



Installation Guide for Cisco Multicast Manager 2.5

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Preface

This preface describes the objectives, audience, organization, and conventions of the *Installation Guide for Cisco Multicast Manager 2.5*. It refers you to related publications and describes online sources of technical information.

Cisco Multicast Manager (CMM) is a web-based software application that requires no client software. With CMM, you can gather information about the multicast running in your network, monitor multicast networks, and diagnose problems.

This preface includes:

- [Document Objectives, page v](#)
- [Document Audience, page v](#)
- [Document Organization, page vi](#)
- [Document Conventions, page vi](#)
- [Related Documentation, page vii](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page vii](#)

Document Objectives

This guide describes how to install Cisco Multicast Manager. Using the information provided in this guide, you can complete the tasks that are necessary to install CMM in your multicast environment.

Document Audience

This guide is for network administrators or operators who use the CMM software to manage multicast networks. Network administrators or operators should have:

- Basic network management skills
- Basic multicast knowledge

Document Organization

This guide contains the following chapter:

- [Chapter 1, “Installing Cisco Multicast Manager,”](#) describes preliminary installation steps, detailed installation steps for the Solaris platform and the Linux platform, and tasks to perform after the initial installation.

Document Conventions

This guide uses basic conventions to represent text and table information.

Command descriptions use the following conventions:

- Commands and keywords are in **boldface** font.
- Arguments for which you supply values are in *italic* font.
- Elements in square brackets ([]) are optional.
- Alternate but required keywords are grouped in braces ({ }) and separated by a vertical bar (|).

Examples use the following conventions:

- Terminal sessions and information that the system displays are printed in `screen` font.
- Information that you enter is in **boldface screen** font. Variables for which you enter actual data are printed in *italic screen* font.
- Nonprinting characters, such as passwords, are shown in angle brackets (< >).
- Information that the system displays is in `screen` font, with default responses in square brackets ([]).

This publication also uses the following conventions:

- Menu items and button names are in **boldface** font.
- Directories and filenames are in *italic* font.
- If items such as buttons or menu options are grayed out on application windows, it means that the items are not available either because you do not have the correct permissions or because the item is not applicable at this time.



Note

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in the manual.



Caution

Means *reader be careful*. You are capable of doing something that might result in equipment damage or loss of data.



Tip

Means *the following are useful tips*.

Related Documentation

Additional information can be found in the following publications of the CMM documentation set:

- *User Guide for Cisco Multicast Manager 2.5*
- *Release Notes for Cisco Multicast Manager 2.5*
- *Documentation Guide and Supplemental License Agreement for Cisco Multicast Manager 2.5*

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>



CHAPTER 1

Installing Cisco Multicast Manager

This chapter contains the following sections:

- [System Requirements, page 1-1](#)
- [Licensing, page 1-3](#)
- [TFTP Server, page 1-3](#)
- [Solaris Installation Instructions, page 1-4](#)
- [Linux Installation Instructions, page 1-8](#)
- [Upgrading to Cisco Multicast Manager 2.5, page 1-13](#)
- [Starting and Stopping CMM, page 1-16](#)

System Requirements

This section describes the system requirements for running Cisco Multicast Manager 2.5.

Operating Systems

Cisco Multicast Manager can run on Linux systems and on Sun Microsystems systems running Sun Solaris.

Linux

CMM 2.5 can run on the following Linux versions:

- Red Hat Enterprise Linux ES/AS 3
- Red Hat Enterprise Linux ES/AS 4

Sun Systems

CMM 2.5 can run on the following Sun Solaris versions:

- Solaris 8
- Solaris 9
- Solaris 10

**Note**

Solaris x86 is not supported.

Supported Hardware Platforms

This section describes the minimum recommended hardware for running Cisco Multicast Manager 2.5 on a Linux system or a Sun Solaris system.

