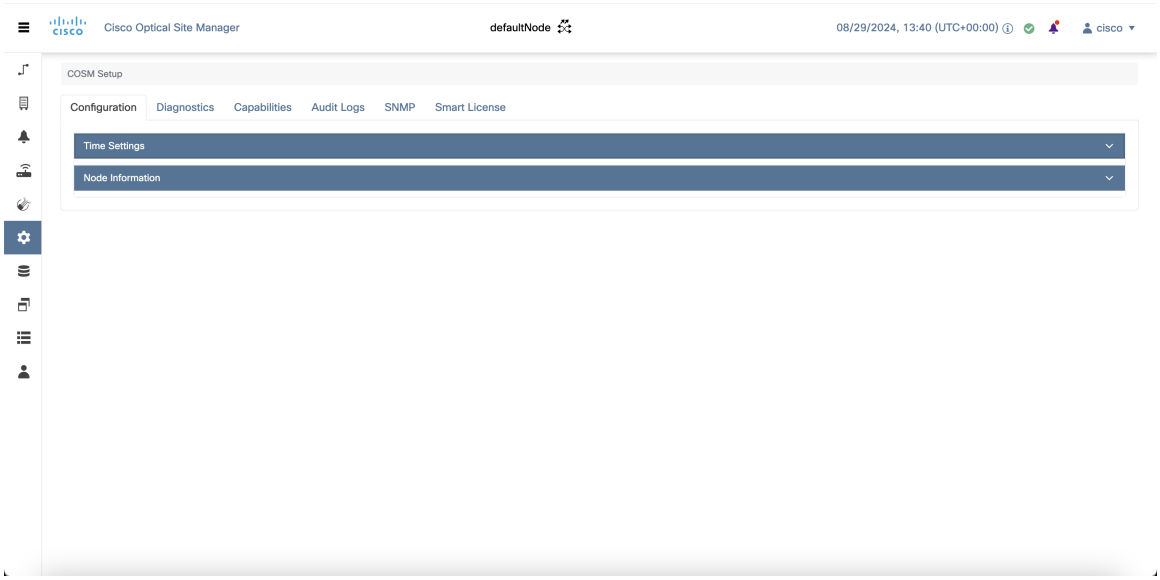
Set up Cisco Optical Site Manager

This chapter covers the tasks for configuring the Cisco Optical Site Manager's timezone and node information. Additionally, you'll learn how to view diagnostic and audit logs, as well as configure smart licensing.

Figure 1: Set up Cisco Optical Site Manager



Configure Timezone

Use this task to configure the time zone.

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **COSM Setup** in the left panel.

Step 2 Click the **Configuration** tab and then click **Time Settings** to expand it.

Step 3 Type the name of the city or press space in the **Time Zone** field and select a time zone from the drop-down list.

Step 4 Click **Apply**.

A confirmation message appears.

Step 5 Click **Yes**.

View Cisco Optical Site Manager Diagnostics

Use this task to retrieve and download Cisco Optical Site Manager diagnostics information.

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **COSM Setup** in the left panel.
The **COSM Configuration** page appears.

Step 2 Click the **Diagnostics** tab.

Step 3 To retrieve Cisco Optical Site Manager diagnostic logs, perform these steps:

a) Select the check boxes for which you want to retrieve the logs.

Note By default, all the check boxes are selected except **NCS Callback Log**.

Table 1: Fields Description

Fields	Description
Alarms	Collects the active alarms
Audit Logs	Collects NSO audit logs
Conditions	Collects the active conditions
Admin Logs	Collects the Admin logs
Engineer Logs	Collects all the system software logs
History Logs	Collects the alarms history logs
Inventory Logs	Collects the hardware inventory logs

Fields	Description
NCS Callback Log	Collects information about the implementation status and return values of entire NSO data tree

b) Click **Retrieve** to retrieve the diagnostics report.

A confirmation message appears.

c) Click **Yes**.

d) Click **Download** to download the diagnostics report.

A zip file containing the logs is downloaded.

View Audit Logs

Use this task to retrieve and download Cisco Optical Site Manager audit logs.

Before you begin

Log into Cisco Optical Site Manager

Procedure

Step 1 Click **COSM Setup** in the left panel.
The **COSM Configuration** page appears.

Step 2 Click the **Audit Logs** tab.

Step 3 Select the search criteria from the **Search filters** section and click **Search**.

Details of each event including the date, user type, SID and event details are displayed in a table.

