APPENDIX D

Security

This appendix includes information used to ensure the security of your Cisco PAM appliance.

Contents

Cisco PAM TCP Port Requirements for Firewall Connections

Table D-1 lists the TCP ports used by the Cisco PAM appliance. Cisco PAM desktop clients require access to these ports when connecting to a Cisco PAM appliance that is behind a firewall.

Table D-1 Cisco PAM Appliance Ports: Firewall Requirements

Port	Description
TCP 80	HTTP for video and redirect to HTTPS
TCP 443	HTTPS
TCP 1236	Fixed port for CPAM client to server communications.
TCP 3306	MYSQL
TCP 8020	Default port for Gateway to Cisco PAM communication.
UDP 69	TFTP

Related Security Documentation

Refer to the following documentation for security information related to Cisco PAM.

- *Red Hat Enterprise Linux 4.5.0 Security Guide*
  http://www.redhat.com/docs/manuals/enterprise/RHEL-4-Manual/en-US/Security_Guide/
- Security in MySQL
  http://dev.mysql.com/doc/mysql-security-excerpt/5.0/en/index.html

Disabling the Cisco PAM TFTP Server

The Cisco PAM appliance includes a TFTP server that is enabled by default. This TFTP server is used primarily to store firmware images for upgrading Gateway modules, as described in Upgrading Gateway Firmware Images Using Cisco PAM, page C-12.

To disable the TFTP server, complete the following steps.

Note If the TFTP server is disabled, you must upgrade the Gateway firmware using image files stored on an external TFTP server. See Upgrading Gateway Firmware Images Using Cisco PAM, page C-12 for more information.

Step 1 Log in to the Cisco PAM Server Administration utility.

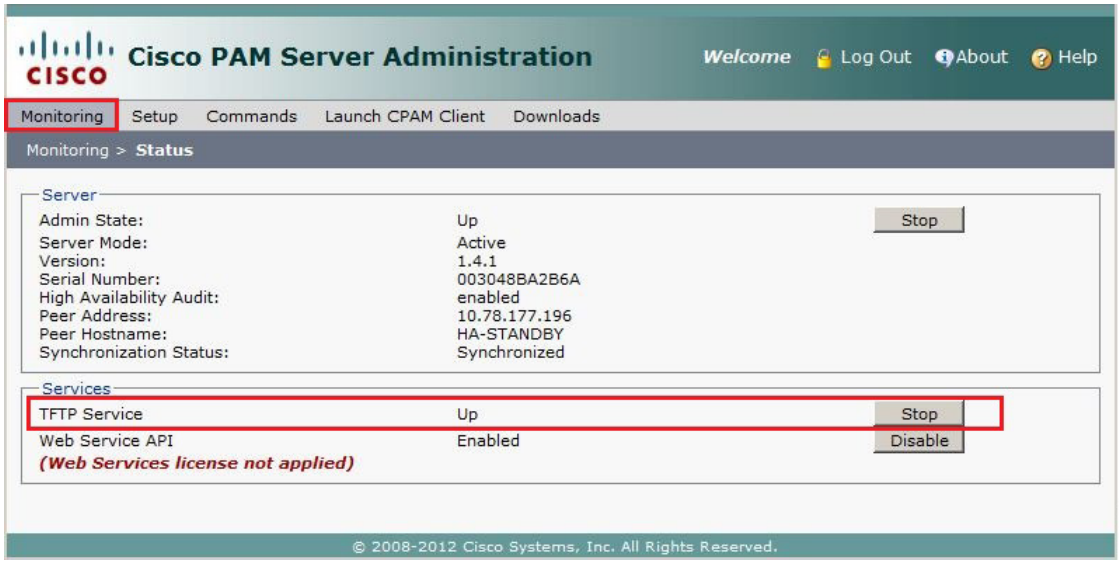
See Logging on to the Cisco PAM Server Administration Utility, page 3-2.

Step 2 Select the **Monitoring** tab and then select **Status**.

Step 3 Verify that the TFTP Service is **Up**, click **Stop**, as shown in Figure D-1.

Step 4 After the confirmation message appears, verify that TFTP Service is **Down**.

Figure D-1 TFTP Service in "Up" State



Tip Once the TFTP Service is **Down**, the button changes to **Start**. Click **Start** to enable the TFTP server.