



# Release Notes for the Cisco Media Gateway Controller Software Release 9.1(5)

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**June 25, 2007**

These release notes describe the features and caveats for the Cisco media gateway controller (MGC) software Release 9.1(5).



**Note**

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The Cisco MGC software was formerly referred to as the Telephony Controller software. Some parts of this document might use the older name.

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**Note**

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The Cisco PGW 2200 PSTN Gateway (hereafter referred to as Cisco PGW 2200) was formerly called the Cisco VSC3000. Some parts of this document might use the older name.

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## Introduction

The Cisco Media Gateway Controller (Cisco MGC) is a software application that runs on a Sun Microsystems host server and provides the functions needed to manage the connections of a packet data network to the Public Switched Telephone Network (PSTN). This version of the software provides full support for configurations of hardware and software that are described as the Cisco PGW 2200 Virtual Switch Controller.

The Cisco PGW 2200, performs the signaling and call control tasks (such as digit analysis, routing, circuit selection, and so forth.) to seamlessly switch calls between the PSTN and a packet network. Called the PSTN Gateway, it supports multiple protocols such as H323, SIP, and MGCP and enables service providers to deploy numerous applications, including transit over packet networks (IP or ATM), voice/data traffic grooming, and high density access to H323 and SIP networks.

Release 9.1(5) of the MGC software supports all of these applications, although system-level testing has not been completed on all the applications and media gateways.

## Voice Transit Application

In the Tandem/Transit application, the Cisco PGW 2200 controls calls that originate and terminate on TDM interfaces (both SS7/C7/CCS7 network and PRI/PBX) and then transmits across a packet network (IP or ATM). This enables existing service providers to cap their investments in TDM switches by offloading traffic onto packet networks directly from local end offices. It also enables innovative service providers to become transit and long distance or international service providers by switching voice calls over packet infrastructures and interfacing to legacy TDM networks via standard interfaces (SS7). The MGX8800/VISM and AS5X00 media gateways are used for this application.

## Hardware and Software Required by Each Solution

Table 52 lists the hardware and software required for each of the solutions supported by this release of the Cisco MGC.



### Note

For more information about Cisco IOS software, see the Cisco IOS release notes for your platform at the following URL:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios120/relnote/index.htm>

**Table 52** *Components Matrix*

Solution Name	Hardware	Software
Media Gateway Controller	Cisco PGW 2200 Virtual Switch Controller (Cisco MGC)	Sun Solaris 2.6 Sun StorEdge Volume Manager 3.1 (for mirrored drives only) Cisco MGC Software Release 9.1(5)
	Cisco 2611 Signaling Link Terminal (SLT)	Cisco IOS Software Release 12.2(2)XA
	Cisco Catalyst 5500 family LAN switch	Software Release 12.0(3x)W5(9)

**Table 52 Components Matrix (continued)**

Solution Name	Hardware	Software
MGC Element Management		Cisco MGC Node Manager (CMNM) Release 2.0 Cisco Voice Service Provisioning Tool (VSPT) Release 2.1(1)B Billing and Measurements Server (BAMS) Release 2.68
Media Gateways	Cisco MGX 8260 Media Gateway	Software Release 1.1.4
	Cisco MGX 8800/VISM Media Gateway	Software Release 1.1.40 Cisco 5300 MGW Release 12.2(2)XB Cisco 5300/5400 Media Gateway Release 12.2(2) XB

## Platform Support

For a list of supported platforms, refer to Chapter 1 of the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide* at the following url:  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel9/swinstl/index.htm>.

## Software Required

You need the following software in order to run the Cisco MGC software on the Sun Netra t 10x, Sun Netra t 112x, and Sun Netra t 140x platforms:



### Note

Sun Solaris is no longer available from Sun and must be obtained from Cisco or another Sun authorized Legacy CD provider.

- Sun Solaris Operating Environment Installation CD, September 1999, part number 704-6914-10
- Sun Solaris 2.6 software, part number 704-6220-10  
(Cisco part numbers—SC2200: MGCV-SUNOS-2.6 and Cisco PGW 2200: MGCV-SUNOS-2.6V)



### Note

Network Time Protocol (NTP) software is installed with Sun Solaris. Be sure to configure your Cisco MGCs to use NTP or the equivalent time synchronization software.

- Cisco Media Gateway Controller Installation CD, which includes the Cisco Media Gateway Controller software, Release 9.1(5)
- All compatible Sun Solaris patches, including log and spool preinstallation patch software (requires a second drive)
- Sun Volume Manager preinstallation patch software (required for mirrored drives only)
- Sun Netra t 112x CD, if you are installing alarm card software

## Required Swap Space

For the Cisco MGC software, you need to partition 4 GB of swap space. Setting swap space at installation is recommended; however, you can change swap space at a later date by adding a swap file or repartitioning the swap space using the format menu (for example, reassigning how many cylinders are in each partition). The swap space necessary is a function of the amount of traffic to be handled. As traffic increases, you should use the **top** command in UNIX to see how much swap space is being used, and determine if more is needed. You can use the MML command **rtrv-ne-health** to pull information from the UNIX top from within MML.

## Host Hardware Requirements

### Host Minimum Server Requirements

Table 53 shows the host minimum hardware requirements.



#### Caution

Before using the minimum hardware configuration, consult with your Cisco representative to determine the hardware that will give you the best results based on your network configuration, proposed traffic, and desired processing power. In particular, B-number analysis or screening, long call hold times, and service control point (SCP) queries might require additional hardware resources.

**Table 53** Host Minimum Hardware Requirements

Component	Netra 10x	Netra 112x	Netra 140x
Memory	1 GB	2 GB	4 GB
Processor	1 at 440 MHz	2 at 440 MHz	4 at 440 MHz
CPUs	1	2	4
Disk	2 disks, each 18 GB	2 disks, each 18 GB	2 disks, each 18 GB
DAT	Optional	Optional	Optional
Ethernet ports (required)	2 ports standard	2	2
DVD/CD	1	1	1

## Media Gateway Hardware Requirements

Table 54 provides the NAS Release Notes locations.

**Table 54** NAS Release Notes Locations

Media Gateway	Release Notes Locations
MGX8260 (for Cisco SS7 PRI Grooming Application)	<a href="http://www.cisco.com/univercd/cc/td/doc/product/wanbu/mgx8260/Rel1_2/relnotes/61753.htm">http://www.cisco.com/univercd/cc/td/doc/product/wanbu/mgx8260/Rel1_2/relnotes/61753.htm</a>
VISM (for Cisco Tandem Offload Application)	<a href="http://www.cisco.com/univercd/cc/td/doc/product/wanbu/mgx8850/vism21/210rnote.htm">http://www.cisco.com/univercd/cc/td/doc/product/wanbu/mgx8850/vism21/210rnote.htm</a>

## Local-Area Network Switch

Your application can use one or more local-area network (LAN) switches from the Cisco Catalyst Switch family to connect the Cisco MGC host to the MGWs and to the Cisco SLTs.



**Note**

User documentation refers to the Cisco Catalyst 5500 switch family (NEBS-compliant). The Cisco Catalyst 2900 XL is another NEBS-compliant LAN switch that can be used for a small configuration, but current MGC user documentation does not address the Cisco Catalyst 2900 XL. Refer to the Cisco Catalyst 2900 XL documentation for information about this switch.



**Note**

A LAN switch is not provided with the Cisco MGC.

## Supported Features

The features listed in [Table 55](#) are supported in Release 9.1(5).

**Table 55 Supported Features in Release 9.1(5)**

Feature	Purpose
Long-distance service through both indirect and direct access	Replaces the need for traditional TDM equipment.
Support for domestic and international dialing plans	Provides scalable and flexible service.
Support for automatic number identification (ANI) authorization	Adds security and prevents fraudulent use of the network.
Support for toll-free and 8XX numbers through the service control point (SCP)	Allows callers to use the free phone and premium services across the Tandem/Transit network.
Centralized element manager	Provides a method to configure and monitor the network.
ISUP PSTN interconnect with full COT support	Provides verification of the voice path.
Support for ISDN direct-access lines	Allows direct line access to the Cisco MGC.
Support for E-ISUP inter-MGC signaling	Provides scalable and flexible service.
Support for generic routing	Provides scalable and flexible service.
Support for MGCP 0.1	Allows the Cisco MGC to control media gateway connections.
Edge-to-edge security	Prevents fraudulent use of the network.
Support for carrier-grade quality of service (QoS)	Replaces the need for traditional TDM equipment.
Support for SS7-to-SS7, SS7-to-ISDN, and ISDN-to-ISDN call types	Provides scalable and flexible service.
Support for voice transit over multiple codecs (G711, G729, etc.)	Provides scalable and flexible service.

**Table 55 Supported Features in Release 9.1(5) (continued)**

<b>Feature</b>	<b>Purpose</b>
Support for ISDN data calls	Provides scalable and flexible service.
Support for echo cancellation	Provides scalable and flexible service.
Support for real-time fax relay	Provides scalable and flexible service.
Support for Cisco media gateways	Protects investment in Cisco equipment.
Provides software upgrade of: <ul style="list-style-type: none"> <li>• Cisco IOS</li> <li>• Cisco MGC and Sun Solaris software</li> <li>• Cisco SLT</li> </ul>	These upgrade paths: <ul style="list-style-type: none"> <li>• Protect investments</li> <li>• Provide low-cost ownership</li> <li>• Are part of a complete solution with Cisco IOS software</li> </ul>
Provides a reliable IP link between Cisco MGC and access servers with Reliable User Datagram Protocol (RUDP)	No single point of failure in connection between media gateways and the Cisco MGC.
Call detail records for PSTN billing	Meets carrier-grade PSTN requirements to migrate existing voice revenue streams to the packet environment and to create new voice service opportunities. Provides a CDR viewer to view billing records.
Facility associated signaling provided by the Cisco SLTs (T1/E1 WIC, optional with SS7)	<ul style="list-style-type: none"> <li>• Grooms off the bearer channels and then delivers them to the media gateway</li> <li>• Delivers MTP-3 to the MGC host over IP</li> </ul>
High availability platform	Established calls are maintained when there is a switchover from the active MGC host to its paired standby host.
Sun Solaris 2.6	<ul style="list-style-type: none"> <li>• Y2K compliant</li> <li>• Open computing platform</li> </ul>
<ul style="list-style-type: none"> <li>• Support for 1000+ destination point codes (DPCs)</li> <li>• Support for up to six origination point codes (OPCs)</li> <li>• Supports 504 PRI D channels</li> </ul>	<ul style="list-style-type: none"> <li>• Scales cost-effectively to central office size</li> <li>• Flexible and scalable</li> </ul>
Complete continuity check (two-wire and four-wire)	Meets interconnect requirements.
NEBS Level 3 compliant	Telco-ready.
Several simplex or high availability platform options	Cost-effective options.

## Cisco MGC Management

[Table 56](#) provides an overview of the management components of the Cisco MGC.

**Table 56 Management Components of the Cisco MGC**

Management Component	Description
Cisco Voice Service Provisioning Tool (VSPT)	The Cisco VSPT is a configuration/provisioning tool for the Virtual Switch Controller/Switch Controller (VSC/SC) host and controlled media gateways. You can use its facilities to create, copy, modify, and deploy the configuration for the Media Gateway Controller host.
Alarms	<p>The Cisco MGC supports a comprehensive set of alarms (in accordance with ITU X.733):</p> <ul style="list-style-type: none"> <li>• Processing errors</li> <li>• QoS alarms</li> <li>• Equipment alarms</li> <li>• Communications alarms</li> <li>• Environment alarms</li> </ul> <p>You can adjust the severity of alarms and thresholds to match your carrier's severity level definitions. You can also configure the system to generate real-time alarms to local or remote terminals. All alarms are written to a log file in an uncompressed format for easy retrieval.</p>
PEG counts	<p>You can obtain a variety of usage statistics from the Cisco MGC. The data is recorded real-time and written to a file. You can specify the statistics to be collected and the time intervals for collection and writing to file. Each PEG count record includes:</p> <ul style="list-style-type: none"> <li>• Start time</li> <li>• Duration</li> <li>• Measured value</li> <li>• Category</li> <li>• Element measured</li> </ul>
Cisco MGC Node Manager (CMNM)	CMNM is both a software requirement and a network management tool. It provides network management for the Cisco PGW 2200 that is beyond the provisioning functionality provided by the VSPT. CMNM covers VSC, SLT, and LAN switches.

## Media Gateway Management

The Cisco IOS software installed on the media gateways provides an array of network management components (described in [Table 57](#)) designed to meet the needs of today's large, complex networks. These management features provide the following benefits:

- Reduce network bandwidth and processing overhead
- Offload management servers
- Conserve resources
- Ease system configuration tasks

Cisco’s integrated management simplifies administrative procedures and shortens the time required to diagnose and fix geographically dispersed networks. Configuration services reduce the cost of installing, upgrading, and reconfiguring network equipment.

**Table 57 Network Management Components**

Management Component	Description
SNMP and RMON support	<p>Media gateways are fully manageable through use of the Simple Network Management Protocol (SNMP) and imbedded Remote Monitoring (RMON) capabilities:</p> <ul style="list-style-type: none"> <li>• SNMP provides for the collection of information about each controller and interface that can be polled through any SNMP-compatible network management system.</li> <li>• RMON acts as a remote protocol analyzer and LAN probe.</li> </ul> <p>By using the Alarm RMON group, you can set a threshold on any integer-valued Management Information Base (MIB) variable. When the threshold is crossed, an event, defined in the Event RMON group, is triggered. With these capabilities, the system can detect and analyze overload conditions and congestion in real time.</p>
Network management systems	<p>The media gateways both support command line interface and the CiscoView GUI for comprehensive, flexible network management.</p> <p>CiscoView provides dynamic status, statistics, and comprehensive configuration information for Cisco switches, routers, media gateways, Cisco SLTs, concentrators, and adapters. It displays a graphical view of Cisco devices, provides configuring and monitoring functions, and offers basic troubleshooting.</p>



**Note**

CiscoView and RMON are not supported on the Cisco MGX 8260.

## Related Documentation

### Before Installation

Before you install the Cisco MGC software, consult the following related documentation for information about hardware installation and system requirements:

- *The Overview Guide* for your solution
- *Cisco Media Gateway Controller Hardware Installation Guide*: <http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/hrdwrnst/index.htm>
- *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*: <http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel9/swinstl/index.htm>
- *Regulatory Compliance and Safety Information for the Cisco Media Gateway Controller*: <http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/rcsi/index.htm>
- *The Gateway Installation Guide* for your solution

## After Installation

After you install the Cisco MGC software, consult the following related documentation for information on configuring and provisioning your system:

- *Cisco Media Gateway Controller Software Release 9 Provisioning Guide:*  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/prvge/index.htm>
- *The Provisioning Guide* for your solution

The most recent patch set should be loaded. Patches can be found at the following url:

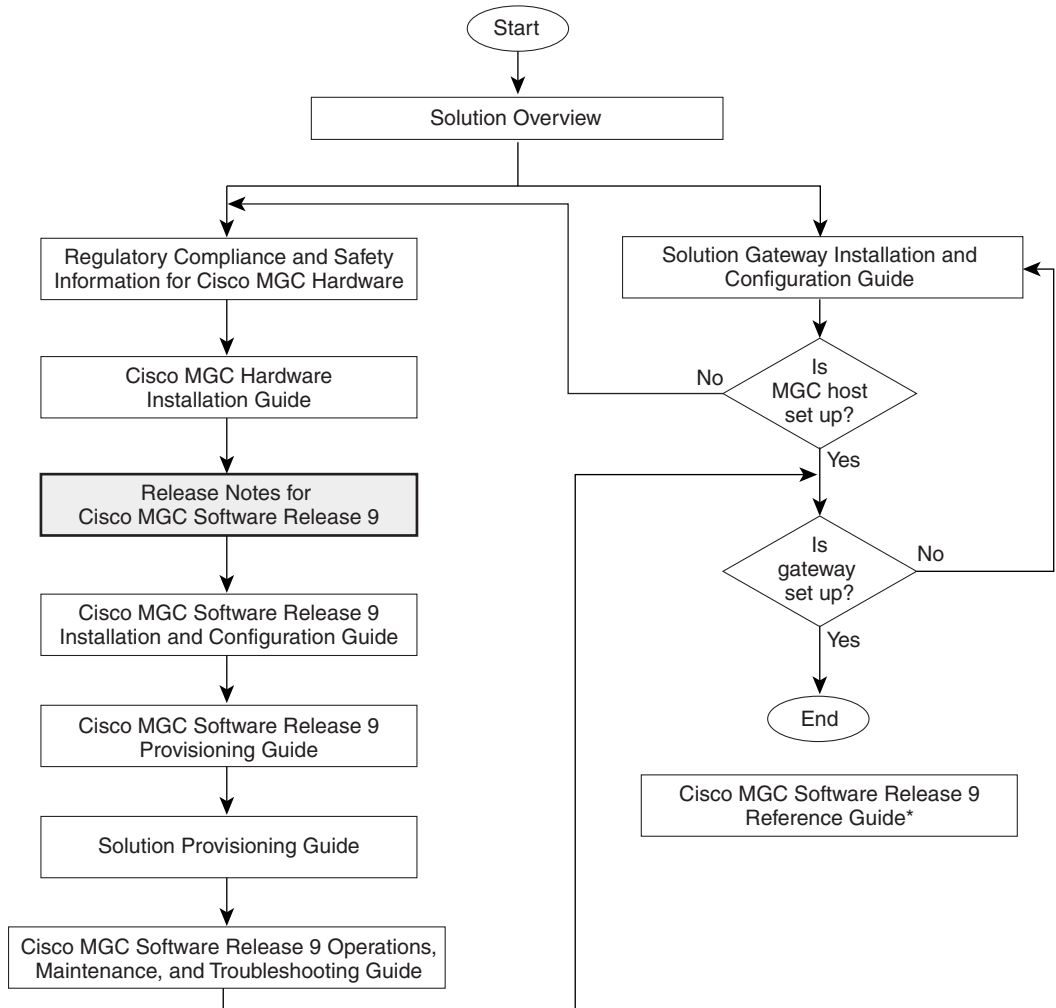
<http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml>

## General Purpose Documents

- *Cisco Media Gateway Controller Software Release 9 Operations, Maintenance, and Troubleshooting Guide*  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/omts/index.htm>
- *Cisco Media Gateway Controller Software Release 9 Messages Reference Guide*  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/errmsg/index.htm>
- *Cisco Media Gateway Controller Software Release 9 MML Command Reference Guide*  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/mmlref/index.htm>
- *Cisco Media Gateway Controller Software Release 9 Dial Plan Guide*  
<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/dplan/index.htm>
- *Cisco Media Gateway Controller Software Release 9 Billing Interface Guide*  
[http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/mgc\\_mib/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/mgc_mib/index.htm)
- *Cisco Media Gateway Controller Software Release 9 Management Information Base Guide*  
[http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/mgc\\_mib/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/access/sc/re19/mgc_mib/index.htm)

# Documentation Map

Figure 1 Documentation Map



\* This guide provides useful information that is not required during installation.

