

Upgrade Firmware on a CBS 250 or 350 Series Switch

Objective

The firmware is the program that controls the operation and functionality of the switch. It is the combination of software and hardware that has program code and data stored in it in order for the device to function.

Upgrading the firmware improves the performance of the device, which could provide enhanced security, new features, and bug fixes. This process is also necessary if you encounter the following:

- Frequent network disconnection or intermittent connection using the switch
- Slow connection

The objective of this document is to show you how to upgrade the firmware on your switch.

Applicable Devices | Software Version

- CBS250 ([DataSheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350 ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350-2X ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350-4X ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))

Backup your configuration prior to upgrading the firmware. You can do this by navigating to **Administration > File Management > File Operations** in the menu. Download a copy of the running configuration to your PC. It is not recommended to do a firmware upgrade of your device remotely.

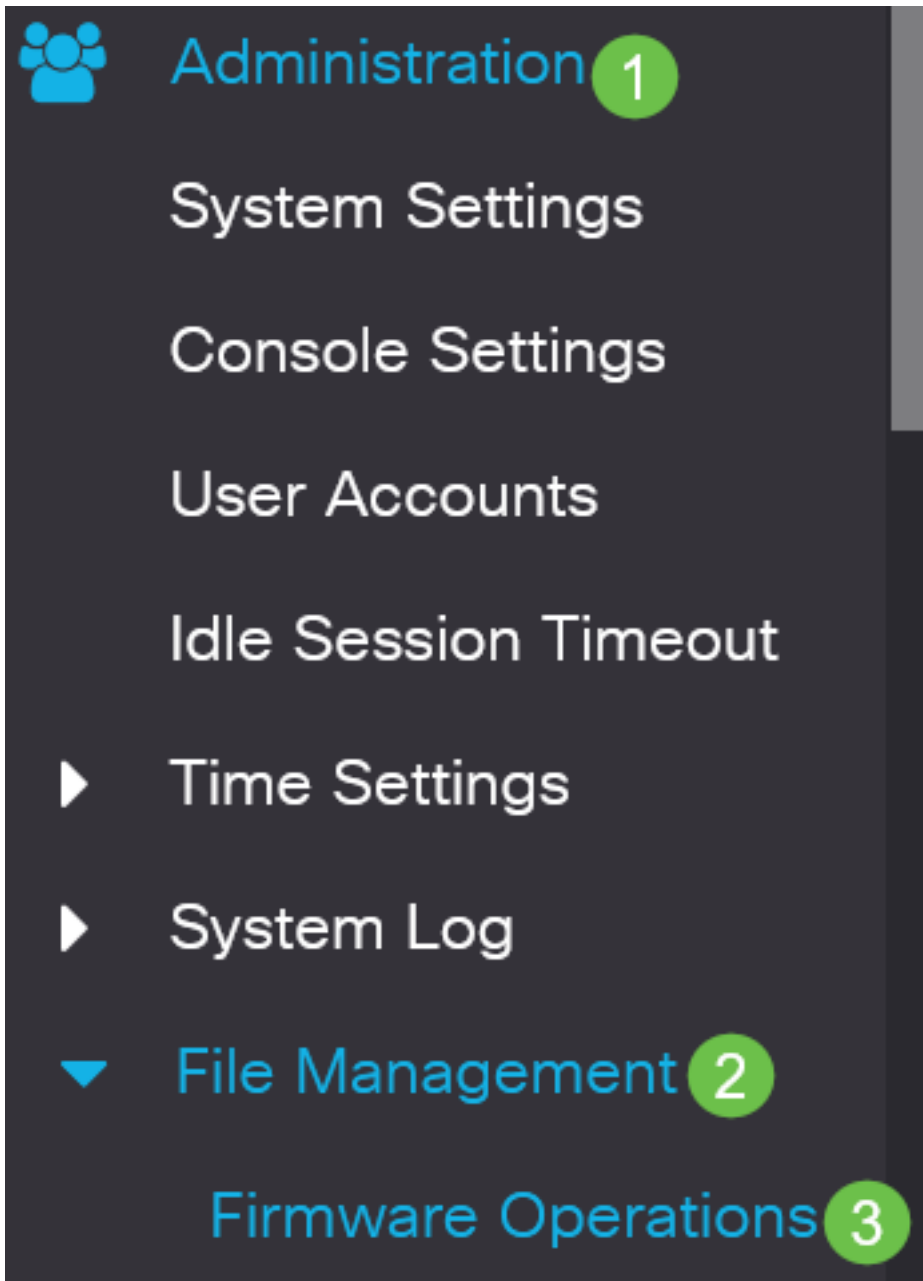
Upgrade Firmware on the Switch

Upgrade the Firmware

Before you proceed, make sure to download first the latest firmware of your switch from the appropriate link above. As an alternative, you can follow the steps in [How to Download and Upgrade Firmware on any Device](#). If you prefer to use the Command Line Interface (CLI) to upgrade firmware, select the toggle button at the top.

Step 1

Log in to the web-based utility of the switch and choose **Administration > File Management > Firmware Operations**.



Step 2

On the *File Operations* page:

- Click the **Update Firmware** radio button as the Operation Type.
- Click the **HTTP/HTTPS** radio button as the Copy Method.
- For the File Name, click **Choose File** and locate the previously downloaded firmware file from your computer.

Firmware Operations

Active Firmware File: image_cbs_ros_3.1.0.57_release_cisco_signed.bin

Active Firmware Version: 3.1.0.57

Operation Type: **1** Update Firmware

Backup Firmware

Swap Image

Copy Method: **2** HTTP/HTTPS

USB

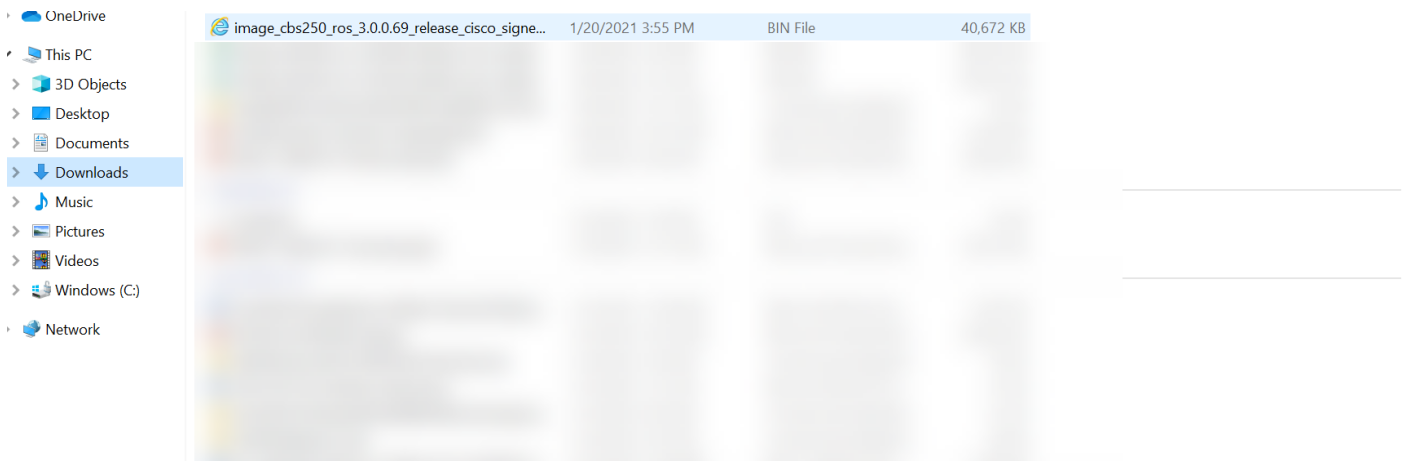


3 File Name: No file selected.

Choose **USB** if you would like to transfer firmware to the switch using a USB flash drive.

