GLOSSARY

This glossary contains Cisco Mobile Wireless Transport Manager (MWTM) specific terms. For an online listing of other internetworking terms and acronyms, see this URL:

http://docwiki.cisco.com/wiki/Category:Internetworking_Terms_and_Acronyms_(ITA)

A

access list — A list kept by routers to control access to or from the router for a number of services (for example, to prevent packets with a certain IP address from leaving a particular interface on the router).

accounting — Collection of SS7 accounting statistics.

adjacent node — In the MWTM, for a given pair of connected nodes, the node that the MWTM discovered second. See primary node.

adjacent point code — Point code of the adjacent ITP signaling point for the linkset. Contrast with local point code.

aggregation site — A Base Station Controller (BSC) or Radio Network Controller (RNC) site where traffic is collected for multiple cell sites. See cell site.

alarm — An alarm is a sequence of events, each representing a specific occurrence in the alarm lifecycle. The lifecycle of an alarm can include any number of related events that are triggered by changes in severity, updates to services, and so on. See event.

alias point code — See capability point code.

ANSI — American National Standards Institute.

API — Application Programming Interface. A source code interface that a computer system or program library provides to support requests for services by a computer program.

APN — Access Point Name.

application server — Logical entity serving a specific routing key. The application server implements a set of one or more unique application server processes, of which one or more is normally actively processing traffic. See application server process, application server process association, routing key, signaling gateway-mated pair.

application server process — IP-based instance of an application server, such as Call Agents, HLRs, SMSCs, and so on. An application server process can implement more than one application server. See application server, application server process association, routing key, signaling gateway-mated pair.

application server process association — ITP's virtual view of an application server process. The application server process association is defined on, and resides on, the ITP. See application server, application server process, routing key, signaling gateway-mated pair.

arrowhead In topology maps, indicator for an application server process association connection. See topology map.

auto save Setting that enables the MWTM to save changes automatically when you exit the MWTM.

auto start Setting that enables the MWTM to start a process automatically when the Process Manager is started. See Data Server, Message Log Server, Process Manager, Trap Receiver.

B

base station controller See BSC.

base transceiver station See BTS.

browser GUI-based hypertext client application, such as Internet Explorer or Mozilla, used to access hypertext documents and other services located on innumerable remote servers throughout the World Wide Web (WWW) and Internet.

BSC Base Station Controller. Equipment that manages radio resources in a GSM network.

BTS Base Transceiver Station. The equipment in a GSM network that is used to transmit radio frequencies over the air waves.

C

capability point code Point code shared by more than one signaling point, each of which is also assigned a "real" point code. Also called alias point code.

CDMA Code Division Multiple Access.

cell site A Base Transceiver Station (BTS) or Node B site, usually located at the remote site with limited connectivity. See aggregation site.

circle In topology maps, indicator for a link that is part of a virtual linkset, associated with the closest node. See topology.

circle layout Topology map layout in which objects are arranged in a circle, connected by links. Contrast with spring layout. See topology map.

Cisco IOS software Cisco Internetwork Operating System software. Cisco system software that provides common functionality, scalability, and security for many Cisco products. The Cisco IOS software allows centralized, integrated, and automated installation and management of internetworks, while ensuring support for a wide variety of protocols, media, services, and platforms.

CLI Command line interface. An interface that allows the user to interact with the Cisco IOS software operating system by entering commands and optional arguments.

client Node or software program that requests services from a server. The MWTM user interface is an example of a client. See also server.

client view User-customized subset of the DEFAULT view. See also DEFAULT view, view, subview.

CLLI code COMMON LANGUAGE Location Identification Code for a node. A CLLI code is a standardized 11-character identifier that uniquely identifies the geographic location of the node.

