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# Firmware Upgrade

## Managed Switches



# Firmware Upgrade

## Introduction

### Introduction

This document explains the step-by-step procedure to use the command-line interface (CLI) in order to upgrade the software image on switches series 61xx, 81xx and 89xx.

### Requirements

- TFTP software running in your computer (for example: TFTP32)
- Computer connected to switch using both console and RJ-45 cable.



# Firmware Upgrade

## Managed Switches

1. Log in to the switch through the console port or a telnet session.

2. Run the command "dir" to list all the internal files.

Search for Operation Code files and check if the existent version is the last one. If not, upgrade your switch using the appropriate boot image file.

```

COM5 - PuTTY

User Access Verification

Username: admin
Password: XFER: End of config sync.

      CLI session with the SMC6128PL2 is opened.
      To end the CLI session, enter [Exit].

No configured settings for reloading.
Console#dir

```

| File name                        | File type             | Startup  | Size (byte)    |
|----------------------------------|-----------------------|----------|----------------|
| SMC6128PL2_diag_V1.0.0.9.bix     | Boot-Rom Image        | Y        | 1384972        |
| <b>SMC6128_52L2_V1.4.6.4.bix</b> | <b>Operation Code</b> | <b>Y</b> | <b>4664116</b> |
| Factory_Default_Config.cfg       | Config File           | N        | 455            |
| startup1.cfg                     | Config File           | Y        | 2682           |
| Total free space:                |                       |          | 786432         |

```

Console#

```

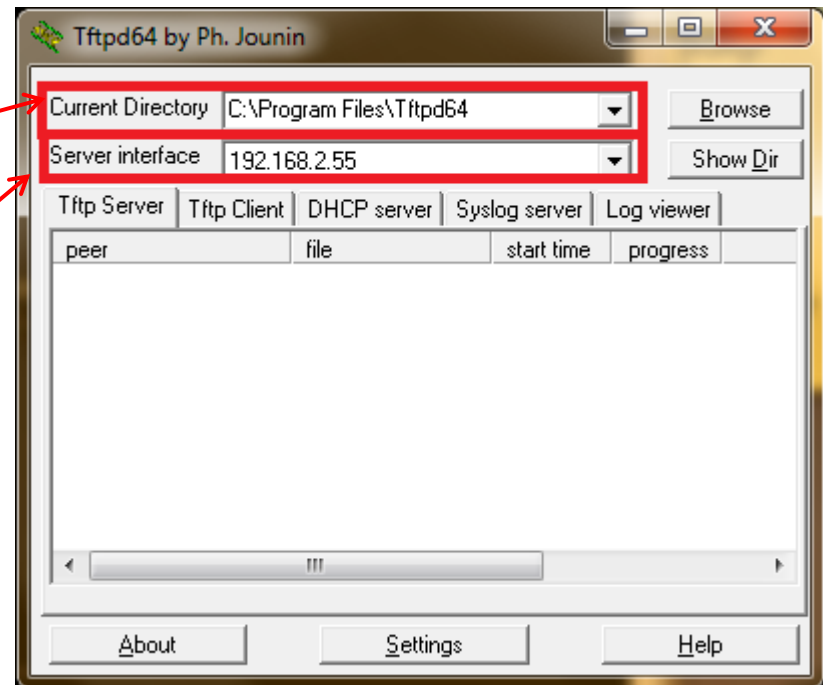


# Firmware Upgrade

## Managed Switches

3. Open the TFTPD application and copy the image (operation code) to the appropriate TFTP directory.

Select the server interface IP address that will connect to the Switch.



# Firmware Upgrade

## Managed Switches

4. The management VLAN IP must be in the same subnet of your computer.

To configure, just enter the following commands:

```
#config
```

```
#int vlan 1
```

```
#ip address 192.168.2.254 255.255.255.0
```



# Firmware Upgrade

## Managed Switches

5. To initiate the firmware upgrade procedure, follow the instructions below:

#copy tftp file

#Enter your computer IP address

# Select option 2 (opcode)

#Type the entire firmware file name (including the extension) in the “Source file name”

