

Release Notes for the Cisco MNM Provisioning Tool Release 2.4

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Introduction

This document contains release information on the Cisco MGC Node Manager Provisioning Tool (MNM-PT) Release 2.4 software through Release 2.4(1), patch 2. For more information on the Cisco MNM-PT software, please visit Cisco's website at: http://www.cisco.com > Software Center > Network Management > Voice Services Provisioning Tool or http://www.cisco.com/cgi-bin/tablebuild.pl/vspt.



In previous releases the Cisco MGC Node Manager Provisioning Tool was packaged separately and known as Voice Services Provisioning Tool (VSPT).



MNM-PT helps you create configuration files across multiple devices including the Cisco PGW 2200, BAMS, and HSI servers.

MNM-PT can help avoid common errors that might arise if devices are provisioned independently. This package eliminates the need to enter duplicate data and enables you to import configurations to and export configurations from the PGW 2200. It also generates the configuration files you need to provision the PGW 2200—including the following provisioning information:

- Signaling
- · Trunk groups
- Trunks
- Routes
- External nodes
- System
- · Dial plans

Related Documentation

For installation instructions, see the Installation Guide available at

http://www.cisco.com/univercd/td/doc/product/access/sc/rel9/emins/index.htm

The Cisco MGC Node Manager Provisioning Tool User's Guide Version 2.4(1) contains information on getting started with MNM-PT and is available at

http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel9/vspt241/index.htm

For details of using MNM-PT for provisioning, refer to the *Cisco Media Gateway Controller Software Provisioning Guide Version 9*, Chapter 3, "Provisioning with the Voice Services Provisioning Tool", at

http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/prvgde/r9gui.htm

For details of using MNM-PT for provisioning dial plans, refer to the *Cisco Media Gateway Controller Dial Plan Guide Version 9*, Chapter 3, "Provisioning Dial Plans with VSPT", at

http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel9/dplan/dp_vspt.htm

Software Release History

This section contains information for the current 2.4 releases. For information on earlier releases, please refer to a previous version's release notes.

The latest patch for this release is Patch 2, described in Release 2.4(1) Patch 2 Information, page 5. Patch installation instructions are described in Patch Procedure, page 9.

Release 2.4(1)

Release 2.4(1) supports Cisco MGC Release 9.4(1) software and adds new or enhanced features to support provisioning features new in Cisco MGC Release 9.4(1).

Release 2.4(1) Enhancements

New Cisco MNM-PT 2.4(1) features are shown in Table 1 and modified features are shown in Table 2.

Table 1 New Features in Software Release 2.4(1)

Feature	Description			
Installation and launching	Bundled with Cisco MGC Node Manager for tighter integration. As in previous releases, may be launched from Cisco MGC Node Manager or standalone from the command line.			
Installation	Installation Package provides menu for installing all supported MNM-PT releases and patches.			
Cisco PGW 2200 9.4(1)	Support for new and modified 9.4(1) Cisco PGW 2200 features as detailed below, in alphabetic or			
Advanced Screening and Number	Support for provisioning the new MML components: CLIPREFIX, CLIIPADDRESS, H323IDDIVFROM			
Modification	Support for p provisioning the following new trunk group properties: EnableIPScreening, SipIPSource, DefaultPN, DefaultPNNOA, DefaultPNNPI, DefaultPNPres			
	New result types: PNMODDIG, PN_NUMBER_TYPE, PN_PRES_IND, CG_SCREEN_IND, PN_SCREEN_IND, A_NUM_NPI_TYPE, CG_PN_COPY, PN_NPI_TYPE.			
Configurable NOA Mapping	Support for provisioning the new NOA translation table, linexlate.			
DPNSS	Support for provisioning DPNSS Sigpath/Trunk Group properties: . FeatureTransparencyDisabled, CallForwardRerouteDisabled, CustomerVPNid, CustomerVPNOnNetTblNum, CustomerVPNOffNetTblNum.			
	New MML component: DPNSSPATH.			
Generic LNP protocol enhancement	New trunk group property and signath property: OD32DigitSupport.			
Global Screening Database Table	Support Global Screening Database Table: Setting the value of the SCREENING result type to 3 or 4, Warning the user that assigning a customer group ID of GLBL will fail, Discovery and display of global screening tables.			
IUA with SCTP (IUA	Support for provisioning the new MML components ASSOCIATION and IPROUTE.			
transport between the PGW and the NAS)	New commands for provisioning of IUA/SCTP: RTRV-ASSOCIATION, SET-ASSOCIATION, RTRV-IPROUTE, SET-IPROUTE.			
M3UA to IPT (SCP via IP)	Support for provisioning the new MML components M3UAROUTE, SUAROUTE, M3UAKEY, SUAKEY, SGP.			
NICS Billing Phase II	New trunk group properties: populateSDPInfoInCDR.			
	Upload and view trunk group data that include populateSDPInfoInCDR.			
Q.SIG Backhaul, Transparency, and Call Forward	Support for provisioning the following signaling path/trunk group properties: FeatureTransparencyDisabled, CallForwardRerouteDisabled, CustomerVPNid, CustomerVPNOnNetTblNum (existing but unused property currently called CustGrptbl or VNET_TABLE_INDICES.), CustomerVPNOffNetTblNum,			

