



Maintaining the Cisco Prime NAM 2404 Appliance

This chapter provides instructions for maintaining your Cisco Prime NAM 2404 appliance.

These instructions are intended for technicians who are experienced with installing, replacing, and removing the hardware components from electronic devices and are familiar with the Cisco Prime NAM 2404 appliances. Additionally, site planners, network administrators, and facility maintenance personnel might also find this chapter helpful.

This chapter contains the following sections:

- [General Maintenance Guidelines](#)
- [Reading the LEDs](#)
- [Replacing Appliance Components](#)
- [Removing or Replacing the Cisco Prime NAM 2404 Appliance](#)

General Maintenance Guidelines

For information about general maintenance tasks, see the *Preparing the Site* section in the *Cisco UCS Site Preparation Guide*.

Reading the LEDs

There are several LEDs on a Cisco Prime NAM 2404 appliance. LEDs serve the following purposes:

- Indicate that basic power is available to the appliance
- Guide you to a broken adapter card, or to one that has failed its diagnostics
- Give an indication that traffic is flowing through the adapter card to the appliance

The LEDs on the front panel of the Cisco Prime NAM 2404 appliance and corresponding adapter card are aids for determining appliance and adapter performance and operation.

This section describes the location and meaning of LEDs and buttons and includes the following topics:

- [Cisco Prime NAM 2404 LEDs](#)
- [Reading the NIC LEDs](#)
- [Reading the AC Power Supply LED](#)

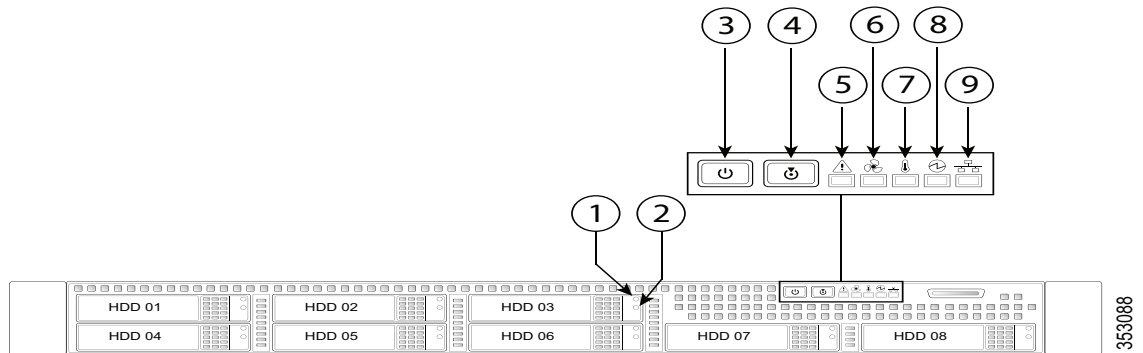
Cisco Prime NAM 2404 LEDs

These sections describe the location and meaning of the LEDs for the Cisco Prime NAM 2404 appliance.

Reading the Cisco Prime NAM 2404 Front-Panel LEDs

Figure 5-1 shows the front-panel LEDs for the Cisco Prime NAM 2404. Table below defines the LED states.

Figure 5-1 Cisco Prime NAM 2404 Appliance Front View



1	Hard drive fault LED Note: NVMe PCIe SSDs drive tray LEDs have slightly different behavior. See Table 5-1 for the LED states.	6	Fan status LED
2	Hard drive activity LED	7	Temperature status LED
3	Power button/power status LED	8	Power supply status LED
4	Identification button/LED	9	Network link activity LED
5	System status LED		

