



Troubleshooting

The Cisco Security Packet Analyzer 2400 series appliances undergo extensive testing before they leave the factory. If you encounter problems, use the information in this appendix to help isolate problems or to eliminate the appliance as the source of the problem.



Note

The procedures in this appendix assume that you are troubleshooting the initial Cisco Security Packet Analyzer 2400 series appliance startup, and that the appliance is in the original factory configuration. If you have removed or replaced components or changed any default settings, the recommendations in this appendix might not apply.

This appendix does not cover every possible trouble event that might occur on an appliance, but instead focuses on those events that are frequently seen by the customer.

This appendix contains the following sections:

- [Troubleshooting Guidelines](#)
- [Troubleshooting Appliance Problems](#)

Troubleshooting Guidelines

Before and at initial system boot, you should verify the following:

- External power cable is connected, and the proper power source is being applied.
- The appliance fan and blower are operating.
- The appliance software boots successfully.
- The adapter cards (if installed) are properly installed in their slots, and each initializes (is enabled by the appliance software) without problems.

When each of these conditions is met, the hardware installation is complete, and you should proceed to perform a basic configuration (see the software installation guide or user guide that shipped with your appliance for proper configuration procedures).

If you cannot locate the source of the problem, contact a customer service representative for information on how to proceed. For technical support information, see the [Cisco Information Packet](#) publication that shipped with your appliance. Before you call, have the following information ready:

- Appliance chassis type (see the [Cisco Product Identification Tool](#)) and serial number (see [Serial Number Locations](#), page A-5)
- Maintenance agreement or warranty information (see the [Cisco Information Packet](#))

- Type of software and version number (if applicable)
- Date you received the new appliance
- Brief description of the problem you are having and the steps you have taken to isolate and resolve the problem

**Note**

Ensure you provide the customer service representative with any upgrade or maintenance information that was performed on the Cisco Security Packet Analyzer 2400 series appliance after your initial installation. (For Site Log information, see [Appendix D, “Sample Site Log and Preinstallation Task Checklist”](#).)

Troubleshooting Appliance Problems

The key to problem solving is to isolate the problem to a specific location by comparing what the Cisco Security Packet Analyzer 2400 series appliance is doing to what it should be doing.

In other words, when troubleshooting, define the specific symptoms, identify all potential problems that could be causing the symptoms, and then systematically eliminate each potential problem (from most likely to least likely) until the symptoms disappear.

**Note**

The LEDs on the front panel of the appliance enable you to determine appliance performance and operation. For a description of these LEDs, see the [“Reading the LEDs” section on page 5-1](#).

When problem solving, check the following appliance subsystems first:

- Power and cooling systems—External power source, AC power cable or DC power wires, and appliance fans. Also check for inadequate ventilation, air circulation, or environmental conditions.
- Adapter cards—Checking the LEDs on the adapter card can help you to identify a failure.
- Cables—Ensure that the external cables connecting the appliance to the network are all secure.

Table A-1 provides troubleshooting tips for possible appliance subsystem problems.

Table A-1 Troubleshooting Tips

Problem Description	What to Check?	What Should You Do?
The power LED on the front panel is not on.	Is the AC power cord connected properly?	If the power LED is still off, the problem might be a power supply failure.
The appliance shuts down after being on for only a short time.	<ul style="list-style-type: none"> Check for an environmentally induced shutdown (see the “Reading the LEDs” section on page 5-1). Check the fans. If the fans are not working, the appliance will overheat and shut itself down. Ensure that the appliance intake and exhaust vents are clear. 	<ul style="list-style-type: none"> If the fans are not working, you might need to check the power supply connections to the fans. Check the environmental site requirements in Appendix C, “Technical Specifications.”
The appliance partially boots, but the LEDs do not light.	Check for a power supply failure by inspecting the power LED on the front panel of the appliance. If the LED is on, the power supply is functional.	If the LED is off, refer to the Cisco Information Packet for warranty information or contact your customer service representative.
Power supply shuts down or latches off.	Check to see if the fan has failed, the air conditioning in the room has failed or airflow is blocked to cooling vents.	Take steps to correct the problem. For information about environmental operating conditions, see the User Guide.
Adapter card is not recognized by the appliance.	<ul style="list-style-type: none"> Make sure that the adapter card is firmly seated in its slot. Check the LEDs on the adapter card. Each adapter card has its own set of LEDs. For information on these LEDs, see the “Reading the LEDs” section on page 5-1. Make sure that you have a version of software that supports the adapter card. 	For information, see the documentation that was included with your adapter card.

Table A-1 Troubleshooting Tips (continued)

Problem Description	What to Check?	What Should You Do?
Adapter card is recognized, but interface ports do not initialize.	<ul style="list-style-type: none"> • Make sure that the adapter card is firmly seated in its slot. • Check external cable connections. • Make sure that you have a version of software that supports the adapter card. Refer to the documentation that was included with your adapter card. 	For information, see the documentation that was included with your adapter card.
The appliance does not boot properly, or it constantly or intermittently reboots.	<ul style="list-style-type: none"> • Make sure that the adapter card is firmly seated in its slot. • Check the appliance chassis or the application software. 	<ul style="list-style-type: none"> • For information, see the documentation that was included with your adapter card. • For warranty information, see the <i>Cisco Information Packet</i> publication that shipped with your appliance or contact your customer service representative.
If you are using the console port with a terminal, and the appliance boots but the console screen is frozen.	<ul style="list-style-type: none"> • Check the external console connection. • Verify that the parameters for your terminal are set as follows: <ul style="list-style-type: none"> (a) The terminal should have the same data rate that the appliance has (9600 bps is the default). (b) 8 data bits. (c) No parity generated or checked. (d) 1 stop bit. 	
The appliance powers up and boots only when an adapter card is removed.	Check the adapter card. There might be a problem with the adapter card. Refer to the documentation that was included with your adapter card.	For warranty information, refer to the <i>Cisco Information Packet</i> publication that shipped with your appliance or contact your customer service representative.

Table A-1 Troubleshooting Tips (continued)

Problem Description	What to Check?	What Should You Do?
The Cisco Security Packet Analyzer 2400 series appliance powers up and boots only when a particular cable is disconnected.	There might be a problem with the cable.	For warranty information, see the <i>Cisco Information Packet</i> publication that shipped with your appliance or contact your customer service representative.
Cannot locate the product serial ID on the Cisco Security Packet Analyzer.	<p>Before you submit a request for service online or by phone, use the Cisco Product Identification tool to locate your product serial number.</p> <p>This tool offers three search options:</p> <ul style="list-style-type: none"> • Search by product ID or model name • Browse for Cisco model • Copy and paste the output of the show command to identify the product 	For the location of the Cisco Security Packet Analyzer 2400 series appliance serial number, see Serial Number Locations, page A-5 .

Serial Number Locations

The serial number for the appliance is printed on a pull-out asset tag inside the front panel. See [Figure 1-1](#).

