another quota block message. Users who have not depleted their daily quota allocation can start a new quota session.

Once quota time is configured, Websense software uses a priority list to determine how to respond when a user requests a site in a quota category. The software looks for quota time configured for:

1. The user
2. The computer or network client
3. Groups to which the user belongs

If a user is a member of multiple groups, Websense software grants quota time according to the **Use more restrictive blocking** setting on the **Settings > General > Filtering** page (see [Configuring Websense filtering settings](#), page 68).

4. Default quota time

Internet applets, such as Java or Flash applets, may not respond as expected to quota time restrictions. Even if it is accessed from a quota-restricted site, an applet that runs within the browser can continue running beyond the configured quota session time.

This is because such applets are downloaded completely to a client machine and run just like applications, without communicating back to the original host server. If the user clicks the browser's Refresh button, however, Websense software detects the communication to the host server, and then blocks the request according to applicable quota restrictions.

Search filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Search filtering is a feature offered by some search engines that helps to limit the number of inappropriate search results displayed to users.

Ordinarily, Internet search engine results may include thumbnail images associated with sites matching the search criteria. If those thumbnails are associated with blocked sites, Websense software prevents users from accessing the full site, but does not prevent the search engine from displaying the image.

When you enable search filtering, Websense software activates a search engine feature that stops thumbnail images associated with blocked sites from being displayed in search results. Enabling search filtering affects both local and remote filtering clients.

Websense, Inc., maintains a database of search engines with search filtering capabilities. When a search engine is added to or removed from the database, an alert is generated (see [Alerting](#), page 388).

Search filtering is activated via the **Settings > General > Filtering** page. See [Configuring Websense filtering settings](#), page 68, for more information.

Working with filters

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering categories and protocols](#), page 50
- ◆ [Internet Filtering Policies](#), page 91
- ◆ [Creating a category filter](#), page 61
- ◆ [Creating a protocol filter](#), page 64
- ◆ [Creating a limited access filter](#), page 257

Use the **Policy Management > Filters** page in TRITON - Web Security to view, create, and modify category and protocol filters, and to work with other filtering tools.

The Filters page is divided into 3 main sections:

- ◆ **Category Filters** determine which categories to block and permit.
- ◆ **Protocol Filters** determine which non-HTTP protocols to block and permit.

Network Agent must be installed to enable full protocol-based filtering.

With Websense Web Security Gateway, it is possible to filter non-HTTP protocols that tunnel over HTTP ports without using Network Agent. See [Tunneled protocol detection](#), page 192, for more information.

In Websense Web Security Gateway Anywhere environments, the hybrid service does not provide protocol filtering.

- ◆ **Limited Access Filters** define a restrictive list of permitted Web sites (see [Restricting users to a defined list of URLs](#), page 255).

Category, protocol, and limited access filters form the building blocks of **policies**. Each policy is made up of at least one category or limited access filter, and one protocol filter, applied to selected clients on a specific schedule.

- ◆ To review or edit an existing category, protocol, or limited access filter, click the filter name. For more information, see:
 - [Editing a category filter](#), page 62
 - [Editing a protocol filter](#), page 64
 - [Editing a limited access filter](#), page 258

- ◆ To create a new category, protocol, or limited access filter, click **Add**. For more information, see:
 - [Creating a category filter](#), page 61
 - [Creating a protocol filter](#), page 64
 - [Creating a limited access filter](#), page 257

To duplicate an existing filter, mark the check box next to the filter name, and then click **Copy**. The copy is given the name of the original filter with a number appended for uniqueness, and then added to the list of filters. Edit the copy just as you would any other filter.

If you have created delegated administration roles (see [Delegated Administration and Reporting](#), page 333), Super Administrators can copy filters that they have created to other roles for use by delegated administrators.

To copy filters to another role, first mark the check box next to the filter name, and then click **Copy to Role**. See [Copying filters and policies to roles](#), page 260, for more information.

Creating a category filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with filters](#), page 60
- ◆ [Editing a category filter](#), page 62

Use the **Policy Management > Filters > Add Category Filter** page to create a new category filter. You can work from a predefined template, or make a copy of an existing category filter to use as the basis for the new filter.

1. Enter a unique **Filter name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Filter names can include spaces, dashes, and apostrophes.

2. Enter a short **Description** of the filter. This description appears next to the filter name in the Category Filters section of the Filters page, and should explain the filter's purpose.

The character restrictions that apply to filter names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. Select an entry from the drop-down list to determine whether to use a template or make a copy of an existing filter. For more information about templates, see [Category and protocol filter templates](#), page 67.
4. To see and edit the new filter, click **OK**. The filter is added to **Category Filters** list on the Filters page.

To customize the filter, click the filter name, and then continue with [Editing a category filter](#).

Editing a category filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering categories and protocols](#), page 50
- ◆ [Filtering actions](#), page 57
- ◆ [Using quota time to limit Internet access](#), page 59
- ◆ [Working with filters](#), page 60
- ◆ [Working with categories](#), page 262

Use the **Policy Management > Filters > Edit Category Filter** page to make changes to existing category filters.



Important

When you edit a category filter, the changes affect every policy that enforces the filter.

Policies that enforce a category filter with the same name in another delegated administration role are not affected.

The filter name and description appear at the top of the page.

- ◆ Click **Rename** to change the filter name.
- ◆ Simply type in the **Description** field to change the filter description.

The number next to **Policies using this filter** shows how many policies currently use the selected filter. If the category filter is active, click **View Policies** for a list of policies that enforce the filter.

The bottom portion of the page shows a list of categories and the actions currently applied to each.

1. Select an entry in the **Categories** list to view category information or to change the filtering action associated with the selected category.
2. Before making changes to the action applied to a category, use the details section (to the right of the Categories list) to review any special attributes associated with the category.
 - To list recategorized URLs assigned to the category, if any, click **See custom URLs in this category**. See [Redefining filtering for specific sites](#), page 268.
 - To list keywords assigned to the category, click **See keywords in this category**. See [Filtering based on keyword](#), page 266.

- To list regular expressions used to define custom URLs or keywords for the category, click **See regular expressions in this category**.
3. Use the buttons at the bottom of the category list to change the action applied to the selected category. For more information about the available actions, see [Filtering actions, page 57](#).

Delegated administrators cannot change the action assigned to categories that have been locked by a Super Administrator.
 4. Use the check boxes to the right of the Categories list to apply advanced filtering actions to the selected category:
 - To change the way that keywords are used in filtering the selected category, mark or clear **Block keywords**. [Filtering based on keyword, page 266](#)
 - To determine whether users can access certain types of files from sites in the selected category, mark or clear **Block file types**. See [Managing traffic based on file type, page 282](#).

If you have chosen to block file types, select one or more file types to block.

To apply the selected file type settings to all permitted categories in the filter, click **Apply to All Categories**.

**Warning**

With Websense Web Security Gateway and Gateway Anywhere, applying file type blocking to all categories may have a serious performance impact.

All files with an extension that does not match the blocked type are scanned to find their true file type, including text files, like HTML and CSS files.

- To specify whether access to sites in the category is limited based on certain bandwidth thresholds, mark or clear **Block with Bandwidth Optimizer**. See [Using Bandwidth Optimizer to manage bandwidth, page 279](#).

If you have chosen to block based on bandwidth, specify which threshold limits to use.

To apply the selected bandwidth settings to all permitted categories in the filter, click **Apply to All Categories**.
5. Repeat steps 1 through 3 to make changes to the filtering actions applied to other categories.
 6. After editing the filter, click **OK** to cache your changes and return to the Filters page. Changes are not implemented until you click **Save and Deploy**.

To activate a new category filter, add it to a policy and assign the policy to clients. See [Internet Filtering Policies, page 91](#).

Creating a protocol filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering categories and protocols, page 50](#)
- ◆ [Filtering actions, page 57](#)
- ◆ [Editing a protocol filter, page 64](#)
- ◆ [Working with protocols, page 272](#)

Use the **Policy Management > Filters > Add Protocol Filter** page to define a new protocol filter. You can work from a predefined template or make a copy of an existing protocol filter to use as the basis for the new filter.

1. Enter a unique **Filter name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Filter names can include spaces, dashes, and apostrophes.

2. Enter a short **Description** of the filter. This description appears next to the filter name in the Protocol Filters section of the Filters page, and should explain the filter's purpose.

The character restrictions that apply to filter names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. Select an entry from the drop-down list to determine whether to use a template (see [Category and protocol filter templates, page 67](#)) or make a copy of an existing filter as a basis for the new filter.
4. To see and edit the new filter, click **OK**. The filter is added to **Protocol Filters** list on the Filters page.

To finish customizing the new filter, continue with [Editing a protocol filter](#).

Editing a protocol filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering categories and protocols, page 50](#)
- ◆ [Creating a protocol filter, page 64](#)
- ◆ [Filtering actions, page 57](#)
- ◆ [Working with protocols, page 272](#)
- ◆ [Using Bandwidth Optimizer to manage bandwidth, page 279](#)

Use the **Policy Management > Filters > Edit Protocol Filter** page to make changes to existing protocol filters.

**Important**

Changes that you make here affect all policies that enforce this filter.

Policies that enforce a protocol filter with the same name in another delegated administration role are not affected.

The filter name and description appear at the top of the page.

- ◆ Click **Rename** to change the filter name.
- ◆ Simply type in the **Description** field to change the filter description.

The number next to **Policies using this filter** shows how many policies currently use the selected filter. If the protocol filter is active, click **View Policies** for a list of policies that enforce the filter.

The bottom portion of the page shows a list of protocols and the actions currently applied to each.

To change the way that protocols are filtered and logged:

1. Select a protocol in the **Protocols** list. Advanced filtering actions for the selected protocol appear to the right of the list.
2. Use the **Permit** and **Block** buttons at the bottom of the Protocols list to change the action applied to the selected protocol.

**Note**

Websense software can block TCP-based protocol requests, but not UDP-based protocol requests.

Some applications use both TCP- and UDP-based messages. If an application's original network request is made via TCP, and then subsequent data is sent using UDP, Websense software blocks the initial TCP request and thus blocks subsequent UDP traffic.

UDP requests may be logged as blocked, even when they are permitted.

To apply the same action to the other protocols in the selected protocol group, click **Apply to Group**.

3. If you want information about use of the selected protocol available for alerting or reporting, mark the **Log protocol data** check box.

4. To impose bandwidth limits on the use of this protocol, click **Block with Bandwidth Optimizer**, and then supply the bandwidth thresholds to use. See [Using Bandwidth Optimizer to manage bandwidth, page 279](#), for more information.
5. After editing the filter, click **OK** to cache your changes and return to the Filters page. Changes are not implemented until you click **Save and Deploy**.

To activate a new protocol filter, add it to a policy and apply the policy to clients (see [Internet Filtering Policies, page 91](#)).

**Note**

You can create policies that start enforcing a protocol filter at a specific time. If users initiate a protocol session before that filter goes into effect, they can continue to access the protocol, even if the filter blocks it, for as long as the session continues. Once a user terminates the session, additional requests for the protocol are blocked.

Websense-defined category and protocol filters

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense software includes several sample category and protocol filters. You can use these filters as they are, or modify them to suit your filtering needs. If you do not need the predefined filters, many of them can also be deleted.

The predefined category filters are:

- ◆ Basic
- ◆ Basic Security
- ◆ Block All
- ◆ Default
- ◆ Monitor Only
- ◆ Permit All
- ◆ Strict Security

The Block All and Permit All category filters are not listed on the Filters page, though they can be added to policies. These filters play a special role in filtering, and cannot be deleted or edited. When an Internet request is filtered, Websense software first checks to see if the Block All or Permit All filter applies, before performing any additional filtering checks (see [Filtering a site, page 100](#)).

The predefined protocol filters are:

- ◆ Basic Security
- ◆ Default
- ◆ Monitor Only

- ◆ **Permit All**

The Permit All protocol filter, like its equivalent category filter, is not listed on the Filters page and cannot be edited or deleted. It is also prioritized when filtering is performed.

The Default category and protocol filters can be edited, but cannot be deleted. In upgrade environments, if there are gaps in the Default policy, the Default filters are used to filter requests during periods when no other filter applies.

Category and protocol filter templates

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you create a new category or protocol filter, you can begin by making a copy of an existing filter on the Filters page, selecting an existing filter as a model on the Add Filter page, or using a filter **template**.

Websense software includes 5 category filter templates:

- ◆ **Monitor Only** and **Permit All** permits all categories.
- ◆ **Block All** blocks all categories.
- ◆ **Basic** blocks the most frequently blocked categories and permits the rest.
- ◆ **Default** applies the Block, Permit, Continue, and Quota actions to categories.
- ◆ **Strict Security** extends the Default template by blocking 2 additional security categories, and adding file-type blocking for executables to a third category.
- ◆ **Basic Security** blocks only the default categories in the Security Risk class (see [Risk classes, page 54](#)).

Websense software also includes 3 protocol filter templates:

- ◆ **Monitor Only** and **Permit All** permit all protocols.
- ◆ **Basic Security** blocks the P2P File Sharing and Proxy Avoidance protocols, as well as Instant Messaging File Attachments (if subscribed) and Malicious Traffic (Websense Web Security).
- ◆ **Default** blocks the Instant Messaging / Chat protocols, as well as the P2P File Sharing, Proxy Avoidance, Instant Messaging File Attachments (if subscribed), and Malicious Traffic (Websense Web Security).

Although you can modify or delete most Websense-defined category and protocol filters, you cannot edit or remove templates. Likewise, although you can create as many custom filters as necessary, you cannot create new templates.

Because templates cannot be modified, they provide a constant method of referring back to the original filtering actions applied by Websense-defined filters. For example, the Default category and protocol filter templates apply the same actions as the original Default category and protocol filters. This means that you can always restore the original Websense filtering configuration by creating filters that use the template defaults.

For instructions on using a template to create a new filter, see [Creating a category filter](#), page 61, or [Creating a protocol filter](#), page 64.

Configuring Websense filtering settings

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related Topics:

- ◆ [Filtering categories and protocols](#), page 50
- ◆ [Block Pages](#), page 117
- ◆ [Password override](#), page 86
- ◆ [Account override](#), page 86
- ◆ [Using Bandwidth Optimizer to manage bandwidth](#), page 279
- ◆ [Filtering based on keyword](#), page 266

Use the **Settings > General > Filtering** page to establish basic settings for a variety of filtering features.

Use the **General Filtering** section to determine how users are filtered when multiple group policies apply, specify keyword search options, and set password override, account override, continue, and quota session behavior.

1. To determine how users are filtered when multiple group policies apply, mark or clear **Use most restrictive group policy** (see [Filtering order](#), page 97).
 - When the option is selected, the policy that applies the most restrictive filtering setting is used. In other words, if one applicable group policy blocks access to a category and another permits access, the user's request for a site in that category is blocked.
 - When the option is not selected, the most permissive setting is used.
2. Select one of the following **Keyword search options** (see [Filtering based on keyword](#), page 266).

| | |
|----------|--|
| CGI only | Blocks sites when keywords appear in CGI query strings (after the “?” in a Web address). Example: search.yahoo.com/search?p=test Websense software does not search for keywords before the “?” when this is selected. |
| URL only | Blocks sites when keywords appear in the URL. If the requested address contains a CGI query string, Websense software searches for keywords up to the “?”. |

| | |
|--------------------------|---|
| URL and CGI | Blocks sites when keywords appear anywhere in the address. If a CGI query string is present, Websense software searches for keywords both before and after the "?". |
| Disable keyword blocking | Use with caution. Disable keyword blocking turns off all keyword blocking, even if Block keywords is selected in a category filter. |

3. In the **Password override timeout** field, enter the maximum number of seconds (up to 3600, default 60) that a user can access sites in all categories after selecting password override (see [Password override](#), page 86).
4. In the **Continue timeout** field, enter the maximum time in seconds (up to 3600, default 60) that a user who clicks Continue can access sites in categories governed by the Confirm action (see [Filtering actions](#), page 57).
5. In the **Account override timeout** field, enter the maximum time in minutes (up to 3600, default 5) that a user is filtered by the policy assigned to the override account (see [Account override](#), page 86).
6. In the **Quota session length** field, enter the interval (up to 60 minutes, default 10) during which users can visit sites in quota-limited categories (see [Using quota time to limit Internet access](#), page 59).

A session begins when the user clicks the Use Quota Time button.

7. Enter the **Default quota time per day** (up to 240 minutes, default 60) for all users.

To change the quota time for individual users, go to the **Policies > Clients** page.

As you make changes to the quota session length and the default quota time per day, the **Default quota sessions per day** is calculated and displayed.

Under **State Server**, provide **IPv4 address or hostname** and **Port** information if:

- ◆ Your environment includes multiple Websense Filtering Service instances, and
- ◆ You use the Quota or Confirm actions, password override, or account override.

State Server tracks clients' quota, confirm, password override, and account override sessions to ensure that session time is allocated correctly across multiple Filtering Service instances (see [Policy Server, Filtering Service, and State Server](#), page 379).

After entering State Server connection details, click **Check Status** to verify the connection. Configure State Server connection information for each Policy Server instance in your deployment.

Under **Bandwidth Optimizer**, enter the information needed to filter Internet usage based on available bandwidth. For more information about bandwidth-based filtering, see [Using Bandwidth Optimizer to manage bandwidth, page 279](#).

**Note**

In Websense Web Security Gateway Anywhere environments, hybrid filtering does not use Bandwidth Optimizer settings. No bandwidth-based restrictions are enforced on requests passing through the hybrid service.

1. To specify an **Internet connection speed**, do one of the following:
 - Select a standard speed from the drop-down list.
 - Enter the network speed in kilobits per second in the text field.
2. Enter the default thresholds to use when bandwidth-based filtering is used. Note that when the thresholds are set, but no category or protocol filters enforce bandwidth-base filtering, no bandwidth usage restriction occurs.
 - **Network:** When total network traffic reaches this percentage of total available bandwidth, start enforcing bandwidth-based filtering, as configured in active filters.
 - **Protocol:** When traffic for a specific protocol (like HTTP or MSN Messenger) reaches this percentage of total available bandwidth, start restricting access to that protocol, as configured in active filters.
3. (*Websense Web Security Gateway*) Content Gateway can collect information about bandwidth consumed by HTTP traffic and protocols that tunnel over HTTP for use in reporting. To enable this option, mark **Include bandwidth data collected by Websense Content Gateway**.

Use the **Block Messages** section to enter the URL or path to the alternative HTML block page you created for the top frame of browser-based block messages (see [Creating alternate block messages, page 127](#)), or to configure Websense Web Security Gateway Anywhere to include a link to ACEInsight on block pages.

- ◆ Separate pages can be used for the different protocols: **FTP**, **HTTP** (including **HTTPS**), and **Gopher**.

Leave these fields blank to use the default block message provided with the Websense software, or a customized version of that message (see [Customizing the block message, page 123](#)).
- ◆ In Websense Web Security Gateway Anywhere environments:
 - Custom block messages specified in the fields above are not applied to hybrid filtering requests.

Instead, use the Settings > Hybrid Configuration > User Access page to customize the hybrid block page (see [Customizing hybrid block pages, page 223](#)).

- When a user clicks the ACEInsight link, the URL the user attempted to access is sent to ACEInsight and a Web page is displayed showing ACEInsight analysis.

The URL sent to ACEInsight is truncated, to omit the CGI string (which could include a user name or password). As a result, ACEInsight does not analyze password-protected content, and may return different results than Content Gateway.

The ACEInsight link does not appear on hybrid block pages.

Under **Search Filtering**, select **Enable search filtering** to have Websense software activate a setting built into certain search engines so thumbnail images and other explicit content associated with blocked sites are not displayed in search results (see [Search filtering, page 59](#)).

The search engines for which this feature is supported are displayed below the check box.

When you have finished configuring Filtering settings, click **OK** to cache the changes. Changes are not implemented until you click **Save and Deploy**.

4

Clients

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You can customize how Websense software filters requests from specific users or machines by adding them as **clients** in TRITON - Web Security. If you are using on-premises Web filtering, clients can be:

- ◆ **Computers:** Individual machines in your network, defined by IP address.
- ◆ **Networks:** Groups of machines, defined collectively as an IP address range.
- ◆ **Directory clients:** User, group, or domain (OU) accounts in a supported directory service.



Note

In Websense Web Security Gateway Anywhere deployments, hybrid filtering can apply policies to users or groups, and to filtered locations (see [Working with hybrid filtering clients](#), page 88).

Initially, Websense software filters all clients in the same manner, using the **Default** policy (see [The Default policy](#), page 92). Once you add a client to the Clients page in TRITON - Web Security, you can assign that client a specific filtering policy.

When multiple policies could apply, such as when one policy is assigned to the user and another is assigned to the machine, by default Websense software determines which policy to enforce as follows:

1. Apply the policy assigned to the **user** making the request. If that policy has no filters scheduled at the time of the request, use the next applicable policy.
2. If there is no user-specific policy, or the policy has no active filters at the time of the request, look for a policy assigned to the **computer** (first) or **network** (second) from which the request was made.
3. If there is no computer or network-specific policy, or the policy has no active filters at the time of the request, look for a policy assigned to any **group** to which the user belongs. If the user belongs to multiple groups, Websense software considers all group policies that apply (see [Filtering order](#), page 97).
4. If there is no group policy, look for a policy assigned to the user's **domain** (OU).
5. If no applicable policy is found, or the policy does not enforce a category filter at the time of the request, enforce the **Default** policy for the role to which the client has been assigned.

For more detailed information about how Websense Filtering Service processes requests, see [Filtering a site](#), page 100.

For information about configuring Filtering Service to prioritize group and domain policies over IP address-based (computer and network) policies, see [Prioritizing group and domain policies](#), page 98.

For information about how the hybrid service applies filtering policies to clients, see [Filtering order](#), page 97.

Working with clients

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Related topics:

- ◆ [Clients](#), page 73
- ◆ [Working with computers and networks](#), page 75
- ◆ [Working with users and groups](#), page 76
- ◆ [Adding a client](#), page 83
- ◆ [Changing client settings](#), page 85

Use the **Policy Management > Clients** page to view information about existing clients, add, edit, or delete clients, or move clients to a delegated administration role.

If you are a delegated administrator, add clients to the Clients page from your managed clients list. This allows you to apply policies to the clients. See [Adding a client](#), page 83, for instructions.

Clients are divided into 3 groups:

- ◆ **Directory**, which includes users, groups, and domains (OUs) from your directory service (see [Working with users and groups](#), page 76).
- ◆ **Networks**, IPv4 or IPv6 address ranges within the filtered network that can be governed by a single policy (see [Working with computers and networks](#), page 75).
- ◆ **Computers**, individual machines in the filtered network, identified by IPv4 or IPv6 address (see [Working with computers and networks](#), page 75).

Click the plus sign (+) next to the client type to see a list of existing clients of the selected type. Each client listing includes:

- ◆ The client name, IP address, or IP address range.
- ◆ The **policy** currently assigned to the client. The **Default** policy is used until you assign another policy (see [Internet Filtering Policies](#), page 91).
- ◆ Whether or not the client can use a **password override** (see [Password override](#), page 86) or **account override** (see [Account override](#), page 86) option to view or attempt to view blocked sites.

- ◆ Whether the client has a custom amount of **quota time** allotted (see [Using quota time to limit Internet access](#), page 59).

To find a specific client, browse the appropriate node in the tree.

To edit client policy, password override, quota time, and authentication settings, select one or more clients in the list, and then click **Edit**. See [Changing client settings](#), page 85, for more information.

To add a client, or to apply a policy to a managed client who does not currently appear on the Clients page, click **Add**, and then go to [Adding a client](#), page 83, for more information.

If you have created delegated administration roles (see [Delegated Administration and Reporting](#), page 333), Super Administrators can move their clients to other roles. First mark the check box next to the client entry, and then click **Move to Role**. When a client is moved to a delegated administration role, the policy and filters applied to the client are copied to the role. See [Moving clients to roles](#), page 88, for more information.

If you have configured Websense software to communicate with an LDAP-based directory service, the **Manage Custom LDAP Groups** button appears in the toolbar at the top of the page. Click this button to add or edit groups based on an LDAP attribute (see [Working with custom LDAP groups](#), page 82).

To remove a client from TRITON - Web Security, select the client and click **Delete**.

Working with computers and networks

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Related topics:

- ◆ [Working with clients](#), page 74
- ◆ [Working with users and groups](#), page 76
- ◆ [Adding a client](#), page 83
- ◆ [Assigning a policy to clients](#), page 97

In TRITON - Web Security, a **computer** is the IP address (for example, 10.201.3.1 or fd3a:918a:71a1:bcaa::0011) associated with a filtered machine. A **network** is the IP address range (for example, 10.201.3.2 - 10.201.3.44 or fd3a:918a:71a1:bcaa::1111 - fd3a:918a:71a1:bcaa::1211) that corresponds to a group of filtered machines.

- ◆ In Websense Web Security Gateway Anywhere deployments, hybrid filtering does not apply policies to individual computer and network clients. See [Working with hybrid filtering clients](#), page 88, for information about applying policies to filtered locations.
- ◆ Before applying policies to IPv6 computer and network clients, disable temporary IPv6 addresses on the affected machines. See support.websense.com for details.

You can assign policies to computer and network clients just as you would to user, group, or domain clients.

- ◆ Assign a policy to a **computer**, for example, that does not require users to log on, or that can be accessed by users with guest accounts.
- ◆ Assign a policy to a **network** to apply the same filtering policy to several machines at once.

When you assign a policy to a computer or network, that policy is enforced regardless of who is logged on to the filtered machine, **unless** you have assigned a policy to the logged-on user. When on-premises filtering components are used, the computer or network policy takes precedence over any group policies that may apply to the user. (In Websense Web Security Gateway Anywhere deployments, hybrid filtering applies the group policy before applying a computer or network policy. See [Working with hybrid filtering clients](#), page 88.)

Working with users and groups

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Related topics:

- ◆ [Working with clients](#), page 74
- ◆ [Directory services](#), page 77
- ◆ [Working with custom LDAP groups](#), page 82
- ◆ [Working with computers and networks](#), page 75
- ◆ [Adding a client](#), page 83
- ◆ [Assigning a policy to clients](#), page 97

In order to apply policies to individual users and groups in your network, configure Websense software to access your directory service to obtain directory object (user, group, and domain [OU]) information.

Websense software can communicate with Windows Active Directory in mixed or native mode, and with Novell eDirectory or Oracle (formerly Sun Java) Directory Server Enterprise Edition accessed via Lightweight Directory Access Protocol (LDAP).

- ◆ When you use an LDAP-based directory service, duplicate user names are not supported. Ensure that the same user name does not appear in multiple domains.
- ◆ If you are using Windows Active Directory or Oracle Directory Server, user names with blank passwords are not supported. Make sure that all users have passwords assigned.

Websense User Service conveys information from the directory service to Policy Server and Filtering Service for use in applying filtering policies. Websense, Inc.,

recommends installing User Service on a Windows machine (though it can reside on a Linux machine).

To configure Websense software to communicate with your directory service, see [Directory services](#).

Directory services

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A directory service is a tool that stores information about a network's users and resources. Before you can add user clients (users, groups, domains, or organizational units) in TRITON - Web Security, you must configure Websense software to retrieve information from your directory service.

Use the **Settings > General > Directory Services** page to identify the directory service used in your network. You can configure settings for only one type of directory service per Policy Server.



Note

In Websense Web Security Gateway Anywhere deployments, information from the Directory Services page is also used to populate the Hybrid Configuration > Shared User Data page. This supports user and group-based filtering by the hybrid service. See [Send user and group data to the hybrid service](#), page 227.

First select a directory service from the Directories list. The selection that you make determines which settings appear on the page.

See the appropriate section for configuration instructions:

- ◆ [Windows Active Directory \(Mixed Mode\)](#), page 78
- ◆ [Windows Active Directory \(Native Mode\)](#), page 78
- ◆ [Novell eDirectory and Oracle \(Sun Java\) Directory Server](#), page 80



Warning

In Websense Web Security Gateway Anywhere deployments, hybrid filtering supports Windows Active Directory (Native Mode), Oracle Directory Server, and Novell eDirectory.

Once configuration is complete, User Service communicates with the directory service to enable user and group-based filtering. User Service caches the user and group information that it collects for up to 3 hours. If you make changes to user, group, or OU entries in the directory service, use the **Clear Cache** button under User Service Cache to force User Service to refresh its user and group mappings

immediately. Note that user-based filtering may slow down for a brief period while the cache is being recreated.

If you plan to allow administrators to use their network accounts to log on to TRITON - Web Security, you must also configure directory service communication on the TRITON Settings > User Directory page. The same directory must be used to authenticate all administrative users. See the TRITON Settings Help for details.

Windows Active Directory (Mixed Mode)

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If your directory service is Active Directory in mixed mode, typically no further configuration is necessary.

In the following circumstances, you need to supply additional information on this screen:

- ◆ DC Agent is being used for transparent identification (see [DC Agent](#), page 306)
and
- ◆ User Service runs on a Linux machine

If this matches your configuration, Websense software must communicate with a Windows Internet Name Server (WINS) to resolve domain names to domain controller IP addresses (see [User Service on Linux](#), page 471).

To enable that communication, use the fields under Windows Active Directory (Mixed Mode) to provide:

1. The account name of an **Administrative user** that can access the directory service.
2. The **Password** for the account.
3. **Domain** information for the account.
4. The IP address or hostname of a **WINS server** in your network.

Note that you can also perform these steps on the Settings > User Identification > DC Agent page when you are configuring a DC Agent instance. You do not need to perform the configuration in both places.

If your installation does not use this configuration, the administrative credential fields are disabled.

Windows Active Directory (Native Mode)

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Windows Active Directory stores user information in one or more global catalogs. The global catalog lets individuals and applications find objects (users, groups, and so on) in an Active Directory domain.

In order for Websense software to communicate with Active Directory in Native Mode, you must provide information about the global catalog servers in your network.

1. Click **Add**, next to the Global catalog servers list. The Add Global Catalog Server page appears.
2. Provide the **IPv4 address or hostname** of the global catalog server:
 - If you have multiple global catalog servers configured for failover, enter the DNS domain name.
 - If your global catalog servers are not configured for failover, enter the IPv4 address or hostname (if name resolution is enabled in your network) of the server to add.
3. Enter the **Port** that Websense software should use to communicate with the global catalog (by default, **3268**).
4. Optionally, enter the **Root context** to use to locate user information. If you supply a value, it must be a valid context in your domain.
 - If you have specified a communications port of 3268 or 3269, you do not need to supply a root context. If there is no root context, User Service begins searching at the top level of the directory service.
 - If the specified port is 389 or 636, you must provide a root context.

**Note**

Avoid having the same user name in multiple domains. If Websense software finds duplicate account names for a user, the user cannot be identified transparently.

5. Specify which administrative account Websense software should use to retrieve user name and path information from the directory service. This account must be able to query and read from the directory service, but does not need to be able to make changes to the directory service, or be a domain administrator.

Select **Distinguished name by components** or **Full distinguished name** to specify how you prefer to enter the account information.

- If you selected Distinguished name by components, enter the **Display name**, account **Password**, **Account folder**, and **DNS domain name** for the administrative account. Use the common name (cn) form of the administrative user name, and not the user ID (uid) form.

**Note**

The **Account folder** field does not support values with the organizational unit (ou) tag (for example, *ou=Finance*). If your administrative account name contains an ou tag, enter the full distinguished name for the administrative account.

- If you selected Full distinguished name, enter the distinguished name as a single string in the **User distinguished name** field (for example, *cn=Admin, cn=Users, ou=InfoSystems, dc=company, dc=net*), and then supply the **Password** for that account.
6. Click **Test Connection** to verify that Websense software can connect to the directory using the account information provided.
 7. Click **OK** to return to the Directory Services page.
 8. Repeat the process above for each global catalog server.
 9. Click **Advanced Directory Settings**, and then go to [Advanced directory settings](#), page 81.

Novell eDirectory and Oracle (Sun Java) Directory Server

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To retrieve information from the directory service, Websense software requires the distinguished name, root context, and password for a user account with administrative privileges.

1. Enter the **IPv4 address or hostname** of the directory server.
2. Enter the **Port** number that Websense software will use to communicate with the directory. The default is 389.
3. If your directory requires administrator privileges for read-only access, enter the **Administrator distinguished name**.
4. Enter the **Root Context** that Websense software should use when searching for user information. For example, *o=domain.com*.
 - Providing a root context is mandatory for Oracle Directory Server, but optional for Novell eDirectory.
 - Narrowing the context increases speed and efficiency in retrieving user information.



Note

Avoid having the same user name in multiple domains. If Websense software finds duplicate account names for a user, the user cannot be identified transparently.

5. Provide a **Password** for the administrator account entered above.
6. Click **Test Connection** to verify that Websense software can connect to the directory server using the information provided.
7. Click **Advanced Directory Settings**, and then go to [Advanced directory settings](#), page 81.

Advanced directory settings

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Related topics:

- ◆ [Windows Active Directory \(Native Mode\), page 78](#)
- ◆ [Novell eDirectory and Oracle \(Sun Java\) Directory Server, page 80](#)

These settings can be used to define:

- ◆ How Websense software searches the directory service to find user, group, and domain information
- ◆ Whether Websense software uses an encrypted connection to communicate with the directory service
- ◆ Which character set Websense software uses to encode LDAP information

Configure these settings as needed for any LDAP-based directory service.

1. If you use custom object class types (attribute names) in your directory service, mark **Use custom filters**. The default filter strings are listed below the check box.
2. Edit the existing filter strings, substituting object class types specific to your directory. For example, if your directory uses an object class type such as **dept** instead of **ou**, insert a new value in the Domain search filter field.

Attributes are always strings used in searching the directory service contents. Custom filters provide the functionality described here.

| Attribute | Description |
|----------------------------|---|
| User logon ID attribute | Identifies user logon names |
| First name attribute | Identifies the user's given name |
| Last name attribute | Identifies the user's surname |
| Group attribute | Identifies the group's name |
| MemberOf attribute | Specifies that the user or group is a member of another group. If you are using Novell eDirectory, this corresponds to the groupMembership attribute. |
| User search filter | Determines how User Service searches for users |
| Group search filter | Determines how User Service searches for groups |
| Domain search filter | Determines how User Service searches for domains and organizational units |
| User's group search filter | Determines how User Service associates users with groups |

3. To secure communications between Websense software and your directory service, check **Use SSL**.

4. To determine which character set Websense software uses to encode LDAP information, select **UTF-8** or **MBCS**.
MBCS, or multibyte character set, is commonly used for encoding East Asian languages such as Chinese, Japanese, and Korean.
5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Working with custom LDAP groups

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Related topics:

- ◆ [Working with users and groups, page 76](#)
- ◆ [Directory services, page 77](#)
- ◆ [Adding or editing a custom LDAP group, page 83](#)

Use the **Manage Custom LDAP Groups** page to manage custom groups based on attributes defined in your directory service. This option is available only if you have configured Websense software to communicate with an LDAP-based directory service.



Important

When you add custom LDAP groups to TRITON - Web Security, the group definitions are stored by the active Policy Server, and do not affect other Policy Server instances. To add custom LDAP groups to multiple Policy Servers, use TRITON - Web Security to connect to each Policy Server and enter the information.

If you add custom LDAP groups, and then either change directory services or change the location of the directory server, the existing groups become invalid. You must add the groups again, and then define each as a client.

- ◆ To add a group, click **Add** (see [Adding or editing a custom LDAP group, page 83](#)).
- ◆ To change an entry in the list, click on its group name (see [Adding or editing a custom LDAP group](#)).
- ◆ To remove an entry, first select it, and then click **Delete**.

When you are finished making changes to custom LDAP groups, click **OK** to cache the changes and return to the previous page. Changes are not implemented until you click **Save and Deploy**.

Adding or editing a custom LDAP group

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Add Custom LDAP Group** page to define a group in TRITON - Web Security based on any attribute you have defined in your directory service. Use the **Edit Custom LDAP Group** page to make changes to an existing definition.



Important

If you add custom LDAP groups, and then either change directory services or change the location of the directory server, the existing groups become invalid. You must add the groups again, and then define each as a client.

1. Enter or change the **Group name**. Use a descriptive name that clearly indicates the purpose of the LDAP group.
Group names are case-insensitive, and must be unique.
2. Enter or change the description that defines this group in your directory service. For example:
(WorkStatus=parttime)
In this example, **WorkStatus** is a user attribute that indicates employment status, and **parttime** is a value indicating that the user is a part-time employee.
3. Click **OK** to return to the Manage Custom LDAP Groups page. The new or revised entry appears in the list.
4. Add or edit another entry, or click **OK** to cache changes and return to the previous page. Changes are not implemented until you click **Save and Deploy**.

Adding a client

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Related topics:

- ◆ [Working with clients, page 74](#)
- ◆ [Working with computers and networks, page 75](#)
- ◆ [Working with users and groups, page 76](#)
- ◆ [Searching the directory service, page 84](#)
- ◆ [Changing client settings, page 85](#)

Use the **Policy Management > Clients > Add Clients** page to add user, group, computer, and network clients to TRITON - Web Security so that you can assign them a policy.

If you are logged on to a delegated administration role, you can only add clients that appear in your managed clients list. In policy management and reporting roles, the process of adding managed clients to the Clients page requires assigning them a policy. (Investigative reporting roles do not have this requirement.)

1. Identify one or more clients:
 - To add a user, group, or domain (OU) client, browse the **Directory** tree to find entries in your directory service. If you are using an LDAP-based directory service, you can also click **Search** to enable a directory search tool (see [Searching the directory service, page 84](#)).
 - To add a computer or network client, enter an **IP address** or **IP address range** in either IPv4 or IPv6 format.

No two network definitions can overlap, but a network client can include an IP address identified separately as a computer client. In the case of such an overlap, the policy assigned to the computer takes precedence over the policy assigned to the network.
2. Click an arrow button (>) to add each client to the **Selected Clients** list.

To remove an entry from the Selected Clients list, select the client, and then click **Remove**.
3. If you are in an **Select a Policy** to assign to all clients in the Selected Clients list.
4. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

The clients are added to the appropriate list on the **Policy Management > Clients** page. To change the policy assigned to one or more clients, or to configure additional client settings, select each client entry, and then click **Edit**. See [Changing client settings, page 85](#), for more information.

Searching the directory service

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If you have configured Websense software to communicate with an LDAP-based directory service, you can use a search function to identify the directory clients you want to add in TRITON - Web Security. Search is also available for adding managed clients and administrators to delegated administration roles.

To search a directory service to retrieve user, group, and OU information:

1. Click **Search**.
2. Enter all or part of the user, group, or OU **Name**.
3. Use the **Type** list to indicate the type of directory entry (user, group, OU, or all) that you want to find.

In a large directory service, selecting **All** may cause the search to take a very long time.
4. Use the **Search for** list to specify how to perform the search:

- Select **Entries containing search string** to find all directory entries that contain the search term you entered.
 - Select **Exact search string only** to find only the directory entry that precisely matches the search term.
5. Browse the **Search Context** tree to specify which portion of the directory to search. A more precise context helps to speed the search.
 6. Click **Go**.

A list of search results is displayed.
 7. Select one or more entry in search results, and then click the right arrow (>) to add each selection as a client or administrator.
 - Click **New Search** to enter another set of search criteria.
 - Click **Browse** to stop using search and instead navigate through the directory tree to identify users.
 8. When you are finished making changes, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Changing client settings

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Policy Management > Clients > Edit Client** page to change policy and authentication settings for one or more clients. If you select multiple clients before clicking Edit, the configuration changes that you make on the Edit Client page are applied to all of the selected clients.

1. Select a **Policy** to apply to the selected clients. The Default policy governs clients until another policy is assigned.
2. Under **Block Page Override Options**, indicate whether this client has the option to override (or attempt to override) a block page to view a requested site.
 - Mark **Enable password override** to enable the selected clients to enter a password that you specify to access any blocked site for the time period configured on the Settings > General > Filtering page (60 seconds, by default). See [Password override, page 86](#).

Also enter and confirm the password.

You might enable this option for specific users who sometimes need access to sites not generally permitted by your organization's acceptable use policy.

To remove a client's password override privileges, click **Off**.

- Mark **Enable account override** to enable the selected clients to enter a network logon name and password to attempt to access a blocked site by having a different policy applied to the request. If the request is permitted by the new policy, the user can access the site for the time period configured on the Settings > General > Filtering page (5 minutes, by default). See [Account override, page 86](#).

You might enable this option for shared machines (like kiosk machines) typically governed by an IP-address-based policy that allows users to log on via a guest account. Users then have the option to enter their network credentials on the block page to see if their usual policy permits access to a site blocked on the shared machine.

If the user's policy also blocks the site, the user receives a second block page.

3. To allocate a custom amount of **Quota Time** to the selected clients, click **Custom**, and then enter the number of minutes of quota time to assign.
To revert to the default quota settings, click **Default**.
4. Click **OK** to cache your changes and return to the Clients page. Changes are not implemented until you click **Save and Deploy**.

The new client settings appear as part of the client listing on the **Policy Management > Clients** page.

Password override

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Password override lets users with valid passwords access sites blocked by Websense software. Password override can be granted to individual clients (users, groups, computers, or networks, but not domains [OUs]).

When an administrator enables the password override option, he or she also creates a password. When clients with password override privileges request a blocked site, the Websense block page includes a password field. The clients can then enter the password to access blocked sites for a limited amount of time.



Important

In multiple Filtering Service deployments, Websense State Server is required for correct allocation of password override time. See [Policy Server, Filtering Service, and State Server](#), page 379, for more information.

Configure how long clients with password override privileges can access blocked sites per password entry on the **Settings > General > Filtering** page (see [Configuring Websense filtering settings](#), page 68).

Grant password override privileges to specific clients via the **Policy Management > Clients** page (see [Adding a client](#), page 83, or [Changing client settings](#), page 85).

Account override

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Account override allows users to change the credentials used to apply a policy to a request.

If, for example, users access the Internet from a kiosk machine, or from a machine where they log on using a local account, rather than a network account, administrators can associate account override permissions with the computer or network (IP-address-based) client.

Account override permissions can also be given to directory clients (users, groups, and domains [OUs]).

When user requests are blocked by the current policy, and account override permissions are assigned to the client being filtered (whether that is an IP address or a directory client), the block page includes an **Enter New Credentials** button. The user can then provide a user name and password.

Once the user clicks **Switch Credentials**, Websense software identifies the policy assigned to the new account, then applies that policy to the request.

- ◆ If the new policy permits the request, the user can access the site.
- ◆ If the new policy blocks the request, the user sees another block page.

In other words, unlike password override, using the account override option does not guarantee access to a blocked site. Instead, it changes the policy used to filter the request.

The new policy is applied to additional requests on that machine for the time period specified on the **Settings > General > Filtering** page (5 minutes, by default). See [Configuring Websense filtering settings](#), page 68.



Important

In multiple Filtering Service deployments, Websense State Server is required for correct allocation of account override time. See [Policy Server, Filtering Service, and State Server](#), page 379, for more information.

If, after successfully switching credentials, the user wants to leave the machine before the account override period has ended, the override session can be ended manually by entering the following URL:

```
http://<Filtering_Service_IP_address>:15871/cgi-bin/cancel_useraccount_overrider.cgi
```

You may want to configure this URL as a browser bookmark on machines where the account override option is used.

Moving clients to roles

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Super Administrators can use the **Move Client To Role** page to move one or more clients to a delegated administration role. Once a client has been moved, that client appears in the Managed Clients list and on the Clients page in the target role.

- ◆ The policy applied to the client in the Super Administrators role and the filters that it enforces are copied to the delegated administration role.
- ◆ Delegated administrators can change the policies applied to their managed clients.
- ◆ Filter Lock restrictions do not affect clients managed by Super Administrators, but do affect managed clients in delegated administration roles.
- ◆ If a group, domain, or organizational unit is added to a role as a managed client, delegated administrators in that role can assign policies to individual users in the group, domain, or organizational unit.
- ◆ If a network (IP address range) is added to a role as a managed client, delegated administrators in that role can assign policies to individual computers in that network.
- ◆ The same client cannot be moved to multiple roles.

To move the selected clients to a delegated administration role:

1. Use the **Select role** drop-down list to select a destination role.
2. Click **OK**

A popup message indicates that the selected clients are being moved. The move process may take a while.

3. Changes are not implemented until you click **Save and Deploy**.

If delegated administrators in the selected role are logged on with policy access during the move process, they will have to log out of TRITON - Web Security and log on again to see the new clients in their Managed Clients list.

Working with hybrid filtering clients

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In Websense Web Security Gateway Anywhere deployments, the hybrid service can provide filtering for Internet requests originating from external IP addresses (locations) that you configure, and for requests from users in unrecognized locations (off-site users, for example) that log on to the hybrid service.

Hybrid filtering can apply policies (created in TRITON - Web Security) to:

- ◆ Users, groups, and domains (OUs) defined in a supported, LDAP-based directory service

This requires that Websense Directory Agent be installed and configured (see [Identification of hybrid filtering users](#), page 322).

- ◆ Filtered locations, identified on the Hybrid Configuration > Filtered Locations page. A location is identified by the external IP address, IP address range, or subnet of one or more firewall or gateway machines.

Hybrid filtering does **not** apply policies to individual client machines in your network

Directory clients (users, groups, and OUs) filtered by the hybrid service are identified on the Policy Management > Clients page in TRITON - Web Security, just like those filtered by on-premises components.

Applying a policy to a filtered location is similar to applying a policy to a computer or network client:

1. Add the location to the Settings > Hybrid Configuration > Filtered Locations page (see [Define filtered locations](#), page 211).
2. Add the IP address or range that appears on the Filtered Locations page as a computer or network client on the Policy Management > Clients page (see [Working with computers and networks](#), page 75).
3. Apply a policy to the IP address or range.

As with on-premises filtering, any time no user, group, or location policy applies, the Default policy is used.

5

Internet Filtering Policies

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Related topics:

- ◆ [Internet Usage Filters, page 49](#)
- ◆ [Clients, page 73](#)
- ◆ [The Default policy, page 92](#)
- ◆ [Working with policies, page 93](#)
- ◆ [Filtering order, page 97](#)

Policies govern user Internet access. A policy is made up of:

- ◆ Category filters, used to apply actions (permit, block) to URL categories (see [Filtering categories and protocols, page 50](#))
- ◆ Limited access filters, used to permit access to only a restricted list of URLs (see [Restricting users to a defined list of URLs, page 255](#))
- ◆ Protocol filters, used to apply actions to Internet protocols (see [Filtering categories and protocols, page 50](#))
- ◆ A schedule that determines when each category or limited access filter and protocol filter is enforced

A new Websense software or appliance installation includes 3 predefined policies:

- ◆ **Default** filters Internet access for all clients not governed by another policy. Websense software begins enforcing this policy as soon as a subscription key is entered (see [The Default policy, page 92](#)).
- ◆ **Unrestricted** provides unlimited access to the Internet. This policy is not applied to any clients by default.
- ◆ **Example - Standard User** shows how multiple category and protocol filters can be applied in a policy to provide different degrees of filtering restriction at different times. This policy is used in the New User Quick Start tutorial to demonstrate the process of editing a policy and applying it to clients.

Use any of these policies as is, edit them to suit your organization, or create your own policies.

The Default policy

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Related topics:

- ◆ [Internet Filtering Policies, page 91](#)
- ◆ [Working with policies, page 93](#)
- ◆ [Filtering order, page 97](#)

When you install Websense software, the **Default** policy begins monitoring Internet usage as soon as you enter your subscription key. Initially, the Default policy permits all requests.



Note

When you upgrade from an earlier Websense software version, existing policy settings are preserved. After upgrading, review your policies to ensure that they are still appropriate.

As you create and apply additional filtering policies, the Default policy continues to filter Internet access for any clients not governed by another policy.

The Default policy must provide Internet filtering coverage (enforce a combination of category or limited access filters and protocol filters) 24 hours a day, 7 days a week.



Important

Those upgrading from an earlier version of Websense software may have a Default policy that does not cover all time periods. You are not required to change your Default policy. If, however, you do edit the policy, Websense software will not allow you to save the changes until all time periods are covered.

Edit the Default policy as needed to suit the needs of your organization. The Default policy cannot be deleted.

Working with policies

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Internet Filtering Policies](#), page 91
- ◆ [Creating a policy](#), page 94
- ◆ [Editing a policy](#), page 95
- ◆ [Internet Usage Filters](#), page 49
- ◆ [Refine Filtering Policies](#), page 255,

Use the **Policy Management > Policies** page to review existing policy information. This page also serves as a launch point for adding, editing, and deleting policies, copying policies to delegated administration roles (Super Administrators only), and printing detailed information about your policy configuration.

The Policies page includes a list of existing policies. The list includes a name and description for each policy, as well as the number of user, network, and computer clients to whom that policy has been assigned.

- ◆ To add a policy, click **Add**, and then see [Creating a policy](#), page 94, for more information.
- ◆ To edit a policy, click the policy name in the list, and then see [Editing a policy](#), page 95, for more information.
- ◆ To delete a policy, mark the check box next to the policy name, and then click **Delete**.
- ◆ To see which clients are filtered by the policy, click a number in the Users, Networks, or Computers column. The client information appears in a popup window.

To print a list of all of your policies and their components, including filters, custom categories and protocols, keywords, custom URLs, and regular expressions, click **Print Policies To File**. This feature creates a detailed spreadsheet of policy information in Microsoft Excel format. It is intended to provide a convenient way for human resources specialists, managers, and others with supervisory authority to review filtering policy information.

If you have created delegated administration roles (see [Delegated Administration and Reporting](#), page 333), Super Administrators can copy policies that they have created

to other roles for use by delegated administrators. The filters enforced by the policy are also copied.

**Note**

Because delegated administrators are governed by the Filter Lock, when the Permit All filters are copied, the copy is given a new name, and Filter Lock restrictions are applied. Unlike the original filter, the copied filter can be edited.

To copy policies to another role, first mark the check box next to the policy name, and then click **Copy to Role**. This process may take up to several minutes. See [Copying filters and policies to roles](#), page 260, for more information.

Creating a policy

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Related topics:

- ◆ [Internet Filtering Policies](#), page 91
- ◆ [Working with policies](#), page 93
- ◆ [Editing a policy](#), page 95
- ◆ [Working with filters](#), page 60
- ◆ [Restricting users to a defined list of URLs](#), page 255

Use the **Policy Management > Policies > Add Policy** page to create a new, custom policy.

1. Enter a unique **Policy name**. The policy name must be between 1 and 50 characters long, and cannot include any of the following characters:
* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,
Policy names can include spaces, dashes, and apostrophes.
2. Enter a **Description** for the policy. The description should be clear and detailed to help with policy management in the long term.
The character restrictions that apply to policy names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).
3. To use an existing policy as the foundation for the new policy, mark the **Base on existing policy** check box, and then select a policy from the drop-down list.
To start with an empty policy, leave the check box unmarked.
4. Click **OK** to cache your changes and go to the Edit Policy page.
Use the Edit Policy page to finish defining the new policy. See [Editing a policy](#), page 95.

Editing a policy

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Related topics:

- ◆ [Internet Filtering Policies](#), page 91
- ◆ [Working with policies](#), page 93
- ◆ [Creating a policy](#), page 94
- ◆ [Working with filters](#), page 60
- ◆ [Restricting users to a defined list of URLs](#), page 255

Use the **Policy Management > Policies > Edit Policy** page to make changes to an existing policy, or to finish defining a new policy.

Use the top portion of the page to edit the policy name and description:

- ◆ Click **Rename** to change the policy name.
- ◆ Simply type in the **Description** field to change the filter description.

Under the policy description, the **Clients** field lists how many clients of each type (directory, computer, and network) are currently filtered by this policy. To see which clients are governed by the policy, click the link corresponding to the appropriate client type.

To assign this policy to additional clients, click **Apply to Clients** in the toolbar at the top of the page, and then see [Assigning a policy to clients](#), page 97.

Use the **Policy Definition** area to define which filters this policy applies at different times:

1. To add a time block to the schedule, click **Add**.
2. Use the **Start** and **End** columns in the Schedule table to define the time period that this time block covers.

To define filtering for a period that spans midnight (for example, 5 p.m. to 8 a.m.), add two time blocks to the schedule: one that covers the period from the start time until midnight, and one that covers the period from midnight to the end time.

The **Example - Standard User** policy, included with your Websense software, demonstrates how to define a filtering period that spans midnight.
3. Use the **Days** column to define which days of the week are included in this time block. To select days from a list, click the down arrow in the right portion of the column. When you are finished selecting days, click the up arrow.
4. Use the **Category / Limited Access Filter** column to select a filter to enforce during this time block.

To add a new filter to enforce in this policy, select **Create category filter** or **Create limited access filter**. See [Creating a category filter](#), page 61, or [Creating a limited access filter](#), page 257, for instructions.

5. Use the **Protocol Filter** column to select a protocol filter to enforce during this time block.

To add a new filter to enforce in this policy, select **Create protocol filter**. See [Creating a protocol filter, page 64](#), for instructions.

6. Repeat steps 1 through 5 to add additional time blocks to the schedule.

When any time block in the schedule is selected, the bottom portion of the Edit Policies page shows the filters enforced during that time block. Each filter listing includes:

- ◆ The filter type (category filter, limited access filter, or protocol filter)
- ◆ The filter name and description
- ◆ The filter contents (categories or protocols with actions applied, or a list of sites permitted)
- ◆ The number of policies that enforce the selected filter
- ◆ Buttons that can be used to edit the filter

When you edit a filter on this page, the changes affect every policy that enforces the filter. Before editing a filter that is enforced by multiple policies, click the **Number of policies using this filter** link to see exactly which policies will be affected.

The buttons that appear at the bottom of the filter listing depend on the filter type:

| Filter Type | Buttons |
|-----------------------|--|
| category filter | <ul style="list-style-type: none"> ◆ Use the Permit, Block, Confirm, or Quota button to change the action applied to the selected categories (see Filtering actions, page 57). ◆ To change the action applied to a parent category and all of its subcategories, first change the action applied to the parent category, and then click Apply to Subcategories. ◆ To enable keyword blocking, file type blocking, or blocking based on bandwidth, click Advanced. |
| limited access filter | <ul style="list-style-type: none"> ◆ Use the Add Sites and Add Expressions button to add permitted URLs, IP addresses, or regular expressions to the filter (see Restricting users to a defined list of URLs, page 255). ◆ To remove a site from the filter, mark the check box next to the URL, IP address, or expression, and then click Delete. |
| protocol filter | <ul style="list-style-type: none"> ◆ Use the Permit or Block button to change the action applied to the selected protocols (see Filtering actions, page 57). ◆ To change the action applied to all protocols in a protocol group, change the action applied to any protocol in the group, and then click Apply to Group. ◆ To log data for the selected protocol, or to enable blocking based on bandwidth, click Advanced. |

When you finish editing a policy, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Assigning a policy to clients

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Related topics:

- ◆ [Internet Filtering Policies](#), page 91
- ◆ [Creating a policy](#), page 94
- ◆ [Editing a policy](#), page 95
- ◆ [Clients](#), page 73
- ◆ [Adding a client](#), page 83

Use the **Policies > Edit Policy > Apply Policy to Clients** page to assign the selected policy to clients.

The Clients list shows all of the available directory, computer, and network clients, as well as the policy currently assigned to each client.

Mark the check box next to each client to be filtered by the selected policy, and then click **OK** to return to the Edit Policy page. Click **OK** again to cache your changes.

Click **Save and Deploy** to prompt Websense software to begin using the new policy to filter requests from the selected clients.

Filtering order

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Multiple criteria, applied in a specific order, are used to determine whether to permit, block, or limit requested Internet data.

For each request it receives, Websense Web Security solutions:

1. Verify subscription compliance, making sure that the subscription is current and the number of subscribed clients has not been exceeded.
2. Determine which exception or policy applies, searching in this order:
 - On-premises software (Websense Filtering Service):
 - a. Policy or exceptions assigned to the **user**
 - b. Policy or exceptions assigned to the **IP address** (computer or network) of the machine being used
 - c. Policies or exceptions assigned to **groups** the user belongs to
 - d. Policies or exceptions assigned to the user's **domain (OU)**

- e. The **Default** policy

**Note**

You can configure Filtering Service to prioritize group and domain-based policies over IP address-based policies, if needed. See [Prioritizing group and domain policies](#), page 98.

- (Websense Web Security Gateway Anywhere) For users filtered by the hybrid service:
 - a. Policy or exceptions assigned to the **user**
 - b. Policy or exceptions assigned to **groups** the user belongs to
 - c. Policy or exceptions assigned to the user's **domain (OU)**
 - d. Policy or exceptions assigned to the external **IP address** (filtered location) from which the request originates
 - e. The **Default** policy

The first applicable exception or policy found is used.

3. Filter the request according to the exception or policy's restrictions.

In some cases, a user belongs to more than one group or domain, and no higher-priority policy applies. In these cases, the Websense Web security solution checks the policies assigned to each of the user's groups.

- ◆ If all the groups have the same policy, Websense software filters the request according to that policy.
- ◆ If one of the groups has a different policy, Websense software filters the request according to the **Use more restrictive blocking** selection on the **Settings > General > Filtering** page.
 - If **Use more restrictive blocking** is checked, and any of the applicable policies blocks access to the requested category, Websense software blocks the site.
 - If the option is not checked, and any of the applicable policies permits access to the requested category, Websense software permits the site.

If one of the applicable policies enforces a limited access filter, the **Use more restrictive blocking** option can have different effects than expected. See [Limited access filters and filtering precedence](#), page 256.

- ◆ If one of the groups has a different policy, and any of the potentially applicable policies enforces file type blocking, the file type blocking settings are ignored.

Prioritizing group and domain policies

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In some cases, organizations may prefer that directory policies (applied to users, groups, and domains) take precedence over policies applied to IP addresses (computers and networks).

This might occur, for example, if group-based policies are used widely in the organization, and the Account Override option (see [Account override](#), page 86) is applied to IP addresses in the network. When the default filtering precedence is applied, the IP address-based policy overrides any group-based policies, which could cause account override to fail frequently. When group and domain policies take precedence, the problem is avoided.

To configure Filtering Service to prioritize directory policies (in other words, use the search order User > Group > Domain > Computer > Network to identify the policy to apply to a request):

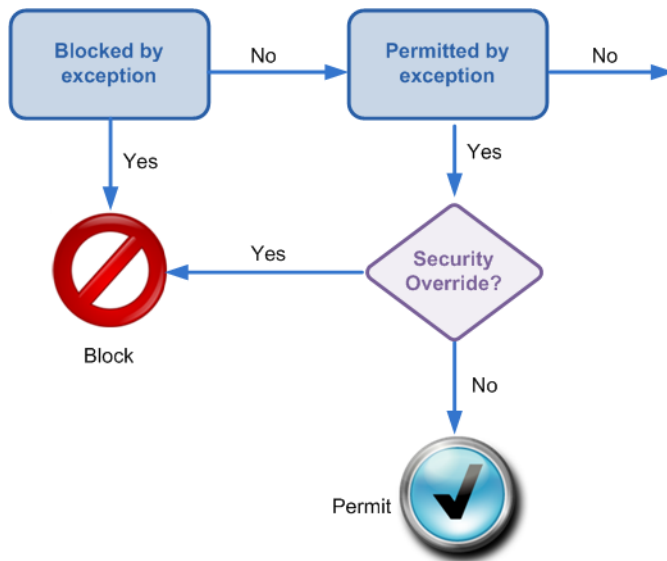
1. Navigate to the Websense **bin** directory on the Filtering Service machine (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).
2. Open the **eimserver.ini** file in a text editor.
3. Locate the **[FilteringManager]** section of the file, and add the following parameter:

```
UserGroupIpPrecedence=true
```
4. Save and close the file.
5. Restart Filtering Service.
 - **Windows:** Use the Windows Services dialog box to restart **Websense Filtering Service**.
 - **Linux:** Use the /opt/Websense/WebsenseDaemonControl command to restart **Filtering Service**.

Filtering a site

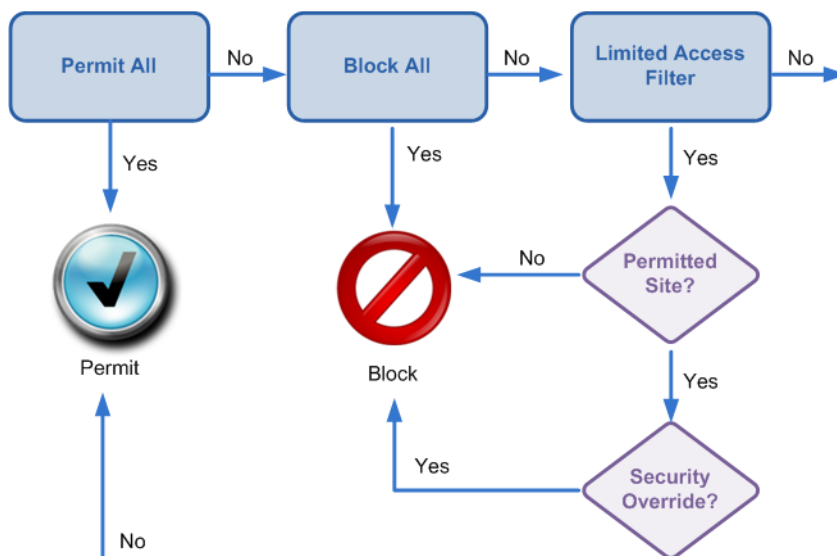
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Websense Web security software evaluates policy restrictions as follows to determine whether the requested site should be permitted or blocked. (For Websense Web Security Gateway Anywhere deployments, note that the logic shown here applies to the on-premises software, but not the hybrid service.)



1. Check to see whether the site is listed in an **exception**.

- If there is a **block exception**, block the site.
- If there is a **permit exception**, permit the site.
- If there is no exception for the site, continue to Step 2.

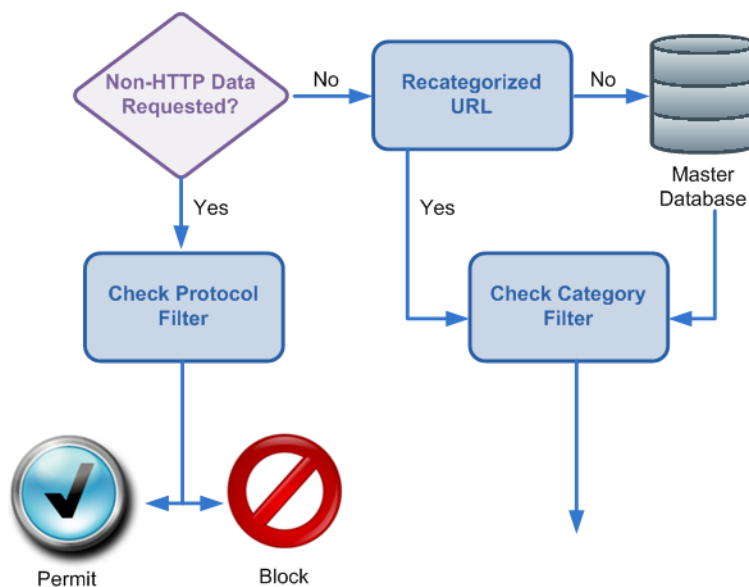


2. Determines which **category filter** or **limited access filter** the policy enforces for the current day and time.
 - If the active category filter is **Permit All**, permit the site.
 - If the active category filter is **Block All**, block the site.
 - If the filter is a **limited access filter**, check whether the filter contains the URL or IP address. If so, permit the site. If not, block the site.
 - If any other category filter applies, continue to Step 3.



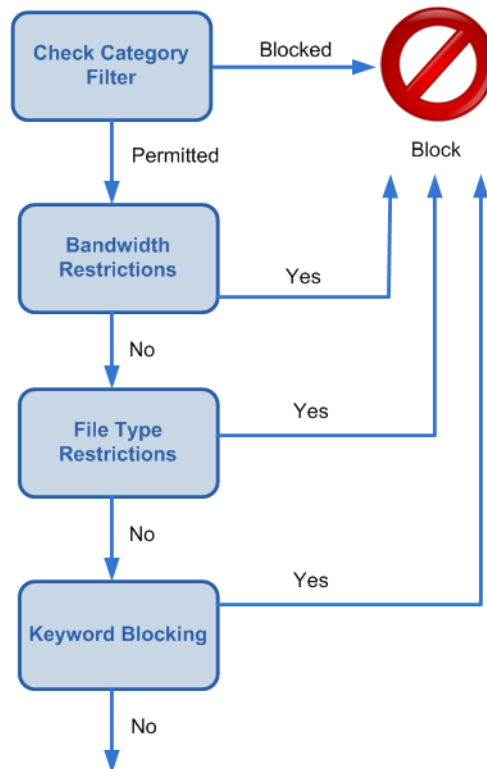
Note

Websense software filters URLs accessed from an Internet search engine's cache like any other URLs. URLs stored this way are filtered according to policies active for their URL categories. Log records for cached URLs show the entire cached URL, including any search engine parameters.



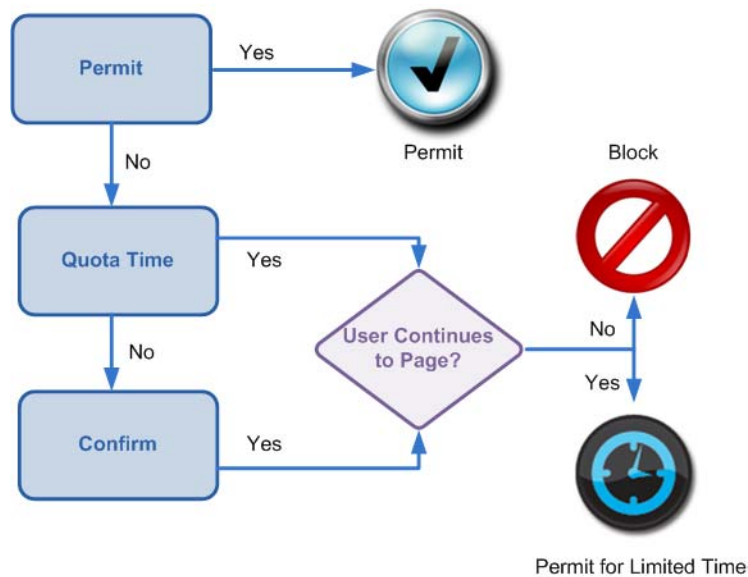
3. Checks the active **protocol filter** and determines whether any non-HTTP protocols are associated with the request.
 - If so, apply protocol filtering settings to data that may be transmitted.
 - If not, continue to Step 4.
4. Tries to match the site to an entry in the **Recategorized URLs** list.
 - If a match is made, identify the category for the site and go to Step 6.
 - If a match is not made, continue to Step 5.
5. Tries to match the site to an entry in the **Master Database**.
 - If the URL appears in the Master Database, identify the category for the site and continue to Step 6.

- If a match is not made, categorize the site as Miscellaneous/Uncategorized and continue to Step 6.



- Checks the active category filter and identifies the action applied to the category containing the requested site.
 - If the action is **Block**, block the site.
 - If any other action is applied, continue to Step 7.
- Checks for **Bandwidth Optimizer** settings in the active category filter (see [Using Bandwidth Optimizer to manage bandwidth, page 279](#)).
 - If current bandwidth usage exceeds any configured limits, block the site.
 - If current bandwidth usage does not exceed the specified limits, or no bandwidth-based action applies, proceed to Step 8.
- Checks for **file type** restrictions applied to the active category (see [Managing traffic based on file type, page 282](#)).
 - If the site contains files whose extensions are blocked, block access to those files. If the site itself is comprised of a blocked file type, block access to the site.
 - If the site does not contain files whose extensions are blocked, go to Step 9.
- Checks for blocked **keywords** in the URL and CGI path, if keyword blocking is enabled (see [Filtering based on keyword, page 266](#)).
 - If a blocked keyword is found, block the site.

- If a blocked keyword is not found, continue to Step 10.



10. Handles the site according to the action applied to the category.

- **Permit:** Permit the site.
- **Limit by Quota:** Display the block message with an option to view the site using quota time or go back to the previous page.
- **Confirm:** Display the block message with the option to view the site for work purposes.

Websense software proceeds until the requested site is either blocked or explicitly permitted. At that point, no further filtering is attempted. For example, if a requested site belongs to a blocked category and contains a blocked keyword, Websense software blocks the site at the category level without checking the keyword filter. Log Server then logs the request as blocked because of a blocked category, not because of a keyword.



Note

Users with password override privileges can access Internet sites regardless of why the site was blocked.

6

Exceptions to Filtering Policies

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Exceptions give administrators a way to quickly permit URLs and IP addresses in blocked categories, or block URLs and IP addresses in permitted categories.

Creating an exception does not require changing the category of a URL, nor does it change the policy assigned to affected clients. It simply allows a flexible and rapid response to user requests, changes in company policies, spikes in Internet activity, or other changes in circumstance.

For example:

- ◆ Permit access to an approved vendor's Web site for all employees, even though the Default policy blocks access to the Shopping category.
- ◆ Block all clients in the Students role from accessing an uncategorized URL that is experiencing a suspicious spike in traffic while the Web site is investigated.
- ◆ Permit access to a design blog for 3 members of the Web Marketing team, while continuing to block general access to the Blogs and Personal Sites category.
- ◆ Block a specific user from accessing a list of URLs at the request of the Human Resources department.

For streamlined instructions for common tasks, see [Exception shortcuts](#), page 112.

For detailed information about what information you can include in an exception, see [Managing filtering exceptions](#), page 105.

Managing filtering exceptions

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Related topics:

- ◆ [Adding or editing a filtering exception](#), page 108
- ◆ [Editing multiple filtering exceptions at the same time](#), page 111

Use the **Policy Management > Exceptions** page to review, edit, or delete existing exceptions, or to add new exceptions.

Super Administrators see all exceptions, regardless of the role in which they were created. Delegated administrators see all exceptions that affect their current role. For more information about how exceptions are ordered in the list, see [How are exceptions organized?](#), page 107.

- ◆ If a single URL or regular expression is blocked or permitted by the exception, the URL or expression is listed. Otherwise, click the link in the URLs column to see a complete list of affected URLs.
- ◆ If the exception affects:
 - A single client, the client's IP address, address range, or display name is listed.
 - A single role, the role name is displayed in the format "Role [Role_Name]"
 - All clients in all roles, the word "Global" is shown.

Global exceptions that can be overridden by delegated administrators are marked with an icon in the Clients column (see [Overriding a filtering exception](#), page 110).

 - Multiple, specific clients, the number of clients is shown. Click the link to see a complete list of affected clients.

The exceptions list also shows:

| Column | Description |
|---------------|---|
| Type | Displays an icon to indicate whether URLs in the exception are: <ul style="list-style-type: none"> • Blocked (🚫) • Permitted (✅) • Permitted with security override disabled (🛑) |
| Last Modified | Shows the date that the exception was last edited. |
| Expires | Indicates whether or not the exception has an expiration date, and if so, displays the date. |
| Active | Shows whether the exception is currently used in filtering (Active) or not (Inactive). |

Use the **Filter** drop-down list to display only exceptions with specified characteristics. The following filters are available:

| Filter | Description |
|-------------|--|
| Permitted | Exceptions that permit URLs. |
| Blocked | Exceptions that block URLs. |
| Active | Exceptions currently used in filtering. |
| Inactive | Exceptions not currently used in filtering. |
| Will Expire | Exceptions for which an expiration date is specified. |
| Expired | Exceptions that are inactive because their expiration date has passed. |

| Filter | Description |
|-----------------------|--|
| Never Expires | Exceptions set to remain active indefinitely. |
| Global | Exceptions that apply to all clients in all roles. |
| All Clients in a Role | Exceptions that apply to all clients in a specific delegated administration role (including the Super Administrator role). |
| Specific Clients | Exceptions that apply to one or more specific clients. |

You can also use the **Search** fields to limit which exceptions are displayed:

1. Use the drop-down list to indicate which table columns you want to search.
2. Enter all or part of the string you want to identify.
3. Click **Search**.
4. To return to your previous view, click **Clear Search Results**.

To create a new exception, click **Add**. See [Adding or editing a filtering exception, page 108](#), for instructions.

To edit an existing exception, click the exception name, or mark the check box next to one or more exceptions, and then click **Edit**. See [Adding or editing a filtering exception, page 108](#), or [Editing multiple filtering exceptions at the same time, page 111](#), for instructions.

To remove an exception, mark the check box next to the exception name, and then click **Delete**.

How are exceptions organized?

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The order in which exceptions are displayed on the Policy Management > Exceptions page depends on the administrator's role.

For Super Administrators, exceptions are grouped as follows:

1. Global exceptions (affecting all clients in all roles)
2. Exceptions that affect specific clients from the Clients page in the Super Administrator role
3. Exceptions that include one or more clients that are not explicitly assigned to a role (do not appear on any Clients page or in any Managed Clients list)
4. Exceptions applied to the entire Super Administrator role
5. Exceptions applied to specific clients in another delegated administration role
6. Exceptions applied to an entire delegated administration role

For delegated administrators in other roles, exceptions are grouped as follows:

1. Exceptions that affect specific clients in the role
2. Exceptions that affect the entire role (including global exceptions)

Within each grouping, exceptions are shown in alphanumeric order.

Adding or editing a filtering exception

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Policy Management > Exceptions > Add Exception** or **Edit Exception** page to create or update an exception that overrides policy-based filtering for specific clients accessing specific sites.

1. Enter or update the unique, descriptive **Name** for the exception. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,
2. In the **URLs** field, list the URLs or IP addresses to be permitted or blocked by the exception.
 - If you enter a URL in the format **domain.com**, both the domain and its subdomains (*www.domain.com*, *subdomain.domain.com*) are matched.
 - If you enter a URL in the format **www.domain.com**:
 - *http://www.domain.com* is matched
 - *http://domain.com* is **not** matched
 - *http://subdomain.domain.com* is **not** matched

Enter one URL or IP address per line.

3. Specify which **Clients** are affected by this exception.
 - Super Administrators can create:
 - **Global** exceptions that apply to all clients in all roles.
If you select this option, also specify whether or not to **Allow delegated administrators to create exceptions that override this exception** (see [Overriding a filtering exception](#), page 110).
 - Exceptions that apply to **All clients in a role**.
After selecting this option, select a role from the drop-down list.
 - Exceptions that apply to **Specific clients in any role**.
After selecting this option, you are offered 2 lists. One (on the left) shows all clients that have been **Defined**: added as managed clients in a delegated administration role, added to the Clients page in any role, or added to an exception. The other (on the right) shows clients **Selected** for this exception.
Search boxes appear above each list to help you quickly find clients to add or remove.

To add a client to the exception that does not appear in the list on the left, click **Add Other Clients**, then add user, group, computer (IPv4 or v6 address), or network (IPv4 or v6 address range) clients.



Important

If you select specific clients that belong to multiple roles, when the exception is created, it is automatically split so that a new exception is created for each affected role.

For example, if you define an exception called “Permit Craigslist” that applies to clients in the Super Administrator, HR, and Facilities roles, when you click OK, 3 exceptions are created.

- ◆ The exceptions for the HR role Facilities role are marked with an icon. Move the mouse over the icon to see which role is affected by the exception.
 - ◆ The exception for the Super Administrator role is not annotated.
-

- Delegated administrators can create exceptions that apply to **All managed clients in this role** or **Specific clients in this role**.

If you select the latter option, you are offered 2 lists. One (on the left) shows all clients **Defined** in your Managed Clients list and Clients page. The other (on the right) shows the clients **Selected** for this exception.

- Search boxes appear above each list to help you quickly find the clients that you want to add.
- If a client does not appear in the **Defined clients** list, that individual is likely a member of a group, OU, or network (IP address range) defined as a managed client in your role. To add such a client, click **Add Other Clients**, then specify the user, group, or IPv4 or v6 address that you want to add.

4. Specify the exception **Type**. This determines whether to **Block** or **Permit** the listed URLs for the specified clients.
5. Indicate when the exception **Expires**.
 - If you select **Never**, the exception is used until you delete it, or edit it to add an expiration date.
 - If you select **After**, enter an expiration date in the format mm/dd/yyyy, or click the calendar icon to select a date. The exception expires at midnight (based on the time set on the Filtering Service machine), when the selected day ends.
6. Determine the exception **State**. By default, the exception is **Active**, and is used for filtering after you cache and save your changes. If you do not want the exception to be used at this time, clear the check box.

7. By default, if a URL is associated with a Security Risk category (like Malicious Web Sites or Spyware), any permitted exception is ignored, and the URL is filtered based on the active policy (see [Prioritizing Security Risk categorization, page 270](#)):

- If a category filter blocks the category, the request is blocked.
- If a category filter permits the category, the request is permitted.
- If a limited access filter is being used, the request is blocked.

To override this security feature, click **Advanced**, then clear the **Block URLs that become a security risk, even if they are permitted by exception** check box.

Making this change is not recommended.

8. To use regular expressions to define URLs that are permitted or blocked by exception, click **Advanced**, then enter one expression per line in the **Regular expressions** box.

To validate the expressions that you create, click **Test Regular Expression**.



Warning

Using large numbers of regular expressions, or using poorly-formed or overly-broad expressions, can lead to a significant decrease in filtering performance.

9. When you are finished making changes, click **OK** to cache your changes and return to the Exceptions page. Changes are not implemented until you click **Save and Deploy**.

Overriding a filtering exception

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Related topics:

- ◆ [Adding or editing a filtering exception, page 108](#)
- ◆ [If multiple exceptions could apply, which takes precedence?, page 111](#)

By default, when a Super Administrator creates an exception, the exception takes precedence over any exceptions that a delegated administrator might create.

For example:

- ◆ A Super Administrator global exception blocks **mysite.com** and a delegated administrator exception for some managed clients permits **mysite.com**.
The URL is blocked by default.
- ◆ A Super Administrator global exception permits **anothersite.com** and a delegated administrator exception blocks the same site.

The URL is permitted by default.

When creating an exception, however, Super Administrators have the option to **Allow delegated administrators to create exceptions that override this exception**. If this option is selected, delegated administrator exceptions take precedence over the Super Administrator exception.


For example:

- ◆ A Super Administrator global exception permits **samplesite.com**, and a delegated administrator exception blocks **samplesite.com** for the delegated administration role.

The URL is blocked for clients in the delegated administration role.

- ◆ A Super Administrator global exception blocks **example.com**, and a delegated administrator exception permits **example.com** for a managed client.

The URL is permitted for the specified managed client.

Super Administrator exceptions that can be overridden are marked by an icon () in the Clients column on the Policy Management > Exceptions page.

If multiple exceptions could apply, which takes precedence?

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By default, Super Administrator exceptions take precedence over exceptions created by delegated administrators. So if a Super Administrator exception blocks a URL, and a delegated administrator exception permits the same URL, the request is **blocked**.

If, however, the Super Administrator configures an exception to allow delegated administrator overrides (see [Overriding a filtering exception, page 110](#)), then the delegated administrator exception takes precedence. So if a Super Administrator exception blocks a URL, and a delegated administrator exception permits the same URL, the request is **permitted**.

If multiple equivalent exceptions could apply to a request (for example, if multiple Super Administrator exceptions include the same URL):

- ◆ Filtering Service checks for blocked exceptions first, so if there is a blocked exception and a permitted exception, the request is **blocked**.
- ◆ If there are multiple blocked exceptions, the first one found is applied.
- ◆ If there are no blocked exceptions and multiple permitted exceptions, the first permitted exception is applied.

After creating an exception, use the Test Filtering tool (see [Test Filtering, page 292](#)) to verify that client requests are filtered as expected.

Editing multiple filtering exceptions at the same time

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Use the **Policy Management > Exceptions > Edit Exceptions** page to edit multiple filtering exceptions at the same time.

When you edit multiple exceptions, you can edit only the exception type (permitted or blocked), expiration setting (never expires or expiration date), state (active or inactive), or security override setting (whether URLs in a permitted exception are permitted or blocked if Websense filtering software finds a security risk).

Click the **View details of each selected exception** link near the top of the page for more information about the exceptions you are editing.

1. Verify the exception **Type** (Block or Permit). To make a change, click **Change**, then make a new selection.
2. To update the **Expires** setting for the exception, click **Change**, then
 - If you select **Never**, the exception is used until you delete it, or edit it to add an expiration date.
 - If you select **After**, enter an expiration date in the format mm/dd/yyyy, or click the calendar icon to select a date.
3. To update the exception **State**, click **Change**, then mark or clear the **Active** check box. Inactive exceptions are not used in filtering.
4. By default, if Websense Web Security determines that a URL is a security risk (hosts malicious software or spyware, for example), the URL is blocked, even if it has been permitted by exception.

To update the current security settings for a permitted exception, click **Advanced**, then click **Change**. Mark or clear the **Block URLs that become a security risk, even if they are permitted by exception** check box.

Disabling the default security override protection is not recommended.

5. When you are finished making changes, click **OK** to cache your changes and return to the Exceptions page. Changes are not implemented until you click **Save and Deploy**.

Exception shortcuts

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Use these shortcuts to find the fastest way to perform common tasks.

For Super Administrators:

- ◆ [How do I block or permit a URL for everyone?, page 113](#)
- ◆ [How do I block or permit a URL for one person?, page 113](#)

For delegated administrators:

- ◆ [How do I block or permit a URL for my entire delegated administration role?, page 114](#)
- ◆ [How do I block or permit a URL for one of my managed clients?, page 114](#)

For all administrators:

- ◆ [How do I create an unfiltered URL?., page 115](#)

How do I block or permit a URL for everyone?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Super Administrators can use the following steps to block or permit a URL for everyone in the network:

1. Click **Create Exception** in the right shortcut pane.
2. Enter a unique **Name** for the exception.
3. Enter the **URL** that you want to permit or block.
4. By default, the exception is set to apply to all clients (**Global** is selected).
5. By default, the exception is set to **Block** the URL. To change this, set the **Type** to **Permit**.
6. Set an expiration date, if applicable.
7. Click **OK** to cache the change, then click **Save and Deploy** to implement it.

How do I block or permit a URL for one person?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Super Administrators can use the following steps to block or permit a URL for a single client in the network, regardless of the client's role.

1. Click **Create Exception** in the right shortcut pane.
2. Enter a unique **Name** for the exception.
3. Enter the **URL** that you want to permit or block.
4. To specify the client affected by this exception, select **Specific clients in any role**.
5. Enter all or part of the user name or IP address in the search box above the **Defined clients** list, then press **Enter**.
 - If the client appears in the search results, select the client and click the right arrow (>) button to place the client in the **Selected** list.
 - If the client does not appear in the search results, click **Add Other Clients**, then:
 - Select a user or group name from the list, or click **Search** to find a user or group in your user directory.
 - Enter an IP address or range in either IPv4 or IPv6 format.When you have identified the client that you want to add, use the appropriate right arrow (>) button to move the client to the Selected list, then click **OK**.
6. By default, the exception is set to **Block** the URL. To change this, set the **Type** to **Permit**.
7. Set an expiration date, if applicable.

8. Click **OK** to cache the change, then click **Save and Deploy** to implement it.

How do I block or permit a URL for my entire delegated administration role?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Delegated administrators can use the following steps to block or permit a URL for all managed clients in the role they manage:



Important

Exceptions created by a Super Administrator may take precedence over exceptions created by a delegated administrator.

If you create an exception that does not seem to be applied to your managed clients, use the **Test Filtering** tool to see if another exception is overriding the one that you created (see [Test Filtering](#), page 292).

1. Click **Create Exception** in the right shortcut pane.
2. Enter a unique **Name** for the exception.
3. Enter the **URL** that you want to permit or block.
4. By default, the exception is set to apply to **All managed clients in this role**.
5. By default, the exception is set to **Block** the URL. To change this, set the **Type** to **Permit**.
6. Set an expiration date, if applicable.
7. Click **OK** to cache the change, then click **Save and Deploy** to implement it.

How do I block or permit a URL for one of my managed clients?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Delegated administrators can use the following steps to block or permit a URL for one of their managed clients.



Important

Exceptions created by a Super Administrator may take precedence over exceptions created by a delegated administrator.

If you create an exception that does not seem to be applied to your managed clients, use the **Test Filtering** tool to see if another exception is overriding the one that you created (see [Test Filtering](#), page 292).

1. Click **Create Exception** in the right shortcut pane.
2. Enter a unique **Name** for the exception.
3. Enter the **URL** that you want to permit or block.
4. To specify the client affected by this exception, select **Specific clients in this role**.
5. Enter all or part of the user name or IP address in the search box above the **Defined clients** list, then press **Enter**.
 - If the client appears in the search results, select the client and click the right arrow (>) button to place the client in the **Selected** list.
 - If the client is a member of a group, OU, or network (IP address range) defined as a managed client in your role, but does not explicitly appear in your Managed Clients list or on your Clients page, that client will not appear in your search results.
In this case, cancel creation of the exception, add the client to your Clients page, then create the exception. This time, the client will appear in your search results on the Add Exceptions page.
6. By default, the exception is set to **Block** the URL. To change this, set the **Type** to **Permit**.
7. Set an expiration date, if applicable.
8. Click **OK** to cache the change, then click **Save and Deploy** to implement it.

How do I create an unfiltered URL?.

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you upgrade from version 7.6 or earlier, your existing unfiltered URLs are changed into permitted exceptions. Unfiltered URLs created by:

- ◆ Super Administrators become global exceptions that permit the URL or regular expression for all clients in all roles.
- ◆ Delegated administrators become role-scoped permitted exceptions that permit the URL or regular expression for all clients in a role.

To permit a URL for everyone (Super Administrators only), or for everyone in the role you manage, see:

- ◆ [How do I block or permit a URL for everyone?](#), page 113
- ◆ [How do I block or permit a URL for my entire delegated administration role?](#), page 114

7

Block Pages

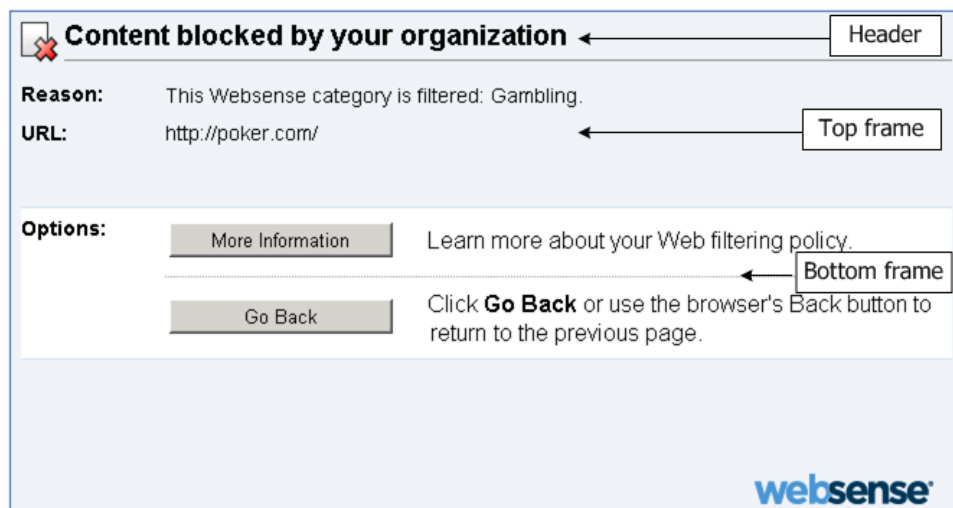
TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Blocking graphical advertisements, page 119](#)
- ◆ [Blocking embedded pages, page 119](#)
- ◆ [Protocol block messages, page 120](#)
- ◆ [Working with block pages, page 121](#)
- ◆ [Creating alternate block messages, page 127](#)
- ◆ [Using an alternate block page on another machine, page 128](#)
- ◆ [Determining why a request was blocked, page 129](#)

When Websense Web Security blocks a Web site, it displays a block page in the client's browser.

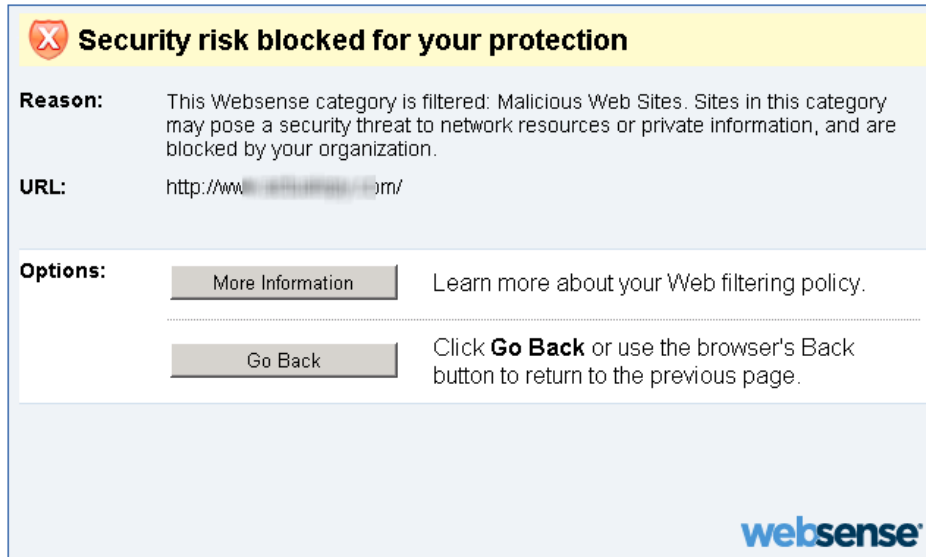
Block pages are constructed from HTML files, by default, made up of 3 main sections.



