SonicWall® SonicOS Virtual 6.5 NS$_v$ Series Upgrade Guide

December 2020

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

> ⓘ **NOTE:** The initial deployment of SonicOS 6.5.4.v must be a fresh install. Upgrading to SonicOS 6.5.4.v from SonicOS 6.5.0.v via the SWI file is not supported.

This guide also provides related information including importing configuration settings from one NS*v* model to another and between NS*v* platforms, upgrading a High Availability pair, using System Update to upgrade both SonicOS and SonicCore, using SafeMode to upgrade SonicOS, and how to perform a Model Upgrade to increase the available node count or number of cores on your NS*v*. See the following topics for details.

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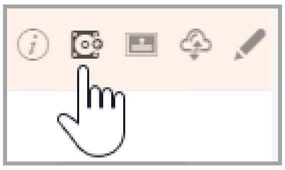
Obtaining the Latest SonicOS Image

To obtain a new SonicOS image file for your SonicWall NS*v* virtual firewall:

1. In a browser on your management computer, log into your MySonicWall account at https://www.mysonicwall.com.
2. In MySonicWall, navigate to **Product Management > My Products** in the left navigation pane to display the list of your registered NS*v* virtual firewalls.
3. Mouse over the row that displays your NS*v*. Options appear at the right side of the row.

4 Click the **Firmware** icon.



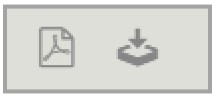
5 Optionally, click the **Browse All Firmware** button to display all available firmware versions. Depending on your NS*v* platform, the following file types are available:

- SWI – Upgrade image file for an existing deployment on any platform. If not displayed, a fresh installation may be required for this release. Check the *Release Notes*.
- ZIP – Contains VHD image file for fresh installation on NS*v* Hyper-V.
- OVA – Fresh installation image file for NS*v* VMware.

> **NOTE:** SonicOSX 7 version is the latest and the default version available on the Amazon Web Services or Microsoft Azure web sites. For information on how to deploy the 6.5.4 version on AWS and Azure platforms, refer to the respective Knowledge Base article.
>
> - For NSv Azure, refer to following the Knowledge Base article *https://www.sonicwall.com/support/knowledge-base/how-do-i-deploy-an-old-version-of-nsv-on-azure/191202144945079*
> - For NSv AWS, refer to the following Knowledge Base article *https://www.sonicwall.com/support/knowledge-base/deploying-previous-versions-of-nsv-on-aws/201111071141760*

6 Mouse over the row for the image file you want. Options appear at the right.

7 Click the Download icon to download the image file to your computer, and click the PDF icon to display the *Release Notes*.



Creating a System Backup and Exporting Your Settings

Before beginning the update process, make a system backup on your SonicWall NS*v*. 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 NS*v* 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 NS*v* or into the same NS*v* 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.

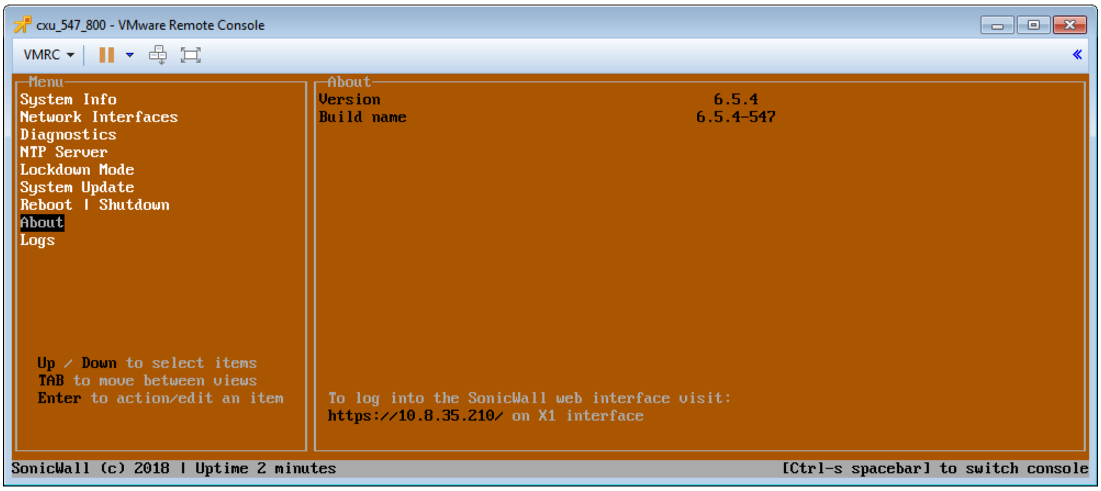
Upgrading via System Update in the NS*v* Management Console

This is the preferred method of upgrading because SonicCore is updated as well as SonicOS. All configuration and registration settings are retained.

When upgrading a High Availability pair using System Update, upgrade each unit individually.

You can access the orange NS*v* management console by opening the virtual console from your hypervisor or by connecting to it with SSH, and then pressing Ctrl+s followed by the spacebar, if needed.

SonicOS 6.5.4.v and SonicCore 547 or higher must be running on the NS*v* before using this upgrade procedure. You can check these versions in the **About** screen of the NS*v* management console.

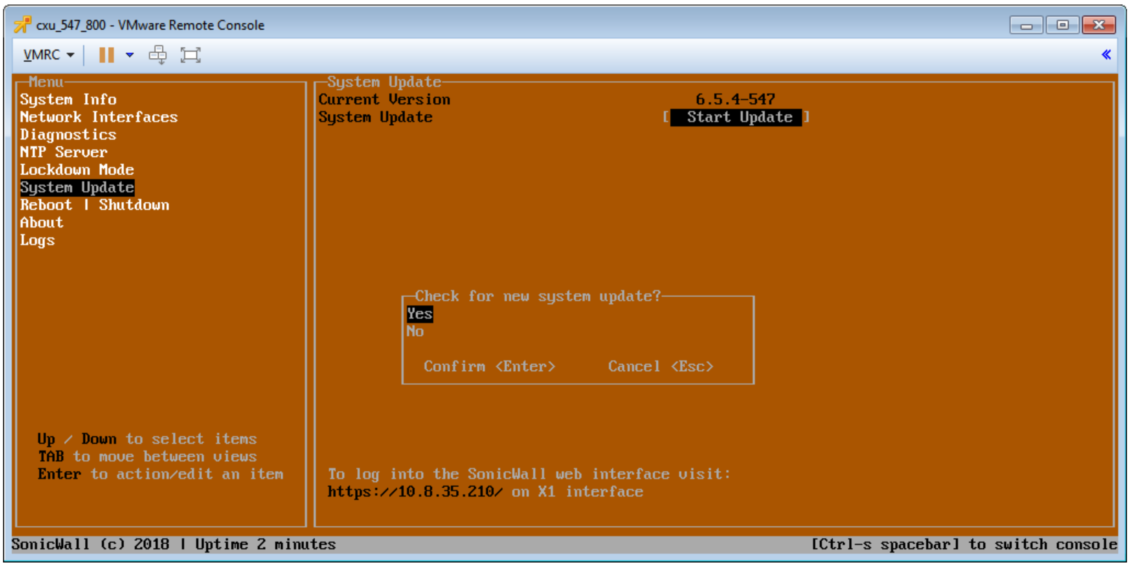


```
Menu                              About
System Info                       Version                                      6.5.4
Network Interfaces                Build name                               6.5.4-547
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs



  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item     To log into the SonicWall web interface visit:
                                   https://10.8.35.210/ on X1 interface

SonicWall (c) 2018 | Uptime 2 minutes                       [Ctrl-s spacebar] to switch console
```

