

Adtran

Adtran Switch Engine (ASE)

Upgrading Firmware

Configuration Guide

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February 2024



To the Holder of this Document

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Table of Contents

Overview	5
Obtaining Updated Firmware	5
Locating the NetVanta 1560 and 1570 Software	6
Locating the NetVanta 1760 Software	8
Upgrading ASE Firmware Using the GUI	9
Accessing the GUI	9
Reviewing the Current Firmware in the GUI	10
Uploading Firmware in the GUI	11
Upgrading ASE Firmware Using the CLI	12
Upload the New Firmware File to the TFTP Server	12
Review the Current Version of Firmware	13
Copy the New Firmware File from the TFTP Server to the ASE Device	13
Reboot the ASE Device	14

1. Overview

This document explains how to obtain new Adtran Switch Engine (ASE) firmware files and upgrade device firmware using the web-based graphical user interface (GUI) or using the command line interface (CLI) with Trivial File Transfer Protocol (TFTP).



NOTE

While upgrading your ASE firmware, it is recommended that you keep a backup (alternate image) of the current firmware in memory whenever possible.

As the GUI in the NetVanta 1560 is different from the GUI in the NetVanta 1570/1760, some sections of this guide are broken out separately to provide content that is tailored to the specific device. The CLI is the same in the NetVanta 1560 and the 1570/1760 devices.

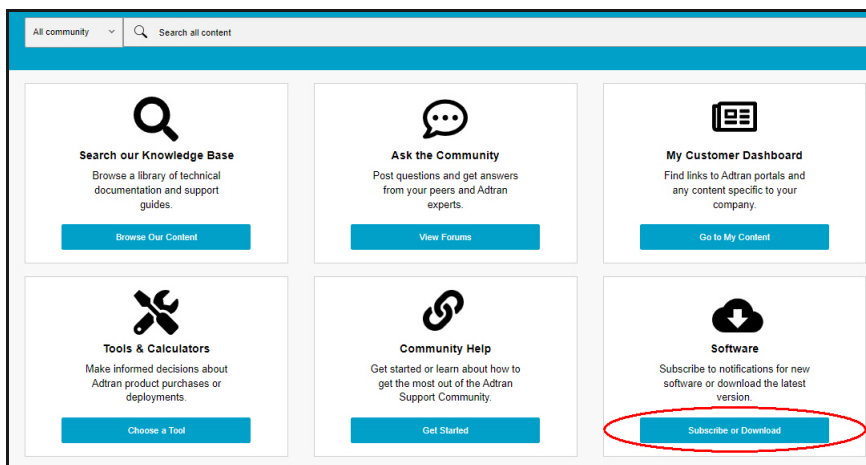
2. Obtaining Updated Firmware

To locate updated firmware for the ASE device, login to the Adtran Support Community and navigate to the software files for your device. Download the firmware file to your computer.

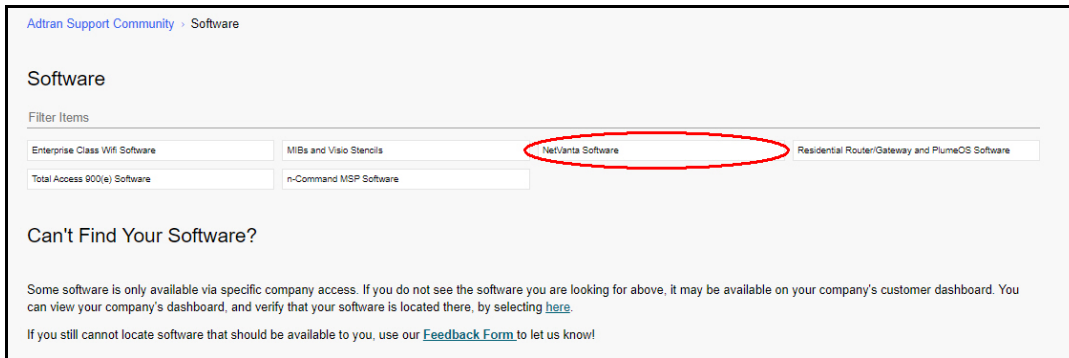
1. Open a session in a web browser and enter the following URL in the address bar:

<https://supportcommunity.adtran.com/>

2. Click **Sign in** at the top right corner of the page and login to the Adtran Support Community through My Adtran.
3. Select **Software**.



