



Preface

This section explains the objectives, intended audience, and organization of this guide and describes the conventions that convey instructions and other information.

New and Changed Information

The following table describes information that has been added or changed since the initial release of this guide.

Table 1 *New and Changed Information in This Guide*

Date Released	Description	Location
March 26, 2007	Initial version.	—
December 12, 2007	Updated the throws for the <code>getCTMHistoryPMDData</code> interface.	3.11.5 performance::Performance ManagementMgr_I::getCTMHistoryPMDData, page 3-233
	Updated the list of PTP values for the <code>LR_T1_and_DS1_1_5M</code> parameter for the ONS 15310 MA and ONS 15454 SONET.	3.11.5 performance::Performance ManagementMgr_I::getCTMHistoryPMDData, page 3-233
May 19, 2009	Corrected this line of code: <pre>name[3] = new NameComponent(version, "Version"); //where version = "7_0" for CTM 8.0</pre> to read: <pre>name[3] = new NameComponent(version, "Version"); //where version = "8_0" for CTM 8.0</pre>	C.2.2.3 Get Reference to EMSSessionFactory, page C-7

Objectives

This document provides a detailed description of the northbound Common Object Request Broker Architecture (CORBA) interfaces supported by Cisco Transport Manager (CTM). This document serves as a reference for developers of Operations Support System (OSS) applications that will interface with the CTM Release 8.0 GateWay/CORBA interface. It provides details of input parameters, output parameters, and attributes.

Use this document to:

- Learn about the northbound GateWay/CORBA interfaces supported by CTM R8.0
- Understand the input parameters, output parameters, and attributes associated with CTM GateWay/CORBA

Audience

The primary audience for this guide includes network operations personnel and system administrators. This guide assumes the reader is familiar with the following products and topics:

- Cisco ONS 15000-series products
- Cisco Carrier Routing System 1 (CRS-1)
- Cisco Catalyst 6509
- Cisco XR 12000
- Cisco MDS 9000 Multilayer Director and Fabric Switch
- Cisco MGX 8880 Media Gateway
- Voice-enabled Cisco MGX 8850 Multiservice Switch
- Voice-enabled Cisco MGX 8830 Multiservice Switch
- Basic internetworking terminology and concepts
- Network topology and protocols
- Microsoft Windows 2000 Professional and XP Professional
- Sun Microsystems Solaris administration
- Oracle database administration
- Object Management Group (OMG) CORBA, notification service, and naming service
- Telecommunication Management Network (TMN) architecture model

Conventions

This document uses the following conventions:

Item	Convention
Commands and keywords	boldface font
Displayed session and system information	<i>screen font</i>
Information that the user must enter	boldface screen font
Variables that the user must supply	<i>italic screen font</i>
Menu items and button names	boldface font
Selecting a menu item	Option > Network Preferences



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Timesaver**

Means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Tip**

Means *the information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information, similar to a Timesaver.

Related Documentation

**Note**

You can access the most current CTM R8.0 documentation online at http://www.cisco.com/en/US/products/sw/opticsw/ps2204/tsd_products_support_series_home.html.

The CTM documentation set comprises the following guides:

1. *Release Notes for Cisco Transport Manager Release 8.0*—Describes the caveats for CTM R8.0.
2. *Cisco Transport Manager Release 8.0 Installation Guide*—Explains how to install CTM R8.0 and how to upgrade from previous releases.
3. *Cisco Transport Manager Release 8.0 User Guide*—Describes how to use the CTM software, which consists of user applications and tools for network discovery, network configuration, connection management, fault management, system administration, and security management.
4. *Cisco Transport Manager Release 8.0 GateWay/CORBA User Guide and Programmer Manual*—This guide.
5. *Cisco Transport Manager Release 8.0 Database Schema*—Describes the database schema that CTM uses to store information in a Structured Query Language (SQL) database such as the Oracle database. The document is designed for users who need to create their own reports without using CTM.
6. *Cisco Transport Manager Release 8.0 High Availability Installation Guide*—Explains how to install CTM in a high availability (HA) environment.

**Note**

The *Cisco Transport Manager Release 8.0 High Availability Installation Guide* is not available online. Contact your Cisco account representative to obtain this guide.

