



Installation

Cisco MGM is based on Cisco's Element Management Framework (Cisco EMF) software, which operates in a distributed environment using a server and clients. This chapter describes the deployment options, software components, hardware requirements, and installation procedures for Cisco MGM, and identifies the Cisco EMF options that are important when you are installing Cisco MGM.

Deployment Options

The following types of deployment are available:

- Server with local client. (See [Figure 2-1.](#)) A client can be local or remote. A local client is one that is running on the server itself.
- Server with local and remote clients. (See [Figure 2-2.](#)) A remote client is running on a Sun workstation separate from the server.

Server with Local Client

Every deployment includes Cisco EMF server and Cisco MGM extensions. Processes on the server keep track of the current state of the network, user access, and events. The Cisco EMF clients provide the user interface to the system. When you install a Cisco EMF server, you automatically add a local client. (See [Figure 2-1.](#))

Figure 2-1 Server With Local Client

**Note**

You can also log on to the server from a PC running X-window emulation software, such as ReflectionX or Exceed.

Server with Remote Clients

A Cisco EMF deployment can have additional clients installed on separate workstations. (See [Figure 2-2](#).) A client installation retrieves management information from the Cisco EMF server and displays it on the user interface. Using clients that run on separate hosts frees system resources on the server and improves overall performance. You can install client software from a local CD ROM drive; you do not need to mount files across a network.

Figure 2-2 Server with Local and Remote Clients

System Requirements

Cisco MGM and MGX 8000 Series hardware and software requirements are listed in the following sections.

Cisco MGM Hardware Requirements

The hardware resources you need for Cisco MGM depend on the number of Cisco MGX 8000 Series CVGs and associated MGCs that Cisco MGM will manage. [Table 2-1](#) lists the server and client requirements for small and large Cisco MGM installations.

Table 2-1 Cisco MGM Platform Requirements

Resource	Cisco MGM Server		Cisco MGM Client
	Small Installation ¹	Large Installation ²	
Workstation	Sun Netra t1400 ³	Sun Netra t1400 ³	Sun Ultra 10
Operating system	Solaris 8	Solaris 8	Solaris 8
Memory	2 GB RAM	4 GB RAM	256 MB RAM
Disk space	Two hard disks, each one 18 GB or larger	Four hard disks, each one 18 GB or larger	One hard disk, 9 GB or larger
Processor	2 x 440 MHz	4 x 440MHz	440 MHz
Swap space	5 GB ⁴	9 GB ⁴	2 GB
Monitor	17-inch color	17-inch color	17-inch color
Graphics card	24-bit	24-bit	24-bit
Power supply	1	2 (second power supply optional for high availability installations)	1
Miscellaneous Resources	Local or remote CD ROM DAT tape backup	Local or remote CD ROM DAT tape backup	Local or remote CD ROM

1. Up to 10 fully-loaded MGX CVGs
2. Between 10 to 50 fully-loaded MGX CVGs
3. Netra platforms are supported, but not required. Alternate platforms that have been tested include: Sun Ultra 60, 220r, 420r, 280r, and Netra 20. Sun UltraSPARC III servers and desktops are also supported by Cisco MGM.
4. If CiscoView is running on the same system as Cisco MGM, you will need an additional 1 GB swap space.

Cisco MGM Supported Hardware

Cisco MGM manages Cisco MGX 8000 Series CVGs based on the Cisco processor switch modules (PXM1, PXM1-E, and PXM45). In addition, Cisco MGM provides management of VISM, VISM-PR, RPM-PR, RPM-XF, SRM, SRM-E, AXSM, and AXSM-E cards. The following table lists the processor switch and services modules supported by chassis.