4. Select **NetVanta Software**.

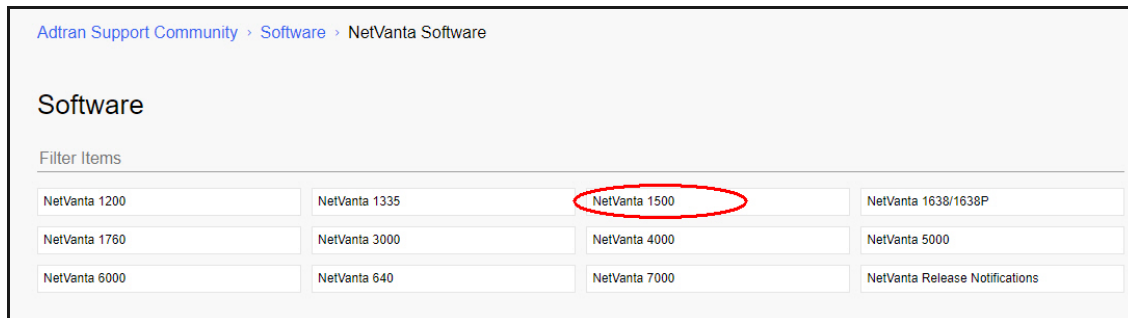


Software is organized based off of the number of the product series. For the next step, refer to the section that corresponds with the product you have:

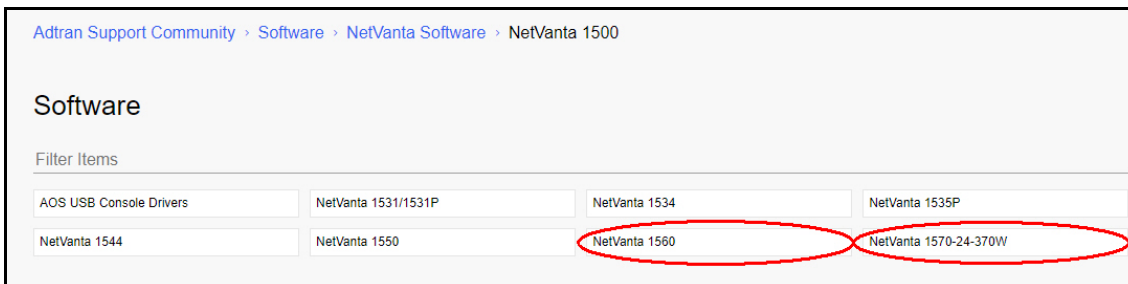
- [Locating the NetVanta 1560 and 1570 Software on page 6](#)
- [Locating the NetVanta 1760 Software on page 8](#)

Locating the NetVanta 1560 and 1570 Software

5. For NetVanta 1560 and 1570 units, select the **NetVanta 1500** product group. Then select either **NetVanta 1560** or **NetVanta 1570-24-370W**.



Next, depending on the product you have, select either **NetVanta 1560** or **NetVanta 1570-24-370W**.



The **NetVanta 1560** will display a list of devices based on the number of ports. Select a device.

Adtran Support Community > Software > NetVanta Software > NetVanta 1500 > NetVanta 1560

Software

Filter Items

NetVanta 1560-08 NetVanta 1560-24 NetVanta 1560-48 NetVanta 1561-04

Click on the link titled **Software** to the right of the version you wish to download.

Adtran Support Community > Software > NetVanta Software > NetVanta 1500 > NetVanta 1560 > NetVanta 1560-48

NetVanta 1560-48 ASE Current and Archived Releases

Current Release

The following are the software files associated with the last software release for the NetVanta 1560-48 ASE products.

