Downloading Software to PowerConnect 62XX Series Switches

NOTE: Software for PowerConnect 6224/6248 is PowerConnect_6200_20012.stk

Using TFTP and the CLI

NOTE: A TFTP server must be on the network and the switch software must be accessible by the TFTP server before attempting to download the switch software by TFTP.

1. Connect to the serial port (default setting 9600 baud, 8 data bits, no start bits, 1 stop bits, no flow control) and enter the CLI mode. The following prompt is displayed:

   ```
   console>
   ```

2. Ensure that an IP address is assigned to at least one port on the switch .   Use the following commands to assign an IP address (this example uses IP address 10.10.10.101).

   ```
   console> enable
   console# config
   console(config)# ip address 10.10.10.101 /24
   console(config)# exit
   config#
   ```

3. Enter **copy tftp://*{tftp address}*/*{file name}* image** to copy the software to the Master switch. The file is copied but does not become active until the file is selected as the active image file after the switch is reset. The following is an example of the information that is displayed:

   ```
   console# copy tftp://10.10.10.200/PowerConnect_62XX_20012.stk image
   Mode.......................................... TFTP
   Set TFTP Server IP............................ 10.10.10.200
   TFTP Path..................................... ./
   TFTP Filename.................................
   PowerConnect_62XX_1043.stk
   Data Type..................................... Code
   Destination Filename.......................... image
   Management access will be blocked for the duration of the transfer
   Are you sure you want to start? (y/n) y
   TFTP code transfer starting

   .........................................................

   Verifying CRC of file in Flash File System

   Unpacking the image file.

   File transfer operation completed successfully.
   ```

4. Enter `show version` to verify which software version is currently running on each switch. The following is an example of the information which is displayed:

```
console#show version
Image Descriptions
image1 : default image
image2 :
Images currently available on Flash
--------------------------------------------------------------------
 unit     image1     image2     current-active     next-active
--------------------------------------------------------------------
    1    1.0.0.27    2.0.0.12           image1             image1
```

5. Since image2 has the new software, enter **boot system image2** to boot from image2

```
console# boot system image2

Activating image image2 ..
```

6. Update to the bootcode after the new image is activated (new bootcode is downloaded with the software):

```
console# update bootcode
Update bootcode and Reset? (Y/N)
Updating boot code …
```

7. The switch reboots automatically.

Using XMODEM and the Startup Menu

The switch software can be downloaded via the Startup menu accessed during the boot process. The boot process can be initiated by cycling power or by commanding a **reload** from the CLI (command line interface).

1. Connect to the serial port (default setting 9600 baud, 8 data bits, no start bits, 1 stop bits, no flow control) and enter the CLI mode. The following prompt is displayed:

```
console>
```

2. Type **enable** to enter the enable CLI mode:

```
console> enable
console#
```

3. Type **reload**. The following message is displayed:

```
console# reload

Are you sure you want to reload the stack? (y/n)
```

4. Type **Y**. The switch reboots.

5. When the switch reboots, the following menu is displayed:

```
1 - Start operational code.
2 - Start Boot Menu.
Select (1, 2):
```

6. Select **2** to start the boot Menu. The Boot menu is displayed.

```
Boot Menu Version:  13 Oct 2006

Options available
1  - Start operational code
2  - Change baud rate
3  - Retrieve event log using XMODEM
4  - Load new operational code using XMODEM
5  - Display operational code vital product data
6  - Run flash diagnostics
7  - Update boot code
8  - Delete backup image
9  - Reset the system
10 - Restore configuration to factory defaults (delete config files)
11 - Activate Backup Image
12 - Password Recovery Procedure
[Boot Menu]
```

7. Type **4** to **Load new operational code using XMODEM**, The following prompt is displayed:

```
Ready to receive the file with XMODEM/CRC....
Ready to RECEIVE File xcode.bin in binary mode
Send several Control-X characters to cancel before transfer starts.
```

8. Using any VT100 emulator (Windows HyperTerminal shown here), select the download file option. The **Send File** window is displayed. Click the **Send** button.
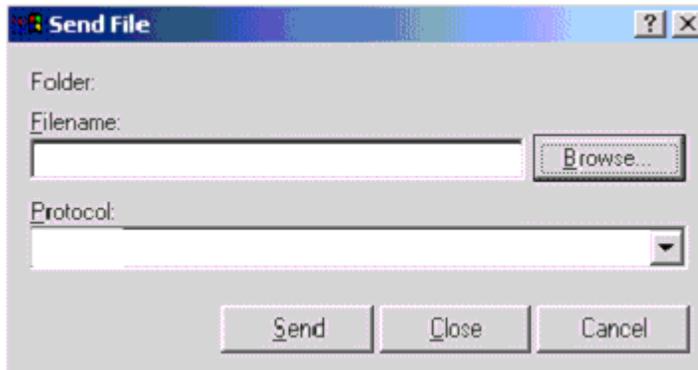
9. Enter the path and filename for the software (PowerConnect_62XX_1043.stk)

10. Ensure the protocol is defined as Xmodem.

11. Click **Send**. The software is downloaded.

12. Once the download is complete (this may take an hour or longer), select **7** to **update boot code** from the boot Menu and then enter **Y** to reset the switch

```
[Boot Menu] 7
Do you wish to update Boot Code and reset the switch? (y/n) y
```

13. The switch reboots automatically.

If Upgrade Fails to update the firmware

📝 **NOTE: You will need to use the following procedure, if the standard upgrade process fails.**