Cisco Optical Site Manager Smart Licensing

Description

Table 2: Feature History

Feature Name	Release Information	Feature Description
Cisco Optical Site Manager Smart Licensing	Cisco IOS XR Release 24.3.1	Cisco Optical Site Manager now supports the smart licensing. It enables you to automate the time-consuming manual licensing tasks and allows you to easily track the status of your license and software usage trends. You can choose any of smart licensing modes based on your requirement: • Smart Transport • CSLU • Offline

Note In the **Fault Monitoring** section, two alarms appear, UNTRUSTED APPLICATION and USAGE-NOT-REPORTED. UNTRUSTED APPLICATION alarm gets cleared once trust is established by the **Smart License** and the USAGE-NOT-REPORTED alarm gets cleared when the license is consumed.

Cisco Optical Site Manager Smart Licensing is a cloud-based, software license management solution that enables you to automate time-consuming, manual licensing tasks. The solution allows you to easily track the status of your license and software usage trends.

Smart Licensing helps you simplify three core functions:

- **Purchasing**: The software that you have installed in your Cisco Optical Site Manager can be registered without External or Local Authentication.
- **Management**: You can automatically track activations against your license entitlements. Smart Licensing offers you Cisco Smart Software Manager, a centralized portal that enables you to manage all your Cisco software licenses from one centralized website.
- **Reporting**: Through the portal, Smart Licensing offers an integrated view of the licenses you have purchased and what has been deployed in your network. You can use this data to make better purchasing decisions, based on your consumption.

Cisco Smart Account

Cisco Smart Account is an account where all products enabled for Smart Licensing are deposited. Cisco Smart Account allows you to manage and activate your licenses to devices, monitor license use, and track Cisco license purchases. Through transparent access, you have a real-time view into your Smart Licensing products. IT administrators can manage licenses and account users within your organization's Smart Account through the Smart Software Manager.

When creating a Smart Account, you must have the authority to represent the requesting organization. After you submit the request, it goes through a brief approval process. Access http://software.cisco.com to learn about, set up, or manage Smart Accounts.

Cisco Smart Software Manager enables you to manage all your Cisco Smart software licenses from one centralized website. With Cisco Smart Software Manager, you organize and view your licenses in groups called virtual accounts (collections of licenses and product instances). Use the Cisco Smart Software Manager to do these tasks:

- Create, manage, or view virtual accounts.
- Create and manage Product Instance ID Tokens.
- Transfer licenses between virtual accounts or view licenses.
- Transfer, remove, or view product instances.
- Run reports against your virtual accounts.
- Modify your email notification settings.
- View overall account information.

Virtual Accounts

A Virtual Account exists as a subaccount tithing the Smart Account. Virtual Accounts are a customer-defined structure based on organizational layout, business function, geography, or any defined hierarchy. They are created and maintained by the Smart Account administrator. Smart Licensing allows you to create multiple license pools or virtual accounts within the Smart Software Manager portal. Using the Virtual Accounts option that you can aggregate licenses into discrete bundles that are associated with a cost center so that one section of an organization cannot use the licenses of another section of the organization. For example, if you segregate your company into different geographic regions, you can create a virtual account for each region to hold the licenses and product instances for that region.

All new licenses and product instances are placed in the default virtual account in the Smart Software Manager, unless you specify a different one during the order process. After you access the default account, you may choose to transfer them to any other account, provided you have the required access permissions.

Use the Smart Software Manager portal to create license pools or transfer licenses.

Product Instance ID Tokens

ID tokens are stored in the Product Instance ID Token Table that is associated with your enterprise account. ID tokens can be valid 1–365 days.

Product Instances

A product instance is an individual device with a unique device identifier (UDI) that is registered using a product instance ID token (or ID token). You can register any number of instances of a product with a single

ID token. Each product instance can have one or more licenses residing in the same virtual account. Product instances must periodically connect to the Cisco Smart Software Manager servers during a specific renewal period. If you remove the product instance, its licenses are released and made available within the virtual account.

Configure Smart Transport

Use this task to configure Smart Transport Licensing Mode.

Before you begin

- Create a Token, on page 7
- Network Configuration to Access Cisco Optical Site Manager, on page 8

Procedure

Step 1 Click **Cisco Optical Site Manager Setup** in the left panel, and then click **Smart License**.

Step 2 Click the **Configuration** to expand it.

Step 3 Under **Transport Settings**, select the **Transport Mode** as **Smart Transport** from the drop-down list.

Step 4 Add *https://smartreceiver.cisco.com/licservice/license* under **Smart Transport URL**.

Step 5 Under **Proxy Setting**

a) Perform these steps as needed.

