

# **Release Notes for Cisco Transport Planner, Release 10.5.2**

#### Revised: February 17, 2016

This Release Notes document contains information about new features and enhancements for the Cisco Transport Planner (CTP). For detailed information regarding features, capabilities, hardware, and software introduced with this release, refer to the Release 10.5.2 version of the *Cisco Transport Planner DWDM Operations Guide*.

Cisco also provides Bug Search Tool, a web resource for tracking defects. To access the Bug Search Tool, visit the following URL:

https://tools.cisco.com/bugsearch/

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# **New Features**

This section highlights new features supported by CTP Release 10.5.2. For detailed documentation of each of these features, refer to the *Cisco Transport Planner DWDM Operations Guide*.

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The new hardware-related features supported by CTP Release 10.5.2 are listed in Table 1.

 Table 1
 Hardware-related Features Supported by CTP Release 10.5.2

Features	Description	
Cisco NCS 2015 AC Shelf Assembly	<ul> <li>y Supports Cisco NCS 2015 AC Shelf assembly. A single NCS 2015 AC shelf supports both ANSI and ETSI standards.</li> <li>You can also configure the AC power modules with 1+0, 1+1, 2+0, and 2+2 redundancy.</li> </ul>	
NCS 2006 ECU-S	Supports ECU-S, which is a new type of ECU introduced for the M6 chassis. It has 2 USB 3.0 connections and 8 USB 2.0 connections. The Fiber Shuffle or the MPO-fan-out unit can be connected to the ONS 15454 M6 ECU-S using the USB 3.0 port.	
15454-80-WXC-C, 15216-MD-40-ODD/EVEN/ID-50, 15216-EF-40-ODD/EVEN	Supports 15454-80-WXC-C, 15216-MD-40-ODD/EVEN/ID-50, 15216-EF-40-ODD/EVEN wavelength management cards on NCS 2015.	
15454-OPT-PRE, 15454-OPT-BST, 15454-OPT-BST-E, 15454-OPT-AMP-C, 15454-OPT-AMP-17C	Supports 15454-OPT-PRE, 15454-OPT-BST, 15454-OPT-BST-E, 15454-OPT-AMP-C, 15454-OPT-AMP-17C amplifier cards on NCS 2015.	
15454-AR-XP=, 15454-OTU2-XP=, 15454-40E-MXP-C=, 15454-40E-TXP-C=, 15454-10E-L1-C, 15454-PSM	Supports 15454-AR-XP=, 15454-OTU2-XP=, 15454-40E-MXP-C=, 15454-40E-TXP-C=, 15454-10E-L1-C, 15454-PSM Transponder/Muxponder ancillary cards on NCS 2015.	
Evolved Mesh	Supports the following degree interconnection rules in Release 10.52 for sites with contentionless sides:	
	• MF-DEG5-CV connects to first five line sides on the degree ports. It is used only to interconnect the degree ports.	
	• Ports 1 through 4 of MF-UPG4 connect with SMR20 and ports 5 through 8 connect with 16 AD CCOFS. This feature is used to extend the contention-less or Add/Drop sides.	
	If the evolved mesh feature is disabled on a site, legacy rules of degree interconnection are followed.	

Features	Description		
Enhanced MSM support for NCS 2015	<ul> <li>The following MSM configurations are supported:</li> <li>Cisco NCS 2015 as the node controller with NCS 2015 as subtended shelves.</li> </ul>		
	• Cisco NCS 2015 as the node controller with a mix of NCS 2015, NCS 2006, and ONS 15454 as subtended shelves.		
	• Cisco NCS 2006 as the node controller with a mix of NCS 2015, NCS 2006, and ONS 15454 shelves as subtended shelves.		
	• Cisco ONS 15454 as the node controller with a mix NCS 2015, NCS 2006, and ONS 15454 shelves as subtended shelves.		
	<b>Note</b> The ONS 15454 shelves must have TCC3 cards installed for the configurations. A warning message appears if the number of shelves exceeds 10 for pure MSM and 15 for mix MSM configuration that include NCS 2015.		
TNCS-O	Supports TNCS-O controller cards that are provisioned as active and standby cards on the M15 and M6 chassis.		
	On the NCS 2015 shelf, the TNCS-O cards can be installed in slots 1 and 17. On the NCS 2006 shelf the cards can be installed in slot 1 and 8.		
	TNCS-O cards support only Fast Ethernet (FE) and wavelength of 1518 nm in OSC transmissions.		
200G-CK-LC and MR-MXP Enhancements	Supports encryption in the 100G operating modes: MXP-100G, and TXP-100G. MR-MXP also supports encryption for MXP-200G and MXP-10x10G-100G operating modes. These cards also provide encryption capability at the optical layer and support feature-based licensing to support high speed and low speed encryption.		
NCS2K-MF-6RU and NCS2K-MF10-6RU	Supports NCS2K-MF-6RU that interfaces up to 14 single-slot passive optical modules, and NCS2K-MF10-6RU that interfaces up to 10 double slot passive optical modules.		
	These units contain a USB 3.0 hub that consolidates all USB 2.0 connections between the passive optical modules units and the NCS 2015 ECU or the NCS2006 ECU-S using a single USB cable.		
MPO 16-2x8 Split Cable	Provides connectivity between the MPO16 connectors of 20 SMR FS or 20 SMR FS CV cards and MPO8 connectors of MF-DEG-5, MF-DEG-5-CV, MF-UPG-4, and MF-UPG-4-CV cards. The MPO 16-2x8 Split Cable can be used in place of MF-2MPO-ADP adapter unit.		