Version	Release Date	Release Notes	Download	Hash
4.4-47	6/29/23	Release Notes	Software	SHA256: 14A5EAAC07D446F727363FE792215BF71ABDBEE70AE02FABE836343756879DC7

Archived Releases

The following are the software files associated with older software releases for the NetVanta 1560-48 ASE products.

Version	Release Date	Release Notes	Download	Hash
4.4-45	10/22/21	Release Notes	Software	SHA256: E44505ED080C9A830987BB2AE923C3371CAETCF43D0FD638AABD785D12EB042
4.4-44	6/28/21	Release Notes	Software	SHA256: 2BA2D09B9034069002A749FC0B1662E796023687C03A701A8BF7E0225AA040

The **NetVanta 1570-24-370W** will display a list of current and archived firmware releases. Click on the link titled **Software** to the right of the version you wish to download.

Adtran Support Community > Software > NetVanta Software > NetVanta 1500 > NetVanta 1570-24-370W

NetVanta 1570-24-370W ASE Software

Current Release

The following are the software files associated with the last software release for the NetVanta 1570-24-370W ASE products.

Version	Release Date	Release Notes	Download	Hash
20.12-4	9/22/23	Release Notes	Software	SHA256: 08B75D095EFFB9CB8888B155B1BDC70542E782B4B3C5070E3E71EC778193626

Archived Releases

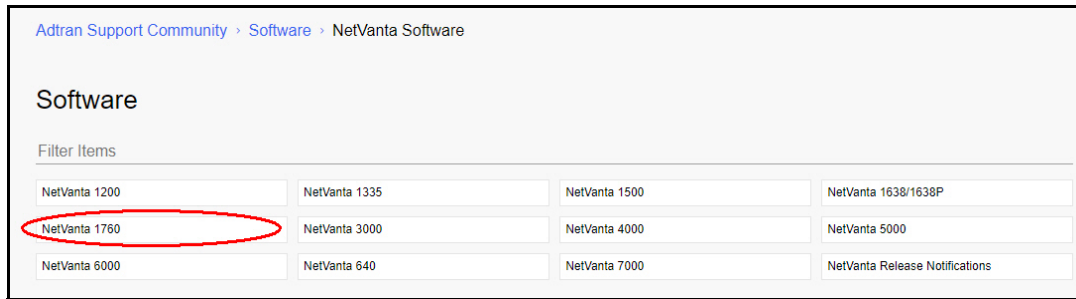
The following are the software files associated with older software releases for the NetVanta 1570-24-370W ASE products.

Version	Release Date	Release Notes	Download	Hash
20.12-3	10/11/22	Release Notes	Software	SHA256: 64A83C07F12A6744D4B7BF37FA547BCDC60A77FAB68047B16B86FE3B608274D9

