

# Upgrade Instructions: TRITON AP-WEB

Upgrade Instructions | TRITON AP-WEB | Version 8.1.x

Version 8.0.x introduced new product names and solution bundles for Websense web protection solutions.

Original Name	New Name
Websense TRITON Web Security Gateway	Websense TRITON AP-WEB
Websense TRITON Web Security Gateway Anywhere	Websense TRITON AP-WEB with: <ul style="list-style-type: none"><li>• Web Hybrid Module</li><li>• Web DLP Module</li><li>• Web Sandbox Module (if purchased)</li></ul>

For more information about how these changes may affect you, contact your sales partner or Websense Sales representative.

These instructions describe how to upgrade from **v7.8.x** Websense Web Security Gateway or Gateway Anywhere components (Windows, Linux, or appliance), or **v8.0.x** TRITON AP-WEB, to TRITON AP-WEB **v8.1.x**.



## Important

Because Content Gateway, Websense appliances, and Web DLP components must be at v7.8.x to upgrade to v8.1.x, it is not possible to upgrade directly from v7.7.x to v8.1.x.

If you are currently running a Web Security Gateway or Gateway Anywhere version earlier than v7.8.x, upgrade to v7.8.x first, then upgrade to v8.1.x. See [Upgrading Websense Web Security Solutions to v7.8](#) for instructions.

Content Gateway Hotfix 94 must be applied to v7.7.x prior to upgrading Content Gateway (software or appliance) to v7.8.x. This retains the default Sync Mode setting for real-time analysis, and can prevent latency. Also, Appliance Hotfix 90 must be applied to v7.7.x prior to upgrading the appliance to v7.8.x. See the [v7.8.x Upgrade Instructions](#).

If you have an earlier version than 7.8.x, there are interim steps to perform. These are shown in the table below.

Your current version	Step 1	Step 2	Step 3	Step 4
v7.1.x	Upgrade to 7.6.x	Upgrade to 7.7.x	Upgrade to 7.8.x	Upgrade to 8.1.x
v7.5.x	Upgrade to 7.6.x	Upgrade to 7.7.x	Upgrade to 7.8.x	Upgrade to 8.1.x
v7.6.x	Upgrade to 7.7.x	Upgrade to 7.8.x	Upgrade to 8.1.x	none
v7.7.x	Upgrade to 7.8.x	Upgrade to 8.1.x	none	none
v7.8.x	Upgrade to 8.1.x	none	none	none
v8.0.x	Upgrade to 8.1.x	none	none	none



**Important**

**V-Series appliance users:**

Some older V10000 and V5000 appliances are not supported with version 8.0.0 and higher.

See [V-Series appliances supported with version 8.x](#).

Note that the following operating systems are not supported as of v8.0.x. If you are using one of these operating systems, you must migrate your operating system before upgrading to v8.1.x, as outlined below:

Red Hat Enterprise Linux 5	<ol style="list-style-type: none"> <li>1. Migrate to Red Hat Enterprise Linux 6.</li> <li>2. Upgrade to v8.0.x on the new platform.</li> <li>3. Upgrade to v8.1.x on the new platform.</li> </ol>
Windows 2008 (32-bit)	<ol style="list-style-type: none"> <li>1. Migrate to Windows 2008 R2.</li> <li>2. Upgrade to v8.0.x on the new platform.</li> <li>3. Upgrade to v8.1.x on the new platform.</li> </ol>

To perform an operating system migration and upgrade, see [Order of migration and upgrade steps for v8.0.x](#) (find links to detailed instructions at the bottom of the page, under the table).

If you are upgrading from v7.8.3 or later, you have the option to upgrade your Web Security deployment incrementally, rather than upgrading all machines and

components at the same time. This allows you to upgrade individual Policy Server instances and their dependent components as separate "logical deployments." Policy Server instances that have not been upgraded and their dependent components continue to function normally at the original version. Please see the new [Incremental Upgrade](#) guide for details.

When you are ready to begin, upgrade your deployment as follows:

- ◆ *Step 1: Prepare for upgrade, page 3*
- ◆ *Step 2: Prepare appliances for upgrade (appliance-only), page 6*
- ◆ *Step 3: Prepare to upgrade Content Gateway, page 7*
- ◆ *Step 4: Restart services before starting the upgrade, page 8*
- ◆ *Step 5: Upgrade the Policy Broker machine, page 9*
- ◆ *Step 6: Upgrade additional Policy Server machines, page 14*
- ◆ *Step 7: Upgrade additional Filtering Service, Network Agent, and User Service machines, page 18*
- ◆ *Step 8: Upgrade Websense Log Server, page 23*
- ◆ *Step 9: Upgrade the TRITON management server, page 25*
- ◆ *Step 10: Upgrade software instances of Content Gateway, page 26*
- ◆ *Step 11: Upgrade any additional components, page 31*
- ◆ *Step 12: Post-upgrade activities for Content Gateway, page 33*

## Step 1: Prepare for upgrade

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### Warning

The upgrade process is designed for a properly functioning Websense Web Security Gateway, Gateway Anywhere, or TRITON AP-WEB deployment. Upgrading does not repair a non-functional system.

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Before upgrading:

1. Make sure the installation machine meets the hardware and operating system recommendations in [System requirements for this version](#).
2. Verify that third-party components, including your database engine and directory service, are supported with TRITON AP-WEB. See [Requirements for web protection solutions](#).
3. Back up **all of your Websense components** before starting the upgrade process. See the [Backup and Restore FAQ](#) for instructions for backing up both software-based and appliance-based components.

On Websense appliances, be sure to perform a **full appliance configuration** backup.

4. Before upgrading Websense Filtering Service, make sure that the Filtering Service machine and the TRITON management server have the same locale settings (language and character set).  
After the upgrade is complete, Filtering Service can be restarted with any locale settings.
5. If you have Web Security Gateway Anywhere or TRITON AP-WEB, and are using Web DLP, before upgrading the management server, make sure your Web DLP components are ready for upgrade:
  - a. Stop all discovery and fingerprinting tasks.
  - b. Route all traffic away from the system.
  - c. Ensure that your supplemental fingerprint repositories are fully synchronized with the primary repository.
  - d. Make sure all settings are deployed successfully. Log onto the Data Security manager. If the **Deploy** button is highlighted, click it.
  - e. If Websense supplied your organization with custom file types, change the name of the following files in the **policies\_store\custom\_policies\config\_files** folder on the management server; otherwise they will be overwritten during upgrade.
    - Change **extractor.config.xml** to **custom\_extractor.config.xml**.
    - Change **extractorlinux.config.xml** to **custom\_extractorlinux.config.xml**.The filenames are case-sensitive.
  - f. If you have custom policies provided by Websense, submit a request for updated versions before proceeding.
6. If you are upgrading from 7.8.3 or earlier, a new logging partition is added to your Log Database. Please make sure you do not have 70 active partitions (the limit) prior to upgrading. Use the **Web > Settings > Reporting > Log Database** page of the TRITON Manager to disable at least one active partition prior to upgrading.
7. Back up your current Log Database and stop Log Server.



### Warning

If database operations are active during upgrade, the Websense Log Database may be rendered unusable.

When this occurs, it can be difficult to fix.

Make **sure** to stop Log Server and the database jobs, as described below, before upgrading the database.

