

Cisco Optical Site Manager Topology

This chapter describes the different Cisco Optical Site Manager views. In this chapter, you will also learn to add new racks.

- Topology, on page 1
- Add a rack, on page 2
- Add a chassis, on page 2
- Open the card view, on page 3
- Identify a passive device associated with a USB, on page 4
- View CPU and memory usage, on page 5
- View voltage, temperature and current details, on page 7
- View power monitoring parameters, on page 8

Topology

The **Topology** page provides a visual and tabular representation that allows users to manage optical site configurations effectively. The page offers two distinct views for managing site configurations:

- Rack View
- Table View

Rack View

Provides a graphical representation of a rack, including nodes and cards. Users can hover over a device or node to display its name in a tooltip, aiding in quick identification.

Table View

Displays a detailed list of chassis with information such as node UIDs, rack numbers, chassis types, and descriptions. This view also allows users to add new racks, simplifying updates and management.

Add a rack

Use this task to add a rack in Cisco Optical Site Manager. This creates a logical container for devices managed by Cisco Optical Site Manager and enables structured placement and visualization of chassis and other components.

A rack serves as a container for devices that are managed within Cisco Optical Site Manager.

After creating a rack, you can add chassis and other supported devices to it. Racks are displayed in both rack and table views.

- Racks are displayed in both rack and table views.

Before you begin

- Log into Cisco Optical Site Manager

Follow these steps to add a rack in Cisco Optical Site Manager.

Procedure

Step 1 Click **Topology** in the left panel.

The Cisco Optical Site Manager Topology page appears.

Step 2 Click **Add Rack**.

The **Add Rack** dialog box appears.

Step 3 Enter a rack ID in the **Rack ID** field.

You can enter any numeric value from 1 through 32767.

Step 4 Click **Apply**.

The rack is created and displayed in the rack and table views.

The rack is available for adding chassis and managing devices in Cisco Optical Site Manager.

What to do next

After creating the rack, add one or more chassis to begin device management.

Add a chassis

Use this task to add a chassis to Cisco Optical Site Manager so that the device can be tracked, monitored, and managed.

Before you begin

Log into Cisco Optical Site Manager

Follow these steps to add a chassis to Cisco Optical Site Manager.

Procedure

Step 1 In the NFV view, right-click a rack and select **Add Chassis**.

The **Add Chassis** dialog box appears.

Step 2 Select a device from the **Device** drop-down list.

Step 3 Select the appropriate **Chassis Type**.

Step 4 Select the **Chassis ID** and enter the **Chassis UID**.

Step 5 Enter a chassis name in the **Display Name** field.

Step 6 Click **Provision**.

Step 7 After adding the chassis, perform these chassis management actions, as needed.

To	perform these steps
Delete a chassis	**a.** Right-click the chassis in the rack. **b.** Select **Delete**.
Move a chassis to a different slot	**a.** Right-click the chassis in the rack and select **Cut**. **b.** Right-click an empty slot and select **Paste**.
View chassis properties	**a.** Right-click the chassis in the rack and select **Properties**.

The chassis is added to Cisco Optical Site Manager and displayed in the selected rack.

What to do next

After adding or modifying a chassis, verify that the device status is synchronized and operational.

Open the card view

Follow these steps to open the card in a card view.

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **Topology** in the left panel.

The rack and **Topology** view appear.

Step 2 To open the card view, perform any of these steps:

- Right-click the outer edge of the chassis or line card from the rack view and select **Open**.
- Double-click the line card in the rack view.

The card view appears.

Identify a passive device associated with a USB

Identify a specific passive device associated with a USB port using the LED blink function.

Follow these steps to identify a passive device associated with a USB:

Before you begin

- Log into Cisco Optical Site Manager

Procedure

Step 1 Click **Topology** in the left panel.

Step 2 Click the rack name in the rack view.

Step 3 Click the **Provisioning** tab.

Step 4 Click **Passives** to expand the section.

The table displays a list of passive devices.

Step 5 Select the check box corresponding to a device and click **Edit**.
After selecting a device, the **USB Port** field becomes editable.

Step 6 Select the USB port from the drop-down list.

Step 7 Click **Apply**.

Step 8 Perform one of these steps:

To	Click
start blinking the LED of the passive device	**LED Blink**
know the LED status of the associated device	**LED Status**
stop the LED blinking	**LED Blink**

