



Operating the Appliance

This chapter describes how to identify the components and other hardware features of the Cisco 8300 Series AON Appliance. It also provides information to help you troubleshoot hardware problems. It contains the following sections:

- [Bringing the Appliance Online, page 3-1](#)
- [Troubleshooting Hardware Problems, page 3-4](#)



Note

This chapter covers only hardware-related topics. For pointers to detailed information on configuring software on the Cisco 8300 Series AON Appliance, see the [“Related Documentation” section on page xi](#).

Bringing the Appliance Online

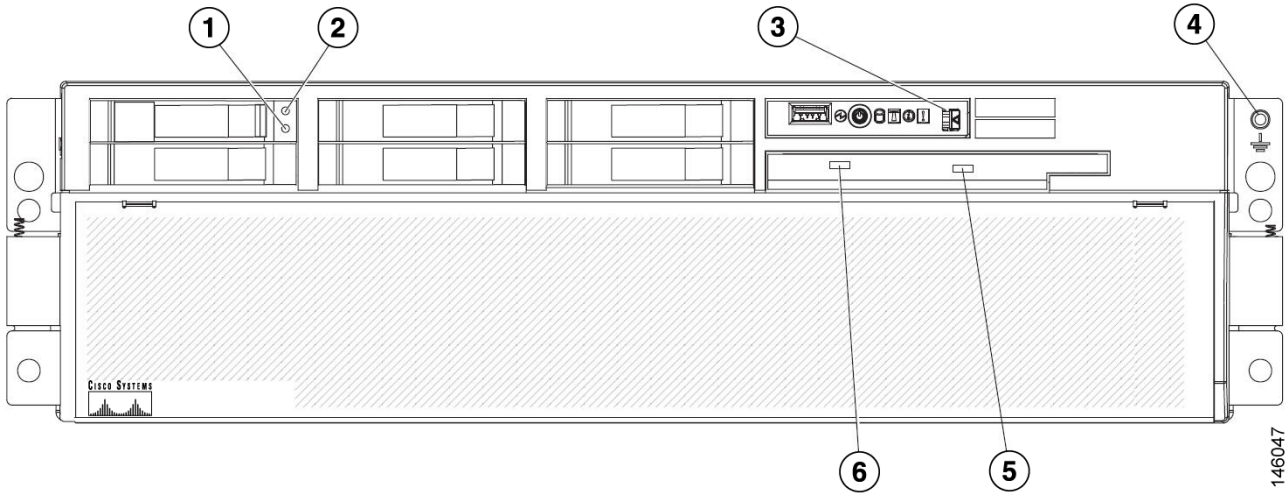
Once you have installed the Cisco 8300 Series AON Appliance in a rack, use the sections that follow to complete the installation and bring the appliance online:

- [Identifying External Components and Connectors, page 3-2](#)
- [Connecting to AC Power, page 3-3](#)
- [Connecting to a Network, page 3-3](#)
- [Connecting a Serial Cable, page 3-4](#)
- [Where to Go Next, page 3-4](#)

Identifying External Components and Connectors

Figure 3-1 shows the indicators and controls on the front panel of the appliance.

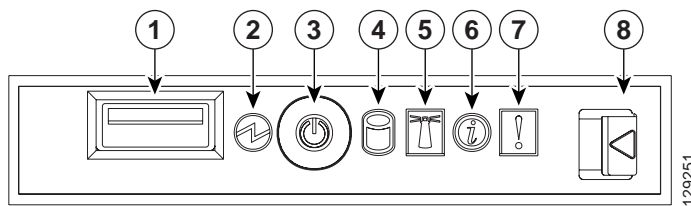
Figure 3-1 Front Panel



| | | | |
|---|---|---|-----------------------------------|
| 1 | Hard disk drive status LED | 4 | Electrostatic-discharge connector |
| 2 | Hard disk drive activity LED | 5 | DVD drive activity LED |
| 3 | Operator information panel and latch for Light Path Diagnostics | 6 | DVD-eject button |

Figure 3-2 shows the indicators on the operator information panel located on the front of the appliance.

