

SonicWall® SonicOS 6.5 NS_v Series Upgrade Guide

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This *Upgrade Guide* provides instructions for upgrading your SonicWall® SonicOS NS_v Series virtual firewall from previous versions to the latest version of SonicOS.

This guide also provides information about importing configuration settings from one NS_v platform to another. See [Importing Configuration Settings](#) for details.

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Obtaining the Latest SonicOS Image

To obtain a new SonicOS image file for your SonicWall NS_v:

- 1 In a browser on your management computer, log into your MySonicWall account at <https://www.mysonicwall.com/>.
- 2 In MySonicWall, click **Downloads** in the left navigation pane to display the Download Center screen.
- 3 Select your NS_v product in the **Software Type** drop-down list to display available SonicOS versions.
- 4 To download the image **SWI** file to your computer, click the link for the version you want. You can also download the *Release Notes* in the same way.

Creating a System Backup and Exporting Your Settings

Before beginning the update process, make a system backup on your SonicWall NSv. When you click the **Create Backup** button, SonicOS takes a “snapshot” of your current system state, SonicOS image, and configuration preferences, and makes the snapshot the new System Backup image. You can save Backups locally or on the cloud. You can also schedule backups to occur automatically. Clicking **Create Backup** overwrites the existing Backup image as necessary.

You can also export the NSv configuration settings to a file on your local management station. This file serves as an external backup of the configuration settings, and can be imported into another NSv or into the same NSv if it is necessary to reboot SonicOS with factory default settings.

To save a system backup and export configuration settings to a file on your local management station:

- 1 In the **MANAGE** view, on the **Updates | Settings** page, click the **Create Backup** drop-down list and select one of the following:
 - Select **Local Backup**. SonicOS takes a “snapshot” of your current system state, SonicOS image, and configuration preferences, and makes it the new local backup image. Clicking **Local Backup** overwrites the existing local backup image, if any. The **Local Backup Configuration File** versions are displayed below the current firmware version.
 - Select **Cloud Backup**. In the popup dialog, optionally select **Retain Cloud Backup** to prevent this backup from being overwritten by a future cloud backup. Optionally enter a comment in the **Comment** field. Click **Upload**. Cloud backups are displayed below the local backups.
- 2 To export your settings to a local file, click the **Import/Export Configuration** drop-down list and select **Export Configuration**. In the popup dialog, which displays the name of the saved file, click **Export** to complete the process.

Upgrading SonicOS with Current Settings

You can update the SonicOS image on a SonicWall NSv remotely if the LAN or WAN interface is configured for management access. You can also connect to the virtual console, put the NSv into SafeMode, and perform the upgrade. See [Using SafeMode to Upgrade the SonicOS Image](#) on page 4 for that procedure.

To upload a new image to your SonicWall NSv and use your current configuration settings upon startup:

- 1 Download the SonicOS image file from MySonicWall and save it to a location on your local computer.
- 2 Point your browser to the NSv IP address, and log in as an administrator.
- 3 In the **MANAGE** view, on the **Updates | Settings** page, under **Image Management**, click **Upload Image**.
- 4 Browse to the location where you saved the SonicOS image file, select the file, and click **Upload**. After the image finishes uploading, it is displayed in the **Image Management** section.
- 5 Click the **Boot** drop-down list in the row for **Uploaded Image Version** and select **Boot Uploaded Image with Current Configuration**.
- 6 In the confirmation dialog box, click **OK**. The NSv restarts and displays the login page.
- 7 Enter your user name and password. Your new SonicOS image version information is displayed in the **MONITOR** view on the **System > Status** page.

Upgrading a High Availability Pair

SonicOS on NSv Series does not support image auto-synchronization from primary to secondary unit in HA mode. Instead, you must upgrade each unit from SonicOS.