COA Change of Authorization.

command line interface See CLI.

community name See community string.

community string Text string that acts as a password and is used to authenticate messages sent between a management station and a node containing an SNMP agent. The community string is sent in every packet between the manager and the agent. Also called community name, read community.

congestion Condition in which a link has too many packets waiting to be sent. This condition could be caused by the failure of an element in the network. Possible levels are None, Low, High, and Very High, which correspond roughly to equivalent ANSI, China standard, ITU, NTT, and TTC congestion levels.

console log Log containing unexpected error and warning messages from the MWTM server, such as those that might occur if the MWTM server cannot start.

cost Measure of the suitability of a route to a destination, relative to other routes. Costs range from 1 (lowest cost and highest priority) through 9 (highest cost and lowest priority).

credentials Login credentials that are stored in an encrypted file on the server, eliminating the need for users to login before running commands. The MWTM enables a system administrator to configure the login credentials using the Node SNMP and Credentials Editor dialog box.

cross-instance GTT file Global Title Translation file that supports the Multiple Instance and Instance Translation ITP features. Cross-instance GTT files contain application groups that reference point codes in other GTT files. See Instance Translation, Multiple Instance.

CSV Comma-separated values. A widely-used file format for storing tabular data.

current view View that is currently in use on an MWTM client. The view can be the DEFAULT view or a customized view. Also called current view. See client view, DEFAULT view.

D

Data Server Multi-threaded process that handles most of the work done by the MWTM, including discovery, polling, and scheduling. See also Message Log Server, Process Manager, Trap Receiver.

DEFAULT view View into which the MWTM places all discovered objects when discovering the network. The DEFAULT view is stored on the MWTM server and shared by all MWTM clients, but it cannot be modified by the clients. See current view, view.

demand polling User-initiated poll of selected nodes. Contrast with status polling.

destination linkset In ITP route tables, linkset associated with the destination point code. Also called the output linkset. See linkset, destination point code, route table.

destination point code In ITP route tables, point code of the adjacent signaling point, the destination for packets on the selected signaling point. See destination linkset, point code, route table.

device See node.

device type In MWTM, the type of a discovered device, either a Cisco device or a BTS, BSC, or legacy SS7 device. Also called system object ID. See legacy device.

diamond In topology maps, indicator for a connection that is part of a configured interface, associated with the closest node. See topology.

discovered Object that has been discovered by the MWTM. Also called *known*. Contrast with unknown.

Discovery Process by which the MWTM discovers objects in your network. See also nonrecursive Discovery, recursive Discovery.

display name User-specified name for a node. Contrast with DNS name. See also node name.

domain name The style of identifier—a sequence of case-insensitive ASCII labels separated by dots ("bbn.com.")—defined for subtrees in the Internet Domain Name System [R1034] and used in other Internet identifiers, such as host names, mailbox names, and URLs.

Domain Name System See DNS.

double triangle In topology maps, indicator for a connection that has multiple interfaces, such as two linksets between the same two signaling points. See topology map.

DNS Domain Name System. System used on the Internet for translating names of network nodes into addresses.

DNS name Initial name of a node, as discovered by the MWTM. Contrast with display name. See also node name.

DPC See destination point code.

E

Erlang (E) The international (dimensionless) unit of the average traffic intensity (occupancy) of a facility during a period of time, normally, a busy hour. The number of Erlangs is the ratio of the time during which a facility is occupied (continuously or cumulatively) to the time this facility is available for occupancy. Another definition is the ratio of the average call arrival rate into the system, to the average call duration. One Erlang is equivalent to 36 ccs (completed call seconds), which is another traffic intensity unit.

event An event is a singular occurrence in time. Events are derived from incoming traps and notifications, and from detected status changes.

The MWTM can detect events that are triggered by SNMP traps or notifications, status changes, and user actions. See trap, alarm.

event forwarding See trap forwarding.

exclude Removing a network object from a view, while retaining the object in the MWTM database.

F

Field Replaceable Units — See FRU.

FRU — Assemblies such as power supplies, fans, processor modules, interface modules, and so forth.

G

GGSN — Gateway GPRS Support Node. A gateway that provides mobile cell phone users access to a public data network or specified private IP networks.