*To upgrade your NS*v* using System Update:*

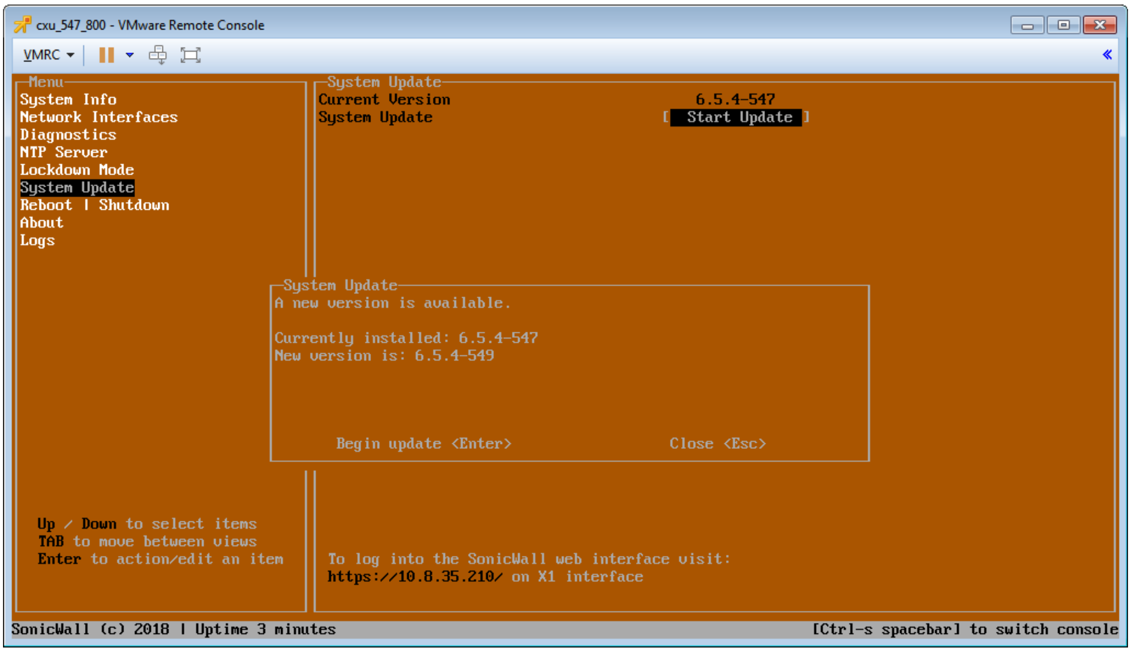
1 Select **System Update** in the left pane of the NS*v* management console.

2 Check for available system updates. Press the **Tab** key to move to the right pane, and use the **arrow keys** to select **Start Update** and then select **Yes** and press **Enter**.



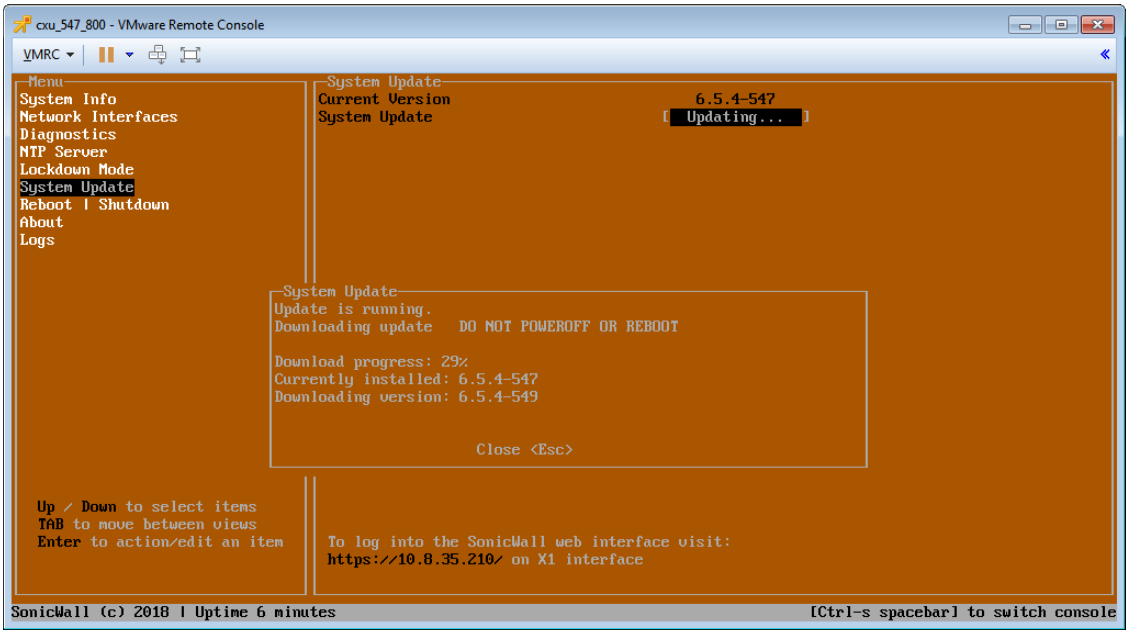
```
-Menu-----------------------------  -System Update----------------------------------------------
System Info                         Current Version                        6.5.4-547
Network Interfaces                  System Update                        [ Start Update ]
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs

                                              -Check for new system update?-----------
                                              Yes
                                              No

                                                Confirm <Enter>       Cancel <Esc>


  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item       To log into the SonicWall web interface visit:
                                     https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 2 minutes                        [Ctrl-s spacebar] to switch console
```

3 If a new version is available, it is displayed in the center of the screen. Select **Begin update** and then press **Enter**. The update version will begin to download and can take a few minutes or, in some cases, a few hours.



```
-Menu-----------------------------  -System Update----------------------------------------------
System Info                         Current Version                        6.5.4-547
Network Interfaces                  System Update                        [ Start Update ]
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs
                               -System Update-------------------------------------
                               A new version is available.

                               Currently installed: 6.5.4-547
                               New version is: 6.5.4-549


                                   Begin update <Enter>                  Close <Esc>


  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item       To log into the SonicWall web interface visit:
                                     https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 3 minutes                        [Ctrl-s spacebar] to switch console
```

