

Troubleshooting

This appendix describes how to troubleshoot the Cisco MDS 9100 Series hardware installation, and it includes the following information:

- [General System Checks, page B-11](#)
- [Troubleshooting Components, page B-11](#)
- [Identifying Startup Problems, page B-12](#)
- [Contacting Customer Service, page B-12](#)

Problems with the initial powerup are often caused by a power supply that has been disconnected from the power cord connector.

General System Checks

When the initial system boot is complete, verify that:

- The switch is installed correctly and it initializes without problems. See [Chapter 2, “Installing the Cisco MDS 9100 Series.”](#)
- Power supplies are supplying power to the system. See the [“Removing and Installing Power Supplies” section on page 2-29.](#)
- The system fan modules are operating. See the [“Removing and Installing Fan Modules” section on page 2-30.](#)

Troubleshooting Components

Ideally, you can isolate the problem to a specific (and replaceable) system component. It is more efficient to isolate the problem to a subsystem rather than troubleshoot each separate component in the system.

The Cisco MDS 9100 Series switch includes the following subsystems:

- **Power supply**—The power supplies provide power to the switch. If one of the power supplies is not working properly, then the Power Supply LED displays orange. On each power supply are two LEDs, “AC ok” and “DC ok”. If either of these LEDs are orange or red, contact a customer service representative. (See the [“Contacting Customer Service” section on page B-12.](#)) There are no installation adjustments that you can make if the power supply does not function properly at initial startup. The faulty power supply must be replaced.

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- Fan module—The fan module should operate whenever system power is on. You should see the Fan Module LED turn green and hear the fans operating. If the Fan Module LED is orange or red, this indicates that one or more fans are not operating. You should immediately contact a customer service representative. (See the “[Contacting Customer Service](#)” section on page B-12.) There are no installation adjustments that you can make if the fan modules do not function properly at initial startup. The faulty fan module must be replaced.

Identifying Startup Problems

LEDs indicate all system states in the startup sequence. By checking the LEDs, you can determine when and where the system failed in the startup sequence.

To identify startup problems, follow these steps:

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- Step 1** Turn on the power. You should immediately hear the fans begin to operate. If you determine that the power supply is functioning normally and that the fan modules are faulty, contact a customer service representative. If the fan modules do not function properly at initial startup, there are no installation adjustments that you can make. To replace the fan modules, see the “[Removing and Installing Fan Modules](#)” section on page 2-30.
- Step 2** Verify that the LEDs are on as follows:
- The Status LED flashes orange once and stays orange during diagnostic boot tests. It turns green when the switch is operational (online). If the system software cannot start up, this LED stays orange.
 - Each Link LED flashes orange once and stays orange during diagnostic boot tests, and turns green when the port is operational (online). If no signal is detected, the Link LED turns off. The Link LED blinks orange if the port is bad.
- If any LEDs on the front panel are red or orange, see the “[Contacting Customer Service](#)” section on page B-12.
- Step 3** Verify that the terminal is set correctly and that it is connected properly to the console port if the boot information and system banner are not displayed.
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Contacting Customer Service

If you cannot solve a startup problem after using the troubleshooting suggestions in this appendix, contact a customer service representative for assistance and further instructions. Before you call, have the following information ready to help your service provider assist you as quickly as possible:

- Date you received the switch
- Chassis serial number (located on a label on the right of the rear panel of the chassis)



Note If you have CLI access, run the **show sprom backplane 1** command to display the backplane contents, including the switch serial number.

- Type of software and release number
- Maintenance agreement or warranty information

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- Brief description of the problem
- Brief explanation of the steps you have already taken to isolate and resolve the problem

After you have collected this information, see the “[Obtaining Documentation, Obtaining Support, and Security Guidelines](#)” section on page -xiv.

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