

Release Notes for Cisco Optical Network Planner, Release 5.2

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Cisco Optical Network Planner (Cisco ONP) is a tool to model and test Optical Transport Networks (OTN) and Dense Wavelength Division Multiplexing (DWDM) optical networks by using a graphical environment. The primary purpose of Cisco ONP is to design and validate networks of NCS 1000, NCS 2000 and NCS 4000 series. Using the Cisco ONP tool, you create multiple instances of a network, modify different parameters of each instance, and compare. Cisco ONP generates a rack view of all the sites that are deployed in the network, shows the differences between the instances, and provides a complete Bill of Materials (BoM) for the network.

Cisco ONP models the network, generates the BoM, and provides detailed information about the network, such as Cabling report, Optical report, and Traffic matrix.



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Hardware and Software Requirements

The hardware and software requirements for installing Cisco ONP, Release 5.2 are:

Hardware Requirements

You need to have an Ubuntu server with version 22.04.

Recommended Server Configuration for Cisco Optical Network Planner (ONP) and Live Network Import (LNI):

- 8 CPU, 48 GB RAM, and 500GB server free space after installation, for 3 concurrent Parallel ONP analysis
- 8 CPU, 64 GB RAM, and 500GB server free space after installation, for 6 concurrent Parallel ONP analysis
- 8 CPU, 96 GB RAM, and 500GB server free space after installation, for 10 concurrent Parallel ONP analysis

Software Requirements

- Supported browsers: Google Chrome and Microsoft Edge
- Recommended version of the Google Chrome browser:
 - For Windows: Version 119.0.6045.159
 - For Mac: Version 119.0.6045.159

Recommended version of the Microsoft Edge browser:

- For Windows: Version 119.0.2151.72
- For Mac: Version 119.0.2151.72



Note A minimum 100Mbps internet speed is recommended for a better Cisco ONP user experience.

Supported Platforms and Releases

Cisco ONP supports the following platforms and releases:

Table 1: Supported Platforms and Releases

Platforms	Recommended and Supported Releases
NCS 1004	7.11.1
NCS 1010	7.7.1, 7.9.1, 7.10.1, 7.11.1
NCS 2000	11.0.0, 11.1.0, 12.1.0, 12.2.0, 12.3.1
NCS 4000	6.5.33

What's New in Cisco Optical Network Planner Release 5.2

Cisco is continuously enhancing the product with every release and this section covers a brief description of key features and enhancements. It also includes links to detailed documentation, where available.

Feature	Description
Configuration	

Feature	Description
<p>NCS 1010 New Hardware Support</p>	<p>Cisco ONP now supports the new PIDs from the NCS 1000 family. This allows you to plan your NCS 1010 network while leveraging the LC connector interfaces of NCS 1010, NCS1K14-CCMD-16-C, and NCS1K14-CCMD-16-L line cards.</p> <p>The new properties that support the new PIDs are:</p> <ul style="list-style-type: none"> • NCS 1010 Line Card—Allows you to select a line card; these options are available: <ul style="list-style-type: none"> • Standard Faceplate-NCS1K-OLT-C, NCS1K-OLT-L, NCS1K-ILA-C, NCS1K-ILA-L, NCS1K-OLT-R-C, NCS1K-ILA-R-C, NCS1K-ILA-2R-C • Enhanced Faceplate- NCS1K-E-OLT-C, NCS1K-E-OLT-L, NCS1K-E-ILA-C, NCS1K-E-ILA-L, NCS1K-E-OLT-R-C, NCS1K-E-ILA-R-C, NCS1K-E-ILA-2R-C, NCS1K-E-ILA-R-C-2, NCS1K14-CCMD-16-C, NCS1K14-CCMD-16-L • Degree Priority—Allows the choice of LC and MPO ports for degree interconnection. • Direct LC Add/Drop—Allows to choose the number of LC ports for direct Add/Drop connection. • Add/Drop Connector—This circuit-level property allows you to choose a specific add/drop type for individual circuits. Available options — Direct OLT, OLT+BRK-8/16/24, OLT+CCMD-16 • Colorless Add/Drop: <p>Under MPO Connector Add/Drop, you can choose a breakout module.</p> <p>Under LC Connector Add/Drop, you can choose NCSK14-CCMD-16-C or NCSK14-CCMD-16-L.</p>