7. *Cisco Transport Manager Release 8.0 ML Provisioning Methodology*—Describes the methodology that CTM uses to provision ML-series cards.

The following table lists the related NE hardware documentation.

Table 2 **Related Cisco NE Documentation**

Cisco Product	Document Title
Cisco 7600	<ul style="list-style-type: none"> • <i>Cisco 7600 Series Router Module Configuration Notes</i> • <i>Regulatory Compliance and Safety Information for the Cisco 7600 Series Routers</i> • <i>Cisco 7600 Series Router Installation Guide</i> • <i>Cisco 7600 Series Router Module Release Notes</i>
Cisco Catalyst 6509	<ul style="list-style-type: none"> • <i>Catalyst 6500 Series Configuration Notes</i> • <i>Catalyst 6500 Series Switch Installation Guide</i> • <i>Catalyst 6500 Series Switch Module Guide</i> • <i>Regulatory Compliance and Safety Information for the Catalyst 6500 Series Switch</i> • <i>Release Notes for Catalyst 6500 Series</i>
Cisco CRS-1	<ul style="list-style-type: none"> • <i>Cisco CRS-1 Series Carrier Routing System Getting Started Guide</i> • <i>Cisco Craft Works Interface User Guide</i> • <i>Cisco CRS-1 Series Carrier Routing System Interface Configuration Guide</i> • <i>Cisco CRS-1 Series Carrier Routing System Getting Started Guide</i> • <i>Cisco CRS-1 Series Carrier Routing System Regulatory Compliance and Safety Information</i> • <i>Cisco IOS XR XML API Guide</i> • <i>Release Notes for the Cisco CRS-1 Series Carrier Routing System</i>
Cisco XR 12000	<ul style="list-style-type: none"> • <i>Regulatory Compliance and Safety Information for Cisco 12000 Series Routers</i> • <i>Cisco CRS-1 and IOS XR Software Documentation, Release 3.2</i> <p>Note Documents listed for the Cisco CRS-1 also apply to the Cisco XR 12000.</p>
Cisco MDS 9000 Multilayer Director and Fabric Switch	<ul style="list-style-type: none"> • <i>Cisco MDS 9000 Family Command Reference</i> • <i>Cisco MDS 9000 Family Configuration Guide</i> • <i>Cisco MDS 9xxx Series Hardware Installation Guide</i> • <i>Cisco MDS 9000 Family Fabric Manager Configuration Guide</i> • <i>Cisco MDS SAN-OS Release Compatibility Matrix for IBM SAN Volume Controller Software for Cisco MDS 9000</i> • <i>Cisco MDS 9xxx Family CIM Programming Reference Guide</i> • <i>Cisco MDS 9000 Family System Messages Guide</i> • <i>Cisco Security Advisory: OpenSSL Vulnerability in the Cisco MDS 9000 Family</i> • <i>Cisco MDS 9000 Family Software Upgrade and Downgrade Guide</i> • <i>Cisco MDS 9000 Family Fabric Manager User Guide</i> • <i>Release Notes for the Cisco MDS 9xxx Family</i>