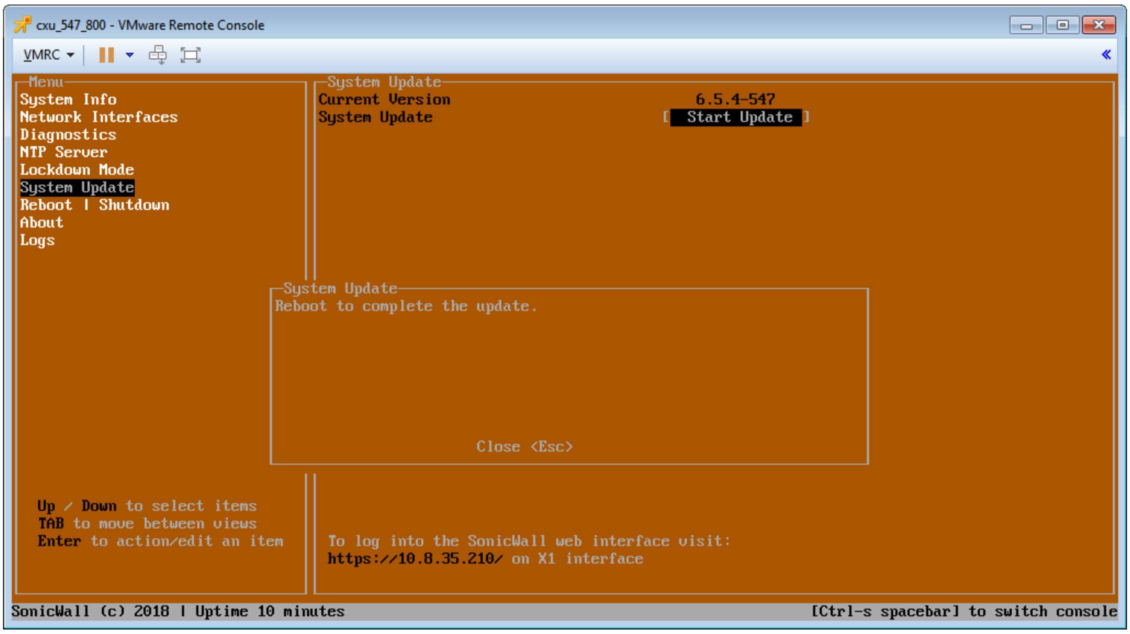
△ | **CAUTION: Do not power off or reboot during the download.**



```
Menu                               System Update
System Info                        Current Version                        6.5.4-547
Network Interfaces                 System Update                      [ Updating... ]
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs

                              System Update
                              Update is running.
                              Downloading update    DO NOT POWEROFF OR REBOOT

                              Download progress: 29%
                              Currently installed: 6.5.4-547
                              Downloading version: 6.5.4-549

                                                  Close <Esc>

  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item       To log into the SonicWall web interface visit:
                                     https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 6 minutes                      [Ctrl-s spacebar] to switch console
```

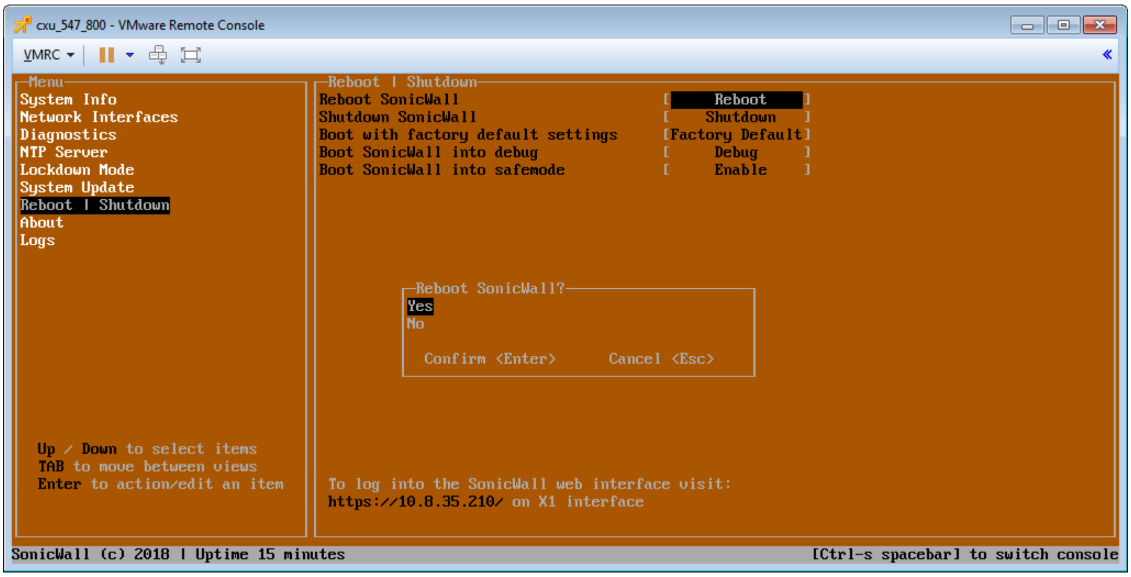
4 If you want to close the downloading progress display, click the **ESC** key. This allows you to move around the NS*v* management console or switch to the SonicOS CLI console with Ctrl+spacebar. SonicOS continues to run during the download.

5 When the download completes, the message **Reboot to complete update** is displayed in the NS*v* management console. Press **ESC** to close the status display.



```
Menu                               System Update
System Info                        Current Version                        6.5.4-547
Network Interfaces                 System Update                      [ Start Update ]
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs

                              System Update
                              Reboot to complete the update.



                                                  Close <Esc>

  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item       To log into the SonicWall web interface visit:
                                     https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 10 minutes                     [Ctrl-s spacebar] to switch console
```