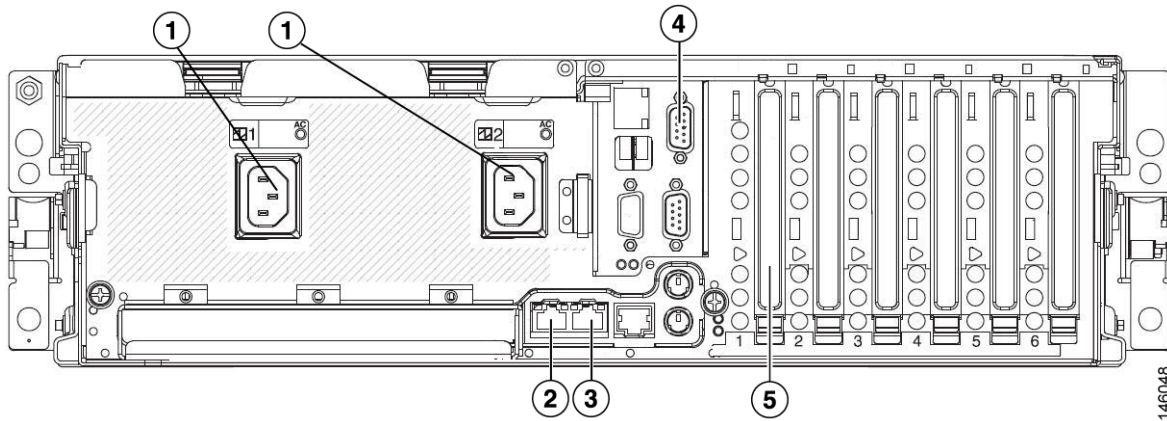
Figure 3-2 Operator Information Panel



| | | | |
|---|--------------------------------------|---|--|
| 1 | USB connector | 5 | Location LED (blue) |
| 2 | Power LED (green) | 6 | Information LED (amber) |
| 3 | Power control button | 7 | System-error LED (amber) |
| 4 | Hard disk drive activity LED (green) | 8 | Release latch for Light Path Diagnostics |

Figure 3-3 shows the I/O and power connectors on the rear panel of the appliance.

Figure 3-3 Rear Panel I/O and Power Connectors



| | | | |
|---|--------------------|---|---------------------|
| 1 | Power supplies | 4 | Console serial port |
| 2 | Gigabit Ethernet 1 | 5 | Gigabit Ethernet 3 |
| 3 | Gigabit Ethernet 2 | | |



Note

Only the four connectors listed above are used by the Cisco 8300 Series AON Appliance. Do not connect devices to other ports or connectors.

Connecting to AC Power

Connect each of the appliance's two power supplies to a 15 A, 120 VAC (10 A, 240 VAC) circuit with overcurrent protection.



Warning

This product relies on the building's installation for short-circuit (overcurrent) protection. Ensure that the protective device is rated not greater than: 15A, 120VAC (10A, 240VAC). Statement 1005

Connecting to a Network

The Cisco 8300 Series AON Appliance has three Gigabit Ethernet connections. Connect an RJ-45 cable to Gigabit Ethernet 1.



Note

Gigabit Ethernet 1 is the primary interface for network and management traffic. The other Ethernet interfaces are not enabled in some AON software releases. See the *Cisco Application-Oriented Networking Administration Guide* for information related to Ethernet interfaces and your AON software release.

Connecting a Serial Cable

The appliance has a serial console port (RJ-45). Depending on the cable and the adapter used, this port appears as a DTE or DCE device at the end of the cable.

For connection to a PC running terminal emulation software, use the RJ-45 to DB-9 adapter cable that shipped with your appliance. Connect the included serial cable to the appropriate port, as shown in [Figure 3-3 on page 3-3](#). Then configure your terminal application with the following settings:

- 9600 baud
- 8 data bit
- N (no) parity
- 1 stop bit

**Note**

Terminal emulation software must use ANSI display and ANSI keyboard settings to connect to the appliance.

Where to Go Next

See the following documents to complete the configuration of the Cisco 8300 Series AON Appliance:

- *Cisco Application-Oriented Networking Installation Guide*
- *Cisco Application-Oriented Networking Administration Guide*

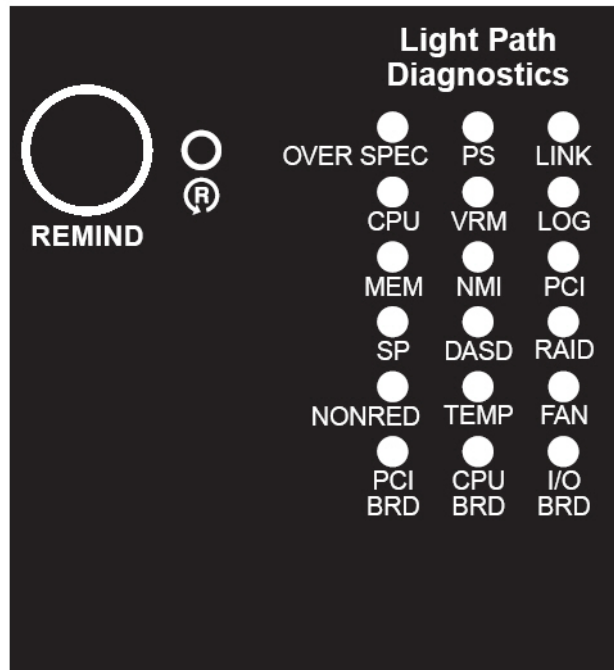
See the [“Obtaining Documentation” section on page xi](#) for information on how to obtain documentation.