Table 2 **Related Cisco NE Documentation (continued)**

Cisco Product	Document Title
Cisco MGX 8880 Voice Gateway Voice-enabled MGX 8850/8830 Multiservice Switch	<ul style="list-style-type: none"> • <i>Release Notes for Cisco MGX 8880 Media Gateway</i> • <i>Cisco MGX 8800/8900 Hardware Installation Guide, Releases 2 - 5.2</i> • <i>Regulatory Compliance and Safety Information for the Cisco Multiservice Switch and Media Gateway Products (MGX, BPX, and SES)</i> • <i>Cisco ATM Services (AXSM) Configuration Guide and Command Reference for MGX Switches, Release 5.2</i> • <i>Cisco MGX 8800/8900 Series Command Reference, Release 5.2</i> • <i>Cisco MGX 8800/8900 Series Configuration Guide, Release 5.2</i> • <i>Cisco RPM-PR Documentation</i> • <i>Cisco RPM-XF Documentation</i> • <i>Cisco Voice Switch Service Module (VXSM) Release 5.3 Documentation</i> • <i>Cisco Voice Switch Service Module (VXSM) Release 5.2 Documentation</i> • <i>Cisco Voice Interworking Service Module (VISM) Release 3.3 Documentation</i>
ONS 15216	<ul style="list-style-type: none"> • <i>Cisco ONS 15216 EDFA Operations Guide</i> • <i>Cisco ONS 15216 EDFA2 Operations Guide</i> • <i>Cisco ONS 15216 EDFA3 Operations Guide</i> • <i>Cisco ONS 15216 FlexLayer User Guide</i> • <i>Cisco ONS 15216 OSC-1510 User Guide</i> • <i>Cisco ONS 15216 System Dispersion Compensation Unit User Guide</i> • <i>Installing Cisco ONS 15216 100 GHz DWDM Filters</i> • <i>Installing Cisco ONS 15216 OADMs</i> • <i>Release Notes for the Cisco ONS 15216 EDFA</i> • <i>Release Notes for the Cisco ONS 15216 OADM</i> • <i>Upgrade Procedures for the Cisco ONS 15216 EDFA2</i>
ONS 15302	<ul style="list-style-type: none"> • <i>Cisco ONS 15302 Installation and Operations Guide</i> • <i>Cisco ONS 15302 Quick Installation Guide</i> • <i>Release Notes for the Cisco ONS 15302</i>
ONS 15305 (non-CTC-based)	<ul style="list-style-type: none"> • <i>Cisco ONS 15305 Installation and Operations Guide</i> • <i>Cisco ONS 15305 Quick Installation Guide</i> • <i>Release Notes for the Cisco ONS 15305</i>
ONS 15305 (CTC-based)	<ul style="list-style-type: none"> • <i>Cisco ONS 15305 Cisco Transport Controller Operations Guide, R5.0</i> • <i>Release Notes for Cisco ONS 15305 Release 3.0</i>

Table 2 **Related Cisco NE Documentation (continued)**

Cisco Product	Document Title
ONS 15310 CL and ONS 15310 MA	<ul style="list-style-type: none"> • <i>Cisco ONS 15310 Network Defaults</i> • <i>Cisco ONS 15310-CL and Cisco ONS 15310-MA Ethernet Card Software Feature and Configuration Guide</i> • <i>Cisco ONS 15310-CL and Cisco ONS 15310-MA Procedure Guide</i> • <i>Cisco ONS 15310-CL and Cisco ONS 15310-MA Reference Manual</i> • <i>Cisco ONS 15310-CL and Cisco ONS 15310-MA Troubleshooting Guide</i> • <i>Release Notes for the Cisco ONS 15310</i>
ONS 15327	<ul style="list-style-type: none"> • <i>Cisco ONS 15327 Procedure Guide</i> • <i>Cisco ONS 15327 Reference Manual</i> • <i>Cisco ONS 15327 Software Upgrade Guide</i> • <i>Cisco ONS 15327 Troubleshooting Guide</i> • <i>Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Guide</i> • <i>Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Quick Reference Guide</i> • <i>Release Notes for the Cisco ONS 15327</i>
ONS 15454 SDH	<ul style="list-style-type: none"> • <i>Cisco ONS 15454 SDH Procedure Guide</i> • <i>Cisco ONS 15454 DWDM Procedure Guide</i> • <i>Cisco ONS 15454 SDH Reference Manual</i> • <i>Cisco ONS 15454 SDH Software Upgrade Guide</i> • <i>Cisco ONS 15454 SDH Troubleshooting Guide</i> • <i>Cisco ONS 15454 SONET/SDH ML-Series Multilayer Ethernet Card Software Feature and Configuration Guide</i> • <i>Release Notes for the Cisco ONS 15454 SDH</i>
ONS 15454 SONET	<ul style="list-style-type: none"> • <i>Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Guide</i> • <i>Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Quick Reference Guide</i> • <i>Cisco ONS 15454 Procedure Guide</i> • <i>Cisco ONS 15454 Reference Manual</i> • <i>Cisco ONS 15454 Software Upgrade Guide</i> • <i>Cisco ONS 15454 SONET/SDH ML-Series Multilayer Ethernet Card Software Feature and Configuration Guide</i> • <i>Cisco ONS 15454 Troubleshooting Guide</i> • <i>Release Notes for the Cisco ONS 15454</i>
ONS 15501	<ul style="list-style-type: none"> • <i>Cisco ONS 15501 User Guide</i> • <i>Regulatory Compliance and Safety Information for the Cisco ONS 15500 Series</i> • <i>Release Notes for the Cisco ONS 15501</i>