GPRS — General Packet Radio Service. A 2.5G mobile communications technology that enables mobile wireless service providers to offer their mobile subscribers packet-based data services over GSM networks.

GSM — ITU standard for defining the Global System for Mobile communications, a digital cellular telephone standard.

Global System for Mobile communications — See GSM.

graphical element — Graphical representation of an object or view in the topology map. See topology map.

graphical user interface — See GUI.

GTP — GPRS Tunneling Protocol. A protocol that enables the connection between the SGSN and the GGSN.

GTT — Global Title Translation. The process by which the SCCP translates a global title into the point code and subsystem number of the destination service switching point where the higher-layer protocol processing occurs.

GUI — Graphical user interface. User environment that uses pictorial as well as textual representations of the input and output of applications and the hierarchical or other data structure in which information is stored. Conventions such as buttons, icons, and windows are typical, and many actions are performed using a pointing device (such as a mouse). Microsoft Windows and the Apple Macintosh are prominent examples of platforms utilizing a GUI.

H

host — Computer system on a network. Similar to the term node except that host usually implies a computer system, whereas node generally applies to any network system, including access servers and ITP, IPRAN, or mSEF devices. See also node.

host address — See host number.

host number — Part of an IP address that designates which node on the subnetwork is being addressed. Also called a host address.

HSL High-speed link. An HSL link is one that uses use the SS7-over-ATM (Asynchronous Transfer Mode) high-speed protocol.

HTML Hypertext Markup Language. Simple hypertext document formatting language that uses tags to indicate how a given part of a document should be interpreted by a viewing application, such as a web browser. See also hypertext and browser.

hypertext Electronically-stored text that allows direct access to other texts by way of encoded links. Hypertext documents can be created using HTML, and often integrate images, sound, and other media that are commonly viewed using a browser. See also HTML and browser.

Hypertext Markup Language See HTML.

I

ignore Exclude an object when aggregating and displaying MWTM status information. See also unignore.

IMSI International Mobile Subscriber Identity. A unique 15-digit code that identifies an individual user on a GSM network.

installation log Log containing messages and other information recorded during installation.

Instance Translation ITP feature in support of the Multiple Instance feature that enables the conversion of packets between instances of any variant. Each instance is a separate domain with a defined variant, network indicator, ITP point code, optional capability point code, and optional secondary point code. Each instance also has its own routing table and GTT file. See cross-instance GTT file, Multiple Instance.

interface Connection between two systems or devices. In the MWTM, an interface is a connection on an ITP, IPRAN, or mSEF node.

internal ID Unique identifier assigned by the MWTM, for its own internal use, to every event, link, linkset, and node.

Internet Protocol See IP.

IP Internet Protocol. Network layer protocol in the TCP/IP stack offering a connectionless internetwork service. IP provides features for addressing, type-of-service specification, fragmentation and reassembly, and security. Documented in RFC 791.

IP address 32-bit address assigned to hosts using TCP/IP. An IP address belongs to one of five classes (A, B, C, D, or E) and is written as 4 octets separated by periods (dotted decimal format). Each address consists of a network number, an optional subnetwork number, and a host number. The network and subnetwork numbers together are used for routing, while the host number is used to address an individual host within the network or subnetwork. A subnet mask is used to extract network and subnetwork information from the IP address. CIDR provides a new way of representing IP addresses and subnet masks. See also IP.

IP backhaul A trunk that transports optimized voice and data traffic between a remote cell-site, RAN-O node and an aggregation RAN-O node at a central site.

IPC Inter Processor Communication.

ITP Part of Cisco's hardware and software SS7-over-IP (SS7oIP) solution. ITP provides a reliable, cost-effective medium for migrating Signaling System 7 (SS7), the telecommunications network signaling technology, to the mobile wireless industry IP environment. ITP off-loads SS7 Short Messaging Service (SMS) traffic onto the IP network, replacing the mobile service provider's signaling network with a redundant IP cloud.