Troubleshooting Hardware Problems

Use Light Path Diagnostics to diagnose system errors. The Light Path Diagnostics panel is inside the operator information panel, on the right front of the appliance (see [Figure 3-1 on page 3-2](#)). To access the Light Path Diagnostics panel, slide the latch to the left on the front of the Light Path Diagnostics drawer.

Figure 3-4 shows the controls and LEDs on the Light Path Diagnostics panel.

Figure 3-4 Light Path Diagnostics Panel



To acknowledge a system error but not take immediate action, press the Remind button and place Light Path Diagnostics in remind mode. When the appliance is in remind mode, the system-error LED on the front of the appliance flashes. If a new failure occurs, the system-error LED is lit again.

Press the Reset button to reset the appliance and run the power-on self-test (POST). You might have to use a pen or the end of a straightened paper clip to press the button.

The appliance is designed so that LEDs remain lit when the appliance is connected to an AC power source but is not turned on, provided that the power supply is operating correctly. This feature helps you to isolate the problem when the operating system is shut down.

Any memory, microprocessor, and VRM LED can be lit again without AC power after you remove the microprocessor tray so that you can isolate a problem. After AC power has been removed from the appliance, power remains available to these LEDs for up to 24 hours.

To view the memory, microprocessor, and VRM LEDs, press and hold the Light Path Diagnostics button on the memory card or microprocessor board to light the error LEDs. The LEDs that were lit while the appliance was running will be lit again while the button is pressed.

Using LEDs to Identify Problems

LEDs in three locations on the appliance are available to help you diagnose problems that might occur during installation and operation of the Cisco 8300 Series AON Appliance. Use them in the following order:

1. **Operator information panel**—Look at this panel first. If an error has occurred, the information LED or the system-error LED is lit.

2. **Light Path Diagnostics panel**—Move the latch on the right front of the operator information panel to access the light path diagnostics panel. Note any LEDs that are lit, and then close the panel. For LED locations, see [Figure 3-4 on page 3-5](#).
3. **LEDs inside the appliance**—To identify the component that is causing the error, note the lit LED beside or on the component.



Note

Cisco does not support field replacement of most components. Only hard disk drives can be replaced in the field. Contact your Cisco support representative for other hardware issues.

[Table 3-1](#) describes the LED indicators on the Light Path Diagnostics panel.

Table 3-1 *Light Path Diagnostics Panel*

| Light Path Diagnostics LED | Description |
|----------------------------|---|
| OVERSPEC | There is insufficient power to power the system. NON RED and LOG might also be lit. |
| PS | A power supply has failed or has been removed. Note In redundant power configuration, the AC power LED on one power supply may be off. |
| LINK | Not used. |
| CPU | A CPU has failed, is missing, or has been improperly installed. Contact your Cisco support representative. |
| VRM | A voltage regulator module has failed or is missing. |
| LOG | Not used. |
| MEM | A memory module has failed. The error LED on the memory card should also be lit. |
| NMI | A hardware error has occurred. The PCI or MEM LED may also be lit. |
| PCI | Not used. |
| SP | Not used. |
| DASD | A hard disk has failed or has been removed. The error LED on the failing disk drive is also lit. See the “Replacing Hard Disk Drives” section on page 3-7 . |
| RAID | The RAID adapter (ServeRAID 8i) has indicated a fault. |
| NONRED | The system is operating without redundant power. If a power supply or its AC power source should fail, the OVERSPEC LED will light. |
| TEMP | The system or a component has exceeded temperature specifications. The FAN LED might also be lit. |
| FAN | A fan has failed or has been removed. A failing fan can also cause the TEMP LED to light. |
| PCI BRD | Not used. |
| CPU BRD | The microprocessor tray has failed. |
| I/O BRD | The I/O board has failed. |

Replacing Hard Disk Drives

Complete the following steps to replace a hard disk drive:

- Step 1 Read the [“Warnings” section on page 1-1](#) to ensure safety and to prevent equipment damage.
- Step 2 Remove the defective hard disc drive from its hot-swap bay.
- Step 3 Wait at least two minutes to allow time for the existing hard disk drive to spin to a stable state.
- Step 4 Make sure that the tray handle on the new drive is open, then install the drive in the hot-swap bay, as shown in [Figure 3-5](#).
- Step 5 Repeat steps 2-4 for each additional hard drive that you want to replace.

Figure 3-5 Installing a Hard Disk Drive