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## Installation Notes

This section contains information and procedures you can use to remove, upgrade, or install the Cisco MGC software. It also contains information about software patches.

## Acquiring the Software

The Cisco MGC software is provided to customers on CD. Before installing the software, check the Solution release notes and the web for the most current patch level. If the information on the CD matches the information provided on the web and in the Solution release notes, the software and patch information can be installed directly from the CD.

Complete the following procedure to obtain software patches from CCO:

- 
- Step 1** From the Cisco Connection Online page, select the Software Center link(located under Service and Support).  
The Technical Assistance Center page displays.
- Step 2** From the Technical Assistance Center page, select the Voice Software link (located under Software Products and Downloads).  
The Voice Software page displays.
- Step 3** From the Voice Software page, select the Login option (located across the top of the page).  
A login box displays.
- Step 4** Enter your CCO user name and password then press OK.  
After authentication the Voice Software page displays.
- Step 5** Select the link for the desired software release. Software release links are located under the Cisco Media Gateway Controller heading.



### Note

Patches can also be obtained from CCO using the following urls:  
[www.cisco.com/kobayashi/sw-center/sw-voice.shtm](http://www.cisco.com/kobayashi/sw-center/sw-voice.shtm)  
 and  
<http://www.cisco.com/cgi-bin/tablebuild.pl/mgc-915>

## Installing and Upgrading the Software



### Warning

**Before upgrading from a current version of Software Release 9 to a higher level, you must verify software release version compatibility by contacting Cisco TAC (see [Obtaining Technical Assistance, page 74](#)) or your Cisco account representative. Software release version incompatibility may cause service disruption.**



### Warning

**Before upgrading, refer to the “New Version of Times Ten Database Software” ([page 46](#)).**



### Caution

Migration from Cisco MGC Software Release 7.4(x) to Cisco MGC Software Release 9.1(x) fails when the MML names used for the PRI backhaul IP links exceed 16 characters. Before attempting the migration, check all IP link names and ensure that they are 16 characters or less. The migration script uses the existing IP link names to create D-channel components, which are new components

in Cisco MGC Software Release 9.(x). To do this, add 4 characters to the existing IP link name. If the existing IP link name is 17 characters or longer, the resultant D-channel name is longer than 20 characters and therefore invalid. (Maximum length of MML names is 20 characters in all releases.)

If you are installing software Release 9.1(5) for the first time, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide* for instructions.

**Note**

In the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*, observe the following change: In the “Configuring SNMP Support Resources” sections, SNMP MIB measurements are valid only on the active node. They are *not* replicated to the standby node.

If you upgrade to a future release of 9.x(x) from Release 9.1(5), and you have a configuration with an active and a standby host, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.

**Caution**

When upgrading a redundant system, verify that the pom.dataSync parameter (located in /opt/CiscoMGC/etc/XECfgParm.dat) is set to **false** to maintain calls and preserve your configuration.

**Caution**

No validation is performed on the IDs you enter. If you enter an invalid ID, the utilities package does not add any accounts.

**Tips**

If you have trouble installing the utilities package, make sure that you do not still have a transpath group in your group file (located in /etc).

## Upgrading from Release 7.x to Release 9.1(5)

When upgrading from Release 7.x to Release 9.1(5), you must edit the following properties (located in properties.dat):

- The value of \*.VSCSipVersion must be SIP/2.0 (not SIP2.0)
- The property \*.redirectingnumbermapping must be \*.RedirectingNbrMap

**Note**

These changes must be made in the etc and the active\_link directories.

# Software Patches

## Manual Patch Installation

If you later receive patches that need to be manually installed, use the following procedure (unless otherwise stated in the summary information for the patch):

- 
- Step 1** Log in as the root user.
- Step 2** Before installing a patch (unless otherwise stated in the summary information for the patch), you must shut down the Cisco MGC application, because the affected programs are part of the running system. To do this, execute the following command:
- ```
/etc/init.d/CiscoMGC stop
```
- Step 3** Once the Cisco MGC application has been shut down, verify that the patch being installed is both compatible with and meant for the software currently installed. One way to do this is to run the following command as the root user:
- ```
pkgparam CSC0gu000
```
- Now that the MGC application has been shut down and the software load has been verified, installation can begin.
- Step 4** At the UNIX prompt, change to the directory containing the software patch to be installed and enter:
- ```
pkgadd -d CSC0gpN.pkg
```
- and/or
- ```
pkgadd -d CSC0gsN.pkg
```
- Where *N* is the patch number (for example, 005).
- Step 5** Follow the on-screen prompts. Answer **y** to each prompt that requires a response.
- Step 6** Repeat Step 4 and Step 5 for each patch.
- Step 7** Restart the MGC application (etc/init.d/CiscoMGC start).
- 

## Patch Removal

To remove a patch (unless otherwise stated in the summary information for the patch), log in as the root user, and then type the following:

```
pkgrm CSC0gpN
```

and/or

```
pkgrm CSC0gsN
```

Where *N* is the patch number (for example, **008**).

Unless the summary information for a particular patch states otherwise, patches do not have to be removed sequentially.

Patch removal restores the data to its state prior to the upgrade. Files are copied from the backup directories, and these backup directories are removed.

## CSCOp021

Patch CSCOp021 resolves the following DDTS ticket:

Identifier	Severity	Component	Description
CSCef42486	3	mdl-generator	PGW does not truncate oversize message.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOps017 is required in order for you to install this software patch.
- Patch CSCOp020 is superseded by the fixes provided in patch CSCOp021. Uninstall patch CSCOp020 before installing patch CSCOp021. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp020

Patch CSCOp020 resolves the following DDTS ticket:

Identifier	Severity	Component	Description
CSCdz19669	3	mdl-analysis	After switchover the call is not routed to the proper dialplan.

Additional information:

- Only patch CSCOps017 is required in order for you to install this software patch.
- Patch CSCOp019 is superseded by the fixes provided in patch CSCOp020. Uninstall patch CSCOp019 before installing patch CSCOp020. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp019

Patch CSCOp019 resolves the following DDTS ticket:

Identifier	Severity	Component	Description
CSCdx95470	3	mdl-btntp	Cause codes incorrect in CDR records.

Additional information:

- Only patch CSCOps014 is required in order for you to install this software patch.
- This patch provides updates to the following:
  - ASP\_NotRealProtocol.mdo
  - ASP\_NotRealProtocol.so
  - BTNUP\_IUP.mdo
  - BTNUP\_IUP.so
  - CALLVER.mdo

- CALLVER\_GENERIC\_ANALYSIS.mdo
- CALLVER\_GENERIC\_ANALYSIS.so
- CALLVER\_LCM.mdo
- CDR\_MAN.mdo
- CDR\_MAN.so
- CONNECTION\_PLANE\_MANAGER.mdo
- CONNECTION\_PLANE\_MANAGER.so
- EISUP.mdo
- EISUP.so
- ETS\_300\_102.mdo
- ETS\_300\_102.so
- ETS\_300\_102\_C1.mdo
- ETS\_300\_102\_C1.so
- GENERIC\_ANALYSIS.mdo
- GENERIC\_ANALYSIS.so
- IN\_TRIGGER.mdo
- IN\_TRIGGER.so
- LEG\_CONTROLLER.mdo
- LEG\_CONTROLLER.so
- Q761\_BASE.mdo
- Q761\_BASE.so
- cc.mdo
- cc.so
- dummy.mdo
- dummy.so
- lcm.mdo
- lcm.so

**Note**

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This patch includes a subset of protocols. Other protocols may not run with this patch installed.

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- Patch CSCOp018 is superseded by the fixes provided in patch CSCOp019. Uninstall patch CSCOp018 before installing patch CSCOp019. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp018

Patch CSCOp018 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdx33219	3	mdl-mgcp	One way voice when COT tests are turned on.
CSCdx59287	3	mdl-cdr	MGC 9.1(5) with gp012 and gs007 puts wrong first release in 1040 CDB.

Additional information:

- Only patch CSCOp013 is required in order for you to install this software patch.
- Patch CSCOp017 is superseded by the fixes provided in patch CSCOp018. Uninstall patch CSCOp017 before installing patch CSCOp018. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp017

Patch CSCOp017 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCuk30528	2	mdl-eisup	No speech path in backwards direction for H323 originated call.
CSCdx30795	3	mdl-btntp	Incorrect SIM returned when NAE not available.
CSCdx45463	3	mdl-btntp	VSC Returns circuit to connected state when RAN received after REL.
CSCdx38292	3	mdl-ansi-ss7	Set the T36 timer to 2-4 seconds to comply with ANSI Specification.

Additional information:

- Only patch CSCOp011 is required in order for you to install this software patch.
- Patch CSCOp016 is superseded by the fixes provided in patch CSCOp017. Uninstall patch CSCOp016 before installing patch CSCOp017. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp016

Patch CSCOp016 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdx08596	2	mdl-ansi-ss7	Terminating ANSI-MDL passes only 16 digits to the PSTN.

Additional information:

- Only patch CSCOp011 is required in order for you to install this software patch.

- Patch CSCOgp015 is superseded by the fixes provided in patch CSCOgp016. Uninstall patch CSCOgp015 before installing patch CSCOgp016. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOgp015

Patch CSCOgp015 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdx05263	2	mdl-ansi-ss7	ANSI-MDL call with greater than 18 digits fail with protocol error.
CSCdw87796	3	mdl-q761	Q761_PERU customer requires NAS alerting to map to term access non-isdn.
CSCdw16792	3	toolkit	Translation verification tool.
CSCdw78921	3	protocol	SC does not start T36 timer.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOgs010 is required in order for you to install this software patch.
- Patch CSCOgp014 is superseded by the fixes provided in patch CSCOgp015. Uninstall patch CSCOgp014 before installing patch CSCOgp015. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOgp014

Patch CSCOgp014 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw04016	2	provision	Unable to add multiple instances of same trunkgroup in a route.
CSCdw78327	3	mdl	Fin ISUP support of 1 (interworking enc) for forward call indicator.
CSCdw64812	3	mdl-btnup	BIS-BTNUP CBI bit not set to 1 on originating calls.
CSCdw67496	3	mdl-analysis	Overlap call fails if route available but Bnum partially match dgt-strng.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOgs009 is required in order for you to install this software patch.
- Patch CSCOgp013 is superseded by the fixes provided in patch CSCOgp014. Uninstall patch CSCOgp013 before installing patch CSCOgp014. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp013

Patch CSCOp013 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw57952	1	engine	One way voice.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOps008 is required in order for you to install this software patch.
- Patch CSCOp012 is superseded by the fixes provided in patch CSCOp013. Uninstall patch CSCOp012 before installing patch CSCOp013. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp012

Patch CSCOp012 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCuk29653	2	mdl-mgcp	ST: VSC releases the endpoint without receiving 200 to his MDCX.
CSCuk29230	3	mdl-q767	Redirecting indicator not defaulted correctly.
CSCdw61913	3	mdl-sip	SIP from field should allow anonymous to set CLI restricted.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOps007 is required in order for you to install this software patch.
- Patch CSCOp011 is superseded by the fixes provided in patch CSCOp012. Uninstall patch CSCOp011 before installing patch CSCOp012. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp011

Patch CSCOp011 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw58142	1	mdl-ansi-ss7	Covert ITU A-Law BearCap > ANSI MU-Law BearCap if TCC=ANSISS7_STAND.
CSCdw57952	1	engine	One way voice.
CSCdw47465	2	mdl-sip	Looped SIP INVITE is attached to ingress call instance upon return.
CSCdw53741	2	mdl-analysis	Failure to support NOA=0 when the calling party is unavailable.

Identifier	Severity	Component	Description
CSCuk31017	2	mdl-eisup	Redirecting number incorrect.
CSCuk31422	2	mdl-analysis	BIS: Result DIGIT_REQ 99 (send SAD) stays in a loop.
CSCdw53002	3	mdl-pri	NI2 release state machine does not send right signal to LCM on rcv.RestartAck.
CSCdw52997	3	mdl-pri	NI2 release state machine ignores LReleaseCont in REL initd. RelSeq.
CSCdw52998	3	mdl-pri	NI2 release state machine ignores LReleaseCont on LinkFail in Conn. state.
CSCdw52999	3	mdl-pri	NI2 release state machine does not send LRelComp on linkfail in some scenarios.
CSCdw53000	3	mdl-pri	NI2 release state machine does not send proper signal to LCM on disc colsn.
CSCdw53001	3	mdl-pri	NI2 release state machine does not send right signal to LCM on T305 exp+rcv.RLC.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOGs007 is required in order for you to install this software patch.
- Patch CSCOGp010 is superseded by the fixes provided in patch CSCOGp011. Uninstall patch CSCOGp010 before installing patch CSCOGp011. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOGp010

Patch CSCOGp010 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCuk31061	1	mdl-analysis	BMODDIG dial plan result cannot insert digits at end.
CSCdw39305	2	mdl-analysis	VSC fails A-number modification when call has null A-number.

This patch provides updates to the generic analysis protocol.

Additional information:

- Only patch CSCOGs006 is required in order for you to install this software patch.
- Patch CSCOGp009 is superseded by the fixes provided in patch CSCOGp010. Uninstall patch CSCOGp009 before installing patch CSCOGp010. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp009

Patch CSCOp009 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw44671	2	mdl-btnup	Mismatch in BTNUP SIC in SIM.
CSCuk30664	2	mdl-eisup	T9 expiration timer is incorrect in EISUP.
CSCuk28157	3	mdl-analysis	Overlap calls fail post dial plan change if insufficient digits.
CSCdw20937	3	mdl-analysis	Return from cause to generic analysis picks up orig ingress B number.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOp005 is required in order for you to install this software patch.
- Patch CSCOp008 is superseded by the fixes provided in patch CSCOp009. Uninstall patch CSCOp008 before installing patch CSCOp009. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOp008

Patch CSCOp008 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw32368	6	mdl-btnup	BT UK ISUP Enhancement.
CSCdw04020	2	provision	Result type A_NUM_DP_TABLE is not open to B-tree analysis.
CSCuk28346	2	mdl-q761	Q.785.2 ISS_I_6_1_10 fails: VSC returns ACM with cause value.
CSCuk28350	2	mdl-q761	Q.785.2 ISS_I_6_2_8b fails: Call not released by VSC after CFN received.
CSCuk28403	2	mdl-q761	Q.785.2 ISS_I_6_1_10 fails: CUG interlock transmitted by CUG indi. changed.
CSCdw18881	2	mdl-q767	Stuck CIC after COT failure on ITU E1 trunks.
CSCdw11275	3	mdl	Cause=20 in ACM is not validated for Q767-RUSS in 9.1(5).
CSCuk29231	3	mdl-q767	Tele2Spain: Redirection count not defaulted to correct value.
CSCdw27630	3	protocol	Call on locked NAS circuit hangs circuit in locked state.
CSCdw09883	3	mdl-analysis	Change dial plan limited to only 3 hops.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOGs005 is required in order for you to install this software patch.
- Patch CSCOGp007 is superseded by the fixes provided in patch CSCOGp008. Uninstall patch CSCOGp007 before installing patch CSCOGp008. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOGp007

Patch CSCOGp007 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdw23891	1	mdl-analysis	Overlap calls corrupt B number on re-attempt.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOGs004 is required in order for you to install this software patch.
- Patch CSCOGp006 is superseded by the fixes provided in patch CSCOGp007. Uninstall patch CSCOGp006 before installing patch CSCOGp007. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOGp006

Patch CSCOGp006 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCuk18738	1	mdl-cdr	CDR tag 4012 and 4014 contain translated number; cannot bill INT calls.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOGs003 is required in order for you to install this software patch.