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- a. Back up your reporting databases.  
Refer to Microsoft documentation for instructions. The databases are named wslogdb70 (the catalog database), wslogdb70\_n (standard logging partition databases), and wslogdb70\_amt\_1 (threats partition database).
- b. On the Log Server machine, use the Windows Services tool to stop **Websense Log Server**.

8. It is best to **stop all Log Database jobs** prior to starting the upgrade, but, before it upgrades the Log Database, the upgrade process will attempt to stop any Log Database jobs not already stopped. If the jobs cannot be stopped, you will need to stop them manually. However, you do not need to exit the installer to do that.

Stop the Log Database jobs using these steps:

- a. If you have a **full version of Microsoft SQL Server** (not Express), stop **all database jobs** as follows. (See below for steps to stop SQL Express jobs.)

- Log in to the Microsoft SQL Server Management Studio and expand **SQL Server Agent > Jobs** (in Object Explorer).
- To disable all currently active Websense SQL Server Agent jobs, right-click each of the following jobs and select **Disable**:

Websense\_ETL\_Job\_wslogdb70

Websense\_AMT\_ETL\_wslogdb70

Websense\_IBT\_DRIVER\_wslogdb70

Websense\_Trend\_DRIVER\_wslogdb70

Websense\_Maintenance\_Job\_wslogdb70

Disabling the jobs prevents them from executing at the next scheduled time, but does not stop them if a job is in process.

**Make sure all jobs have completed any current operation before proceeding with upgrade.**

- After upgrade, verify that the jobs have been to enabled.  
Enable any that were not automatically enabled by the upgrade process. Normal database operations will then resume.
- Continue with step 9.

- b. If you have **SQL Server Express**, stop **all database jobs** as follows:

- Log in to the Microsoft SQL Server Management Studio.
- Expand the **Databases** tree to locate the catalog database (wslogdb70, by default), then expand the catalog database node.
- Expand **Service Broker > Queues**.
- Right click **dbo.wse\_scheduled\_job\_queue** and select **Disable Queue**.
- The upgrade process will re-enable the job queue. After upgrade, verify that the Queue has been enabled.

Enable it, if necessary, by repeating the process, this time ultimately selecting **Enable Queue** to resume normal database operations.

When Log Server is upgraded, the upgrade process first checks the Log Database version and updates the database, if necessary. If you have multiple Log Servers, the database update occurs with the first Log Server upgrade. The database update, including the need to stop the database jobs, is not repeated when additional Log Server instances are upgraded.

9. If Websense Log Server uses a Windows trusted connection to access the Log Database, be sure to log on to the Log Server machine using the trusted account to perform the upgrade. To find out which account is used by Log Server:

- a. Launch the Windows Services tool.

- b. Scroll down to find **Websense Log Server**, then check the **Log On As** column to find the account to use.
10. If your deployment includes V-Series appliances, continue with the next section (*Step 2: Prepare appliances for upgrade (appliance-only)*, page 6).  
If you have a software-only deployment, skip to *Step 4: Restart services before starting the upgrade*, page 8.

## Step 2: Prepare appliances for upgrade (appliance-only)



### **Important**

#### **V-Series appliance users:**

Some older V10000 and V5000 appliances are not supported with version 8.0.0 and higher.

See [V-Series appliances supported with version 8.x](#).

Before applying the 8.1.x patch, perform the following tasks and be aware of the following issues.

1. During the upgrade, depending on their size, older Content Gateway logs may be automatically removed. If you want to retain all Content Gateway logs, you can download the Content Gateway logging directory before starting the upgrade.
  - a. In the Appliance Manager, go to **Administration > Logs**.
  - b. Select the **Websense Content Gateway** module and then **Download entire log file**.
  - c. Click **Submit** and specify a location to save the file.Policy databases and Websense databases are not affected by the upgrade.
2. If the appliance is running 7.8.1 or 7.8.2 and you plan to download the upgrade patch file from MyWebsense and then upload it to the appliance, you must first apply hotfix 10. Hotfix 10 removes a file size limit that otherwise prevents the patch file from successfully uploading from the local storage location.
  - a. In the Appliance manager, go to **Administration > Patches/Hotfixes > Hotfixes**.
  - b. Locate and download the hotfix 10 rpm package.
    - If the appliance is running 7.8.1, enter **APP-7.8.1-010** and click **Find**.
    - If the appliance is running 7.8.2, enter **APP-7.8.2-010** and click **Find**.
  - c. After locating the hotfix, click **Download**.
  - d. When the download is complete, click **Install**.
  - e. When installation is complete, restart the appliance.

After hotfix 10 is installed, to upload a patch to the appliance you must use Internet Explorer 11 or higher, or Chrome 11 or higher, or Firefox 4 or higher.

## Step 3: Prepare to upgrade Content Gateway

Before upgrading Content Gateway, be aware of the following:

- ◆ Most SSL configuration settings are saved and applied to the upgraded Content Gateway, except for dynamic certificates. Note that:
  - The Incident list is retained. Before upgrading, consider performing maintenance on the Incident list; remove unwanted entries.
  - SSLv2 is not enabled by default. If it is enabled prior to upgrade, the setting is retained.
- ◆ For user authentication, there is one credential cache for both explicit and transparent proxy mode, and one Global Authentication Options page for setting the caching method and Time-To-Live.

During upgrade, the Cache TTL value is retained from the Transparent Proxy Authentication tab **unless** the value on the Global Authentication Options tab is not the default. In this case, the customized value is used.

- ◆ If you use Integrated Windows Authentication (IWA), be aware that IWA domain joins should be preserved through the upgrade process. However, in case the joins are dropped, make a record of the settings before starting the upgrade. Log on to the Content Gateway manager and record the IWA settings, including the names of domains to which IWA is joined. Keep this record where it is easily retrieved after the upgrade.
- ◆ If you have software instances of Content Gateway, make sure the host system meets the following hardware requirements before upgrading:

<b>CPU</b>	Quad-core running at 2.8 GHz or faster
<b>Memory</b>	6 GB minimum 8 GB recommended
<b>Disk Space</b>	2 disks: <ul style="list-style-type: none"> <li>• 100 GB for the operating system, Content Gateway, and temporary data.</li> <li>• Max 147 GB for caching If caching will not be used, this disk is not required. The caching disk:               <ul style="list-style-type: none"> <li>– Should be at least 2 GB and no more than 147 GB</li> <li>– Must be a raw disk, not a mounted file system</li> <li>– Must be dedicated</li> <li>– Must <i>not</i> be part of a software RAID</li> <li>– Should be, for best performance, a 10K RPM SAS disk on a controller that has at least 64 MB of write-through cache</li> </ul> </li> </ul>
<b>Network Interfaces</b>	2

- ◆ In addition, to support **transparent proxy** deployments:

Router	Must support WCCP v2. A Cisco router must run IOS 12.2 or later. The latest version is recommended. To support IPv6, WCCP v2.01 and Cisco router version 15.4(1)T or later are required. Client machines, the destination Web server, and Content Gateway must reside on different subnets.
—or—	
Layer 4 switch	You may use a Layer 4 switch rather than a router. To support WCCP, a Cisco switch requires the EMI or IP services image of the 12.2SE IOS release (or later). Websense Content Gateway must be Layer 2 adjacent to the switch. The switch must be able to rewrite the destination MAC address of frames traversing the switch. The switch must be able to match traffic based on the layer 4 protocol port (i.e., TCP port 80).

