

# **Cisco ONP UI Reference**

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## Menu Bar

The following table describes the options available in the Cisco ONP GUI menu bar.

Options	Description	
File	Includes the common file options such as New, Open, Open Shared, Save, Save As, Share, and Delete	
Network	Includes Entity Editor, Analyze, and SSON Convert	
Export	Includes options to export reports of CPZ, sites, fibers, SRLGs, services, waves, media channels, optical results, service aggregation, BOM, and messages. Export enables you to download excel and LNI templates	
Import	Imports different types of files (CPZ, Excel, LNI, and MPZ) and designs a network in CONP	
Manage	Manages Layout Templates and Optical Sources	
Logs	Displays logs events that are initiated during a specific period, such as user login, user logout, password change, and LNI - start, failed, and completed	
Job Monitor	Checks and manages tasks running in the background	
Control Panel	Manages users, user groups, user roles, permissions, system configuration, and dictionary	
Help	Displays the Cisco ONP version	
Last Login	Shows last date and time when the user logged in to Cisco ONP, and last login with IP details	
Username	Shows name of the user who has currently logged in to Cisco ONP	

#### **File**

The **File** menu includes common file options such as New, Open, and Delete.

Options	Description	
New	Creates a new network. By default, NCS 1010 is created. To create NCS 2000 networks, change <b>L0 Network Platform</b> to <i>NCS2000</i> . You can check the <b>SSON Network</b> check box and select <b>System Release</b> for NCS 2K to create an SSON network.	
Open	Opens a saved network. The network name in blue-colored font indicates that the network is in the Design mode, and the network name in green-colored font indicates that the network is in the Analyze mode.	
	Note If you view a blank screen when you open a network, refresh the browser, or log in to Cisco ONP again.	
Open Shared	Opens a shared network.	
Save	Saves a network.	
Save As	Saves the network with a new name.	
Share	Shares a network or networks.	
Delete	Deletes a network or networks.	

#### **Network**

The **Network** menu includes options such as Entity Editor, Analyze, and SSON Convert in the design mode. It includes options such as Entity Editor, Design, Upgrade, and Enter Plan Mode in the Analyze mode.

Options	Description
Entity Editor	Use this option to edit various properties of an element in the network
Analyze	Analyzes the network after completing the design
SSON Convert	Converts a Non-SSON network to an SSON network
Design	Switches from Analyze mode to Design, Upgrade, or Release Upgrade mode
Upgrade	Upgrades an existing network that is in the Analyze mode
Release Upgrade	Upgrades the NCS 2K or NCS 1010 System Release of a network
Enter Plan Mode	Switches to the Plan mode
Exit Plan Mode	Exits the plan mode
Restore	Restores failed fibers and nodes
Open Failure Report	Expands the Failure Report from the bottom of the Map. Data is populated after Restore.

Options	Description
Open Feasibility Report	Expands the Feasibility Report from the bottom of the Map. The report displays the data regarding Auto Regen Suggestions for channel feasibility.

## **Export**

The **Export** menu includes options to export reports of Sites, Fibers, Services, SRLG, Waves, Messages, and BOM.

Options	Description
CPZ	Export the .cpz design file of a network into your local system.
Sites	Exports site details such as x and y coordinates, grooming site flag, CLLI code, site address, site type, and site name.
Fibers	Exports fiber details such as length, loss to fiber, source and destination site, source and destination edge.
Services	Exports service details such as name, type, path, quantity, and protection.
SRLGs	Exports details about created SRLGs.
Waves (Available for non-SSON network)	Exports wave details such as Label, Source and Destination sites, Card Type, Wavelength, Utilization, Source port, Destination port, Demands, OTN Hops, OSNR, OSNRMarginEOL, StatusEOL, Excluded Channels, and Path of Wave.
Media Channels (Available for SSON network)	Exports media channel details such as Media Channel Label, Media Carrier Label, Source and Destination sites, Card Type, Wavelength, Utilization, Source port, Destination port, Demands, OTN Hops, OSNR, OSNRMarginEOL, StatusEOL, Excluded Channels, and Path of Media channel.
Circuits (Available for NCS1010 network)	Exports circuits details such as Circuit Label, Carrier Label, Source and Destination sites, Card Type, Traffic Type, Wavelength, Utilization, Source port, Destination port, Demands, OTN Hops, OSNR, OSNRMarginEOL, StatusEOL, Excluded Circuits, and Path of Circuit.
Messages	Shows the complete log of the analysis, including critical errors.
Excel	Download sample Excel file that can be used as a reference for creating networks using the Import Excel feature.
Download LNI Template	Download sample LNI file that can be used as a reference for creating networks using the Import feature.
Optical Source Template	Download sample Optical Source Excel file that can be used as a reference for creating User Defined/custom Optical Source using the <b>Manage &gt; Optical Sources</b> feature.
BOMs	Exports details about pricing and quantity of the network equipment