Table 2 **Related Cisco NE Documentation (continued)**

Cisco Product	Document Title
ONS 15530	<ul style="list-style-type: none"> • <i>Cisco ONS 15530 Configuration Guide and Command Reference</i> • <i>Cisco ONS 15530 Hardware Installation Guide</i> • <i>Cisco ONS 15530 MIB Quick Reference</i> • <i>Cisco ONS 15530 Optical Transport Turn-up and Test Guide</i> • <i>Cisco ONS 15530 Planning and Design Guide</i> • <i>Cisco ONS 15530 System Alarms and Error Messages</i> • <i>Network Management for the Cisco ONS 15530</i> • <i>Quick Reference for the Cisco ONS 15530 TL1 Commands</i> • <i>Release Notes for the Cisco ONS 15530</i>
ONS 15540 ESP	<ul style="list-style-type: none"> • <i>Cisco ONS 15540 ESP Configuration Guide and Command Reference</i> • <i>Cisco ONS 15540 ESP Hardware Installation Guide</i> • <i>Cisco ONS 15540 ESP MIB Quick Reference</i> • <i>Cisco ONS 15540 ESP Planning and Design Guide</i> • <i>Cisco ONS 15540 ESP Troubleshooting Guide</i> • <i>Network Management for the Cisco ONS 15540 ESP</i> • <i>Optical Transport Turn-Up and Test Guide</i> • <i>Regulatory Compliance and Safety Information for the Cisco ONS 15500 Series</i> • <i>Release Notes for the Cisco ONS 15540 ESP</i> • <i>ROMMON and Functional Image Release Notes</i>
ONS 15540 ESPx	<ul style="list-style-type: none"> • <i>Cisco ONS 15540 ESPx Cleaning Procedures for Fiber Optic Connections</i> • <i>Cisco ONS 15540 ESPx Configuration Guide and Command Reference</i> • <i>Cisco ONS 15540 ESPx Hardware Installation Guide</i> • <i>Cisco ONS 15540 ESPx MIB Quick Reference</i> • <i>Cisco ONS 15540 ESPx Planning and Design Guide</i> • <i>Cisco ONS 15540 ESPx System Alarms and Error Messages</i> • <i>Network Management for the Cisco ONS 15540 ESPx</i> • <i>Optical Transport Turn-Up and Test Guide</i> • <i>Quick Reference for the Cisco ONS 15540 ESP and Cisco ONS 15540 ESPx TL1 Commands</i> • <i>Regulatory Compliance and Safety Information for the Cisco ONS 15500 Series</i> • <i>Release Notes for the Cisco ONS 15540 ESPx</i> • <i>ROMMON and Functional Image Release Notes</i>

