

## Firmware Update on PANVIEW iQ™ Hardware via TFTP

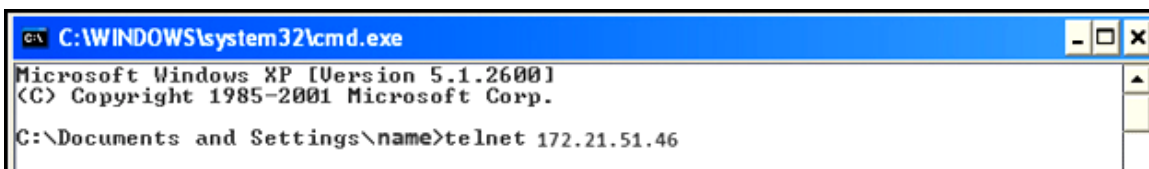
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A TFTP server can be used to download the firmware files to your *PANVIEW iQ™* PMs and *PANVIEW iQ™* EMs. However, before you begin, make sure that you have completed the following:

- Install and connect the PVIQ hardware as indicated in the System Hardware Installation Instructions.
- Make sure that you have completed all Firmware Preparations as instructed in Technical Reference # TR44
- Make sure that you have access to a DHCP server

### Perform the Firmware Update

1. Telnet into the PVIQ device (i.e. "telnet 172.21.51.46").

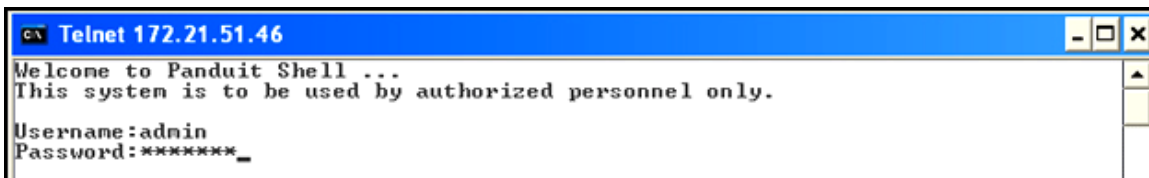


```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\name>telnet 172.21.51.46
```

2. At the login prompt, use the following to bring up the welcome Screen.

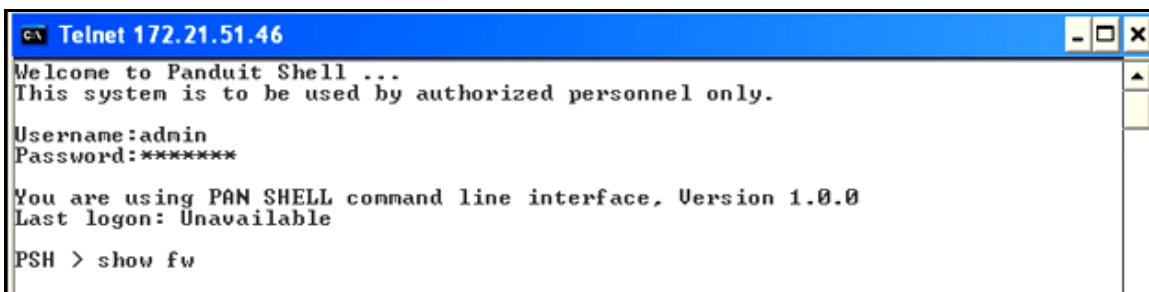
**login:** admin

**password:** panduit



```
Telnet 172.21.51.46
Welcome to Panduit Shell ...
This system is to be used by authorized personnel only.
Username:admin
Password:*****_
```

3. At the PSH prompt, type in "show fw"



```
Telnet 172.21.51.46
Welcome to Panduit Shell ...
This system is to be used by authorized personnel only.
Username:admin
Password:*****
You are using PAN SHELL command line interface, Version 1.0.0
Last logon: Unavailable
PSH > show fw
```

4. The screen will display information pertaining to your firmware, ending with another PSH > prompt.

```
Telnet 172.21.51.46
Welcome to Panduit Shell ...
This system is to be used by authorized personnel only.
Username:admin
Password:*****
You are using PAN SHELL command line interface, Version 1.0.0
Last login: Unavailable
PSH > show fw
-----
FLASH Images:
PMM <bootloader>:
  MBL v0.5 <07Oct2007>
PMM <application>:
  Mar 31 2008 10:15:11 #PUiQ:FW Version 01.08.04 <Mar2008> Onyx #
PEPIC:
  Feb 28 2008 11:36:33:0x40000000:000.022:
MBPIC:
  Feb 22 2008 09:09:08:0x400f8180:000.064:099099
PPPIC:
  Feb 28 2008 16:03:32:0x401604c0:000.004:
-----
Running Images:
PP:
<01: > HU:90 BL:000.002 AP:000.004
PE:
<01:..> HU:00 BL:000.005 AP:000.022
<02:..> HU:10 BL:000.005 AP:000.022
<03:..> HU:10 BL:000.005 AP:000.022
MB:
<01:01> HU:99 BL:000.015 AP:000.064
<01:02> HU:99 BL:000.015 AP:000.064
<01:03> HU:99 BL:000.015 AP:000.064
<01:04> HU:09 BL:000.015 AP:000.064
<01:05> HU:09 BL:000.015 AP:000.064
<01:06> HU:09 BL:000.015 AP:000.064
<02:01> HU:99 BL:000.015 AP:000.064
<02:02> HU:99 BL:000.015 AP:000.064
<02:03> HU:99 BL:000.015 AP:000.064
<02:04> HU:09 BL:000.015 AP:000.064
<02:05> HU:09 BL:000.015 AP:000.064
<02:06> HU:09 BL:000.015 AP:000.064
<03:01> HU:99 BL:000.017 AP:000.064
<03:02> HU:99 BL:000.017 AP:000.064
<03:03> HU:99 BL:000.017 AP:000.064
<03:04> HU:09 BL:000.017 AP:000.064
<03:05> HU:09 BL:000.017 AP:000.064
<03:06> HU:09 BL:000.017 AP:000.064
PSH >
```