# Repeat again the same name in the “Destination file name”.



# Firmware Upgrade

## Managed Switches

6. Configure the management IP address

7. Console commands for firmware upgrade

```

COM5 - PuTTY
No configured settings for reloading.
Console#dir
-----
File name                               File type      Startup Size (byte)
-----
Unit1:
  SMC6128PL2_diag_V1.0.0.9.bix          Boot-Rom Image Y             1384972
  SMC6128_52L2_V1.4.6.4.bix             Operation Code Y             4664116
  Factory_Default_Config.cfg            Config File    N              455
  startup1.cfg                           Config File    Y              2682
-----
Total free space: 786432

Console#config
Console(config)#int vlan 1
Console(config-if)#ip address 192.168.2.254 255.255.255.0
Console(config-if)#end
Console#
Console#
Console#copy tftp file
TFTP server IP address: 192.168.2.55
Choose file type:
1. config; 2. opcode; 4. diag; 5. loader: 2
Source file name: SMC6128_52L2_V1.4.10.1.bix
Destination file name: SMC6128_52L2_V1.4.10.1.bix
  
```

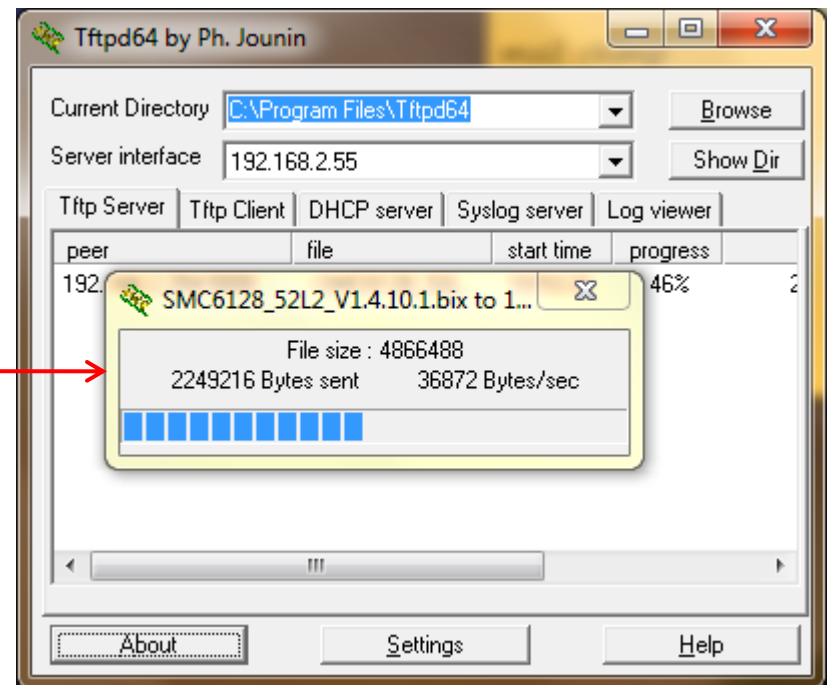




# Firmware Upgrade

## Managed Switches

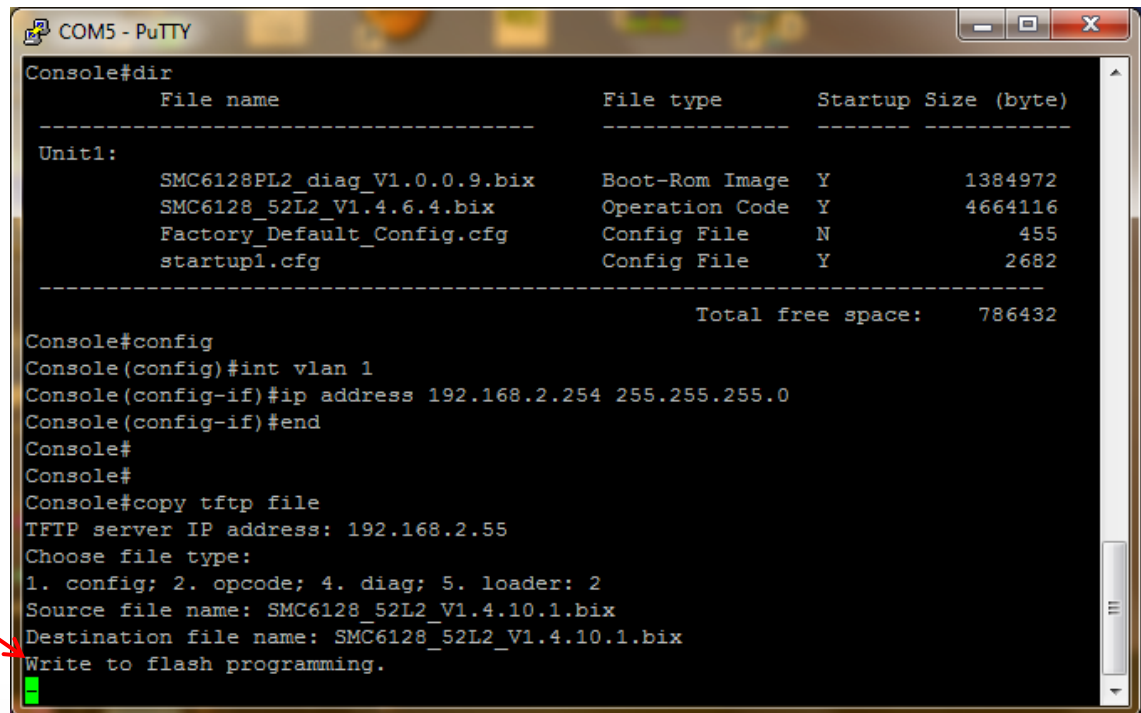
8. You will see the progress bar running in the TFTP application.