## CSCOGp005

Patch CSCOGp005 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdw07635	2	protocol	BTIUP sends a Confusion when it receives SIMw/ICC/IRC = 7/0
CSCdv88093	2	mdl-ansi-ss7	BD1.1:Call failures due to stuck CICs, (Release 7) (core)
CSCuk28351	2	mdl-q761	Q.785.2 ISS_V_6_3_3_B fails:USR message not passed backwards,ST in Release 9.
CSCuk28157	3	mdl-analysis	Overlap calls fail post dialplan change if insufficient digits in Release 9.

Identifier	Severity	Component	Description
CSCdv32964	3	mdl-sip	Incorrect BYE when SysMdlMemoryReduction is set to 1 in Release 9.
CSCdv87682	3	protocol	COT failure does not generate alarm in Release 7.
CSCdu22599	2	mdl-sip	SS7-SIP Call Blind Transfer does not work in Release 9.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOGs004 is required in order for you to install this software patch.
- Patch CSCOgp004 is superseded by the fixes provided in patch CSCOgp005. Uninstall patch CSCOgp004 before installing patch CSCOgp005. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patches.

## CSCOgp004

Patch CSCOgp004 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCCuk28695	1	mdl-q761	Prov-add: SS7PATH: broken for Danish ISUP.
CSCdv81562	2	ioccc7	VSC does not reply to GRS message.
CSCdv84505	2	mdl	Danish ISUP CPC default in IAM is incorrect.
CSCCuk28295	2	mdl-q761	Telecom Austria Q784-1 test 1.7.2.1 rcv unknown parameter.
CSCCuk28318	2	mdl-q761	Q.784.1 6.1.1B and 6.1.2 fail when overlap is used.
CSCCuk28355	2	mdl-q761	Q.785.2 ISS_V_9_5B fails: IDR after ACM not transmitted.
CSCCuk28357	2	mdl-q761	Q.785.2 ISS_V_10_13: No CPG messages transmitted after ANS.
CSCCuk28360	2	mdl-q761	Q.785.2 ISS_V_11_20B: CPG not transmitted forwards before ANM.
CSCCuk28364	2	mdl-q761	Q.785.2 ISS_V_12_9B: CPG not transmitted correctly.
CSCCuk28386	2	mdl-q761	Q.785.2 ISS_V_3_13A: COLP screening mapped incorrectly from DSS1.
CSCCuk28763	2	mdl-eisup	From time to time call cannot be setup.
CSCCuk28737	3	mdl-q761	Timer T6 does not expire after Suspend received.
CSCCuk28986	2	mdl-analysis	T9 timer expiry, Danish ISUP, wrong rel cause.
CSCCuk29325	3	mdl-connctrl	TDC—CVA far end ring tone not cutthrough by VSC/gateway.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOGs004 is required in order for you to install this software patch.

- Patch CSCOgp003 is superseded by the fixes provided in patch CSCOgp004. Uninstall patch CSCOgp003 before installing patch CSCOgp004. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patches.

## CSCOgp003

Patch CSCOgp003 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdv44674	1	mdl-concntrl	When NotifySetupComplete is set VSC does not send x-atm/sc
CSCuk27509	1	mdl-q761	AUSTRAIN ISUP does not support screening indicator 0
CSCdv24974	2	mdl-q761	Ring no Answer trnkgrpprop does not change the RNA time
CSCdv34980	2	mdl-pri	VSC sends PROG without PI for PRI-ETSI to EISUP to PRI-E5
CSCdv42948	2	mdl-concntrl	Network COT calls fail when TDM COT is used
CSCdv59199	2	protocol	Wrong codec type sent for fax and modem upspeed for T1
CSCuk27282	2	mdl-callctrl	rv cpg with progr indic and unkm param VSC send rsc
CSCuk28298	2	mdl-callctrl	T9 timer expires we should send release (no answer from user)
CSCuk28300	2	mdl-q761	Telecom austria mdo rcv 7 khz call we should release
CSCuk28325	2	mdl-q761	Q.784-1 6.6.4 fails—IAM passes but USI dropped
CSCdv46678	3	protocol	ITU ISUPv2 call released when INF received with A-number not available

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOgs002 is required in order for you to install this software patch.
- Patch CSCOgp002 is superseded by the fixes provided in patch CSCOgp003. Uninstall patch CSCOgp002 before installing patch CSCOgp003. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.



### Note

The fix supplied for CSCdv56763 requires that both patches CSCOgp003 and CSCOgs002 be installed. This fix includes internal configuration information file changes.

- CSCdv11334—Mid-Call DTMF Relay for H323

The Mid-Call DTMF Relay for H323 featurette allows you to connect Cisco call managers to the PSTN using the VSC with the H323 adjunct as the PSTN gateway. AS5300 and AS5400 media gateways are used.

This featurette does not allow you to pass mid-call DTMF digits into the PSTN from a Cisco IP phone. For example, an IP phone user who dials in to a PSTN IVR, cannot submit DTMF digits to the IVR.

The Cisco Call Manager supports out-of-band DTMF using H.245. This feature allows the VSC and H323 adjunct to receive the H.245 DTMF indications and forward them to the media gateway for relay into the PSTN. The VSC can receive DTMF digits from the PSTN and send these digits using H.245 out-of-band signaling to the Cisco Call Manager.

## CSCOp002

Patch CSCOp002 resolves the following DDTs ticket:

Identifier	Severity	Component	Description
CSCuk27947	2	mdl-eisup	ISDN data calls over EISUP do not allow data to pass.

This patch provides updates to the full protocol suite.

Additional information:

- Only patch CSCOs001 is required in order for you to install this software patch.
- Patch CSCOp001 is superseded by the fixes provided in patch CSCOp002. Uninstall patch CSCOp001 before installing patch CSCOp002. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOp001

Patch CSCOp001 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdv03763	2	mdl-callctrl	CRCX reattempt for a 510 ack from GW with TDM COT fails
CSCdv15025	2	protocol	Q.761 does not support some release locations
CSCdv19227	2	mdl-callctrl	Circuit gets hung at expiry of T1/T5
CSCdv30167	3	mdl-sip	SIP ACK sent in wrong order
CSCdv30289	3	mdl-sip	Presentation Indicator always set to restricted for SIP-ISUP calls

This patch provides updates to the full protocol suite.

Additional information:

- Patch CSCOp001 contains all of the 9.1(4)T fixes up to and including patch CSCOp003 except the Mid-Call DTMF Relay feature (CSCdv11334).
- The fixes provided for CSCuk27262 and CSCuk27290 require that both patches CSCOp001 and CSCOs001 be installed (changes are made to properties.dat and propSet.dat).

For the changes to take effect, you must provision your system from a new state. The following new property is added:

EISUP SIGPATH—Used to identify an EISUP link that is connected to an H323 adjunct platform. This property enables use of the generic mechanism for COT handling when the terminating side does not support COT.

New property: H323AdjunctLink

Default value: 0

Valid values: 0—EISUPlink is not connected to an H323 adjunct platform; 1—EISUP link is connected to an H323 adjunct platform

## CSCOs017

Patch CSCOs017 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdz32879	3	provision	prov-exp fails if dialPlan has multiple x placeholders.
CSCdz35422	3	engine	Incorrect release cause code in CDR record.

The engine component was updated.

Additional information:

- Only patch CSCOgp020 is required in order for you to install this software patch.



### Note

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs016 is superseded by the fixes provided in patch CSCOs017. Uninstall patch CSCOs016 before installing patch CSCOs017. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- For information on provisioning restrictions imposed while upgrading to patches that support the Seamless Upgrade feature, refer to [Seamless Upgrade](#) under the New Features section.

## CSCOs016

Patch CSCOs016 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdz03638	2	provision	prov-sta failed w/peer version err after prov-sync & sw-over & back.
CSCdz04348	3	ioccxgcp	MGCP ERR: Unrecognized control vector 99.
CSCdy84196	3	xe-sj	# of file under CFG_ directory causing the standby OOS.
CSCdy89318	3	provision	after deleting the dialplan, prov-exp cannot export the dialplan.
CSCdy89331	3	provision	After del a dialPlan, the .dialPlan and .bin file should be deleted.

The following components were updated:

- engine
- measMgr

- pom
- libxe.so
- librudp.so
- libpolnuman.so
- SS7
- MGCP
- EISUP
- ISDNL3
- TALI
- libconvutil.so

Additional information:

- Only patch CSCOp019 is required in order for you to install this software patch.



**Note**

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It does not matter whether you install protocol or nonprotocol patches first.

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- Patch CSCOs015 is superseded by the fixes provided in patch CSCOs016. Uninstall patch CSCOs015 before installing patch CSCOs016. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- For information on provisioning restrictions imposed while upgrading to patches that support the Seamless Upgrade feature, refer to [Seamless Upgrade](#) under the New Features section.

## CSCOs015

Patch CSCOs015 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdw82828	3	mmlhelp	With stp-softw:<proc>:kill removed then no need for sta-softw.

The following components were updated:

- mmlhelp
- foverd
- sagt
- mml
- engine
- libpom.so

Additional information:

- Only patch CSCOp019 is required in order for you to install this software patch.



**Note**

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It does not matter whether you install protocol or nonprotocol patches first.

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- Patch CSCOGs014 is superseded by the fixes provided in patch CSCOGs015. Uninstall patch CSCOGs014 before installing patch CSCOGs015. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- The Seamless Upgrade feature has been incorporated in release 9.3(2). To support seamless upgrade from earlier releases to 9.3(2), software changes have been installed using patches. For release 9.1(5), you must have a patch level greater than or equal to CSCOGs015.
- For information on provisioning restrictions imposed while upgrading to patches that support the Seamless Upgrade feature, refer to [Seamless Upgrade](#) under the New Features section.

## CSCOGs014

Patch CSCOGs014 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdx95470	3	mdl-btntp	Cause codes incorrect in CDR records.

The ioChanMgr component was updated.

Additional information:

- Only patch CSCOGp019 is required in order for you to install this software patch.



### Note

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOGs013 is superseded by the fixes provided in patch CSCOGs014. Uninstall patch CSCOGs013 before installing patch CSCOGs014. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOGs013

Patch CSCOGs013 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdx64514	2	provision	MML needs to warn of potential failover when deleting MGCP sigpath.
CSCdx22260	3	mmlhelp	MML online: need update documentation for how to add/ed lnksetprop.
CSCdx55732	3	ioccc7	Warm-start alarm when deleting and adding a ss7path.

The following components were updated:

- SS7
- mml
- libpolcomp.so
- mml help files

Additional information:

- Only patch CSCOp018 is required in order for you to install this software patch.



**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs012 is superseded by the fixes provided in patch CSCOs013. Uninstall patch CSCOs012 before installing patch CSCOs013. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOs012

Patch CSCOs012 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdx35629	2	ioccxgcp	Dynamic re-add of MGCP link goes OOS CONF.
CSCdw61228	3	iocm	Get [COMMAND-ABORTED] when executing set-c7lnk:<link>:unh.
CSCdx13980	3	mmlhelp	MML online need to update the new parameterWeighedTgfor RTTRNK.
CSCdx17931	3	provision	Point code for trueopc cannot be edited if 6 trueopcs are used.
CSCdx30755	3	provision	Provisioning should support old configs with >1 port per SS7-IOCC.
CSCdx32667	3	usability	mgcbakcup script fails when /opt/CiscoMGC/etc is given as a dir.
CSCdx33649	3	iocm	Channel Manager restart leads to warm-start failure.
CSCdx34640	3	provision	Improper error message for prov-rtrv:lnksetprop command.
CSCdx36062	3	mmlhelp	No help under MML>HELP:SET-SPC.

The following components were updated:

- MGCP
- ioChanMgr
- mml
- pom
- libpom.so
- libpolcomp.so
- MML Help

Additional information:

- Only patch CSCOp017 is required in order for you to install this software patch.

**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOGs011 is superseded by the fixes provided in patch CSCOGs012. Uninstall patch CSCOGs011 before installing patch CSCOGs012. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOGs011

Patch CSCOGs011 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdx34332	2	toolkit	TOOLKIT: LogViewer: No message displayed and/or messages out of time-range.
CSCdw59945	2	iocceisup	Dynamically add EISUP connection; EISUP DEST stays OOS.
CSCdw84247	2	engine	Dynamically change the ISDN CIC SPAN failed.
CSCdw53421	3	mmlhelp	MML online help command help:rtrv-tc has incorrect call states.
CSCdx05827	3	usability	mgcbbackup script does not work for a tape device.
CSCdw25467	3	provision	prov-add:files/export COMPLD No file created on cust_specific dir.
CSCdx15301	3	toolkit	TOOLKIT:LogViewer:CLEAR takes longer to clear screen than query.
CSCdx20024	3	other	Add/delete schedule backup does not work correctly with overlap name.
CSCdx21432	3	toolkit	ToolKit:CDRViewer report wrong userid.
CSCdx12459	4	toolkit	TVT tool needs to change naming of outgoing side.
CSCdx05822	6	mdl-btnup	ISDN Q931 3.1Khz incorrectly coded for BTNUP.
CSCdx30132	6	mmlhelp	Update property section of prov-add in MML help (featurette ENG-194974).

The following components were updated:

- MML help
- mml
- engine
- EISUP
- callver
- lib\_cmg.so
- lib\_cxn.so
- lib\_eng.so
- lib\_rmg.so

- libpolbase.so
- libpolcomp.so
- libpolnuman.so
- libpolroute.so
- libpolfiles.so

Additional information:

- Only patch CSCOp015 is required in order for you to install this software patch.



**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOGs010 is superseded by the fixes provided in patch CSCOGs011. Uninstall patch CSCOGs010 before installing patch CSCOGs011. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- The BTNUP 3.1 KHz Custom Configuration feature (CSCdx05822) extends the function of the existing defaultBC property to include BTNUP-based trunk groups. The property can be set to SPEECH or 3\_1\_KHZ. The default setting is SPEECH.

If the property is set to 3\_1\_KHZ, PGW converts the outgoing ISDN 3.1KHz (CAT3) call over the BTNUP TrunkGroup to ISDN speech (CAT2) call. This property has no impact on outgoing ISDN data (CAT1) and speech (CAT2) calls over the BTNUP TrunkGroup.

## CSCOGs010

Patch CSCOGs010 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdx04436	2	provision	Dial plan corrupted after adding a new route.
CSCdw71658	2	ioccxgcp	Sust: After deleting MGX-iplnk and sw-over standby MGX-iplnk goes OOS.
CSCdw70732	2	engine	After fail-over, G_Held CICs on terminating end; ok on originating end.
CSCdw79041	2	iocm	Set ISDN destination to OOS and IS, ISDN destination cannot come up as IS.
CSCdw92044	2	toolkit	Toolkit: LogView queries debug message only in current platform.log.
CSCdw54404	3	toolkit	Toolkit: LogView: SHOW_DEBUG_MESSAGE not working properly.
CSCdw58521	3	mmlhelp	MML help needs to be corrected.
CSCdw78918	3	provision	The number term table is updated after each MML command.
CSCdw86625	3	mmlhelp	MML online help documentation for prov-add:files is incorrect.
CSCdw86759	3	mmlhelp	MML online help need to remove CUSTGRPTBL for EISUPPATH.

Identifier	Severity	Component	Description
CSCdw87809	3	measm	Call counter bucket for 24-hour measurement fluctuates radically.
CSCdw90852	3	provision	Need restart warning message for prov-add property MML commands.
CSCdw16792	3	toolkit	Translation verification tool.

The following components were updated:

- measMgr
- ca
- sim
- callver
- simWriter
- pom
- sagt
- MGCP
- mml
- ioChanMgr
- engine
- libpom.so
- libda.so
- libpolbase.so
- libpolcomp.so
- libpolnuman.so
- libpolroute.so
- libpolfiles.so
- lib\_cmg.so
- lib\_cxn.so
- lib\_eng.so
- lib\_rmg.so
- toolkit
- mml help

Additional information:

- Only patch CSCOp015 is required in order for you to install this software patch.



**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs009 is superseded by the fixes provided in patch CSCOs010. Uninstall patch CSCOs009 before installing patch CSCOs010. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOs009

Patch CSCOs009 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCdw54277	2	ioccc7	SS7 IOCC warmstart may fail on patch downgrade through patch 61.
CSCdw58564	2	provision	Deletion of A- and B-lists choke if parameter length is not checked.
CSCdw58567		ioccxgcp	Dynamically changed MGCP STBY link PeerAddr; links went to INB.
CSCdw52132	3	provision	MML committed the invalid TYPE for rtrnkgrp.
CSCdw56923	2	provision	Dynamic provisioning drops some newly added components.
CSCdw70243	3	iocm	Mismatch DCHAN state between .sigChanDSS.dat and rtrv-dchan:all.l
CSCdw67664	3	engine	set-admin-state:mgc-01:lock/unlock,confirm behaviour inconsistent.
CSCdw04016	3	provision	Unable to add multiple instances of same trunkgroup in a route.
CSCdw22618	3	other	Backup/Restore Featurette: No hostname info on menu screen.
CSCdw26275	3	sim	get_trc.sh core dumps when analyzing euro lnp trace.
CSCdw44027	3	toolkit	Toolkit:LogView: No messages displayed up to [CURRENT-TIME-AS-STOP-TIME].
CSCdw52966	3	toolkit	Toolkit: Execute button does not work. Hangs CDR, Alarm and Measurement Viewer.
CSCdw53417	3	mmlhelp	CCR Message not repeated (ITU-T Q.784, 1.4.4).
CSCdw53072	3	mdl	Variants do not appear in variant.dat.
CSCdw54404	3	toolkit	TOOLKIT:LogView:SHOW_DEBUG_MESSAGE not working properly.
CSCdw54471	3	toolkit	Toolkit: LogViewer: Text-string query displays non-text-string messages.
CSCdw57165	3	toolkit	Toolkit: AlarmView: Truncated filename after query of platform logs.
CSCdw60585	3	toolkit	Toolkit: AlarmView: Platform query via AlarmView takes long time.
CSCdw60605	3	mml	Sust: Mistral: MML cores if you try to provision with no open session.

