



About This Guide

This guide describes how to administer and maintain the Cisco IP Solution Center Traffic Management (TEM) software.

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Objective

The purpose of this guide is to enable you to take advantage of the features provided by TEM to enhance the traffic performance and predictability in an IP network.

Audience

This book is written as a resource for experienced users and administrators who must install, configure, deploy, and monitor the TEM software.

It is assumed you have a basic understanding of network design, operation, and terminology, a general familiarity with the ISC software, and that you are familiar with your own network configurations.

A general understanding of MPLS TE concepts and traffic engineering is also required.

Organization

This guide is organized as follows:

[Chapter 1, “Getting Started,”](#) describes prerequisites and limitations and the preconfiguration process required to enable network data collection and deployment of TE configurations on the network.

[Chapter 2, “TE Network Discovery,”](#) describes the process of discovering the network for a particular TE provider.

Chapter 3, “TE Resource Management,” explains how to modify resource characteristics to optimize tunnel placement.

Chapter 4, “Basic Tunnel Management,” provides an overview of the stages required to create and deploy primary and backup tunnels with a base license.

Chapter 5, “Advanced Primary Tunnel Management,” describes the stages required to create and deploy primary tunnels using the planning functions.

Chapter 6, “Protection Planning,” explains how to compute protection tunnels for network elements and deploy these on the network.

Chapter 7, “Traffic Admission,” explains how to assign traffic to traffic-engineered tunnels.

Chapter 8, “Administration,” describes various administrative tools and features.

Chapter 9, “Task Monitoring,” explains how deployment and collection tasks are monitored and how task details are logged.

Chapter 10, “TE Topology,” explains how to use the TE Topology tool to display the layout of the network.

Appendix A, “Sample Configlets,” contains configlets for primary and backup tunnel creation and other operations for both IOS and IOS XR.

Appendix B, “Traffic Engineering Management GUI,” describes the TEM GUI and provides definitions for the various fields and other GUI elements.

Appendix C, “Managing Service Requests,” covers the various operations used to manage service requests.

Appendix D, “Warnings and Violations,” lists warnings and violations that might be invoked when using the planning tools in TEM.

Appendix E, “Document Type Definition (DTD) File,” contains a sample DTD file that specifies the structure and rules used for XML import.

Appendix F, “Background and Concepts,” gives an overview of the TEM software and an explanation of key concepts.

Related Documentation

The entire documentation set for Cisco IP Solution Center, 5.1 can be accessed at:

http://www.cisco.com/en/US/products/sw/netmgmtsw/ps4748/tsd_products_support_series_home.html



Tip

To cut and paste a two-line URL into the address field of your browser, you must cut and paste each line separately to get the entire URL without a break.

The following documents comprise the ISC 5.1 documentation set.

General documentation (in suggested reading order)

- *Cisco IP Solution Center Getting Started and Documentation Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/roadmap/docguide.html
- *Release Notes for Cisco IP Solution Center, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/release/notes/relnotes.html

- *Cisco IP Solution Center Installation Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/installation/guide/installation.html
- *Cisco IP Solution Center Infrastructure Reference, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/infrastructure/reference/guide/infrastructure.html
- *Cisco IP Solution Center System Error Messages, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/system/messages/messages.html

Application and technology documentation (listed alphabetically)

- *Cisco IP Solution Center Carrier Ethernet and L2VPN User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/carrier_ethernet/user/guide/l2vpn51book.html
- *Cisco IP Solution Center MPLS VPN User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_vpn/user/guide/mpls51book.html
- *Cisco IP Solution Center Traffic Engineering Management User Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/traffic_management/user/guide/tem.html
- *Cisco MPLS Diagnostics Expert 2.1 Failure Scenarios Guide on ISC 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_failure_scenarios/user/guide/mdefs.html
- *Cisco MPLS Diagnostics Expert 2.1.3 User Guide on ISC 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/mpls_diagnostics/user/guide/mdeuser.html

API Documentation

- *Cisco IP Solution Center API Programmer Guide, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/developer/guide/api-gd.html
- *Cisco IP Solution Center API Programmer Reference, 5.1.*
http://www.cisco.com/en/US/docs/net_mgmt/ip_solution_center/5.1/developer/reference/xmlapi.zip

**Note**

All documentation *might* be upgraded over time. All upgraded documentation will be available at the same URLs specified in this document.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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>