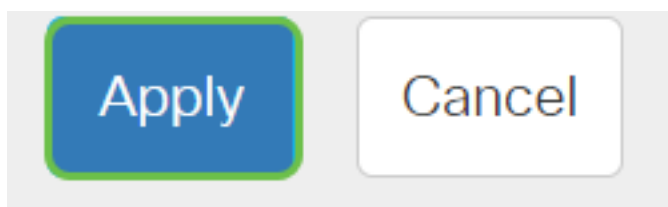
Step 3

Choose the file then click **Open**.



Step 4

Click **Apply**.



Reboot the Switch

For the upgraded firmware version to be applied, the switch must be rebooted.

Step 1

Choose **Administration > Reboot**.

1 Administration

System Settings

User Accounts

Idle Session Timeout

▶ Time Settings

▶ System Log

▶ File Management

Cisco Business
Dashboard Settings

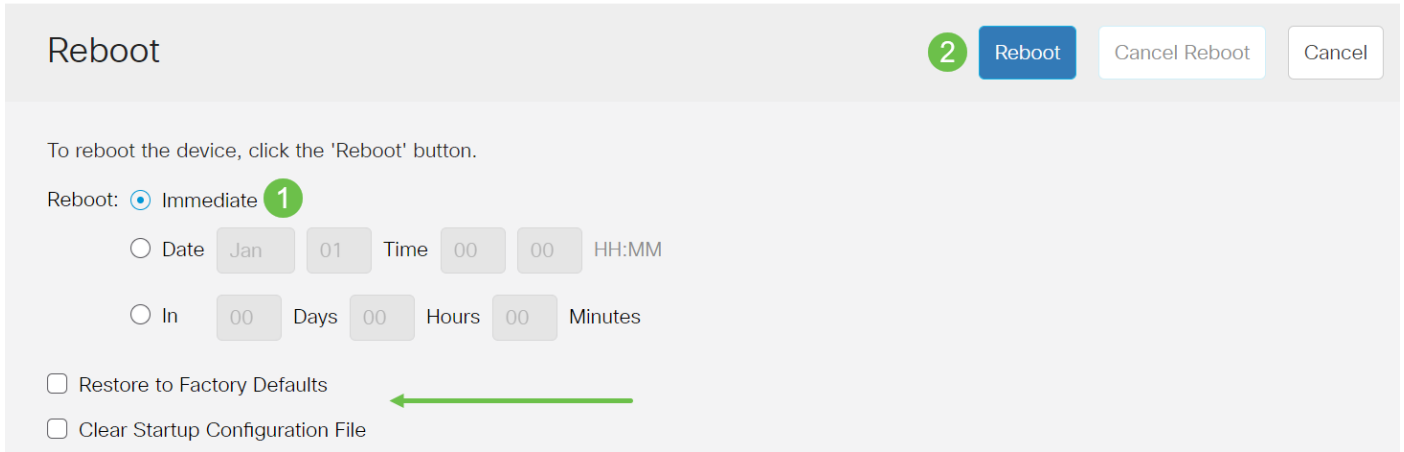
▶ PNP

2 Reboot

Step 2

On this page, enter the following:

- Ensure the default of **Immediate** is selected.
- (Optional) Check the **Restore to Factory Defaults** or **Clear Startup Configuration File** check boxes if desired. With either option chosen, the switch essentially performs a factory default reset since both the running and startup configurations will be deleted upon reboot.
- Click **Reboot**.



The screenshot shows a 'Reboot' configuration page. At the top right, there is a green circle with the number '2' next to a blue 'Reboot' button, and two white buttons labeled 'Cancel Reboot' and 'Cancel'. Below the title, a text instruction reads: 'To reboot the device, click the 'Reboot' button.' The 'Reboot:' section has three radio button options: 'Immediate' (selected, with a green circle '1' next to it), 'Date' (with dropdowns for 'Jan' and '01', and 'Time' with dropdowns for '00' and '00', followed by 'HH:MM'), and 'In' (with dropdowns for '00' Days, '00' Hours, and '00' Minutes). At the bottom, there are two unchecked checkboxes: 'Restore to Factory Defaults' and 'Clear Startup Configuration File'. A green arrow points from the 'Restore to Factory Defaults' checkbox towards the left.