Table 2-2 Cisco MGM Supported Hardware

Modules	Chassis			
	MGX 8230	MGX 8250	MGX 8830	MGX 8850
PXM1	Yes	Yes	N/A	Yes
PXM1-E	N/A	N/A	Yes	Yes
PXM45	N/A	N/A	N/A	Yes
VISM	Yes	Yes	N/A	Yes
VISM-PR	Yes	Yes	Yes	Yes
RPM-PR	Yes	Yes	Yes	Yes
RPM-XF	N/A	N/A	N/A	Yes
SRM/SRM-E	Yes	Yes	Yes	Yes
AXSM/AXSM-E	N/A	N/A	N/A	Yes

In the preceding table, “yes” indicates that the module listed in the left-hand column is supported by the chassis type displayed at the top of the column. An entry of “N/A” indicates that the module listed in the left-hand column is not supported by the chassis type displayed at the top of the column.

For information on card-to-card compatibility, see the appropriate Cisco MGX software release notes.

Cisco MGM Software Requirements

This version of Cisco MGM requires the following software components:

- Cisco EMF Release 3.2 Service Pack 4 or greater
- CiscoView 5.4
- MGX 8230, 8250, 8830, and 8850 package release 4.11 (included with Cisco MGM 3.0 package)



Note

To ensure optimal system performance and the inclusion of critical security updates, it is recommended that you install the latest Solaris patches available.

Cisco MGX 8000 Series Software Requirements

The Cisco processor switch and service modules require the installation of specific firmware releases in order to function properly in Cisco MGX 8000 series chassis running Cisco MGM. Depending on the Cisco processor switch module present in the chassis, different service modules may be supported. For each processor module and service module within a particular chassis, the firmware release may vary.

The following table lists Cisco MGM and Cisco MGX 8000 Series CVG compatibility, including the supported firmware release. Other firmware versions may be used; however, some functionality may not be compatible with other firmware releases.

Table 2-3 Cisco MGM and Cisco MGX 8000 Series CVG Compliance Matrix

Chassis	Module		Supported Firmware Release ¹
	Processor Module	Service Module	
MGX 8230	PXM1	N/A	MGX 1.2.10
MGX 8250		VISM/VISM-PR	VISM 3.1
MGX 8850		RPM-PR	RPM 1.2.13
		SRM/SRM-E	N/A
MGX 8830	PXM1-E	N/A	MGX 3.0.20
MGX 8850		VISM-PR	VISM 3.1
		RPM-PR	RPM 1.2.13
		SRM/SRM-E	N/A
MGX 8850	PXM45	N/A	MGX 3.0.20
		VISM-PR	VISM 3.1
		RPM-PR/RPM-XF	RPM 1.2.13
		SRM/SRM-E	N/A
		AXSM/AXSM-E	AXSM 3.0.20

1. For other Cisco MGX firmware versions, see the corresponding Cisco MGX software release notes to determine the appropriate firmware version supported for the specific service module(s).

Media Gateway Controller Software Requirements

Cisco EMF and Cisco MGM provide integrated connection to the management interfaces of the following Media Gateway Controllers (MGCs):

- Cisco BTS 10200 Softswitch
- Tekelec VXi Media Gateway Controller (MGC)
- NexVerse ipVerse ControlSwitch

Table 2-4 shows the software requirements for each supported media gateway controller.

Table 2-4 Media Gateway Controller Software Requirements

Cisco BTS 10200	Release 3.3
Tekelec Vxi	Release 4.0
NexVerse ipVerse	Release 5.1

Configuring /etc/hosts Files

Before installing the Cisco MGM client software, the /etc/hosts file of the server and client machines must be modified.

Configuring the Server /etc/hosts File

Modify the server /etc/hosts file by adding the IP address and name of the client machine. Following is an example of the server hosts file before and after the modification:

Before:

```
# more /etc/hosts
#
# Internet host table
#
127.0.0.1    localhost
172.29.51.179  cmgm-server    loghost
```

After:

```
# more /etc/hosts
#
# Internet host table
#
127.0.0.1    localhost
172.29.51.179  cmgm-server    loghost
172.29.51.164  cmgm-client
```



Note

If the Cisco MGM server does not have DNS or NIS service, you need to also add the following line to your server /etc/hosts file to access the Cisco MGM online user guide:

```
198.133.219.25    www.cisco.com    www.cisco.com
```

If you do not update the server etc/hosts file, the warning dialog box and error message shown in [Figure 2-3](#) will appear when you attempt to login to Cisco MGM from the client machine:

Figure 2-3 Cisco MGM Login Warning Dialog

After you modify the /etc/hosts file, enter the following commands to restart the Cisco MGM server:

```
cd /opt/cemf/bin
./cemf shell
./cemf stop
./cemf start
```

**Note**

Wait until Cisco EMF stops before executing the cemf start command.