1. Check if the flash file system is intact by performing the following command
    `console#Devshell chkdsk('/DskVol/',0,0x200)`

2. If errors are reported the perform the following command to fix the errors
    `console#Devshell chkdsk('/DskVol/',2,0x200)`

3.   confirm the flash file system errors are fixed
    `console#Devshell chkdsk('/DskVol/',0,0x200)`

4. Delete the backup-image and try to download the image via tftp

    ```
    console#delete backup-image
    console#copy tftp:// 10.10.10.200/PowerConnect_62XX_2007.stk image
    ```

📝 **NOTE: If you have performed the above steps 1-4 and the copy is still failing then perform then skip steps 5-8**

   5. Set the boot to new image
       `console#boot system image? --> where ? denoted the new boot image`

   6. If new image download is successful then reboot the switch
       `console#reload`

   7. Once switch is rebooted perform the following command to update the boot code
       `console#update bootcode`

   8. System reboots after boot code is update

   9. Upgrade is complete. Do not perform any more steps.

📝 **NOTE: Record the switch MAC address, Serial Number and Service Tag, You need this information during the process**.

10. Perform the following command and record the Switch Mac Address

       `console#show system`

11. Perform the following command and record the Switch Service Tag and Serial Number

       `console#show system id`

12. Export the current saved switch configuration to the remote server Via tftp server.

```
console#copy startup-config tftp:// 10.10.10.200/startup-config
```

13. reboot the switch

```
console#reload
```

14. Upon the switch reboot, go to boot menu by selecting 2

    operational code will start.

    1 - Start operational code.
    2 - Start Boot Menu.
    Select (1, 2):2

    Boot Menu Version: 13 Oct 2006
    Options available
    1 - Start operational code
    2 - Change baud rate
    3 - Retrieve event log using XMODEM
    4 - Load new operational code using XMODEM
    5 - Display operational code vital product data
    6 - Run flash diagnostics
    7 - Update boot code
    8 - Delete backup image
    9 - Reset the system
    10 - Restore configuration to factory defaults (delete config files)
    11 - Activate Backup Image
    12 - Password Recovery Procedure

15. Select option 6, switch will prompt the following and say "y:
    This will destroy the file system. Do you wish to run flash diagnostics?
    (Boot code region will not be tested.) (y/n): y

16. For number of diagnostic iterations type 1

       Input number of diagnostic iterations -> 1

17. This process continues by erasing the file sectors (1-123), it takes few minutes. Once
     complete you will notice the following

    Verify sector 123 erased
    Flash Diagnostics passed
    Boot Menu]

18. Type 9 (reset the system)

    [Boot Menu] 9
    Are you SURE you want to reset the system? (y/n):y

19. Upon boot the flash file system gets formatted

20. Now you need enter the MAC address, serial number and service tag

    Do you wish to input a MAC address?
    If you choose no, the currently stored

MAC address (00:00:00:00:00:00) will be used. (y/n):y

Enter the six byte starting MAC address (example: 000629328140)
-> 00FFF218CB10 **(This is the MAC address you recorded earlier)**
Entered MAC: 00:FF:F2:18:CB:10

Please enter the DS/N serial number of this unit (a.k.a. PPID) ->
(This is the Serial number you recorded earlier)
Please enter the Dell Service Tag for this unit ->
(This is the Service Tag you recorded earlier)

21. The switch now boots into the boot menu

    Options available
    1 - Start operational code
    2 - Change baud rate
    3 - Retrieve event log using XMODEM
    4 - Load new operational code using XMODEM
    5 - Display operational code vital product data
    6 - Run flash diagnostics
    7 - Update boot code
    8 - Delete backup image
    9 - Reset the system
    10 - Restore configuration to factory defaults (delete config files)
    11 - Activate Backup Image
    12 - Password Recovery Procedure
    13) Select 2 to change the baud rate to 115200

    [Boot Menu] 2
    Select baud rate:
    1 - 1200
    2 - 2400
    3 - 4800
    4 - 9600
    5 - 19200
    6 - 38400
    7 - 57600
    8 - 115200
    0 - no change
    -> 8

    Setting baud rate to 115200, you must change your terminal baud rate.

22. Now change the terminal baud rate to 115200

23. Now select the option 4 to download the new image via XMODEM. This will take
     Approximately 60 minutes to download the new image

    [Boot Menu] 4
    Ready to receive the file with XMODEM/CRC….
    Ready to RECEIVE File xcode.bin in binary mode
    Send several Control-X characters to cancel before transfer starts.
    CKCKCKCKCKCKCKCKCKCK

24. Select option 7 to update the boot code

    Boot Menu Version: 13 Oct 2006
    Options available

```
1  - Start operational code
2  - Change baud rate
3  - Retrieve event log using XMODEM
4  - Load new operational code using XMODEM
5  - Display operational code vital product data
6  - Run flash diagnostics
7  - Update boot code
 8  - Delete backup image
9  - Reset the system
10 - Restore configuration to factory defaults (delete config files)
11 - Activate Backup Image
12 - Password Recovery Procedure

[Boot Menu] 7
 Do you wish to update Boot Code and reset the switch? (y/n) y
```

25. Now the system reboots with latest boot code and image

26. Now change the terminal baud rate to 9600

27. Now download the new image via tftp (for backup image)

    `console#copy tftp://10.10.10.200/PowerConnect_62XX_20012.stk image`

28. Import back the saved switch configuration to the switch tftp server.
    `console#copy tftp://10.10.10.200/startup-config startup-config`