- ◆ The **header** explains that the site is blocked.
- ◆ The **top frame** contains a block message showing the requested URL and the reason the URL was blocked.

- ◆ The **bottom frame** presents any options available to the user, such as the option to go back to the previous page, or to click a Continue or Use Quota Time button to view the site.

If the site is blocked because it belongs to a category in the Security Risk class (see [Risk classes, page 54](#)), a security block page is displayed.



In Websense Web Security Gateway and Gateway Anywhere deployments, Super Administrators can enable an enhanced version of the block page that includes a link to Websense ACEInsight.

- ◆ Enable the link on the Settings > General > Filtering page.
- ◆ Users can click the link find more information about URLs blocked for security reasons.

Default block page files are included with your Websense software. You can use these default files or create your own custom versions.

**Note**

In Websense Web Security Gateway Anywhere deployments, changes to the on-premises block pages do not affect hybrid filtering block pages. See [Customizing hybrid block pages, page 223](#).

- ◆ Customize the default files to change the block message (see [Working with block pages, page 121](#)).
- ◆ Configure Websense software to use block messages (default or custom) hosted on a remote Web server (see [Using an alternate block page on another machine, page 128](#)).

Blocking graphical advertisements

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In some cases, Websense software displays a very small, blank image file (BlockImage.gif) instead of a standard or security block page. This occurs when:

- ◆ The Advertisements category is blocked, and
- ◆ A site tries to display an image (like a GIF or JPG file) hosted at a URL in the Advertisements category.

Advertisements are often displayed in frames or iframes on a page that also displays non-advertisement information. In this case, graphical advertisements typically appear as white (empty) boxes on the page. The rest of the site content displays normally.

In some cases, an entire site may be made up of advertisement images. In this case, the user will see a blank Web page in the browser instead of a standard block message. Users can tell that the site has been blocked because of the URL, which is something like this:

```
http://<Filtering Service IP address>:15871/cgi-bin/  
blockpage.cgi?ws-session=<session number>
```

If you would prefer to show an image other than the default, 1-pixel block image, simply replace the default file:

1. Navigate to the block page directory on the Filtering Service machine (C:\Program Files\Websense\Web Security\BlockPages\Images or /opt/Websense/BlockPages/Images, by default).
2. Make a backup copy of the original **blockImage.gif** file.
3. Name your image **blockImage.gif** and copy it to the Images directory (overwriting the original file).

Blocking embedded pages

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Most Web pages contain content from multiple sources (ad servers, streaming video sites, social networking applications, image hosting services, and so on). Some sites aggregate content, pulling pieces from multiple sites into a single presentation.

In these instances, users may request sites that contain a mix of permitted and blocked content.

When a frame or iframe within a larger page contains blocked content, Websense software displays a standard or security block page within that frame. When the frame is small, however, the end user might be able to see only a tiny portion of the page (perhaps not even the full block icon), and not understand why the content is blocked.

To address this issue, users can mouse over whatever portion of the block page is visible to see a tooltip-style popup with a brief block message. Clicking the message causes the full block page to appear in a separate window.

To return to browsing the permitted content of the original page, users should close the window showing the block page. Due to browser restrictions, clicking the Back button on a block page opened from within a frame does not have any effect.

If, when the block page is displayed in a new window, it offers a Use Quota Time or Continue option, clicking the button:

1. Closes the new (popup) window.
2. Displays the previously blocked content (and only that content) in the original browser window.

To see the original page, including the previously blocked content, do either of the following:

- ◆ Re-enter the site URL.
- ◆ Use the browser Back button to return to the site, then refresh the page.

Protocol block messages

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with block pages, page 121](#)
- ◆ [Creating alternate block messages, page 127](#)
- ◆ [Using an alternate block page on another machine, page 128](#)

When a user or application requests a blocked, non-HTTP protocol, Websense software typically displays a protocol block message.

When, however, a user requests a blocked FTP, HTTPS, or Gopher site from within a browser, and the request passes through a proxy, an HTML-based block page displays in the browser, instead.

If an application requests the blocked protocol, the user may also receive an error message from the application, indicating that it cannot run. Application error messages are not generated by Websense software.

Some system configuration may be required to display protocol block messages on Windows machines:

- ◆ To display a protocol block message on client machines running Windows NT, XP, or 200x, the Windows Messenger service must be enabled. This service is disabled by default. You can use the Windows Services dialog box to find out if the service is running on a given machine (see [The Windows Services dialog box, page 524](#)).

- ◆ To display protocol block messages on a Windows 98 machine, you must start **winpopup.exe**, located in the Windows directory. Run the application from the command prompt, or configure it to launch automatically by copying it to the Startup folder.

Protocol block messages are not displayed on Linux machines. HTML block pages display regardless of operating system.

If protocol filtering is enabled, Websense software filters protocol requests whether or not the protocol block messages are configured to display on client machines.

Working with block pages

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Protocol block messages, page 120](#)
- ◆ [Customizing the block message, page 123](#)
- ◆ [Creating alternate block messages, page 127](#)
- ◆ [Using an alternate block page on another machine, page 128](#)

The files used to create Websense block pages are stored in the following directory:

- ◆ Windows:

```
C:\Program Files\Websense\Web Security\BlockPages\  
<language_code>\Default
```

or

```
C:\Program Files (x86)\Websense\Web Security\BlockPages\  
<language_code>\Default
```

- ◆ Linux:

```
/opt/Websense/BlockPages/<language_code>/Default
```



Note

In Websense Web Security Gateway Anywhere deployments, these block pages are applied only to users filtered by the on-premises software. To customize the pages provided by hybrid filtering, see [Customizing hybrid block pages, page 223](#).

There are 2 primary HTML files used to construct block pages:

- ◆ **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

| File Name | Contents |
|--------------------|--|
| blockFrame.html | Text and button (Go Back option) for sites in blocked categories. |
| continueFrame.html | Text and buttons for sites in categories to which the Confirm action is applied. |
| quotaFrame.html | Text and buttons for sites in categories to which the Quota action is applied. |
| moreInfo.html | Content for the page that appears when a user clicks the More information link on the block page. |

- ◆ **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.

In addition, several supporting files are used to supply the text content, styles, and button functionality used in block pages:

| File Name | Description |
|-------------------|--|
| blockStyle.css | Cascading style sheet containing most block page styles |
| master.css | Cascading style sheet containing styles for block page popups (like the account override popup) |
| popup.html | When an embedded page is blocked (see Blocking embedded pages, page 119), this file is used to display the full-sized block page popup. |
| block.inl | Provides tools used in constructing the block frame of the block page |
| blockframe.inl | Provides additional information for standard block pages |
| continueframe.inl | Provides additional information for the block frame when users have a “Continue” option |
| quotaframe.inl | Provides additional information for the block frame when users have a “Use Quota Time” option |
| base64.js | JavaScript file used to support credential encryption when users have an “Account Override” option. This file should not be changed or removed. |
| master.js | JavaScript file used in construction of a standard block page |
| security.js | JavaScript file used in construction of a security block page |
| messagefile.txt | Contains text strings used in block pages |

| File Name | Description |
|-----------------------|--|
| WebsenseCopyright.txt | Copyright information for Websense block pages |
| master.wml | WML file with basic blocking information |

In deployments that include Web DLP components, an additional file, **policyViolationDefaultPage.html**, provides block page content when Websense Data Security components block content from being posted to or downloaded from the Web.

Customizing the block message

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Related topics:

- ◆ [Changing the size of the message frame, page 124](#)
- ◆ [Changing the logo that displays on the block page, page 125](#)
- ◆ [Using block page content variables, page 125](#)
- ◆ [Reverting to the default block pages, page 127](#)

You can make a copy of the default block page files, and then use the copy to customize the top frame of the block page that users receive.

- ◆ Change the appearance of the block page to use your organizations logo, colors, and style.
- ◆ Add information about your organization's Internet use policies.
- ◆ Provide a method for contacting an administrator about Internet use policies.

To create your own, custom block pages:

1. Navigate to the Websense block page directory. For English:
Websense/Web Security/BlockPages/en/Default
2. Copy the block page files to the custom block page directory. For English:
Websense/Web Security/BlockPages/en/Custom



Note

Do **not** modify the original block message files in the **BlockPages/en/Default** directory. Copy them to the **BlockPages/en/Custom** directory and then modify the copies.

3. Open the file in a text editor, such as Notepad or vi.

**Warning**

Use a plain text editor to edit block message files. Some HTML editors modify HTML code, which could corrupt the files and cause problems displaying the block messages.

4. Modify the text. The files contain comments that guide you in making changes.
Do not modify the tokens (enclosed by `$*` and `*$` symbols), or the structure of the HTML code. These enable Websense software to display specific information in the block message.
5. Some block page HTML files use hard-coded paths to reference the support files used to construct the page. If you have modified the stylesheet used to format the block pages (**blockStyle.css**) or the JavaScript file used to construct security block pages (**security.js**), make sure that you also update the path to those files in your custom HTML files. For example:

```
<link rel="stylesheet" href="/en/Custom/blockStyle.css" type="text">
```
6. Save the file.
7. Restart Websense Filtering Service (see [Stopping and starting Websense services](#), page 385, for instructions).

Changing the size of the message frame

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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 in the **master.html** file:

1. Copy **master.html** from the **Websense/BlockPages/en/Default** directory to **Websense/BlockPages/en/Custom**.
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.

- Restart Filtering Service to implement the change (see [Stopping and starting Websense services](#), page 385).

Changing the logo that displays on the block page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

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

- Copy the block page files from the **Websense/BlockPages/en/Default** directory to **Websense/BlockPages/en/Custom**, if they have not already been copied.
- Copy an image file containing your organization's logo to the same location.
- 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 your organization's logo:

```

```

 - Replace **wslogo_block_page.png** with the name of the image file containing your organization's logo.
 - Replace the values of the **title** parameter to reflect name of your organization.
- Save and close the file.
- Restart Filtering Service to implement the change (see [Stopping and starting Websense services](#), page 385).

Using block page content variables

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Content variables control the information displayed on HTML block pages. The following variables are included with the default block message code.

| Variable Name | Content Displayed |
|----------------|---|
| WS_DATE | Current date |
| WS_USERNAME | Current user name (excluding domain name) |
| WS_USERDOMAIN | Domain name for the current user |
| WS_IPADDR | IP address of the requesting source machine |
| WS_WORKSTATION | Machine name of the blocked computer (if no name is available, IP address is displayed) |

To use a variable, insert the variable name between the **\$* *\$** symbols in the appropriate HTML tag:

```
<p id="UserName">$*WS_USERNAME*$</p>
```

Here, *WS_USERNAME* is the variable.

The block message code includes additional variables, described below. You may find some of these variables useful in constructing your own, custom block messages. When you see these variables in Websense-defined block message files, however, please do **not** modify them. Because Filtering Service uses these variables when processing blocked requests, they must remain in place.

| Variable Name | Purpose |
|---|--|
| WS_URL | Displays the requested URL |
| WS_BLOCKREASON | Displays why the site was blocked (i.e., which filtering action was applied) |
| WS_ISSECURITY | Indicates whether the requested site belongs to any of the categories in the Security Risk class. When TRUE, the security block page is displayed. |
| WS_PWOVERRIDECGIDATA | Populates an input field in the block page HTML code with information about use of the Password Override button |
| WS_QUOTA_CGIDATA | Populates an input field in the block page HTML code with information about use of the Use Quota Time button |
| WS_PASSWORDOVERRIDE_BEGIN, WS_PASSWORDOVERRIDE_END | Involved in activating password override functionality |
| WS_MOREINFO | Displays detailed information (shown after the More information link is clicked) about why the requested site was blocked |
| WS_POLICYINFO | Indicates which policy governs the requesting client |
| WS_MOREINFOCGIDATA | Sends data to Filtering Service about use of the More information link |
| WS_QUOTATIME | Displays the amount of quota time remaining for the requesting client |
| WS_QUOTAINTERVALTIME | Displays quota session length configured for the requesting client |
| WS_QUOTABUTTONSTATE | Indicates whether the Use Quota Time button is enabled or disabled for a particular request |
| WS_SESSIONID | Acts as an internal identifier associated with a request |
| WS_TOPFRAMESIZE | Indicates the size (as a percentage) of the top portion of a block page sent by a custom block server, if one is configured |

| Variable Name | Purpose |
|----------------------|--|
| WS_BLOCKMESSAGE_PAGE | Indicates the source to be used for a block page's top frame |
| WS_CATEGORY | Displays the category of the blocked URL |
| WS_CATEGORYID | The unique identifier for the requested URL category |

Reverting to the default block pages

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If users experience errors after you implement customized block messages, you can restore the default block messages as follows:

1. Delete all the files from the **Websense/BlockPages/en/Custom** directory. By default, Websense software will return to using the files in the Default directory.
2. Restart Filtering Service (see [Stopping and starting Websense services](#), page 385).

Creating alternate block messages

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Related topics:

- ◆ [Working with block pages](#), page 121
- ◆ [Customizing the block message](#), page 123

You can create your own HTML files to supply the text that appears in the top frame of the block page. Use existing HTML files, create alternate files from scratch, or make copies of **block.html** to use as a template.

- ◆ Create different block messages for each of 3 protocols: HTTP, FTP, and Gopher.
- ◆ Host the files on the Websense machine, or on your internal Web server (see [Using an alternate block page on another machine](#), page 128).

After creating alternate block message files, you must configure Websense software to display the new messages (see [Configuring Websense filtering settings](#), page 68). During this process, you can specify which message is used for each of the configurable protocols.

Using an alternate block page on another machine

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Related topics:

- ◆ [Working with block pages, page 121](#)
- ◆ [Customizing the block message, page 123](#)
- ◆ [Creating alternate block messages, page 127](#)

Instead of using Websense block pages and customizing just the message in the top frame, you can create your own HTML block pages and host them on an internal Web server.



Note

It is possible to store block pages on an external Web server. If, however, that server hosts a site listed in the Master Database, and that site is in a blocked category, the block page itself is blocked.

Some organizations use alternate, remote block pages to hide the identity of the Websense server machine.

The remote block page can be any HTML file; it does not need to follow the format of the default Websense block pages. Using this method to create block pages, however, does prevent you from using the Continue, Use Quota Time, and Password Override functions available with Websense-defined block pages (default or custom).

When the files are in place, edit the **eimserver.ini** file to point to the new block page.

1. Stop the Websense Filtering Service and Policy Server services, in that order (see [Stopping and starting Websense services, page 385](#)).
2. On the Filtering Service machine, navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).
3. Create a backup copy of the **eimserver.ini** file and store it in another directory.
4. Open **eimserver.ini** file in a text editor, and locate the **[WebsenseServer]** section (at the top of the file).
5. Enter either the host name or the IP address of the server hosting the block page in the following format:
`UserDefinedBlockPage=http://<hostname or IP address>`
The protocol portion of the URL (http://) is required.
6. Save the file and close the text editor.
7. Restart the Websense Policy Server and Filtering Service, in that order.

When the services have started, users receive the block page hosted on the alternate machine.

Determining why a request was blocked

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If you want to investigate why a request was blocked, information is available in the block page source code.

- ◆ If the block page was sent by Filtering Service (for users filtered by the appliance or on-premises software), click **More information**. Next, right-click anywhere in the message text and select **View Source**. See [Request blocked by Filtering Service, page 129](#).
- ◆ If the block page was sent by hybrid filtering (in Websense Web Security Gateway Anywhere environments), right-click anywhere in the block message and select **View Source**. See [Request blocked by hybrid filtering, page 130](#).

Request blocked by Filtering Service

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The HTML source for the more information block page shows information about who requested the site, and what criteria were used to filter the request. Specifically, it shows:

- ◆ The user name and source IP address of the request (if available), and the time (in the format HH:MM) that the request was made.
- ◆ Which policy is being applied to the request, and whether the policy is assigned to the user, group, domain, computer (individual IP address), or network (IP address range).

If more than one group policy could apply, the message also states whether the **Use more restrictive blocking** setting is in use. See [Configuring Websense filtering settings, page 68](#).

- ◆ What aspect of the policy caused the request to be blocked (for example, category or limited access filter, file type, keyword, bandwidth usage).
- ◆ The name of the role in which the policy was assigned.
- ◆ What resource was used to categorize the site (Websense Master Database, real-time database update, a regular expression included in a real-time database update, custom URL, keyword, Websense Web Security Gateway scanning, and so on).

For example:

```
User Name: WinNT://Test/tester1 Source IP Address:
10.12.132.17 Current Time: 15:30
```

This network (10.12.132.0 to 10.12.132.255) is filtered by policy: role-8**Default. The policy includes a category or limited access filter for the current time.

This policy is associated with role: Super Administrator.

The request was categorized by: Master database.

Here, the request is filtered by a policy (Default) applied to the network (IP address range) in which the user's machine is located. The policy assignment was performed in the Super Administrator role, and the requested site was categorized by the Master Database.

Request blocked by hybrid filtering

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The HTML source for the block page sent by hybrid filtering shows information about how the requested site was categorized, and how a policy was applied to the request. Specifically, it shows:

- ◆ The name of the role in which the policy was assigned. See [Delegated administration roles, page 334](#).
- ◆ The category assigned to the site.
- ◆ The policy or policies assigned to the request.
- ◆ If file type blocking was used, which file type applies.
- ◆ The protocol (HTTP, HTTPS, or FTP over HTTP) used to make the request.
- ◆ What resource was used to categorize the site (Websense Master Database, real-time database update, a regular expression included in a real-time database update, custom URL, keyword, Websense Web Security Gateway scanning, and so on).
- ◆ If a problem occurred that prevented the hybrid service from reporting why a request was blocked, or if the hybrid service experienced an error when the block page was being displayed, the **Exception reason** field displays an explanation and numeric error code. If the problem recurs, Websense Technical Support can use the error code in troubleshooting the issue.

For example:

```
Role: Super Administrator
Category: Peer-to-Peer File Sharing
Policy: Default
Domain:
Group:
FileType:
Network:
Protocol: http
Category Reason String: Master database
Exception reason:
```

Here, the request is filtered by a policy (Default) in the Super Administrator role that blocks the Peer-to-Peer File Sharing category. The requested HTTP site was categorized by the Master Database.

8

Use Reports to Evaluate Filtering

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Related topics:

- ◆ [Presentation reports](#), page 135
- ◆ [Investigative reports](#), page 156
- ◆ [Accessing self-reporting](#), page 182
- ◆ [Real-Time Monitor](#)

TRITON - Web Security provides several reporting tools for use in evaluating the effectiveness of your filtering policies. (Log Server, a Windows-only component, must be installed to enable all reporting features except Real-Time Monitor.)



Note

In organizations that use delegated administration, reporting features may not be available to all administrators. See [Delegated Administration and Reporting](#), page 333.

- ◆ **Web Security Dashboard charts** provide threat, risk, usage, and system information to help you review Internet activity in your network at a glance. For most charts, the time period, chart style, and set of results shown can be customized. See [The Web Security Dashboard](#), page 33.
- ◆ **Presentation reports** offer a list of predefined reports, custom reports, and report templates. Reports are available in bar chart, trend chart, and tabular formats. Copy any predefined report apply your own filters to create a custom report, or use a report template to create your report from scratch. See [Presentation reports](#), page 135, for complete details.
- ◆ **Investigative reports** let you browse through log data interactively. The main page shows a summary-level bar chart of activity by risk class. Click the different elements on the page to update the chart or get a different view of the data. See [Investigative reports](#), page 156, for details on the many ways you can view Internet use data.

- ◆ **Real-Time Monitor** provides insight into current Internet filtering activity in your network, showing the URLs being requested and the action applied to each request. In Websense Web Security Gateway and Web Security Gateway Anywhere deployments, the monitor also shows which sites were scanned by Content Gateway. If a site is dynamically recategorized based on scanning results, both the original category and current category are shown.

See [Real-Time Monitor](#), page 183, for more information.



Important

Internet Explorer 8 Compatibility View is **not** supported with the TRITON console. If you experience odd reporting behavior or page layouts in Internet Explorer 8, make sure that Compatibility View button (between the URL and the Refresh button in the browser address bar) is not selected.

What is Internet browse time?

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Related topics:

- ◆ [Database jobs](#), page 419
- ◆ [Configuring Internet browse time options](#), page 426

You can generate both presentation and investigative reports showing **Internet browse time** (IBT), the estimated amount of time an individual spent accessing Web sites. No software program can tell the exact amount of time that someone spends actually viewing a particular site once it is open. One person might open a site, view it for a few seconds, and then take a business call before requesting another site. Someone else might spend several minutes reading each site in detail before moving on to the next one.

Websense software includes a Log Database job to calculate IBT, using a formula based on certain configurable values. This job runs once a day, so browse time information can lag the actual log data. See [Database jobs](#), page 419, for more information.

For browse time calculations, an Internet session begins when a user opens a browser. It continues as long as that user requests additional Web sites at least every 3 minutes. (This default read time threshold is configurable. See [Configuring Internet browse time options](#), page 426.)

The Internet session ends when more than 3 minutes pass before the user requests another site. Websense software calculates the total time of the session, starting with the time of the first request and ending 3 minutes after the last request.

A new session begins if the user makes additional requests after more than 3 minutes. Commonly, a user's browse time consists of multiple sessions each day.

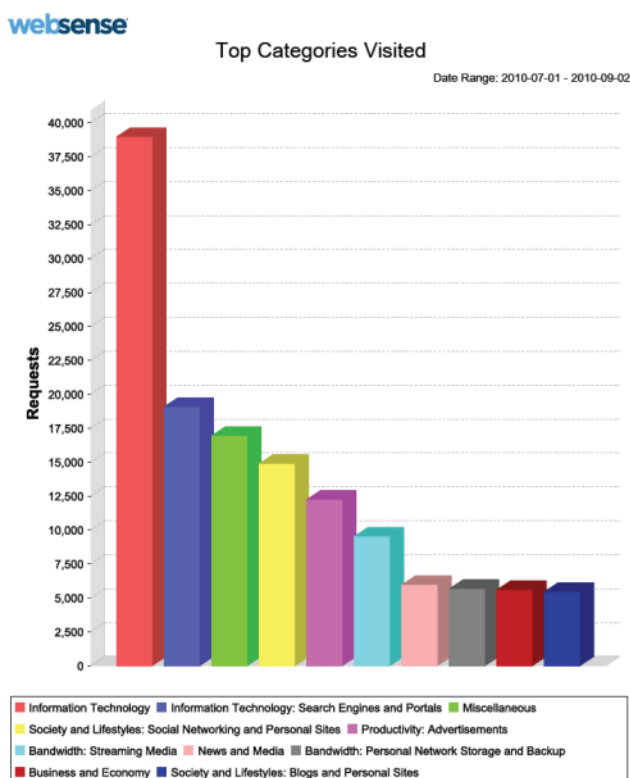
Presentation reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Creating a new presentation report, page 137](#)
- ◆ [Working with Favorites, page 145](#)
- ◆ [Running a presentation report, page 146](#)
- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Viewing the scheduled jobs list, page 153](#)

Use the **Reporting > Presentation Reports** page to generate bar charts, trend charts, and tabular reports in HTML, PDF, or Microsoft Excel (XLS) format.



Available reports and templates are found in the Report Catalog, which organizes them into related **report categories**. Your subscription determines which report categories and predefined reports appear in the catalog. For example, report categories like Real Time Security Threats and Scanning Activity require a Websense Web Security Gateway or Gateway Anywhere subscription.

- ◆ Expand a category to see the reports or templates that it includes.
- ◆ Click a report title to see a brief description of the information included in the report.

To run a presentation report:

1. Select the report in the catalog, and then click **Run**. The Run Report page appears.
2. Specify report details as explained in [Running a presentation report, page 146](#).
 - If you run the report in the foreground (do not schedule the report to run), the report is not automatically saved when you close the application used to view the report (a Web browser, Adobe Reader, or Microsoft Excel, for example). You must save the report manually.
 - If you run the report in the background (schedule the report to run immediately), when the report completes, a copy is saved, and a link to the report appears on the Review Reports page.

To use any template, predefined report, or custom report in the Report Catalog as the basis for a new report:

1. Select a report or template name in the catalog.

If you select a report template:

- A **New Trend Report** shows Internet activity trends over time.
- A **New Top N Report** shows top levels of Internet activity with the characteristics you specify.

2. Click **Save As**.
3. Provide a name, title, and report category for the new file.

If you are using a report template, also define the report dimensions (i.e., what is measured and the unit of measurement).

For instructions, see [Creating a new presentation report, page 137](#).

4. To refine the report, edit the report filter. The report filter controls elements such as which users, categories, protocols, and actions are to be included in your report. For instructions, see [Defining the report filter, page 139](#).

To make changes to the report filter for any custom report, select the report, and then click **Edit**. You cannot modify or delete predefined reports or report templates.

To delete a custom report, select the report, and then click **Delete**. If a deleted report appears in any scheduled jobs, it will continue to be generated with that job. See [Viewing the scheduled jobs list, page 153](#), for information on editing and deleting scheduled jobs.

Reports that are used frequently can be marked as Favorites to help you find them more quickly. Just select the report, and then click **Favorite** (see [Working with Favorites, page 145](#)). Mark **Show Favorites only** to display only templates that you have marked as favorites in the Report Catalog.

Use the buttons at the top of the page to schedule reports to run later, view scheduled report jobs, and view and manage reports created by the scheduler.

- ◆ Click **Scheduler** to define a job containing one or more reports to be run at a specific time or on a repeating schedule. See [Scheduling presentation reports, page 147](#).
- ◆ Click **Job Queue** to see and manage a list of existing scheduled jobs, along with the status of each job. See [Viewing the scheduled jobs list, page 153](#).
- ◆ Click **Review Reports** to see and manage a list of reports that were successfully scheduled and run. See [Reviewing scheduled presentation reports, page 155](#).

Creating a new presentation report

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Related topics:

- ◆ [Presentation reports, page 135](#)
- ◆ [Defining the report filter, page 139](#)
- ◆ [Running a presentation report, page 146](#)

Use the **Save As New Report** page to create:

- ◆ An editable version of any predefined report.
- ◆ A copy of an existing custom report, in order to apply different report filters.
- ◆ A new report, based on a report template.

The options available on the page depend on which option you have selected.

If you are making a copy of a predefined or custom report:

1. Replace the **Report name** with a name that will make it easy to identify the new report. (The default name is the name of the original report template, with a number appended to indicate that this is a copy.)
The name must be from 1 to 85 characters, and cannot duplicate another report name.
2. Enter a **Report title**. This is the title that will appear on at the top of the page when the report is generated.
3. Select a **Report category**. This determines how the report is grouped in the Report Catalog. The default is User-Defined Reports.
4. Do one of the following:
 - Click **Save** to save the new version of the report and return to the Report Catalog.
 - Click **Save and Edit** to edit the report filter for the new report (see [Defining the report filter, page 139](#)).
 - Click **Cancel** to abandon your changes and return to the Report Catalog.

If you are using a report template to create a new report:

1. Enter a unique **Report name**. This is the name that will appear in the Report Catalog.
The name must be from 1 to 85 characters, and cannot duplicate another report name.
2. Enter a **Report title**. This is the title that will appear on at the top of the page when the report is generated.
3. Select a **Report category**. This determines how the report is grouped in the Report Catalog. The default is User-Defined Reports.
4. If you are creating a top N report, continue with step 5.

If you are creating a trend report, indicate the **Time unit** for the trend report's X-axis. You can create a report showing trends by day (default), week, month, or year.

- To ensure that the data you want appears in a trend report, make sure the **first day** of the first week, month, or year that you want to include is set as the first date in the range. (By default, the first day of the week is Sunday, but this may vary based on your Microsoft SQL Server configuration and locale.)
- When user information is updated in the directory service, user group information may also change. This can affect weekly, monthly, and yearly group trend reports, because to be included in a group report, the user must be in the group at least one day before the start of the selected period.

For example, for a user's activity to be included in a monthly group trend report for August 2012, the user must be in the group as of July 31, 2012. A user joining the group on August 23, 2012 (a Wednesday) would be included in daily trend reports starting on the following day, in weekly trend reports starting the following Saturday, Sunday, or Monday (depending on the SQL Server configuration), and in monthly trend reports starting September 01, 2012.

5. Use the **Internet activity per** drop-down list to select the focal area of the report. You can show Internet activity per category (default), protocol, risk class, action (like permit or block), user, or group.
6. Use the **Measure by** drop-down list to select how the focal area is measured. You can measure by requests (default), bandwidth, or browse time.
7. Do one of the following:
 - Click **Save** to save the report and return to the Report Catalog. The new report is now listed in the report category that you selected in step 5.
 - Click **Save and Edit** to edit the report filter for the new report. The process of editing the report filter is the same as for any custom report (see [Defining the report filter](#), page 139).
 - Click **Cancel** to abandon your changes and return to the Report Catalog.

Defining the report filter

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Related topics:

- ◆ [Creating a new presentation report, page 137](#)
- ◆ [Running a presentation report, page 146](#)

Report filters let you control what information is included in a presentation report. For example, you might choose to limit a report to selected clients, categories, risk classes, or protocols, or even selected filtering actions (permit, block, and so forth). You also can give a new name and description for the entry in the Report Catalog, change the report title, specify a custom logo to appear, and set other general options through the report filter.



Note

Using a custom logo requires some preparation before you define the report filter. You must create the image in a supported format and place the file in the appropriate location. See [Customizing the report logo, page 144](#).

The options available in the filter vary:

- ◆ If you are editing either a predefined report or a custom report based on a predefined report, the options available in the filter depend on the report selected. For instance, if you selected a report of group information, such as Top Blocked Groups by Requests, you can control which groups appear in the report but you cannot choose individual users.
- ◆ If you are editing a report created using a the New Top N Report or New Trend Report template, **all** options are shown in the filter, even if they are not applicable in the custom report.

Be careful to select only options relevant to your report.

The filter for predefined reports cannot be changed. You can edit the filter for a custom report when you create it by choosing **Save and Edit** on the Save As New Report page, or select the report in the Report Catalog at any time and click **Edit**.

The Edit Report Filter page opens, with separate tabs for managing different elements of the report. Select the items you want on each tab, then click **Next** to move to the next tab. For detailed instructions, see:

- ◆ [Selecting clients for a report, page 140](#)
- ◆ [Selecting categories for a report, page 141](#)
- ◆ [Selecting protocols for a report, page 142](#)
- ◆ [Selecting actions for a report, page 142](#)
- ◆ [Setting report options, page 143](#)

On the **Confirm** tab, choose whether to run or schedule the report, and save the report filter. See [Confirming report filter definition](#), page 144.

Selecting clients for a report

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Related topics:

- ◆ [Selecting categories for a report](#), page 141
- ◆ [Selecting protocols for a report](#), page 142
- ◆ [Selecting actions for a report](#), page 142
- ◆ [Setting report options](#), page 143
- ◆ [Confirming report filter definition](#), page 144

The **Clients** tab of the Presentation Reports > Edit Report Filter page lets you control which clients are included in the report. You can select only one type of client for each report. For example, you cannot select some users and some groups for the same report.

When the report definition specifies a particular client type, you can choose clients of that type or clients that represent a larger grouping. For example, if you are defining a filter for a report based on Top Blocked Groups by Requests, you can select groups or domains (OUs) for the report, but you cannot select individual users.

No selections are required on this tab if you want to report on all relevant clients.

1. Select a client type from the drop-down list.
2. Set the maximum number of search results from the **Limit search** list.

Depending on the traffic in your organization, there may be large numbers of users, groups, or domains (OUs) in the Log Database. This option manages the length of the results list, and the time required to display the search results.
3. Enter one or more characters for searching, and then click **Search**.

Use asterisk (*) as a wildcard to signify missing characters. For example, J*n might return Jackson, Jan, Jason, Jon, John, and so forth.

Define your search string carefully, to assure that all desired results are included within the number selected for limiting the search.
4. Highlight one or more entries in the results list, and click the right arrow button (>) to move them to the **Selected** list.
5. Repeat steps 2-4 as needed to conduct additional searches and add more clients to the Selected list.
6. After you are finished making selections, click **Next** to open the Categories tab. See [Selecting categories for a report](#), page 141.

Selecting categories for a report

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Related topics:

- ◆ [Selecting clients for a report, page 140](#)
- ◆ [Selecting protocols for a report, page 142](#)
- ◆ [Selecting actions for a report, page 142](#)
- ◆ [Setting report options, page 143](#)
- ◆ [Confirming report filter definition, page 144](#)

The **Categories** tab of the Presentation Reports > Edit Report Filter page lets you control the information included in the report on the basis of categories or risk classes. See [Risk classes, page 54](#).

No selections are required on this tab if you want to report on all relevant categories or risk classes.

1. Select a classification: **Category** or **Risk Class**.

Expand a parent category to display its subcategories. Expand a risk class to see a list of the categories currently assigned to that risk class.

If the associated report is for a specific risk class, only the relevant risk class and the categories it represents are available for selection.



Note

If you select a subset of categories for the risk class named in the report, consider modifying the report title to reflect your selections.

2. Mark the check box for each category or risk class to be reported.
Use the **Select All** and **Clear All** buttons below the list to minimize the number of individual selections required.
3. Click the right arrow button (>) to move your selections to the **Selected** list.
When you mark a risk class, clicking the right arrow places all the associated categories into the Selected list.
4. After all selections are complete, click **Next** to open the Protocols tab. See [Selecting protocols for a report, page 142](#).

Selecting protocols for a report

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Related topics:

- ◆ [Selecting clients for a report, page 140](#)
- ◆ [Selecting categories for a report, page 141](#)
- ◆ [Selecting actions for a report, page 142](#)
- ◆ [Setting report options, page 143](#)
- ◆ [Confirming report filter definition, page 144](#)

The **Protocols** tab of the Presentation Reports > Report Filter lets you control which protocols are included in the report.

No selections are required on this tab if you want to report on all relevant protocols.

1. Expand and collapse the protocol groups with the icon beside the group name.
2. Mark the check box for each protocol to be reported.
Use the **Select All** and **Clear All** buttons below the list to minimize the number of individual selections required.
3. Click the right arrow button (>) to move your selections to the **Selected** list.
4. After all selections are complete, click **Next** to open the Actions tab. See [Selecting actions for a report, page 142](#).

Selecting actions for a report

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Related topics:

- ◆ [Selecting clients for a report, page 140](#)
- ◆ [Selecting categories for a report, page 141](#)
- ◆ [Selecting protocols for a report, page 142](#)
- ◆ [Setting report options, page 143](#)
- ◆ [Confirming report filter definition, page 144](#)

The **Actions** tab of the Presentation Reports > Edit Report Filter page lets you control which precise filtering actions (for example, permitted by limited access filter or blocked by quota) are included in the report. If the report specifies that it applies only to blocked requests, you can select only block-related actions (blocked by file type, blocked by keyword, and so on).

No selections are required on this tab if you want to report on all relevant actions.

1. Expand and collapse the action groups with the icon beside the group name.
2. Mark the check box for each action to be reported.

Use the **Select All** and **Clear All** buttons below the list to minimize the number of individual selections required.

3. Click the right arrow button (>) to move your selections to the **Selected** list.
4. After all selections are complete, click **Next** to open the Options tab. See [Setting report options](#), page 143.

Setting report options

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Related topics:

- ◆ [Customizing the report logo](#), page 144
- ◆ [Selecting clients for a report](#), page 140
- ◆ [Selecting categories for a report](#), page 141
- ◆ [Selecting protocols for a report](#), page 142
- ◆ [Selecting actions for a report](#), page 142
- ◆ [Setting report options](#), page 143
- ◆ [Confirming report filter definition](#), page 144

Use the **Options** tab of the Presentation Reports > Edit Report Filter page to configure several aspects of the report.

1. Optionally modify the **Report catalog name**. The name must contain from 1 to 85 characters.
This name does not appear on the report itself; it is used only for identifying the unique combination of report format and filter in the Report Catalog.
2. Modify the **Report title** that appears on the report. The title can have up to 85 characters.
3. Modify the **Description** to appear in the Report Catalog. The description can have up to 336 characters.
The description should help you identify this unique combination of report format and filter in the Report Catalog.
4. Select a logo to appear on the report.
All supported image files in the appropriate directory are listed. See [Customizing the report logo](#), page 144.
5. Mark the **Save as Favorite** check box to have the report listed as a Favorite.
The Report Catalog shows a star symbol beside Favorite reports. You can select **Show only Favorites** on the Report Catalog page to reduce the number of reports listed, which enables you to move more quickly to a particular report.
6. Mark the **Show only top** check box and then enter a number from 1 to 20 to limit the number of items reported.
This option appears only if the selected report is formatted as a Top N report, designed to show a limited number of items. The item that is limited depends on

the report. For example, for a Top Categories Visited report, this entry determines how many categories are reported.

7. After all entries and selections are complete, click **Next** to open the Confirm tab. See [Confirming report filter definition](#), page 144.

Customizing the report logo

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By default, presentation reports display the Websense logo in the upper left corner. When you create a custom report and edit its report filter, you can choose a different logo.

1. Create an image file in one of the following formats:
 - .bmp
 - .gif
 - .jfif
 - .jpe
 - .jpg
 - .jpeg
 - .png
 - .tiff
2. Use a maximum of 25 characters for the image file name, including extension.
3. Copy the image file to the **ReportTemplates\images** directory. The default path is:

```
C:\Program Files (x86)\WebSense\Web Security\Manager\
ReportTemplates\images
```

All supported image files in this directory automatically appear in the drop-down list on the Options tab of the Edit Report Filter page. The image is automatically scaled to fit within the space allocated for the logo. (See [Setting report options](#), page 143.)



Note

Do not delete or move images that are active in report filters. If the logo file is missing, the report cannot be generated.

Confirming report filter definition

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Related topics:

- ◆ [Selecting clients for a report](#), page 140
- ◆ [Selecting categories for a report](#), page 141
- ◆ [Selecting protocols for a report](#), page 142
- ◆ [Selecting actions for a report](#), page 142
- ◆ [Setting report options](#), page 143

The **Confirm** tab of the Presentation Reports > Edit Report Filter page displays the name and description that will appear in the Report Catalog, and lets you choose how to proceed.

1. Review the **Name** and **Description**.

If any changes are needed, click **Back** to return to the Options tab, where you can make those changes. (See [Setting report options](#), page 143.)

2. Indicate how you want to proceed:

| Option | Description |
|-------------------|---|
| Save | Saves the report filter and returns to the Report Catalog. See Presentation reports , page 135. |
| Save and Run | Saves the report filter and opens the Run Report page. See Running a presentation report , page 146. |
| Save and Schedule | Saves the report filter and opens the Schedule Report page. See Scheduling presentation reports , page 147. |

3. Click **Finish** to implement the selection made in step 2.

Working with Favorites

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Related topics:

- ◆ [Presentation reports](#), page 135
- ◆ [Running a presentation report](#), page 146
- ◆ [Scheduling presentation reports](#), page 147

You can mark any presentation report, either template or custom, as a Favorite. Use this option to identify the reports you generate most frequently and want to be able to locate quickly in the Report Catalog.

1. On the **Presentation Reports** page, highlight a report that you generate frequently, or want to be able to locate quickly.
2. Click **Favorite**.
A star symbol appears beside Favorite report names in the list, letting you quickly identify them when all reports are shown.
3. Mark the **Show only Favorites** check box above the Report Catalog to limit the list to those marked as Favorites. Clear this check box to restore the full list of reports.

If your needs change and a Favorite report is no longer being used as frequently, you can remove the Favorite designation.

1. Highlight a report that shows the star symbol of a Favorite.
2. Click **Favorite**.

The star symbol is removed from that report name in the Report Catalog. The report is now omitted from the list if you choose **Show only Favorites**.

Running a presentation report

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Related topics:

- ◆ [Presentation reports](#), page 135
- ◆ [Scheduling presentation reports](#), page 147

Use the **Presentation Reports > Run Report** page to generate a single report immediately. You can also create jobs with one or more reports and schedule them to run once or on a repeating cycle (see [Scheduling presentation reports](#), page 147).



Note

Before generating a report in PDF format, make sure that Adobe Reader v7.0 or later is installed on your local machine.

Before generating a report in XLS format, make sure that Microsoft Excel 2003 or later is installed on your local machine.

If the appropriate software is not installed, you have the option to save the file.

To run a report:

1. Select the **Start date** and **End date** to define the time period covered in the report.
2. Select an **Output format** for the report.

| Format | Description |
|--------|---|
| PDF | Portable Document Format. PDF files are formatted for viewing, and can be opened in Adobe Reader. |
| HTML | HyperText Markup Language. HTML files are formatted for viewing, and can be opened in a browser. |
| XLS | Excel spreadsheet. XLS files are formatted for reuse, and can be opened in Microsoft Excel. |

3. If you selected a **Top N** report, choose the number of items to be reported.
4. Specify how you want the report to be generated:

- Select **Schedule the report to run in the background** (default) to have the report run immediately as a scheduled job. Optionally provide an email address to be notified when the report is complete. You can also provide an email address to be notified if the report cannot be generated. (You can also monitor the job queue to see the status of the report.)
- Deselect **Schedule the report to run in the background** to have the report run in the foreground. In this case, the report is not scheduled, and does not appear on the Review Reports page.

**Note**

If you plan to run multiple reports in the foreground, make sure that you use the embedded **Close** button to close the popup window used to display the “generating report” and “report complete” messages. If you use the browser’s close (X) button, subsequent attempts to run reports in the foreground may fail until you navigate away from the Presentation Reports page, come back, and run the report again.

5. Click **Run**.

- If you scheduled the report to run immediately, the completed report is saved automatically and added to the Review Reports list. To view, save, or delete the report, click **Review Reports** at the top of the Presentation Reports page.
- If you ran the report in the foreground, a new browser window appears, displaying report progress. HTML reports appear in the browser window when complete; with PDF or XLS formats, you have a choice of whether to open the report or save it to disk.

With this option, presentation reports does not automatically store a copy of the report. Use the save functionality built into the application used to open the report if you want to save a copy to view later.

6. To print a report, use the print option offered by the application used to display the report.

For best results, generate PDF output for printing. Then, use the print options in Adobe Reader.

Scheduling presentation reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Presentation reports, page 135](#)
- ◆ [Running a presentation report, page 146](#)
- ◆ [Viewing the scheduled jobs list, page 153](#)

You can run presentation reports as they are needed, or you can use the **Presentation Reports > Scheduler** page to create jobs that define a schedule for running one or more reports.

Reports generated by scheduled jobs are distributed to one or more recipients via email. As you create scheduled jobs, consider whether your email server will be able to handle the size and quantity of the attached report files.

The completed reports are also added to the Presentation Reports > Review Reports page (see [Reviewing scheduled presentation reports](#), page 155).

To access the Scheduler:

- ◆ Click the **Scheduler** button at the top of the Presentation Reports page (above the Report Catalog).
- ◆ When editing a report filter, choose **Save and schedule** in the Confirm tab, and then click **Finish** (see [Defining the report filter](#), page 139).
- ◆ Click the job name link on the Job Queue page to edit a job.
- ◆ Click **Add** on the Job Queue page to create a new job.

The Scheduler page contains several tabs for selecting the reports to run and the schedule for running them. For detailed instructions, see:

- ◆ [Setting the schedule](#), page 149
- ◆ [Selecting reports to schedule](#), page 151
- ◆ [Setting the date range](#), page 151
- ◆ [Selecting output options](#), page 152

After creating jobs, use the Job Queue to review job status and find other helpful information (see [Viewing the scheduled jobs list](#), page 153).

When a scheduled presentation report has run, the report file is sent to recipients as an email attachment called **presentationreport_0**. The number increments, according to the number of reports attached.

Scheduled reports are also automatically saved to the **ReportingOutput** directory on the TRITON - Web Security machine (C:\Program Files (x86)\Websense\Web Security\ReportingOutput, by default). Note that the name of the attachment sent via email does not match the name of the file stored in the ReportingOutput directory. The best way to find a specific report is to use the Review Reports page, which can be searched by date or job name, as well as report name.

Reports are automatically deleted from the Review Reports page and the ReportingOutput directory after the period specified on the Settings > Reporting > Preferences page (5 days, by default). If you want to retain the reports for a longer time, include them in your backup routine or save them in a location that permits long term storage.

An alert is displayed on the Review Reports page for a period of time before the report is deleted (3 days, by default). Use the Settings > Reporting > Preferences page to change this warning period.

Depending on the number of reports you generate daily, report files can occupy considerable amounts of disk space. Be sure there is adequate disk space available on

the TRITON - Web Security machine. If the ReportingOutput directory grows too large before the files are automatically deleted, you can delete the files manually.

Websense software generates the report in the format you choose: PDF (Adobe Reader), XLS (Microsoft Excel), or HTML. If you choose HTML format, the report may display in the TRITON - Web Security content pane. Reports displayed in the content pane cannot be printed or saved to a file. To print or save a report to file, choose the PDF or XLS output format.



Important

To display presentation reports in PDF format, Adobe Reader v7.0 or later must be installed on your local machine.

To display presentation reports in XLS format, Microsoft Excel 2003 or later must be installed on your local machine.

Setting the schedule

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Related topics:

- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Selecting reports to schedule, page 151](#)
- ◆ [Selecting output options, page 152](#)
- ◆ [Setting the date range, page 151](#)

Define a reporting job to occur once or on a repeating cycle on the **Schedule** tab of the Presentation Reports > Scheduler page.



Note

It is advisable to schedule report jobs on different days or at different times, to avoid overloading the Log Database and slowing performance for logging and interactive reporting.

1. Enter a **Job name** that uniquely identifies this scheduled job.

2. Select a **Recurrence Pattern** and **Recurrence Options** for the job. The specific options available depend on the pattern selected.

| Pattern | Options |
|---------|--|
| Once | Enter the exact date on which to run the job, or click the icon to select from a calendar. |
| Daily | No additional recurrence options are available. |
| Weekly | Mark the check box for each day of the week the job is to run. |
| Monthly | Enter the dates during the month for running the job. Dates must be a number between 1 and 31, and must be separated by commas (1,10,20). To run the job on consecutive dates each month, enter a start and end date separated by a hyphen (3-5). |

3. Under **Schedule Time**, set the start time for running the job.
The job begins according to the time on the machine running TRITON - Web Security.

**Note**

To start generating the scheduled reports today, select a time late enough that you can complete the job definition before the start time.

4. Under **Schedule Period**, select a date for starting the job, and an option for ending the job.

| Option | Description |
|-------------|--|
| No end date | The job continues to run according to the established schedule, indefinitely. To discontinue the job at some time in the future, either edit or delete the job. See Viewing the scheduled jobs list, page 153 . |
| End after | Select the number of times to run the job. After that number of occurrences, the job does not run again, but it stays in the Job Queue until you delete it. See Viewing the scheduled jobs list, page 153 . |
| End by | Set the date when the job stops running. It does not run on or after this date. |

5. Click **Next** to open the Reports tab. See [Selecting reports to schedule, page 151](#).

Selecting reports to schedule

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Related topics:

- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Setting the schedule, page 149](#)
- ◆ [Selecting output options, page 152](#)
- ◆ [Setting the date range, page 151](#)

Use the **Select Report** tab of the Presentation Reports > Scheduler page to choose reports for the job.

1. Highlight a report for this job in the Report Catalog tree.
2. Click the right arrow (>) button to move that report to the **Selected** list.
3. Repeat steps 1 and 2 until all reports for this job appear in the **Selected** list.
4. Click **Next** to open the Date Range tab. See [Setting the date range, page 151](#).

Setting the date range

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Related topics:

- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Setting the schedule, page 149](#)
- ◆ [Selecting reports to schedule, page 151](#)
- ◆ [Selecting output options, page 152](#)

Use the **Date Range** tab of the Presentation Reports > Scheduler page to set the date range for the job. The options available depend on your selection for **Date range**.

| Date range | Description |
|------------|---|
| All Dates | <p>Reports include all dates available in the Log Database. No additional entries are required.</p> <p>When this option is used for repeating jobs, there may be duplicate information on reports in separate runs.</p> |

| Date range | Description |
|----------------|---|
| Specific Dates | <p>Choose the exact start (From) and end (To) dates for the reports in this job.</p> <p>This option is ideal for jobs that run only one time. Choosing this option for a repeating schedule results in duplicate reports.</p> |
| Relative Dates | <p>Use the drop-down lists to choose the number of periods to report (This, Last, Last 2, and so forth), and the type of period (Days, Weeks, or Months). For example, the job might cover the Last 2 Weeks or This Month.</p> <p>Week represents a calendar week, Sunday through Saturday. Month represents a calendar month. For example, This Week produces a report from Sunday through today; This Month produces a report from the first of the month through today; Last Week produces a report for the preceding Sunday through Saturday; and so forth.</p> <p>This option is ideal for jobs that run on a repeating schedule. It lets you manage how much data appears on each report, and minimize duplication of data on reports in separate runs.</p> |

After setting the date range for the job, click **Next** to display the Output tab. See [Selecting output options, page 152](#).

Selecting output options

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Related topics:

- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Setting the schedule, page 149](#)
- ◆ [Selecting reports to schedule, page 151](#)
- ◆ [Setting the date range, page 151](#)

After you select the reports for a job, use the **Output** tab to select the output format and distribution options.

1. Select the file format for the finished report.

| Format | Description |
|--------|--|
| PDF | Portable Document Format. Recipients must have Adobe Reader v7.0 or later to view the PDF reports. |
| XLS | Excel Spreadsheet. Recipients must have Microsoft Excel 2003 or later to view the XLS reports. |

2. Enter email addresses for distributing the report.
Enter each address on a separate line.

3. Mark the **Customize subject and body of email** check box, if desired. Then, enter the custom **Subject** and **Body** text for this job's distribution email.
4. Click **Save Job** to save and implement the job definition, and display the Job Queue page.
5. Review this job and any other scheduled jobs. See [Viewing the scheduled jobs list](#), page 153.

Viewing the scheduled jobs list

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Related topics:

- ◆ [Presentation reports](#), page 135
- ◆ [Scheduling presentation reports](#), page 147
- ◆ [Selecting output options](#), page 152
- ◆ [Scheduling investigative reports](#), page 177

The **Presentation Reports > Job Queue** page lists the scheduled jobs created for presentation reports. The list gives status for each job, as well as basic information about the job, such as how frequently it runs. From this page, you can add and delete scheduled jobs, temporarily suspend a job, and more.

(To review scheduled jobs for investigative reports, see [Managing scheduled investigative reports jobs](#), page 179.)

The list provides the following information for each job.

| Column | Description |
|------------|---|
| Job Name | The name assigned when the job was created. |
| Status | Indicates whether the job is <ul style="list-style-type: none"> • running • scheduled (waiting for the next scheduled run time) • completed successfully • failed • misfired (did not run at the last scheduled time due to a problem such as low memory or server shutdown) |
| State | One of the following: <ul style="list-style-type: none"> • ENABLED indicates a job that runs according to the established recurrence pattern. • DISABLED indicates a job that is inactive, and does not run. |
| Recurrence | The recurrence pattern (Once, Daily, Weekly, Monthly) set for this job. |
| History | Click the Details link to open the Job History page for the selected job. See Viewing job history , page 154. |

| Column | Description |
|----------------|---|
| Next Scheduled | Date and time for the next run. |
| Owner | The user name of the administrator who scheduled the job. |

Use the options on the page to manage the jobs. Some of the buttons require that you first mark the check box beside the name of each job to be included.

| Option | Description |
|---------------|---|
| Job name link | Opens the Scheduler page, where you can edit the job definition. See Scheduling presentation reports, page 147 . |
| Add Job | Opens the Scheduler page where you can define a new job. See Scheduling presentation reports, page 147 . |
| Delete | Deletes from the Job Queue all jobs that have been checked in the list. After a job has been deleted, it cannot be restored. To temporarily stop running a particular job, use the Disable button. |
| Run Now | Starts running the jobs that have been checked in the list immediately. This is in addition to the regularly scheduled runs. |
| Enable | Reactivates disabled jobs that have been checked in the list. The job begins running according to the established schedule. |
| Disable | Discontinues running of enabled jobs that are checked in the list. Use this to temporarily suspend the job that you may want to restore in the future. |

Viewing job history

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Related topics:

- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Viewing the scheduled jobs list, page 153](#)

Use the **Presentation Reports > Job Queue > Job History** page to view information about recent attempts to run the selected job. The page lists each report separately, providing the following information.

| Column | Description |
|-------------|---|
| Report Name | Title printed on the report. |
| Start Date | Date and time the report started running. |
| End Date | Date and time the report was complete. |

| Column | Description |
|---------|--|
| Status | Indicator of whether the report succeeded or failed. |
| Message | Relevant information about the job, such as whether the report was emailed successfully. |

Reviewing scheduled presentation reports

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Related topics:

- ◆ [Presentation reports](#), page 135
- ◆ [Running a presentation report](#), page 146
- ◆ [Scheduling presentation reports](#), page 147

Use the **Presentation Reports > Review Reports** page to find, access, and delete scheduled reports. By default, reports are listed from oldest to newest.

To view any report in the list, click the report name.

- ◆ If the report is a single PDF or XLS file, you may be given the option to save or open the report. This depends on your browser security settings and the plug-ins installed on your machine.
- ◆ If the report is very large, it may have been saved as multiple PDF or XLS files and stored in a ZIP file. The file is compressed using ZIP format regardless of whether the report was created on a Windows or Linux machine. Save the ZIP file, then extract the PDF or XLS files it contains to view the report content.
- ◆ Hover the mouse pointer over the report icon next to the report name to see if the report is one or multiple files.

To limit the list to reports that will be deleted soon, mark the **Show only reports due to be purged** check box. The length of time that reports are stored is configured on the Settings > Reporting > Preferences page (see [Configuring reporting preferences](#), page 409).

To search the report list, first select an entry from the **Filter by** drop-down list, and then enter all or part of a name or date. You can search by:

- ◆ The report or job name
- ◆ The name of the administrator that scheduled the report (Requestor)
- ◆ The date the report was created (Creation Date)
- ◆ The date the report is due to be deleted (Purge Date)

Enter your search term, and then click **Go**. The search is case-sensitive.

Click **Clear** to remove the current search term, and then either perform a different search or click **Refresh** to display the complete list of reports.

If a recently completed report does not appear on the Review Reports page, you can also click **Refresh** to update the page with the latest data.

To delete a report, click the X to the right of the report file size.

To see the status of a scheduled report job, click **Job Queue** at the top of the page. See [Viewing the scheduled jobs list, page 153](#), for more information about using the job queue.

To schedule a new report job, click **Scheduler** (see [Scheduling presentation reports, page 147](#)).

Investigative reports

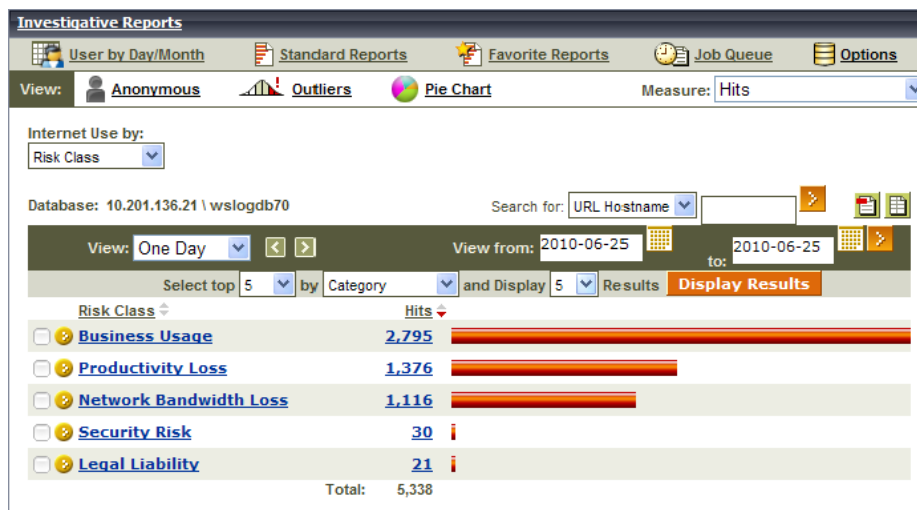
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Related topics:

- ◆ [Summary reports, page 159](#)
- ◆ [Multi-level summary reports, page 163](#)
- ◆ [Flexible detail reports, page 164](#)
- ◆ [User Activity Detail reports, page 168](#)
- ◆ [Standard reports, page 173](#)
- ◆ [Favorite investigative reports, page 174](#)
- ◆ [Scheduling investigative reports, page 177](#)
- ◆ [Outliers reports, page 180](#)
- ◆ [Output to file, page 181](#)
- ◆ [Database connection and report defaults, page 433](#)

Use the **Reporting > Investigative Reports** page to analyze Internet filtering activity in an interactive way.

Initially, the main Investigative Reports page shows a summary report of activity by risk class (see [Risk classes](#), page 54).





Work in the summary report view by clicking the available links and elements to explore areas of interest and gain general insight into your organization's Internet usage (see [Summary reports](#), page 159).

Multi-level summary reports (see [Multi-level summary reports](#), page 163) and flexible detail reports (see [Flexible detail reports](#), page 164) let you analyze the information from different perspectives.

Other report views and investigative reports features can be accessed from links at the top of the page. See the table below for a list of links and the features they access. (Not all links are available on all pages.)

| Option | Action |
|-------------------|---|
| User by Day/Month | Displays a dialog box that lets you define a report of a specific user's activity, covering either a day or a month. For more information, see User Activity Detail reports , page 168. |
| Standard Reports | Displays a list of predefined reports so you can quickly see a specific combination of data. See Standard reports , page 173. |
| Favorite Reports | Lets you save the current report as a Favorite, and displays a list of existing Favorites that you can generate or schedule. See Favorite investigative reports , page 174. |
| Job Queue | Displays the list of scheduled investigative reports jobs. See Scheduling investigative reports , page 177. |
| Outliers | Displays reports showing Internet usage that is significantly different from average. See Outliers reports , page 180. |

| Option | Action |
|---|---|
| Options | Displays the page for selecting a different Log Database for reporting. The Options page also lets you customize certain reporting features, such as the time period initially shown on summary reports and the default columns for detail reports. See Database connection and report defaults, page 433 . |
|  | Click this button, at the right of the Search fields, to export the current report to a spreadsheet file compatible with Microsoft Excel. You are prompted to either open or save the file. To open the file, Microsoft Excel 2003 or later must be installed. See Output to file, page 181 . |
|  | Click this button, at the right of the Search fields, to export the current report to a PDF file compatible with Adobe Reader. You are prompted to either open or save the file. To open the file, Adobe Reader version 7.0 or later must be installed. See Output to file, page 181 . |

Keep in mind that reporting is limited to the information that has been recorded in the Log Database.

- ◆ If you disable logging for user names, IP addresses, or selected categories (see [Configuring how filtered requests are logged, page 410](#)), that information cannot be included.
- ◆ Similarly, if you disable logging for certain protocols (see [Editing a protocol filter, page 64](#)), requests for those protocols are not available.
- ◆ If you want reports to show both the domain name (www.domain.com) and the path to a particular page in the domain (/products/productA) you must log full URLs (see [Configuring how URLs are logged, page 425](#)).
- ◆ If your directory service does not include the first and last name of the user, reports cannot display user name information.

Websense investigative reports are limited by the processor and available memory of the machine running TRITON - Web Security, as well as some network resources. Some large reports may take a very long time to generate. The progress message includes an option for saving the report as a Favorite so you can schedule it to run at another time. See [Scheduling investigative reports, page 177](#).

Summary reports

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Related topics:

- ◆ [Multi-level summary reports](#), page 163
- ◆ [Flexible detail reports](#), page 164
- ◆ [User Activity Detail reports](#), page 168
- ◆ [Standard reports](#), page 173
- ◆ [Favorite investigative reports](#), page 174
- ◆ [Scheduling investigative reports](#), page 177
- ◆ [Outliers reports](#), page 180
- ◆ [Output to file](#), page 181

Initially, the investigative reports page gives a summary report of usage for all users by risk class, showing the current day's activity from the Log Database. The measurement for this initial bar chart is Hits (number of times the site was requested). To configure the time period for this initial summary report, see [Database connection and report defaults](#), page 433.

Use the links and options on the page to quickly change the information reported, or drill down into the report details.

1. Customize the way that results are quantified by selecting one of the following options from the **Measure** list.

| Option | Description |
|----------------|---|
| Hits | The number of times the URL was requested. Depending on how Log Server is configured, this may be true hits, which logs a separate record for each separate element of a requested site, or it may be visits, which combines the different elements of the site into a single log record. |
| Bandwidth [KB] | The amount of data, in kilobytes, contained in both the initial request from the user and the response from the Web site. This is the combined total of the Sent and Received values. Keep in mind that some integration products do not send this information to Websense software. Two examples are Check Point FireWall-1 and Cisco PIX Firewall. If your integration does not send this information, and Network Agent is installed, enable Log HTTP requests to enable bandwidth-based reporting. See Configuring NIC settings , page 443. |
| Sent [KB] | The number of kilobytes sent as the Internet request. This represents the amount of data transmitted, which may be a simple request for a URL, or may be more significant (for example, if the user is registering for a Web site.) |

| Option | Description |
|---------------|--|
| Received [KB] | <p>The number of kilobytes of data received in response to the request, including all text, graphics, and scripts on the page.</p> <p>For sites that are blocked, the number of kilobytes varies according to the software creating the log record. When Network Agent logs the records, the number of bytes received for a blocked site represents the size of the Websense block page.</p> <p>If the log record is created by Websense Security Gateway, as a result of scanning, the kilobytes received represents the size of the page scanned. See Scanning and SSL Decryption Bypass Options, page 187, for more information scanning.</p> <p>If another integration product creates the log records, the kilobytes received for a blocked site may be zero (0), may represent the size of the block page, or may be a value obtained from the requested site.</p> |
| Browse Time | An estimate of the amount of time spent viewing the site. See What is Internet browse time? , page 134. |

2. Change the primary grouping of the report by selecting an option from the **Internet Use by** list above the report.

Options vary according to the contents of the Log Database and certain network considerations. For example, if there is only one group or domain in the Log Database, Groups and Domains do not appear in this list. Similarly, if there are too many users (more than 5,000) or groups (more than 3,000), those options do not appear. (Some of these limits can be configured. See [Display and output options](#), page 435.)

3. Click a name in the left column (or the arrow beside the name) to display a list of options, such as by user, by domain, or by action.

The options listed are similar to those listed under Internet Use by, customized to be a meaningful subset of the content currently displayed.



Note

Sometimes an option, such as User or Group, appears in red lettering. In this case, selecting that option may produce a very large report that may be slow to generate. Consider drilling down further into the details before selecting that option.

4. Select one of those options to generate a new summary report showing the selected information for the associated entry.

For example, on a Risk Class summary report, clicking by User under the Legal Liability risk class generates a report of each user's activity in the Legal Liability risk class.

5. Click a new entry in the left column, and then select an option to see more detail about that particular item.
6. Use the arrows beside a column heading to change the report's sort order.

7. Control the summary report with the following options above the chart. Then, delve into related details by clicking the elements of the new report.

| Option | Action |
|-----------------------------|---|
| Report path (User > Day) | Beside the Internet use by list is a path showing the selections that created the current report. Click any link in the path to return to that view of the data. |
| View | <p>Select a period for the report: One Day, One Week, One Month, or All. The report updates to show data for the selected period.</p> <p>Use the adjacent arrow buttons to move through the available data, one period (day, week, month) at a time.</p> <p>As you change this selection, the View from fields update to reflect the time period being viewed.</p> <p>The View field displays Custom, instead of a time period, if you choose specific date in the View from fields or through the Favorites dialog box.</p> |
| View from... to... | <p>The dates in these fields update automatically to reflect the time period being viewed when you make changes in the View field.</p> <p>Alternatively, enter exact start and end dates for the reports, or click the calendar icon to select the desired dates.</p> <p>Click the adjacent right arrow button to update the report after selecting dates.</p> |
| Pie Chart / Bar Chart | <p>When the bar chart is active, click Pie Chart to display the current summary report as a pie chart. Click the slice label to display the same options that are available when you click an entry in the left column of the bar chart.</p> <p>When the pie chart is active, click Bar Chart to display the current summary report as a bar chart.</p> |
| Full Screen | Select this option to display the current investigative report in a separate window, without the left and right navigation panes. |
| Anonymous / Names | <ul style="list-style-type: none"> Click Anonymous to have reports display an internally-assigned user identification number wherever a user name would have appeared. When names are hidden, click Names to return to showing user names. <p>Under some circumstances, user names cannot be displayed. For more information, see Configuring how filtered requests are logged, page 410.</p> <p>For more information about hiding user-identifying information, see Anonymizing investigative reports, page 162.</p> |
| Search for | <p>Select a report element from the list, then enter all or part of a value for the search in the adjacent text box.</p> <p>Click the adjacent arrow button to start the search and display results.</p> <p>Entering a partial IP address, such as 10.5., searches for all subnets, 10.5.0.0 through 10.5.255.255 in this example.</p> |

8. Add a subset of information for all or selected entries in the left column by creating a multi-level summary report. See [Multi-level summary reports](#), page 163.
9. Create a tabular report for a specific item in the left column by clicking the adjacent number or measurement bar. This detailed report can be modified to meet your specific needs. See [Flexible detail reports](#), page 164.

Anonymizing investigative reports

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If you want to prevent identifying information from appearing in investigative reports, you have several options.

- ◆ The most absolute method is to prevent the logging of user names and source IP addresses. In this case, no user-identifying information is recorded in the Log Database, making it impossible for investigative or presentation reports to include the information. See [Configuring how filtered requests are logged](#), page 410, for instructions.
- ◆ If some administrators need access to reports that include user information, but other administrators should never see user information, use delegated administration roles to control reporting access. You can configure roles to grant access to investigative reports, but hide user names in reports. See [Delegated Administration and Reporting](#), page 333, for details.
- ◆ If you sometimes need to generate reports that contain user information, but sometimes need to generate anonymous reports, use the **Anonymous** option at the top of the Investigative Reports page to hide user names and, optionally, source IP addresses temporarily. See [The Anonymous option](#), page 162, for details.

The Anonymous option

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By default, clicking **Anonymous** hides only user names, continuing to show source IP addresses in reports. You can configure Websense software to instead hide both user names and source IP addresses when Anonymous is selected:

1. On the TRITON - Web Security machine, open the **wse.ini** file in a text editor. (By default, this file is located in C:\Program Files\Wesense\webroot\Explorer.)
2. Add the following line under the **[explorer]** heading:

```
encryptIP=1
```
3. Save and close the file.

Now, any time you click Anonymous, all user-identifying information is hidden.

When you click **Anonymous**, and then move to a different view of the data, such as detail view or outliers, user names remain hidden in the new report. However, to return to the summary view with the names hidden, you must use the links at the top of the report, not the breadcrumbs in the banner.

Multi-level summary reports

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Summary reports](#), page 159
- ◆ [Flexible detail reports](#), page 164
- ◆ [User Activity Detail reports](#), page 168
- ◆ [Standard reports](#), page 173
- ◆ [Favorite investigative reports](#), page 174
- ◆ [Scheduling investigative reports](#), page 177
- ◆ [Outliers reports](#), page 180
- ◆ [Output to file](#), page 181

Multi-level summary reports show a second level of information to supplement the primary information displayed. For example, if the primary display shows risk classes, you can define a second level to learn which categories have been requested most within each risk class. As another example, if the primary report shows requests for each category, you might show the top 5 categories and the 10 users who made the most requests to each.

Use the settings immediately above the summary report to create a multi-level summary report.

Select top 5 by User and Display 10 Results **Display Results**

1. In the **Select top** list, choose a number to designate how many primary entries (left column) to report. The resulting report includes the primary entries with the largest values. (This shows the earliest dates if Day is the primary entry.)
Alternatively, mark the check box beside the desired individual entries in the left column to report only those entries. The **Select top** field displays **Custom**.
2. From the **by** list, choose the secondary information to report.
3. In the **Display** field, choose the number of secondary results to report for each primary entry
4. Click **Display Results** to generate the multi-level summary report.
The summary report updates to show only the selected number of primary entries. Below the bar for each primary entry, a list of secondary entries appears.
5. Use the arrows beside a column heading to change the report's sort order.

To return to a single-level summary report, select a different option under **Internet Use by**. Alternatively, click one of the primary or secondary entries, and select an option to generate a new investigative report of that information.

Flexible detail reports

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Summary reports](#), page 159
- ◆ [Multi-level summary reports](#), page 163
- ◆ [Favorite investigative reports](#), page 174
- ◆ [Scheduling investigative reports](#), page 177
- ◆ [Outliers reports](#), page 180
- ◆ [Output to file](#), page 181
- ◆ [Database connection and report defaults](#), page 433
- ◆ [Columns for flexible detail reports](#), page 166

Detail reports give you a tabular view of the information in the Log Database. Access the detail report view from the main page after viewing a summary report for which you want more detail.

You can request a detail view from any row. However, when requesting a detail report based on hits, it is best to start from a row that shows fewer than 100,000 hits. If there are more than 100,000 hits for a particular row, the hits value displays in red to alert you that a detail report may be slow to generate.

Detail report view is considered *flexible* because it lets you design your own report. You can add or delete columns of information, and change the order of the columns displayed. The information is sorted according to order of the columns. You can even reverse the sort order within any column from ascending to descending, or vice versa.

Websense investigative reports are limited by the processor and available memory of the machine running TRITON - Web Security, as well as some network resources. Requests for large reports may time out. When you request a large report, you are given options for generating the report without timeouts.



Important

In any drop-down or values list, some options may appear in red. The red lettering indicates that selecting this option may result in a very large report. It is generally more effective to drill down further into the details before selecting that option.

1. Generate a summary report or multi-level report on the investigative reports main page. (See [Summary reports](#), page 159, or [Multi-level summary reports](#), page 163.)
2. Drill down into the results to focus on the information of immediate interest.

When generating a report on hits, it is best to drill down to an entry that shows fewer than 100,000 hits before opening the detail report view.

3. Click the number or the bar on the row that you want to explore in more detail. To include multiple rows in one report, mark the check box for each row before clicking the number or bar on one row.

A popup message shows progress while the detail report loads.



Note

If the report takes a long time to generate, consider saving it as a Favorite report by clicking the link in the Loading message, and scheduling it to run later. See [Favorite investigative reports](#), page 174.

4. Review the information in the initial report.

The default columns vary, depending on whether you are reporting on hits, bandwidth, or browse time, and on the selections made on the Options page. (See [Database connection and report defaults](#), page 433.)

5. Click **Modify Report** at the top of the page.

The **Current Report** list in the Modify Report dialog box shows which columns appear in the current detail report.

6. Select a column name in the **Available Columns** or **Current Report** list, and click the right arrow (>) or left arrow (<) buttons to move that column to the other list.

Choose a maximum of 7 columns for the report. The column showing the measure (hits, bandwidth, browse time) from the initial summary report always appears as the right-most column. It does not appear as a choice when modifying the report.

See [Columns for flexible detail reports](#), page 166, for a list of the columns available, and a description of each.

7. Select a column name in the **Current Report** list and use the up and down arrow buttons to change the order of the columns.

The column at the top of the Current Report list becomes the left column in the report.

8. Click the **Summary** or **Detail** link above the report to toggle between the two displays.

| Option | Description |
|---------|---|
| Summary | You must remove the Time column to display a summary report. Summary reports group into a single entry all records that share a common element. The specific element varies, according to the information reported. Typically, the right-most column before the measure shows the summarized element. |
| Detail | The Detail option displays every record as a separate row. The Time column can be displayed. |

9. Click **Submit** to generate the report you defined.
10. Use the following options to modify the displayed report.
 - Use the **View** options above the report to change the time period reported.
 - Click the up or down arrow in a column heading to reverse the sort order for that column, and the associated data.
 - Use the **Next** and **Prev** links above and below the report to display additional pages of the report, if any. By default, each page contains 100 rows, which can be adjusted to fit your needs. See [Display and output options](#), page 435.
 - Click the URL to open the requested Web site in a new window.
11. Click **Favorite Reports** if you want to save the report so that you can generate it again quickly or on a recurring basis (see [Saving a report as a Favorite](#), page 175).

Columns for flexible detail reports

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Related topics:

- ◆ [Flexible detail reports](#), page 164
- ◆ [Favorite investigative reports](#), page 174
- ◆ [Scheduling investigative reports](#), page 177

The table below describes the columns available for detail reports (see [Flexible detail reports](#), page 164).

Not all columns are available at all times. For example, if the User column is displayed, Group is not available; if Category is displayed, Risk Class is not available.

| Column Name | Description |
|--------------|--|
| User | Name of the user who made the request. User information must be available in the Log Database to include it on reports. Group information is not available in user-based reports. |
| Day | Date the Internet request was made. |
| URL Hostname | Domain name (also called hostname) of the requested site. |
| Domain | Directory service domain for the directory-based client (user or group, domain, or organizational unit) that made the request. |
| Group | Name of the group to which the requestor belongs. Individual user names are not given on group-based reports. If the user who requested the site belongs to more than one group in the directory service, the report lists multiple groups in this column. |

| Column Name | Description |
|------------------|--|
| Risk Class | Risk class associated with the category to which the requested site belongs. If the category is in multiple risk classes, all relevant risk classes are listed. See Assigning categories to risk classes , page 408. |
| Directory Object | Directory path for the user who made the request, excluding the user name. Typically, this results in multiple rows for the same traffic, because each user belongs in multiple paths. If you are using a non-LDAP directory service, this column is not available. |
| Disposition | Action Websense software took as a result of the request (for example, category permitted or category blocked). |
| Source Server | IP address of the machine sending requests to Filtering Service. In standalone deployments, this is the Network Agent IP address. In integrated deployments, this is the gateway, firewall, or cache IP address. With Websense Web Security Gateway Anywhere, use this option to identify requests filtered by the hybrid service from both on-site (filtered location) and off-site users. |
| Protocol | Protocol of the request (for example, HTTP or FTP). |
| Protocol Group | Master Database group in which the requested protocol falls (for example, Remote Access or Streaming Media). |
| Source IP | IP address of the machine from which the request was made. With Websense Web Security Gateway Anywhere, you can use this option to review requests coming from a specific hybrid filtered location. See Define filtered locations , page 211. |
| Destination IP | IP address of the requested site. |
| Full URL | Domain name and path for the requested site (example: http://www.mydomain.com/products/itemone/). If you are not logging full URLs, this column is blank. See Configuring how URLs are logged , page 425. |
| Month | Calendar month the request was made. |
| Port | TCP/IP port over which the user communicated with the site. |
| Bandwidth | The amount of data, in kilobytes, contained in both the initial request from the user and the response from the Web site. This is the combined total of the Sent and Received values. Keep in mind that some integration products do not send this information to Websense software. Two examples are Check Point FireWall-1 and Cisco PIX Firewall. If your integration does not send this information, and Websense Network Agent is installed, activate the Log HTTP requests option for the appropriate NIC to enable reporting on bandwidth information. See Configuring NIC settings , page 443. |
| Bytes Sent | Number of bytes sent as the Internet request. This represents the amount of data transmitted, which may be a simple request for a URL, or may be a more significant submission if the user is registering for a Web site, for example. |

| Column Name | Description |
|----------------|---|
| Bytes Received | <p>Number of bytes received from the Internet in response to the request. This includes all text, graphics, and scripts that make up the site.</p> <p>For sites that are blocked, the number of bytes varies according to the software creating the log record. When Websense Network Agent logs the records, the number of bytes received for a blocked site represents the size of the block page.</p> <p>If the log record is created by Websense Security Gateway, as a result of scanning, the bytes received represents the size of the page scanned. See Scanning and SSL Decryption Bypass Options, page 187, for more information on scanning.</p> <p>If another integration product creates the log records, the bytes received for a blocked site may be zero (0), may represent the size of the block page, or may be a value obtained from the requested site.</p> |
| Time | Time of day the site was requested, shown in the HH:MM:SS format, using a 24-hour clock. |
| Category | Category to which the request was assigned. This may be a category from the Master Database or a custom category. |

User Activity Detail reports

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Related topics:

- ◆ [Investigative reports](#), page 156

Click the **User by Day/Month** link to generate a User Activity Detail report for one user. This report gives a graphical interpretation of the user's Internet activity for a single day or a full month.

First, generate a report for a specific user for a selected day. From that report, you can generate a report of the same user's activity for a full month. For detailed instructions, see:

- ◆ [User activity detail by day](#), page 169
- ◆ [User activity detail by month](#), page 170

User activity detail by day

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [User Activity Detail reports](#), page 168
- ◆ [User activity detail by month](#), page 170

The User Activity Detail by Day report gives a more in-depth view of a specific user's activity on one day.

1. Select **User by Day/Month** at the top of the main page. The User Detail by Day dialog box appears.
2. Enter a user's name, or a portion of the name, in the **Search for user** field, and then click **Search**.
The search displays a scrolling list of up to 100 matching user names from the Log Database.
3. Make a selection from the **Select user** list.
4. In the **Select day** field, either accept the last activity date that appears by default, or choose a different date.

You can type the new date or click the calendar icon to select a date. The calendar selection box indicates the date range covered by the active Log Database.

5. Click **Go to User by Day** to see a detailed report of activity for that user on the requested date.

The initial report shows a timeline of the user's activity in 5-minute increments. Each request appears as an icon, which corresponds to a Websense Master Database category. A single icon represents all custom categories. (The color of the icons corresponds to the risk grouping shown on the User Activity by Month reports. See [User activity detail by month](#), page 170.)

Rest the mouse over an icon to show the exact time, category, and action for the associated request.

Use the controls listed below to modify the report display or to see a legend.

| Option | Description |
|-------------------------|--|
| Previous Day / Next Day | Display this user's Internet activity for the previous or next calendar day. |
| Table View | Displays a list of each requested URL, giving the date and time of the request, the category, and the action taken (blocked, permitted, or other). |
| Detail View | Displays the initial, graphical view of the report. |

| Option | Description |
|------------------------------------|--|
| Group Similar Hits / View All Hits | <p>Combines into a single row all requests that occurred within 10 seconds of each other and have the same domain, category, and action. This results in a shorter, summarized view of information.</p> <p>The standard time threshold is 10 seconds. If you need to change this value, see Display and output options, page 435.</p> <p>After you click the link, it becomes View All Hits, which restores the original list of each request.</p> |
| Category View Control | <p>Displays a list of each category in the current report, showing both the category name and the icon representing that category.</p> <p>Control which categories appear in the report by marking the check boxes for the categories to be included. Then, click Accept to update the report according to your selections.</p> |

- Click **User Activity Detail by Month**, above the report, to view the same user's activity for the full month. See [User activity detail by month](#), page 170,. for more information.

User activity detail by month

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [User Activity Detail reports](#), page 168
- ◆ [User activity detail by day](#), page 169
- ◆ [Category mapping](#), page 171

While the User Activity Detail by Day report is open, you can switch to see the monthly activity for that user.

- Open a User Activity Detail by Day report. See [User activity detail by day](#), page 169.
- Click **User Activity Detail by Month** at the top.

The new report displays a calendar image, with each day's area showing small colored blocks representing the user's Internet activity for that day. Requests to sites in custom categories are shown as gray blocks.
- Click **Database Category Legend** at the top left to see how the colors represent low to high potential risk for the requested site.

The category assignments are fixed, and cannot be changed. See [Category mapping](#), page 171.
- Click **Prev** or **Next** to display this user's Internet activity for the previous or the next month.

Category mapping

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [User Activity Detail reports](#), page 168
- ◆ [User activity detail by month](#), page 170

The following list identifies which categories are represented by each of the colors on the User Activity by Day and User Activity Detail by Month reports.

Keep in mind that category names in the Master Database are subject to change. Additionally, categories may be added or deleted at any time.

| Color | Categories |
|------------|---|
| Gray | Custom Categories Non-HTTP traffic |
| Dark Blue | Business and Economy and all its subcategories Education , and all its subcategories Health Information Technology , including the Search Engines and Portals, and Web Hosting subcategories Miscellaneous subcategories Content Delivery Networks, Dynamic Content, Images (Media), Image Servers, and Private IP Addresses Productivity/Advertisements |
| Light Blue | Drugs/Prescribed Medications Government and its Military subcategory Information Technology/URL Translation Sites Miscellaneous , parent category only News and Media , parent category only Special Events |

| Color | Categories |
|--------------|--|
| Yellow Green | Abortion and all its subcategories Adult Material /Sex Education Bandwidth , including the subcategories Internet Radio and TV, Personal Network Storage and Backup, and Streaming Media Entertainment , including its subcategory MP3 Games Government /Political Organizations Information Technology /Computer Security Internet Communication /Web-based Email Miscellaneous /File Download Servers Miscellaneous /Network Errors News and Media /Alternative Journals Productivity , including its subcategories Instant Messaging, Message Boards and Clubs, and Online Brokerage and Trading Religion and its subcategories Non-Traditional Religions and Occult and Folklore, and Traditional Religions Security , parent category only Shopping and all its subcategories Social Organizations and all its subcategories Society and Lifestyles , including its subcategories Gay or Lesbian or Bisexual Interest, Hobbies, Personal Web Sites, and Restaurants and Dining Sports and all its subcategories Travel User-Defined Vehicles |

| Color | Categories |
|--------|---|
| Orange | Adult Material /Nudity Advocacy Groups Bandwidth /Internet Telephony Drugs and its subcategories Abused Drugs, Marijuana, and Supplements and Unregulated Compounds Information Technology /Proxy Avoidance Internet Communication and its subcategory Web Chat Job Search Miscellaneous /Uncategorized Productivity subcategories Freeware and Software Download, and Pay-to-Surf Religion Society and Lifestyles subcategories Alcohol and Tobacco, and Personals and Dating Tasteless Weapons |
| Red | Adult Material and these subcategories: Adult Content, Lingerie and Swimsuit, and Sex Bandwidth /Peer-to-Peer File Sharing Gambling Illegal or Questionable Information Technology /Hacking Militancy and Extremist Racism and Hate Security subcategories Keyloggers, Malicious Web Sites, Phishing, and Spyware Violence |

Standard reports

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Related topics:

- ◆ [Investigative reports, page 156](#)
- ◆ [Favorite investigative reports, page 174](#)
- ◆ [Scheduling investigative reports, page 177](#)

Standard reports let you display a particular set of information quickly without using the drill-down process.

1. Click the **Standard Reports** link on the main Investigative Reports page.

2. Choose the report containing the desired information. The following reports are available.

Highest Activity Levels

- Which users have the most hits?
- Top 10 users for top 10 visited URLs
- Top 5 users activity in Shopping, Entertainment, and Sports
- Top 5 URLs for the top 5 visited categories

Highest Bandwidth Consumption

- Which groups are consuming the most bandwidth
- Groups consuming most bandwidth in Streaming Media
- Detail URL report on users by Network Bandwidth Loss
- Top 10 groups for Bandwidth categories

Most Time Online

- Which users spent the most time online
- Which users spent the most time on sites in Productivity categories

Most Blocked

- Which users were blocked most?
- Which sites were blocked most?
- Detail URL report on users who were blocked
- Top 10 blocked categories

Highest Security Risk

- Top categories posing a security risk
- Top users of P2P protocol
- Top users of sites in Security categories
- URLs for top 10 machines with spyware activity

Legal Liability

- Legal Liability Risk by Category
 - Top users in Adult categories
-

3. View the report that appears.
4. Save the report as a Favorite if you want to run it on a recurring basis. See [Favorite investigative reports](#), page 174.

Favorite investigative reports

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Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Scheduling investigative reports](#), page 177

You can save most investigative reports as **Favorites**. This includes reports you generate by drilling down to specific information, standard reports, and detail reports that you have modified to meet your specific needs. Then, run the Favorite report at any time, or schedule it to run on specific days and times.

In organizations that use delegated administration, permission to save and schedule Favorites is set by the Super Administrator. Administrators who are granted this permission can run and schedule only the Favorites they saved; they do not have access to Favorites saved by other administrators.

For detailed instructions on working with Favorite reports, see:

- ◆ [Saving a report as a Favorite, page 175](#)
- ◆ [Generating or deleting a Favorite report, page 175](#)
- ◆ [Modifying a Favorite report, page 176](#)

Saving a report as a Favorite

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Related topics:

- ◆ [Favorite investigative reports, page 174](#)
- ◆ [Modifying a Favorite report, page 176](#)

Use the following procedure to save a report as a Favorite.

1. Generate an investigative report with the desired format and information.
2. Click **Favorite Reports**.
3. Accept or modify the name displayed by TRITON - Web Security.

The name may contain letters, numbers and underscore characters (_). No blanks or other special characters can be used.

4. Click **Add**.

The report name is added to the list of Favorites.

5. Select a report on this list, then select an option for managing the report.

Depending on the option you choose, see:

- [Generating or deleting a Favorite report, page 175](#)
- [Scheduling investigative reports, page 177](#)

Generating or deleting a Favorite report

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Related topics:

- ◆ [Favorite investigative reports, page 174](#)
- ◆ [Modifying a Favorite report, page 176](#)

You can generate a Favorite report at any time, or delete one that has become obsolete.

1. Click **Favorite Reports** to display a list of reports saved as favorites.

**Note**

If your organization uses delegated administration, this list does not include Favorite reports saved by other administrators.

2. Select a report from the list.
3. Do one of the following:
 - Click **Run Now** to generate and display the selected report immediately.
 - Click **Schedule** to schedule a report to run later or on a recurring basis. See [Scheduling investigative reports, page 177](#), for more information.
 - Click **Delete** to remove the report from the Favorites list.

Modifying a Favorite report

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports, page 156](#)
- ◆ [Favorite investigative reports, page 174](#)

You can easily create a new Favorite report that is similar to an existing Favorite report, as follows.

1. Click **Favorite Reports** to display a list of reports saved as favorites.

**Note**

If your organization uses delegated administration, this list does not include Favorite reports saved by other administrators.

2. Select and run the existing Favorite report that most closely resembles the new report you want to create. (See [Generating or deleting a Favorite report, page 175](#).)
3. Modify the displayed report as desired.
4. Click **Favorite Reports** to save the revised display as a Favorite report with a new name. (See [Saving a report as a Favorite, page 175](#).)

Scheduling investigative reports

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Related topics:

- ◆ [Favorite investigative reports](#), page 174
- ◆ [Saving a report as a Favorite](#), page 175
- ◆ [Managing scheduled investigative reports jobs](#), page 179

You must save an investigative report as a Favorite before it can be scheduled to run at a later time or on a repeating cycle. When the scheduled report job runs, the resulting reports are sent via email to the recipients you designate. As you create scheduled jobs, consider whether your email server will be able to handle the size and quantity of the attached report files.

Scheduled report files are stored in the following directory:

```
<install_path>\webroot\Explorer\<name>\
```

The default installation path is C:\Program Files\WebSense\Web Security. If the scheduled job has only one recipient, <name> is the first portion of the email address (before the @). In the case of multiple recipients, the reports are saved in a directory called Other.



Note

The reports saved from a repeating job use the same file name each time. If you want to save files for longer than a single cycle, be sure to change the file name or copy the file to another location.

Depending on the size and number of reports scheduled, this directory could become very large. Be sure to clear the directory periodically, eliminating unneeded report files.

1. Save one or more reports as Favorites. (See [Saving a report as a Favorite](#), page 175).
2. Click **Favorite Reports** to display a list of reports saved as favorites.



Note

If your organization uses delegated administration roles, this list does not include favorite reports saved by other administrators.

3. Highlight up to 5 reports to run as part of the job.

4. Click **Schedule** to create a scheduled report job, and then provide the information requested on the Schedule Report page.

It is advisable to schedule report jobs on different days or at different times, to avoid overloading the Log Database and slowing performance for logging and interactive reporting.

| Field | Description |
|---------------------------------------|---|
| Recurrence | Select the frequency (Once, Daily, Weekly, Monthly) for running the report job. |
| Start Date | Choose the day of the week or calendar date for running the job the first (or only) time. |
| Run Time | Set the time of day for running the job. |
| Email to | Use the Additional Email Addresses field to add the appropriate addresses to this list. Highlight one or more email addresses to receive the reports in the job. (Be sure to deselect any that should not receive the reports.) |
| Additional Email Addresses | Enter an email address, and then click Add to put it on the Email to list. The new email address is automatically highlighted with the other selected email addresses. |
| Customize email subject and body text | Mark this check box to customize your email notification subject line and body text. If this box is not checked, the default subject and body text are used. |
| Email Subject | Enter the text to appear as the email subject line when scheduled reports are distributed. The default email subject reads: Investigative Reports scheduled job |
| Email Text | Enter text to be added to the email message for distributing scheduled reports. The email reads as shown below, with your text in place of <CUSTOM TEXT>. Report scheduler generated the attached file or files on <date time>. <CUSTOM TEXT> To view the generated report(s), click on the following link(s). Note: The link will not work if the recipient does not have access to the web server from which the job was sent. |
| Schedule Job Name | Assign a unique name for the scheduled job. The name identifies this job in the Job Queue. See Managing scheduled investigative reports jobs , page 179. |

| Field | Description |
|---------------|--|
| Output Format | Choose the file format for the scheduled reports: PDF: Portable Document Format files are viewed in Adobe Reader. Excel: Excel spreadsheet files are viewed in Microsoft Excel. |
| Date Range | Set the date range to be covered by reports in this job. All Dates: all available dates in the Log Database. Relative: Choose a time period (Days, Weeks, or Months) and the specific period to include (This, Last, Last 2, and so on). Specific: set specific dates or a date range for the reports in this job. |

- Click **Next** to display the Schedule Confirmation page.
- Click **Save** to save your selections and go to the Job Queue page (see [Managing scheduled investigative reports jobs](#), page 179).

