



## CHAPTER 3

# Installing the Collection Manager

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## Introduction

This chapter describes how to install the Collection Manager, its database. The chapter also explains and how to run the Collection Manager.



**Note**

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For a typical installation and configuration, see *Cisco Service Control Management Suite Collection Manager Quick Start Guide*.

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- [System Requirements, page 3-2](#)
- [How to Install the Collection Manager, page 3-9](#)
- [Configuring the External MySQL Server, page 3-17](#)
- [Uninstalling the Sybase Database and Collection Manager Software, page 3-18](#)
- [Upgrading the Collection Manager to Version 3.7.2, page 3-19](#)

# System Requirements

The Collection Manager and its database are software components that run on a server platform. You can install the Collection Manager on any of the following platforms:

- Sun SPARC machine (64 bit) running 64-bit versions of Solaris 9 or Solaris 10. (See the “[Solaris Requirements](#)” section on page 3-3.)
- Intel machine (32 or 64 bit) running 32-bit versions of Red Hat Enterprise Linux 4.0 or Red Hat Enterprise Linux 5.0 or 64-bit versions of Red Hat Enterprise Linux 5.0. (See the “[Red Hat Linux Requirements](#)” section on page 3-6.)
- Intel machine (32 or 64 bit) running 32-bit or 64-bit versions of CentOS 5.x. (See the “[CentOS Linux Requirements](#)” section on page 3-7.)
- Intel machine (32 or 64 bit) running VMware Server or VMware ESX  
VMware-VMvisor-Installer-4.0.0-164009.x86\_64.iso.
- Cisco Unified Computing System (UCS) server model R210-2121605 with a Intel(R) Xeon(R) X5570 2.93-GHz CPU with eight Cores (minimum memory 4 GB).

All configurations use a 32-bit Java Virtual Machine (JVM).



## Caution

The Cisco Collection Manager must run on a dedicated server. The local database for Cisco Collection Manager is also located on that server. You cannot run the Cisco Subscriber Manager or other applications on that server.



## Note

When using the bundled Sybase database, the server on which you install the Collection Manager can have a maximum of 4 CPU cores.

- [Checking System Prerequisites](#), page 3-2
- [Solaris Requirements](#), page 3-3
- [Red Hat Linux Requirements](#), page 3-6
- [CentOS Linux Requirements](#), page 3-7
- [Distribution Content](#), page 3-8
- [Default Configuration Settings](#), page 3-8

## Checking System Prerequisites

The Collection Manager distribution contains a script, **check\_prerequisites.sh**, located in the **install\_scripts** directory. The script helps to determine if a system meets the requirements for installing a Collection Manager or the bundled Sybase database.

The script checks overall readiness of the system for a Collection Manager or Sybase installation. The main prerequisites checked are:

- CPU speed
- Amount of RAM
- Operating System version (Solaris 9 or 10, Red Hat Enterprise Linux 4 or 5)
- Additional required and optional packages
- Free space for Collection Manager and Sybase homes
- Names for all network interface cards (NICs)
- Sybase kernel parameters
- Locale and time zone formats

```
check_prerequisites.sh [ --sybhome=SYBHOME ] [ --cmhome=CMHOME ] [ --datadir=DATADIR ]
```

**Table 3-1** *check\_prerequisites.sh* Script Options

<code>--sybhome=SYBHOME</code>	Intended home directory for Sybase installation
<code>--datadir=DATADIR</code>	Intended data directory for Sybase data files (for the Datadir installation method)
<code>--cmhome=CMHOME</code>	Intended home directory for Collection Manager installation

## Solaris Requirements

You can install Collection Manager Release 3.1.0 or later on any Sun SPARC Machine running Solaris that conforms to the requirements listed in the following sections:

- [Hardware, page 3-3](#)
- [Software and Environment, page 3-4](#)
- [Setting the Locale and Time Zone, page 3-5](#)

### Hardware

- Minimum 500-MHz CPU
- Minimum 1-GB RAM per CPU
- Hard disk:
  - One hard disk, at least 18 GB
  - For bundled installations, a second hard disk of at least 30 GB is recommended to store Sybase data.
- 100BASE-T network interface

## Software and Environment

- Solaris Version 5.9 64-bit build 04/01 or later (currently only Solaris Version 5.9 and 5.10 are supported).
  - Solaris 9—Patch level 9 is recommended
  - Solaris 10—Patch level 10 is recommended
- Solaris Core Installation.
- Install the additional packages as shown in [Table 3-2](#).

**Table 3-2 Additional Packages**

system	SUNWbash	GNU Bourne-Again shell (bash)
system	SUNWgzip	The GNU Zip (gzip) compression utility
system	SUNWzip	The Info-Zip (zip) compression utility
system	SUNWlibC	Sun Workshop Compilers Bundled libC
system	SUNWlibCx	Sun WorkShop Bundled 64-bit libC

- If you are installing the Collection Manager in bundled mode with the Sybase database, install the package shown in [Table 3-3](#).

**Table 3-3 SUN Wipc Package**

system	SUNWipc	Interprocess Communication
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- (Optional) You can install the packages listed in [Table 3-4](#) (for sysadmin applications such as sys-unconfig).

