

# Switches

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# Updating Firmware Cisco Switch

Updating the Firmware on a Cisco Switch is easy.

New firmware can be found at

<https://software.cisco.com/download/home/283018960>

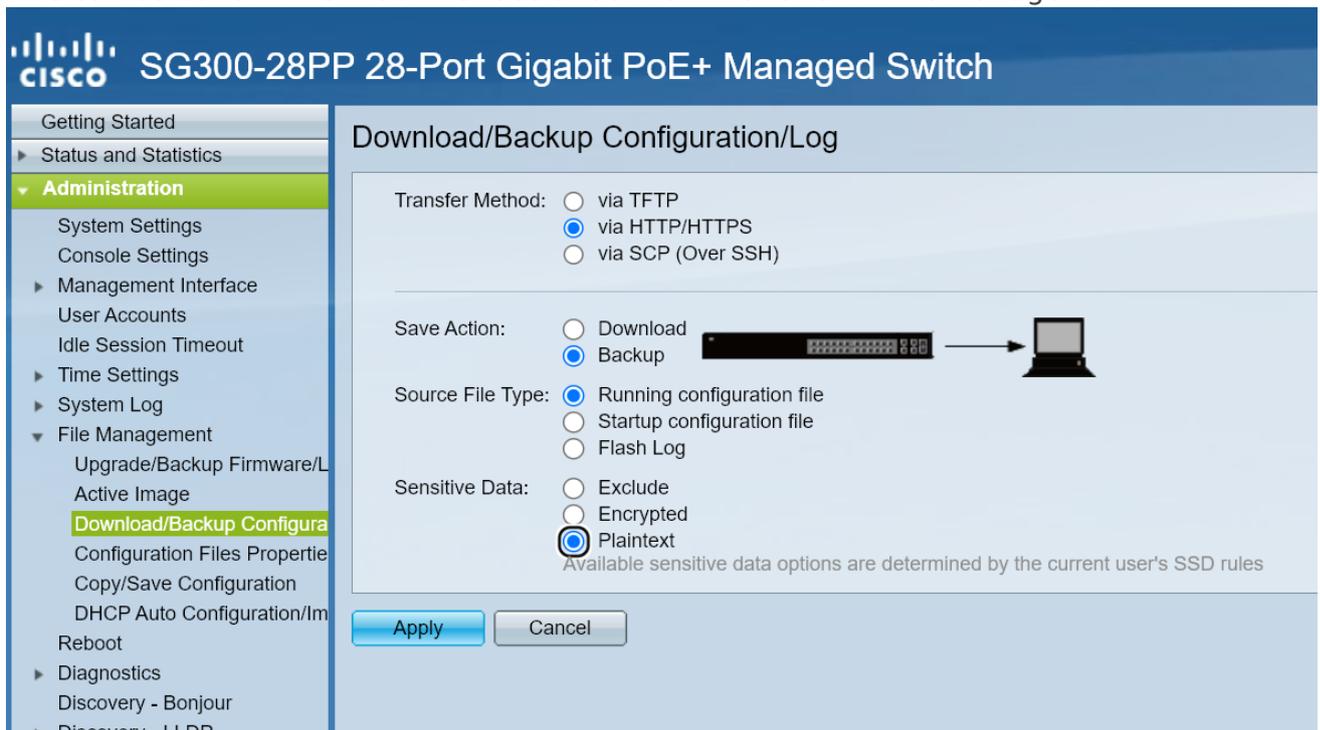
## SG300 Series

In the 300 series of switches a few steps are to be taken

1. Where possible a backup should be taken of the Firmware and Configuration files should something go wrong.

1. This can be done in the Web Interface under Administration > File Management

2.



2. Once backups are taken and new firmware is ready to upload, go to **Upgrade/Backup Firmware/Language**

3. On this screen, upload your firmware file

# 1. P 28-Port Gigabit PoE+ Managed Switch

### Upgrade/Backup Firmware/Language

Transfer Method:  via TFTP  
 via HTTP/HTTPS  
 via SCP (Over SSH)

Save Action:  Upgrade  ←   
 Backup

File Type:  Firmware Image  
 Boot Code  
 Language File

File Name:  No file chosen

The firmware is upgraded to the inactive image file. You must activate the firmware using the [Active Image](#) page.