## **Step 4: Restart services before starting the upgrade**

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1. To ensure the success of the upgrade, manually stop and start all the Websense services **except Log Server** before beginning the upgrade. (Log Server should remain stopped, as described in [Step 1: Prepare for upgrade, page 3.](#))
  - *Windows*: Navigate to the Websense **Web Security** directory (C:\Program Files or Program Files (x86)\Websense\Web Security\, by default) and enter the following command:

```
WebsenseAdmin restart
```
  - *Linux*: Navigate to the **Websense** directory (/opt/Websense/, by default) and enter the following command:

```
./WebsenseAdmin restart
```
  - *Appliance*: On the **Status > General** page in the Appliance manager, click **Restart Appliance** to restart all services.
2. Make sure that all Websense services (except Log Server) are running successfully before you begin the upgrade. If any service is stopped, use the Windows Services tool, opt/Websense//WebsenseDaemonControl command, or appliance Start Services button to start the affected service or services.

During the upgrade, when Websense services are stopped, policy enforcement stops. Users have unrestricted access to the Internet until the services are restarted.

The Websense Master Database is removed during the upgrade process. Websense Filtering Service downloads a new Master Database after the upgrade is completed.



## Step 5: Upgrade the Policy Broker machine

You must upgrade the machine that hosts **Websense Policy Broker** first, regardless of which other components are on the machine. Policy Broker may reside on:

- ◆ A Websense **full policy source** appliance
- ◆ A Windows Server 2008 R2, 2012, or 2012 R2 machine
- ◆ A RHEL 6.x machine

Any other components on the Policy Broker machine are upgraded along with Policy Broker.

If your configuration includes a primary Policy Broker and one or more replica Policy Brokers, you **must** upgrade the primary Policy Broker first.

Upgrade replica Policy Brokers after the primary has been upgraded and before attempting to upgrade any Policy Servers associated with the replicas. If Policy Server is installed on the Policy Broker machine, it is upgraded at the same time.

Jump to the section with the upgrade instructions for the platform that hosts Policy Broker:

- ◆ [Policy Broker: Appliance upgrade instructions, page 9](#)
- ◆ [Policy Broker: Windows upgrade instructions, page 11](#)
- ◆ [Policy Broker: Linux upgrade instructions, page 12](#)

### Policy Broker: Appliance upgrade instructions

Before you begin:

- ◆ Log on to the Appliance manager directly, rather than using single sign-on from the TRITON console. This avoids potential timeout problems while the upgrade patch is being loaded onto the appliance.
- ◆ Take all precautions to ensure that power to the V-Series appliance is not interrupted during the upgrade. Power failure can result in operating system and software component corruption.

You can either use an automated process to download the patch directly from Websense servers to the appliance, or manually download the patch to a machine in your network, then upload it from that machine to the appliance.

1. To download the upgrade patch using the automated process:
  - a. In the Appliance manager, go to the **Administration > Patches / Hotfixes > Patches** page.
  - b. If the 8.1.x upgrade patch is not listed in the table of **Available patches**, click **Check for Patches**.
  - c. If a security warning appears, click **Continue**, mark the **I accept the risk...** check box, and then click **Run**.

The upgrade patch file name has the following format:

Websense-V-Series-Patch-8.1.x.rpm

- d. Click **Download**. The patch size is over 6 GB, so the process may take some time.

When the download is done, the patch status becomes **Ready to Install**.

- e. Continue with step 3.
2. To upload the upgrade patch manually:



**Note**

If you are upgrading from 7.8.1 or 7.8.2, you need to apply hotfix 10. Hotfix 10 removes a file size limit that otherwise prevents the patch file from successfully uploading from the local storage location. See *Step2: Prepare appliance for upgrade*.

If you are upgrading from 7.8.3, 7.8.4, 8.0.0, or 8.0.1, you may get a Java version error when you initiate the upload. If you do, please see the knowledge base article [V-Series patch upload Java version error](#).

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- a. Use a browser to connect to [mywebsense.com](http://mywebsense.com).
- b. Log in to MyWebsense and click the **Downloads** tab.
- c. On the Downloads page, select the **Upgrades** tab.
- d. Select your appliance model from the **Product** drop-down list.
- e. Under **Patch 8.1.x for V-Series Appliances**, click **download**.
- f. Log on to the Appliance manager directly (no single-sign on) and navigate to the **Administration > Patches / Hotfixes > Patches** page.
- g. Click **Upload Patch Manually** and select the patch that you want to upload.  
When the upload is complete, the patch is listed on the page with the status **Ready to Install**.
3. Click **Install** to apply the patch.
4. A **system check** is launched to verify that your system is ready for upgrade. This may take several minutes.
5. After the check succeeds, if you skipped the preparation step of backing up your files, click **Back Up**. If you are performing the backup now:
  - a. Provide the connection information for the remote machine where the backup files will reside, then click **Test Connection**.
  - b. Click **Run Backup Now**.Wait for the backup process to complete.
6. Click **Install Patch**.  
If the subscription agreement is not displayed within 60 seconds, close and re-open the browser, return to the Patches / Hotfixes > Patches page, and initiate the patch installation again.

7. Review the subscription agreement, then mark the **I accept this agreement** check box and click **Continue**.
8. A confirmation message tells you that during the upgrade, you are logged out of the Appliance manager and the appliance restarts twice. Click **OK** to begin the upgrade.  
The upgrade process may take up to 2 hours to complete.
9. After the appliance has automatically restarted twice, log on to the Appliance manager.  
If your browser cannot connect to the Appliance manager immediately, the appliance may not have finished restarting all modules. Please be patient.
10. Navigate to the **Administration > Patches / Hotfixes > Patches** page.
11. Under **Patch History**, for version 8.1.x, verify that an **Upgrade Succeeded** status appears in the Comments section.
12. Navigate to the **Configuration > System** page and confirm the **Time and Date** settings, paying particular attention to the time zone setting. Make adjustments if needed.

When the appliance upgrade is complete, continue with [Step 6: Upgrade additional Policy Server machines](#).

Do not upgrade any other appliances or off-appliance components until the full policy source appliance has successfully completed the upgrade process.

To finish the upgrade process for the Content Gateway module on the appliance, be sure to perform the steps in [Step 12: Post-upgrade activities for Content Gateway](#), page 33.

## Policy Broker: Windows upgrade instructions

1. Make sure that no administrators are logged on to the TRITON console.
2. Log on to the installation machine with an account having **domain** and **local** administrator privileges.



### Important

If you are upgrading Log Server on this machine and it uses a Windows trusted connection to access the Log Database, you must log on to this machine using the same trusted account.

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3. Close all applications and stop any antivirus software.



### Warning

Be sure to close the Windows Event Viewer, or the upgrade may fail.

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4. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.
  - Installer files occupy approximately 5 GB of disk space.
5. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears as files are extracted. The file extraction process takes several minutes. Please be patient.
6. The installer detects software components from an earlier version and asks whether you want to proceed.  
Click **OK**.
7. On the installer **Introduction** screen, click **Next**.  
Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
8. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
9. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped.  
In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
10. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**.  
Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.  
If Policy Broker resides on the TRITON management server, or on the same machine as Log Server, the upgrade process checks for a required version of Microsoft SQL Server Native Client and related tools and installs them, if necessary.
11. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
12. Reboot the machine.