# Firmware Upgrade

## Managed Switches

9. Wait while the switch write the new Opcode to the flash.



```
COM5 - PuTTY
Console#dir
-----
File name                               File type      Startup Size (byte)
-----
Unit1:
  SMC6128PL2_diag_V1.0.0.9.bix          Boot-Rom Image Y           1384972
  SMC6128_52L2_V1.4.6.4.bix             Operation Code Y           4664116
  Factory_Default_Config.cfg            Config File    N              455
  startup1.cfg                           Config File    Y             2682
-----
Total free space: 786432

Console#config
Console(config)#int vlan 1
Console(config-if)#ip address 192.168.2.254 255.255.255.0
Console(config-if)#end
Console#
Console#
Console#copy tftp file
TFTP server IP address: 192.168.2.55
Choose file type:
1. config; 2. opcode; 4. diag; 5. loader: 2
Source file name: SMC6128_52L2_V1.4.10.1.bix
Destination file name: SMC6128_52L2_V1.4.10.1.bix
Write to flash programming.
```



# Firmware Upgrade

## Managed Switches

10. Type again the command “dir” and check if the new Operation Code is listed. Make sure that the new Opcode is flagged with the letter “Y”.

```
COM5 - PuTTY
Console(config-if)#ip address 192.168.2.254 255.255.255.0
Console(config-if)#end
Console#
Console#
Console#copy tftp file
TFTP server IP address: 192.168.2.55
Choose file type:
1. config; 2. opcode; 4. diag; 5. loader: 2
Source file name: SMC6128_52L2_V1.4.10.1.bix
Destination file name: SMC6128_52L2_V1.4.10.1.bix
Write to flash programming.
Programming flash started.
Success.
Console#dir
      File name                File type      Startup Size (byte)
-----
Unit1:
  SMC6128API2_diag_V1.0.0.9.bix  Boot-Rom Image Y      1384972
  SMC6128_52L2_V1.4.10.1.bix    Operation Code Y      4866488
  Factory_Default_Config.cfg    Config File    N         455
  startup1.cfg                  Config File    Y         2682
-----
Total free space: 524288
Console#
```

If not, type the following commands:

#config

#boot system opcode:<firmware image file name>



# Firmware Upgrade

## Managed Switches

11. The image copy is complete, and you are ready for the reboot.

To restart the unit type the following command:

#reload

```
COM5 - PuTTY
Console(config-if)#end
Console#
Console#
Console#copy tftp file
TFTP server IP address: 192.168.2.55
Choose file type:
1. config; 2. opcode; 4. diag; 5. loader: 2
Source file name: SMC6128_52L2_V1.4.10.1.bix
Destination file name: SMC6128_52L2_V1.4.10.1.bix
Write to flash programming.
Programming flash started.
Success.
Console#dir

```

| File name                    | File type      | Startup | Size (byte) |
|------------------------------|----------------|---------|-------------|
| SMC6128PL2_diag_V1.0.0.9.bix | Boot-Rom Image | Y       | 1384972     |
| SMC6128_52L2_V1.4.10.1.bix   | Operation Code | Y       | 4866488     |
| Factory_Default_Config.cfg   | Config File    | N       | 455         |
| startup1.cfg                 | Config File    | Y       | 2682        |
| Total free space:            |                |         | 524288      |

```

Console#reload
System will be restarted. Continue <y/n>?y

```