Linux

On Linux systems, the following hardware is supported:

- Dual AMD Opteron 250 processor.
A 2.4 GHz 64-bit processor is recommended for a large enterprise network (more than 500 devices).
- 2.8 GHz Intel Pentium IV or 2.8 GHz Intel Xeon processor.
- A Dual 2.8 GHz Intel Pentium IV or a Dual 2.8 GHz Intel Xeon processor is recommended for large enterprise networks (more than 500 devices).

Sun Microsystems Servers

Cisco Multicast Manager supports the following hardware on Sun Microsystems servers:

- **Sun Fire V440:** Up to four 1.593 GHz UltraSPARC IIIi processors for a large enterprise network (more than 500 devices).
- **Sun Fire V240:** One 1.34 GHz or two 1.5 GHz UltraSPARC processors.

**Note**

The 64-bit versions of Red Hat are currently not supported.

Disk Space Requirements

CMM requires 300 MB of disk space.

**Note**

Disk space requirements will vary depending on the size of the network, the number of devices being polled for thresholds, and how often log files are rotated. The following log files are generated by CMM 2.5:

```
<INSTALLDIR>/mmtsys/sys/events.log  
<INSTALLDIR>/mmtsys/sys/rmspollid.log  
<INSTALLDIR>/httpd_perl/logs/error_log
```

Memory Requirements

- 2 GB
- 4 GB for Large Enterprise (more than 500 devices)

Licensing

CMM 2.5 requires a license file, which is provided when you purchase the product. The license file enables the product features that you have purchased.

The license file can enable:

- Cisco Multicast Manager with Video Operations Solution (VOS) support.
- Cisco Multicast Manager with Multicast VPN (MVPN) support.
- Cisco Multicast Manager with both VOS support and MVPN support.

If one of the features is not enabled, then the menus in the user interface do not include selections that enable options provided with the feature.

The application license is contained in the `license.key` file.

The `license.key` file can be saved anywhere on the installation machine. During installation of CMM, the system prompts for the license key. If `license.key` file is present on the installation machine, then the path and filename of the license key must be entered.

If the `license.key` file is not present during installation, or the system has an invalid license file, then place the correct valid license file in the following directory:

On Solaris:

```
/opt/RMSMMT/mmtsys/sys
```

On Linux:

```
/usr/local/netman/mmtsys/sys
```

The file should be owned by `mmtuser` (`chown mmtuser:mmtuser license.key`) and be set to read-only (`chmod 0444 license.key`). The license is tied to the IP address of the CMM server.

TFTP Server

Cisco Multicast Manager requires that the server have TFTP enabled if you want to download router configurations and use the router config verification tool.

A TFTP directory should be created on the largest partition and then linked from the root directory as follows—assuming the directory was created under `/usr`: `ln -s /usr/tftpboot /tftpboot`.

For Linux ES/AS 4:

```
tftp-0.39-2
```

For Linux ES/AS 3:

```
tftp-0.39-0.EL3.1
```

After TFTP is installed, modify the `/etc/xinetd.d/tftp` file to enable the TFTP server.

Set the ownership and permissions as follows:

```
chown root:mmtuser tftpboot
chmod 0775 tftpboot
```

Then restart the **xinetd** process: `/etc/init.d/xinetd restart`.

For Solaris:

Comment out the `tftpd` line in the `/etc/inetd.conf` file to enable the TFTP server, then restart the **inetd** process.

Linux IP Address/Default Route

- To change the system's IP address you modify the `/etc/sysconfig/network-scripts/ifcfg-eth0` file, then restart the system.
- To change the default gateway, you must modify the `/etc/sysconfig/network` file.
- To temporarily change these values you can use the following commands:

```
ifconfig eth0 x.x.x.x
route delete default
route add default gw x.x.x.x metric 1
```

Solaris Installation Instructions

Complete these steps to install CMM 2.5 on a Sun Solaris system:

1. Install the license file.
2. Create the installation directory (optional).
3. If you are installing from the CD-ROM, mount the CD-ROM.
4. If you are installing from the tar file, unzip the tar file.
5. Run the Solaris installation script.