Table 1 New Features in Software Release 2.4(1) (continued)

Feature	Description		
Redirecting Number. Modifications and Advanced A-Number. Normalization	New Trunk Group properties: Anumnormalise, Bnumnormalise.		
	Changes to existing MML parameter names to indicate whether provisioning A-number tables (\$NOAcg/\$NPIcg) or B-number tables (NOA/NPI tables).		
	New target identifiers added to the number analysis command syntax: ANOA and ANPI (for provisioning \$NOAcg and \$NPIcg), BNOA and BNPI (for provisioning \$NOA and \$NPI).		
	Two new result types for modification of Redirecting number and its NOA. RMODDOG, R_NUMBER_TYPE.		
Secure Communications (SSH)	If you are implementing secure communications (SSH) on the Cisco PGW, BAMS, or HSI served MNM-PT can be installed with crypto-enablement to support secure communications with those devices, ssh and sftp application programs are used instead of Telnet and FTP. This uses the same security module that the PGW uses (CSCOk9000).		
Simple INAP Provisioning	Support for provisiojning the new intelligent network service table (INSERVICE MML).		
SIP Subscribe/Notify	New trunk group properties: SubscribeNotifySupport, UnsolicitedNotifyMethod, MinEventSubscribeDuration, MaxSubscriptionDuration		
SIP-T and SIP-T/GTD	New trunk group properties: sipMimeBodySupport, IsupTransEarlyBackwardDisabled, GtdMsglGtdCapTypeProp.		

Table 2 Modified Features in Software Release 2.4(1)

Feature	Description	
M3UA to IPT (SCP via IP)	Removed support for the ENETIF component.	
	Under EXTNODE component, added M3UA/SUA Group attribute.	
	Under IPLNK, SIPLNK, and SS7SGIPLNK, removed IF attribute.	
	Updated SS7PATH by adding the M3UAKEY attribute.	
	Modified the SS7ROUTE MML component validation rules.	
	Under SS7SUBSYS added OPC and SUAKEY attributes.	

Table 2 Modified Features in Software Release 2.4(1) (continued)

Feature	Description		
IUA with SCTP	This feature allows IUA transport between the PGW and the NAS. These components were modified or removed:		
	Under SIPLNK, removed MML NEXTHOP and NETMASK attributes		
	Under SS7 SG IPLNK, removed NEXTHOP and NETMASK attributes; Added IPROUTE attribute.		
	FASPATH MML component is no longer supported.		
	Under IP LNK, removed NEXTHOP and NETMASK attributes; Added IPROUTE attribute.		
	Under NASPAATH, added SIGPORT and SIGSLOT attributes.		
	Under SESSIONSET, removed NEXTHOP1, NEXTHOP2, NETMASK1 and NETMASK2 attributes; Added IPROUTE1 and IPROUTE2 attributes.		
	Under EXTNODE component, added new attribute ISDNSIGTYPE.		
	To suppost the provisioning of IUA/SCTP, support these existing commands: RTRV- IPLINK and SET-IPLNK.		
	Removed support for these MML components:		
	CARD, since the ITK, PTI, and V35 cards are no longer supported by the PGW – already implemented under 2.3(2).		
	TDMIF, which is no longer supported by the PGW – already implemented under 2.3(2).		
	TDMLNK, which is no longer supported by the PGW - already implemented under 2.3(2).		
Simple INAP Provisioning	Under SS7SUBSYS added RemoteSSN and LocalSSN (new name for SSN.)		
Removed support	Obsolete solution wizards.		
for	BAMS phase 2.		
Result types: Modified support	Result type SCREENING: Added new attributes (CustGrpIdPass and CustGrpIdFail). Result type CG_PRES_IND: Updated the original enums (0 – disable and 1 –enable) to new enums (1 – restricted, 2 – allowed and 3 – unavailable).		
VISM: Support for ATM Operating Modes (Streamlined 2.3(2) Feature)	Support provisioning theseATM operating modes on VISM 3.1 software: VoATM /AAL1 SVC (VISM-PR only), VoATM /AAL2 SVC (VISM-PR only), VoIP & switched ATM / AA1 SVC.		