Configuring the Client /etc/hosts File

Modify the client /etc/hosts file by adding the IP address and name of the server machine. Following is an example of the client hosts file before and after the modification:

Before:

```
CEMF Client> more /etc/hosts
#
# Internet host table
#
127.0.0.1    localhost
172.29.51.164 cmgm-client  loghost
```

After:

```
CEMF Client> more /etc/hosts
#
# Internet host table
#
127.0.0.1    localhost
172.29.51.164 cmgm-client  loghost
172.29.51.179 cmgm-server
```

Installing CiscoView Applications

The Cisco MGM server software requires the integration of the CiscoView security package and installation of the WanCV package on the CiscoView server. The CiscoView security integration implements functionality on the CiscoView server so that you will not be required to log into the CiscoView server each time you launch the CiscoView application from the Cisco MGM EM. Essentially, the CiscoView server authenticates the CiscoView launch per the Cisco MGM login. The WanCV installation adds four device packages to the CiscoView server, specifically in support of MGX 8230, MGX 8250, MGX 8830, and MGX 8850.

If the CiscoView server is on the local machine, the CiscoView security and WanCV installation will be automatically performed by the Cisco MGM server installation. If the CiscoView server is on the remote machine, you must manually install the CV security and WanCV applications.

To manually install the CV security integration and WanCV applications on a remote CiscoView server, follow these steps:

-
- Step 1** Log into the remote CiscoView server as the root user.
 - Step 2** Ensure that CiscoView 5.4 is installed and running on the remote machine. For information about installing CiscoView, refer to the CiscoView product documentation located in the documentation directory of the CiscoView CD ROM.
 - Step 3** Enter the following commands in a terminal window on the remote machine:

```
/cdrom/cmgm3.0pkg/ciscoview/cvsecurity/cvsecurityinstall
/cdrom/cmgm3.0pkg/ciscoview/wancv/wancvinstall
```

Installing the Cisco MGM Server

Installing the Cisco MGM server software requires the following procedures:

1. Installing the Cisco EMF server software
2. Configuring raw partitions
3. Backing up the Cisco EMF database
4. Installing the Cisco MGM server software



Note

Before beginning the installation process, refer to the “Important Notes” section of *Release Notes for Cisco Media Gateway Manager, Release 3.0*.

Installing Cisco EMF Server Software

Install the Cisco EMF server software according to the procedures described in the *Cisco Element Management Framework Installation and Administration Guide*.

Configuring Raw Partitions

In the RAW File System (RAWFS), databases can be placed in a raw partition. If you have a large deployment, the databases should be placed in a raw partition. This improves Cisco EMF performance and allows databases to grow larger than 2 GB.

For more detailed information about configuring raw partitions for the Cisco EMF database, refer to the *Cisco Element Management Framework Installation and Administration Guide*.

Backing up the Cisco EMF Database

Cisco EMF backup and restore functions allow you to recover from hardware or software failures with minimal loss of management data. You can also use the backup and restore functions to move databases from one Cisco EMF installation to another, for example, to facilitate hardware upgrades.

Cisco EMF backups should be performed under the following circumstances:

- Before upgrading Cisco EMF
- Before installing or uninstalling a new element manager, such as Cisco MGM
- Before installing an upgrade or patch for installed Cisco EMF element manager packages
- Before making major changes to the network data model (such as deletion or untested changes)
- Before making major changes to the network hardware
- Before deploying a large number of new network devices
- On a daily basis

For detailed Cisco EMF backup and restore instructions, refer to *Cisco Element Management Framework Installation and Administration Guide*.

Installing Cisco MGM Server Software

The following procedure details how to install Cisco MGM server software. If this software already exists on the workstation, you may upgrade to a new release. For further information on upgrading Cisco MGM server software, see the [“Upgrading the Cisco MGM Server” section on page 2-13](#).