Managing scheduled investigative reports jobs

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Scheduling presentation reports](#), page 147

When you create a scheduled job for investigative reports, the **Job Queue** page appears, showing the new job and a list of existing scheduled jobs. You can also access the page by clicking the **Job Queue** link on the main investigative reports page.



Note

If your organization uses delegated administration, this page does not show jobs scheduled by other administrators.

The **Schedule Report Detail** section lists each scheduled job in the order it was created showing an overview of the defined schedule and the job status. In addition, the following options are available.

| Option | Description |
|--------|---|
| Edit | Displays the schedule defined for this job, and allows you to modify it, as needed. |
| Delete | Deletes the job and adds an entry to the Status Log section showing the job as Deleted. |

The **Status Log** section lists each job that has changed in some way, showing the scheduled start time for the job, the actual end time, and the status.

Click **Clear Status Log** to remove all entries in the Status Log section.

Outliers reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports, page 156](#)
- ◆ [Summary reports, page 159](#)

An Outliers report shows which users have the most unusual Internet activity in the database. Websense software calculates the average activity for all users per category, per day, per action (disposition), and per protocol. It then displays the user activity that has the most statistically significant variance from the average. Variance is calculated as the standard deviation from the mean.

1. On the main Investigative Reports page, generate a summary report that displays the information for which you want to see outliers. The report selections underlined and shown in blue beside the Internet Use by field are reflected in the Outliers report.

For example, to view outliers by hits for a particular category, select **Category** in the **Internet Use by** list, and select **Hits** as the **Measure**.



Note

Outliers reports cannot be generated for browse time. If you start from a summary report showing browse time, the Outliers report is based on hits.

2. Click **Outliers**.

The rows are sorted in descending order with the highest variance shown first. Each row shows:

- Total (hits or bandwidth) for the user, category, protocol, day, and action.
 - Average (hits or bandwidth) for all users, for that category, protocol, day, and action.
 - Variance from the average for the user.
3. To see an individual user's activity in this category over time, click the user name. For example, if one user's activity is noticeably high for a certain day, click that user's name to see a report that gives a more in-depth understanding of the user's overall activity.



Output to file

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Printing investigative reports](#), page 181

After you generating an investigative report, you can use the buttons above the report to save it to a file. The button you click determines the format of the file.

| Option | Description |
|--|--|
|  | <p>Saves the report in XLS format.</p> <p>If Microsoft Excel 2003 or later is installed on the machine from which you are accessing TRITON - Web Security, you are prompted to view or save the report. Otherwise, you are prompted to select a directory and file name for the saved report.</p> <p>Use the options in Microsoft Excel to print, save, or email the report.</p> |
|  | <p>Generates a report in PDF format.</p> <p>If Adobe Reader v7.0 or later is installed on the machine from which you are accessing TRITON - Web Security, you are prompted to view or save the report. Otherwise, you are prompted to select a directory and file name for the saved report.</p> <p>Use the options in Adobe Reader to print, save, or email the report.</p> |

Printing investigative reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports](#), page 156
- ◆ [Output to file](#), page 181

To print investigative reports:

- ◆ Use the Web browser print function while the report is displayed.
- ◆ Create a PDF or XLS file, and then use the print function in Adobe Reader or Microsoft Excel (see [Output to file](#), page 181).

Although reports have been set up to print successfully from the browser, you may want to test printing to check the result.

User Activity Detail by Month reports are configured to print in landscape mode. All other reports are configured for portrait mode.

When you design your own report (see [Flexible detail reports, page 164](#)), the column widths differ according to the information included. The page orientation changes to landscape if the report is wider than 8 1/2 inches.

The content of the page is either 7 1/2 inches or 10 inches wide. In the case of A4, the margins are slightly narrower but still within the print range. (The default paper size is Letter, or 8.5 x 11 inches. If you are working with A4 paper, be sure to change this setting in the wse.ini file. See [Display and output options, page 435](#).)

Accessing self-reporting

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Investigative reports, page 156](#)
- ◆ [Configuring reporting preferences, page 409](#)
- ◆ [Self-reporting, page 437](#)

Websense self-reporting allows you to evaluate your own Internet browsing activities and adjust them, as needed, to meet organizational guidelines. It also accommodates government regulations that require organizations to let users see the type of information being collected.

If self-reporting is enabled in your organization, access it from your browser:

1. Enter the URL supplied by your Websense software administrator, or click the Self-Reporting link on the main TRITON - Web Security logon page to access the self-reporting logon page.
2. If **Policy Server** shows a drop-down list, choose the IP address for the Policy Server that logs information on your Internet activity.
Contact your Websense software administrator for assistance.
3. Enter the **User name** and **Password** you use to log on to the network.
4. Click **Log On**.

TRITON - Web Security opens to an investigative report showing your Internet activity by risk class. Click the various links and elements on the page to access other options for alternative views of the information stored on your activity. Use the **Help** system for assistance when working with the reports.

Real-Time Monitor

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Use Reports to Evaluate Filtering, page 133](#)
- ◆ [Real-Time Monitor in Multiple Policy Server Deployments, page 185](#)

Use the **Reporting > Real-Time Monitor** page to review current Internet filtering activity in your network.



Important

Internet Explorer 8 Compatibility View is **not** supported with the TRITON console. If Real-Time Monitor does not display correctly in Internet Explorer 8, make sure that Compatibility View button (between the URL and the Refresh button in the browser address bar) is not selected.

Click **Start** to populate the page with data. The page shows recent Internet requests, including:

- ◆ The **IP** address or name of the **user** who made the request.
 - If user-based filtering is used in your network, and the user name is shown, mouse over an entry to see the IP address.
 - If a user name is longer than 30 characters, a hyphen (“-”) and the last 30 characters of the name are displayed. If you right-click to add a long user name to the search filter, delete the hyphen character from the filter field and click **Show Results** to display matching entries.
- ◆ The **URL** requested.

By default, if the URL is too long to display in the space provided, the field shows the first 30 characters of the URL, a space, a hyphen (“-”), and a space, and then last 20 characters of the URL. Right-click the truncated URL to see the entire string.

Click **Customize** in the toolbar at the top of the page, then select **Show the full URL** to change this behavior.
- ◆ Whether or not the requested site was recategorized as a result of Content Gateway scanning.
 - The presence of an icon indicates that the site was dynamically recategorized based on the results of scanning. Mouse over the icon to see the original category.

- No icon indicates that the Master Database category or custom URL category was used. (This includes sites that were scanned by Content Gateway, but not recategorized.)
- ◆ The **Category** assigned to the site.

The actual category used to filter the request is shown, whether that is the Master Database category, the custom URL category, or the category dynamically assigned as a result of scanning.
- ◆ The **Action** (permitted or blocked) applied to the request.

Hover the mouse over an entry to see the policy or policies used to determine the action. Multiple policies may be listed if, for example:

 - Multiple group policies could be applied to the same user.
 - A policy is assigned to both the IP address and the user or group.

When multiple policies are listed, you can use the Test Filtering tool (in TRITON - Web Security Toolbox) to see which policy takes precedence for a request from the user or IP address shown in Real-Time Monitor.
- ◆ The **Time** the request was passed to Real-Time Monitor.

Because Real-Time Monitor receives request information from Usage Monitor in real time, rather than reading the request from the Log Database, the request time shown here may not match the request time that appears in investigative and presentation reports.

To review current data, click **Pause** to prevent the page from continuing to refresh. When you are ready to start monitoring new information, click **Start** again.

- ◆ By default, data is refreshed every 15 seconds. To change the update rate, click **Customize** in the toolbar at the top of the page, then select a new **Data refresh rate** value.

Depending on your current settings, Real-Time Monitor holds a set number of records (250, 500, or 1000), and always displays the latest set of available records. When you pause display of new records to review current data, this can mean that the hundreds or thousands of requests that occur while the display is paused are not available for display in the monitor. (The requests are, however, stored in the Log Database, and appear in investigative and presentation reports.)

To change how many records are displayed, click **Customize** in the toolbar at the top of the page, then select a new **Number of records shown** value.

Filtering report data

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To filter the data displayed on the screen:

1. Enter all or part of a user name or IP address, URL, category, or action in the **Filter results by** fields. You can also select a time filter to show the past 5, 10, or 15 minutes worth of applicable results.
2. Click **Show Results**.

3. To return to viewing all results, click **Clear Search Filters**.

You can also right-click any entry in the User, URL, Category, or Action fields and select the **Filter by** or **Add...to search filter** option to immediately filter results based on the selected string.

Understanding timeout behavior

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

By default, TRITON Unified Security Center sessions time out after 30 minutes. To run Real-Time Monitor without timing out, click **Full Screen** to open the monitor in a new window. The IP address of the monitored Policy Server appears in the Real-Time Monitor title bar. If you want to monitor multiple Policy Server instances, see [Real-Time Monitor in Multiple Policy Server Deployments](#), page 185, for considerations and instructions.

Real-Time Monitor in Multiple Policy Server Deployments

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you go to the Reporting > Real-Time Monitor page in TRITON - Web Security, Real-Time Monitor shows information for the Policy Server instance to which the management console is currently connected. This means that if you have multiple Policy Servers, when you connect the management console to a new Policy Server instance, Real-Time Monitor starts to display information for a different set of filtering clients.

If you want Real-Time Monitor to continue monitoring traffic for a specific Policy Server, regardless of which Policy Server instance TRITON - Web Security is connected to, click **Full Screen** to open the monitor in a new window. The IP address of the monitored Policy Server is displayed at the top of the screen.

- ◆ Real-Time Monitor receives Internet activity information from Usage Monitor. Each Policy Server must have a Usage Monitor instance associated with it for Real-Time Monitor to show its filtering activity.
- ◆ You can have multiple Real-Time Monitor instances running in full-screen mode, each showing data for a different Policy Server:
 1. Open TRITON - Web Security. It will connect to the central (default) Policy Server.
 2. Go to the Reporting > Real-Time Monitor page and click Full Screen. The IP address of the central Policy Server appears in the title bar.
 3. Return to TRITON - Web Security and use the Policy Server Connection button in the TRITON toolbar to connect to a different Policy Server instance.
 4. Repeat step 2.
 5. Repeat for each additional Policy Server instance in your network.
- ◆ In full screen mode, Real-Time Monitor does not time out.

9

Scanning and SSL Decryption Bypass Options

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Tunneled protocol detection](#), page 192
- ◆ [Security threats: Content security](#), page 193
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Outbound security](#), page 196
- ◆ [Advanced options](#), page 197
- ◆ [Scanning exceptions](#), page 199
- ◆ [Data files used with scanning](#), page 201
- ◆ [Reporting on scanning activity](#), page 202
- ◆ [SSL decryption bypass](#), page 205

Scanning (advanced analysis) options and SSL decryption bypass features are available with Websense Web Security Gateway and Websense Web Security Gateway Anywhere.

Scanning options support the advanced analysis of Web traffic as it flows through the Content Gateway module (the Websense on-premises proxy). Only sites that are not already blocked, based on the active policy, are analyzed.

- ◆ [Content categorization](#), page 190, categorizes content from URLs that are not in the Websense Master Database and from sites with dynamic content, as identified by Websense Security Labs. Analysis returns a category for use in filtering.
- ◆ [Tunneled protocol detection](#), page 192, analyzes traffic to discover protocols tunneled over **HTTP** and **HTTPS**. Such traffic is reported to Websense Web filtering for protocol policy enforcement. Analysis is performed on both inbound and outbound traffic.
- ◆ [Security threats: Content security](#), page 193, analyzes inbound content to find security threats such as malware, viruses, phishing, URL redirection, Web exploits, proxy avoidance, and others.

- ◆ [Security threats: File analysis, page 194](#), applies 2 methods of inspection to detect security threats.

- **Websense Advanced Detection** to discover malicious content, such as viruses, Trojan horses, and worms, returning a threat category for policy enforcement.
- **Traditional antivirus (AV) definition files** to find virus-infected files.

When either Advanced Detection or Antivirus Scanning is enabled, you can also optionally analyze:

- **Rich Internet applications**, such as Flash files, to detect and block malicious content.
- **FTP files** to detect and block malicious content.

The **File Type Options** settings determine which types of files are analyzed for malicious content, including executable and unrecognized files. Individual file extensions may also be specified.

- ◆ [Outbound security, page 196](#), provides 2 types of outbound analysis. The first performs outbound content analysis that mirrors your inbound Security Threats content analysis and file analysis configuration. The second performs data theft analysis, looking for and blocking outbound custom encrypted files, password files, and other sensitive data.
- ◆ The **Content Categorization and Scanning Sensitivity** control allows you to tune the Content Categorization and Content Analysis sensitivity thresholds ([Advanced options, page 197](#)).
- ◆ For large, streaming, or slow transactions, the **Content Delay Handling** option provides some control over how long to wait before releasing a portion of buffered content to the client ([Advanced options, page 197](#)).
- ◆ The **Scanning Timeout, File Size Limit and Content Stripping** Advanced Options apply to all traffic transiting the proxy ([Advanced options, page 197](#)).

Several presentation reports can provide details about how advanced analysis features protect your network from attempts to access sites containing threats. See [Reporting on scanning activity, page 202](#).

SSL decryption bypass options support the specification of clients, Web sites, and Web site categories that are **not** subject to decryption and analysis as they flow through the proxy. These options apply only if SSL Manager is enabled in Content Gateway. See [SSL decryption bypass, page 205](#).

Scanning exceptions are lists of hostnames or URLs that are always analyzed or never analyzed. The type of analysis to always or never perform is specified per hostname/URL or group of hostnames/URLs. A list of client IP addresses whose content is never analyzed can also be specified. See [Scanning exceptions, page 199](#).

Enabling scanning and SSL decryption bypass features

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To enable the scanning advanced analysis and SSL decryption bypass features that are available with Websense Web Security Gateway and Gateway Anywhere, an

appropriate subscription key must be entered in TRITON - Web Security. You can enter the key:

- ◆ When prompted after logging on
- ◆ On the **Settings > General > Policy Servers** page

Review current key information on the **Settings > General > Account** page.

The key is automatically passed to all Content Gateway instances associated with the current Policy Server. See [Reviewing Policy Server connections, page 371](#), and [Managing Content Gateway connections, page 383](#), for more information.

For information about configuring advanced analysis options, see [Scanning options, page 189](#). For information about SSL decryption bypass options, see [SSL decryption bypass, page 205](#).

Scanning options

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Content categorization, page 190](#)
- ◆ [Tunneled protocol detection, page 192](#)
- ◆ [Security threats: Content security, page 193](#)
- ◆ [Security threats: File analysis, page 194](#)
- ◆ [Outbound security, page 196](#)
- ◆ [Advanced options, page 197](#)
- ◆ [Scanning exceptions, page 199](#)
- ◆ [Reporting on scanning activity, page 202](#)

Scanning analysis options are available with Websense Web Security Gateway and Websense Web Security Gateway Anywhere. These options control the types of advanced analysis performed on Web traffic as it transits the Content Gateway module (the Websense on-premises proxy).

For an introduction to advanced analysis options and other options related to Content Gateway, see [Scanning and SSL Decryption Bypass Options, page 187](#).

Use the **Settings > Scanning > Scanning Options** page to configure the following:

- ◆ [Content categorization, page 190](#)
- ◆ [Tunneled protocol detection, page 192](#)
- ◆ [Security threats: Content security, page 193](#)
- ◆ [Security threats: File analysis, page 194](#)
- ◆ [Outbound security, page 196](#)

- ◆ Scanning sensitivity, scanning timeout, scan size limit, content delay handling, and content stripping ([Advanced options](#), [page 197](#))

Basic settings are:

- ◆ **Off** – No analysis.
- ◆ **On** (default) – Analyze content or files with elevated risk profiles, as determined by Websense Security Labs.
- ◆ **Aggressive analysis** – Analyze content and files with elevated risk profiles and content and files with lower risk profiles. Aggressive analysis consumes more resources. For best results, monitor system performance and scale system resources to meet demand.

In addition to the On/Off/Aggressive analysis settings, analysis is performed or not performed, based on the Always Scan, Never Scan, and client IP exception lists. These lists are maintained on the **Settings > Scanning > Scanning Exceptions** page. See [Scanning exceptions](#), [page 199](#).



Warning

Sites on the Never Scan list are not analyzed under any circumstances. If a site on the Never Scan list is compromised, scanning options do not analyze and detect the malicious code.

When you have completed configuration on the current page, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Content categorization

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), [page 189](#)
- ◆ [Tunneled protocol detection](#), [page 192](#)
- ◆ [Security threats: Content security](#), [page 193](#)
- ◆ [Security threats: File analysis](#), [page 194](#)
- ◆ [Outbound security](#), [page 196](#)
- ◆ [Advanced options](#), [page 197](#)
- ◆ [Scanning exceptions](#), [page 199](#)
- ◆ [Reporting on scanning activity](#), [page 202](#)

When a Web page is requested, content categorization is performed if:

- ◆ The URL has not already been blocked by the active policy
- ◆ The URL is not in the Websense Master Database

- ◆ The URL has an elevated risk profile, as identified by Websense Security Labs

The category that is determined by content categorization is forwarded to Websense filtering software for policy enforcement.

Content categorization can, optionally, include **analysis of URL links embedded in the content**. Such analysis can provide more accurate categorization of certain types of content. For example, a page that otherwise has little or no undesirable content, but that links to sites known to have undesirable content, can itself be more accurately categorized. Link analysis is particularly good at finding malicious links embedded in hidden parts of a page, and in detecting pages returned by image servers that link thumbnails to undesirable sites. For more information about how analysis of link neighborhoods can improve coverage, read the Websense Security Labs blog post [In Bad Company](#).

The effectiveness of content categorization and link analysis is quantified in several presentation reports. See [Presentation reports](#), [page 135](#), for more information.



Important

If you plan to generate reports of advanced analysis activity, enable full URL logging (see [Configuring how URLs are logged](#), [page 425](#)). Otherwise, log records include only the domain (www.domain.com) of the site categorized, and individual pages within a site may fit into different categories.

If your site uses WebCatcher to report uncategorized URLs to Websense, Inc. (see [What is WebCatcher?](#), [page 30](#)), URLs categorized through content categorization are forwarded for inclusion in the Master Database.

To configure content categorization:

1. Go to **Settings > Scanning > Scanning Options**.
2. Select **Off** to disable content categorization.
3. Select **On** (default) to enable content categorization.
4. Select **Analyze links embedded in Web content** to include embedded link analysis in content analysis. Requests that are blocked as a result of link analysis are logged and can be viewed in Scanning Activity presentation reports.
5. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

The algorithms used to perform content categorization are tuned by Websense Security Labs to provide the best results for most organizations. However, if the Optimized setting does not produce the results you expect, you can adjust the sensitivity level to influence more restrictive or more permissive results. See the [Advanced options](#) section of this screen.

Tunneled protocol detection

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Security threats: Content security](#), page 193
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Outbound security](#), page 196
- ◆ [Advanced options](#), page 197
- ◆ [Scanning exceptions](#), page 199
- ◆ [Reporting on scanning activity](#), page 202

Tunneled protocol detection analyzes traffic to discover protocols that are tunneled over HTTP and HTTPS. Traffic that is allowed to tunnel over specific ports is also analyzed. Such traffic is reported to Websense Web filtering for protocol policy enforcement. When tunneled protocol detection is enabled, analysis is performed on both inbound and outbound traffic, regardless of other scanning settings.

HTTP tunneling occurs when applications that use custom protocols for communication are wrapped in HTTP (meaning that standard HTTP request/response formatting is present) in order to use the ports designated for HTTP/HTTPS traffic. These ports are open to allow traffic to and from the Web. HTTP tunneling allows these applications to bypass firewalls and proxies, leaving a system vulnerable.

The tunneled protocol detection feature analyzes HTTP and HTTPS traffic and, when it detects a protocol, forwards it to Websense Web filtering for policy enforcement. At this point, a protocol is blocked or allowed based on policy definitions. This feature can be used to block protocols used for instant messaging, peer-to-peer applications, and proxy avoidance. Note that some applications running over HTTP (for example, Google Video) may not display the protocol block page. See [Filtering categories and protocols](#), page 50, for information about protocol filtering.



Note

Tunneled protocol detection is performed before content categorization. As a result, when a tunneled protocol is identified, protocol policy is enforced and content categorization is not performed.

Use the **Settings > Scanning > Scanning Options** page to enable and configure tunneled protocol detection:

1. Select **Off** to disable tunneled protocol detection.

2. Select **On** (default) to analyze all traffic to detect protocols tunneling over HTTP or HTTPS. Such traffic is reported to Web filtering for policy enforcement.
3. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Use the **Settings > Scanning > Scanning Exceptions** page to specify trusted sites that are never analyzed ([Scanning exceptions](#), page 199).

Security threats: Content security

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Tunneled protocol detection](#), page 192
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Outbound security](#), page 196
- ◆ [Advanced options](#), page 197
- ◆ [Scanning exceptions](#), page 199
- ◆ [Reporting on scanning activity](#), page 202

Content Security performs Web page content analysis to discover security threats and malicious code in HTTP and HTTPS content (HTTPS when Content Gateway SSL Manager is enabled).

Use the **Settings > Scanning > Scanning Options** page to enable and configure content security.

1. Select **Off** to disable content analysis.
2. Select **On** (default) to enable content analysis for uncategorized sites and sites with elevated risk profiles, as identified by Websense Security Labs.
3. Select **Aggressive analysis** to analyze content from sites with elevated risk profiles and also sites with lower risk profiles. This option consumes additional system resources.
4. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Use the **Settings > Scanning > Scanning Exceptions** page to specify untrusted or trusted sites that are always analyzed or never analyzed ([Scanning exceptions](#), page 199).

Content analysis sensitivity is tuned by Websense Security Labs to provide the best results for most organizations. However, if the Optimized setting does not produce the results you expect, you can adjust the sensitivity in the [Advanced options](#) section.

Security threats: File analysis

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Security threats: Content security](#), page 193
- ◆ [Outbound security](#), page 196
- ◆ [Advanced options](#), page 197
- ◆ [Scanning exceptions](#), page 199
- ◆ [Reporting on scanning activity](#), page 202

File analysis inspects files that users attempt to download or open remotely for viruses and other malicious content. File analysis returns a category to Websense filtering for policy enforcement.

There are 4 types of file analysis. They can be used together.

- ◆ **Advanced detection** applies techniques developed by Websense to discover known and emerging threats, including viruses, Trojan horses, worms, and other malicious content.
- ◆ **Antivirus scanning** uses antivirus definition files to identify virus-infected files.
- ◆ **Rich Internet application scanning** examines Flash files for malicious content.
- ◆ **FTP file scanning** examines inbound FTP files for malicious content.

You can configure the specific types of files to analyze by clicking **File Type Options**.



Note

If file analysis is configured to include multimedia files, sometimes when the streaming media is buffered and analyzed, the connection to the server times out. In such cases, the best remedy is to create an exception for that site. See [Scanning exceptions](#).

Use the **Settings > Scanning > Scanning Exceptions** page to specify untrusted or trusted sites that are always analyzed or never analyzed ([Scanning exceptions](#), page 199).

Use the **Settings > Scanning > Scanning Options** page to enable and configure file analysis.

Advanced Detection

1. Select **Off** to disable file analysis.

2. Select **On** (default) to enable file analysis on files from uncategorized sites and files from sites with elevated risk profiles, as identified by Websense Security Labs.
3. Select **Aggressive analysis** to analyze inbound files from sites with elevated risk profiles and from sites with lower risk profiles. This option consumes additional system resources.

Antivirus Scanning

1. Select **Off** to disable antivirus analysis.
2. Select **On** (default) to enable antivirus analysis of files from uncategorized sites and files from sites with elevated risk profiles, as identified by Websense Security Labs.
3. Select **Aggressive analysis** to apply antivirus analysis to inbound files from sites with elevated risk profiles and from sites with lower risk profiles. This option consumes additional system resources.

Rich Internet application scanning

Select **Scan rich Internet applications** to analyze Flash files for malicious content.

FTP file scanning

Select **Scan FTP files** to analyze files that are downloaded with the FTP protocol. (FTP over HTTP file downloads and uploads are subject to the HTTP/HTTPS file scanning settings.) To be meaningful, this option requires that Content Gateway be configured to proxy FTP traffic. See Content Gateway Manager Help.



Note

The **Scan rich Internet applications** and **Scan FTP files** options are available only when Advanced Detection is enabled. When the Advanced Detection file analysis feature is turned off, the rich Internet application scanning feature is disabled and the check box is cleared.

File Type Options

1. To specify the types of files to analyze, click **File Type Options**. As a best practice, analyze all suspicious files, as identified by Websense Security Labs, and all executable and unrecognized files.
2. To always analyze files having a specific extension, select **Files with the following extensions**, enter the extension in the entry field and click **Add**.
To remove an extension from the list, click on the extension to select it, and click **Delete**.

When you are done configuring file analysis options, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Several presentation reports provide details about attempts to download files containing security risks. These reports are listed in the Report Catalog only after analysis activity has detected sites whose activity has changed since it was assigned a Master Database category. See [Presentation reports](#), page 135, for more information.

See [Managing traffic based on file type](#), page 282, for information about blocking files based on type and URL category.

Outbound security

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Security threats: Content security](#), page 193
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Scanning exceptions](#), page 199
- ◆ [Reporting on scanning activity](#), page 202
- ◆ [Advanced options](#), page 197

Outbound security:

- ◆ Provides outbound analysis that mirrors your inbound Security Threats configuration. This option also supports TRITON - Web Security social Web controls.
 - ◆ Performs specialized data theft protection, analyzing for and blocking outbound custom encrypted files, password files, and other forms of sensitive data.
1. Enable **Analyze for and block outbound security threats** (default) to analyze outbound content for threats like bot and spyware phone home traffic. This option performs outbound analysis that mirrors your inbound Security Threats configuration.



Important

This option must be enabled to support TRITON - Web Security social Web controls.

2. Enable **Data theft protection** (default) to analyze for and block outbound custom encrypted files, password files, and files containing sensitive or suspicious data. Results from this analysis are reported to the Threats dashboard, and are included in transaction logs and reports.

Advanced options

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Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Security threats: Content security](#), page 193
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Outbound security](#), page 196
- ◆ [Scanning exceptions](#), page 199
- ◆ [Reporting on scanning activity](#), page 202

Use these options to:

- ◆ Set the sensitivity level of Content Categorization and Content Security analysis
- ◆ Set the analysis time limit*
- ◆ Set the analysis size limit*
- ◆ Enable stripping of specific types of code from HTML content*

*These settings apply to all incoming traffic.

Content categorization and scanning sensitivity level

The algorithms used to perform content categorization and content analysis are tuned by Websense Security Labs to provide optimal results for most organizations. However, if the Optimized setting does not produce the results you expect, you can adjust the sensitivity level to influence more restrictive or more permissive results.

There are 5 sensitivity levels.

- ◆ **Optimized** is the sensitivity level tuned by Websense Security Labs.
- ◆ **More Stringent** and **Most Stringent** raise analytic sensitivity.
- ◆ **Less Stringent** and **Least Stringent** reduce analytic sensitivity.

When you are finished, click **OK** to cache your changes.

Changes are not implemented until you click **Save and Deploy**.

Scanning timeout

Each content or file analysis consumes a variable amount of time that cannot be determined before analysis begins. By default, to ensure a good user experience, analysis is limited to 1.5 seconds (1500 milliseconds). To adjust the timeout, select **Custom** and enter a value within the range 500 - 10000 (milliseconds).

Scan size limit

The scan size limit is the threshold to which analysis is performed. Analysis stops when the threshold is reached. The default is 10 MB. To change the value, select **Custom** and enter a size in megabytes.

Content delay handling

Depending on the Content Gateway configuration and load conditions, very large files, streamed transactions, and slow origin servers can leave clients waiting for content.

The options in this section provide a tool for delivering a portion of buffered content to the client **before analysis is performed**. Analysis begins when all data is received or the scan size limit is exceeded.

Use **Begin returning data to the client after** to specify a time period after which a percentage of buffered data is released to the client. The default is 30 seconds. Select **Custom** to enter another value.

Use **Specify how much data to return to the client** to specify the percentage of buffered data to release to the client. The default is 80 percent. Select **Custom** to enter a different value, up to 90 percent.

Content stripping

Threats to your system can be hiding in **active content** sent via Web pages. Active content is content that is embedded in the HTML page that performs actions, such as running an animation or a program.

The content stripping options make it possible to specify that content in particular scripting languages (ActiveX, JavaScript, or VB Script) be stripped from incoming Web pages. If content stripping is enabled, all content in the specified scripting languages is removed from sites flagged as containing dynamic content or appearing on the Always Scan list (see [Scanning options](#), page 189).

Content is removed only after the advanced analysis options have categorized the site and Websense filtering software has determined which policy applies.



Warning

Web pages that rely on active content that has been stripped do not function as expected. To permit full access to sites that require active content, disable content stripping or add the sites to the Never Scan list.

The user requesting a page with active content does not receive any notification that content has been removed.

Use the **Settings > Scanning > Scanning Options > Advanced Options** area to set content stripping options.

1. In the **Advanced Options > Content Stripping** area, select the types of scripting languages to be removed from incoming Web pages.
To disable content stripping for a selected language, clear the associated check box.
2. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.



Warning

Content stripping can result in some content being garbled and unreadable. You can reduce the number of such occurrences by making a small change to the Content Gateway configuration.

1) Open Content Gateway Manager and go to the **Configure > Protocols > HTTP > Privacy** tab.

2 In the **Remove Headers > Remove Others** field, add: Accept-Encoding

3) Click **Apply** and restart Content Gateway.

Scanning exceptions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Scanning options, page 189](#)
- ◆ [Content categorization, page 190](#)
- ◆ [Security threats: Content security, page 193](#)
- ◆ [Security threats: File analysis, page 194](#)
- ◆ [Outbound security, page 196](#)
- ◆ [Advanced options, page 197](#)

Scanning exceptions are lists of trusted or untrusted sites (hostnames and URLs) that are **never analyzed** or **always analyzed**. The type of analysis to never or always perform is specified per hostname or URL, or group of hostnames and URLs.

You can also create a list of trusted client IP addresses whose content is never analyzed.

For an introduction to scanning options, see [Scanning and SSL Decryption Bypass Options, page 187](#).

Use the **Always Scan** and **Never Scan** lists to refine the behavior of content categorization, tunneled protocol detection, security threats (content analysis and file analysis), and content stripping.

- ◆ When Content Categorization, Content Security, or File Analysis options are **On**, sites on the **Always Scan** list are always analyzed, and sites on the **Never Scan** list are never analyzed (see [Scanning options](#), page 189).
- ◆ When the Tunneled Protocol Detection option is **On** or **Aggressive analysis** is selected, sites on the **Never Scan** list are never analyzed.

Use the Never Scan list with caution. If a site on the list is compromised, Websense Web Security Gateway does not analyze the site and cannot detect the security problem.

Hostname/URL Exceptions

To add sites to the Always Scan or Never Scan lists:

1. Click the **Add Hostname/URL** button.

You can specify a site in several ways, and you can specify more than one hostname or URL at a time.

- You can enter a simple hostname, for example, **thissite.com**. Be sure to enter both the hostname and the extension (**thissite.com** and **thissite.net** are distinct hosts).
- Sites with multiple labels are supported. For example: **www.bbc.co.uk**
- You can use the wild card “*” to match leading subdomains only.
For example: ***.yahoo.com**.
- You can enter a complete or partial hostname or URL. The leading scheme “HTTPS://” is not required. An exact match is performed on the specified string.

For example: **www.example.com/media/**

Or: **www.youtube.com/watch?v=**

2. After entering a single or group of hostnames/URLs, select the scanning options that apply to all of the sites you have entered. You can select one or more options.

To apply different options to different sites, enter the names separately.

A site can appear in only 1 of the 2 lists. You cannot, for example, specify that the same site should never be analyzed for tunneled protocols and always analyzed for content categorization.

Click **OK** to add the entry.

3. To delete a site from a list, select the site and click **Delete**.
4. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

To change the scanning options associated with a site:

1. Select the site in the list and adjust the options.

2. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Client Exceptions

Use the Client Exceptions list to identify trusted users (client IP addresses) whose content is never analyzed.

To add an IP address to the list:

Click in the **Enter clients** box and enter an IP address or IP address range. For example, 10.201.67.245, or 10.201.67.245 - 10.201.67.250.

Click the right arrow (>) to move the address to the list.

To edit an entry:

Select the entry in the list and click **Edit**.

Make the desired changes and click **OK**.

To delete an entry:

Select the entry from the list and click **Delete**.

When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Data files used with scanning

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Analysis uses a set of data files to support its work. These files are updated regularly by Websense Security Labs and made available on the Websense download server. Websense Content Gateway checks for updated analytic data files at regular intervals. The name and version of each file is displayed in Content Gateway Manager **Monitor > MyProxy > Summary**.

Data file updates occur independent of Websense Master Database updates (including real-time database updates and Real-Time Security Updates).

Every time the **./WCGAdmin start** command is run, a data file check and download is performed. If the download fails, a new download is attempted every 15 minutes until a successful download results.

The default interval for database update checks is 15 minutes. This is the recommended setting. Longer intervals increase the window of vulnerability to emerging, *zero day* exploits.

You can change the polling interval by editing the **PollInterval** value in the **/opt/bin/downloadservice.ini** file on the Content Gateway machine. After editing the

downloadservice.ini file, you must stop and restart Content Gateway from the command line:

```
/opt/WCG/WCGAdmin restart
```

Reporting on scanning activity

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Related topics:

- ◆ [Scanning options](#), page 189
- ◆ [Content categorization](#), page 190
- ◆ [Security threats: File analysis](#), page 194
- ◆ [Content stripping](#), page 198

After you install Websense Content Gateway and enter a key that enables the advanced analysis features, you can see and analyze the effects of these features on the dashboard, and with presentation and investigative reports.

On the Usage dashboard, by default, 2 charts tally requests to Web 2.0 sites over the past 30 days:

- ◆ Web 2.0 Categories
- ◆ Web 2.0 URL Bandwidth

See [The Web Security Dashboard](#), page 33, for information about customizing the charts or moving them to a different dashboard tab.

On the **Presentation Reports** page, the **Scanning Activity** group contains reports that focus on Web 2.0 browsing and analysis activity, including recategorization that results from content categorization. There is also a report that tracks page blocks that result from link analysis.



Important

Enable full URL logging (see [Configuring how URLs are logged](#), page 425) to ensure that reports of analysis activity are meaningful. Otherwise, reports can display only the domain (www.domain.com) of the site categorized, even though individual pages within the site may fall into different categories, or be recategorized for different reasons.

You can copy a security or analysis report template to create a custom report. You can then edit the report filter to refine the information included when you generate that custom report.

Some security threat reports include a **Threat ID** column. You can click the individual threat ID to open a Websense Security Labs Web page that describes the type of threat identified.

Other presentation reports can contain information on analysis activities, as well as standard filtering activities. For example, the Detail of Full URLs by Category report, found in the Internet Activity group of the Report Catalog, provides a detailed listing of each URL accessed within each category. To make a report that is specific to advanced analysis, copy the Detail of Full URLs by Category report, and edit the report filter for the new custom report. On the Actions tab, select only permitted and blocked actions that relate to analysis. On the Options tab, change the report catalog name and report title to identify this as an advanced analysis report. For example, you might change the name and title to Advanced Analysis: Detail of Full URLs by Category.

Investigative reports can also be used to gain insight into advanced analysis activities.

1. In the **Internet use by** drop-down list, select **Action**.
2. In the resulting report, click an action, such as **Category blocked real time**, to show a list of drill-down options.
3. Click the desired drill-down option, such as **Category** or **User**.
4. Click the **Hits value** or the bar on any row to see related detail.
5. Click **Modify Report**, at the top of the page, to add the **Full URL** column to the report.

See [Investigative reports](#), page 156, for details on using all the investigative reports features.

How scanning is logged

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There are important differences in the way that standard Web filtering activity and advanced analysis activity are logged.

For standard Web filtering, you have several options to reduce the size of the Log Database.

- ◆ Enable **visits** to log only one record for each Web site requested. See [Configuring Log Server](#), page 412.
- ◆ Enable **consolidation** to combine into a single log record multiple requests with certain common elements. See [Configuring Log Server](#), page 412.

- ◆ Disable **full URL logging** to log only the domain name (www.domain.com) for each request, and not the path to the specific page in the domain (/products/productA). See [Configuring how URLs are logged](#), page 425.

**Note**

If your organization needs reports that include the full URL of each site visited, you should leave full UR logging enabled. Otherwise, reports will include only the domain (www.domain.com) of the site categorized, even though individual pages within the site may fall into different categories, or be recategorized for different reasons.

- ◆ Configure **selective category logging** to limit logging to only those categories that are required for your organization. See [Configuring how filtered requests are logged](#), page 410.

**Note**

Enabling **visits**, **consolidation**, or **selective category logging**, will impact the accuracy of Internet Browse Time.

Scanning (advanced analysis) features, however, are bound only partially by these settings. When scanning analyzes a site, it creates 2 separate log records.

- ◆ **Web filter records** take advantage of any size reduction settings that have been implemented, and are available for all Web filter reports.
- ◆ **Scanning records** ignore most size reduction settings. Every separate hit is logged, requests to all categories are logged, and no records are consolidated. A scanning analysis record is generated regardless of whether the site is blocked or permitted as a result of analysis. Only the setting for full URL logging is honored for advanced analysis records.

If you have enabled any Log Database size reduction options, the numbers that appear in analysis reports may **not** match those that appear in standard filtering reports, even when the reports are configured for the same users, time periods, and categories. For example, if you have chosen to log visits, and a user requests a site analyzed by scanning features, that user request appears as one visit in standard filtering reports, but may show as multiple hits in advanced analysis reports.

To see comparable data for standard and advanced analysis filtering, **disable** the Log Database size reduction settings. Because this may result in a very large and fast-growing database, make sure that the Log Database machine has adequate hard disk, processing, and memory capacity.

See [Reporting Administration](#), page 407, for more information on configuring size reduction settings. See [Presentation reports](#), page 135, and [Investigative reports](#), page 156, for information on generating reports.

SSL decryption bypass

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When Content Gateway is configured to use SSL Manager to handle encrypted traffic:

- ◆ Category settings can be used to specify categories of Web sites for which decryption and inspection are bypassed.
- ◆ A list of client IP addresses and IP address ranges can be created to specify trusted clients for which decryption and inspection are bypassed.
- ◆ A list of destination hostnames, IP addresses, and IP address ranges can be created to specify trusted destination servers for which decryption and inspection are bypassed.

Category settings

For Category settings, a predefined **Privacy Category** group includes categories that may be subject to regulatory requirements.

Default privacy categories include:

- ◆ Education
- ◆ Financial Data and Services
- ◆ Government
- ◆ Health
- ◆ Online Brokerage and Trading
- ◆ Prescribed Medications

Traffic that involves Web sites in these categories may include personal identification information that should not be decrypted. In order to avoid liability for inspecting this type of information, you may want to specify some or all of these categories for decryption bypass. End users can determine that the Web site they are viewing is not decrypted by verifying that the certificate is the original for that site.

Use **Settings > SSL Decryption Bypass** to select the default privacy categories for SSL decryption bypass:

1. Click the **Select Privacy Categories** button. Check boxes for the Web site categories that constitute the default group are selected in the Category Bypass box.
2. Click the arrow to the right of the category tree to add the privacy categories to the **Categories selected for SSL decryption bypass** box.

You can create your own set of categories for SSL decryption bypass. On the **SSL Decryption Bypass** page, specify individual Web site categories for which decryption is not performed:

1. Click a check box to select a category or subcategory for bypass.

2. Click the arrow to right of the category tree to enter the selected category into the **Categories selected for SSL decryption bypass** box.

To clear your selections from the category tree, click the **Clear All** button.

To remove a category or subcategory from the list, select the category and click the **Remove** button.

Client list

To identify a client IP address or IP address range for SSL decryption bypass:

1. Click **Add** and enter the client IP address or IP address range in the **Add Client Entry** box, one entry per line.

When specifying an IP address range, use a “-” (hyphen) to separate the first address from the last.

IPv6 addresses are valid with explicit proxy traffic only.

2. To facilitate maintenance of the list, add a description that identifies the entry.
3. Click **OK** to add the entries to the list.

To modify an entry, click on the IP address and modify the entry in the **Edit Client Entry** box. Click **OK** to save your changes or **Cancel** to close the dialog box without saving your changes.

To remove an entry from the list, select the check box adjacent to the entry and click **Delete**. Confirm the action.

When you are finished, click **OK** to cache your changes.

Changes are not implemented until you click **Save and Deploy**.

Destination list

To specify a destination hostname, IP address, or IP address range for SSL decryption bypass:

1. Click **Add** and enter the destination hostname, IP address, or IP address range in the **Add Destination Entry** box, one entry per line.
 - You can enter a simple hostname.
For example: **thissite.com**.
Be sure to enter both the hostname and the extension (**thissite.com** and **thissite.net** are distinct hosts).
 - Sites with multiple labels are supported.
For example, **www.bbc.co.uk**
 - You can use the wild card “*” to match leading subdomains only.
For example: ***.yahoo.com**.

- You can enter a complete or partial hostname or URL. The leading scheme “HTTPS://” is not required. An exact match is performed on the specified string.

For example: **www.example.com/media/**

Or: **www.youtube.com/watch?v=**

- Use a “-” (hyphen) to separate the first and last address in an IP address range.
 - IPv6 addresses are valid with explicit proxy traffic only.
2. To facilitate maintenance of the list, add a description that clearly identifies the entry.
 3. Click **OK** to add the entries to the list.

To modify an entry, click on the hostname or IP address and modify the entry in the **Edit Destination Entry** dialog box. Click **OK** to save your changes or **Cancel** to close the dialog box without saving your changes.

To remove an entry, select the check box adjacent to the entry and click **Delete**. Confirm the action.

When you are finished, click **OK** to cache your changes.

Changes are not implemented until you click **Save and Deploy**.

10

Configure Hybrid Filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Web Security Gateway Anywhere offers a flexible, comprehensive Web security solution that lets you combine on-premises and hybrid (in-the-cloud) filtering as needed to manage Internet activity for your organization. You decide which method to use for which clients.

An organization might use the robust on-premises software to provide Web security for the main office or campus, while smaller regional offices or satellite locations send their Internet requests through the hybrid service. Hybrid filtering is also useful for users who are off-network, such as telecommuters, those who travel for business, and so on (see [Applying hybrid filtering to off-site users](#), page 250).

With Web Security Gateway Anywhere you define clients and create policies for on-premises and hybrid filtering in the same user interface—TRITON - Web Security—and configuration, reporting, and management are centralized.

To use hybrid filtering:

1. [Activate your hybrid filtering account](#), page 210
2. [Define filtered locations](#), page 211
3. [Specify sites not filtered by hybrid filtering](#), page 218 (if any)
4. [Configure user access to hybrid filtering](#), page 220
5. [Identification of hybrid filtering users](#), page 322
6. [Send user and group data to the hybrid service](#), page 227

In order to ensure that the hybrid service has current policy, user, and group information, and that the on-premises reporting software has reporting data from users filtered by the hybrid service, see [Schedule communication with hybrid filtering](#), page 234.

Activate your hybrid filtering account

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Related topics:

- ◆ [Define filtered locations, page 211](#)
- ◆ [Specify sites not filtered by hybrid filtering, page 218](#)
- ◆ [Configure user access to hybrid filtering, page 220](#)
- ◆ [Send user and group data to the hybrid service, page 227](#)
- ◆ [Schedule communication with hybrid filtering, page 234](#)

Before you can configure the hybrid service to start filtering Internet requests for your organization, you must activate your hybrid account by submitting a contact email address. This creates a connection between the on-premises and hybrid portions of Websense Web Security Gateway Anywhere.

Use the Hybrid Filtering section of the **Settings > General > Account** page to provide the contact email address and country for your Websense filtering administrators (see [Configuring your account information, page 25](#)).

The email address is typically an alias monitored by the group responsible for managing your Websense software. It is very important that email sent to this account be received and acted upon promptly.

- ◆ Websense Technical Support uses this address to send out notifications about urgent issues affecting hybrid filtering.
- ◆ If there is a configuration problem with your account, failure to respond to an email message from Technical Support in a timely fashion could lead to service interruptions.
- ◆ Should certain rare problems occur, the email address is used to send the information needed to allow Sync Service to resume contact with the hybrid service.
- ◆ This email address is **not** used to send marketing, sales, or other, general information.

The country you enter provides the system with time zone information.

Once you have activated hybrid filtering for your account, you can specify which locations (identified by IP address, IP address range, or subnet) are filtered by the hybrid service, how information is exchanged between the on-premises and hybrid portions of your Web security software, how users filtered by the hybrid service are authenticated, and more.

Define filtered locations

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Related topics:

- ◆ [Specify sites not filtered by hybrid filtering, page 218](#)
- ◆ [Configure user access to hybrid filtering, page 220](#)
- ◆ [Schedule communication with hybrid filtering, page 234](#)

Use the **Settings > Hybrid Configuration > Filtered Locations** page to review, add, or edit information about the locations whose users can be filtered by the hybrid service.

A **filtered location** is the IP address, IP address range, or subnet from which browsers connecting to Web filtering appear to be originating. In Web Security Gateway Anywhere deployments, hybrid filtering can be applied to off-site users, regardless of how those users are filtered when they are in-network.

- ◆ For users filtered by hybrid filtering both in and outside the network, enter their in-network location details and specify that the location is filtered using the hybrid service. When off-site users make an Internet request, they are prompted to log on to hybrid filtering so that the appropriate user or group-based policy can be applied.

Because the hybrid service is hosted outside your network, any locations filtered by the hybrid service must be external addresses, visible from the Internet.

Locations filtered by the hybrid service:

- Are public-facing IP addresses for offices filtered by Web Security Gateway Anywhere
- Are often the external address of your Network Address Translation (NAT) firewall
- Could include branch offices, remote sites, or satellite campuses

These locations are NOT:

- IP addresses of individual client machines
- The IP address of any Content Gateway machine used by the on-premises components of Websense Web Security Gateway Anywhere
- ◆ For users filtered by on-premises components (Filtering Service) when they are inside the network, you can configure the browser PAC file to determine whether the user is in-network or off-site before sending an Internet request for filtering.

If you are using the PAC file generated by the hybrid service, this configuration occurs automatically based on the settings that you provide on the Filtered Locations page. Specify that these users are filtered by local Websense software and define whether their on-premise filtering is through a firewall-integrated or transparent proxy (for example, Content Gateway in transparent mode), or an explicit proxy. If Internet requests from in-network machines at a specified location pass through an explicit proxy, you provide the proxy location (hostname

or IP address) and port to ensure requests are routed properly for users at that location.

Each location that you define appears in a table that combines a name and description with technical configuration details, including the selected proxy mode, the type of location (single IP address, IP address range, or subnet), and the actual external IP address or addresses from which requests originate.

To edit an existing entry, click the location **Name**, and then see [Editing filtered locations](#), page 213.

To define a new location, click **Add**, and then see [Adding filtered locations](#), page 212.

To remove a location, mark the check box next to the location name, and then click **Delete**.

To add and edit on-premises explicit proxies for use with filtered locations, click **Manage Explicit Proxies**, then see [Managing explicit proxies](#), page 215.

If you have added or edited a location entry, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding filtered locations

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Use the **Filtered Locations > Add Filtered Location** page to define a location either filtered by the hybrid service (like a branch office, remote site, or satellite campus), or that contains users filtered by the hybrid service when off site.

1. Enter a unique location **Name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Enter a short **Description** of the location (up to 255 characters). This appears next to the location name on the Filtered Locations page, and should clearly identify the location to any administrator.

The character restrictions that apply to names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. If you are adding a location filtered by the hybrid service, select the **Time zone** of this location. Time zone information is used in applying policies, to ensure that the correct filters are applied at the appropriate time.

Each location filtered by the hybrid service can have a different time zone setting. Locations filtered by transparent or explicit proxies use the time zone of the machine on which Filtering Service is running as the time zone for policy enforcement.

4. In the **Type** field, indicate how you want to define this location: as an **IP address**, an IP address **Range**, or a **Subnet**.

If you are providing a subnet, specify whether you are identifying it by **By bit range (CIDR)** or **By subnet mask**, and then select a bit range or mask.

5. Enter the external IP address, range, or subnet of the firewall or firewalls through which filtered clients at this location access the Internet.
 - For locations filtered by the hybrid service, these are external IP addresses, visible from outside your network, and not internal (LAN) addresses.



Important

Do not enter private IP addresses (in the ranges 10.0.0.0 - 10.255.255.255, 172.16.0.0 - 172.31.255.255, and 192.168.0.0 - 192.168.255.255) to identify locations filtered by the hybrid service. Because these addresses are not visible from outside your network, and are used within multiple local area networks, the hybrid service does not accept private IP addresses as valid entries.

If the proxy mode for this location is Transparent or Explicit, you can enter private IP addresses.

- Do not include the IP address of any Content Gateway machine used by the on-premises components of Websense Web Security Gateway Anywhere.
 - External IP addresses must be unique to your organization, not shared with any other entity, so that the hybrid service is able to associate requests originating from these locations with the policies belonging to your organization.
6. Specify how the location is filtered: using the hybrid service, or by local Websense software.
 7. If the site is filtered by local Websense software, select the proxy mode for this location: using a **Transparent** proxy, or an **Explicit** on-premises proxy.
 If you select Explicit, there must be at least one proxy defined in the Explicit proxy configuration table. To add a new explicit proxy to the table, click **Add**, select a proxy location and preference order from the popup window, then click **OK**. See [Managing explicit proxies, page 215](#), for more information on the available explicit proxies.
 The filtered location uses the first proxy on the list. If that proxy is not available, Web filtering requests from the filtered location are redirected to the next proxy on the list. To change the order, select any proxy on the list and then click **Move Up** or **Move Down** to change its position in the list.
 To remove a proxy from the table, mark the check box next to the proxy name, and then click **Delete**. The deleted proxy is no longer available for this filtered location, but can still be selected for other filtered locations.
 8. Click **OK** to return to the Filtered Locations page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Editing filtered locations

Use the **Filtered Locations > Edit Filtered Locations** page to change the way a location filtered by the hybrid service is defined.

1. If you make changes to the location **Name**, make sure that the name remains unique. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Enter or update the **Description** of the location.
The character restrictions that apply to names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).
3. Verify the **Time zone** of this location to ensure accurate policy enforcement.
4. Verify the method used to define this location: by **IP address**, IP address **Range**, or **Subnet**.

If you are entering or editing a subnet, specify whether it is identified by **By bit range (CIDR)** or **By subnet mask**, and then select a bit range or mask.

5. Update the external IP address, range, or subnet of the firewall or firewalls through which filtered clients at this location access the Internet.
 - For locations filtered by the hybrid service, these are external IP addresses, visible from outside your network, and not internal (LAN) addresses.



Important

Do not enter private IP addresses (in the ranges 10.0.0.0 - 10.255.255.255, 172.16.0.0 - 172.31.255.255, and 192.168.0.0 - 192.168.255.255) to identify locations filtered by the hybrid service. Because these addresses are not visible from outside your network, and are used within multiple local area networks, the hybrid service does not accept private IP addresses as valid entries.

If the proxy mode for this location is Transparent or Explicit, you can enter private IP addresses.

- These never include the IP address of the Content Gateway machine. The Content Gateway is used only by the on-premises portion of your Websense software.
- External IP addresses must be unique to your organization, not shared with any other entity, so that the hybrid service is able to associate requests originating from these locations with the policies belonging to your organization.

If a filtered location is already associated with one organization, and a second organization adds the same IP address as a filtered location, hybrid filtering may be temporarily suspended for the second organization, until the conflict is resolved.

6. Verify how the location is filtered: using the hybrid service, or by local Websense software.
7. If the site is filtered by local Websense software, select the proxy mode for this location: using a **Transparent** proxy, or an **Explicit** on-premises proxy.

If you select Explicit, the filtered location uses the first proxy on the list defined in the Explicit Proxy Configuration table. If that proxy is not available, Web filtering requests from the filtered location are redirected to the next proxy on the list. To change the preference order, select any proxy on the list and then click **Move Up** or **Move Down** to change its position in the list.

To view the details of an existing table entry, click the proxy **Name**.

To add a new explicit proxy to the table, click **Add**, select a proxy location and preference order from the popup window, then click **OK**. See [Managing explicit proxies, page 215](#) for more information on the available explicit proxies.

To remove a proxy from the table, mark the check box next to the proxy name, and then click **Delete**. The deleted proxy is no longer available for this filtered location, but can still be selected for other filtered locations.

8. Click **OK** to return to the Filtered Locations page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Managing explicit proxies

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Adding an explicit proxy, page 216](#)
- ◆ [Editing an explicit proxy, page 216](#)

Use the **Filtered Locations > Manage Explicit Proxies** page to review, add, and edit the on-premises explicit proxies available for use with filtered locations.

Each explicit proxy that you define appears in a table that displays a proxy name, its IP address or hostname, the port number or numbers used for HTTP, SSL, or FTP access, and the filtered locations (if any) that currently reference the proxy.

To edit an existing entry, click the proxy **Name**, and then see [Editing an explicit proxy, page 216](#).

To define a new explicit proxy, click **Add**, and then see [Adding an explicit proxy, page 216](#).

To remove a proxy, mark the check box next to the proxy name, and then click **Delete**.

**Note**

You cannot delete a proxy that is being used by one or more filtered locations. If you wish to delete a proxy, first edit each filtered location to remove the proxy from the Explicit Proxy Configuration table.

Adding an explicit proxy

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When managing explicit proxies, use the **Add Explicit Proxy** page to define an on-premises explicit proxy to be used for your filtered locations.

1. Enter a unique proxy **Name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Enter the **IP address or name** of the explicit proxy. This must be in one of the following forms:

- An IP address (for example 123.45.67.89)
- A hostname (for example my.example.com)

The IP address or name can include a port number, for example 123.45.67.89:443.

3. Enter at least one port number for the proxy. This can be an **HTTP port**, an **SSL port**, or an **FTP port**.
4. Click **OK** to return to the Manage Explicit Proxies page.

Editing an explicit proxy

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When managing explicit proxies, use the **Edit Explicit Proxy** page to change the details of a configured on-premises explicit proxy.

1. If you make changes to the proxy **Name**, make sure the name remains unique. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Verify or update the **IP address or name** of the explicit proxy. This must be in one of the following forms:

- An IP address (for example 123.45.67.89)
- A hostname (for example my.example.com)

The IP address or name can include a port number, for example 123.45.67.89:443.

3. If you change the proxy port, enter at least one port number. This can be an **HTTP port**, an **SSL port**, or an **FTP port**.
4. Click **OK** to return to the Manage Explicit Proxies page.

Configuring failover to the hybrid service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

For filtered locations that use explicit proxies, you can configure failover to the hybrid service. This ensures that users are able to access the Internet and are always filtered in the event that your other proxies are unavailable.

Failover to the hybrid service for a filtered location must be approved, to ensure that Websense services can provision the correct number of users at the data center nearest to your location. Once failover for a filtered location has been approved, it does not need to be re-approved if you change the failover details or later disable and then re-enable failover.

To configure failover to the hybrid service:

1. On the **Hybrid Configuration > Filtered Locations** page, select a filtered location name to edit it. This must be a location filtered by local Websense software with the proxy mode set to Explicit.
2. Click **Advanced**.
3. Mark **Enable failover to hybrid service**.
4. Enter the **Number of users filtered by this filtered location**.
5. Select the **Nearest data center** to the filtered location.
6. Click **OK** to return to the Filtered Locations page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

When failover for a filtered location is approved, an alert appears on the System dashboard and on the Status > Alerts page. You can view the approval status of all failover requests on the Status > Hybrid Service page.



Note

If automatic proxy caching is disabled in Internet Explorer, end users may notice a delay on every page they visit as the browser checks the list of proxies. When automatic proxy caching is enabled, the browser checks the proxy list only on startup. For more information, see the Microsoft article at <http://support.microsoft.com/kb/271361>.

Specify sites not filtered by hybrid filtering

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Related topics:

- ◆ [Define filtered locations, page 211](#)
- ◆ [Send user and group data to the hybrid service, page 227](#)
- ◆ [Schedule communication with hybrid filtering, page 234](#)

Use the **Settings > Hybrid Configuration > Unfiltered Destinations** page to review, add, or edit information about target sites to which you want to grant clients unfiltered access. Clients can access these sites directly, without sending the request to either the hybrid service or an on-premises explicit proxy in a filtered location, if used. Typical unfiltered destinations include organizational webmail sites, internal IP addresses, and Microsoft update sites.



Tip

As a best practice, add your organization's webmail address as an unfiltered destination. This ensures that:

- ◆ You can access messages from Technical Support in situations that cause your proxy or the hybrid service to block all requests.
- ◆ Off-site users who have forgotten (or not created) their hybrid filtering password can retrieve it via email.

Destinations listed here are added to the Proxy Auto-Configuration (PAC) file that defines how filtered users' browsers connect to the hybrid service (see [Configure user access to hybrid filtering, page 220](#)). By default, the PAC file excludes all non-routable and multicast IP address ranges from filtering. Therefore, if you are using private IP address ranges defined in RFC 1918 or RFC 3330, you need not enter them here.

Each unfiltered destination that you define appears in a table that combines a name and description with technical configuration details, including how the destination is defined (as an IP address, domain, or subnet), and the actual IP address, domain, or subnet that users can access directly.

To edit an existing entry, click the location **Name**, and then see [Editing unfiltered destinations, page 219](#).

To define a new location, click **Add**, and then see [Adding unfiltered destinations, page 219](#).

To remove an unfiltered destination, mark the check box next to the destination name, and then click **Delete**.

If you have added or edited an unfiltered destination entry, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding unfiltered destinations

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Unfiltered Destinations > Add Unfiltered Destination** page to define a site or set of sites that users can access directly, without sending a request to the hybrid service or an on-premises explicit proxy.

1. Enter a unique destination **Name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Enter a short **Description** of the destination. This appears next to the unfiltered destination name on the Unfiltered Destinations page, and should clearly identify the unfiltered target site or sites to any administrator.

The character restrictions that apply to names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. In the **Type** field, indicate how you want to define this destination: as an **IP address**, **Domain**, or **Subnet**.

If you are providing a subnet, specify whether you are identifying it by **By bit range (CIDR)** or **By subnet mask**, and then select a bit range or mask.

4. Enter the IP address, domain, or subnet that you want users to be able to access without sending the request to the hybrid service or an on-premises explicit proxy.
5. Select the **Proxy** type that this unfiltered destination applies to.
 - Select **Hybrid** to enable all hybrid filtering users to access the destination directly without sending a request to the hybrid service.
 - Select **Explicit** to enable all users in filtered locations using an on-premises explicit proxy to access the destination directly.
 - Select **Hybrid and Explicit** to enable all users filtered by the hybrid service and an on-premises explicit proxy from a filtered location to access the destination directly.
6. Click **OK** to return to the Unfiltered Destinations page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Editing unfiltered destinations

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Unfiltered Destinations > Edit Unfiltered Destination** page to change the definition of an existing site or set of sites that users can access directly, without sending a request to the hybrid service.

1. If you make changes to the destination **Name**, make sure that the name remains unique. The name must be between 1 and 50 characters long, and cannot include any of the following characters:
* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,
Names can include spaces, dashes, and apostrophes.
2. Enter or update the destination **Description**.
The character restrictions that apply to names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).
3. Verify the method used to define this destination: **IP address**, **Domain**, or **Subnet**.
If you are entering or editing a subnet, specify whether you are identifying it by **By bit range (CIDR)** or **By subnet mask**, and then select a bit range or mask.
4. Update the IP address, domain, or subnet that you want users to be able to access without sending the request to the hybrid service.
5. Update the **Proxy** type that this unfiltered destination applies to.
 - Select **Hybrid** to enable all hybrid filtering users to access the destination directly without sending a request to the hybrid service.
 - Select **Explicit** to enable all users in filtered locations using an on-premises explicit proxy to access the destination directly.
 - Select **Hybrid and Explicit** to enable all users filtered by the hybrid service and an on-premises explicit proxy from a filtered location to access the destination directly.
6. Click **OK** to return to the Unfiltered Destinations page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configure user access to hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To use hybrid filtering, you must configure how users connect to and are filtered by the hybrid service. To do so, select **Settings > Hybrid Configuration > User Access**.

The **Proxy Auto-Configuration (PAC) File** section shows the URL from which browsers on filtered users' machines retrieve the PAC file (see [What is a PAC file?](#), page 225).

The PAC file defines which requests the browsers send to the hybrid service, and which are sent directly to the target site (see [Specify sites not filtered by hybrid filtering](#), page 218). The PAC file also contains information about filtered locations, and the proxy configuration for any locations that filter their users through an explicit

or transparent proxy when on-premises, so that traffic can be routed properly at all locations.

**Note**

The exact mechanism for configuring a user's browser to use the PAC file depends on the browser and your network environment. For example, if you are using Microsoft Active Directory and Internet Explorer or Mozilla Firefox, you might want to automate the process by using group policies.

The default PAC file is retrieved over port 8082. If users request this PAC file from a location where port 8082 is locked down, they cannot access it. In this case, use the second PAC file address in this section, which enables the user to access the PAC file and hybrid service over port 80. Remote users should also use the PAC file address for port 80 if requesting access from a network that has port 8081 locked down. Even if they can access the PAC file on port 8082, port 8081 is the standard port required to be able to use hybrid filtering.

**Note**

PAC files for previous versions of Web Security Gateway Anywhere use a different URL than the one displayed on the User Access page. If you have deployed a PAC file for a previous version, there is no need to change the URL unless you wish to. PAC file URLs provided with earlier versions of Web Security Gateway Anywhere continue to work.

Use the **Availability** section to specify whether all Internet requests should be permitted or blocked when the hybrid service is unable to access policy information for your organization.

Under **Time Zone**, use the drop-down list to select a default time zone to use when applying policies in the following situations:

- ◆ For users connecting to the hybrid service from an IP address that is not part of an existing filtered location (see [Define filtered locations](#), page 211)
The default time zone is used, for example, by off-site users, or for other users that self-register with the hybrid service.
- ◆ Whenever time zone information is not available for a filtered location

Use the **Custom End User Block Page** section to define a customized logo and text for block pages displayed by the hybrid service (see [Customizing hybrid block pages](#), page 223).

Use the **HTTPS Notification Pages** section to enable users making HTTPS requests to view the appropriate Websense notification pages (see [Enabling HTTPS notification pages](#), page 224).

If hybrid filtering uses directory data collected by Websense Directory Agent to identify users, you can configure hybrid passwords for user accounts on the **Hybrid Configuration > Shared User Data** page in TRITON - Web Security (see [Send user and group data to the hybrid service](#), page 227). If your organization does not use directory data collected by Directory Agent to identify users connecting to the hybrid service from outside filtered locations, you can let users **self-register** for the service. This allows users with email accounts associated with domains that you specify under **Registered Domains** to identify themselves to the hybrid service.

Users requesting Internet access from an unrecognized IP address are prompted to self-register. The domain portion of the user's email address is used to associate the user with your organization so that the proper Default policy is applied.

Users who cannot be associated with an organization are filtered by the hybrid service Default policy.

- ◆ Click **Add** to add a domain (see [Adding domains](#), page 222).
- ◆ Click a domain entry to edit the domain or its attributes (see [Editing domains](#), page 223).

You can also apply hybrid filtering to off-site users connecting from unknown IP addresses, regardless of how those users are filtered when they are in-network or connecting from a filtered location. Under Off-site Users, mark **Enable hybrid filtering of off-site users**.

If you clear this check box, any user connecting from an unknown IP address will not be filtered.

See [Applying hybrid filtering to off-site users](#), page 250 for more information.

Adding domains

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **User Access > Add Domain** page to identify the domains and subdomains (if any) belonging to your organization. This makes it possible for users with email addresses in the specified domains to self-register (authenticate themselves) for hybrid filtering. This is typically enabled only in organizations that do not use Directory Agent to send user information to hybrid filtering.

The hybrid service is unable to provide user name information about self-registered users to the on-premises components for use in reporting. Only the IP address from which the request originated is logged.

1. Enter a **Domain** name (in the format **sampledomain.org**) belonging to your organization.
2. Enter a clear **Description** of the domain as a point of reference to simplify hybrid filtering administration.

3. If you want users with email addresses in both the domain and its subdomains (like **university.edu** and **humanities.university.edu**) to be able to self-register, mark **Include subdomains**.
4. Click **OK** to return to the User Access page.
5. Click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Editing domains

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **User Access > Edit Domain** page to make changes to the domain entries that allow users to self-register for hybrid filtering.

1. Verify the domain **Name** and make changes, if necessary.
2. Update the **Description** as needed.
3. To change whether or not email addresses in subdomains are considered valid, mark or clear **Include subdomains**.
4. Click **OK** to return to the User Access page.
5. Click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Customizing hybrid block pages

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When the hybrid service denies access to a resource, it serves a default block page. You can either use the default page, or modify the page text to suit your needs. For example, you could:

- ◆ Add information about your organization's Internet use policies.
- ◆ Provide a method for contacting Human Resources or a Websense administrator about Internet use policies.
- ◆ Add your organization's logo.

Customizing the logo

If you want to customize the logo that appears on a hybrid filtering block page, create a directory named **logo** in the Websense **ssdata** directory (by default, \Program Files\Websense\Web Security\bin\ssdata\ on Windows, or /opt/websense/bin/ssdata/ on Linux). Then place your logo file in that directory.

The logo must be a JPEG, GIF, or PNG file. If a file with one of these extensions exists in the **logo** directory, Sync Service detects it and sends the data to the hybrid service. The file must be greater than 0 KB and smaller than 50 KB for Sync Service to send it. Sync Service also detects when there is a newer version of the file and updates the version on the hybrid service. If there are multiple valid files in this directory, Sync Service uses the most recent file.

The **Hybrid Service** page displays the date and time that Sync Service sent a customized block page logo to the hybrid service (see [Monitor communication with the hybrid service](#), page 241).

To stop using a customized logo file, delete the file from the **logo** directory.



Note

Clearing **Use a custom block page title and message** on the **Hybrid Configuration > User Access** page does not automatically remove the customized logo from your block pages. The logo file must be deleted from the logo directory for Sync Service to stop pushing the file to the hybrid service.

Customizing the text

1. On the **Hybrid Configuration > User Access** page, mark **Use a custom block page title and message**.
2. Enter the page **Title** and **Message**. This must be in plain text, with no HTML tags.
3. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Enabling HTTPS notification pages

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

SSL (Secure Sockets Layer) is the industry standard for transmitting secure data over the Internet. It is based on a system of trusted certificates issued by certificate authorities and recognized by servers.

If you install the Websense SSL certificate for hybrid filtering, the hybrid proxy can establish SSL channels with newer browsers (Internet Explorer 8 or later, and Firefox 3.5 or later) in order to serve notification pages to the user – for example, a block page if the SSL site is in a category that requires a notification, or the appropriate page if authentication is required.

To preserve performance, only HTTPS traffic is diverted in this manner; HTTP traffic goes through the proxy to the requested site.

To ensure hybrid filtering users can see the notification pages when browsing with HTTPS, you need a root certificate on each client machine that can act as a Certificate Authority for SSL requests to the hybrid proxy.

**Note**

End users using Websense Authentication Service require this root certificate to ensure seamless authentication to HTTPS sites. If the certificate is not installed for Authentication Service users, they must authenticate using NTLM identification or manual authentication, depending on the settings on the Hybrid User Identification page. See [Deploying Websense Authentication Service, page 328](#).

To install the hybrid root certificate on all clients using hybrid filtering:

1. On the **Hybrid Configuration > User Access** page, click **View Hybrid SSL Certificate**.
2. Save the certificate file to a location of your choice.
3. Deploy the SSL certificate to your hybrid filtering users with your preferred administration or deployment method, for example Microsoft Group Policy Object (GPO) or a third-party deployment tool.

Once you have distributed the certificate, mark **Use the hybrid SSL certificate to display a notification page for HTTPS requests when required**, then click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

What is a PAC file?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

A Proxy Auto-Configuration file is a JavaScript function definition that a browser calls to determine how to handle requests. The PAC file used to enable hybrid filtering contains a number of global settings and allows you to configure sites (for example, intranet sites or organizational Web mail) that users can access directly, without sending the request to the hybrid service (see [Specify sites not filtered by hybrid filtering, page 218](#)).

If you want to use hybrid filtering on client machines, you must configure browser settings on each of the clients to point to the URL hosting the PAC file. This URL is displayed on the **Hybrid Configuration > User Access** page in TRITON - Web Security (see [Configure user access to hybrid filtering, page 220](#)).

The exact mechanism for configuring a browser to use the PAC file depends on the browser and network environment. For example, if you are using Microsoft Active Directory and Internet Explorer or Mozilla Firefox, you have the option to automate the process via group policies. Users can also be instructed to set up their browsers manually.

- ◆ For Microsoft Internet Explorer 8 or 9, go to **Tools > Internet Options** and click the **Connections** tab. Click **LAN Settings**, and then mark **Use automatic configuration script**. Enter the PAC file URL in the **Address** field.
- ◆ For Mozilla Firefox 3.x, go to **Tools > Options**, click the **Advanced** icon, and then select the **Network** tab. Under Connection, click **Settings**, and then select **Automatic proxy configuration URL**. Enter the PAC file URL in the blank field.

The default PAC file is supplied by Websense, and comprises default settings from the hybrid service and any changes you make on the Hybrid Configuration pages. If you want to customize the PAC file, create a directory named **pac** in the Websense **ssdata** directory (by default, \Program Files\Websense\Web Security\bin\ssdata\pac on Windows, or /opt/websense/bin/ssdata/pac on Linux). Then you have the following options:

- ◆ To use your own PAC file, create a file named *websense.pac* and place it in the Websense **pac** directory.
- ◆ To add a customized fragment to the default PAC file, place the JavaScript fragment in a file named *customfinal.pac*, and put it in the Websense **pac** directory. This fragment is appended to the default PAC file, replacing the token `_CUSTOMFINALPAC_`.

**Note**

The customized websense.pac file must contain the following function:

```
function FindProxyForURL(url, host) {}
```

If this function is not in the file, it will be rejected by the hybrid service.

If either of these files exists in the **pac** directory, Sync Service detects it and sends the data to the hybrid service. The file must be greater than 0KB and smaller than 50KB for Sync Service to send it. Sync Service also detects when there is a newer version of the PAC file or fragment and updates the version on the hybrid service.

The recommended state for custom PAC files is to set up a custom file or a custom fragment, not both. If both files exist in the **pac** directory, we recommend you decide whether a full customized PAC file or a customized fragment suits your needs better, and delete the other file from the directory.

To stop using a customized PAC file or fragment, delete the file or fragment from the **pac** directory.

The **Hybrid Service** page displays the type of PAC file you are using, and lists the date and time that Sync Service last sent a customized file or fragment to the hybrid service (see *Monitor communication with the hybrid service*, page 241).

If you are unfamiliar with PAC files, it is useful to search the Internet for basic information. Wikipedia has a good introductory article, and a good Web site for more information and several example PAC files is <http://www.findproxyforurl.com/>.

Send user and group data to the hybrid service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If your organization uses a supported, LDAP-based directory service—Windows Active Directory (Native Mode), Oracle (Sun Java) Directory Server, or Novell eDirectory—you can collect user and group data and send it to the hybrid service. This is accomplished using 2 Websense components:

- ◆ **Websense Directory Agent** collects user and group information from Directory Server and collates it for hybrid filtering.
- ◆ **Websense Sync Service** transports policy, reporting, custom PAC file information, and user/group data between the on-premises and hybrid systems.

When hybrid filtering is configured properly, the information from Directory Agent can be used to apply user- and group-based filtering.

If your organization uses Windows Active Directory in mixed mode, user and group data cannot be collected and sent to the hybrid service.

If hybrid filtering uses directory data collected by Directory Agent to identify users, you have 2 options:

- ◆ Configure the hybrid service to automatically create a hybrid logon password for all user accounts sent by Directory Agent. Passwords are sent to each user's email address in staggered intervals to avoid a sudden influx of email messages.
- ◆ Have users request their own password the first time they connect to the hybrid service from outside a filtered location. In order for the process to succeed, users must provide an email address that matches an account sent by Directory Agent. The password is then sent to that email address.

For this reason, be sure that your organization's webmail address has been added as an unfiltered destination. See [Specify sites not filtered by hybrid filtering](#), page 218.

Configure Directory Agent settings for hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Select **Settings > Hybrid Configuration > Shared User Data** to review and edit your current Directory Agent configuration, and to configure Directory Agent to communicate with Sync Service.

The table near the top of the page lists the Active Directory global catalogs identified on the **Settings > General > Directory Services** page. Add or remove global catalog servers, or change the directory service used by Websense software, on that page.



Note

If you remove an Active Directory server from the Directory Services page, also do the following manual step to ensure that the server is fully removed from Directory Agent settings:

- ◆ Software deployments: Delete all files in the **Websense/Web Security/bin/snapshots** directory. Then go to **Settings > Hybrid Configuration > Scheduling**, and click **Send** under Send Update Now.
 - ◆ Appliance deployments: Contact Websense Technical Support for assistance.
-

To refine the way that Directory Agent searches the directory and packages results for the hybrid service, click an IP address or hostname in the table. See [Configure how data is gathered for hybrid filtering](#), page 229.

To view the global catalog directory contexts defined for identifying hybrid users, click **View Context** under Contexts in the table. See [Adding and editing directory contexts](#), page 231.

To have the hybrid service generate passwords for all user accounts that it sees, scroll down to the **Generate User Passwords** section and mark **Automatically generate and email passwords**.

In order for Directory Agent data to be sent to the hybrid service:

1. Scroll to the **Synchronize User Data** section.
2. Verify the **Name or IP address** of the Sync Service machine and the **Port** used for Sync Service communication (by default, 55832).

In most configurations, these fields are populated automatically, but can be updated manually, if needed.

3. Click **Test Connection** to verify that Directory Agent can send data to Sync Service. The test may take a minute or more.
 - If the connection is made, a success message is displayed.
 - If the connection cannot be made, verify the IP address or hostname of the Sync Service machine and the communication port. Also verify that the Sync Service machine is on, that Sync Service is running, and that your network firewall permits connections on the Sync Service port.
4. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configure how data is gathered for hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Shared User Data > Active Directory (Native Mode)** page to refine the way that Directory Agent searches the selected directory server and packages user and group information for the hybrid service.

Under Root Context for Hybrid Filtering Users, click **Add** to provide a **Root Context** to use when gathering user and group data from the directory. Narrow the context to increase speed and efficiency. See [Adding and editing directory contexts](#), page 231.



Warning

There is a limit to how many groups the hybrid service can support. The limit is affected by a number of factors, but if it is exceeded, user requests are not filtered properly (the service fails open).

If your organization has a large directory forest with thousands of groups, be sure to configure Directory Agent to upload only the information required to filter the users whose requests are sent to the hybrid service. You might select only specific groups to upload, or set a specific and narrowed root context.

It is best to provide contexts that include only users filtered by the hybrid service.

If you are using Active Directory and have multiple Directory Agent instances, make sure that each has a unique, non-overlapping root context. Especially watch out for this if:

- ◆ Multiple Directory Agent instances are configured to connect to domain controllers that all manage the same Active Directory server.
- ◆ One Directory Agent instance is configured to communicate with an Active Directory parent domain and another instance is configured to communicate with an Active Directory child domain (a separate global catalog server).

You can further refine the data that is sent to the hybrid service by defining patterns, or search filters, used to remove duplicate or otherwise unwanted entries from the directory search results. See [Optimizing search results](#), page 233, for more information.

Oracle (Sun Java) Directory Server and hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If your organization uses Oracle (Sun Java) Directory Server, select **Settings > Hybrid Configuration > Shared User Data** to refine the way that Directory Agent searches the directory and packages user and group information for the hybrid service.



Important

To use any version of Sun Java System Directory or Oracle Directory Server to send user and group information to the hybrid service, a Directory Agent configuration change is required.

Open the **das.ini** file (located in the Websense **bin** directory on the Directory Agent machine) and locate the following section:

```
# Enable next two parameters if your DS
is Sun Java
# GroupMembershipAttribute=uniqueMember
# MemberOfAttribute=memberOf
```

Enable the GroupMembershipAttribute and MemberOfAttribute parameters by removing the # symbol from the beginning of those lines, then save the file and restart Directory Agent.

1. Under Root Context for Hybrid Filtering Users, click **Add** to provide a **Root Context** to use when gathering user and group data from the directory. Narrow the context to increase speed and efficiency. See [Adding and editing directory contexts](#), page 231.

Provide a context that includes only users filtered by the hybrid service.

2. Under Synchronize User Data, verify the **Name or IP address** of the Sync Service machine and the **Port** used for Sync Service communication (by default, 55832).

These fields are populated automatically, but can be updated manually, if needed.

3. Click **Test Connection** to verify that Directory Agent can send data to Sync Service. The test may take a minute or more.
 - If the connection is made, a success message is displayed.
 - If the connection cannot be made, verify the IPv4 address or hostname of the Sync Service machine and the communication port. Also verify that the Sync Service machine is on, that Sync Service is running, and that your network firewall permits connections on the Sync Service port.

You can further refine the data that is sent to the hybrid service by defining patterns, or search filters, used to remove duplicate or otherwise unwanted entries from the directory search results. See [Optimizing search results](#), page 233, for more information.

Novell eDirectory and hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If your organization uses Novell eDirectory, select **Settings > Hybrid Configuration > Shared User Data** to refine the way that Directory Agent searches the directory and packages user and group information for the hybrid service.

1. Under Root Context for Hybrid Filtering Users, click **Add** to provide a **Root Context** to use when gathering user and group data from the directory. Narrow the context to increase speed and efficiency. See [Adding and editing directory contexts](#), page 231.

Provide a context that includes only users filtered by the hybrid service.

2. Under Synchronize User Data, verify the **Name or IP address** of the Sync Service machine and the **Port** used for Sync Service communication (by default, 55832).

These fields are populated automatically, but can be updated manually, if needed.

3. Click **Test Connection** to verify that Directory Agent can send data to Sync Service. The test may take a minute or more.
 - If the connection is made, a success message is displayed.
 - If the connection cannot be made, verify the IPv4 address or hostname of the Sync Service machine and the communication port. Also verify that the Sync Service machine is on, that Sync Service is running, and that your network firewall permits connections on the Sync Service port.

You can further refine the data that is sent to the hybrid service by defining patterns, or search filters, used to remove duplicate or otherwise unwanted entries from the directory search results. See [Optimizing search results](#), page 233, for more information.

Adding and editing directory contexts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Settings > Hybrid Configuration > Shared User Data > Add Context** page to refine the way that Directory Agent searches your user directory and packages user and group information for the hybrid service.



Warning

There is a limit to how many groups the hybrid service can support. The limit is affected by a number of factors, but if it is exceeded, user requests are not filtered properly (the service fails open).

If your organization has a large directory forest with thousands of groups, be sure to configure Directory Agent to upload only the information required to filter the users whose requests are sent to the hybrid service. You might select only specific groups to upload, or set a specific and narrowed root context.

You can select multiple contexts within the directory. It is best to include contexts that include only users filtered by the hybrid service: for example, you might have hybrid users in multiple OUs. Alternatively, if you want to synchronize all users in a number of specific groups, then you can select a context for each group where each context is the fully qualified group name.

By default, Directory Agent uses the user and group filters defined under [Advanced directory settings](#) on the **Settings > General > Directory Services** page. If required, you can customize these filters for each hybrid filtering context, for example to include only users that are members of a group filtered by the hybrid service.

You can also choose to exclude certain contexts from the Directory Agent search. You might want to do this if you have a particular context that is not required or could cause problems with the hybrid service, such as an administrator group with multiple email addresses in a record. You can only set a context as an exclude context if it is within an included directory context.

1. Expand the Directory Entries tree to locate the context you want to use when gathering user and group data from the directory. Narrow the context to increase speed and efficiency.

Use the search field to locate the context name if required. You can search on OUs, groups, users, or all directory entries. If multiple contexts appear in the search results, select a context and click **Show in Tree** to see the context's location in the Directory Entries tree.

2. Mark the context, then click **Specify Include Context**.
3. In the popup window that appears, indicate how far below the root context Directory Agent looks for users and groups.
 - Select **Context Only** to limit searches to the root context only.
 - Select **One Level** to limit searches to the root context and one level below.
 - Select **All Levels** to expand searches to the root context and all levels below.

4. If you selected One Level or All Levels for group searches, mark **Include all users in selected groups, regardless of context** if you want to ensure that all users are included from the groups found in the directory search, even if some of those users are in a different context. This option is selected by default for Active Directory.
5. To fine-tune the search filters that Directory Agent uses for this context, click **Customize Search Filters**.
6. Mark **Customize search filters**, and edit the user and group search filters as required.
7. Click **OK** to save the directory context.
8. When you specify that a context is included, by default any contexts below that context in the tree are also included. To exclude a context within an included context, mark the context that should not be sent to the hybrid service, and click **Specify Exclude Context**. You can select multiple contexts if required.
9. In the popup window that appears, note that **Set as exclude context** is selected. The **Remove exclude context** option is available only when you select an existing excluded context and click **Specify Exclude Context** to edit it.
10. Indicate how far below the excluded context Directory Agent looks for users and groups.
 - Select **Context Only** to limit searches to the specified context only.
 - Select **One Level** to limit searches to the specified context and one level below.
 - Select **All Levels** to expand searches to the specified context and all levels below.

Note that the user and group levels for an excluded context cannot be greater than the defined levels for its root context. For example, if the root context's Directory Search level for either users or groups is set to Context Only, the corresponding users or groups search level for the excluded context are also set to Context Only and cannot be changed.

If you select All Levels for both users and groups, everything below the selected context is excluded and you cannot browse further levels of the Directory Entries tree.

11. Click **OK** to save the excluded context.

When you are finished, click **OK** to close the Add Context page and update the Root Context for Hybrid Filtering Users table. You must also click **OK** on the Shared User Data page to cache the change.

Optimizing search results

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Optimizing search results further refines the data that is sent to the hybrid service by defining patterns, or search filters, used to remove duplicate or otherwise unwanted entries from the directory search results. It also provides a way to modify the **mail**

attribute for directory entries collected by Directory Agent before they are sent to the hybrid service.

If, for example, the **mail** attribute in your directory service has a partial or internal email address reference, you could use a search filter to replace that partial or internal information with external information, usable by the hybrid service. This would be useful for those who configure the hybrid service to automatically create passwords for users so that they can connect to hybrid filtering when they are off site (see [Configuring hybrid filtering for off-site users, page 251](#)).

Any search filters that you create in TRITON - Web Security are applied to the directory data collected by Directory Agent before that data is sent to the hybrid service.

Click **Optimize Search Results** to see the current search filters, or to create new search filters using wildcards or regular expressions. There are 2 types of search filters: one to filter user entries and one to filter group entries.

- ◆ To create a new search filter, click **Add** under the appropriate table.
- ◆ To edit an existing search filter, click the associated **Find String**.

A popup dialog box prompts you to edit or enter:

- ◆ **Find string:** The text to search for in the original directory data collected by Directory Agent.
- ◆ **Replace string:** The new text that you want to substitute for the original text in data sent to the hybrid service.

When you are finished, click **OK** to close the dialog box and update the Filter User Results or Filter Group Results table. You must also click **OK** on the Shared User Data page to cache the change.

At this time, Directory Agent applies the search filters that you create only to the **mail** attribute.

Schedule communication with hybrid filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Select **Settings > Hybrid Configuration > Scheduling** to specify how frequently directory data collected by Directory Agent is sent to the hybrid service, and how often reporting data is retrieved.



Note

Policy data is collected whenever you click **Save and Deploy** in TRITON - Web Security, and sent to the hybrid service at 15 minute intervals by default. If you have made an important update to your policy data, and want to send user and group information right away, click **Send** under Send Policy Data Now.

To configure how often directory information is sent to the hybrid service:

1. Under **Send User Data**, select one or more days of the week to send user and group information to the hybrid service. If you are using directory information to identify users, you must send Directory Agent data at least once a week.
2. Enter start and end times to define the time period during which Sync Service attempts to send directory data to the hybrid service. Typically, directory data is sent at a period of low traffic in your network.
3. If you have made an important update to your directory service data, and want to send user and group information right away, click **Send** under Send Update Now. If TRITON - Web Security receives confirmation from Sync Service, a success message is displayed. This means that Sync Service will send the data, not that the data has been received by the hybrid service.

To configure whether the hybrid service collects reporting data, and how often Sync Service retrieves the data:



Important

In order for Sync Service to pass hybrid reporting data to Log Server, a hybrid communication port must be configured on the Settings > General > Logging page. See [Configuring how filtered requests are logged, page 410](#), for details.

If you are using distributed logging, Sync Service must be configured to communicate with the central Log Server. Hybrid logging data cannot be passed from remote Log Server instances to the central Log Server.

1. Under Collect and Retrieve Reporting Data, mark **Have the hybrid service collect reporting data for the clients it filters**.

If you clear this check box, log data is not saved for hybrid filtering users. No information about these users' Internet activity will appear in reports.

2. Select one or more days of the week for Sync Service to request reporting data from the hybrid service. You must retrieve data at least once a week.
3. Enter start and end times to define the time period during which Sync Service retrieves data from the hybrid service. You may want to retrieve data at a period of low traffic in your network.
4. Select how often you want Sync Service to request reporting data from the hybrid service within the specified start and end times.

Sync Service cannot download reporting data any more frequently than every 15 minutes. This means that there is a time delay between when hybrid filtering makes Internet requests and when those requests appear in TRITON - Web Security reports.

If you need to route Sync Service traffic to and from the hybrid service through a proxy server or firewall:

1. Under Route Sync Service Traffic, mark **Route Sync Service traffic through a proxy server or firewall**.
2. Enter the IP address or hostname of the proxy server or firewall, and specify the port that is to be used.
3. If the specified server requires authentication, enter the user name and password for Sync Service to access it.

When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Define custom authentication settings

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Settings > Hybrid Configuration > Custom Authentication** page to add and edit custom rules to change the default authentication behavior for specific applications or sites.

Occasionally, some Internet applications and Web sites cannot authenticate with the hybrid service. This might occur with, for example, instant messaging programs, antivirus updates, or software update services.

To allow particular applications that do not properly handle authentication challenges to bypass authentication, you can specify user agents, domains, or URLs, or a combination of these options.

A user agent is a string sent from your browser or Internet application to the server hosting the site that you are visiting. This string indicates which browser or application you are using, its version number, and details about your system, such as the operating system and version. The destination server then uses this information to provide content suitable for your specific browser or application.

For example, this is a user agent for Firefox:

```
Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2.6)
```

In this example, Windows NT 5.1 indicates that the operating system is Windows XP, and the language it uses is US English.

To get the user agent string for your browser, enter the following in the browser's address bar:

```
javascript:alert(navigator.userAgent)
```

You can view the user agents that have made authentication requests via the hybrid service in the User Agents by Volume report, available from the Custom Authentication page and also on the **Main > Status > Hybrid Service** page. If a user agent in this report has a high number of authentication requests, it may be experiencing authentication problems. You can select a user agent in the report and click **Create Rule** to add a new custom authentication rule for that agent. See [View User Agent Volume report, page 243](#).

To define a custom authentication rule, click **Add**, and then see [Adding custom authentication rules, page 237](#).

To edit an existing rule, click the rule **Name**, and then see [Editing custom authentication rules, page 239](#).

To remove a custom authentication rule, mark the check box next to the rule name, and then click **Delete**.

If you have added or edited a custom authentication rule, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding custom authentication rules

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Custom Authentication > Add Custom Authentication Rule** page to define one or more user agents, domains, or URLs that are failing to authenticate with the hybrid service.

1. Enter a **Name** for the rule. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Names can include spaces, dashes, and apostrophes.

2. Define the **User agents**, if any, for the rule:
 - To match against all user agent strings, select **All user agents**. You might do this to set up a custom rule that applies to all browsers on all operating systems in your organization.
 - If the application does not send a user agent string to the Internet, select **No user agent header sent**.

This option matches against all applications that do not send a user agent. In this case, refine the rule by entering one or more URLs or domains in the **Destinations** field.

- To apply the custom authentication to one or more user agents, select **Custom user agents**. Enter each user agent on a separate line. Use the asterisk wildcard to match one line to multiple user agent strings, for example Mozilla/5.0*.

**Note**

If you are creating a new rule directly from the User Agents by Volume report, the user agents you selected in the report are already entered in this field.

3. Define the URLs or domains (if any) for the rule in the **Destinations** field:
 - To match against all URLs and domains, select **All destinations**. You might want to do this if you are setting up a custom rule that applies to a specific user agent that accesses multiple sites.
 - To apply the custom authentication to one or more specific domains or URLs, select **Custom destinations**. Enter each URL or domain on a separate line.

URLs must include the protocol portion (http://) at the beginning and a forward slash (/) at the end (for example, http://www.google.com/). If these elements are not present, the string is treated as a domain. Domains cannot include a forward slash at the end (for example, mydomain.com).