Release 2.4(1) Patch 2 Information

The following caveats were resolved in Release 2.4(1) Patch 2. Patch installation instructions are described in Patch Procedure, page 9.

Table 3 Resolved in Release 2.4(1) Patch 2

DDTS Number	Description
CSCuk43512	MNM-PT cannot insert additional routes in a route list
CSCea91713	MNM-PT does not change trunk groupes in route correctly
CSCeb49810	MNM-PT fails to manipulate a dial plan correctly

Release 2.4(1) Patch 1 Information

The following caveats were resolved in Release 2.4(1) Patch 1. Patch installation instructions are described in Patch Procedure, page 9.

Table 4 Resolved in Release 2.4(1) Patch 1

DDTS Number	Description
CSCdz35864	MNM-PT adding unwanted cause codes to the configuration
CSCea00317	Misleading error message when deploying from BAMS config tool
CSCea15821	Incorrect MNM-PT behavior after removing DigMod string
CSCea91847	Audit fails with device ssh toggle disabled
CSCeb55741	PGW Restore: Functional issues using Backup-Restore feature
CSCuk44603	MNM-PT still required Ethernet card config for PGW rel 9.4(1)
CSCuk44638	IProute config should allow special chars (eg _)
CSCuk44487	MNM-PT does not import DPNSS trunk groups
CSCeb73479	M3UAGroup default value should be 0 for ext. node.
CSCeb74842	Default value incorrect for Trunk Group routing Properties

Release 2.4(1) (Base Release) Open Caveats

The following caveats are open in the base 2.4(1) release; all are fixed in Patch 1, described in the previous section.

Table 5 Open Caveats for Software Release 2.4(1)

Identifier	Severity	Description
CSCea91847	3	Audit fails with SSH-enabled BAMS when Telnet and ftp are disabled on the BAMS host. A configuration cannot be imported for an SSH-enabled BAMS host if Telnet and ftp are disabled (toggled off) on that host. Workaround: (If feasible) Do not disable Telnet and ftp on the BAMS host.
CSCeb55741	3	Problems restoring a Cisco PGW configuration using MNM-PT backup and restore feature. Workaround: Restore the Cisco PGW configuration manually:
		1. Connect to the Cisco PGW host.
		2. From the Cisco PGW host, make a TFTP connection (as a client) to the backup host.
		3. As a TFTP client, gets the backup file (tar file), placing it in a temporary location (/tmp).
		4. Untar the tar file from the temporary location into the /opt/CiscoMGC/etc/cust_specific/ directory location.
CSCuk44638	4	IP route configuration should allow special characters. The special character '_' is not allowed for the IP Gateway (nexthop) attribute text field. Workaround: None.

System Requirements

The following is the minimum hardware and software you need to run the Cisco MNM-PT software:

- Sun Ultra 5 workstation, 440 MHz or faster
- · Sun Solaris 8 operating system
 - April 2001 release recommended
 - Open Windows with the Common Desktop Environment (CDE)
- · 8-bit video graphics card
- 128 MB of System RAM
- 128 MB of free disk space (in installation directory)
- 128 MB of free swap space
- · Approximately 4 MB of disk space in the /var partition required for each configuration session

Supported Configurations

These configurations are supported:

 Cisco MGC Node Manager and Cisco MNM PT installed together on a network management server. (Recommended)

- Cisco MGC Node Manager installed on a network management server and Cisco MNM-PT installed on a Cisco PGW host machine.
- Cisco MGC Node Manager installed on a network management server and Cisco MNM-PT installed on a separate server.



Other element managers may be installed on the network management server.



Cisco MGC Node Manager should not be installed on a Cisco PGW 2200 host machine.

Supported Network Elements

The following network elements have been tested and verified to work with this release of the Cisco MNM-PT.



Other network element software versions have not been tested and are not supported with this version.

Cisco PGW 2200 Release 9.4(1) including provisioning the following components:

- Signaling
- · Trunk groups
- · Trunks
- Routes
- External nodes
- System
- Dial plans

Devices managed by the Cisco PGW 2200:

- Cisco Media Gateway (MGX) 8850
 - Voice Interworking Service Module (VISM) Release 3.1

For the Cisco Media Gateway, MNM-PT supports these provisioning tasks:

- Chassis provisioning tasks
- VISM provisioning tasks:

Installation Procedure Checklist

Before installing the software, read Chapters 1 and 3 of the *Installation Guide*. lation Guide for detailed instruction on how to mount the CD-ROM.