- 4. Once uploaded go to **Active Image**
- 5. Select your new firmware version to go to

### Active Image

Active Image:	Image 2
Active Image Version Number:	1.4.11.5
Active Image After Reboot:	1.4.11.5 ▾
Active Image Version Number After Reboot :	1.4.10.6 1.4.11.5

- 6. Once you click apply the new firmware version should show as the Active After Reboot

Active Image Version Number After Reboot : 1.4.11.5

1.

- 7. Click the Reboot hyperlink to reboot the switch.
- 8. **Monitor the switch to ensure the upgrade occurs successfully.**
- 9. Navigate back to the Active Image section once rebooted to ensure the new image is currently active

## Active Image

1. 

Active Image:	Image 2
Active Image Version Number:	1.4.11.5

## SG350 Series

In the 350 series of switches a few steps are to be taken

1. Where possible a backup should be taken of the Firmware and Configuration files should something go wrong.

1. This can be done in the Web Interface under Administration > File Management > File Operations

- 2.

The screenshot shows the Cisco SG350-10P 10-Port Gigabit PoE Managed Switch web interface. The left sidebar contains a navigation menu with 'Administration' expanded to 'File Management', where 'File Operations' is selected. The main content area is titled 'File Operations' and contains the following settings:

- Operation Type:  Update File,  Backup File,  Duplicate
- Source File Type:  Running Configuration,  Startup Configuration,  Mirror Configuration,  Logging File,  Language File,  Dashboard Info File
- Copy Method:  HTTP/HTTPS,  USB,  Internal Flash
- Sensitive Data Handling:  Exclude,  Encrypt,  Plaintext

Below the settings are 'Apply' and 'Cancel' buttons. An illustration of a switch connected to a laptop is also visible.

2. Once backups are taken and new firmware is ready to upload, go to **Firmware Operations**

3. On this screen, upload your firmware file

1.

The screenshot shows the Cisco SG350-10P 10-Port Gigabit PoE Managed Switch configuration interface. The left sidebar contains a navigation menu with categories like 'Getting Started', 'Dashboard', 'Configuration Wizards', 'Search', 'Status and Statistics', and 'Administration'. The 'Administration' section is expanded, showing 'Firmware Operations' as the active page. The main content area is titled 'Firmware Operations' and displays the following information:

- Active Firmware File: image\_tesla\_hybrid\_2.5.9.54\_release\_cisco\_signed.bin
- Active Firmware Version: 2.5.9.54
- Operation Type:  Update Firmware,  Backup Firmware,  Swap Image
- Copy Method:  HTTP/HTTPS,  USB
- File Name: Choose File No file chosen

At the bottom of the main content area, there are 'Apply' and 'Cancel' buttons. To the right of the 'Copy Method' section, there is a small graphic of a switch and a laptop connected by an arrow, indicating the copy method.

## 2. FROM HERE OUT OF DATE JUST COPIED

4. Once uploaded go to **Active Image**

5. Select your new firmware version to go to

1.

The screenshot shows the Cisco SG350-10P 10-Port Gigabit PoE Managed Switch configuration interface, specifically the 'Active Image' page. The page displays the following information:

- Active Image: Image 2
- Active Image Version Number: 1.4.11.5
- Active Image After Reboot: 1.4.11.5 (dropdown menu)
- Active Image Version Number After Reboot: 1.4.10.6 (dropdown menu), 1.4.11.5 (selected)

At the bottom of the page, there are 'Apply' and 'Cancel' buttons.

6. Once you click apply the new firmware version should show as the Active After Reboot

Active Image Version Number After [Reboot](#) : 1.4.11.5

1.