Installing the License File

Copy the `license.key` file into an appropriate directory on the host machine. During installation, the interface will prompt you for the location of the license file. Enter the path where the `license.key` file is located. If the license file is invalid, or not present in the host, then after the installation is complete, copy the valid license file under the directory `/opt/RMSMMT/mmts/sys/sys` with the owner as `mmtuser`, and then restart the CMM.

Creating the Installation Directory (Optional)

On Solaris systems, Cisco Multicast Manager must be installed in the `/opt/RMSMMT` directory, and requires approximately 300MB of disk space.

If there is not enough room in `/opt`, create the `RMSMMT` directory on another partition, then create a symbolic link to it from `/opt`. For example, log in as root and issue these commands:

```
# mkdir /space/RMSMMT
# cd /opt
# ln -s /space/RMSMMT RMSMMT
```

```
# chown -h mmtuser:mmtuser RMSMMT
```

If you symbolically link /opt/RMSMMT to the actual installation directory as shown above, when the installation is complete, you **must** change directory to the actual installation directory. For example:

```
# cd /space
```

and issue the following command:

```
# chown -R mmtuser:mmtuser RMSMMT
```

Otherwise, the installation creates the directory and sets the ownership for you.

Mounting the CD-ROM

If you are mounting a **DVD** and the process vold is not running, you will need to manually mount the CD-ROM, use one of the following commands:

```
# mount -rt hsfs /dev/sr0 /cdrom
or
# mount -rt hsfs /dev/dsk/c0t6d0s2 /cdrom
```

If you are mounting an **ISO CD-ROM** image downloaded from Cisco.com, use the following command::

```
mount -F hsfs -o ro `lofiadm -a /export/temp/cmm25.iso` /mnt
```



Note /mnt is the mount point and can be any designated directory. If this command does not work, please check with your sysadmin for mounting instructions.

Unzipping the Tar File

If you are installing from the tar file, create a /tmp directory and place the tar file there:

```
# cd /tmp
# gunzip -c mmt-sol-2.5-X-full.tar.gz | tar xvf -
```

Running the Solaris Installation Script

To run the Solaris installation script:

Step 1 Log in as **root**.

Step 2 If you are installing from a CDROM, enter:

```
# cd /cdrom/cdrom0
# ./install.sh
```

If you are installing from the extracted tar file location, enter:

```
# cd /tmp/RMSMMT
# ./setup.sh
```

The system issues a series of prompts.

Step 3 Answer the prompts as indicated in [Table 1-1](#).

Table 1-1 *Solaris Installation Prompts*

Prompt	Response
Each product must be purchased individually, however a single license can enable one or more of the applications. Have you obtained a license key? [y/n]:	If you have obtained a license key, enter y .
The application installs in /opt/RMSMMT. Do you wish to continue? [y/n]:	Enter y to install in the default installation directory.
The community name to add read-only access for (default- public):	The (default - public) is the default but user can specify what community string that is configured on their devices.
The physical location of the system:	Enter a description of where you are located.
Contact information of the administrator (default - root):	Enter the best method of contacting the administrator (Example: phone number, email address, etc.).
Do you want to disable access control checks (y/n): (Default - y)	Select y .
Do you want to add some other Trap OIDs with the default list (y/n) (default - n):	Select n if you do not wish to add more Trap OIDs. If you wish to add more OIDs, select y and enter the TRAP OID to be modified.
Would you like to install the license key now? [y/n]:	Select y to install the license.key file.
Enter license file:	Enter the path and filename of the license.key file.

Example 1-1 shows sample output from the Solaris installation.

