Release Notes for Cisco Transport Planner, Release 10.6.1

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Cisco Transport Planner Release Notes

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 10.6.1 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/

New Features

This section highlights new features supported by CTP Release 10.6.1 and CTP Release 10.6.1 Software Update. For detailed documentation of each of these features, refer to the *Cisco Transport Planner DWDM Operations Guide*.

Features	Description	
Support for NCS2K-400G-XP Card	400G-XP-LC card is a double-slot transponder and muxponder card with 400G bandwidth and can be used in Flex, MSTP, or hybrid configurations.	
	This card supports the following characteristics:	
	• Two trunk ports that support 100G and 200G	
	• 10 client ports	
	• 10GE, 100GE service types	
	• 25% and 15% SD-FEC	
	• M6 and NCS 2015	
	• Only Client 1+1 protection	

Features	Description
Support for new pluggables	The following pluggables are supported for 400G-XP-LC:
	 QSFP-100G-SR4-S—This is the default pluggable and is for 100G client traffic.
	ONS-QSFP28-LR4—This pluggable is for 100G client.
	QSFP-100G-LR4-S—This pluggable is for 100G client.
	QSFP-4X10G-LR-S—This pluggable is for 10G client.
	ONS-CFP2-WDM—This pluggable is for 100G and 200G trunk.
	All the above pluggables except QSFP-4X10G-LR-S are QSFP+28 pluggables. These pluggables can handle 100G traffic.
Support for OTU4 service type on 200G-CK-LC cards	OTU4 service type is supported on 200G-CK-LC in the FEC, EFEC, and SD-FEC modes.
Support for OTU2 and OTU2e service type support on 200G-CK-LC and 10x10G-LC combinations	OTU2 and OTU2e service types are supported on 200G-CK-LC and 10x10G-LC combinations in the FEC, EFEC, and SD-FEC modes.
Support for NCS2K-MF-8X10G-FO passive module	NCS2K-MF-8X10G-FO passive module is supported only for 10G on the client-side of the NCS2K-400G-XP card. By default this passive module is enabled in CTP.
	The NCS2K-MF-8X10G-FO unit uses a ONS-12MPO-MPO-8 cable to connect to the client ports of the NCS2K-400G-XP card.
Support for TNCS controller card on M2 chassis	TNCS controller card is supported on M2 chassis.
Support for MR-MXP breakout cable	ONS-MPO-MPOLC-10 breakout cable interconnects the client ports of the MR-MXP card with the NCS2K-MF-MPO-20LC passive module when the MR-MXP card is configured as a 10x10GE fan-out.
Support for OPT-AMP-C on FLEX NG-DWDM Line Amplifier Nodes	From CTP 10.6.1 Software Update and Sytem Release 10.6, OPT-AMP-C amplifier is supported on FLEX NG-DWDM Line Amplifier nodes.

Features	Description
Support for TNCS controller card on M6 chassis	From CTP 10.6.1 Software Update and Software Release 10.5.2, TNCS is enabled as a valid controller card for NCS 2006 Chassis.
Support for 16-MPO-MPO cable	A new Multi-fiber patchcord with MPO24 connectors implemented in CTP Release 10.6.1 Software Update. To implement this, a new property "Mpo16ToMpo16Cable" is added at Site level.
Option to share/unshare MF-2LC-ADP with RAMAN amplifiers	From CTP 10.6.1 Software Update, the MF-2LC-ADP Unit is configured to be shared only with EDRA amplifiers and not to be shared with RAMAN-CTP and RAMAN-CTP-COP amplifiers as in earlier releases.

Important Notes

- In Release 10.6.1, the TCC2P card can be used only on a standalone Network Element (NE) or as subtended shelf of an MSM having node controller with TCC3 card in M12 or TNCE/TNCS in NCS 2006 or NCS 2015.
- In Release 10.6.1, an MS-ISC card is not supported in a shelf with a TCC2P card.

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: Online Update Available, Would you like to Update CTP? Click Yes.
- Step 2 The Software Update Dialog box appears listing the applicable software updates. Select the required software update and click **Apply**.
- **Step 3** The Update Successful message appears. Click **OK**.

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 rollbacks 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.

Note

- 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\CTP10.6.1.
 - o Default location on Mac OS: Applications/CiscoCTP10.6.1

Software and Hardware Requirements

Before you begin to install CTP Release 10.6.1, you must check if your system meets the minimum software and hardware requirements.

This section describes the software and hardware requirements for CTP Release 10.6.1.

Operating System Requirements

CTP Release 10.6.1 runs on systems with the following operating systems:

- Microsoft Windows 10 Professional
- Microsoft Windows 7 Professional
- Linux
- Apple Mac OS (up to X El Capitan).



Note

Microsoft Windows 7 Professional is the preferred operating system for CTP Release 10.6.1.

Supported Java Runtime Environment

CTP Release 10.6.1 requires that you install one of the following Java Runtime Environment versions:

- Java 1.7
- Java 1.8

Hardware Requirements

CTP Release 10.6.1 runs on systems with the following hardware configurations:

Hardware	Minimum Requirements	Typical Requirements	Recommended Requirements
CPU	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 10.6.1 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.

Cisco Bug Search Tool

Use the Bug Search Tool (BST) to view the list of outstanding and resolved bugs in CTP Release 10.6.1.

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 10.6.1 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 10.6.1 enter the following parameters:
 - Search For—Enter Cisco TransportPlanner in the text box.

Or

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

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

Step 4 Press Enter.

Note

- 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 10.6.1

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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Obtaining Documentation and Submitting a Service Request

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