Options	Description
Failure Groups	This option is available only in the plan mode. You can add failed fibers to a failure group.
Failure Report	This option is available only in the plan mode. It shows the failed fibers, total channels, failed channels, restored channels, and fiber hotzones.
Optical Result	Exports details such as protection type, SOL, EOL, source, and destination

### **Import**

The Import menu imports an Excel file, a CPZ file, or an MPZ file.

Options	Description
CPZ	Imports the .cpz network design files that are exported from another Cisco ONP instance
Excel	Imports an Excel file containing all the design parameters
Live	Imports a live deployed network by retrieving configurations of the nodes, provided in the LNI input Excel sheet
MPZ	Imports the .mpz network design files from CTP to Cisco ONP, to avoid recreating the networks that are already created in CTP

### Manage

You can manage layout templates and optical sources.

Options	Description
Layout Templates	Imports reusable templates to design layout configurations for a network
Optical Sources	Imports an optical source from your local system

### Logs

The System Logs option allows an admin user, or user with USER MANAGEMENT, and NETWORK MANAGEMENT permissions to view at logs the events that are initiated during a specific time interval. Examples of events are user login, user logout, password change, Live Network Import (LNI)-start, failed, completed and analysis-start, and failed.

The **SYSTEM LOGS** page includes the following fields:

Field	Description	
Time Stamp	Provides the date and time of the specific event	
Event Type	Shows the type of event, which includes user login, user logout, password change, and so on	

Field	Description	
Description	Describes the event, which includes user login success, user logout success, and so on	
Username	Shows the user who has initiated specific events	
Event Source	Shows the IP address of the device from where the event is initiated	

Events that are captured in the System Logs are:

Event	Description
SIGNUP	New user sign-up for Cisco ONP
LOGIN	User log in to Cisco ONP
USER STATE CHANGE	User state change from Active to Inactive and the converse
USER ROLE CHANGE	User role change, such as admin to planner, and so on
LOGOUT	User log out from Cisco ONP
USER DELETION	Deletion of a particular user
UNAUTHORIZED	User enters invalid login credentials
LNI_START	Successful initiation of Live Network Import
LNI_COMPLETE	Successful completion of live import of a network
LNI_CANCEL	Cancellation of Live Network Import
LNI_PURGE	Imported Live network data is successfully purged
ANALYZE_LNI_START	Analysis of LNI network started successfully
ANALYZE_LNI_END	Analysis of LNI network completed successfully
LNI_POPULATE_DESIGN_DATA	Populating of L0 DesignData initiated
ANALYZE START	Starting of the network analysis
ANALYZE END	Completion of the network analysis
ANALYZE CANCEL	Cancellation of the network analysis
UPGRADE NETWORK	Entering the Upgrade mode
PLAN_INIT	Entering the Plan mode
PLAN_END	Exiting the Plan mode
PLAN_REROUTE	Checking for alternate paths to restore failed media channels or waves
PLAN_PROGRESS	Restoration of failed media channels or waves in progress
RELEASE_UPGRADE_NETWORK	Upgrading the system release of the network is in progress.

#### **Job Monitor**

The Job Monitor menu checks and manages tasks running in the background.

You can access this menu if you have ADMIN, NETWORK\_MANAGEMENT, or NETWORK\_PLANNING role.

The **JOB MONITOR** page has the following options:

Options	Description	
Refresh	Refreshes the display information.	
Filter	Applies one or more of the following filter options:	
	Task Type: Filters the display information based on the task type.	
	Select Start Date: Filters the display information based on the start date of the task.	
	Select End Date: Filters the display information based on the end date of the task.	
	Username: Filters the display information based on the username.	
Created Date	The date on which the task is started by the user.	
Network Name	Name of the network on which the task is running.	
Task Type	The type of background task: Valid values are ANALYZE and EPNM_IMPORT.	
Messages	The current state of the task.	
Cancel	Enables you to cancel or stop an ongoing background task:	
	<ul> <li>The Admin can cancel any of the running background tasks. Other valid users can cancel only their own tasks.</li> </ul>	
	• If you want to cancel your ongoing network analysis, you can open Cisco ONP at the browser in incognito mode, or contact the Admin.	
	• After a task is cancelled, it gets removed from the job monitor. You can check the status of a cancelled task from <b>System logs</b> page. Click <b>Logs</b> to open the <b>System logs</b> page.	
Check Progress	Enables you to view the status of the LNI operation.	

