



# Release Notes for Cisco Media Gateway Manager Release 5.0

---

May 24, 2005

These release notes describe the caveats for Cisco Media Gateway Manager (Cisco MGM) Release 5.0. These release notes accompany the *Cisco Media Gateway Manager 5.0 Installation Guide* and the *Cisco Media Gateway Manager 5.0 User Guide*.



**Note**

---

You can access the most current Cisco documentation, including these release notes, online at <http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cmgm/index.htm>

---

These release notes are updated as follows:

- Part numbers for VXSM Front and Back cards updated.

All changes are shown with change bars.

## 1.1 Contents

This document includes the following topics:

- [1.2 Introduction](#)
- [1.3 Cisco MGM-Supported Network Element Software Releases](#)
- [1.4 Limitations and Restrictions](#)
- [1.5 Open Caveats](#)
- [1.6 Documentation Updates](#)
- [1.7 Related Documentation](#)
- [1.8 Obtaining Documentation](#)
- [1.9 Documentation Feedback](#)
- [1.10 Obtaining Technical Assistance](#)
- [1.11 Obtaining Additional Publications and Information](#)



---

**Corporate Headquarters:**  
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Copyright © 2005 Cisco Systems, Inc. All rights reserved.

## 1.2 Introduction

Cisco Media Gateway Manager (Cisco MGM) is the element management system for the Cisco MGX 8880 Media Gateway and voice enabled Cisco MGX 8850 Multiservice Switch for voice solutions based on VoIP technologies. Cisco MGM supports fault, configuration, performance, and security management functional areas. Cisco MGM also serves as a foundation for integration into a larger overall operations support system (OSS) environment by providing northbound gateway interfaces to higher layer management systems.

Cisco MGM GateWay is an architectural component that provides northbound EMS-to-network management system (NMS) interface mediation. Cisco MGM GateWay enables service providers to integrate Cisco MGM with their existing Operations Support Systems by using standardized open interfaces. In Release 5.0, Cisco offers Common Object Request Broker Architecture (CORBA) interface options for Cisco MGM GateWay..


**Note**

In Cisco MGM R5.0, the GateWay/CORBA functionality is sold separately.

## 1.3 Cisco MGM-Supported Network Element Software Releases

[Table 1-1](#) lists the network element (NE) software releases supported in Cisco MGM R5.0.

**Table 1-1 Cisco MGM-Supported NE Software Releases**

Product	Software Release
Cisco MGX 8880 Media Gateway	5.0.20
Voice Enabled Cisco MGX 8850 Multiservice Switch	5.0.20

**Table 1-2 MGX8880 and MGX8850 Modules and Cards**

Module	Front Card	Software Release	Back Card	Software Release
PXM45	PXM45/B	5.0(20.201)	PXM-UI-S3	5.0(20.201)
			PXM-HD	5.0(20.201)
	PXM45/C	5.0(20.201)	PXM-UI-S3/B	5.0(20.201)
			PXM-HD	5.0(20.201)
RPM-PR	MGX-RPM-PR-256	12.3(7)T3	MGX-RJ45-4E/B	12.3(7)T3
			MGX-RJ45-FE	12.3(7)T3
			MGX-MMF-FE	12.3(7)T3
RPM-XF	MGX-RPM-XF-512	12.3(7)T3	MGX-1OC12POS-IR	12.3(7)T3
			MGX-1GE	12.3(7)T3
			MGX-2GE	12.3(7)T3
			MGX-2OC12POS	12.3(7)T3

Table 1-2 MGX8880 and MGX8850 Modules and Cards (continued)

Module	Front Card	Software Release	Back Card	Software Release
AXSM/B	AXSM-16-T3E3/B	5.0(20.200)	SMB-8-T3	5.0(20.200)
			SMB-8-E3	5.0(20.200)
	AXSM-16-155/B	5.0(20.200)	MMF-8-155-MT/B	5.0(20.200)
			SMFIR-8-155-LC/B	5.0(20.200)
			SMFLR-8-155-LC/B	5.0(20.200)
			SMB-4-155	5.0(20.200)
	AXSM-4-622/B	5.0(20.200)	SMFIR-2-622/B	5.0(20.200)
			SMFLR-2-622/B	5.0(20.200)
AXSM-1-2488/B	5.0(20.200)	SMFSR-1-2488/B	5.0(20.200)	
		SMFLR-1-2488/B	5.0(20.200)	
AXSME	AXSM-32-T1E1-E		MCC-16-E1	
			RBBN-16-T1E1	
VXSM	MGX-VXSM-155	5.0(20.200)	VXSM-BC-4-155	5.0(20.200)
	MGX-VXSM-T1E1	5.0(20.200)	VXSM-BC-24T1E1	5.0(20.200)
VXSM redundant backcard			VXSM-R-BC	5.0(20.200)
RCON-1TO5-8850	5.0(20.200)			
VISM-PR	MGX-VISM-PR-8T1	3.3(0.200)	AX-RJ48-8T1	3.3(0.200)
			AX-R-RJ48-8T1	3.3(0.200)
	MGX-VISM-PR-8E1	3.3(0.200)	AX-RJ48-8E1	3.3(0.200)
			AX-R-RJ48-8E1	3.3(0.200)
			AX-SMB-8E1	3.3(0.200)
		AX-R-SMB-8E1	3.3(0.200)	
SRME/B	MGX-SRME/B		MGX-SMFIR-1-155	
			MGX-STM1-EL-1	
			MGX-BNC-3T3-M	
SRME	MGX-SRME		MGX-SMFIR-1-155	
			MGX-STM1-EL-1	

## 1.4 Limitations and Restrictions

The following limitations apply to Cisco MGM 5.0:

- The supported statistics collection interval is 15 minutes. When Cisco MGM turns on statistics collection on Cisco MGX nodes, the collection interval is set to 15 min.