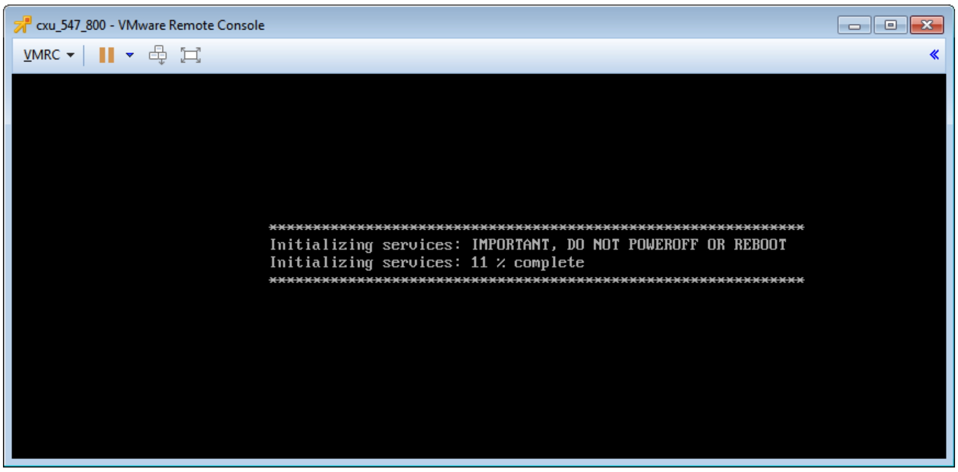
6 Select **Reboot | Shutdown** in the left pane, then select **Reboot** in the right pane and select **Yes** and press **Enter** to start the reboot process.



```
Menu                              Reboot | Shutdown
System Info                       Reboot SonicWall                        [   Reboot     ]
Network Interfaces                Shutdown SonicWall                      [  Shutdown    ]
Diagnostics                       Boot with factory default settings      [Factory Default]
NTP Server                        Boot SonicWall into debug               [   Debug      ]
Lockdown Mode                     Boot SonicWall into safemode            [   Enable     ]
System Update
Reboot | Shutdown
About
Logs

                                            Reboot SonicWall?
                                            Yes
                                            No

                                              Confirm <Enter>      Cancel <Esc>

  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item      To log into the SonicWall web interface visit:
                                    https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 15 minutes                   [Ctrl-s spacebar] to switch console
```

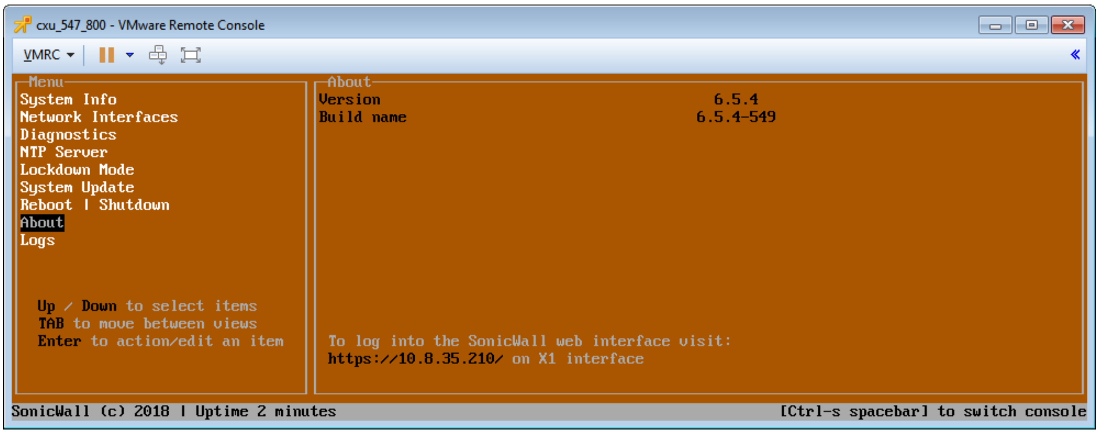
CAUTION: **You can reboot from the NS*v* management console as shown here, or from the VM menu. However, DO NOT reboot from the SonicOS web management interface or the CLI – those methods will reboot to the old version.**

After the reboot but before SonicOS comes up, the **Initializing services** message is displayed. **Do not power off or reboot again until this completes.**



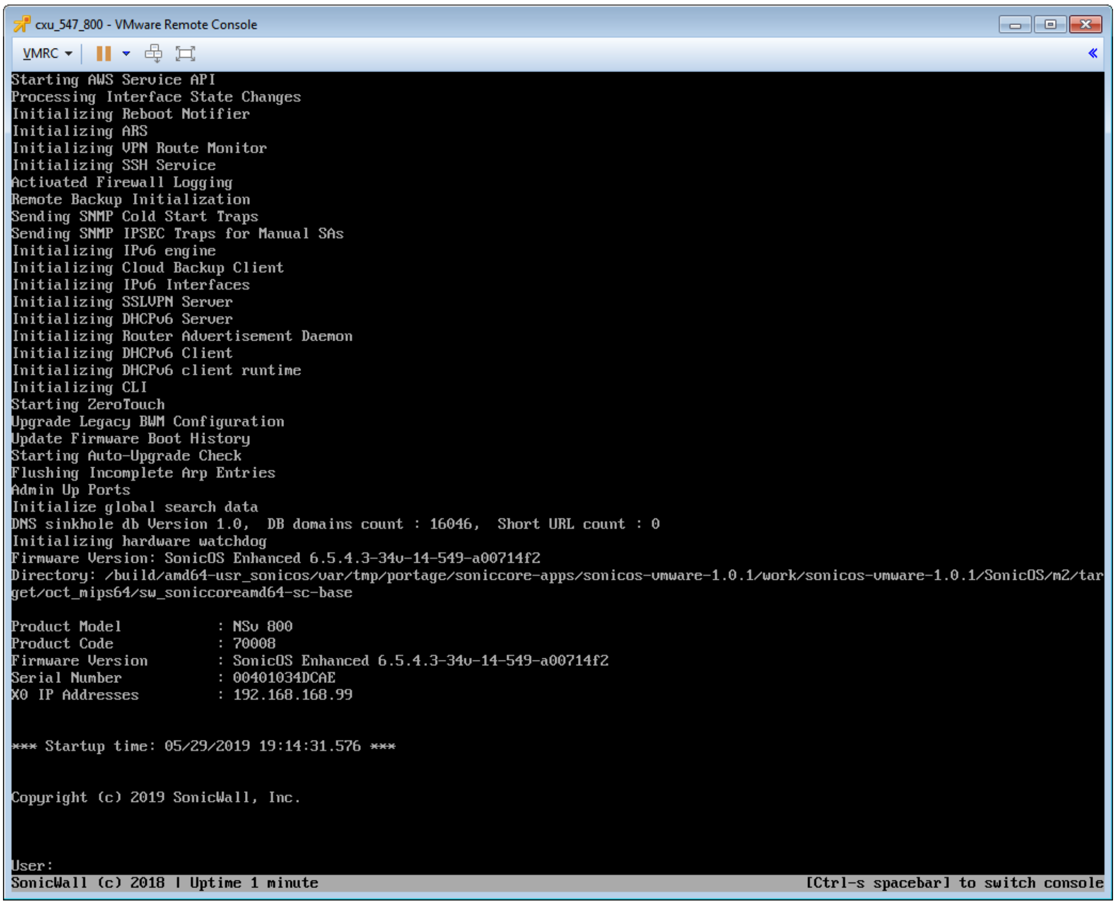
```
****************************************************************
Initializing services: IMPORTANT, DO NOT POWEROFF OR REBOOT
Initializing services: 11 % complete
****************************************************************
```

7 When SonicOS comes up, view the About screen to verify that SonicCore is updated.



```
Menu                              About
System Info                       Version                                  6.5.4
Network Interfaces                Build name                             6.5.4-549
Diagnostics
NTP Server
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs

  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item      To log into the SonicWall web interface visit:
                                    https://10.8.35.210/ on X1 interface
SonicWall (c) 2018 | Uptime 2 minutes                  [Ctrl-s spacebar] to switch console
```