Example 1-1 Sample Output from the Solaris Installation Script

```
# /tmp/RMSMMT/
# ./setup.sh
Installing Cisco Multicast Manager Version 2.5
Installing Cisco Route Manager Version 2.3.2
Copyright (c) 2003-2007 Cisco Systems, Inc. All Rights Reserved.

Each product must be purchased individually, however a single license can enable
one or more of the applications.
Have you obtained a license key? [y/n]: y

Please install the license file according to the release notes once this install
ation finishes.

The application installs in /opt/RMSMMT. Do you wish to continue? [y/n]: y
Creating mmtuser gid...
The mmtuser group already exists
Creating mmtuser uid...
The mmtuser id already exists.
Installing Apache...
Installing Perl...
Installing MIBS...
Installing support files...
Installing ciscomm to /etc/init.d...
ln: /etc/init.d/ciscomm and /etc/rc0.d/K03ciscomm are identical
ln: /etc/init.d/ciscomm and /etc/rc1.d/K03ciscomm are identical
ln: /etc/init.d/ciscomm and /etc/rc3.d/S98ciscomm are identical
ln: /etc/init.d/ciscomm and /etc/rcS.d/K03ciscomm are identical
Initializing IP Address database with reserved Multicast Addresses...
Modifying httpd.conf file for this system...
Configuring Trap Receiver and SNMP Agent...
-e
Getting Configuration Information for SNMP Agent
=====
-e
Access control Setup
-e Description: SNMPv1/SNMPv2c read-only access community name
-e
The community name to add read-only access for (default - public):
-e Community name for read only access is public
-e
System Information Setup
-e Description: This section defines some of the information reported in the
-e          "System" mib group
-e
The physical Location of the system :
-e Contact Information of the Administrator (default - root@):
-e
Contact Information of the Administrator is root@
-e
Getting Configuration Information for Trap Receiver
=====
-e
Access control Setup
-e Do you want to disable access control checks (y/n) (default - y):
-e
Disables the access control check and accepts all incoming Notification traps
-e
Following are the list of default OIDs the TRAP receiver is configured with
-e
```

```

        1. ciscoIpMRouteMissingHeartBeats (1.3.6.1.4.1.9.10.2.3.1.0.1)
-e      2. pimNeighborLoss (1.3.6.1.3.61.1.0.1)
-e      3. CISCO-PIM-MIB Traps (1.3.6.1.4.1.9.9.184.2.0.*)
-e      4. MSDP-MIB Traps (1.3.6.1.3.92.1.1.7.*)
-e      5. ciscoMvpnMvrfChange (1.3.6.1.4.1.9.10.113.0.2)
-e      6. iVMS Traps (1.3.6.1.4.1.15181.11.1.*)
-e
Do you want to add some other Trap OIDs with the default list (y/n) (default - n
):
-e Default Trap OIDs Configured
Installation Finished.
Would you like to install the license key now? [y/n]: y

Cisco Multicast Manager/Cisco Route Manager
License Installation Utility
Copyright (c) 2003-2007 Cisco Systems, Inc. All Rights Reserved.

Enter license file: /opt/license.key
Installing license...
Testing license...
Licensed to   : Cisco
Ip address   : 172.20.111.216
Expire date  : No expiration date.
Features     : MMT,VOS,MVPN
Device limit : 1000
Starting the application...
Sun Microsystems Inc.  SunOS 5.8      Generic Patch  February 2004

going to start liblog

completed to start liblog
/opt/RMSMMT/httpd_perl/bin/apachectl startssl: httpd started
Starting the polling daemon...
Sun Microsystems Inc.  SunOS 5.8      Generic Patch  February 2004
Starting the CLI proxy daemon...
Sun Microsystems Inc.  SunOS 5.8      Generic Patch  February 2004
Starting SNMP Trap Receiver daemon...
-e Starting SNMP Trap Receiver

Starting SNMP Agent daemon...
-e Starting SNMP Agent

```

Linux Installation Instructions

Complete these steps to install CMM 2.5 on a Linux system:

1. Install the license file.
2. Create the installation directory (optional).
3. If you are installing from the CD-ROM, mount the CD-ROM.
4. If you are installing from the tar file, unzip the tar file.
5. Run the Linux installation script.

Installing the License File

Copy the license.key file into an appropriate directory on the host machine. During installation, the interface will prompt you for the location of the license file. Enter the path where the license.key file is located. If the license file is invalid, or not present in the host, then after the installation is complete, copy the valid license file under the directory /usr/local/netman/mmtsys/sys with the owner as mmtuser, and then restart the CMM.

