

Preface

This preface describes the objectives, audience, organization, and conventions of the *User Guide for Cisco Mobile Wireless Transport Manager 6.1.7.* It refers you to related publications and describes online sources of technical information.

The Cisco Mobile Wireless Transport Manager (MWTM) is a network management software product that enables you to discover, manage, and troubleshoot the following networks:

- IP Transfer Point (ITP)
- IP Radio Access Network (IPRAN), which includes:
 - Radio Access Network Optimization (RAN-O)
 - Pseudowire Emulation Edge to Edge (PWE3)
- Cisco Mobile Internet (MI) / mobile Services Exchange Framework (mSEF), which includes:
 - Cisco Gateway GPRS Support Node (GGSN)
 - Cisco Content Services Gateway (CSG)
 - Cisco Home Agent (HA)
 - Cisco Broadband Wireless Gateway (BWG)
 - Cisco Packet Data Node Gateway (PDNGW)
 - Cisco Serving Gateway (SGW)
 - Cisco Serving Gateway/PDN Gateway (SPGW)
 - Cisco Policy and Charging Rules Function (PCRF)
 - Cisco Packet Data Serving Node (PDSN)

For a more detailed description of the MWTM, see Chapter 1, "Overview." For the latest MWTM information and software updates, go to http://www.cisco.com/go/mwtm.

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Document Objectives

This guide describes the architecture, supporting hardware and software, and management procedures for the MWTM. Using the information provided in this guide, you can complete the tasks that are necessary to use the MWTM in your ITP, IPRAN, and/or mSEF network.

Document Audience

This guide is for network administrators or operators who use the MWTM software to manage ITP, RAN-O, and/or mSEF networks. Network administrators or operators should have:

- Basic network management skills
- Basic Solaris system administrator skills
- Basic ITP, RAN-O, and/or mSEF knowledge

Document Organization

This guide is divided into the following chapters and appendixes:

- "Overview" provides brief descriptions of ITP, IPRAN, and mSEF, the MWTM, the MWTM's client-server architecture, and an overview of how to use the MWTM to manage your network.
- "Configuring Security" provides information about configuring MWTM security and limiting access to the MWTM.
- "Setting Up Your Server" provides procedures to set up your MWTM server, which includes enabling traps, configuring a backup server, setting up TFTP, configuring SNMP settings and credentials, and creating new troubleshooting commands.
- "Getting Started" provides basic information and procedures for using the MWTM.
- "Basic Operations" provides information about basic operations you can perform using the MWTM, including navigating windows, exporting data, and performing basic server operations.
- "Understanding Basic Object Functions" provides information about basic object functions found within the Summary Lists section of the navigation tree.
- "Managing Views" provides information about using the MWTM to create, change, and load views and subviews, and view basic and detailed information for views and subviews.
- "Understanding Detailed Object Functions" provides information about more detailed object functions you can perform on specific types of objects.
- "Managing Alarms and Events" provides information about using the MWTM to view basic and detailed information for events, and change the way the MWTM processes events.
- "Viewing Network Topology" provides procedures for viewing the topology of your network, changing the way the MWTM shows the topology, and saving customized topology displays.
- "Accessing Data from the Web Interface" describes how to access MWTM data from the MWTM web interface.
- "Managing Reports" provides procedures for creating and viewing MWTM accounting and statistics reports for your ITP network.
- "Editing an ITP Route Table File" provides procedures for viewing and editing ITP route table files.

- "Editing an ITP Global Title Translation Table" provides procedures for viewing and editing ITP GTT files.
- "Editing ITP MLR Address Table Files" provides procedures for viewing and editing ITP MLR address table files.
- "Client Object Map Reference" provides an overview of the tabs available for each MWTM object within a view.
- "Command Reference" describes the commands used to set up and operate the MWTM.
- "FAQs" provides a list of frequently asked questions and troubleshooting tips for the MWTM.
- "Troubleshooting the MWTM and the Network" provides information for troubleshooting basic MWTM and network problems, including how to verify network discovery, clearing a locked-up MWTM display, and using the MWTM to diagnose typical network problems.
- "Status Definitions" defines the default status settings for all MWTM network objects.
- "MIB Reference" lists the MIBs used by the MWTM.
- "Trap Reference" lists and describes the traps that the MWTM supports.
- "Configuring MWTM to Run with Various Networking Options" describes communication between the MWTM client and the MWTM server in different networking environments, including Virtual Private Network (VPN), Network Address Translation (NAT), firewall, port-forwarding, and Secure Sockets Layer (SSL).
- "MWTM Ports" lists MWTM services ports, port type, and descriptions.