Use the asterisk wildcard to match one line to multiple destinations: for example, entering *.mydomain.com would match against all domains ending in "mydomain.com."
4. Select the **Authentication method** for the custom rule.
 - **Default**: Uses your default authentication method.
 - **NTLM**: Uses NTLM identification for the specified user agents and destinations. If an application is not NTLM-capable, basic authentication is used instead.

**Note**

You must have NTLM identification enabled for your account to use this option.

- **Secure form authentication**: Uses secure form authentication to display a secure logon form to the end user. For more information, see [Identification of hybrid filtering users](#), page 322.
- **Basic authentication**: Uses the basic authentication mechanism supported by many Web browsers. No welcome page is displayed. For more information on basic authentication, see [Identification of hybrid filtering users](#), page 322.
- **Welcome page**: Displays a welcome page to users before they use basic authentication to proceed.
- **None**: Bypasses all authentication and identification methods in the hybrid service. Select this option for Internet applications that are incapable of authentication.

- Optionally, select **Bypass content scanning** to bypass all filtering for the specified user agents and destinations.



Important

Select this option **only** for applications and sites that for some reason do not work well with hybrid Web filtering and that you trust implicitly. Selecting this option could allow viruses and other malware into your network.

- Click **OK** to return to the Custom Authentication page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Editing custom authentication rules

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Custom Authentication > Edit Custom Authentication Rule** page to edit user agents, domains, or URLs that are failing to authenticate with the hybrid service.

- If you make changes to the rule **Name**, ensure it is between 1 and 50 characters long, and does not include any of the following characters:
 * < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,
 Names can include spaces, dashes, and apostrophes.
- Define or update the **User agents**, if any, for the rule:
 - To match against all user agent strings, select **All user agents**. You might want to do this if you are setting up a custom rule that applies to all browsers on all operating systems in your organization.
 - If the application does not send a user agent string to the Internet, select **No user agent header sent**.
 This option will match against all applications that do not send a user agent. In this case, we recommend you refine the rule by entering one or more URLs or domains in the **Destinations** field.
 - To apply the custom authentication to one or more user agents, select **Custom user agents**. Enter each user agent on a separate line. Use the asterisk wildcard to match one line to multiple user agent strings, for example Mozilla/5.0*.
- Define or update the URLs or domains (if any) for the rule in the **Destinations** field:
 - To match against all URLs and domains, select **All destinations**. You might want to do this if you are setting up a custom rule that applies to a specific user agent that accesses multiple sites.
 - To apply the custom authentication to one or more specific domains or URLs, select **Custom destinations**. Enter each URL or domain on a separate line.

URLs must include the protocol portion (http://) at the beginning and a forward slash (/) at the end (for example, http://www.google.com/). If these elements are not present, the string is treated as a domain. Domains cannot include a forward slash at the end (for example, mydomain.com).

Use the asterisk wildcard to match one line to multiple destinations: for example, entering *.mydomain.com would match against all domains ending in 'mydomain.com.'

4. Verify or update the **Authentication Method** for the custom rule.
 - **Default:** Uses your default authentication method.
 - **NTLM:** Uses NTLM identification for the specified user agents and destinations. If an application is not NTLM-capable, basic authentication is used instead.

**Note**

You must have NTLM identification enabled for your account to use this option.

- **Form Authentication:** Uses secure form authentication to display a secure logon form to the end user. For more information, see [Identification of hybrid filtering users](#), page 322.
 - **Basic Authentication:** Uses the basic authentication mechanism supported by many Web browsers. No welcome page is displayed. For more information on basic authentication, see [Identification of hybrid filtering users](#), page 322.
 - **Welcome Page:** Displays a welcome page to users before they use basic authentication to proceed.
 - **None:** Bypasses all authentication and identification methods in the hybrid service. Select this option for Internet applications that are incapable of authentication.
5. Optionally, select **Bypass content scanning** to bypass all filtering for the specified user agents and destinations.

**Important**

Select this option **only** for applications and sites that for some reason do not work well with hybrid Web filtering and that you trust implicitly. Selecting this option could allow viruses and other malware into your network.

6. Click **OK** to return to the Custom Authentication page, and then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Monitor communication with the hybrid service

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You can view the status of the hybrid service on the **Status > Dashboard > Hybrid Service** page in TRITON - Web Security. This page displays when data was most recently sent to or received from the hybrid service. If an attempt to send or receive data failed, find out when the failure occurred, and which components were involved.

The page lists the date and time that Sync Service last:

- ◆ Connected or attempted to connect to the hybrid service for any reason
- ◆ Sent or attempted to send directory information to the hybrid service
- ◆ Retrieved or attempted to retrieve log (reporting) data from the hybrid service
- ◆ Sent or attempted to send log data to Log Server
- ◆ Sent or attempted to send account information to the hybrid service
- ◆ Sent or attempted to send policy information to the hybrid service

If you have not yet set up the connection between the on-premises and hybrid portions of Websense Web Security Gateway Anywhere, a message explains that “No communication has occurred.”

Under Last Directory Agent Sync Results, the page lists:

- ◆ The date and time that Directory Agent last sent data to the hybrid service
- ◆ The total number of users and groups processed by Directory Agent
- ◆ The number of users and groups that were updated in the hybrid service
- ◆ The number of groups filtered out because they contained invalid values
- ◆ The number of users filtered out because they included invalid email addresses
- ◆ The number of new users and groups synchronized with the hybrid service
- ◆ The number of obsolete users and groups removed from the hybrid service

This page also allows you to access authentication method and user agent reports from the hybrid service (see [View hybrid service authentication reports, page 242](#), and [View User Agent Volume report, page 243](#)), and displays the type of PAC file you are using:

- ◆ The default PAC file from the hybrid service
- ◆ A customized PAC file uploaded from the Websense **pac** directory (see [What is a PAC file?, page 225](#))
- ◆ The default PAC file with an uploaded customized fragment

If you are using a custom file or fragment, the page shows how long the file or fragment has been in use.

If a **Secondary date stamp** is shown for the PAC file, this means that Sync Service has uploaded both a custom PAC file and a custom fragment from the **pac** directory. The recommended state for custom PAC files is to set up a custom file or a custom fragment, not both. To rectify this, go to the **pac** directory (by default, \Program

Files\Websense\Web Security\bin\data\pac on Windows, or /opt/websense/bin/data/pac on Linux) and delete either websense.pac or customfinal.pac.

If you are using a customized block page logo, this page displays the date and time the logo file was uploaded to the hybrid service.

View hybrid service authentication reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Select **View Report** under Authentication Report on the **Main > Status > Hybrid Service** page to download reporting data from the hybrid service and see a breakdown of how hybrid users are identified or authenticated with the service.

The report output consists of a pie chart and a table, showing the number of clients using each available authentication method over the last 7 days. **Web Endpoint, Authentication Service, NTLM identification, Form authentication, and Manual authentication** are all set up for clients on the Settings > Hybrid Configuration > Hybrid User Identification page (see [Identification of hybrid filtering users, page 322](#)).

X-Authenticated-User authentication is available if you have deployed one of the following as a downstream chained proxy server:

- ◆ Microsoft® Internet Security and Acceleration (ISA) Server or Forefront™ Threat Management Gateway (TMG) server
- ◆ BlueCoat Proxy SG

The downstream proxy server performs user authentication and forwards requests to the hybrid proxy using the X-Authenticated-User header.

Click an authentication method in the table to see a list of users who have most recently authenticated with that method. You cannot click an authentication method that you have not deployed or that is currently not in use.

Each authentication method report can contain up to 1000 users. The users are listed by user name, email address, and last logon time. Click the arrow buttons at the bottom of the report to view previous or subsequent pages.

Reports displayed in the content pane cannot be printed or saved to a file. To print or save a report to file, click **Export to PDF** or **Export to XLS** to view the report in the appropriate output format.



Important

To display authentication reports in PDF format, Adobe Reader v7.0 or later must be installed on the machine from which you are accessing TRITON - Web Security.

To display authentication reports in XLS format, Microsoft Excel 2003 or later must be installed on the machine from which you are accessing TRITON - Web Security.

Each report includes the data and time it was last updated. Updates are not automatic: to download the latest report data from the hybrid service, click **Update**.

View User Agent Volume report

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Select **View Report** under User Agent Volume Report on the **Main > Status > Hybrid Service** page to view user agents that have made authentication requests via the hybrid service.

The report output consists of a table, showing the number of authentication requests and total requests made by each user agent. If a user agent already has a custom authentication rule associated with it, you can hover over the **Rule** column to see details of the custom rule.

You can filter the report results as follows:

- ◆ Enter a search term and click **Search**
- ◆ Select a **Time range** from the drop-down list. If you select Custom date range, select a time period between 1 and 14 days.
- ◆ Mark **View only user agents with rules** to see only the user agents that have custom authentication rules associated with them.

If there is more than one page of results, click the arrow buttons at the bottom of the report to view previous or subsequent pages.

If a user agent in this report has a high number of authentication requests, it may be experiencing authentication problems. To add a new custom authentication rule for one or more user agents in the report, mark the check box for each agent and click **Create Rule**. The user agents you select are automatically entered in the **Custom user agents** field on the Add Custom Authentication Rule page. See [Adding custom authentication rules, page 237](#).

Reports displayed in the content pane cannot be printed or saved to a file. To print or save a report to file, click **Export to PDF** or **Export to XLS** to view the report in the appropriate output format.



Important

To display authentication reports in PDF format, Adobe Reader v7.0 or later must be installed on the machine from which you are accessing TRITON - Web Security.

To display authentication reports in XLS format, Microsoft Excel 2003 or later must be installed on the machine from which you are accessing TRITON - Web Security.

Each report includes the data and time it was last updated. Updates are not automatic: to download the latest report data from the hybrid service, click **Update**.

11

Filter Users Off Site

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Using remote filtering software, page 246](#)
- ◆ [Applying hybrid filtering to off-site users, page 250](#)

In addition to filtering users inside your organization's network, Websense Web security solutions provide options for filtering users when they are outside the network.

- ◆ Install remote filtering software to monitor Internet activity for users outside the network. See [Using remote filtering software, page 246](#).

Remote filtering software is included with Websense Web Security Gateway Anywhere subscriptions, and is available as an option for Websense Web Filter, Websense Web Security, and Websense Web Security Gateway customers.

- ◆ Use hybrid filtering to monitor Internet activity for users outside the network, regardless of how they are filtered when they are in the network. See [Applying hybrid filtering to off-site users, page 250](#).

Hybrid filtering is available only with Websense Web Security Gateway Anywhere.

These methods can be used, for example, to filter users who work from home, users who travel using company laptops, or students who use institutional laptops on and off campus.



Important

With Websense Web Security Gateway Anywhere, you can use remote filtering software for some off-site users and hybrid filtering for others. The hybrid service cannot, however, be used to monitor Internet activity for machines that also have Remote Filtering Client installed.

Using remote filtering software

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [When server communication fails, page 247](#)
- ◆ [Configuring Remote Filtering settings, page 248](#)

By default, remote filtering software components monitor HTTP, SSL, and FTP traffic and apply a user-based policy or the Default policy. Remote filtering software does not apply policies to IP addresses (computers or network ranges).

- ◆ Bandwidth-based filtering is not applied to remote filtering clients, and bandwidth generated by remote filtering traffic is not included in bandwidth measurements and reports.
- ◆ Remote filtering software can only block or permit FTP and SSL (HTTPS) requests. FTP and HTTPS sites in categories assigned the quota or confirm action are blocked when the user is outside the network.
- ◆ While remote filtering software always monitors HTTP traffic, you can configure it to ignore FTP traffic, HTTPS traffic, or both. See [Configure remote filtering to ignore FTP or HTTPS traffic, page 249](#).

Remote filtering software includes the following components:

- ◆ **Remote Filtering Server** is installed inside your network's outermost firewall, and configured so that filtered machines outside the network can communicate with it.
- ◆ **Remote Filtering Client** is installed on Microsoft Windows machines that are used outside the network.



Notes

Follow the recommendations in the [Deployment and Installation Center](#) carefully to deploy these components. See the [Remote Filtering Software](#) technical paper for instructions on installing them.

All communication between Remote Filtering Client and Remote Filtering Server is authenticated and encrypted.

By default, when an HTTP, SSL, or FTP request is made from a machine with Remote Filtering Client installed:

1. The client first determines whether or not it is inside the network by sending a **heartbeat** to the Remote Filtering Server in the DMZ.

2. If the machine is **inside** the network, Remote Filtering Client takes no action. The request is passed to Network Agent or an integration product, and filtered like other in-network Internet activity.
3. If the machine is **outside** the network, Remote Filtering Client communicates with Remote Filtering Server over the configured port (80, by default).
4. Remote Filtering Server then contacts Filtering Service (installed inside the network) to ask what action to apply to the request.
5. Filtering Service evaluates the request and sends a response to Remote Filtering Server.
6. Finally, Remote Filtering Server responds to Remote Filtering Client, either permitting the site or sending the appropriate block message.

When it starts for the first time, Remote Filtering Client creates a log file that tracks its filtering activities, such as entering and leaving the network, failing open or closed, and restarting the client. You control the presence and size of this log file. See [Configuring Remote Filtering settings, page 248](#).

Complete information about planning for, deploying, and configuring remote filtering software is available in the [Remote Filtering Software](#) technical paper, available from the support.websense.com.

When server communication fails

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Related topics:

- ◆ [Using remote filtering software, page 246](#)
- ◆ [Configuring Remote Filtering settings, page 248](#)

Filtering occurs when Remote Filtering Client, outside the network, successfully communicates with Remote Filtering Server.

You can configure what action Remote Filtering Client takes if it cannot contact Remote Filtering Server.

- ◆ By default, Remote Filtering Client permits all HTTP, SSL, and FTP requests while it continues attempting to contact Remote Filtering Server (fails open). When the communication is successful, the appropriate filtering policy is enforced.
- ◆ When Remote Filtering Client is configured to block all requests (fail closed), a timeout value is applied (default 15 minutes). The clock begins running when the remote computer is started. Remote Filtering Client attempts to connect to Remote Filtering Server immediately and continues cycling through available Remote Filtering Servers until it is successful.

If the user has Web access at startup, no filtering occurs (all requests are permitted) until Remote Filtering Client connects to the Remote Filtering Server.

If Remote Filtering Client cannot connect within the configured timeout period, all Internet access is blocked (fail closed) until connection to Remote Filtering Server can be established.

**Note**

If Remote Filtering Server cannot connect to Filtering Service for any reason, an error is returned to the Remote Filtering Client, and filtering always fails open.

This timeout period allows users who pay for Internet access when travelling to start the computer and arrange for connection without being locked out. If the user does not establish Web access before the 15 minute timeout period expires, Web access cannot be established during that session. When this occurs, the user must restart the computer to begin the timeout interval again.

To change whether requests are permitted or blocked when Remote Filtering Client can't communicate with Remote Filtering Server, and change the timeout value, see [Configuring Remote Filtering settings](#), page 248.

Configuring Remote Filtering settings

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Related topics:

- ◆ [When server communication fails](#), page 247
- ◆ [Configure remote filtering to ignore FTP or HTTPS traffic](#), page 249
- ◆ [Configure the Remote Filtering Client heartbeat interval](#), page 250

Use the **Settings > General > Remote Filtering** page to configure options that affect all Remote Filtering Clients associated with this installation.

For detailed information about how remote filtering works, which components are involved, and how to deploy components, see the [Remote Filtering Software](#) technical paper.

1. Select **Block all requests...** check box to prevent users from accessing the Internet when Remote Filtering Client cannot communicate with Remote Filtering Server (fail closed).

By default, users have unfiltered access to the Internet when Remote Filtering Client cannot communicate with the Remote Filtering Server (fail open).

For more information, see [When server communication fails](#), page 247.

2. For **v7.5.x** Remote Filtering Clients only: If you selected the block all requests option, specify a **Timeout interval** (by default, 15 minutes). During the timeout period, all HTTP, SSL, and FTP requests are permitted.

If the Remote Filtering Client cannot communicate with Remote Filtering Server during the timeout interval, all Internet access is blocked until communication is reestablished.

Selecting **No timeout** may lock out a remote computer before the user can establish Internet connection from a hotel or other pay-for-use-provider.



Warning

Websense, Inc., does not recommend choosing **No timeout** or setting the timeout period to a very low number.

3. Select a **Maximum size** for the Remote Filtering Client log file (in megabytes), up to 10. Select **No log** to disable logging.

This controls the size and existence of the log file the remote computer creates when it is initially disconnected from the Remote Filtering Server. This log file tracks the following events:

- The computer leaves the network
- The computer rejoins the network
- The Remote Filtering Client is restarted
- Fail open condition occurs
- Fail closed condition occurs
- Remote Filtering Client receives a policy update

The computer retains the 2 most recent logs. These logs can be used to troubleshoot connection issues or other problems with remote filtering software.

Configure remote filtering to ignore FTP or HTTPS traffic

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You can configure remote filtering software to ignore FTP traffic, HTTPS traffic, or both. HTTP traffic is always monitored.

If you have multiple Remote Filtering Servers, repeat these steps for each instance.

1. Navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default) on the Remote Filtering Server machine.
2. Open the **securewispproxy.ini** file in a text editor.
3. To disable FTP filtering for this Remote Filtering Server instance, add the following line to the file:

```
FilterFTP=0
```

If you want to later turn FTP filtering back on, change the parameter value from “0” to “1”.

4. To disable HTTPS filtering for this Remote Filtering Server instance, add the following line to the file:

```
FilterHTTPS=0
```

If you want to later turn HTTPS filtering back on, change the parameter value from “0” to “1”.

5. Save and close the file.
6. Restart the Remote Filtering Server service or daemon.

Configure the Remote Filtering Client heartbeat interval

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In order to determine whether it is inside or outside of the network, Remote Filtering Client sends a heartbeat to Remote Filtering Server. If the heartbeat connection succeeds, Remote Filtering Client knows that it is inside the network. By default, Remote Filtering Client continues to send the heartbeat every 15 minutes to ensure that its status has not changed.

If you would prefer that Remote Filtering Client send the heartbeat less frequently once it has determined that it is inside the network, you can increase the heartbeat interval. In this case, Remote Filtering Client will only send a more frequent heartbeat if it registers a change in network.

To change the heartbeat interval:

1. Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default) on the Remote Filtering Server machine.
2. Open the **securewispproxy.ini** file in a text editor.
3. Find the **HeartbeatRetryInterval** parameter and change its value. For example:

```
HeartbeatRetryInterval=360
```

In this example, the heartbeat will be sent every 360 minutes, or 6 hours.

- The value can be any number of minutes between 0 and 1440 (24 hours).
 - The default is 15 minutes.
4. Save and close the file.
 5. Restart the Remote Filtering Server service or daemon.

Applying hybrid filtering to off-site users

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Related topics:

- ◆ [Configuring hybrid filtering for off-site users, page 251](#)
- ◆ [Off-site user self-registration, page 251](#)

In Websense Web Security Gateway Anywhere deployments, hybrid filtering can be applied to off-site users, regardless of how those users are filtered when they are in-network.

- ◆ For users filtered by on-premises components (Filtering Service) when they are inside the network, you can configure the browser PAC file to determine whether the user is in-network or off-site before sending an Internet request for filtering.
If you are using the PAC file generated by the hybrid service, this configuration occurs automatically based on the settings that you provide in TRITON - Web Security.
- ◆ For users filtered by hybrid filtering both in and outside the network, no PAC file changes are required. When off-site users make an Internet request, they are prompted to log on to hybrid filtering so that the appropriate user or group-based policy can be applied.



Important

While you can use remote filtering software for some off-site users and hybrid filtering for others, the hybrid service cannot be used to monitor Internet activity for machines that also have Remote Filtering Client installed.

Configuring hybrid filtering for off-site users

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To configure hybrid filtering for users outside a filtered location:

- ◆ If hybrid filtering uses directory data collected by Websense Directory Agent to identify users, you can either configure the hybrid service to automatically create a hybrid logon password for all user accounts sent by Directory Agent (see [Send user and group data to the hybrid service](#), page 227), or you can have users request their own password the first time they connect to the hybrid service from outside a filtered location (see [Off-site user self-registration](#), page 251).
- ◆ If your organization does not use directory data collected by Directory Agent to identify users connecting to the hybrid service, you can let users **self-register** for the service. See [Configure user access to hybrid filtering](#), page 220.
- ◆ Once you have established an identification policy for off-site users, mark **Enable off-site users** on the **Settings > Hybrid Configuration > User Access** page in TRITON - Web Security. See [Configure user access to hybrid filtering](#), page 220.

Off-site user self-registration

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If you are not sending directory service data to the hybrid service (in other words, if you have not enabled Directory Agent), users must self-register in order to be filtered properly when they are off site (outside a filtered location).

In order for users to be allowed to self-register, you must first identify the domains associated with your organization on the **Settings > Hybrid Configuration > User Access** page in TRITON - Web Security (see [Configure user access to hybrid filtering, page 220](#)).

Users connecting to hybrid filtering from outside a filtered location are prompted to enter a user name and password, or to register. To register with the hybrid service:

1. The user provides a name and email address.
2. Hybrid filtering then sends a password to the user via email, along with a link that can be used to change the password.
3. The user clicks the link, and is prompted to enter the password.
4. Registration is complete.

When registered users connect to the hybrid service from outside a filtered location, they enter their email address and password. Hybrid filtering then applies your organization's Default policy to their Internet requests.

12

Protect Vital Information

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Web Security secures your enterprise from Web-based threats, liability issues, and productivity loss. But what if you want—or are required—to protect sensitive data, such as social security numbers or credit card numbers, from leakage over the Web? Or what if you want to monitor removable media devices, printers, instant messages, copy/paste operations, or email for the such data?

To protect against data loss over the Web, you can deploy Websense Web Security Gateway Anywhere. To protect against data loss over other channels, including the Web, you can purchase Websense Data Protect, Data Monitor, Data Discover, Data Endpoint, or the full Data Security Suite as add-ons to your Web security software.

Websense Web and data security solutions interoperate in fundamental ways, giving the data security software access to user information (collected by User Service) and URL categorization information (from the Master Database).

By combining Web and data security, you can create data loss prevention (DLP) policies that base rules on URL categories. For example, you can define a rule that credit card numbers cannot be posted to known fraud sites. You can also define rules based on users and computers rather than IP addresses. For example, Jane Doe cannot post financial information to FTP sites.

For an end-to-end description of setting up data loss protection over the Web, see the [Deployment and Installation Center](#). This covers installation, deployment, and configuration of the various components, including Websense Content Gateway.

For instructions on creating data security policies, see the TRITON - Data Security Help.

13

Refine Filtering Policies

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

At it's simplest, Internet usage filtering requires a single policy that applies one category filter and one protocol filter 24 hours a day, 7 days a week. Websense software offers tools, however, for going far beyond this basic filtering, to achieve precisely the level of granularity you need to manage Internet usage. You can:

- ◆ Create **limited access filters** to block access to all but a specified list of sites for certain users (see [Restricting users to a defined list of URLs](#), page 255).
- ◆ Create **custom categories** to redefine how selected sites are filtered (see [Working with categories](#), page 262).
- ◆ **Recategorize URLs** to move specific sites from their default, Master Database category to another Websense-defined or custom category (see [Redefining filtering for specific sites](#), page 268).
- ◆ Implement **bandwidth** restrictions, blocking users from accessing otherwise permitted categories and protocols when bandwidth usage reaches a specified threshold (see [Using Bandwidth Optimizer to manage bandwidth](#), page 279).

In Websense Web Security Gateway Anywhere environments, bandwidth-based restrictions are not enforced for hybrid filtering users.

- ◆ Define **keywords** used to block sites in otherwise permitted categories when keyword blocking is enabled and activated (see [Filtering based on keyword](#), page 266).
- ◆ Define **file types** used to block the download of selected types of files from otherwise permitted categories when file type blocking is activated (see [Managing traffic based on file type](#), page 282).

Restricting users to a defined list of URLs

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Limited access filters and filtering precedence](#), page 256
- ◆ [Creating a limited access filter](#), page 257
- ◆ [Editing a limited access filter](#), page 258

Limited access filters provide a very precise method of filtering Internet access. Each limited access filter is a list of individual URLs or IP addresses. Like category filters, limited access filters are added to policies and enforced during a specified time period. When a limited access filter is active in a policy, users assigned that policy can visit only URLs in the list. All other sites are blocked.

For example, if the First Grade policy enforces a limited access filter that includes only certain educational and reference sites, students governed by the First Grade policy can visit only those sites, and no others.

When a limited access filter is active, a block page is returned for any requested URL not included in that filter.

Websense software can support up to 2,500 limited access filters containing 25,000 URLs in total.

Limited access filters and filtering precedence

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In some cases, more than one filtering policy could apply to a single user. This happens when a user belongs to more than one group, and the groups are governed by different policies.

When multiple group policies apply to a user, the **Use more restrictive blocking** setting (see [Filtering order, page 97](#)) determines how the user is filtered. By default, this setting is off.

Websense software determines which filtering setting is less restrictive at the filter level. In cases where a user might be filtered by multiple policies, one of which is enforcing a limited access filter, “less restrictive” may sometimes seem counterintuitive.

When **Use more restrictive blocking** is **OFF**:

- ◆ If the **Block All** category filter and a limited access filter could apply, the limited access filter is always considered less restrictive.
- ◆ If any other category filter and a limited access filter could apply, the category filter is considered less restrictive.

This means that even when the limited access filter permits the site and the category filter blocks the site, the site is blocked.

When **Use more restrictive blocking** is **ON**, a limited access filter is considered more restrictive than any category filter except Block All.

The table below summarizes how the **Use more restrictive blocking** setting affects filtering when multiple policies could apply:

| | <i>Use more restrictive blocking OFF</i> | <i>Use more restrictive blocking ON</i> |
|--|--|---|
| limited access filter + Block All category filter | limited access filter (request permitted) | Block All (request blocked) |
| limited access filter + permitted category | category filter (request permitted) | limited access filter (request permitted) |
| limited access filter + blocked category | category filter (request blocked) | limited access filter (request permitted) |
| limited access filter + Quota/Confirm category | category filter (request limited by quota/confirm) | limited access filter (request permitted) |

Creating a limited access filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with filters, page 60](#)
- ◆ [Restricting users to a defined list of URLs, page 255](#)
- ◆ [Editing a limited access filter, page 258](#)

Use the **Add Limited Access Filter** page (accessed via the **Filters** or **Edit Policy** page) to give your new filter a unique name and a description. After creating the filter, enter a list of permitted URLs, assign the filter to a policy, and apply the policy to clients.

1. Enter a unique **Filter name**. The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Filter names can include spaces, dashes, and apostrophes.

2. Enter a short **Description** of the filter. This description appears next to the filter name in the Limited Access Filters section of the Filters page, and should explain the filter's purpose to help administrators manage policies over time.

The character restrictions that apply to filter names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. To see and edit the new filter, click **OK**. To abandon your changes and return to the Filters page, click **Cancel**.

When you create a new limited access filter, it is added to the **Policy Management > Filters > Limited Access Filters** list. Click a filter name to edit the filter.

To finish customizing your new filter, continue with [Editing a limited access filter](#).

Editing a limited access filter

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Restricting users to a defined list of URLs, page 255](#)
- ◆ [Limited access filters and filtering precedence, page 256](#)
- ◆ [Creating a limited access filter, page 257](#)
- ◆ [Editing a policy, page 95](#)

A limited access filter is a list of URLs, IP addresses, and regular expressions, used to identify specific Web sites that users can access. When the filter is applied to clients, those clients cannot visit any site that is not in the list.



Important

If a URL permitted by a limited access filter becomes infected with malicious code, as long as Security categories are blocked, user requests for that site are blocked.

For instructions to change this behavior, see [Prioritizing Security Risk categorization, page 270](#).

Use the **Policy Management > Filters > Edit Limited Access Filter** page to make changes to an existing limited access filter. You can change the filter name and description, see a list of policies that enforce the filter, and manage which URLs, IP addresses, and regular expressions are included in the filter.

When you edit a limited access filter, the changes affect every policy that enforces the filter.

1. Verify the filter name and description. To change the filter name, click **Rename**, and then enter the new name. The name is updated in all policies that enforce the selected limited access filter.
2. Use the **Policies using this filter** field to see how many policies currently enforce this filter. If 1 or more policies enforce the filter, click **View policies** to list them.
3. Under Add or Remove Sites, enter the URLs and IP addresses that you want to add to the limited access filter. IP addresses may use IPv4 or IPv6 format.

Enter one URL or IP address per line.

- For HTTP sites, it is not necessary to include the **http://** prefix.
- When an HTTP site is filtered according to its Master Database category, Websense software matches the URL with its equivalent IP address. This is not the case for limited access filters. To permit a Web site's URL and IP address, add both to the filter.

- For FTP and HTTPS sites, include the prefix and provide the site's IP address, rather than host (domain) name.
4. Click the right arrow (>) to move the URLs and IP addresses to the Permitted sites list.
 5. In addition to adding individual sites to the limited access filter, you can add regular expressions that match multiple sites. To create regular expressions, click **Advanced**.
 - Enter one regular expression per line, and then click the right arrow to move the expressions to the Permitted sites list.
 - To verify that a regular expression matches the intended sites, click **Test**.
 - See [Using regular expressions, page 290](#), for detailed information about using regular expressions for filtering.
 6. Review the URLs, IP addresses, and regular expressions in the **Permitted sites** list.
 - To make changes to a site or expression, select it and click **Edit**.
 - To remove a site or expression from the list, select it and click **Delete**.
 7. After editing the filter, click **OK** to cache your changes and return to the Filters page. Changes are not implemented until you click **Save and Deploy**.

Adding sites from the Edit Policy page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Restricting users to a defined list of URLs, page 255](#)
- ◆ [Limited access filters and filtering precedence, page 256](#)
- ◆ [Creating a limited access filter, page 257](#)
- ◆ [Editing a policy, page 95](#)

Use the **Policies > Edit Policy > Add Sites** page to add URLs and IP addresses to a limited access filter.

Enter one URL or IP address per line. If you do not specify a protocol, Websense software automatically adds the **http://** prefix.

When you are finished making changes, click **OK** to return to the Edit Policy page. You must also click **OK** on the Edit Policy page to cache the changes. Changes are not implemented until you click **Save and Deploy**.

Changes made to a limited access filter affect all policies that enforce the filter.

Copying filters and policies to roles

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Creating a category filter, page 61](#)
- ◆ [Creating a protocol filter, page 64](#)
- ◆ [Creating a limited access filter, page 257](#)
- ◆ [Creating a policy, page 94](#)

Super Administrators can use the **Filters > Copy Filters To Role** and **Policies > Copy Policies To Role** pages to copy one or more filters or policies to a delegated administration role. Once the filter or policy has been copied, delegated administrators can use the filters or policies to filter their managed clients.

- ◆ In the target role, the tag “(Copied)” is added to the end of the filter or policy name. A number is added if the same filter or policy is copied multiple times. For example, “(Copied 2).”
- ◆ Delegated administrators can rename or edit filters or policies that have been copied to their role.
- ◆ Category filters copied to a delegated administration role set the filtering action to Permit for custom categories created in the role. Delegated administrators should update the copied category filters to set the desired action for their role-specific custom categories.
- ◆ Changes made by a delegated administrator to a filter or policy copied to their role by a Super Administrator do not affect the Super Administrator’s original filter or policy, or any other role that received a copy of the filter or policy.
- ◆ Filter Lock restrictions do not affect the Super Administrator’s original filter or policy, but they do affect the delegated administrator’s copy of the filter or policy.
- ◆ Because delegated administrators are affected by Filter Lock restrictions, the Permit All category and protocol filters cannot be copied to a delegated administration role.

To copy a filter or policy:

1. On the Copy Filters to Role or Copy Policies to Role page, verify that the correct policies or filters appear in the list at the top of the page.
2. Use the **Select a role** drop-down list to select a destination role.
3. Click **OK**.

A popup dialog box indicates that the selected filters or policies are being copied. The copy process may take a while.

The changes are not implemented until you click **Save and Deploy**.

After the copy process is complete, the copied filters or policies will be available to delegated administrators in the selected role the next time they log on to TRITON -

Web Security. If a delegated administrator is logged on to the role with policy access when the filters or policies are copied, they will not see the new filters or policies until they log off and log on again.

Building filter components

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Policy Management > Filter Components** page to access tools used to refine and customize the way that Websense software enforces your organization's Internet access policies. The 3 buttons on the screen are associated with the following tasks:

| | |
|------------------------|---|
| Edit Categories | <ul style="list-style-type: none"> Recategorize a URL (see Redefining filtering for specific sites, page 268). For example, if the Shopping category is blocked by your Internet filtering policies, but you want to permit access to specific supplier or partner sites, you could move those sites to a permitted category, like Business and Economy. Define or edit custom categories (see Creating a custom category, page 265). Create additional subcategories within Websense-defined parent categories, or within the User-Defined parent category, and then assign URLs to the new categories. Assign keywords to a category (see Filtering based on keyword, page 266). To recategorize and block access to sites whose URLs contain a specific string, first define keywords, and then enable keyword blocking in a category filter. Create regular expressions (see Using regular expressions, page 290), patterns or templates that can be used to match multiple URLs and assign them to a category. |
| Edit Protocols | Create or edit custom protocol definitions (see Creating a custom protocol, page 277 , and Editing custom protocols, page 274). For example, if members of your organization use a custom messaging tool, you could create a custom protocol definition to permit use of that tool while blocking other Instant Messaging / Chat protocols. |
| File Types | Create or edit file type definitions, used to block files with specific extensions within otherwise permitted categories (see Managing traffic based on file type, page 282). |

Working with categories

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Related topics:

- ◆ [Editing categories and their attributes, page 262](#)
- ◆ [Creating a custom category, page 265](#)
- ◆ [Filtering based on keyword, page 266](#)
- ◆ [Redefining filtering for specific sites, page 268](#)

Websense software provides multiple methods for filtering sites that are not in the Master Database, and for changing the way that individual sites in the Master Database are filtered.

- ◆ Create **custom categories** for more precise filtering and reporting.
- ◆ Use **recategorized URLs** to define categories for uncategorized sites, or to change the category for sites that appear in the Master Database.
- ◆ Define **keywords** to recategorize all sites whose URL contains a certain string.

If you want to configure whether or not attempts to access a category are recorded in the Log Database, see [Configuring how filtered requests are logged, page 410](#). If a category is not logged, client requests for that category do not appear in reports.

Editing categories and their attributes

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Related topics:

- ◆ [Creating a custom category, page 265](#)
- ◆ [Reviewing all customized category attributes, page 263](#)
- ◆ [Making global category filtering changes, page 264](#)
- ◆ [Filtering based on keyword, page 266](#)
- ◆ [Redefining filtering for specific sites, page 268](#)

Use the **Policy Management > Filter Components > Edit Categories** page to create and modify custom categories, recategorized URLs, and keywords.

The existing categories, both Websense-defined and custom, are listed in the left portion of the content pane. To see current custom settings associated with a category, or to create new custom definitions, first select a category from the list.

To see a list of all custom URLs, keywords, and regular expressions associated with all categories, click **View All Custom URLs / Keywords** in the toolbar at the top of

the page. See [Reviewing all customized category attributes](#), page 263, for more information.

- ◆ To create a new category, click **Add**, and then go to [Creating a custom category](#), page 265, for further instructions.
To remove an existing custom category, select the category, and then click **Delete**. You cannot delete Websense-defined categories.
- ◆ To change the name or description of a custom category, select the category and click **Rename** (see [Renaming a custom category](#), page 264).
- ◆ To change the filtering action associated with a category in all category filters, click **Override Action** (see [Making global category filtering changes](#), page 264).
- ◆ The **Recategorized URLs** list shows which recategorized sites (URLs and IP addresses) have been assigned to this category.
 - To add a site to the list, click **Add URLs**. See [Redefining filtering for specific sites](#), page 268, for further instructions.
 - To change an existing recategorized site, select the URL or IP address, and then click **Edit**.
- ◆ The **Keywords** list shows which keywords have been associated with this category.
 - To define a keyword associated with the selected category, click **Add Keywords**. See [Filtering based on keyword](#), page 266, for further instructions.
 - To change an existing keyword definition, select the keyword, and then click **Edit**.
- ◆ In addition to URLs and keywords, you can define **Regular Expressions** for the category. Each regular expression is a pattern or template used to associate multiple sites with the category.
To see or create regular expressions for the category, click **Advanced**.
 - To define a regular expression, click **Add Expressions** (see [Using regular expressions](#), page 290).
 - To change an existing regular expression, select the expression, and then click **Edit**.
- ◆ To delete a recategorized URL, keyword, or regular expression, select the item to remove, and then click **Delete**.

When you are finished making changes on the Edit Categories page, click **OK** to cache the changes and return to the Filter Components page. Changes are not implemented until you click **Save and Deploy**.

Reviewing all customized category attributes

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Use the **Filter Components > Edit Categories > View All Custom URLs and Keywords** page to review custom URL, keyword, and regular expression definitions. You can also delete definitions that are no longer needed.

The page contains 3 similar tables, one for each category attribute: custom URLs, keywords, or regular expressions. In each table, the attribute is listed next to the name of the category with which it is associated.

To delete a category attribute, mark the appropriate check box, and then click **Delete**.

To return to the Edit Categories page, click **Close**. If you deleted any items on the View All Custom URLs and Keywords page, click **OK** on the Edit Categories page to cache the changes. Changes are not implemented until you click **Save and Deploy**.

Making global category filtering changes

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Use the **Filter Components > Edit Categories > Override Action** page to change the action applied to a category in all existing category filters. This also determines the default action applied to the category in new filters.

Although this change overrides the action applied to the category in all existing filters, administrators can later edit those filters to apply a different action.

Before changing the filtering settings applied to a category, first verify that the correct category name appears next to **Selected Category**. Next, you can:

1. Chose a new **Action** (Permit, Block, Confirm, or Quota). See [Filtering actions, page 57](#), for more information.
By default, **Do not change current settings** is selected for all options on the page.
2. Specify whether or not to **Block Keywords**. See [Filtering based on keyword, page 266](#), for more information.
3. Specify whether or not to **Block File Types**, and customize blocking settings. See [Managing traffic based on file type, page 282](#), for more information.
4. Under **Advanced Filtering**, specify whether or not to use Bandwidth Optimizer to manage access to HTTP sites, and customize blocking settings. See [Using Bandwidth Optimizer to manage bandwidth, page 279](#), for more information.



Important

Changes made here affect every existing category filter, except **Block All** and **Permit All**.

5. Click **OK** to return to the Edit Categories page (see [Editing categories and their attributes, page 262](#)). The changes are not cached until you click **OK** on the Edit Categories page.

Renaming a custom category

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Use the **Filter Components > Edit Categories > Rename Category** page to change the name or description associated with a custom category.

- ◆ Use the **Filter name** field to edit the category name. The new name must be unique, and cannot exceed 50 characters.

The name cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

- ◆ Use the **Description** field to edit the category description. The description cannot exceed 255 characters.

The character restrictions that apply to filter names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

When you are finished making changes, click **OK** to return to the Edit Categories page. The changes are not cached until you click **OK** on the Edit Categories page.

Creating a custom category

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Related topics:

- ◆ [Editing categories and their attributes, page 262](#)
- ◆ [Filtering based on keyword, page 266](#)
- ◆ [Redefining filtering for specific sites, page 268](#)

In addition to using the more than 90 Websense-defined categories in the Master Database, you can define your own **custom categories** to provide more precise filtering and reporting. For example, create custom categories like:

- ◆ **Business Travel**, to group sites from approved vendors that employees can use to buy airplane tickets and make rental car and hotel reservations
- ◆ **Reference Materials**, to group online dictionary and encyclopedia sites deemed appropriate for elementary school students
- ◆ **Professional Development**, to group training sites and other resources that employees are encouraged to use to build their skills

Use the **Policy Management > Filter Components > Edit Categories > Add Category** page to add custom categories to any parent category. You can create up to 100 custom categories.

1. Enter a unique, descriptive **Category name**. The name cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

2. Enter a **Description** for the new category.

The character restrictions that apply to filter names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. Select a parent category from the **Add to** list. By default, **All Categories** is selected.
4. Enter the sites (URLs or IP addresses) that you want to add to this category. See [Redefining filtering for specific sites, page 268](#), for more information.

You can also edit this list after creating the category.

5. Enter the keywords that you want to associate with this category. See [Filtering based on keyword](#), page 266, for more information.

You can also edit this list after creating the category.

6. Define a default filtering **Action** to apply to this category in all existing category filters. You can edit this action in individual filters later.



Note

Category filters copied to a delegated administration role set the filtering action to Permit for custom categories created in the role. Delegated administrators should update the copied category filters to set the desired action for their role-specific custom categories.

7. Enable any **Advanced Filtering** actions (keyword blocking, file type blocking, or bandwidth blocking) that should be applied to this category in all existing category filters.
8. When you are finished defining the new category, click **OK** to cache changes and return to the Edit Categories page. Changes are not implemented until you click **Save and Deploy**.

The new category is added to the Categories list and custom URL and keyword information for the category is displayed.

Filtering based on keyword

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Related topics:

- ◆ [Redefining filtering for specific sites](#), page 268
- ◆ [Configuring Websense filtering settings](#), page 68
- ◆ [Creating a category filter](#), page 61
- ◆ [Editing a category filter](#), page 62
- ◆ [Working with categories](#), page 262

Keywords are associated with categories, and then used to offer protection against sites that have not explicitly been added to the Master Database or defined as a custom URL. Three steps are necessary to enable keyword blocking:

1. Enable keyword blocking at a global level (see [Configuring Websense filtering settings](#), page 68).
2. Define keywords associated with a category (see [Defining keywords](#), page 267).
3. Enable keyword blocking for the category in an active category filter (see [Editing a category filter](#), page 62).

When keywords have been defined and keyword blocking is enabled for a specific category, Websense software tries to match the keyword against each requested URL as follows:

- ◆ If the keyword contains only ASCII characters, the keyword is matched against the domain, path, and query portions of a URL.
For example, if you associated the keyword “nba” with the permitted Sports category, the following URLs are blocked:
 - sports.espn.go.com/**nba**/
 - modern**nb**akery.com
 - fashion**nb**ar.com
- ◆ If the keyword contains characters outside the ASCII character set, the keyword is matched against only the path and query portions of the string.
For example, if you associated the keyword “fútbol” with the permitted Sports category:
 - “www.**fútbol**.com” is **permitted** (the domain portion of the URL is not matched)
 - “es.wikipedia.org/wiki/**Fútbol**” is **blocked** (the path portion of the URL is matched)

When a site is blocked by keyword, the site is recategorized according to the keyword match. Reports show the keyword category, rather than the Master Database category, for the site.

Be cautious when defining keywords to avoid unintended overblocking.



Important

Avoid associating keywords with any of the Extended Protection subcategories. Keyword blocking is not enforced for these categories.

When a request is blocked based on a keyword, this is indicated on the Websense block page that the user receives.

Defining keywords

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Related topics:

- ◆ [Editing a category filter](#), page 62
- ◆ [Working with categories](#), page 262
- ◆ [Filtering based on keyword](#), page 266
- ◆ [Using regular expressions](#), page 290

A keyword is a string of characters (like a word, phrase, or acronym) that might be found in a URL. Assign keywords to a category, and then enable keyword blocking in a category filter.

Use the **Policy Management > Filter Components > Edit Categories > Add Keywords** page to associate keywords with categories. If you need to make changes to a keyword definition, use the **Edit Keywords** page.

When you define keywords, be cautious to avoid unintended overblocking. You might, for example, intend to use the keyword “sex” to block access adult sites, but end up blocking search engine requests for words like sextuplets or City of Essex, and sites like msexchange.org (Information Technology), vegasexperience.com (Travel), and sci.esa.int/marsexpress (Educational Institutions).

Enter one keyword per line.

- ◆ Do not include spaces in keywords. URL and CGI strings do not include spaces between words.
- ◆ Include a backslash (\) before special characters such as:

. , # ? * +

If you do not include the backslash, Websense software ignores the special character.

- ◆ Avoid associating keywords with any of the Extended Protection subcategories. Keyword blocking is not enforced for these categories.

When you are finished adding or editing keywords, click **OK** to cache your changes and return to the Edit Categories page. Changes are not implemented until you click **Save and Deploy**.

In order for keyword blocking to be enforced, you must also:

1. Enable keyword blocking via the **Settings > Filtering** page (see [Configuring Websense filtering settings](#), page 68).
2. Enable keyword blocking in one or more active category filters (see [Editing a category filter](#), page 62).

Redefining filtering for specific sites

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Related topics:

- ◆ [Creating a custom category](#), page 265
- ◆ [Filtering based on keyword](#), page 266
- ◆ [Redefining filtering for specific sites](#), page 268

You can use TRITON - Web Security to change the category assigned to a site. Sites that have been added to a new category are called custom URLs or recategorized URLs.

- ◆ Use the **Policy Management > Filter Components > Edit Categories > Recategorize URLs** page to add sites to a new category.
- ◆ Make changes to existing recategorized sites on the **Edit URLs** page.

This functionality allows you to:

- ◆ Apply more precise filtering to sites that are not in the Websense Master Database.
By default, these sites are grouped into the **Miscellaneous\Uncategorized** category.
- ◆ Filter sites differently than their Master Database category. Sites can be added to:
 - A different Websense-defined category
 - Any custom category (see [Creating a custom category, page 265](#))
- ◆ Ensure that a site recently moved to a new domain is filtered appropriately, especially if users are still being sent to the new URL via an HTTP redirect.

A recategorized URL is not blocked by default. It is filtered according to the action applied to its new category in each active category filter.



Important

If a site is recategorized into a permitted category, and later becomes infected with malicious code, as long as Security categories are blocked, user requests for that site are blocked.

For instructions to change this behavior, see [Prioritizing Security Risk categorization, page 270](#).

When you recategorize sites:

- ◆ Enter each URL or IP address on a separate line.
 - If a site can be accessed via multiple URLs, define each URL that can be used to access the site as a custom URL to ensure that the site is permitted or blocked as intended.
 - When recategorized URLs are filtered, the URL is not automatically matched to its equivalent IP address. To ensure proper filtering of the site, specify both its URL and IP address.
- ◆ Include the protocol for any non-HTTP site. If the protocol is omitted, Websense software filters the site as an HTTP site.
For HTTPS sites, also include the port number (https://63.212.171.196:443/, https://www.onlinebanking.com:443/).
- ◆ Websense software recognizes custom URLs exactly as they are entered. If the Search Engines and Portals category is blocked, but you recategorize

www.yahoo.com in a permitted category, the site is permitted only if users type the full address. If a user types `images.search.yahoo.com`, or just `yahoo.com`, the site is still blocked. If you recategorize **yahoo.com**, however, all sites with `yahoo.com` in the address are permitted.

When you are finished adding or editing recategorized sites, click **OK** to return to the Edit Categories page. You must also click **OK** on the Edit Categories page to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Websense software looks for custom URL definitions for a site before consulting the Master Database, and therefore filters the site according to the category assigned to the recategorized URL.

After saving recategorized URLs, use the **URL Category** tool in the right shortcut pane to verify that the site is assigned to the correct category. See [Using the Toolbox to verify filtering behavior](#), page 291.

Prioritizing Security Risk categorization

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By default, when a site is categorized in a Security Risk category, the site is filtered based on its Security Risk classification, even when the site:

- ◆ Is added as a recategorized URL in a permitted category
- ◆ Appears in a limited access filter



Note

Although the Extended Protection categories are default members of the Security Risk class, because they group sites that are still being analyzed, they receive lower prioritization than other categories. As a result, custom categorization always takes precedence over Extended Protection categorization.

When Filtering Service or the hybrid service assigns a site to a Security Risk class category (based on Master Database category or Content Gateway scanning):

- ◆ If a category filter is in effect, and the security-related category is blocked, the site is blocked.
- ◆ If a limited access filter is in effect, the site is blocked.

Configure which categories are part of the Security Risk class on the **Settings > General > Risk Classes** page in TRITON - Web Security.

If you want to always filter based on custom categorization, regardless of whether a site appears in a Security Risk category (like Malicious Web Sites or Spyware):

1. Navigate to the Websense **bin** directory on the Filtering Service machine (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default) and open the **eimserver.ini** file in a text editor.
2. Navigate to the **[FilteringManager]** section and add the following line:

```
SecurityCategoryOverride=OFF
```
3. Save and close the file.
4. Restart Filtering Service.
 - *Windows:* Use the Services dialog box (Start > Administrative Tools > Services) to restart Websense Filtering Service.
 - *Linux:* Use the /opt/WebSense/WebSenseDaemonControl command to stop and then start Filtering Service.

In Websense Web Security Gateway Anywhere environments, you can also disable this feature for hybrid filtering:

1. Navigate to the Websense **bin** directory on the Sync Service machine (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default) and open the **syncservice.ini** file in a text editor.
2. If it does not already exist, add a section called **[hybrid]**, and then add the **SecurityCategoryOverride** parameter, as shown here:

```
[hybrid]  
SecurityCategoryOverride=false
```
3. Save and close the file.
4. Restart Sync Service.
 - *Windows:* Use the Services dialog box (Start > Administrative Tools > Services) to restart Websense Sync Service.
 - *Linux:* Use the /opt/WebSense/WebSenseDaemonControl command to stop and then start Sync Service.

Blocking posts to sites in some categories

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By default, if users are permitted access to a category, like Message Boards and Forums, they can both view and post to sites in the category.

You can configure Websense software to block posting to sites in specific categories using the **BlockMessageBoardPosts** configuration parameter.

- ◆ If the parameter is set to **ON**, users are blocked from posting only to sites in the Message Boards and Forums category.
- ◆ The parameter can also take a comma-separated list of category identifiers (in the form **112,122,151**). In this case, users are blocked from posting to sites in any of the listed categories.

To enable this feature for on-premises components:

1. Navigate to the Websense **bin** directory on the Filtering Service machine (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default) and open the **eimserver.ini** file in a text editor.
2. Navigate to the **[WebSenseServer]** section and add the following line:

```
BlockMessageBoardPosts=<value>
```

Here, <value> can be either **ON** or a comma-separated list of category identifiers
3. Save and close the file.
4. Restart Filtering Service.
 - *Windows:* Use the Services dialog box (Start > Administrative Tools > Services) to restart Websense Filtering Service.
 - *Linux:* Use the /opt/WebSense/WebSenseDaemonControl command to stop and then start Filtering Service.

In Websense Web Security Gateway Anywhere environments, to enable this feature for hybrid filtering:

1. Navigate to the Websense **bin** directory on the Sync Service machine (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default) and open the **syncservice.ini** file in a text editor.
2. If it does not already exist, add a section called **[hybrid]**, and then add the **BlockMessageBoardPosts** parameter, as shown here:

```
[hybrid]  
BlockMessageBoardPosts=<value>
```

Here, <value> is a comma-separated list of category identifiers.
3. Save and close the file.
4. Restart Sync Service.
 - *Windows:* Use the Services dialog box (Start > Administrative Tools > Services) to restart Websense Sync Service.
 - *Linux:* Use the /opt/WebSense/WebSenseDaemonControl command to stop and then start Sync Service.

Working with protocols

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The Websense Master database includes protocol definitions used to filter Internet protocols other than HTTP, HTTPS and FTP. These definitions include Internet applications and data transfer methods such as those used for instant messaging, streaming media, file sharing, file transfer, Internet mail, and other network and database operations.

These protocol definitions can even be used to filter protocols or applications that bypass a firewall by tunneling through ports normally used by HTTP traffic. Instant

messaging data, for example, can enter a network whose firewall blocks instant messaging protocols by tunneling through HTTP ports. Websense software accurately identifies these protocols, and filters them according to policies you configure.

**Note**

In Websense Web Filter and Websense Web Security deployments, Network Agent must be installed to enable protocol-based filtering.

With Websense Web Security Gateway, it is possible to filter non-HTTP protocols that tunnel over HTTP ports without using Network Agent. See [Tunneled protocol detection](#), page 192, for more information.

In addition to using Websense-defined protocol definitions, you can define custom protocols for filtering. Custom protocol definitions can be based on IP addresses or port numbers, and can be edited.

To block traffic over a specific port, associate that port number with a custom protocol, and then assign that protocol a default action of **Block**.

To work with custom protocol definitions, go to **Policy Management > Filter Components**, and then click **Protocols**. See [Editing custom protocols](#), page 274, and [Creating a custom protocol](#), page 277, for details.

Filtering protocols

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Related topics:

- ◆ [Working with protocols](#), page 272
- ◆ [Editing custom protocols](#), page 274
- ◆ [Creating a custom protocol](#), page 277
- ◆ [Adding or editing protocol identifiers](#), page 275
- ◆ [Adding to a Websense-defined protocol](#), page 278

When Network Agent is installed or with a Websense Web Security Gateway deployment, Websense software can block Internet content transmitted over particular ports, or using specific IP addresses, or marked by certain signatures, regardless of the

nature of the data. By default, blocking a port intercepts all Internet content entering your network over that port, regardless of source.

**Note**

Occasionally, internal network traffic sent over a particular port may not be blocked, even though the protocol using that port is blocked. The protocol may send data via an internal server more quickly than Network Agent can capture and process the data. This does not occur with data originating outside the network.

When a protocol request is made, Websense software uses the following steps to determine whether to block or permit the request:

1. Determine the protocol (or Internet application) name.
2. Identify the protocol based on the request destination address.
3. Search for related port numbers or IP addresses in custom protocol definitions.
4. Search for related port numbers, IP addresses, or signatures in Websense-defined protocol definitions.

If Websense software is unable to determine any of this information, all content associated with the protocol is permitted.

Editing custom protocols

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Related topics:

- ◆ [Working with protocols](#), page 272
- ◆ [Creating a custom protocol](#), page 277
- ◆ [Creating a protocol filter](#)
- ◆ [Editing a protocol filter](#)
- ◆ [Working with categories](#)

Use the **Policy Management > Filter Components > Edit Protocols** page to create and edit custom protocol definitions, and to review Websense-defined protocol definitions. Websense-defined protocols cannot be edited.

The Protocols list includes all custom and Websense-defined protocols. Click on a protocol or protocol group to get information about the selected item in the right-hand portion of the content pane.

To add a new, custom protocol, click **Add Protocol**, and then continue with [Creating a custom protocol](#), page 277.

To edit a protocol definition:

1. Select the protocol in the Protocols list. The protocol definition appears to the right of the list.
2. Click **Override Action** to change the filtering action applied to this protocol in all protocol filters (see [Making global protocol filtering changes](#), page 276).
3. Click **Add Identifier** to define additional protocol identifiers for this protocol (see [Adding or editing protocol identifiers](#), page 275).
4. Select an identifier in the list, and then click **Edit** to make changes to the **Port**, **IP Address Range**, or **Transport Method** defined by that identifier.
5. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

To delete a protocol definition, select an item in the Protocols list, and then click **Delete**.

Adding or editing protocol identifiers

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Use the **Filter Components > Edit Protocols > Add Protocol Identifier** page to define additional protocol identifiers for an existing custom protocol. Use the **Edit Protocol Identifier** page to make changes to a previously-defined identifier.

Before creating or changing an identifier, verify that the correct protocol name appears next to **Selected Protocol**.

When working with protocol identifiers, remember that at least one criterion (port, IP address or transport type) must be unique for each protocol.

1. Specify which **Ports** are included in this identifier.
 - If you select **All Ports**, that criterion overlaps with other ports or IP addresses entered in other protocol definitions.
 - Port ranges are not considered unique if they overlap. For example, the port range 80-6000 overlaps with the range 4000-9000.
 - Use caution when defining a protocol on port 80 or 8080. Network Agent listens for Internet requests over these ports.
You can configure Network Agent to ignore these ports in conjunction with a Websense Web Security Gateway deployment.
Since custom protocols take precedence over Websense protocols, if you define a custom protocol using port 80, all other protocols that use port 80 are filtered and logged like the custom protocol.
2. Specify which **IP Addresses** are included in this identifier.
 - If you select **All external IP addresses**, that criterion overlaps with any other IP addresses entered in other protocol definitions.
 - IP address ranges are not considered unique if they overlap.
3. Specify which **Protocol Transport** method is included in this identifier.

4. Click **OK** to cache your changes and return to the Edit Protocols page. Changes are not implemented until you click **Save and Deploy**.

Renaming a custom protocol

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Filter Components > Edit Protocols > Rename Protocol** page to change the name of a custom protocol, or move it to a different protocol group.

- ◆ Use the **Name** field to edit the protocol name. The new name cannot exceed 50 characters.
The name cannot include any of the following characters:
* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,
- ◆ To move the protocol to a different protocol group, select the new group from the **In group** field.

When you are finished making changes, click **OK** to return to the Edit Protocols page. You must also click **OK** on the Edit Protocols to cache the changes.

Making global protocol filtering changes

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Use the **Filter Components > Edit Protocols > Override Action** page to change the way a protocol is filtered in all existing protocol filters. This also determines the default action applied to the protocol in new filters.

Although this change overrides the filtering action applied in all existing protocol filters, administrators can later edit those filters to apply a different action.

1. Verify that the correct protocol name appears next to **Selected Protocol**.
2. Select a new **Action** (Permit or Block) to apply to this protocol. By default, **No change** is selected. See [Filtering actions, page 57](#), for more information.
3. Specify new **Logging** options. Protocol traffic must be logged to appear in reports and enable protocol usage alerts.
4. Specify whether or not **Bandwidth Optimizer** is used to manage access to this protocol. See [Using Bandwidth Optimizer to manage bandwidth, page 279](#), for more information.



Important

Changes made here affect every existing protocol filter, except **Block All** and **Permit All**.

5. When you are finished, click **OK** to return to the Edit Protocols page (see [Editing custom protocols, page 274](#)). You must also click **OK** on the Edit Protocols page to cache the changes.

Creating a custom protocol

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Related topics:

- ◆ [Working with protocols, page 272](#)
- ◆ [Filtering protocols, page 273](#)
- ◆ [Editing custom protocols, page 274](#)
- ◆ [Adding to a Websense-defined protocol, page 278](#)

Use the **Filter Components > Protocols > Add Protocol** page to define a new, custom protocol.

1. Enter a **Name** for the protocol.

The name cannot include any of the following characters:

* < > { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

A custom protocol can be assigned the same name as a Websense-defined protocol, in order to extend the number of IP addresses or ports associated with the original protocol. See [Adding to a Websense-defined protocol, page 278](#), for more information.

2. Expand the **Add protocol to this group** drop-down list, and then select a protocol group. The new protocol appears in this group in all protocol lists and filters.
3. Define a unique **Protocol Identifier** (set of **ports**, **IP addresses**, and **transport methods**) for this group. You can add additional identifiers later, from the Edit Protocols page.

Follow these guidelines for creating protocol identifiers:

- At least one criterion (port, IP address or transport type) must be unique for each protocol definition.
- If you select **All Ports** or **All external IP addresses**, that criterion overlaps with any other ports or IP addresses entered in other protocol definitions.
- Port ranges or IP address ranges are not considered unique if they overlap. For example, the port range 80-6000 overlaps with the range 4000-9000.



Note

Use caution when defining a protocol on port 80 or 8080. Network Agent listens for Internet requests over these ports. (In Websense Web Security Gateway deployments, you can configure Network Agent to ignore these ports.)

Since custom protocols take precedence over Websense protocols, if you define a custom protocol using port 80, all other protocols that use port 80 are filtered and logged like the custom protocol.

The following tables provide examples of valid and invalid protocol definitions:

| Port | IP Address | Transport Method | Accepted combination? |
|------|------------|------------------|--|
| 70 | ANY | TCP | Yes - the port number makes each protocol identifier unique. |
| 90 | ANY | TCP | |

| Port | IP Address | Transport Method | Accepted combination? |
|------|------------|------------------|--|
| 70 | ANY | TCP | No - the IP addresses are not unique. 10.2.1.201 is included in the “ANY” set. |
| 70 | 10.2.1.201 | TCP | |

| Port | IP Address | Transport Method | Accepted combination? |
|------|------------|------------------|------------------------------------|
| 70 | 10.2.3.212 | TCP | Yes - the IP addresses are unique. |
| 70 | 10.2.1.201 | TCP | |

- Under Default Filtering Action, specify the default action (**Permit** or **Block**) that should be applied to this protocol in all active protocol filters:
 - Indicate whether traffic using this protocol should be **Logged**. Protocol traffic must be logged to appear in reports and enable protocol usage alerts.
 - Indicate whether access to this protocol should be regulated by **Bandwidth Optimizer** (see [Using Bandwidth Optimizer to manage bandwidth](#), page 279).
- When you are finished, click **OK** to return to the Edit Protocols page. The new protocol definition appears in the Protocols list.
- Click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding to a Websense-defined protocol

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

You cannot add a port number or IP address directly to a Websense-defined protocol. You can, however, create a custom protocol with the same name as the Websense-defined protocol, and then add ports or IP addresses to its definition.

When a custom protocol and a Websense-defined protocol have the same name, Websense software looks for protocol traffic at the ports and IP addresses specified in both definitions.

In reports, custom protocol names have a “C_” prefix. For example, if you created a custom protocol for SQL_NET and specified additional port numbers, reports display C_SQL_NET when the protocol uses the port numbers in the custom protocol.

Using Bandwidth Optimizer to manage bandwidth

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with categories, page 262](#)
- ◆ [Working with protocols, page 272](#)
- ◆ [Configuring the default Bandwidth Optimizer limits, page 280](#)

When you create a category or protocol filter, you can elect to limit access to a category or protocol based on bandwidth usage.

- ◆ Block access to categories or protocols based on total network bandwidth usage.
- ◆ Block access to categories based on total bandwidth usage by HTTP traffic.
- ◆ Block access to a specific protocol based on bandwidth usage by that protocol.



Note

If you have Websense Web Security Gateway Anywhere, be aware that hybrid filtering does not enforce bandwidth-based restrictions.

For example:

- ◆ Block the AOL Instant Messaging protocol if total network bandwidth usage exceeds 50% of available bandwidth, or if current bandwidth usage for AIM exceeds 10% of the total network bandwidth.
- ◆ Block the Sports category when total network bandwidth usage reaches 75%, or when bandwidth usage by all HTTP traffic reaches 60% of available network bandwidth.

Protocol bandwidth usage includes traffic over all ports, IP addresses, or signatures defined for the protocol. This means that if a protocol or Internet application uses multiple ports for data transfer, traffic across all of the ports included in the protocol definition are counted toward that protocol's bandwidth usage total. If an Internet application uses a port not included in the protocol definition, however, traffic over that port is not included in bandwidth usage measurements.

Websense software records bandwidth used by filtered TCP- and UDP-based protocols.

Websense, Inc., updates Websense protocol definitions regularly to ensure bandwidth measurement accuracy.

Network Agent sends network bandwidth data to Filtering Service at a predetermined interval. This ensures that Websense software accurately monitors bandwidth usage, and receives measurements that are closest to an average.

In a Websense Web Security Gateway deployment, Content Gateway collects bandwidth data for FTP, HTTP, and, when enabled, the individual protocols that tunnel over HTTP (see [Tunneled protocol detection](#), page 192). Measurement and reporting parallel that used by Network Agent. You can specify that this data be used to determine bandwidth-based protocol filtering in the Bandwidth Optimizer settings.

1. In TRITON - Web Security, go to **Settings > General > Filtering**.
2. Select the **Bandwidth Monitoring** check box.
3. When you are finished, click **OK** to cache your change. Changes are not implemented until you click **Save and Deploy**.

When bandwidth-based filtering options are active, Websense software begins bandwidth-based filtering 10 minutes after initial configuration, and 10 minutes after each Websense Policy Server restart. This delay ensures accurate measurement of bandwidth data and use of this data in filtering.

When a request is blocked based on bandwidth limitations, the Websense block page displays this information in the **Reason** field. For more information, see [Block Pages](#), page 117.

Configuring the default Bandwidth Optimizer limits

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Editing a category filter](#), page 62
- ◆ [Editing a protocol filter](#), page 64
- ◆ [Using Bandwidth Optimizer to manage bandwidth](#), page 279

Before specifying bandwidth settings in policies, verify the default bandwidth thresholds that trigger bandwidth-based filtering settings. The Websense-defined values are:

- ◆ Default bandwidth for network: **50%**
- ◆ Default bandwidth per protocol: **20%**

Default bandwidth values are stored by Policy Server, and enforced by all associated instances of Network Agent. If you have multiple Policy Servers, changes to default bandwidth values on one Policy Server do not affect other Policy Servers.

To change the default bandwidth values:

1. In TRITON - Web Security, go to **Settings > General > Filtering**.
2. Enter the bandwidth usage thresholds that will trigger bandwidth-based filtering, when bandwidth filtering is enabled.
 - When a category or protocol is blocked based on traffic for the entire network, **Default bandwidth for network** defines the default filtering threshold.

- When a category or protocol is blocked based on traffic for the protocol, the **Default bandwidth per protocol** defines the default filtering threshold.

You can override the default threshold values for each category or protocol in any category or protocol filter.

3. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Any changes to the defaults have the potential to affect any category and protocol filters that enforce Bandwidth Optimizer restrictions.

- ◆ To manage bandwidth usage associated with a particular protocol, edit the active protocol filter or filters.
- ◆ To manage bandwidth usage associated with a particular URL category, edit the appropriate category filter or filters.

When you filter categories based on HTTP bandwidth usage, Websense software measures total HTTP bandwidth usage over all ports specified as HTTP ports for Websense software.

Managing traffic based on file type

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Filtering based on file extension, page 283](#)
- ◆ [Filtering based on file analysis, page 286](#)
- ◆ [Working with file type definitions, page 288](#)
- ◆ [Adding custom file types, page 288](#)
- ◆ [Adding file extensions to a file type, page 289](#)

When you create or edit a category filter, you can configure file type blocking for permitted categories. This allows your organization to restrict access to particular file types from Web sites in some or all permitted categories. For example, you could permit the category Sports, but block multimedia (audio and video) files from sites in the Sports category.

How file type blocking is implemented depends on your Websense Web security solution.

- ◆ Websense Web Filter and Websense Web Security (no Content Gateway or hybrid service proxy) allow you to block file types based solely on file extension (see [Filtering based on file extension, page 283](#)).

For example:

1. The General Email category is permitted in the active category filter, but file type blocking is enabled for Compressed Files in the category.
2. An end user attempts to download a file with a file with a .zip extension (like “myfile.zip”).
3. The user receives a block page indicating that the download was blocked by file type, because the “.zip” file extension is associated with the Compressed Files file type.

- ◆ Websense Web Security Gateway and Gateway Anywhere (which include Content Gateway and the hybrid service) enable 2-part file type blocking, based on a combination of file extension (see [Filtering based on file extension, page 283](#)) and analysis of requested files (see [Filtering based on file analysis, page 286](#)).

For example:

1. The General Email category is permitted in the active category filter, but file type blocking is enabled for Compressed Files in the category.
2. An end user attempts to download a file with a file with a .zip extension (like “myfile.zip”).
3. The user receives a block page indicating that the download was blocked by file type, because the “.zip” file extension is associated with the Compressed Files file type.

4. The user attempts to download another file from email. This file does not have a known file extension (for example, “myfile.111”).
5. The file is scanned to find its file type.
 - If analysis determines that the file is in a compressed format, the user receives a block page indicating that the download is blocked by file type.
 - If analysis determines that the file is not compressed, the download request is permitted.

Combine protocol-based filtering with file type filtering to implement full filtering for Internet audio and video media. Protocol filtering handles streaming media, while file type filtering handles files that can be downloaded and then played.

Filtering based on file extension

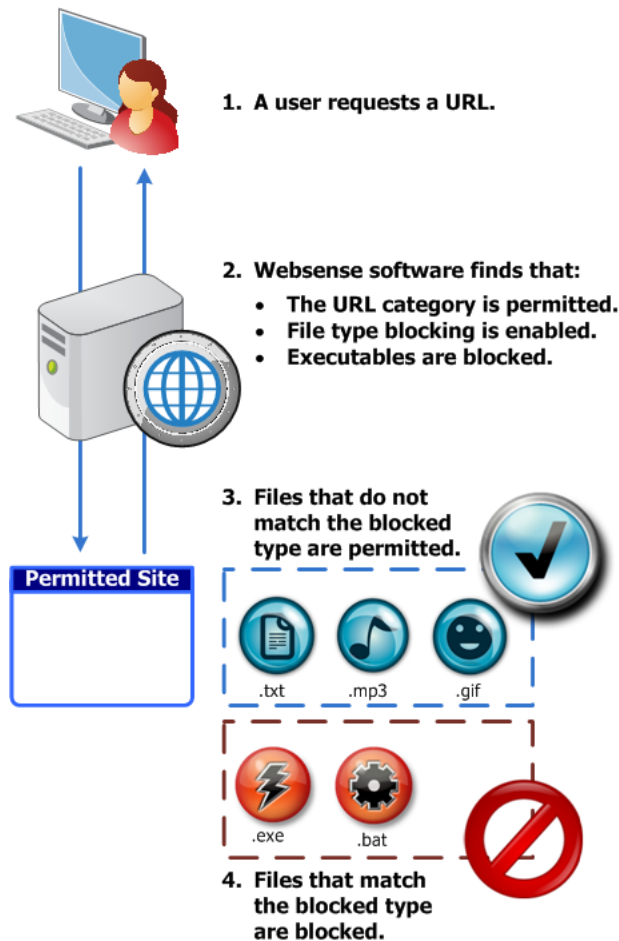
TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Enabling file type blocking in a category filter, page 287](#)
- ◆ [Working with file type definitions, page 288](#)
- ◆ [Adding custom file types, page 288](#)
- ◆ [Adding file extensions to a file type, page 289](#)

When a user requests a URL in a permitted category for which file type blocking is enabled, Filtering Service checks the files associated with the URL to see if any of them has a file extension that is assigned to a blocked file type. If so, the request is

blocked, and the user receives a block page that indicates that the request was blocked by file type.



If the file extension is not associated with a blocked file type, what happens next depends on your Web security solution:

- ◆ *Websense Web Security and Web Filter:* The file is permitted.
- ◆ *Websense Web Security Gateway and Gateway Anywhere:* The file is analyzed to determine its true file type, and permitted or blocked based on that analysis (see [Filtering based on file analysis, page 286](#)).

Several predefined file types (groups of file extensions) are included with the product. These file type definitions are maintained in the Master Database, and may be changed as part of the Master Database update process.

You can filter using predefined file types, modify the existing file type definitions, or create new file types. You cannot, however, delete Websense-defined file types, or delete the file extensions associated with them.

Any of the file extensions associated with a Websense-defined file type can be added to a custom file type. The file extension is then filtered and logged according to the settings associated with the custom file type.

File type definitions may contain as many or as few file extensions as are useful for filtering purposes. Websense-defined file types, for example, include the following file extensions:

| File Type | Associated Extensions |
|-----------------------------------|--|
| Compressed files | .ace, .arc, .arj, .b64, .bhx, .cab, .gz, .gzip, .hqx, .iso, .jar, .lzh, .mim, .rar, tar, taz, .tgz, .tz, .uu, .uue, .xxe, .z, .zip |
| Documents | .ade, .adp, .asd, .cwk, .doc, .docx, .dot, .dotm, .dotx, .grv, .iaf, .lit, .lwp, .maf, .mam, .maq, .mar, .mat, .mda, .mdb, .mde, .mdt, .mdw, .mpd, .mpp, .mpt, .msg, .oab, .obi, .oft, .olm, .one, .ops, .ost, .pa, .pdf, .pip, .pot, .potm, .potx, .ppa, .ppam, .pps, .ppsm, .ppsx, .ppt, .pptm, .pptx, .prf, .pst, .pub, .puz, .sldm, .sldx, .snp, .svd, .thmx, .vdx, .vsd, .vss, .vst, .vsx, .vtx, .wbk, .wks, .wll, .wri, .xar, .xl, .xla, .xlb, .xlc, .xll, .xlm, .xls, .xlsb, .xlsm, .xlsx, .xlt, .xltm, .xltx, .xlw, .xsf, .xsn |
| Executables | .bat, .exe |
| Images | .bmp, .cmu, .djvu, .emf, .fbm, .fits, .gif, .icb, .ico, .jpeg, .jpg, .mgr, .miff, .pbk, .pbm, .pcx, .pdd, .pds, .pix, .png, .psb, .psd, .psp, .rle, .sgi, .sir, .targa, .tga, .tif, .tiff, .tpic, .vda, .vst, .zif |
| Multimedia | .aif, .aifc, .aiff, .asf, .asx, .avi, .ivf, .m1v, .m3u, .mid, .midi, .mov, .mp2, .mp2v, .mp3, .mpa, .mpe, .mpg, .mpv2, .ogg, .qt, .ra, .ram, .rmi, .snd, .wav, .wax, .wm, .wma, .wmp, .wmv, .wmx, .wxv |
| Rich Internet Applications | .swf |
| Text | .htm, .html, .txt, .xht, .xhtml, .xml |
| Threats | .vbs, .wmf |

When a user requests a site, Websense software:

1. Determines the URL category.
2. Checks the file extension.
3. (*Websense Web Security Gateway* and *Gateway Anywhere*) If not blocked by extension, the file is analyzed to find its true file type.



Note

When multiple group policies could apply to a user request, file type blocking is not performed.

When a user tries to access a blocked file type, the **Reason** field on the Websense block page indicates that the file type was blocked (see [Block Pages](#), page 117).

The standard block page is not displayed if a blocked image comprises just a portion of a permitted page. Instead, the image region appears blank. This avoids the possibility of displaying a small portion of a block page in multiple locations on an otherwise permitted page.

To view existing file type definitions, edit file types, or create custom file types for filtering by extension, go to **Policy Management > Filter Components**, and then click **File Types**. See [Working with file type definitions](#), page 288, for more information.

To enable file type blocking, see [Enabling file type blocking in a category filter](#), page 287.

Filtering based on file analysis

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Enabling file type blocking in a category filter](#), page 287
- ◆ [Security threats: File analysis](#), page 194

If user traffic passes through Websense Content Gateway or the hybrid service, requested files are analyzed to define their type when all of the following are true:

1. A user requests a URL in a permitted category.
2. File type blocking is enabled for the category in the active category filter.
3. There is no file extension match in a blocked file type (see [Filtering based on file extension](#), page 283).

In this case, the file type returned for filtering describes the purpose or behavior of similar files, independent of extension. So attempts to disguise an executable by giving it a “.txt” or other innocuous file extension are prevented by file type analysis.

File type definitions are maintained in the analytics databases, and may be changed as part of the Content Gateway database or hybrid service update process.

The file types identified by file analysis are:

| File Type | Description |
|-----------------------------------|--|
| Compressed files | Files that have been packaged to take up less space, like ZIP, RAR, or JAR archives. |
| Documents | Binary document formats, like DOCX or PDF. |
| Executables | Programs that can be run on your machine, like EXE or BAT files. |
| Images | Picture formats, like JPG, BMP, and GIF. |
| Multimedia | Audiovisual formats, like MP3, WMV, and MOV. |
| Rich Internet Applications | Web applications that run in a browser, like Flash. |
| Text | Unformatted textual material, like HTML and TXT files. |
| Threats | Malicious applications that could harm your machine or network, like spyware, worms, or viruses. |

When a user requests a site, Websense Web Security Gateway solutions first determine the site category, and then check for filtered file types (first by extension, then by analysis).

**Note**

When multiple group policies could apply to a user request, file type blocking is not performed.

When a user tries to access a blocked file type, the **Reason** field on the Websense block page indicates that the file type was blocked (see [Block Pages](#), page 117).

The standard block page is not displayed if a blocked image comprises just a portion of a permitted page. Instead, the image region appears blank. This avoids the possibility of displaying a small portion of a block page in multiple locations on an otherwise permitted page.

To view existing file extensions in a file type, edit file types, or create custom file types for filtering by extension, go to **Policy Management > Filter Components**, and then click **File Types**. See [Working with file type definitions](#), page 288, for more information.

To enable file type blocking, see [Enabling file type blocking in a category filter](#), page 287.

Enabling file type blocking in a category filter

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To prevent users from accessing some file types in otherwise permitted categories:

1. Go to the **Policy Management > Filters** page and click on a category filter name.
Note that you can also edit category filters from within a policy.
2. Select a category in the **Categories** list.
3. Mark the **Block file types** check box under Advanced Filtering on the right-hand side of the page.
A list of file types is displayed.
4. Use the check boxes to select one or more file types to block.
5. If you want to block the select file types in all categories permitted by this category filter, click **Apply to All Categories**.
6. Click **OK**, then **Save and Deploy** to implement your changes.

Working with file type definitions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Managing traffic based on file type, page 282](#)
- ◆ [Editing a category filter, page 62](#)
- ◆ [Filtering a site, page 100](#)

Use the **Policy Management > Filter Components > Edit File Types** page to create and manage up to 32 file types (groups of file extensions) that can be explicitly blocked in category filters (see [Managing traffic based on file type, page 282](#)).



Important

Custom file types and custom additions to predefined types are used in extension-based filtering, but not Websense Web Security Gateway or Gateway Anywhere true file type analysis. See [Filtering based on file extension, page 283](#), and [Filtering based on file analysis, page 286](#), for more information.

- ◆ Click on a file type to see the file extensions associated with that type.
- ◆ To add extensions to the selected file type, click **Add Extension**, and then see [Adding file extensions to a file type, page 289](#), for further instructions.
- ◆ To create a new file type, click **Add File Type**, and then see [Adding custom file types, page 288](#), for further instructions.
- ◆ To delete a custom file type or extension, select an item, and then click **Delete**.
You cannot delete Websense-defined file types, or delete the file extensions associated with them.
You can, however, add file extensions associated with a Websense-defined file type to a custom file type. The file extension is then filtered and logged according to the settings associated with the custom file type. You cannot add the same extension to multiple custom file types.

When you are finished making changes to file type definitions, click **OK**. Changes are not implemented until you click **Save and Deploy**.

Adding custom file types

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Use the **Filter Components > Edit File Types > Add File Type** page to define custom file types.



Important

Custom file types and custom additions to predefined types are used in extension-based filtering, but not Websense Web Security Gateway or Gateway Anywhere true file type analysis. See [Filtering based on file extension, page 283](#), and [Filtering based on file analysis, page 286](#), for more information.

1. Enter a unique **File type name**.
You can create a custom file type with the same name as a Websense-defined file type in order to add additional file extensions to the existing file type.
2. Enter file extensions, one per line, in the **File extensions** list. You do not need to include the dot (".") before each extension.
3. Click **OK** to return to the Edit File Types screen. The new file type appears in the File Types list.
4. When you are finished working with file type definitions, click **OK** on the Edit File Types page. Changes are not implemented until you click **Save and Deploy**.

Adding file extensions to a file type

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Filter Components > Edit File Types > Add File Extensions** page to add file extensions to the selected file type.



Important

Custom file types and custom additions to predefined types are used in extension-based filtering, but not Websense Web Security Gateway or Gateway Anywhere true file type analysis. See [Filtering based on file extension, page 283](#), and [Filtering based on file analysis, page 286](#), for more information.

1. Verify that the expected file type name appears next to **Selected file type**.
2. Enter file extensions, one per line, in the **File extensions** list. You do not need to include the dot (".") before each extension.
3. Click **OK** to return to the Edit File Types screen. The new file extensions appear in the Custom file extensions list.
4. When you are finished working with file type definitions, click **OK** on the Edit File Types page. Changes are not implemented until you click **Save and Deploy**.

Using regular expressions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

A **regular expression** is a template or pattern used to match multiple strings, or groups of characters. You can use regular expressions in limited access filters, or to define custom URLs or keywords. Filtering Service then tries to match the general pattern, rather than a specific, single URL or keyword.

Consider this simple regular expression:

```
domain.(com|org|net)
```

This expression pattern matches the URLs:

- ◆ domain.com
- ◆ domain.org
- ◆ domain.net

Use regular expressions with caution. They provide a powerful filtering tool, but can easily result in either unexpected over blocking or under blocking. Also, poorly constructed regular expressions can result in excessive filtering overhead.



Important

Using regular expressions as filtering criteria may increase CPU usage. Tests have shown that with 100 regular expressions, the average CPU usage on the Filtering Service machine increased by 20%.

As with keywords, when non-ASCII characters appear in a regular expression, the expression is matched against only the path and query strings in a URL, and not the domain (“www.domain.com/**path?query**”).

Websense software supports most Perl regular expression syntax, with 2 exceptions. The unsupported syntax is unlikely to be useful for matching strings that could be found in a URL.

Unsupported regular expression syntax includes:

```
(?{code})  
??{code})
```

For further help with regular expressions, see:

en.wikipedia.org/wiki/Regular_expression
www.regular-expressions.info/

Using the Toolbox to verify filtering behavior

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The right shortcut pane in TRITON - Web Security includes a **Toolbox** that allows you to perform quick checks of your filtering setup.

Click a tool name to access the tool. Click the name again to see the list of tools. For more information about using a tool, see:

- ◆ [URL Category](#), page 291
- ◆ [Check Policy](#), page 291
- ◆ [Test Filtering](#), page 292
- ◆ [URL Access](#), page 292
- ◆ [Investigate User](#), page 292

You can also click **Support Portal** to access the Websense Technical Support Web site in a new browser tab or window. From the Support Portal, you can search the knowledge base to find articles, tips, tutorials, videos, and product documentation.

URL Category

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To find out how a site is currently categorized:

1. Click **URL Category** in the Toolbox.
2. Enter a URL or IP address.
3. Click **Go**.

The site's current category is displayed in a popup window. If your organization has recategorized the URL, the new category is shown.

The site's categorization may depend on which version of the Master Database (including real-time updates) you are using.

Check Policy

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use this tool to determine which policies apply to a specific client. The results are specific to the current day and time.

1. Click **Check Policy** in the Toolbox.
2. To identify a directory or computer client, enter either:
 - A fully qualified user name

To browse or search the directory to identify the user, click **Find User** (see [Identifying a user to check policy or test filtering](#), page 293).

- An IP address

3. Click **Go**.

The name of one or more policies is displayed in a popup window. Multiple policies are displayed only when no policy has been assigned to the user, but policies have been assigned to multiple groups, domains, or organizational units to which the user belongs.

Even if multiple policies are shown, only one policy is enforced for a user at any given time (see [Filtering order](#), page 97).

Test Filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To find out what happens when a specific client requests a particular site:

1. Click **Test Filtering** in the Toolbox.
2. To identify a directory or computer client, enter either:
 - A fully qualified user name
To browse or search the directory to identify the user, click **Find User** (see [Identifying a user to check policy or test filtering](#), page 293).
 - An IP address
3. Enter the URL or IP address of the site you want to check.
4. Click **Go**.

The site category, the action applied to the category, and the reason for the action are displayed in a popup window.

URL Access

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To see whether users have attempted to access a site in the past 2 weeks, including today:

1. Click **URL Access** in the Toolbox.
2. Enter all or part of the URL or IP address of the site you want to check.
3. Click **Go**.

An investigative report shows whether the site has been accessed, and if so, when.

You might use this tool after receiving a security alert to find out if your organization has been exposed to phishing or virus-infected sites.

Investigate User

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To review a client's Internet usage history for the last 2 weeks, excluding today:

1. Click **Investigate User** in the Toolbox.
2. Enter all or part of a user name (if user-based filtering is enabled) or IP address (for machines on which users are not identified).

The IP address search shows only results for which no user name has been logged.

3. Click **Go**.

An investigative report shows the client's usage history.

Identifying a user to check policy or test filtering

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Find User** page to identify a user (directory) client for the Check Policy or Test Filtering tool.

The page opens with the **User** option selected. Expand the **Directory Entries** folder to browse the directory, or click **Search**. The search feature is available only if you are using an LDAP-based directory service.

To search the directory to find a user:

1. Enter all or part of the user **Name**.
2. Expand the **Directory Entries** tree and browse to identify a search context.
You must click a folder (DC, OU, or CN) in the tree to specify the context. This populates the field below the tree.
3. Click **Search**. Entries matching your search term are listed under **Search Results**.
4. Click a user name to select a user, or click **Search Again** to enter a new search term or context.
To return to browsing the directory, click **Cancel Search**.
5. When the correct fully qualified user name appears in the **User** field, click **Go**.

If you are using the Test Filtering tool, make sure that a URL or IP address appears in the **URL** field before you click **Go**.

To identify a computer client instead of a user, click **IP address**.

14

User Identification

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To apply policies to users and groups, Websense software must be able to identify the user making a request, given the originating IP address. Various identification methods are available:

- ◆ An integration device or application identifies and authenticates users, and then passes user information to Websense software. For more information, see the [Deployment and Installation Center](#).
- ◆ A Websense transparent identification agent works in the background to communicate with a directory service and identify users (see [Transparent identification](#)).
- ◆ Websense software prompts users for their network credentials, requiring them to log on when they open a Web browser (see [Manual authentication, page 297](#)).

In Websense Web Security Gateway Anywhere environments, the hybrid service must likewise be able to identify users to apply user and group based policies. It does not use information provided by User Service or transparent identification agents. Instead, the following methods are available:

- ◆ A component called Websense Directory Agent collects the information used to identify users (see [Identification of hybrid filtering users, page 322](#)).
- ◆ Websense Web Endpoint is installed on client machines to provide transparent authentication, enforce use of hybrid filtering, and pass authentication details to the hybrid service.
- ◆ Websense Authentication Service provides transparent authentication via a virtual machine hosted on your network that communicates with your directory service.

Transparent identification

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Manual authentication, page 297](#)
- ◆ [Configuring user identification methods, page 298](#)

In general, **transparent identification** describes any method that Websense software uses to identify users in your directory service without prompting them for logon information. This includes integrating Websense software with a device or application that provides user information for use in filtering, or using optional Websense transparent identification agents.

- ◆ Websense [DC Agent](#), [page 306](#), is used with a Windows-based directory service. The agent periodically queries domain controllers for user logon sessions and polls client machines to verify logon status. It runs on a Windows server and can be installed in any domain in the network.
- ◆ Websense [Logon Agent](#), [page 311](#), identifies users as they log on to Windows domains. The agent runs on a Linux or Windows server, but its associated Logon Application runs only on Windows machines.
- ◆ Websense [RADIUS Agent](#), [page 313](#), can be used in conjunction with either Windows- or LDAP-based directory services. The agent works with a RADIUS server and client to identify users logging on from remote locations.
- ◆ Websense [eDirectory Agent](#), [page 315](#), is used with Novell eDirectory. The agent uses Novell eDirectory authentication to map users to IP addresses.

For instructions on installing each agent, see the [Deployment and Installation Center](#). Agent can be used alone, or in certain combinations.

Both general user identification settings and specific transparent identification agents are configured in TRITON - Web Security. Go to the **Settings > General > User Identification** page.

See [Configuring user identification methods](#), [page 298](#), for detailed configuration instructions.

In some instances, Websense software may not be able to obtain user information from a transparent identification agent. This can occur if more than one user is assigned to the same machine, or if a user is an anonymous user or guest, or for other reasons. In these cases, you can prompt the user to log on via the browser (see [Manual authentication](#), [page 297](#)).

Transparent identification of remote users

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In certain configurations, Websense software can transparently identify users logging on to your network from remote locations:

- ◆ If you have deployed the Websense Remote Filtering Server and Remote Filtering Client, Websense software can identify any off-site user logging on to a cached domain using a domain account. For more information, see [Filter Users Off Site](#), [page 245](#).
- ◆ If you have deployed DC Agent, and remote users directly log on to named Windows domains in your network, DC Agent can identify these users (see [DC Agent](#), [page 306](#)).

- ◆ If you are using a RADIUS server to authenticate users logging on from remote locations, RADIUS Agent can transparently identify these users so you can apply filtering policies based on users or groups (see [RADIUS Agent](#), page 313).

Manual authentication

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Setting authentication rules for specific machines](#), page 299
- ◆ [Secure manual authentication](#), page 302
- ◆ [Configuring user identification methods](#), page 298

Transparent identification is not always available or desirable in all environments. For organizations that do not use transparent identification, or in situations when transparent identification is not available, you can still filter based on user and group-based policies using **manual authentication**.

Manual authentication prompts users for a user name and password the first time they access the Internet through a browser. Websense software confirms the password with a supported directory service, and then retrieves policy information for that user.

You can configure Websense software to enable manual authentication any time transparent identification is not available (see [Configuring user identification methods](#), page 298 and [Configure user access to hybrid filtering](#), page 220).

You can also create a list of specific machines with custom authentication settings on which users are prompted to log on when they open a browser (see [Setting authentication rules for specific machines](#), page 299).

When manual authentication is enabled, users may receive HTTP errors and be unable to access the Internet if:

- ◆ They make 3 failed attempts to enter a password. This occurs when the user name or password is invalid.
- ◆ They click **Cancel** to bypass the authentication prompt.

When manual authentication is enabled, users who cannot be identified are prevented from browsing the Internet.

Configuring user identification methods

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Transparent identification, page 295](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Working with users and groups, page 76](#)

Use the **Settings > General > User Identification** page to manage when and how Websense software attempts to identify users in the network in order to apply user- and group-based policies.

- ◆ Configure Policy Server to communicate with transparent identification agents.
- ◆ Review and update transparent identification agent settings.
- ◆ Set a global rule to determine how Websense software responds when users cannot be identified by a transparent identification agent or integration device.
- ◆ Identify machines in your network to which global user identification rules do not apply, and specify whether and how users of those machines should be authenticated.