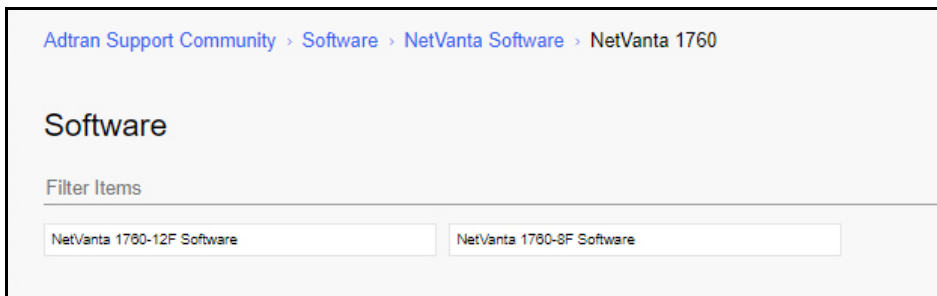
Go to Step 7 on page 8

Locating the NetVanta 1760 Software

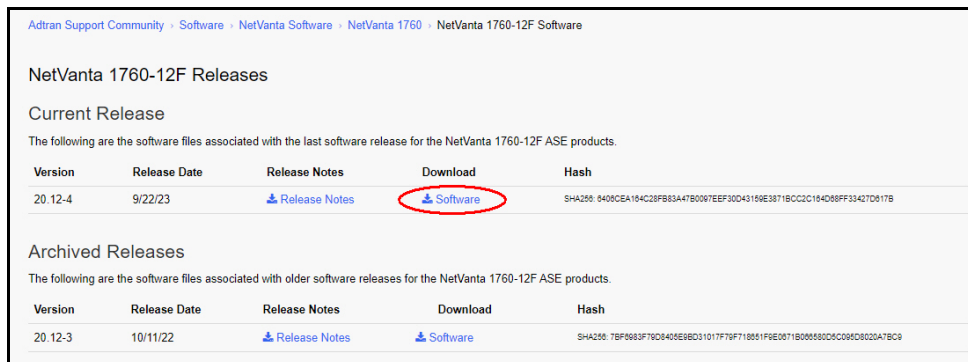
6. Select NetVanta 1760.



The next page will display a list of devices based on the number of ports. Select your device.



Click on the link titled **Software** to the right of the version you wish to download.



7. After clicking the Software download link, the **Export Control Policy** dialog box will appear. Select whether or not you accept the **ADTRAN Export Policy Agreement** (you must select **Yes** to be able to proceed with the download). Select your **Country of Location** and click **Submit**. The file should begin downloading.

3. Upgrading ASE Firmware Using the GUI

When updating the system firmware on an ASE device using the GUI, the new firmware must be downloaded to a computer, uploaded to the ASE unit, and the ASE device rebooted. The following sections describe how to upgrade the ASE firmware using the GUI.

i **NOTE**

The NetVanta 1560 GUI is different than the NetVanta 1570/1760 GUI. In the following steps, refer to the section that corresponds with the model of your ASE device.

Accessing the GUI

You can access the GUI using a web browser:

1. Connect the ASE unit directly to your PC using any port on the switch and a straight-through Ethernet cable. Refer to the quick start guide specific to your unit for details on connecting to your PC.
2. Open a Web browser and enter the unit's default IP address (or the unit's assigned IP address if it has been modified from the default) in your browser address line.
3. At the prompt, enter your user name and password and select **OK**.

i **NOTE**

*The default user name is **admin** and the default password is **password**.*

**NOTE**

The factory default IP address of the switch is 10.10.10.1. The factory default subnet mask is 255.255.255.0. If the switch is connected to a Dynamic Host Control Protocol (DHCP) server, the server assigns the switch an IP address that will likely be different than the default 10.10.10.1. The DHCP server also assigns your PC the correct IP address to allow a connection on the same subnet as the switch.

4. The GUI menu appears.

Reviewing the Current Firmware in the GUI

Review and record the name of the existing active firmware file on the device. Refer to the section that pertains to your specific ASE device:

- [Reviewing the Firmware on the NetVanta 1560 on page 10](#)
- [Reviewing the Firmware on the NetVanta 1570/1760 on page 10](#)

Reviewing the Firmware on the NetVanta 1560

Navigate to **Maintenance > Software > Image Select**.



Review the firmware stored on the unit for the **Active** and **Alternate Image**. The **Active Image** is the image that is currently being used by the ASE unit. The **Alternate Image** is the backup firmware file stored on the unit.

Reviewing the Firmware on the NetVanta 1570/1760

Navigate to **Maintenance > Firmware > Firmware Selection**

Review the firmware stored on the unit for the **Active** and **Alternate Image**. The **Active Image** is the image that is currently being used by the ASE unit. The **Alternate Image** is the backup firmware file stored on the unit.