Document Conventions

This guide uses basic conventions to represent text and table information.

Command descriptions use the following conventions:

- Commands and keywords are in **boldface** font.
- Arguments for which you supply values are in *ialic* font.
- Elements in square brackets ([]) are optional.
- Alternate but required keywords are grouped in braces ({ }) and separated by a vertical bar (l).

Examples use the following conventions:

- Terminal sessions and information that the system displays are printed in screen font.
- Information that you enter is in **boldface screen** font. Variables for which you enter actual data are printed in *italic screen* font.
- Nonprinting characters, such as passwords, are shown in angle brackets (<>).
- Information that the system displays is in screen font, with default responses in square brackets ([]).

This publication also uses the following conventions:

- Menu items and button names are in **boldface** font.
- Directories and filenames are in *italic* font.
- If items such as buttons or menu options are dimmed on application windows, it means that the items are not available either because you do not have the correct permissions or because the item is not applicable at this time.

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

Caution

Means *reader be careful*. You are capable of doing something that might result in equipment damage or loss of data.



Means the following are useful tips.

Related Documentation

Related MWTM documentation includes:

- Additional MWTM Documentation, page xl
- ITP Documentation, page xl
- IPRAN Documentation, page xli
- mSEF Documentation, page xli

Additional MWTM Documentation

Additional MWTM documentation can be found on Cisco.com:

http://www.cisco.com/en/US/products/ps6472/tsd_products_support_series_home.html

The MWTM includes a browser-based online help system that is searchable and supports bookmarking of favorite content.

Note

When you access online help for the first time, there might be a slight pause while your client browser loads the online help.

ITP Documentation

Cisco IP Transfer Point (ITP)

Information about Cisco IP Transfer Point (ITP) software, including procedures for configuring ITP nodes, can be found on Cisco.com:

http://www.cisco.com/en/US/products/sw/wirelssw/ps1862/products_feature_guides_list.html

Information about the Cisco ITPs can be found in the documentation that shipped with the ITP.

IPRAN Documentation

Cisco IP Radio Access Network (IP-RAN)

For information about IP-RAN, visit these websites:

http://www.cisco.com/en/US/netsol/ns675/networking_solutions_solution_category.html

 $http://www.cisco.com/en/US/products/hw/routers/ps368/tsd_products_support_series_home.html$

Information about Cisco IPRAN nodes, including procedures for configuring IPRAN objects, can be found on Cisco.com:

Cisco MWR 1900 Series:

http://www.cisco.com/en/US/products/hw/routers/ps4062/tsd_products_support_install_and_upgra de.html

• Cisco MWR 2900 Series:

http://www.cisco.com/en/US/products/ps9395/prod_installation_guides_list.html

• Cisco 3800 Series:

http://www.cisco.com/en/US/products/ps5855/products_installation_and_configuration_guides _list.html

• Cisco ME 3400 Series:

http://www.cisco.com/en/US/products/ps6580/products_installation_and_configuration_guides _list.html

Cisco ONS 15400:

http://www.cisco.com/en/US/products/hw/optical/ps2006/products_installation_and_configuration _guides_list.html

• Cisco 7600 Series:

http://www.cisco.com/en/US/products/hw/routers/ps368/products_installation_and_configuration _guides_list.html

mSEF Documentation

Information about mSEF documentation can be found on Cisco.com:

Cisco Gateway GPRS Support Node (GGSN)

For information about GGSN, visit these websites: http://www.cisco.com/en/US/products/sw/wirelssw/ps873/index.html

Cisco Home Agent (HA)

For information about HA, visit these websites: http://www.cisco.com/en/US/products/ps6506/index.html http://www.cisco.com/en/US/products/ps5940/tsd_products_support_series_home.html

Cisco Content Services Gateway (CSG)

For information about CSG, visit these websites: http://www.cisco.com/en/US/products/sw/wirelssw/ps779/index.html

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Cisco Broadband Wireless Gateway (BWG) For information about BWG, visit these websites: http://www.cisco.com/en/US/products/ps8738/index.html

Cisco Packet Data Serving Node (PDSN)

For information about PDSN, visit these websites: http://www.cisco.com/en/US/products/sw/wirelssw/ps4341/index.html

Cisco Packet Data Network Gateway (PDNGW) For information about PDNGW, visit these websites: http://www.cisco.com/en/US/products/ps11079/index.html

Cisco Signaling Gateway (SGW) For information about SGW, visit these websites: http://www.cisco.com/en/US/products/ps11083/index.html

Server Load-Balancing/Exchange Director

 $http://www.cisco.com/en/US/products/hw/modules/ps2706/products_installation_and_configuration _guides_list.html$

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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