





Firmware Upgrade Instructions – PRO Series

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Purpose

This technical note provides end-user instructions for downloading and upgrading the firmware for Server Technology's PRO Series PDU products.

Note: Verify your PDU is a PRO Series model before following these upgrade instructions.

Downloading PDU Firmware from the Website

- 1. Go to: http://www.servertech.com/support
- 2. From the Support menu, select the Firmware Downloads option:



3. All PRO Series firmware upgrades can be selected with one of the three colored buttons for Switched Rack PDU Firmware, Smart Rack PDU Firmware, or -48V PDU Firmware. Click the button for the firmware you want to upgrade. In this example, "Switched Rack PDU Firmware" was selected.

| Server Technology | Products Support About Us Partners How to Buy | | | | | |
|---|---|--|--|--|--|--|
| | Home > Support > Rack PDU Firmware Downloads | | | | | |
| | Rack PDU Firmware Downloads | | | | | |
| | Switched Rack Smart Rack PDU -48V PDU | | | | | |
| | PDU Firmware Firmware Firmware | | | | | |
| OUESTIONS? Please call 1-800-835-1515 or for technical support requests, check the Help Desk, or Submit a support ticket from your dashboard. | | | | | | |
| | Sign-up for Support Notifications | | | | | |



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|--|--------------------------------------|---|----------------------|--------------------------|--|--|--|
| | Home + Support + Rack PDU Firmware D | ownloads 🕨 Switched Rack PDU Firmware (| Downloads | | | | |
| Switched Rack PDU Firmware Downloads | | | | | | | |
| Download - BIN swcdu-v71 x.bin pro-v80 x.bin | | | | | | | |
| | ZIP - Bin & History | Version History | (PRO®) | P700 | | | |
| | Can I Upgrade My Rack PDU? | Upgrade Instructions | ZIP - Bin & History | Version History | | | |
| | RADIUS Dictionary | | Upgrade Instructions | STIC Documentation | | | |
| | | | STIC Reference | STIC Template | | | |
| | | | RADIUS Dictionary | JAWS (API) Documentation | | | |

4. Click the orange PRO Series firmware (pro-v80x.bin) button:



Methods for Upgrading PRO Series PDU Firmware

Click one of the following upgrade methods to display step-by-step instructions:

Method 1: Upgrading PDU Firmware Using HTTP/S through the GUI

Method 2: Upgrading PDU Firmware Using an FTP/SFTP Client to PUT the Bin File to the PDU

Method 3: Upgrading PDU Firmware Using an FTP Client to GET the Bin File from the FTP Server

Method 4: Upgrading PDU Firmware Using an Automated Bash Script



Method 1: Upgrading PDU Firmware Using HTTP/S through the GUI

- 1. When logged in at the administrator level, from the **Configuration > System Files** menu, click **Browse** to locate and select the binary update file.
- 2. To upgrade the PDU, click Upload. If the PDU is currently running firmware version 8.0g or later, the PDU's Management Module will automatically restart and perform the flash update to the new release. If running firmware older than v8.0g, the message "Restart required to apply changes" appears, and the final step is to go to the Tools > Restart page and perform a standard "Restart".

Note: This process may take up to five minutes.

| Server | 27.02 Sentry Switche | ed PDU <i>(PIPS</i>) | Location : VALID LOCATION User : adm IP Address : 10.1.2.58 Access : Adm |
|------------------------------------|--------------------------------------|-----------------------------------|---|
| IECNNOLOGY. A brand of Diegrand | Files | | |
| Overview | Upload firmware or system | n configuration files | |
| Monitoring | Upload File: | Browse No file selected. | |
| Control | Upload | | |
| Configuration | System files | | |
| System | Date/Time | File | Size (Bytes) |
| About | 2017-10-12 10:22 | dictionary.sti | 2419 |
| Bluetooth | 2018-02-12 08:34 2018-02-12 08:34 | Sentry4.mib Sentry40IDTree.txt | 165171 52694 |
| Branches | 2019-01-18 10:39 | config.bak | 25049 |
| Cords | 2019-01-18 10:39 | config.ini | 30891 |
| Features | | | |
| Files | | | |

Upload progress message...

| PRO2 Sentry Switched PDU PPS | | | | | |
|--|--|--|--|--|--|
| Tools - Firmware | | | | | |
| Upload a System Firmware File | | | | | |
| Select and upload a system firmware file (*.bin) | | | | | |
| Select a System Firmware File: | Choose File Upload in progress Please wait. | | | | |

Server Technology.

Method 2: Upgrading PDU Firmware Using an FTP/SFTP Client to PUT the Bin File to the PDU

1. Using FileZilla (or any compatible FTP client), you can update the PRO Series PDU by connecting over port 21 (for FTP) or port 22 (for SFTP), and dragging the upgrade file to the root directory in the PDU:

| Eile E | //admn@10.1.2.133 - FileZilla dit View Transfer Server F | Rookmarks H | eln | _ | | |
|---------|---|----------------|-----------|------|----------|--------------|
| × | | 🎉 🛷 🗐 | R 🕈 🐧 | | | |
| Host: | sftp://10.1.2.133 Username: | admn | Password: | •••• | Port: 22 | Quickconnect |
| Status: | Connecting to 10.1.2.13 | 3 | | | | |
| Status: | Connected to 10.1.2.133 | | | | | |
| Status: | Retrieving directory listing | | | | | |
| Status: | Listing directory /admn | | | | | |
| Status: | Directory listing of "/adu | mn" successful | | | | |

