Monitoring the Cisco CMC

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Verifying the Cisco CMC Using the LEDs

Verify the following LEDs located inside the Cisco CMC to check if it is operational.

LED	Status	Description
PWR	Off	The Cisco CMC is not powered up.
	Green	The Cisco CMC is powered up.
UPLINK	Off	Passive Optical Network (PON) or Metro Ethernet is not configured.
	Green	PON or Metro Ethernet is configured.
	Green (blinking)	PON or Metro Ethernet is configured and transmitting data.
DS RF	Off	Downstream RF is not connected.
	Green	Downstream RF is connected.
ALARM	Off	The Cisco CMC is working.
	Yellow (major alarm)	Indicates one of the following: • The power received on the Optical Network Unit (ONU) is less than -25 dBm, and the connection between the ONU and Optical Line Terminal (OLT) is unstable or down. • The FPGA on the Cisco CMC is not working and the Cisco CMC must be restarted. • Voltage or current has exceeded the major threshold value. • Temperature has exceeded the major threshold value.
	Red (critical alarm)	Indicates one of the following: • The CPU on the Cisco CMC is not working. • Voltage or current has exceeded the critical threshold value and the Cisco CMC must be shut down. • Temperature has exceeded the critical threshold value and the Cisco CMC must be shut down. • The switch is not working and the Cisco CMC cannot be accessed.

LED	Status	Description
STATUS	Off	The Cisco CMC has not booted or run the power-on self-test (POST).
	Green	The Cisco CMC is connected to the Cisco CMTS and has received an IP address.
	Green (blinking)	The Cisco CMC is in bootup mode and running the power-on self-test.
RESERVED	None	Reserved for future use.
GE0 and GE1	Off	The RJ-45 Gigabit Ethernet port is not configured on the Cisco CMC.
	Green	The RJ-45 Gigabit Ethernet port is configured on the Cisco CMC.
	Green (blinking)	The RJ-45 Gigabit Ethernet port is configured on the Cisco CMC and transmitting data.

Verify the following LEDs located inside the Cisco CMC to check if the FRx is operational.

LED	Status	Description
COMM	Off	There is no power.
	Green	There is no communication.
	Green (blinking)	Communication is working.
OPTICAL POWER	Off	Optical input level is normal (optical input level ≥ -6 dBm)
	Red (blinking)	Low optical input level (-10 dBm ≤ optical input level < -6 dBm)
	Red	No optical input (optical input level < -10 dBm)

Verifying the Cisco CMC Using the CLI

Using the Cisco CMTS Commands

Use the following commands on the Cisco CMTS to verify the Cisco CMC configuration.

Table 1: Commands for Monitoring the Cisco CMC using the Cisco CMTS

Command	Purpose
show cable cmc	Displays the Cisco CMC information.

Command	Purpose
show cable channel-group	Displays information on the associated Cisco CMCs in the channel group.

Using the Cisco CMC Commands

Use the following commands on the Cisco CMC console to verify the Cisco CMC configuration.

Table 2: Commands for Monitoring the Cisco CMC using the Cisco CMC Console

Command	Purpose
show frx	Displays the FRx information on the Cisco CMC.
show frx alarm	Displays the FRx alarm information on the Cisco CMC.
show gcp config command stats info	Displays the statistics information for the Generic Control Protocol (GCP) Exchange Data Structure (EDS) messages at *command* level.
show gcp config op stats info	Displays the statistics information for the GCP EDS messages at *operation code* level.
show gcp config subtype stats info	Displays the statistics information for the GCP EDS messages at *TLV* level.
show gcp stats	Displays the GCP statistics information.
show hardware	Displays the basic hardware information of the Cisco CMC.
show hardware alarm active	Displays the current information of the hardware sensor monitors on the Cisco CMC.
show hardware alarm history	Displays information on the history of the hardware sensor monitors on the Cisco CMC.
show hardware alarm threshold	Displays the alarm threshold information for the hardware sensor monitors on the Cisco CMC.
show igmp status	Displays the current Internet Group Management Protocol (IGMP) status on the Cisco CMC.
show log file	Display the Cisco CMC error log files.
show onu	Displays the Optical Network Unit (ONU) information.
show psu	Displays the Power Supply Unit (PSU) information.
show system	Displays the basic system information of the Cisco CMC.

For more information on the Cisco CMC commands, see Cisco Coaxial Media Converter Command Reference.