Identifier	Severity	Component	Description
CSCdw64735	3	toolkit	Toolkit: MeasurementViewer: Query continues despite STOP-search.
CSCdw66395	3	ioccsip	SIP requires fully qualified domain name.
CSCdw79614	3	mml	MML Reference Guide for set-iplnk input description is incorrect.
CSCdw62783	4	mmlhelp	MML: Help does not have LINH state for HELP:RTRV-C7LNK.

The following components were updated:

- sagt
- ca
- sim
- SS7
- MGCP
- SIP
- ioChanMgr
- engine
- mml
- libpolcomp.so
- libpolnuman.so
- libpolroute.so
- lib\_cmg.so
- lib\_cxn.so
- lib\_eng.so
- lib\_rmg.so
- toolkit

Additional information:

- Only patch CSCOp014 is required in order for you to install this software patch.



**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs008 is superseded by the fixes provided in patch CSCOs009. Uninstall patch CSCOs008 before installing patch CSCOs009. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- This patch introduces a new MML parameter for RTRNKGRP. This parameter enables you to implement weighted trunk group based routing by allowing the same trunk group to be used multiple times in the same route when the random distribution algorithm is enabled. This requires an extra parameter to be added at the rtrnk level to specify if weighted trunk group base routing is enabled.

To support the new parameter, `weightedtg`, a new column with the heading `weightedtg` has been added to the `$routeName` table in the `routeAnalysis.dat` file. This table is currently used by the AMS code to find the route name that has been provisioned. The table also has a new column that indicates if weighted trunk group based routing is enabled or disabled. A value of 0 indicates that the `weightedtg` parameter is set to off; a value of 1 indicates if the `weightedtg` parameter is set to a percentage.

The following rules must be maintained if weighted trunk group based routing is enabled or disabled at the `rttrnk` level:

- If weighted trunk group based routing is enabled at the `rttrnk`, any `rtlist` that it is connected to must have its distribution parameter set to on to ensure that the random algorithm is
- If at the `rttrnk` then the same weighted trunk group based routing is enabled `rttrnkgrp` can be added to the `rttrnk` multiple times.
- If weighted trunk group based routing is disabled at the `rttrnk` then the same `rttrnkgrp` cannot be added to the `rttrnk` multiple times.
- If the `rttrnk` has the same `rttrnkgrp` connected to it more than once the weighted trunk group based routing cannot be changed to disabled.
- If the `rtlist` is connected to a `rttrnk` that has weighted trunk group based routing enabled the parameter `distrib` on the `rtlist` cannot be changed from on to off.
- If the `rttrnk` has weighted trunk group based routing as enabled then the `nexttrkgrp` parameter is not supported.
- When the user deletes the `rttrnkgrp` from an `rttrnk` that has multiple `rttrnkgrp` of the same value it will delete the first one in the list only. We could put back to the user a success for action and a warning that there is still x instances of the `rttrnkgrp` are still configured in the `rttrnk`.
- Limit the number of `rttrnkgrp` in the `rttrnk` to 100 if the weighted trunk group based routing is enabled.

Functionality is maintained for existing customers with no change to their MML input files. The default is to have the weighted trunk group based routing disabled. VSPT will not be broken by the implementation of this bug fix. Any migration to implement this feature automatically happens the first time the file is read by the provisioning system.

## CSCOs008

Patch CSCOs008 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw72273	1	snmp	SNMP mishandles exceptional elements.

Additional information:

- Only patch CSCOp012 is required in order for you to install this software patch.



**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs007 is superseded by the fixes provided in patch CSCOs008. Uninstall patch CSCOs007 before installing patch CSCOs008. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSC0gs007

Patch CSC0gs007 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw46859	2	engine	Checkpointing is not done after switchover.
CSCdw44203	2	engine	CIC in GW_HELD after call on REMMAN CIC followed by failover.
CSCdw53089	2	configlib	Config-lib tool cannot delete old config file if MGC software is running.
CSCdw54686	2	other	MML logging is not functional.
CSCdw56923	2	provision	Dynamic provisioning drops some newly added components.
CSCdv17799	3	provision	No buffer space available for RUDP on startup.
CSCdw53080	3	toolkit	MGC Toolbar: No hostname information.
CSCdw53082	3	snmp	Missing return statement could cause SNMP problems.
CSCdw56046	3	other	Replication setup failed without giving message to indicate failure.
CSCdw57226	3	pkg	SC2200 does not gracefully shutdown upon reboot.
CSCdw58132	3	provision	SC2200 sends incorrect SLTM messages after SS7 configuration changes.

This patch provides updates to the following:

- mml
- measMgr
- pom
- mmSAgt
- engine.no\_smartalloc
- ISDNIP
- SIP
- libxe.so
- libpolcomp.so
- librudp.so
- lib\_cmg.so
- lib\_cxn.so
- lib\_eng.so
- lib\_rmg.so
- toolkit

Additional information:

- Only patch CSC0gp010 is required in order for you to install this software patch.

**Note**

It does not matter whether you install protocol or nonprotocol patches first.

- Patch CSCOs006 is superseded by the fixes provided in patch CSCOs007. Uninstall patch CSCOs006 before installing patch CSCOs007. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOs006

Patch CSCOp006 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw45109	1	iocm	ioChanMgr crash on IP routing error.
CSCdw44398	2	toolkit	Toolkit: Measurement: Unable to display previous 5 hour totals.
CSCdw47037	2	iocceisup	If EISUP links to the active MGC fails and the remote MGC switches over, the EISUP destination goes OOS.
CSCdw49562	2	ioccc7	RUDP client does not check ack seq number of incoming SYN+ACK packet.
CSCdw47302	2	iocm	Setting a EISUP link IS that was set OOS on other MGC fails.
CSCdw24251	3	provision	Empty values allowed on properties.
CSCdw11402	3	mmdb	prov-add: files need provisioning session for screening db.
CSCdw18720	3	mml	STP-SOFTW:all:kill, confirm command shows the SC2200 to be in standby state instead of OOS.
CSCdw18897	3	other	Backup/restore featurette: back file created for failed backup process.
CSCdw22812	3	provision	DA library routines do not return a value.
CSCdw23735	3	other	TimesTen replicator script error ODBC Error=IM002.
CSCdw25260	3	toolkit	Toolkit: LogView: Default time at initialization is 5 hours behind.
CSCdw43407	3	mml	SC2200 commands set-admin-state, stp-call not accepting rng parameter.
CSCdw44404	3	dumper	CDR file name still uses GMT.
CSCdw45796	3	mmdb	TimesTen checkpoints cause MML and engine to core.
CSCdw46445	3	mml	TV13: set-admin-state: <NASPATH>: reset does not work.
CSCdw47311	3	provision	prov-dply takes a long time to timeout when peer VSC is OOS.
CSCdw45691	4	toolkit	Toolkit: AlarmView: Log name truncated in alarm search window.

Identifier	Severity	Component	Description
CSCdw54814	2	flowr	New standby takes over active after disconnect and reconnect Ethernet.
CSCdv87645	3	flowr	Standby stays OOS after local isolation/reconnect.

This patch provides updates to:

- ttreplic
- config.tbc
- floverd

Additional information:

- Only patch CSCOgp010 is required in order for you to install this software patch.
- Patch CSCOgs005 is superseded by the fixes provided in patch CSCOgs006. Uninstall patch CSCOgs005 before installing patch CSCOgs006. If this is a fresh installation, install the patches listed in the preceding bullet before installing this patch.

## CSCOgs005

Patch CSCOgs005 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdw27058	2	ioccxgcp	Unexpected jump in virtual memory causes VM overload.
CSCdw32602	2	ioccc7	SS7 IOCC chkpt interfaces sometimes fail to connect.
CSCdw04020	2	provision	Result type A_NUM_DP_TABLE is not open to Btree analysis.
CSCdw27621	3	ioccc7	Optimize memory allocation in the fix for CSCdu43181.
CSCdv86009	3	pkg	TimesTen stoped for unknown reason.
CSCdw33026	3	ioccc7	Release 7.4(12): Delete Inkset1; DPC2 that is associated with Inkset2 goes OOS.

This patch provides updates to the following:

- SS7
- MGCP
- libpolnuman.so

Additional information:

- Only patch gp008 is required in order for you to install this software patch.
- The fix for CSCdw04020 requires that both CSCOgp008 and CSCOgs005 be installed.
- Patch gs004 is superseded by the fixes provided in patch gs005. Uninstall patch gs004 before installing patch gs005. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.

## CSCOs004

Patch CSCOs004 resolves the following DDTs tickets:

Identifier	Severity	Component	Description
CSCuk28247	1	procm	RUDP errors noted during Goldwing failover.
CSCdw17784	2	alrmm	After provisioning from new and failing over, almM fails to start.
CSCdw17254	2	ioccc7	High number of [MSO refused, Warm start-up Failed] errors.
CSCdv87667	2	ioccc7	C7iplnks OOS, CONF when provisioning from new.
CSCdv88078	2	replicator	Standby box does not recover following Ethernet removal.
CSCdv87664	2	ioccc7	Unable to switch back after dynamically deleting SS7 links.
CSCdv83374	3	provision	POM is not flushing pom.dat immediately to disk.
CSCdv83385	3	provision	BD: prov-rtrv-session does not pick up prov-sync.
CSCdv86785	3	iocm	prov-dply does not work when route is deleted from IOCM.
CSCdv70304	6	other	Automated MGC Backup/Restore Utilities
CSCdv11222	3	userdoc	Default TZ in logs etc. is GMT, need to be local time or configurable.
CSCdv11532	3	userdoc	ASCII CDR converter does not work.
CSCdw08523	3	toolkit	CDR viewer contains tags 4064 and 4065 and misses tags 2017 and 3017.

This patch provides updates to the following:

- foverd
- cdrDmpr
- ISDNPRI
- DPNSS
- ISDNIP
- ioChanMgr
- pom
- mml
- LogServerd
- almM
- amDmpr
- SS7
- libpxelog.so
- libxe.so

- libpom.so

Additional information:

- Only patch gp005 is required in order for you to install this software patch.
- Patch gs003 is superseded by the fixes provided in patch gs004. Uninstall patch gs003 before installing patch gs004. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- CSCdv70304—Automated MGC Backup/Restore— This backup method uses a script to backup the configuration data for the Cisco MGC software, select UNIX administrative files, and the Main Memory Database (MMDB). This script only performs full backups. It enables you to perform manual backups, schedule and administer automatic backups, and view a history of the last 30 backup operations performed.

The running of the restoration script must be done in a particular order, based on your network environment and the number of failed Cisco MGCs.

The following items should be noted:

- If your Cisco MGC is a continuous service system, ensure that you perform backup procedures on both Cisco MGC hosts.
- We recommend that you back up your system software during periods of low call volume to minimize the effect of the backup on your call processing.
- Because of a limitation in the Sun Solaris version 2.6, the maximum file size that can be saved on a disk drive is 2 gigabytes. If you save your backup files to a remote server, be aware that the file can be no larger than 2 gigabytes. Backup files saved to your local tape drive are only restricted by the amount of space available on the tape itself.

After completing your backup, you must synchronize the databases on the active and standby Cisco MGCs. Contact TAC for assistance in synchronizing the databases.



**Note**

The backup script is designed to have minimal impact on the CPU. However, we recommend that the script be run at off-peak hours.

For more information on this feature, refer to the Cisco MGC Software Release 7 Operations, Maintenance, and Troubleshooting Guide at the following url:

<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/omts/index.htm>

- CSCdv11222—the time zone displayed by the system will be the same as the time zone configured in the operating system. So, if you configure your operating system time zone for GMT, the time zone used by the system will be GMT.

For more information, refer to the Cisco MGC Software Release 7 Operations, Maintenance, and Troubleshooting Guide at the following url:

<http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/omts/index.htm>

## CSCOs003

Patch CSCOs003 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdv81770	1	provision	Validation errors are given when dynamically updating sessionsets.
CSCuk28247	1	procm	RUDP errors noted during Goldwing failover.
CSCdu67206	2	mml	MML core dumps retrieving misconfigured charge table.
CSCuk26200	2	provision	Provisioning fails with unknown component ID because the sessionset empty.
CSCuk28322	2	ioccc7	Q.784-1 6.5.2 fails—IAM not passed through VSC.
CSCdu61068	3	provision	Misleading error message while editing Charge table.
CSCdv11488	3	toolkit	Current CDRs are not viewable in the toolkit.
CSCdv17657	3	procm	Service not found in Table Services <error>.
CSCdv43034	3	provision	AOC holiday should accept 4-digit years.
CSCdv44322	3	provision	Tariff command should not require all fields for edits/deletes.
CSCdv50410	3	toolkit	Current alarm and measurement data are not viewable in the toolkit.
CSCdv71187	3	mml	dw1 (resultset) modification after route list deleted.
CSCdv77574	3	provision	Database migration from 7.4(11) to 9.1(5) fails.
CSCdv81522	3	engine	CIC stuck in BLK=GW after trunk flaps and SS7 message lost.
CSCuk26359	3	engine	Audit gateway overloads the VSC at 40 cps.
CSCuk28381	3	mdl-runtime	MDL simulator test causes core dump.
CSCdu00754	4	provision	Error generated after prov-sync.
CSCdv85720	3	mmdb	Missing commands for TimesTen database status.
CSCdv85869	2	iocm-sj	MGCP links went to OOS STBY after failover.
CSCdv87653	2	mdl-ansi-ss7	TV13: Stuck CIC problem; call-IN; SC does not respond to RSC.
CSCuk28902	2	provision	ST: VSC does not understand 5350 as external node type.
CSCdv87633	3	provision	AMS should not allow delete of last SS7 link until SS7 route delete.
CSCdv87641	2	iocm	Prov-sync or prov-dply followed by switchover, corrupts .sigChanDSS.dat file.
CSCuk29220	1	iocm	UDP hop count for SLT limited to 10, should be 25.
CSCdw05178	2	engine	Core-engine.no_smart experienced with 7.4(11)P64.

This patch provides updates to the following:

- Ca

- sim
- cfgM
- almM
- procM
- mmdbd
- measMgr
- cdrDmpr
- amDmpr
- pom
- cms
- replicator
- sagt
- mmSAgt
- ISDNPRI
- DPNSS
- ASP
- ISDNIP
- SS7
- MGCP
- SIP
- EISUP
- ISDNL3
- TALI
- ioChanMgr
- TCAP
- engine
- mml
- libx.so
- librudp.so
- libmmdb.so
- libsa.so
- libconvutil.so
- libda.so
- libpolbase.so
- libpolcomp.so
- libpolnuman.so
- libpolroute.so
- libpolfiles.so

- lib\_cmg.so
- lib\_cxn.so
- lib\_eng.so
- lib\_rmg.so
- propSet.dat
- properties.datdmprSink.dat
- procGroups.dat
- dependencies.dat
- processes.dat
- components.dat
- variant.dat
- extNodeTypes.dat
- AM.tbc
- AlarmView.tbc
- AlarmLogView.tbc
- MeasView.tbc
- am.tbc
- query.tbc
- readme
- search.tbc
- TLVParser.tbc
- MGC\_Toolkit

Additional information:

- Only patch gp004 is required in order for you to install this software patch.
- Patch gs002 is superseded by the fixes provided in patch gs003. Uninstall patch gs002 before installing patch gs003. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.
- CSCdv87641 fixes the problem that causes corruption of the .sigChanDSS.dat file. Corruption can occur on the active, inactive, or both systems.



**Note**

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The fix provided in CSCdv87641 cannot correct the .sigChanDSS.dat file if it is already corrupted.

---

- CSCdu58978, carried forward from Release 7, validates that a c7iplnk cannot be committed to a configuration unless it is referenced by an ss7route.

## CSCOgs002

Patch CSCOgs002 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdv56763	2	other	Graceful shut down not working/inactive host will not go standby
CSCdv43925	3	ioccxgcp	MGCP message from Tremolo image too big for VSC

This patch provides updates to the following:

- MGCP
- LogServerd
- components.dat
- procGroups.dat
- processes.dat
- dependencies.dat
- CiscoMGC
- startLogserver
- critagt.cnf

Additional information:

- Only patch gp003 is required in order for you to install this software patch.
- Patch gs001 is superseded by the fixes provided in patch gs002. Uninstall patch gs001 before installing patch gs002. If this is a fresh installation, install the patch listed in the preceding bullet before installing this patch.



**Note**

The fix supplied for CSCdv56763 requires that both patches CSCOgp003 and CSCOgs002 be installed. This fix includes internal configuration information file changes.

- The fix supplied for CSCdv56763 requires that you create a good batch file for provisioning before installing the patch. After installing the patch you must run the batch file to configure from the CONFIG\_LIB/new directory.
- The fix provided for CSCdv28020 (EISUP links quickly bouncing causes EISUP destination to go OOS) was propagated from the Release 7 baseline and incorporated into this patch.