ITU International Telecommunication Union.

K

known See discovered.

L

LAN Local Area Network.

legacy device In the MWTM, an SS7 device that is not a Cisco ITP or a Cisco RAN-O node. Legacy devices include MSCs, SCPs, SSPs, STPs, BSCs, and BTSs. See MSC, SCP, SS7, SSP, STP, BTS, BSC.

link In ITP, the connection between nodes. See ITP, linkset, node.

link type In the MWTM, the type of a discovered ITP link, either SCTP IP or serial. See HSL, SCTP, serial, virtual link.

linkset In ITP, a grouped set of links. In the MWTM, a representation of two linksets associated with two nodes, one for each side of a logical connection. See ITP, link, node.

linkset pair In the MWTM, a single linkset with input from the perspective of both of its endpoints. See also linkset.

linkset type In the MWTM, the type of a discovered linkset, either SCTP IP, serial, HSL, mixed, or other. Other means no links have been defined for the linkset. See HSL, mixed linkset, SCTP, serial, virtual linkset.

local authentication Type of MWTM security authentication that allows the creation of user accounts and passwords local to the MWTM system. When using this method, usernames, passwords, and access levels are managed using MWTM commands. Contrast with Solaris authentication.

For more information on Solaris authentication, see the "Implementing Secure User Access (Server Only)" section on page 2.

local IP address IP address used by the MWTM client to connect to the MWTM server.

local point code Point code of the primary signaling point for a linkset. Contrast with adjacent point code.

local VPN IP address IP address used by the MWTM client to connect to the MWTM server via VPN. See local IP address, VPN.

M

M3UA MTP3 User Adaptation layer. A protocol for supporting the transport of any SS7 MTP3 user signaling over the IP network. M3UA provides a seamless operation of the MTP3 user peers in the SS7 and IP domains. See MTP3.

managed object Node, application server, application server process, application server process association, link, linkset, node, signaling gateway-mated pair, or signaling point that is being managed by the MWTM.

Management Information Base See MIB.

MAP Mobile Application Part. An SS7 protocol that allows for the implementation of mobile network signaling infrastructure. See SS7.

mask Bit combination used in the MWTM to indicate the significant bits of the point code.

For ANSI and China standard networks using the default 24-bit point code format, the default mask is **255.255.255**.

For ITU networks using the default 14-bit point code format, the default mask is **7.255.7**.

For NTT and TTC networks using the default 16-bit point code format, the default mask is **31.15.127**.

Message Log Server Multi-threaded process that logs messages from the Data Server, Process Manager, and MWTM client. See also Data Server, Process Manager, Trap Receiver.

MIB Management Information Base. Database of network management information that is used and maintained by a network management protocol such as SNMP. The value of a MIB object can be changed or retrieved using SNMP commands, usually through a GUI network management system. MIB objects are organized in a tree structure that includes public (standard) and private (proprietary) branches.

mixed linkset Linkset in which the links are of two or more types. (This configuration is not recommended.)

MLR Multi-Layer SMS Routing. Scheme that enables intelligent routing of Short Message Service (SMS) mobile originated (MO) messages based on the application or service from which they originated or to which they are destined. The MLR feature can make SMS message routing decisions based on information found in the TCAP, MAP, and MAP-user layers; MAP operation codes MAP-MT-FORWARD-SM and SEND-ROUTING-INFO-FOR-SM; and ANSI TCAP and IS-41 MAP operations.

mobile switching center See MSC.

MSC Mobile switching center. Provides telephony switching services and controls calls between telephone and data systems.

MSU Message Signal Unit. MSUs provide MTP protocol fields and are the workhorses of the SS7 network. All signaling associated with call setup and teardown, database query and response, and SS7 management requires the use of MSUs. See MTP3.

MTP3 Message Transfer Part, level 3. An SS7 protocol that routes SS7 signaling messages to public network nodes by means of destination point codes, which allow messages to be addressed to specific signaling points. See SS7.