Apply

Cancel

7. Click the Reboot hyperlink to reboot the switch.

8. **Monitor the switch to ensure the upgrade occurs successfully.**

9. Navigate back to the Active Image section once rebooted to ensure the new image is currently active

## Active Image

Active Image:

Image 2

1.

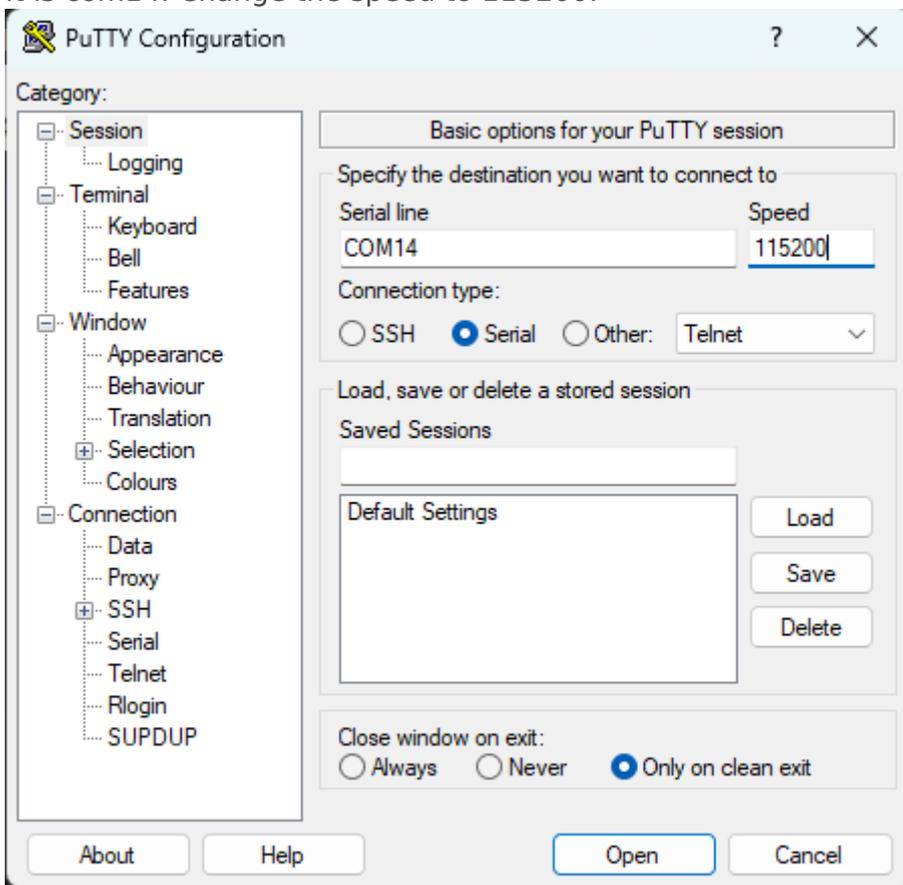
Active Image Version Number:

1.4.11.5

# Aruba Switch Initial Config

This article will guide you on how to initially configure an Aruba switch to get ready for deployment out into the field.

1. Firstly you will need to plug a USB-C cable from your laptop into the console USB-C port of the switch. Open device manager and search for the "Ports" dropdown. In this instance our switch is using com port 14.
  - ▼ Ports (COM & LPT)
    - USB Serial Device (COM14)
2. Open up putty and select the serial checkbox, enter your com port, for example this time it is com14. Change the speed to 115200.



3. The login will be admin, there will be no password by default so press enter. It will then prompt you to make a new password, this can be a temporary password for now. Make sure to add it into 1pass.
4. Enter command "conf" to get into configure mode. Add vlan 10 (server vlan) by using command "vlan 10".