If you are using Websense transparent identification agents, the agents are listed under **Transparent Identification Agents**:

- ◆ **Server** shows the IP address or name of the machine hosting the transparent identification agent.
- ◆ **Port** lists the port that Websense software uses to communicate with the agent.
- ◆ **Type** indicates whether the specified instance is a DC Agent, Logon Agent, RADIUS Agent, or eDirectory Agent. (See [Transparent identification, page 295](#), for an introduction to each type of agent.)

To add an agent to the list, select the agent type from **Add Agent** drop-down list. Click one of the following links for configuration instructions:

- ◆ [Configuring DC Agent, page 306](#)
- ◆ [Configuring Logon Agent, page 312](#)
- ◆ [Configuring RADIUS Agent, page 314](#)
- ◆ [Configuring eDirectory Agent, page 316](#)

To remove an agent instance from the list, mark the checkbox next to the agent information in the list, and then click **Delete**.

If you have one or more DC Agent instances, under DC Agent Domains and Controllers, click **View Domain List** for information about which domain controllers the agents are currently polling. See [Reviewing DC Agent polled domains and domain controllers, page 309](#), for more information.

Under **User Identification Exceptions**, list the IP addresses of machines that should use different user identification settings than the rest of your network.

For example, if you use a transparent identification agent or integration product to identify users, and have enabled manual authentication to prompt users for their credentials when they cannot be identified transparently, you can identify specific machines on which:

- ◆ Users who cannot be identified are never be prompted for their credentials. In other words, when transparent identification fails, manual authentication is not attempted, and the computer or network policy, or the Default policy, is applied.
- ◆ User information is always ignored, even when it is available, and users are always prompted for their credentials.
- ◆ User information is always ignored, even when it is available, and users are never prompted for their credentials (the computer or network policy, or the Default policy, is always applied).

To create an exception, click **Add**, and then see [Setting authentication rules for specific machines, page 299](#). To remove an exception, mark the check box next to an IP address or range, then click **Delete**.

Under **Additional Authentication Options**, specify the default response of Websense software when users are not identified transparently (by an agent or integration):

- ◆ Click **Apply computer or network policy** to ignore user and group-based policies in favor of computer and network-based policies, or the Default policy.
- ◆ Click **Prompt user for logon information** to require users to provide logon credentials when they open a browser. User and group-based policies can then be applied (see [Manual authentication, page 297](#)).
- ◆ Specify the **Default domain context** that Websense software should use any time a user is prompted for log on credentials. This is the domain in which users' credentials are valid.

If you use the Exceptions list to specify any machines on which users are prompted for logon information, you must provide a default domain context, even if the global rule is to apply a computer or network-based policy.

When you are finished making changes on this page, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Setting authentication rules for specific machines

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Related topics:

- ◆ [Configuring user identification methods, page 298](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Secure manual authentication, page 302](#)

Selective authentication lets you determine whether users requesting Internet access from a specific client machine (identified by IPv4 or IPv6 address) are prompted to provide their logon credentials via the browser. This can be used to:

- ◆ Establish different authentication rules for a machine in a public kiosk than for employees of the organization supplying the kiosk.
- ◆ Ensure that users of an exam-room computer in a medical office are always identified before getting Internet access.

Machines with special user identification settings applied are listed on the **Settings > General > User Identification** page. Click **Exceptions** to establish specific user identification settings for some machines in your network, or see if special settings have been defined for a specific machine.

To add a machine to the list, click **Add**, and then see [Defining exceptions to user identification settings, page 300](#), for further instructions.

When you are finished adding machines or network ranges to the list, click **OK**. Changes are not implemented until you click **Save and Deploy**.

Defining exceptions to user identification settings

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Related topics:

- ◆ [Transparent identification, page 295](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Configuring user identification methods, page 298](#)

Use the **User Identification > Add IP Addresses** page to identify machines to which specific user identification rules should be applied.

1. Enter an **IP address** or network **Range** in IPv4 or IPv6 format to identify clients to which to apply a specific authentication method, and then click the right-arrow button to add them to the **Selected** list.

If the same rules should be applied to multiple machines, add them all to the list.

2. Select an entry in the **User identification** drop-down list to indicate whether Websense software should attempt to identify users of these machines transparently.
 - Select **Try to identify user transparently** to request user information from a transparent identification agent or integration device.
 - Select **Ignore user information** to avoid using any transparent method to identify users.
3. Indicate whether users should be prompted to provide logon credentials via the browser. This setting applies when user information is not available, either because other identification failed, or because user information was ignored.

- Select **Apply computer or network policy** to ensure that users are never required to provide logon credentials.
If “Try to identify user transparently” is also selected, users whose credentials can be verified transparently are filtered by the appropriate user-based policy.
 - Select **Prompt user for logon information** to require users to provide logon credentials, then specify the **Default domain context** to use (if applicable).
If “Try to identify user transparently” is also selected, users receive a browser prompt only if they are not identified transparently.
4. Click **OK** to return to the User Identification page.
 5. When you are finished updating the Exceptions list, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Revising exceptions to user identification settings

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Related topics:

- ◆ [Transparent identification, page 295](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Configuring user identification methods, page 298](#)

Use the **Settings > User Identification > Edit IP Addresses** page to make changes to entries in the Exceptions list. Changes made on this page affect all machines (identified by IP address or range) that appear in the Selected list.

1. Select an entry in the **User identification** drop-down list to indicate whether Websense software should attempt to identify users of these machines transparently.
 - Select **Try to identify user transparently** to request user information from a transparent identification agent or integration device.
 - Select **Ignore user information** to avoid using any transparent method to identify users.
2. Indicate whether users should be prompted to provide logon credentials via the browser. This setting applies when user information is not available, either because transparent identification failed, or because transparent identification was ignored.
 - Select **Apply computer or network policy** to ensure that users are never prompted to provide logon credentials.
 - If “Try to identify user transparently” is also selected, users whose credentials can be verified transparently are filtered by the appropriate user-based policy.
 - Select **Prompt user for logon information** to require users to provide logon credentials, then specify the **Default domain context** to use (if applicable).
If “Try to identify user transparently” is also selected, users receive a browser prompt only if they are not identified transparently.

3. Click **OK** to return to the User Identification page.
4. When you are finished updating the Exceptions list, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Secure manual authentication

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Related topics:

- ◆ [Configuring user identification methods, page 298](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Setting authentication rules for specific machines, page 299](#)
- ◆ [Activating secure manual authentication, page 304](#)

Websense secure manual authentication uses Secure Sockets Layer (SSL) encryption to protect authentication data being transmitted between client machines and Websense software. An SSL server built into Filtering Service provides encryption of user names and passwords transmitted between client machines and Filtering Service. By default, secure manual authentication is disabled.



Note

Secure manual authentication cannot be used with remote filtering software. The Remote Filtering Server can not serve block pages to clients if it is associated with a Filtering Service instance that has secure manual authentication enabled.

To enable this functionality, you must perform the following steps:

1. Generate SSL certificates and keys, and place them in a location accessible by Websense software and readable by Filtering Service (see [Generating keys and certificates, page 303](#)).
2. Enable secure manual authentication (see [Activating secure manual authentication, page 304](#)) and secure communication with the directory service.
3. Import certificates into the browser (see [Accepting the certificate within the client browser, page 305](#)).

Generating keys and certificates

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Related topics:

- ◆ [Manual authentication, page 297](#)
- ◆ [Setting authentication rules for specific machines, page 299](#)
- ◆ [Secure manual authentication, page 302](#)
- ◆ [Activating secure manual authentication, page 304](#)
- ◆ [Accepting the certificate within the client browser, page 305](#)

A certificate consists of a public key, used to encrypt data, and a private key, used to decipher data. Certificates are issued by a Certificate Authority (CA). You can generate a certificate from an internal certificate server, or obtain a client certificate from any third-party CA, such as VeriSign.

The CA issuing the client certificate must be trusted by Websense software. Typically, this is determined by a browser setting.

- ◆ For answers to common questions about private keys, CSRs, and certificates, see http://httpd.apache.org/docs/2.2/ssl/ssl_faq.html#aboutcerts.
- ◆ To learn more about generating your own private key, CSR, and certificate, see www.akadia.com/services/ssh_test_certificate.html.

There are many tools that you can use to generate a self-signed certificate, including the OpenSSL toolkit (available from openssl.org).

Regardless of the method you choose for generating the certificate, use the following general steps.

1. Generate a private key (**server.key**).
2. Generate a Certificate Signing Request (CSR) with the private key.



Important

When prompted for the CommonName, enter the IP address of the Filtering Server machine. If you skip this step, client browsers will display a security certificate error.

3. Use the CSR to create a self-signed certificate (**server.crt**).
4. Save the **server.crt** and **server.key** files in a location that Websense software can access, and where they can be read by Filtering Service.

Activating secure manual authentication

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Related topics:

- ◆ [Manual authentication, page 297](#)
- ◆ [Setting authentication rules for specific machines, page 299](#)
- ◆ [Secure manual authentication, page 302](#)
- ◆ [Generating keys and certificates, page 303](#)
- ◆ [Accepting the certificate within the client browser, page 305](#)

1. Stop Websense Filtering Service (see [Stopping and starting Websense services, page 385](#)).
2. Navigate to the Websense installation directory on the Filtering Service machine (by default, **C:\Program Files\Websense\bin** or **/opt/Websense/bin/**).
3. Locate **eimserver.ini** and make a backup copy of the file in another directory.
4. Open the original INI file in a text editor.
5. Find the **[WebsenseServer]** section, and then add the line:
`SSLManualAuth=on`
6. Below the previous line, add the following:
`SSLCertFileLoc= [path]`
Replace **[path]** with the full path to the SSL certificate, including the certificate file name (for example, **C:\secmanauth\server.crt**).
7. Also add:
`SSLKeyFileLoc= [path]`
Replace **[path]** with the full path to the SSL key, including the key file name (for example, **C:\secmanauth\server.key**).
8. Save and close **eimserver.ini**.
9. Start Websense Filtering Service.

After starting, Filtering Service listens for requests on the default secure HTTP port (**15872**).

The preceding steps ensure secure communication between the client machine and Websense software. To also secure communication between Websense software and the directory service, make sure that **Use SSL** is selected on the **Settings > Directory Services** page. See [Advanced directory settings, page 81](#), for details.

Accepting the certificate within the client browser

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Related topics:

- ◆ [Manual authentication, page 297](#)
- ◆ [Setting authentication rules for specific machines, page 299](#)
- ◆ [Secure manual authentication, page 302](#)
- ◆ [Generating keys and certificates, page 303](#)
- ◆ [Activating secure manual authentication, page 304](#)

The first time you try to browse to a Web site, the browser will display a warning about the security certificate. To avoid seeing this message in the future, install the certificate in the certificate store.

Microsoft Internet Explorer

1. Open the browser and go to a Web site.
A warning appears, stating that there is a problem with the site's security certificate.
2. Click **Continue to this website (not recommended)**.
If you receive an authentication prompt, click **Cancel**.
3. Click the **Certificate Error** box to the right of the address bar (at the top of the browser window), and then click **View certificates**.
4. On the General tab of the Certificate dialog box, click **Install Certificate**.
5. Select **Automatically select the certificate store based on the type of certificate**, and then click **Next**.
6. Click **Finish**.
7. When asked whether to install the certificate, click **Yes**.

Users will no longer receive certificate security warnings related to Filtering Service on this machine.

Mozilla Firefox

1. Open the browser and go to a Web site.
A warning message appears.
2. Click **Or you can add an exception**.
3. Click **Add Exception**.
4. Make sure that **Permanently store this exception is selected**, and then click **Confirm Security Exception**.

Users will no longer receive certificate security warnings related to Filtering Service on this machine.

DC Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Configuring DC Agent](#), page 306

Websense DC Agent runs on Windows and detects users in a Windows network running NetBIOS, WINS, or DNS networking services.

DC Agent and User Service gather network user data and send it to Websense Filtering Service. Several variables determine the speed of data transmission, including the size of your network and the amount of existing network traffic.

To enable transparent identification with DC Agent:

1. Install DC Agent. For more information, see the [Deployment and Installation Center](#).

In order to perform domain discovery (automatic domain and domain controller detection) and computer polling (to verify the logged-on user), DC Agent must run with **domain admin** or **enterprise admin** permissions. If you do not plan to use either of these features, DC Agent can run as any network user with read privileges on the domain controller. Note that when domain discovery is disabled, you must maintain the domain and domain controller list for each DC Agent instance manually (see [The dc_config.txt file](#), page 310).

2. Configure DC Agent to communicate with other Websense components and with domain controllers in your network (see [Configuring DC Agent](#)).
3. Use TRITON - Web Security to add users and groups to filter (see [Adding a client](#), page 83).

Websense software can prompt users for identification if DC Agent is unable to identify users transparently. For more information, see [Manual authentication](#), page 297.

Configuring DC Agent

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Transparent identification](#)
- ◆ [Manual authentication](#)
- ◆ [Configuring user identification methods](#)
- ◆ [DC Agent](#)

Use the **User Identification > DC Agent** page to configure a new instance of DC Agent, as well as to configure the global settings that apply to all instances of DC Agent.

To add a new instance of DC Agent, first provide basic information about where the agent is installed, and how Filtering Service should communicate with it. These settings may be unique to each agent instance.

1. Under Basic Agent Configuration, enter the **IPv4 address or hostname** of the machine on which the agent is installed.



Note

Hostnames must start with an alphabetical character (a-z), not a numeric or special character.

Hostnames containing certain extended ASCII characters may not resolve properly. If you are using a non-English version of Websense software, enter an IP address instead of a machine name.

2. Enter the **Port** that DC Agent should use to communicate with other Websense components. The default is 30600.
3. To establish an authenticated connection between Filtering Service and DC Agent, select **Enable authentication**, and then enter a **Password** for the connection.

Next, customize global DC Agent communication and troubleshooting, domain controller polling, and computer polling settings. By default, changes that you make here affect all DC Agent instances.

Some of these settings can, however, be overridden in a configuration file (see the [Using DC Agent for Transparent User Identification](#) technical paper).

1. Under Domain Discovery, mark or clear **Enable automatic domain discovery** determine whether DC Agent automatically finds domains and domain controllers in your network.
2. If domain discovery is enabled, also specify:
 - How often to **Discover domains**. Domain discovery occurs at 24-hour intervals, by default.
 - Whether **DC Agent** or **User Service** is responsible for performing domain discovery.

In many environments, it is preferable to use User Service for domain discovery.

If DC Agent is used for domain discovery, the service must run with **domain** or **enterprise admin** privileges.
3. When User Service is installed on a Linux machine, the page includes a **Linux WINS Server Information** section. A WINS server is required to resolve domain names to domain controller IP addresses.

If you have not already provided WINS information on the Settings > Directory Services page, enter:

- a. The account name of an **Administrative user** that can access the directory service.
 - b. The **Password** for the account.
 - c. **Domain** information for the account.
 - d. The IP address or hostname of a WINS server in your network.
4. In the Domain Controller Polling section of the DC Agent Communication box, mark **Enable domain controller polling** to enable DC Agent to query domain controllers for user logon sessions.

To perform domain controller polling, the DC Agent service needs only read privileges on the domain controller. Automatic domain discovery (steps 1 and 2) and computer polling (step 7) require that the service run with elevated permissions.

You can specify which domain controllers each instance of DC Agent polls in a configuration file (see [The *dc_config.txt* file](#), page 310).

5. Use the **Query interval** field to specify how often (in seconds) DC Agent queries domain controllers.

Decreasing the query interval may provide greater accuracy in capturing logon sessions, but also increases overall network traffic. Increasing the query interval decreases network traffic, but may also delay or prevent the capture of some logon sessions. The default is 10 seconds.

6. Use the **User entry timeout** field to specify how frequently (in hours) DC Agent refreshes the user entries in its map. The default is 24 hours.
7. Under Computer Polling, check **Enable computer polling** to enable DC Agent to query computers for user logon sessions. This may include computers that are outside the domains that the agent already queries.

DC Agent uses WMI (Windows Management Instruction) for computer polling. If you enable computer polling, configure the Windows Firewall on client machines to allow communication on port **135**.

If DC Agent performs computer polling, the service must run with **domain** or **enterprise admin** privileges.

8. Enter a **User map verification interval** to specify how often DC Agent contacts client machines to verify which users are logged on. The default is 15 minutes.

DC Agent compares the query results with the user name/IP address pairs in the user map it sends to Filtering Service. Decreasing this interval may provide greater user map accuracy, but increases network traffic. Increasing the interval decreases network traffic, but also may decrease accuracy.

9. Enter a **User entry timeout** period to specify how often DC Agent refreshes entries obtained through computer polling in its user map. The default is 1 hour.

DC Agent removes any user name/IP address entries that are older than this timeout period, and that DC Agent cannot verify as currently logged on.

Increasing this interval may lessen user map accuracy, because the map potentially retains old user names for a longer time.

**Note**

Do not make the user entry timeout interval shorter than the user map verification interval. This could cause user names to be removed from the user map before they can be verified.

10. Click **OK** to return to the User Identification page, then click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Reviewing DC Agent polled domains and domain controllers

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Use the **User Identification > DC Agent Domains and Controllers** page to review which domain controllers each DC Agent instance in your network is currently polling.

**Important**

If the DC Agent Domains and Controllers page displays text explaining that DC Agent is not “polling any domain controllers at this time,” see [DC Agent Domains and Controllers page is blank](#), page 467.

Typically, the page shows the **Domains** and **Domain Controllers** detected by each of the **DC Agent Instances** in your network.

By default, DC Agent performs its **domain discovery** process (identifying domains and domain controllers) at startup, and at 24 hour intervals thereafter. Domain and controller information is stored in a file called **dc_config.txt** (see [The dc_config.txt file](#), page 310).

Information displayed on the DC Agent Domains and Controllers page is compiled from each dc_config.txt file in your deployment.

- ◆ The list includes only domains and controllers that are actively being queried.
 - If you have disabled queries to a domain controller in the dc_config.txt file, that domain controller is not shown.
 - Likewise, if you have disabled queries to all domain controllers within a domain, neither the domain nor its controllers are listed.
- ◆ Information is shown for all of the DC Agent instances in your network.
 - If the same domain controller is polled by multiple DC Agent instances, each is listed.

- To configure different DC Agent instances to poll different domains, update the `dc_config.txt` file for each instance. See [The `dc_config.txt` file](#), page 310.
- ◆ TRITON - Web Security checks for the latest domain and controller information each time you navigate to the DC Agent Domains and Controllers page. This means that if domain discovery is underway while you are viewing the page, you must navigate away, then return to the page to see updates.

The `dc_config.txt` file

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DC Agent works by identifying domain controllers in the network, and then querying those domain controllers for user logon sessions. By default, the agent automatically verifies existing domain controllers and detects new domains or domain controllers added to the network.

- ◆ By default, DC Agent performs domain discovery (identifying domains and domain controllers) at startup, and every 24 hours thereafter.
- ◆ Either DC Agent or User Service can be used to perform domain discovery.

For information about enabling domain discovery and setting the discovery interval, see [Configuring DC Agent](#), page 306.

DC Agent stores domain and domain controller information in a file called **`dc_config.txt`** (located, by default, in the `C:\Program Files or Program Files (x86)\Websense\Web Security\bin\` directory on each DC Agent machine).

Edit the `dc_config.txt` file to change which domain controllers DC Agent polls:

1. Go to the Websense **`bin`** directory (by default, `C:\Program Files or Program Files (x86)\Websense\Web Security\bin\`) on the DC Agent machine.
2. Make a backup copy of the **`dc_config.txt`** file in another location.
3. Open the original **`dc_config.txt`** file in a text editor (like Notepad).
4. Confirm that all of your domains and domain controllers are listed. For example:

```
[WEST_DOMAIN]
dcWEST1=on
dcWEST2=on
[EAST_DOMAIN]
dcEAST1=on
dcEAST2=on
```

5. If there are domain controllers in the list that DC Agent should not poll, change the entry value from **`on`** to **`off`**. For example:

```
dcEAST2=off
```

 - If you configure DC Agent to avoid polling an active domain controller, the agent cannot transparently identify users logging on to that domain controller.
 - If DC Agent's automatic domain discovery has detected a domain controller that should not be used to identify users, set the entry to **`off`**, rather than removing it. Otherwise, the next discovery process will re-add the controller.

6. If there are domain or domain controller entries missing from the list, you can add them manually. Before adding entries, run the **net view /domain** command on the DC Agent machine to make sure that the agent can see the new domain.
7. Save your changes and close the file.
8. Restart the **Websense DC Agent** service.

Logon Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Configuring Logon Agent](#), page 312

Websense Logon Agent identifies users in real time, as they log on to domains. This eliminates the possibility of missing a user logon due to a query timing issue.

Logon Agent (also called Authentication Server) can reside on a Windows or Linux machine. The agent works with the Websense logon application (LogonApp.exe) on Windows client machines to identify users as they log on to Windows domains.

In most cases, using either DC Agent or Logon Agent is sufficient, but you can use both agents together. In this case, Logon Agent takes precedence over DC Agent. DC Agent only communicates a logon session to Filtering Service in the unlikely event that Logon Agent has missed one.

Install Logon Agent, and then deploy the logon application to client machines from a central location. For more information, see the [Using Logon Agent for Transparent User Identification](#) technical paper.

After installation, configure the agent to communicate with client machines and with the Websense Filtering Service (see [Configuring Logon Agent](#)).



Note

If you are using Windows Active Directory (Native Mode) and User Service is installed on a Linux machine, see [User Service on Linux](#), page 471, for additional configuration steps.

Configuring Logon Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Manual authentication](#), page 297
- ◆ [Configuring user identification methods](#), page 298
- ◆ [Logon Agent](#), page 311

Use the **User Identification > Logon Agent** page to configure a new instance of Logon Agent, as well as to configure the global settings that apply to all instances of Logon Agent.

To add a new instance of Logon Agent:

1. Under Basic Agent Configuration, enter the **IPv4 address or hostname** of the Logon Agent machine.



Note

Machine names must start with an alphabetical character (a-z), not a numeric or special character.

Machine names containing certain extended ASCII characters may not resolve properly. If you are using a non-English version of Websense software, enter an IP address instead of a machine name.

2. Enter the **Port** that Logon Agent should use to communicate with other Websense components (30602, by default).
3. To establish an authenticated connection between Filtering Service and Logon Agent, mark **Enable authentication**, and then enter a **Password** for the connection.

Next, customize global Logon Agent communications settings. By default, changes that you make here affect all Logon Agent instances.

1. Under Logon Application Communication, specify the **Connection port** that the logon application uses to communicate with Logon Agent (15880, by default).
2. Enter the **Maximum number of connections** that each Logon Agent instance allows (200, by default).

If your network is large, you may need to increase this number. Increasing the number does increase network traffic.

To configure the default settings that determine how user entry validity is determined, you must first determine whether Logon Agent and the client logon application operate in **persistent mode** or **nonpersistent mode** (default).

Nonpersistent mode is activated by including the /NOPERSIST parameter when launching **LogonApp.exe**. (More information is available in the **LogonApp_ReadMe.txt** file, which is included with your Logon Agent installation.)

- ◆ In persistent mode, the logon application contacts Logon Agent periodically to communicate user logon information.

If you are using persistent mode, specify a **Query interval** to determine how frequently the logon application communicates logon information.



Note

If you change this value, the change does not take effect until the previous interval period has elapsed. For example, if you change the interval from 15 minutes to 5 minutes, the current 15-minute interval must end before the query starts occurring every 5 minutes.

- ◆ In nonpersistent mode, the logon application sends user logon information to Logon Agent only once for each logon.

If you are using nonpersistent mode, specify a **User entry expiration** time period. When this timeout period is reached, the user entry is removed from the user map.

When you are finished making configuration changes, click **OK** to return to the Settings > User Identification page, then click **OK** again to cache your changes. Changes are not saved until you click **Save and Deploy**.

RADIUS Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Configuring RADIUS Agent](#), page 314

Websense RADIUS Agent lets you apply user and group-based policies using authentication provided by a RADIUS server. RADIUS Agent enables transparent identification of users who access your network using a dial-up, Virtual Private Network (VPN), Digital Subscriber Line (DSL), or other remote connection (depending on your configuration).

RADIUS Agent works together with the RADIUS server and RADIUS client in your network to process and track Remote Access Dial-In User Service (RADIUS) protocol traffic. This enables you to assign particular filtering policies to users or groups that access your network remotely, as well as to local users.

When you install RADIUS Agent, the agent integrates with existing Websense components. However, RADIUS Agent, your RADIUS server, and your RADIUS client must be configured appropriately (see [Configuring RADIUS Agent](#), page 314).

Configuring RADIUS Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Manual authentication](#), page 297
- ◆ [Configuring user identification methods](#), page 298
- ◆ [RADIUS Agent](#), page 313

Use the **User Identification > RADIUS Agent** page to configure a new instance of RADIUS Agent, as well as to configure the global settings that apply to all instances of RADIUS Agent.

To add a new instance of RADIUS Agent:

1. Under Basic Agent Configuration, enter the **IPv4 address or hostname** of the Logon Agent machine.



Note

Machine names must start with an alphabetical character (a-z), not a numeric or special character.

Machine names containing certain extended ASCII characters may not resolve properly. In non-English environments, enter an IP address instead of a name.

2. Enter the **Port** that RADIUS Agent should use to communicate with other Websense components (30800, by default).
3. To establish an authenticated connection between Filtering Service and RADIUS Agent, mark **Enable authentication**, and then enter a **Password** for the connection.

Next, customize global RADIUS Agent settings. By default, changes that you make here affect all RADIUS Agent instances. Settings marked with an asterisk (*), however, can be overridden in an agent's configuration file to customize the behavior of that agent instance (see the [Using RADIUS Agent for Transparent User Identification](#) technical paper).

1. Under RADIUS Server, enter the **RADIUS server address or name**. If you provide the IP address, use IPv4 address format.

RADIUS Agent forwards authentication requests to the RADIUS server, and must know the identity of this machine.

2. If your network includes a RADIUS client, enter the **RADIUS client address or name**. If you provide the IP address, use IPv4 address format.
Websense software queries this machine for user logon sessions.
3. Enter the **User entry timeout** interval, used to determine how often RADIUS Agent refreshes its user map. Typically, the default query value (24 hours) is best.
4. Use the **Authentication Ports** and **Accounting Ports** settings to specify which ports RADIUS Agent uses to send and receive authentication and accounting requests. For each type of communication, you can specify which port is used for communication between:
 - RADIUS Agent and the RADIUS server (authentication default 1645; accounting default 1646)
 - RADIUS Agent and the RADIUS client (authentication default 12345; accounting default 12346)
5. When you are finished making configuration changes, click **OK** to return to the Settings > User Identification page, then click **OK** again to cache your changes. Changes are not saved until you click **Save and Deploy**.

For information about configuring your RADIUS client and RADIUS server to communicate with Websense RADIUS Agent, see the [Using RADIUS Agent for Transparent User Identification](#) technical paper.

eDirectory Agent

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Related topics:

- ◆ [Transparent identification](#), page 295
- ◆ [Configuring eDirectory Agent](#), page 316

Websense eDirectory Agent works together with Novell eDirectory to transparently identify users so Websense software can filter them according to policies assigned to users, groups, domains, or organizational units.

eDirectory Agent gathers user logon session information from Novell eDirectory, which authenticates users logging on to the network. The agent then associates each authenticated user with an IP address, and records user name-to-IP-address pairings to

a local user map. eDirectory Agent then communicates this information to Filtering Service.

**Note**

From a Novell client running Windows, multiple users can log on to a single Novell eDirectory server. This associates one IP address with multiple users. In this scenario, eDirectory Agent's user map only retains the user name/IP address pairing for the last user logged on from a given IP address.

One instance of Websense eDirectory Agent can support one Novell eDirectory master, plus any number of Novell eDirectory replicas.

Configuring eDirectory Agent

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Related topics:

- ◆ [Transparent identification, page 295](#)
- ◆ [Manual authentication, page 297](#)
- ◆ [Configuring user identification methods, page 298](#)
- ◆ [eDirectory Agent, page 315](#)
- ◆ [Configuring eDirectory Agent to use LDAP, page 318](#)

Use the **User Identification > eDirectory Agent** page to configure a new instance of eDirectory Agent, as well as to configure the global settings that apply to all instances of eDirectory Agent.

To add a new instance of eDirectory Agent:

1. Under Basic Agent Configuration, enter the **IPv4 address or hostname** of the eDirectory Agent machine.

**Note**

Machine names must start with an alphabetical character (a-z), not a numeric or special character.

Machine names containing certain extended ASCII characters may not resolve properly. In non-English environments, enter an IP address instead of a name.

2. Enter the **Port** that eDirectory Agent should use to communicate with other Websense components (30700, by default).

3. To establish an authenticated connection between Filtering Service and eDirectory Agent, select **Enable authentication**, and then enter a **Password** for the connection.

Next, customize global eDirectory Agent communication settings:

1. Under eDirectory Server, specify a **Search base** (root context) for eDirectory Agent to use as a starting point when searching for user information in the directory.
2. Provide the administrative user account information that eDirectory Agent should use to communicate with the directory:
 - a. Enter the **Administrator distinguished name** for a Novell eDirectory administrative user account.
 - b. Enter the **Password** used by that account.
 - c. Specify a **User entry timeout** interval to indicate how long entries remain in the agent's user map.

This interval should be approximately 30% longer than a typical user logon session. This helps prevent user entries from being removed from the map before the users are done browsing.

Typically, the default value (24 hours) is recommended.

**Note**

In some environments, instead of using the User entry timeout interval to determine how frequently eDirectory Agent updates its user map, it may be appropriate to query the eDirectory Server at regular intervals for user logon updates. See [Enabling full eDirectory Server queries](#), page 319.

3. Add the eDirectory Server master, as well as any replicas, to the **eDirectory Replicas** list. To add an eDirectory Server master or replica to the list, click **Add**, and then follow the instructions in [Adding an eDirectory server replica](#), page 317.

When you are finished making configuration changes, click **OK** to return to the Settings > User Identification page, then click **OK** again to cache your changes. Changes are not saved until you click **Save and Deploy**.

Adding an eDirectory server replica

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One instance of the Websense eDirectory Agent can support one Novell eDirectory master, plus any number of Novell eDirectory replicas running on separate machines.

eDirectory Agent must be able to communicate with each machine running a replica of the directory service. This ensures that the agent gets the latest logon information as quickly as possible, and does not wait for eDirectory replication to occur.

Novell eDirectory replicates the attribute that uniquely identifies logged-on users only every 5 minutes. Despite this replication time lag, eDirectory Agent picks up new logon sessions as soon as a user logs on to any eDirectory replica.

To configure eDirectory Agent installation to communicate with eDirectory:

1. Enter the eDirectory master or replica **Server IP address**.
2. Enter the **Port** that eDirectory Agent uses to communicate with the eDirectory machine. The valid values are **389** (default) and **636** (SSL port).
3. Click **OK** to return to the eDirectory Agent page. The new entry appears in the eDirectory Replicas list.
4. Repeat the process for any additional eDirectory server machines.
5. Click **OK** to return to the Settings > User Identification page, then click **OK** again to cache your changes.
6. Click **Save and Deploy** to implement the changes.
7. Stop and start eDirectory Agent so that the agent can begin communicating with the new replica. See [Stopping and starting Websense services](#), page 385, for instructions.

Configuring eDirectory Agent to use LDAP

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense eDirectory Agent can use Netware Core Protocol (NCP) or Lightweight Directory Access Protocol (LDAP) to get user logon information from Novell eDirectory. By default, eDirectory Agent on Windows uses NCP. On Linux, eDirectory Agent must use LDAP.

If you are running eDirectory Agent on Windows, but want the agent to use LDAP to query Novell eDirectory, set the agent to use LDAP instead of NCP. Generally, NCP provides a more efficient query mechanism.

To set eDirectory Agent on Windows to use LDAP:

1. Ensure that you have at least one Novell eDirectory replica containing all directory objects to monitor and filter in your network.
2. Stop the Websense eDirectory Agent service (see [Stopping and starting Websense services](#), page 385).
3. Navigate to the eDirectory Agent installation directory (by default, **\Program Files\Websense\bin**), and then open the **wsedir.ini** file in a text editor.
4. Modify the **QueryMethod** entry as follows:

```
QueryMethod=0
```

This sets the Agent to use LDAP to query Novell eDirectory. (The default value is 1, for NCP.)

5. Save and close the file.
6. Restart the Websense eDirectory Agent service.

Enabling full eDirectory Server queries

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In small networks, you can configure Websense eDirectory Agent to query the eDirectory Server for all logged-on users at regular intervals. This allows the agent to detect both newly logged-on users and users who have logged off since the last query, and to update its local user map accordingly.



Important

Configuring eDirectory Agent to use full queries is not recommended for larger networks, because the length of time required to return query results depends on the number of logged on users. The more logged-on users there are, the higher the performance impact.

When you enable full queries for eDirectory Agent, the **User entry timeout** interval is not used, because users who have logged off are identified by the query. By default, the query is performed every 30 seconds.

Enabling this feature increases eDirectory Agent processing time in 2 ways:

- ◆ Time needed to retrieve the names of logged-on users each time a query is performed
- ◆ Time required to process user name information, remove obsolete entries from the local user map, and add new entries based on the most recent query

eDirectory Agent examines the entire local user map after each query, rather than identifying only new logons. The time required for this process depends on the number of users returned by each query. The query process can therefore affect both eDirectory Agent and Novell eDirectory Server response times.

To enable full queries:

1. On the eDirectory Agent machine, navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).
2. Locate the file **wsedir.ini** and make a backup copy in another directory.
3. Open **wsedir.ini** in a text editor (like Notepad or vi).
4. Go to the **[eDirAgent]** section of the file and find the following entry:

```
QueryMethod=<N>
```

Make a note of the QueryMethod value, in case you want to revert to the default setting later.

5. Update the **QueryMethod** value as follows:
 - If the current value is 0 (communicate with the directory via LDAP), change the value to **2**.

- If the current value is 1 (communicate with the directory via NCP), change the value to **3**.

**Note**

If changing this query value slows system performance, return the QueryMethod entry to its previous value.

6. If the default query interval (30 seconds) is not appropriate for your environment, edit the **PollInterval** value appropriately.

Note that the interval time is set in **milliseconds**.

7. Save and close the file.
8. Restart the Websense eDirectory Agent service (see [Stopping and starting Websense services](#), page 385).

Configuring an agent to ignore certain user names

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

You can configure a transparent identification agent to ignore logon names that are not associated with actual users. This feature is often used to deal with the way that some Windows 200x and XP services contact domain controllers in the network.

For example, **user1** logs on to the network, and is identified by the domain controller as **computerA/user1**. That user is filtered by a Websense policy assigned to **user1**. If a service starts up on the user's machine that assumes the identity **computerA/ServiceName** to contact the domain controller, this can cause filtering problems. Websense software treats **computerA/ServiceName** as a new user with no policy assigned, and filters this user by the computer policy, or by the **Default** policy.

To address this issue:

1. Stop the agent service (see [Stopping and starting Websense services](#), page 385).
2. Navigate to the **\Websense\bin** directory, and open the **ignore.txt** file in a text editor.
3. Enter each user name on a separate line. Do not include wildcard characters, such as **"*"**:

```
maran01
WindowsServiceName
```

Websense software ignores these user names, regardless of which machine they are associated with.

To prompt Websense software to ignore a user name within a specific domain, use the format **username, domain**.

```
aperez, engineering1
```

4. When you are finished, save and close the file.

5. Restart the agent service.

The agent ignores the specified user names, and Websense software does not consider these names in filtering.

Identification of hybrid filtering users

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Websense Directory Agent](#), page 330
- ◆ [When users are not identified](#), page 332
- ◆ [Authentication priority and overrides](#), page 324
- ◆ [Working with hybrid filtering clients](#), page 88

Select **Settings > Hybrid Configuration > Hybrid User Identification** to configure how users are identified by the hybrid service, and to test and configure users' connections to the service. You can configure multiple authentication or identification options for your hybrid users if required.

To ensure that the appropriate per-user or per-group policy is applied to hybrid filtering users, whether from a filtered location or when off-site, Websense Web Security Gateway Anywhere provides options for identifying hybrid filtering users transparently:

- ◆ **Websense Web Endpoint** is installed on client machines to provide transparent authentication, enforce use of hybrid filtering, and pass authentication details to the hybrid service. See [Web Endpoint deployment overview](#), page 325.
- ◆ **Websense Authentication Service** provides clientless transparent authentication via a gateway hosted on your network. See [Deploying Websense Authentication Service](#), page 328.

If you do not deploy either Web Endpoint or Authentication Service, the hybrid service can identify users transparently or manually when they connect to hybrid filtering.

- ◆ Users can only be identified transparently via NTLM if they are logging on from a known IP address, defined as a **filtered location** (see [Define filtered locations](#), page 211). Note that NTLM identification is not available for off site users.
- ◆ The hybrid service can be configured to automatically generate passwords for all users whose information is collected by Directory Agent (see [Configure user access to hybrid filtering](#), page 220).
- ◆ If you do not enable any form of transparent authentication:
 - Off site users without Web Endpoint or Authentication Service are prompted for an email address and password when they open a browser and connect to the Internet.
 - Other hybrid filtering users are filtered based on their IP address if Web Endpoint, Authentication Service, or NTLM identification are not available.

Indicate how the hybrid service should identify users requesting Internet access. These options are also used as a fallback if either the endpoint or Authentication Service fails.

- ◆ Mark **Always authenticate users on first access** to enable transparent NTLM identification or manual authentication when users first connect to hybrid filtering.

If you do not select this option and no other authentication methods are available for users in filtered locations, those users will be filtered by IP address-based policy.

Internet Explorer and Firefox can be used for transparent user identification. Other browsers will prompt users for logon information.

If Directory Agent is sending data to the hybrid service, using NTLM to identify users is recommended.

- ◆ Mark **Use NTLM to identify users when possible** to use directory information gathered by Directory Agent to identify users transparently, if possible.

When this option is selected, the hybrid service uses NTLM to identify the user if the client supports it, and otherwise provides a logon prompt.

**Note**

When NTLM is used to identify users, **do not** use self-registration (configured on the User Access page under Registered Domains).

- ◆ Mark **Use secured form authentication to identify users** to display a secure logon form to the end user. When the user enters their email address and hybrid filtering password, the credentials are sent over a secure connection for authentication.

If you select this option, define how often users' credentials are revalidated for security reasons under Session Timeout. The default options are 1, 7, 14, or 30 days. The same session timeout applies to Authentication Service, if enabled.

**Note**

It is possible to extend the Session Timeout options to 3 months, 6 months, and 12 months. To enable this extended feature, contact Support.

If the users have not previously registered to use the service, they can do so by clicking **Register** on the logon form. To use this option, enable self-registration (configured on the User Access page under Registered Domains). Advise end users **not** to use the same password for hybrid filtering that they use to log on to the network.

If you do not select either the NTLM or the secured form authentication option, but **Always authenticate users on first access** is selected, users who could not be identified via another means see a logon prompt every time they access the Internet. Basic authentication is used to identify users who receive a logon prompt.

- ◆ Specify whether or not a Welcome page is displayed when users who have not been identified via NTLM or who are not using secured form authentication open a browser to connect to the Internet. The Welcome page:
 - Provides a simple selection of common search engines to get the user started
 - Is used mainly by those who connect to the hybrid service from outside a filtered location (while working from home or traveling, for example)

When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Once you have set up hybrid filtering and configured user browsers to access the PAC file, you can use the links provided under **Verify End User Configuration** to make sure that end user machines have Internet access and are correctly configured to connect to the hybrid service.

If your hybrid filtering account has not been verified (which may mean that no email address has been entered on the Settings > General > Account page), the URLs are not displayed.

Authentication priority and overrides

TRITON - Web Security Help | Web Security Solutions | Version 7.7.

You can select multiple authentication options for your end users on the **Settings > Hybrid Configuration > Hybrid User Identification** page. The options are prioritized as follows:

- ◆ Web Endpoint is always used if installed on a client machine.
- ◆ If Web Endpoint is not installed or fails, Authentication Service is used if:
 - it has been deployed in your network, and
 - it has been selected on the Hybrid User Identification page for an end user filtered by the hybrid service.
- ◆ If neither Web Endpoint nor Authentication Service is available, the end user is authenticated via secure form-based authentication, if:
 - it has been selected on the Hybrid User Identification page, and
 - the user agent or application requesting authentication supports form-based authentication via an HTML page.
- ◆ Applications that do not support form-based authentication use either NTLM identification or basic authentication. Basic authentication is always used if **Always authenticate users on first access** is selected and none of the other options are either selected or available.

You can also enforce a specific authentication option for certain end users, for example all users in a branch office, by deploying a PAC file URL in the following format:

```
http://hybrid-web.global.blackspider.com:8082/proxy.pac?a=X
```

The a= parameter controls the authentication option, and X can be one of the following:

| Parameter | Description |
|-----------|---|
| a=n | NTLM identification or basic authentication is used, depending on the policy settings and the browser or application capability. |
| a=t | Authentication is performed using Authentication Service. If the application or user agent cannot use Authentication Service, NTLM identification or basic authentication is used. If a remote user cannot log on to Authentication Service, they are given the option to try again or log on using Websense credentials. |
| a=f | Authentication is performed using secure form-based authentication. |

We recommend that you deploy PAC files with the a= parameter if you want some of your users to use Authentication Service, and others to use secure form-based authentication. This is because the two methods use different ports in the hybrid service.

Web Endpoint deployment overview

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Web Endpoint is a piece of software that gets installed on an client machine. It enforces the use of the hybrid service for Web filtering, and passes authentication information to the hybrid proxies, enabling secure transparent authentication.

32 and 64-bit versions of Web Endpoint are available for the following operating systems:

- ◆ Windows XP with Service Pack 2 or higher
- ◆ Windows Vista with Service Pack 1 or higher
- ◆ Windows 7

To deploy Web Endpoint to Windows clients, you can:

- ◆ Download the installation files, then use a Microsoft Group Policy Object or similar distribution tool to deploy the files to selected client machines.
- ◆ Download or copy the installation files onto a client machine, then manually install the Web Endpoint software.
- ◆ Deploy the endpoint to some or all of your hybrid filtering users directly from the hybrid service. Each user is prompted to install the endpoint software on their machine.

If a user does not install the endpoint, he or she is authenticated according to the options you have selected on the User Identification page. Websense Authentication Service is used if configured; otherwise the hybrid service falls back to the other identification or authentication options you have selected, or finally basic authentication. The user is again asked to install the endpoint next time they start a browsing session.

See [Manually deploying Web Endpoint for Windows](#), page 327.

If you also have TRITON - Data Security and wish to deploy both the Web Endpoint and the Data Endpoint to client machines, you must use the package builder supplied with Data Security to create a deployment package for both endpoints. See [Installing and Deploying Websense Endpoints](#) in the Deployment and Installation Center.

The endpoint has a number of key protections against tampering, which should prevent the majority of end users uninstalling or deleting the endpoint even if they have local administrator rights.

- ◆ Endpoint files and folders are protected from being deleted or renamed.
- ◆ The endpoint process will automatically restart if it is stopped or killed.
- ◆ A password is required to uninstall the endpoint or stop the endpoint service.
- ◆ Endpoint registry settings cannot be modified or deleted.
- ◆ The Service Control command to delete the endpoint service is blocked.

You must define an anti-tampering password to be used to stop the endpoint service or uninstall the endpoint before you can download the installation file or enable deployment from the hybrid service. The password is automatically linked to any deployments of the endpoint.



Important

For security reasons, Websense does not retain a copy of your anti-tampering password. If you forget your password, you can reset it on the Hybrid User Identification page by entering and confirming a new password. All installed endpoints will be updated to use the new password next time they connect to the Internet.

To enable Web Endpoint deployment:

1. On the Settings > Hybrid Configuration > Hybrid User Identification page, mark **Enable installation and update of Web Endpoint on client machines**.
Selecting this option allows you to configure Web Endpoint deployment and automatic update settings. If you later deselect this option, any installed endpoint clients continue to work until they are uninstalled, though they no longer receive automatic updates.
2. Enter and confirm your anti-tampering password. The password must be between 4 and 25 characters.
3. Select a deployment method:

- Click **Deploy Web Endpoint Manually** if you want to install Web Endpoint by hand on individual machines or via your preferred distribution method.

Note the GPO command displayed on screen. If you plan to use GPO to distribute the endpoint, use this command in your deployment script. See [Manually deploying Web Endpoint for Windows, page 327](#).

Click **View Web Endpoint Files** to view the endpoint versions suitable for your client machines. Select a client operating system, then click on a version of the endpoint to download. You can also view a PDF of the release notes for each version by clicking a release notes link. Click **Close** when done.

- To deploy the endpoint directly from the hybrid service, mark **Deploy Web Endpoint from hybrid service proxies**.

Choose whether the endpoint is deployed to **all users** that are filtered through the hybrid service, or only to **off-site users**.

You can provide a customized message that appears to end users at the beginning of the endpoint download and installation process. The message can be used to reassure the user that the download is company-approved, and to provide any further information they may need. To customize the message, click **Advanced Settings**, then enter your organization name and the message you want to display. Click **View Sample Page** to see what will appear to the end user.

The sample page also contains the default text that is always displayed to the end user at the beginning of the download.

4. Mark **Automatically update endpoint installations when a new version is released** if you want to ensure that all endpoints on your client machines always have the latest version when it is available from the hybrid service.
5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Manually deploying Web Endpoint for Windows

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Deploy via GPO

To deploy Web Endpoint via Group Policy Object (GPO):

1. Create a shared folder on the domain controller and set its permissions to read-only.
2. Use a text editor to create a batch file (.bat) in the shared folder (for example **installwebep.bat**).
3. Type the following msexec command into the batch file and save it.
4. Enter the **GPO command** displayed on the Settings > Hybrid Configuration > Hybrid User Identification page in TRITON - Web Security.
5. Save and close the file.

6. Open the Group Policy Management Console (GPMC) and create a new (or open an existing) GPO for the OU in which your computer accounts reside. To create a new GPO:
 - a. In the console tree, right-click Group Policy Objects in the forest and domain in which you want to create a Group Policy object (GPO).
 - b. Click **New**.
 - c. In the New GPO dialog box, specify a name for the new GPO, then click **OK**.
7. Navigate to **Computer Configuration > Windows Settings > Scripts**, then double-click **Startup** in the right pane.
8. Click **Add**.
9. In the Script Name field, type the full network path and file name of the batch file you created in step 2, then click **OK** and close the GPMC.
10. Run the **gpupdate /force** command from a command prompt to refresh the group policy.

The application is installed on startup. The client may not be fully functional until a reboot occurs.

Deploy to a single machine

1. Copy the endpoint client installation file to a temporary folder on the client machine, then unzip the file.
2. Open a command prompt, then navigate to the location of the unzipped endpoint client files.
3. Enter the following command:

```
msiexec /package "Websense Endpoint.msi" /norestart  
WSCONTEXT=xxxx
```

Replace “xxxx” with the unique configuration code shown on the Settings > Hybrid Configuration > Hybrid User Identification page in TRITON - Web Security. The code is shown as part of the **GPO command** string.

Deploying Websense Authentication Service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Authentication Service is an on-network virtual machine that authenticates user identity, attributes, and roles with enterprise directories. All communications between components are secured.

When Authentication Service is installed on your network, clients connecting to the hybrid proxy from a filtered location are redirected to Authentication Service. Once Authentication Service has authenticated a user against your directory service, they are directed back to the proxy and the appropriate policy is applied. Clients who have authenticated once do not then have to authenticate again for subsequent Web browsing sessions.

Off-site users must enter their email address and network password whenever they connect to the hybrid proxy. These credentials are verified with Authentication Service and the appropriate policy is applied for that session.

For more information, see the [Authentication Service Installation and Configuration Guide](#).

To download and deploy Websense Authentication Service:

1. On the **Settings > Hybrid Configuration > Hybrid User Identification** page, click **Authentication Service Files** to view the available Authentication Service downloads.

Click on a file name to download that version. You can also view a PDF of the release notes for each version by clicking a release notes link. Click **Close** when done.
2. Install Authentication Service, following the instructions in the [Authentication Service Installation and Configuration Guide](#).
3. On the **Settings > Hybrid Configuration > User Access** page, download and install the hybrid SSL certificate to ensure seamless authentication to HTTPS sites. If the certificate is not installed for Authentication Service users, they must authenticate using NTLM identification or manual authentication, depending on the settings on the Hybrid User Identification page. See [Enabling HTTPS notification pages](#), page 224.
4. Once Authentication Service is installed and configured and the SSL certificate is installed on clients, copy the metadata URL from the Configuration > Federation page in the Authentication Service Console and enter it in the Metadata URL field on the Hybrid User Identification page.
5. To test that Authentication Service is set up correctly, configure a client to use one of the temporary PAC file URLs displayed under Test Authentication Service.
 - To access the PAC file via port 8082, use the **PAC file (port 8082)** URL.
 - To access the PAC file via port 80, use the **PAC file (port 80)** URL.An end user on the client machine should be able to browse Web sites permitted by their policy with no requests for credentials.

If you receive an error page while browsing with the test PAC file, make sure you have followed all of the steps in the *Authentication Service Installation and Configuration Guide*.
6. Mark **Enable Authentication Service** to activate Authentication Service for all client machines. Ensure that the client used to test the implementation in step 6 is reverted to the standard PAC file.
7. Under Session Timeout, define how often users' credentials are revalidated for security reasons. The default options are 1, 7, 14, or 30 days.

**Note**

It is possible to extend the Session Timeout options to 3 months, 6 months, and 12 months. To enable this extended feature, contact Support.

8. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Websense Directory Agent

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In Websense Web Security Gateway Anywhere environments, an interoperability component called **Websense Directory Agent** is required if you want to enable user, group, and domain (OU) based filtering through the hybrid service.

Directory Agent must be installed on a machine from which it can communicate with:

- ◆ Your supported LDAP-based directory service (Windows Active Directory [Native Mode], Oracle Directory Server, or Novell eDirectory)
If your organization uses Windows Active Directory in mixed mode, user and group data cannot be collected and sent to the hybrid service.
- ◆ Websense Sync Service

Directory Agent can be installed on the same machine as other Websense components, including Sync Service and User Service.

After deployment, use TRITON - Web Security to configure Directory Agent to collect data from your directory service (see [Send user and group data to the hybrid service, page 227](#)). Once configured, Directory Agent collects user and group data from your directory service and sends it to Sync Service in LDIF format.

At scheduled intervals (see [Schedule communication with hybrid filtering, page 234](#)), Sync Service sends the user and group information collected by Directory Agent to the hybrid service. Sync Service compresses large files before sending them.

Directory Agent and User Service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Identification of hybrid filtering users, page 322](#)
- ◆ [Working with users and groups, page 76](#)
- ◆ [Directory services, page 77](#)
- ◆ [Send user and group data to the hybrid service, page 227](#)

Although Directory Agent collects directory information independently, it has one important dependency on User Service. At installation, Directory Agent must connect to a Policy Server instance that has a User Service associated with it. Directory Agent can be configured to communicate only with the directory that this User Service instance is configured to use.

In other words, in a distributed deployment, if you have multiple Policy Servers, each with an associated User Service, and the User Service instances connect to different

directory servers, you must associate Directory Agent with the Policy Server whose User Service connects to the directory that you want to use for hybrid filtering user identification.

- ◆ You can have multiple Directory Agent instances.
- ◆ 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. (Communication is configured automatically for the Directory Agent instance that connects to the same Policy Server as Sync Service.) To do this:

1. When you log on to TRITON - Web Security, select the appropriate Policy Server instance for the Directory Agent that you want to configure.
2. Go to the Settings > Hybrid Configuration > Shared User Data page.
3. Under Synchronize User Data, verify the **Name or IP address** of the Sync Service machine and the **Port** used for Sync Service communication (by default, 55832).
4. Click **Test Connection** to verify that Directory Agent can send data to Sync Service. The test may take a minute or more.
 - If the connection is made, a success message is displayed.
 - If the connection cannot be made, verify the IP address or host name of the Sync Service machine and the communication port. Also verify that the Sync Service machine is on, that Sync Service is running, and that your network firewall permits connections on the Sync Service port.
5. Click **OK** to cache your changes, and then click **Save and Deploy** to implement them.

Directory Agent configuration can not be performed until there is a supported User Service configuration. Changes to User Service configuration may also require you to update your Directory Agent configuration.

- ◆ User Service configuration is performed on the Settings > General > Directory Services page (see [Working with users and groups](#), page 76).
- ◆ Directory Agent configuration is performed on the Settings > Hybrid Configuration > Shared User Data page (see [Send user and group data to the hybrid service](#), page 227).

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.

Note that if you have multiple Directory Agent instances, each instance must use a unique, non-overlapping root context.

When users are not identified

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Related topics:

- ◆ [Identification of hybrid filtering users, page 322](#)
- ◆ [Working with hybrid filtering clients, page 88](#)

If you do not choose to deploy Directory Agent, Web Endpoint, or Authentication Service, or disable user identification, only 3 types of policies can be applied to users:

- ◆ The policy applied to the external IP address from which the user connects.
This IP address must be defined as a filtered location.
- ◆ Your organization's Default policy, if the request originates from outside a filtered location, or if no computer or network policy has been applied to the filtered location.
- ◆ The hybrid filtering Default policy, if the user's connection cannot be associated with your organization.
This is a rare case, that should occur only if there is a configuration problem with your hybrid filtering account.

User and group policies cannot be applied to self-registered users. Self-registered users are always filtered by the Default policy (see [Off-site user self-registration, page 251](#)).

15

Delegated Administration and Reporting

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Delegated administration provides an effective way to distribute responsibility for Web security configuration, Internet access management, Internet activity reporting, and compliance auditing to multiple individuals. For example:

- ◆ Allow individual managers to set policies and run reports on users in their teams.
- ◆ Give local administrators for regional offices or campuses policy management permissions, as well as some access to local configuration options, but limit reporting access to protect end-user privacy.
- ◆ Ensure that Human Resources can run Internet activity reports on some or all clients, identified by user name or IP address.
- ◆ Grant auditors access to view all configuration and policy management screens in TRITON - Web Security without the ability to save changes.

The sections that follow detail the main concepts of delegated administration, and then provide specific configuration and implementation instructions.

- ◆ [*The fundamentals of delegated administration, page 334*](#)
- ◆ [*Preparing for delegated administration, page 341*](#)
- ◆ [*Managing delegated administration roles, page 345*](#)
- ◆ [*Updating delegated administration roles, page 354*](#)
- ◆ [*Performing delegated administrator tasks, page 357*](#)
- ◆ [*Enabling network accounts, page 362*](#)

The fundamentals of delegated administration

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Related topics:

- ◆ [Delegated administration roles](#), page 334
- ◆ [Delegated administrators](#), page 335
- ◆ [Delegated administration and reporting permissions](#), page 336
- ◆ [Administrators in multiple roles](#), page 339
- ◆ [Multiple administrators accessing TRITON - Web Security](#), page 340

Before setting up delegated administration for your organization, there are 3 main concepts to understand:

- ◆ **Roles** are containers used to group **administrators** and clients. There are 3 types of roles. See [Delegated administration roles](#), page 334.
- ◆ **Administrators** are individuals or groups given responsibility for configuring TRITON - Web Security settings, managing policies for clients, running Internet activity reports, or auditing the system. An administrator's set of responsibilities is determined by the **role** and **permissions** that the administrator is assigned. See [Delegated administrators](#), page 335.
- ◆ **Permissions** determine what responsibilities (like creating policies or running reports) an **administrator** has within a **role**. The available permissions change based on which type of role an administrator is assigned to. See [Delegated administration and reporting permissions](#), page 336.

Delegated administration roles

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A **role** groups clients—users, groups, domains (OUs), computers, and networks—with one or more administrators.

- ◆ Clients in a delegated administration role are referred to as **managed clients**.
- ◆ Administrators can perform different tasks (like managing policies or running reports) for managed clients in their role, based on their **permissions**.

TRITON - Web Security includes one predefined role: Super Administrator. Although it is not shown, **admin**, the Global Security Administrator account, is a member of this role. The admin account cannot be deleted, nor can its permissions be changed.



Important

You cannot delete the Super Administrator role or the admin account.

Administrators assigned to the Super Administrator role have the ability to create roles, assign administrators and managed clients to roles, and determine the permissions for administrators in the role. Global Security Administrators can add administrators to the Super Administrator role.

Super Administrators can create 2 types of delegated administration and reporting roles:

- ◆ **Policy management and reporting:** User policies are managed by administrators in the role. Administrators in the role can optionally also run reports.
- ◆ **Investigative reporting:** Administrators can run investigative reports showing Internet activity for only managed clients in the role. Client policies are managed in one or more other roles.

Define as many additional roles as are appropriate for the organization. For example:

- ◆ Create a role for each department, with the department manager as administrator and the department members as managed clients.
- ◆ In a geographically distributed organization, create a role for each location and assign all the users at the location as managed clients of that role. Then, assign one or more individuals at the location as administrators.

Delegated administrators

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Administrators are the individuals who can access TRITON - Web Security. Depending on their permissions, they may be able to:

- ◆ Log on and view some elements of the System dashboard, but take no other actions.
- ◆ Access all configuration and management features of TRITON - Web Security, but save no changes.
- ◆ Run reports on specific groups of clients, or on all clients.
- ◆ Manage policies for specific groups of clients.
- ◆ Have full configuration access to all features of TRITON - Web Security.

The specific permissions available depend on the administrator's role type (Super Administrator, policy management and reporting, or investigative reporting). See [Delegated administration roles, page 334](#).

Global Security Administrators (like **admin**) define administrator accounts in TRITON Settings. These accounts may either be network logon accounts (defined in a supported directory service) or local accounts, used only to access TRITON. Once an account has been defined, the Global Security Administrator assigns each one a level of logon access to one or more TRITON modules.

The levels of Web Security access that can be granted to administrators are:

- ◆ **Access and account management**, which grants unconditional Super Administrator permissions (see [Delegated administration and reporting permissions](#), page 336).
- ◆ **Access**, which allows the administrator to log on and view limited portions of the Status > Dashboard and Alerts pages only. Super Administrators can add those administrators to roles to allow them some level of additional policy management access, reporting access, or both.

Any administrator account that has been granted access to the Web Security module appears on the Delegated Administration > View Administrator Accounts page. These accounts are also listed on the Delegated Administration > Edit Role > Add Administrators page.

Only administrators that have already been granted Web Security access via TRITON Settings can be added to roles.

Delegated administration and reporting permissions

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The permissions available to an administrator depend on whether the administrator is assigned to the Super Administrator role, a policy management and reporting role, or an investigative reporting role.

Super Administrator permissions

The Super Administrator role can contain 2 types of administrators: unconditional Super Administrators and conditional Super Administrators.

When you create a Global Security Administrator account on the TRITON Settings > Administrators page, or select the **Web Security > Grant access and the ability to modify access permissions for other accounts** option, the account is automatically added to the Super Administrator role in TRITON - Web Security with unconditional permissions.

Unconditional Super Administrators can:

- ◆ Access all system configuration settings for Websense Web security solutions (managed via the Settings tab).
- ◆ Add or remove administrators in the Super Administrator role.
- ◆ Create or edit the Filter Lock that blocks certain categories and protocols for all users managed by delegated administration roles. See [Creating a Filter Lock](#), page 342.
- ◆ Manage policies for clients in the Super Administrator role, including the Default policy that applies to all clients not assigned another policy in any role.
- ◆ Create and run reports on all clients, regardless of which role they are assigned to.
- ◆ Access Real-Time Monitor.
- ◆ Review the audit log, which records administrator access to and actions within TRITON - Web Security.

- ◆ (Web Security Gateway [Anywhere]) Open Content Gateway Manager via a button on the Settings > General > Content Gateway Access page and be logged on automatically, without having to provide credentials.

When an unconditional Super Administrator adds additional administrators to the Super Administrator role (via the Policy Management > Delegated Administration page in TRITON - Web Security), the new administrators are granted conditional permissions.

Unlike unconditional Super Administrators, whose permissions cannot be changed, conditional Super Administrators can be granted a combination of policy management, reporting, and access permissions.

- ◆ **Full policy** permissions allow conditional Super Administrators to:
 - Create and edit delegated administration roles, filtering components, filters, policies, and exceptions, and to apply policies to clients that are not managed by any other role.
 - Access database download, directory service, user identification, and Network Agent configuration settings. Conditional Super Administrators with reporting permissions can also access configuration settings for the reporting tools.
 - Create and edit delegated administration roles, but not to delete roles or remove the administrators or managed clients assigned to them.
- ◆ **Exceptions only** permissions allow conditional Super Administrators to create and edit exceptions. (Exceptions permit or block URLs for specified users, regardless of which filtering policy normally governs their Internet access.) Policies, filters, filter components, the Filter Lock, and all Settings pages are hidden for Super Administrators with exceptions only permissions.
- ◆ **Reporting** permissions allow conditional Super Administrators to:
 - Access Web Security Dashboard charts.
 - Run investigative and presentation reports on all users.

If an administrator is granted reporting permissions only, the Create Policy, Recategorize URL, and Unblock URL options in the Common Tasks list are not shown. Additionally, the Check Policy tool does not appear in the Toolbox.
- ◆ **Real-Time Monitor** permissions allow Super Administrators to monitor all Internet filtering activity for each Policy Server associated with TRITON - Web Security.
- ◆ **Content Gateway direct access** permissions allow Super Administrators to be logged on to Content Gateway Manager automatically via a button on the Settings > General > Content Gateway Access page in TRITON - Web Security.

Only one administrator at a time can log on to a role with **full policy** or **exceptions only** permissions. Therefore, if an administrator is logged on to the Super Administrator role to perform policy or configuration tasks, other Super Administrators can log on with only reporting, auditor, or status monitor permissions in the role. Super Administrators also have the option to select a different role to manage.

To switch to another role after logon, go to the **Role** drop-down list in the Web Security toolbar and select a role.

Policy Management and Reporting permissions

Delegated administrators in policy management and reporting roles can be given any combination of the following permissions:

- ◆ **Full policy** permissions allow delegated administrators to create and manage filter components (including custom categories and recategorized URLs), filters (category, protocol, and limited access), policies, and exceptions (black and white lists) for their managed clients.

Filters created by delegated administrators are restricted by the Filter Lock, which may designate some categories and protocols as **blocked and locked**. These categories and protocols cannot be permitted by delegated administrators.

Only one administrator at a time can log on to a role with policy permissions. Therefore, if an administrator is logged on to a role to perform policy tasks, other administrators in the role can log on with auditing (read-only), reporting, or Real-Time Monitor permissions only. Administrators who have been assigned to multiple roles also have the option to select a different role to manage.

To switch to another role after logon, go to the **Role** drop-down list in the banner and select a role.

- ◆ **Exceptions only** permissions allow delegated administrators to create and manage exceptions for managed clients in their role. (Exceptions permit or block URLs for specified users, regardless of which filtering policy normally governs their Internet access.)

Policies, filters, and filter components are hidden for delegated administrators with exceptions only permissions.

- ◆ Reporting permissions can be granted in either of 2 general categories: report on **all clients**, or report on **only managed clients** in the role.
 - Any delegated administrator with reporting permissions can be given access to the Web Security Dashboard, investigative reports, and the Settings pages used to manage Log Server and the Log Database.
 - Delegated administrators with the option to report on all clients can also be given access to presentation reports.
- ◆ **Real-Time Monitor** permissions allow administrators to monitor all Internet filtering activity for each Policy Server associated with TRITON - Web Security.

Investigative reporting permissions

Administrators in investigative reporting roles can create investigative reports for managed clients in their role. (Clients' policies are managed in other roles.) They can also use the URL Category, URL Access, and Investigate User tools.

These administrators do not have access to presentation reports or Real-Time Monitor, but can optionally be allowed to view charts on the Web Security Dashboard.

Auditors

Any conditional Super Administrator or delegated administrator account can be granted **Auditor** permissions. An auditor can see all of the TRITON - Web Security features and functions that other administrators in the role can access, but cannot save any changes.

Instead of the OK and Cancel buttons that allow other administrators to cache or discard changes, Auditors are given a single Back button. The Save and Deploy button is disabled.

Administrators in multiple roles

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Related topics:

- ◆ [Delegated administration roles, page 334](#)
- ◆ [Delegated administrators, page 335](#)
- ◆ [Delegated administration and reporting permissions, page 336](#)

Depending on the needs of your organization, the same administrator may be assigned to multiple roles. Administrators assigned to multiple roles must choose a single role to manage at logon.

After logon, your permissions are as follows:

- ◆ **Policy management:**
 - **Full policy:** You can add and edit filters and policies for the role selected during logon, and apply policies to that role's managed clients.
 - **Exceptions only:** You can create and manage exceptions for the role selected during logon, and apply exceptions to that role's managed clients.
- ◆ **Reporting:** you have the combined reporting permissions of all your roles. For example, suppose you are assigned to 3 roles, with reporting permissions as follows:
 - Role 1: no reporting
 - Role 2: investigative reporting only
 - Role 3: report on all clients, full access to all reporting features

In this situation, regardless of which role you choose during logon, you are permitted to view charts on the Web Security Dashboard, and report on all clients, using all reporting features.

If you are logged on for reporting only, the Role field in the banner bar indicates whether you have Full Reporting (report on all clients) or Limited Reporting (report on managed clients only) permissions.

Multiple administrators accessing TRITON - Web Security

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Administrators in **different** roles can access TRITON - Web Security simultaneously to perform whatever activities their role permissions allow. Since they manage different clients, they can create and apply policies without conflict.

The situation is different if administrators with policy permissions in the **same** role try to connect at the same time. Only **one administrator at a time** can log on with full policy or exceptions-only permissions in the shared role. If a second administrator tries to log on with full policy or exceptions-only permissions while another administrator logged on, the second administrator is given a choice:

- ◆ Log on with read-only access (similar to temporary auditor permissions).
When this option is selected, the Role drop-down box shows “Role Name - [Read-Only]” as the current role, and offers the option of switching to “Role Name” (without any modifiers). This makes it possible to access the role with policy permissions when the role is no longer locked.
- ◆ Log on for reporting only, if the administrator has reporting permissions.
- ◆ Log on to a different role, if the administrator is assigned to any other roles.
- ◆ Log on to view only the Status pages until the role becomes available (Limited Status access).
- ◆ Try again later, after the first administrator logs off.

Administrators who are not using their policy permissions can do one of the following to unlock the role and allow another administrator to log on to manage policies:

- ◆ If generating reports, select **Release Policy Permissions** from the **Role** drop-down list.
When this option is selected, policy management features are hidden from the logged-on administrator, but reporting features remain active.
- ◆ If monitoring system performance, select **Status Monitor** from the **Role** drop-down list.

Administrators in Status Monitor mode can access the Status > Dashboard and Alerts pages, as well as Real-Time Monitor (if applicable). Their session does not time out.

If administrators in Status Monitor mode try to go to a page other than Dashboard, Alerts, or Real-Time Monitor, they are prompted to log on again.

Preparing for delegated administration

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Related topics:

- ◆ [The fundamentals of delegated administration, page 334](#)
- ◆ [Creating a Filter Lock, page 342](#)
- ◆ [Preparing delegated administrators, page 344](#)
- ◆ [Managing delegated administration roles, page 345](#)

Before creating delegated administration roles, there are 2 key planning and setup tasks for the Super Administrator to perform:

- ◆ Review and edit the Filter Lock, which blocks specified categories and protocols for managed clients in all delegated administration roles. By default, the Filter Lock blocks and locks several categories, so it is important to check the default settings against the requirements of your organization. (See [Creating a Filter Lock, page 342](#).)
 - Filter Lock restrictions are automatically enforced for all filters created in or copied to a delegated administration role, and cannot be modified by the delegated administrator.
 - Delegated administrators can apply any filtering action to categories and protocols **not** blocked and locked in the Filter Lock.
 - Changes to the Filter Lock are implemented for all managed clients as soon as the changes are saved. Delegated administrators who are working in TRITON - Web Security when the changes take effect will not see the changes in their filters until the next time they log on.
 - Filter Lock restrictions do not apply to clients managed by the Super Administrator role.
- ◆ Determine which Super Administrator policies and filters will be copied to each new role that you plan to create, and make adjustments to existing policies as needed.
 - By default, each role is created with a single Default policy, created from the Default category and protocol filter (**not** the Default policy) currently configured for the Super Administrator role.
 - Optionally, you can instead copy all policy objects (policies, filters, custom categories, and custom URLs) from the Super Administrator role to the new role. The delegated administrator then starts with a complete set of policies and policy components.
 - Copies of policies and filters in a delegated administration role are subject to the Filter Lock, and are therefore not identical to the same policies and filters in the Super Administrator role.

- When the Unrestricted policy is copied, the policy **and** filter names are changed to reflect the fact that they are subject to the Filter Lock, and no longer permit all requests.

Copying Super Administrator policy objects to a new role can take a very long time, depending on how much information must be copied.

Once these planning steps are completed, each of the following delegated administration components must be put into place:

1. A Global Security Administrator creates administrator accounts on the TRITON Settings > Administrators page, and grant the accounts the appropriate level of Web Security access.
2. A Super Administrator creates delegated administration roles on the Policy Management > Delegated Administration page, then adds administrators and managed clients to the roles. See [Managing delegated administration roles](#), page 345.
3. The Super Administrator notifies the delegated administrators that they have been granted administrative access to TRITON - Web Security, and explains their level of permissions. See [Preparing delegated administrators](#), page 344.

Creating a Filter Lock

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Related topics:

- ◆ [Locking categories](#), page 342
- ◆ [Locking protocols](#), page 343

The **Policy Management > Filter Lock** page lets you specify categories and protocols that are blocked for all managed clients in delegated administration roles. Any category or protocol that is blocked in the Filter Lock is considered **blocked and locked**.

- ◆ Click the **Categories** button to block and lock specific categories or category elements (keywords and file types). See [Locking categories](#), page 342.
- ◆ Click the **Protocols** button to block and lock protocols, or to specify protocols that are always logged. See [Locking protocols](#), page 343.

Locking categories

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Related topics:

- ◆ [Creating a Filter Lock](#), page 342
- ◆ [Locking protocols](#), page 343

Use the **Policy Management > Filter Lock > Categories** page to select the categories to be blocked and locked for all members of delegated administration roles. You also can block and lock keywords and file types for a category.

1. Select a category in the tree.

Delegated administration roles do not have access to custom categories created by the Super Administrators. Therefore, custom categories do not appear in this tree.

2. Set the restrictions for this category in the box that appears beside the category tree.

| Option | Description |
|------------------------|--|
| Lock category | Blocks and locks access to sites in this category. |
| Lock keywords | Blocks and locks access based on keywords defined for this category in each role. |
| Lock file types | Blocks and locks the selected file types for sites in this category. Be sure to mark the check box for each file type to be blocked and locked. Custom file types created by the Super Administrator are included on this list because they are available to delegated administration roles. |
| Apply to Subcategories | Applies the same settings to all subcategories of this category. |

You can block and lock selected elements for all categories at once, if appropriate. Select **All Categories** in the tree, and then select the elements to be blocked for all categories. Then, click **Apply to Subcategories**.

3. When you are finished making changes, click **OK** to cache the changes and return to the Filter Lock page. Changes are not implemented until you click **Save and Deploy**.

Locking protocols

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Related topics:

- ◆ [Creating a Filter Lock, page 342](#)
- ◆ [Locking categories, page 342](#)

Use the **Policy Management > Filter Lock > Protocols** page to block and lock access to or lock logging of selected protocols for all clients managed by delegated administration roles.



Note

Protocol logging is associated with protocol usage alerts. You cannot generate usage alerts for a protocol unless it is set for logging in at least one protocol filter. Enabling the **Lock protocol logging** option through the Filter Lock assures that usage alerts can be generated for the protocol. See [Configuring protocol usage alerts](#), page 393.

1. Select a protocol in the tree.

Delegated administration roles do have access to custom protocols created by the Super Administrator. Therefore, custom protocols do appear in this tree.

2. Set the restrictions for this protocol in the box that appears beside the protocol tree.

| Option | Description |
|-----------------------|---|
| Lock protocol | Blocks and locks access to applications and Web sites using this protocol. |
| Lock protocol logging | Logs information about access to this protocol, and prevents delegated administrators from disabling logging. |
| Apply to Group | Applies the same settings to all protocols in the group. |

When you are finished making changes, click **OK** to cache the changes and return to the Filter Lock page. Changes are not implemented until you click **Save and Deploy**.

Preparing delegated administrators

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Related topics:

- ◆ [The fundamentals of delegated administration](#), page 334
- ◆ [Preparing for delegated administration](#), page 341
- ◆ [Performing delegated administrator tasks](#), page 357

After assigning individuals as administrators in any administrative role, make sure to give them the following information:

- ◆ The URL for logging on to TRITON - Web Security. By default:
https://<TRITON_location>:9443/triton/

Substitute the IP address or host name of the machine running TRITON - Web Security.

- ◆ What Policy Server to select after logon, if applicable. In an environment with multiple Policy Server instances, administrators can select the Policy Server to use from the Web Security toolbar. They must select the Policy Server that is configured to communicate with the directory service that authenticates their managed clients.
- ◆ Whether to use their network logon account or a local Websense account when logging on to TRITON - Web Security. If administrators log on with local accounts, provide the user name and password.
- ◆ Their permissions: to create and apply policies to clients in the role, generate reports, create policies and generate reports, or audit administrator tasks without implementing changes.

Advise administrators who have both policy and reporting permissions to consider what activities they plan to perform during the session. If they only plan to generate reports, recommend that they go to the **Role** field in the banner, and choose **Release Policy Permissions**. This frees the policy permissions for the role, enabling another administrator to access TRITON - Web Security and manage policy for that role.

- ◆ How to find the list of clients managed by their role. Administrators can go to Policy Management > Delegated Administration, and then click their role name to display the Edit Role page, which includes a list of managed clients.
- ◆ Limitations imposed by the Filter Lock, if any categories or protocols have been blocked and locked.
- ◆ The tasks that are generally performed by administrators. See [Performing delegated administrator tasks](#), page 357.

Be sure to notify delegated administrators when you add or change custom file types and protocols. These components automatically appear in filters and policies for all roles, so it is important for those administrators to know when changes have been made.

Managing delegated administration roles

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Related topics:

- ◆ [The fundamentals of delegated administration](#), page 334
- ◆ [Preparing for delegated administration](#), page 341
- ◆ [Managing role conflicts](#), page 353

The **Policy Management > Delegated Administration** page offers different options, depending on whether it is viewed by a Super Administrator or a delegated administrator.

Super Administrators see a list of all the roles currently defined, and have the following options available.

| Option | Description |
|-----------------------------|---|
| Add | Click to add a new role. See Adding roles, page 346 . |
| Role | Click a role name to view or configure the role. See Editing roles, page 347 . |
| Delete | Mark the check box next to a role name, then click the button to delete the selected roles. Available to unconditional Super Administrators only. See Delete roles, page 355 , for information about how a role's clients are managed after the role is deleted. |
| Advanced | Click to access the Manage Role Priority function. |
| Manage Role Priority | Click to specify which role's policy settings are used when the same client exists in multiple groups that are managed by different roles. See Managing role conflicts, page 353 . |
| View Administrator Accounts | Click to see the local and network administrator accounts with TRITON - Web Security access, and review their permission level and role assignments. See Reviewing administrator accounts, page 361 . |

Delegated administrators see only the roles in which they are administrators, and have access to more limited options.

| Option | Description |
|--------|---|
| Role | Click to view the clients assigned to the role, and the specific reporting permissions granted. See Editing roles, page 347 . |

Adding roles

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Related topics:

- ◆ [Preparing for delegated administration, page 341](#)
- ◆ [Managing delegated administration roles, page 345](#)
- ◆ [Editing roles, page 347](#)

Use the **Delegated Administration > Add Role** page to provide a name and description for the new role.

1. Enter a **Name** for the new role.

The name must be between 1 and 50 characters long, and cannot include any of the following characters:

* < > ' { } ~ ! \$ % & @ # . " | \ & + = ? / ; : ,

Role names can include spaces and dashes.

2. Enter a **Description** for the new role.

The description may be up to 255 characters. The character restrictions that apply to role names also apply to descriptions, with 2 exceptions: descriptions can include periods (.) and commas (,).

3. Specify the **Role Type**:

- A **Policy management and reporting** role allows administrators the ability to create filters and policies and apply them to manage clients. Administrators in these roles may also be given permission to report on managed clients or all clients.

If you select this role type, also indicate whether or not to **Copy all Super Administrator policies, filters, and filter components to the new role**. If you select this option, the process of creating the role may take several minutes.

If you do not copy all Super Administrator policies to the role, a Default policy is created for the role that enforces the Super Administrator Default category and protocol filters.

- An **Investigative reporting** role allows administrators to report on their managed clients only, using the investigative reports tool. Managed clients in an investigative reporting role may also be added to a policy management and reporting role.

4. Click **OK** to display the **Edit Role** page and define the characteristics of this role. See [Editing roles](#), page 347.

- If you created a policy management and reporting role, the new role is added to the Role drop-down list in the Web Security toolbar the next time you log on.
- If you created an investigative reporting role, the name does not appear in the role drop-down. This reflects the fact that reporting permissions are cumulative (see [Administrators in multiple roles](#), page 339).

Editing roles

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Related topics:

- ◆ [Managing delegated administration roles](#), page 345
- ◆ [Adding roles](#), page 346
- ◆ [Managing role conflicts](#), page 353

Delegated administrators can use the **Delegated Administration > Edit Role** page to view the list of clients managed by their role, and the specific reporting permissions granted.

Super Administrators can use this page to select the administrators and clients for a role, and to set administrator permissions, as described below. Only unconditional Super Administrators can delete administrators and clients from a role.

1. Change the role **Name** and **Description**, as needed.

The name of the Super Administrator role cannot be changed.

2. Add or remove administrators for this role (Super Administrators only).

| Item | Description |
|-------------------|--|
| User Name | Administrator's user name. |
| Account Type | Indicates whether the user is defined in the network directory service (Directory) or unique to the TRITON console (Local). |
| Reporting | Give the administrator permission to use reporting tools. |
| Real-Time Monitor | Give the administrator permission to monitor all Internet filtering activity for any Policy Server. |
| Policy | Give the administrator permission to create filters and policies, and apply policies to the role's managed clients. In the Super Administrator role, administrators with policy permission can also manage certain Websense configuration settings. See Super Administrator permissions , page 336. |
| Auditor | Give the administrator permissions to see all of the features and functions available to other administrators in the role, but without the ability to save changes. The check boxes for other permissions are disabled when Auditor permissions are selected. |
| Add | Open the Add Administrators page. See Adding Administrators , page 350. |
| Delete | Remove the selected administrators from the role. <ul style="list-style-type: none"> • Available to unconditional Super Administrators only. • Unconditional Super Administrator accounts can only be removed from the TRITON Settings > Administrators page. |

3. Add and delete **Managed Clients** for the role.

Changes can be made by Super Administrators only. Delegated administrators can view the clients assigned to their role.

| Item | Description |
|--------|--|
| <Name> | Displays the name of each client explicitly assigned to the role. Administrators in the role must add the clients to the Clients page before policies can be applied. See Performing delegated administrator tasks , page 357. |

| Item | Description |
|--------|--|
| Add | Opens the Add Managed Clients page. See Adding managed clients , page 352. |
| Delete | Available to unconditional Super Administrators only, this button removes from the role any clients marked in the managed clients list. Some clients cannot be deleted directly from the managed clients list. See Delete managed clients , page 355, for more information. |

4. Use the **Reporting Permissions** area to select the features available to administrators in this role who have reporting access.

- a. Choose the general level of reporting permissions:

| Option | Description |
|--------------------------------|---|
| Report on all clients | Select this option to give administrators permission to generate reports on all network users. Use the remaining options in the Reporting Permissions area to set the specific permissions for administrators in this role. |
| Report on managed clients only | Select this option to limit administrators to reporting on the managed clients assigned to this role. Then, select the investigative reports features these administrators can access. Administrators limited to reporting on managed clients only cannot access presentation reports or user-based reports on the Web Security Dashboard. |

- b. Mark the check box for each reporting feature that appropriate administrators in the role are permitted to use.

| Option | Description |
|-----------------------------------|---|
| Access presentation reports | Enables access to presentation reports features. This option is available only when administrators can report on all clients. See Presentation reports , page 135. |
| Access the Web Security Dashboard | Enables display of charts showing Internet activity on the Risks, Usage, and System dashboards. See The Web Security Dashboard , page 33. If this option is deselected, administrators can view only the Health Alert and Value Estimates (if displayed) sections of the System dashboard. |
| Access the Threats dashboard | Allows administrators to access charts, summary tables, and event details related to advanced malware threat activity in your network. See Threats dashboard , page 35. |

| Option | Description |
|--|--|
| Access forensics data in the Threats dashboard | With Websense Web Security Gateway or Gateway Anywhere, allows administrators to view files associated with threat activity, and review information about attempts to send the files. See Configuring forensics data storage , page 431. |
| Access investigative reports | Enables access to basic investigative reports features. When this option is selected, additional investigative reports features can be selected, also. See Investigative reports , page 156. |
| View user names in investigative reports | Enables administrators in this role to view user names, if they are logged. See Configuring how filtered requests are logged , page 410. Deselect this option to show only system-generated identification codes, instead of names. This option is available only when administrators are granted access to investigative reports. |
| Save investigative reports as favorites | Enables administrators in this role to create favorite investigative reports. See Favorite investigative reports , page 174. This option is available only when administrators are granted access to investigative reports. |
| Schedule investigative reports | Enables administrators in this role to schedule investigative reports to run at a future time or on a repeating cycle. See Scheduling investigative reports , page 177. This option is available only when administrators are granted permissions to save investigative reports as favorites. |
| Manage Log Server and the Log Database | Enables administrators to access the Settings > Reporting > Log Server and Log Database pages. See Configuring Log Server , page 412, and Log Database administration settings , page 420. |

- When you are finished making changes, click **OK** to cache the changes and return to the Delegated Administration page. Changes are not implemented until you click **Save and Deploy**.

Adding Administrators

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Delegated administrators](#), page 335
- ◆ [Editing roles](#), page 347

Super Administrators can use the **Delegated Administration > Edit Role > Add Administrators** page to specify which individuals are administrators for a role.



Note

Administrators can be added to multiple roles. These administrators must choose a role during logon. In this situation, the administrator receives the combined reporting permissions for all roles.

Delegated administrators have significant control over the Internet activities of their managed clients. To ensure that this control is handled responsibly and in accordance with your organization's acceptable use policies, Super Administrators should use the Audit Log page to monitor changes made by administrators. See [Viewing and exporting the audit log, page 384](#).

1. If you plan to assign network accounts as delegated administrators, make sure you are logged on to the Policy Server whose Settings > General > Directory Service configuration (see [Directory services, page 77](#)) matches the TRITON Settings > User Directory configuration.

If you are adding only local accounts as administrators, you can be logged on to any Policy Server.

2. Under **Local Accounts**, mark the check box for one or more users, and then click the right arrow button to move the highlighted users to the **Selected** list.
3. Under **Network Accounts**, mark the check box for one or more users, and then click the right arrow (>) button to move them to the **Selected** list.



Note

Custom LDAP groups cannot be added as administrators.

4. Set the **Permissions** for administrators in this role.

| Option | Description |
|----------------------------------|--|
| Administrator: Policy Management | Let administrators in this role apply policies to their managed clients. This also grants access to certain Websense configuration settings. |
| Administrator: Reporting | Grant administrators access to reporting tools. Use the Edit Role page to set the specific reporting features permitted. |
| Administrator: Real-Time Monitor | Allow administrators to monitor Internet filtering traffic in real time. See Real-Time Monitor, page 183 . |
| Auditor | Give the administrator access to view all features available to other administrators in the role, without the ability to save changes. |

5. When you are finished making changes, click **OK** to return to the Edit Role page.

6. Click **OK** on the Edit Role page to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding managed clients

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Related topics:

- ◆ [Managing delegated administration roles, page 345](#)
- ◆ [Editing roles, page 347](#)

Managed clients are the users and computers assigned to a role, whose policies are set by the role's administrators. Directory clients (users, groups, and domains [OUs]), computers (individual IPv4 or v6 addresses), and networks (IPv4 or v6 address ranges) can all be defined as managed clients.

Super Administrators can use the **Delegated Administration > Edit Role > Add Managed Clients** page to add as many clients to a role as needed. Each client can be assigned to only one policy management and reporting role.

If you assign a network range as managed client in one role, you cannot assign individual IP addresses within that range to any other role. Additionally, you cannot specifically assign a user, group, or domain (OU) to 2 different roles. However, you can assign a user to one role, and then assign to a different role a group or domain (OU) of which the user is a member.



Note

If a group is a managed client in one role, and that role's administrator applies a policy to each member of the group, individual users in that group cannot later be assigned to another role.

When adding managed clients, consider which client types to include.

- ◆ If you add IP addresses to a role, administrators for that role can report on **all** activity for the specified machines, regardless of who is logged on.
- ◆ If you add users to a role, administrators can report on all activity for those users, regardless of the machine where the activity occurred.

Administrators are not automatically included as managed clients in the roles they administer, since that would enable them to set their own policy. To allow administrators to view their own Internet usage, enable self-reporting (see [Self-reporting, page 437](#)).

If your organization has deployed multiple Policy Servers, and the Policy Servers communicate with different directories, be sure to select the Policy Server connected to the directory containing the clients you want to add.

**Note**

Best practices indicate that all directory clients in the same role be defined in the same directory.

1. Select clients for the role:
 - Under **Directory**, mark the check box for one or more users.
If your environment uses Active Directory (Native Mode) or another LDAP-based directory service, you can search the directory to find specific user, group, or domain (OU) names. See [Searching the directory service, page 84](#).
 - Under **Computer**, enter the IP address to be added to this role in IPv4 or IPv6 format.
 - Under **Network**, enter the first and last IP addresses in a range in IPv4 or IPv6 format.
2. Click the right arrow (>) button adjacent to the client type to move the clients to the **Selected** list.
3. When you are finished making changes, click **OK** to return to the Edit Role page.
4. Click **OK** on the Edit Role page to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Managing role conflicts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Managing delegated administration roles, page 345](#)
- ◆ [Adding managed clients, page 352](#)

Directory services allow the same user to belong to multiple groups. As a result, a single user may exist in groups that are managed by different delegated administration roles. The same situation exists with domains (OUs).

Additionally, it is possible for a user to be managed by one role, and belong to a group or domain (OU) that is managed by a different role. If the administrators for both of these roles are logged on simultaneously, the administrator responsible for the user could apply policy to that user at the same time as the administrator responsible for the group applies policy to the individual members of the group.

Use the **Delegated Administration > Manage Role Priority** page to tell Websense software what to do if different policies apply to the same user because of an overlap. When a conflict occurs, Websense software applies the filtering policy from the role that appears highest on this list.

1. Select any role on the list, except Super Administrator.

**Note**

The Super Administrator role is always first on this list. It cannot be moved.

2. Click **Move Up** or **Move Down** to change its position in the list.
3. Repeat steps 1 and 2 until all roles have the desired priority.
4. When you are finished making changes, click **OK** to cache the changes and return to the Delegated Administration page. Changes are not implemented until you click **Save and Deploy**.

Updating delegated administration roles

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Related topics:

- ◆ [Delete roles, page 355](#)
- ◆ [Delete managed clients, page 355](#)

Policies and managed clients are typically added to a role when the role is created.

- ◆ Delegated administrators with policy permissions can edit existing policies and create new policies within the role that they manage.
- ◆ As new members join the organization, a Super Administrator can add them to existing roles (see [Editing roles, page 347](#)).

Super Administrators can also move clients (see [Moving clients to roles, page 88](#)) and policies ([Copying filters and policies to roles, page 260](#)) from the Super Administrator role to an existing delegated administration role at any time.

- ◆ When a client is moved to a delegated administration role, the policy applied in the Super Administrator role is also copied. During this copy process, the filters are updated to enforce the restrictions of the Filter Lock, if any.

In the target role, the tag “(Copied)” is added to the end of the filter or policy name. Administrators for that role can readily identify the new item and update it appropriately.

Encourage administrators in the role to rename the filters and policies, and to edit them as needed, to clarify their settings and to minimize duplicates. These changes can simplify future maintenance efforts.

After the client is moved to the new role, only an administrator in that role can modify the client’s policy or the filters it enforces. Changes in the original policy or filters in the Super Administrator role do not affect copies of the policy or filters in delegated administration roles.

- ◆ When policies and filters are copied to a delegated administration role directly, the same constraints are enforced that apply when filters and policies are copied as part of moving a client.
 - Filter Lock restrictions are implemented during the copy.
 - Permit All category and protocol filters are renamed, and become editable filters subject to the Filter Lock.
 - Copied filters and policies are identified in the role by the (Copied) tag in the name.

Consider editing policy descriptions before starting the copy, to assure that they are meaningful to the administrators in the target roles.

Delete roles

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On the **Delegated Administration** page, unconditional Super Administrators can delete any roles that have become obsolete.

Deleting a role also removes all clients that the role's administrators have added to the Clients page. After the role is deleted, if those clients belong to any networks, groups, or domains managed by other roles, they are governed by the appropriate policy applied in those roles (see [Filtering order, page 97](#)). Otherwise, they are governed by the Super Administrator's Default policy.

1. On the **Delegated Administration** page, mark the check box beside each role to be deleted.



Note

You cannot delete the Super Administrator role.