#### **Important**

The machine must be rebooted to complete the upgrade process.

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13. If you stopped your antivirus software, restart it.

## **Policy Broker: Linux upgrade instructions**

1. Make sure no administrators are logged on to the TRITON console.
2. Log on the installation machine with administrator privileges (typically, as **root**).
3. Close all applications and stop any antivirus software.

4. Check the **etc/hosts** file. If there is no host name for the machine, add one.
5. Create a setup directory for the installer files, such as **/root/Websense\_setup**.
6. Download the Linux installer from the Downloads page at [mywebsense.com](http://mywebsense.com). The installer file is called **WebsenseWeb81xSetup\_Lnx.tar.gz**.
7. Uncompress the installer file using:

```
tar -xvzf <installer tar archive>
```
8. Use one of the following commands to launch it:  
To launch the graphical installer (available only on English versions of Linux):

```
./install.sh -g
```

  
To launch the command-line installer, omit the -g switch:

```
./install.sh
```
9. On the Introduction screen, click **Next**.

**Note**

These instructions refer to the graphical installer screens. If you are using the command-line installer, the same prompts appear. Enter the menu-item number or character, corresponding to the button described in each step.

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10. On the Subscription Agreement screen, click **I accept the terms of the Subscription Agreement** and click **Next**.
11. On the Websense Upgrade screen, select **Start the upgrade** and then click **Next**.
12. When you click **Next**, a “Stopping All Services” progress message appears. Wait for Websense services to be stopped.  
  
In some cases, the installer may be unable to stop the Websense services. If this occurs, stop them manually using the **/opt/Websense/WebsenseDaemonControl** command. Once you have manually stopped the services, return to the installer.
13. On the Pre-Upgrade Summary screen, review the list of Websense components that will be upgraded, and then click **Next**.  
  
Critical files are backed up and install properties initialized, then the **Installing Websense** screen appears.
14. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
15. Reboot the machine.

**Important**

The machine must be rebooted to complete the upgrade process.

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16. If you stopped your antivirus software, restart it.

## Step 6: Upgrade additional Policy Server machines

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The central Policy Server resides on the same machine as the primary Policy Broker, and was automatically upgraded in the previous section.

If you have additional Policy Server instances, upgrade them next, regardless of what other services reside on the machines. Policy Server may reside on:

- ◆ Websense **user directory and filtering** appliances
- ◆ Windows Server 2008 R2, 2012, or 2012 R2 machines
- ◆ RHEL 6.x machines

Jump to the section with the upgrade instructions for the platform that hosts Policy Server:

- ◆ [Policy Server: Appliance upgrade instructions, page 14](#)
- ◆ [Policy Server: Windows upgrade instructions, page 16](#)
- ◆ [Policy Server: Linux upgrade instructions, page 17](#)

### Policy Server: Appliance upgrade instructions

Before you begin:

- ◆ Log on to the Appliance manager directly, rather than using single sign-on from the TRITON console. This avoids potential timeout problems while the upgrade patch is being loaded onto the appliance.
- ◆ Take all precautions to ensure that power to the V-Series appliance is not interrupted during the upgrade. Power failure can result in operating system and software component corruption.

You can either use an automated process to download the patch directly from Websense servers to the appliance, or manually download the patch to a machine in your network, then upload it from that machine to the appliance.

1. To download the upgrade patch using the automated process:
  - a. In the Appliance manager, go to the **Administration > Patches / Hotfixes > Patches** page.
  - b. If the 8.1.x upgrade patch is not listed in the table of **Available patches**, click **Check for Patches**.
  - c. If a security warning appears, click **Continue**, mark the **I accept the risk...** check box, and then click **Run**.

The upgrade patch file name has the following format:

```
Websense-V-Series-Patch-8.1.x.rpm
```

- d. Click **Download**. The patch size is over 6 GB, so the process may take some time.

When the download is done, the patch status becomes **Ready to Install**.

- e. Continue with step 3.

- To upload the upgrade patch manually:

**Note**

If you are upgrading from 7.8.1 or 7.8.2, you need to apply hotfix 10. Hotfix 10 removes a file size limit that otherwise prevents the patch file from successfully uploading from the local storage location. See *Step2: Prepare appliance for upgrade*.

If you are upgrading from 7.8.3, 7.8.4, 8.0.0, or 8.0.1, you may get a Java version error when you initiate the upload. If you do, please see the knowledge base article [V-Series patch upload Java version error](#).

- Use a browser to connect to [mywebsense.com](http://mywebsense.com).
  - Log in to MyWebsense and click the **Downloads** tab.
  - On the Downloads page, select the **Upgrades** tab.
  - Select your appliance model from the **Product** drop-down list.
  - Under **Patch 8.1.x for V-Series Appliances**, click **download**.
  - Log on to the Appliance manager directly (no single-sign on) and navigate to the **Administration > Patches / Hotfixes > Patches** page.
  - Click **Upload Patch Manually** and select the patch that you want to upload.  
When the upload is complete, the patch is listed on the page with the status **Ready to Install**.
- Click **Install** to apply the patch.
  - A **system check** is launched to verify that your system is ready for upgrade. This may take several minutes.
  - After the check succeeds, if you skipped the preparation step of backing up your files, click **Back Up**. If you are performing the backup now:
    - Provide the connection information for the remote machine where the backup files will reside, then click **Test Connection**.
    - Click **Run Backup Now**.  
Wait for the backup process to complete.
  - Click **Install Patch**.  
If the subscription agreement is not displayed within 60 seconds, close and re-open the browser, return to the Patches / Hotfixes > Patches page, and initiate the patch installation again.
  - Review the subscription agreement, then mark the **I accept this agreement** check box and click **Continue**.
  - A confirmation message tells you that during the upgrade, you are logged out of the Appliance manager and the appliance restarts twice. Click **OK** to begin the upgrade.

The upgrade process may take up to 2 hours to complete.

9. After the appliance has automatically restarted twice, log on to the Appliance manager.  
If your browser cannot connect to the Appliance manager immediately, the appliance may not have finished restarting all modules. Please be patient.
10. Navigate to the **Administration** > **Patches / Hotfixes** > **Patches** page.
11. Under **Patch History**, for version 8.1.x, verify that an **Upgrade Succeeded** status appears in the Comments section.
12. Navigate to the **Configuration** > **System** page and confirm the **Time and Date** settings, paying particular attention to the time zone setting. Make adjustments if needed.

When the appliance upgrade is complete, continue with [Step 7: Upgrade additional Filtering Service, Network Agent, and User Service machines](#).

To finish the upgrade process for the Content Gateway module on the appliance, be sure to perform the steps in [Step 12: Post-upgrade activities for Content Gateway](#), page 33.

## Policy Server: Windows upgrade instructions

1. Make sure that no administrators are logged on to the TRITON console.
2. Log on to the installation machine with an account having **domain** and **local** administrator privileges.



### Important

If you are upgrading Log Server on this machine and it uses a Windows trusted connection to access the Log Database, you must log on to this machine using the same trusted account.

---

3. Close all applications and stop any antivirus software.



### Warning

Be sure to close the Windows Event Viewer, or the upgrade may fail.