---

**Note** Some cards support intervals of 5-10 or 15 min, but Cisco MGM only supports 15 min intervals.

---

- Cisco MGM 5.0 supports 32-bit Oracle9i. 64-bit Oracle9i is not supported.
- Service Class Template (SCT) is not supported to customize card and port service templates.
- Only default preference is supported for Configuration Center, Diagnostic Center, Chassis View and Statistics Report in this release.
- Cisco MGM 5.0 cannot co-exist with Cisco WAN Manager 15.0.10.
- No trunking and routing is supported in Cisco MGM 5.0.
- Close User Group (CUG) code is supported but there is no valid use case.

### 1.4.1 Issues With Cisco MGM Online Help

Online help content is not launched when Cisco MGM is installed on a Solaris system. See Open Caveats CSCef43109 and CSCeg80477.

There are the following issues with Cisco MGM online help on a Windows system:

1. In the Equipment Inventory table, the help file does not launch.
2. The Using Help link returns a File Not Found error
3. Within the Control Panel, the following property sheets are linked to the wrong help file:
  - Cisco MGM Properties
  - UI Properties
  - NE Service > MGX 8880/8850 MG
  - NE Service > Unmanaged NE
  - PM Service
  - GateWay/TL1 Service

## 1.5 Open Caveats

The following sections describe the open caveats that are not resolved in the Cisco MGM 5.0 software:

---

**ID** CSCee47158

**Symptom** topod and NMserver core dumped.

**Conditions** When mgms-stop is done or all the NEs are purged.

**Workaround** None.

---

**ID** CSCef21216

**Symptom** Telnet and SSH does not work from MGM Solaris client.

**Conditions** Launch any GUI and select any NE and right click for popup menu. Try launching Telnet or SSH session to the NE. Observe that neither works.

1. Telnet doesn't start at all, and
2. SSH pops up window asking for Userid but no further action happens.

**Workaround** Make sure these path are set up correctly:

1. xterm is in /usr/openwin/bin
2. telnet and ssh should be in the default path /usr/bin

---

**ID** CSCef43109

**Symptom** Solaris help does not launch.

**Conditions** When there is no instance of Netscape running and help is launched for the first time and the Netscape version is 4.76 (from /usr/dt/appconfig/netscape/netscape -version).

**Workaround** Launch Netscape manually and then launch help, or use a different version of Netscape 4.78, 4.79, 4.8, or 7.

---

**ID** CSCeg20793

**Symptom** Available RAM and swap space is decreasing, with the statsparser and pmcollector processes using a lot of memory.

**Conditions** This occurs when Cisco MGM has been running for two days without stopping.

**Workaround** Install Oracle patch 4147836 as follows:

- 
- Step 1** Go to <http://metalink.oracle.com> and click **Login to MetaLink**. Enter your Oracle metalink username and password.
  - Step 2** Click **Patches**.
  - Step 3** Click **Simple Search**.
  - Step 4** In the Search by Patch Number(s) field, enter **4147836**.
  - Step 5** In the Platform or Language field, choose the **Solaris Operating System (SPARC 32-bit)** option.
  - Step 6** Click **Go**.
  - Step 7** Click **Download**.
  - Step 8** Save the patch to the location of your choice.
- 

To install Oracle patch 4147836:

- 
- Step 1** Log into the database workstation as the Oracle user and enter the following commands:
 

```
cd /oraclesw9i
mkdir oracle_patch
```
  - Step 2** Locate the saved patch (4147836) and copy it to the /oraclesw9i/oracle\_patch directory.
  - Step 3** Enter the following sets of commands to unzip the patch file:
 

```
unzip p4147836_9206_SOLARIS.zip
```
  - Step 4** Enter the following commands to shut down the Oracle listener and all Oracle processes, if they are running:
 

```
sqlplus /nolog
connect /as sysdba
shutdown immediate
exit
lsnrctl stop
```
  - Step 5** Enter the following commands to apply the Oracle security patch:
 

```
cd /oraclesw9i/oracle_patch/4147836
setenv PATH $ORACLE_HOME/OPatch:$(PATH)
/oraclesw9i/oracle_patch/OPatch/opatch apply ----
```
-

After installing the Oracle patch, monitor EMS alarms for memory usage, and use the unix `top` command. When the memory usage goes over 95% (using EMS alarms) or less than 500 MB (using `top`), check the memory usage of `statsparser` process and `pmcollector` process. If the memory usage increases by more than 10MB each day, even without the user starting and stopping PM collection, then the process is behaving abnormally.

Observe the `/opt/svplus/incoming/<hostname>` directory to see if there are any files being collected/parsed. Usually this directory will have a burst of stats files. When there are no new files being added in this directory, the processes that are behaving abnormally should be restarted.

Then, observe the memory usage using the `top` command.