2. Click **Delete**.
3. Confirm the delete request to remove the selected roles from the Delegated Administration page. Changes are not permanent until you click **Save and Deploy**.

The deleted role is cleared from Role drop-down list in the banner the next time you log on to TRITON - Web Security.

Delete managed clients

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Clients cannot be deleted directly from the managed clients list (Delegated Administration > Edit Role) if:

- ◆ the administrator has applied a policy to the client
- ◆ the administrator has applied a policy to one or more members of a network, group, or domain (OU)

There may also be problems if the Super Administrator is connected to a different Policy Server than the one that communicates with the directory service containing the clients to be deleted. In this situation, the current Policy Server and directory service do not recognize the clients.

An unconditional Super Administrator can assure that the appropriate clients can be deleted, as follows.

1. Open the **Policy Server** list in the Web Security toolbar and make sure that you are connected to the Policy Server that communicates with the appropriate directory. You must be logged on with unconditional Super Administrator permissions.
2. Open the **Role** list in the Web Security toolbar, and select the role from which managed clients are to be deleted.
3. Go to **Policy Management > Clients** to see a list of all the clients to which the delegated administrator has explicitly assigned a policy.
This may include both clients that are specifically identified on the role's managed clients list, and clients who are members of networks, groups, domains, or organizational units on the managed clients list.
4. Delete the appropriate clients.
5. Click **OK** to cache the changes.
6. Open the **Role** list in the banner, and select the **Super Administrator** role.
7. Go to **Policy Management > Delegated Administration > Edit Role**.
8. Delete the appropriate clients from the managed clients list, and then click **OK** to confirm the delete request.
9. Click **OK** on the Edit Role page to cache the changes. Changes are not implemented until you click **Save and Deploy**.

Managing Super Administrator clients

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Clients who are not specifically assigned to a delegated administration role are managed by Super Administrators. There is no Managed Clients list for the Super Administrator role.

To apply policies to these clients, add them to the Policy Management > Clients page. See [Adding a client](#), page 83. Clients who have not been assigned a specific policy are governed by the Super Administrator Default policy.

There may be times when you cannot add clients to the Clients page. This can occur when the client is a member of a network, group, or domain (OU) that is assigned to another role. If the administrator of the other role has applied a policy to individual members of the network or group, those clients cannot be added to the Super Administrator role.

Performing delegated administrator tasks

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Delegated administrators who have **policy** permissions can perform the following tasks.

- ◆ [View your user account, page 357](#)
- ◆ [View your role definition, page 358](#)
- ◆ [Add clients to the Clients page, page 358](#)
- ◆ [Create policies and filters, page 359](#)
- ◆ [Apply policies to clients, page 361](#)

Reporting permissions can be granted at a granular level. The specific reporting permissions granted to your role determine which of the following tasks are available to administrators with reporting permissions. See [Generate reports, page 361](#).

View your user account

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Related topics:

- ◆ [Performing delegated administrator tasks, page 357](#)
- ◆ [View your role definition, page 358](#)
- ◆ [Add clients to the Clients page, page 358](#)
- ◆ [Create policies and filters, page 359](#)
- ◆ [Apply policies to clients, page 361](#)

If you log on to TRITON - Web Security with network credentials, password changes are handled through your network directory service. Contact your system administrator for assistance.

If you have been assigned a local user name and password, view information about your account and change your password within the TRITON console.

1. Click **TRITON Settings** in the TRITON toolbar, just under the banner.
The My Account page opens.
2. To change your password, first enter your current password, then enter and confirm a new password.
 - The password must be between 4 and 255 characters.
 - Strong passwords are recommended: 8 characters or longer, including at least one uppercase letter, lowercase letter, number, and special character (such as hyphen, underscore, or blank).

Click **OK** to save and implement the change.

3. To see a list of roles that you can administrator, go to the TRITON - Web Security Policy Management > Delegated Administration > View Administrator Accounts page.
 - If you are assigned to manage only one role, its name appears in the list.
 - If you are assigned to manage multiple roles, click **View** next to your user name to see them listed.
4. When you are finished, click **Close** to return to the Delegated Administration page.

View your role definition

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Related topics:

- ◆ [Performing delegated administrator tasks, page 357](#)
- ◆ [View your user account, page 357](#)
- ◆ [Add clients to the Clients page, page 358](#)
- ◆ [Create policies and filters, page 359](#)
- ◆ [Apply policies to clients, page 361](#)

Open the Delegated Administration page and click your role name to display the Edit Role page, which lists the role's managed clients. This page also shows the reporting features available to administrators who have reporting permissions in this role.

Administrators who have only reporting permissions are unable to view this page. Only the specified reporting features are available to these administrators.

Add clients to the Clients page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Performing delegated administrator tasks, page 357](#)
- ◆ [View your user account, page 357](#)
- ◆ [View your role definition, page 358](#)
- ◆ [Create policies and filters, page 359](#)
- ◆ [Apply policies to clients, page 361](#)

Super Administrators assign managed clients to a role, but delegated administrators must add them to the Clients page before applying policies. See [Adding a client, page 83](#), for instructions.

When clients are added to a managed clients list, they are immediately filtered by a policy in the role.

- ◆ Clients previously assigned a policy within the Super Administrator role are governed by a copy of that policy in the new role. The Move to Role process automatically copies the applicable policy.
- ◆ Clients not previously assigned a policy are filtered by the new role's Default policy. Initially, this Default policy enforces a Default category and protocol filter copied from the Super Administrator role.

Any client listed on the Delegated Administration > Edit Role page for your role can be added to the Clients page and assigned a policy. For groups, domains (OUs), and networks assigned to the role, you can also add:

- ◆ Individual users who members of the group or domain/organizational unit
- ◆ Individual computers that are members of the network

Because a user may be part of multiple groups, domains, or organizational units, adding individuals from a larger client grouping has the potential to create conflicts when different roles manage groups, domains, or organizational units with common members. If administrators in different roles access TRITON - Web Security at the same time, they might add the same client (individual member of a group, for instance) to their Clients page. In that situation, Internet filtering for that client is governed by the priority established for each role. See [Managing role conflicts](#), page 353.

Create policies and filters

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Performing delegated administrator tasks](#), page 357
- ◆ [View your user account](#), page 357
- ◆ [View your role definition](#), page 358
- ◆ [Add clients to the Clients page](#), page 358
- ◆ [Apply policies to clients](#), page 361

When your role was created, it automatically inherited the current Default category filter and protocol filter from the Super Administrator role. A role-specific Default policy was created that enforces the inherited Default category and protocol filters. (This role-specific Default policy is automatically applied to any client added to the role until another policy is assigned.)

The Super Administrator may have copied other policies and filters to your role, as well.

In addition to policies and filters, you also inherit any custom file types and protocols created by the Super Administrator.

You can edit inherited policies and filters. Changes you make affect your role only. Any changes the Super Administrator later makes to the original policies and filters do not affect your role.



Note

Changes the Super Administrator makes to file types and protocols automatically affect the filters and policies in your role.

When a Super Administrator informs you of changes to these components, review your filters and policies to be sure they are handled appropriately.

You can also create as many new filters and policies as you need. Filters and policies created by a delegated administrator are available only to administrators logged on to your role. For instructions on creating policies, see [Working with policies](#), page 93. For instructions on creating filters, see [Working with filters](#), page 60.

You can edit filter components for your role, with some limitations.

- ◆ **Categories:** add custom categories, and edit both Master Database and custom categories, defining recategorized URLs and keywords for use within their role; change the action and advanced filtering option applied by default in category filters they create. (Changes to a category's default action are implemented only if the category is not locked by the Filter Lock.)
- ◆ **Protocols:** change the action and advance filtering options applied by default in protocol filters they create. (Changes to a protocol's default action are implemented only if the protocol is not locked by the Filter Lock.) Delegated administrators cannot add or delete protocol definitions.
- ◆ **File types:** view the file extensions assigned to each file type. Delegated administrators cannot add file types or change the extensions assigned to a file type.

For more information, see [Building filter components](#), page 261.

If a Super Administrator has implemented Filter Lock restrictions, there may be categories or protocols that are automatically blocked, and cannot be changed in the filters you create and edit.

Apply policies to clients

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Performing delegated administrator tasks, page 357](#)
- ◆ [View your user account, page 357](#)
- ◆ [View your role definition, page 358](#)
- ◆ [Add clients to the Clients page, page 358](#)
- ◆ [Create policies and filters, page 359](#)

After creating a policy, you can apply that policy directly to clients who have already been added to the Clients page by clicking the **Apply to Clients** button. See [Assigning a policy to clients, page 97](#).

Alternatively, you can go to the Clients page and add the clients who should be governed by this policy. See [Working with clients, page 74](#).

Generate reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you have reporting permissions, the specific reporting options available are set by the Super Administrator. To learn which features you can use, go to the Delegated Administration page and click the role name. The Edit Role page shows the reporting features for which you have permissions. See:

- ◆ [Presentation reports, page 135](#)
- ◆ [Investigative reports, page 156](#)
- ◆ [Real-Time Monitor, page 183](#)

Reviewing administrator accounts

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Use the **Delegated Administration > View Administrator Accounts** page to:

- ◆ See a list of local and network accounts that have been given Web Security access by a Global Security administrator.
- ◆ Check the level of permissions assigned to each account.
- ◆ See a list of roles associated with each account.

If an account has been added to a single role as an administrator, that role is listed to the right of the account name. If the account can be used to manage multiple roles, click **View** to see the roles listed

Delegated administrators see account information for only their own account, and not for all accounts.

When you are finished reviewing administrator accounts, click **Close** to return to the Delegated Administration page.

Enabling network accounts

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Global Security Administrators can use the **TRITON Settings > User Directory** page to enter the directory service information needed to allow administrators to log on to TRITON - Web Security with their network credentials.

This task is done **in addition to** the configuration done by Web Security Super Administrators to define the directory service used to identify user and group clients.



Note

Client directory service information is configured on the Settings > Directory Services page (see [Directory services, page 77](#)).

TRITON administrators' network credentials must be authenticated against a single directory service. If your network includes multiple directories, a trusted relationship must exist between the directory specified in TRITON Settings and the others.

If it is not possible to define a single directory service for use with the TRITON Unified Security Center, consider creating local accounts for administrators.

Specific instructions for defining the directory used to authenticate administrator logons can be found in the TRITON Settings Help.

16

Web Security Server Administration

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Related topics:

- ◆ [Websense Web Security product components, page 364](#)
- ◆ [Understanding the Policy Database, page 370](#)
- ◆ [Working with Policy Server, page 370](#)
- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Integrating with a third-party SIEM solution, page 381](#)
- ◆ [Working with Content Gateway, page 382](#)
- ◆ [Viewing and exporting the audit log, page 384](#)
- ◆ [Stopping and starting Websense services, page 385](#)
- ◆ [Alerting, page 388](#)
- ◆ [Backing up and restoring your Websense data, page 397](#)

Internet usage filtering requires interaction between several Websense Web Security software components:

- ◆ User requests for Internet access are received by Network Agent, Content Gateway, or an integrated third-party product or device (integration).
- ◆ The requests are sent to Filtering Service for processing.
- ◆ Filtering Service communicates with Policy Server and Policy Broker to apply the appropriate policy in response to the request.

A single Policy Database holds client, filter, policy, and general configuration information, whether there is a single Policy Server or multiple Policy Servers.

Each instance of TRITON - Web Security is associated with that Policy Database, and can be used to configure any Policy Server associated with that database.

Because the policy configuration performed in TRITON - Web Security is stored in the central database, policy information is automatically available to all Policy Servers associated with that Policy Database.

Websense Web Security product components

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Related topics:

- ◆ [Understanding the Policy Database, page 370](#)
- ◆ [Working with Policy Server, page 370](#)
- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Policy Server, Filtering Service, and State Server, page 379](#)
- ◆ [Stopping and starting Websense services, page 385](#)
- ◆ [Reviewing current system status, page 396](#)

Websense Web Security software is made up of several components that work together to provide Internet security, user identification, and reporting capabilities. This section provides an overview of each component to help you understand and manage your environment.

For a list of components with a description of each, see:

- ◆ [Filtering and management components, page 364](#)
- ◆ [Reporting components, page 367](#)
- ◆ [User identification components, page 368](#)
- ◆ [Interoperability components, page 369](#)

When Websense software is integrated with Citrix, Microsoft Forefront TMG, or a proxy or proxy-cache that uses ICAP, an additional integration component (integration service, filtering plugin, or ICAP server) is also installed.

Filtering and management components

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| Component | Description |
|------------------------|---|
| Policy Database | Stores Websense software settings and policy information. Installed automatically with Policy Broker. |
| Policy Broker | Manages requests from Websense components for policy and general configuration information. |

| Component | Description |
|------------------------------|--|
| Policy Server | <ul style="list-style-type: none"> Identifies and tracks the location and status of other Websense components. Stores configuration information specific to a single Policy Server instance. Communicates configuration data to Filtering Service, for use in filtering Internet requests. <p>Configure Policy Server settings in TRITON - Web Security (see Working with Policy Server, page 370).</p> <p>Policy and most configuration settings are shared between Policy Servers that share a Policy Database (see Working in a multiple Policy Server environment, page 373).</p> |
| Filtering Service | <p>Provides Internet filtering in conjunction Network Agent or a third-party integration product. When a user requests a site, Filtering Service receives the request and determines which policy applies.</p> <ul style="list-style-type: none"> Filtering Service must be running for Internet requests to be filtered and logged. Each Filtering Service instance downloads its own copy of the Websense Master Database. <p>Configure filtering and Filtering Service behavior in TRITON - Web Security (see Internet Usage Filters, page 49, and Configuring Websense filtering settings, page 68).</p> |
| Network Agent | <ul style="list-style-type: none"> Enhances filtering and logging functions Enables protocol management Enables filtering in a standalone environment <p>For more information, see Network Configuration, page 439.</p> |
| Master Database | <ul style="list-style-type: none"> Includes more than 36 million Web sites, sorted into more than 90 categories and subcategories Contains more than 100 protocol definitions for use in filtering protocols <p>Download the Websense Master Database to activate Internet filtering, and make sure that the database is kept up to date. If the Master Database is more than 2 weeks old, no filtering can occur. See The Websense Master Database, page 27, for more information.</p> |
| TRITON Infrastructure | <p>The platform that supports and unites the TRITON - Web Security, Data Security, and Email Security modules.</p> <p>Maintains an internal database of global settings that apply to all TRITON modules.</p> |

| Component | Description |
|--------------------------------|--|
| TRITON - Web Security | <p>Serves as the configuration, management, and reporting interface for Websense software.</p> <p>Use TRITON - Web Security to define and customize Internet access policies, configure Websense software components, report on Internet filtering activity, and more.</p> <p>TRITON - Web Security is made up of the following services:</p> <ul style="list-style-type: none"> • Websense - TRITON Web Security • Websense Web Reporting Tools • Websense Explorer Report Scheduler • Websense Information Service for Explorer • Websense Reporter Scheduler <p>See Working in TRITON - Web Security, page 18, for more information.</p> |
| Usage Monitor | <ul style="list-style-type: none"> • Enables alerting based on Internet usage. • Provides Internet usage information to Real-Time Monitor. <p>Usage Monitor tracks URL category access (shown in Real-Time Monitor) and protocol access, and generates alert messages according to the alerting behavior you have configured. See Alerting, page 388, and Real-Time Monitor, page 183, for more information.</p> |
| Content Gateway | <ul style="list-style-type: none"> • Provides a robust proxy and cache platform. • Can analyze the content of Web sites and files in real time to categorize previously uncategorized sites. • Enables protocol management. • Analyzes HTML code to find security threats (for example, phishing, URL redirection, Web exploits, and proxy avoidance). • Inspects file content to assign a threat category (for example, viruses, Trojan horses, or worms). • Strips active content from certain Web pages. <p>See Scanning and SSL Decryption Bypass Options, page 187.</p> |
| Remote Filtering Client | <ul style="list-style-type: none"> • Resides on client machines outside the network firewall. • Identifies the machines as clients to be filtered, and communicates with Remote Filtering Server. <p>See Filter Users Off Site, page 245, for more information.</p> |
| Remote Filtering Server | <ul style="list-style-type: none"> • Allows filtering of clients outside a network firewall. • Communicates with Filtering Service to provide Internet access management of remote machines. <p>See Filter Users Off Site, page 245, for more information.</p> |
| State Server | <p>In multiple Filtering Service environments, tracks client quota, confirm, password override, and account override sessions to ensure that access time is allocated correctly.</p> <p>To enable this functionality, deploy one State Server per Policy Server.</p> |

For information about other components, see:

- ◆ [Reporting components](#), page 367
- ◆ [User identification components](#), page 368
- ◆ [Interoperability components](#), page 369

Reporting components

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| Component | Description |
|--------------------------|---|
| Log Server | <p>Logs Internet request data, including:</p> <ul style="list-style-type: none"> • The request source • The category or protocol associated with the request • Whether the request was permitted or blocked • Whether keyword blocking, file type blocking, quota allocations, bandwidth levels, or password protection were applied <p>With Network Agent and some integration products, Log Server also stores information about the amount of bandwidth used.</p> <p>Log Server is a Windows-only component that must be installed to enable most TRITON - Web Security reporting features.</p> <p>After installing Log Server, configure Filtering Service to pass logging data to the correct location (see Configuring how filtered requests are logged, page 410).</p> |
| Log Database | Stores Internet request data collected by Log Server for use by Websense reporting tools. |
| Real-Time Monitor | <p>Displays current URL filtering activity, including:</p> <ul style="list-style-type: none"> • Request source (user name or IP address) • URL (full or domain only) • Category (Master Database, custom URL, or dynamic, based on Content Gateway scanning) • Whether the request was permitted or blocked • Time of the request <p>Real-Time Monitor is made up of 3 services:</p> <ul style="list-style-type: none"> • Websense RTM Client • Websense RTM Server • Websense RTM Database <p>See Real-Time Monitor, page 183.</p> |
| Multiplexer | <p>When enabled, passes logging data from Filtering Service to:</p> <ul style="list-style-type: none"> • A specified SIEM solution • Log Server <p>Used only when Websense software is integrated with a supported SIEM product. To enable SIEM integration, install one Multiplexer instance per Policy Server.</p> |

For information about other components, see:

- ◆ [Filtering and management components](#), page 364
- ◆ [User identification components](#), page 368
- ◆ [Interoperability components](#), page 369

User identification components

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| Component | Description |
|---------------------|--|
| User Service | <ul style="list-style-type: none"> Communicates with your directory service. Conveys user-related information, including user-to-group and user-to-domain relationships, to Policy Server and Filtering Service, for use in applying filtering policies. <p>If you have installed and configured a Websense transparent identification agent (see Transparent identification, page 295), User Service helps to interpret user logon session information, and uses this information to provide user name-to-IP-address associations to Filtering Service.</p> <p>When you add users and groups as Websense clients (see Adding a client, page 83), User Service provides name and path information from the directory service to TRITON - Web Security.</p> <p>For information about configuring directory service access, see Directory services, page 77.</p> |
| DC Agent | <ul style="list-style-type: none"> Offers transparent user identification for users in a Windows-based directory service. Communicates with User Service to provide up-to-date user logon session information to Websense software for use in filtering. <p>For more information, see DC Agent, page 306.</p> |
| Logon Agent | <ul style="list-style-type: none"> Provides unsurpassed accuracy in transparent user identification in Linux and Windows networks. Does not rely on a directory service or other intermediary when capturing user logon sessions. Detects user logon sessions as they occur. <p>Logon Agent communicates with the logon application on client machines to ensure that individual user logon sessions are captured and processed directly by Websense software.</p> <p>For more information, see Logon Agent, page 311.</p> |

| Component | Description |
|-------------------------|--|
| eDirectory Agent | <ul style="list-style-type: none"> • Works with Novell eDirectory to transparently identify users. • Gathers user logon session information from Novell eDirectory, which authenticates users logging on to the network. • Associates each authenticated user with an IP address, and then works with User Service to supply the information to Filtering Service. <p>For more information, see eDirectory Agent, page 315.</p> |
| RADIUS Agent | <p>Enables transparent identification of users who use a dial-up, Virtual Private Network (VPN), Digital Subscriber Line (DSL), or other remote connection to access the network.</p> <p>For more information, see RADIUS Agent, page 313.</p> |

For information about other components, see:

- ◆ [Filtering and management components](#), page 364
- ◆ [Reporting components](#), page 367
- ◆ [Interoperability components](#), page 369

Interoperability components

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| Component | Description |
|--------------------------|--|
| Directory Agent | In Websense Web Security Gateway Anywhere deployments, collects user and group information from a supported directory service for use in filtering by the hybrid service. |
| Filtering Plug-In | When Websense software is integrated with certain firewall, proxy, cache, or similar products, a filtering plug-in may be installed to enable communication between Filtering Service and the integration. |
| Linking Service | In Websense Web Security Gateway Anywhere deployments, or in environments that combine Websense data and Web security solutions, gives data security software access to Master Database categorization information and user and group information collected by User Service. |
| Sync Service | <p>In Websense Web Security Gateway Anywhere deployments:</p> <ul style="list-style-type: none"> • Sends policy updates and user and group information to the hybrid service. • Receives reporting data from the hybrid service. |

For information about other components, see:

- ◆ [Filtering and management components](#), page 364
- ◆ [Reporting components](#), page 367
- ◆ [User identification components](#), page 368

Understanding the Policy Database

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Related topics:

- ◆ [Working with Policy Server, page 370](#)
- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Policy Server, Filtering Service, and State Server, page 379](#)

Websense Policy Database stores both policy data (including clients, filters, filter components, and delegated administration settings) and global settings configured in TRITON - Web Security. Settings specific to a single Policy Server instance (like its Filtering Service and Network Agent connections) are stored separately.

In multiple Policy Server environments, a single Policy Database holds policy and general configuration data for all Policy Server instances.

1. At startup, each Websense component requests applicable configuration information from the Policy Database via the Policy Broker.
2. Running components frequently check for changes to the Policy Database.
3. The Policy Database is updated each time administrators make changes in TRITON - Web Security and click Save and Deploy.
4. After a change to the Policy Database, each component requests and receives the changes that affect its functioning.

Back up the Policy Database on a regular basis to safeguard important configuration and policy information. See [Backing up and restoring your Websense data, page 397](#), for more information.

Working with Policy Server

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Related topics:

- ◆ [Reviewing Policy Server connections, page 371](#)
- ◆ [Adding or editing Policy Server instances, page 372](#)
- ◆ [Working in a multiple Policy Server environment, page 373](#)
- ◆ [Changing the Policy Server IP address, page 373](#)
- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Policy Server, Filtering Service, and State Server, page 379](#)

Policy Server communicates with Filtering Service to aid in policy enforcement and is responsible for identifying other Websense software components and tracking their location and status.

When you log on to TRITON - Web Security, you are logging onto a graphical interface to Policy Server.

- ◆ You cannot log on to TRITON - Web Security until it is configured to communicate with Policy Server.
- ◆ If your Websense software installation includes multiple Policy Servers, you can switch between Policy Server instances after logging on to TRITON - Web Security.
- ◆ You can add and remove Policy Server instances within TRITON - Web Security.

Communication between TRITON - Web Security and one Policy Server instance is established during TRITON - Web Security installation.

Most environments require only one Policy Server. A single Policy Server can communicate with multiple Filtering Service and Network Agent instances for load balancing. In very large organizations (10,000+ users), however, it may help to install multiple instances of Policy Server. If you install additional Policy Servers, add each instance to TRITON - Web Security (see [Reviewing Policy Server connections](#), page 371).

Reviewing Policy Server connections

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Settings > General > Policy Servers** page to review Policy Server information for all Policy Server instances associated with TRITON - Web Security.

If you have multiple Policy Server instances that share a subscription key, you can create one instance as the primary Policy Server, and the others as secondary Policy Servers. This may save you some time in configuring the Policy Server connections.

To see the secondary Policy Server instances associated with a primary Policy Server in the list, click the “+” symbol next to the Policy Server name or IP address.

For each listed Policy Server, the table shows both a short description and a communication port. Primary Policy Server entries also include the subscription key associated with the instance and its secondaries, as well as the subscription level (for example, Web Security or Web Security Gateway) of the key.

- ◆ Click **Add** to associate an additional Policy Server with this TRITON - Web Security instance. See [Adding or editing Policy Server instances](#), page 372.
- ◆ Click a Policy Server IP address or name to edit configuration information for the selected instance. See [Adding or editing Policy Server instances](#), page 372.

TRITON - Web Security is associated with one Policy Server instance at installation time. This becomes the base Policy Server for the TRITON - Web Security installation, and its IP address and description cannot be changed.

You can, however, change the subscription key associated with the base Policy Server.

- ◆ Mark one or more Policy Server entries and click **Delete** to remove the connection between TRITON - Web Security and the selected Policy Server.

Clicking Delete removes the Policy Server instance from TRITON - Web Security, but does not uninstall or stop the Websense Policy Server service. You cannot delete the base Policy Server instance.

After adding or editing a Policy Server connection, click **OK** on the Policy Servers page to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Adding or editing Policy Server instances

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the Settings > General > **Add Policy Server** or **Edit Policy Server** page to associate a new Policy Server instance with TRITON - Web Security, or to update configuration information for an existing Policy Server.

1. Enter or edit the **IP address or name** and communication **Port** for the Policy Server instance. The default port is **55806**.
2. Enter or update the **Description** of the selected Policy Server instance.
You cannot change the description for the base Policy Server.
3. Indicate whether this is a **Primary** or **Secondary** Policy Server.
 - A primary Policy Server has a different subscription key than other Policy Server instances associated with TRITON - Web Security.
 - A secondary Policy Server uses the same subscription key as another Policy Server that has already been associated with TRITON - Web Security.
4. If this is a **secondary** Policy Server, select the IP address of the primary Policy Server from which the secondary should get its key, and then click **OK** to return to the Policy Servers page.

You must also click **OK** on the Policy Servers page to cache your changes. Changes are not implemented until you click **Save and Deploy**.

5. If this is a **primary** Policy Server, indicate whether to **Use the current subscription key** registered to the new instance or **Enter a subscription key**.
 - If you are editing an existing entry, the current subscription key and subscription type are displayed below the radio buttons.
 - Click **Verify Policy Server** to make sure that TRITON - Web Security can communicate with the new Policy Server. If you have selected “Use the current subscription key,” and the connection is successful, the subscription key is displayed.
 - If you are not sure whether the new Policy Server instance already has a key registered, you can either select the option to enter the key manually, or click **Verify Policy Server** to see if TRITON - Web Security finds an existing key for the instance.

6. Click **OK** to return to the Policy Servers page. You must click **OK** again to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Working in a multiple Policy Server environment

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In some distributed environments with a large number of users, it may be appropriate to install multiple Policy Servers. This entails some special considerations.

- ◆ Because policy information is stored in the Policy Database, policy changes are automatically shared between all Policy Servers when you click **Save and Deploy**.
- ◆ Many global configuration settings (like risk class definitions and alerting options) are also shared between Policy Servers.
- ◆ Configuration settings that are specific to a single Policy Server (like its Filtering Service and Network Agent connections) are stored locally by each Policy Server and not distributed.
- ◆ In order to apply time-based filtering actions (Confirm, Quota, Password Override, or Account Override) correctly, one or more instances of Websense State Server is required. State Server allows the timing information associated with these features to be shared, so that clients are granted exactly the Internet access than you intend (see [Policy Server, Filtering Service, and State Server](#), page 379).

To switch between Policy Server instances in TRITON - Web Security:

1. In the Web Security toolbar, next to the IP address of the current Policy Server, click **Switch**.

If there are unsaved changes to the current Policy Server instance, a warning prompt appears. To remain connected to the current Policy Server so that you can save your changes, click **Cancel**.

2. Select a Policy Server IP address or hostname from the **Connect to** list.
3. Click **OK**.

You are logged onto the selected Policy Server automatically, and the TRITON - Web Security interface is updated.

Changing the Policy Server IP address

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Before changing the IP address of the Policy Server machine, **stop all Websense services** on the machine. If TRITON - Web Security is also installed on the machine, this includes the both the Websense TRITON - Web Security and the Websense Web Reporting Tools services.

After changing the IP address, you must manually update Websense configuration files used by TRITON - Web Security, Policy Server, and other Websense services before filtering resumes.

Step 1: Update TRITON - Web Security configuration

Update TRITON - Web Security to use the new IP address to connect to Policy Server.

1. On the TRITON - Web Security machine, stop the **Websense Web Reporting Tools** and **Websense TRITON - Web Security** services (if necessary).
If TRITON - Web Security and Policy Server are installed on this same machine, these services should already be stopped.
2. Navigate to the following directory:
`websense\Web Security\tomcat\conf\Catalina\localhost\`
3. Locate the **mng.xml** file, and then make a backup copy of the file in another directory.
4. Open **mng.xml** in a text editor (like Notepad or vi) and replace each instance of the old Policy Server IP address with the new one.
The Policy Server IP address appears twice: as the **ps/default/host** value and the **psHosts** value.
5. When you are finished, save and close the file.

Do not restart the TRITON - Web Security services until you have completed the remaining configuration updates in this section.

Step 2: Update Policy Server configuration

Update the Policy Server configuration file, and the initialization file used to configure communication between Websense components.

1. If you have not already done so, stop all Websense services on the Policy Server machine (see [Stopping and starting Websense services, page 385](#)).
2. Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).
3. Locate the **config.xml** file, and then make a backup copy of the file in another directory.
4. Open **config.xml** in a text editor and replace each instance of the old Policy Server IP address with the new one.
5. When you are finished, save and close the file.
6. In the **bin** directory, locate the **websense.ini** file, and then make a backup copy in another directory.
7. Open **websense.ini** in a text editor and replace each instance of the old Policy Server IP address with the new one.
8. When you are finished, save and close the file.

Step 3: Verify the Log Database connection

Use the Windows ODBC Data Source Administrator on the Policy Server machine to verify the ODBC connection to the Log Database.

1. Go to **Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC)**.
2. On the **System DSN** tab, select the appropriate data source name (by default, **wslogdb70**), and then click **Configure**.
3. Verify that the correct database server machine is selected, and then click **Next**.
4. Enter the credentials used to connect to the database, and then click **Next**.
5. Accept the defaults on the next 2 screens, and then click **Test Data Source**.



Note

If the test fails, check the database server machine name and try again.

If the machine name is correct, but the test continues to fail, verify that the correct connection port is being used, and that the firewall allows communication on the selected port.

Step 4: Restart Websense services

1. Reboot the Policy Server machine. Make sure that all Websense services on the machine restart normally.
2. If the TRITON - Web Security used to configure this Policy Server is installed on another machine, restart the **Websense Web Reporting Tools** and **Websense TRITON - Web Security** services on that machine.



Note

If TRITON - Web Security is installed on the same machine as Policy Server, administrators must use the new IP address to log on.

Working with Filtering Service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Review Filtering Service details, page 376](#)
- ◆ [Resuming Master Database downloads, page 377](#)
- ◆ [Policy Server, Filtering Service, and State Server, page 379](#)
- ◆ [Working with Content Gateway, page 382](#)

Filtering Service is the Websense software component that works with Network Agent, Content Gateway, or a third-party integration product to filter Internet activity. When a user requests a site, Filtering Service receives the request, determines which policy applies, and uses the applicable policy to determine how the site is filtered.

Each Filtering Service instance downloads its own copy of the Websense Master Database to use in determining how to filter Internet requests.

If you have multiple Filtering Service instances, an additional component, Websense State Server, is required to enable correct application of time-based filtering actions (Confirm, Quota, Password Override, or Account Override). State Server allows the timing information associated with these features to be shared, so that clients are granted exactly the Internet access that you intend (see [Policy Server, Filtering Service, and State Server, page 379](#)).

Filtering Service also sends information about Internet activity to Log Server, so that it can be recorded and used for reporting.

In TRITON - Web Security, a **Filtering Service Summary** on the System dashboard lists the IP address and current status of each Filtering Service instance associated with the current Policy Server. Click a Filtering Service IP address for more detailed information about the selected Filtering Service.

Review Filtering Service details

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **Status > Dashboard > Filtering Service Details** page to review the status of an individual Filtering Service instance. The page lists:

- ◆ The Filtering Service IP address
- ◆ Whether or not the selected instance is running
- ◆ The Filtering Service version
This should match your Websense software version, including any hotfixes that have been applied.
- ◆ The operating system of the Filtering Service machine
- ◆ The Websense software platform

This indicates whether Websense software is running in standalone mode or integrated with Content Gateway or a third-party product.

- ◆ The IP address and status of any Network Agent instances with which the selected Filtering Service communicates.
- ◆ The IP address and status of any Content Gateway instances with which the selected Filtering Service communicates

Click **Close** to return to the Web Security Dashboard.

Review Master Database download status

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Each Filtering Service instance in your network downloads its own copy of the Master Database. When you are working in TRITON - Web Security, the Health Alert Summary on the System tab of the Status > Dashboard page displays a status message when a Master Database download is in progress, or if a download attempt fails.

For detailed information about recent or ongoing database downloads, click **Database Download** on the Web Security Dashboard toolbar. The Database Download page includes an entry for each Filtering Service instance associated with the current Policy Server.

Initially, the Database Download page displays a quick download summary, showing where the database was downloaded, which database version was downloaded, and whether the download was successful. From this summary view, you can:

- ◆ Initiate a database download for a single Filtering Service (click **Update**).
- ◆ Initiate database downloads for all listed Filtering Service instances (click **Update All**).
- ◆ Cancel one or all ongoing updates.

Click an IP address in the list on the right to review more detailed database download status for the selected Filtering Service.

- ◆ If the selected Filtering Service has encountered download problems, a recommendation for addressing the problem may be displayed.
- ◆ To manually initiate a database download for the selected Filtering Service, click **Update**.

During database download, the status screen shows detailed progress information for each stage of the download process. Click **Close** to hide progress information and continue working in TRITON - Web Security.

Resuming Master Database downloads

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If a Master Database download is interrupted, Websense software attempts to resume the download automatically. If Filtering Service is able to reconnect to the download server, the download resumes from where it was interrupted.

You can manually restart a failed or interrupted download. This does not resume the download from the point of interruption, but instead restarts the process from the beginning.

1. In TRITON - Web Security, go to **Status > Dashboard** and click **Database Download**.
2. Click **Stop All Updates** to stop the interrupted process.
3. Select a Filtering Service instance and click **Update**, or click **Update All**, to restart the download process from the beginning.

Filtering Service support for YouTube in Schools

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Educational institutions with a software deployment of Websense Web Security or Web Filter can use a Filtering Service configuration parameter to enable YouTube for Schools. This YouTube service provides access to educational videos from inside the school network, even when other YouTube content is blocked.



Note

In Web Security Gateway and Gateway Anywhere software or appliance deployments, you can enable YouTube for Schools via Content Gateway, rather than via Filtering Service.

Once you have enrolled in the program and received a school account code or ID, first:

- ◆ In TRITON - Web Security, navigate to the **Settings > General > Filtering** page, and verify that **Enable search filtering** is selected at the bottom of the page.
You must enable search filtering to use the YouTube in Schools feature.
If search filtering was not previously enabled, click **OK** and **Save and Deploy** to cache and implement the change.
- ◆ Make sure that the YouTube is permitted for the clients that will be granted YouTube in Schools access.

When that configuration is complete, perform the following steps for each Filtering Service instance in your deployment:

1. Navigate to the Websense **bin** directory on the Filtering Service machine (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin\ or /opt/WebSense/bin/, by default).
2. Make a backup copy of the **eimserver.ini** file in another location.
3. Open the original **eimserver.ini** file and add the following lines:

```
[SafeSearchCustomValues]
YouTubeEDUFilter=<school_account_code>
```

Replace <school_account_code> with the actual code or ID received from YouTube.

4. Save and close the file.
5. Restart Filtering Service:
 - Windows: Use the Services dialog box to restart **Websense Filtering Service**.
 - Linux: Use the `/opt/Websense/WebsenseDaemonControl` command to restart **Filtering Service**.

Policy Server, Filtering Service, and State Server

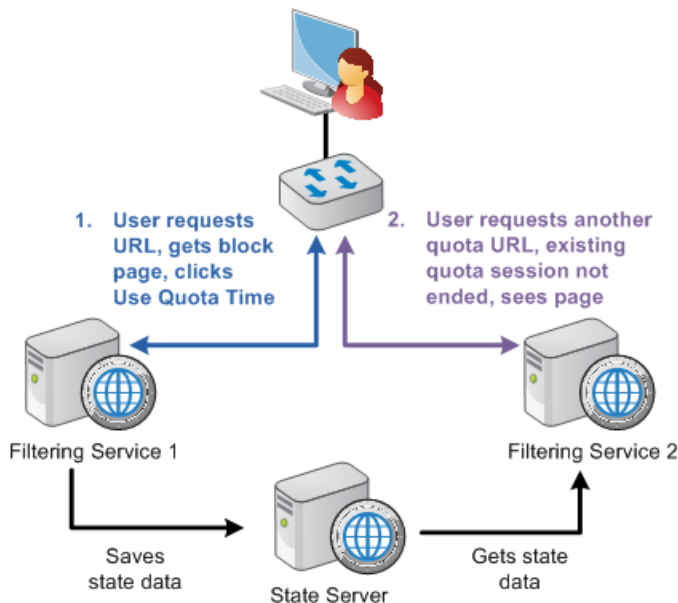
TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with Policy Server, page 370](#)
- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Filtering actions, page 57](#)
- ◆ [Password override, page 86](#)
- ◆ [Account override, page 86](#)

If your deployment includes multiple instances of Filtering Service that might handle a request from the same user, an optional component, **Websense State Server**, can be installed to enable proper application of time-based filtering actions (Quota, Confirm) or overrides (Password Override, Account Override).

When State Server is installed, it allows its associated Filtering Service instances to share timing information, so users receive the correct allotment of quota, confirm, or override session time.

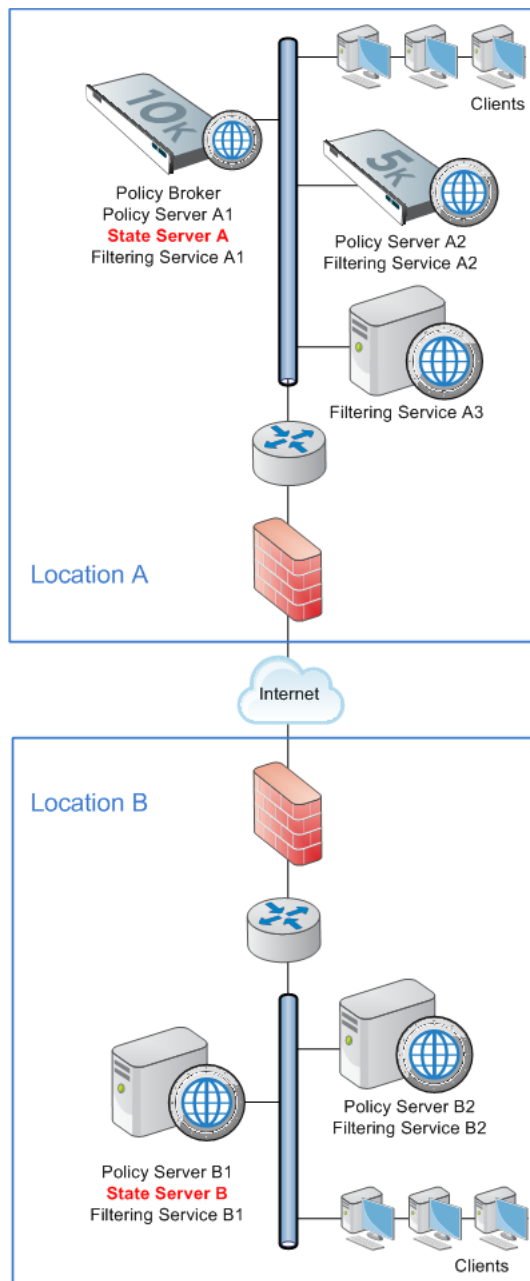


State Server is typically installed on a Policy Server machine, and only one State Server instance is required per **logical deployment**. A logical deployment is any group of Policy Server and Filtering Service instances that might handle requests from the same set of users.

- ◆ All Filtering Service instances that communicate with the same State Server instance must share the same time zone, and the time on all machines must be in synch.
- ◆ Each Filtering Service instance can communicate with only one State Server.
- ◆ All Filtering Service instances associated with the same Policy Server must communicate with the same State Server.
- ◆ Multiple Policy Server instances can share a single State Server.

Configure which State Server instance a Policy Server communicates with on the **Settings > General > Filtering** page in TRITON - Web Security (see [Configuring Websense filtering settings](#), page 68).

In a geographically dispersed organization, where each location has its own Policy Server and Filtering Service instances, deploy one State Server instance (on the Policy Server machine or V-Series appliance) at each location. For example:



In an organization where all requests are filtered through a central location, only one State Server instance is needed.

Integrating with a third-party SIEM solution

Use the **Settings > General > SIEM Integration** page to configure Websense software to send log data from Filtering Service to a supported Security Information and Event Management (SIEM) solution.

Before using this page to enable SIEM integration, make sure an instance of Websense Multiplexer is installed for each Policy Server in your deployment.

Perform these steps for each Policy Server instance in your deployment.

1. Select **Enable SIEM integration for this Policy Server** to turn on the SIEM integration feature.
2. Provide the **IP address or hostname** of the machine hosting the SIEM product, as well as the communication **Port** to use for sending SIEM data.
3. Specify the **Transport protocol** (UDP or TCP) to use when sending data to the SIEM product.
4. Select the **SIEM format** to use. This determines the syntax of the string used to pass log data to the integration.
 - The available formats are syslog/CEF (Arcsight), syslog/key-value pairs (Splunk and others), syslog/LEEF (QRadar), and Custom.
 - If you select Custom, a text box is displayed. Enter or paste the string that you want to use. Click **View SIEM format strings** for a set of sample strings to use as a reference or template.
 - If you select a non-custom option, a sample **Format string** showing fields and value keys is displayed.
5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

When you save your changes, Websense Multiplexer connects to Filtering Service and takes over the job of distributing log data to both Log Server and the selected SIEM integration.

Note that although the same data is passed from Filtering Service to both Log Server and the SIEM product, Log Server may be configured to perform data reduction processing tasks (like recording visits instead of hits, or consolidating log records). Because the SIEM product does not perform these data reduction tasks, there may be more SIEM entries than records in the Log Database.

Working with Content Gateway

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Working with Filtering Service, page 376](#)
- ◆ [Working with Policy Server, page 370](#)
- ◆ [Managing Content Gateway connections, page 383](#)

Content Gateway is a Linux-only Websense software component that provides high-performance Web proxy services in Websense Web Security Gateway and Gateway Anywhere deployments. Content Gateway is also used as a proxy by Websense Data Security and Email Security Gateway solutions.

In Websense Web Security Gateway and Gateway Anywhere deployments, Content Gateway provides:

- ◆ Real-time content scanning and Web site classification to protect the network from malicious Web content. This is especially valuable for Web 2.0 sites, whose multiple sources and dynamic nature limit the usefulness of static categorization.
- ◆ Advanced file scanning to discover and block infected and malicious files from being uploaded or downloaded
- ◆ Detection of inbound and outbound protocols tunneled over HTTP and HTTPS and apply protocol filtering

Content Gateway works with Filtering Service to filter Internet requests based on both:

- ◆ Static categorization by the Master Database or custom URL definitions
- ◆ Dynamic recategorization resulting from content scanning and analysis

At installation, Content Gateway establishes communication with a Policy Server instance. This connection:

- ◆ Allows Policy Server to pass subscription key information to Content Gateway, mitigating the need to maintain keys in 2 management consoles
- ◆ Provides TRITON - Web Security with information about Filtering Service connections to Content Gateway
- ◆ Is used to populate the Settings > General > Content Gateway Access page in TRITON - Web Security, and makes it possible to launch Content Gateway Manager from within TRITON

Managing Content Gateway connections

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Use the **Settings > General > Content Gateway Access** page to review configuration and status information for Content Gateway instances associated with the current Policy Server, or to launch Content Gateway Manager for a selected instance.

When a Content Gateway instance is registered with a Policy Server, the Content Gateway Access page is automatically updated with IP address, host name, and status information for that Content Gateway. This information appears in one of 3 tables:

- ◆ If the Content Gateway is part of a cluster, a table is displayed with the cluster name as its title. All Content Gateway instances in the cluster are listed. If there are multiple clusters, multiple tables will appear.
- ◆ If the Content Gateway is not clustered, it is shown in the Unclustered Content Gateway instances table.

- ◆ If Policy Server cannot communicate with a Content Gateway instance, it appears in the Not Responding table. This table is only displayed when Policy Server cannot communicate with a registered Content Gateway instance.

To launch Content Gateway Manager for any listed instance, click the corresponding link in the **IP Address** column of the table.

To update the description of an instance, to make it easier to manage Content Gateway connections, mark the radio button next to an instance IP address and click **Edit Description**.

If a Content Gateway instance appears in the **Not Responding** table because the instance has been uninstalled or relocated, mark the radio button next to the instance name and click **Delete**.

After editing Content Gateway descriptions or deleting obsolete entries, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Viewing and exporting the audit log

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Websense software provides an audit trail showing which administrators have accessed TRITON - Web Security, as well as any changes made to policies and settings. This information is available only to Super Administrators who are granted policy permissions (see [Super Administrator permissions](#), page 336).

Delegated administrators have significant control over the Internet activities of their managed clients. Monitoring their changes through the audit log enables you to ensure that this control is handled responsibly and in accordance with your organization's acceptable use policies.

Use the **Status > Audit Log** page to view the audit log, and to export selected portions of it to an Excel spreadsheet (XLS) file, if desired.

Audit records are saved for 60 days. To preserve audit records longer than 60 days, use the export option to export the log on a regular basis. Exporting does not remove records from the audit log.

When the Audit Log page opens, the most recent records are shown. Use the scroll bar and the paging buttons above the log to view older records.

The log displays the following information. If an item is truncated, click the partial entry to display the full record in popup window.

| Column | Description |
|--------|---|
| Date | Date and time of the change, adjusted for time zones. To assure consistent data in the audit log, be sure all machines running Websense components have their date and time settings synchronized. |
| User | User name of the administrator who made the change. |

| Column | Description |
|----------|--|
| Server | IP address or name of machine running the Policy Server affected by the change. This appears only for changes that affect the Policy Server, such as changes made on the Settings tab. |
| Role | Delegated administration role affected by the change. When a change affects a client explicitly assigned as a managed client in the delegated administrator's role, that change shows as affecting the Super Administrator role. If the change affects a client that is a member of a network range, group, domain or organizational unit assigned to the role, the change shows as affecting the delegated administrator's role. |
| Type | Configuration element that was changed, such as policy, category filter, or logon/logoff. |
| Element | Identifier for the specific object changed, such as the category filter name or role name. |
| Action | Type of change made, such as add, delete, change, log on, and so on. |
| Previous | Value before the change. |
| Current | New value after the change. |

Not all items are shown for all records. For example, the role is not displayed for logon and logoff records.

To export audit log records:

1. Select a time period from the **Export range** list.
Choose **Last 60 days** to export the entire audit log file.
2. Click **Go**.
If Microsoft Excel is installed on the machine running TRITON - Web Security, the exported file opens. Use options in Excel to save or print the file.
If Microsoft Excel is not installed on the machine running TRITON - Web Security, follow the on-screen instructions to either locate the software or save the file.

Stopping and starting Websense services

Websense services are configured to start each time the machine restarts. However, in some cases you need to stop or start one or more product components separately from a machine restart.

**Note**

If Filtering Service is in the process of downloading the Master Database, it does not stop running until the download is complete.

When you stop **all Websense services**, always end with the policy services, in the order shown:

1. Websense Policy Server
2. Websense Policy Broker
3. Websense Policy Database

Note that unless a problem specifically pertains to Policy Broker or the Policy Database, it is rarely necessary to restart these services. Avoid restarting these services when possible.

When you start all Websense services, always start with the policy services, in the reverse of the shutdown order (starting with Policy Database and ending with Policy Server).

When you stop the services associated with **Real-Time Monitor**:

- ◆ Also stop the TRITON - Web Security services (Websense TRITON - Web Security and Websense Web Reporting Tools).
- ◆ Stop the Real-Time Monitor services in the order shown:
 1. Websense RTM Client
 2. Websense RTM Server
 3. Websense RTM Database

Start the Real-Time Monitor services in the reverse of shutdown order (starting with RTM Database and ending with RTM Client).

Windows

1. Open the Windows Services dialog box (**Start > Settings > Control Panel > Administrative Tools > Services**).
2. Right-click the Websense service name, and then select **Stop** or **Start**.

Linux

On Linux machines, there are 2 tools that can be used to stop and start daemons:

- ◆ The **WebsenseAdmin** script starts, stops, and restarts **all** daemons on the machine.
- ◆ The **WebsenseDaemonControl** script starts and stops **individual** daemons.

**Warning**

Do not use the **kill** command to stop a Websense service, as it may corrupt the service.

To use the WebsenseAdmin script to start or stop all daemons:

1. Go to the **/opt/Websense** directory.
2. Check the status of the Websense services with the following command:

```
./WebsenseAdmin status
```
3. Stop, start, or restart all Websense services with the commands:

```
./WebsenseAdmin stop  
./WebsenseAdmin start  
./WebsenseAdmin restart
```

To use the WebsenseDaemonControl script to start or stop a daemon:

1. Go to the **/opt/Websense** directory.
2. Enter the following command:

```
./WebsenseDaemonControl
```

A list of installed components is displayed, showing whether each process is running or stopped.
3. Enter the letter associated with a component to start or stop the associated process. To refresh the list, enter **R**.
4. When you are finished, enter **Q** or **X** to exit the tool.

V-Series appliance

On Websense V-Series appliances, use Appliance Manager to stop, start, and restart Websense services.

To restart services:

1. Go to the Status > General page. This page is displayed by default when you log on to Appliance Manager.
2. Scroll to the Network Agent section and click **Restart Module**.
3. When the Network Agent module has restarted, go to the Web Security section and click **Restart Module**.

To stop the services (perhaps while performing a maintenance task):

1. Scroll to the Network Agent section of the Status > General page and click **Stop Services**.

2. In the Websense Web Security section, also click **Stop Services**.
3. When you are ready start the services again:
 - a. Go to the Websense Web Security section and click **Start Services**.
 - b. Go to the Network Agent section and click **Start Services**.

Websense Web Security installation directories

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The Websense Web Security installation directory depends on the machine operating system, the operating system version, and whether you have a new installation or have upgraded existing components.

On **Windows** machines, the default installation directories are:

- ◆ For components on 32-bit platforms:
`C:\Program Files\Websense\Web Security\`
- ◆ For components on 64-bit platforms:
`C:\Program Files (x86)\Websense\Web Security\`

On **Linux** machines, the default installation directory is:

`/opt/Websense/`

Alerting

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Related topics:

- ◆ [Flood control, page 389](#)
- ◆ [Configuring general alert options, page 389](#)
- ◆ [Configuring system alerts, page 391](#)
- ◆ [Configuring category usage alerts, page 392](#)
- ◆ [Configuring protocol usage alerts, page 393](#)

To facilitate tracking and management of both Websense software and client Internet activity, Super Administrators can configure alerts to be sent when selected events occur.

- ◆ **System alerts** notify administrators of Web Security events relating to subscription status and Master Database activity, as well as Content Gateway events, including loss of contact to a domain controller, log space issues, and more.

- ◆ **Usage alerts** notify administrators when Internet activity for selected categories or protocols reaches configured thresholds.
Usage alerts can be generated for both Websense-defined and custom categories or protocols.
- ◆ **Suspicious activity alerts** notify administrators when threat-related events of a selected severity level reach configured threshold.

All alerts can be sent to selected recipients via email or SNMP.

Flood control

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Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Configuring general alert options, page 389](#)

There are built-in controls for usage alerts to avoid generating excessive numbers of alert messages. Use the **Maximum daily alerts per usage type** setting to specify a limit for how many alerts are sent in response to user requests for particular categories and protocols. See [Configuring general alert options, page 389](#), for more information.

You can also set threshold limits for each category and protocol usage alert, and for each suspicious activity alert. For example, if you set a threshold limit of 10 for a certain category, an alert is generated after 10 requests for that category (by any combination of clients). See [Configuring category usage alerts, page 392](#), and [Configuring protocol usage alerts, page 393](#), for more information.

Suppose that the maximum daily alerts setting is 20, and the category alert threshold is 10. Administrators are only alerted the first 20 times category requests exceed the threshold. That means that only the first 200 occurrences result in alert messages (threshold of 10 multiplied by alert limit of 20).

Configuring general alert options

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Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Configuring system alerts, page 391](#)
- ◆ [Configuring category usage alerts, page 392](#)
- ◆ [Configuring protocol usage alerts, page 393](#)
- ◆ [Configuring suspicious activity alerts, page 395](#)

Websense software can notify administrators of various kinds of system events, as well as Internet usage or suspicious activity that exceeds defined thresholds

Use the **Settings > Alerts > Enable Alerts** page to specify flood control settings, and to enable and configure one or more alerting notification methods. After enabling alerting on this page, use the other pages in the Settings > Alerts section to specify which alerts you want to receive.

1. Under Alert Limits per 24 Hours, enter a number to specify the **Maximum daily alerts per type** to be generated for each category usage, protocol usage, and suspicious activity alert.

For example, you might configure a category usage alert to be sent every 5 times (threshold) someone requests a site in the Sports category. Depending on the number of users and their Internet use patterns, that could generate hundreds of alerts each day.

If the maximum daily alerts per type is 10, administrators would receive alerts about the first 50 requests for Sports sites on a specific day (5 requests per alert multiplied by 10 alerts), but no alerts for subsequent requests for the category on the same day.

2. Mark **Enable email alerts** to deliver alerts and notifications by email. Then, configure these email settings.

| | |
|----------------------------------|--|
| SMTP server IPv4 address or name | IPv4 address or hostname for the SMTP server through which email alerts should be routed. |
| From email address | Email address to use as the sender for email alerts. |
| Administrator email address (To) | Email address of the primary recipient of email alerts. |
| Recipient email addresses (Cc) | Email address for up to 50 additional recipients. Each address must be on a separate line. |

3. Mark **Enable SNMP alerts** to deliver alert messages through an SNMP Trap system installed in your network. Then, provide information about your SNMP Trap system.

| | |
|--------------------------|---|
| Community name | Name of the trap community on your SNMP Trap server. |
| IPv4 address or hostname | The IPv4 address or hostname of the SNMP Trap server. |
| Port | Port number SNMP messages use. The default is 162. |

4. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring system alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Configuring general alert options, page 389](#)
- ◆ [Reviewing current system status, page 396](#)

TRITON - Web Security displays detailed system health and status information via the **Status > Alerts** page, described in [Reviewing current system status, page 396](#).

To assure that administrators are notified of significant system events, configure Websense system alerts to be distributed by email via SNMP trap.

Websense Web Security Gateway and Gateway Anywhere administrators have the option to enable system alerts for both Web Security events (related to subscription and database download issues) and Content Gateway events for a variety of issues.

Use the **Settings > Alerts > System** page to specify which alerts to send, and select the methods used to send each notification.

To enable an alert, mark one or more check box to the right of the message summary to indicate how to notify administrators. Depending on what methods are enabled on the Enable Alerts page, you may be able to choose **Email**, **SNMP**, or a combination.

To disable an alert, clear all check boxes to the right of the message summary.

All alerts are enabled, by default. If you have provided SMTP information for email notifications, 4 Web Security events cannot be disabled:

- ◆ A Websense Master Database download failed.
- ◆ The number of current users exceeds your subscription level.
- ◆ Your subscription expires in one month.
- ◆ Your subscription expires in one week.

There are also 3 optional alerts:

- ◆ The number of current users has reached 90% of your subscription level.
- ◆ The search engines supported by Search Filtering have been changed.
- ◆ The Websense Master Database has been updated.

In Websense Web Security Gateway and Gateway Anywhere environments, you have the option to enable the following additional system alerts:

- ◆ A domain controller is down.
- ◆ A scanning database download failed.
- ◆ Decryption and inspection of secure content has been disabled.
- ◆ Log space is critically low.

- ◆ Subscription information could not be retrieved.
- ◆ The connection limit is approaching, and connections will be dropped.
- ◆ Non-critical alerts have been received. (See [Content Gateway non-critical alerts](#), page 509, for information about conditions that can trigger this alert.)

When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring category usage alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting](#), page 388
- ◆ [Flood control](#), page 389
- ◆ [Configuring general alert options](#), page 389
- ◆ [Adding category usage alerts](#), page 393

Websense software can notify you when Internet activity for particular URL categories reaches a defined threshold. You can define alerts for permitted requests or for blocked requests to the category.

For example, you might want to be alerted each time 50 requests for sites in the Shopping category have been permitted to help decide whether to place restrictions on that category. Or, you might want to receive an alert each time 100 requests for sites in the Entertainment category have been blocked, to see whether users are adapting to a new Internet use policy.

Use the **Settings > Alerts > Category Usage** page to view the alerts that have already been established, and to add or delete usage alert categories.

1. View the **Permitted Category Usage Alerts** and **Blocked Category Usage Alerts** lists to learn which categories are configured for alerts, the threshold for each, and the selected alert methods.
2. Click **Add** below the appropriate list to open the Add Category Usage Alerts page (see [Adding category usage alerts](#), page 393) and configure additional URL categories for alerting.
3. Mark the check box for any categories you want to delete from its list, and then click **Delete** below the appropriate list.
4. When you are finished, click **OK** to cache your changes and return to the Category Usage page. Changes are not implemented until you click **Save and Deploy**.

Adding category usage alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Configuring general alert options, page 389](#)
- ◆ [Configuring category usage alerts, page 392](#)

The **Add Category Usage Alerts** page appears when you click Add on the Category Usage page. Here, you can select new categories for usage alerts, establish the threshold for these alerts, and select the alert methods.

1. Mark the check box beside each category to be added with the same threshold and alert methods.



Note

You cannot add usage alerts for any category that is excluded from logging. See [Configuring how filtered requests are logged, page 410](#).

2. Set the **Threshold** by selecting the number of requests that cause an alert to be generated.
3. Mark the check box for each desired alert method (**Email, SNMP**) for these categories.
Only the alert methods that have been enabled on the Alerts page (see [Configuring general alert options, page 389](#)) are available for selection.
4. Click **OK** to cache your changes and return to the Category Usage page (see [Configuring category usage alerts, page 392](#)). Changes are not implemented until you click **Save and Deploy**.

Configuring protocol usage alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Flood control, page 389](#)
- ◆ [Configuring general alert options, page 389](#)
- ◆ [Adding protocol usage alerts, page 394](#)

Websense software can notify you when Internet activity for a particular protocol reaches a defined threshold. You can define alerts for permitted or blocked requests for the selected protocol.

For example, you might want to be alerted each time 50 requests for a particular instant messaging protocol are permitted to help decide whether to place restrictions on that protocol. Or, you might want to receive an alert each time 100 requests for a particular peer-to-peer file sharing protocol have been blocked, to see whether users are adapting to a new Internet use policy.

On the Settings tab, use the **Alerts > Protocol Usage** page to view the alerts that have already been established, and to add or delete protocols for usage alerts.

1. View the **Permitted Protocol Usage Alerts** and **Blocked Protocol Usage Alerts** lists to learn which protocols are configured for alerts, the threshold for each, and the selected alert methods.
2. Click **Add** below the appropriate list to open the Add Protocol Usage Alerts page (see [Adding protocol usage alerts, page 394](#)) and configure additional protocols for alerting.
3. Select the check box for any protocols you want to delete, and then click **Delete** under the appropriate list.
4. When you are finished, click **OK** to cache your changes and return to the Protocol Usage page. Changes are not implemented until you click **Save and Deploy**.

Adding protocol usage alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting, page 388](#)
- ◆ [Configuring general alert options, page 389](#)
- ◆ [Configuring protocol usage alerts, page 393](#)

Use the **Protocol Usage > Add Protocol Usage Alerts** page to select new protocols for usage alerts, establish the threshold for these alerts, and select the alert methods.

1. Mark the check box beside each protocol to be added with the same threshold and alert methods.



Notes

You cannot select a protocol for alerting unless it is configured for logging in one or more protocol filters.

Protocol alerts only reflect usage by clients governed by a protocol filter that logs the protocol.

2. Set the **Threshold** by selecting the number of requests that cause an alert to be generated.
3. Select each desired alert method (**Email**, **SNMP**) for these protocols.
Only the alert methods that have been enabled on the Alerts page (see [Configuring general alert options](#), page 389) are available for selection.
4. Click **OK** to cache changes and return to the Protocol Usage page (see [Configuring protocol usage alerts](#), page 393). Changes are not implemented until you click **Save and Deploy**.

Configuring suspicious activity alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Alerting](#), page 388
- ◆ [Flood control](#), page 389
- ◆ [Configuring general alert options](#), page 389

Websense software can notify you when suspicious activity of a specified severity level reaches a defined threshold. You can define alerts for permitted requests and blocked requests of each severity level.

Because Content Gateway is required to detect critical and high severity alerts, it is not possible to configure alerting for those severity levels in Websense Web Security and Websense Web Filter deployments.

Use the **Settings > Alerts > Suspicious Activity** page to enable, disable, or change alerting configuration for alerts associated with suspicious events in your network. Detailed information about these events is displayed on the Threats dashboard.

The page displays 2 tables: **Permitted Suspicious Activity Alerts** and **Blocked Suspicious Activity Alerts**. Each table shows:

- ◆ The **Severity** level to be configured. The 4 severity levels are critical, high, medium, and low. Severity level is determined by the threat category associated with the alert. See [How severity is assigned to suspicious activity](#), page 39, for more information.
- ◆ The alerting **Threshold**. By default, the threshold for critical and high severity alerts, both permitted and blocked, is **1**.
- ◆ One or more notification methods. Suspicious activity alerts can be sent via **Email**, **SNMP**, or both.
- ◆ Whether or not the alert is **Enabled**. A green check mark indicates that alerts are being generated for suspicious activity of the selected severity. A red “X” indicates that alerting is disabled for the selected severity.

To update suspicious activity alert settings, you can:

1. Mark the check box to the left of a severity level, then click **Enable** or **Disable** to activate or stop alerts of the selected type.
2. For enabled alerts, enter a number in the **Threshold** field to specify the number of suspicious events that cause an alert to be generated.
3. Select each notification method (**Email**, **SNMP**) to use to deliver suspicious activity alerts.
Only alert methods that have been enabled on the Enable Alerts page (see [Configuring general alert options](#), page 389) are available for selection.
4. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Reviewing current system status

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Use the **Status > Alerts** page to find information about problems affecting the health of your Websense software, get troubleshooting help, and review the details of recent real-time updates to the Websense Master Database.

The **Active Alerts** list shows the status of monitored Websense software components.

- ◆ For detailed information about which components are monitored, click **What is monitored?** above the list of alert messages.
- ◆ To troubleshoot a problem, click the **Solutions** button next to the error or warning message.
- ◆ To hide an alert message, click **Hide Persistent Alerts**. If your organization does not use Log Server, Network Agent, or User Service, or if you do not plan to enable WebCatcher, mark the appropriate check box in the **Hide Alert** column of the table. Alerts associated with the selected service are no longer displayed.

The **Real-Time Database Updates** list provides information about emergency updates to the Websense Master Database, showing:

- ◆ When the update occurred
- ◆ The update type
- ◆ The new database version number
- ◆ The reason for the update
- ◆ The IP address of the Filtering Service instance that received the update

These supplemental updates occur in addition to regular, scheduled Master Database updates, and can be used, for example, to recategorize a site that has been temporarily miscategorized. Websense software checks for database updates every hour.

For Websense Web Security users, the Alerts page includes a third list: **Real-Time Security Updates**. This list has the same format as the Real-Time Database Updates list, but specifically shows security-related database updates.

Installing security updates as soon as they are created eliminates vulnerability to threats such as new phishing (identity fraud) scams, rogue applications, or malicious code infecting a mainstream Web site or application.

For more information about Real-Time Security Updates, see [Real-Time Security Updates™](#), page 28.

Use the **Print** button, above the page, to open a secondary window with a printable version of the Alerts area. Use browser options to print this page, which omits all the navigation options found in the main TRITON - Web Security window.

Backing up and restoring your Websense data

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Running immediate backups](#), page 401
- ◆ [Maintaining the backup files](#), page 402
- ◆ [Restoring your Websense data](#), page 403
- ◆ [Discontinuing scheduled backups](#), page 404
- ◆ [Command reference](#), page 404

The Websense Backup Utility makes it easy to back up your Websense software settings and policy data, and to revert to a previous configuration. Data saved by the utility can also be used to import Websense configuration information after an upgrade.



Important

Make sure that all administrators log off of TRITON - Web Security before you back up or restore your configuration.

The Backup Utility saves:

- ◆ Global configuration information, including client and policy data, stored in the Policy Database.
- ◆ Local configuration information, such as Filtering Service and Log Server settings, stored by each Policy Server.
- ◆ Websense component initialization and configuration files.

The backup process works as follows:

1. You initiate an immediate backup (see [Running immediate backups](#), page 401) or define a backup schedule (see [Scheduling backups](#), page 399).

- Manually launch a backup at any time.
 - Backup files are stored in a directory you specify when you run or schedule the backup.
2. The Backup Utility checks all Websense components on the machine, collects the data eligible for backup, and creates an archive file. The file name is given the format:

```
wsbackup_<yyyy-mm-dd_hhmmss>.tar.gz
```

Here, <yyyy-mm-dd_hhmmss> represents the date and time of the backup. **tar.gz** is a portable compressed file format.

Only root (Linux) and members of the Administrators group (Windows) can access the backup files.

Run the Websense Backup Utility on each machine that includes Websense components. The tool identifies and saves any of the following files that it finds on the current machine:

| Path | File name |
|---|---|
| \Program Files or Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin | authserver.ini BrokerService.cfg config.xml eimserver.ini LogServer.ini netcache.conf securewispproxy.ini transid.ini upf.conf websense.ini WebUI.ini wsauthserver.ini wscitrix.ini WSE.ini wsedir.ini wsradius.ini wsufpserver.ini |
| bin/i18n | i18n.ini |
| bin/postgres/data | postgresql.conf pg_hba.conf |
| BlockPages/*/Custom | All custom block page settings |
| tomcat/conf/Catalina/Localhost | mng.xml |
| Windows\system32 | isa_ignore.txt ignore.txt |

Store Websense backup files in a safe and secure location. These files should be part of your organization's regular backup procedures.

To revert to an earlier configuration:

1. Retrieve the backup files from their storage site.
2. Copy each backup file to the Websense machine on which it was created.

**Important**

Do not attempt to use a backup file created on one operating system platform to restore configuration to an installation on another platform.

For example, do not attempt to restore a backup file created on Linux to a Windows machine.

3. Run the Backup Utility in restore mode.

**Important**

Always use the Backup Utility to restore a Websense software configuration. Do not extract the files from the archive using other extraction utilities.

If the backup file is corrupted, you will not be able to restore your settings.

During the restore process, any error messages or warnings are displayed on the machine where the restore is being run.

Scheduling backups

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Related topics:

- ◆ [Running immediate backups, page 401](#)
- ◆ [Maintaining the backup files, page 402](#)
- ◆ [Restoring your Websense data, page 403](#)
- ◆ [Discontinuing scheduled backups, page 404](#)
- ◆ [Command reference, page 404](#)

Notify Websense administrators of the backup schedule, so that they can be sure to log out of TRITON - Web Security during the backup process.

To schedule backups:

- ◆ Windows:

1. Open a command prompt and navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin, by default).
2. Enter the following command.

```
wsbackup -s -t "<m> <h> <day_of_month> <month>
<day_of_week>" -d <directory>
```

Note that the time information uses **crontab** format, and the straight quotation marks and spaces are required.

◆ Linux:

1. Open a command shell and navigate to the **Websense** directory (/opt/Websense/, by default).
2. Enter the following command:

```
./WebsenseTools -b -s -t "\"<m> <h> <day_of_month>
<month> <day_of_week>\"" -d <directory>
```

In addition to the \" characters at the beginning and end of the entire time and date string, if the string includes any asterisk characters (*), those must also be set off by a \" pair. For example:

```
./WebsenseTools -b -s -t "\"45 1 \"*\" \"*\" 5\""
```

Here, the backup is scheduled to run at 1:45 a.m. on Fridays (regardless of the month or date).

In place of the variables shown in the example, provide the following information:

| Variable | Information |
|----------------|---|
| <m> | 0 - 59 Specify the precise minute to start the backup. |
| <h> | 0 - 23 Specify the general hour of the day to start the backup. |
| <day_of_month> | 1 - 31 Specify the date to perform the backup. If you schedule a backup for days 29 - 31, the utility uses the standard substitution procedure for the operating system in months that do not include that date. |
| <month> | 1 - 12 Specify the month to perform the backup. |
| <day_of_week> | 0 - 6 Specify a day of the week. 0 represents Sunday. |

Each field can take a number, an asterisk, or a list of parameters. Refer to any **crontab** reference for details.

Running immediate backups

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Maintaining the backup files](#), page 402
- ◆ [Restoring your Websense data](#), page 403
- ◆ [Discontinuing scheduled backups](#), page 404
- ◆ [Command reference](#), page 404

Before running the Backup Utility, make sure that all administrators are logged out of TRITON - Web Security.

To launch an immediate backup:

- ◆ Windows:
 1. Open a command prompt and navigate to the **Websense bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin, by default).
 2. Enter the following command.

```
wsbackup -b -d <directory>
```
- ◆ Linux:
 1. Open a command shell and navigate to the **Websense** directory (/opt/Websense/, by default).
 2. Enter the following command:

```
./WebsenseTools -b -b -d <directory>
```

Here, <directory> indicates the destination directory for the backup archive.



Warning

Do not store backup files in the Websense **bin** directory. This directory is deleted if you uninstall your Websense software.

When you initiate an immediate backup, any error messages and notifications are displayed on the console of the machine running the backup.

Maintaining the backup files

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Running immediate backups](#), page 401
- ◆ [Restoring your Websense data](#), page 403
- ◆ [Discontinuing scheduled backups](#), page 404
- ◆ [Command reference](#), page 404

When you perform a backup, a configuration file (**WebsenseBackup.cfg**) is created and stored with the backup archive. This configuration file specifies:

- ◆ How long to keep the backup archive in the backup directory
- ◆ The maximum amount of disk space that may be consumed by all backup files in the directory

Edit the **WebsenseBackup.cfg** file in any text editor to change either of these parameters:

| Parameter | Value |
|-----------|---|
| KeepDays | <p>Number of days archive files should remain in the backup directory. The default is 365.</p> <p>Any files older than the KeepDays value are deleted from the backup directory. If the amount of allotted disk space is exceeded, the oldest files are deleted from the backup directory to make room for newer files.</p> |
| KeepSize | <p>Number of bytes allotted for backup files. The default is 10857600.</p> <p>The KeepSize parameter is not applied until there are multiple backup files in the directory. The size of the last (most recent) backup file is not affected by this setting. (In other words, if the most recent backup file is larger than the KeepSize limit, it will be the only file in the directory, but it will not be truncated.)</p> |

Note that by default, one or both of these parameters may be commented out when the default configuration file is created. If you customize the value of either parameter, and there is a “#” character at the start of the line, delete the “#” to enable your changes.

Restoring your Websense data

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Running immediate backups](#), page 401
- ◆ [Maintaining the backup files](#), page 402
- ◆ [Discontinuing scheduled backups](#), page 404
- ◆ [Command reference](#), page 404

When you restore Websense configuration data, make sure that you are restoring data for the components that exist on the current machine. Also make sure that all administrators are logged off of TRITON - Web Security.

If you run the restore process on the Policy Broker machine, once the restore is complete, restart all Websense services in your deployment. This includes the services on and off the Policy Broker machine.

To initiate the restore process:

- ◆ Windows:
 1. Open a command prompt and navigate to the **Websense bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin, by default).
 2. Enter the following command:

```
wsbackup -r -f archive_file.tar.gz
```
- ◆ Linux:
 1. Open a command shell and navigate to the **Websense** directory (/opt/Websense/, by default).
 2. Enter the following command:

```
./WebsenseTools -b -r -f archive_file.tar.gz
```



Important

The restore process may take several minutes. Do not stop the process while restoration is underway.

During the restore process, the Backup Utility stops all Websense services. If the utility is unable to stop the services, it sends a message asking the user to manually stop them. Services must be stopped in the order described in [Stopping and starting Websense services](#), page 385.

The Backup Utility saves some files used for communication with third-party integration products. Because these files reside outside the Websense directory

structure, you must restore them manually, by copying each file to the correct directory.

Files that must be restored manually include:

| File name | Restore to |
|----------------|----------------------|
| isa_ignore.txt | Windows\system32 |
| ignore.txt | Windows\system32\bin |

Discontinuing scheduled backups

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Running immediate backups](#), page 401
- ◆ [Maintaining the backup files](#), page 402
- ◆ [Restoring your Websense data](#), page 403
- ◆ [Command reference](#), page 404

To clear the backup schedule and stop running currently scheduled backups, open a command shell and navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin, by default). Enter the following command:

```
wbackup -u
```

Command reference

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Related topics:

- ◆ [Scheduling backups](#), page 399
- ◆ [Running immediate backups](#), page 401
- ◆ [Maintaining the backup files](#), page 402
- ◆ [Restoring your Websense data](#), page 403
- ◆ [Discontinuing scheduled backups](#), page 404

Only root (Linux) or a member of the Administrators group (Windows) can run the Backup Utility.

The **wbackup** and **WebsenseTools -b** commands take the following options:

- ◆ -b (or --backup)

- ◆ -d directory_path (or --dir directory_path)
- ◆ -f full_file_name (or --file full_file_name)
- ◆ -h (or --help, or -?)
- ◆ -r (or --restore)
- ◆ -s (or --schedule)
- ◆ -t (or --time)
- ◆ -u (or --unschedule)
- ◆ -v (or --verbose [0 - 3])

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Reporting Administration

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Related topics:

- ◆ [Configuring how filtered requests are logged, page 410](#)
- ◆ [Assigning categories to risk classes, page 408](#)
- ◆ [Configuring reporting preferences, page 409](#)[Configuring Log Server, page 412](#)
- ◆ [Log Database administration settings, page 420](#)
- ◆ [Configuring investigative reports, page 433](#)
- ◆ [Self-reporting, page 437](#)

In organizations that use only the default administrator account (admin), everyone who uses TRITON - Web Security has access to all reporting settings and tools. In organizations that use delegated administration, access to reporting settings and tools is controlled by members of the Super Administrator role (see [Editing roles, page 347](#)).

Administrators with access to reporting settings have many options for customizing reporting in their environment.

- ◆ The Websense Master Database organizes categories into **risk classes**. Risk classes suggest possible types or levels of vulnerability posed by sites in those categories. Use the Settings > General > Risk Classes page to customize risk classes for your organization. See [Assigning categories to risk classes, page 408](#).
- ◆ Use the Settings > Reporting > Preferences page to configure the email server used to distribute reports, activate self-reporting, and configure how long scheduled reports are stored on the TRITON - Web Security machine. Also configure whether Real-Time Monitor collects data all the time, or only when Real-Time Monitor is open. See [Configuring reporting preferences, page 409](#).

Logging is the process of storing information about Websense filtering activities in a Log Database so that you can generate reports.

- ◆ Use the Settings > General > Logging page to enable logging, select the categories to be logged, and determine what user information is logged. See [Configuring how filtered requests are logged, page 410](#), for more information.

- ◆ Use the Settings > Reporting > Log Server page to manage the way the log records are processed and connections to the Log Database. See [Configuring Log Server](#), page 412.
- ◆ Use the Settings > Reporting > Log Database page to administer the Log Database, including database partition, URL logging, browse time, and trend data options. See [Log Database administration settings](#), page 420.

Assigning categories to risk classes

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Related topics:

- ◆ [Risk classes](#), page 54
- ◆ [Block Pages](#), page 117
- ◆ [Use Reports to Evaluate Filtering](#), page 133

The Websense Master Database organizes categories into **risk classes**. Risk classes suggest possible types or levels of vulnerability posed by sites in those categories.

Risk classes are used primarily in reporting. The Web Security Dashboard includes charts that track Internet activity by risk class, and you can generate presentation or investigative reports organized by risk class.

Use the **Settings > General > Risk Classes** page to review or change which categories comprise each risk class.

1. Select an entry in the **Risk Classes** list.
2. Review the **Categories** list to see which categories are currently included in that risk class.

A check mark shows that the category is currently assigned to the selected risk class. The blue W icon indicates categories that are included in the risk class by default.

3. Mark or clear entries in the category tree to include or exclude a category from the selected risk class. Categories can belong to more than one risk class.

Other choices include:

| Option | Description |
|-------------------------|---|
| Select All | Selects all categories in the tree. |
| Clear All | Deselects all categories in the tree. |
| Restore Defaults | Resets the category choices for the selected risk class to those provided by the Websense software. A blue W icon indicates a default category. |

4. Repeat this process for each risk class.

5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring reporting preferences

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Related topics:

- ◆ [Self-reporting, page 437](#)
- ◆ [Scheduling presentation reports, page 147](#)
- ◆ [Scheduling investigative reports, page 177](#)

Use the **Settings > Reporting > Preferences** page to provide information used to send completed scheduled reports to selected recipients via email, activate self-reporting, determine how long scheduled presentation reports are stored, and configure when Real-Time Monitor collects data.

1. Under Email Reports, enter the **Email address** to display in the “From” field when scheduled reports are distributed via email.
2. Enter the **SMTP server IPv4 address or name** for the email server to use for distributing scheduled reports.
3. Mark the **Allow self-reporting** check box to let end users in your organization access TRITON - Web Security to run investigative reports on their personal Internet activity.

When this option is selected, the URL used to access self-reporting features is displayed. See [Self-reporting, page 437](#).

4. Under Scheduled Presentation Reports, use the **Store reports for** drop-down list to indicate how long reports are stored on the TRITON - Web Security machine (5 days, by default).

Note that as you increase the length of time that reports are stored, you affect the amount of disk space required on the TRITON - Web Security machine. The TRITON - Web Security machine is not an appropriate location for a long-term reporting archive.

5. Use the **Warn administrators...** drop-down list to indicate how long a warning is displayed on the Review Reports page before a scheduled presentation report is deleted (3 days, by default).

The warning is intended to give administrators time to archive important reports in an appropriate location before they are deleted from the management server.

6. Under Real-Time Monitor, select a radio button to determine when Real-Time Monitor starts to capture user data:

- Select **Capture data only when Real-Time Monitor is active** (default) to improve system performance. With this option selected, data collection begins when you launch Real-Time Monitor. There may be a slight delay (of a few seconds) before records start appearing on the screen.
 - Select **Always capture data** to have the Real-Time Monitor client continually process data into the RTM database, even when no one is viewing the data. This may have a noticeable effect on system performance.
7. Click **Save Now** to implement your changes.

Configuring how filtered requests are logged

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Related topics:

- ◆ [Introducing the Log Database, page 418](#)
- ◆ [Configuring Log Server, page 412](#)

Use the **Settings > General > Logging** page to:

- ◆ Provide the IP address and port that Filtering Service uses to send log records to Log Server.
- ◆ (*Websense Web Security Gateway Anywhere*) Provide the port that Sync Service uses to send hybrid log records to Log Server.
- ◆ Specify what client-identifying information, if any, Filtering Service sends to Log Server for use in reporting.
- ◆ Determine which URL categories are logged for use in reporting and category usage alerting (see [Configuring category usage alerts, page 392](#)).

In an environment with multiple Policy Servers, configure the Logging page separately for each Policy Server instance. All Filtering Service instances associated with the active Policy Server send their log records to the Log Server identified on this page.

When working with multiple Policy Servers, note that:

- ◆ Each Policy Server can communicate with a single Log Server instance.
- ◆ For reporting data to display properly in TRITON - Web Security, there must be a Log Server associated with the base Policy Server (the Policy Server instance specified during TRITON - Web Security installation, noted on the Settings > General > Policy Server page).

This is typically the Policy Server installed with Policy Broker (for example, the Policy Server on the full policy source appliance).

- ◆ If the Log Server IP address and port are blank for any Policy Server, the Filtering Service instances associated with that Policy Server cannot log any traffic for reporting or alerts.

- ◆ Information about whether or not user names and IP addresses are logged is stored centrally, so the same settings are used throughout your deployment.

Likewise, any changes you make to how categories are logged are shared by all Filtering Service and Log Server instances.

If your environment includes both multiple Policy Servers and multiple Log Servers, make sure you log on to each Policy Server separately, and verify that it is communicating with the correct Log Server.

1. Enter the **Log Server IPv4 address or hostname**.
2. Enter the **Port** that Filtering Service uses to send log records to Log Server (55805, by default).
3. (*Websense Web Security Gateway Anywhere*) Enter the port that Sync Service uses to send log records from the hybrid service to Log Server.
4. Click **Check Status** to determine whether TRITON - Web Security is able to communicate with Log Server using the specified location and port.
A message indicates whether the connection test passed. Update the IP address or hostname and port, if needed, until the test is successful.
5. Specify how much user data is stored in log records and displayed in reports:
 - To log identifying information for machines accessing the Internet, mark **Log IP addresses**.
 - To log identifying information for users accessing the Internet, mark **Log user names**.

**Note**

If you do not log IP addresses or user names, there can be no user data in your reports. This is sometimes called **anonymous logging**.

- If you are using Web Security Gateway or Gateway Anywhere, and want Threats dashboard tables to include source device name information, when available, click **Log hostnames**.
Name information is available in threat-related logs only. It is not available for Internet activity to which no severity is assigned.
6. Use the **Selective Category Logging** list to indicate any URL categories that should not be logged. Changes made here apply to all category filters in all active policies.

**Note**

If you disable logging for categories that have usage alerts set up (see [Configuring category usage alerts](#), page 392), no usage alerts can be sent.

Reports cannot include information about categories that are not logged.

- Use the **Find category** search box to quickly jump to a specific category.
 - Expand parent categories as needed to change logging for subcategories.
 - Clear the check box next to a category name to stop logging the category.
You must select or deselect each category separately. Selecting a parent category does not automatically select its subcategories. Use **Select All** and **Clear All** to assist with selections.
7. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring Log Server

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During installation, you configure certain aspects of Log Server operation, including how Log Server interacts with Websense filtering components. Use the **Settings > Reporting > Log Server** page to update these settings, or to configure other details about Log Server operation.

When you finish your configuration updates, click **OK** to cache your changes. Changes are not saved until you click **Save and Deploy**.

If you make changes to the database connection, after saving and deploying the changes, also restart the **Websense TRITON - Web Security** service on the management server machine to update the database connection for all reporting tools.

In multiple Log Server environments, the settings configured on this page apply to the Log Server instance assigned to the Policy Server whose IP address or appears on the Web Security toolbar.



Note

The Settings > Reporting > Log Server page replaces the Log Server Configuration Utility, which was used to perform these tasks in previous versions.

Verify basic Log Server details

Under **Location**, verify the Log Server IP address. If necessary, use the **Port** field to update the port over which Log Server communicates with Filtering Service (55805, by default).

This port must match the logging port displayed on the **Settings > General > Logging** page.

Configure the Log Database connection

Under **Log Database Connection**, configure the ODBC connection that Log Server uses to connect to the Log Database.

1. Specify the ODBC **Data source name (DSN)** and enter a unique **Description** for the database connection.
2. Provide the **SQL Server location** (IP address or host name and instance name, if applicable) for the Microsoft SQL Server installation that hosts the Log Database, as well as the **Connection port** for sending data to the Log Database (1433, by default).
3. If your environment uses SQL Server clustering, enter the virtual IP address for the cluster.
4. Enter the name of the **Default database** (wslogdb70, by default).
5. Indicate whether or not to **Use SSL to connect to the Log Database**. When SSL encryption is enabled:
 - BCP cannot be used to add records to the Log Database.
 - Log Database connections are slower, affecting reporting performance.
 - If you are running TRITON - Web Security on a Websense appliance, the connection from the console to the database cannot be encrypted. This means that if the Microsoft SQL Server “Force Protocol Encryption” option is set to **Yes**, no data will appear in the Web Security Dashboard or other reporting tools.



Important

When Microsoft SQL Server components are configured so that “Trust Server Certificate” is set to **No** (the default), self-signed SSL certificates are not accepted for encryption of database connections.

In this case, SSL certificates signed by a Certificate Authority must be properly deployed to the SQL Server, TRITON management server, and Log Server machines before you enable the “Use SSL” option in TRITON - Web Security.

See your SQL Server documentation for information about database encryption.

6. Specify a Log Server connection method:
 - By default, **SQL Server authentication** is selected. To use SQL Server authentication, provide the SQL Server **Account** and **Password** to use.
 - Alternatively, you can use a **Windows trusted connect (network logon account)**. The Websense Log Server service must be configured to run as this account.

7. Click **Test Connection** to verify that it is possible to connect to the Log Database using the credentials provided.

For information about the tests performed when you click the button, see [Testing the Log Database connection](#), page 417.

If you make changes to the database connection, after saving and deploying the changes, also restart the **Websense TRITON - Web Security** service on the management server machine to update the database connection for all reporting tools.

Specify how log records are processed into the database

Click **Log Record Creation** to specify how Log Server adds records to the Log Database.

- ◆ **ODBC (Open Database Connectivity)** inserts records into the database individually, using a database driver to manage data between Log Server and Log Database.

If you select this option, also set the **Maximum number of connections** to specify how many internal connections can be made between Log Server and the database engine.

- For Microsoft SQL Server Standard or Enterprise, select a value between 4 and 50, as appropriate for your SQL Server license.



Note

Increasing the number of connections can increase processing speed for log records, but could impact other processes in the network that use the same SQL Server. In most cases, you should set the number of connections to fewer than 20. Contact your Database Administrator for assistance.

- For Microsoft SQL Server Express, the value is set to **4**, and should not be changed.
- ◆ **BCP (Bulk Copy Program)** (*recommended*) inserts records into the Log Database in batches. This option offers better efficiency than ODBC insertion, and is selected by default if the **bcp.exe** file is found on the machine.

The BCP option is available only if you install the SQL Server Client Tools (SQL Server 2005 SP4) or Management Tools - Basic (SQL Server 2008) on the Log Server machine.

BCP cannot be used when SQL Server SSL encryption is used.

If you select the BCP option, also specify:

| Option | Description |
|--------------------|---|
| BCP file location | Directory path for storing BCP files. Log Server must have read and write access to the location. (The default folder is C:\Program Files (x86)\ Websense\Web Security\bin\Cache\BCP\.) After entering the path, click Test Location to verify that the location is accessible. |
| File creation rate | Maximum number of minutes Log Server spends placing records into a batch file before closing that batch file and creating a new one. This setting works in combination with the batch size setting: Log Server creates a new batch file as soon as either limit is reached. |
| Maximum batch size | Maximum number of log records before a new batch file is created. This setting works in combination with the creation rate setting: Log Server creates a new batch file as soon as either limit is reached. |

After selecting a log record insertion method, click **Log Cache Files** to specify where and how log cache files are created. These provide temporary storage for log records that have not yet been processed into the Log Database or moved to BCP files.

1. For **Cache location**, indicate where on the Log Server machine logging cache files are stored (C:\Program Files (x86)\Websense\Web Security\bin\Cache\, by default).
2. Click **Test Location** to verify that the path is accessible.
3. For **Cache file creation rate**, indicate the maximum number of minutes (1, by default) Log Server should spend sending Internet access information to a log cache file before closing it and creating a new file.
4. For **Maximum cache file size**, specify how large a log cache file should be before Log Server closes it and creates a new one.

The file creation rate and maximum file size settings work in combination: Log Server creates a new log cache file as soon as either limit is reached.

Adjust database sizing settings

Configure **Database Size Management** settings to meet your organization's needs. The higher the level of detail recorded, the larger the Log Database.

1. To minimize the size of the Log Database, mark **Enable log record consolidation**. This combines multiple, similar Internet requests into a single log record, reducing the granularity of reporting data.

If you have enable SIEM integration, note that Log Server applies consolidation to the log records that it processes into the Log Database. Consolidation does not occur for records passed to the SIEM product.

When consolidation is enabled, requests that share all of the following elements are combined into a single log record:

- Domain name (for example: www.websense.com)
- Category
- Keyword
- Action (for example: Category Blocked)
- User/IP address

The log record includes the number of requests combined into the consolidated record, as well as the total bandwidth for all of the consolidated requests.

Reports run faster when the Log Database is smaller. However, consolidation may decrease the accuracy of some detail reports, as separate records for the same domain name may be lost.



Important

To assure consistent reports, create a new database partition whenever you enable or disable consolidation. Also, be sure to generate reports from partitions with the same consolidation setting.

With Websense Web Security Gateway (Anywhere), when consolidation is enabled, numbers shown on Web filtering reports that include traffic blocked by scanning are **lower** than the numbers shown on scanning-specific reports. This is a side-effect of the way that scanning activity is recorded.

2. If you enable consolidation, also specify the **Consolidation time interval**. This represents the greatest allowable time difference between the earliest and latest records combined to make one consolidation record.

Decrease the interval to increase granularity for reporting. Increase the interval to maximize consolidation. Be aware that a larger interval can also increase usage of system resources, such as memory, CPU, and disk space.