---

4. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.
  - Installer files occupy approximately 5 GB of disk space.
  - Verify that the MD5 value of the downloaded file matches the value shown on the download page.
5. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears as files are extracted.  
The file extraction process takes several minutes. Please be patient.



6. The installer detects software components from an earlier version and asks how you want to proceed.  
Click **OK**.
7. On the installer **Introduction** screen, click **Next**.  
Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
8. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
9. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped.  
In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
10. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**.  
Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.
11. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
12. Reboot the machine.



### Important

The machine must be rebooted to complete the upgrade process.

---

13. If you stopped your antivirus software, restart it.

## Policy Server: Linux upgrade instructions

1. Make sure no administrators are logged on to the TRITON console.
2. Log on the installation machine with administrator privileges (typically, as **root**).
3. Close all applications and stop any antivirus software.
4. Check the **etc/hosts** file. If there is no host name for the machine, add one.
5. Create a setup directory for the installer files, such as **/root/Websense\_setup**.
6. Download the Linux installer from the Downloads page at [mywebsense.com](http://mywebsense.com). The installer file is called **WebsenseWeb81xSetup\_Lnx.tar.gz**.
7. Uncompress the installer file using:
 

```
tar -xvzf <installer tar archive>
```
8. Use one of the following commands to launch it:  
To launch the graphical installer (available only on English versions of Linux):
 

```
./install.sh -g
```

 To launch the command-line installer, omit the **-g** switch:

```
./install.sh
```

9. On the Introduction screen, click **Next**.



#### Note

These instructions refer to the graphical installer screens. If you are using the command-line installer, the same prompts appear. Enter the menu-item number or character, corresponding to the button described in each step.

---

10. On the Subscription Agreement screen, click **I accept the terms of the Subscription Agreement** and click **Next**.
11. On the Websense Upgrade screen, select **Start the upgrade** and then click **Next**.
12. When you click **Next**, a “Stopping All Services” progress message appears. Wait for Websense services to be stopped.  
  
In some cases, the installer may be unable to stop the Websense services. If this occurs, stop them manually using the `/opt/Websense/WebsenseDaemonControl` command. Once you have manually stopped the services, return to the installer.
13. On the Pre-Upgrade Summary screen, review the list of Websense components that will be upgraded, and then click **Next**.  
  
Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.
14. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
15. Reboot the machine.



#### Important

The machine must be rebooted to complete the upgrade process.

---

16. If you stopped your antivirus software, restart it.

## Step 7: Upgrade additional Filtering Service, Network Agent, and User Service machines

---

If you have additional Filtering Service, Network Agent, or User Service instances, upgrade them next, regardless of what other services reside on the machines. Filtering Service, Network Agent, and User Service may reside on:

- ◆ Windows Server 2008 R2, 2012, or 2012 R2 machines
- ◆ RHEL 6.x machines

Filtering Service and Network Agent may also reside on Websense **filtering only** appliances.

## Filtering Service and Network Agent: Appliance upgrade instructions

Before you begin:

- ◆ Log on to the Appliance manager directly, rather than using single sign-on from the TRITON console. This avoids potential timeout problems while the upgrade patch is being loaded onto the appliance.
- ◆ Take all precautions to ensure that power to the V-Series appliance is not interrupted during the upgrade. Power failure can result in operating system and software component corruption.

You can either use an automated process to download the patch directly from Websense servers to the appliance, or manually download the patch to a machine in your network, then upload it from that machine to the appliance.

1. To download the upgrade patch using the automated process:
  - a. In the Appliance manager, go to the **Administration > Patches / Hotfixes > Patches** page.
  - b. If the 8.1.x upgrade patch is not listed in the table of **Available patches**, click **Check for Patches**.
  - c. If a security warning appears, click **Continue**, mark the **I accept the risk...** check box, and then click **Run**.

The upgrade patch file name has the following format:

```
Websense-V-Series-Patch-8.1.x.rpm
```

- d. Click **Download**. The patch size is over 6 GB, so the process may take some time.  
When the download is done, the patch status becomes **Ready to Install**.
  - e. Continue with step 3.
2. To upload the upgrade patch manually:



### Note

If you are upgrading from 7.8.1 or 7.8.2, you need to apply hotfix 10. Hotfix 10 removes a file size limit that otherwise prevents the patch file from successfully uploading from the local storage location. See *Step2: Prepare appliance for upgrade*.

If you are upgrading from 7.8.3, 7.8.4, 8.0.0, or 8.0.1, you may get a Java version error when you initiate the upload. If you do, please see the knowledge base article [V-Series patch upload Java version error](#).

- a. Use a browser to connect to [mywebsense.com](http://mywebsense.com).
- b. Log in to MyWebsense and click the **Downloads** tab.
- c. On the Downloads page, select the **Upgrades** tab.

- d. Select your appliance model from the **Product** drop-down list.
  - e. Under **Patch 8.1.x for V-Series Appliances**, click **download**.
  - f. Log on to the Appliance manager directly (no single-sign on) and navigate to the **Administration > Patches / Hotfixes > Patches** page.
  - g. Click **Upload Patch Manually** and select the patch that you want to upload.  
When the upload is complete, the patch is listed on the page with the status **Ready to Install**.
3. Click **Install** to apply the patch.
  4. A **system check** is launched to verify that your system is ready for upgrade. This may take several minutes.
  5. After the check succeeds, if you skipped the preparation step of backing up your files, click **Back Up**. If you are performing the backup now:
    - a. Provide the connection information for the remote machine where the backup files will reside, then click **Test Connection**.
    - b. Click **Run Backup Now**.Wait for the backup process to complete.
  6. Click **Install Patch**.  
If the subscription agreement is not displayed within 60 seconds, close and re-open the browser, return to the Patches / Hotfixes > Patches page, and initiate the patch installation again.
  7. Review the subscription agreement, then mark the **I accept this agreement** check box and click **Continue**.
  8. A confirmation message tells you that during the upgrade, you are logged out of the Appliance manager and the appliance restarts twice. Click **OK** to begin the upgrade.  
The upgrade process may take up to 2 hours to complete.
  9. After the appliance has automatically restarted twice, log on to the Appliance manager.  
If your browser cannot connect to the Appliance manager immediately, the appliance may not have finished restarting all modules. Please be patient.
  10. Navigate to the **Administration > Patches / Hotfixes > Patches** page.
  11. Under **Patch History**, for version 8.1.x, verify that an **Upgrade Succeeded** status appears in the Comments section.
  12. Navigate to the **Configuration > System** page and confirm the **Time and Date** settings, paying particular attention to the time zone setting. Make adjustments if needed.

When the appliance upgrade is complete, continue with [Step 8: Upgrade Websense Log Server](#).

To finish the upgrade process for the Content Gateway module on the appliance, be sure to perform the steps in [Step 12: Post-upgrade activities for Content Gateway](#), page 33.

## Filtering Service, Network Agent, or User Service: Windows upgrade instructions

1. Make sure that no administrators are logged on to the TRITON console.
2. Log on to the installation machine with an account having **domain** and **local** administrator privileges.



### Important

If you are upgrading Log Server on this machine and it uses a Windows trusted connection to access the Log Database, you must log on to this machine using the same trusted account.

---

3. Close all applications and stop any antivirus software.



### Warning

Be sure to close the Windows Event Viewer, or the upgrade may fail.