8 Switch consoles to verify that SonicOS is updated to the new version, and that the NS*v* is still registered and X0 still has the configured IP address.



```
Starting AWS Service API
Processing Interface State Changes
Initializing Reboot Notifier
Initializing ARS
Initializing VPN Route Monitor
Initializing SSH Service
Activated Firewall Logging
Remote Backup Initialization
Sending SNMP Cold Start Traps
Sending SNMP IPSEC Traps for Manual SAs
Initializing IPv6 engine
Initializing Cloud Backup Client
Initializing IPv6 Interfaces
Initializing SSLVPN Server
Initializing DHCPv6 Server
Initializing Router Advertisement Daemon
Initializing DHCPv6 Client
Initializing DHCPv6 client runtime
Initializing CLI
Starting ZeroTouch
Upgrade Legacy BWM Configuration
Update Firmware Boot History
Starting Auto-Upgrade Check
Flushing Incomplete Arp Entries
Admin Up Ports
Initialize global search data
DNS sinkhole db Version 1.0,  DB domains count : 16046,  Short URL count : 0
Initializing hardware watchdog
Firmware Version: SonicOS Enhanced 6.5.4.3-34v-14-549-a00714f2
Directory: /build/amd64-usr_sonicos/var/tmp/portage/soniccore-apps/sonicos-vmware-1.0.1/work/sonicos-vmware-1.0.1/SonicOS/m2/tar
get/oct_mips64/sw_soniccoreamd64-sc-base

Product Model           : NSv 800
Product Code            : 70008
Firmware Version        : SonicOS Enhanced 6.5.4.3-34v-14-549-a00714f2
Serial Number           : 00401034DCAE
X0 IP Addresses         : 192.168.168.99


*** Startup time: 05/29/2019 19:14:31.576 ***


Copyright (c) 2019 SonicWall, Inc.



User:
SonicWall (c) 2018 | Uptime 1 minute                                                   [Ctrl-s spacebar] to switch console
```

NOTE: The system might require two or three minutes to mark the update as successful. To avoid rolling back to the previous SonicCore version during a subsequent reboot, wait a couple of minutes before rebooting the system again.

Upgrading from SonicOS with Current Settings

You can update the SonicOS image on a SonicWall NS*v* remotely if the LAN or WAN interface is configured for management access. You can also connect to the virtual console, put the NS*v* into SafeMode, and perform the upgrade. See Using SafeMode to Upgrade the SonicOS Image for that procedure.

To upload a new upgrade image to your SonicWall NSv and restart using current configuration settings:

1 Download the SonicOS ***SWI*** image file from MySonicWall and save it to a location on your local computer.

2 Point your browser to the NS*v* 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 supports High Availability on VMware ESXi, Hyper-V, KVM, and Azure platforms.

NOTE: High Availability on Azure is introduced on SonicOS 6.5.4.4-44v-21-987 NSv series. For more information on how to configure HA on Azure, refer to the *SonicWall NSv Azure Getting Started Guide.*

In SonicOS 6.5.4.v, HA Stateful Synchronization is supported, which means that the secondary unit will automatically synchronize with the primary unit when SonicOS is updated on the primary. However, when upgrading a High Availability pair using **System Update**, upgrade each unit individually. See the Upgrading via System Update in the NSv Management Console on page 3 for details.

SonicOS 6.5.0.v 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 an NSv HA pair running SonicOS 6.5.0.v:

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 from 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 ***SWI*** 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 NS*v* 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 NS*v* *Series Getting Started Guide* for information about using the virtual console.

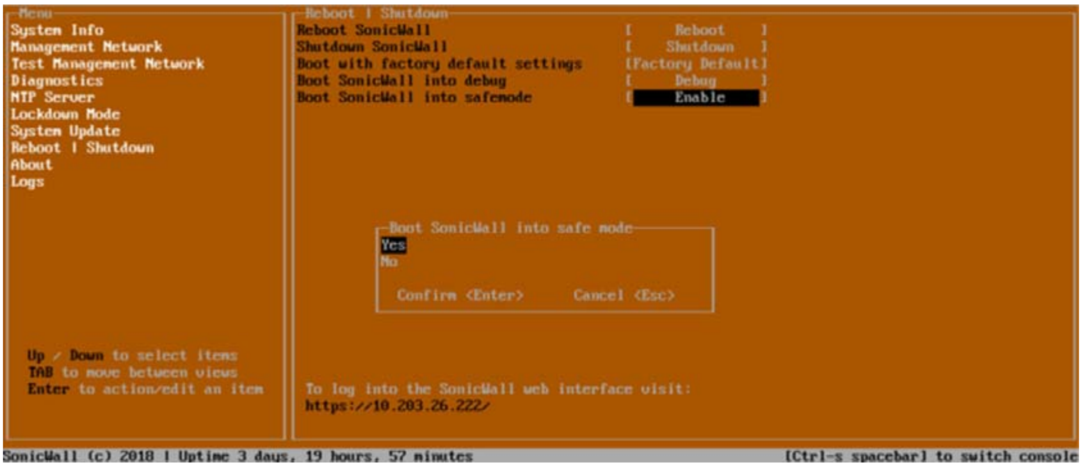
8. Enter the default user name and password (*admin/password*) to access the SonicOS management interface.

Using SafeMode to Upgrade the SonicOS Image

If you are unable to connect to the SonicOS management interface, you can restart the SonicWall NS*v* 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* NS*v*:**

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 NS*v* 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**.



