Release Notes for Cisco Transport Planner, Release 9.4

Revised: February 9, 2012, OL-25607-01

Release notes contain the 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 9.4 version of the *Cisco Transport Planner DWDM Operations Guide*.

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

http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs

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Software and Hardware Requirements

Before you begin to install *CTP Release 9.4*, you must check if your system meets the minimum software and hardware requirements. This section describes the software and hardware requirements for CTP Release 9.4.

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

Operating System Requirements

CTP Release 9.4 runs on systems with the following operating systems:

- Microsoft Windows 2000 Professional
- Microsoft Windows XP Professional
- Microsoft Vista Business
- Microsoft Windows 7 Professional
- Linux

Note Microsoft Windows XP Professional is the preferred operating system for CTP Release 9.4.

Supported Java Runtime Environment

CTP Release 9.4 requires that you install Java Runtime Environment Version 1.6.

You can download it from this URL:

http://www.oracle.com/technetwork/java/javase/downloads/index.html

Hardware Requirements

CTP Release 9.4 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	512 MB RAM	1 GB RAM	2 GB RAM or more
Video Resolution	1024x768	1280x1024	1280x1024

Customizing Memory Usage for JVM

CTP Release 9.4 allows you to customize the maximum amount of memory to be used by the Java Virtual Machine (JVM). The default value of 512 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
512 MB	256 MB	450 MB	350 MB
1 GB	512 MB	900 MB	700 MB
2 GB or more	1024 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 (512M) 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.

Note 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.

Using the Bug ToolKit

In CTP Release 9.4, use the Bug ToolKit to view the list of outstanding and resolved bugs in a release. This section explains how to use the Bug ToolKit.

Step 1 Go to http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs.

You will be prompted to log into Cisco.com. After you login, the Bug Toolkit page opens.

Step 2 To search for a specific bug, enter the bug ID in the **Search for Bug ID** field and click **Go** in the **Search Bugs** tab.

To search for all the bugs in a specified release, enter the following search criteria in the **Search Bugs** tab:

- Select Product Category—Select **Optical Networking**.

- Select Products—Select **Cisco DWDM Design Tool** from the list.

- Software Version—Select **9.40** to view the list of outstanding and resolved bugs in CTP, Release 9.4.

- Search for Keyword(s)—Separate search phrases with boolean expressions (AND, NOT, OR) to search within the bug title and details.

- Advanced Options—You can either perform a search using the default search criteria or define custom criteria for an advanced search. To customize the advanced search, select **Use custom settings for severity, status, and others** and provide the following information:

    – Severity—Check the check box for the severity level.

    – Status—Check the check box corresponding to **Open**, **Fixed**, or **Terminated**.

    Select **Open** to view all the open bugs. To filter the open bugs, uncheck the **Open** check box and select the appropriate sub-options that appear below the Open check box. The sub-options are Assigned, Forwarded, Held, Information Required, More, New, Open, Postponed, Submitted, and Waiting. For example, select **New** if you want to view only new bugs in CTP Release 9.4.

    Select **Fixed** to view fixed bugs. To filter fixed bugs, uncheck the **Fixed** check box and select the appropriate sub-options that appear below the Fixed check box. The sub-options are Resolved and Verified.

    Select **Terminated** to view terminated bugs. To filter terminated bugs, uncheck the **Terminated** check box and select the appropriate sub-options that appear below the Terminated check box. The sub-options are Closed, Junked, and Unreproducible.

    You can select multiple options as required.

    – Advanced—Check the **Show only bugs containing bug details** check box to view only those bugs that contain detailed information, such as symptoms and workarounds. Check the **Include only bugs available to customers** check box to view only those bugs that are customer facing.

    – Modified Date—Use this option to filter bugs based on the time duration within which the bugs were last modified. Select the appropriate option from the drop-down list.

    – Results Displayed Per Page—Select the appropriate option from the drop-down list to restrict the number of results that appear per page.

Step 3   Click **Search**. The Bug Toolkit displays the list of bugs based on the specified search criteria.

Export to Spreadsheet

The Bug ToolKit provides the following options to export bugs to a spreadsheet:

- Click **Export All to Spreadsheet** link in the Search Results page under the Search Bugs tab. Specify the file name and folder name to save the spreadsheet. All the bugs retrieved by the search will be exported.

- Click **Export All to Spreadsheet** link in the My Notifications tab. Specify the file name and folder name to save the spreadsheet. All the saved bugs in all the groups will be exported.

If you are unable to export the spreadsheet, log into the Technical Support Website at http://www.cisco.com/cisco/web/support/index.html for more information, or call Cisco TAC (1-800-553-2447).