**ID** CSCeg44814

**Symptom** Telnet and SSH windows launch even when no access privilege is set.

**Conditions** When launched from GUIs.

**Symptom** None. No major impact as Telnet and SSH require MGXs ID and password to ensure security.

**ID** CSCeg62641

**Symptom** DC polling fails on AXSM-16T3E3B and AXSME-32T1E1 ports. The polling of call statistics and load statistics counters fails in DC. This happens when the operation status of the port is down.

**Conditions** Polling of load and call statistics counters via DC GUI.

**Workaround** When the operation status of the port is down, do not poll the load and call statistics counters from the DC GUI. You do not need to poll these counters since the operation status of the port is down and there are no statistics to collect in this case.

**ID** CSCeg76641

**Symptom** NE Service or PM Service may not come up.

**Conditions** When all NEs are purged, and one or more NEs are added quickly.

**Workaround** There are two possible workarounds:

When you purge all NEs from Domain Explorer, first verify that all NEs are successfully purged (from the Audit Log) and MGX NE and PM Service are stopped (using `showmgm -v` command).

1. Add new NEs only after above verification is done.

or

2. Start Cisco MGX NE and PM services from Control Panel.

---

**ID** CSCeg76713

**Symptom** PM data continues to be collected even though the node has been purged.

**Conditions** This problem occurs when you:

---

**Step 1** Change the state of the NE to out-of-state.

**Step 2** Choose **Edit > Delete** immediately

If the time difference between Step 1 and Step 2 is less than (say 5 seconds) than the time it takes to stop the PM (time depends on number of slots, say 10 seconds for 7 slots).

---

**Workaround** Wait for a good 1 minute or so before going to Step 2.

---

**ID** CSCeg76902

**Symptom** Inspector view shows the wrong type for VXSM sensors.

**Conditions** Via Inspector view.

**Workaround** None. This is not a blocking issue and does not impact functionality.

---

**ID** CSCeg78953

**Symptom** NMServer dumps core while processing alarms.

**Conditions** This happens while NMServer processes alarms.

**Workaround** This core dump happens very rarely. The NMServer will automatically restart and there will not be major impact because of this process restarting since this symptom does not happen often.

We have observed this once during our entire development and testing cycle.

The core dump happens because the xml library used by the NMServer to evaluate the alarm correlation rules is not thread safe.

---

**ID** CSCeg79063

**Symptom** Cisco MGM Duration calculation is not correct.

**Conditions** When "Currently in sync-up" alarm is cleared and acknowledged.

**Workaround** Calculate manually.

---



**ID** CSCeg79107

**Symptom** Control Panel shows Cisco MGX NE/PM Service in Active state, even though Cisco MGX NE/PM Service is not running.

**Conditions** Condition for Incorrect state of Cisco MGX NE Service:

When MGX NE Service is deactivated from Control Panel, immediately after Cisco MGX NE Service was started (i.e. Cisco MGX NE Service is not initialized completely). When you deactivate the Cisco MGX NE Service from Control Panel, a dialog box pops up saying that Cisco MGX NE Service is not initialized yet, try after some time. When user clicks "OK", it actually deactivates Cisco MGX NE Service.

Condition for Incorrect state of Cisco MGX PM Service:

When Cisco MGX NE Service is deactivated from the Control Panel after it was initialized completely. When you deactivate Cisco MGX NE Service from Control Panel, a dialog box pops up saying that Cisco MGX PM Service will not run without Cisco MGX NE Service. So Cisco MGX PM Service will also be deactivated. When you click "OK," Cisco MGX PM Service will be activated but Control Panel will still show Cisco MGX PM Service as Active.

**Workaround** Because the Control Panel shows the Cisco MGX NE Service or PM Service as active even though the service is not active, you must deactivate the service before activating it.

**ID** CSCeg80477

**Symptom** Help contents are not shown, and the following error message is displayed:

"The requested URL /help/shared/WHnonIE4.css was not found on this server."

**Conditions** When Help is launched on a Solaris client.

**Workaround** Create a help directory and .css file as follows:

**Step 1** Create the following directory on the server, and create the .css file:

```
mkdir /opt/svplus/webServer/htdocs/help/shared
touch /opt/svplus/webServer/htdocs/help/shared/WHnonIE4.css
```