## CSCOgs001

Patch CSCOgs001 resolves the following DDTS tickets:

Identifier	Severity	Component	Description
CSCdv13193	2	engine	Incorrect number of Version Cntrl bits read by eng into Call Context
CSCdv15102	2	iocm	If EISUP dest is put commanded OOS on failover it comes IS
CSCdt12266	3	pxelgger	POM err: Logger requested to reread component.dat
CSCdv17657	3	procmm	Service not found in Table Services <Error>

Identifier	Severity	Component	Description
CSCdv17697	3	ioccpriip	bsm_write_session failed <Errors> on startup
CSCdv17707	3	engine	MCL <Errors> logged on startup
CSCdv17744	3	mml	MML memory leaks
CSCCuk26974	3	ioccxgcp	GW IPLNK will not come IS. Log states message is on the wrong link.
CSCCuk27163	3	ioccxgcp	Some MGCP links go OOS CONF after restarting the VSC
CSCCuk27371	3	ioccxgcp	MGCP links not OOS when gateway fails to reply to AUEPs
CSCdv39488	3	alrmm	MML retrieval of alarms gives wrong timestamps on alarms

This patch provides updates to the following:

- MGCP
- ISDNL3
- EISUP
- engine
- libda.so
- lib\_eng.so
- libxelog.so
- mml
- ioChanMgr
- almM

Additional information:

- Patch CSCOgs001 contains all of the 9.1(4)T fixes up to and including patch CSCOgs004.

## New Features in This Release

### Seamless Upgrade

This featurette (CSCdy19491) provides the following:

- A mechanism for upgrade and downgrade across major releases.
- Preservation of all active calls during both the upgrade and downgrade across major releases.
- Limited provisioning capability during upgrade and downgrade.
- Screening configuration during upgrade/downgrade period when upgrading from 9.1, 9.2, and 9.3(1) to 9.3(2).
- No provisioning is allowed while upgrading from release 7.4(x) to 9.3(2).
- Calls in connected state are check-pointed to standby systems.

- Check point will work in upgrade or downgrade scenario.

The Seamless Upgrade feature has been incorporated in release 9.3(2). To support seamless upgrade from earlier releases to 9.3(2), software changes have been installed using patches. For release 9.1(5), you must have a patch level greater than or equal to CSCOGs015.

**Caution**

When upgrading the PGW 2200 platform from a patch level which does not support Seamless Upgrade to a patch level which does support seamless upgrade, the pom.dataSync parameter (located in XECfgParm.dat) must be set to false. If this parameter is not set to false, the standby system will not transition to the standby state; instead it will remain OOS.

**Note**

Provisioning is not supported when the system is run on mismatched patches (one PGW node has a pre-Seamless Upgrade patch level and its peer has a Seamless Upgrade supported patch).

**Note**

When both PGW 2200 nodes have been upgraded to a Seamless Upgrade supported patch level, normal provisioning can be done.

The following mml commands should not be used if one PGW 2200 node has a pre-Seamless Upgrade patch level and its peer has a Seamless Upgrade supported patch:

- prov-sta
- prov-cpy
- prov-dply
- prov-sync

**Note**

The latest version of a patch is always required. Refer to CCO to determine the latest patch version available.

## 36 GB Disk Drive Upgrade

This featurette enables you to upgrade your system from a 18 GB to a 36 GB disk drive. This patch should only be installed if you want to use a 36 GB disk drive.

This featurette provides changes to the following packages:

- Log and Spool Package (CSCO0h005) — This package is used to partition the second disk and mount it on the file system at /opt/CiscoMGC/var/log and /opt/CiscoMGC/var/spool. The following modifications were made to package CSCO0h005:
  - CSCO0h005 has been modified to work with arbitrary disk sizes.
  - A check has been added to ensure that DiskSuite is not using a second disk. If a second disk is used, the installation aborts and you are prompted to disable DiskSuite's use of the second disk. This allows you (if using a Cisco configured system) to use the Log and Spool Package to increase the usable disk space.

- User prompts have been added for the mount points of the two partitions being created. This allows you to use the second disk when the base directory of the MGC software is changed. The default is the current hard coded values `/opt/CiscoMGC/var/log` and `/opt/CiscoMGC/var/spool`. This also allows you to change the default base directory during the MGC application installation.
- The ration this package uses to divide up the second disk between the log and spool directories has been changed. Currently each directory gets 50%. This has been changed to use 40% of the disk for the log directory and 60% for the spool directory. This provides more room for CDRs.
- CSCOh006—Veritas Volume Manager 2.6 Package— This package installs version 2.6 of the Veritas Volume Manager software on Solaris 2.6 based MGCs. It does not contain disk size dependencies.
- CSCOh000—Veritas Volume Manager 3.1 Package— This package installs version 3.1 of the Veritas Volume Manager software on Solaris 2.6 based MGCs. It does not contain disk size dependencies.
- Solaris 2.6 Operating System Installation change (ENG-54205)
  - Added partition table for 36G disk drive for MGC Host platform
  - Added upgrade procedure for replacing hard drives without upgrading OS and MG application.

The following configurations are not supported:

- More than two disks in a Netra t 1400/1405
- Mixed disk sizes in the same chassis
- External disks other than the st A1000 disk array with eight 36G drives for the BAMS product only

## BTNUP 3.1 KHz Custom Configuration

This featurette (CSCdx05822) extends the function of the existing `defaultBC` property to include BTNUP-based trunk groups. The property can be set to `SPEECH` or `3_1_KHZ`. The default setting is `SPEECH`.

If the property is set to `3_1_KHZ`, PGW converts the outgoing ISDN 3.1KHz (CAT3) call over the BTNUP TrunkGroup to ISDN speech (CAT2) call. This property has no impact on outgoing ISDN data (CAT1) and speech (CAT2) calls over the BTNUP TrunkGroup.

## New Version of Times Ten Database Software



### Note

If you are migrating from MGC software Release 9.1(4)T, the requirement to migrate the Times Ten Database information was fulfilled during the 9.1(4)T installation and no longer applies when you are installing this release.

Prior to uninstalling the previous release of the MGC software, you must run the following command:

```
/opt/TimesTen32/32/bin/ttMigrate -c DSN=howdydb /opt/CiscoMGC/etc/migrate.ttdb
```

If you do not run the **migrate** command before uninstalling the previous release, the following message displays when you install the new release:

```
A backup file was found for the database, but no migration file.
```

A migration file is required before you can upgrade to the latest release of Times Ten. If the previous message displays, complete one of the following procedures.

## Option 1

**Step 1** Reinstall the previous release of the MGC and run the following command:

```
/opt/TimesTen32/32/bin/ttMigrate -c DSN=howdydb /opt/CiscoMGC/etc/migrate.ttdb
```

**Step 2** Uninstall the previous release.

**Step 3** Reinstall the software.

## Option 2

**Step 1** If you do not want to save the data from the previous release, remove the file:

```
/opt/CiscoMGC/etc/export.ttdb
```

**Step 2** Reinstall the software.



**Note**

After upgrading the software on both machines, run the `setup_replication.sh` script on the standby MGC.

## Adding Multiple Instances of Same Trunk Group in a Route

Patch CSCOs009 (CSCdw04016) introduces a new MML parameter for `RTTRNKGRP`. This parameter enables you to implement weighted trunk group based routing by allowing the same trunk group to be used multiple times in the same route when the random distribution algorithm is enabled. This requires an extra parameter to be added at the `rtrnk` level to specify if weighted trunk group based routing is enabled.

To support the new parameter, `weightedtg`, a new column with the heading `weightedtg` has been added to the `$routeName` table in the `routeAnalysis.dat` file. This table is currently used by the AMS code to find the route name that has been provisioned. The table also has a new column that indicates if weighted trunk group based routing is enabled or disabled. A value of 0 indicates that the `weightedtg` parameter is set to off; a value of 1 indicates if the `weightedtg` parameter is set to a percentage.

The following rules must be maintained if weighted trunk group based routing is enabled or disabled at the `rtrnk` level:

- If weighted trunk group based routing is enabled at the `rtrnk`, any `rtlist` that it is connected to must have its distribution parameter set to on to ensure that the random algorithm is
- If at the `rtrnk` then the same weighted trunk group based routing is enabled `rtrnkgrp` can be added to the `rtrnk` multiple times.

- If weighted trunk group based routing is disabled at the rtrnk then the same rtrnkgrp cannot be added to the rtrnk multiple times.
- If the rtrnk has the same rtrnkgrp connected to it more than once the weighted trunk group based routing cannot be changed to disabled.
- If the rtrlist is connected to a rtrnk that has weighted trunk group based routing enabled the parameter distrib on the rtrlist cannot be changed from on to off.
- If the rtrnk has weighted trunk group based routing as enabled then the nexttrkgrp parameter is not supported.
- When the user deletes the rtrnkgrp from an rtrnk that has multiple rtrnkgrp of the same value it will delete the first one in the list only. We could put back to the user a success for action and a warning that there is still x instances of the rtrnkgrp are still configured in the rtrnk.
- Limit the number of rtrnkgrp in the rtrnk to 100 if the weighted trunk group based routing is enabled.

Functionality is maintained for existing customers with no change to their MML input files. The default is to have the weighted trunk group based routing disabled. VSPT will not be broken by the implementation of this bug fix. Any migration to implement this feature automatically happens the first time the file is read by the provisioning system.

## MML Numan Enhancements (CR308)—Adding and Removing a Number Without Opening a Provisioning Session



### Note

The call screening database must be started before using this feature. For information on starting the call screening database, refer to the Software Installation and Configuration Guide:  
[http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/swinst/2ins\\_74.htm#xtocid1401440](http://www.cisco.com/univercd/cc/td/doc/product/access/sc/rel7/swinst/2ins_74.htm#xtocid1401440)

The MML Numan Enhancements allow systems to automatically add and remove entries in the screening database without opening a provisioning session. The screening database is updated regularly as customers are added and removed from service. This is typically automated by a customer service system writing MML commands to a node.

Previously, users were required to open a provisioning session to add and remove entries in the screening database. Because only one provisioning session is allowed at a time, access to the screening database was limited to only one user at a time. This feature allows access to the screening database without opening a provisioning session. As a result, more than one user can access the screening database.



### Note

There are two methods that can be used to add screening data. One method uses individual mml commands and the other method uses the **prov-add: files** command to import a file.

Implementation of this feature does not require opening a provisioning session for individual mml commands. However, a provisioning session is required when using the **prov-add: file** command and for CMM.

## Featurette D333: Ethernet Redundancy

This featurette allows you to configure and support multiple routes using multiple local Ethernet interfaces to the same destination IP address on a VISM Media Gateway.

## Featurette CSCdu31140: INAP Number Portability in Norway

This featurette provides a subset of the International Telecommunications Union (ITU) Capability Set 1 (CS-1) Intelligent Networks Application Part (INAP) based Local Number Portability (LNP) for Norwegian interconnect.

## Featurette CSCdu31222: Modification of Number Formats on Outgoing Calls

Some markets require that the Outgoing Number (the Called Party Number CdPN) be prefixed depending on the outgoing trunk group or signaling path. Two properties existed (on a signaling path only basis) to implement this: NationalPrefix and InternationalPrefix. This featurette implements the intent of those properties and expands them to be valid on both a trunk group and signaling path basis, as well as separate A- and B-number values.

## Change to Install Script

A new performance profile script has been added to this release. This script is automatically invoked during installation. You must select one of the following performance profiles:

- Standard Performance Profile—Configures the system to optimize both the number of calls per second and the number of simultaneous calls. This profile is recommended in applications that have a mixture of short and longer duration call hold times.
- Maximum Sustained Calls—Configures the system to maximize the number of simultaneous calls that can be accommodated at the expense of calls per second (reduces the calls per second). This profile is recommended in applications that require long call hold times.
- Maximum Call Throughput—Configures the system to maximize the number of calls per second processed at the expense of sustained calls (reduces the number of sustained calls). This profile is recommended in applications that require short call hold times.

After you select a performance profile, the script sets the parameters in XECfgParm.dat to reflect the settings that are appropriate for your selected profile. Selected performance profiles take effect when the MGC is restarted.



### Note

The performance profile can be selected only at installation time. To change a selection, you must remove and reinstall the system.

## Additional Protocol Variants

The following protocol variants have been added:

- ISUPV2\_Norwegian
- ISUPV3\_French

- ISUPV2\_Austrian

## Known Issues and Operational Recommendations

This section contains information about known issues and the corresponding workarounds in the Cisco MGC software Release 9.1(5).

### 2651 Approved for Use In the SC2200

For releases 7.4(12) and going forward, the 2651 has been approved for use in the SC2200. The 2651, used as an SLT, is ordered and shipped as a standard 2651. It ships with a non-SLT image. You must reload it with an SLT image prior to operating the device as an SLT.

### TCSLT 2611s

Current images might need to be downloaded on TCSLT 2611s prior to starting live service.

### Prov-sync Should Not Be Used Between Different Software Version Levels

Because of differences in the software file formats, you should not use the **PROV-SYNC** command between MGC platforms that have different software version levels.

### Do Not Use the ifconfig UNIX Commands to Shut Down Ethernet Interfaces

During a failover on the master SC where both ethernet connections are lost, the failover correctly switches to the slave SC. However, after the ethernet connections are restored on the master, the slave SC does not return to standby mode.

Workaround:

- 
- Step 1** With the slave in Active mode, execute (as root) on the the Master:
- ```
/etc/init.d/CiscoMGC stop
```
- Step 2** After the SC software has stopped, restart it using the following command:
- ```
/etc/init.d/CiscoMGC start
```
- Step 3** To verify that the SC has entered the Standby state, return to MML and execute the following command:
- ```
rtrv-ne
```



**Note**

The ifconfig UNIX commands should not be used to administratively down the ethernet interfaces while the MGC software is running.

---

### A\_NUM\_DP\_TABLE Can Be Added to a B-Digit Tree

A\_NUM\_DP\_TABLE can be added to a B-Digit tree as detailed in the original design specification.

## Upgrading from Release 7.x to Release 9.1(5)

When upgrading from Release 7.x to Release 9.1(5), you must edit the following properties (located in properties.dat):

- The value of \*.VSCSipVersion must be SIP/2.0 (not SIP2.0)
- The property \*.redirectingnumbermapping must be \*.RedirectingNbrMap



**Note**

---

These changes must be made in the etc and the active\_link directories.

---

## 9.1(5) Migration Changed PTCODE for the Destination in Release 7 to OPC

During the migration from Release 7 to 9, the PTCODE TID is converted to an OPC or DPC. If there is no SS7ROUTE associated with the PTCODE, it is converted to an OPC by default.

The OPC must be removed then added as a DPC with a SS7ROUTE. If no SS7ROUTE is added it cannot be used as a DPC.

## \*.runAsDaemon Parameter

The \*.runAsDaemon parameter enables processes to run in the background.

Default:

logger.runAsDaemon = true

procM.runAsDaemon = true (runs in the background)

MML.runAsDaemon = false



**Note**

---

Do not change the default values for these settings or the system might not operate correctly.

---

The following default values apply to logger.runAsDaemon:

- Release 9.1.5—true
- Release 7.4(7) through 9.1.4—false
- Release 7.4(6)—true

## VSC Does Not Release the Second Leg of PRI Call

The VSC does not release the second leg of a PRI call on the 8260 multichassis on an Ethernet failure to a master SCC card. To clear this situation, reduce the duration of the T309 timer in the PropSet and Properties.dat files to be less than the failover period specified for the 8260 SCC (for example, 40 seconds). This ensures that the VSC clears the call before the link comes up. For more information, refer to CSCdv23899.

## CUSTGRPTBL Parameter

The CUSTGRPTBL parameter is no longer supported. It must be removed from your provisioning files.

## Completing Calls From Release 9.x to Release 7.x

Customers upgrading from Release 7.x to Release 9.x must disable ISUP transparency until all VSCs have been upgraded. After all VSCs are upgraded, ISUP transparency can be reenabled.

To modify the ISUP transparency property, enter the following command:

```
prov-ed:trnkgrpprop:name="YOUR NAME", IsupTransparencyDisabled="1"
prov-cpy
```

Valid values for the ISUP transparency property are 0 and 1 (1 = disabled; 0 = enabled). The ISUP transparency property must be provisioned to a value of 0 for it to be reenabled.

## MML Command prt-call Might Cause Overload Conditions

The **prt-call** MML command might cause an overload condition on the VSC. Refer to software problem report (SPR) CSCdu68160. Do not use **prt-call** until a patch with a fix for this SPR has been released and installed.

## Multiple Executions of MML Command kill-call Might Cause Engine to Restart

Multiple executions of the MML command **kill-call** might cause the engine to restart at some traffic levels (refer to SPR CSCdu49050). Do not use **kill-call** until a patch with a fix for this SPR has been released and installed.

## No Route to Host When You Try to Run Toolbar From Remote Station

It is not possible to use the toolbar on the VSC unless you are connected directly on the private Ethernet network. In deployment, if the toolbar must be used from a remote management station, such as an xterm connecting to the CNMN server, the VSC requires a third Ethernet card for a connection to an external routed network.

Possible solutions:

- Install additional Ethernet cards for the two VSC netras and connect them to the corporate LAN.
- Add a router to the solution to carry traffic between the private network and the corporate LAN.
- Enable routing on the CNMN box to carry traffic between the private network and the corporate LAN.