To install the Cisco MGM server, follow these steps:

-
- Step 1** Log in to the Cisco EMF server as the root user.
 - Step 2** Ensure that CiscoView 5.4 is installed and running on either the local or remote machine. For information about installing CiscoView, refer to the CiscoView product documentation located in the documentation directory of the CiscoView CD ROM.
 - Step 3** If the CiscoView server is on a remote machine, ensure that the CiscoView security integration and WANCV installation has taken place. For instructions on performing the security and Wan CV installations, see the [“Installing CiscoView Applications” section on page 2-8](#).



Tip

To ensure that the WANCV packages have been installed, click **About** on the CiscoView main window. Verify that the package names appear in the Installed Device Packages list at the bottom of the window.

If the CiscoView server is on the local machine, the security and WanCV installation will be automatically performed by the Cisco MGM installation. Proceed to [Step 4](#).

- Step 4** Navigate to the appropriate directory on the CD ROM by entering:

```
cd /cdrom/cm3m3.0pkg/cm3mv
```

- Step 5** Start the installation script.

```
./cm3mvinstall
```



Tip

To get help, enter **cm3mvinstall -h**



Note

During installation, you may get the following CiscoView installation message that can be ignored:

```
Preparing to install CiscoView Security files...
ERROR: cmd failed. Server reason:
CiscoView Security installation completed successfully.
```

- Step 6** Follow the onscreen instructions. When prompted for the type of installation, select the **cm3mvpkg Server Package** option.
A prompt displays requesting how you want to provide the host on which CiscoView and the required CiscoView applications are installed, by hostname or IP address.
- Step 7** Enter the corresponding CiscoView host option at the prompt.
A prompt displays according to the entry provided in [Step 7](#), hostname or IP address.
- Step 8** Enter the appropriate CiscoView server hostname or IP address accordingly.
Text displays indicating that the CiscoView Security and WanCV device packages are required by manual installation and lists the basic steps for installing. For additional information, see the [“Installing CiscoView Applications” section on page 2-8](#).

The script continues with the Cisco MGM server package installation. Text displays recommending that you backup the Cisco EMF database before continuing. Should you initiate a backup at this time, all sessions connected to the server will stop. For additional information, see the [“Backing Up the Cisco EMF Database” section on page 2-13](#).

The script checks to see if the Cisco MGM server package has been previously installed. If it determines that the package already exists, installation occurs as the [“Upgrading the Cisco MGM Server” section on page 2-13](#) describes. You are prompted to confirm the installation option displayed.

Step 9 Enter y to proceed with the installation or n to quit the installation accordingly.

If you entered n, the installation of the software aborts. If you entered y, the installation of the software continues and data displays indicating the resulting activities.

Upon completion of the package installation, you may check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Server/logfile
```

You may verify that the cmgmCtrl process is running. For example:

```
/opt/cemf/bin/cemf status
```

Installing Cisco MGM Clients

The Cisco EMF clients provide the user interface to the system. When you install a Cisco EMF Server, you automatically add a local client. (See [Figure 2-1](#)).

Installing the Cisco MGM clients requires the following procedures:

1. Installing the Cisco EMF client
2. Installing the Cisco MGM client



Note

Before beginning the installation process, refer to the Important Notes section of *Release Notes for Cisco Media Gateway Manager, Release 3.0*.



Note

For additional information about installing MGC EMS packages, refer to [Chapter 8, “Media Gateway Controller Integration”](#).

Installing Cisco EMF Client Software

Install the Cisco EMF client software according to the procedures described in the *Cisco Element Management Framework Installation and Administration Guide*.

Installing Cisco MGM Client Software

The following procedure details how to install the Cisco MGM client software. If Cisco MGM client software already exists on the client workstation, you may upgrade to a more recent release without uninstalling the existing software. For further information on upgrading Cisco MGM client software, see the [“Upgrading a Cisco MGM Client”](#) section on page 2-16.

To install Cisco MGM client software, follow these steps:

Step 1 Log in to the Cisco EMF client as the root user.

Step 2 Navigate to the appropriate directory on the CD ROM by entering:

```
cd /cdrom/cm3m3.0pkg/cm3mv
```

Step 3 Start the installation script.