Software Image Selection	
Active Image	
Image	linux
Version	NetVanta 1570-24-370W (standalone) v20.12-4
Date	2023-09-18T10:22:38+08:00
Alternate Image	
Image	linux.bk
Version	NetVanta 1570-24-370W (standalone) v20.12-3-1316
Date	2023-07-06T11:12:59+08:00
<input type="button" value="Activate Alternate Image"/> <input type="button" value="Cancel"/>	

Uploading Firmware in the GUI

Refer to the section that pertains to your specific ASE device:

- [Uploading a Firmware Update to the NetVanta 1560 Unit on page 11](#)
- [Uploading a Firmware Update to the NetVanta 1570 and 1760 Units on page 12](#)



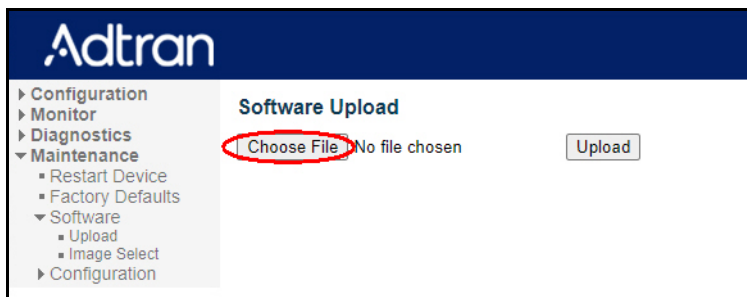
NOTE

For information on uploading firmware upgrades using the CLI with TFTP, see [Upgrading ASE Firmware Using the CLI on page 12](#)

Uploading a Firmware Update to the NetVanta 1560 Unit

After the selected firmware has been downloaded to your computer, upload it from your computer to flash storage in the ASE unit.

1. In the GUI menu on the left, navigate to **Maintenance > Software > Upload**.
2. Select **Choose File** and Browse to the directory on your computer containing the ASE firmware upgrade file.



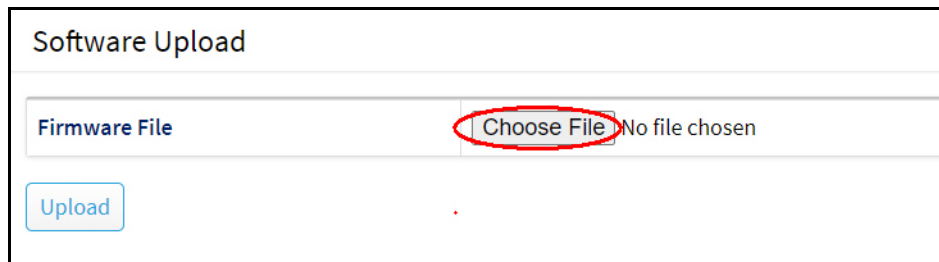
3. Select the firmware file (with a **.mfi** extension), and then select **Open**. The directory location and file name should now be displayed to the right of the **Choose File** button.

4. Select **Upload** to transfer the new firmware file to the ASE unit. The upload will overwrite the **Alternate image** with the newly downloaded image. This process can take several minutes.
5. When the process is complete, navigate to **Maintenance > Software > Image Select** and verify that the **Alternate Image** is the software version of the firmware you just uploaded to the unit.
6. Save the configuration. Navigate to **Maintenance > Save startup-config** and select **Save Configuration**.
7. Reboot the ASE device to activate the new image. Navigate to **Maintenance > Restart Device**. A message will display asking if you are sure you want to perform a Restart. Select **Yes**.

Uploading a Firmware Update to the NetVanta 1570 and 1760 Units

After the selected firmware has been downloaded to your computer, upload it from your computer to flash storage in the ASE unit.

1. In the GUI menu on the left, navigate to **Maintenance > Firmware Upgrade**.
2. Select **Choose File** and Browse to the directory on your PC containing the ASE firmware upgrade file.



