Dell™ PowerConnect™ 6224/6224F/6224P/6248/6248P

PowerConnect 6224/6224F/6224P/6248/6248P Firmware Upgrade Procedure From Version 3.x.x.x to 3.3.18.1

Date: Feb 2019

Notes, Notices, and Cautions

A NOTE indicates important information that helps you make better use of your computer.

A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the

problem. A CAUTION indicates a potential for property damage, personal injury, or death.

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Introduction

This document provides specific information for upgrading or downgrading image on Dell PowerConnect 6200 switches with J3D old flash part and J3F new flash part. The table below lists PPID number changes for switches that have old flash J3D with old PPID and new flash J3F with new PPID.

Model	Old PPID	New PPID
PC6224	TK308 A15	TK308 A16
PC6224I	RN856 A15	RN856 A16
PC6248	GP931 A15	FWXNG A00
PC6248I	XT800 A15	XT800 A16
PC6224P	UU687 A16	UU687 A17
PC6224PI	HG682 A16	HG682 A17
PC6248P	PK463 A16	J0J1W A00
PC6248PI	DX850 A16	DX850 A17
PC6224F	FN848 A15	FN848 A16
PC6224FI	RR224 A15	RR224 A16

It is recommended that this document be thoroughly reviewed prior to installing or upgrading of this product.

Global Support

For information regarding the latest available firmware, release note revisions, or additional assistance, please visit support.dell.com.

Important Note before Upgrading PC6200 switches with J3F flash parts

1. Support for PC6200 with J3F flash part is added in switch firmware version 3.3.1.10

2. All versions starting from firmware version 3.3.1.10 shall be supported on PC6200 switches with old J3D and new J3F flash parts.

3. PC6200 with new J3F flash part will not allow to downgrade to any firmware image version lower than 3.3.1.10, and an error message is shown indicating that the image is not supported, when try to downgrade

4. On a mixed stack of PC6200, some with old J3D flash part and some with new J3F flash part, downloading a firmware image version less than 3.3.1.10.

   a. If PC6200 with J3F flash part is the master, error message is shown to the user saying that the image downloaded is not supported.
   b. If PC6200 with J3D flash part is the master, then all stack members with J3F flash part will not be able to downgrade.

5. Do not load any releases delivered before 3.3.1.10, on PC6200 switch with new J3F flash part.

Upgrading Software from version 3.x.x.x to 3.3.18.1 on PowerConnect 6200 Series Switches

Connecting to the Switch Serial port

Use a DB9 null modem serial cable. Connect one end to switch and the other to your PC. Set terminal emulation software to correct settings (9600 baud, 8 data bits, no parity, 1 stop bit, no flow control).

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 switch serial port. The following prompt is displayed:

   ```
   console>
   ```

2. Ensure that an IP address is assigned to the management interface on the switch and TFTP server is ping-able from 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
```

3. Enter `console# copy tftp://{tftp address}/{file name}` **image** to copy the software to the Master switch (see section "Stacking Notes"). 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/PC6200v3.3.18.1.stk image
Mode.......................................... TFTP
Set TFTP Server IP............................ 10.10.10.200
TFTP Path..................................... ./
TFTP Filename................................. PC6200v3.3.18.1.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


9732700 bytes transferred
File reception complete
Verifying file...
File contents are valid.

Distributing the code to the members of the stack!

File transfer operation completed successfully.
```

NOTE: Stacked switches take longer to download than a standalone switch. See section "Stacking Notes".

4. Enter `console# 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     3.3.10.3    3.3.18.1     image1               image1
```

5. Since image2 has the new software, enter

```
console# boot system image2

Activating image image2 ..
```

6. Verify boot-code version on the switch

```
console#show boot-version
---------------------------------------
   unit       Boot Image Version
---------------------------------------
    1          3.3.10.3
```

7. Update the bootcode (new bootcode is downloaded with the software):

NOTE: This step can take 3 minutes to complete. Do not reset the switch during this time.

```
console#update bootcode
Update bootcode and reset (Y/N)?
Issuing boot code update command...
Validating boot code from image...CRC Valid.
```

8. The switch reboots automatically.

Stacking Notes

Regarding steps 3, 4 and 5 above:

- The "copy" command will take longer to complete with a stack of switches. This is due to the master switch copying the software to the member switches.   The master switch will display the line "Distributing the code to the members of the stack!" for several minutes until the copy is done.

- The "copy" command will copy the software to the non-active image on all the switches.

Examples:

- If all switches in the stack have image1 as active, then the downloaded software will go to image2 on all switches and a single "boot system image2" command will select image2 for the next active image on all switches in the stack.

```
console#show version
Image Descriptions
image1 : default image
image2 :
Images currently available on Flash
---------------------------------------------------------------------
 unit   image1      image2      current-active        next-active
---------------------------------------------------------------------
   1    3.3.10.3    3.3.18.1        image1                image1
   2    3.3.10.3    3.3.18.1        image1                image1


console# boot system image2

Activating image image2 ..

console#show version
Image Descriptions
image1 : default image
image2 :
Images currently available on Flash
---------------------------------------------------------------------
 unit   image1      image2      current-active        next-active
---------------------------------------------------------------------
   1    3.3.10.3    3.3.18.1        image1                image2
   2    3.3.10.3    3.3.18.1        image1                image2
```

- If the switches in the stack have some image1 active and some image2 active members, then the downloaded software will go to the non-active image on each switch and multiple

"boot system <unit> imageX" commands will be required to select the next active image on each switch in the stack.

```
console#show version
Image Descriptions
image1 : default image
image2 :
Images currently available on Flash
-----------------------------------------------------------------
 unit      image1      image2     current-active        next-active
-----------------------------------------------------------------
   1    3.3.10.3    3.3.18.1        image1                image1
   2    3.3.18.1    3.3.10.3        image2                image2


console# boot system 1 image2
Activating image image1 ..

console# boot system 2 image1
Activating image image1 ..

console#show version
Image Descriptions
image1 : default image
image2 :
Images currently available on Flash
-----------------------------------------------------------------
 unit      image1      image2     current-active        next-active
-----------------------------------------------------------------
   1    3.3.10.3    3.3.18.1        image1                image2
   2    3.3.18.1    3.3.10.3        image2                image1
```

Using XMODEM and the Startup Menu

The switch software can be downloaded to a single switch (not a stack) 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 switch serial port (default setting 9600 baud, 8 data bits, no parity, 1 stop bits) 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:  3.3.10.3


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.
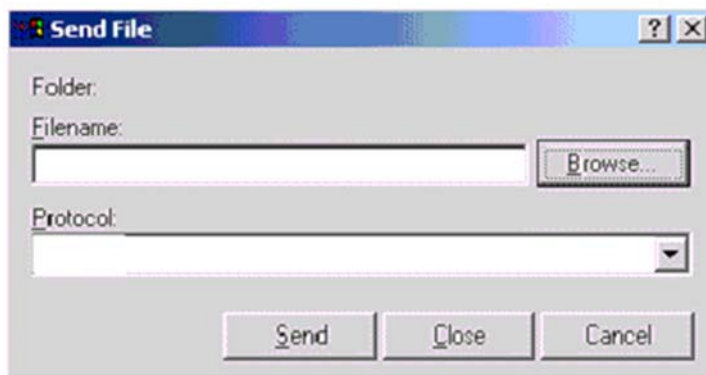
9. Enter the path and filename for the software (for example: PC6200v3.3.18.1.stk)

10. Ensure the protocol is defined as XMODEM (use Xmodem-1K if available for much quicker download)

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.