**Step 2** Update the file with the following contents:

```
/* Copyright (c) 1999 by Cisco Systems, Inc. */
/* All rights reserved */
/* Filename: WHnonIE4.css Version: 1.0.00 */
/* See end of file for revision history */

/* Stylesheet for IE 4 and higher browsers. */
/* Use WHnonIE4.css for Navigator browsers */

/* WinNS4 */
    /* begin body box */
    /* 1 - 'em-based symmetric a' */
    /* Added font-family attribute for IE version */
```

```
BODY{
    margin-right: 25px;
}

/* **** Define headings. Size is based on % of base font size **** */

h1{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 175%;
}

h2{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 160%;
}

h3{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 145%;
}

h4{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 130%;
}

h5{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 115%;
}

h6{
    font-family: Arial Narrow, Helvetica Black, sans-serif;
    font-weight:900;
    font-size: 100%;
}

/* Define the size of SMALL text */

SMALL {
    font-size: .8em;
}

/* **** Miscellaneous lists - not thoroughly tested! **** */

UL {
    list-style-type:disc;}
UL UL {
    list-style-type: square;}
UL UL UL {
    list-style-type: circle;}
OL UL {
    list-style-type: disc;}
OL OL LI {
    list-style-type: lower-alpha;}
OL OL OL LI{
    list-style-type: upper-alpha;}
OL OL UL LI {
    list-style-type: disc;}
```

```

OL UL UL {
    list-style-type: square;}
OL UL UL UL {
    list-style-type: circle;}
OL UL OL LI {
    list-style-type: lower-alpha;}
OL UL OL UL LI {
    list-style-type: square;}

/* **** Define basic table formatting. **** */

TD{ vertical-align: top;
}
TH { background: #cccccc;
}

/* **** Use this class for Return to Top lines **** */
/* For legacy support of Essentials help topics */

.return {
    color: blue;
    font-size: .6em;
    text-align: center;
}

/***** Use this style for buttons that are not based on graphics or javascript *****/

A.button1 {
    font-family: Arial, Helvetica Narrow, sans-serif;
    font-size: 10pt;
    text-decoration: none;
    font-weight: normal;
    color: white;
    background: #327474;
}
TH.button1 {
    background: #327474;
}

/* Button classes copied in from old style_2.css file. */
/* Verify that they don't conflict with existing button classes, */
/* And that they'll work in Navigator */

/*
A.button1:hover{
    color: #FFCC00;
}
A.button1{
    text-decoration: none;
    font-weight: normal;
    color: white;
    background: #327474;
}
TH.button1 {
    background: #327474;
}
.button1 {
    font-family: Arial, Helvetica Narrow, sans-serif;
    font-size: 10pt;
    float: center;
    padding: 1pt;
    border-top: 3px solid #99CC99;
    border-left: 3px solid #99CC99;
    border-right: 3px solid #006633;

```

```

border-bottom:      3px solid #006633;
}
*/

/* Classes copied from RoboHelp HTML-processed stylesheets that we discontinued,
for legacy support of files that use them */

/* Applied to Return To Top links */
P.return {
font-size : 0.6em;
text-align : center;
color : blue;}

/* Applied to heading row of data tables */
P.tablehead {
font-weight : bold;
text-align : center;}

/* **** Import IE style sheet. This command is only recognized by IE browsers, so this
next line doesn't affect NN output. */

/* @import url(style_2.css); */

/***** UPDATE HISTORY *****/

/* 4/27/1999 Merge style_1 and style_2; remove styles not supported by NN 4.x ;add
classes to support RoboHelp HTML-processed stylesheets that we discontinued. */
/*****/

```

**Step 3** Relaunch the Solaris client help page again or refresh the existing page.

---

**ID** CSCeg81498

**Symptom** The dashboard comes to the front when the Solaris desktop is locked.

**Conditions** Start the client and keep the dashboard open, then wait for Solaris to lock due to inactivity. Even when the desktop is locked, the dashboard comes to the top of the locked CDE.

**Workaround** From the CDE window Style Manager, deselect Allow primary windows on top.

---

**ID** CSCeg81540

**Symptom** Message dialog boxes flash and cannot be read properly.

**Conditions** This problem occurs if a network map is open and more than one NE visible on the map is deleted from the Domain Explorer.

**Workaround** None. The message indicates that the deleted NEs will disappear from their network map. Click OK or x to close the dialog box.

---

**ID** CSCeg81547

**Symptom** No log details are provided when an NE is marked as Under Maintenance.

**Conditions** No entry was found in the Audit log for the NE marked as Under Maintenance in the Domain Explorer.

**Workaround** None.

---

**ID** CSCeg81568

**Symptom** Alarm Browser shows wrong card alarms.

**Conditions** Upgrade the PXM runtime image.

**Workaround** Resynchronize the node manually.

---

**ID** Polling of real time counters for the SPVC VP connections fail in the Diagnostics Center GUI.

**Conditions** In Diagnostic Center, drag and drop the VP connection. Select the counters to be polled and the polling interval.

**Workaround** There is no workaround for this issue.

The users can monitor the real time counters for the VP Connections either through the CLI or by performing a SNMP GET on the cwacsTable defined in CISCO-WAN-ATM-CONN-STAT-MIB.my For the VP connections, the VCI Number should be defaulted to 0. In the server side code, the VCI number is defaulted to -1. Because of this, the SNMP GET for the real time counters fail.

## 1.6 Documentation Updates

This section of the Release Notes includes the following updates to the Cisco MGM documentation set:

- [1.6.1.1 Sample Configurations and Disk Space Requirements](#)
- [1.6.3.1 Ports between the Cisco MGM Server and MGX Switches](#)
- [1.6.2 Installing Oracle9i](#)

## 1.6.1 Errors

### 1.6.1.1 Sample Configurations and Disk Space Requirements

In the *Cisco Media Gateway Manager 5.0 Installation Guide*, *Table 1-1 Sample Configurations for Installing the Cisco MGM Server and Oracle9i on the Same Workstation*, and *Table 1-2 Disk Space Requirements for Installing the Cisco MGM Server and Oracle9i on the Same Workstation* the following errors have been corrected:

- RAM configurations for medium and large networks
- Disk space without PM for a large network

The correct values are shown in [Table 1-3](#) and [Table 1-4](#).

