



# APPENDIX **D**

## Troubleshooting

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If your Cisco PAM appliance is not working as expected, begin troubleshooting by following the procedures in this appendix. This appendix guides you through some initial checks and procedures that can help you solve some basic problems.

### Contents

- [Licensing: Frequently Asked Questions, page D-1](#)
- [Troubleshooting the Server Hardware, page D-3](#)

### Licensing: Frequently Asked Questions

This section provides answers to common licensing questions. For more information, see [Obtaining and Installing Optional Feature Licenses, page 4-17](#).

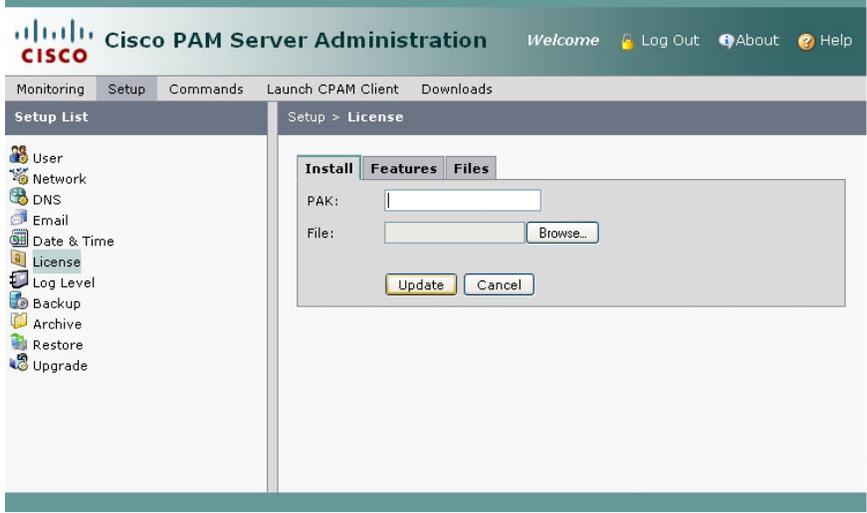
**Table D-1**      *Licensing: Frequently Asked Questions*

Question	Answer
What does the CPAM base license cover?	The base license will permit the following number of modules (Cisco or non-Cisco) to connect to the CPAM server: <ul style="list-style-type: none"><li>• Release 1.0.0: 4 modules are included with the base license</li><li>• Release 1.1.0 and later: 32 modules are included with the base license</li></ul>
What additional license SKUs are available for additional Cisco modules?	<ul style="list-style-type: none"><li>• CIAC-PAME-M64= is needed for up to 64 additional Cisco Modules</li><li>• CIAC-PAME-M128= is needed for up to 128 additional Cisco Modules</li><li>• CIAC-PAME-M512= is needed for up to 512 additional Cisco Modules</li><li>• CIAC-PAME-M1024= is needed for up to 1024 additional Cisco Modules</li></ul>
What do I need if I have 200 Cisco modules?	You need the base, plus quantity 2 of CIAC-PAME-128=
Are licenses cumulative?	Yes, if you currently have a 64 module license and need to add 50 more, you need quantity 1 of CIAC-PAME-64= to add to the current license.

Table D-1 Licensing: Frequently Asked Questions

Question	Answer
How are licenses keyed to the specific server?	<p>By the CPAM software serial number that is obtained via the CPAM admin web interface. The serial number is 16 digits in the range of 0-F. The server hardware serial number is not used.</p>  <p>The screenshot shows the Cisco PAM Server Administration web interface. The 'Monitoring &gt; Server Status' page is displayed. The 'Server Serial Number' is highlighted with a red box and is 0015175973F3. Other status information includes: Admin State: Up, Server Mode: ACTIVE, Server Version: 1.1.0, and HA: Disabled.</p>
If the CPAM is in an HA (high availability) configuration with 2 servers, do I need 2 copies of each license?	No, all licenses are installed on the primary server with the exception of the HA license. The HA license is the only license installed on the standby server.
What is the SKU for the HA feature?	CIAC-CPAME-HA= is the SKU for the HA license.
Can a license be moved to another CPAM server?	No, once a license is issued it is bound to the server serial number that the license is issued against. You must obtain a new license for the server you wish to move the license to.
Who handles licensing issues for the CPAM server?	TAC can assist with installing a license. TAC can not generate licenses. If you have a problem with the license file itself you can email <a href="mailto:licensing@cisco.com">licensing@cisco.com</a> and seek additional assistance. You should include the CPAM serial number and the purchase or sales order number as well.
What software features require a license?	<ul style="list-style-type: none"> <li>• The Badge Designer application requires SKU CIAC-BD=</li> <li>• The Enterprise Data Integration feature requires SKU CIAC-EDI=</li> </ul>