The switch will then reboot. This process may take a few minutes.

Verify the New Firmware

To verify if the new firmware has been successfully upgraded:

Step 1

Choose **Administration > File Management > Firmware Operations**.

▼ Administration 1

System Settings

Stack Management

User Accounts

Idle Session Timeout

▶ Time Settings

▶ System Log

2 ▼ File Management

3 Firmware Operations

Step 2

Check the Active Firmware Version area to verify if the updated firmware has been successfully uploaded to the switch.

Firmware Operations

Active Firmware File: image_cbs_ros_3.1.0.57_release_cisco_signed.bin
Active Firmware Version: 3.1.0.57

Nice work! You should now have successfully upgraded the firmware of your switch.

Looking for more articles on your CBS250 or CBS350 switch? Check out any of the links below for more information!

[SNMP Settings](#) [SNMP Views](#) [SNMP Groups](#) [DHCP Image Upgrade](#) [Password Strength](#) [TCP and UDP Settings](#) [Port Security](#) [Time Settings](#) [Smartport Best Practices](#) [Troubleshoot: No IP Address](#) [Troubleshoot Smartports](#) [Troubleshoot Link Flapping](#) [Create VLANs](#)

Article Skeleton w/ Content

Objective

The firmware is the program that controls the operation and functionality of the Cisco Business 250 or 350 Series Switch. It is the combination of software and hardware that has program code and data stored in it in order for the device to function.

Upgrading the firmware improves the performance of the device, which could provide enhanced security, new features, and bug fixes. This process is also necessary if you encounter the following:

- Frequent network disconnection or intermittent connection using the switch
- Slow connection

You can upgrade the firmware of the Cisco Business 250 or 350 Series Switch through its web-based utility or through the Command Line Interface (CLI).

This article aims to show you how to upgrade the firmware on your Cisco Business 350 Series Switch through the CLI. If you are a beginner, you may want to upgrade the firmware using the Web User Interface (UI). Click the toggle button at the top to Upgrade Firmware on a Cisco Business 250 or 350 Series Switch using the Web UI.

Applicable Devices | Software Version

- CBS250 ([DataSheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350 ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350-2X ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))
- CBS350-4X ([Data Sheet](#)) | 3.0.0.69 ([Download latest](#))

Upgrade Firmware on a Cisco Business 250 or 350 Series Switch through the CLI

Download the Latest Firmware

In preparation for the upgrade process, download first the latest firmware of the switch.

Select the link for the latest version of firmware using the appropriate link above.

If you need step-by-step guidance for downloading the latest firmware, check out [New to Cisco Business: How to Download and Upgrade Firmware on any Device](#).

Make sure to copy the file to your TFTP folder.