Creating the Linux Installation Directory (Optional)

On a Linux system, install Cisco Multicast Manager in /usr/local/netman. On a Linux installation, Cisco Multicast Manager requires approximately 300 MB of disk space.

If there is not enough room in /usr/local, create the netman directory on another partition, then create a symbolic link to it from /usr/local. For example:

```
# mkdir /space/netman
# cd /usr/local
# ln -s /space/netman netman
# chown -h mmtuser:mmtuser netman
```

If you symbolically link /usr/local/netman to the actual installation directory as shown above, then when the installation is complete, you **must** change directory to the actual installation directory. For example:

```
# cd /space
```

and issue the following command:

```
# chown -R mmtuser:mmtuser netman
```

Otherwise, the installation program creates the directory and sets the ownership for you.

Mounting the CD-ROM (Linux)

If you are mounting an actual physical CD-ROM, use one of the following commands:

For **Red Hat Linux ES/AS 3**:

```
# mount /dev/cdrom /mnt/cdrom
```

For **Red Hat Linux ES/AS 4**:

```
# mount /dev/hdc /media/cdrom
```

If you are mounting an **ISO CD-ROM** image downloaded from Cisco.com, use the following command:

```
# mount -t iso9660 -o loop image.iso /mnt/isoimage
```

**Note**

/mnt is the mount point and can be any designated directory. If this command does not work, please check with your system administrator for mounting instructions.

Unzipping the Tar File

If you are installing from the tar file, create a /tmp directory and place the tar file there:

```
# cd /tmp  
# gunzip -c mmt-lin-2.5-X-full.tar.gz | tar xvf -
```

Running the Linux Installation Script

To run the Linux installation script:

Step 1 Log in as root.

Step 2 If installing from a CDROM enter:

```
# cd /cdrom/cdrom0  
# ./install.sh
```

If installing from the extracted tar file location enter:

```
# cd /tmp/netman  
# ./setup.sh
```

The system issues a series of prompts.

Step 3 Answer the prompts as indicated in [Table 1-2](#).

Table 1-2 Linux Installation Prompts

Prompt	Response
Each product must be purchased individually, however a single license can enable one or more of the applications. Have you obtained a license key? [y/n]:	If you have obtained a license key, enter y .
The application installs in /usr/local/netman. Do you wish to continue? [y/n]	Enter y to install in the default installation directory.
The community name to add read-only access for (default- public):	Enter (default - public) as the default but you can specify what community string that is configured on your devices.
The physical location of the system:	Enter a description of where you are located.
Contact information of the administrator (default - root):	Enter the best method of contacting the administrator (Example: phone number, email address, etc.)
Do you want to disable access control checks (y/n): (Default - y)	Enter y .
Do you want to add some other Trap OIDs with the default list (y/n) (default - n):	Enter n if you do not wish to add more Trap OIDs. If you wish to add more OIDs, select y and enter the TRAP OID to be modified.
Would you like to install the license key now? [y/n]:	Enter y to install the license.key file. Specify the absolute path.
Enter license file:	Enter the path and filename of the license.key file

[Example 1-2](#) shows sample output from the Linux installation.