Multi-Layer SMS Routing See MLR.

Multiple Instance ITP feature that makes it possible to connect an ITP to different networks at one time, each with specific variant and network indicator values. The ITP treats each combination of variant and network indicator as a separate "instance" or signaling point with its own local point code and routing table on the ITP. Each instance is part of the SS7 network and shares the same variant and network indicator. In order for instances in the same network to be properly managed they must be assigned the same network name. See cross-instance GTT file, Instance Translation.

N

name server Server connected to a network that resolves network names into network addresses.

NAT Network Address Translation. Internet standard that enables a LAN to use one set of IP addresses for internal traffic and a second set of addresses for external traffic.

Network Address Translation See NAT.

network indicator See NI.

network management system See NMS.

network view See view.

Network Time Protocol See NTP.

new node Node that the MWTM has newly discovered, and that has not yet been added to the current view.

NI Network indicator. Information within the service information octet of the MSU that permits discrimination between national and international messages. See MSU.

NMS Network management system. System responsible for managing at least part of a network. An NMS is generally a reasonably powerful and well-equipped computer such as an engineering workstation. NMSes communicate with agents to help keep track of network statistics and resources.

node Endpoint of a network connection or a junction common to two or more lines in a network. Nodes can be processors, controllers, or workstations. Nodes, which vary in routing and other functional capabilities, can be interconnected by links, and serve as control points in the network.

In ITP, a node is a Cisco ITP or a legacy SS7 device (SSP, SCP, or STP).

In RAN-O networks, a node is a Cisco Mobile Wireless Router (MWR), Optical Networking System (ONS), RAN service module, or a legacy RAN device (BTS or BSC).

See legacy device.

Node B Physical unit for radio transmission/reception with cells in the UTRAN.

node name Name of a node. This is either the DNS name of the node, or a user-specified name. See display name, DNS name.

nonrecursive Discovery Discovery of seed nodes only. The MWTM discovers all seed nodes and attempts to manage them, then marks all nodes that are adjacent to those seed nodes as Unmanaged. Contrast with recursive Discovery.

Non-Stop Operation See NSO.

note User-defined descriptive string attached to an object.

NSO Non-Stop Operation. Implementation of redundant data elements and software functionality, enabling networks to approach 99.999% availability. See also RF.

NTP Network Time Protocol. Timing protocol that maintains a common time among Internet hosts in a network.

O

object Node, application server, application server process, application server process association, link, linkset, node, signaling gateway-mated pair, or signaling point that has been discovered by the MWTM.

output linkset See destination linkset.

P

PDP Packet Data Protocol. Network protocol used by external packet data networks that communicate with a GPRS network. IP is an example of a PDP supported by GPRS. Refers to a set of information (such as a charging ID) that describes a mobile wireless service call or session, which is used by mobile stations and GGSNs in a GPRS network to identify the session.

PCRF Policy and Charging Rules Function.

PDNGW Packet Data Node Gateway.

PDSN Packet Data Serving Node.

PDU Protocol Data Unit. OSI term for packet.

ping Packet internet groper. ICMP echo message and its reply. Often used in IP networks to test the reachability of a network device.

point code A unique address code that identifies a service provider within a signaling network. Also called primary point code. See capability point code, destination point code, local point code, secondary point code.

polling Access method in which a primary network device inquires, in an orderly fashion, whether secondaries have data to transmit. The inquiry occurs in the form of a message to each secondary that gives the secondary the right to transmit.

poll interval Time between polls.

poll response Time taken by a node to respond to MWTM poll requests.

port In IP terminology, an upper-layer process that receives information from lower layers. Ports are numbered, and each numbered port is associated with a specific process. For example, SMTP is associated with port 25. A port number is also called a well-known address.

preferences Settings that enable a user to change the way the MWTM presents information.

primary node In the MWTM, for a given pair of connected signaling points or nodes, the signaling point or node that the MWTM discovered first. See adjacent node.

primary point code See point code.

primary SNMP address IP address used by SNMP to poll the node. (There might be other IP addresses on the node that are not the primary SNMP address.) Contrast with secondary IP address.

process Internal component of the MWTM. See Data Server, Message Log Server, Process Manager, Trap Receiver.

