



Maintaining the Cisco MGC

This chapter contains the recommended hardware maintenance procedures for the Cisco Media Gateway Controller (MGC). The Cisco MGC performs call-processing, trunk resource management, alarm management, and routing. Cisco MGCs also provide various Cisco telephony solutions with Advanced Intelligent Network (AIN) capabilities, including the ability to detect conditions that cause the Cisco MGC to query service logic for further call-processing instructions. Cisco MGCs can be installed in simplex or continuous service configurations. In simplex configurations, only one Cisco MGC is equipped. In continuous service configurations, two Cisco MGCs are equipped. Only one Cisco MGC is active at any given time in a continuous service configuration, while the other Cisco MGC operates in standby mode. The Cisco MGC runs on a variety of Sun Netra UNIX systems.

This chapter briefly describes hardware maintenance for the Cisco MGC. For more detailed information, refer to the documentation provided by Sun Microsystems for your hardware platform. For information on upgrading and maintaining Cisco MGC software, refer to the *Cisco Media Gateway Controller Software Release 7 Installation and Configuration Guide*.

This chapter includes the following sections:

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Checking Equipment Status

You can quickly check the status of the Cisco MGC by using the following methods:

- Reading the LEDs
- Querying the system using UNIX and Man-Machine Language (MML) commands

The UNIX and MML commands for querying the status of the system are found in [“Cisco MGC Node Operations” section on page 3-1](#). Information about the LEDs on the Cisco MGC hosts is found in the sections that follow.

Sun Netra LEDs

The Sun Netra t 1120/1400 and Sun Netra t 1125/1405 display the following LEDs:

- POWER—Green LED is illuminated at all times when the system is on.

- **SYSTEM**—Green LED is off (or reset) during power-up procedures and is illuminated when UNIX is running and the alarms driver is installed. This LED is reset by a hardware Watchdog timeout, or when the user-defined Alarm3 (spare) is asserted.
- **ALARM1**—Amber LED is illuminated when the user-defined Alarm 1 is asserted.
- **ALARM2**—Amber LED is illuminated when the user-defined Alarm 2 is asserted.
- **SPARE**—Amber LED is reserved for future enhancement.

The DC-powered Sun Netra t 1120/1400 displays the following additional LEDs:

- **SUPPLY A**—Green LED is illuminated when DC input A is present and the system is powered on.
- **SUPPLY B**—Green LED is illuminated when DC input B is present and the system is powered on.

Sun Enterprise 450 LEDs

The Sun Enterprise 450 platform is no longer being offered. However, customers upgrading their MGC software to Release 7 might be using this platform. For this reason, information on the LEDs for this platform is provided.

[Table 5-1](#) describes the LEDs, and their associated icons, for the Sun Enterprise 450 platform.

Table 5-1 LED Descriptions for the Sun Enterprise 450 Platform

Name	Icon	Description
Power-on		This green LED lights steadily while the system power is on and the keyswitch is in the On, Diagnostics, or Locked position.
General fault		This yellow LED blinks slowly while the system runs its power-on self-test (POST) diagnostics and blinks rapidly during OpenBoot diagnostics (OBdiag) tests. It lights steadily when any fault is detected (including a fault also reported by another LED).
Activity		This green LED blinks continuously if the system is operating normally.
Disk fault		This yellow LED lights steadily if there is a fault in one of the hard disk drives. When this LED is lit, one or more disk LEDs might also be lit, indicating the source of the fault.
Temperature fault		This yellow LED lights steadily if there is an over-temperature condition in the system or a faulty fan assembly.
Power supply fault		This yellow LED lights steadily if there is a fault in one of the power supplies. When this LED is lit, LEDs on the rear of each power supply indicate the source of the fault.

Maintaining Technical Support Staff

Skill Level of Personnel

The engineering staff must collectively have training specific to the Sun Netra to support the product in the field. To be classified as “certified” by Sun, support personnel must successfully complete the Sun certification training courses and pass the Solaris administrator’s certification examinations.

All engineers must be able to perform the following tasks:

- User assistance
- Problem diagnosis and duplication
- Hardware replacement
- Patch distribution

The technical profile portion of the Sun audit analyzes the technical ability of service personnel and determines if the number of support staff is sufficient for quality customer support.

Staff Software Troubleshooting Tools

The support engineers must have a current version of Sunsolve to assist in troubleshooting and resolving problems.

Maintaining Components

For more detailed information, see the *Cisco Media Gateway Controller Hardware Installation Guide*.

Software Upgrades

Refer to the *Cisco Media Gateway Controller Software Release 7 Installation and Configuration Guide* for a description of the procedures for software upgrades.