## Call Detail Record Files

The format of call detail record (CDR) files has changed in Release 9. CDR files are now generated in a binary format and consist of call detail blocks (CDBs). CDBs contain statistics taken at various points in a call. CDR files are generated at regular intervals based on file size, call records, or a specified number of minutes.



### Note

You can no longer configure the Cisco MGC software to generate CDRs in an ASCII format. Generation of ASCII format CDRs requires the Billing and Measurements Server (BAMS) adjunct.

It is possible to change the following settings:

- *Number of records.* This setting indicates that the CDR file is generated when a specified number of call records is reached. The default is 1000.
- *File size.* This setting indicates that a CDR file is generated when a certain file size is reached. The default is 0, which indicates no limit.
- *Minutes.* This setting indicates the time interval at which a CDR file is generated. The default is 15.

For information about CDBs and the fields in CDR files, see the *Cisco Media Gateway Controller Software Release 9 Messages Reference Guide* and the *Cisco Media Gateway Controller Software Release 9 Operations, Maintenance, and Troubleshooting Guide*.

## Camp-On When Circuit Is Blocked

If you set the administrative state of a circuit or block a circuit while it is in use, the circuit remains in the camped-on state until the call is dropped.

## Changing the System Date

If you use the Sun Enterprise Volume Manager software to mirror your system and you set the system to a future date, you must reinstall the Sun Solaris operating system to reset the current date. If you change the setting from a future date back to the present date without reinstalling Sun Solaris, your system will not operate.

## Changing the Value of a Circuit Identification Code

To change the value of the circuit identification code (CIC) on a switch trunk with the MML command **prov-ed**, block the CIC using the **blk-cic** MML command before issuing a **prov-cpy** command.

## Configurations Using 8-Port Connectors

If your configuration uses an 8-port connector as a serial connection for switchover, you must enable the read-write permissions for the connection. The permissions file is located at `/devices/pci@1f,2000`. With root access, use the **chmod** command to change the setting from `crw-----` to `crw-rw-rw-`.

## Logging Parameters

The \*.logFileNamePrefix parameter replaces the \*.logDest parameter to determine log file names. However, the \*.logDest parameter remains in the XECfgParm.dat file because some processes rely on it to start correctly.

## Log Priority Processes

For sustainable runs, we recommend that all log priority processes be set to **Error**.

## Maximum Number of Stored Configurations

A maximum of 64 configurations can be stored on your host machine. Your configurations are automatically saved to the /opt/CiscoMGC/etc/CONFIG\_LIB directory. If you have a continuous-service configuration, during execution of the **prov-sync** command, all of the configurations in this directory on the active host are synchronized on the standby host. If you have too many configurations stored in this directory, the command fails and the standby is left in an out-of-service state.

The number of stored configurations is automatically controlled by the disk monitor utility, which runs periodically. When the number of stored configurations exceeds the configured maximum value, the disk monitor utility automatically deletes the oldest configurations until the number of stored configurations remaining equals the configured maximum value.

The configured maximum value is controlled by setting the CfgRmDirs parameter located in the XECfgParm.dat file. The default value for this parameter is 64. Setting the parameter to a value of 0 or a value greater than 64 disables the automatic cleanup feature.

## MICA Modems and Echo

MICA Technologies modems do not include a near-end echo canceller, so they do not function correctly on circuits with excessive near-end echo (greater than -60 dBm, for example -33 dBm.) Typical observed results are poor or no V.34 or PCM connects on long-distance calls. With a short round-trip delay, the near-end and far-end echoes might overlap and the modem's far-end echo canceller might cancel both.

Workaround: Reengineer the line to the MICA modem to eliminate any near-end echo (for example, remove any near-end A/D conversion), or replace the MICA modem with a Microcom modem. Microcom modems (3.1.30 fw) function correctly and establish solid, if not exceptionally fast, V.34 connections (in the range of 19.2 to 24 kbps). Also, setting a modem cap with s29 = 4 (for example, V.22bis and below) causes incoming calls to succeed.

## MML Commands

- The MML command **set-sc-state** is no longer used to control the network access servers (NASs). Instead, use the MML command **set-dest-state** to stop and start signaling channels.
- The **vid-cic** MML command might report an immediate CVT timeout failure in configurations that do not support a trunk group designation.

- The **prov-rtrv:session** MML command applies only to the current session being provisioned. The command is not applicable if there is no open session.
- The **prov-add** MML command is case-sensitive.
- Do not use spaces between parameter delimiters when entering MML commands.

## MML Provisioning

- The `clear_channel` compression type is not supported for trunk group provisioning.
- The following enhancements have been made to MML:
  - You can now export to a text file the MML commands that you use to create the current provisioning session.
  - The allowable MML name length (CLLI name for SS7 resources) has been increased from 10.

## Multiple Version Messages Exchanged on PRI Backhaul

When you reboot a media gateway (MGW), you might see several version messages exchanged between the Cisco MGC and the MGW during synchronization. This behavior does not affect system performance or PRI initialization.

## PEERPORT Parameter

The PEERPORT field is no longer used in the C7IPLNK component and has been removed from the CMM C7IPLINK panel and from the MML command. Since the PEERPORT value is now determined through the use of the XECfgParm.dat file, rather than the sigChanDevIp.dat file, all your links have the same PEERPORT. All Cisco SLTs must have the same PEERPORT.

In the XECfgParm.dat file, you must enter the PEERPORT number in the \*.stPort parameter.

## RLM Heartbeat Timer

When the RLM heartbeat timer is increased on the NAS, the RLM.timerLinkDownMin property must be changed to heartbeat + 5 seconds.

## Migration Fails If iplink Names Exceed 20 Characters

When you migrate from Release 7.x to Release 9.x, the migration script uses the existing IP link names to create D-channel components, which are new components in Release 9. To create the D-channel components, 4 characters are added to the existing IP link name. If the existing IP link name is 17 characters or more, the resulting D-channel name is longer than 20 characters, and therefore invalid. The maximum length for MML names is 20 characters. For that reason, be sure that IP link names are 16 characters or less before you migrate to Release 9 or later.

## Failovers Caused by Bouncing Active Primary IPs

Switchover induced failovers (caused by bouncing of the active primary IP) take longer to complete. Failovers that normally take 1 minute to complete a full activity switch can take 10 or more minutes to complete. This occurs because the active stays out of service (OOS) for a longer period of time.

## Caveats

This section describes resolved and open caveats for Cisco MGC software Release 9.1(5).

### Resolved Caveats for Software Release 9.1(5)

Caveats in [Table 58](#) are sorted by severity, then identifier, then component.