#### **Control Panel**

Apart from designing, analyzing, and creating BOM for a network, a user with admin rights can activate, manage, and delete users and their roles.

To navigate to the control panel page, click Control Panel.

The admin or any user with USER\_MANAGEMENT role can lock, unlock an individual user account, and manually expire the individual user password. For more information, see Manage Users and Roles.

### Help

This menu provides information about the Cisco ONP version.

Field	Description
About	Provides the Cisco ONP version.

## **Network Tree**

The left pane of the Cisco ONP home page comprises a network tree. The network tree includes various network elements. When you click each element, the respective property is displayed under the network tree. You can edit the properties. For more information on editing the network properties, see Modify Network Properties.

**Table 1: Network Tree Elements** 

Network Tree Elements	Description
Network name	Displays the name of the network.
Sites	Customer premise equipment that is located in a rack within a building.
Fiber	Optical fiber connecting two sites.
Fiber Couple	A fiber couple consists of two different fibers (clockwise and counterclockwise), one for transmission and another for reception.
Services	Service is the circuit through which traffic flows between nodes.
	When you add services to the Traffic site (of the type 1K-2K-4K) in an SSON network, a DefaultGroup is created under the Services in the network tree. You can also create a new service group.
Waves or Medial Channel or Circuits	The wave or Media channel represents a DWDM channel. In a wave hierarchy, for each wave, there is a trail. When you expand a trail, there is a section under each trail. The trail is an optical path or a network section joining two traffic nodes. It can have more than one section depending on whether the trail has a regenerator site. For more information on regeneration, see Regeneration Support.

Network Tree Elements	Description
SRLG	Shared Risk Link Group (SRLG) is useful for routing the protected services. If there are Fiber 1 and Fiber 2 in the network, they are assumed to be diverse and are used as alternates for protection purposes. If Fiber 1 and Fiber 2 are in an SRLG, they are not true alternates, and they share the same risk of failure. Therefore, if Fiber1 fails, Fiber 2 also fails, and Fiber 2 cannot be used as a protected path.
Optical subnet	An optical subnet is a collection of spans with certain associated properties. When you create a new network, Cisco ONP automatically creates an optical subnet that is associated to the network. At least one optical subnet must exist for each network.
Stage button	Visible only in the Analyze mode.

Use the Search box on top of the network tree to search for any specific site, fiber, or wave in the network tree panel. Click the Refresh icon to refresh your search.

# **Design Palette**

**Table 2: Feature History** 

Feature Name	Release Information	Feature Description
Intuitive Map Display	Cisco ONP Release 5.2	The new intuitive map display allows you to virtually rearrange networks for a clutter-free view without impacting the original design. This display simplifies adding new nodes to complex networks. Save the last modified network in the new view to retain the latest rearrangement. The new icons in the Design Palette that enable the intuitive display are:  • Switch to Intuitive Arrangement/Switch to Coordinates  Arrangement—Toggles the map between the intuitive and original displays.  • Rearrange nodes—Overrides node coordinates and rearranges the map in a presentable manner.

At the right of the Cisco ONP home page, there is the design palette. You can use this design palette to create a network design. It consists of the following six icons:

Icons	Description	
Zoom In	Click this icon to magnify the map.	
Zoom Out	Click this icon to minimize the map.	