Process Manager Multi-threaded process that handles the management of registered MWTM processes. See also Data Server, Message Log Server, Trap Receiver.

Q

QoS Quality of service. Measure of performance for a transmission system that reflects its transmission quality and service availability.

Quality of Service See QoS.

R

Radio Network Controller See RNC.

RAN Radio Access Network.

RAN backhaul The end-to-end RAN connections between the BTS or Node B at the cell site and the BSC or RNC. See also virtual RAN backhaul, IP backhaul.

RAN shorthaul An interface that transports GSM or UMTS voice and data traffic between the BTS or Node-B and the RAN-O node at the cell site. At the aggregation site, RAN shorthauls exist between the RAN-O node and the BSC or RNC.

RAN-O RAN optimization. Standard-based, end-to-end, IP connectivity for GSM and UMTS RAN transport. The Cisco solution puts RAN voice and data frames into IP packets at the cell-site, and transports them seamlessly over an optimized backhaul network. At the central site, the RAN frames are extracted from IP packets, and the GSM or UMTS data streams are rebuilt.

read community See community string.

recursive Discovery Discovery of the entire network. The MWTM discovers all seed nodes and attempts to manage them; then attempts to discover and manage all ITP nodes that are adjacent to those seed nodes (unless the nodes are connected by serial links only); then attempts to discover and manage all ITP nodes that are adjacent to *those* nodes; and so on, until the MWTM has discovered the entire network.

Contrast with nonrecursive Discovery.

Redundancy Framework See RF.

RF Redundancy Framework. Mechanism for logical redundancy of software functionality, designed to support 1:1 redundancy on processor cards. See also NSO.

RNC Radio Network Controller. Network element that controls one or more Node B transceiver stations in the UTRAN.

route Path through an internetwork.

route set Set of routes with the same destination point code.

route table Table used in ITP to locate a destination linkset for a packet whose destination point code does not match the ITP's local point code.

routing key Set of SS7 parameters that uniquely define the range of signaling traffic to be handled by a particular application server or application server route table. Thus, the routing key identifies an application server or an application server route table. See application server, application server process, application server process association, signaling gateway-mated pair

S

SCCP Signaling Connection Control Part. A routing protocol in SS7 protocol suite in layer 4 that provides end-to-end routing for TCAP messages. SCCP also provides the means by which an STP can perform global title translation, a procedure by which the destination signaling point and subsystem number is determined from digits present in the signaling message. See also TCAP.

SCP Service control point. An element of an SS7-based Intelligent Network that performs various service functions, such as number translation, call setup and teardown, and so on.

SCTP Stream Control Transmission Protocol. An end-to-end, connection-oriented protocol that transports data in independent sequenced streams.

SGW Serving Gateway.

secondary IP address Alternate or backup IP address used by a node. Contrast with primary SNMP address.

secondary point code Alternate or backup point code used by a signaling point. See point code.

seed file List of seed nodes. See seed node.

seed node Node used by the MWTM to discover the other objects in your network.

serial Method of data transmission in which the bits of a data character are transmitted sequentially over a single channel.

server Node or software program that provides services to clients. See client.

service control point See SCP.

service switching point See SSP.

SGMP See signaling gateway-mated pair.

SGSN Serving GPRS Support Node. Node that connects the radio access network to the GPRS or UMTS core and tunnels user sessions to the GGSN.

signaling gateway-mated pair Pair of signaling gateways that exchange necessary state information using the Signaling Gateway-Mated Protocol (SGMP). See application server, application server process, application server process association, routing key, signaling gateway-mated pair.