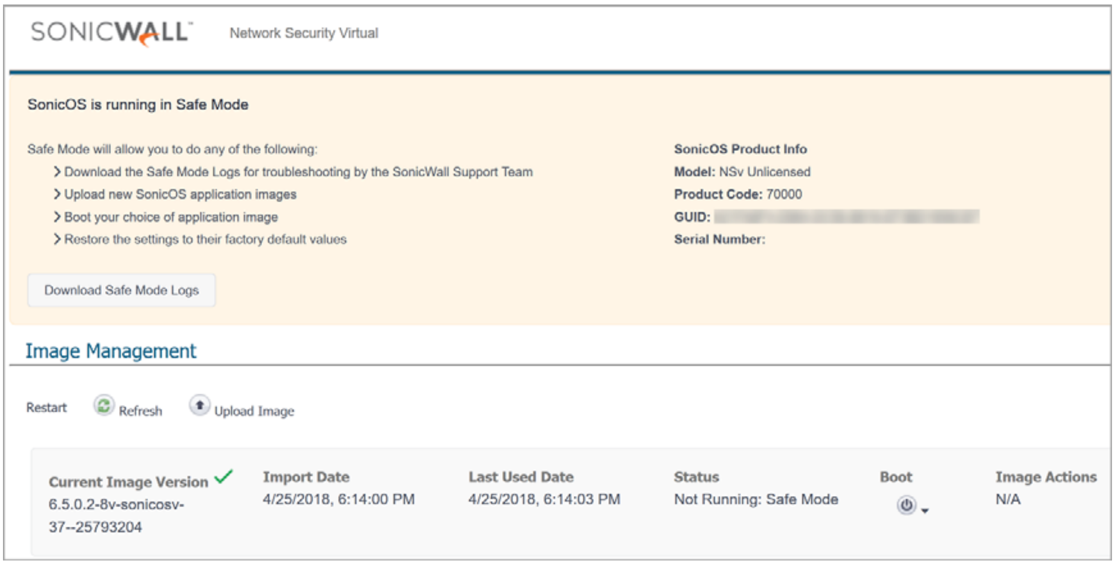
```
Menu                          Reboot | Shutdown
System Info                   Reboot SonicWall                    [     Reboot     ]
Management Network            Shutdown SonicWall                  [    Shutdown    ]
Test Management Network       Boot with factory default settings  [Factory Default]
Diagnostics                   Boot SonicWall into debug           [     Debug      ]
NTP Server                    Boot SonicWall into safemode        [     Enable     ]
Lockdown Mode
System Update
Reboot | Shutdown
About
Logs

                                        Boot SonicWall into safe mode
                                        Yes
                                        No

                                          Confirm <Enter>     Cancel <Esc>

  Up / Down to select items
  TAB to move between views
  Enter to action/edit an item  To log into the SonicWall web interface visit:
                                https://10.203.26.222/

SonicWall (c) 2018 | Uptime 3 days, 19 hours, 57 minutes            [Ctrl-s spacebar] to switch console
```

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

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

   > **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 NS*v* management console screen. The SafeMode web management interface displays.



SONICWALL Network Security Virtual

SonicOS is running in Safe Mode

Safe Mode will allow you to do any of the following:

- Download the Safe Mode Logs for troubleshooting by the SonicWall Support Team
- Upload new SonicOS application images
- Boot your choice of application image
- Restore the settings to their factory default values

SonicOS Product Info
Model: NSv Unlicensed
Product Code: 70000
GUID: [redacted]
Serial Number:

Download Safe Mode Logs

Image Management

Restart | Refresh | Upload Image

Current Image Version ✓	Import Date	Last Used Date	Status	Boot	Image Actions
6.5.0.2-8v-sonicosv-37--25793204	4/25/2018, 6:14:00 PM	4/25/2018, 6:14:03 PM	Not Running: Safe Mode	⏻	N/A

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 NS*v*. 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 NS*v* with your current configuration settings.

- **Boot Uploaded Image with Factory Default Configuration**

  Use this option to restart the NS*v* with factory default configuration settings.

9 In the confirmation dialog box, click **OK** to proceed.

The NS*v* 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.

Performing a Model Upgrade

You can upgrade your NS*v* to a model with a higher node count and/or number of cores by selecting and purchasing the desired SKU for the higher model on MySonicWall and then applying the activation key on the Service Management page. Model Upgrade SKUs are available for single NS*v* appliances and for High Availability pairs.

Model Upgrade on NS*v* AWS or NS*v* Azure platforms might require moving to a new virtual machine model from the vendor (Amazon AWS or Microsoft Azure) if it does not already have the CPU and memory allocations required for the new NS*v* model, For information about VM models supported by these vendors, refer to the *NSv Series Getting Started Guide* for your platform.

Model upgrade for *higher node count* is only applicable for NS*v* 10, 25, 50, and 100 models, since NS*v* 200 and higher already support unlimited nodes. For NS*v* 200 and higher, Model Upgrade provides additional cores to increase computing power.

ⓘ **NOTE:** Be sure to manually update the memory and CPU/processor settings in the VM console before this upgrade. For details about changing your hypervisor settings, see the *Upgrading to a Higher Capacity NSv Model* section, and for the new memory and CPU/processor values, refer to the *Product Matrix and Requirements* section in the *NSv Series Getting Started Guide* for your platform.

Upon activation of the Model Upgrade service, the product ID of the NSv is updated to match the ID of the new model. This update is also communicated to the SonicWall License Manager to update the product code for the NSv serial number.

Depending on your NSv deployment, refer to one of the following sections:

- For Model Upgrade on a single NSv, see Performing a Model Upgrade on a Single NSv.
- For Model Upgrade on NSv AWS or NSv Azure platforms when the current NSv does not already have the CPU and memory allocations in the vendor VM that are required for the new NSv model, see Performing a Model Upgrade on NSv AWS or NSv Azure.
- For Model Upgrade on a High Availability pair, see Performing a Model Upgrade on an HA Pair.

Performing a Model Upgrade on a Single NSv

This procedure works for Model Upgrade on NSv ESXi, NSv Hyper-V, and NSv KVM, and Step 2 through Step 9 also apply to NSv AWS or NSv Azure platforms that have enough CPU and memory for the upgrade in the underlying vendor VM model.

To perform a model upgrade on a single NSv:

1. In the VM console of your hypervisor, adjust the memory and CPU/processor settings of the NSv you are upgrading to match the required settings for the new model.
2. In a browser on your management computer, log into your MySonicWall account at https://www.mysonicwall.com.
3. In MySonicWall, navigate to **Product Management > My Products** in the left navigation pane to display the list of your registered NSv virtual firewalls.
4. Click the link for the NSv that you wish to upgrade. The **Service Management** page opens.
5. Under **Applicable Services** in the **GATEWAY SERVICES** section, click the Cart icon in the **Model Upgrade** row to buy the SKU for the higher model. Or, obtain the license from your SonicWall sales contact. Copy the resulting activation key into your clipboard or make a note of it.
6. Click the Key icon in the **Model Upgrade** row to open the **Activate Service: Model Upgrade** dialog.
7. Enter the key into the **Activation Key** field and then click **Submit**.
8. Log into the NSv, navigate to the **MANAGE | System Setup | Updates | Licenses** page and click **SYNCHRONIZE**.
9. Restart the NSv if prompted, or navigate to **Updates | Restart** and click **RESTART** to reboot the NSv.

   Your NSv is updated to the new model, both in MySonicWall and in the License Manager. All services and maximum limits are now applied according to the updated Product ID.

Supported Model Upgrades, Single NS*v* and HA Pairs, All NS*v* Platforms

	NS*v* 25	NS*v* 50	NS*v* 100	NS*v* 200	NS*v* 300	NS*v* 400	NS*v* 800	NS*v* 1600
NS*v* 10	Supported	Supported	Supported	Supported	Supported	Supported	Supported	Supported
NS*v* 25		Supported	Supported	Supported	Supported	Supported	Supported	Supported
NS*v* 50			Supported	Supported	Supported	Supported	Supported	Supported
NS*v* 100				Supported	Supported	Supported	Supported	Supported
NS*v* 200					Supported	Supported	Supported	Supported
NS*v* 300						Supported	Supported	Supported
NS*v* 400							Supported	Supported
NS*v* 800								Supported

Performing a Model Upgrade on NS*v* AWS or NS*v* Azure

If your NS*v* AWS or NS*v* Azure does not already have the CPU and memory allocations in the vendor VM that are required for the new NS*v* model, use the following procedure for the Model Upgrade. If the CPU and memory are already adequate for the new NS*v* model, you can use the steps provided in Performing a Model Upgrade on a Single NS*v*.