Table 5-1 Cisco Prime NAM 2404 Appliance Front Panel LEDs, Definitions of

	LED Name	State
1 SAS	SAS/SATA drive fault Note: If your controller is a Cisco UCS RAID SAS 9300-8i or 9300-8e HBA, see the Cisco UCS SAS 9300-8e HBA Considerations Section in the Cisco UCS C220 M4 Server Installation and Service Guide, for differing LED behavior.	<ul style="list-style-type: none"> • Off—The hard drive is operating properly. • Amber—Drive fault detected. • Amber, blinking—The device is rebuilding. • Amber, blinking with one-second interval—Drive locate function activated.
2 SAS	SAS/SATA drive activity	<ul style="list-style-type: none"> • Off—There is no hard drive in the hard drive tray (no access, no fault). • Green—The hard drive is ready. • Green, blinking—The hard drive is reading or writing data.
1 PCI e	NVMe PCIe SSD status (SFF, 8-drives version only)	<ul style="list-style-type: none"> • Off—The drive is not in use and can be safely removed. • Green—The drive is in use and functioning properly. • Green, blinking—the driver is initializing following insertion or the driver is unloading following an eject command. • Amber—The drive has failed. • Amber, blinking—A drive Locate command has been issued in the software.
2 PCI e	NVMe PCIe SSD activity (SFF, 8-drives version only)	<ul style="list-style-type: none"> • Off—No drive activity. • Green, blinking—There is drive activity.
3	Power button/LED	<ul style="list-style-type: none"> • Off—There is no AC power to the server. • Amber—The server is in standby power mode. Power is supplied only to the Cisco IMC and some motherboard functions. • Green—The server is in main power mode. Power is supplied to all server components.
4	Unit identification	<ul style="list-style-type: none"> • Off—The unit identification function is not in use. • Blue—The unit identification function is activated.

	LED Name	State
5	System status	<ul style="list-style-type: none"> • Green—The server is running in normal operating condition. • Green, blinking—The server is performing system initialization and memory check. • Amber, steady—The server is in a degraded operational state. For example: <ul style="list-style-type: none"> – Power supply redundancy is lost. – CPUs are mismatched. – At least one CPU is faulty. – At least one DIMM is faulty. – At least one drive in a RAID configuration failed. • Amber, blinking—The server is in a critical fault state. For example: <ul style="list-style-type: none"> – Boot failed. – Fatal CPU and/or bus error is detected. – Server is in an over-temperature condition.
6	Fan status	<ul style="list-style-type: none"> • Green—All fan modules are operating properly. • Amber, steady—One or more fan modules breached the critical threshold. • Amber, blinking—One or more fan modules breached the non-recoverable threshold.
7	Temperature status	<ul style="list-style-type: none"> • Green—The server is operating at normal temperature. • Amber, steady—One or more temperature sensors breached the critical threshold. • Amber, blinking—One or more temperature sensors breached the non-recoverable threshold.

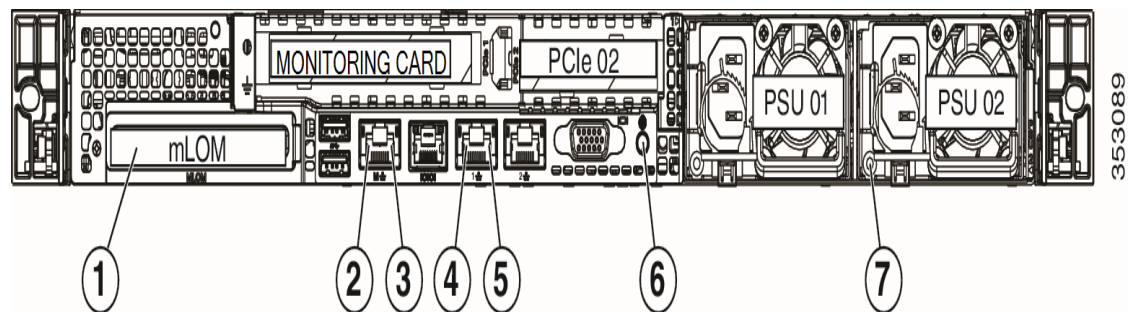
	LED Name	State
8	Power supply status	<ul style="list-style-type: none"> Green—All power supplies are operating normally. Amber, steady—One or more power supplies are in a degraded operational state. Amber, blinking—One or more power supplies are in a critical fault state.
9	Network link activity	<ul style="list-style-type: none"> Off—The Ethernet link is idle. Green—One or more Ethernet LOM ports are link-active, but there is no activity. Green, blinking—One or more Ethernet LOM ports are link-active, with activity.

States

Reading the Cisco Prime NAM 2404 Rear-Panel LEDs

Figure 5-2 shows the rear-panel LEDs for the Cisco Prime NAM 2404.

