



# Troubleshooting

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This chapter provides troubleshooting procedures for problems encountered during installation and consists of the following sections:

- [Solving Problems at the Component Level, page 3-1](#)
- [Identifying Startup Problems, page 3-2](#)
- [Troubleshooting the Power Supply, page 3-3](#)
- [Contacting Customer Service, page 3-3](#)

## Solving Problems at the Component Level

The key to success when troubleshooting the SN 5420 storage router is to isolate the problem to a specific storage router component. The first step is to compare what the SN 5420 storage router *is doing* to what it *should be doing*. Because a startup problem is usually attributed to a single component, it is more efficient to isolate the problem to a subsystem rather than troubleshoot each separate component in the storage router.

The SN 5420 storage router chassis consists of the following subsystems:

- The power supply operates whenever system power is on (see the [“Troubleshooting the Power Supply” section on page 3-3](#)).
- The chassis fan assembly operates when the system power is on. The fan may continue to operate even when the power supply shuts down the SN 5420 storage router because of an overtemperature or overvoltage condition (although it does shut down for a power supply shutdown).

The following are simple checks you can make to determine if there is a fan problem:

- Listen to the fan assembly to determine if it is operating.
- Check for any obstructions restricting airflow through the storage router.

If you determine that the fan is not operating, contact a customer service representative.

## Identifying Startup Problems

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

Perform the following steps when you connect the power cord to the SN 5420 storage router:

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- Step 1** Listen for the chassis fan operation. If it does not operate, see the [“Troubleshooting the Power Supply” section on page 3-3](#). If you determine that the power supply is functioning normally and that the fan is faulty, contact a customer service representative. If the SN 5420 storage router fan does not function properly at initial startup (there are no installation adjustments that you can make), contact a customer service representative.
  - Step 2** Check the POWER LED on the front panel. The POWER LED turns on immediately when power is on. The LED remains on during normal SN 5420 storage router operation. If the LED is not on, see the [“Troubleshooting the Power Supply” section on page 3-3](#).
  - Step 3** Check the LEDs on the front panel. See the [“Front-Panel LEDs” section on page 1-5](#) for LED descriptions.
  - Step 4** Verify that the PC terminal emulation program is set correctly and that the PC is connected properly to the RS-232 management port if the boot information, storage router banner, and CLI prompt are not displayed.
  - Step 5** Contact a customer service representative for instructions if a status LED indicates a failure or if the PC connected to the RS-232 management port indicates an incomplete boot-up process.
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# Troubleshooting the Power Supply

To help isolate a power problem, follow these steps:

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- Step 1** Check the POWER LED.
- If the POWER LED is off, unplug the power cord, and then plug the power cord back in.
  - If the POWER LED remains off, check the AC source or the power cable for problems.
- Step 2** Connect the power cord to another power source if one is available.
- If the POWER LED comes on, the problem is the first power source.
  - If the POWER LED is off after you connect the power supply to a new power source, replace the power cord.
  - If the POWER LED still fails to light when the storage router is connected to a different power source with a new power cord, the power supply is probably faulty.
- Step 3** Check the line filter fuses in the voltage selector. Replace them if they are burned out. Make sure that the voltage selector setting matches the source power. If the line filter fuses continue to burn out, there is a problem with either the power supply or the power source.
- Step 4** If you are unable to resolve the problem, contact a customer service representative for instructions.
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## Contacting Customer Service

If you are unable to solve a startup problem after using the troubleshooting suggestions in this chapter, contact a customer service representative for assistance and further instructions. Before you call, have the following information ready to help your service representative assist you as quickly as possible:

- Date you received the SN 5420 storage router

- Chassis serial number (located on a label to the right of the power connector on the rear panel of the chassis)
- Type of software and release number
- Maintenance agreement or warranty information
- Brief description of the problem
- Brief explanation of the steps you have already taken to isolate and resolve the problem