**Table 1-3** *Sample Configurations for Installing the Cisco MGM Server and Oracle9i on the Same Workstation*

Network Size	Oracle Database	CPUs	RAM	Max No. of MGX-MGWs with PM	Max No. of MGX-MGWs without PM	Max No. of Client	Disk Space with PM	Disk Space without PM
Small	Enterprise Edition	2 (1.2GHz)	4 GB	5	10	30	130 GB	42 GB
Medium	Enterprise Edition	4 (1.2GHz)	16 GB	25	50	50	214 GB	68 GB
Large	Enterprise Edition	8 (1.2GHz)	32 GB	50	100	100	434 GB	130 GB

**Table 1-4** *Disk Space Requirements for Installing the Cisco MGM Server and Oracle9i on the Same Workstation*

Network Size	No. of NEs	Disk Space with PM Collection	Disk Space Without PM Collection
Small	30	130 GB	42 GB
Medium	50	214 GB	68 GB
Large	100	434 GB	130 GB

### 1.6.1.2 5.3.5 Changing the Server IP Address When CiscoMGM and Oracle Are on the Same Server

In the *Cisco Media Gateway Manager 5.0 User Guide*, *5.3.6 Changing the Server IP Address When Cisco MGM and Oracle are on the Same Server* the following procedure has been corrected:

- 
- Step 1** Log into the Cisco MGM server as the root user.
- Step 2** Enter the following command to shut down the Cisco MGM server:
- ```
mgms-stop
```
- Step 3** Enter the following commands to shut down Oracle:
- ```
su - oracle
% sqlplus /nolog
SQL> connect /as sysdba
SQL> shutdown immediate
SQL> exit
```

- Step 4** Complete the following with the new IP address:
- Enter the following command to change the IP address in the `/etc/netmasks` file:  

```
#vi /etc/netmasks
```
  - Enter the following command to change the IP address in the `/etc/hosts` file:  

```
# vi /etc/hosts
```
  - Enter the following command to change the IP address in the `etc/hostname.xxx` file, where `xxx` is the IP interface that is defined in the Solaris server:  

```
# vi /etc/hostname.xxx
```
  - Enter the following command to change the default router file, if required:  

```
# vi /etc/defaultrouter
```

- Step 5** Enter the following commands to enter the new IP address in the Oracle files:

```
/oraclesw9i/product/9.2/network/admin/listener.ora
/oraclesw9i/product/9.2/network/admin/tnsnames.ora
```

- Step 6** Enter the following commands to enter the new IP address:

```
/opt/CiscoMGMServer/cfg/CTMServer.cfg
/opt/CiscoMGMServer/openfusion/classes/jacorb.properties
```




---

**Note** Change all instances of the IP address in these files.

---

- Step 7** Reboot the Cisco MGM server.
- Step 8** Enter the following command to verify that the Cisco MGM server has started:  

```
showmgm
```
- Step 9** Stop the Cisco MGM server:  

```
mgms-stop
```
- Step 10** Enter the following command to update the orbix domain:  

```
/opt/CiscoMGMServer/cwm/svplus/scripts/conf_orbix.csh PUBLISH_IP <new IP Address>
```
- Step 11** Enter the following command to start the Cisco MGM server :  

```
mgms-start
```
- 

## 1.6.2 Installing Oracle9i

In the *Cisco Media Gateway Manager 5.0 Installation Guide, 2.1.1 Installing Oracle 9i* the following procedure have been updated.

This section provides supporting information to assist you with the Oracle9i installation. You need to install the following components in this order:

- Oracle 9.2
- 9.2.0.6 Patch for Oracle9i

3. Oracle Patch 2617419
4. Oracle Patch 4067938
5. Oracle Patch 4147836

Use this information with Oracle's documentation.

## 1.6.2.1 Setting the Environment for Installation

To set the environment for installation, log in as the root user and complete the following steps:

- Step 1** Verify that the disk directories shown in [Table 1-5](#) exist.

**Table 1-5 Disk Directories**

Directory	Contents
/db01	For the system tablespace used by Oracle
/db02	For the basedata tablespace, the alarmdata tablespace, and the eventdata tablespace used by Cisco MGM
/db03	For the PM metadata tablespace used by Cisco MGM
/db04	For the INDEX tablespace used by Cisco MGM
/db05 <sup>1</sup>	For the archived logs
/mgm_backup <sup>2</sup>	For the backed-up database and configuration files
/oraclesw9i	For the Oracle software
/tftpboot	For the TFTP directory
	<b>Note</b> Disk partitioning is not required for /tftpboot, but the directory is required.

1. If you want to install the Cisco MGM database in ARCHIVELOG mode, the /db05 directory is required. ARCHIVELOG mode is required for hot database backups.
2. The /mgm\_backup directory can be a symbolic link to a storage device. Note that performance degrades if you map all of your symbolic links to the same partition and you do not have disk striping.

- Step 2** (Optional) If you want to use your existing partitions, enter the following commands from the / directory:

```
ln -s /partition_name_1 /db01
ln -s /partition_name_2 /db02
ln -s /partition_name_3 /db03
ln -s /partition_name_4 /db04
ln -s /partition_name_5 /db05
ln -s /partition_name_6 /mgm_backup
ln -s /partition_name_7 /oraclesw9i
```

- Step 3** If you do not have a TFTP directory, complete the following substeps to create one:

- a. Enter the following commands:

```
mkdir /tftpboot
chmod 777 /tftpboot
```



- b. Verify that the TFTP entry in the `/etc/inetd.conf` file is not commented.