Icons	Description	
Reset Zoom	Click this icon to reset the map to its original size.	
<b>Drawing Tool</b>	The Drawing Tool consists of the following icons:	
	• <b>Traffic Site</b> : Select this icon, and click the working area to create traffic sites in the network.	
	• <b>ROADM Site</b> : Select this icon, and click the working area to create ROADM sites.	
	OLA Site: Select this icon, and click the working area to create OLA sites.	
	<ul> <li>Passthrough Site: Select this icon, and click the working area to create passthrough sites.</li> </ul>	
	• Link: Click this icon, and drag and drop between sites to create a fiber link.	
	• OTN Service: Click this icon to create OTN service between sites.	
	• <b>DWDM channel</b> : Click this icon to add a wave or medial channel between sites.	
	• Select: The Select icon looks similar to the cursor tool. Click this icon to select a node, link service, and so on.	
Layers Window	Use this icon to view or hide layers such as fiber link, service, text, and channel. The following are the four toggle icons:	
	• Toggle Fiber: Click this icon to view or hide fiber link details from the network.	
	• Toggle Service: Click this icon to view or hide service details from the network.	
	• Toggle Wave: Click this icon to view or hide the channel or wave details from the network.	
	• Toggle Text: Click this icon to view or hide the text from the network.	
	• Toggle SVO associations: Click this icon to remove or add SVO associations.	
	• Expand/Collapse All Demands: Click this icon to expand the waves or media channels so that you can view them clearly. Click this icon again to collapse the waves and media channels to their original shape and position.	
	The eye symbol in the icon indicates that you are currently viewing the respective details.	
Zoom Tool	The icon below the <b>Drawing Tool</b> is the <b>Zoom Tool</b> . You can change the display of the working area by using this function. Click the arrow to view two sliders.	
	• Map Fade: Move the Map Fade slider from right to left to fade the map from the background.	
	• <b>Zoom In/Out</b> : To magnify the map, move the Zoom in or out slider from left to right.	

Icons	Description
Zoom Elements	Click the <b>Zoom Elements</b> icon to view four sliders.
	Media Channel Width: Move this slider from left to right to increase the channel width.
	• <b>Path Spread</b> : Move this slider from left to right to increase the space between the paths.
	• Fiber Width: Move this slider from left to right to increase the fiber width.
	• Service Width: Move this slider from left to right to increase the service width.
Show Failed (available only in plan mode)	This icon shows the failed media channels in the map. Failed ones are marked with a red cross mark.
Traffic Monitor (available only in plan mode)	This icon shows the total number of impacted media channels, demands, or services that are working or failed in the entire network.

# **Entity Editor**

The **Entity Editor** allows you to edit various properties of an element in the network. Choose **Network** > **Entity Editor** to open the **Entity Editor** window. The following table explains the operations that you can perform in the **Entity Editor** window.

Options	Description
Left pane filter	Includes check boxes to filter the network elements displayed under each tab:
	• For the <b>SITE</b> tab, you can choose whether to display OTN (only traffic node), DWDM (ROADM, OLA, or pass-through) node, or both.
	• For the <b>FIBER</b> tab, you can choose the fiber connecting a particular source and destination sites.
	For the <b>SERVICE</b> tab, you can choose to display either services, waves, or both.
Right pane properties	Displays all properties of the selected network element. You can modify the properties as required.
Search	Searches for a particular network element.
Refresh	Refreshes the network elements that are listed under each tab.

Options	Description
Expand/Collapse	Expands or collapses the network elements available in the network tree under each tab.
Select Similar	Use this option to make a similar selection. For example, select a ROADM site, and click the <b>Select Similar</b> icon. All ROADM sites get selected.
	You can change a property in all the selected sites at one time.
	Allows you to identify and compare the property difference. For example, if a property is different among the selected sites, that property is dimmed. You can select an option that is applied to all the selections.
Un-Select All	Deselects all selections that you make under the network tree.
Delete	Deletes the selected network elements.
Add Contentionless Sides (available only under the SITE tab)	Contentionless functionality on a site refers to the contentionless add/drop ability of an N-degree ROADM node to accommodate N wavelengths of the same frequency from a single add/drop device. For a ROADM to be contentionless, the number of drop units have to be equal to ROADM degrees.
	Click the ROADM site to which you want to add contentionless sides.
	Click the Add Contentionless Side icon.
	Enter the appropriate value in the Enter number of contentionless sides field.
	• Click <b>OK</b> .
	After adding the contentionless side, you can edit the contentionless port property of the side at the right pane. You can select any of the values ranging from 1 to 16. The default value is 16.

Options	Description
Copy (available only under the SERVICE tab)	Use this option to clone a service or wave that is connected between two sites.
	• Select a wave and click <b>Copy</b> .
	• Enter the quantity in the Clone Service/DWDM Channel dialog box, and click OK.
	The label of the new wave has -1 appended to the label of the cloned wave. For example, Site-2-Site3-1-1 is the label of the new wave that is created by cloning the wave Site-2-Site3-1. You can rename the label.  You can also clone a service in a similar way.