Before you begin: The X Windows DISPLAY environment variable must be set in order for you to install the Cisco MNM-PT. Use the following examples to set your X Windows DISPLAY environment variable. Replace the value <hostname> with your machine's hostname:

In csh or tcsh:

setenv DISPLAY <hostname>:0

In sh or ksh:

DISPLAY=<hostname>:0 ; export \$DISPLAY

- Step 1 Become the root user.
- Step 2 Place Cisco MGC Node Manager CD in the CD-ROM drive.
- Step 3 Change to the /cdrom/cdrom0 directory
- Step 4 Execute the command: ./cmnminstall.
- Step 5 Enter 2 to install MNM-PT 2.4(1).
- **Step 6** Follow the on-screen prompts.
- Step 7 Eject the CD-ROM when the installation is complete.

Patch Procedure

The Cisco MNM-PT patch process is cumulative. Downloading and installing the latest patch installs all previous patches. In order for you to install a patch, the base Cisco MNM-PT 2.4(1) software must be installed. Use the following steps to install the desired patch.

- **Step 1** Verify that the base Cisco MNM-PT 2.4(1) software is installed.
- Step 2 Become the root user.
- **Step 3** Create a temporary installation directory.
- **Step 4** Download the patched software:
 - a. Go to www.cisco.com.
 - b. Log in.
 - c. Navigate to *Technical Support > Software Center > Products and Downloads > Network Management Software*. On this page find and click on *Cisco Voice Services Provisioning Tool*. You go to the patch download page.
 - **d**. Download the desired patch to the temporary installation directory.
- **Step 5** Extract the patched software to the temporary directory. For example, you can use:

zcat CMNM_2_4_1-patch01.tar.Z | tar xvf -

- Step 6 Untar the CMNM_2_4_1-patch01.tar file.
- Step 7 Execute the "cmnminstall" script to install the VSPT 2.4(1) patch package.
- **Step 8** Follow the on-screen prompts.

Troubleshooting

 The X-Windows DISPLAY environment variable must be set in order for you to install the Cisco MNM-PT:

During installation, the X-Windows DISPLAY environment variable must be set properly. If this variable is not set properly, the installation program exits with a Java error message or simply appears to stop responding. Use the following examples to set your X-Windows DISPLAY environment variable. Replace the value <hostname> with your machine's hostname:

In csh or tcsh:

```
setenv DISPLAY <hostname>:0
```

In sh or ksh:

```
DISPLAY=<hostname>:0 ; export $DISPLAY
```

- If you experience problems or errors deploying to or communicating with a remote machine, check the following points:
 - Ensure that the machine is alive and responding to the **ping** command.
 - Ensure that correct login/passwords have been specified.
- If you experience errors when deploying to the PGW 2200, check the following:
 - The PGW 2200 supports only one provisioning session at a time. When deploying to the PGW 2200, ensure that no other provisioning sessions are active.
 - When activating a configuration on the PGW 2200, the PGW 2200 might require that some signaling components are taken out of service before the configuration is activated. If you do not take the component out of service, you receive an MML error message. You can take the component out of service from MML manually, and after that you can activate the configuration.
- Enter the following command to determine where Cisco MNM-PT is installed:

```
/usr/bin/pkgparam _DART_PKG_NAME_ BASEDIR
```

CSCOvsp stores configuration files in the /var/<install directory>/data directory. Each
_DART_PKG_NAME_ configuration is stored in a separate directory; the directory name is the same
as the configuration name.

In the examples below, the assumption is that CSCOvsp16 was installed in the directory /opt/CSCOvsp16, thus = /opt/CSCOvsp16

- To rename a configuration, simply rename the directory under /var/opt/_DART_PKG_NAME_/data
- To remove a configuration, remove the directory under /var/opt/_DART_PKG_NAME_/data
- To determine where the data directory is located, search for DartStoreDir in the configEditor.properties file:

```
/usr/bin/grep DartStoreDir
/opt/_DART_PKG_NAME_/classes/com/cisco/transpath/dart/editor/configEditor.properties
```

As a safety precaution, the deinstallation procedure does not remove configuration data. The data must be removed manually.

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

http://www.cisco.com

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

 Registered Cisco Direct Customers can order Cisco product documentation from the Networking Products MarketPlace:

http://www.cisco.com/cgi-bin/order/order_root.pl

• Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

http://www.cisco.com/go/subscription

 Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems Attn: Document Resource Connection 170 West Tasman Drive San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

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- · Resolve technical issues with online support
- Download and test software packages
- · Order Cisco learning materials and merchandise
- · Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.

- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

http://www.cisco.com/register/

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

