



# APPENDIX **E**

## 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 E-1](#)

### Licensing: Frequently Asked Questions

This section provides answers to common licensing questions. For more information, see [Obtaining and Installing Optional Feature Licenses, page 2-42](#).

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

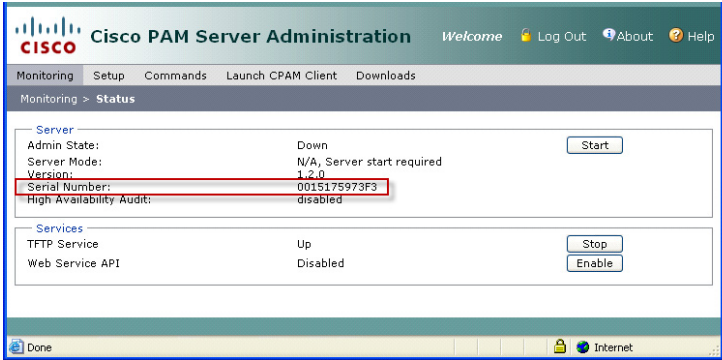
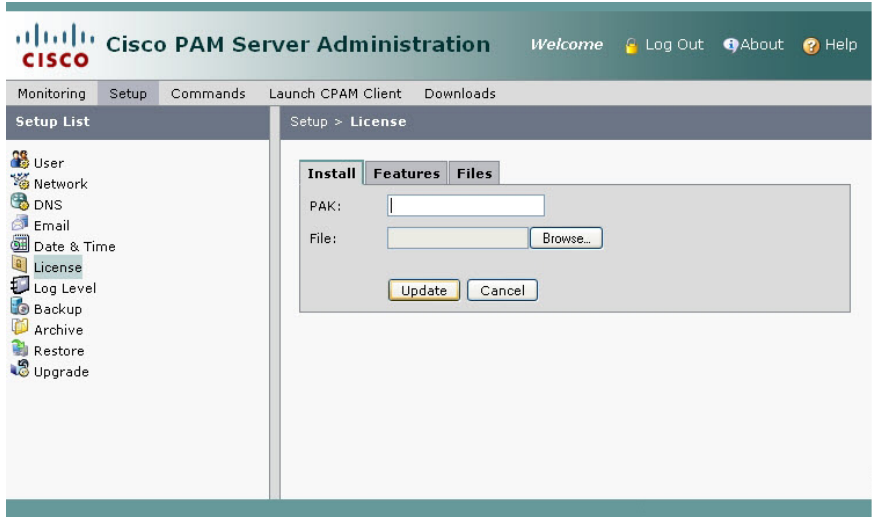
Question	Answer																		
How are licenses keyed to the specific server?	<p>By the CPAM software serial number that is obtained using the CPAM admin web interface. The serial number is 16 digits in the range of 0-F. The server hardware serial number is not used.</p>  <p>The screenshot shows the Cisco PAM Server Administration web interface. The 'Status' page displays the following information:</p> <table border="1"> <thead> <tr> <th colspan="2">Server</th> </tr> </thead> <tbody> <tr> <td>Admin State:</td> <td>Down</td> </tr> <tr> <td>Server Mode:</td> <td>N/A, Server start required</td> </tr> <tr> <td>Version:</td> <td>1.2.0</td> </tr> <tr> <td>Serial Number:</td> <td>0015175973F3</td> </tr> <tr> <td>High Availability Audit:</td> <td>disabled</td> </tr> </tbody> </table> <p>Below the server information, there are sections for 'Services':</p> <table border="1"> <thead> <tr> <th colspan="2">Services</th> </tr> </thead> <tbody> <tr> <td>TFTP Service</td> <td>Up</td> </tr> <tr> <td>Web Service API</td> <td>Disabled</td> </tr> </tbody> </table>	Server		Admin State:	Down	Server Mode:	N/A, Server start required	Version:	1.2.0	Serial Number:	0015175973F3	High Availability Audit:	disabled	Services		TFTP Service	Up	Web Service API	Disabled
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Table E-1 Licensing: Frequently Asked Questions

Question	Answer
<p>What is the process to acquire additional licenses?</p>	<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. See the <a href="#">“Obtaining and Installing Optional Feature Licenses”</a> section on page 2-42.</p> 
<p>What are Controller Conversion licenses for?</p>	<p>These are for supporting non Cisco access panels.</p>
<p>What are the Controller Conversion licenses SKUs?</p>	<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>