 Table 1
 Hardware-related Features Supported by CTP Release 10.5.2 (continued)

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### **Software Features**

The new software features of Cisco Transport Planner, Release 10.5.2 are listed in Table 2.

Features Description Multi-side Editor Allows you to configure all side-level properties for all sites in the design phase from a single window. For more information, see the Side Editor section in the Cisco Transport Planner DWDM Operations Guide. **Connection Viewer** Provides a Card View and Mesh View for analyzed networks. Card View allows you to view the details of the individual cards. Each port and the corresponding connecting card is displayed. Mesh View is applicable for multi-degree nodes and shows the details of the degree interconnections. **Connection Verification** Validates the correct optical interconnection between the optical cards inside a Flex ROADM. This feature also measures the insertion loss of the external passive path, validates the quality of the connections to the patch panel, and checks if the insertion loss is within expected value. The SMR-20 FS CV cards provide the connection verification feature along with the passive modules MF-DEG-5-CV, MF-UPG-4-CV, and MF-M16LC-CV. For more information, see Connection Verification section of the Cisco Transport Planner DWDM Operations Guide. Split Node support Supports split ROADM feature on M15 chassis.

Table 2 New Features in CTP Release 10.5.2

# **Performing Software Updates in CTP**

CTP enables you to update the CTP software automatically or manually.

### **Performing Automatic Software Updates in CTP**

This section explains how to perform an automatic software update.

Step 1	When CTP is launched, it checks for the latest software update automatically. If available, the following dialog box appears: <b>Online Update Available, Would you like to Update CTP?</b> Click <b>Yes</b> .
Step 2	The Software Update Dialog box appears listing the applicable software updates. Select the required software update and click <b>Apply</b> .
Step 3	The Update Successful message appears. Click <b>OK</b> .
Note	The Update dialog box appears every time CTP is launched until the software update is applied.

#### **Performing Manual Software Updates in CTP**

Contact the Cisco Sales/Account team to get the software update files.

This section explains how to perform a manual software update.

- **Step 1** In the CTP Help menu, go to **Help > Check updates**. The update CTP dialog box appears.
- Step 2 Click Browse.
- **Step 3** Select the **.upz** update file and click **OK**.
- **Step 4** The Software Update Dialog box appears listing the applicable software updates. Select the required software update and click **Apply**.
- **Step 5** The Update Successful message appears. Click **OK**.
- **Step 6** Delete the cache and restart CTP.

#### **Performing Software Update Rollback**

CTP allows rollback of software updates. A single rollback moves the CTP software to the previous state (prior to the software update). For example, if there are two updates applied one by one—Update 1 and Update 2, after the first rollback, CTP removes Update 2 and retains Update 1. Further rollback(s) are needed if multiple updates are present.

This section explains how to perform a rollback.

- **Step 1** Press **R** while CTP is launching. The CTP launch is interrupted to perform a software rollback.
- **Step 2** Click **Yes** to confirm software rollback. The rollback successful dialog box appears.



- Delete CTP Cache before and after applying update. Procedures about deleting cache are mentioned in the CTP Operations Guide. Take a backup of the required files (User preferences, CTP Design Files (.mpz), NeUpdate File, Alien Files, and so on) before deleting CTP cache.
- Automatic Update can be performed only when you are connected to the Cisco network. If you are not on a Cisco network, try to connect to Cisco VPN first. Otherwise, the software update file should be manually provided by a Cisco representative and manually updated.
- Changes caused by the software update is applicable even if the CTP Cache is deleted after the update. To remove an update, follow the rollback procedure mentioned in the previous section.
- Multiple rollbacks are not supported in this release. Re-install CTP if required.
- In the Java Control Panel, set the Java security to **medium** and mention the CTP installation directory in the Exception Site List (if there are issues with the rollback). If the screen is unresponsive, end CTP process and restart CTP.
- For MAC, force quit the process and restart CTP (if there are issues with the rollback).
- After uninstallation, delete all the files under the directory where CTP is installed manually.
  - Default location on Windows OS: C:\Program Files\Cisco\CTP10.5.2.
  - Default location on Mac OS: Applications/CiscoCTP10.5.2

## **Software and Hardware Requirements**

Before you begin to install CTP Release 10.5.2, you must check if your system meets the minimum software and hardware requirements. This section describes the software and hardware requirements for CTP Release 10.5.2.