If you enable full URL logging on the Settings > Reporting > Log Database page, consolidated log records contain the full path (up to 255 characters) of the first matching site Log Server encounters.

For example, suppose a user visited the following sites and all were categorized in the shopping category.

- www.domain.com/shoeshopping
- www.domain.com/purseshopping
- www.domain.com/jewelrshopping

With full URL logging enabled, consolidation creates a single log entry showing 3 requests for the URL www.domain.com/shoeshopping.

- Under Hits and Visits, use the **Enable visits** check box to indicate the level of granularity recorded for each user Internet request.



Note

It is best to create a new database partition prior to changing the method of logging between visits and hits. See the **Settings > Reporting > Log Database** page to create a new database partition.

When this option is **not** selected, a separate log record is created for each HTTP request generated to display different page elements, including graphics, advertisements, embedded videos, and so on. Also known as logging hits, this creates a much larger Log Database that grows rapidly.

When this option **is** selected, Log Server combines the individual elements that create the Web page (such as graphics and advertisements) into a single log record that includes bandwidth information for all elements of the visit.

With Websense Web Security Gateway (Anywhere), when visits are enabled, numbers shown on Web filtering reports that include traffic blocked by scanning are **lower** than the numbers shown on scanning-specific reports. This is a side-effect of the way that scanning activity is recorded.

Configure User Service communication

Click the **User Service Connection** button, then use the **User and group update interval** field to indicate how often Log Server connects to User Service to retrieve full user name and group assignment information (every 12 hours, by default).

Activity for a user whose user name or group information has changed continues to be reported with the original user name or group assignment until the next update occurs. Organizations that update their directory service frequently or have a large number of users should consider updating the user/group information more frequently.

Testing the Log Database connection

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The database connection information used by Log Server and other reporting tools can be updated on the Settings > Reporting > Log Server page in TRITON - Web Security.

The Log Database Connection section of the page includes a **Test Connection** button. When you click the button, Log Server performs the following tests:

- Log Server retrieves the updated database connection information from TRITON - Web Security.

If Log Server is stopped, or the network is down between the TRITON management server and the Log Server machine, this test fails. If the connection to Log Server fails, an IO exception error is likely to display.

2. Log Server uses ODBC to create a data source name (DSN) for testing purposes.
3. Log Server uses the DSN to establish a connection to the Log Database. Log Server checks to see that:
 - A Websense database exists.
 - The database version is correct.
4. Log Server verifies its database permissions.

See [Configuring user permissions for Microsoft SQL Server](#), page 494, for information about the required database roles and permissions.
5. Log Server deletes the DSN it created for testing.
6. Log Server notifies TRITON - Web Security that its tests succeeded.

If this return notification fails, an IO exception error is likely to display.

In addition, TRITON - Web Security verifies that it can create a JDBC connection to the database. The TRITON - Web Security test may pass even when a Log Server test fails.

The new database connection information is not used until you cache and save your changes. At that point:

- ◆ The new database connection information is saved to the Policy Server configuration file.
- ◆ Log Server creates a permanent DSN (reproducing the temporary DSN created during the connection test).

Restart the Websense TRITON - Web Security service to update reporting tools (like presentation reports) to use the new database connection.

Introducing the Log Database

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Related topics:

- ◆ [Database jobs](#), page 419
- ◆ [Log Database administration settings](#), page 420

The Log Database stores the records of Internet activity and the associated Websense filtering actions. Installation creates the Log Database with a catalog database and one database partition.

The **catalog database** (wslogdb70, by default) provides a single connection point for the various Websense components that need to access the Log Database: dashboards, Log Server, presentation reports, and investigative reports. It contains supporting information for the database partitions, including the list of category names, risk class

definitions, trend data, the mapping of users to groups, database jobs, and so forth. The catalog database also maintains a list of all the available database partitions.

Database partitions store the individual log records of Internet activity. There are 2 partition types:

- ◆ The standard logging partition (wslogdb70_1, wslogdb70_2, etc.) stores information about all logged Internet requests. Information from the standard logging partition is used to populate investigative and presentation reports, as well as dashboard charts.
- ◆ The threats partition (wslogdb70_amt_1) stores information about requests that have been assigned a severity level (see [How severity is assigned to suspicious activity](#), page 39). Information from the threats partition is used to populate the Threats dashboard.

New standard logging partitions are created based on size or date interval. See [Configuring database partition options](#), page 421, for more information.

- ◆ When partitions are based on size, all incoming log records are inserted into the most recent active partition that satisfies the size rule. When the partition reaches the designated maximum size, a new partition is created for inserting new log records.
- ◆ When the partitions are based on date, new partitions are created according to the established cycle. For example, if the rollover option is monthly, a new partition is created as soon as any records are received for the new month. Incoming log records are inserted into the appropriate partition based on date.

Database standard logging partitions provide flexibility and performance advantages. For example, you can generate reports from a single partition to limit the scope of data that must be analyzed to locate the requested information.

Database jobs

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The following database jobs are installed along with the Log Database.



Important

If you are using a full version of Microsoft SQL Server (not Express), the SQL Server Agent service must be running on the database engine machine. Make sure that this service is configured to start automatically when SQL Server or the machine is restarted.

- ◆ The **Extract, Transform, and Load (ETL) job** runs continuously, receiving data from Log Server, processing it, and then inserting it into the standard logging partition database. When trend data retention is enabled, the ETL job is also responsible for inserting trend data into the catalog database.

The ETL job must be running to process log records into the Log Database.

- ◆ The **database maintenance job** performs database maintenance tasks and preserves optimal performance. This job runs nightly, by default.
- ◆ The **Internet browse time (IBT) job** analyzes the data received and calculates browse time for each client. The IBT database job is resource intensive, affecting most database resources. This job runs nightly, by default.
- ◆ When trend data retention is enabled, the **trend job** uses daily trend data created by the ETL job to update weekly, monthly, and yearly trend records for use in presentation reports.

Even when trend data retention is disabled, the trend job processes data from the threats (AMT) partition to provide trend data on the Threats dashboard.

This job runs nightly.

- ◆ The **Advanced Malware Threat (AMT) ETL job** receives, processes, and inserts data into the threats partition database. Only log records that include a severity ranking (see [How severity is assigned to suspicious activity](#), page 39) are recorded in the threats partition. Data from this partition is used to populate the Threats dashboard (see [Threats dashboard](#), page 35).

Certain aspects of these database jobs can be configured on the Settings > Reporting > Log Database page. See [Log Database administration settings](#), page 420, for more information.

When configuring the start time for the maintenance job and the Internet browse time job, consider system resources and network traffic. These jobs are resource intensive, and can slow logging and reporting performance. When trend data retention is enabled, the trend job is run, by default, at 4:30 a.m. Try to avoid starting other jobs at times that might overlap with the trend job.

Log Database administration settings

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Use the **Settings > Reporting > Log Database** page to manage:

- ◆ When, where, and how the Log Database creates new standard logging partitions, and which partitions are used in creating reports ([Configuring database partition options](#), page 421)
- ◆ When and how maintenance jobs are run (see [Configuring Log Database maintenance options](#), page 424)
- ◆ Whether log records include the full URL, including both the domain and the full path to the page or item (see [Configuring how URLs are logged](#), page 425)
- ◆ How Internet browse time is calculated (see [Configuring Internet browse time options](#), page 426)
- ◆ Whether and how long trend data should be stored (see [Configuring trend data retention](#), page 428).

The name of the active Log Database instance is displayed at the top of the page.

Configuring database partition options

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Related topics:

- ◆ [Log Database administration settings, page 420](#)
- ◆ [Log Database sizing guidance, page 429](#)
- ◆ [Configuring Internet browse time options, page 426](#)
- ◆ [Configuring how URLs are logged, page 425](#)
- ◆ [Configuring Log Database maintenance options, page 424](#)
- ◆ [Configuring trend data retention, page 428](#)

Use the **Database Rollover Configuration** section of the Settings > Reporting > Log Database page to specify when you want the Log Database to create a new database partition (roll over), where database partitions are stored, and how large partitions are. Also create new partitions manually, rather than waiting for the planned rollover, and review all database partitions available for reporting.

Refer to the **Growth Rates and Sizing** chart at the bottom of the Database Rollover Configuration section for average daily database partition size over time. This may be helpful in planning for future growth, determining how frequently to create new partitions, and in setting partition size and growth options.

- ◆ Use the drop-down list under the chart to configure the **Time period** displayed. (The time period is based on the partition creation date; not the dates that the partition spans.) You can display partitions created in the last 1 week, 1 month, 3 months, 6 months, or show all available partitions.
Note that when a longer time period is selected, each partition may appear as a small dot on the chart.
- ◆ Indicate whether or not to **Show chart legend**. When displayed, the legend indicates which partitions (by name) are mapped in the chart.
The legend is only available when the chart includes 20 or fewer partitions for the selected time period.
- ◆ Select a section of the chart to view it more closely. Click **Zoom Out** or **Reset Chart** to reduce the level of detail shown.

For more help with database sizing, see [Log Database sizing guidance, page 429](#).

To manage database rollover and growth:

1. Next to **Roll over every**, indicate how often you want a new partition to be created.
 - For all supported database engines, you can enter a size limit for each partition. When the size limit is reached, a new partition is created.

The size limit can be set as follows:

- *SQL Server Standard or Enterprise*: 100-1,000,000 MB, default 5000

- *Microsoft SQL Server Express*: 100-8000 MB, default 5000
- If you are using Microsoft SQL Server Standard or Enterprise, you can alternatively specify a partition rollover time interval (every 1-52 weeks, or every 1-12 months).

**Note**

If the rollover begins during a busy part of the day, performance may slow during the rollover process.

To avoid this, some organizations set the automatic rollover to a long time period or large maximum size. Then, they perform manual rollovers to prevent the automatic rollover from occurring. See [Configuring Log Database maintenance options](#), page 424, for information on manual rollovers.

Keep in mind that extremely large individual partitions are not recommended. Reporting performance can slow if data is not divided into multiple, smaller partitions.

When a new partition database is created, the partition is automatically enabled for use in reporting.

2. Under Partition Management, provide the following information:
 - a. Specify the **File Path** for creating both the **Data** and **Log** files for new database partitions.
 - b. Under **Init Size** set the initial file size for both the **Data** and **Log** files that make up new database partitions.
 - *SQL Server Standard or Enterprise*: Data file initial size 100-500,000 MB, default 2000; Log file initial size 1-250,000 MB, default 100
 - *SQL Server Express*: Data file initial size 1-5000 MB, default 100; Log file initial size 1-4000 MB, default 100

**Note**

As a best practice, calculate the average partition size over a period of time, then update the initial size to approximate that value. You might, for example, set the initial size to 80% of the average size. This minimizes the number of times the partition must be expanded, and frees resources to process data into the partitions.

Use the information in the Growth Rates and Sizing list (below the list of available partitions) for help in making this calculation.

- c. Under **Growth**, set the increment by which to increase the size of a partition's **Data** and **Log** files when additional space is required.

- *SQL Server Standard or Enterprise*: Data file growth 100-500,000 MB, default 500; Log file size 1-250,000 MB, default 100
 - *SQL Server Express*: Data file growth 1-1000 MB, default 100; Log file size 1-1000 MB, default 100
3. If you want to create a partition the next time the ETL job runs (see [Database jobs](#), page 419), rather than waiting for the next automatic rollover, click **Manually Create Partition**. This process usually takes a few minutes.
 - To have the new partition use changes made on the Log Database page, click **OK** and **Save and Deploy** before clicking **Manually Create Partition**.
 - Click the Refresh link under the Available Partitions list periodically. The new partition is added to the list when the creation process is complete.
 4. Use the **Available Partitions** list to review the partitions available for reporting. The list shows the dates covered, as well as the size and name of each partition. Mark the check box next to a partition name, and use the buttons below the list to determine whether the partition's data is used in or excluded from reports, or to delete the partition.
 - Click **Enable** to include a selected partition's data in reports. You must enable at least one partition for reporting.
 - Click **Disable** to exclude a selected partition's data from reports. Together, the Enable and Disable options allow you to manage how much data is analyzed during report generation and speed report processing.
 - Click **Delete** to remove a partition that is no longer needed. The partition is actually deleted the next time the nightly database maintenance job runs. Only enabled partitions can be deleted. To delete a disabled partition, first enable it, then delete it.



Warning

Use this option with care. You cannot recover deleted partitions.

Deleting obsolete partitions minimizes the number of partitions in the Log Database, which improves database and reporting performance. Use this Delete option to delete individual partitions as needed. See [Configuring Log Database maintenance options](#), page 424, if you prefer to delete older partitions according to a schedule.

5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring Log Database maintenance options

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Related topics:

- ◆ [Log Database administration settings, page 420](#)
- ◆ [Configuring database partition options, page 421](#)
- ◆ [Configuring Internet browse time options, page 426](#)
- ◆ [Configuring how URLs are logged, page 425](#)
- ◆ [Configuring trend data retention, page 428](#)

Use the **Database Maintenance** section of the Settings > Reporting > Log Database page to control when the database maintenance job runs, whether and how often database partitions are automatically deleted, and how often tasks like reindexing partitions and deleting error log messages occur.

1. For **Maintenance start time**, select the time of day for running the database maintenance job (01:00 hours, by default).

The time and system resources required by this job vary depending on the tasks you select in this area. To minimize any impact on other activities and systems, it is best to run this job during a slow time on the network, different from the time set for the IBT job (see [Configuring Internet browse time options, page 426](#)).
2. To permanently delete partitions based on age, select **Automatically delete partitions when data is older than**, and then specify the number of days (from 1 to 1825) after which to delete the partitions.



Warning

After a partition has been deleted, the data cannot be recovered. See [Configuring database partition options, page 421](#), for an alternative way to delete partitions.

3. Select **Enable automatic reindexing of partitions**, and then select a day of the week to have this processing performed automatically each week (Saturday, by default).

Reindexing the database is important to maintain database integrity and to optimize reporting speed.



Important

It is best to perform this processing during a quiet time on the network. Reindexing database partitions is resource intensive and time-consuming. Reports should not be run during the process.

4. Select **Process failed batches during the database maintenance job** to have the nightly database maintenance job reprocess any failed batches.
Failed batches occur when there is insufficient disk space or inadequate database permissions to insert log records into the database. Typically, these batches are successfully reprocessed and inserted into the database during the nightly database maintenance job. Reprocessing, however, cannot be successful if the disk space or permission problem has not been resolved.
If this option is unchecked, failed batches are never reprocessed. Instead, they are deleted after the time specified (below), if any.
5. Select **Delete failed batches after** and then enter a number of days (from 0 to 90; 20, by default) after which to delete any failed batches.
If this option is not selected, failed batches are retained indefinitely for future processing.
6. Select **Delete the error log after**, and then enter a number of days (0 to 90; 60, by default) after which to delete database error records from the catalog database.
If this option is not checked, error logs are retained indefinitely.
7. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring how URLs are logged

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Related topics:

- ◆ [Log Database administration settings, page 420](#)
- ◆ [Configuring database partition options, page 421](#)
- ◆ [Configuring Internet browse time options, page 426](#)
- ◆ [Configuring Log Database maintenance options, page 424](#)
- ◆ [Configuring trend data retention, page 428](#)

Use the **Full URL Logging** section of the Settings > Reporting > Log Database page to determine how much of each requested URL is logged.



Note

Managing Log Database size is an important concern in high-volume networks. Disabling the Full URL Logging option is one way to control database size and growth.

1. Select **Record domain and full URL of each site requested** to log the entire URL, including the domain (www.domain.com) and the path to the particular page (/products/productA.html).



Important

Enable full URL logging if you plan to generate reports of scanning activity (see [Reporting on scanning activity](#), page 202). Otherwise, reports can display only the domain (www.domain.com) of the site categorized, even though individual pages within the site may fall into different categories, or contain different threats.

If this option is not checked, only domain names are logged. This choice results in a smaller database, but provides less detail.

If you activate full URL logging when consolidation is active, the consolidated record contains the full URL from the first record in the consolidation group. See [Configuring Log Server](#), page 412, for more information.

2. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring Internet browse time options

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Related topics:

- ◆ [Log Database administration settings](#), page 420
- ◆ [Configuring database partition options](#), page 421
- ◆ [Configuring how URLs are logged](#), page 425
- ◆ [Configuring Log Database maintenance options](#), page 424
- ◆ [Configuring trend data retention](#), page 428

Internet browse time (IBT) reports give a view into the amount of time users spend on the Internet. A nightly database job calculates browse time for each client based on the new log records received that day. Set browse time options in the **Internet Browse Time** section of the Settings > Reporting > Log Database page.

1. Select an **IBT job start time** for the IBT database job.

The time and system resources required by this job vary depending on the volume of data logged each day. It is best to run this job at a different time than the nightly maintenance job (see [Configuring Log Database maintenance options](#), page 424), and to select a slow time on the network to minimize any impact on generating reports.

The IBT database job can be resource intensive, affecting most database resources. If you enable this job, set the start time so that it does not interfere with

the database system's ability to process scheduled reports and other important operations. Also, monitor the job to determine whether more robust hardware is needed to accommodate all processing needs.

2. For **Average browse time per site**, set an average number of minutes for reading the contents of a Web page.

This number defines browsing sessions for the purpose of Internet browse time reports. Opening a browser generates HTTP traffic. This represents the beginning of a browse session. The session is open as long as HTTP traffic is continually generated within the time set here. The browse session is considered closed once this amount of time passes with no HTTP traffic. A new browse session begins as soon as HTTP traffic is generated again.

**Note**

It is best to change the average browse time per site setting as seldom as possible, and to start a new database partition whenever you do make a change.

To avoid inconsistent data on the reports, generate IBT reports from database partitions that use the same average browse time per site value.

Be aware that some Web sites use an automatic refresh technique to update information frequently. One example is a news site that rotates a display of the latest news stories. This refresh generates new HTTP traffic. Therefore, when this kind of site is left open, new log records are generated each time the site refreshes. There is no gap in HTTP traffic, so the browser session is not closed.

3. Set a **Browse time for last site read** value to account for time spent reading the last Web site before the end of a browse session.

When the time gap of HTTP traffic is longer than the average "per site" browse time threshold, the session is ended and the "last site read" browse time value is added to the session time.

4. To enable detail reports that include browse time using investigative reports, mark **Calculate detailed browse time for use in investigative detail reports**.

**Important**

Enabling detailed browse time calculations increases Log Database size, and may also affect database performance. If you use this option, monitor Log Database growth and overall reporting performance carefully.

When detailed browse time is disabled, the IBT job still runs to perform the calculations used to include browse time in summary reports.

5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring trend data retention

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Related topics:

- ◆ [Log Database administration settings, page 420](#)
- ◆ [Configuring database partition options, page 421](#)
- ◆ [Configuring how URLs are logged, page 425](#)
- ◆ [Configuring Log Database maintenance options, page 424](#)
- ◆ [Configuring Internet browse time options, page 426](#)

Optionally, the Log Database can store trend data to enable presentation reporting on Internet activity trends. When trend reporting is enabled, the ETL database job (see [Database jobs, page 419](#)) adds daily trend data to the catalog database, and the trend job runs nightly to store weekly, monthly, and yearly trend information.

Use the **Trend Data Retention** section of the Settings > Reporting > Log Database page to specify how long trend data should be retained in the Log Database.

1. Mark **Store trend data** to prompt the ETL job to store trend data, and to activate the nightly trend job.

Trend data is calculated only for data collected while this option is enabled.

Data stored in the database before trend data retention is enabled, or data collected after the option is disabled, cannot be included in trend reports.

When this option is disabled, the Trend database job runs only to process threat-related data in the AMT partition.

2. Indicate how long to store weekly, monthly, and yearly trend data. Note that increasing the length of time trend data is stored increases the size of the Log Database (see [Log Database sizing guidance, page 429](#)).



Note

Because trend data is stored in the catalog database, rather than the partition database, trend data storage periods are not dependent on how long database partitions are retained.

The default storage periods for trend data are:

| | SQL Server | SQL Server Express |
|----------------|------------|--------------------|
| Daily | 90 days | 60 days |
| Weekly | 26 weeks | 13 weeks |
| Monthly | 18 months | 6 months |
| Yearly | 5 years | 3 years |

The nightly trend job purges data when it is older than the specified retention period.

3. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Log Database sizing guidance

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Related topics:

- ◆ [Configuring database partition options, page 421](#)
- ◆ [Configuring how filtered requests are logged, page 410](#)
- ◆ [Configuring how URLs are logged, page 425](#)

It is difficult to make precise sizing predictions for the Log Database, because database size is affected by a number of variables, including the number of filtered users and average requests per second. In addition, size is affected by whether the database is configured to:

- ◆ Record hits or visits for each Web request (see [Configuring Log Server, page 412](#)).
Recording hits provides a high level of detail, but recording visits can reduce the size of the database by roughly 40%.
- ◆ Consolidate log records (see [Configuring Log Server, page 412](#)).
By default, all requests are logged as separate hits or visits. When you turn on consolidation, similar requests (by the same user, for sites in the same domain, that have the same filtering action applied) in a defined time period are recorded as a single log record. This can reduce the size of the Log Database by roughly 60%.
- ◆ Store the full URL for each logged request (see [Configuring how URLs are logged, page 425](#)).
Recording full URLs provides precise information about which sites a user has visited, but more than doubles Log Database size.
- ◆ Log requests for all categories (see [Configuring how filtered requests are logged, page 410](#)).
By default, requests for sites in all categories are logged. To reduce the size of the Log Database, you can stop logging requests for sites in categories that, for example, present no security risk or legal liability to your organization.
The impact of this change depends on the number of categories that are not logged, and how often users requests sites in those categories.
- ◆ Perform detailed browse time calculations (see [Configuring Internet browse time options, page 426](#)).
In order to create investigative detail reports that include browse time, the IBT job must calculate detailed browse time. Storing detailed browse time data, however, increases the size of the database, and may also affect database performance.

- ◆ Store trend data (see [Configuring trend data retention](#), page 428).

Storing trend data makes it possible to report on trends in users' Internet activity throughout the course of a day, week, or longer period, but storing trend data increases the size of the Log Database. The longer the data is stored, the greater its effect on database size.

Use the **Growth Rates and Sizing** chart on the Settings > Reporting > Log Database page to monitor the average daily size of your active and inactive standard logging partitions. This information may help you identify trends in traffic volume over time, and make it easier to plan for future growth.

As you collect average sizing information, adjust your rollover **Initial Size** and **Growth** settings (in the Partition Management section of the Settings > Reporting > Log Database page).

As a best practice, set the Initial Size value to approximately 80% of the **average partition size** over the rollover period (week, month, etc.). The idea is to:

- ◆ Minimize the number of times the partition must be expanded.
- ◆ Free resources to process data into the partitions.
- ◆ Prevent unneeded disk space from being allocated when the partition is created. Unused portions of the initial space allocated to a partition cannot be recovered until the partition is deleted.

Configuring Dashboard reporting data

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Use the **Settings > Reporting > Dashboard** page to configure the maximum time period that can be shown in elements of the Threats, Risks, Usage, and System dashboards.

If you have Websense Web Security Gateway or Gateway Anywhere, also configure whether to create a forensics repository for storing data about files associated with suspicious threat activity in your network.

Configuring the maximum time period for dashboard charts

By default, charts, counters, and tables on all tabs of the Status > Dashboard page show a maximum of **30 days** of data. This limit was chosen to minimize the amount of time it takes to load the Dashboard, optimize TRITON - Web Security overall performance, and reduce load on the Log Database.

With Standard and Enterprise versions of Microsoft SQL Server, you can configure dashboard charts to show a longer time period. Extending the maximum time period, however, may have serious performance impacts for both TRITON - Web Security and the Log Database.

- ◆ To change the maximum time period that can be displayed in Risks, Usage, and System dashboard charts, under General Dashboard Data, select a value from the **Show a maximum of** drop-down list.
 - Increasing the time period does not affect the size of the Log Database, but does increase the time needed to query the database, retrieve information, and update dashboard charts.
 - If you are using Microsoft SQL Server Express, the maximum time period is 30 days, and cannot be changed.
- ◆ To change the maximum time period that can be displayed on the Threats dashboard and Event Details page, under Threats Data, select a value from the **Keep Threats data for** drop down list.
 - Because detailed Threats data is stored in a separate partition from standard logging data, increasing the time period also increases the size of the Log Database.
 - If threat-related forensic data storage is enabled (see below), the forensics repository attempts to store data for the time period selected here. If, however, the maximum repository size is reached, older records are automatically deleted to make room for newer records.
 - If you are using Microsoft SQL Server Express, the maximum time period is 30 days, and cannot be changed.

Note that data may not always be available for the full period selected. If your Websense Web Security solution has only been installed for 7 days, for example, 30-day reports show data for only the 7 days that filtering has occurred.

Threats dashboard sample data

If you would like to see examples of the types of data that can appear on the Threats dashboard without generating potentially dangerous network traffic, you can import sample data.

Because the sample data is loaded into the Log Database, where it is mixed with any real data generated in your network, it is best to load the sample data only in a test or evaluation environment.

To clearly flag the sample data, each of the users in the sample database is assigned the middle name **Demo** (for example, Sam Demo Smith and Lisa Demo Brady). In addition, the timestamp on the user activity predates the creation of the Log Database partition holding the data.

To load sample data into the database, click **Sample Data**, then click **Import Sample Data**. When you click **OK** and **Save and Deploy**, the data is loaded into the Log Database. After a few seconds, the Threats dashboard is updated to show the new data.

Configuring forensics data storage

In Websense Web Security Gateway and Gateway Anywhere deployments, threat-related forensic data can include:

- ◆ Information about the source (IP address, device name, and user) attempting to send the data.
- ◆ Information about the target (IP address, URL, and geographic location) to which the data is being sent.
- ◆ Header information associated with the attempt to send the data.
- ◆ A copy of the actual data being sent (such as a text file, spreadsheet, ZIP file).

If you enable storage of forensics data, also specify where the **forensics repository** (a specialized database) is stored, the maximum size to which the database can grow, and how long to store forensics data.

1. Under Incident Data for Forensic Investigation, mark **Store forensic data about Threats incidents for further investigation** to create the forensics repository.
If your deployment includes a Websense Data Security solution, this new forensics repository is similar to the Data Security repository. The smaller Web Security repository stores information about only those incidents displayed on the Threats dashboard.
2. Indicate whether to store forensics details for **Blocked requests only**, or for **All requests** (both blocked and permitted).
3. Specify the **Path** to the location that will host the forensics repository.
 - The specified directory must already exist.
 - The path can be either local (on the TRITON management server) or remote.
 - Make sure that there is enough free space in the selected location for the repository to grow to the maximum size that you specify (below).
4. Provide credentials for an account with read, write, and delete permissions for the forensics repository directory.
 - Select **Use Local System account** if neither network access nor special permissions are required to access the directory.
 - Select **Use this account** to use a domain account, then enter **User name**, **Password**, and **Domain** for the account.

Click **Test Connection** to verify that the selected account can access the forensics repository location.
5. To specify how large the forensics repository can grow, enter a **Maximum size** in GB (default 20) for the forensics repository.
 - If you are using SQL Server Express, this value cannot be changed.
 - When the maximum size is reached, **or** records reach the age limit specified for Threats data, records are automatically purged from the repository.
6. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Configuring investigative reports

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Related topics:

- ◆ [Database connection and report defaults, page 433](#)
- ◆ [Display and output options, page 435](#)

Investigative reports let you interactively delve into the information about your organization's Internet usage. See [Investigative reports, page 156](#).

The Options link on the main investigative reports page gives you the opportunity to modify which Log Database is used for reporting. It also lets you modify the default view of detail reports. See [Database connection and report defaults, page 433](#).

The **wse.ini** file lets you configure certain defaults for viewing summary and multi-level reports. It also gives you control over the default page size used when a report is output to PDF. See [Display and output options, page 435](#).

Database connection and report defaults

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Related topics:

- ◆ [Configuring investigative reports, page 433](#)
- ◆ [Display and output options, page 435](#)
- ◆ [Summary reports, page 159](#)
- ◆ [Multi-level summary reports, page 163](#)

Use the **Investigative Reports > Options** page to connect to the desired Log Database, and to control defaults for investigative reports detail view.

Changes made to this page affect your reports. Other administrators, or even users logging on for self-reporting, can change these values for their own reporting activities.

1. Choose the Log Database to use for investigative reports.
 - Mark **View the catalog database** to connect to the Log Database to which Log Server is currently logging. Proceed to step 2.

- To access a different Log Database, deselect **View the catalog database**, then enter the following information:

| Field | Description |
|----------|--|
| Server | Enter the machine name or IP address where the Log Database is located. If your environment uses SQL Server clustering, enter the virtual IP address for the cluster |
| Database | Enter the name of the Log Database. |
| User ID | Enter the user ID for an account that has permission to access the database. Leave this blank if Log Server is configured to use a trusted connection to access the Log Database. |
| Password | Enter the password for the specified account. Leave this blank for a trusted connection. |

2. Select the following defaults for detail reports.

| Field | Description |
|---|--|
| Select default Investigative Reports date range | Choose the date range for the initial summary report display. |
| Select the default detail report format | Choose Smart columns selection to display detail reports with the default columns set for the information being reported. Choose Custom columns selection to specify the exact columns for initial display on all detail reports. Use the Available Columns list to make your selections. Users can modify the columns displayed after generating the report. |
| Select report type | Choose whether to open detail reports initially showing: <ul style="list-style-type: none"> • Detail: each record appears on a separate row; time can be displayed. • Summary: combines into a single entry all records that share a common element. The specific element varies, according to the information reported. Typically, the right-most column before the measure shows the summarized element. Time cannot be displayed. |
| Available Columns / Current Report | Select a column name in the Available Columns list and click the appropriate arrow to move it to the Current Report list. Up to 7 columns can be on the Current Report list. After the Current Report list contains all the columns for initial detail reports, set the order of the columns. Select an entry in the list, and use the up and down arrow buttons to change its position. |

- Click **Save Options** to immediately save all changes.

Display and output options

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Related topics:

- ◆ [Configuring investigative reports, page 433](#)
- ◆ [Database connection and report defaults, page 433](#)
- ◆ [Output to file, page 181](#)

You can make adjustments to the way certain report choices and report results are displayed in summary and multi-level investigative reports, and specify the default page size when reports are output to PDF format.

These investigative reports configuration options are set in the **wse.ini** file (located by default in the C:\Program Files or Program Files (x86)\Websense\Web Security\webroot\Explorer\ directory).

The following table lists the parameters that affect display and output of investigative reports, what each controls, and its default value. (Do NOT modify any other settings in the wse.ini file.)

| Parameter | Description |
|-------------------|--|
| maxUsersMenu | The database must have fewer users than this value (by default, 5000) to show User as a report choice in the Internet Use by list. |
| maxGroupsMenu | <p>The database must have fewer groups than this value (by default, 3000) to show Group as a report choice in the Internet Use by list.</p> <p>Note: There must be 2 or more groups for Group to appear in the Internet Use by list.</p> <p>There also must be 2 or more domains for Domain to appear in the Internet Use by list. There is no maximum value for domains.</p> |
| maxUsersDrilldown | <p>This works with the warnTooManyHits parameter to control when the User option displays in red. The red lettering indicates that selecting User will produce a very large report, which could be slow to generate.</p> <p>If there are more users than this value (by default, 5000), and more hits than the warnTooManyHits value, the User option displays red in various drop-down lists and values lists.</p> <p>If there are more users than this value, but fewer hits than the warnTooManyHits value, the User option displays in normal color, as the resulting report will be a more reasonable size.</p> |

| Parameter | Description |
|------------------------------|--|
| maxGroupsDrilldown | The Group option displays in red during drill down if the proposed report includes more groups than this number (by default, 2000). The red lettering indicates that selecting Group will produce a very large report, which could be slow to generate. |
| warnTooManyHits | <p>This works with the maxUsersDrilldown parameter to control when the User option displays in red.</p> <p>If there are more users than the maxUsersDrilldown value, but fewer hits than this value (by default, 10000), the User option does <i>not</i> display in red.</p> <p>If there are more users than the maxUsersDrilldown value, and more hits than this value, the User option does display in red. The red lettering indicates that selecting User will produce a very large report, which could be slow to generate.</p> |
| hitsPerPage | This determines the maximum number of items (by default, 100) displayed per page. (This does not affect printed reports.) |
| maxOutputBufferSize | <p>This is the maximum amount of data (in bytes) that can be displayed on the main investigative reports page. If the requested data exceeds this limit (by default, 4000000, or, 4 million bytes), a message stating that some results are not shown appears in red at the end of the report.</p> <p>Larger values enable you to display larger amounts of data in one report, if this is an issue. However, if you encounter memory errors, consider decreasing this value.</p> |
| sendMulti | This option is disabled (0) by default. Set it to 1 (enabled) to divide very large, scheduled detail reports into multiple files of 10,000 rows each. The files that represent one report are zipped and sent to the email recipients. The report files can be extracted with most common file compression utilities. |
| maxSlices | This is the maximum number of distinct slices (by default, 6) in a pie chart, including an Other slice, which combines all values that do not have individual slices. |
| timelineCompressionThreshold | This option is used only for User Activity by Day or Month, when the Group Similar Hits/View All Hits option is available. The report collapses all hits with the same category that occur within the number of seconds set here (by default, 10). |
| PageSize | <p>Investigative report results can be output to Portable Document Format (PDF) for easy distribution or printing. The page size (by default, Letter) can be:</p> <ul style="list-style-type: none"> • A4 (8.27 X 11.69 inches) • Letter (8.5 X 11 inches) |

Self-reporting

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Related topics:

- ◆ [Configuring reporting preferences, page 409](#)
- ◆ [Accessing self-reporting, page 182](#)
- ◆ [Investigative reports, page 156](#)

Self-reporting is a feature you can enable to allow users to view investigative reports on their personal Internet activity. This allows them to see what kind of information is being gathered and monitored about them, which accommodates government regulations in many countries. In addition, viewing their own activity may encourage some users to alter their browsing habits so they meet the organization's Internet policy.

To enable self-reporting:

1. Go to **Settings > General > Directory Services**, and configure the directory service used to authenticate users who access TRITON - Web Security with their network credentials. This may have been done previously to enable filtering by user and group names. See [Directory services, page 77](#).
2. Go to the **Settings > Reporting > Preferences**, and mark the **Allow self-reporting** check box. See [Configuring reporting preferences, page 409](#).

After enabling the option, be sure to give users the information they need to run the reports:

- ◆ The URL for accessing the self-reporting interface:

```
https://<IP_address>:9443/mng/login/pages/  
selfReportingLogin.jsf
```

Replace <IP_address> with the IP address of the TRITON - Web Security machine.

Remind users that they can save the URL as a favorite or bookmark for future use.

Administrators and users can also access the self-reporting logon page by opening the TRITON - Web Security logon page and clicking the Self-Reporting link.

- ◆ What user name and password to use during logon.

Self-reporting users must enter their network user name and password during logon.

18

Network Configuration

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Related topics:

- ◆ [Network Agent configuration, page 440](#)
- ◆ [Verifying Network Agent configuration, page 446](#)

When you run Websense Web Security or Websense Web Filter in standalone mode (not integrated with a proxy or firewall product), Websense Network Agent enables:

- ◆ Internet content filtering
- ◆ Network protocol and Internet application management
- ◆ Bandwidth management
- ◆ Logging of bytes transferred

In an integrated Websense software deployment, a gateway, firewall, or caching product may handle the task of routing user requests to Websense software for filtering, and routing block pages back to the client. In this environment, Network Agent may still be used to filter non-HTTP requests, provide enhanced logging detail, or both.

In addition, Websense Web Security Gateway can detect protocols that tunnel over HTTP (see [Tunneled protocol detection, page 192](#)) and provide some bandwidth management capabilities ([Using Bandwidth Optimizer to manage bandwidth, page 279](#)), independent of Network Agent.

Network Agent works by continually monitoring overall network usage, including bytes transferred over the network. The agent sends usage summaries to Websense software at predefined intervals. Each summary includes start time and end time, overall bytes used, and bytes used per protocol.

By default, Network Agent also provides bandwidth usage data to Policy Server, and filtering log data to Filtering Service.

Network Agent is typically configured to see all 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)

The latter is the primary concern in monitoring employee Internet usage.

Network Agent configuration

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Related topics:

- ◆ [Configuring global settings, page 440](#)
- ◆ [Configuring local settings, page 442](#)
- ◆ [Configuring NIC settings, page 443](#)
- ◆ [Adding or editing IP addresses, page 445](#)

After installing Network Agent, use TRITON - Web Security to configure its network monitoring behavior. Network Agent settings are divided into two main areas:

- ◆ **Global settings** affect all Network Agent instances. Use these settings to:
 - Identify the machines in your network.
 - List machines in your network that Network Agent should monitor for **incoming** requests (for example, internal Web servers).
 - Specify bandwidth calculation and protocol logging behavior.
- ◆ **Local settings** apply only to the selected Network Agent instance. Use these settings to:
 - Identify which Filtering Service instance is associated with each Network Agent.
 - Note proxies and caches used by the machines that this Network Agent monitors.
 - Configure how each network card (NIC) in the Network Agent machine is used (to monitor requests, send block pages, or both).

Network card settings also determine which segment of the network each Network Agent instance monitors.

Configuring global settings

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Related topics:

- ◆ [Configuring local settings, page 442](#)
- ◆ [Configuring NIC settings, page 443](#)
- ◆ [Adding or editing IP addresses, page 445](#)

Use the **Settings > Network Agent > Global** page to define basic monitoring and logging behavior for all instances of Network Agent.

The **Describe Your Network** list identifies the IP addresses that are part of your network in IPv4 or IPv6 format. By default, Network Agent does not monitor the traffic sent **between** these IP addresses (internal network communications).

Network Agent does not use this list to determine which IP addresses to monitor for Internet requests. That behavior is configured separately for each Network Agent NIC (see [Configuring NIC settings, page 443](#)). This list is used only to exclude internal traffic (like LAN and intranet connections) from monitoring.

An initial set of entries is provided by default. You can add more entries, or edit or delete existing entries.

The **Internal Traffic to Monitor** list includes any internal IPv4 or IPv6 addresses (encompassed by the “Describe Your Network” list) for which you **do** want Network Agent to monitor traffic. This might include internal Web servers, for example, to help you to track internal connections.

Any request sent from anywhere in the network to the specified internal machines is monitored. By default, this list is blank.

- ◆ Click **Add** to add an IP address or range to the appropriate list. Both IPv4 and IPv6 formats are supported. See [Adding or editing IP addresses, page 445](#), for more information.
- ◆ To edit an entry in the list, click the IP address or range. See [Adding or editing IP addresses, page 445](#), for more information.
- ◆ To remove an entry from the list, mark the check box next to an IP address or range, and then click **Delete**.

The **Additional Settings** options allow you to determine how often Network Agent calculates bandwidth usage, and whether and how often protocol traffic is logged:

| Field | What to do |
|-----------------------------------|--|
| Bandwidth calculation interval | Enter a number between 1 and 300 to specify how frequently, in seconds, Network Agent should calculate bandwidth usage. An entry of 300, for example, indicates that Network Agent will calculate bandwidth every 5 minutes. The default is 10 seconds. |
| Log protocol traffic periodically | Mark this option to enable the Logging interval field. |
| Logging interval | Enter a number between 1 and 300 to specify how frequently, in minutes, Network Agent logs protocols. An entry of 60, for example, indicates that Network Agent will write to the log file every hour. The default is 1 minute. |

When you are finished making changes, click **OK** to cache the changes. Changes are not implemented until you click **Save and Deploy**.

Configuring local settings

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Related topics:

- ◆ [Configuring global settings, page 440](#)
- ◆ [Configuring NIC settings, page 443](#)

Use the **Settings > Network Agent > Local Settings** page to configure filtering behavior, proxy information, and other settings for the selected instance of Network Agent.

- ◆ To get to the Local Settings page for a Network Agent instance, navigate to **Settings > Network Agent** and position the mouse over the **Global** option. A list of IP addresses appears. Select the IP address of the instance you want to configure.
- ◆ The IP address of the selected Network Agent instance appears in the title bar of the content pane.

Use the **Filtering Service Definition** settings to specify which Filtering Service is associated with the selected Network Agent instance, and how to respond to Internet requests if Filtering Service is not available.

| Field | What to do |
|-------------------------------------|---|
| Filtering Service IP address | Select the Filtering Service that is associated with this Network Agent. |
| If Filtering Service is unavailable | Select Permit to permit all requests or select Block to block all requests until Filtering Service is available again. The default is Permit. |

To ensure that user requests are monitored, filtered, and logged correctly, use the **Proxies and Caches** list to specify the IP address of any proxy or cache server that communicates with Network Agent.

- ◆ Click **Add** to add an IPv4 or IPv6 address or range to the list (see [Adding or editing IP addresses, page 445](#)).
- ◆ To edit an entry in the list, click the IP address or range.
- ◆ To remove an entry from the list, mark the check box next to an IP address or range, and then click **Delete**.

Use the **Network Interface Cards** list to configure individual NICs. Click on a NIC in the **Name** column, and then see [Configuring NIC settings, page 443](#), for further instructions.

The **Advanced Network Agent Settings** options are used when:

- ◆ HTTP requests in your network are passed through a non-standard port.

By default the **Ports used for HTTP traffic** are **8080, 80** (when Websense software is integrated with a firewall, proxy, or cache) or **All** (in a standalone deployment).

- ◆ You want Network Agent to ignore traffic on specific ports.

Mark **Configure this Network Agent instance to ignore traffic on the following ports**, and then enter one or more ports.

If you have deployed Websense Content Gateway, this may be used to prevent double logging of HTTPS traffic.

- ◆ Websense Technical Support instructs you to change debugging options for troubleshooting purposes.

Debug Settings options should not be changed without direction from Technical Support.

| Field | Description |
|--------|---|
| Mode | <ul style="list-style-type: none"> • None (default) • General • Error • Detail • Bandwidth |
| Output | <ul style="list-style-type: none"> • File (default) • Window |
| Port | 55870 (default) |

When you are finished making changes to your Network Agent settings, click **OK** to cache the changes. Changes are not implemented until you click **Save and Deploy**.

Configuring NIC settings

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Related topics:

- ◆ [Network Agent configuration](#), page 440
- ◆ [Configuring monitoring settings for a NIC](#), page 444
- ◆ [Adding or editing IP addresses](#), page 445

Use the **Network Agent > Local Settings > NIC Configuration** page to specify how Network Agent uses each available network interface card (NIC) to monitor and manage network usage.

The **NIC Information** area provides the context for the changes that you make, showing the **IP address**, brief **NIC Description**, and card **Name**. Use this information to ensure that you are configuring the correct NIC.

Monitoring

In a multiple-NIC configuration, you can identify one NIC to monitor network traffic, and another NIC to serve block pages. At least one NIC must be used for monitoring, and more than one NIC can monitor traffic.

Use the **Monitoring** section to indicate whether or not to **Use this NIC to monitor traffic**.

- ◆ If this NIC is not used for monitoring, deselect the check box and then continue with the next section.
- ◆ If the NIC is used for monitoring, select the check box, and then click **Configure**. You are taken to the Configure Monitoring Behavior page. See [Configuring monitoring settings for a NIC](#), page 444, for instructions.

Other NIC options

In addition to configuring monitoring options, you can also determine other NIC behaviors:

1. Under Blocking, make sure that the appropriate NIC is listed in the **Blocking NIC** field. If you are configuring multiple NICs, the settings for each NIC should show the same value in this field. In other words, only one NIC is used for blocking.
2. If you are running Websense software in **Stand-Alone** mode, **Filter and log HTTP requests** is selected, and cannot be changed.
3. If you have integrated Websense software with a third-party device or application, use the **Integrations** options to indicate how this Network Agent should filter and log HTTP requests. Options that do not apply to your environment are disabled.
 - Select **Log HTTP requests** to improve accuracy in Websense reports.
 - Select **Filter all requests not sent over HTTP ports** to use Network Agent to filter only those HTTP requests not sent through the integration product.
4. Under Protocol Management, indicate whether Network Agent should use this NIC to filter non-HTTP protocols:
 - Check **Filter non-HTTP protocol requests** to activate the protocol management feature. This allows Websense software to filter Internet applications and data transfer methods, such as those used for instant messaging, streaming media, file sharing, Internet mail, and so on. See [Filtering categories and protocols](#), page 50, and [Working with protocols](#), page 272, for more information.
 - Check **Measure bandwidth usage by protocol** to activate the Bandwidth Optimizer feature. Network Agent uses this NIC to track network bandwidth usage by each protocol or application. See [Using Bandwidth Optimizer to manage bandwidth](#), page 279, for more information.

Configuring monitoring settings for a NIC

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Use the **Local Settings > NIC Configuration > Monitor List** page to specify which IP addresses Network Agent monitors via the selected network interface card (NIC).

1. Under Monitor List, specify which requests Network Agent monitors:
 - **All:** Network Agent monitors requests from all IP addresses it sees using the selected NIC. Typically, this includes all machines in the same network segment as the current Network Agent machine or NIC.
 - **None:** Network Agent does not monitor any requests.
 - **Specific:** Network Agent monitors only the network segments included in the Monitor List.
2. If you selected Specific, click **Add**, and then specify the IP addresses that Network Agent should monitor in IPv4 or IPv6 format. See [Adding or editing IP addresses](#), page 445, for more information.

**Note**

You cannot enter overlapping IP address ranges. If ranges overlap, network bandwidth measurements may not be accurate, and bandwidth-based filtering may not be applied correctly.

To remove an IP address or network range from the list, check the appropriate list item, and then click **Delete**.

3. Under Monitor List Exceptions, identify any internal machines Network Agent should exclude from monitoring.

For example, Network Agent could ignore requests made by CPM Server. This way, CPM Server requests will not clutter Websense log data or any of the status monitors output.

 - a. To identify a machine, click **Add**, and then enter its IP address in IPv4 or IPv6 format.
 - b. Repeat the process to identify additional machines.
4. Click **OK** to cache your changes and return to the NIC Configuration page. Changes are not implemented until you click **Save and Deploy**.

Adding or editing IP addresses

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Related topics:

- ◆ [Configuring global settings](#), page 440
- ◆ [Configuring local settings](#), page 442
- ◆ [Configuring NIC settings](#), page 443

Use the **Add IP Addresses** or **Edit IP Addresses** page to make changes to any of the following Network Agent lists: Internal Network Definition, Internal Traffic to Monitor, Proxies and Caches, Monitor List, or Monitor List Exceptions.

- ◆ Both IPv4 and IPv6 addresses and ranges are supported.
- ◆ When you add or edit an IP address range, make sure that it does not overlap any existing entry (single IP address or range) in the list.
- ◆ When you add or edit a single IP address, make sure that it does not fall into a range that already appears in the list.

To add a new IP address or range:

1. Select the **IP address** or **IP address range** radio button.
2. Enter a valid IP address or range.
3. Click **OK** to return to the previous Network Agent Settings page. The new IP address or range appears in the appropriate table.

To return to the previous page without caching your changes, click **Cancel**.

4. Repeat this process for additional IP addresses, as needed.

When you edit an existing IP address or range, the Edit IP Addresses page displays the selected item with the correct radio button already selected. Make any necessary changes, and then click **OK** to return to the previous page.

When you are finished adding or editing IP addresses, click **OK** on the Network Agent Settings page. Changes are not implemented until you click **Save and Deploy**.

Verifying Network Agent configuration

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

After configuring Network Agent in TRITON - Web Security, you can use any third-party packet analyzer to ensure that computers on your network are visible to Websense software.

Make sure that the network card that you have configured as the Network Agent monitoring NIC can see traffic from IP addresses in all network segments that the Network Agent instance has been configured to monitor. (This configuration is done on the Local Settings > NIC Configuration > Monitor List page. See [Configuring monitoring settings for a NIC](#), page 444.)

If packets from some IP addresses are not visible to the monitoring NIC:

- ◆ Review the network configuration and NIC placement requirements (see the [Deployment and Installation Center](#) or [Network Agent Quick Start](#))
- ◆ Verify that you have properly configured the monitoring NIC ([Configuring NIC settings](#), page 443).

Use this section to find solutions to common issues before contacting Technical Support.

The Websense Support Web site features an extensive Knowledge Base and customer forums, available at support.websense.com. Search for topics by keyword or phrase, or browse content by product and version.

Troubleshooting instructions are grouped into the following sections:

- ◆ *Installation and subscription issues*
- ◆ *Master Database issues*, page 449
- ◆ *Filtering issues*, page 456
- ◆ *Network Agent issues*, page 460
- ◆ *User configuration and identification issues*, page 463
- ◆ *Block message issues*, page 473
- ◆ *Log, status message, and alert issues*, page 475
- ◆ *Policy Server and Policy Database issues*, page 479
- ◆ *Delegated administration issues*, page 481
- ◆ *Log Server and Log Database issues*, page 482
- ◆ *Investigative report and presentation report issues*, page 496
- ◆ *Other reporting issues*, page 503
- ◆ *Interoperability issues*, page 507
- ◆ *Troubleshooting tips and tools*, page 523

Installation and subscription issues

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- ◆ *There is a subscription problem*, page 448
- ◆ *Unable to verify the subscription key*, page 448
- ◆ *After upgrade, users are missing from TRITON - Web Security*, page 448

There is a subscription problem

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A valid subscription key is needed to download the Websense Master Database and perform Internet filtering. When your subscription expires or is invalid, and when the Master Database has not been downloaded for more than 2 weeks, the Health Alerts summary on the System tab of the Status > Dashboard page displays a warning.

- ◆ Verify that you have entered your subscription key exactly as you received it. The key is case sensitive.
- ◆ Make sure that your subscription has not expired. See [Subscription key, page 451](#).
- ◆ Ensure that the Master Database has been downloaded successfully within the last 2 weeks. You can check download status in TRITON - Web Security: click **Database Download** on the Status > Dashboard page.

See [The Master Database does not download, page 450](#), for help troubleshooting database download problems.

If you have entered the key correctly, but continue to receive a status error, or if your subscription has expired, contact Websense, Inc., or your authorized reseller.

When your subscription expires, TRITON - Web Security settings determine whether all users are given unfiltered Internet access or all Internet requests are blocked. See [Your subscription, page 24](#), for more information.

Unable to verify the subscription key

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

After you enter your subscription key, Filtering Service attempts to connect to the Websense database download server to both verify the key and download the Master Database.

If Filtering Service is unable to connect to the database download server, both subscription errors and database download errors will appear in TRITON - Web Security.

- ◆ If the database download server is down, the problem should resolve itself within a short period of time.
- ◆ If Filtering Service is unable to connect to the download server, see [Internet access, page 451](#), and [Verify firewall or proxy server settings, page 452](#), to make sure that Filtering Service and the network environment are properly configured to enable the connection.

After upgrade, users are missing from TRITON - Web Security

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If you defined Active Directory as your directory service after upgrading your Websense software, user names may not appear in TRITON - Web Security. This

occurs when user names include characters that are not part of the UTF-8 character set.

To support LDAP 3.0, the Websense installer changes the character set from MBCS to UTF-8 during upgrade. As a result, user names that include non-UTF-8 characters are not properly recognized.

To fix this problem, manually change the character set to MBCS:

1. Go to **Settings > General > Directory Services**.
2. Make sure that **Active Directory (Native Mode)** is selected under Directories, near the top of the page.
3. Click **Advanced Directory Settings**.
4. Under Character Set, click **MBCS**. You may have to scroll down to see this option.
5. Click **OK** to cache the change. Changes are not implemented until you click **Save and Deploy**.

Master Database issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [The initial filtering database is being used, page 449](#)
- ◆ [The Master Database is more than 1 week old, page 450](#)
- ◆ [The Master Database does not download, page 450](#)
- ◆ [Master Database download does not occur at the correct time, page 455](#)
- ◆ [Contacting Technical Support for database download issues, page 455](#)

The initial filtering database is being used

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The Websense Master Database houses the category and protocol definitions that provide the basis for filtering Internet content.

A partial version of the Master Database is installed with your Websense software on each Filtering Service machine. This partial database is used to enable basic filtering functionality from the time you enter your subscription key.

You must download the full database for complete filtering to occur. See [The Websense Master Database, page 27](#), for more information.

The process of downloading the full database may take a few minutes or more than 60 minutes, depending on factors such as Internet connection speed, bandwidth, available memory, and free disk space.

The Master Database is more than 1 week old

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Websense Master Database houses the category and protocol definitions that provide the basis for filtering Internet content. Websense software downloads changes to the Master Database according to the schedule defined in TRITON - Web Security. By default, download is scheduled to occur once a day.

To manually initiate a database download:

1. Go to the **Status > Dashboard** page, and then click **Database Download**.
2. Click **Update** next to the appropriate Filtering Service instance to start the database download, or click **Update All** to start the download on all Filtering Service machines.



Note

After downloading updates to the Master Database, CPU usage can be 90% or more for a short time while the database is loaded into local memory. It is a good idea to perform the download at off-peak times.

3. To continue working while the database is downloaded, click **Close**.

Click the **Database Download** button at any time to view download status.

If a new version of the Master Database adds or removes categories or protocols, administrators performing category- or protocol-related policy management tasks (like editing a category set) at the time of the download may receive errors. Although such updates are somewhat rare, as a best practice, try to avoid making changes to categories, protocols, and filters while a database is being updated.

The Master Database does not download

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you are unable to download the Websense Master Database successfully:

- ◆ Make sure that you have entered your subscription key correctly in TRITON - Web Security, and that the key has not expired ([Subscription key](#), page 451).
- ◆ Verify that the Filtering Service machine is able to access the Internet ([Internet access](#), page 451).
- ◆ Check firewall or proxy server settings to make sure that Filtering Service can connect to the Websense download server ([Verify firewall or proxy server settings](#), page 452).
- ◆ Make sure that there is enough disk space ([Insufficient disk space on the Filtering Service machine](#), page 453) and memory ([Insufficient memory on the Filtering Service machine](#), page 454) on the download machine.

- ◆ Look for any application or appliance in the network, such as anti-virus software, that might prevent the download connection (*Restriction applications*, page 454).

Subscription key

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To verify that the subscription key is entered correctly and has not expired:

1. Go to **Settings > General > Account**.
2. Compare the key that you received from Websense, Inc., or your reseller to the **Subscription key** field. The key must use the same capitalization as in your key document.
3. Check the date next to **Key expires**. If the date has passed, contact your reseller or Websense, Inc., to renew your subscription.
4. If you have made changes to the key in the Settings dialog box, click **OK** to activate the key and enable database download.

To manually initiate a database download, or to check the status of the most recent database download, click **Database Download** in the toolbar at the top of the Status > Dashboard page.

Internet access

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To download the Master Database, the Filtering Service machine sends an **HTTP post** command to the download servers at the following URLs:

download.websense.com
 ddsdom.websense.com
 ddsint.websense.com
 portal.websense.com
 my.websense.com

To verify that Filtering Service has the Internet access necessary to communicate with the download server:

1. Open a browser on the machine running Filtering Service.
2. Enter the following URL:

<http://download.websense.com/>

If the machine is able to open an HTTP connection to the site, a redirect page is displayed, and then the browser displays the Websense home page.

If this does not happen, ensure that the machine:

- Can communicate over port 80, or the port designated in your network for HTTP traffic
- Is configured to properly perform DNS lookups
- Is configured to use any necessary proxy servers (see *Verify firewall or proxy server settings*, page 452)

Also make sure that your gateway does not include any rules that block HTTP traffic from the Filtering Service machine.

3. Use one of the following methods to confirm that the machine can communicate with the download site:
 - From the command prompt, enter the following command:
`ping download.websense.com`
 Verify that the ping receives a reply from the download server.
 - Use telnet to connect to **download.websense.com 80**. If you see a cursor and no error message, you can connect to the download server.

Verify firewall or proxy server settings

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If the Master Database is downloaded through a firewall or proxy server that requires authentication, ensure that a browser on the Filtering Service machine can load Web pages properly. If pages open normally, but the Master Database does not download, check the proxy server settings in the Web browser.

Microsoft Internet Explorer:

1. Navigate to **Tools > Internet Options**, then select the **Connections** tab.
2. Click **LAN Settings**, then make a note of the settings that appear under **Proxy server**.

Mozilla Firefox:

1. Navigate to **Tools > Options >**, then select the **Advanced** tab.
2. On the **Network** tab (usually selected by default), click **Settings**.

The Connection Settings dialog box shows whether the browser is configured to connect to a proxy server. Make a note of the proxy settings.

Next, make sure that Websense software is configured to use the same proxy server to perform the download.

1. Go to **Settings > General > Database Download**.
2. Verify that **Use proxy server or firewall** is selected, and that the correct server and port are listed.
3. Make sure that the **Authentication** settings are correct. Verify the user name and password, checking spelling and capitalization.

If Websense software must provide authentication information, the firewall or proxy server must be configured to accept clear text or basic authentication.

Information about enabling basic authentication is available from support.websense.com.

If a firewall restricts Internet access at the time Websense software normally downloads the database, or restricts the size of a file that can be transferred via HTTP, Websense software cannot download the database. To determine if the firewall is causing the download failure, search for a rule on the firewall that might be blocking

the download, and change the download times in TRITON - Web Security ([Configuring database downloads](#), page 29), if necessary.

Insufficient disk space on the Filtering Service machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Filtering Service needs adequate space to download compressed Master Database updates to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default). It also needs space to decompress and load the database. As a general rule, Websense, Inc., recommends at least 4 GB of free disk space on the download drive.

A disk space warning indicates that free disk space on the Filtering Service machine has dipped below 4 GB.

On Windows systems, use Windows Explorer to check disk space:

1. Open **My Computer** in Windows Explorer (not Internet Explorer).
2. Select the drive on which Websense software is installed. By default, Websense software is located on the C drive.
3. Right-click the drive and select **Properties**.
4. On the General tab, verify that at least 4 GB of free space is available. If there is insufficient free space on the drive, delete any unnecessary files to free up the required space.

On Linux systems, use the **df** command to verify the amount of available space in the file system in which Websense software is installed:

1. Open a terminal session.
2. At the prompt, enter:

```
df -h /opt
```

Websense software is usually installed in the /opt/WebSense/bin/ directory. If it is installed elsewhere, use that path.

3. Make sure that at least 4 GB of free space is available. If there is insufficient free space on the drive, delete any unnecessary files to free up the required space.

If, after addressing any disk space issues, you are unable to download the Master Database:

1. Stop all Websense services on the Filtering Service machine (see [Stopping and starting Websense services](#), page 385).
2. Delete the **Websense.xfr** and **Websense** (no extension) files from the Websense **bin** directory.
3. Restart the Websense services.
4. Manually initiate a database download (go to the **Status > Dashboard** page in TRITON - Web Security, and then click **Database Download**).

Insufficient memory on the Filtering Service machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The memory required to run Websense software, download the Master Database, and apply Master Database updates varies, depending on the size of the network.

- ◆ In a small network, at least 2 GB of memory is recommended (Windows and Linux).
- ◆ Refer to the [Deployment and Installation Center](#) for complete system recommendations.

When free memory drops below 512 MB on the Filtering Service machine, a Health Alert message is generated. Buffer and cache space are not included in this calculation.

If the machine meets or exceeds the requirements in the [Deployment and Installation Center](#), and Filtering Service is able to load the Master Database, the low memory condition is unlikely to cause problems.

If Filtering Service is unable to load the Master Database, however, you will need to free up memory on the machine, or add additional RAM.

To check the memory in a Windows system:

1. Open the Task Manager.
2. Select the **Performance** tab.
3. Check the total **Physical Memory** available.

You also use the Windows Performance monitor (Start > Administrative Tools > Performance) to capture information.

To check the memory in a Linux system:

1. Open a terminal session.
2. At the prompt, enter:
`top`
3. Compute the total memory available by adding **Mem: av** and **Swap: av**.

To address problems with insufficient memory, you can either upgrade the machine's RAM or move applications with high memory usage to another machine.

Restriction applications

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Some restriction applications or appliances, such as virus scanners, size-limiting applications, or intrusion detection systems can interfere with database downloads. Ideally, configure Websense software to go straight to the last gateway so that it does not connect to these applications or appliances. Alternatively:

1. Disable the restrictions relating to the Filtering Service machine and to the Master Database download location.

See the appliance or software documentation for instructions on changing the device's configuration.

2. Attempt to download the Master Database.

If this change has no effect, reconfigure the application or appliance to include the machine running Filtering Service.

Master Database download does not occur at the correct time

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The system date and time may not be set correctly on the Filtering Service machine. Websense software uses the system clock to determine the proper time for downloading the Master Database.

If the download is not occurring at all, see [The Master Database does not download, page 450](#).

Contacting Technical Support for database download issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you are still experiencing Master Database download problems after completing the troubleshooting steps in this Help section, send the following information to Websense Technical Support:

1. The exact error message that appears in the Database Download dialog box
2. External IP addresses of the machines attempting to download the database
3. Your Websense subscription key
4. Date and time of the last attempt
5. Number of bytes transferred, if any
6. Open a command prompt and perform an **nslookup** on **download.websense.com**. If connection to the download server is made, send the IP addresses returned to Technical Support.
7. Open a command prompt and perform a **tracert** to **download.websense.com**. If connection to the download server is made, send the route trace to Technical Support.
8. A packet trace or packet capture performed on the Websense download server during an attempted download.
9. A packet trace or packet capture performed on the network gateway during the same attempted download.
10. The following files from the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default): **websense.ini**, **eimserver.ini**, and **config.xml**.

Go to support.websense.com/ for Technical Support contact information.

Filtering issues

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- ◆ [Filtering service is not running](#), page 456
- ◆ [User Service is not available](#), page 457
- ◆ [Sites are incorrectly categorized as Information Technology](#), page 458
- ◆ [Keywords are not being blocked](#), page 458
- ◆ [Custom or limited access filter URLs are not filtered as expected](#), page 459
- ◆ [An FTP request is not blocked as expected](#), page 459
- ◆ [Websense software is not applying user or group policies](#), page 459
- ◆ [Remote users are not filtered by correct policy](#), page 460

Filtering service is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When Filtering Service is not running, Internet requests cannot be filtered and logged.

Filtering Service may stop running if:

- ◆ There is insufficient disk space on the Filtering Service machine (see [Insufficient disk space on the Filtering Service machine](#), page 453).
- ◆ A Master Database download failed due to lack of disk space (see [The Master Database does not download](#), page 450).
- ◆ The **websense.ini** file is missing or corrupted.
- ◆ You stop the service (after creating custom block pages, for example) and do not restart it.

Filtering Service may also appear to have stopped if you restarted multiple Websense services, and they were not started in the correct order. When you restart multiple services, remember to start the Policy Database, Policy Broker, and Policy Server before starting other Websense services.

To troubleshoot these problems:

- ◆ Verify that there is at least 3 GB of free disk space on the Filtering Service machine. You may need to remove unused files or add additional capacity.
- ◆ Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default), and confirm that you can open **websense.ini** in a text editor. If this file has been corrupted, replace it with a backup file.
- ◆ Check the Windows Event Viewer or **websense.log** file for error messages from Filtering Service (see [Troubleshooting tips and tools](#), page 523).
- ◆ Log off of TRITON - Web Security, restart Policy Server, and then restart Filtering Service (see [Stopping and starting Websense services](#), page 385).

Wait 1 minute before logging on to TRITON - Web Security again.

User Service is not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When User Service is not running, or when Policy Server cannot communicate with User Service, Websense software cannot correctly apply user-based filtering policies.

User Service may appear to have stopped if you restarted Policy Server after restarting other Websense Services. To correct this issue:

1. Restart the Websense Policy Server service (see [Stopping and starting Websense services](#), page 385).
2. Start or restart Websense User Service.
3. Close TRITON - Web Security.

Wait 1 minute before logging on to TRITON - Web Security again.

If the previous steps do not fix the problem:

- ◆ Check the Windows Event Viewer or **websense.log** file for error messages from User Service (see [Troubleshooting tips and tools](#), page 523).
- ◆ Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin or /opt/WebSense/bin/, by default), and make sure that you can open **websense.ini** in a text editor. If this file has been corrupted, replace it with a backup file.

High CPU usage on the Filtering Service machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When the CPU on the Filtering Service machine is overloaded (whether by the volume of processing being performed by Filtering Service, or by demands from other software running on the Filtering Service machine), users may experience slow browsing, as requests for sites take longer to process.

During times of peak CPU usage (exceeding 95%), Filtering Service may be unable to process requests at all, leading to incorrect filtering.

To address this issue, start by using the Task Manager (Windows) or **top** command (Linux) to determine which processes on the machine are causing CPU usage to peak.

- ◆ Are there applications that could be run from another machine?
- ◆ Can you move Filtering Service to a dedicated machine?

If Filtering Service is using a high amount of processing time:

- ◆ Evaluate the amount of traffic being processed by Filtering Service. DNS lookups can require a fair amount of processing time; you may want to install an additional Filtering Service instance for load balancing.

- ◆ Evaluate your use of keywords and regular expressions. Are you using a large number of regular expressions or keywords, or using very complex regular expressions?

Reducing the number of keywords and regular expressions, or removing or simplifying complex regular expressions can improve Filtering Service performance.

Sites are incorrectly categorized as Information Technology

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Internet Explorer versions 4.0 and later have the ability to accept searches from the Address bar. When this option is enabled, if a user enters only a domain name in the Address bar (**websense** instead of **http://www.websense.com**, for example), Internet Explorer considers the entry a search request, not a site request. It displays the most likely site the user is looking for, along with a list of closely matching sites.

As a result, Websense software permits, blocks, or limits the request based on the status of the Information Technology/Search Engines and Portals category in the active policy—not on the category of the requested site. For Websense software to filter based on the category of the requested site, you must turn off searching from the Address bar:

1. Go to **Tools > Internet Options**.
2. Go to the **Advanced** tab.
3. Under Search from the Address bar, select:
 - Internet Explorer 5, 6, and 7: **Do not search from the Address bar**
 - Internet Explorer 8: **Do not submit unknown addresses to your auto-search provider**
4. Click **OK**.

Keywords are not being blocked

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

There are 2 possible reasons for this problem: **Disable keyword blocking** is selected, or the site whose URL contains the keyword uses **post** to send data to your Web server.

To ensure that keyword blocking is enabled:

1. Go to **Settings > General > Filtering**.
2. Under General Filtering, check the **Keyword search options** list. If **Disable keyword blocking** is shown, select another option from the list. See [Configuring Websense filtering settings, page 68](#), for more information about the available options.
3. Click **OK** to cache the change. Changes are not implemented until you click **Save and Deploy**.

If a site uses **post** to send data to your Web server, Websense software does not recognize keyword filtering settings for that URL. Unless your integration product recognizes data sent via post, users can still access URLs containing blocked keywords.

To see whether a URL uses a post command, view the URL source from within your browser. If the source code contains a string like “<method=post>”, then post is used to load that URL.

Custom or limited access filter URLs are not filtered as expected

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If an HTTPS URL in a limited access filter or custom URL list (recategorized or unfiltered) is not filtered as expected, an integration product may be transforming the URL into a format that Filtering Service cannot recognize.

Non-proxy integration products translate URLs from domain format into IP format. For example, the URL **https://<domain.com>** is read as **https://<IP_address>:443**. When this occurs, Filtering Service cannot match the URL received from the integration product with a custom URL or limited access filter, and does not filter the site appropriately.

To work around this problem, add both the IP addresses and URLs for sites you want to filter using custom URLs or limited access filters.

An FTP request is not blocked as expected

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When integrated with Check Point® firewalls, Websense software requires **folder view** to be enabled in the client's browser to recognize and filter FTP requests.

When folder view is not enabled, FTP requests sent to the FireWall-1 proxy are sent to Websense software with an “http://” prefix. As a result, Websense software filters these requests as HTTP requests, rather than FTP requests.

Websense software is not applying user or group policies

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Users may not be filtered by the user or group policy you assigned for a variety of reasons. Check the following topics, and search the [Knowledge Base](#) for additional information.

- ◆ *User Service is not available, page 457*
- ◆ *Remote users are not filtered by correct policy, page 460*
- ◆ *Directory service connectivity and configuration, page 468*
- ◆ *Directory service configuration in TRITON - Web Security, page 469*
- ◆ *User identification and Windows Server 2008, page 469*

- ◆ [User Service on Linux](#), page 471
- ◆ [Remote users are not being filtered correctly](#), page 472

Remote users are not filtered by correct policy

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If a remote user accesses the network by logging on using cached domain credentials (network logon information), Websense software applies the policy assigned to that user, or to the user's group or domain, if appropriate. If there is no policy assigned to the user, group, or domain, or if the user logs on to the computer with a local user account, Websense software applies the Default policy.

Occasionally, a user is not filtered by a user or group policy or the Default policy. This occurs when the user logs on to the remote computer with a local user account, and the last portion of the remote computer's Media Access Control (MAC) address overlaps with an in-network IP address to which a policy has been assigned. In this case, the policy assigned to that particular IP address is applied to the remote user.

Network Agent issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [Network Agent is not installed](#), page 460
- ◆ [Network Agent is not running](#), page 460
- ◆ [Network Agent is not monitoring any NICs](#), page 461
- ◆ [Network Agent can't communicate with Filtering Service](#), page 461

Network Agent is not installed

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Network Agent is required to enable protocol filtering. With some integrations, Network Agent is also used to provide more accurate logging.

If you are running with an integration product, and do not require Network Agent protocol filtering or logging, you can hide the "No Network Agent is installed" status message. See [Reviewing current system status](#), page 396, for instructions.

For standalone installations, Network Agent must be installed for network traffic to be monitored and filtered. See the [Deployment and Installation Center](#) for installation instructions, and then see [Network Agent configuration](#), page 440.

Network Agent is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Network Agent is required to enable protocol filtering. With some integrations, Network Agent is also used to provide more accurate logging.

For standalone installations, Network Agent must be running to monitor and filter network traffic.

To troubleshoot this problem:

1. Check the Windows Services dialog box (see [The Windows Services dialog box](#), page 524) to see if the **Websense Network Agent** service has started.
2. Restart the **Websense Policy Broker** and **Websense Policy Server** services (see [Stopping and starting Websense services](#), page 385).
3. Start or restart the **Websense Network Agent** service.
4. Close TRITON - Web Security.
5. Wait 1 minute, and then log on to TRITON - Web Security again.

If that does not fix the problem:

- ◆ Check the **Windows Event Viewer** for error messages from Network Agent (see [The Windows Event Viewer](#), page 524).
- ◆ Check the **Websense.log** file for error messages from Network Agent (see [The Websense log file](#), page 525).

Network Agent is not monitoring any NICs

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Network Agent must be associated with at least one network interface card (NIC) to monitor network traffic.

If you add or remove network cards from the Network Agent machine, you must update your Network Agent configuration.

1. In TRITON - Web Security, go to **Settings**.
2. In the left navigation pane, under Network Agent, select the IP address of the Network Agent machine.
3. Verify that all NICs for the selected machine are listed.
4. Verify that at least one NIC is set to monitor network traffic.

See [Network Agent configuration](#), page 440, for more information.

Network Agent can't communicate with Filtering Service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Network Agent must be able to communicate with Filtering Service to enforce your Internet usage policies.

- ◆ Did you change the IP address of Filtering Service machine or reinstall Filtering Service?

If so, see [Update Filtering Service IP address or UID information](#), page 462.

- ◆ Do you have more than 2 network interface cards (NICs) on the Network Agent machine?

If so, see [Network Configuration](#), page 439, to verify your Websense software settings.

- ◆ Have you reconfigured the switch connected to the Network Agent?

If so, refer to the [Deployment and Installation Center](#) to verify your hardware setup, and see [Network Agent configuration](#), page 440, to verify your Websense settings.

If none of these apply, see [Configuring local settings](#), page 442, for information about associating Network Agent and Filtering Service.

Update Filtering Service IP address or UID information

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When Filtering Service has been uninstalled and reinstalled, Network Agent does not automatically update the internal identifier (UID) for the Filtering Service. TRITON - Web Security attempts to query Filtering Service using the old UID, which no longer exists.

Likewise, when you change the IP address of the Filtering Service machine, this change is not automatically registered.

To re-establish connection to the Filtering Service:

1. Open TRITON - Web Security.
A status message indicates that a Network Agent instance is unable to connect to Filtering Service.
2. Click **Settings** at the top of the left navigation pane.
3. In the left navigation pane, under Network Agent, select the IP address of the Network Agent machine.
4. At the top of the page, under Filtering Service Definition, expand the **Server IP address** list, and then select the IP address of the Filtering Service machine.
5. Click **OK** at the bottom of the page to cache the update. Changes are not implemented until you click **Save and Deploy**.

Insufficient memory on the Network Agent machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Network Agent allocates the operation memory that it needs at startup. If there are severe memory constraints on the Network Agent machine, the agent will either:

- ◆ Fail to start
- ◆ Be unable to monitor traffic

In either case, filtering and logging based on information from Network Agent does not occur. As a result, users may be given access to sites or applications that would typically be blocked.

Use the Task Manager (Windows) or **top** command (Linux) to evaluate memory usage on the Network Agent machine. To solve the problem, you can:

- ◆ Upgrade the RAM on the machine.
- ◆ Move applications or components with high memory requirements to another machine.
- ◆ Simplify your Network Agent configuration to reduce memory needs.

High CPU usage on the Network Agent machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When the CPU on the Network Agent machine is overloaded by demands from other software running on the machine, the agent may be unable to detect and log traffic. In a standalone environment, this can mean that all user requests for Web sites and Internet applications are permitted, even those that would be typically be blocked.

To address this issue, start by using the Task Manager (Windows) or **top** command (Linux) to determine which processes on the machine are causing CPU usage to peak.

- ◆ Are there applications that could be run from another machine?
- ◆ Can you move Network Agent to a dedicated machine?

User configuration and identification issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [User and group-based policies are not applied](#), page 463
- ◆ [Filtering Service cannot communicate with a transparent identification agent](#), page 464
- ◆ [DC Agent has insufficient permissions](#), page 465
- ◆ [DC Agent unable to access required file](#), page 466
- ◆ [I cannot add users and groups to TRITON - Web Security](#), page 468
- ◆ [User Service on Linux](#), page 471

User and group-based policies are not applied

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If Websense software is using computer or network policies, or the **Default** policy, to filter Internet requests, even after you have assigned user or group-based policies, or if the wrong user or group-based policy is being applied, use the following steps to pinpoint the problem:

- ◆ If you are using nested groups in Windows Active Directory, policies assigned to a parent group are applied to users belonging to a sub-group, and not directly to the parent group. For information on user and group hierarchies, see your directory service documentation.
- ◆ The User Service cache may be outdated. User Service caches user name to IP address mappings for 3 hours. To clear and recreate the cache, go to the User Service Cache section of the Settings > General > Directory Services page in TRITON - Web Security, and then click **Clear Cache**.
- ◆ User Service may have been installed using the Guest account, equivalent to an anonymous user to the domain controller. If the domain controller has been set not to give the list of users and groups to an anonymous user, User Service is not allowed to download the list. See [Changing DC Agent, Logon Agent, and User Service permissions](#), page 470.
- ◆ If the user being filtered incorrectly is on a machine running Windows XP SP2, the problem could be due to the Windows Internet Connection Firewall (ICF), included and enabled by default in Windows XP SP2. For more information about the Windows ICF, see Microsoft Knowledge Base Article #320855.

For DC Agent or Logon Agent to get user logon information from a machine running Windows XP SP2:

1. On the Client machine, go to **Start > Settings > Control Panel > Security Center > Windows Firewall**.
2. Go to the **Exceptions** tab.
3. Check **File and Printer Sharing**.
4. Click **OK** to close the ICF dialog box, and then close any other open windows.

If none of these steps addresses your issue, check the following topics, or search support.websense.com for additional information.

- ◆ [Directory service connectivity and configuration](#), page 468
- ◆ [Directory service configuration in TRITON - Web Security](#), page 469
- ◆ [User identification and Windows Server 2008](#), page 469

Filtering Service cannot communicate with a transparent identification agent

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you use DC Agent, Logon Agent, eDirectory Agent, or RADIUS Agent for transparent user identification, Filtering Service must be able to communicate with the agent to correctly apply user-based policies. If this communication fails, the user may be filtered by an IP-address-based policy or the Default policy.

To address this problem:

1. Verify that the agent service or daemon is running.

- **Windows:** Use the Windows Services dialog box to make sure that Websense DC Agent, Websense Logon Agent, Websense eDirectory Agent, or Websense RADIUS Agent is running.
 - **Linux:** Navigate to the `/opt/Websense/` directory and use the following command to verify that Logon Agent, eDirectory Agent, or RADIUS Agent is running:

```
./WebsenseAdmin -status
```
2. You can **ping** the transparent identification agent machine from the Filtering Service machine. Try both the IP address and the hostname of the transparent identification agent machine, to make sure that DNS is properly configured. For example:

```
ping 10.55.127.22
```

```
ping transid-host
```
 3. The transparent identification agent communication port is open between the Filtering Service machine and the agent machine. The default ports are:
 - DC Agent: 30600
 - Logon Agent: 30602
 - eDirectory Agent: 30700
 - RADIUS Agent: 30800
 4. The correct agent IP address or hostname and port appear on the **Settings > General > User Identification** page in TRITON - Web Security.

If the service appears to be running normally, and there does not appear to be a network communication problem between the Filtering Service and agent machines:

- ◆ Use the Windows Services dialog box or the `/opt/Websense/WebsenseDaemonControl` command to restart the agent.
- ◆ Check the Windows Event Viewer (see [The Windows Event Viewer, page 524](#)) or **websense.log** file (see [The Websense log file, page 525](#)) on the agent machine for error messages from the transparent identification agent.

DC Agent has insufficient permissions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

DC Agent may have been installed as a service using the Guest account, equivalent to an anonymous user to the domain controller.

In order to perform domain discovery (required for DC Agent to create and maintain the `dc_config.txt` file), or to perform computer polling, the Websense DC Agent service requires **domain admin** permissions. In some environments (typically very large enterprise networks), DC Agent requires **enterprise admin** permissions.

If you have disabled domain discovery and workstation polling, and are just using domain controller polling while maintaining the `dc_config.txt` file manually, DC Agent can run as any network user with read access to the domain controller.

To grant DC Agent domain admin privileges:

1. On the DC Agent machine, create a user account with a descriptive name, like **WsUserID**. This account exists only to provide a security context for DC Agent when it requests information from the directory service.
 - Assign the new account **domain admin** privileges in all domains.
 - Assign the same password to this account in all domains.
 - Set the password to never expire.

Make a note of the user name and password.
2. Open the Windows **Services** dialog box (Start > Administrative Tools > Services).
3. Scroll to the **Websense DC Agent** service, right-click the service name, and then select Stop.
4. Right-click the service name again, select **Properties**, and then click the **Log On** tab.
5. Select **This account**, and then enter the account name and password that you created for DC Agent. Some domains require that the account name be entered in the format domain\username.
6. Click **OK** to return to the Services dialog box.
7. Right-click the service name again, and then select **Start**.
8. Close the Services dialog box.

You may also need to assign User Service the same administrative privileges as DC Agent.

DC Agent unable to access required file

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

DC Agent works by identifying domain controllers in the network, then querying them for user logon sessions. By default, the agent automatically verifies existing domain controllers and detects new domains or domain controllers added to the network. It stores this information in a file called **dc_config.txt**, located in the Websense **bin** directory on the DC Agent machine.

An alert stating that DC Agent is unable to access this file can occur if:

- ◆ DC Agent is unable to open the file with read or write permissions.
 - Make sure that the domain account used to run DC Agent has read and write permissions to the file and directory.
 - If the file is present, and not write protected, make sure that the file can be opened manually, and has not been corrupted.
- ◆ DC Agent is unable to create the file, because it cannot find any domain controller information.
 - If User Service is installed on a Linux machine, make sure that you have performed required WINS setup steps. For complete instructions, see [User Service on Linux](#), page 471.

- If User Service is installed on a Windows Server 2008 machine, make sure that the service is running with **domain admin** credentials. See [Changing DC Agent, Logon Agent, and User Service permissions](#), page 470.
- Make sure that NetBIOS for TCP/IP is enabled, and that the NetBIOS ports (137, 138, 139, and 445) are open between the DC Agent machine and the domain controller.
If User Service is running on Windows, make sure that the NetBIOS ports are also open between the User Service machine and the domain controller.
- Make sure that the Computer Browser Service is running on any Windows 2008 Server machine that hosts DC Agent, User Service, or Active Directory. See [Turning on the Computer Browser service](#), page 470.
- ◆ DC Agent does not find any valid entries in the file.
 - Make sure that at least one domain controller entry in the file is enabled. If all entries are disabled, DC Agent has effectively been instructed to stop working.
 - Make sure that all entries in the file are in a valid format. For example:


```
[WEST_DOMAIN]
dcWEST1=on
dcWEST2=on
[EAST_DOMAIN]
dcEAST1=on
dcEAST2=off
```

DC Agent Domains and Controllers page is blank

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By default, DC Agent performs automatic **domain discovery**, identifying domain controllers in the network. Domain and controller information is stored in a file called **dc_config.txt**. The information from the dc_config.txt file is collected and displayed in TRITON - Web Security on the Settings > User Identification > DC Agent Domains and Controllers page.

This page may display only error text if:

- ◆ DC Agent was recently installed, and domain discovery is still underway.
- ◆ An administrator has modified the **dc_config.txt** file to turn off polling for all domain controllers in the network.
- ◆ Something is preventing DC Agent from performing domain discovery.

Make sure that:

- ◆ DC Agent domain discovery is enabled on the **Settings > User Identification > DC Agent** page for each DC Agent instance in your network.
- ◆ DC Agent has had enough time to complete its domain discovery process.
- ◆ No DC Agent alerts appear on Status > Alerts page.

If a DC Agent alert appears, see [DC Agent has insufficient permissions](#), page 465, and [DC Agent unable to access required file](#), page 466. These articles provide instructions for ensuring that DC Agent has the required permissions and network access to complete the domain discovery process and create the dc_config.txt file.

I cannot add users and groups to TRITON - Web Security

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Being unable to see the list of users and groups when you attempt to add clients into TRITON - Web Security, can be caused by a variety of problems. Check the following topics, and check the [Knowledge Base](#) for additional information.

- ◆ [Directory service connectivity and configuration](#), page 468
- ◆ [Directory service configuration in TRITON - Web Security](#), page 469
- ◆ [User identification and Windows Server 2008](#), page 469

Directory service connectivity and configuration

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Make sure that the Websense User Service machine and your directory server are running, and able to communicate over the network. The default ports used for directory service communication are:

| | |
|------|--|
| 139 | NetBIOS communication: Active Directory |
| 389 | LDAP communication: Active Directory, Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 636 | SSL port: Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 3268 | Active Directory |
| 3269 | SSL port: Active Directory |

In addition, consider the following:

- ◆ If you are using Windows Active Directory in **mixed** mode, and User Service runs on a Windows Server 2008 machine, the account used to run User Service must have administrative privileges on the directory. This may sometimes also be required in other versions of Windows Server.
To check or change the User Service account, see [Changing DC Agent, Logon Agent, and User Service permissions](#), page 470.
- ◆ If you are running Active Directory in **native** mode, set the User Service to run as the Local System account. No account should be assigned to the actual service.
User Service connects to the directory with the administrator user name and password configured on the Settings > General > Directory Services > Add Global Catalog Server page in TRITON - Web Security.

- ◆ If you are running User Service on a Linux machine and communicating with a Windows-based directory service, see [User Service on Linux](#), page 471, for additional instructions.
- ◆ Determine whether a firewall is blocking communication between TRITON - Web Security and User Service on port 55815. If so, open the blocked port.

Directory service configuration in TRITON - Web Security

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If you encounter problems adding users and groups in TRITON - Web Security, make sure that you have provided complete and accurate configuration for your directory service.

1. Go to Settings > General > Directory Services.
2. Select the directory service used by your organization.
3. Verify the configuration. See [Directory services](#), page 77, and its sub-topics for details.

If Websense User Service is installed on a Linux machine, and is configured to communicate with Active Directory, see [User Service on Linux](#), page 471, for additional configuration requirements.

User identification and Windows Server 2008

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

You may encounter problems adding users and groups in TRITON - Web Security if you install one or more of the following components on Windows Server 2008:

- ◆ Websense User Service
- ◆ Windows Active Directory

If your network uses Active Directory in mixed mode, the Windows Computer Browser service must be running on the machine where User Service is installed, and also on the machine running Active Directory 2008. This service is turned on by default in earlier versions of Windows. However, it is disabled by default on Windows Server 2008.

In addition, when User Service is installed on Windows Server 2008, and you are using Active Directory in mixed mode, you must configure User Service with domain rights to access information from Active Directory.

If you are running User Service on Linux and using Active Directory 2008, additional configuration is required. See [User Service on Linux](#), page 471.

To enable the Computer Browser service on a relevant machine, see [Turning on the Computer Browser service](#), page 470.

To configure User Service with rights to access directory information, see [Changing DC Agent, Logon Agent, and User Service permissions](#), page 470.

Turning on the Computer Browser service

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Websense Setup offers the option to turn on the Computer Browser service during installation of the following components on Windows Server 2008.

- ◆ Websense User Service
- ◆ Websense DC Agent
- ◆ Websense Logon Agent

If you chose not to have it started, or the installer was not successful, you must turn on the service manually.

Perform the following procedure on each machine running an affected component:

1. Make sure that Windows Network File Sharing is enabled.
 - a. Go to **Start > Network** and click **Network and Sharing Center**.
 - b. Click **Advanced Sharing Settings**, then select **Turn on file and print sharing**.
2. Go to **Control Panel > Administrative Tools > Services**.
3. Double-click **Computer Browser** to open the Properties dialog box.
4. Set the Startup type to **Manual**.
5. Click **Start**.
6. Change the Startup type to **Automatic**. This ensures that the service is started automatically every time the machine is restarted.
7. Click **OK** to save your changes and close the Services dialog box.
8. Repeat these steps on each machine running Windows Server 2008 and an affected component.

Changing DC Agent, Logon Agent, and User Service permissions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Sometimes, DC Agent, Logon Agent, or User Service needs to run as an account that has permission to access the directory service.

1. On the machine running the domain controller, create a user account such as **Websense**. You can use an existing account, but a Websense account is preferable so the password can be set not to expire. No special privileges are required.
 Set the password never to expire. This account only provides a security context for accessing directory objects.
 Make note of the user name and password you establish for this account, as they must be entered in step 6 and 7.
2. On the machine running an affected component, go to **Start > Programs > Administrative Tools > Services**.
3. Select the appropriate Websense service entry, listed below, and then click **Stop**.

- Websense DC Agent
 - Websense Logon Agent
 - Websense User Service
4. Double-click the Websense service entry.
 5. On the **Log On** tab, select the **This account** option.
 6. Enter the user name of the Websense account created in step 1. For example: **DomainName\websense**.
 7. Enter and confirm the Windows password for this account.
 8. Click **OK** to close the dialog box.
 9. Select the Websense service entry in the Services dialog box, and then click **Start**.
 10. Repeat this procedure for each instance of Websense DC Agent, Logon Agent, and User Service in the network.

User Service on Linux

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you plan to apply filtering policies to individual users and groups in your network, special configuration steps are required to assure that the Websense software can identify users successfully in networks that run Websense User Service on a Linux server and one of the following:

- ◆ Use Active Directory in mixed mode
- ◆ Plan to use Websense Logon Agent to transparently identify users via Active Directory in native mode
- ◆ Use DC Agent to transparently identify users

In these environments, Websense software must be configured to communicate with a Windows Internet Name Server (WINS) to resolve domain names to domain controller IP addresses. The precise steps vary, depending on your environment.

If your network uses Windows Active Directory in mixed mode:

1. In TRITON - Web Security, go to the **Settings > General > Directory Services** page.
2. Select **Windows Active Directory (Mixed Mode)**. This is the default option.
3. Enter the name and password for the administrative user.
4. Enter the **Domain** name.

If your organization uses multiple domains, enter the name of a domain that is trusted by all domains that authenticate your users.

5. Enter the IP address of a Windows Internet Name Server (WINS) that can resolve the domain name entered above to a domain controller IP address.
6. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

If your network uses Active Directory (Native Mode), and you need to configure WINS settings:

1. Go to the **Settings > General > Directory Services** page.
2. Provide administrative credentials and identify the Windows Internet Name Server (WINS), as follows.
 - a. Select **Windows Active Directory (Mixed Mode)**, which is the default.
 - b. Enter the name and password for the administrative user.
 - c. Enter the **Domain** name.

If your organization uses multiple domains, enter the name of a domain that is trusted by all domains that authenticate your users.
 - d. Enter the IP address of a Windows Internet Name Server (WINS) that can resolve the domain name entered above to a domain controller IP address.
 - e. Click **OK** to cache your changes.
 - f. Click **Save and Deploy** to implement these changes.
3. On the Directory Service page, select **Active Directory (Native Mode)**.
4. Configure the global catalog servers and other settings for your directory service. See [Windows Active Directory \(Native Mode\)](#), page 78, for assistance.
5. Click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Remote users are not prompted for manual authentication

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you have configured remote users to manually authenticate when accessing the Internet, there may be some occasions when individual users are not prompted for the authentication. This can occur in situations where some in-network IP addresses have been configured to bypass manual authentication.

When a remote user accesses the network, Websense software reads the last portion of the computer's Media Access Control (MAC) address. If this matches an in-network IP address that has been configured to bypass manual authentication, the remote user will not be prompted to authenticate manually when accessing the Internet.