Example 1-2 Sample Linux Installation Output

```
# ./install.sh
Installing CMM for Linux
AS4 ok
Installing Cisco Multicast Manager Version 2.5
Installing Cisco Route Manager Version 2.3.2
Copyright (c) 2003-2007 Cisco Systems, Inc. All Rights Reserved.
```

```
Each product must be purchased individually, however a single license can enable one or more of the applications.
Have you obtained a license key? [y/n]: y
```

```
Please install the license file according to the release notes once this installation finishes.
```

```
The application installs in /usr/local/netman. Do you wish to continue? [y/n]: y
Creating mmtuser gid...
The mmtuser group already exists
Creating mmtuser uid...
The mmtuser id already exists.
```

```

Installing Apache...
Installing Perl...
Installing MIBS...
Installing support files...
Installing ciscomm to /etc/init.d...
/bin/ln: `/etc/rc0.d/K03ciscomm': File exists
/bin/ln: `/etc/rc1.d/K03ciscomm': File exists
/bin/ln: `/etc/rc2.d/S98ciscomm': File exists
/bin/ln: `/etc/rc3.d/S98ciscomm': File exists
/bin/ln: `/etc/rc4.d/S98ciscomm': File exists
/bin/ln: `/etc/rc5.d/S98ciscomm': File exists
/bin/ln: `/etc/rc6.d/K03ciscomm': File exists
Initializing IP Address database with reserved Multicast Addresses...
Modifying httpd.conf file for this system...
Configuring Trap Receiver and SNMP Agent...

Getting Configuration Information for SNMP Agent
=====

Access control Setup
Description:      SNMPv1/SNMPv2c read-only access community name

The community name to add read-only access for (default - public):
Community name for read only access is public

System Information Setup
Description:      This section defines some of the information reported in the
                  "System" mib group

The physical Location of the system : SJ
Contact Information of the Administrator (default - root@): cmm-dev@cisco.com

Getting Configuration Information for Trap Receiver
=====

Access control Setup
Do you want to disable access control checks (y/n) (default - y):

Disables the access control check and accepts all incoming Notification traps

Following are the list of default OIDs the TRAP receiver is configured with

    1.  ciscoIpMRouteMissingHeartBeats (1.3.6.1.4.1.9.10.2.3.1.0.1)
    2.  pimNeighborLoss (1.3.6.1.3.61.1.0.1)
    3.  CISCO-PIM-MIB Traps (1.3.6.1.4.1.9.9.184.2.0.*)
    4.  MSDP-MIB Traps (1.3.6.1.3.92.1.1.7.*)
    5.  ciscoMvpnMvrfChange (1.3.6.1.4.1.9.10.113.0.2)
    6.  iVMS Traps (1.3.6.1.4.1.15181.11.1.*)

Do you want to add some other Trap OIDs with the default list (y/n) (default - n):
Default Trap OIDs Configured
Installation Finished.
Would you like to install the license key now? [y/n]: y

Cisco Multicast Manager/Cisco Route Manager
License Installation Utility
Copyright (c) 2003-2007 Cisco Systems, Inc. All Rights Reserved.

Enter license file: /usr/local/license.key
Installing license...
Testing license...
Licensed to   : Cisco
Ip address    : 172.20.111.239
Expire date   : No expiration date.

```

```
Features      : MMT,VOS,MVPN
Device limit : unlimited
Starting the application...

going to start liblog

completed to start liblog
/usr/local/netman/httpd_perl/bin/apachectl startssl: httpd started
Starting the polling daemon...
Starting the CLI proxy daemon...
Starting SNMP Trap Receiver daemon...
Starting SNMP Trap Receiver

Starting SNMP Agent daemon...
Starting SNMP Agent
```

Changing the HTTPS Port

The server is configured by default to run on port 8080.

Step 1 1. To change to the default port from 8080 to another port number, change the port in the Listen field and the VirtualHost_default field.

Step 2 Navigate to the following directories:

Linux:

```
/usr/local/netman/httpd_perl/conf/httpd.conf.
```

Solaris:

```
/opt/RMSMMT/httpd_perl/conf/httpd.conf
```

Step 3 Define the new port number.

Example:

```
<IfDefine SSL>
Listen 8080
</IfDefine>
```

```
<VirtualHost _default_:8080>
```

Upgrading to Cisco Multicast Manager 2.5

You may upgrade from version 2.4 to 2.5 using a DVD, ISO image downloaded from Cisco.com, or a tar file from the enterprise application bundle.

Upgrading on Linux Using a CD or ISO Image

- Step 1** Mount the CD-ROM or ISO image.
- a. If you are mounting an actual physical CD-ROM, use one of the following commands:
- For **Red Hat Linux ES/AS 3**:
- ```
mount /dev/cdrom /mnt/cdrom
```
- For **Red Hat Linux ES/AS 4**:
- ```
# mount /dev/hdc /media/cdrom
```
- b. If you are mounting an **ISO CD-ROM** image downloaded from Cisco.com, use the following command:
- ```
mount -t iso9660 -o loop image.iso /mnt/isoimage
```



**Note** /mnt is the mount point and can be any designated directory. If this command does not work, please check with your system administrator for mounting instructions.