```
./cm3m3install
```



Tip To get help, enter **cm3m3install -h**

Step 4 Follow the onscreen instructions. When prompted for the type of installation, select the **cm3m3pkg Client Package** option.

A prompt displays requesting how you want to provide the host on which CiscoView and the required CiscoView applications are installed, by hostname or IP address.

Step 5 Enter the corresponding CiscoView host option at the prompt.

A prompt displays according to the entry provided in [Step 7](#), hostname or IP address.

Step 6 Enter the appropriate CiscoView server hostname or IP address accordingly.

Text displays indicating that the CiscoView Security and WanCV device packages are required by manual installation and lists the basic steps for installing. For additional information, see the [“Installing CiscoView Applications”](#) section on page 2-8.

The script continues with the Cisco MGM client package installation.

The script checks to see if the Cisco MGM client package has been previously installed. If it determines that the package already exists, installation occurs as the [“Upgrading the Cisco MGM Server”](#) section on page 2-13 describes. You are prompted to confirm the installation option displayed.

Step 7 Enter y to proceed with the installation or n to quit the installation accordingly.

If you entered n, the installation of the software aborts. If you entered y, the installation of the software continues and data displays indicating the resulting activities.

Upon completion of the package installation, you may check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Server/logfile
```

You may verify that the cm3m3Ctrl process is running. For example:

```
/opt/cemf/bin/cemf status
```

Installing MGC EMS Packages

For information about media gateway controllers (MGCs) supported in Cisco MGM, refer to [Chapter 8, “Media Gateway Controller Integration.”](#)

Upgrading Cisco MGM

Cisco MGM servers and clients may be upgraded as necessary.

Upgrading the Cisco MGM Server

When upgrading the Cisco MGM server, the Cisco EMF server must be upgraded as well. By upgrading previously installed versions of the Cisco EMF and Cisco MGM server software packages, you are able to retain existing network data through the use of the Cisco EMF backup and restore feature.

Upgrading the Cisco MGM server involves the following:

1. [Backing Up the Cisco EMF Database](#)
2. [Saving Backup MGX Configuration Files](#)
3. [Upgrading the Cisco EMF Server Software](#)
4. [Upgrading Cisco MGM Server Software](#)
5. [Restoring the Cisco EMF Database](#)
6. [Restoring Cisco MGM Configuration Files](#)
7. [Synchronizing Managed Devices](#)

The following sections provide information on the performing the tasks in the preceding list.

Backing Up the Cisco EMF Database

Cisco EMF offers configuration backup capabilities through the Resource Manager Essentials (RME) application. Using the RME application you can archive the network database as necessary. For overview information on the RME tool and instructions specific to using RME with Cisco EMF, see the *Cisco Element Management Framework Installation and Administration Guide* and the *Cisco Element Management Framework User Guide*. For detailed information on the RME tool, see the *User Guide for Resource Manager Essentials*.

Saving Backup MGX Configuration Files

You can back up network card and chassis configurations using the Cisco MGM configuration save feature. The Cisco MGM configuration save function logs on to the selected device, invokes a **saveallcnf** command to generate the configuration file, and sends a **tftp get** command to transfer the device configuration file to your Cisco MGM workstation. For further information, see the [“Configuration Save”](#) section on page 4-9.

Upgrading the Cisco EMF Server Software

In order to upgrade the Cisco MGM server software, you must ensure that the Cisco EMF server software is upgraded to the required level and that the appropriate service pack is being used. For the current Cisco EMF software requirements, see the [“Cisco MGM Software Requirements” section on page 2-5](#).

Upgrade the Cisco EMF server software according to the procedures described in the *Cisco Element Management Framework Installation and Administration Guide*.

Upgrading Cisco MGM Server Software

The following procedure details how to upgrade Cisco MGM server software which has been previously installed. If Cisco MGM server software has never been installed on the client workstation, you may perform a new installation. For further information on upgrading Cisco MGM server software, see the [“Installing the Cisco MGM Server” section on page 2-9](#).