Feature	Description
New Network Level Properties	<p>New Network Level properties are introduced under Advanced Optical Settings for NCS 1010 network. You have the flexibility to define custom values for the following properties for the Raman span and validate the optical circuit feasibility.</p> <ul style="list-style-type: none"> • Amplifier Gain Range • Connector Loss • Minimum OSNR Margin • Minimum Span Loss for Raman Amplifiers • Percentage of Fibers with Higher Aging Loss • Generate Cross-Connect • Maximum OSC Reach for NCS 1010 Raman Amplifiers • Retain Auto Placed Raman Spans for Failure • Freq Allocation Order • Link Power Control • Gain Estimator • OTDR
Export Cisco Optical Site Manager (COSM) NETCONF File from NCS 1010 network	<p>The new Generate COSM NetConf XML option allows you to export from the Cisco Optical Network Planner, the Cisco Optical Site Manager NETCONF XML files for all the NCS 1010 nodes. You can then upload these files to the NCS 1010 nodes through the Cisco Optical Site Manager, enabling automatic bring-up of the NCS 1010 nodes.</p>
Automated Selection of Optimal Wavelength Bitrate: Flexible Modelling	<p>You can now automate the calculation of optical sources for your networks using the new Line Rate Tuner Mode. This mode reduces human errors while finding the correct optical source for your network from a set of network resources.</p>
Layer-2 SMR Enhancement to Support Second and Third Port Extension	<p>This enhancement allows you to extend the contentionless sides in a ROADM site, increasing the number of provisioned contentionless sides in the NCS 2000 networks. New contentionless sides increase the number of traffic channels in the NCS 2000 networks. The new Reserve Cascaded SMR Port property reserves more SMR ports to extend the Layer-2 contentionless sides in a ROADM site.</p>
4K-2K SSON Network Creation Support	<p>Now you can include the 4K-2K nodes in both SSON and non-SSON networks while designing the network. This helps you to validate 4K-2K nodes in the SSON design which has higher line rates.</p>

Feature	Description
Power Consumption and Unit Weight Report	<p>Now, you can generate the power consumption and unit weight report for each product ID (PID). In the layout tab, you can see the power consumption and unit weight values and export them into Excel as a report for a single site or all sites. With prior knowledge of power consumption and weight details for each PID, you can plan and design an energy-efficient network.</p> <p>The new options that allow you to view and export the reports are:</p> <ul style="list-style-type: none"> • Show Typical Power Consumption • Show Max Power Consumption • Show Unit Weight • Power Consumption & Weight
Intuitive Map Display	<p>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:</p> <ul style="list-style-type: none"> • 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.
Network Tree Enhancements	<p>Now, you can use the Ellipsis icon at the right side of each element in the Network tree to perform various actions such as Expand All, Collapse All, Enable Multi-Select, and so on. Also, you have multiple entity-level options to filter the elements under the Network tree. These enhancements make the Network tree more intuitive.</p>
Database Operations Optimization	<p>Cisco ONP now provides an option to run some operations in the background involving database interaction, such as Save As, Import CPZ, and Export CPZ. You can continue to use the Cisco ONP interface for other operations when these operations are running in the background.</p>
NCS 2000 Network Analysis Error Message Improvements	<p>The error messages that are displayed during the analysis of the NCS 2000 network are improved. It now includes the primary cause of the issue and the OTN service to which the error is associated.</p>

Caveats

Open Caveats

The following table lists the open caveats for Cisco ONP Release 5.2.

Table 2: Open Caveats

Identifier	Headline
CSCwh41979	Optical subnet Band type is not showing after edting Sd value in upgrade.
CSCwh44696	Association of Services with Media Channels not happening properly with Denali_QPSK Card
CSCwh74182	Notification should not disappear, when clicked anywhere in notification expect, action button
CSCwh80064	CCMD-16 card movement across different NCS1014 shelf should be allowed
CSCwh82488	Analysis fails when Tethys is not exhusted and colorless port forced and on circuit MPO is forced
CSCwh96280	After expand all, if we select multi select, it is auto collapsing
CSCwi11732	Unlock Sides auto collapsing network tree, should not auto collapse when sides unlocked
CSCwi16401	New setting of OLT and Tethys for C and L band
CSCwi23665	COSM XML Enhancements

Bug Search Tool

Cisco Bug Search Tool (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.

Using Bug Search Tool

You can use the Cisco Bug Search Tool to search for a specific bug or to search for all bugs in a release.

Procedure

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- Step 1** Go to the <http://tools.cisco.com/bugsearch>.
- Step 2** Log in using your registered Cisco.com username and password.
The Bug Search page opens.
- Step 3** Use any of these options to search for bugs, and then press Enter (Return) to initiate the search:
- To search for a specific bug, enter the bug ID in the Search For field.
 - To search for bugs based on specific criteria, enter search criteria, such as a problem description, a feature, or a product name, in the Search For field.
 - To search for bugs based on products, enter or select a product from the Product list. For example, if you enter “WAE,” you get several options from which to choose.

- To search for bugs based on releases, in the Releases list select whether to search for bugs affecting a specific release, bugs that were fixed in a specific release, or both. Then enter one or more release numbers in the Releases field.

Step 4 When the search results are displayed, use the filter tools to narrow the results. You can filter the bugs by status, severity, and so on.

To export the results to a spreadsheet, click **Export Results to Excel**.

Other Important Information