



# Setup Cisco Optical Site Manager

This chapter describes the tasks related to standalone Cisco Optical Site Manager configuration and activating Cisco Optical Site Manager.

Setting up Cisco Optical Site Manager involves the following tasks:

- [Enable Netconf, on page 1](#)
- [Standalone Cisco Optical Site Manager Configuration, on page 2](#)
- [Activate Cisco Optical Site Manager, on page 3](#)
- [Enable or Disable Cisco Optical Site Manager Interfaces, on page 4](#)

## Enable Netconf

Using the Network Configuration Protocol (NETCONF) over the Secure Shell Version 2 (SSHv2), you can securely configure networks through the Cisco command-line interface (CLI). The NETCONF client, also known as the NETCONF Network Manager, must communicate with the NETCONF server using Secure Shell Version 2 (SSHv2) as the network transport. The NETCONF server allows multiple NETCONF clients to connect to it for network configuration purposes.

To enable netconf, perform these steps:

### Procedure

**Step 1**     **configure terminal**  
Enters the configuration mode.

**Step 2**     **netconf-yang agent ssh**

**Example:**

```
RP/0/RSP0/CPU0:ios(config)# netconf-yang agent ssh
```

Enables NETCONF agent over SSH connection.

**Step 3**     **ssh server v2.**

**Example:**

```
RP/0/RP0/CPU0:ios(config)# ssh server v2
```

If you choose the **ssh server v2** command, only the SSH v2 client connections are accepted.

**Step 4**     **ssh server rate-limit rate-limit.**

**Example:**

```
RP/0/RP0/CPU0:ios(config)# ssh server rate-limit 600
```

limit the number of incoming SSH connection requests allowed per minute to 600.

- Step 5** **ssh server netconf**  
Brings up the netconf subsystem support with SSH server.
- Step 6** Commit the changes using the **commit** command.
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## Standalone Cisco Optical Site Manager Configuration

You can also configure Cisco Optical Site Manager in Standalone mode. After configuring the Cisco Optical Site Manager interfaces, you need to set up the Cisco Optical Site Manager admin user ID and password. Additionally, you must configure the management interface of the node on which Cisco Optical Site Manager is installed.

To configure Cisco Optical Site Manager in standalone mode, perform these steps:

### Procedure

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**Step 1** **configure terminal**

**Example:**

```
RP/0/RP0/CPU0:ios#configure terminal
```

Enters the XR configuration mode.

**Step 2** **cosm**

**Example:**

```
RP/0/RP0/CPU0:ios(config)# cosm
```

Enters the Cisco Optical Site Manager configuration mode.

**Step 3** (Optional) **optical-type olt**.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm)# optical-type olt
```

If optical-type is not specified, it is auto-detected from chassis PID. Available options: *ila*, *olt*, and *txp*.

**Step 4** **mgmt-interface-name MgmtEth R/S/I/P**.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm)# mgmt-interface-name MgmtEth 0/RP0/CPU0/0
```

**Step 5** **user-name user name**.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm)# user-name cisco
```

**Note** For automatic onboarding of peer devices, the configured credentials must match those of all devices on the network.

**Step 6** **user-password** *password*.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm)# user-password ***
```

**Step 7** From R24.3.1, enable auto-onboarding of the Cisco Optical Site Manager host devices.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm)#cosm auto-onboard enable
```

**Step 8** Commit the changes using the **commit** command.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm) commit
```

**Step 9** Exit the configuration mode.

**Example:**

```
RP/0/RP0/CPU0:ios(config-cosm) end
```

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## Activate Cisco Optical Site Manager

Once you have finished configuring the Cisco Optical Site Manager standalone, you need to activate it.

To activate Cisco Optical Site Manager, perform these steps:

### Procedure

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**Step 1** **cosm activate**.

**Example:**

```
RP/0/RP0/CPU0:ios# cosm activate
```

Activates Cisco Optical Site Manager.

**Step 2** **show cosm status**.

**Example:**

```
RP/0/RP0/CPU0:OLT-2#show cosm status
Tue Nov 28 14:10:15.375 UTC
COSM status APP_ACTIVATED
AppMgr app status ACTIVATED
AppMgr container status RUNNING
Last error: No error
COSM version: 23.1.0.D0612
```

**Note** It may a few minutes to activate Cisco Optical Site Manager.

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# Enable or Disable Cisco Optical Site Manager Interfaces

Cisco Optical Site Manager provides three control interfaces: NETCONF, RESTCONF, and an interactive Web-UI. By default, all these interfaces are enabled. If required, individual interfaces can be disabled and the NETCONF port can be changed. Ensure that you make these changes before activating Cisco Optical Site Manager.

To enable or disable Cisco Optical Site Manager interfaces, perform these steps:

## Procedure

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### Step 1 **configure terminal**

#### Example:

```
RP/0/RP0/CPU0:ios#configure terminal
```

Enters the XR configuration mode.

### Step 2 **cosm**

#### Example:

```
RP/0/RP0/CPU0:ios(config)# cosm
```

Enters the Cisco Optical Site Manager configuration mode.

### Step 3 **netconf port <port-number>.**

#### Example:

```
RP/0/RP0/CPU0:ios(config-cosm)# netconf port 2021
```

Configures the specified port for the netconf ssh server. This command is optional. If no port is specified, port 2022 is used by default.

### Step 4 **interface-name enable | disable.**

#### Example:

```
RP/0/RP0/CPU0:ios(config-cosm)# netconf disable  
RP/0/RP0/CPU0:ios(config-cosm)# restconf disable  
RP/0/RP0/CPU0:ios(config-cosm)# webui disable
```

Enables or disables the Cisco Optical Site Manager interface

### Step 5 **Commit the changes using the commit command.**

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