To perform a model upgrade on NSv AWS or NSv Azure:

1 Log into your current NS*v* and navigate to **MANAGE | Updates | Firmware & Backups**.

2 Click **Import/Export Configuration** and select **Export Configuration** to export your settings.

3 Navigate to **MONITOR | System Status** and write down the values shown in the **Serial Number** and **Authentication Code** fields.

4 Navigate to **Updates | Licenses** and click **DEREGISTER**, then click **OK** in the confirmation dialog.

5 In either Amazon AWS or Microsoft Azure, deploy the same NS*v* model as you had before, but select a higher VM model from the vendor, with the CPU and memory capacity required for your desired higher NS*v* model. For information about VM models supported by these vendors, refer to the *NSv Series Getting Started Guide* for your platform.

6 Log into your new NS*v* and register it using the same serial number and authentication code that you saved in Step 3.

7 Navigate to **MANAGE | Updates | Firmware & Backups** and select **Import Configuration** to import your saved settings.

8 To complete the Model Upgrade process, perform Step 2 through Step 9 of the procedure in Performing a Model Upgrade on a Single NS*v*.

Performing a Model Upgrade on an HA Pair

For Model Upgrade on a High Availability pair, you need two activation keys, one for the primary unit and one for the secondary unit. The primary unit upgrade key is generated using a regular SKU, while the secondary unit upgrade key is generated using an HA SKU. First, associate the HA pair (if not already associated) in MySonicWall before the model upgrade, then perform similar steps as you would for a single node model upgrade on both the primary and secondary units to complete the model upgrade on your HA pair.

To perform a model upgrade on a High Availability pair:

1 In the VM console of your hypervisor, adjust the memory and CPU settings of the NS*v* you are upgrading to match the required settings for the new model.

2 Log into your MySonicWall account and associate the HA secondary unit with the primary unit (if not already associated).

3 Click the link for the primary unit to open the **Service Management** page for it. Buy the Model Upgrade license using the Cart icon, if needed.

4 Click the Key icon in the **Model Upgrade** row to open the **Activate Service: Model Upgrade** dialog.

5 Enter the key into the **Activation Key** field and then click **Submit**.

6 Go to the **Service Management** page for the secondary unit. Buy the Model Upgrade license (HA SKU) using the Cart icon, if needed.

7 Click the Key icon in the **Model Upgrade** row, enter the key (the HA SKU key) into the **Activation Key** field and then click **Submit**.

8 Log into the HA Pair as an administrator. This logs you into the active (primary) unit.

9 Navigate to the **MANAGE | System Setup | Updates | Licenses** page and click **SYNCHRONIZE**.

10 Restart the NS*v* if prompted, or navigate to **Updates | Restart** and click **RESTART** to reboot the primary unit.

After bootup, the NS*v* will stay in the STANDBY state and the previously idle (secondary) NS*v* will become the active unit.

11 Log into the HA Pair again, as administrator. This logs you into the secondary NS*v*, which is now the active unit.

12 Navigate to the **MANAGE | System Setup | Updates | Licenses** page and click **SYNCHRONIZE**.

13 Restart the NS*v* if prompted, or navigate to **Updates | Restart** and click **RESTART** to reboot the secondary unit.

While this unit boots up, the first unit becomes active again and the HA Pair is upgraded and synchronized.

Importing Configuration Settings

You can import configuration settings from one NS*v* model to another on the same platform, which can save a lot of time when replacing or deploying a new NS*v*. This feature is also useful when you need multiple NS*v* virtual firewalls with similar configuration settings.

You can also import settings from an NS*v* running SonicOS Virtual 6.5.0.v to an NS*v* on the same platform running SonicOS Virtual 6.5.4.v.

Before importing settings, you need a configuration file exported from an NS*v* whose settings you want. You can export configuration settings from an NS*v* to a file on your management computer at any time.

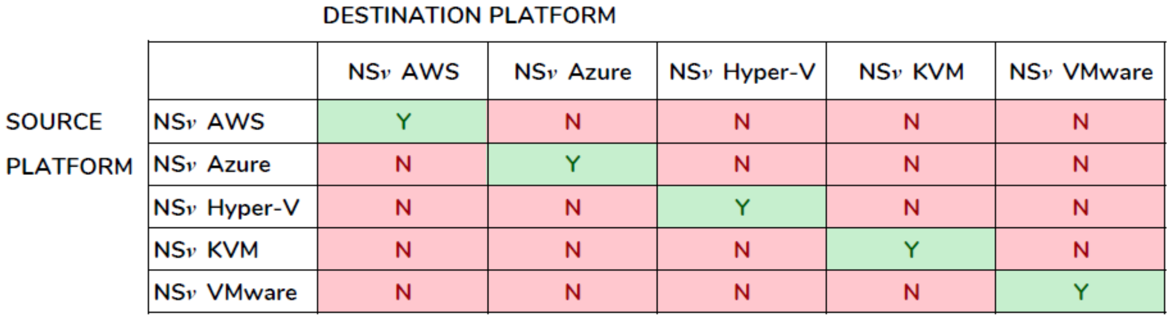
Topics:

- Settings Import Support Across NS_v Platforms
- Settings Import Support Across NS_v Models
- Settings Export and Import Procedures

Settings Import Support Across NS_v Platforms

Configuration settings import is supported between NS*v* virtual firewalls on the same platform, but cross-platform settings import is not supported. The NS*v* Cross-Platform Settings Import Support table illustrates support for importing configuration settings between NS*v* virtual firewall platforms.