One solution is to reconfigure the in-network IP address to use manual authentication. An alternative solution is to disable the manual authentication requirement for the affected remote user.

Remote users are not being filtered correctly

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If remote users are not being filtered, or are not being filtered by particular policies assigned to them, check the RADIUS Agent logs for the message **Error receiving from server: 10060** (Windows) or **Error receiving from server: 0** (Linux).

This usually occurs when the RADIUS server does not recognize RADIUS Agent as a client (source of RADIUS requests). Ensure that your RADIUS server is configured properly (see the [Using RADIUS Agent for Transparent User Identification](#) technical paper).

If you have installed remote filtering software (see [Filter Users Off Site](#), page 245), off-site users cannot be filtered if the Remote Filtering Client cannot communicate with the Remote Filtering Server within the network.

For instructions on configuring remote filtering software, see the [Remote Filtering Software](#) technical paper.

Block message issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [No block page appears for a blocked file type](#), page 473
- ◆ [Users receive a browser error instead of a block page](#), page 473
- ◆ [A blank white page appears instead of a block page](#), page 474
- ◆ [Protocol block messages don't appear as expected](#), page 475
- ◆ [A protocol block message appears instead of a block page](#), page 475

No block page appears for a blocked file type

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When file type blocking is used, the block message may not always be visible to the user. For example, when a downloadable file is contained within an internal frame (iframe) on a permitted site, the block message sent to that frame is not visible because the frame size is zero.

This is only a display problem; users cannot access or download the blocked file.

Users receive a browser error instead of a block page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If users receive an error message instead of a block page, the 2 most likely causes are:

- ◆ The user's browser is configured to use an external proxy. In most browsers, there is a setting that enables use of an external proxy. Verify that the browser is not set to use an external proxy.
- ◆ There is a problem identifying or communicating with the Filtering Service machine.

If the user's browser settings are correct, make sure that the IP address of the Filtering Service machine is listed correctly in the **eimserver.ini** file.

1. Stop **Websense Filtering Service** (see *Stopping and starting Websense services*, page 385).
2. Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).
3. Open the **eimserver.ini** file in a text editor.
4. Under **[WebsenseServer]**, add a blank line, and enter the following:

```
BlockMsgServerName = <Filtering Service IP address>
```

For example, if the Filtering Service IP address is 10.201.72.15, enter:

```
BlockMsgServerName = 10.201.72.15
```
5. Save and close the file.
6. Restart Filtering Service.

If the Filtering Service machine has more than one NIC, and the block page still does not display correctly after editing the **eimserver.ini** file, try the IP addresses of the other NICs in the **BlockMsgServerName** parameter.

If the block page still does not appear, make sure that users have read access to the files in the Websense block page directories:

- ◆ Websense\BlockPages\en\Default
- ◆ Websense\BlockPages\en\Custom

If the block page problem persists, search support.websense.com for additional troubleshooting hints.

A blank white page appears instead of a block page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When advertisements are blocked, or when a browser does not correctly detect the encoding associated with a block page, users may receive a blank white page instead of a block page. The reasons for this behavior are as follows:

- ◆ When the Advertisements category is blocked, Websense software sometimes interprets a request for a graphic file as an advertisement request, and displays a blank image instead of a block message (the normal method for blocking advertisements). If the requested URL ends in .gif or similar, have the user reenter the URL, leaving off the *.gif portion. See *Blocking graphical advertisements*, page 119.
- ◆ Some older browsers may not detect the encoding of block pages. To enable proper character detection, configure your browser to display the appropriate character set (UTF-8 for French, German, Italian, Spanish, Brazilian Portuguese, Simplified Chinese, Traditional Chinese, or Korean; and Shift_JIS for Japanese). See your browser's documentation for instructions, or upgrade the browser to a newer version.

Protocol block messages don't appear as expected

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Protocol block messages may not appear, or appear only after a delay, for any of the following reasons:

- ◆ User Service must be installed on a Windows machine in order for protocol block messages to display properly. For more information, see the [Deployment and Installation Center](#).
- ◆ Protocol block messages may not reach client machines if Network Agent is installed on a machine with multiple network interface cards (NICs), and a NIC is monitoring a different network segment from Filtering Service. Ensure that the Filtering Service machine has NetBIOS and Server Message Block protocol access to client machines, and that port 15871 is not blocked.
- ◆ A protocol block message may be slightly delayed, or appear on an internal machine where the requested protocol data originated (instead of on the client machine), when Network Agent is configured to monitor requests **sent to** internal machines.
- ◆ If the filtered client or the Websense filtering machine is running Windows 200x, the Windows **Messenger** service must be running for the protocol block message to display. Use the Windows Services dialog box on the client or server machine to see if the Messenger service is running (see [The Windows Services dialog box, page 524](#)). Even though the block message does not appear, protocol requests are still blocked.

A protocol block message appears instead of a block page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If your integration product does not send HTTPS information to Websense software, or if Websense software is running in standalone mode, Network Agent may interpret an HTTPS site request that is blocked via category settings as a protocol request. As a result, a protocol block message is displayed. The HTTPS request is also logged as a protocol request.

Log, status message, and alert issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [Where do I find error messages for Websense components?, page 476](#)
- ◆ [Websense Health alerts, page 476](#)
- ◆ [Two log records are generated for a single request, page 478](#)
- ◆ [Usage Monitor is not available, page 478](#)
- ◆ [Usage Monitor is not running, page 479](#)

Where do I find error messages for Websense components?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When there are errors or warnings related to core Websense components, alert messages are listed on the **Status > Alerts** page in TRITON - Web Security. In addition, by default, short alert messages are displayed in the **Health Alert Summary** list at the top of the System tab of the **Status > Dashboard** page (see [Websense Health alerts, page 476](#)).

- ◆ Click an alert summary in the dashboard to see more detailed information on the Status > Alerts page.
- ◆ Click **Solutions** next to a message on the Status > Alerts page for troubleshooting assistance.

Errors, warnings, and messages from Websense software components, as well as database download status messages, are recorded in the **websense.log** file in the Websense **bin** directory (see [The Websense log file, page 525](#)).

For Websense software components installed on Windows machines, you can also check the Windows Event viewer. See [The Windows Event Viewer, page 524](#).

Websense Health alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

By default, the System tab of the Web Security Dashboard includes a **Health Alert Summary** that lists potential concerns encountered by monitored components of your Websense software. These include:

- ◆ The initial filtering database is in use
- ◆ The Master Database is downloading for the first time
- ◆ The Master Database is more than 1 week old
- ◆ WebCatcher is not available
- ◆ Log Server is not running
- ◆ Presentation reports scheduler is not connected to the Log Database
- ◆ The Log Database ETL job has not completed successfully after 4 hours
- ◆ Log Server is not running
- ◆ Low disk space on the Log Server machine
- ◆ Log Server has not received data from Filtering Service for over an hour
- ◆ No monitoring NIC has been configured for a Network Agent
- ◆ The Master Database is being updated
- ◆ The Master Database did not download successfully
- ◆ Low disk space on the TRITON - Web Security machine
- ◆ The Log Database is not available
- ◆ One or more presentation report jobs failed
- ◆ There is no Log Server configured for a Policy Server
- ◆ The Log Database is not available
- ◆ A Log Server cache directory contains more than 100 cache files
- ◆ No Filtering Service has been configured for a Network Agent
- ◆ High CPU usage on the Network Agent machine

- Low memory on the Network Agent machine
- Filtering Service is not running
- Low disk space on the Filtering Service machine
- High CPU usage on the Filtering Service machine
- DC Agent has insufficient permissions
- Filtering Service is unable to communicate with Logon Agent
- Filtering Service is unable to communicate with eDirectory Agent
- Usage Monitor is not running
- The forensics repository location could not be reached
- A configuration problem is interfering with Threats forensics data collection
- There is no Network Agent configured for a Policy Server
- Network Agent is not running
- Low memory on the Filtering Service machine
- A DC Agent instance is unable to access a required file
- Filtering Service is unable to communicate with DC Agent
- Filtering Service is unable to communicate with RADIUS Agent
- Usage Monitor is not available
- The forensics repository has reached 90% of its maximum size
- Some records in the forensics repository are scheduled to be deleted within 1 week

If you have subscribed to Websense Web Security Gateway or Gateway Anywhere, Websense software monitors Content Gateway to provide alerts about the following conditions:

- Content Gateway is not running
- Content Gateway is not available

If you have subscribed to Websense Web Security Gateway Anywhere, or if your subscription includes both Web and data security components, Websense software monitors interoperability components to provide alerts about the following conditions:

- A Sync Service is not running.
- There is no Sync Service associated with a Policy Server instance.
- On-premises components are unable to connect to the hybrid service.
- Disk space is low on the partition hosting Sync Service.
- 24 hours since Sync Service downloaded log files from the hybrid service.
- Missing information required to activate hybrid filtering.
- A Directory Agent is not running.
- There is no Directory Agent associated with a Policy Server instance.
- Alerts were received from the hybrid service.
- 24 hours since Sync Service sent log files to Log Server.

The icon next to the alert message indicates the potential impact of the related condition.



The message is informational, and does not reflect a problem with your installation (for example, WebCatcher is not enabled, or Filtering Service is downloading a Master Database update).



The alert condition has the potential to cause a problem, but will not immediately prevent filtering or reporting (for example, the Master Database is more than 1 week old, or the subscription key is about to expire).



A Websense software component is not functioning (has not been configured or is not running), which may impair filtering or reporting, or your subscription has expired.

Click an alert message in the Health Alerts Summary to go to the Status > Alerts page, which provides additional information about current alert conditions. Click **Learn More** (for informational alerts) or **Solutions** (for errors or warnings) for details and troubleshooting tips.

If a Health Alert indicates that messages were received from the hybrid service, check the Hybrid Filtering Alerts table for details.

In some cases, if you are receiving error or status messages about a component that you are not using, or that you have disabled, you can choose to hide the alert messages. See [Reviewing current system status](#), [page 396](#), for more information.

Two log records are generated for a single request

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When Windows QoS Packet Scheduler is installed on the same machine as Network Agent, 2 requests are logged for each single HTTP or protocol request made from the Network Agent machine. (This duplication does not occur with requests made by client machines within your network.)

To fix the problem, disable Windows QoS Packet Scheduler on the Network Agent machine.

This problem does not occur if you use Network Agent for all logging. See [Configuring NIC settings](#), [page 443](#), for details.

Usage Monitor is not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In order to enable category and protocol usage alerting and Real-Time Monitor, Websense Usage Monitor must be installed. Typically, one Usage Monitor instance is installed for each Policy Server in your network. Usage Monitor may be installed on the Policy Server machine.

When installing Usage Monitor, make sure that it can communicate with:

- ◆ Policy Server on ports 55806 and 40000
- ◆ Policy Broker on port 55880
- ◆ Filtering Service and Real-Time Monitor on port 55809

Usage Monitor should also be able to receive information from Policy Server and Filtering Service on its listening port: 55813.

Usage Monitor is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When Websense Usage Monitor is stopped:

- ◆ Category and protocol access information cannot be collected for alerting purposes.
- ◆ Category and protocol usage alerts cannot be generated.
- ◆ Real-Time Monitor does not receive Internet activity data.

To start Usage Monitor:

- ◆ Windows: Open the Windows Services dialog box, scroll to Websense Usage Monitor, right-click the service, and select **Start**.
- ◆ Linux: Use the `/opt/Websense/WebsenseDaemonControl` command.

If Usage Monitor will not start, check the Windows Event Viewer or **websense.log** file for error information from the service.

Policy Server and Policy Database issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [I forgot my password, page 479](#)
- ◆ [The Websense Policy Database service fails to start, page 480](#)
- ◆ [Policy Server stops unexpectedly, page 480](#)

I forgot my password

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you are a Super Administrator or delegated administrator using a local account to log on to the TRITON Unified Security Center, any Global Security Administrator can reset the password. Global Super Administrators can manage accounts and passwords on the TRITON Settings > Administrators page.

If a Global Super Administrator is not available, administrators using local accounts can request a new password via the **Forgot my password** link on the TRITON logon page.

- ◆ A temporary password is sent to the email address associated with your administrator account.
- ◆ The temporary password is valid for only 30 minutes. If more than 30 minutes elapses before you attempt to log on with the temporary password, you must request a new password again.
- ◆ You are prompted to enter a new password after you have logged on using the temporary password.

The Websense Policy Database service fails to start

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Websense Policy Database runs as a special account: **WebsenseDBUser**. If this account experiences logon problems, the Policy Database is unable to start.

To address this issue, change the WebsenseDBUser password.

1. Log on to the Policy Database machine as a local administrator.
2. Go to **Start > Programs > Administrative Tools > Computer Management**.
3. In the navigation pane, under System Tools, expand **Local Users and Groups**, and then select **Users**. User information is displayed in the content pane.
4. Right-click **WebsenseDBUser** and select **Set Password**.
5. Enter and confirm the new password for this user account, and then click **OK**.
6. Close the Computer Management dialog box.
7. Go to **Start > Programs > Administrative Tools > Services**.
8. Right-click **Websense Policy Database** and select **Properties**.
9. On the Log On tab of the Properties dialog box, enter the new WebsenseDBUser password information, and then click **OK**.
10. Right-click Websense Policy Database again, and then select **Start**.

When the service has started, close the Services dialog box.

Policy Server stops unexpectedly

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If the hard disk on the Policy Server machine runs out of free space, the Websense Policy Server service or daemon stops. Even if the lack of disk space is the result of a transient condition (another application creates large temporary files, for example, and then removes them), Policy Server does not restart automatically.

- ◆ If Filtering Service or Network Agent is installed on the Policy Server machine, a Health Alert message in TRITON - Web Security will provide a warning that disk space is getting low.
- ◆ When Policy Server stops, a Health Alert message is displayed in TRITON - Web Security.

Manually restart Policy Server to address the immediate issue. Then, determine which application is sometimes filling up all available disk space on the machine. You can then decide whether the best solution is to move the application to another machine or to add disk space to the Policy Server machine.

Delegated administration issues

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- ◆ [Managed clients cannot be deleted from role, page 481](#)
- ◆ [Logon error says someone else is logged on at my machine, page 481](#)
- ◆ [Recategorized sites are filtered according to the wrong category, page 482](#)
- ◆ [I cannot create a custom protocol, page 482](#)

Managed clients cannot be deleted from role

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Clients cannot be deleted directly from the managed clients list on the Delegated Administration >Edit Role page if:

- ◆ the administrator has applied a policy to the client
- ◆ the administrator has applied a policy to one or more members of a network, group, domain, or organizational unit

There may also be problems if, during TRITON - Web Security logon, the Super Administrator chooses a different Policy Server than the one that communicates with the directory service containing the clients to be deleted. In this situation, the current Policy Server and directory service do not recognize the clients.

For assistance deleting managed clients, see [Delete managed clients, page 355](#).

Logon error says someone else is logged on at my machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you attempt to log on to TRITON - Web Security you may sometimes receive the error “Logon failed. The role *role_name* has been in use by *user_name*, since *date, time*, on computer 127.0.0.1.” The IP address 127.0.0.1 is also called the loopback address, and typically indicates the local machine.

This message means that someone is logged on at the TRITON - Web Security installation machine, in the same role you are requesting. You can select a different role (if you administer multiple roles), log on for reporting only, or wait until the other administrator logs off.

Recategorized sites are filtered according to the wrong category

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Recategorized URLs affect only the clients managed by role in which the URLs are added. For example, when a Super Administrator recategorizes URLs, clients managed by delegated administration roles continue to be filtered according to the Master Database category for those sites.

To apply the recategorization to clients in other roles, the Super Administrator can switch to each role and recategorize the sites for that role.

I cannot create a custom protocol

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Only Super Administrators are able to create custom protocols. However, delegated administrators can set filtering actions for custom protocols.

When Super Administrators create custom protocols, they should set the appropriate default action for most clients. Then, inform delegated administrators of the new protocol so they can update the filters for their role, as appropriate.

Log Server and Log Database issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [Log Server is not running, page 483](#)
- ◆ [Log Server has not received log files from Filtering Service, page 483](#)
- ◆ [Low disk space on the Log Server machine, page 486](#)
- ◆ [No Log Server is installed for a Policy Server, page 486](#)
- ◆ [Log Database was not created, page 488](#)
- ◆ [Log Database is not available, page 489](#)
- ◆ [Log Database size causes reporting delays, page 490](#)
- ◆ [More than 100 files in the Log Server cache directory, page 490](#)
- ◆ [Last successful ETL job ran more than 4 hours ago, page 492](#)
- ◆ [Configure Log Server to use a database account, page 492](#)
- ◆ [Log Server is not recording data in the Log Database, page 493](#)
- ◆ [Updating the Log Server connection account or password, page 493](#)
- ◆ [Configuring user permissions for Microsoft SQL Server, page 494](#)
- ◆ [Log Server cannot connect to the directory service, page 495](#)
- ◆ [Wrong reporting page displayed, page 495](#)

Log Server is not running

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If Log Server is not running, or if other Websense components are unable to communicate with Log Server, Internet usage information is not stored. Charts on the **Status > Dashboard** page stop updating, and you may not be able to generate reports.

Log Server may be unavailable if:

- ◆ It is unable to contact the Log Database after 20 attempts.
Make sure that the Log Database machine is running, that Microsoft SQL Server is operating properly, and that network communication has not been interrupted between the Log Server and Log Database machines.
- ◆ There is insufficient disk space on the Log Server machine.
Verify the amount of free disk space on the Log Server machine, and remove extraneous files, as needed.
- ◆ You changed the Microsoft SQL Server password without updating the ODBC or Log Server connection.
See [Updating the Log Server connection account or password](#), page 493, for information about addressing this issue.
- ◆ It has been more than 14 days since the Master Database was downloaded successfully.
See [The Master Database is more than 1 week old](#), page 450, and [The Master Database does not download](#), page 450, for information about addressing this issue.
- ◆ The **logserver.ini** file is missing or corrupted.
Navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\WebSense\Web Security\bin, by default) and make sure that you can open **logserver.ini** in a text editor. If this file has been corrupted, replace it with a backup file.
- ◆ You stopped Log Server to avoid logging Internet usage information.
Check the Windows Services dialog box to verify that Log Server has started, and restart the service if necessary (see [Stopping and starting Websense services](#), page 385).

If none of these address the issue, check the Windows Event Viewer and **websense.log** file for error messages from Log Server (see [Troubleshooting tips and tools](#), page 523) in order to better understand the problem.

Log Server has not received log files from Filtering Service

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Log Server receives Internet usage information from Filtering Service and stores it in the Log Database. If Log Server is not receiving files from Filtering Service, no data is being logged, recent data is not displayed on the **Status > Dashboard** page, and you cannot generate Internet usage reports that include recent data.

Log Server may not be receiving files from Filtering Service if:

- ◆ Filtering Service is not running.
See [Filtering service is not running](#), page 456, for information about addressing this issue.
- ◆ The two services are not able to communicate across the network.
 - Verify that there have been no recent changes to firewall rules that might affect traffic between the machines on port 55805 (default), or the custom port your organization uses.
 - Use a utility like **telnet** or **ping** to verify that the machines can communicate.
 - Verify that the Log Server IP address and port (55805, by default) is correct on the **Settings > General > Logging** page in TRITON - Web Security.
If the loopback address (127.0.0.1) or “localhost” is shown, enter the actual IP address of the Log Server machine.
 - Use the **Check Status** button on the Settings > General > Logging page to verify that it is possible to connect to Log Server.
If the status check fails:
 - a. Verify there is no firewall blocking the port.
 - b. Run the following command on the Log Server machine to verify that Log Server is listening on the port:

```
netstat -ban > port.txt
```
- ◆ Network Agent, Content Gateway, or a third-party integration product is not configured properly and not receiving Internet traffic.
 - See [Network Agent issues](#), page 460, and [Network Configuration](#), page 439, for information about addressing Network Agent configuration issues.
 - See the [Deployment and Installation Center](#) and [Content Gateway Help](#) for information about addressing Content Gateway configuration issues.
 - See the [Deployment and Installation Center](#) and your vendor’s documentation for information about other supported integrations.
- ◆ There is not sufficient disk space for Log Server to create new cache files.
See [Low disk space on the Log Server machine](#), page 486, for more information about addressing this issue.
- ◆ Filtering Service is associated with a Policy Server that is not configured for logging or is sending logs to TestLogServer.
See [No Log Server is installed for a Policy Server](#), page 486, and [Configuring how filtered requests are logged](#), page 410, for more information about addressing this issue.
- ◆ Files cannot be written to the cache or BCP folders.
Verify that the path defined for ODBC cache files or BCP files on the **Settings > Reporting > Log Server** page is correct, and that the account used to run Log Server has permissions to write to the path.
- ◆ Log Server did not install properly.

Use the following steps to verify that the Log Server service is registered properly with the Windows operating system:

1. Use the Windows Services dialog box to stop the Websense Log Server service.
2. Open a command prompt (**Run > cmd**) and navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin, by default).
3. Enter the following command.

```
LogServer .exe -c
```

 - If no errors display, the service is registered correctly.
 - If errors display, continue with the next step.
4. To remove the Log Server service, enter:

```
LogServer.exe -u
```
5. To register the executable, enter:

```
LogServer.exe -i
```
6. Once again, enter the following command. Verify that no errors appear.

```
LogServer .exe -c
```

If none of the items above addresses your issue:

- ◆ Verify that the Log Server executable version matches the installed product version. To find the Log Server version:
 1. Open a Windows command prompt on the Log Server machine.
 2. Navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin, by default).
 3. Enter the command:

```
logserver -v
```

This should match the version shown next to **Web Security build** on the **Help > About the TRITON Console** page in the TRITON Unified Security Center.
 - ◆ Occasionally, the Filtering Service on a Websense Appliance does not restart as expected after a settings change. If the Filtering Service on an appliance stops running, go to **Status > Modules** and restart the entire Websense Web Security module.
 - ◆ If Log Server stops running immediately after restarting and the runtime error “C error (Visual C Runtime Error)” displays, delete the **LogServer.state** file located in the Log Server **Cache** folder (C:\Program Files *or* Program Files (x86)\WebSense\Web Security\bin\Cache, by default) and restart the **Websense Log Server** service.
 - ◆ If you are using TestLogServer, verify that the tool is set up to forward log data to Log Server.
- See support.websense.com for detailed information about TestLogServer.

Low disk space on the Log Server machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Log Server stores Internet filtering records in temporary log cache files or BCP (bulk copy program) files on the Log Server machine until they can be processed into the Log Database.

Websense software watches the space available for both log cache files and BCP files are stored. By default:

- ◆ Log cache files are stored in the **C:\Program Files or Program Files (x86)\Websense\Web Security\bin\Cache** directory.
- ◆ BCP files are stored in the **C:\Program Files or Program Files (x86)\Websense\Web Security\bin\Cache\BCP** directory.

The log cache file and BCP file location can be changed on the **Settings > Reporting > Log Server** page in TRITON - Web Security. See [Configuring Log Server](#), page 412.



Note

If you have multiple Log Servers that forward their data to a primary Log Server, disk space is tracked for the primary Log Server only.

A Health Alert message is displayed on the System tab of the Status > Dashboard page if the space available at either of these locations drops too low. If there is insufficient disk space, logging stops.

- ◆ A warning message appears when the free disk space falls below 10% on the drive where log cache files and BCP files are stored. Although logging continues, you should clear disk space on the machine as soon as possible to avoid loss of log data.
- ◆ An error message appears when there is less than 4 MB of free disk space on the drive where log cache files and BCP files are stored.

When disk space dips below 4 MB, logging may become intermittent or stop completely. To minimize loss of log data, clear disk space on the Log Server machine as soon as possible after the error message appears.

No Log Server is installed for a Policy Server

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense Log Server collects Internet usage information and stores it in the Log Database for use in investigative reports, presentation reports, and the charts and summaries on the Dashboard page in TRITON - Web Security.

Log Server must be installed for reporting to occur.

You may see this message if:

- ◆ Log Server is installed on a different machine than Policy Server, and the Log Server IP address is incorrectly set to localhost in TRITON - Web Security.
- ◆ You are not using Websense reporting tools.
- ◆ Log Server is associated with a different Policy Server instance.

To verify that the correct Log Server IP address is set in TRITON - Web Security:

1. Select the **Settings** tab of the left navigation pane, and then go to **General > Logging**.
2. Enter the IP address of the Log Server machine in the **Log Server IP address or name** field.
3. Click **OK** to cache your change, and then click **Save and Deploy**.

If you are not using Websense reporting tools, or if Log Server is associated with a different Policy Server instance, you can hide the alert message in TRITON - Web Security.

1. On the Main tab of the left navigation pane, go to **Status > Alerts**.
2. Under Active Alerts, click **Advanced**.
3. Mark **Hide this alert** for the “No Log Server installed” message.
4. Click **Save Now**. The change is implemented immediately.

More than one Log Server is installed for a Policy Server

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Each Policy Server instance can connect to only one instance of Web Security Log Server. When multiple instances of Log Server attempt to connect to the same Policy Server, log data is not recorded properly, causing problems with multiple reporting tools.

To resolve this issue:

- ◆ If multiple, active Log Server instances are running, uninstall all but one of the Log Server instances connecting to the Policy Server that is reporting the error.
If you would like to configure multiple Log Server instances to communicate with a central Log Server that is responsible for recording data in the Log Database, see [Extending your Web Security deployment](#) in the Deployment and Installation Center.
- ◆ If this error appears, but only one instance of Log Server is active, it is likely that:
 - Policy Server was not running when a Log Server instance was uninstalled.
 - The Policy Server IP address was changed after Log Server was installed.
 - During installation, Log Server connected to a Policy Server instance on another machine. Later, a Policy Server instance was installed on the Log Server machine.

In all of these cases, the safest way to address the problem is:

1. Uninstall the Log Server instance or instances currently connected to the Policy Server instance displaying the error.
2. Stop Websense Policy Server (via the Windows Services dialog box or the /opt/Websense/WebsenseDaemonControl command).
3. Navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin) and make a backup copy of **config.xml** in another location. **Do not skip this step.**
4. Open the original **config.xml** file in a basic text editor (not an XML or HTML editor).
5. Near the top of the file, locate the WebsenseLogServer container. This contains the ID for the “ghost” Log Server instance.

```
<container name="WebsenseLogServer">
```
6. Delete the entire container, including the close tag. For example:

```
<container name="WebsenseLogServer">
  <data name="0c65012f-93af-11e1-8616-f215ee9c7d9d">10.201.136.34</data>
</container>
```
7. Save and close the **config.xml** file.
8. Delete the **config.xml.bak** file from the Websense **bin** directory.
9. Use the Windows Services dialog box or /opt/Websense/WebsenseDaemonControl command to start Websense Policy Server.

Log Database was not created

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If the installer cannot create the Log Database, make sure that:

- ◆ The account used to log on for installation has inadequate SQL Server permissions to create a database. The required permissions depend on the version of Microsoft SQL Server:

- SQL Server Standard or Enterprise:
 - **dbcreator** server role membership
 - **SQLServerAgentReader** permissions required
- SQL Server Express: **sysadmin** permissions required

Update the logon account or log on with an account that already has the required permissions (see [Configuring user permissions for Microsoft SQL Server](#), page 494), then run the installer again.

- ◆ A file or files exist with the default Log Database names (wslogdb70 and wslogdb70_1), but the files are not properly connected to the database engine and cannot be used by the Websense installer.

To address this issue:

- If you don't want to upgrade the existing database files, remove or rename them, and then run the installer again.

- If the existing database files are from a version that can be upgraded, and you want to continue using them, use the SQL Server Management Studio to attach the files to the database engine, then run the installer again.
- ◆ The account used to run the installer has inadequate permissions on the drive where the database is being installed.
Update the logon account to have read and write permissions for the installation location, or log on with a different account that already has these permissions. Then, run the installer again.
- ◆ There is insufficient disk space available to create and maintain the Log Database at the specified location.
Clear enough space on the selected disk to install and maintain the Log Database. Then, run the installer again. Alternatively, choose another location.

Log Database is not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Websense Log Database stores Internet usage information for use in presentation reports, investigative reports, and the charts and summaries on the Dashboard page in TRITON - Web Security.

If Websense software is unable to connect to the Log Database, first verify that the database engine (Microsoft SQL Server or Microsoft SQL Server Express) is running on the Log Database machine.

1. Open the Windows Services dialog box (see [The Windows Services dialog box, page 524](#)) and verify that the **MSSQLSERVER** service is running.
If you are running Microsoft SQL Server Standard or Enterprise (not Express), also make sure that the **SQLSERVERAGENT** service is running.
2. If a service has stopped, right-click the service name and click **Start**.
If the service does not restart, check the Windows Event Viewer (see [The Windows Event Viewer, page 524](#)) for Microsoft SQL Server errors and warnings.
3. If you are running Microsoft SQL Server Standard or Enterprise (not Express), double-click the SQLSERVERAGENT service to open a Properties dialog box, and verify that the **Startup type** is set to **Automatic**. This ensures that SQL Server Agent restarts each time Microsoft SQL Server, or the database engine machine, is restarted.
If the Startup type is Manual or Disabled, change it to **Automatic**, and then click **OK**.

If the database engine and (if applicable) SQL Server Agent services are running:

- ◆ Use the Windows Services dialog box to make sure that the **Websense Log Server** service is running.
- ◆ If Log Server and the Log Database are on different machines, make sure that both machines are running, and that the network connection between the machines is not impaired.

- ◆ Make sure that there is enough disk space on the Log Database machine, and that the Log Database has a sufficient quantity of allocated disk space (see [Log Server is not recording data in the Log Database](#), page 493).
- ◆ Make sure that the SQL Server password has not been changed. If the password changes, you must update the password information Log Server uses to connect to the database. See [Updating the Log Server connection account or password](#), page 493.
- ◆ Make sure that there are no network interruptions that are preventing TRITON - Web Security from communicating with the Log Database.

After making sure that the database engine and related services are running, and that any network problems have been resolved, use the Windows Services dialog box to restart the Websense TRITON - Web Security service. This ensures that presentation reports scheduler can save job definitions (see [No Log Server is installed for a Policy Server](#), page 486).

Log Database size causes reporting delays

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Log Database size is always a concern. If you have been successfully generating Websense reports and notice the reports are now taking much longer to display, or you begin receiving timeout messages from your Web browser, consider disabling some database partitions.

1. In TRITON - Web Security, go to **Settings > Reporting > Log Database**.
2. Locate the **Available Partitions** section of the page.
3. Mark the check box next to any partitions that are not required for current reporting operations, then click **Disable**.
4. Click **OK**, then **Save and Deploy** to implement the change.

See [Log Database sizing guidance](#), page 429, for more information about estimating database size.

More than 100 files in the Log Server cache directory

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Normally, Log Server ODBC cache files or BCP files are moved to the Log Database at a steady rate. If temporary files are accumulating on the Log Server machine, current Internet usage information is not being sent to the Log Database.

Log Server may be unable to process temporary files if:

- ◆ The Log Database is not running, the connection to the Microsoft SQL Server machine is down, or the database is busy. See [Log Database is not available](#), page 489.
- ◆ The Log Database is not installed properly or is the wrong version. See [Log Database was not created](#), page 488.

- ◆ The ETL job has stopped running and the incoming buffer is full.
- ◆ The Log Database is out of allocated disk space. See [Log Server is not recording data in the Log Database](#), page 493.
- ◆ The database creation path is invalid.
- ◆ There is no current active partition.
- ◆ There is a problem with BCP insertion.
- ◆ There is a problem with the size of **tempdb**.

To troubleshoot the problem:

- ◆ Make sure Microsoft SQL Server is running (see [Log Database is not available](#), page 489), and that no other processes that use significant resources, such as a full backup or antivirus scan, are running.

Also check the disk IO to verify that the machine is able to handle a fast insertion rate into the database.

- ◆ Verify that you are using a supported version of Microsoft SQL Server. The supported versions are:

- SQL Server 2008 or 2008 R2 Enterprise or Standard (32 or 64-bit)
- SQL Server 2005 SP 4 Enterprise or Standard
- SQL Server 2008 R2 Express (32 or 64-bit)

If you are using SQL Server Express, you must use the TRITON Unified Installer to install the database engine.

- ◆ Use SQL Server Management Studio to verify that the ETL job is running.

If you are using SQL Server Enterprise or Standard, and the ETL job is not running, make sure the SQL Server Agent service is running on the machine.

If SQL Server Agent is running:

- Expand the catalog database (wslogdb70) and verify that there are records in the INCOMINGBUFFER. If the INCOMINGBUFFER is full, Log Server cannot add additional records.
- If records exist in the INCOMINGBUFFER table:
 - a. Locate the **wse_etl_config** table.
 - b. Right-click, then select **Open Table**.
 - c. Change the value for **max_buffer_size** to **40000**.

- ◆ Use SQL Server Management Studio to verify that the **Auto Growth** option is enabled for the catalog database.

- ◆ Go to the **Settings > Reporting > Log Database** page in TRITON - Web Security and verify that:

- The **File Path** entries under **Partition Management** are valid.
- There is at least one active partition listed under **Available Partitions**.

- ◆ If Log Server has been configured to use BCP insertion, but BCP files are not being processed, change the insertion method to ODBC and see if new cache files are processed:

1. Go to Settings > Reporting > Log Server in TRITON - Web Security.

2. Expand the **Log Record Creation** section.
3. Select the **ODBC (Open Database Connectivity)** radio button.
4. Click **OK** to cache your changes, then click **Save and Deploy** to implement them.

By default, ODBC cache files are created in the **C:\Program Files (x86)\ Websense\ Web Security\ bin\ Cache** directory.

- ◆ The log (ldf) file for the database **tempdb** may be full. Restart the Microsoft SQL Server (MSSQLSERVER) services to clear the tempdb database.

Last successful ETL job ran more than 4 hours ago

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The ETL (Extract, Transform, and Load) job is responsible for processing data into the partition database. If the job does not run regularly, data is delayed in being written to the Log Database, resulting in reports and Dashboard charts that are out of date.

Typically, the ETL job runs quickly and is scheduled to start again 10 seconds after it completed its last process. If the job has not run recently, verify that:

- ◆ Make sure Microsoft SQL Server is running (see [Log Database is not available, page 489](#)), and that no other processes that use significant resources, such as a full backup or antivirus scan, are running.

Also check the disk IO to verify that the machine is able to handle a fast insertion rate into the database.

- ◆ Verify that you are using a support version of Microsoft SQL Server. The supported versions are:

- SQL Server 2008 or 2008 R2 Enterprise or Standard (32 or 64-bit)
- SQL Server 2005 SP4 Enterprise or Standard
- SQL Server 2008 R2 Express (32 or 64-bit)

If you are using SQL Server Express, you must use the TRITON Unified Installer to install the database engine.

- ◆ (*Microsoft SQL Server Standard and Enterprise*) SQL Server Agent is running. Use the Windows Services dialog box.

- ◆ The ETL job is running.

Use SQL Server Management Studio to verify that ETL job is running. If it isn't, check for errors in the job history and restart or manually run the job.

Configure Log Server to use a database account

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When TRITON - Web Security runs on a Websense appliance, reporting components are not available when Log Server uses a Windows Trusted Connection to connect to the Log Database.

To display all reporting components in TRITON - Web Security on an appliance, configure Log Server to use a database account (like **sa**) to connect to the Log Database. To do this:

1. Open TRITON - Web Security and go to the **Settings > Reporting > Log Server** page.
2. Under **Log Database Connection**, select the **SQL Server authentication** radio button.
3. Enter the **Account** name (like **sa**) and **Password** for a SQL Server account with create, read, and write permissions. See [Configuring user permissions for Microsoft SQL Server, page 494](#), for more information.
4. Click **Test Connection** to verify that Log Server can connect to the Log Database using the selected account, and that the account has the correct permissions.
5. Click **OK** to cache your changes, then click **Save and Deploy** to implement them.
6. Use the Windows Services dialog box to restart the **Websense TRITON - Web Security** service.

Log Server is not recording data in the Log Database

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Usually, when Log Server is unable to write data to the Log Database, the database has run out of allocated disk space. This can occur either when the disk drive is full, or in the case of Microsoft SQL Server, if there is a maximum size set for how large the database can grow.

If the disk drive that houses the Log Database is full, you must add disk space to the machine to restore logging.

If your SQL Server Database Administrator has set a maximum size for how large an individual database within Microsoft SQL Server can grow, do one of the following:

- ◆ Contact your SQL Server Database Administrator to increase the maximum.
- ◆ Find out the maximum size, and go to **Settings > Reporting > Log Database** to configure the Log Database to roll over when it reaches approximate 90% of the maximum size. See [Configuring database partition options, page 421](#).

If your IT department has established a maximum amount of disk space for SQL Server operations, contact them for assistance.

Updating the Log Server connection account or password

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

To change the account or password that Log Server uses to connect to the Log Database:

1. Log on to TRITON - Web Security and go to the **Settings > Reporting > Log Server** page.

2. Under **Log Database Connection**, verify that the correct database (by default, wslogdb70) appears in the **Data source name (DSN)** field.
3. Make sure that **SQL server authentication** is selected as the connection method, and that a valid account name (like **sa**) appears in the **Account** field.
4. Enter the current password for the connection account.
5. Click **Test Connection** to verify that Log Server can use the account.
6. Click **OK** to cache your changes, then click **Save and Deploy** to implement them.
7. Use the Windows Services dialog box to restart the **Websense TRITON - Web Security** service.

Configuring user permissions for Microsoft SQL Server

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Microsoft SQL Server Standard and Enterprise editions define SQL Server Agent roles that govern accessibility of the job framework. The SQL Server Agent jobs are stored in the SQL Server **msdb** database.

To install Websense Log Server successfully, the user account that owns the Websense database must:

1. Have membership in one of the following roles in the msdb database:
 - SQLAgentUserRole
 - SQLAgentReader Role
 - SQLAgentOperator Role
2. Have membership in the **db_datareader** role.
3. Be a member of the **dbcreator** fixed server role.

Use Microsoft SQL Server Management Studio to grant the database user account the necessary permissions to successfully install Log Server.

1. On the SQL Server machine, go to **Start > Programs > Microsoft SQL Server 2005 or 2008 > Microsoft SQL Server Management Studio**.
2. Select the **Object Explorer** tree, and then go to select **Security > Logins**.
3. Select the login account to be used during the installation.
4. Right-click the login account and select **Properties** for this user.
5. Select **User Mapping** and do the following:
 - a. Select **msdb** in database mapping.
 - b. Grant membership to one of these roles:
 - SQLAgentUserRole
 - SQLAgentReader Role
 - SQLAgentOperator Role
 - c. Grant membership to the **db_datareader** role.
 - d. Click **OK** to save your changes.
6. Select **Server Roles**, and then select **dbcreator**. The dbcreator role is created.

7. Click **OK** to save your changes.

Log Server cannot connect to the directory service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If either of the errors below occurs, Log Server is unable to access the directory service, which is necessary for updating user-to-group mappings for reports. These errors appear in the Windows Event Viewer (see [The Windows Event Viewer, page 524](#)).

- ◆ EVENT ID:4096 - Unable to initialize the Directory Service. Websense Server may be down or unreachable.
- ◆ EVENT ID:4096 - Could not connect to the directory service. The groups for this user will not be resolved at this time. Please verify that this process can access the directory service.

The most common cause is that Log Server and User Service are on different sides of a firewall that is limiting access. To resolve this problem, configure the firewall to permit access over port 55815.

The default ports used for directory service communication are:

| | |
|------|--|
| 139 | NetBIOS communication: Active Directory |
| 389 | LDAP communication: Active Directory, Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 636 | SSL port: Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 3268 | Active Directory |
| 3269 | SSL port: Active Directory |

Wrong reporting page displayed

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you have deployed a V-Series appliance, the time zone settings on the TRITON - Web Security and Log Server machines must match the time zone on the appliance.

When the time zone settings are out of sync, the wrong page is displayed when administrators attempt to open the **Reporting > Investigative Reports** page or the **Settings > Reporting > Log Database** page in TRITON - Web Security. A login page or a “login failed” message is displayed instead of the expected functionality.

To resolve this issue, update the time zone on the TRITON - Web Security and Log Server machines to match the time zone on the appliance, then restart the off-box services.

Investigative report and presentation report issues

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- ◆ [Presentation Reports Scheduler not connected to Log Database](#), page 496
- ◆ [Inadequate disk space to generate presentation reports](#), page 496
- ◆ [Scheduled jobs in presentation reports failed](#), page 497
- ◆ [Wrong reporting page displayed](#), page 495
- ◆ [Bandwidth is larger than expected](#), page 497
- ◆ [Some protocol requests are not being logged](#), page 499
- ◆ [All reports are empty](#), page 499
- ◆ [Microsoft Excel output is missing some report data](#), page 501
- ◆ [Saving presentation reports output to HTML](#), page 501
- ◆ [Error generating presentation report, or report does not display](#), page 502
- ◆ [Investigative reports search issues](#), page 502
- ◆ [General investigative reports issues](#), page 503

Presentation Reports Scheduler not connected to Log Database

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When a health alert warns that Presentation Reports Scheduler is disconnected from the Log Database, do **not** create any scheduled jobs in presentation reports until you resolve the problem.

Any scheduled jobs that you create in presentation reports while this connection is broken are only stored temporarily; they cannot be written to the Log Database and saved permanently. As a result, the job definitions are lost when the TRITON machine has to be restarted, or any other time the Websense TRITON - Web Security service is restarted.

Make sure that the database engine is running and any network problems have been resolved. Then, restart the Websense TRITON - Web Security service.

1. On the TRITON machine, open the Windows Services dialog box.
2. Select **Websense TRITON - Web Security** in the services list.
3. Click the Restart button in the toolbar.
4. Close the Services dialog box after the service has started.

Inadequate disk space to generate presentation reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

By default, to generate presentation reports, Websense software uses space in the following folder on the TRITON machine:

C:\Program Files (x86)\ Websense\Web Security\ReportingOutput

If the space available at this location falls below 1 GB, a warning message appears in the Health Alert Summary on the System tab of the Status > Dashboard page.

When this message appears, clear disk space on the appropriate disk of the TRITON machine to avoid problems generating presentation reports or other system performance problems.

Scheduled jobs in presentation reports failed

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If one or more scheduled jobs cannot run successfully in presentation reports, the Health Alert Summary on the System tab Status > Dashboard page displays a warning message.

Scheduled jobs may fail for a variety of reasons, such as:

- ◆ Email server information has not been configured on the Settings > Reporting > Preferences page. See [Configuring reporting preferences](#), page 409, for instructions.
- ◆ There is insufficient disk space on the TRITON machine to generate presentation reports. See [Inadequate disk space to generate presentation reports](#), page 496, for more information.
- ◆ Connectivity with the Log Database has been lost. See [No Log Server is installed for a Policy Server](#), page 486, for more information.
- ◆ The configured email server is not running. Work with your system administrator to resolve the problem.

To find out which job has failed, go to the **Presentation Reports > Job Queue** page.

- ◆ If known problems have been resolved, mark the check box for the failed job, and then click **Run Now** to try the job again.
- ◆ Click the **Details** link for the failed job to display the Job History page, which gives information about recent attempts to run the selected job.

Data on Internet browse time reports is skewed

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Be aware that consolidation may skew the data for Internet browse time reports. These reports show the time users spend accessing the Internet and can include details about the time spent at each site. Internet browse time is calculated using a special algorithm, and enabling consolidation may skew the accuracy of the calculations for these reports.

Bandwidth is larger than expected

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Many, but not all, Websense integrations provide bandwidth information. If your integration does not provide bandwidth information, you can configure Network Agent to perform logging so that bandwidth data is included.

When a user requests a permitted file download, the integration product or Network Agent sends the full file size, which Websense software logs as bytes received.

If the user subsequently cancels the actual download, or the file does not download completely, the bytes received value in the Log Database still represents the full file size. In these circumstances, the reported bytes received will be larger than the actual number of bytes received.

This also affects reported bandwidth values, which represent a combination of bytes received and bytes sent.

Trend data is missing from the Log Database

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Trend data is inserted into the Log Database first by the ETL job (which generates daily trend data) and then by the trend job (which generates weekly, monthly, and yearly tables). This data is then used in presentation trend reports.

If there is no trend data in your database, or some trend data is missing:

- ◆ Verify that you have enabled trend data retention on the Settings > Reporting > Log Database page in TRITON - Web Security. The **Store trend data** check box (under Trend Data Retention) must be marked in order for any trend data to be generated and stored.
- ◆ If you are using Microsoft SQL Server **Standard** or **Enterprise**, verify that the SQL Server Agent service is running, and that it is running as the correct user. See [Configuring user permissions for Microsoft SQL Server](#), page 494, and [SQL Server Agent job](#), page 500.

Use the Windows Services dialog box to verify that the **SQL Server Agent** service is running.

- ◆ Verify that the **ETL** and **trend** database jobs are running.

The ETL job generates daily trend data, and the trend job runs on a nightly basis to generate weekly, monthly and yearly trend values. Use SQL Server Management Studio to verify that both jobs are running. If they're not, check for errors in the job history and restart or manually run the jobs. See [Last successful ETL job ran more than 4 hours ago](#), page 492, for additional information.

Trend reports are not displaying data

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you use presentation reports, you can generate trend reports to provide trend information by day, week, month or year. There are separate tables in the Log Database that maintain trend data for each of these time periods.

If the trend reports you generate contain no data, first see:

- ◆ [All reports are empty, page 499](#)
- ◆ [Error generating presentation report, or report does not display, page 502](#)
- ◆ [Trend data is missing from the Log Database, page 498](#)

If these topics don't help to determine the problem, verify that:

- ◆ The report you are running is defined for a trend period that has valid data.
There are 4 different time periods for which trend data can be stored, for which reports can be defined: daily, weekly, monthly, or yearly. Make sure there is trend data for the time option selected for the trend report you are running.
- ◆ Presentation reports is connected to the Log Database.
If the connection to the Log Database has been lost, the presentation reports tool cannot create the reports. See [Log Database is not available, page 489](#).
- ◆ There is disk space available for the report to be created and stored.
The presentation reports tool writes to the disk when it generates a report. See [Inadequate disk space to generate presentation reports, page 496](#).

Some protocol requests are not being logged

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

A few protocols, such as those used by ICQ and AOL, prompt users to log into a server using one IP address, and then send a different identifying IP address and port number to the client for messaging purposes. In this case, all messages sent and received may not be monitored and logged by the Websense Network Agent, because the messaging server is not known at the time messages are exchanged.

As a result, the number of requests logged may not match the number of requests actually sent. This affects the accuracy of reports produced by Websense reporting tools.

All reports are empty

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If there is no data for any of your reports, make sure that:

- ◆ The active database partitions include information for the dates included in the reports. See [Database partitions, page 500](#).
- ◆ The SQL Server Agent job is active on the Microsoft SQL Server machine. (This service is not used with SQL Server Express.) See [SQL Server Agent job, page 500](#).
- ◆ Log Server is correctly set up to receive log information from Filtering Service. See [Log Server configuration, page 500](#).

Database partitions

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense log records are stored in partitions within the database. New partitions may be created based on size or date, depending on your database engine and configuration.

You can activate or deactivate individual partitions in TRITON - Web Security. If you attempt to generate report based on information stored in deactivated partitions, no information is found and the report is empty.

To make sure the appropriate database partitions are active:

1. Go to **Settings > Reporting > Log Database**.
2. Scroll down to the **Available Partitions** section.
3. Mark the **Enable** check box for each partition that contains data to be included on the reports.
4. Click **Save Now** to implement the change.

SQL Server Agent job

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you are using a Standard or Enterprise edition of Microsoft SQL Server, it is possible that the SQL Server Agent database job has been disabled. This job must be running for the log records to be processed into the database by the ETL database job.

1. Go to **Start > Administrative Tools > Services**.
2. Make sure that both the MSSQLSERVER and SQLSERVERAGENT services are started.
3. Make sure that the SQLSERVERAGENT service is configured for **Automatic** startup. (Double-click the service name in the Services list to open a Properties dialog box that includes **Startup type** information.)

This ensures that SQL Server Agent restarts automatically any time SQL Server or the host machine is restarted.

If you do not have access to the SQL Server machine, ask your Database Administrator to make sure the SQL Server Agent job is running, and configured for automatic startup.

Log Server configuration

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Configuration settings must be correct in both TRITON - Web Security and Log Server to make sure that Log Server receives log information from Filtering Service. Otherwise, log data is never processed into the Log Database.

First, verify that TRITON - Web Security is connecting to the Log Server successfully.

1. Log on to TRITON - Web Security with unconditional Super Administrator permissions.
2. Go to **Settings > General > Logging**.
3. Enter the IP address or host name for the Log Server machine.
4. Enter the port that Log Server is listening on (the default is 55805).
5. Click **Check Status** to determine whether TRITON - Web Security is able to communicate with the specified Log Server.
A message indicates whether the connection test passed. Update the IP address or machine name and port, if needed, until the test is successful.
6. When you are finished, click **OK** to cache your changes. Changes are not implemented until you click **Save and Deploy**.

Next, verify your Log Server settings.

1. Go to the **Settings > Reporting > Log Server** page.
2. Under **Location**, verify that the **Port** matches the value on the Settings > General > Logging page.
3. Click **OK** to validate and cache any change, then click **Save and Deploy** to implement it.
4. If you changed the Log Server port setting, use the Windows Services dialog box to restart the **Websense Log Server** and **Websense TRITON - Web Security** services.

Microsoft Excel output is missing some report data

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The largest number of rows that can be opened in a Microsoft Excel worksheet is 65,536. If you export a report with more than 65,536 records to Microsoft Excel format, the 65,537th and all following records are not available in the worksheet.

To assure access to all information in the exported report, do one of the following:

- For presentation reports, edit the report filter to define a smaller report, perhaps by setting a shorter date range, selecting fewer users and groups, or selecting fewer actions.
- For investigative reports, drill down into the data to define a smaller report.
- Select a different export format.

Saving presentation reports output to HTML

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you generate a report directly from the Reporting > Presentation Reports page, you can choose from 3 display formats: HTML, PDF, and XLS. If you choose the HTML display format, you can view the report in the TRITON - Web Security window.

Printing and saving presentation reports from the browser are not recommended. The printed output includes the entire browser window, and opening a saved file launches TRITON - Web Security.

To print or save reports more effectively, choose PDF or XLS as the output format. You can open these file types immediately if the viewing software (Adobe Reader or Microsoft Excel) is installed on the local machine. You also can save the file to disk (the only option if the proper viewing software is not available).

After you open a report in Adobe Reader or Microsoft Excel, use that program's print and save options to produce the desired final output.

Error generating presentation report, or report does not display

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Presentation reports offers 2 options for running a report immediately: schedule the report to run in the background (default) or run the report without scheduling (if you deselect the default option).

If you run the report without scheduling (in the foreground), a popup window indicates the status of the report, and then the report is displayed. In some cases, instead of displaying a completed report:

- ◆ The message "error generating report" is displayed.
- ◆ A "report complete" message is displayed, but no report is shown.

This typically occurs after an administrator closes the popup window displaying the "generating report" and "report complete" messages the browser's close (X) button. To avoid this issue, instead use the embedded **Close** button to close the window.

If you encounter this issue, navigate away from the Presentation Reports page in TRITON - Web Security, and then run the report again. If that does not work, log out of TRITON - Web Security and log back on before running the report again.

If the problem persists, you can:

- ◆ Use the **Schedule the report to run in the background** option and open reports from the Review Reports page.
- ◆ Use Firefox, rather than Internet Explorer, when generating reports.

Investigative reports search issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Search fields above the bar chart on the main Investigative Reports page allow searches for a specific term or text string in the selected chart element. There are two potential concerns related to searching investigative reports: extended ASCII characters and search pattern matching.

- ◆ If you are using Mozilla Firefox on a Linux machine to access TRITON - Web Security, you cannot enter extended ASCII characters in the Search fields. This is a known limitation of Firefox on Linux.

If you need to search an investigative report for a text string that includes extended ASCII characters, access TRITON - Web Security from a Windows machine, using any supported browser.

- ◆ Sometimes, investigative reports is unable to find URLs associated with a pattern entered in the Search fields on the main investigative reports page. If this occurs, and you are reasonably certain that the pattern exists within the URLs reported, try entering a different pattern that would also find the URLs of interest.

General investigative reports issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ Some queries take a very long time. You may see a blank screen or get a message saying that your query has timed out. This can happen for the following reasons:
 - Web server times out
 - Microsoft SQL Server times out
 - Proxy or caching server times out

You may need to manually increase the timeout limit for these components.

- ◆ If users are not in any group, they will not show up in a domain either. Both Group and Domain choices will be inactive.
- ◆ Even if the Log Server is logging visits instead of hits, investigative reports label this information as **Hits**.

Other reporting issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [Low memory on the Real-Time Monitor machine, page 503](#)
- ◆ [Real-Time Monitor is not running, page 504](#)
- ◆ [Real-Time Monitor is not responding, page 504](#)
- ◆ [Cannot access certain reporting features, page 505](#)
- ◆ [No charts appear in on the Status > Dashboard page, page 505](#)
- ◆ [There is a forensics data configuration problem, page 506](#)
- ◆ [The forensics repository location could not be reached, page 506](#)
- ◆ [Forensics data will soon exceed a size or age limit, page 506](#)
- ◆ [Websense Multiplexer is not running or not available, page 507](#)

Low memory on the Real-Time Monitor machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

This alert is displayed when available memory on the Real-Time Monitor machine is at 15% or less of total memory. Low memory can prevent Real-Time Monitor from receiving, displaying, and storing some or all filtering records.

This can result in gaps in the data displayed in the monitor, or prevent the monitor's server and database components from running at all.

Use the Windows Task Manager to evaluate memory usage on the Real-Time Monitor machine. To solve the problem, you can:

- ◆ Upgrade the RAM on the machine.
- ◆ Move applications or components with high memory requirements to another machine.

Move Real-Time Monitor to a machine with more available memory.

Real-Time Monitor is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

This alert is displayed when the Websense RTM Server service is stopped.

Use the Windows Services dialog box to verify that all 3 Real-Time Monitor services are started, and to start any of the following services that have stopped:

- ◆ Websense RTM Database
- ◆ Websense RTM Server
- ◆ Websense RTM Client

If any service will not start:

- ◆ Check the Windows Event Viewer for any errors or warnings from Websense RTM Server.
- ◆ Check the **WebsenseRTMMemoryOutput0.log** file (located, by default, in the C:\Program Files (x86)\WebSense\Web Security\rtm\logs directory) for information about Real-Time monitor memory usage.
- ◆ Make sure that there are sufficient resources (memory, hard disk, and CPU) available for the services to run.

If the service is running, but the alert continues to appear, this may indicate that Real-Time Monitor was unable to register with Policy Server. Verify that the Policy Server associated with this Real-Time Monitor instance is running, and that the Real-Time Monitor machine can communicate with the Policy Server machine on port 55836 (encrypted communication) or 55856 (non-encrypted communication).

If the services do start, make sure that they are configured for **Automatic** (not Manual) startup.

Real-Time Monitor is not responding

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If Real-Time Monitor is installed on a different machine from the TRITON Unified Security Center, use the ping command to make sure that the 2 machines can communicate across the network. Also verify that the TRITON machine can communicate with Real-Time Monitor on port 9445 (for user interface display).

In addition, Real-Time Monitor must be able to communicate with:

- ◆ Usage Monitor on port 55835
- ◆ Policy Server on port 55836 (encrypted communication) or 55856 (non-encrypted communication)

If there is not a network communication problem, Real-Time Monitor may be experiencing resource constraints.

- ◆ Check memory, CPU usage, and available disk space on the Real-Time Monitor machine.

Note that the RTM Database can hold a maximum of 10,000 records, which should help to limit its impact on available disk space.

- ◆ The database may be receiving too many requests, or be unable to accept additional connections.

If the Windows Event Viewer shows Websense RTM Database errors, you can restart the service to address the problem.

Note that when the database is restarted, all records are cleared, so older data is lost. Data that is not available for display in Real-Time Monitor is still stored in the Log Database, and can be seen in investigative and presentation reports.

Cannot access certain reporting features

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If your Web browser has popup blocking at a very strict setting, it may block certain reporting features. To use those features, you must decrease the blocking level or disable popup blocking entirely.

No charts appear in on the Status > Dashboard page

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In organizations that use delegated administration, review the reporting permissions for the delegated administrator's role. If **View dashboard charts** is not selected, these chart do not appear for delegated administrators in that role.

In environments that use multiple Policy Servers, TRITON - Web Security only shows reporting data when connected to the Policy Server that is also configured to communicate with Log Server. You must log on to that Policy Server to view charts in the dashboard, or to access other reporting features.

If you have multiple Log Server instances, there are special considerations for also deploying multiple TRITON - Web Security instances. In these distributed logging environments, it is important that only one TRITON - Web Security instance be used

for reporting. Administrators connecting to the reporting instance of TRITON - Web Security will see all reporting features (including the dashboard charts). Administrators connecting to other TRITON - Web Security instances will not see reporting features.

There is a forensics data configuration problem

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When forensics data collection is enabled on the **Settings > Reporting > Dashboard** page in TRITON - Web Security, transaction details related to attempts to send data out of your network, as well as the actual data files involved, are recorded in a forensics repository.

In rare circumstances, files used to enable collection and storage of this forensic data may be damaged or corrupted. Assistance from Websense Technical Support is required to resolve such issues.

The forensics repository location could not be reached

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When forensics data collection is enabled on the **Settings > Reporting > Dashboard** page in TRITON - Web Security, the administrator provides a location (local directory or UNC path) for storing the file, and credentials for an account with read, write, and delete permissions to the specified directory.

If a health alert indicates problems reaching the forensics repository location, verify that:

- ◆ The path and credential information on the **Settings > Reporting > Dashboard** page is correct.
- ◆ The specified account does have read, write, and delete permissions to the directory.
- ◆ No network problem impedes communication between the TRITON Management Server and the remote machine.

Forensics data will soon exceed a size or age limit

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When forensics data collection is enabled on the **Settings > Reporting > Dashboard** page in TRITON - Web Security, the administrator sets both a maximum size (in GB) for the repository, and a maximum length of time (in days) for storing forensic data.

When the size of the forensics repository approaches the limit, a health alert is displayed. When the limit is reached, the oldest records are deleted, one day's worth of time, until there is room for new, incoming records to be stored.

If the size limit has not been reached, but records are approaching the maximum record age, health alert is also displayed. When the age limit is reached, records exceeding that limit are deleted.

There is no mechanism available for retrieving deleted forensic data.

Websense Multiplexer is not running or not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When SIEM integration is enabled for Websense Web Security solutions, Websense Multiplexer passes Internet activity data (logs) from Filtering Service to both Log Server and the configured SIEM product.

If Multiplexer is not running or not available, a failover feature ensures that Filtering Service passes log data to Log Server. No data, however, is sent to the SIEM product.

To resolve this issue in a Websense appliance-based deployment:

1. If you have not enabled the Multiplexer service, go to the **Administration > Toolbox > Command Line Utility** in Appliance Manager.
Select **multiplexer**, then use the **enable** command.
2. If Multiplexer has already been enabled, but is not running, go to the **Status > General** page in Appliance Manager and restart the Websense Web Security module.

To resolve this issue in a software-only deployment:

1. Start or restart the Multiplexer service or daemon:
 - Windows: Use the Services dialog box to start (or restart) the **Websense Multiplexer** service.
 - Linux: Use the **/opt/Websense/WebsenseDaemonControl** command to start (or restart) **Multiplexer**.
2. If the service is unable to restart, the Multiplexer Controller executable may have become unresponsive.
 - Windows: Use Task Manager to stop the **MuxCtrl.exe** process, then use the Services dialog box to start **Websense Multiplexer**.
 - Linux: Kill the **MuxCtrl** process, then use the **/opt/Websense/WebsenseDaemonControl** command to start **Multiplexer**.

Interoperability issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [Content Gateway is not running, page 508](#)
- ◆ [Content Gateway is not available, page 508](#)
- ◆ [Content Gateway non-critical alerts, page 509](#)

- ◆ [Administrator unable to access other TRITON modules, page 512](#)
- ◆ [Sync Service is not available, page 512](#)
- ◆ [Sync Service has been unable to download log files, page 513](#)
- ◆ [Sync Service has been unable to send data to Log Server, page 514](#)
- ◆ [Hybrid filtering data does not appear in reports, page 514](#)
- ◆ [Disk space is low on the Sync Service machine, page 514](#)
- ◆ [The Sync Service configuration file, page 515](#)
- ◆ [Directory Agent is not running, page 516](#)
- ◆ [Directory Agent cannot connect to the domain controller, page 517](#)
- ◆ [Directory Agent does not support this directory service, page 518](#)
- ◆ [The Directory Agent configuration file, page 518](#)
- ◆ [Directory Agent command-line parameters, page 520](#)
- ◆ [Alerts were received from the hybrid service, page 521](#)
- ◆ [Unable to connect to the hybrid service, page 521](#)
- ◆ [Hybrid service unable to authenticate connection, page 522](#)
- ◆ [Missing key hybrid configuration information, page 523](#)
- ◆ [Hybrid failover proxy removed from explicit proxies list, page 523](#)

Content Gateway is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When a Content Gateway instance registers with Policy Server, that connection is tracked in TRITON - Web Security. Information about the Content Gateway instance appears on the Settings > General > Content Gateway Access page, and in the Filtering Service Summary on the System tab of the Status > Dashboard page.

If the registered instance stops, or is removed, a health alert message is displayed in TRITON - Web Security.

- ◆ If the instance has stopped unexpectedly, check the **syslog** file on the Content Gateway machine for information about what caused the failure.
- ◆ If you have relocated Content Gateway to another IP address or physical machine, or if you have removed an instance that was not needed, you can manually remove the instance from the Settings > General > Content Gateway Access page to stop the health alert from being displayed.

Content Gateway is not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When a Content Gateway instance registers with Policy Server, that connection is tracked in TRITON - Web Security. Information about the Content Gateway instance appears on the Settings > General > Content Gateway Access page, and in the Filtering Service Summary on the System tab of the Status > Dashboard page.

If Web Security components can no longer communicate with the registered instance, a health alert message is displayed in TRITON - Web Security.

- ◆ Make sure that the Content Gateway machine is up, and that Content Gateway is running.
- ◆ This alert may indicate a network problem. Verify that Content Gateway can communicate with the Policy Server (ports 55806 and 55880) and Filtering Service (port 15868) machines.

Content Gateway non-critical alerts

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When you receive notification that non-critical alerts have been received from a Content Gateway instance, any of the following errors or conditions may have occurred. To determine which error occurred, check the Content Gateway Manager associated with the affected Content Gateway instance.

Use the table below to get an overview of the error condition. More detailed information can be found in the system, error, and event log files on the Content Gateway machine.

| Alert | Description |
|----------------------------------|---|
| Content Gateway process reset | A problem that caused Content Gateway to restart. See the Content Gateway syslog file for information about what caused the reset. |
| Cache configuration issue | Content Gateway was unable to configure a cache. See “Configuring the Cache” in the Content Gateway Manager Help for more information. |
| Unable to create cache partition | An error occurred during cache configuration. See “Configuring the Cache” in the Content Gateway Manager Help. |
| Unable to initialize cache | A cache failure occurred. Content Gateway tolerates disk failure on any cache disk. If the disk fails completely, Content Gateway marks the disk as corrupt and continues using the remaining disks. See “Configuring the Cache” in the Content Gateway Manager Help. |

| Alert | Description |
|---|---|
| Unable to open configuration file | <p>There is a problem in a configuration file.</p> <ul style="list-style-type: none"> • Check the system log for information about which file is affected. • Permissions to the file or directory may have changed. • If the file was edited outside Content Gateway Manager, there may be invalid syntax or other problems preventing the file from being read. |
| Invalid fields in configuration file | <p>One or more parameters or parameter values in a configuration file is incorrect. Check the system log for information about which file is affected.</p> |
| Unable to update configuration file | <p>There is a problem preventing a configuration file from being saved. Check the system log for information about which file is affected.</p> |
| Clustering peer operating system mismatch | <p>The nodes in a cluster must be homogeneous, with the same:</p> <ul style="list-style-type: none"> • Hardware platform • Operating system version |
| Could not enable virtual IP addressing | <p>Content Gateway attempted to enable virtual IP address failover, but failed. This often occurs when the designated virtual IP address is already in use in the network.</p> <p>Like all IP addresses, virtual IP addresses must be pre-reserved before they can be assigned to Content Gateway.</p> |
| Connection throttle too high | <p>A connection throttle event occurs when client or origin server connections reach 90% of half the configured connection limit (45000 by default).</p> <p>When you raise the connection throttle limit, the system must have adequate memory to handle the client connections required. A system with limited RAM might need a throttle limit lower than the default value.</p> |

| Alert | Description |
|---|---|
| Host database disabled | <p>The host database stores the Domain Name Server (DNS) entries of origin servers to which the proxy connects. It tracks:</p> <ul style="list-style-type: none"> • DNS information (for fast conversion of host names to IP addresses) • The HTTP version of each host (so advanced protocol features can be used with hosts running modern servers) • Host reliability and availability information (to avoid waits for non-functional servers) |
| Logging configuration error | <p>Content Gateway can be configured to log transactions, errors, or both to a location that you specify.</p> <p>See “Working with Log Files” in the Content Gateway Manager Help for information about logging.</p> |
| Unable to open Content Gateway Manager | <p>Content Gateway is unable to set up a socket to handle management API calls to start the Web interface.</p> |
| ICMP echo failed for a default gateway | <p>A Content Gateway node failed to contact its default gateway while assigning virtual IP addresses for a cluster. The node will shut down.</p> |
| HTTP origin server is congested | <p>When Content Gateway is deployed as a Web proxy cache, user requests for Web content pass through Content Gateway on the way to the destination Web server (origin server).</p> <p>When a client requests an HTTP object that is stale in the cache, Content Gateway revalidates the object, querying the origin server to check if the object is unchanged.</p> <p>If the origin server is congested (unable to accept additional connections), and does not respond to the revalidation query, the proxy does not perform any validation; it serves the stale object from the cache.</p> |
| Congestion alleviated on the HTTP origin server | <p>An origin server that previously denied connection attempts is now accepting requests again.</p> |

| Alert | Description |
|--------------------------|--|
| Content scanning skipped | Content Gateway did not scan content for a requested site that would have ordinarily be scanned. This may occur when Content Gateway is experiencing too many connections, or inadequate system resources (CPU and memory). |
| WCCP configuration error | See the “WCCP Configuration” section of the Content Gateway Manager Help for configuration parameter details. |

Administrator unable to access other TRITON modules

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If you receive an error when you click **Data Security** or **Email Security** in TRITON - Web Security, the local or network account that you use to log on to TRITON may not have been granted Data Security or Email Security access permissions.

A Global Security Administrator must give an administrator access to each module on the TRITON Settings > Administrators page before an administrator can switch between TRITON modules.

The default TRITON Unified Security Center administrator account, **admin**, has full access to all installed modules.

See the TRITON Unified Security Center Help (which can be opened from the Help menu when you are on any TRITON Settings page) for more information.

Sync Service is not available

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In Websense Web Security Gateway Anywhere deployments, Websense Sync Service is responsible for communication between the on-premises and hybrid services. Sync Service:

- ◆ Sends policy configuration data to the hybrid service
- ◆ Sends user information collected by Directory Agent to the hybrid service
- ◆ Receives reporting log records from the hybrid service

If you have not yet activated hybrid filtering, or if you have attempted to activate hybrid filtering, but have not been able to do so, note that your local Websense software components must be able to communicate with Sync Service before the connection to the hybrid service can be created.

To troubleshoot this issue, make sure that:

- ◆ Sync Service is running.
- ◆ Sync Service is successfully binding to the correct IP address and port.

- The IP address and port that Sync Service is attempting to use are listed in the **syncservice.ini** file, located in the Websense **bin** directory on the Sync Service machine.
- The IP address and port shown on the Settings > Hybrid Configuration > Shared User Data page in TRITON - Web Security must match those listed in the **syncservice.ini** file. If you update the configuration file, also manually update the Settings page.
- The IP address and port in the **syncservice.ini** file must match the Sync Service IP address and port values in the **das.ini** file (located in the Websense **bin** directory on the Directory Agent machine).

Verify that no other service on the Sync Service machine is binding to the IP address and port that Sync Service is attempting to use. If you suspect that Sync Service is unable to bind to the correct IP address and port, stop the service, open a command prompt, and try to start the service in console mode:

```
syncservice -c
```

In console mode, Sync Service displays the IP address and port that it is using, or displays an error, if it is unable to bind to the IP address and port.

- ◆ The Sync Service machine can communicate with the Policy Broker machine on port 55880.
- ◆ The Sync Service machine can connect to the Policy Server machine on ports 55806 and 40000, and receive data from Policy Server on ports 55830 and 55831.
- ◆ The TRITON - Web Security machine can create an HTTP connection to the Sync Service machine on port 55832.

Also check the Windows Event Viewer or **websense.log** file for errors from Sync Service.

Sync Service has been unable to download log files

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Sync Service attempts to connect to the hybrid service to download reporting log files at an interval that you configure (see [Schedule communication with hybrid filtering](#), page 234). If Sync Service is unable to make the connection, or if Sync Service is unable to retrieve the log files after connecting, the following problems may occur:

- ◆ The hybrid service stores log files for only 14 days. After that period, the files are deleted, and cannot be recovered. When this occurs, your organization is no longer able to report on hybrid filtering activity recorded in those logs.
- ◆ Depending on the volume of Internet activity that your organization sends through the hybrid service, reporting log files may grow quickly. If Sync Service is unable to download log files for a day or more, the bandwidth required to download the files and the disk space required to temporarily store them may be substantial.

To address this issue, check the **Status > Hybrid Service** page to verify that Sync Service is able to connect to hybrid filtering. See [Unable to connect to the hybrid service](#), page 521, for more troubleshooting steps.

If Sync Service is connecting to the hybrid service, but cannot retrieve log records, check the **Status > Alerts** page for information from the hybrid service. Also check the administrative email address associated with your hybrid filtering account.

Sync Service has been unable to send data to Log Server

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

After Sync Service downloads reporting log files from the hybrid service, it passes the files to Log Server so that they can be processed into the Log Database and included in reports. If Sync Service cannot pass the data to Log Server, log files may accumulate on the Sync Service machine, consuming potentially large amounts of disk space.

- ◆ Use the **telnet** command to verify that it is possible for the Sync Service machine to connect to the Log Server machine on port **55885**.
- ◆ Make sure that Log Server is running, and that no Log Server errors appear on the **Status > Alerts** page.

Hybrid filtering data does not appear in reports

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If Internet activity information for users filtered by the hybrid service does not appear in reports, first make sure that:

- ◆ A hybrid logging port is configured on the **Settings > General > Logging** page. See [Configuring how filtered requests are logged](#), page 410.
- ◆ The **Have the hybrid service collect reporting data for the clients it filters** check box is selected on the **Settings > Hybrid Configuration > Scheduling** page. See [Schedule communication with hybrid filtering](#), page 234.
- ◆ The **Status > Hybrid Service** page shows that Sync Service has successfully connected to the hybrid service, and retrieved log records. See [Monitor communication with the hybrid service](#), page 241.
- ◆ No health alerts appear on the System tab of the **Status > Dashboard** page indicating Sync Service communication problems or Log Server errors. See [Sync Service has been unable to send data to Log Server](#), page 514.

If your deployment uses distributed logging, in which multiple, remote Log Servers send data to a centralized Log Server instance, also make sure that Sync Service is configured to communicate with the central Log Server. Hybrid logging data cannot be passed to the central Log Server by remote Log Server instances.

Disk space is low on the Sync Service machine

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If Sync Service is unable to pass reporting log files collected by the hybrid service to Log Server in a timely manner, log files may accumulate on the Sync Service machine, consuming large amounts of disk space. To avoid this issue:

- ◆ Make sure that Sync Service is collecting reporting log data from the hybrid service at appropriate intervals. The more Internet activity your organization sends through the hybrid service, the more frequently log files should be downloaded to avoid large backlogs.
- ◆ Make sure that the Sync Service machine is able to connect to the Log Server machine on port **55885**.
- ◆ Allocate sufficient resources on the Sync Service machine for the volume of reporting data being processed.

The Sync Service configuration file

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **syncservice.ini** file to configure aspects of Sync Service behavior that cannot be configured in TRITON - Web Security.

The **syncservice.ini** file is located in the Websense **bin** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\bin, by default).

- ◆ Use a text editor to edit the file.
- ◆ When you are finished making changes, save and close the file, and then restart Sync Service. Changes do not take effect until the service has restarted.

The file contains the following information:

- ◆ **SyncServiceHTTPAddress**: The IP address that Sync Service binds to for communication with Directory Agent and TRITON - Web Security. Must match the Sync Service IP address on the Settings > Hybrid Configuration > Shared User Data page in TRITON - Web Security.
- ◆ **SyncServiceHTTPPort**: The port that Sync Service listens on for communication from Directory Agent and TRITON - Web Security (default 55832). Must match the Sync Service port displayed on the Settings > Hybrid Configuration > Shared User Data page in TRITON - Web Security.
- ◆ **UseSyncServiceProxy**: Indicates whether Sync Service goes through a proxy to connect to the hybrid service. Values are **true** or **false**.
 - **SyncServiceProxyAddress**: The IP address of the proxy through which Sync Service connects to the hybrid service.
 - **SyncServiceProxyPort**: The port of the proxy through which Sync Service connects to the hosted service.
 - **SyncServiceProxyUsername**: The user name (if required) that Sync Service uses to connect to the proxy in order to contact the hybrid service.
 - **SyncServiceProxyPassword**: The password (if required) that Sync Service uses to connect to the proxy in order to contact the hybrid service.

Directory Agent is not running

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In Websense Web Security Gateway Anywhere deployments, Websense Directory Agent gathers user information from your directory service and sends it to the hybrid service for use in applying filtering policies.

When Directory Agent is not available, the hybrid service's user data may become outdated.

Make sure that Directory Agent is installed (software) or enabled (appliance), and that the service or daemon is running.

- ◆ Appliance: Go to the **Status > General** page in Appliance Manager and verify that Websense Directory Agent appears as a running service.
 - If Directory Agent is listed as a disabled service (in pale gray), go to the **Administration > Toolbox > Command Line Utility** page and select **directory-agent-service**, then **enable**.
 - If Directory Agent is enabled but not running, restart the Websense Web Security module.
- ◆ Windows: Use the Windows Services dialog box (**Start > Administrative Tools > Services**) to start the service or verify that it is running.
- ◆ Linux: Use the **/opt/Websense/WebsenseDaemonControl** command to start the daemon or verify that it is running.

If Directory Agent is running, but the alert message continues to appear, verify that:

- ◆ The Directory Agent machine can communicate with the Policy Server machine (ports 40000 and 55806).
- ◆ The Directory Agent machine can communicate with the Sync Service machine (port 55832).
- ◆ The firewall permits communication on the Directory Agent port (55900).

If the service starts, but does not continue to run:

- ◆ Check the Administration > Logs page (Appliance), Event Viewer (Windows), or websense.log file (Linux) for errors.
- ◆ For software installations, navigate to the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default) and verify that the **das.ini** file exists, and that it has not been corrupted or truncated.
- ◆ Make sure that there is enough disk space on the Directory Agent machine to store a full snapshot of your directory. For example, a snapshot of a 200,000 user directory requires about 100 MB of disk space.
- ◆ Make sure that there is enough available memory for Directory Agent to compare its current snapshot with the previous one. For example, comparing snapshots of a 200,000 user directory requires about 100 MB of memory.

Directory Agent cannot connect to the domain controller

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Directory Agent must be able to connect to the domain controller to gather user information from the directory service. If there are communication problems between the Directory Agent machine and the domain controller, the hybrid service's user data may become outdated, leading to incorrect filtering.

To troubleshoot this problem:

- ◆ Make sure that the Directory Agent machine is bound to the domain, and that the firewall permits communication on the directory service port.

| Port | Used for: |
|------|--|
| 139 | NetBIOS communication: Active Directory |
| 389 | LDAP communication: Active Directory, Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 636 | SSL port: Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 3268 | Active Directory |
| 3269 | SSL port: Active Directory |

- ◆ Go to the **Settings > General > Directory Services** page in TRITON - Web Security and verify that your directory service configuration has not changed since you last updated your Directory Agent settings.
- ◆ Go to the **Settings > Hybrid Configuration > Shared User Data** page and verify that Directory Agent is attempting to search a valid context (path) for user and group information. To do this:
 - If you are using Windows Active Directory, click a directory server name or IP address, and then click Test Context. Repeat this process for each global catalog server.
 - If you are using Oracle (formerly Sun Java) Directory Server or Novell eDirectory, click Test Context.
- ◆ On the Shared User Data page, also make sure that the context is not only valid, but appropriate. The context should be limited to include only those users and groups filtered by the hybrid service.
- ◆ Still on the Shared User Data page, make sure that the Directory Search option is set correctly, so that Directory Agent is searching only the relevant portion of your directory service.
- ◆ Verify that it is possible to connect to the directory service IP address and port from the Directory Agent machine.

Directory Agent communication issues

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

If Directory Agent is prevented from communicating with directory service to gather user information, or if Directory Agent cannot connect to Sync Service, updated user and group information cannot be sent to the hybrid service.

Communication problems can occur if:

- ◆ There is problem in the network.
- ◆ The ports used for directory service (see table) or Sync Service (55832) communication are blocked between the Directory Agent machine and the target machine.

| Port | Used for: |
|------|--|
| 139 | NetBIOS communication: Active Directory |
| 389 | LDAP communication: Active Directory, Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 636 | SSL port: Novell eDirectory, Oracle (formerly Sun Java) Directory Server |
| 3268 | Active Directory |
| 3269 | SSL port: Active Directory |

- ◆ Directory Agent is using incorrect credentials, or the target service is unable to authenticate the connection.
- ◆ A service is not available, because of a service restart or a machine reboot, for example.

To determine what is causing the communication problem, consult the Windows Event Viewer or **websense.log** file for detailed information.

Directory Agent does not support this directory service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Directory Agent is only able to retrieve user and group information from LDAP-based directory services. Windows Active Directory (Mixed Mode) is not supported. The supported directory services include:

- ◆ Windows Active Directory (Native Mode)
- ◆ Oracle (formerly Sun Java System) Directory
- ◆ Novell eDirectory
- ◆ If you are not using a supported directory service, hybrid filtering can still be applied to filtered locations. User and group-based filtering, however, cannot be performed.

The Directory Agent configuration file

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Use the **das.ini** file to configure aspects of Directory Agent behavior that cannot be configured in TRITON - Web Security. These include the maximum memory the agent can use, the maximum threads it can create, the directory where it should store user information snapshots, and more.

The **das.ini** file is located in the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).

- ◆ Use a text editor to edit the file.
- ◆ For parameters that can take multiple values, use the pipe symbol (“|”) to separate entries.
- ◆ For parameters that are either enabled or disabled, the only valid values are **0** (for disable) and **1** (for enable). In this file, the values “on” and “off” cannot be used.
- ◆ When you are finished making changes, save and close the file, and then restart the Directory Agent service or daemon. Changes do not take effect until the service has restarted.

Key values that can be configured in the file include:

- ◆ The maximum amount of memory that Directory Agent can use, in megabytes (MB). If Directory Agent is configured to collect a very large number of directory entries (more than 200,000 user or group definitions), you may need to increase this number.

```
MaxMemory=100
```

- ◆ The full directory path showing where Directory Agent stores directory service snapshots (complete views of the directory, used to determine what has changed between one query and the next).

```
SnapshotDir=./snapshots/
```

This relative path translates to C:\Program Files\Websense\bin\snapshots (Windows) or /opt/Websense/bin/snapshots/ (Linux).

- ◆ The full directory path showing where Directory Agent stores the LDIF files that Sync Service sends to hybrid filtering.

```
DiffDir=./diffs/
```

- ◆ The regular expression Directory Agent uses to validate email addresses in LDAP records. Records whose email addresses do not match the pattern are dropped. For example, [a-z0-9!#\$%&'*/+=?^_`{|}~-]+(?:\.[a-z0-9!#\$%&'*/+=?^_`{|}~-]+)*@(?:[a-z0-9](?:[a-z0-9-]*[a-z0-9])?\.)+[a-z0-9](?:[a-z0-9-]*[a-z0-9])?

Leave the parameter blank (default) if you do not want Directory Agent to perform email address validation.

```
EmailValidateRegex=
```

- ◆ The number of times Directory Agent retries after a failed attempt to connect to Sync Service. Takes an integer value between 1 and 65535.

```
SyncServiceRetryCount=5
```

- ◆ The number of seconds Directory Agent waits between retry attempts when establishing a connection to Sync Service. Takes an integer value between 1 and 65535.

```
SyncServiceRetryDelay=60
```

- ◆ The number of times Directory Agent retries after a failed attempt to connect to the directory service. Takes an integer value between 1 and 65535.
`DirServiceRetryCount=5`
- ◆ The number of seconds Directory Agent waits between retry attempts when establishing a connection to the directory service. Takes an integer value between 1 and 65535.
`DirServiceRetryDelay=60`
- ◆ The number of seconds the Directory Agent backup subsystem waits between attempts to reconnect to Sync Service. The backup subsystem is responsible for verifying that user data is successfully received by Sync Service and sent to the hybrid service. In the event of a failure, the backup subsystem makes sure that the LDIF file that could not be sent is preserved for a later retry attempt.
Takes an integer value between 1 and 65535.
`BackupPollPeriod=60`
- ◆ The number of times the Directory Agent backup subsystem attempts to reconnect to Sync Service to determine the status of the last transaction. Takes an integer value between 1 and 65535.
`BackupRetryCount=60`
- ◆ Configuration settings if you are using Sun Java System Directory or Oracle Directory Server to send user and group information to the hybrid service. Enable these parameters by removing the # symbol from the beginning of the lines.
`# GroupMembershipAttribute=uniqueMember`
`# MemberOfAttribute=memberOf`
- ◆ Whether or not Directory Agent follows LDAP referrals. Takes a value of 1 (enabled) or 0 (disabled).
`EnableLDAPReferrals=1`

Directory Agent command-line parameters

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Directory Agent has a command-line interface that you can use to install, uninstall, start, and stop the agent if necessary. You can also print version and usage information about the agent.

To start Directory Agent in console mode (as an application), open a command prompt and navigate to the Websense **bin** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default) and enter the following:

```
DAS.exe -c
```


Directory Agent accepts the following command-line parameters. Note that some parameters can only be used in Microsoft Windows environments.

| Parameter | Description |
|----------------------------------|--|
| -i | Installs Directory Agent service. Registers itself with the operating system (Windows only). |
| -u | Uninstalls Directory Agent service. (Windows only). |
| -c | Runs Directory Agent in console mode. |
| -r | Runs Directory Agent as daemon or service. |
| -s | Stops the Directory Agent service. (Windows only). |
| -v | Prints version information about the Directory Agent service. |
| -h -? -help <no option> | Prints usage information about the Directory Agent service. |

Alerts were received from the hybrid service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

When the hybrid service encounters a problem that could affect your organization, it sends an alert to your installation of Sync Service. Alerts are sent for issues that affect either hybrid filtering as a whole, or that are specific to your account. When the alert is received:

- ◆ A general alert is displayed under Health Alerts on the System tab of the Status > Dashboard page in TRITON - Web Security.
- ◆ A more specific alert is shown on the Status > Alerts page under Hybrid Filtering Alerts.

If there are steps that you can take to correct the problem (for example, prompting Directory Agent to re-send user information, or clicking Save and Deploy to prompt Sync Service to re-send policy information), that information is included in the detailed alert message on the Status > Alerts page.

In many cases, alerts from hybrid filtering are informational, making sure that you are aware that a temporary issue may be preventing user or policy information from being received, or reporting data from being sent. No action on your part is required to address such issues.

When the condition causing the problem has been resolved, both the System dashboard summary alert and the alerts on the Status > Alerts page are cleared.

Unable to connect to the hybrid service

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The on-premises and hybrid portions of your Websense Web Security Gateway Anywhere solution must communicate regularly to ensure consistent filtering and accurate reporting.

Sync Service may be prevented from accessing the hybrid service due to network problems, either affecting Internet or internal network connections.

- ◆ Use a browser or the **ping** utility to verify that the Sync Service machine can connect to the Internet.
- ◆ Make sure that an HTTPS connection to the Internet can be established from the Sync Service machine. Sync Service uses port 443 to connect to the hybrid service.
- ◆ Make sure that Sync Service can communicate with other on-premises components in the network via ports 55830 and 55831.

Also verify that there is not a problem preventing the hybrid service from accepting the Sync Service connection.

- ◆ Check the Hybrid Filtering Alerts table on the Status > Alerts page for information from the hybrid service.
- ◆ Make sure that administrators have been monitoring the email account provided as a contact address on the Settings > General > Account page for messages from Websense Technical Support.

Hybrid service unable to authenticate connection

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In hybrid filtering environments, Sync Service provides an account identifier each time it connects to the hybrid service to send or retrieve information. This identifier is unique to your organization, and updated each time the **admin** password changes.

Under rare circumstances, possibly involving a serious problem with the Policy Database, the connection between your on-premises software and the hybrid service may be lost. In these cases, you must request a security token, used to generate a new identifier for your hybrid filtering account. The security token is sent to the **contact email address** specified on the Settings > General > Account page in TRITON - Web Security.

To request a new token:

1. Click the **Get Token** button that appears next to the “unable to authenticate connection” alert on the Status > Alerts page in TRITON - Web Security.
2. Verify that you receive a success message stating that the request has been sent to the hybrid service.
3. Monitor the administrative email account associated with your hybrid filtering account. It may take some time for the request for a new security token to be processed.
4. When you receive an email message from the hybrid service, go to the Settings > General > Account page in TRITON - Web Security.

5. Scroll down to the Hybrid Filtering section of the page and enter the **Security token** provided in the email message,
6. Click **Connect**.

The temporary token is verified and used to resume communication between Sync Service and the hybrid service.

Missing key hybrid configuration information

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In hybrid filtering environments, Sync Service provides an account identifier each time it connects to the hybrid service to send or retrieve information. This identifier is unique to your organization, and updated each time the **admin** password changes.

Under rare circumstances, possibly involving a serious problem with the Policy Database, the connection between your on-premises software and the hybrid service may be lost. In these cases, you must request a security token, used to generate a new identifier for your hybrid filtering account. The security token is sent to the **contact email address** specified on the Settings > General > Account page.

If you receive the alert message, “Missing configuration information; connection to hybrid filtering lost,” either no contact email address has been provided, or the contact email address is no longer valid.

In this case, in order to maximize the security of your organization’s private data, you must contact [Websense Technical Support](#) directly to update your hybrid filtering account.

Hybrid failover proxy removed from explicit proxies list

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

In Websense Web Security Gateway Anywhere version 7.6, failover to the hybrid service was configured by manually adding the hybrid proxy address to the list of explicit proxies, then including that proxy as the last explicit proxy in the list for a filtered location. Failover is configured differently in version 7.7, which means the hybrid proxy is removed from the explicit proxy list on upgrade.

Failover to the hybrid proxy must now be enabled for each filtered location and then approved by the hybrid service. See [Configuring failover to the hybrid service](#), page 217.

Troubleshooting tips and tools

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

- ◆ [The Windows Services dialog box](#), page 524
- ◆ [The Windows Event Viewer](#), page 524

- ◆ [The Websense log file](#), page 525

Where is the Websense “bin” directory?

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Many Websense Web Security executable and configuration files are installed in the Websense **bin** directory. When a troubleshooting step prompts you to navigate to this directory, the location depends on the operating system and installed components.

Linux platforms

For all supported Linux operating systems, the default path is:

```
/opt/Websense/bin/
```

Windows platforms

The default path is either:

```
C:\Program Files\Websense\Web Security\bin
C:\Program Files (x86)\Websense\Web Security\bin
```

The Windows Services dialog box

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

On Microsoft Windows machines, Filtering Service, Network Agent, Policy Server, User Service, and other Web Security components run as services. You can use the Windows Services dialog box to check the status of these services.

1. In the Windows Control Panel, open the **Administrative Tools** folder.
2. Double-click **Services**.
3. Scroll through the list of services to find the service you are troubleshooting.
The service entry includes the service name, a brief service description, the service status (started or stopped), how the service starts, and what account the service uses to perform its tasks.
4. Double-click a service name to open a properties dialog box with more detailed information about the service.

The Windows Event Viewer

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

The Windows Event Viewer records error messages about Windows events, including service activities. These messages can help you identify network or service errors that may be causing Internet filtering or user identification problems.

1. In the Windows Control panel, open the **Administrative Tools** folder.
2. Double-click **Event Viewer**.

3. In the Event Viewer, click **Application** for a list of error messages, warnings, and informational messages.
4. Scroll through the list to identify errors or warnings from Websense services.

The Websense log file

TRITON - Web Security Help | Web Security Solutions | Version 7.7.x

Websense software writes error messages to the **websense.log** file, located in the Websense **bin** directory (C:\Program Files *or* Program Files (x86)\Websense\Web Security\bin or /opt/Websense/bin/, by default).

The information in this file is comparable to that found in the Windows Event Viewer. In Windows environments, the Event Viewer presents messages in a more user-friendly format. The **websense.log** file, however, is available on Linux systems, and can be sent to Websense Technical Support if you need help troubleshooting a problem.

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