2. Click on the pro-v8*.bin file and drag the file to the right-side of the pane. The upgrade and subsequent PDU restart begins automatically. This will not affect the power the PDU is supplying to the outlets.

| Local site: C:\TEMP\ | | | | Remote site: /admn |
|---|-----------|----------|-------------------|---|
| TEMP TYPSoft FTP TYPSoft FTP TYPSoft FTP Server Users Windows D: U: (\\sti-data01\users\skania) | | | | admn |
| Filename | Filesize | Filetype | Last modified | Filename Filesize Filetype Last modified |
| Bin file. | 1,099,328 | 81N File | 4/17/2015 9:20:13 | Config.bak 7,746 BAK File 4/16/2015 2:44 dictionary.sti 2,419 STI File 9/7/2012 10:10 ftp.ini 159 Configuration settings 1/20/2015 3:24 network.ini 301 Configuration settings 1/20/2015 3:24 Sentry4.mib 153,308 MIB File 12/23/2014 11 Sentry4OIDTree.txt 49,236 Text Document 12/23/2014 11 sentry.ini 153 Configuration settings 1/20/2015 3:24 |



Method 3: Upgrading PDU Firmware Using an FTP Client to GET the Bin File From the FTP Server

Note: This method is generally used for auto updates. This method also assumes: (1) an FTP server exists on the network, (2) the binary file has been placed on the FTP server, and (3) login credentials and the location of the binary file are known or automatically pathed. The screen capture below is only a random example. Contact Server Technology's Technical Support for additional instructions.

 Configure the firmware Configuration > Network > FTP page as displayed below with the exception of typing in your IP address for "Host".

| Server | (DIOR) Sentry Switched PDU (PIPS) | Location : VALID LOCATION User : admin IP Address : 10.1.2.58 Access : Admin |
|---------------------|-----------------------------------|---|
| lechnology. | | |
| A brand of Diegrand | FTP | |
| Overview | Configure FTP client options | |
| Monitoring | Host: | 10.1.2.100 |
| Control | Username: | taxe |
| Configuration | Password: | • Change |
| System | Directory: | /firmware/8.0n/ |
| Network | Filename: | pro-v80n.bin |
| DHCP/IP | Automatic Updates: | Enable |
| Email/SMTP | Scheduled Day: | Everyday 💌 |
| FTP | Scheduled Hour: | 12 AM 💌 |
| HTTP/HTTPS | lest | |
| ΙΠΔΡ | Configure FTP server options | |
| RADIUS | FTP Server: | ✓ Enable |
| SNMP | Apply Cancel | |
| SNTP | | |
| Syslog | | |
| TACACS+ | | |
| Telnet/SSH | | |
| ZTP | | |
| Access | | |
| Tools | | |
| | | |

- 2. Click Apply, then click Test. It should take about 10-20 seconds for the test to come back as "Test Passed update available".
- If the test passed, go to the firmware Tools > Restart page, select the action "Restart and download firmware via FTP", and click Apply, as illustrated:

| | PRO2 Sentry Switched PDU PPS | | | | | | |
|---|------------------------------|--|--|--|--|--|--|
| Abrandet Diegend Overpriem | | | | | | | |
| Monitoring Action: None | | | | | | | |
| Configuration Apply Cancel None Restart | | | | | | | |
| Tools Step 2. Click Apply. Restart and reset to factory defaults | | | | | | | |
| Change Password Step 1. From the Action Restart and reset to factory defaults, except n | etwork | | | | | | |
| Ping drop-down menu, select extended and download firmware via FTP | | | | | | | |
| Restart Restart and generate a new X.509 certificate | | | | | | | |
| View Log Restart and compute new SSH keys | | | | | | | |

Method 4: Upgrading PDU Firmware Using an Automated Bash Script

Note: This script can be found at <u>https://www.servertech.com/support/rack-pdu-firmware-downloads/switched-rack-pdu-firmware-downloads/</u>

STI PRO PDU Firmware Update Script (v0.6)

The provided script will allow for an automated firmware udpate of a single Server Technology PRO PDU. For the script to work, the following is expected:

- The provided script, **sti-pro-fw-update-script.sh**, must be saved to a server with a Linux/Unix operating system.
- Both Perl and Curl must be installed on the server.
- The server must be able to reach the PRO Series PDU via network.
- The PRO Series PDU must have HTTP or HTTPS enabled.
- The PRO Series PDU must be running v8.xx firmware.
- The user should read and understand the release notes for the firmware version that is being pushed to the PRO Series PDU.

Edit the sti-pro-fw-update-script.sh

Change the following lines:

Change these lines so they are the credentials for an administrator user on the PRO PDU. USERNAME=<username> PASSWORD=<password>

Change this line to be the IP of the PRO PDU that needs the update. IP_ADDRESS=<IP>

Change this line to the protocol (http or https) to be used for the update. PROTOCOL=<protocol>

Change this line to be the path and name of the update file. It is recommended to use absolute paths. UPDATE_FILE=~/pro-v80k.bin

Change this line to be the path of the log file. It is recommended to use absolute paths. By default, it will print to the console. LOG_FILE=/dev/stdout



Contact Technical Support

If you would like assistance with the instructions in this document, contact Server Technology's Technical Support department as follows:



Experience Server Technology's FREE Technical Support

Server Technology understands that there are often questions when installing and/or using a new product. Free Technical Support is provided from 8 a.m. to 5 p.m. Pacific Time, Monday through Friday.

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