---

- Step 2** To install use the following commands:
- For a physical **DVD**:
- ```
cd /mnt/cdrom
```
- For an **ISO** image downloaded from Cisco.com:
- ```
cd /mnt/<isoimage folder >
```
- Step 3** Execute the script `update.sh` and follow the steps in subsection [Running the Linux Installation Script, page 1-10](#).
- 

## Upgrading on Linux Using a Tar File

---

- Step 1** Untar the file in a directory other than installation target directory.
- ```
# cd /tmp  
# gunzip -c mmt-lin-2.5-x-full.tar.gz | tar xvf -
```
- Step 2** Change the directory.
- ```
cd /tmp/netman
```
- Step 3** Execute the script `setup.sh` and follow the steps in subsection [Running the Linux Installation Script, page 1-10](#).
-

## Upgrading on Solaris Using a CD or ISO Image

- Step 1** Mount the CD-ROM or ISO image.
- If you are mounting a **DVD** and the process vold is not running, you will need to manually mount the CD-ROM, use one of the following commands:  

```
mount -rt hsfs /dev/sr0 /cdrom
or
mount -rt hsfs /dev/dsk/c0t6d0s2 /cdrom
```
  - If you are mounting an **ISO CD-ROM** image downloaded from Cisco.com, use the following command:  

```
mount -F hsfs -o ro `lofiadm -a /export/temp/cmm25.iso` /mnt
```



**Note** /mnt is the mount point and can be any designated directory. If this command does not work, please check with your sysadmin for mounting instructions.

- Step 2** To install use the following commands:

For a **DVD**:

```
cd /cdrom/cdrom0
```

For an **ISO image** downloaded from Cisco.com:

```
cd /mnt/<isoimage folder>
```

- Step 3** Execute the script update.sh and follow the steps in subsection [Running the Linux Installation Script, page 1-10](#).

## Upgrading on Solaris Using a Tar File

- Step 1** Untar the file in a directory other than installation target directory:

```
cd /tmp
gunzip -c mmt-sol-2.5-X-full.tar.gz | tar xvf -
```

- Step 2** Change the directory.

```
cd /tmp/RMSMNT
```

- Step 3** Execute the script setup.sh and follow the steps in subsection [Running the Linux Installation Script, page 1-10](#).

# Starting and Stopping CMM

To start the application:

## On Solaris:

From the CMM home directory (by default, /opt/RMSMMT), run the **S98mmt** script.

## On Linux:

From the CMM home directory (by default, /usr/local/netman), run the **S98mmt** script.

To stop the application, run the **K98mmt** script.

The **S98mmt** script also runs the **S98mmtpoll** script, which starts the polling daemon. The **S98mmtpoll** script can also be used as a watchdog script to ensure that the polling daemon is up and running. The root **crontab** configuration would be:

## On Solaris:

```
0,5,10,15,20,25,30,35,40,45,50,55 * * * * /opt/RMSMMT/S98mmtpoll
```

## On Linux:

```
* /5 * * * * /usr/local/netman/S98mmtpoll
```

These entries will run the script every 5 minutes.

The default login user name is admin, and the default password is rmsmmt.



### Note

The **K98mmt** script will stop the apache server, polling daemon, cliproxyd daemon, SNMP trap agent daemon and SNMP trap receiver daemon. The **S98mmt** script will start the apache server, cliproxyd daemon, SNMP trap agent daemon and SNMP trap receiver daemon but not the polling daemon for the first time. You will have to manually start the polling daemon through the application for the first time after configuring the global polling configuration.

During installation, the **K98mmt** script is installed in the /etc/rc0.d directory. This ensures that the polling daemon shuts down properly upon system reboot.



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