You can determine whether Cisco MGM server software exists on the workstation and/or the version of previously installed packages. For further information, see the [“Viewing Software Version Information” section on page 2-18](#).

Before loading the software, the installation script automatically checks the system for existing Cisco MGM server packages. If an existing Cisco MGM server package is found, the script compares the existing version to the version on the CD. If the version on the CD is more recent, the previously installed version is upgraded. If the version on the CD is older than the installed version, no system change occurs. If an existing package is not found, the version on the CD is installed.

To upgrade the Cisco MGM server, follow these steps:

-
- Step 1** Log in to the Cisco EMF/Cisco MGM server as the root user.
 - Step 2** Ensure that CiscoView 5.4 is installed and running on either the local or remote machine. For information about installing CiscoView, refer to the CiscoView product documentation located in the documentation directory of the CiscoView CD ROM.
 - Step 3** If the CiscoView server is on a remote machine, ensure that the CiscoView security integration and WANCV installation has taken place. For instructions on performing the security and Wan CV installations, see the [“Installing CiscoView Applications” section on page 2-8](#).



Tip To ensure that the CiscoView security integration and WANCV packages have been installed, click **About** on the CiscoView main window. Verify that the package names appear in the Installed Device Packages list at the bottom of the window.

If the CiscoView server is on the local machine, the security and WanCV installation will be automatically performed by the Cisco MGM installation. Proceed to [Step 4](#).

- Step 4** Navigate to the appropriate package directory on the CD ROM by entering:

```
cd /cdrom/cm3m3.0pkg/cm3m3
```

- Step 5** Start the installation script.

```
./cm3m3install
```



Tip To get help, enter **cm3m3install -h**



Note During installation, you may see the following CiscoView installation message that can be ignored:

```
Preparing to install CiscoView Security files...
ERROR: cmd failed. Server reason:
CiscoView Security installation completed successfully.
```

Step 6 Follow the onscreen instructions. When prompted for the type of installation, select the **cmgmvpkg Server Package Upgrade** option.

A prompt displays requesting how you want to provide the host on which CiscoView and the required CiscoView applications are installed, by hostname or IP address.

Step 7 Enter the corresponding CiscoView host option at the prompt.

A prompt displays according to the entry provided in [Step 7](#), hostname or IP address.

Step 8 Enter the appropriate CiscoView server hostname or IP address accordingly.

Text displays indicating that the CiscoView Security and WanCV device packages must be installed before upgrading the Cisco MGM server package and basic steps for installing. For additional information, see the [“Installing CiscoView Applications”](#) section on page 2-8.

The script continues with the Cisco MGM server package installation. Text displays recommending that you backup the Cisco EMF database before continuing. Should you initiate a backup at this time, all sessions connected to the server will stop. For additional information, see the [“Backing Up the Cisco EMF Database”](#) section on page 2-13.

The script checks to see if the Cisco MGM server package has been previously installed. If it determines that it has not, installation occurs as the [“Installing Cisco EMF Server Software”](#) section on page 2-9 describes. If a version of the Cisco MGM server package has been previously installed, the timestamp of the installed package displays. If this time stamp is newer or the same as the version on the CD, the installation script aborts. If the time stamp is older than the version on the CD, the time stamp displays and you are prompted to confirm the upgrade.

Step 9 Enter y to proceed with the upgrade or n to quit the upgrade accordingly.

The script removes the existing Cisco MGM server package and, again, prompts you to confirm the upgrade.

Step 10 Enter y to proceed with the upgrade or n to quit the upgrade accordingly.

Note that if you did not proceed with the upgrade at this point, you must install the Cisco MGM server package as a new installation. For further information, see the [“Installing Cisco EMF Server Software”](#) section on page 2-9.

The installation of the current software continues and data displays indicating the resulting activities.