The following example represents a typical TFTP entry in the `/etc/inetd.conf` file. In this example, the TFTP directory is `/tftpboot`:

```
tftp dgram udp6 wait root /usr/sbin/in.tftpd in.tftpd -s /tftpboot
```

- c. If the TFTP entry is commented, remove the pound sign (#) at the beginning of the line to uncomment it.

- Step 4** Enter the following command to create a UNIX group for database administrators:

```
groupadd -g 3303 dba
```

- Step 5** Enter the following command to create a UNIX account to own the Oracle software:

```
useradd -g dba -m -s /bin/csh -d /oraclesw9i oracle
```

- Step 6** Enter the following command to change the Oracle user password:

```
passwd oracle
```

Enter the new password; then, reenter the password to confirm it.

- Step 7** Insert the Cisco MGM 5.0 Server installation CD and enter the following command:

```
cd /cdrom/cdrom0/disk1/mgms
```

- Step 8** Enter the following command to list the files in the `cdrom/cdrom0/disk1/mgms` directory:

```
ls -laR
```




---

**Note** If a list of files is returned, it indicates that you can access the CD-ROM successfully. If no files are visible, or if an error message is returned, refer to [Appendix B, “Mounting and Unmounting CDs on Sun Solaris”](#) for mounting the CD-ROM.

---

- Step 9** Enter the following command to copy the default profile to the Oracle home directory:

```
cp /cdrom/cdrom0/disk1/mgms/cfg/{small | medium | large end}/.cshrc /oraclesw9i/.cshrc
```

For example, to copy the default profile for a small network, enter:

```
cp /cdrom/cdrom0/disk1/mgms/cfg/small/.cshrc /oraclesw9i/.cshrc
```

- Step 10** Enter the following command to determine what type of applications you can run on your operating system (OS):

```
isainfo -kv
```

If the output reads “64-bit sparcv9 applications” you can run both 64-bit and 32-bit applications. If the output reads “32-bit sparcv9 applications” you can run only 32-bit applications.




---

**Note** Cisco recommends being able to run 32-bit applications.

---

- Step 11** Complete the following:

- For installing 32-bit Oracle Enterprise Edition, enter the following command:

```
cp /cdrom/cdrom0/disk1/mgms/svrcustom.rsp /oraclesw9i
cp /cdrom/cdrom0/disk1/mgms/mgms/patchset.rsp /oraclesw9i
cp /cdrom/cdrom0/disk1/mgms/mgms/oui.rsp /oraclesw9i
```

**Step 12** Enter the following commands to change ownership of the Oracle software directories:

```
/usr/bin/chown -R oracle:dba /oraclesw9i
/usr/bin/chown -R oracle:dba /db01
/usr/bin/chown -R oracle:dba /db02
/usr/bin/chown -R oracle:dba /db03
/usr/bin/chown -R oracle:dba /db04
/usr/bin/chown -R oracle:dba /db05
/usr/bin/chown -R oracle:dba /mgm_backup
```

**Step 13** Enter the following commands to eject the Cisco MGM 5.0 Server installation CD:

```
cd /
eject cdrom
```

**Step 14** Enter the following commands to create a temporary staging area:

```
cd /
mkdir temp
chmod 777 /temp
```

**Step 15** If you are using an xterm window or a remote host, enter the following command to enable the xterm connection from the clients:

```
/usr/openwin/bin/xhost +
```

## 1.6.2.2 Installing the Oracle9i Software with the .rsp Response File Provided by Cisco

To install the Oracle9i software with the response file provided by Cisco:

**Step 1** Enter the following command to log in as the Oracle user:

```
su - oracle
```



**Tip** To verify the username, enter the **id** command.

**Step 2** Insert disk one of the Oracle9i installation CDs in the CD-ROM drive.

**Step 3** Enter the following command to set the display on your terminal:

```
setenv DISPLAY hostname:0.0
```

**Step 4** Enter the following command to verify that the display is set correctly:

```
echo $DISPLAY
```

In the output, you should see:

```
<hostname_or_IP_address>:0.0
```

**Step 5** Complete the following options:

- Enter the following command to start the Oracle Installer:  

```
./cdrom/cdrom0/orcl9201_1/runInstaller -responseFile /oraclesw9i/svrcustom.rsp &
```
- Enter the following command to start the Oracle Installer:  

```
./cdrom/cdrom0/orcl9201_1/runInstaller -responseFile /oraclesw9i/svrcustom.rsp &
```

**Step 6** At the Inventory Location screen, click **OK**.

- Step 7** The Oracle Universal Installer screen appears and prompts you to run the `/tmp/orainstRoot.sh` script. Log into another terminal window as the root user and enter the following command:

```
cd /tmp/
```




---

**Note** The Installer does not prompt you to run the `/tmp/orainstRoot.sh` script if you have a previous version of Oracle installed on your workstation or if the `/var/opt/oracle/oratab` file already exists on your workstation.

---

- Step 8** Enter the following command to run the `orainstRoot.sh` script:

```
./orainstRoot.sh
```

- Step 9** Return to the Oracle Universal Installer screen and click **Continue**.




---

**Note** The Oracle Universal Installer process might take up to five minutes.

---

- Step 10** The Disk Location dialog box prompts you for disk two of the Oracle9i installation CDs. Return to the terminal window where you ran the `./runInstaller` command and press **Return** on your keyboard to bring up the command prompt.