**Table 58** Resolved Caveats for Software Release 9.1(5)

| Identifier | Severity | Component     | Description                                                             |
|------------|----------|---------------|-------------------------------------------------------------------------|
| CSCdt95167 | 1        | mdl-analysis  | Incorrect restriction: Number of returns from cause to B-analy is 1.    |
| CSCdu01376 | 1        | mdl-analysis  | Return from cause to generic analy picks up original ingress B num.     |
| CSCdu04289 | 1        | mdl-cdr       | CDR does not reflect original number if A-num replaced by digmod.       |
| CSCdu10971 | 1        | mdl-pri       | Mistral: ETS 300_102 fails overdecadic digit calls.                     |
| CSCdu17317 | 1        | iocm-sj       | G/W reload causes single MGCP link transition to OOS OFF DUTY.          |
| CSCdu83219 | 1        | ioccpriip     | ISDNIP core dump.                                                       |
| CSCdu85350 | 1        | engine        | Engine core dump (sigpath bouncing).                                    |
| CSCdu89017 | 1        | alrmm         | On startup everything is in alarm.                                      |
| CSCdu89035 | 1        | alrmm         | After failover, standby does not recover.                               |
| CSCdv00040 | 1        | alrmm         | VSC does not restart upon los critical processes (i.e., eng).           |
| CSCdv17646 | 1        | mdl-q761      | ISUPV3_UK does not set the CBI bit in the Forward Call Indicator.       |
| CSCdv17655 | 1        | mdl-q761      | ISUPV3_UK maps a CPC of 10 dec to 0xFE.                                 |
| CSCdv44674 | 1        | mdl-conncntrl | When NotifySetupComplete property is set VSC does not send x-atm/sc.    |
| CSCdv61811 | 1        | ioccc7        | Cannot compile the SS7 because of trillium use of restrict keyword.     |
| CSCdv81770 | 1        | provision     | Validation errors when dynamically updating sessionsets.                |
| CSCdw18738 | 1        | mdl-cdr       | CDR tag 4012 and 4014 contain translated number; cannot bill INT calls. |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                           |
|------------|----------|--------------|-----------------------------------------------------------------------|
| CSCuk25546 | 1        | engine       | VSC crashes at 40 cps.                                                |
| CSCuk25882 | 1        | mdl-concntrl | First MDCX is needed before ACM rxd.                                  |
| CSCuk27262 | 1        | mdl-callctrl | VSC rxes IAM with CCR but transits EISUP IAM before rxing COT.        |
| CSCuk27509 | 1        | mdl-q761     | Austrian ISUP does not support screening indicator.                   |
| CSCuk28247 | 1        | engine       | RUDP errors noted during H323 failover.                               |
| CSCuk28695 | 1        | mdl-q761     | prov-add: SS7PATH: does not work for Danish ISUP.                     |
| CSCuk29220 | 1        | iocm         | UDP hop count for SLT limited to 10; should be 25.                    |
| CSCds07293 | 2        | mdl-tools    | Translation verification tool encountering errors.                    |
| CSCds43491 | 2        | install      | Install script problems.                                              |
| CSCds73440 | 2        | mdl-ansi-ss7 | Cause Code mapping not correct in ANSI Standard for cause analysis.   |
| CSCds74954 | 2        | userdoc      | Adding links to existing linksets on different ioccs.                 |
| CSCds78711 | 2        | engine       | VSC sends CGB CGU and GRS when restarted.                             |
| CSCdt00923 | 2        | flovrr       | SS7 links bounce when IP cables (Primary/Secondary) are disconnected. |
| CSCdt02481 | 2        | mdl-pri      | TV: SC release blacklist terminating calls with cause code 63.        |
| CSCdt08253 | 2        | dumper       | /opt at 100% cdr errors after seq # 102540.                           |
| CSCdt38827 | 2        | iocm         | Sessionset does not accept redundant link for VISM.                   |
| CSCdt46843 | 2        | userdoc      | mml core dumps when adding large dialplan.                            |
| CSCdt47315 | 2        | mdl-pri      | 1.1.3.1 LLC info element is transited.                                |
| CSCdt47464 | 2        | mdl-in       | LNP lookup failure, default route does not work.                      |
| CSCdt58753 | 2        | provision    | Cannot add digits (0280) when longer string (0280123456) exists.      |
| CSCdt59440 | 2        | mdl-in       | TCAP call failed after overnight run.                                 |
| CSCdt62113 | 2        | procm        | VSC goes OOS after changing eisup configuration.                      |
| CSCdt65976 | 2        | mml          | prov-exp: all not exporting updated rtlist.                           |
| CSCdt72875 | 2        | mml          | provexp: all not exporting all params for caspath.                    |
| CSCdt78772 | 2        | iocm-sj      | Problem with MGCP link status and failover.                           |
| CSCdt82361 | 2        | iocm         | Route Unsuccessful completion for OPCs and APCs.                      |
| CSCdt82480 | 2        | iocceisup    | GW: session up/down transition array—malloced but not zero-filled.    |
| CSCdt86300 | 2        | mml          | prov-ed:rtlist does not work properly.                                |
| CSCdt97676 | 2        | provision    | SS7—SS7: engine gives failed to get property value error.             |
| CSCdu01475 | 2        | engine       | Engine core dump upon initiating blo/cgb.                             |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                             |
|------------|----------|--------------|-------------------------------------------------------------------------|
| CSCdu01728 | 2        | iocm         | Dynamic Reconfig: Modify of STP causes prov-cpy to fail (ioChanMgr).    |
| CSCdu03712 | 2        | performance  | SS7-SS7: 30 cps with 180 sec hold time fail for overnight run.          |
| CSCdu05444 | 2        | mdl-analysis | Mistral: MDP (Lotus) forces overlap to be en-bloc.                      |
| CSCdu06154 | 2        | performance  | SS7-SIP: CPU utilization unstable with default ACC parameters.          |
| CSCdu13479 | 2        | protocol     | PB: Swiss ISUP Release C2 Cause 15 incorrectly mapped.                  |
| CSCdu16757 | 2        | provision    | TV: Not able to make SS7 call.                                          |
| CSCdu17958 | 2        | mdl-sip      | SIP DCS.mdo file missing from 9.0(0.6T) release.                        |
| CSCdu22078 | 2        | mml          | Mistral: rtrv-ne-health command causes defunct processes.               |
| CSCdu22088 | 2        | provision    | Mistral: numan-rtrv on Bdigit with 12.5k takes 25+ minutes to complete. |
| CSCdu27462 | 2        | mdl-sip      | Session times does not work when making SS7-SIP-SS7 calls.              |
| CSCdu27791 | 2        | provision    | Error in migration from 9.0 to 9.1 due to maxNumPriL3Links parameter.   |
| CSCdu43079 | 2        | engine       | TV: ReleaseMode defaults to Async for nailed config, should be Sync.    |
| CSCdu49050 | 2        | engine       | Repetitive kill-call, query cic may crash the engine.                   |
| CSCdu55239 | 2        | iocm         | When building 192 ss7 links a few stay in the oos conf state.           |
| CSCdu59056 | 2        | provision    | After dynamic reconfiguration SS7 link does not come IS.                |
| CSCdu59237 | 2        | protocol     | SSUTR2: Additional calling party and routing parms dropped over EISUP.  |
| CSCdu61312 | 2        | provision    | Dynamic Reconfig: engine restarts after modify of SS7 path.             |
| CSCdu61328 | 2        | engine       | eisup calls cause engine core dump.                                     |
| CSCdu63138 | 2        | ioccpriip    | VSC needs support for RELEASE REQUEST DISCONNECTED mode Dchanbackup.    |
| CSCdu63250 | 2        | iocceisup    | Dynamic Reconfig:Modified EISUplink and it comes up OOS.                |
| CSCdu64117 | 2        | ioccpriip    | Dynamic Reconfig: Modify Dchan and it comes up OOS.                     |
| CSCdu65297 | 2        | iocm         | Dynamic Reconfig: Modify of IP_Addr on NASlink comes up INB.            |
| CSCdu68160 | 2        | engine       | per-call causes memory overload.                                        |
| CSCdu85687 | 2        | replicator   | Ungraceful shut down on standalone due to replicator.                   |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                         |
|------------|----------|--------------|---------------------------------------------------------------------|
| CSCdu69274 | 2        | mdl-callctrl | Cut-through on ACM results in cause analysis processing failure.    |
| CSCdu71463 | 2        | iocm         | Restoring link on primary interface causes loss of both links.      |
| CSCdu73814 | 2        | iocm         | Dynamic Reconfig: Delete of linkset 1 causes linkset 2 OOS.         |
| CSCdu74742 | 2        | provision    | With the primary E/N down, master does not recover from fover.      |
| CSCdu80520 | 2        | ioccxgcp     | Not enough MGCP timers allocated to support max number of VISM GWs. |
| CSCdu80552 | 2        | iocm         | Dynamic Reconfig: Modify of C7links causes all C7links to go OOS.   |
| CSCdu85583 | 2        | provision    | Removal of Transport Type field.                                    |
| CSCdu85738 | 2        | mdl-in       | INAP lite: VSC fails call when SCP returns End msg with cdpnoa=8.   |
| CSCdv00220 | 2        | mdl-callctrl | VSC only using global GLARE setting for ITU calls.                  |
| CSCdv03763 | 2        | mdl-callctrl | CRCX reattempt for a 510 ack from GW with TDM COT fails.            |
| CSCdv05414 | 2        | protocol     | SIP > SS7 IAM does not have full Bearer Capability information.     |
| CSCdv05889 | 2        | mdl-callctrl | Terminating COT fails when originating COT run.                     |
| CSCdv07732 | 2        | mmdb         | MGMT_ERR_MMDBDETLE ODBC Error S1T00, TimesTen error 6003.           |
| CSCdv09178 | 2        | protocol     | EDCS-127431 calling party number is not propagated for cases.       |
| CSCdv10523 | 2        | other        | MGC cannot set performance profile for midrange.                    |
| CSCdv12644 | 2        | ioccxgcp     | Only 1 mgcp link to a GW goes IS after loading CSCOgs003.pkg.       |
| CSCdv12859 | 2        | toolkit      | Toolkit has no measurements.                                        |
| CSCdv13193 | 2        | engine       | Incorrect num of version ctrl bits read by eng into call context.   |
| CSCdv15025 | 2        | protocol     | Q.761 doesn't support some release locations.                       |
| CSCdv15102 | 2        | iocm         | If EISUP dest is put commanded OOS on failover it comes IS.         |
| CSCdv19227 | 2        | mdl-callctrl | Circuit gets hung at expiry of T1/T5.                               |
| CSCdv24974 | 2        | mdl-q761     | Ring No Answer trnkgrpprop does not change the RNA time.            |
| CSCdv34980 | 2        | mdl-pri      | VSC sends PROG without PI for PRI-ETSI to EISUP to PRI-E5.          |
| CSCdv42948 | 2        | mdl-connctrl | Network COT calls fail when TDM COT is used.                        |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component     | Description                                                         |
|------------|----------|---------------|---------------------------------------------------------------------|
| CSCdv56763 | 2        | other         | Graceful shutdown not working; inactive host will not standby.      |
| CSCdv59199 | 2        | protocol      | Wrong codec type send for fax and modem upspeed for T1.             |
| CSCdv81562 | 2        | ioccc7        | VSC does not reply to GRS messages.                                 |
| CSCdv84505 | 2        | mdl           | Danish ISUP CPC default in IAM is incorrect.                        |
| CSCdv85869 | 2        | iocm-sj       | MGCP links went OOS standby after failover.                         |
| CSCdv87653 | 2        | mdl-ansi-ss7  | TV13: Stuck cic problem call=IN SC does not respond to RSC.         |
| CSCdv87664 | 2        | ioccc7        | Unable to switchback after dynamically deleting SS7 links.          |
| CSCdv87667 | 2        | ioccc7        | C7iplnks OOS CONF when provisioning from new.                       |
| CSCdv88078 | 2        | replicator    | Standby box does not recover following Ethernet removal.            |
| CSCdv88093 | 2        | mdl-ansi-ss7  | BD1.1: Call failures due to stuck CICs.                             |
| CSCdw04020 | 2        | mdl-analysis  | Result type A_NUM_DP_TABLE is not open to Btree analysis.           |
| CSCdw05178 | 2        | engine        | Core-engine.no_samrt experienced with 7.4(11) p64.                  |
| CSCdw07635 | 2        | protocol      | BTIUP sends a Confusion message when it receives SIMw/ICC/IRC = 7/0 |
| CSCuk21402 | 2        | mdl-callctrl  | Goldwing call fails if CPG is slow to arrive from SS7.              |
| CSCuk21473 | 2        | ioccpriip     | Unable to bring dchan IS after setting Dest COOS to IS.             |
| CSCuk21701 | 2        | mdl-btnup     | Charge indicator needs to be no-charge for 0800 calls.              |
| CSCuk21747 | 2        | mdl-pri       | Must conform to the CLI code practice for BTNUP to PRI.             |
| CSCuk21794 | 2        | mdl-analysis  | Overlap input on PRI missed BMOD in analysis.                       |
| CSCuk21802 | 2        | mdl-btnup     | Digits inserted in overlap mode, BTNUP-IUP.                         |
| CSCuk21804 | 2        | mdl-btnup     | SHP=1 should always be set for VSC originating calls from PRI.      |
| CSCuk21806 | 2        | mdl-btnup     | SIM interchange needs to be transited.                              |
| CSCuk21861 | 2        | mdl-pri       | Cause mapping for temp out of service wrong for ISDN-SS7 BTNUP.     |
| CSCuk21903 | 2        | mdl-generator | ASUI with partial CLI causes core dump/VSC restart.                 |
| CSCuk21929 | 2        | mdl-btnup     | VSC does not reject calls with SHP=0, CPI=2 on termination.         |
| CSCuk21969 | 2        | mdl-callctrl  | Ringback tone via RQNT does not work.                               |
| CSCuk22185 | 2        | mdl-btnup     | ACI not fwd on b-leg, BTNUP.                                        |
| CSCuk22189 | 2        | mdl-btnup     | No backwards release on receipt of OVL message.                     |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                                |
|------------|----------|--------------|----------------------------------------------------------------------------|
| CSCuk22201 | 2        | iocm         | PB: Change of network ind. causes VSC to hang.                             |
| CSCuk22706 | 2        | mdl-callctrl | Locally applied ringing does not work AGAIN.                               |
| CSCuk22956 | 2        | performance  | Cross-office delay too high.                                               |
| CSCuk23634 | 2        | performance  | PB: prov-rtrv: rtlist and numan-rtrv: bdigtree causes overload at 71 cps.  |
| CSCuk23637 | 2        | performance  | PB: All CPUs are 100% utilized when two pro-rtrv: rtlist.                  |
| CSCuk23682 | 2        | performance  | PB: numan-add causes overload heavy at 4 cps.                              |
| CSCuk23781 | 2        | engine       | Q784-1 1.7.1.1 test case fails—vsc sends RSC.                              |
| CSCuk23782 | 2        | engine       | Q784-1 1.7.1.1 test case fails—vsc sends RSC and doesn't release call leg. |
| CSCuk24828 | 2        | mdl-connctrl | CPM fails to ACK LModifyConnection msg in EISUP-EISUP call.                |
| CSCuk25098 | 2        | mdl-btnup    | BTNUP handling of CLI after exchange.                                      |
| CSCuk25985 | 2        | mml          | Tariff table corruption after prov-cpy command.                            |
| CSCuk26200 | 2        | provision    | Provisioning fails with unknown component ID when the sessionset is empty. |
| CSCuk26302 | 2        | performance  | ST: Overload Medium at 35 cps and 12k sustained calls.                     |
| CSCuk26360 | 2        | ioccc7       | VSC does not send SLTA in response to SLTM.                                |
| CSCuk26893 | 2        | mdl-btnup    | SND message sent after SA protocol started in overlap dialing.             |
| CSCuk27282 | 2        | mdl-callctrl | rcv cpg with progr indic and unkm param VSC send rsc.                      |
| CSCuk28295 | 2        | mdl-q761     | Telecom Austria Q764-1 test 1.7.2.1 rcv unknown parameter.                 |
| CSCuk28298 | 2        | mdl-callctrl | T9 timer expires.                                                          |
| CSCuk28300 | 2        | mdl-q761     | Telecom Austria mdo rev 7 khz call.                                        |
| CSCuk28318 | 2        | mdl-q761     | Q.784 1.6.1.1B and 6.1.2 fail when overlap dialing used.                   |
| CSCuk28322 | 2        | ioccc7       | Q.764-1 6.5.2 fails—IAM not passed through VSC.                            |
| CSCuk28325 | 2        | mdl-q761     | Q.784 1.6.6.4 fails—IAM passed but USI dropped.                            |
| CSCuk28351 | 2        | mdl-q761     | Q.785.2 ISS_V_6_3_3_B for USR message not passed backwards.                |
| CSCuk28355 | 2        | mdl-q761     | Q.785.2 ISS_V_9_5B fails: IDR after ACM not transitted.                    |
| CSCuk28357 | 2        | mdl-q761     | Q.785.2 ISS_V_11_20B: No CPG messages transitted after ANS.                |
| CSCuk28360 | 2        | mdl-q761     | Q.785.2 ISS_V_10_13: CPG not transitted forward before ANM.                |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                                              |
|------------|----------|--------------|------------------------------------------------------------------------------------------|
| CSCuk28364 | 2        | mdl-q761     | Q.785.2 ISS_V_12_9B: CPG not transitted correctly.                                       |
| CSCuk28386 | 2        | mdl-q761     | Q.785.2 ISS_V_3_13A: COLP screening mapped incorrectly from DSS1.                        |
| CSCuk28763 | 2        | mdl-eisup    | Call cannot be set up (intermittent problem).                                            |
| CSCuk28851 | 2        | mdl-q767     | Unrestricted data calls rejected.                                                        |
| CSCuk28902 | 2        | provision    | VSC does not understand 5350 as external node type.                                      |
| CSCuk28986 | 2        | mdl-analysis | T9 timer expiry Danish ISUP wrong rel cause.                                             |
| CSCdr66886 | 3        | provision    | DynamicReconfig: Deleted all the SS7 routes to a DPC at IS state.                        |
| CSCdr90651 | 3        | performance  | CPU number in SW_Layout.cfg not dynamic.                                                 |
| CSCdr99182 | 3        | mdl-q761     | Repeat timer for CCR in case of failed COT greater than 3 minutes if COT init. with IAM. |
| CSCds29413 | 3        | provision    | BD1.1: *.sessionPauseTimer property is missing.                                          |
| CSCds33027 | 3        | provision    | Remove reference to VSC from mml output.                                                 |
| CSCds35356 | 3        | mml          | MML: Help command-Prov-exp needs the TID of signal removed.                              |
| CSCds37357 | 3        | mml          | Trkgrp file error needs more detail.                                                     |
| CSCds40130 | 3        | pxelgger     | Manual prov-sync: Logger requested to reread component.dat.                              |
| CSCds47334 | 3        | provision    | MML should prevent the assig. of same port to LSs of mult. OPCs.                         |
| CSCds48167 | 3        | upgrade      | XECfgParm disk monitor parameters not migrated.                                          |
| CSCds54802 | 3        | provision    | MGC IP Routing: Wrong nexthop and netmask.                                               |
| CSCds75824 | 3        | provision    | MML names are remembered across configs-types changed incorrectly.                       |
| CSCds77077 | 3        | xe           | prov-dply command procedures error but does/doesn't work.                                |
| CSCds83678 | 3        | ioccxgcp     | Dual MGCP links show inconsistent status OOS and IS STBY.                                |
| CSCds85344 | 3        | ioccc7       | BD1.1: Error in logs when setting c7iplnk OOS.                                           |
| CSCds88474 | 3        | mml          | Modifying the UDP port of a redund. mgcp link corrupts the config.                       |
| CSCds90120 | 3        | provision    | Standalone VSC won't start (POM) without peer address.                                   |
| CSCds90774 | 3        | provision    | No limitation on the STP used by SG.                                                     |
| CSCdt02258 | 3        | mdl-q761     | Cause not OLDed when CFN sent.                                                           |
| CSCdt06866 | 3        | provision    | prov-exp fails after dynamic prov session.                                               |
| CSCdt08557 | 3        | mml          | An established mml session w/ VSC down timesout on each command.                         |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                             |
|------------|----------|--------------|-------------------------------------------------------------------------|
| CSCdt08761 | 3        | mdl-ansi-ss7 | Release cause 26 and 27 not define in VSC exist in GR-246 ANSI.         |
| CSCdt11962 | 3        | ioccc7       | Deleting NAS does not delete associated entry in Solaris routing tab.   |
| CSCdt12266 | 3        | pxelgger     | PON err: Logger requested reread component.dat.                         |
| CSCdt12997 | 3        | engine       | PB: Engine.smartalloc core dump at _sigprocmask with no traffic.        |
| CSCdt14192 | 3        | pxelgger     | Error msgs logged on multiple control entries found to same GW.         |
| CSCdt17736 | 3        | provision    | Standby takes longer time to come in-service after IP-bounced failover. |
| CSCdt25213 | 3        | ioccpriip    | PRI backhaul ignoring RESUME ACK.                                       |
| CSCdt29881 | 3        | mml          | prov-rtrv:c7iplnk mml command does not show peerPort info.              |
| CSCdt37197 | 3        | provision    | prov-exp: caspath not exported properly.                                |
| CSCdt37236 | 3        | provision    | Unable to add icmp timeout field for DNS parameter.                     |
| CSCdt44614 | 3        | sccp-tcap    | VSC ignoring SSA messages.                                              |
| CSCdt46164 | 3        | alrmm        | AlarmManager error is non-descriptive.                                  |
| CSCdt50566 | 3        | mdl-q761     | PB: UII with no payload causes calls to be rejected.                    |
| CSCdt52824 | 3        | iocm         | Patch 13 makes the GW_STAT: CXN_OOS with hmel set as primary interface. |
| CSCdt62441 | 3        | mml          | prov-exp: signal not exporting components.                              |
| CSCdt63966 | 3        | mml          | rtrv-spc command shows the wrong executable.                            |
| CSCdt67327 | 3        | mdl-btnup    | BTNUP-IUP: Call not clear if remote end locally blocked.                |
| CSCdt72587 | 3        | provision    | IETF_DCS is a new variant which needs to be added int variant.dat.      |
| CSCdt78085 | 3        | provision    | Need ability to set dnsparameter value to default.                      |
| CSCdt79793 | 3        | provision    | AS5850/Marvel needs to be included as a known node type.                |
| CSCdt85180 | 3        | mml          | set-admin-stat:<naspath>:reset does not work.                           |
| CSCdt87882 | 3        | doc          | MML online help needs clarification.                                    |
| CSCdt88823 | 3        | mml          | MML.log produces confusing messages with prov-add command.              |
| CSCdt88839 | 3        | toolkit      | TOOLKIT: Log Viewer: CP_TRACE query executing incorrectly.              |
| CSCdt93252 | 3        | mdl-analysis | A_NUMBER_TYPE modifications lost with new dialplan.                     |
| CSCdt97451 | 3        | provision    | Without provision SS7Route MGCP/PRI process cannot be generated.        |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component     | Description                                                          |
|------------|----------|---------------|----------------------------------------------------------------------|
| CSCdu02838 | 3        | provision     | In provisioning C7IPLNK the attribute TIMESLOT is misleading.        |
| CSCdu03147 | 3        | provision     | MGC_Setup.                                                           |
| CSCdu11322 | 3        | mml           | num-dlt: dialplan not clean.                                         |
| CSCdu16271 | 3        | other         | Diskmonitor.limit (number of days to preserve) not deleting.         |
| CSCdu17472 | 3        | replicator    | Simultaneous restart cause replic to max out on single CPU platform. |
| CSCdu19597 | 3        | provision     | VSC wrong output for Defresultset when doing prov-exp.               |
| CSCdu35850 | 3        | provision     | Export numan bdigtree displays x when digittopresent>entry.          |
| CSCdu44585 | 3        | upgrade       | Alarm and Alarm Manager Errors on startup.                           |
| CSCdu44735 | 3        | mml           | VSC is exporting slot rather than timeslot.                          |
| CSCdu46201 | 3        | usability     | MGC_Setup: Missing/wrong password terminates GUI during FTP-Config.  |
| CSCdu46941 | 3        | procm         | procM cores when prov-cpy.                                           |
| CSCdu55658 | 3        | mml           | Confirm check required on set-admin-state MML command.               |
| CSCdu59204 | 3        | protocol      | SSUTR2: ISDN Presence Indicator changed on SSUTR2-SSUTR2 call.       |
| CSCdu59205 | 3        | protocol      | SSUTR2: ISDN presence indicator changed on SSUTR2-SSUTR2 call.       |
| CSCdu62008 | 3        | mdl-calletrl  | MGCP E/C on during loopback.                                         |
| CSCdu60831 | 3        | mml           | query-cic:ss7svc2:cic=118 on Standby show as RTRV as oppose to DENY. |
| CSCdu60852 | 3        | provision     | povision.dat contains redundant tags for Scalefactor and TariffRate. |
| CSCdu61020 | 3        | pxellogger    | SynchronizerWriter log message conflict with message severity.       |
| CSCdu62008 | 3        | mdl-calletrl  | MGCP E/C on during loopback.                                         |
| CSCdu63359 | 3        | mdl-conncntrl | In response to vbd the VSC sends a 400 error code.                   |
| CSCdu63377 | 3        | mdl-conncntrl | When a vbdt is received the VSC sends a DLCX for the connection.     |
| CSCdu66631 | 3        | ioccpriip     | Add new error message for backhaul iocc.                             |
| CSCdu67166 | 3        | toolkit       | Toolkit: with a stop time no data is found.                          |
| CSCdu67221 | 3        | mml           | RTRV-EQUIPT:ALL command on Standby gives misleading info.            |
| CSCdu67442 | 3        | userdoc       | MML_Help for rtrv-iplnk: Missing & incorrect attributes.             |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                             |
|------------|----------|--------------|-------------------------------------------------------------------------|
| CSCdu68393 | 3        | userdoc      | MML_Help for rtrv-sp-ctr should reflect SS7 service and not point code. |
| CSCdu68487 | 3        | measm        | Measurements for rtrv-sp-ctr not being returned for SS7_Services.       |
| CSCdu68615 | 3        | userdoc      | Missing rtrv-cfg parameter.                                             |
| CSCdu68698 | 3        | ioccpriip    | Taking a Dchan destination OOS.                                         |
| CSCdu68806 | 3        | mdl-callctrl | EISUP COT on previous to SS7 with COT sends 2 COT messages.             |
| CSCdu69272 | 3        | mmdb         | MMDB should use fuzzy checkpoints.                                      |
| CSCdu71848 | 3        | provision    | Disable custgrptbl option from provisioning prov-add and prov-ed.       |
| CSCdu72877 | 3        | provision    | pom does not validate version number when srever value=active.          |
| CSCdu72931 | 3        | mml          | Wildcard set-c7lnk duplicates mml response.                             |
| CSCdu78759 | 3        | alrmm        | rtrv-alm times out if there are many alarms to report.                  |
| CSCdu80765 | 3        | iocm         | iplnk INB when eisup IS.                                                |
| CSCdu82924 | 3        | provision    | DataBaseAccessError XECfgParm.dat parameter not migrated.               |
| CSCdv03809 | 3        | provision    | Default for property PropagateSvcMsgBlock should be true.               |
| CSCdv05763 | 3        | iocm         | Failover fails MSO refused warm start failed.                           |
| CSCdv09993 | 3        | protocol     | Include new noa values for Finnish ISUP.                                |
| CSCdv11488 | 3        | toolkit      | Current CDRs are not viewable in the toolkit.                           |
| CSCdv11532 | 3        | other        | ASCII CDR converter does not work.                                      |
| CSCdv17657 | 3        | procm        | Service not found in tables services.                                   |
| CSCdv17744 | 3        | mml          | MML memory leaks.                                                       |
| CSCdv30167 | 3        | mdl-sip      | SIP ACK sent in wrong order.                                            |
| CSCdv30289 | 3        | mdl-sip      | Presentation Indicator always set to restricted for SIP-ISUP calls.     |
| CSCdv39488 | 3        | alrmm        | MML retrieval of alarms given wrong timestamps on alarms.               |
| CSCdv43034 | 3        | provision    | AOC holiday should accept digit years.                                  |
| CSCdv43925 | 3        | ioccxgcp     | MGCP message image too big for VSC.                                     |
| CSCdv44322 | 3        | provision    | Require all fields for edits and deletes.                               |
| CSCdv46678 | 3        | protocol     | ITU ISUPv2 call released when INF received with A number not available. |
| CSCdv50410 | 3        | toolkit      | Current alarm and measurement data are not viewable in the toolkit.     |
| CSCdv71187 | 3        | mml          | dw1 (resultset) modification after route list deleted.                  |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                            |
|------------|----------|--------------|------------------------------------------------------------------------|
| CSCdv77574 | 3        | provision    | Database migration from 7.4(11) to 9.1(5) fails.                       |
| CSCdv81522 | 3        | engine       | CIC stuck in BLK=gw after trunk flaps and ss7 messages lost.           |
| CSCdv83374 | 3        | provision    | POM is not flushing pom.dat immediately to disk.                       |
| CSCdv83385 | 3        | provision    | Prov-rtrv-session does pick up prov-sync.                              |
| CSCdv85720 | 3        | mmdb         | Missing commands for TimesTen database status.                         |
| CSCdv86009 | 3        | pkg          | TimesTen stopped for unknown reason.                                   |
| CSCdv86785 | 3        | iocm         | prov-dply does not work when route is deleted from IOCM.               |
| CSCdv87682 | 3        | protocol     | COT failure does not generate alarm.                                   |
| CSCdw08523 | 3        | toolkit      | CDR viewer contains tags 4064 and 4065 and misses tags 2017 and 3017.  |
| CSCdw09883 | 3        | mdl-analysis | Change dial plan limited to only 3 hops.                               |
| CSCdw11402 | 3        | mmdb         | prov-add: files need provisioning session for screening db.            |
| CSCdw19618 | 3        | mmdb         | \$digModStrings in Dial Plan only accepts X (not x as in Release 7).   |
| CSCuk21335 | 3        | mdl-eisup    | H323 to H323 via VSC can't tunnel H245.                                |
| CSCuk21386 | 3        | mdl-callctrl | OverlapDigitsTimer not reset on ACM.                                   |
| CSCuk21488 | 3        | mdl-analysis | Cannot convert calls from overlap to enblock in dialplan.              |
| CSCuk21639 | 3        | mdl-callctrl | Error in platform.log regarding ISUP Transparency.                     |
| CSCuk21645 | 3        | mdl-btnup    | Need to act on CTI-1.                                                  |
| CSCuk21865 | 3        | mdl-btnup    | CCTF is sent immediately after sending a REL.                          |
| CSCuk22178 | 3        | alrmm        | Dialplan base read failure does not raise alarm.                       |
| CSCuk22187 | 3        | mdl-btnup    | Extra SASUI sent after 30 secs BTNUP.                                  |
| CSCuk23569 | 3        | mdl-q761     | Hop counter not decremented.                                           |
| CSCuk23599 | 3        | iocm-sj      | PB: sta-aud-gw will do nothing.                                        |
| CSCuk23877 | 3        | ioccc7       | Q.782 test case 7.8 fails-link uninhibition on inactive link.          |
| CSCuk23900 | 3        | ioccc7       | Q.782 testcase 13.7 fails wit spares bits set not set to 00.           |
| CSCuk24004 | 3        | mdl-q761     | VSC does not transmit connected number info and discards call history. |
| CSCuk24014 | 3        | mdl-q761     | APP parameter not forwarded and parameter compatibility not sent.      |
| CSCuk24024 | 3        | mdl-q761     | UUI in ACM is not transmitted.                                         |
| CSCuk24048 | 3        | mdl-q761     | USR information message discarded by vsc in transit case.              |