---

4. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.
  - Installer files occupy approximately 5 GB of disk space.
5. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears as files are extracted. The file extraction process takes several minutes. Please be patient.
6. The installer detects software components from an earlier version and asks how you want to proceed. Click **OK**.
7. On the installer **Introduction** screen, click **Next**. Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
8. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
9. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped. In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
10. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**. Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.

11. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
12. Reboot the machine.



**Important**

The machine must be rebooted to complete the upgrade process.

---

13. If you stopped your antivirus software, restart it.

## Filtering Service, Network Agent, or User Service: Linux upgrade instructions

1. Make sure no administrators are logged on to the TRITON console.
2. Log on the installation machine with administrator privileges (typically, as **root**).
3. Close all applications and stop any antivirus software.
4. Check the **etc/hosts** file. If there is no host name for the machine, add one.
5. Create a setup directory for the installer files, such as **/root/Websense\_setup**.
6. Download the Linux installer from the Downloads page at [mywebsense.com](http://mywebsense.com). The installer file is called **WebsenseWeb81xSetup\_Lnx.tar.gz**.
7. Uncompress the installer file using:

```
tar -xvzf <installer tar archive>
```

8. Use one of the following commands to launch it:

To launch the graphical installer (available only on English versions of Linux):

```
./install.sh -g
```

To launch the command-line installer, omit the -g switch:

```
./install.sh
```

9. On the Introduction screen, click **Next**.



**Note**

These instructions refer to the graphical installer screens. If you are using the command-line installer, the same prompts appear. Enter the menu-item number or character, corresponding to the button described in each step.

---

10. On the Subscription Agreement screen, click **I accept the terms of the Subscription Agreement** and click **Next**.
11. On the Websense Upgrade screen, select **Start the upgrade** and then click **Next**.
12. When you click **Next**, a “Stopping All Services” progress message appears. Wait for Websense services to be stopped.

In some cases, the installer may be unable to stop the Websense services. If this occurs, stop them manually using the **/opt/Websense/WebsenseDaemonControl** command. Once you have manually stopped the services, return to the installer.

13. On the Pre-Upgrade Summary screen, review the list of Websense components that will be upgraded, and then click **Next**.

Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.

14. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
15. Reboot the machine.

**Important**

The machine must be rebooted to complete the upgrade process.

---

16. If you stopped your antivirus software, restart it.

## Step 8: Upgrade Websense Log Server

---

Next, upgrade the Websense Log Server machine. Any other services on the machine are also upgraded.

Log Server runs on Windows Server 2008 R2, 2012, or 2012 R2 machines.

To upgrade Log Server:

1. Make sure that no administrators are logged on to the TRITON console.
2. Log on to the installation machine with an account having **domain** and **local** administrator privileges.

**Important**

If Log Server uses a Windows trusted connection to access the Log Database, you must log on to this machine using the same trusted account.

---

3. Close all applications and stop any antivirus software.

**Warning**

Be sure to close the Windows Event Viewer, or the upgrade may fail.

---

4. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.

- Installer files occupy approximately 5 GB of disk space.
- 5. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears as files are extracted.  
The file extraction process takes several minutes. Please be patient.
- 6. The installer detects software components from an earlier version and asks how you want to proceed.  
Click **OK**.
- 7. On the installer **Introduction** screen, click **Next**.  
Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
- 8. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
- 9. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped.  
In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
- 10. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**.  
Critical files are backed up and install properties initialized, then the **Installing Websense** screen appears.  
The upgrade process checks for a required version of Microsoft SQL Server Native Client and related tools and installs them, if necessary.
- 11. If you are upgrading from 7.8.3 or earlier, a new logging partition is added to your Log Database. If the upgrade process detects 70 active partitions (the limit) in your database, you are prompted to select one or more partitions to be disabled. If the upgrade process cannot disable the selected partition or partitions, you are asked to exit the installer and relaunch it after manually disabling them.  
Manually disable partitions by using SQL Server Management Studio to run the following command, after connecting to the catalog database (wslogdb70, by default):

```
UPDATE WSE_PARTITIONS SET OFFLINE=1 WHERE  
DB_NAME='<partition database name>'
```

Here, <partition database name> is the name of the partition to be disabled (for example, wslogdb70\_4). Run the command for each partition you wish to disable.  
Relaunch the installer.
- 12. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
- 13. Reboot the machine.



### Important

The machine must be rebooted to complete the upgrade process.

---



14. If you stopped your antivirus software, restart it.
15. Enable the database jobs that you disabled prior to upgrade.

## Step 9: Upgrade the TRITON management server

---

If you have not already upgraded the TRITON management server in the course of upgrading another component, use the following steps to upgrade the management server machine.

1. Make sure that no administrators are logged on to the TRITON console.
2. Log on to the installation machine with an account having **domain** and **local** administrator privileges.
3. Close all applications and stop any antivirus software.



### Warning

Be sure to close the Windows Event Viewer, or the upgrade may fail.

---

4. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.
  - Installer files occupy approximately 5 GB of disk space.
5. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears, as files are extracted.

The file extraction process takes several minutes. Please be patient.
6. The installer detects software components from an earlier version and asks how you want to proceed.

Click **OK**.
7. On the installer **Introduction** screen, click **Next**.

Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
8. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
9. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped.

In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
10. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**.

Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.

The upgrade process checks for a required version of Microsoft SQL Server Native Client and related tools and installs them, if necessary.

11. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
12. Reboot the machine.



**Important**

The machine must be rebooted to complete the upgrade process.

---

13. If you stopped your antivirus software, restart it.

## **Step 10: Upgrade software instances of Content Gateway**

---

Content Gateway runs on Websense full policy source, user directory and filtering, and filtering only appliances (all of which should already have been upgraded at this point).

Content Gateway is also:

- ◆ **Certified** on Red Hat Enterprise Linux, updates 4 and 5
  - Kernel version for 6.6: 2.6.32-504
  - Kernel version for 6.5: 2.6.32-431



**Note**

Websense testing encountered a kernel bug in version 2.6.32-431 that can impact performance. However, Content Gateway features were tested on this version of the OS and passed the certification tests.

---

- Kernel version for 6.4: 2.6.32-358

To display the kernel version installed on your system, enter the command:

```
/bin/uname -r
```



**Note**

If you have multiple Content Gateway instances deployed in a cluster, you **do not** have to disable clustering or VIP (if used). As each member of the cluster is upgraded, it will rejoin the cluster.

---



### Important

At the beginning of the upgrade procedure, the installer checks to see if the partition that hosts **/opt** has enough space to hold a copy of the existing Content Gateway log files (copied to **/opt/WCG\_tmp/logs**). If there's not enough space, the installer prints an error message and quits.

In this situation, if you want to retain the log files you must copy the contents of **/opt/WCG/logs** to a location that has enough space, and then delete the log files in **/opt/WCG/logs**.

When the upgrade is complete, move the files from the temporary location back to **/opt/WCG/logs** and delete the files in the temporary location.

1. If your v7.8.x Web Security Gateway or v8.0.x TRITON AP-WEB solution is deployed with Data Security, log on to the Content Gateway manager and go to the **Configure > My Proxy > Basic** page and disable **Data Security** (v7.8.x) or **Web DLP** (v8.0.x).