Table D-1 Licensing: Frequently Asked Questions

Question	Answer
What is the process to acquire additional licenses?	<p>Cisco or our partner generates a sales order and the licensing team then generates a PAK (Product Authorization Key). The PAK is entered into the Cisco.com licensing portal, and a license file is generated. The file can be downloaded at this point. The file is then installed onto the CPAM primary server (except the HA license which is installed on the standby server) using the web GUI interface.</p> 
What are Controller Conversion licenses for?	These are for supporting non Cisco access panels.
What are the Controller Conversion licenses SKUs?	<ul style="list-style-type: none"> <li>• CIAC-PAME-L64= is needed for up to 64 additional non-Cisco Modules</li> <li>• CIAC-PAME-L128= is needed for up to 128 additional non-Cisco Modules</li> <li>• CIAC-PAME-L512= is needed for up to 512 additional non-Cisco Modules</li> <li>• CIAC-PAME-L1024= is needed for up to 1024 additional non-Cisco Modules</li> </ul>

## Troubleshooting the Server Hardware

- [Checking the Basics, page D-3](#)
- [Checking Connections and Switches, page D-4](#)

### Checking the Basics

To solve some basic system problems, follow these steps:

- Step 1** Was an alert message issued by the system software?
- Yes.* Check the component named in the alert message.
- No.* Go to [Step 2](#).

- Step 2** Visually inspect the chassis. Is the system wet or damaged?
- Yes.* Liquid spills, splashes, and excessive humidity can cause damage to the system. If an external device such as an external drive gets wet, contact your service representative for instructions.
- If the chassis was dropped or damaged while being moved, you should check the system to see if it functions properly. If an external device attached to the system is dropped or damaged, contact your service representative for instructions (see the [“Obtaining Documentation and Submitting a Service Request”](#) section on page -xiii).
- No.* Go to [Step 3](#).
- Step 3** Perform the steps in the
- Is the problem resolved?
- Yes.* The power to the system was faulty, or the connections to the system were loose. You have fixed the problem.
- No.* Go to [Step 4](#).
- Step 4** Verify the settings in the system setup program. For details, refer to the software configuration guide or user guide that corresponds to the version of software you are running on your system (see the [“Obtaining Documentation and Submitting a Service Request”](#) section on page -xiii).
- Did the system complete the boot routine?
- Yes.* The system configuration information was incorrect. You have fixed the problem.
- No.* Call your service representative (see the [“Obtaining Documentation and Submitting a Service Request”](#) section on page -xiii).

## Checking Connections and Switches

Improperly set switches and controls and loose or improperly connected cables are the most likely source of problems for the chassis or other external equipment. A quick check of all the switches, controls, and cable connections can easily solve these problems. (See [Figure 1-8 on page 1-17](#) for the location of front panel controls and indicators. See [Figure 1-9 on page 1-18](#) for the location of back panel connections on the system.)

To check all the connections and switches, follow these steps:

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- Step 1** Power down the system, including any attached peripherals such as external drives. Disconnect all the power cables from their electrical outlets.
- Step 2** If the system is connected to a power strip (or power distribution unit), turn the power strip off and then on again.
- Is the power strip receiving power?
- Yes.* Go to [Step 5](#).
- No.* Go to [Step 3](#).
- Step 3** Plug the power strip into another electrical outlet.
- Is the power strip receiving power?
- Yes.* The original electrical outlet probably does not function. Use a different electrical outlet.
- No.* Go to [Step 4](#).
- Step 4** Plug a system that you know works into the electrical outlet.

Does the system receive power?

*Yes.* The power strip is probably not functioning properly. Use another power strip.

*No.* Go to [Step 5](#).

**Step 5** Reconnect the system to the electrical outlet or power strip.

Make sure that all connections fit tightly together.

**Step 6** Power up the system.

Is the problem resolved?

*Yes.* The connections were loose. You have fixed the problem.

*No.* Call your service representative. (See the [“Obtaining Documentation and Submitting a Service Request”](#) section on page -xiii.)