**Table 58 Resolved Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                         |
|------------|----------|--------------|---------------------------------------------------------------------|
| CSCuk24053 | 3        | icom         | PB. Can't put iplnk-session OOS therefore I can't prov-cpy.         |
| CSCuk24164 | 3        | mdl-q761     | IDR functionality fails to remove MCID info from IDR message.       |
| CSCuk24166 | 3        | mdl-q761     | Generic notification parameter forwarded in ACM message.            |
| CSCuk24170 | 3        | mdl-q761     | FRJ cause release of call if UUS service 3 request, not essential.  |
| CSCuk24179 | 3        | mdl-q761     | IAM received with hop count=1 causes release reason 3 backwards.    |
| CSCuk24282 | 3        | mdl-callctrl | Min digit value returned by analysis is not acted upon.             |
| CSCuk24794 | 3        | mdl-callctrl | Notification msg is not transmitted in inter-vsc calls.             |
| CSCuk24808 | 3        | mdl-btnup    | Confusion should be sent in UK-IUP if invalid SIM-B received.       |
| CSCuk25128 | 3        | mml          | ST: After starting VSC rtrv-ne-health shows OOS.                    |
| CSCuk25460 | 3        | install      | ST: MGC software installation stops after package CSCOgc001.        |
| CSCuk25552 | 3        | protocol     | Overlap calls are occasionally rejected with InvalidNumber.         |
| CSCuk26117 | 3        | mdl-connctrl | After call answered, phone keeps ringing.                           |
| CSCuk26359 | 3        | engine       | Audit gateway overloads the VSC at 40cps.                           |
| CSCuk26974 | 3        | ioccxgcp     | GW IPLNK will not come IS. Log states message is on the wrong link. |
| CSCuk27275 | 3        | mdl-btnup    | IUP to ISDN call maps screening indicator incorrectly.              |
| CSCuk27371 | 3        | ioccxgcp     | MGCP links not OOS when gateway fails to reply to AUEPs.            |
| CSCuk28157 | 3        | mdl-analysis | Overlap calls fail post dial plan change if insufficient digits.    |
| CSCuk28737 | 3        | mdl-q767     | Timer T6 does not expire after suspend received.                    |
| CSCuk29231 | 3        | mdl-q767     | Redirection count not defaulted to correct value.                   |
| CSCuk29325 | 3        | mdl-connctrl | TDC-CVA far end ring tone not cutthrough by VSC/Gateway.            |

## Open Caveats for Software Release 9.1(5)

Contact your Cisco representative to obtain status on problem reports. For more information on IOS caveats, see the IOS release notes for your platform. Caveats in [Table 59](#) are sorted by severity, then identifier, then component.

**Table 59** Open Caveats for Software Release 9.1(5)

| Identifier  | Severity | Component | Description                                                            | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------|----------|-----------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCdw25182  | 1        | engine    | Engine.smartall core after SWO and remains OOS afterwards.             | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CSCdw26308  | 1        | engine    | Calls released after abort attempt (cause 38—Network Out of Order).    | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CSCCuk27967 | 1        | engine    | No smartalloc engine core when VSC traffic test 20 cps and 25K calls.  | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CSCdu49524  | 2        | engine    | Unable to clear BLK=GATEWAY state when GW MGCP resources are available | If a VSC puts a CIC into GW_STAT=CARRIER_FAILURE, BLK=GATEWAY state because the gateway previously reported an MGCP 502 message, you cannot clear the VSC state without restarting the VSC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CSCdw15278  | 2        | engine    | Calls are rejected because of virtual memory overload.                 | <p>The PGW 2200 goes into virtual memory overload prematurely and drops calls even if there is ample memory available.</p> <p>Workaround: Turn off virtual memory overload management by setting one or more of the MCL virtual memory onset thresholds to 0.</p> <p>The mml provisioning commands to do this are as follows:</p> <pre>prov-ed:MCLTHRESHOLD:name="virtualmemory",MCL1ONSET=0  prov-ed:MCLTHRESHOLD:name="memoryaddress",MCL1ONSET=0</pre> <p>Applying this workaround to a system configured for Max Sustained Calls has no adverse effect unless the system has been provisioned to accept more than 25,000 sustained calls or has less than the recommended physical ram and swap space configuration.</p> |
| CSCdw17254  | 2        | flavr     | High number of [MSO refused Warm start-up Failed] errors.              | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CSCdw32993  | 2        | engine    | Not from EISUP coming from HSI DTMF core dump.                         | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Table 59 Open Caveats for Software Release 9.1(5) (continued)**

| Identifier | Severity | Component    | Description                                                          | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------|----------|--------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCuk27967 | 2        | engine       | No smartalloc engine core when VSC traffic test 20cps and 25K calls. | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CSCuk29090 | 2        | mdl-callctrl | IAM forwarded before COT result received.                            | IAM is forwarded by VSC before result of continuity check is received from originating exchange.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| CSCuk29653 | 2        | mdl-mgcp     | ST. VSC releases the endpoint without receiving 200 to its MDCX.     | <p>While running a small amount of calls, the VSC sends MDCX to the AS5400 but the message is not received by the gateway.</p> <p>The VSC sends the message two more times and then releases the endpoint.</p> <p>However, the AS5400 still has the endpoint busy, so the next call on that endpoint fails because the AS5400 sends a "Circuit Already Busy" message.</p> <p>Workaround: To clear this condition immediately, start a manual audit. The daily Audit that executes in the cron job automatically clears this condition as well.</p> |
| CSCuk30062 | 2        | mdl-q761     | Tnova.ISDN HOLD message is not passed as CPG to SS7.                 | <p>While testing ETS_300 356-36 ISS_V_13_3, noticed the hold message coming from the ISDN part is not passed to the SS7 side.</p> <p>Workaround: None.</p>                                                                                                                                                                                                                                                                                                                                                                                         |
| CSCuk30410 | 2        | other        | ST. When installing CSCOh013, FTP access to the box is lost.         | <p>When installing CSCOh013 on a Solaris 2.6 box, FTP access to the box is lost. Creation of the /etc/shells file restricts the mgcusr user from logging into the box using FTP.</p> <p>Workaround: Include the shell that the mgc user has in the /etc/passwd file or remove it.</p>                                                                                                                                                                                                                                                              |
| CSCdw04016 | 2        | provision    | Unable to add multiple instances of same trunkgroup in a route.      | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CSCdv32621 | 3        | engine       | Engine dispatcher goes up high when releasing calls only.            | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CSCdv46501 | 3        | ioccxgcp     | No REL messages for active calls when CIC state is BLK=GATEWAY.      | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

Table 59 Open Caveats for Software Release 9.1(5) (continued)

| Identifier | Severity | Component    | Description                                                               | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------|--------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCdv87645 | 3        | flvr         | Standby stays OOS after local isolation/reconnect.                        | <p>When the standby machine is locally isolated (all ethernet connectivity removed), it goes OOS and the active remains up as normal. When ethernet connectivity is restored, the box remains OOS.</p> <p>Workaround: Change the failover timers in XECfgParm.dat to:</p> <ul style="list-style-type: none"> <li>foverd.heartbeatInterval = 4000</li> <li>foverd.peerCommTimeout = 10000</li> </ul> |
| CSCdw13946 | 3        | alrmm        | Propagation of dynamic reconfiguration of SS7 UICCs fix.                  | The fix applied in CSCdv50251, which addresses dynamic reconfiguration problems associated with SS7 IOCCs, should be applied to Release 9.1(5) and Release 7.x, as this problem exists in those releases as well.                                                                                                                                                                                   |
| CSCdw16792 | 3        | toolkit      | Translation verification tool.                                            | Translation verification in MGC Toolkit does not verify calls that switch to a new dialplan.                                                                                                                                                                                                                                                                                                        |
| CSCdw20937 | 3        | mdl-analysis | Return from cause to generic analysis picks up original ingress B number. | <p>This is a clone of CSCdu01376. It was reopened on atg uk-dev request (CSCdu01376 has been archived).</p> <p>Return from cause analysis to generic analysis reverts to original delivered B-number and not previously modified B-number during the first pass through generic analysis.</p> <p>Workaround: None.</p>                                                                              |
| CSCdw21671 | 3        | mml          | prov-exp: all failed with TimesTen connection errors.                     | <p>prov-exp:all failed and returned database connection errors.</p> <p>Condition: SysConnectDataAccess in XECfgParm.dat has been set to false and timesten daemon is down.</p> <p>Workaround: Restart timesten daemon.</p>                                                                                                                                                                          |

**Table 59** Open Caveats for Software Release 9.1(5) (continued)

| Identifier | Severity | Component    | Description                                                          | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------|----------|--------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCdw22618 | 3        | other        | Backup/restore featurette: No hostname info on menu screen.          | No hostname displays on the backup/restore menu screen; if you have several backup/restore menu screens open on different hosts (master and slave), it is easy to lose track of which menu screen is associated with which host.<br><br>Workaround: Close the menu screen and restart it on the desired host to make sure you are working on the correct host.                                                                                                                                                                                                                                         |
| CSCdw25467 | 3        | provision    | prov-add; files/export COMPLD, no file created on cust_specific dir. | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CSCdw26275 | 3        | other        | get_trc.sh core dumps when analysing euro lnp.                       | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CSCdw27543 | 3        | mdl-analysis | Unable to negate the effect of NEW_DIALPLAN intermediate resulttype. | It is not possible to remain in the same dialplan if the NEW_DIALPLAN resulttype is invoked and the requirement is further down the same tree.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CSCdw31125 | 3        | ioccc7       | Extra SS7 controllers seen in RTRV-SOFTW:ALL after linkset prov-dlt. | When deleting multiple linksets, the appropriate number of SS7 controllers should be automatically deleted, and new number of SS7 controllers should be reflected when executing the RTRV-SOFTW:ALL command. However, RTRV-SOFTW:ALL still reflects previous number SS7 controllers, as though SS7 linksets were NOT provision-deleted.<br><br>Workaround: Reprovision active from NEW, then execute prov-dply. This negatively impacts live operations.<br><br>Incorrect RTRV-SOFTW:ALL display does not appear to have negative impact on system. You can delay workaround until a planned downtime. |
| CSCdw33048 | 3        | xe           | Need individual logPrio for a channel controller in XECfgParm.dat.   | Need the capability to enable Debug Level LogPrio for individual channel controllers in XECfgParm.dat.<br><br>Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CSCuk23933 | 3        | engine       | CICs stay IS when mgcp-iplnk goes OOS.                               | Workaround: None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

Table 59 Open Caveats for Software Release 9.1(5) (continued)

| Identifier | Severity | Component    | Description                                                     | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------|----------|--------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCuk28157 | 3        | mdl-analysis | Overlap calls fail post dialplan change if insufficient digits. | <p>This problem occurs if a VSC configuration is employed using multiple dialplans. It is only a problem in overlap working in the specific case where after a dialplan changeover has occurred there are insufficient digits to complete analysis.</p> <p>Workaround: The problem can be avoided if enbloc working is used or if in overlap mode, sufficient digits are delivered in the IAM to effect full analysis without having to await further SAM's.</p> |
| CSCuk28381 | 3        | mdl-runtime  | MDL simulator test causes core dump.                            | <p>This problem only occurs when MDL simulation tests are run. It affects the mdl interpreter which is not used on customer implementations.</p> <p>Workaround: Change the symbolic link to link to the GNU version of the simulator.</p>                                                                                                                                                                                                                        |
| CSCuk29008 | 3        | mdl-q761     | Q784 6.3.1 Bizarre behavior in the VSC.                         | VSC sends unexpected IAM and SAM message when testing Q784 6.3.1.                                                                                                                                                                                                                                                                                                                                                                                                |
| CSCuk29123 | 3        | mdl-q767     | Simple segmentation procedure does not work.                    | <p>The VSC receives an IAM with optional forward call indicators indicating that additional information will be sent in a segmentation message.</p> <p>A SEG message is received after the IAM, but the message is not recognized by the VSC, so no information is contained in the ensuing IAM from the VSC.</p> <p>According to Spanish ISUP v1 spec, the extra information should be sent in an INF message, not a segmentation message.</p>                  |

**Table 59** Open Caveats for Software Release 9.1(5) (continued)

| Identifier | Severity | Component | Description                                           | Explanation/Workaround                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------|-----------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSCuk29206 | 3        | mdl-q767  | T24 and T26 not working—CCR not resent after failure. | <p>A manual COT test is executed on the vsc with command:</p> <pre>tst-cot:spb-ss7path:cic=1</pre> <p>The CCR message is sent by the VSC on cic 1, but the test is arranged such that continuity is unsuccessful. The VSC correctly sends a COT (failed) message, but then nothing else.</p> <p>T24 (2s) should be started and then the CCR should be attempted again. If that fails, then T26 should be started (120s) and the CCR reattempted after its expiry, ad infinitum.</p> |
| CSCuk29230 | 3        | mdl-q767  | Redirecting indicator not defaulted correctly.        | Redirecting indicator in Redirection Information parameter is not defaulted to the correct value if a spare value is received.                                                                                                                                                                                                                                                                                                                                                      |
| CSCuk29233 | 3        | mdl-q767  | Location in REL messages set incorrectly.             | Location indicator field of REL message set to International Network for all calls that are failed by the VSC.                                                                                                                                                                                                                                                                                                                                                                      |
| CSCuk30062 | 3        | mdl-q761  | Tnova.CPG message does not pass to ISDN as Hold.      | <p>While testing ETS_300 356-36 ISS_V_13_3, noticed the hold message coming from the ISDN part is not passed to the SS7 side.</p> <p>Workaround: None.</p>                                                                                                                                                                                                                                                                                                                          |

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