To upgrade the SonicOS image on a SonicWall NSv HA pair:

- 1 Log into the HA Pair as an administrator. This logs you into the active unit.
- 2 Navigate to the **MANAGE | System Setup | High Availability > Base Settings** page.
- 3 Clear the **Enable Preempt Mode** checkbox, if it is not already cleared.
- 4 Navigate to the **MANAGE | Updates | Settings** page.
- 5 Under **Image Management**, click **Upload Image**.
- 6 In the **Upload Image** dialog, click **Choose File** and select the SWI file to be used for the update. Click **Upload**. The image version appears in the **Image Management** list.
- 7 In the row for the new image, click **Boot** and select **Boot Uploaded Image with Current Configuration**.
After bootup, the NSv will stay in the STANDBY state and the previously idle NSv will become the active unit.
- 8 Log into the HA Pair again, as administrator. This logs you into the second NSv, which is now the active unit.
- 9 Perform [Step 4](#) through [Step 7](#) again, and boot the second unit with the new image.
While this unit boots up, the first unit becomes ACTIVE again and the HA Pair is upgraded and synchronized.

Upgrading SonicOS with Factory Default Settings

To upload a new image to your SonicWall appliance and start it up using the default configuration:

- 1 Download the SonicOS image file from MySonicWall and save it to a location on your local computer.
- 2 Point your browser to the appliance IP address, and log in as an administrator.
- 3 In the **MANAGE** view, on the **Updates | Settings** page, use **Create Backup** to create a local or cloud backup.
Wait for the backup to complete.
- 4 Click **Upload Image**.
- 5 Browse to the location where you saved the SonicOS image file, select the file, and click **Upload**.
- 6 On the **Updates | Settings** page, click the **Boot** drop-down list in the row for **Uploaded Image Version** and select **Boot Uploaded Image with Factory Default Configuration**.
- 7 In the confirmation dialog box, click **OK**. The NSv restarts and then displays the SonicOS login prompt.

NOTE: The IP address for the X0 (LAN) interface reverts to the default, 192.168.168.168. You can log into SonicOS by connecting to X0 and pointing your browser to <https://192.168.168.168>. You can also use the virtual console to configure the LAN or WAN IP address, and then log in. See the *NSv Series Getting Started Guide* for information about using the virtual console.

- 8 Enter the default user name and password (*admin/password*) to access the SonicOS management interface.

Using SafeMode to Upgrade the SonicOS Image

If you are unable to connect to the SonicOS management interface, you can restart the SonicWall NSV in SafeMode. The SafeMode feature allows you to quickly recover from uncertain configuration states with a simplified management interface that includes the same settings available in the SonicOS **Updates | Settings** page.

To use SafeMode to upgrade the image on a SonicWall NSV:

- 1 Launch the virtual console and then click inside the console window.
- 2 Press **Ctrl+s** and then press the **spacebar** to switch to the NSV management console.
- 3 In the console, use the arrow keys to select the **Reboot | Shutdown** option and then press **Enter**. The right pane displays the **Reboot | Shutdown** options.
- 4 Navigate down to the **Boot SonicWall into safemode** option to highlight **Enable**, and then press **Enter**.

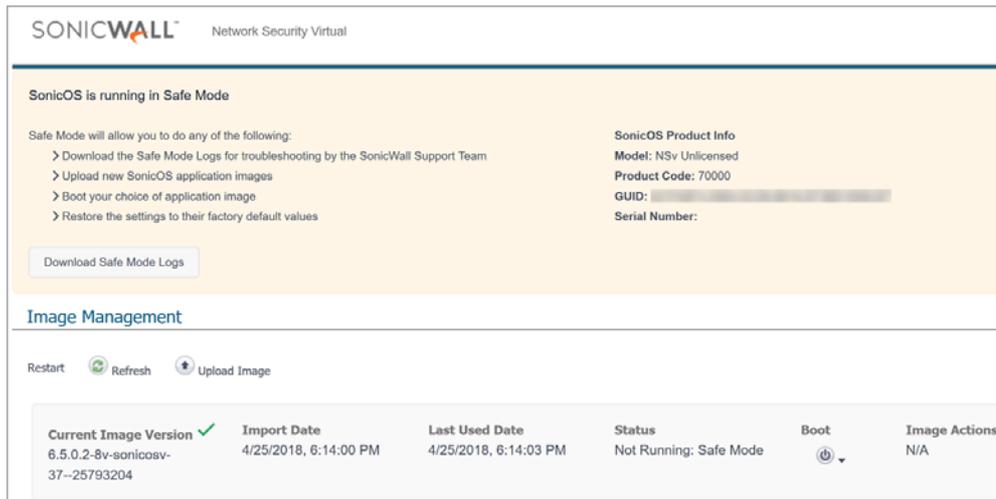


- 5 Select **Yes** in the confirmation dialog and press **Enter** to confirm.