Figure 5-2 Cisco Prime NAM 2404 Appliance Rear View



1	Optional mLOM card LEDs (not shown, see Table 5-2)	5	1-Gb Ethernet link status LED
2	1-Gb Ethernet dedicated management link status LED	6	Rear unit identification button/LED
3	1-Gb Ethernet dedicated management link speed LED	7	Power supply status LED
4	1-Gb Ethernet link speed LED		

Table 5-2 Cisco Prime NAM 2404 Appliance Rear Panel LEDs, Definitions

	LED Name	State
1	Optional mLOM 10-Gb SFP (there is a single status LED)	<ul style="list-style-type: none"> Off—No link is present. Green, steady—Link is active. Green, blinking—Traffic is present on the active link.
1	Optional mLOM 10-Gb BASE-T link speed	<ul style="list-style-type: none"> Off—Link speed is 10 Mbps. Amber—Link speed is 100 Mbps/1 Gbps. Green—Link speed is 10 Gbps.
1	Optional mLOM 10-Gb BASE-T link status	<ul style="list-style-type: none"> Off—No link is present. Green—Link is active. Green, blinking—Traffic is present on the active link.
2	1-Gb Ethernet dedicated management link speed	<ul style="list-style-type: none"> Off—Link speed is 10 Mbps. Amber—Link speed is 100 Mbps. Green—Link speed is 1 Gbps.
3	1-Gb Ethernet dedicated management link status	<ul style="list-style-type: none"> Off—No link is present. Green—Link is active. Green, blinking—Traffic is present on the active link.
4	1-Gb Ethernet link speed	<ul style="list-style-type: none"> Off—Link speed is 10 Mbps. Amber—Link speed is 100 Mbps. Green—Link speed is 1 Gbps.
5	1-Gb Ethernet link status	<ul style="list-style-type: none"> Off—No link is present. Green—Link is active. Green, blinking—Traffic is present on the active link.
5	1-Gb Ethernet link status	<ul style="list-style-type: none"> Off—No link is present. Green—Link is active. Green, blinking—Traffic is present on the active link.

	LED Name	State
6	Rear unit identification	<ul style="list-style-type: none"> Off—The unit identification LED is not in use. Blue—The unit identification LED is activated.
7	Power supply status	<p>AC power supplies:</p> <ul style="list-style-type: none"> Off—No AC input (12 V main power off, 12 V standby power off). Green, blinking—12 V main power off; 12 V standby power on. Green, solid—12 V main power on; 12 V standby power on. Amber, blinking—Warning threshold detected but 12 V main power on. Amber, solid—Critical error detected; 12 V main power off (for example, over-current, over-voltage, or over-temperature failure). <p>DC power supply (UCSC-PSUV2-1050DC):</p> <ul style="list-style-type: none"> Off—No DC input (12 V main power off, 12 V standby power off). Green, blinking—12 V main power off; 12 V standby power on. Green, solid—12 V main power on; 12 V standby power on. Amber, blinking—Warning threshold detected but 12 V main power on. Amber, solid—Critical error detected; 12 V main power off (for example, over-current, over-voltage, or over-temperature failure).

Input/Output Ports and Connectors

The Cisco Prime NAM 2404 support the following ports on the rear of the appliance:

- Cisco Prime NAM management port (LAN1, marked “1”)

Additional ports include:

- The video connector is not required for normal day-to-day operation of the Cisco Prime NAM appliance.
- The built-in port labeled “M” is the Cisco Integrated Management Controller (CIMC) port.



Note You can either use a single connection on port "1" for both pRIME nam management and CIMC or use port "1" for Cisco Prime NAM management and port "M" for CIMC to connect them to different switches.

The Cisco Prime NAM 2404 series appliance use the following connector types:

Reading the NIC LEDs

Figure 5-3 shows the NIC 1 LEDs located on the rear of the NAM appliance. These LEDs indicate the connection activity and speed of the NIC ports. Table 5-3 describes the activity and connection speed associated with each LED state.

Figure 5-3 NIC 1 LEDs

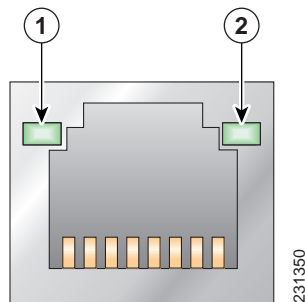


Table 5-3 NIC 1 LED Descriptions

Location	LED	Color	State	Description
1	Left		Off	No network connection
		Green	Solid	Network connection
		Green	Blinking	Transmit/receive activity
2	Right		Off	10-Mb/s connection (if left LED is on or blinking)
		Green	Solid	100-Mb/s connection
		Amber	Solid	1000-Mb/s (or 1-Gb/s) connection

Reading the AC Power Supply LED

The rear of Cisco Prime NAM 2404 appliances include LEDs that indicate the power status of the AC power supply. (See location 2 in [Figure 5-2](#).) [Table 5-4](#) describes the power status associated with the AC power supply LED.

