



Release Notes for Cisco Transport Planner Release 9.1

Revised: October 2009, OL-20801-01

Release notes contain the new features and enhancements for the Cisco Transport Planner. For detailed information regarding features, capabilities, hardware, and software introduced with this release, refer to the Release 9.1 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 *Cisco Transport Planner Release 9.1*, you must check if your system meets the minimum software and hardware requirements. This section describes the software and hardware requirements for Cisco Transport Planner Release 9.1.

- [Operating System Requirements](#)
- [Supported Java Runtime Environment](#)
- [Hardware Requirements](#)



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Operating System Requirements

Cisco Transport Planner Release 9.1 runs on systems with the following operating systems:

- Microsoft Windows 2000 Professional
- Microsoft Windows XP Professional/Home Edition
- Linux

Supported Java Runtime Environment

Cisco Transport Planner Release 9.1 requires that you install Java Runtime Environment Version 1.6.

You can download it from the following URL:

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

Hardware Requirements

Cisco Transport Planner Release 9.1 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 | 256MB RAM | 512MB RAM | 1GB RAM |
| Video Resolution | 1024x768 | 1280x1024 | 1280x1024 |

Customizing Memory Usage for JVM

Cisco Transport Planner Release 9.1 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 (1 GB 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 with 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 |
|------------|--------------------|--------------------|----------------------|
| 256 MB | 128 MB | 200 MB | 170 MB |
| 512 MB | 256 MB | 450 MB | 350 MB |
| 1 GB | 512 MB | 900 MB | 700 MB |
| 2 GB | 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 above. Save the file and restart 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 Cisco Transport Planner Release 9.1, 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.

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- 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** Click **Launch Bug Toolkit**.
- Step 3** 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 **9.10** to view the list of outstanding and resolved bugs in Cisco Transport Planner Release 9.1.
 - 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—Select the severity level.
 - Status—Select **Open**, **Fixed**, or **Terminated**.

Select **Open** to view all the open bugs. To filter the open bugs, clear the Open check box and select the appropriate sub-options that appear below the Open check box. The sub-options are New, Held, More, Open, Waiting, Assigned, Forwarded, Postponed, Submitted, and Information Required. For example, if you want to view only new bugs in Cisco Transport Planner Release 9.1, only select **New**.

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

Select **Terminated** to view terminated bugs. To filter terminated bugs, clear 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**. Select multiple options as required.

- Advanced—Select the **Show only bugs containing bug details** check box to view only those bugs that contain detailed information, such as symptoms and workarounds.
- Modified Date—Select this option if you want filter bugs based on the date on which the bugs were last modified.
- Results Displayed Per Page—Select the appropriate option from the list to restrict the number of results that appear per page.

Step 4 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 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 file name and folder name to save the spreadsheet. All the saved bugs in all the groups will be exported.

New Features and Functionality

This section highlights new features and functionality for Release 9.1. For detailed documentation of each of these features, refer to the *Cisco Transport Planner DWDM Operations Guide*.

Common Hardware

Cisco Transport Planner Release 9.1 supports the following new hardware:

- [OPT-RAMP-CE Card, page 5](#)
- [ONS-XC-10G-C XFP Cards, page 5](#)
- [TXP_MR_10EX_C, MXP_2.5G_10EX_C, and MXP_MR_10DMEX_C Cards, page 5](#)
- [Tunable Dispersion Compensation Unit, page 5](#)
- [40-SMR1-C and 40-SMR2-C Cards, page 5](#)

- [15216 Flex Layer Hybrid, page 5](#)
- [15216 40- Channel Mux/Demux Unit, page 6](#)

OPT-RAMP-CE Card

The OPT-RAMP-CE card is an enhanced version of the OPT-RAMP-C Card, optimized for shorter spans (18 to 20 dB) and higher number of channels.

The OPT-RAMP-CE design is identical to that of OPT-RAMP-C, with the exception of the embedded erbium-doped fiber amplifier (EDFA). For the embedded EDFA, the optimum gain has been moved from 14dB to 11dB and its maximum power from 17dBm to 20dBm.

ONS-XC-10G-C XFP Cards

The Cisco Transport Planner Software R9.1 supports the ONS-XC-10G-C XFP card.

TXP_MR_10EX_C, MXP_2.5G_10EX_C, and MXP_MR_10DMEX_C Cards

The Cisco Transport Planner Software R9.1 supports the TXP_MR_10EX_C, MXP_2.5G_10EX_C, and MXP_MR_10DMEX_C cards.

Tunable Dispersion Compensation Unit

The tunable dispersion compensation unit (TDCU) can be configured to reduce chromatic dispersion (CD) of the transmission fibre.