The NSV immediately reboots and comes back up in SafeMode. When viewing the NSV management console in SafeMode, the URL for the SafeMode **web** interface is displayed at the bottom of the screen.

i **NOTE:** In SafeMode, the web interface is served from an HTTP server. The HTTPS server is not started in SafeMode

- 6 In a browser, navigate to the URL provided at the bottom of the NSV management console screen. The SafeMode web management interface displays.



- 7 Click the **Upload Image** button to select the **SWI** file that you downloaded from MySonicWall, and then click **Upload** to upload the image to the NSv. Once the upload completes, the image is available in the **Image Management** list in the SafeMode web interface.
- 8 In the row with the uploaded image file, click the **Boot** button and select one of the following:
 - **Boot Uploaded Image with Current Configuration**
Use this option to restart the NSv with your current configuration settings.
 - **Boot Uploaded Image with Factory Default Configuration**
Use this option to restart the NSv with factory default configuration settings.
- 9 In the confirmation dialog box, click **OK** to proceed.
The NSv appliance reboots with the new image.
- 10 After successfully booting the SonicOS image, the login screen is displayed. If you booted with factory default settings, enter the default user name and password (*admin / password*) to access the SonicOS management interface.

You can manage the appliance from the X0 interface or another LAN interface, or from the WAN interface, if configured. The default IP address of the X0 interface is 192.168.168.168.

Importing Configuration Settings

You can import configuration settings from one NSv to another, which can save a lot of time when replacing or deploying a new NSv. This feature is also useful when you need multiple NSv firewalls with similar configuration settings.

To export the configuration settings from an NSv, navigate to the **MANAGE | Updates | Settings** page in SonicOS, click the **Import/Export Configuration** drop-down list and select **Export Configuration**. In the popup dialog, click **Export** to complete the process. You can then import the settings file to another NSv by selecting **Import Configuration** from the **Import/Export Configuration** drop-down list.

The **NSv Configuration Import Support** table shows the SonicWall NSv Series virtual firewalls whose configuration settings can be imported to other NSv Series virtual firewalls. The source firewalls are in the left column, and the destination firewalls are listed across the top.

The legend for the table is:

Y	Supported
N	Unsupported. While importing the settings file may be successful, firewall limitations may result in the removal of items such as DHCP scopes, VPN settings, etc.
C	Configuration information from extra interfaces will be removed. NAT policies, Firewall access rules, and other interface-dependent configuration will also be

NSv Configuration Import Support

		DESTINATION FIREWALLS								
		NSv 10	NSv 25	NSv 50	NSv 100	NSv 200	NSv 300	NSv 400	NSv 800	NSv 1600
SOURCE FIREWALLS	NSv 10	Y	Y	Y	Y	Y	Y	Y	Y	Y
	NSv 25	N	Y	Y	Y	Y	Y	Y	Y	Y
	NSv 50	N	N	Y	Y	Y	Y	Y	Y	Y
	NSv 100	N	N	N	Y	Y	Y	Y	Y	Y
	NSv 200	N	N	N	N	Y	Y	Y	Y	Y
	NSv 300	N	N	N	N	N	Y	Y	Y	Y
	NSv 400	N	N	N	N	N	N	Y	Y	Y
	NSv 800	N	N	N	N	N	N	N	Y	Y
	NSv 1600	N	N	N	N	N	N	N	N	Y

SonicWall Support

Technical support is available to customers who have purchased SonicWall products with a valid maintenance contract and to customers who have trial versions.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. To access the Support Portal, go to <https://www.sonicwall.com/support>.

The Support Portal enables you to:

- View knowledge base articles and technical documentation
- View video tutorials
- Access MySonicWall
- Learn about SonicWall professional services
- Review SonicWall Support services and warranty information
- Register for training and certification
- Request technical support or customer service

To contact SonicWall Support, visit <https://www.sonicwall.com/support/contact-support>.

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To view the SonicWall End User Product Agreement, go to: <https://www.sonicwall.com/legal/eupa>. Select the language based on your geographic location to see the EUPA that applies to your region.

Legend



WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.



CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.



IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO: An information icon indicates supporting information.