



Troubleshooting Hardware Components

This appendix describes how to identify and resolve problems that might occur with the hardware components of the Cisco UCS 6100 Series Fabric Interconnect. It includes the following sections:

- [Overview, page 1-1](#)
- [SNMP Traps, page 1-1](#)
- [System Hardware Best Practices, page 1-2](#)

Overview

The key to success when troubleshooting the system hardware is to isolate the problem to a specific system component. The first step is to compare what the system is doing to what it should be doing. Because a startup problem can usually be attributed to a single component, it is more efficient to isolate the problem to a subsystem rather than troubleshoot each separate component in the system.

Problems with the initial power up are often caused by a module that is not firmly connected to the backplane or a power supply that has been disconnected from the power cord connector.

Overheating can also cause problems with the system, though typically only after the system has been operating for an extended period of time. The most common cause of overheating is the failure of a fan module.

SNMP Traps

You can set SNMP traps to monitor fans, power supplies, and temperature settings, or to test a call home application. Use the following commands to set SNMP traps:

- **test pfmtest-SNMP-trap fan**
- **test pfmtest-SNMP-trap power supply**
- **test pfmtest-SNMP-trap temp-sensor**

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System Hardware Best Practices

Use the recommendations in this section to ensure the proper installation, initialization, and operation of the system. This section includes the following topics:

- [Installation Best Practices, page 1-2](#)
- [Initialization Best Practices, page 1-2](#)
- [System Operation Best Practices, page 1-2](#)

Installation Best Practices

When installing the chassis, follow these best practices:

- Plan your site configuration and prepare the site before installing the chassis.
- Verify that you have the appropriate power supplies for your chassis configuration.
- Install the chassis following the rack and airflow guidelines presented in this guide.
- Verify that the chassis is adequately grounded.

Initialization Best Practices

When the initial system boot is complete, verify the following:

- Power supplies are supplying power to the system.
- Fan modules are operating normally.
- The system software boots successfully. See the [Cisco UCS Manager CLI Configuration Guide](#) appropriate to your software version.

System Operation Best Practices

To ensure proper operation of your system, take the following actions:

- Make a copy of the running configuration to CompactFlash for a safe backup.
- Never use the **init system** CLI command unless you understand that you will lose the running and startup configuration as well as the files stored on bootflash:.