Table 2 **Related Cisco NE Documentation (continued)**

Cisco Product	Document Title
ONS 15600 SDH	<ul style="list-style-type: none"> • <i>Cisco ONS 15600 SDH Procedure Guide</i> • <i>Cisco ONS 15600 SDH Reference Manual</i> • <i>Cisco ONS 15600 SDH TL1 Test Access</i> • <i>Cisco ONS 15600 SDH Troubleshooting Guide</i> • <i>Release Notes for the Cisco ONS 15600 SDH</i>
ONS 15600 SONET	<ul style="list-style-type: none"> • <i>Cisco ONS 15600 Procedure Guide</i> • <i>Cisco ONS 15600 Reference Manual</i> • <i>Cisco ONS 15600 TL1 Command Guide</i> • <i>Cisco ONS 15600 Troubleshooting Guide</i> • <i>Release Notes for the Cisco ONS 15600</i>
ONS 15800	<ul style="list-style-type: none"> • <i>Cisco ONS 15800 DWDM System Common Platform Installation Manual</i> • <i>Cisco ONS 15800 DWDM System Description</i> • <i>Cisco ONS 15800 DWDM System Installation, Setup, and Test Manual</i> • <i>Cisco ONS 15800 DWDM system module handbooks</i> • <i>Cisco ONS 15800 DWDM System Technical Specifications Manual</i> • <i>Cisco Photonics Local Terminal Software Administrator Manual for the ONS 15800 System</i> • <i>Cisco Photonics Tool Kit Software Administrator Manual for the ONS 15800 System</i> • <i>TL1 Message Manual for the Cisco ONS 15800/15801 System</i>
ONS 15801	<ul style="list-style-type: none"> • <i>Cisco ONS 15801 DWDM System Common Platform Installation Manual</i> • <i>Cisco ONS 15801 DWDM System Description Manual</i> • <i>Cisco ONS 15801 DWDM System Installation, Setup, and Test Manual</i> • <i>Cisco ONS 15801 DWDM system module handbooks</i> • <i>Cisco ONS 15801 DWDM System Technical Specifications Manual</i> • <i>Cisco Photonics Local Terminal Software Administrator Manual for the ONS 15801 System</i> • <i>Cisco Photonics Tool Kit Software Administrator Manual for the ONS 15801 System</i> • <i>TL1 Message Manual for the Cisco ONS 15800/15801 System</i>
ONS 15808	<ul style="list-style-type: none"> • <i>Cisco ONS 15808 DWDM System Common Platform Installation Manual</i> • <i>Cisco ONS 15808 DWDM System Description Manual</i> • <i>Cisco ONS 15808 DWDM System Extended Long Haul Installation, Setup, and Test Manual</i> • <i>Cisco ONS 15808 DWDM System Long Haul Installation, Setup, and Test Manual</i> • <i>Cisco ONS 15808 DWDM System Module Technical Description Manual</i> • <i>Cisco Wavelength Director Software Installation Manual for the ONS 15808 System</i> • <i>TL1 Command Reference for the Cisco ONS 15808 DWDM System</i>

The following related documentation may also be used as reference:

- Telcordia GR-253-CORE: Synchronous Optical Network (SONET) Transport Systems: Common Generic Criteria
- Telcordia GR-815-CORE: Generic Requirements for Network Elements/Network Systems (NE/NS) Security
- Telcordia GR-820-CORE: Generic Digital Transmission Surveillance
- Telcordia GR-831-CORE: Operations Applications Messages
- Telcordia GR-2998-CORE: Generic Requirements for Wavelength Division Multiplexing (WDM) Element Management Systems
- Telcordia GR-3000-CORE: Generic Requirements for SONET Element Management Systems
- ITU-T G.774: Synchronous Digital Hierarchy (SDH)—Management information for the network element view
- ITU-T G.784: Synchronous Digital Hierarchy (SDH) management
- ITU-T G.826: Error performance parameters and objectives for international, constant bit rate digital paths at or above the primary rate
- ITU-T G.829: Error performance events for SDH multiplex and regenerator sections
- ITU-T G.831: Management Capabilities of Transport Networks based on the synchronous digital hierarchy (SDH)
- ITU-T G.872: Architecture of optical transport networks
- ITU-T M.3010: Principles for a Telecommunications management network
- ITU-T M.3100: Generic network information model
- ITU-T M.3400: TMN Management Functions
- ITU-T X.721: Information technology—Open Systems Interconnection—Structure of management information: Definition of management information
- ITU-T X.731: Information technology—Open Systems Interconnection—Systems Management: State management function
- ITU-T X.733: Information technology—Open Systems Interconnection—Systems Management: Alarm reporting function
- ITU-T X.734: Information technology—Open Systems Interconnection—Systems Management: Event report management function
- ITU-T X.735: Information technology—Open Systems Interconnection—Systems Management: Log control function
- ITU-T X.736: Information technology—Open Systems Interconnection—Systems Management: Security alarm reporting function
- TMF 513: TM Forum Business Agreement, version 1.02
- TMF 513: Multi-Technology Network Management Business Agreement, version 2.0
- TMF 608: Multi Technology Network Management Information Agreement, version 0.4
- TMF 608: Multi Technology Network Management Information Agreement, version 2.0
- TMF 814: Multi Technology Network Management Solution Set, version 0.2

- TMF 814: Multi-Technology Network Management Solution Set, version 2.0
- TMF 814A: Multi-Technology Network Management Solution Set, TM Forum Implementation (IS) Template Guidelines, version 2.0

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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