New Features and Functionality

This section highlights new features and functionality supported by CTP Release 9.4. For detailed documentation of each of these features, refer to the *Cisco Transport Planner DWDM Operations Guide*.

Common Hardware

The new hardware supported by CTP Release 9.4 are:

AR-MXP and AR-XP Cards

The AR-MXP (Any Rate Muxponder) and AR-XP (Any Rate Xponder) cards aggregate a mix of client SAN service inputs (GE, FICON, ESCON, ISC3 and Fibre Channel),OC3/STM-1, OC12/STM-4, OC48/STM-16, Video (3G-SDI, SD-SDI, HD-SDI) into one 10 Gbps signal on the trunk side. The AR-MXP card supports bandwidth upto 10 Gbps, and the AR-XP card supports bandwidth upto 20 Gbps.

The AR-MXP and AR-XP cards have eight SFP and two XFP ports. The client and trunk ports are either SFP ports (2.5 Gbps) or XFP ports (10 Gbps).

The AR-MXP or AR-XP cards can be installed in the Cisco ONS 15454, the Cisco ONS 15454 M2, and the Cisco ONS 15454 M6 systems. FTA4 fan tray assembly has to be installed in the Cisco ONS 15454 system before installing the AR-MXP or AR-XP cards.

The AR-MXP or AR-XP cards can be configured in High Rate and Low Rate modes. High Rate mode supports up to 80 channels with tunable XFPs and Low Rate mode supports up to 40 channels.

The AR-MXP or AR-XP cards can be configured in multiple card modes. See the table "Operational modes supported by AR-MXP and AR-XP cards" in the chapter "Editing a Project" of the *Cisco Transport Planner DWDM Operations Guide* for card modes supported by AR-MXP and AR-XP cards.

See the table "Supported XFPs" in the appendix "Card Types" of the *Cisco Transport Planner DWDM Operations Guide* for a list of Small Form-factor Pluggable (SFP) and 10 Gbps Small Form-factor Pluggable (XFP) optical modules supported on AR-MXP and AR-XP cards.

Fiber Bragg Dispersion Compensation Units

The low latency Fiber Bragg Dispersion Compensation Units (FDCUs) units are used in point-to-point demands to overcome optical impairments. The FDCUs are allowed only in 100 GHz optical subnets and cannot interoperate with standard DCUs. The FDCUs can be used for the following client interfaces:

- OTU2_XP with ONS-XC-10G-C
- High rate AR-XP and AR-MXP cards with ONS-XC-10G-C
- TXP_MR_10EX_C
- 40G DQPSK MXP

Software Features

The new software features of Cisco Transport Planner, Release 9.4 are listed in Table 1.

Table 1   *New Features in Cisco Transport Planner, Release 9.4*

Features	Description
100 G alien interfaces	Uses the wavelength assignment algorithm in CTP as the maximum separation rule for services using the 100 G alien interfaces.
Add or Remove Sites from P-Ring, Ethernet Aggregated, and TDM Aggregated Demands	Adds or removes sites from P-Ring, Ethernet Aggregated, and TDM Aggregated demands.
Any-to-any demand finalization	Finalizes the any-to-any demand when the network is in design-analyzed state. An A2A Finalized Circuits report is generated after the network is finalized and analyzed.
Bi-directional communication with the network element	Imports node data from the network element, edits, analyzes the network, and exports node parameters to the network element.
Delete Cache (Tools menu)	Deletes CTP cache on restart.
GUI enhancements	Enhancements made to the CTP interface: • Network details icon (in the network view)—This is used to hide or display duct information (duct name, EOL), amplifier forcing, and circuits of the network in the Network tab. • Wavelength usage information icon (in the network view)—This is used to hide or display the number of used and free wavelengths for every duct of the network in the Network tab. • Start Page—This is used to create a new project, open an existing project, or import node parameters of a network.
Multiple optical bypass sites	Specifies multiple sites where the channels for the current demand are optically dropped. Sites present between the source and destination sites along the path of this section are available to be added as optical bypass sites.
Omnidirectional support for 40-SMR2-C cards	Supports multidegree OXC sites of type SMR-2 with omnidirectional capability.
PAYG at card level	Uses of PAYG licenses per card to reduce the initial setup cost.
TCC Type	Chooses the TCC card type.
XFP in Restricted Equipment List	Places or moves the ONS-XC-10G-C and ONS-XC-10G-EP XFPs to the Restricted Equipment List.
Y-cable protection for LAN-WAN Conversion	Supports Y-cable protection type for LAN-WAN Conversion service type.

Related Documentation

Cisco Transport Planner DWDM Operations Guide, Release 9.4

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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