Upon completion of the package installation, you may check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Server/logfile
```

You may verify that the cmgmCtrl process is running. For example:

```
/opt/cemf/bin/cemf status
```

Restoring the Cisco EMF Database

If the Cisco EMF database was backed up as identified by the [“Backing Up the Cisco EMF Database” section on page 2-13](#), restoration is possible via the RME application.

For overview information on the RME tool and instructions specific to using RME with Cisco EMF, see the *Cisco Element Management Framework Installation and Administration Guide* and the *Cisco Element Management Framework User Guide*. For detailed information on the RME tool, see the *User Guide for Resource Manager Essentials*.

Restoring Cisco MGM Configuration Files

You restore network card and chassis configurations using the Cisco MGM configuration restore feature. The Cisco MGM configuration restore function logs on to the selected device, and sends a **ftpput** command to transfer the configuration file from your Cisco MGM workstation to the selected device. For further information, see the [“Configuration Restore” section on page 4-11](#).

Synchronizing Managed Devices

After upgrading the server package, manually invoking subchassis synchronization initiates the subchassis discovery process to resync the system with the managed devices. Subchassis component information from each Cisco MGX 8000 Series CVG is retrieved to display corresponding objects on the Cisco MGM user interface.

The subchassis synchronization process inspects SNMP MIBs for the following configurable objects:

- Chassis and status
- Card configuration and status, including PXM1, PXM1-E, PXM45, VISM, VISM-PR, RPM-PR, RPM-XF, SRM, SRM-E, AXSM, and AXSM-E cards and lines
- Line configuration and status, including DS1, DS3, and SONET

For additional information, see the [“Manual Initiation of Subchassis Synchronization” section on page 4-5](#).

Upgrading a Cisco MGM Client

In order to upgrade the Cisco MGM client software, you must first ensure that the Cisco EMF client software is upgraded to the required level. For the current Cisco EMF software requirements, see the [“Cisco MGM Software Requirements” section on page 2-5](#). Upgrade the Cisco EMF client software according to the procedures described in the *Cisco Element Management Framework Installation and Administration Guide*.

The following procedure details how to upgrade Cisco MGM client software which has been previously installed. If Cisco MGM client software has never been installed on the client workstation, you may perform a new installation. For further information on upgrading Cisco MGM client software, see the [“Installing Cisco MGM Clients” section on page 2-11](#).

Before loading the software, the installation script automatically checks the system for existing Cisco MGM client packages. If an existing Cisco MGM client package is found, the script compares the existing version to the version on the CD. If the version on the CD is more recent, the previously installed version is upgraded. If the version on the CD is older than the installed version, no system change occurs. If an existing package is not found, the version on the CD is installed.

To upgrade Cisco MGM client software, follow these steps:

-
- Step 1** Log in to Cisco EMF as the root user.
- Step 2** Ensure that the CiscoView Security and WanCV device packages are installed on the CiscoView server. For further details, see the [“Installing CiscoView Applications” section on page 2-8](#).
- Step 3** Navigate to the appropriate package directory on the CD ROM by entering:
- ```
cd /cdrom/cm3m3.0pkg/cm3mv
```
- Step 4** Start the installation script.
- ```
./cm3mvininstall
```



Tip To get help, enter **cm3mvininstall -h**

- Step 5** Follow the onscreen instructions. When prompted for the type of installation, select the **cm3mvpkg Client Package Upgrade** option.
- A prompt displays requesting how you want to provide the host on which CiscoView and the required CiscoView applications are installed, by hostname or IP address.
- Step 6** Enter the corresponding CiscoView host option at the prompt.
- A prompt displays according to the entry provided in [Step 6](#), hostname or IP address.
- Step 7** Enter the appropriate CiscoView server hostname or IP address accordingly.
- Text displays indicating that the CiscoView Security and WanCV device packages must be installed before upgrading the Cisco MGM client package and basic steps for installing. For additional information, see the [“Installing CiscoView Applications” section on page 2-8](#).
- The script continues with the Cisco MGM client package installation. The script checks to see if the Cisco MGM client package has been previously installed. If it determines that it has not, installation occurs as the [“Installing Cisco MGM Client Software” section on page 2-12](#) describes. If a version of the Cisco MGM client package has been previously installed, the timestamp of the installed package displays. If this time stamp is newer or the same as the version on the CD, the installation script aborts. If the time stamp is older than the version on the CD, the time stamp displays and you are prompted to confirm the upgrade.
- Step 8** Enter y to proceed with the upgrade or n to quit the upgrade accordingly.
- The script removes the existing Cisco MGM client package and prompts you to confirm the upgrade.
- Step 9** Enter y to proceed with the upgrade or n to quit the upgrade accordingly.
- Note that if you did not proceed with the upgrade at this point, you must install the Cisco MGM client package as a new installation. For further information, see the [“Installing Cisco MGM Client Software” section on page 2-12](#).
- The installation of the current software continues and data displays indicating the resulting activities. Upon completion of the package installation, you may check the installation log for errors. The log file is in the following location:

```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Server/logfile
```

You may verify that the cm3mCtrl process is running. For example:

```
/opt/cemf/bin/cemf status
```

Changing the Installation

Cisco MGM includes scripts and options for viewing software information and uninstalling software.

Viewing Software Version Information

To view software version information, follow these steps:

-
- Step 1** Log in as the root user.
- Step 2** Change to the directory for the installation script.
- ```
cd <CEMFROOT>/config/scripts/cmgmv
```
- Step 3** Run the installation script with the -s option.
- ```
./cmgmvinstall -s
```

The script displays software information

Uninstalling Cisco MGM Server or Client

The uninstall script can be run on the server and/or client machines. When you uninstall the Cisco MGM server, you also remove the Cisco MGM client from the same host. On a client machine, the script just removes the client software.



Note

Before uninstalling the Cisco MGM server or client, backup your Cisco EMF database according to the procedures described in the *Cisco Element Management Framework Installation and Administration Guide*, Chapter, 10, “Cisco EMF Database Backup and Restore”.

To remove Cisco MGM, follow these steps:

-
- Step 1** Log in as the root user.
- Step 2** Change to the script directory.
- ```
cd <CEMFROOT>/config/scripts/cmgmv
```
- Step 3** Run the uninstallation script.
- ```
./cmgmvinstall -r
```
- Step 4** If you receive a “port not ready” message, repeat [Step 3](#). If the problem persists, contact technical support.
- Step 5** Check the installation log for errors. The server log file is in the following location:
- ```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Server/logfile
```
- The client log file is in the following location:
- ```
/var/adm/Atlantech/avinstall/Cisco_Element_Management_Framework_-_Client/logfile
```
-

**Note**

Uninstalling Cisco MGM does not uninstall WanCV and other CiscoView integration files that were installed in [Step 2](#) of the installation procedures. The following directory and files remain in your CiscoView installation:

```
<CiscoView Root>/www/classpath/ems  
<CiscoView Root>/www/classpath/cvpars.properties  
<CiscoViewRoot>/www/classpath/com/cisco/nm/cvw/devpkgs/MGX8*.zip  
<CiscoView Root>/htdocs/CmgmSessionTimeout.html
```

Configuring Cisco MGX 8000 Series CVGs

For the Cisco MGM to communicate with Cisco MGX 8000 Series CVGs, you must initialize the following parameters for each chassis:

- Management IP address
- System location
- Read and read-write community strings
- Telnet/FTP login and password

For more information about configuring Cisco MGX nodes, refer to the following documents:

- *Cisco MGX 8230 Multiservice Gateway Command Reference*
- *Cisco MGX 8250 Multiservice Gateway Command Reference*
- *Cisco MGX 8830, MGX 8850 (PXM45 and PXM1E), and MGX 8950 Command Reference*

For detailed information about managing Cisco MGX 8000 Series CVGs using CiscoView, refer to CiscoView Documents on CCO, or refer to the following individual documents:

- *WAN CiscoView Release 3 for the MGX 8230 Edge Concentrator, Release 1*
- *WAN CiscoView Release 3 for the MGX 8250 Edge Concentrator, Release 1*
- *WAN CiscoView Release 3 for the MGX 8850 Edge Switch, Release 1*
- *WAN CiscoView Release 2 of the MGX 8850*