- Step 11** Enter the following commands at the command prompt:

```
eject cdrom
```

- Step 12** Remove disk one and insert disk two of the Oracle9i installation CDs.

- Step 13** Minimize the terminal window.

- Step 14** Return to the Disk Location dialog box and change the path to read:

```
/cdrom/cdrom0/orcl9201_2
```

Click **OK**.

- Step 15** The Disk Location dialog box prompts you for disk three of the Oracle9i installation CDs. Return to the terminal window where you ran the `./runInstaller` command and press **Return** on your keyboard to bring up the command prompt.

- Step 16** Enter the following command at the command prompt:

```
eject cdrom
```

- Step 17** Remove disk two and insert disk three of the Oracle9i installation CDs.

- Step 18** Minimize the terminal window.

- Step 19** Return to the Disk Location dialog box and change the path to read:

```
/cdrom/cdrom0/orcl9201_3
```

Click **OK**.

- Step 20** You are prompted to run `/oraclesw9i/product/9.2/root.sh` from another window. Log into another terminal window as the root user and enter the following command:

```
cd /oraclesw9i/product/9.2
```

- Step 21** Enter the following command to run the `root.sh` script:

```
./root.sh
```

**Step 22** At the prompt for the local bin directory, enter the following path in the root.sh script:

```
/oraclesw9i/product/9.2/local/bin
```



**Note** The local bin directory needs to be created before running root.sh script.

**Step 23** Return to the Oracle Universal Installer screen and click **Next**.

**Step 24** Enter the following commands to eject the CD:

```
eject cdrom
```

### 1.6.2.3 Downloading the 9.2.0.6 Patch for Oracle9i



**Note** If you already have the 9.2.0.6 patch for Oracle9i installed, you can skip this section.

Verify that the /oraclesw9i directory has enough disk space to download the patch.

To download the 9.2.0.6 patch for Oracle9i:

**Step 1** Go to <http://metalink.oracle.com> and click **Login to MetaLink**. Enter your Oracle metalink username and password.

**Step 2** Click **Patches**.

**Step 3** Click **Simple Search**.

**Step 4** In the Search by Patch Number(s) field, enter **3948480**.

**Step 5** In the Platform or Language field, choose the **Solaris Operating System (SPARC 32-bit)** option.

**Step 6** Click **Go**.

**Step 7** Click **Download**. For 32-bit Oracle, download **p3948480\_9206\_SOLARIS.zip**.

**Step 8** As the root user, save the patch to the /oraclesw9i directory and enter the following command to unzip the .zip file:

```
cd /oraclesw9i
unzip p3948480_9204_SOLARIS.zip
unzip <patch_zip_filename>
```

### 1.6.2.4 Installing the 9.2.0.6 Patch for Oracle9i

To install the 9.2.0.6 patch for Oracle9i:

**Step 1** Insert disk one of the Oracle9i installation CDs in the CD-ROM drive.

**Step 2** Enter the following command to log into the database workstation as the Oracle user:

```
su - oracle
```

**Step 3** Enter the following command to install the 9.2.0.6 rdbms server patch:



**Note** Errors will be displayed if the patch installation failed.

```
cd /oraclesw9i/Disk1
./runInstaller -silent -responseFile /oraclesw9i/patchset.rsp
```

**Step 4** At the prompt to run the root.sh script, log into another terminal window as the root user and enter the following commands:

```
cd /oraclesw9i/product/9.2
./root.sh
```

**Step 5** `./root.sh` will prompt you to enter the local bin directory path. The script will then ask whether to keep some of the Oracle relevant files. Enter **n** to replace the files.

**Step 6** Enter the following commands to eject the CD:

```
cd /
eject cdrom
```

**Step 7** Enter the following set of commands to remove the 9.2.0.6 patch installation files:

```
rm -rf Disk1
rm -rf p3948480_9206_SOLARIS.zip
rm -rf README.html
```

## 1.6.2.5 Downloading Oracle Patch 4067938



**Note** If you already have Oracle patch 4067938 installed, you can skip this section.

To download the Oracle patch:

**Step 1** Go to <http://metalink.oracle.com> and click **Login to MetaLink**. Enter your Oracle metalink username and password.

**Step 2** Click **Patches**.

**Step 3** Click **Simple Search**.

**Step 4** In the Search by Patch Number(s) field, enter **4067938**.

**Step 5** In the Platform or Language field, choose the **Solaris Operating System (SPARC 32-bit)** option.

**Step 6** Click **Go**.

**Step 7** Click **Download**.

**Step 8** Save the patch to the location of your choice.

## 1.6.2.6 Downloading the Oracle Patch Installer

Oracle patch 2617419 requires the Oracle patch installer. To download the Oracle patch installer:

- 
- Step 1** Go to <http://metalink.oracle.com> and click **Login to MetaLink**. Enter your Oracle metalink username and password.
  - Step 2** Click **Patches**.
  - Step 3** Click **Simple Search**.
  - Step 4** In the Search by Patch Number(s) field, enter **2617419**.
  - Step 5** In the Platform or Language field, choose **Solaris Operating System (SPARC 32-bit)**.
  - Step 6** Click **Go**.
  - Step 7** In the list of patches returned, click the first patch, which has the latest release number.
  - Step 8** In the Patch 2617419 window, go to the Platform or Language field and choose **Generic Platform** (the default).
  - Step 9** Click **Download**.
  - Step 10** Save the patch to the location of your choice.
- 