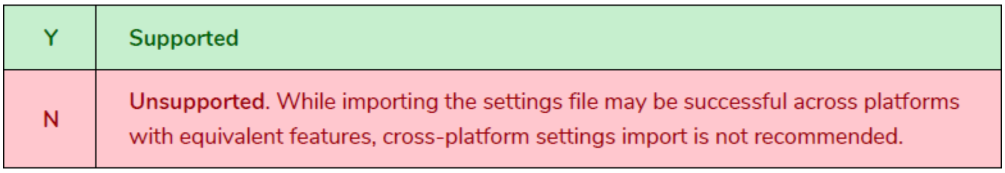
NS*v* Cross-Platform Settings Import Support



DESTINATION PLATFORM

		NSv AWS	NSv Azure	NSv Hyper-V	NSv KVM	NSv VMware
SOURCE	NSv AWS	Y	N	N	N	N
PLATFORM	NSv Azure	N	Y	N	N	N
	NSv Hyper-V	N	N	Y	N	N
	NSv KVM	N	N	N	Y	N
	NSv VMware	N	N	N	N	Y

Legend

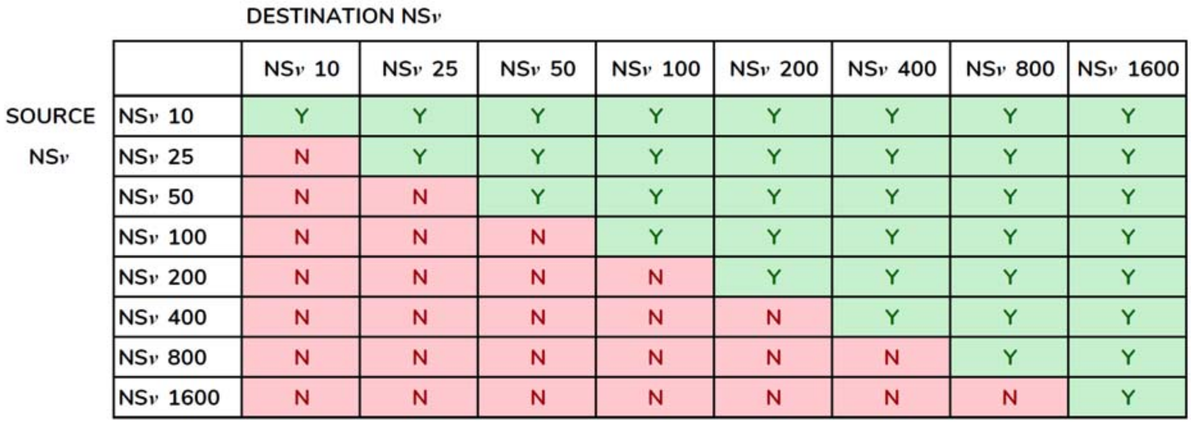


Y	Supported
N	**Unsupported**. While importing the settings file may be successful across platforms with equivalent features, cross-platform settings import is not recommended.

Settings Import Support Across NS$_v$ Models

The following tables illustrate support for importing configuration settings between NS*v* virtual firewall models. The source firewalls are in the left column, and the destination firewalls are listed across the top.

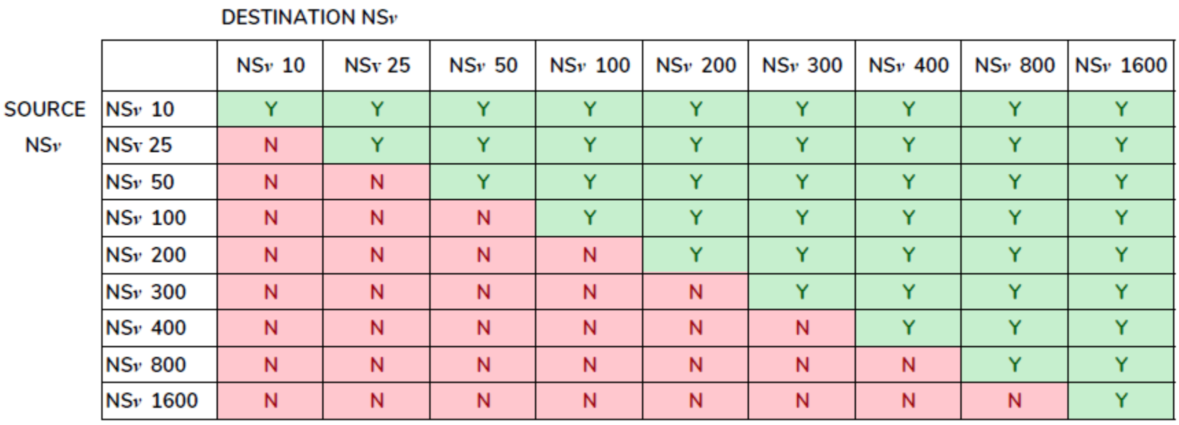
Configuration Settings Import Support on NS*v* AWS and NS*v* Azure



DESTINATION NSv

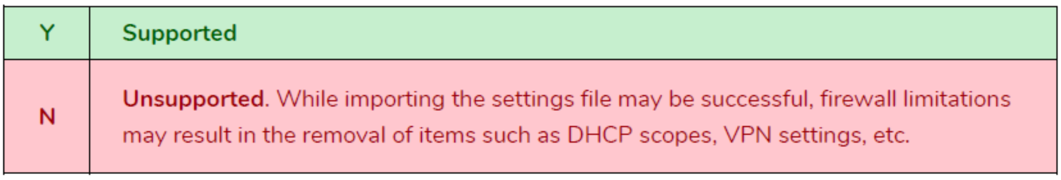
		NSv 10	NSv 25	NSv 50	NSv 100	NSv 200	NSv 400	NSv 800	NSv 1600
SOURCE	NSv 10	Y	Y	Y	Y	Y	Y	Y	Y
NSv	NSv 25	N	Y	Y	Y	Y	Y	Y	Y
	NSv 50	N	N	Y	Y	Y	Y	Y	Y
	NSv 100	N	N	N	Y	Y	Y	Y	Y
	NSv 200	N	N	N	N	Y	Y	Y	Y
	NSv 400	N	N	N	N	N	Y	Y	Y
	NSv 800	N	N	N	N	N	N	Y	Y
	NSv 1600	N	N	N	N	N	N	N	Y

Configuration Settings Import Support on NS*v* Hyper-V, NS*v* KVM, and NS*v* VMware



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

Legend



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.

Settings Export and Import Procedures

To export the configuration settings from an NS*v:*

1 Navigate to the **MANAGE | Updates | Settings** page in SonicOS.

2 Click the **Import/Export Configuration** drop-down list and select **Export Configuration**.

3 In the popup dialog, click **Export**.

The exported configuration settings file is saved to your Downloads folder. The file type extension is ***.exp***.

To import configuration settings to an NS*v:*

1 Navigate to the **MANAGE | Updates | Settings** page in SonicOS.

2 Click the **Import/Export Configuration** drop-down list and select **Import Configuration**.

3 The popup dialog advises you to export a copy of the current configuration before importing new configuration settings. Do one of the following:

- Click **Export Local Copy** to export the current settings to your management computer and then continue to the **Import Configuration** dialog.
- If you have already saved the current settings or prefer not to, click **Proceed to Import**.

4 In the **Import Configuration** dialog, click **Choose File** and select the ***.exp*** file that you want to import.

5 Click **Import**.

The imported configuration overwrites the existing configuration settings and then the NS*v* automatically reboots.

SonicWall Support

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

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 and participate in the Community forum discussions at https://community.sonicwall.com/technology-and-support.
- 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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For more information, visit https://www.sonicwall.com/legal.

To view the SonicWall End User Product Agreement, go to: https://www.sonicwall.com/legal/end-user-product-agreements/.

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.

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