Signaling Gateway-Mated Protocol Protocol that enables two Cisco ITP M3UA/SUA signaling gateways to act as a mated pair and exchange necessary state information. See signaling gateway-mated pair.

signaling point See SP.

signal transfer point See STP.

Signaling System 7 See SS7.

Simple Network Management Protocol See SNMP.

SMPP Short Message Peer-to-Peer Protocol. A messaging protocol meant to simplify integration of data applications with wireless mobile networks such as GSM.

SNMP Simple Network Management Protocol. Network management protocol used almost exclusively in TCP/IP networks. SNMP provides a means to monitor and control network devices, and to manage configurations, statistics collection, performance, and security.

SOAP Simple Object Access Protocol. A protocol for exchanging XML-based messages over computer networks. See XML.

Solaris authentication Type of MWTM security authentication that uses standard Solaris-based user accounts and passwords, as specified in the */etc/nsswitch.conf* file. You can provide authentication with the local */etc/passwd* file or from a distributed Network Information Services (NIS) system. Contrast with local authentication.

For more information on Solaris authentication, see the "Implementing Secure User Access (Server Only)" section on page 2.

SP Signaling point. An SCP, SSP, or STP, or an ITP instance. See SCP, SSP, or STP.

SPGW Serving Gateway/PDN Gateway.

spring layout Topology map layout in which objects are arranged in a spring layout. Objects with the most links are drawn closer to the center of the map, while objects with fewer links are drawn farther away. Contrast with circle layout. See topology map.

SS7 Signaling System 7. Standard CCS system used with BISDN and ISDN. Developed by Bellcore.

SSL Secure Sockets Layer. A protocol for transmitting private documents via the Internet.

SSP Service switching point. Element of an SS7-based Intelligent Network that performs call origination, termination, or tandem switching.

status Current condition, such as Active or Unknown, of a network object.

status polling Regularly scheduled polling of nodes performed by the MWTM. Contrast with demand polling.

STP Signal transfer point. Element of an SS7-based Intelligent Network that performs routing of the SS7 signaling.

SUA SCCP User Adaptation. A client/server protocol that provides a gateway to the legacy SS7 network for IP-based applications that interface at the SCCP layer. See also SCCP.

Stream Control Transmission Protocol See SCTP.

subview A view within a customized view. You can create subviews on an MWTM client, with each subview devoted to a different part of the network. You can then load a subview to manage a different part of the network, or switch to the DEFAULT view to see the entire network. See also DEFAULT view.

superuser User specified in the MWTM to be able to perform most functions that otherwise require the user to be logged in as the root user.

For more information, see the "Specifying a Super User (Server Only)" section on page 21.

system object ID See device type.

T

TCP Transmission Control Protocol. Connection-oriented transport layer protocol that provides reliable full-duplex data transmission. TCP is part of the TCP/IP protocol stack. See also TCP/IP.

TCAP Transaction Capabilities Application Part. An SS7 protocol that enables the deployment of advanced intelligent network services by supporting non-circuit related information exchange between signaling points using the SCCP connectionless service. See also SCCP.

TCP/IP Transmission Control Protocol/Internet Protocol. Common name for the suite of protocols developed by the U.S. DoD in the 1970s to support the construction of worldwide internetworks. TCP and IP are the two best-known protocols in the suite. See also IP and TCP.

TFTP Trivial File Transfer Protocol. A protocol that is used to transfer small files between hosts of a network. See also host.

thread name Task name.

timeout Event that occurs when one network device expects to hear from another network device within a specified period of time, but does not. The resulting timeout usually results in a retransmission of information or the dissolving of the session between the two devices.

tooltip Popups that display information about objects and table entries.

topology See topology map.

topology map Graphical representation by the MWTM of the network. Also called topology.

Transmission Control Protocol See TCP.