## 1.6.2.7 Installing Oracle Patch Installer 2617419 and 4067938

Oracle patches 2617419 and 4067938 require the Oracle patch installer. To download the Oracle patch installer:

- 
- Step 1** Log into the database workstation as the Oracle user and enter the following commands:
 

```
cd /oraclesw9i
mkdir oracle_patch
cd oracle_patch
```
  - Step 2** Locate the saved Oracle patch installer and the patch (2617419 and 4067938 respectively) and copy it to the /oraclesw9i/oracle\_patch directory.
  - Step 3** Enter the following of command to unzip the patch installer file. A directory by name "Opatch" will be created under oracle\_patch directory:
 

```
unzip p2617419_10102_GENERIC.zip
```
  - Step 4** Enter the following of command to unzip the patch file:
 

```
unzip p4067938_9206_SOLARIS.zip
```
  - Step 5** Enter the following commands to shut down the Oracle listener and all Oracle processes, if they are running:
 

```
sqlplus /nolog
connect /as sysdba
shutdown immediate
exit
lsnrctl stop
```

**Step 6** Enter the following commands to apply the Oracle security patch:

```
cd /oraclesw9i/oracle_patch/2617419
setenv PATH $ORACLE_HOME/OPatch:$(PATH)
/oraclesw9i/oracle_patch/OPatch/opatch apply

or
cd /oraclesw9i/oracle_patch/4067938
setenv PATH /oraclesw9i/oracle_patch/OPatch:$PATH
/oraclesw9i/oracle_patch/OPatch/opatch apply
```

---

## 1.6.2.8 Downloading Oracle Patch 4147836

To download the Oracle patch 4147836:

- 
- Step 1** Go to <http://metalink.oracle.com> and click Login to MetaLink. Enter your Oracle metalink username and password.
  - Step 2** Click **Patches & Updates**.
  - Step 3** Click **Simple Search**.
  - Step 4** In the Search by Patch Number(s) field, enter **4147836**
  - Step 5** In the Platform or Language field, choose the Solaris Operating System (SPARC 32-bit) option.
  - Step 6** Click **Go**.
  - Step 7** Click **Download**.
  - Step 8** Save the patch to the location of your choice.
- 

## 1.6.2.9 Installing the Oracle Patch 4147836

To install the Oracle patch 4147836:

- 
- Step 1** Log into the database workstation as the Oracle user and enter the following commands.
 

```
cd /oraclesw9i
mkdir oracle_patch
cd oracle_patch
```
  - Step 2** Locate the saved patch (4147836) and copy it to the /oraclesw9i/oracle\_patch directory.
  - Step 3** Enter the following of command to unzip the patch file:
 

```
unzip p4147836_9206_SOLARIS.zip
```
  - Step 4** Enter the following commands to shut down the Oracle listener and all Oracle processes, if they are running:
 

```
sqlplus /nolog
connect /as sysdba
shutdown immediate
exit
lsnrctl stop
```

**Step 5** Enter the following commands to apply the Oracle security patch:

```
cd /oraclesw9i/oracle_patch/4147836
setenv PATH /oraclesw9i/oracle_patch/OPatch:$PATH
/oraclesw9i/oracle_patch/OPatch/opatch apply
```

## 1.6.3 Omissions

### 1.6.3.1 Ports between the Cisco MGM Server and MGX Switches

Table 1-6 lists the FTP ports used to upload configurations from the Cisco MGM server to the Cisco MGX switches. This information is additional to 5.6.3 Ports between the Cisco MGM Server and MGX Switches in the *Cisco Media Gateway Manager 5.0 User Guide*.

**Table 1-6** Cisco MGM Server and MGX Switches

Module or Protocol	Port
Data port (FTP port used for configuration upload)	20
Control port (FTP port used for configuration upload)	21

## 1.7 Related Documentation

Refer to the following publications for additional information:

- *Cisco Media Gateway Manager 5.0 Installation Guide*
- *Cisco Media Gateway Manager 5.0 User Guide*
- *Cisco Media Gateway Manager 5.0 GateWay/CORBA User Guide and Programmer Manual*
- Online Help for Cisco MGM
- Cisco Documentation CD-ROM

## 1.8 Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

### 1.8.1 Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>



You can access international Cisco websites at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## 1.8.2 Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm)

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/index.shtml>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 1 800 553-NETS (6387).

## 1.9 Documentation Feedback

You can send comments about technical documentation to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

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

We appreciate your comments.

## 1.10 Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

### 1.10.1 Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year, at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

**Note**

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

## 1.10.2 Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

## 1.10.3 Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

## 1.11 Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:  
<http://www.cisco.com/go/marketplace/>
- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:  
<http://cisco.com/univercd/cc/td/doc/pcat/>
- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:  
<http://www.ciscopress.com>
- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:  
<http://www.cisco.com/packet>
- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:  
<http://www.cisco.com/go/iqmagazine>
- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:  
<http://www.cisco.com/ipj>
- World-class networking training is available from Cisco. You can view current offerings at this URL:  
<http://www.cisco.com/en/US/learning/index.html>

---

This document is to be used in conjunction with the documents listed in the “1.7 Related Documentation” section.

CCSP, CCVP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StrataView Plus, TeleRouter, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0502R)

Copyright © 1998 - 2005 Cisco Systems, Inc. All rights reserved.