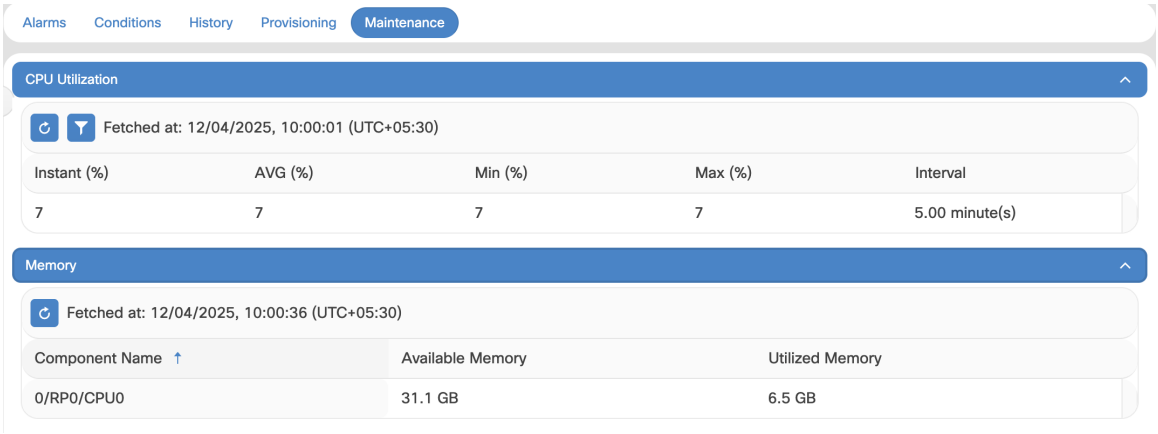
View CPU and memory usage

Monitor real-time CPU utilization and memory consumption on the device. This monitoring capability helps in quickly assessing the device's performance and identifying any resource bottlenecks or issues.

Table 1: Feature History

Feature Name	Release Information	Description
Real-Time CPU and Memory Monitoring	Cisco IOS XR release 25.4.1	You can now monitor real-time CPU usage and memory data in the **CPU Utilization** and **Memory** sections of the **Maintenance** tab. This helps you to quickly assess the device performance and take action as needed.

Figure 1: CPU and Memory Usage



Before you begin

Log into Cisco Optical Site Manager

Follow these steps to view the CPU usage and memory information:

Procedure

Step 1 Click **Topology**.

Step 2 Click the rack name from the rack view.

Step 3 To open the chassis or line card view, perform any of these steps:

- Right-click the outer edge of the chassis or line card from the Rack view and select **Open** to open the chassis view.
- Double-click the chassis or line card to open the chassis or line card view.

Step 4 Navigate to the **Maintenance** tab for your selected chassis or line card, then select **CPU Utilization** and **Memory** to view usage details.

For more details about the filed descriotions, see the Table 2: CPU Utilization and Memory field descriptions, on page 6 table.

You can now view real-time CPU and memory usage statistics for the selected device.

This table describes the fields displayed in the **CPU Utilization** and **Memory** sections:

Table 2: CPU Utilization and Memory field descriptions

Field	Description
CPU Utilization	
Instant	Shows the current CPU utilization at the moment the data was fetched.
AVG	Displays the average CPU utilization calculated over the **Interval** .
Min	Indicates the lowest CPU usage recorded during the **Interval** .
Max	Indicates the highest CPU usage recorded during the **Interval** .
Memory	
Component Name	Displays the specific device for which the memory details are shown.
Available Memory	Shows the total memory currently free and available for use by that device.
Utilized memory	Indicates the amount of memory currently in use by the device.
Interval	Specifies the time window (in minutes) used to collect and compute the CPU utilization statistics.

View voltage, temperature and current details

Table 3: Feature History

Feature Name	Release Information	Description
Environmental Monitoring in the Maintenance Tab	Cisco IOS XR release 25.1.1	The **Maintenance** tab now features an **Environmental Monitoring** section, providing real-time voltage, current, and temperature data for line cards and chassis. This addition simplifies device monitoring and management.

View the voltage, temperature, and current information of a device using the Cisco Optical Site Manager.

Cisco Optical Site Manager facilitates the monitoring of device voltage, temperature, and current to ensure stable operation, prevent overheating, and maintain safe and efficient device performance.

Follow these steps to view the voltage, temperature, and current information:

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **Topology** in the left panel.

Step 2 Click the rack name from the rack view.

Step 3 To open the chassis or line card view, perform any of these steps:

- Right-click the outer edge of the chassis or line card from the Rack view and select **Open** to open the chassis view.
- Double-click the chassis or line card to open the chassis or line card view.

Step 4 Click the **Maintenance** tab.

Step 5 Click the **Environmental Monitoring** section to expand it.

Step 6 From the **Type** drop-down list, select any of these options to view the related information:

- Voltage
- Temperature
- Current
- Fan (Only available for Chassis)

View power monitoring parameters

You can view different power metrics of a chassis, such as total power consumption and maximum power, using Cisco Optical Site Manager.

Follow these steps to view the power monitoring parameters of a chassis:

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **Topology** in the left panel.

The **Topology** page appears.

Step 2 Click the rack name from the rack view.

Step 3 To open the chassis view, perform any of these steps:

- Right-click the outer edge of the chassis from the rack view and select **Open**.
- Double-click the chassis.

Step 4 Click the **Maintenance** tab.

Step 5 Click the **Power Monitoring** section to expand it.
The chassis total power consumption and maximum power display.