When the upgrade is complete, return to the **Configure > My Proxy > Basic** page and enable the new **Web DLP** option. Next, restart Content Gateway, and then navigate to the **Configure > Security > Web DLP** page and confirm that automatic registration was successful. If it was not, confirm that the DATA module of TRITON Manager is running as expected.

2. Log on to the Content Gateway Linux host and acquire root permissions:
 

```
su root
```
3. Disable any currently running firewall on this machine for the duration of the upgrade. Bring the firewall back up after the upgrade is complete, opening ports used by Content Gateway.

For example, if you are running IPTables:

- a. At a command prompt, enter **service iptables status** to determine if the firewall is running.
  - b. If the firewall is running, enter **service iptables stop**.
  - c. After upgrade, restart the firewall. In the firewall, be sure to open the ports used by Content Gateway on this machine. See [Websense TRITON APX default ports](#) for more information.
4. Download the Content Gateway version 8.1.x installer from [mywebsense.com](http://mywebsense.com) and save it to a temporary directory. For example, place it in:

```
/tmp/wcg_v81
```

5. Unpack the Content Gateway installer tar archive:

```
cd /tmp/wcg_v81
```

```
tar -xvzf <installer tar archive>
```



### Important

If SELinux is enabled, set it to permissive, or disable it before installing Content Gateway. Do not install or run Content Gateway with SELinux enabled.

---

6. If you intend to upgrade Red Hat Enterprise Linux 6.x to a more recent version, perform the upgrade now. See your Red Hat Enterprise Linux documentation.
7. In the directory where you unpacked the tar archive (for example, /tmp/wcg\_80), start the installation/upgrade script.

```
./wgc_install.sh
```

Respond to the prompts.

Content Gateway is installed and runs as **root**.



### Note

Up to the point that you are prompted to confirm your intent to upgrade, you can quit the installer by pressing CTRL+C. If you change your mind after you choose to continue, do **not** use CTRL+C to stop the process. Instead, allow the installation to complete and then uninstall.

---

8. If your server does not meet the minimum hardware requirements or is missing required operating system packages, you will receive error or warning messages. For example:

```
Error: Websense Content Gateway v8.1.x on x86_64 requires several packages that are not present on your system.
```

```
Please install the following packages: <list of packages>
```

```
If you are connected to a yum repository you can install these packages with the following command:
```

```
yum install <list of packages>
```

```
See the Websense Technical Library (www.websense.com/library) for information about the software requirements for x86_64 installation.
```

To make it easier to install the needed packages, the Content Gateway distribution includes a Linux “rpm” containing the needed packages. To install its contents, ensure that the operating system has access to the Red Hat Linux distribution library (for example the DVD), and enter:

```
yum install wgc_deps-1-0.noarch.rpm
```

Upon successful completion, a list of updated packages displays and then the word “Complete!”.

Here is an example of a system resource warning:

```
Warning: Websense Content Gateway requires at least 6 gigabytes of RAM.
```

Do you wish to continue [y/n]?

Enter **n** to end the installation and return to the system prompt.

Enter **y** to continue the upgrade. You should not install or upgrade on a system that does not meet the minimum requirements. If you choose to run Content Gateway after receiving a system resource warning, performance and stability may be affected.

9. Read the subscription agreement. At the prompt, enter **y** to accept the agreement and continue the upgrade, or **n** to cancel.

Do you accept the above agreement [y/n]? **y**

10. The installer checks for the presence of an existing Content Gateway installation. When asked, choose to replace the existing version with version 8.1.x.

WCG version 7.8.n-nnnn was found.

Do you want to replace it with version 8.1.x-nnnn [y/n]? **y**

11. Existing settings and logs are copied to backup files and stored. For example:

Stopping Websense Content Gateway processes...done

Copying settings from /opt/WCG to /root/WCG/OldVersions/  
7.8.0-1418-PreUpgrade/...done

Zipping configuration archive...done

Moving log files from /opt/WCG/logs to /opt/WCG\_tmp/logs/  
...done

12. You can either re-use the installation selections you entered during the last install, or provide new answers to all installation prompts, such as admin password, admin email address, Policy Server IP address, etc.:

Previous installation selections </root/WCG/Current/  
WCGinstall.cfg> found.

Use previous installation selections [y/n]?

Enter **y** to use previous installation selections.

Enter **n** to revert to Websense default values, and receive all installation questions and answer them again.

13. If you answered **y** at Step 12, then you can also leave proxy settings at their current values or revert to Websense default values (which perform a fresh install!).

Restore settings after install [y/n]?

Enter **y** to keep the proxy settings as they are.

Enter **n** to restore Websense default settings for the proxy.

**Caution:** If you answer **n** (no), the current installation of Content Gateway is removed, and a fresh install of 8.1.x begins. See [Installation Instructions: TRITON AP-WEB](#) for a detailed description of the installation procedure. This is not an upgrade, but rather a fresh install.

14. The previously installed version of Content Gateway is removed, and the settings and selections you chose to retain are re-used. Details of the upgrade process are output to the screen. Please wait.

\*COMPLETED\* Websense Content Gateway 8.1.x-nnnn installation.

A log file of this installation process has been written to /root/WCG/Current/WCGinstall.log

For full operating information, see the Websense Content Gateway Help system.

Follow these steps to start the Websense Content Gateway management interface (Content Gateway Manager):

- 
1. Start a browser.
  2. Enter the IP address of the Websense Content Gateway server, followed by a colon and the management interface port (8081 for this installation). For example: https://11.222.33.44:8081.
  3. Log on using username admin and the password you chose earlier.

15. The automated portion of the upgrade is now complete, and the proxy software is running.

If you chose to revert to Websense default proxy settings, be sure to configure any custom options.

16. Check Content Gateway status with:

```
/opt/WCG/WCGAdmin status
```

All services should be running. These include:

- Content Cop
- Websense Content Gateway
- Content Gateway Manager
- Analytics Server



### Important

If Content Gateway fails to complete startup after upgrade, check for the presence of the **no\_cop** file. Look for:

```
/opt/WCG/config/internal/no_cop
```

If the file exists, remove it and start Content Gateway:

```
/opt/WCG/WCGAdmin start
```

---

To finish the upgrade, be sure to perform the post-upgrade instructions at the end of this document.

## Step 11: Upgrade any additional components

Upgrade any additional server components, including Sync Service, Directory Agent, transparent identification agents and Remote Filtering Server, that may be running on other machines.

See:

- ◆ *Additional components: Windows upgrade instructions, page 31*
- ◆ *Additional components: Linux upgrade instructions, page 32*

### Additional components: Windows upgrade instructions

1. Log on to the installation machine with an account having **domain** and **local** administrator privileges.
2. Close all applications and stop any antivirus software.



#### Warning

Be sure to close the Windows Event Viewer, or the upgrade may fail.