5. At the PSH> Prompt, type in “start fwupdate (and IP ADDRESS FILENAME – see example below)”

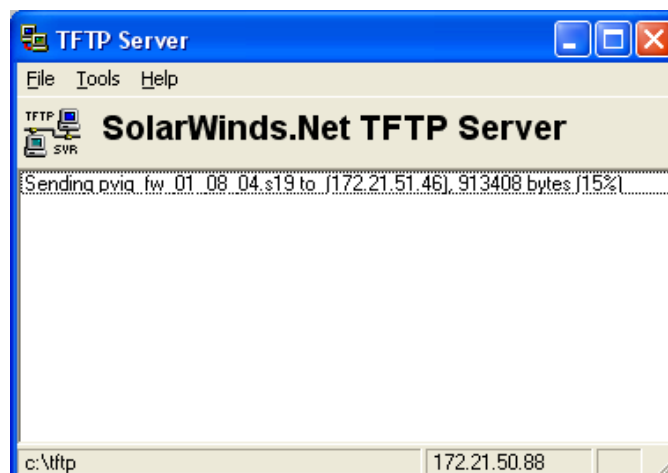
```

C:\WINDOWS\system32\cmd.exe
PSH >
PSH >
PSH > start fuupdate 172.21.50.88 PUIQ_FW_01_08_04.s19
PSH > fuupdate: Starting Firmware Update.
fuupdate: Server is reachable.
fuupdate: Sync internal data changes (~1-10 minutes)
fuupdate: Sync complete
fuupdate: Start maintenance mode
CFmgr_trans_mode: Error: failed to send buzzer job
CFpla_set_pepic_node: Can't set PEPIC to mode 9 ret -1
fuupdate: Erase scratch memory.
fuupdate: Erase FLASH sectors 36 to 19.
fuupdate: Begin TFTP download/verify. (~5 minutes)
fuupdate: Download complete - verify image.
Image Info:
#####
#          nyx # 2008          #
#PUIQ:FW Version 01.08.04 (31Mar2008) Onyx #
#####
fuupdate: Server image is valid.
CFfuup_does_image_match_flash(1997): Image Mismatch addr:x00260400 i:0x0010
fuupdate: Program FLASH with server image (~2 min) [cnt=65535].
fuupdate: Erase FLASH sectors 36 to 19.
fuupdate: Write image to FLASH.
CFfuup_copy_scratch_to_working(2118): Image copy complete
fuupdate: Programming complete.
fuupdate: < fuupdate: PASS, 1548 >
fuupdate: Processor Reset in 5 seconds.
PAN SHELL is closed by your end, bye ..

Connection to host lost.
C:\>

```

6. Check to see that the Firmware update has been sent by the TFTP server. You will see a file transfer status in the window.



**NOTE:** The TFTP server process takes approximately 5 minutes, followed by an additional 30 minutes for the panel to be updated. During this time, it is common for the panel to experience various LED flashes and audible beeps from the panel.

7. The process is complete when all of the ports LEDs turn from red to off.

**NOTE:** It is a good idea to shut down the TFTP server when not in use for network security reasons.

8. Should an error occur during the TFTP process, verify the following:
- a. Did you specify the correct IP address for the TFTP server? Note: this TFTP server IP address is not the same as the IP address for the PViQ panel.
  - b. Did you specify the correct TFTP file name? The file name will look similar to this: "PViQ\_FW\_01\_14\_04.s19", although the name will change for every firmware release.
  - c. Is the TFTP server powered up?
  - d. Is the TFTP server ping-able? If not, then verify your network settings.
  - e. Is the TFTP server application configured to point to the directory with the firmware file? We generally use the "c:\tftp" directory to perform transfers, although you can use another directory if desired. Be sure to put the firmware file in this directory.
  - f. Is the TFTP server application enabled? Some TFTP servers allow you to turn TFTP communication on/off, even though they are installed and running.
  - g. For multiple simultaneous TFTP updates, does your TFTP server support multiple simultaneous file downloads? Some free TFTP servers only allow one or two downloads at a time, while others allow many simultaneous downloads.