1. HTTPS Proxy *(Optional)*
2. HTTP Proxy *(Optional)*
3. Username *(Optional)*
4. Password *(Optional)*

Step 6 Under **Reports Settings**, add **Reporting Interval (Days)**

a) Enter *<1–30>*

Step 7 Check the **Send Hostname** check box to receive the hostname information.

Step 8 Check the **Send Product Version** check box to receive the product version.

Step 9 Click **Apply** to apply the settings.

Step 10 Click **Check Connection** to check the connection with the new settings.

If the **Check Connection** button turns **Green**, it indicates that the connection good.

If the **Check Connection** button turns **Yellow**, it indicates that there is an issue with the connection.

- **Transport Mode**—Specifies the optical span of the side.
- **Smart Transport**—Specifies the optical span of the side.
- **CSLU URL**—Specifies the optical span of the side.

- **Smart Transport URL**—Specifies the optical span of the side.
- **HTTPS Proxy**—(Optional) Type the HTTPS Proxy Address.
- **HTTP Proxy**—(Optional) Type the HTTP Proxy Address.
- **Username**—(Optional) Type the Username.
- **Password**—(Optional) Type the Password.
- **Reporting Iinterval (Days)**—Specifies the reporting interval in days.
- **Hostname**—Specifies the hostname which will be sent.
- **Product Version**—Specifies the product version which will be sent.

What to do next

Establish Trust.

1. Go to **Information Tab**, click **Establish Trust**, it displays **Establish Trust** pop up.
2. Copy the **Token** text from the **Virtual Account**, paste under the **ID Token** dialog box and click **Trust**.
3. Configuration Verification
   - Under **Trust** tab **Trust Established** time and **Last Attempt Result** as **Success** displays, indicating that the **Trust Established.**
   - Click **Sync**, under **Reporting** it displays **Last Report Pushed** time and **Last Acknowledgement Received** time indicating synchronization is done.
   - Under **License Usage**, license count displays.

Note For the NCS 1010, the license count is based on the chassis, whereas for the NCS 1014, the license count is based the number of line cards available on Cisco Optical Site Manager application.

Create a Token

Use this task to create a new token using Cisco Smart Software Manager.

Procedure

Step 1 Log in to the Cisco Smart Software Manager.

https://software.cisco.com/software/csws/ws/platform/home#SmartLicensing-Inventory

Step 2 Click the Inventory tab, and select your virtual account from the **Virtual Account** drop-down list.

The Create **Registration Token** window is displayed.

Step 3 Click the **General** tab, and click **New Token**.

Step 4 Enter the token description. Specify the number of days the token must be active.

Step 5 Check the **Allow export-controlled functionality on the products registered with this token** check box.

Step 6 Click **Create Token**.

Step 7 Copy the token and register Cisco Optical Site Manager with the same token ID.

An example of the token ID:
YzY2ZjYyNjktY2NlOS00NTc4LWIxNTAtMjZkNmNiNzMxMTY1LTE2NjAzNjQ3
%0ANzY4Njl8ZVJSckxKN2pFV2tIeHVoMUkxbGxTazFDVm9kc1B5MGlHQmlFWUJi%0Ac3VNRT0%3D%0A

Network Configuration to Access Cisco Optical Site Manager

Provide Domine Name System(DNS) configuration, as Cisco Optical Site Manager will not be accessible from outside the network.

Procedure

Use this sample configuration to connect to the Cisco Optical Site Manager from your network.

Example:

```
Config
admin server-information networking dns-configuration dns-server <ipaddress> of DNS
commit
exit
```

Configure CSLU

Use this task to configure CSLU Licensing Mode.

Before you begin

1. Install CSLU Application on Windows System or Linux.
2. Test CSLU Connection, on page 10

Procedure

Step 1 Click **Settings** in the left panel, and then click **Smart License**.

Step 2 Click the **Configuration** to expand it.

Step 3 Under **Transport Settings**, select the **CSLU/OnPrem** from the drop-down list.

Step 4 Under **CSLU URL** enter *http://<Device IP>:8182/cslu/v1/pi* under.

Device IP is the Ethernet2 IP address of the computer in which the CSLU application is installed.

Step 5 Under **Proxy Setting**

a) Perform these steps as needed.

1. HTTPS Proxy *(Optional)*
2. HTTP Proxy *(Optional)*
3. Username *(Optional)*
4. Password *(Optional)*

Step 6 Under **Reports Settings**, add **Reporting Interval (Days)**

a) Enter *<1–30>*

Step 7 Check the check box **Send Hostname** to receive the hostname information.

Step 8 Check the check box **Send Product Version** to receive the product version.

Step 9 Click **Apply** to apply the settings.

Step 10 Click **Check Connection** to check the connection with the new settings.