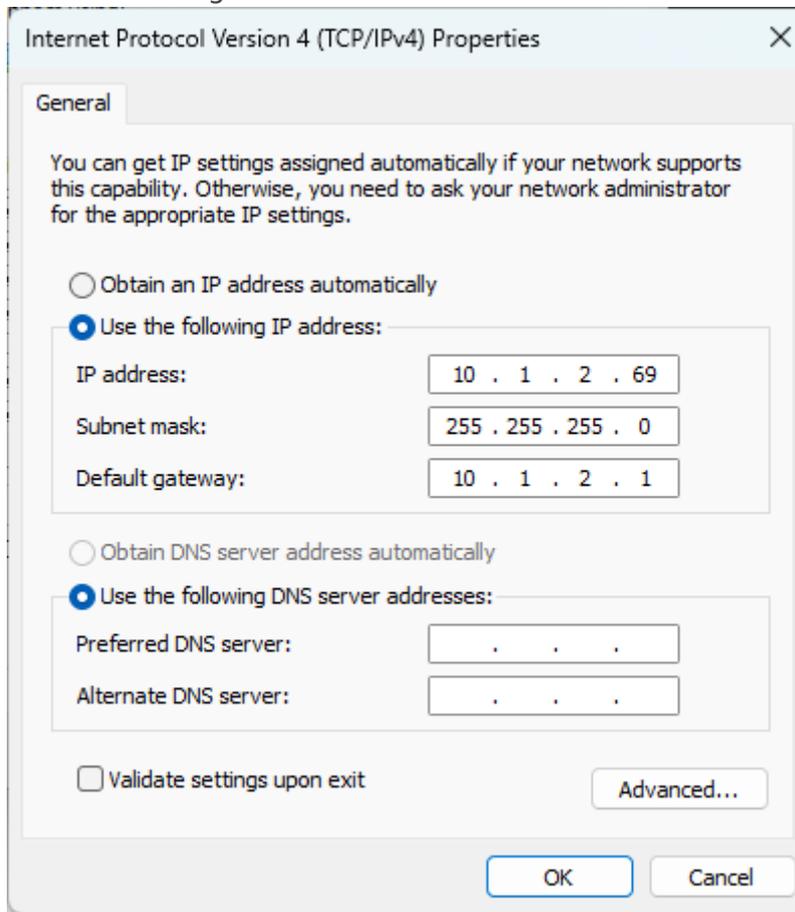
```
6000 (config)# vlan 10
```

5. Now we need to give the interface of our vlan 10 a static IP. Refer to [this](#) spreadsheet for available IP addresses. Enter into the vlan interface by using this command "int vlan 10".

The next command will assign the static IP to the interface of VLAN 10 "ip address 10.1.2.102 255.255.255.0".

```
6000(config)# int vlan 10
6000(config-if-vlan)# ip address 10.1.2.102 255.255.255.0
```

- Now you will need to plug an ethernet cable from your management port, in our case it is port 1, plug the other end into your laptop ethernet and change the IP address of your device to be on the same network as the switch. In our case the switch's IP is 10.1.2.102, so we will assign a static IP to our device 10.1.2.69.



- We will now be able to view the web interface by typing in the IP of the switch into the URL but will still be doing everything in the CLI.
- You will need to add all the vlan's that are currently set in the switch that is going to be replaced. The vlan's will need to be renamed with command "desc "name of vlan"" whilst in the vlan interface. A good idea is to take screenshots of all current settings in the switch being replaced, for example what vlan's you will need to create, and descriptions on the port, also what ports have what vlans etc.
- To help, you can open a running config of another Aruba switch, putty into another switch and run command "sh running-config". These 3 commands need to be ran:

```
ip route 0.0.0.0/0 10.1.1.1
ip dns server-address 10.1.1.90
ip dns server-address 10.1.1.91
```

Note: Whatever DNS server is closer to where the new switch is going to be deployed is the DNS server you will need to use. For example the DNS server for Belgrave is 10.1.1.90. For Kilvington it is 10.1.8.90. IP route is for when the switch does not know an IP address to send it to the nearest router which can determine where the IP will need to go. In the above image it is being sent to 10.1.1.1 which is the firewall in BDC.

10. Also don't forget to change the password of the new switch to a more complex password created by 1pass.