40-SMR1-C and 40-SMR2-C Cards

The 40-SMR1-C and 40-SMR2-C cards integrate the following functional blocks onto a single line card:

- Optical preamplifier
- Optical booster amplifier
- Optical service channel (OSC) filter
- 2x1 wavelength cross-connect (WXC) or a 4x1 WXC
- Optical channel monitor (OCM)

40-SMR1-C is a Single Module ROADM for line and terminal sites. It integrates the preamplifier, OSC splitter/combiner and a 2X1 wavelength cross connect.

40-SMR2-C is a Single Module ROADM for line, terminal and multidegree sites (upto a maximum of 4 degrees). It integrates the preamplifier, booster, OSC splitter/combiner and a 4x1 wavelength cross connect.

15216 Flex Layer Hybrid

The ONS 15216 Flex Layer Hybrid allows you to add FLB-2, FLA-8, and 15216-MD-40-ODD Add/Drop units. It also supports a maximum of 40 channels for 15216-MD-40-ODD units and 32 channels for other units (FLB-2 and FLA-8).

15216 40- Channel Mux/Demux Unit

The Cisco ONS 15216 40-channel Mux/Demux unit is a new ONS 15216 FlexLayer unit that allows 40-channels of ITU wavelengths to be placed onto a single fiber, and removes 40-channels of ITU wavelengths from a single fiber.

New Software Features and Functionality

The following new software features and functionality are added for Release 9.1:

- Supports alien shelves—CTP allows you to add non-Cisco entities to the node layout. Alien shelves can be added to individual sites or to the whole network
- Supports dark fiber— A dark fiber is defined as a span not traversed by any present or forecast traffic. If a particular side does not have any demand and does not have traffic passing through that side, the ANS parameters related to that side will not be displayed in the Installation Parameters report.
- Supports Different Phase Shift Keying (DPSK) and Different Quadrature Phase Shift Keying (DQPSK)—DPSK and DQPSK are client cards that helps to define third-party DWDM interfaces, when creating traffic demands.
- Supports double slot card movement—CTP supports the movement of double slot card even when the destination has a blank faceplate in a single slot card. The single slot card is placed before and/or after the blank faceplate.
- Supports even channels design —CTP supports the design of ONS 15454 MSTP systems with 50GHz channels spacing of 64, 72, and 80 channels. This facilitates the usage of even wavelengths in the traffic matrix.
- Supports Forcing Manager—The forcing manager is an advanced unlock options that CTC allows. It enables you to unlock multiple interfaces connected to various ducts and sites. This helps you unlock a group of sites and ducts based on individual units such as Amplifiers, DCUs, Add/Drop units, Band Parameters, and Node Layout. The Forcing Manger is used to unlock sites/ducts in both the design mode and the upgrade mode.
- Supports CTP File Lock —Any saved network loaded in CTP is locked for the exclusive use of that CTP. You cannot open an existing CTP project in multiple CTP instances. The .MPZ project file is unlocked and released only after you close the CTP instance and Network.
- Supports Km/Miles Runtime Settings—You can change the km/miles runtime settings in the network parameters. Any change made to the measurement unit at the network level will change the measurement unit of all the ducts within that network.
- Supports regeneration in ROADM demands.
- Supports maximum scalability placement—CTP now supports the possibility to perform designs to allow maximum scalability in terms of flexibility and system capacity. This new operating mode is supported in parallel with the standard one, designing for lowest possible day1 cost.
- Supports MSM Shelf ID in Multi Shelf Management Configuration — Allows you to modify the MSM Shelf ID for multi shelf management configuration.
- Supports MSM Shelf Movement—Allows you to move all the shelves in the layout using the “Move” option.
- Supports network wide layout report—The network wide layout report feature exports the layout reports of multiple sites in an analyzed network.

- Supports the Ne Update XML file to include the installation parameters reports that shows the values set (provisioned) at the time of the installation of each site in the network. The NE Update file now provides details of the parameters used to provision the passive units.
- Supports OC-192/STM-64 client on ADM-10G card as client port in TDM aggregated demands, when the card is in a single card mode.
- Supports Site Functional View—Allows you to view the graphical display of all the internal connections of cards, circuits, patchcords and passive units (for example, DCU units and Patch Panel).
- Supports 10G Ethernet LAN to WAN Conversion—The OTU2_XP card can be configured to convert the 10G Ethernet LAN traffic to WAN traffic. The OTU2_XP card supports 10G Ethernet LAN Phy to 10G Ethernet WAN Phy conversion on Ports 1 (client port) and 3 (trunk port).
- Supports wavelength routing report— CTP lists the wavelengths supported by the platform for the network that is analyzed.

Related Documentation

Release-Specific Documents

- *Cisco Transport Planner DWDM Operations Guide, Release 9.1*
- *Release Notes for Cisco Transport Planner 9.1*

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>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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