Transmission Control Protocol/Internet Protocol See TCP/IP.

trap Unsolicited message sent by an SNMP agent to an NMS, console, or terminal to indicate the occurrence of a significant event, such as a specifically defined condition or a threshold that has been reached.

trap forwarding Forwarding MWTM events to other hosts, in the form of SNMP traps. This enables the MWTM to integrate with high-level event- and alarm-monitoring systems such as the Cisco Info Center (CIC) and Micromuse's Netcool suite of products. These systems can provide a single high-level view of all alarm monitoring in your network, making it easier to detect and resolve problems.

Trap Receiver Multi-threaded process that receives SNMP traps for the MWTM. See also Data Server, Message Log Server, Process Manager.

Trivial File Transfer Protocol See TFTP.

U

UDP User Datagram Protocol. Connectionless transport layer protocol in the TCP/IP protocol stack. UDP is a simple protocol that exchanges datagrams without acknowledgments or guaranteed delivery, requiring that error processing and retransmission be handled by other protocols. UDP is defined in RFC 768.

UMTS Universal Mobile Telecommunications System. Third generation wireless standard for supporting data transfer rates of 144 kbs (vehicular), 384 kbs (pedestrian), or up to 2 Mbs in buildings.

UMTS Terrestrial RAN See UTRAN.

unignore Stop ignoring the selected object at the next polling cycle. See also ignore.

unknown Device type for which the MWTM is unable to determine the device type. If a node, the node failed to respond to an SNMP request. If a linkset or link, either the associated node failed to respond to an SNMP request, or the MWTM found that the linkset or link no longer exists. Contrast with discovered.

Universal Mobile Telecommunications System See UMTS.

unmanaged Node status in which the node is known indirectly by the MWTM (the MWTM knows the device exists but no known SNMP stack exists on the device for the MWTM to query), or a user has set the node to this status to prevent the MWTM from polling the node.

User-Based Access MWTM security scheme that provides multi-level password-protected access to MWTM features. Each user can have a unique username and password. Each user can also be assigned to one of five levels of access, which control the list of MWTM features accessible by that user.

For more information, see the "Configuring User Access" section in Chapter 2, "Configuring Security."

User Datagram Protocol See UDP.

Amount of an object's send or receive capacity that is being used, expressed as a percentage or in Erlangs.

UTRAN UMTS Terrestrial RAN. Radio access network for UMTS networks.

V

variant A method of identifying SS7 point codes. Example point code variants are:

ITU: 3-8-3 format is common, made up of 14 bits

ANSI: 8-8-8 format is common, made up of 24 bits

view View that is currently in use on an MWTM client. The current view can be the DEFAULT view or a customized view. A customized view can have one or more subviews. See client view, current view, DEFAULT view.

virtual RAN backhaul A grouping of RAN backhauls. A virtual RAN backhaul is useful if you have configured several RAN backhauls for the same interface. To view the for that interface, create a virtual RAN backhaul that contains all the real backhauls that you have configured for the interface. See RAN backhaul.

virtual link Link that connects signaling point instances running on the same device. The MWTM does not poll virtual links, nor does it display real-time data or accounting statistics for virtual links.

virtual linkset Linkset in which the links are virtual links, which connect signaling point instances running on the same device. The MWTM does not poll virtual linksets, nor does it display real-time data or accounting statistics for virtual linksets.

Note Prior to IOS release 12.2(23)SW1, virtual linksets on multi-instance routers were created manually by the user. Within and after that release, virtual linksets are created automatically.

Virtual Private Network See VPN.

VPDN Virtual Private Dialup Network.

VPN Virtual Private Network. Enables IP traffic to travel securely over a public TCP/IP network by encrypting all traffic from one network to another. A VPN uses “tunneling” to encrypt all information at the IP level.

VRF Virtual Routing and Forwarding.

W

World Wide Web See WWW.

WWW World Wide Web. Large network of Internet servers providing hypertext and other services to terminals running client applications such as a browser. See also *browser*.

X

XML Extended Markup Language. A general-purpose markup language for to facilitating the sharing of data across different information systems connected through the Internet. See SOAP.