3. Select the firmware file (with a **.imgs** extension), and then select **Open**. The directory location and file name should now be displayed to the right of the **Choose File** button.
4. Select **Upload** to transfer the new firmware file to the ASE unit. The upload will overwrite the Alternate image with the newly downloaded image. This process can take several minutes.
5. When the process is complete, navigate to **Maintenance > Firmware > Firmware Selection** and verify that the **Alternate Image** is the software version of the firmware you just uploaded to the unit.
6. Save the configuration. Navigate to **Maintenance > Configuration > Save Startup-config** and ensure the radio button to the left of **startup-config** is selected. Select **Save Configuration**.
7. Reboot the ASE device to activate the new image. Navigate to **Maintenance > Restart Device**. A message will display asking if you are sure you want to perform a Restart. Select **Yes**.

4. Upgrading ASE Firmware Using the CLI

The process for updating firmware on an ASE device using the CLI is the same for the NetVanta 1560, 1570, and 1760 units. Prior to updating the firmware, ensure the following prerequisites are in place:

- A TFTP server with anonymous access
- Network access from the ASE device to the TFTP server
- Access to Privileged Exec mode on the ASE device

Upload the New Firmware File to the TFTP Server

After downloading the new firmware file for your ASE device as outlined in [Obtaining Updated Firmware on page 5](#), ensure that the firmware file is uploaded to the TFTP server.

Review the Current Version of Firmware

Connect to the CLI in the ASE device. If you need help connecting to the CLI, refer to the document [Configuring the CLI in ASE](#) located on the Adtran Support Community.

Enter the **show version** command in Privileged exec mode to display the current version of firmware in use on the ASE device as well as the stored backup (alternate) image:

```
ASE_Switch#show version

MAC Address : cc-66-18-1a-88-99
Serial Number : LBADTN223112345
Previous Restart : Cold
.....
Primary Image
-----
Image : linux (Active)
Version : v20.12-4
Date : 2023-09-18T10:22:38+08:00

Backup Image
-----
Image : linux.bk
Version : v20.12-3-1316
Date : 2023-07-06T11:12:59+08:00
```

Copy the New Firmware File from the TFTP Server to the ASE Device

Use the **firmware upgrade** command to copy the new firmware file from the TFTP server to the ASE device:

```
#firmware upgrade tftp://<ip address>/<filename>
```

<ip address> Specifies the IP address of the TFTP server

<filename> Specifies the name and extension of the new firmware file to be downloaded. A valid file name is a text string drawn from alphabet (A-Za-z), digits (0-9), dot (.), hyphen (-), under score (_). The maximum length is 63 and hyphen must not be first character. The file name content that only contains '.' is not allowed.



NOTE

The file extension is *.mfi* for the NetVanta 1560 firmware and *.img*s for NetVanta 1570/1760 firmware.

The following example copies the NetVanta 1760 firmware file titled **NetVanta-1760-12F_v20.12-3.1225.imgs** from the TFTP server located at IP address **10.10.10.100** to the ASE 1760 switch.

```
ASE_Switch#firmware upgrade
tftp://10.10.10.100/NetVanta-1760-12F_v20.12-3.1225.imgs
Downloading...
Got 22399253 bytes
Starting flash update - do not power off device!
```

```
Checking old image linux.bk... needs update
Erasing 'linux.bk'...done!
Programming 'linux.bk'...done!
Swapping images...done!
File transfer is completed, reload the device to activate the firmware
```

Reboot the ASE Device

The reboot command used depends on whether the command is being issued in the CLI for a NetVanta 1560 or a NetVanta 1570/1760 device.

NetVanta 1560

Use the **reload cold** command to reboot the ASE device to activate the new image:

```
ASE_Switch#reload cold
Do you want to save the configuration (y/n) ? y
Saving configuration...
Are you sure you want to reboot the device (y/n) ? y
% Cold reload in progress, please stand by.
```

NetVanta 1570 and 1760

Use the **reload warm** command to restart the CPU and activate the new image:

```
ASE_Switch#reload warm
Do you want to save the configuration [Yes|No]? y : DO save startup config
Do you want to reload the system ? [Yes|No] y : DO reload the system
% Warm reload in progress, please stand by.
```