## **Overview**

To use the G5 firmware version 2.2.0.2, you need to be at the latest version of the boot loader, which is 2.24. This can be seen from the Web UI under the HOME>Identification. The version will be listed under "Boot Version".

As a note, this version did not come out until after we shipped the units to the Cisco Lab, so the boot loader version will need to be updated.

# **Bootloader Update Procedure**

To update the boot loader, follow either one of these options:

### 1. FTPs Method

To access a PDU using a FTPs program, FTPs must be enabled through the PDU Web Interface or CLI. In the Web Interface, go to Network Settings >SSH/**FTPs Configuration**. Select the check box to enable FTPs Access. In the CLI, login as an administrator and use the command "net ftps on"

- 1. Login to a FTPs program with a role with administration privileges.
- 2. Transfer the updated file PANDUITBOOT.bin to the folder labeled fw. Close the FTPs.
- Connect to the PDU CLI interface using a program such as HyperTerm or PuTTY.
- 4. Login using a role with administration privileges.
- 5. Enter the command **sys upd boot**
- 6. It will show the message: Reboot required for change to take effort, System Reboot now, Are you sure? (Y/N).
- 7. Enter Y.

## 2. Bootloader Mode

To do this, you will need an USB drive, with at least 2MB free.

- 1. Save the PANDUITBOOT.bin file to a USB drive.
- 2. Insert the USB drive into the USB port of the Network Management Module.
- 3. Enter USB mode on the PDU: Press Select. Go to Setup>USB>Yes. Select Yes to confirm entering USB mode.
- 4. Select Boot Up>Yes to upload the boot loader.

- 5. The OLED will show the update progress.
- 6. When the update is complete, remove the USB.
- 7. From the USB Menu, select Quit to exit USB mode. Select Yes to confirm exit.
- 8. The PDU will automatically reboot. This should take about a minute.
- 9. To confirm that the firmware was uploaded successfully, go to Setup>Device>Firmware.

# **Firmware Update Procedure**

After the boot loader is upgraded, you can update the firmware by following, one of these three modes.

### 1. FTPs Method

To access a PDU using a FTPs program, FTPs must be enabled through the PDU Web Interface or CLI. In the Web Interface, go to Network Settings >SSH/**FTPs Configuration**. Select the check box to enable FTPs Access. In the CLI, login as an administrator and use the command "net ftps on"

- 1. Login to a FTPs program with a role with administration privileges.
- 2. Transfer the updated Panduit.fw to the root directory. Close the FTPs.
- Connect to the PDU CLI interface using a program such as HyperTerm or PuTTY.
- 4. Login using a role with administration privileges.
- 5. Enter the command sys upd all
- 6. It will show the message: System will enter upgrade mode after reboot, System Reboot now, Are you sure? (Y/N).
- 7. Enter Y.

## 2. USB Method

- 1. Save the Panduit.fw file to a USB drive.
- 2. Insert the USB drive into the USB port of the Network Management Module.
- 3. Enter USB mode on the PDU: Press Select. Go to Setup>USB>Yes. Select Yes to confirm entering USB mode.
- 4. Select F/W Up>Yes to upload the new Firmware.

- 5. The OLED will show the Firmware update progress.
- 6. When the update is complete, remove the USB.
- 7. From the USB Menu, select Quit to exit USB mode. Select Yes to confirm exit.
- 8. The PDU will automatically reboot.
- 9. To confirm that the Firmware was uploaded successfully, go to Setup>Device>Firmware.

#### 3. Web Interface Method

- 1. Open the User interface in a web browser by entering the PDU IP address.
- 2. Login to with Administration credentials.
- 3. Go to System Management> Upload Firmware.
- 4. In the Upload Firmware dialog box, select "Choose File"
- 5. Browse to Panduit.fw Firmware file. Select the file and select Open.
- 6. Then select Upload.
- 7. The system will upload the file, then reset.