3. Go to the **Downloads** tab of [mywebsense.com](http://mywebsense.com) to download the TRITON Unified Installer.
  - The installer file is **WebsenseTRITON81xSetup.exe**.
  - Installer files occupy approximately 5 GB of disk space.
4. Right-click **WebsenseTRITON81xSetup.exe** and select **Run as administrator** to launch the installer. A progress dialog box appears, as files are extracted. The file extraction process takes several minutes. Please be patient.
5. The installer detects software components from an earlier version and asks how you want to proceed. Click **OK**.
6. On the installer **Introduction** screen, click **Next**. Note the **Installer Dashboard** remains on-screen, behind the installer screens mentioned in the remaining steps.
7. On the **Websense Upgrade** screen, select **Start the upgrade**, then click **Next**.
8. Accept the subscription agreement. When you click **Next**, a *Stopping All Services* progress message appears. Wait for Websense services to be stopped. In some cases, the installer may be unable to stop the Websense services. If this occurs, you are prompted to stop them manually (you do not need to exit the installer to do this). Use the Windows Services tool to stop the services, then return to the installer.
9. On the **Pre-Upgrade Summary** screen, review the list of Websense components that will be upgraded, and then click **Next**.

Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.

10. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
11. Reboot the machine.



#### **Important**

The machine must be rebooted to complete the upgrade process.

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12. If you stopped your antivirus software, restart it.

## **Additional components: Linux upgrade instructions**

1. Log on the installation machine with administrator privileges (typically, as **root**).
2. Close all applications and stop any antivirus software.
3. Check the **etc/hosts** file. If there is no host name for the machine, add one.
4. Create a setup directory for the installer files, such as **/root/Websense\_setup**.
5. Download the Linux installer from the Downloads page at [mywebsense.com](http://mywebsense.com). The installer file is called **WebsenseWeb81xSetup\_Lnx.tar.gz**.
6. Uncompress the installer file using:

```
tar -xvzf <installer tar archive>
```

7. Use one of the following commands to launch it:

To launch the graphical installer (available only on English versions of Linux):

```
./install.sh -g
```

To launch the command-line installer, omit the -g switch:

```
./install.sh
```

8. On the Introduction screen, click **Next**.



#### **Note**

These instructions refer to the graphical installer screens. If you are using the command-line installer, the same prompts appear. Enter the menu-item number or character, corresponding to the button described in each step.

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9. On the Subscription Agreement screen, click **I accept the terms of the Subscription Agreement** and click **Next**.
10. On the Websense Upgrade screen, select **Start the upgrade** and then click **Next**.
11. When you click **Next**, a “Stopping All Services” progress message appears. Wait for Websense services to be stopped.

In some cases, the installer may be unable to stop the Websense services. If this occurs, stop them manually using the **/opt/Websense/WebsenseDaemonControl** command. Once you have manually stopped the services, return to the installer.



12. On the Pre-Upgrade Summary screen, review the list of Websense components that will be upgraded, and then click **Next**.  
Critical files are backed up and install properties initialized. And then the **Installing Websense** screen appears.
13. Wait for the **Upgrade Complete** screen to appear. Click **Done** to exit the installer.
14. Reboot the machine.



#### Important

The machine must be rebooted to complete the upgrade process.

15. If you stopped your antivirus software, restart it.

## Step 12: Post-upgrade activities for Content Gateway

After you have finished upgrading components, perform the following steps to ensure that your Content Gateway upgrade is complete.

1. If at the start of the upgrade process you manually moved your existing log files to a temporary location, move them back to **/opt/WCG/logs** and delete the files in the temporary location.
2. Register Content Gateway nodes in the Web module of TRITON Manager on the **Settings > Content Gateway Access** page. Registered nodes add a link to the Content Gateway manager logon portal and provide a visual system health indicator: a green check mark or a red X.
3. Configure Content Gateway system alerts in the Web module. A subset of Content Gateway system alerts are sent to the Web module, in addition to the Content Gateway manager). To configure which alerts are sent, in the Web module of the TRITON Manager go to the **Settings > Alerts > System** page.
4. If you use SSL support:
  - a. If your clients don't yet use a SHA-1 internal Root CA, create and import a SHA-1 Root CA into all affected clients. See [Internal Root CA](#) in Content Gateway Help.
  - b. Using the notes you compiled prior to upgrade, rebuild your Static Incident list.
5. If you use proxy user authentication, review the settings on the **Global Authentication Options** page (**Configure > Security > Access Control > Global Configuration Options**).
6. If you use IWA user authentication, confirm that the AD domain is still joined. Go to **Monitor > Security > Integrated Windows Authentication**. If it is not joined, rejoin the domain. Go to **Configure > Security > Access Control > Integrated Windows Authentication**.

7. If you use Rule-Based Authentication, review your configuration. Go to **Configure > Security > Access Control**.
  - a. Check the **Domains** page.
    - IWA domains that were joined before upgrade should still be joined.
    - LDAP and Legacy NTLM domains should be listed.
  - b. Check each rule.
    - Go to the **Authentication Rules** page and enter the editor.
    - Select each rule and check the configuration.
    - For Multiple Realm Authentication rules that used Cookie Mode Caching, check the cookie list on the Global Authentication Option page.
    - Check that the expected domain is in the **Auth Sequence** list.

**Important:** The Rule-Based Authentication feature is very rich and can satisfy many user authentication requirements. To make best use of it, please refer to [Rule-Based Authentication](#).

8. If TRITON AP-WEB (Web Security Gateway Anywhere for v7.8.x) and TRITON AP-DATA (Data Security for v7.8.x) were deployed together, confirm that Content Gateway has automatically re-registered with the Data module of the TRITON Manager. If it has not, manually re-register
  - a. Ensure that the Content Gateway and the TRITON management server system clocks are synchronized to within a few minutes.
  - b. In the Content Gateway manager:
    - Go to **Configure > My Proxy > Basic**, ensure that **Web DLP: Integrated on-box** is enabled, and click **Apply**.
    - Next to **Integrated on-box**, click the **Not registered** link. This opens the **Configure > Security > Web DLP registration** screen.
    - Enter the IP address of the TRITON management server.
    - Enter a user name and password for logging onto the TRITON Manager. The user must be a TRITON AP-DATA (formerly Data Security) administrator with Deploy Settings privileges.
    - Click **Register**. If registration is successful, a message confirms the result and prompts you to restart Content Gateway. If registration fails, an error message indicates the cause of failure. Correct the problem and perform the registration process again.
9. If TRITON AP-WEB (Web Security Gateway Anywhere for v7.8.x) and TRITON AP-DATA (Data Security for v7.8.x) were deployed together and upgraded, you may need to remove stale entries of Content Gateway instances registered in TRITON AP-DATA (formerly Data Security) system modules:
  - a. Log onto the TRITON console.
  - b. Select the **Data** tab.
  - c. Select **Settings > Deployment > System Modules**.
  - d. Listed are 2 instances of each Content Gateway module registered with the system. Delete the older instances. You can identify these by looking at the version number.
  - e. Click **Deploy**.

10. If TRITON AP-WEB (Web Security Gateway Anywhere for v7.8.x) and TRITON AP-DATA (Data Security for v7.8.x) were deployed together and configured to use the on-box policy engine, and then reconfigured during upgrade or later to use the ICAP interface, the Content Gateway instance may need to be deleted from the list of TRITON AP-DATA (formerly Data Security) system modules or the deployment will fail. Go to the **Data > Settings > Deployment > System Modules** page, click on the affected Content Gateway instance to open its **Details** page, click **Delete** and then **Deploy**.
11. If your 7.8.2 or higher explicit proxy deployment was customized to support an external load balancer with IWA user authentication (see this [knowledge base article](#)), the configuration is preserved during upgrade to version 8.1.x. You do not need to re-apply the custom configuration. You should, however, test your deployment to verify that the load balancer is performing as expected.