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- Operating System Requirements
- Supported Java Runtime Environment
- Hardware Requirements

### **Operating System Requirements**

CTP Release 10.5.2 runs on systems with the following operating systems:

- Microsoft Windows 2000 Professional
- Microsoft Windows XP Professional
- Microsoft Vista Business
- Microsoft Windows 7 Professional
- Linux
- Apple MacBook (up to Yosemite).



Microsoft Windows 7 Professional is the preferred operating system for CTP Release 10.5.2.

#### **Supported Java Runtime Environment**

CTP Release 10.5.2 requires that you install one of the following Java Runtime Environment versions:

- Windows 7 OS with Java 1.7
- Mac OS Yosemite with Java 1.7
  - Use the following command to set the Java path to 1.7: export JAVA\_HOME=`/usr/libexec/java\_home -v '1.7\*'`

#### **Hardware Requirements**

CTP Release 10.5.2 runs on systems with the following hardware configurations:

Hardware	Minimum Requirements	Typical Requirements	<b>Recommended Requirements</b>
СРИ	Intel Pentium Processor 800 MHz	Intel Pentium Processor 1.4 GHz	Intel Pentium Processor 1.7 GHz
Memory	1024 MB RAM	1 GB RAM	2 GB RAM or more
Video Resolution	1024x768	1280x1024	1280x1024

#### **Customizing Memory Usage for JVM**

CTP Release 10.5.2 allows you to customize the maximum amount of memory to be used by the Java Virtual Machine (JVM). The default value of 1024 MB is appropriate for use with the recommended hardware (1GB of RAM).

For hardware using less physical memory, it is recommended that you reduce the maximum amount of memory to be used by the JVM. This reduction prevents the system from using system virtual memory, which results in poorer system performance.

If you reduce the amount of memory dedicated to JVM, Cisco Transport Planner may generate an Out of Memory error in the case of a complex design, typically when designing an any-to-any traffic design with a large number of nodes. In such cases, it is recommended that you increase the memory size.

Allowing JVM to use too much memory compared to the available RAM can instead result in very low system performances due to the use of virtual memory. The following table lists the recommended settings:

System RAM	Minimum JVM Memory	Maximum JVM Memory	Suggested JVM Memory
1024 MB	256 MB	450 MB	350 MB
1 GB	512 MB	900 MB	700 MB
2 GB or more	512 MB	1800 MB	1450 MB

To change the maximum amount of memory to be used by the JVM, you need to edit the *Startup.properties* file, which is available in the directory where you saved the *ctp.jar* file during installation. Replace the default value (1024 MB) with the appropriate one from the Suggested JVM Memory column of the preceding table. Save the file and restart the Cisco Transport Planner for the changes to take effect.



The suggested memory values are for a system with fairly less load. If there are many processes running on your system, changing to the suggested memory value may not launch CTP. In such cases, reduce the JVM memory appropriately (you may reduce the memory in granularity of 100 MB) by editing the *Startup.properties* file.

### **Important Notes**

• The Search feature of the Online Help does not show the new features of CTP Release 10.5.2.

# **Cisco Bug Search Tool**

Use the Bug Search Tool (BST) to view the list of outstanding and resolved bugs in CTP Release 10.5.2.

BST, the online successor to Bug Toolkit, is designed to improve the effectiveness in network risk management and device troubleshooting. The tool allows partners and customers to search for software bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. The tool has provision to filter bugs based on credentials to provide external and internal bug views for the search input.

The BST is available at https://tools.cisco.com/bugsearch/. For more information on BST, see Bug Search Tool Help.

#### **Search Bugs in BST**

Follow the instructions below to search bugs specific to software release 10.5.2 in BST.

- **Step 1** Go to https://tools.cisco.com/bugsearch/. You will be prompted to log into Cisco.com. After you login, the Bug Search Tool page opens.
- **Step 2** To search for a specific bug, enter the bug ID in the **Search For** field and click **Enter**.

**Step 3** To search for all the bugs in CTP 10.5.2 enter the following parameters:

• Search For—Enter Cisco TransportPlanner in the text box.

Or

Click Select from List and choose Optical Networking > Network Design Tools > Cisco TransportPlanner.

- Releases—Enter the appropriate release number.
- Show Bugs—Select Affecting or Fixed in these Releases.

Step 4 Press Enter.



- By default, the search results include bugs with all severity levels and statuses, and bugs that were modified during the life cycle of the bug. After you perform a search, you can filter your search results to meet your search requirements.
- An initial set of 25 search results is shown in the bottom pane. Drag the scroll bar to display the next set of 25 results. Pagination of search results is not supported.

### **Related Documentation**

Cisco Transport Planner DWDM Operations Guide, Release 10.5.2

## **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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