If the **Check Connection** button turns **Green**, it indicates that the connection good.

If the **Check Connection** button turns **Yellow**, it indicates that there is an issue with the connection.

- **Transport Mode**—Specifies the optical span of the side.
- **CSLU URL**—Specifies the optical span of the side.
- **HTTPS Proxy**—(Optional) Type the HTTPS Proxy Address.
- **HTTP Proxy**—(Optional) Type the HTTP Proxy Address.
- **Username**—(Optional) Type the Username.
- **Password**—(Optional) Type the Password.
- **Reporting Iinterval (Days)**—Specifies the reporting interval in days.
- **Hostname**—Specifies the hostname which will be sent.
- **Product Version**—Specifies the product version which will be sent.

What to do next

Configure **Sync**.

1. In the COSM application, click the **Sync** button.
2. CSLU displays **COMPLETE: Sync response acknowledgement to product instance** when the **Sync** is complete from the CSLU.

1. Configuration Verification
   - Under **Trust** tab **Trust Established** time and **Last Attempt Result** as **Success** displays, indicating that the **Trust Established.**
   - When **Sync** is done, under **Reporting** it displays **Last Report Pushed** time and **Last Acknowledgement Received** time indicating synchronization is done.
   - Under **License Usage**, license count displays.

Note For the NCS 1010, the license count is based on the chassis, whereas for the NCS 1014, the license count is based the number of line cards available on Cisco Optical Site Manager application.

Test CSLU Connection

- Use this task to test the CSLU connection.

Procedure

Step 1 Go to the CSLU application installed on your system.
Step 2 Login using Cisco User ID and Password.
Step 3 Fill the appropriate details under the **Preferences** tab Click **Apply**.
Step 4 Click **Test Connection**.
Step 5 CSLU displays a pop-up showing the **Test connection** is successful.

If the **Test connection** is not successful, contact the Cisco Systems technical support representative.

Configure Offline

Use this task to configure Offline Licensing Mode.

Procedure

Step 1 Click **Settings** in the left panel, and then click **Smart License**.
Step 2 Click the **Configuration**to expand it.
Step 3 Under **Transport Settings**, select **Transport Mode** and then by selecting **Offline** from the drop-down list.
Step 4 Check the **Send Hostname** check box to receive the hostname information.
Step 5 Check the **Send Product Version** check box to receive the product version.
Step 6 Click **Apply** to apply the settings.
Step 7 **Check Connection** is disabled for **Offline** mode.

What to do next

Establishing Trust - CSSM

1. Click the **Information** tab to expand it.
2. Click the **Save** button, choose **Trust Request**.
3. **trust-request** XML file downloads.

4. Go to Cisco Smart Software Manager then go to **Reports** then click **Usage Data Files** then click **Upload Usage Data** and select the **Virtual Account** and click **Ok**.
5. **Upload Usage Data** window opens, click the **Browse** button and upload the **trust-request** file.
6. Check under the **Reporting Status** tab to see **No Errors**. It may take a few minuets to show **No Errors**. If it shows **Errors**, you have to fix them.

Establishing Trust - Cisco Optical Site Manager

1. Click **Download** under **Acknowledgement** tab.
2. In the Cisco Optical Site Manager click **Import** button,

   it opens a **Establish Trust** window.
3. Click **Select files...** and upload **Ack_trust-request-xxxx** click **Open** then click **Upload**.
4. Click **Save**, then **Usage**, it opens a **Select what to save** window, then choose any one option.
   - unreported
   - all
   - days
5. **rum-report-xxx** downloads

Establishing Trust - CSSM

1. In the CSSM, under **Usage Data Files** click **Upload Usage Data**.
2. It opens a **Upload Usage Data** window, click **Browse** and select **rum-report-xxx** click **Open** then click **Upload Data** In the **Select Virtual Accounts** window, select the appropriate account and click **ok**.
3. It may take a few minuets to show **No Errors**. If it shows **Errors**, you have to fix them.
4. When **No Errors** appears, **Download** the **Ack_rum-report-xxx**.
5. In the Cisco Optical Site Manager click **Import** button,

   it opens **Establish Trust** click **Select files..** and select **Ack_rum-report-xxx** click **Open** then click **Done**.
6. Click the **Refresh** button to see updated information.
7. Configuration Verification
   - Under the **Trust** tab, you will see a **Trust Established** time, indicating that the trust has been established.
   - Under **Reporting** it displays **ACK Report Time** will be displayed.
   - Under **License Usage**, license count displays.

Note For the NCS 1010, the license count is based on the chassis, whereas for the NCS 1014, the license count is based on the number of line cards available on the Cisco Optical Site Manager application.