Table 5-4 AC Power Supply LED

LED	Color	State	Description
Below AC power supply input connector		Off	No AC input power to power supply
	Green	Blinking	AC power applied to power supply and standby voltages are available
	Green	Solid	All power available
	Amber	Blinking	AC power supply warning due to overcurrent or overtemperature condition or slow fan
	Amber	Solid	AC power supply failed or shut down due to blown fuse, high overcurrent or overtemperature condition, or fan failure

Replacing Appliance Components

[Table 5-5](#) lists the Field Replaceable Units (FRUs) of the Cisco Prime NAM 2404 appliances.

Table 5-5 Cisco Prime NAM 2404 Appliances FRUs

Description	Notes
SFP	See Replacing Transceiver Modules , page 5-9.
Hard Disk Drive, 1 TB	See Removing and Replacing a Hard Disk Drive , page 5-10.
AC Redundant Power Supply	See Installing or Replacing a Power Supply , page 5-10.
UCS PCIe NIC Card	See Installing or Removing a UCS PCIe NIC Card , page 5-9

Installing or Removing a UCS PCIe NIC Card

For information about installing or removing a UCS PCIe NIC Card in Cisco Prime NAM 2404 appliances, see the [Replacing a PCIe Card](#) section in the Cisco UCS C220 Server Installation and Service Guide for NAM 2404 appliance.

Replacing Transceiver Modules

To replace an SFP transceiver module in a Cisco Prime NAM 2404 appliance:

- Step 1** Locate the new transceiver module you plan to install, remove any protective packaging, and examine it for any signs of damage.
- Step 2** Determine which module you want to replace on the Cisco Prime NAM rear panel.
- Step 3** Remove the fiber optical cable from the module to be replaced.

- Step 4** With your finger, pull the latch down to release the module from its latched position (see [Figure 2-2](#)).
- Step 5** Using the latch, pull the SFP out of the appliance and place it in a safe location.
- Step 6** Insert the new SFP into the slot and slide it in until you feel resistance, then push the SFP harder until you feel (or hear) it click into its socket.
- Step 7** With your finger, pull the latch upwards to lock the SFP into its slot (see [Figure 2-3](#)).
- Step 8** Replace the fiber optical cable.



Note If you use NIC card with RJ45 ports, do not install the transceiver modules.

Removing and Replacing a Hard Disk Drive

For information about replacing hard disk drives in Cisco Prime NAM 2404 appliances, see the [Replacing Hard Drives or Solid State Drives](#) section in the Cisco UCS C220 Server Installation and Service Guide for NAM 2404 appliance.

Customer should not swap any disk with another disk inside the same NAM appliance. This will make the RAID unrecoverable and all data on the RAID will be lost.



Note A single disk failure per RAID can be fixed in the field by replacing the failed disk with an exactly matching disk. You should not swap any disk with another disk inside the same NAM appliance. It makes the RAID unrecoverable and all data on the RAID is lost.

Installing or Replacing a Power Supply.

For information about replacing power supplies in Cisco Prime NAM 2404 appliances, see the [Replacing Power Supplies](#) section in the Cisco UCS C220 Server Installation and Service Guide for NAM 2404 appliance.

Removing or Replacing the Cisco Prime NAM 2404 Appliance

Always use the NAM CLI command **shutdown** to shut down the NAM application.



Warning **Power off the unit before you begin.** Statement 237



Warning **Ultimate disposal of this product should be handled according to all national laws and regulations.** Statement 1040

To remove a Cisco Prime NAM 2404 appliance from your network, use the NAM CLI command **shutdown** to shut down the NAM application.

The appliance is in constant communication on your network, which means that when the network notices that the appliance is no longer responding to it, the network stops sending requests to the appliance. This change is transparent to users. If other appliances are attached to the network, the network continues sending requests to the other appliances.

To replace an appliance, remove it from the network. Then, install a new appliance and configure it using the same configuration parameters that you used for the removed appliance.