Upgrade the Firmware through the CLI

Step 1

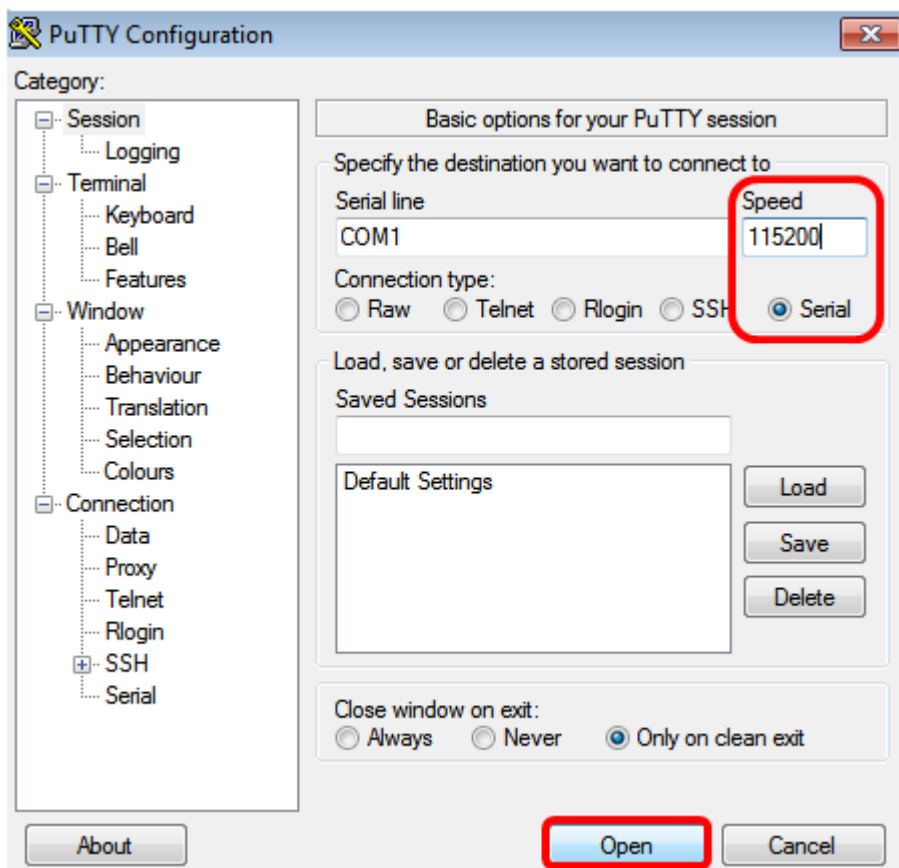
Connect your computer to the Cisco Business 250 or 350 Series Switch using a console cable and launch a terminal emulator application to access the switch CLI.



In this example, PuTTY is used as the terminal emulator application.

Step 2

In the PuTTY Configuration window, choose **Serial** as the Connection type and enter the default speed for the serial line which is 115200. Then, click **Open**.



Step 3

Log in to the switch CLI using your own User Name and Password.

```
User Name:cisco
Password:*****
```

The default username and password is cisco/cisco. In this example, the default User Name cisco, and a personal password is used.

Step 4

Once you are on the CLI, enter the privileged exec mode and check the firmware version your switch is currently using as well as the location where the image is installed, and other information by entering the following:

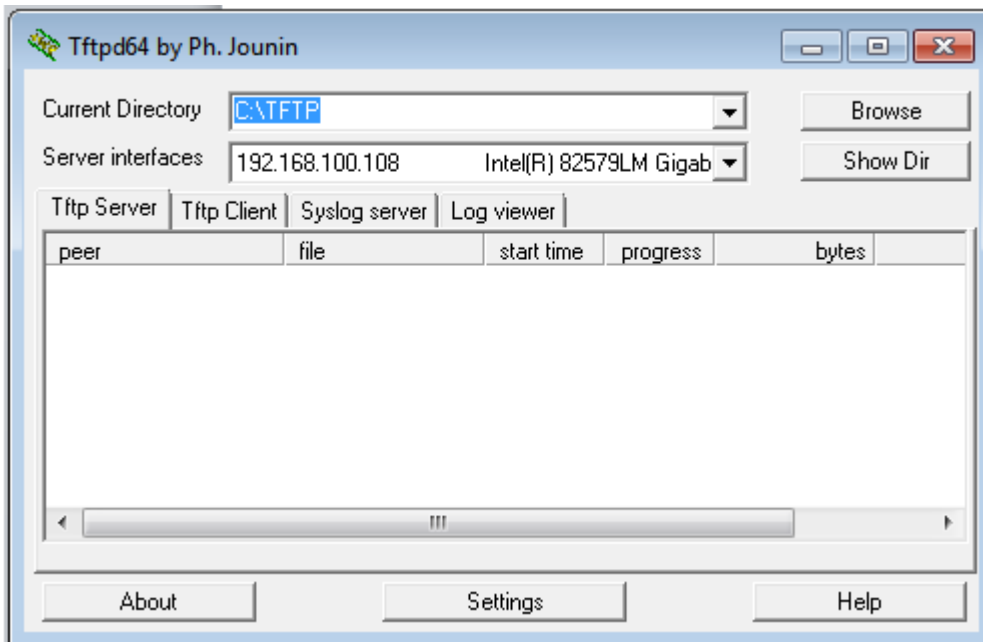
```
CBS350#sh ver
```

- The switch is running firmware version 2.2.5.68
- The image is installed in the flash directory
- The MD5 hash string
- The time and date the image is loaded to the switch

```
SG350X#sh ver
Active-image: flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.5.68.b
in
Version: 2.2.5.68
MD5 Digest: 43747e9a3a4fd6624625b6624153f7a3
Date: 04-Aug-2016
Time: 19:36:27
```

Step 5

Browse through your TFTP folder and run the TFTP server in the background in preparation for the upgrade process.



Step 6

Upload the latest firmware file from your TFTP folder to the switch by entering the following:

```
CBS350#boot system
tftp://192.168.100.108/image/image_cbs_ros_3.0.0.69_releas
e_cisco_signed.bin
```

In this example, the IP address of the TFTP server used is 192.168.100.108.

```
SG350X#boot system tftp://192.168.100.108/image/image_tesla_Sx250-350_Sx350X-550X_2.2.8.4.bin
```

Step 7

Wait until the page shows that the operation has been completed.

```
SG350X#tftp://192.168.100.108/image/image_tesla_Sx250-350_Sx350X-550X_2.2.8.4.bin
25-Apr-2017 08:23:08 %COPY-I-FILECPY: Files Copy - source URL tftp://192.168.100.108/image/image_tesla_Sx250-350_Sx350X-550
X_2.2.8.4.bin destination URL flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.8.4.bin
25-Apr-2017 08:27:36 %COPY-N-TRAP: The copy operation was completed successfully
Copy: 26353291 bytes copied in 00:04:27 [hh:mm:ss]
```

Step 8 (Optional)

To verify that the new image file has been successfully loaded, check your switch firmware information again by entering the following:

```
CBS350#sh ver
```

Step 9

Check the firmware information. The page should show both the old and new image files but should indicate that the old image file will be inactive after reboot and the new image file will be active after reboot.

```
SG350X#sh ver
Active-image: flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.5.68.bin
  Version: 2.2.5.68
  MD5 Digest: 43747e9a3a4fd6624625b6624153f7a3
  Date: 04-Aug-2016
  Time: 19:36:27
  Inactive after reboot
Inactive-image: flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.8.4.bin
  Version: 2.2.8.4
  MD5 Digest: d75d9f2e1a06e99ba793af2418470df1
  Date: 21-Dec-2016
  Time: 22:03:09
  Active after reboot
```

Step 10

Reboot the switch by entering the following:

```
CBS350#reload
```

Step 11

Enter Y in the message prompt to continue.

```
SG350X#reload
This command will reset the whole system and disconnect your current session. Do you want to continue ? (Y/N) [N] Y
```

Step 12

Wait for a few minutes while the system is shutting down and rebooting.

Step 13

Once the system has rebooted, log in to the switch again.

```
User Name:cisco
Password:*****
```

Step 14

Verify the if the new image file is now active by entering the following:

```
CBS350#sh ver
```

Step 15

Check the image information displayed. It should now show that the active image is the latest version.

```
SG350X#sh ver
Active-image: flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.8.4.bin
Version: 2.2.8.4
MD5 Digest: d75d9f2e1a06e99ba793af2418470df1
Date: 21-Dec-2016
Time: 22:03:09
Inactive-image: flash://system/images/image_tesla_Sx250-350_Sx350X-550X_2.2.5.68.bin
Version: 2.2.5.68
MD5 Digest: 43747e9a3a4fd6624625b6624153f7a3
Date: 04-Aug-2016
Time: 19:36:27
```

You should now have successfully upgraded the firmware on your Cisco Business 250 or 350 Series Switch through the CLI.

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