**Table 3-4 Optional Packages**

system	SUNWadmap	System administration applications
system	SUNWadmc	System administration core libraries

- You can download these packages from <http://sunfreeware.com/>  
The root (/) partition must have at least 104 MB of free space to install these packages.
- Apply the latest recommended patches from Sun:
  - For Solaris 9, go to <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/xos-9&nav=pub-patches>
  - For Solaris 10, go to <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/xos-10&nav=pub-patches>
  - For Java, go to <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/J2SE>

- If you are using Sybase, install the current Solaris patches recommended by Sybase.
- At least 8 GB free on the partition where you intend to install the Collection Manager. (This memory is used for CSV storage and persistent buffers.)
- At least 3 GB free on one partition for the Sybase home directory (for installations with bundled Sybase).
- For bundled installations, a second hard disk of at least 30 GB is recommended to store Sybase data.
- Free space on one partition to hold the desired size of the Sybase data and logs (for installations with bundled Sybase). You can configure memory size during installation.
- An FTP server must listen on port 21 so that the SCA Reporter can authenticate it (for installations with bundled Sybase that use the legacy (pre-3.0) Cisco Service Control Application Suite (SCAS) Reporter).
- Before installation, verify that all IP addresses that are configured for the machine NICs have hostnames associated with them in `/etc/hosts` or in another active naming service (for installations with bundled Sybase). (This action is required due to a limitation of Sybase Adaptive Server Enterprise.)
- Use the `set_shmmax.sh` script (located under `install-scripts/`) to configure the kernel memory (for installations with bundled Sybase).
- Additionally, at startup you must load the IPC module by inserting the following lines in the file `/etc/system`:

```
forceload: sys/shmsys
```
- If you are using database periodic delete, enable the `scmscm` user to schedule and run cron jobs.

## Setting the Locale and Time Zone

- For correct Collection Manager and Sybase operation, use the locale U.S. English.

To set the locale, put the following line in the `/etc/TIMEZONE` configuration file (to enable a change to this configuration to take effect, you must restart the Collection Manager):

```
LANG=en_US
```

To use the U.S. English locale, the Collection Manager must be running on the Solaris operating system. Verify that the locale is installed by ensuring that the directory `/usr/lib/locale/en_US` exists. If the directory does not exist, install the locale files from the Solaris CDs.
- Setting the OS time zone as an offset from GMT in POSIX format is not recommended, and can lead to problems. Set the time zone in the `/etc/TIMEZONE` configuration file by country (supported) name, as in the following example.

```
TZ=Japan
```

Verify that the country name is supported as a time zone setting by ensuring that it is listed in the directory `/usr/share/lib/zoneinfo`.

If you must use GMT offset, use the zoneinfo format by prepending the prefix `:Etc/`, as in the following example:

```
TZ=:Etc/GMT+5
```

## Red Hat Linux Requirements

You can install Collection Manager Version 3.1.0 or later on any i386 running Red Hat Linux that conforms to the requirements listed in the following sections:

- [Hardware, page 3-6](#)
- [Software and Environment, page 3-6](#)
- [Setting the Locale and Time Zone, page 3-7](#)

### Hardware

- Minimum 800-MHz CPU
- Minimum 1-GB RAM per CPU
- Hard disk:
  - One hard disk, at least 18 GB
  - For bundled installations, a second hard disk of at least 30 GB is recommended to store Sybase data.
- 100BASE-T network interface

### Software and Environment

The Cisco Collection Manager Version 3.7.5 or later requires the following software when running on Red Hat Linux:

- Red Hat Linux 4.x:
  - kernel-2.6.9-5
  - glibc-2.3.4-2
  - compat-libstdc++-33-3.2.3-47.3
  - Minimum patch level required—Update 7
- Red Hat Linux 5.x:
  - kernel-2.6.18-8.el5
  - glibc-2.5-12
  - compat-libstdc++-33-3.2-61
  - Minimum patch level required—Update 5.3
- Red Hat Enterprise Linux 6.x

### Installing Red Hat Linux

For Red Hat Linux installations perform the following steps:

- Apply the latest recommended patches from Red Hat.
- Reserve at least 8 GB on the partition where you want to install the Cisco Collection Manager. The Cisco Collection Manager uses this disk space for CSV storage and persistent buffers.
- If you are using database periodic delete, enable the scm scm user to schedule and run cron jobs.

- If you use Red Hat Enterprise Linux 6.x, confirm that the desired database is compatible with Red Hat Enterprise Linux 6.x. Red Hat Enterprise Linux 6.x does not support the Cisco Collection Manager bundled Sybase database.

## Installing Red Hat Linux and the Bundled Sybase Database



### Note

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Red Hat Enterprise Linux 6.x does not support the bundled Sybase database.

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For installations with bundled Sybase, perform the following steps:

- Install the `compat-libstdc++` package. This package is available on the Red Hat installation CD.
- Install the current Sybase-recommended patches.
- Reserve at least 1 GB on some partition for the Sybase home directory.
- Verify that all the configured IP addresses for the machine NICs have hostnames associated with them in `/etc/hosts` or in another active naming service. This action is required due to a limitation of Sybase Adaptive Server Enterprise.
- Use the `set_shmmax.sh` script (located under `install-scripts/`) to configure the kernel memory.

## Setting the Locale and Time Zone

For correct Collection Manager and Sybase operation, use the locale U.S. English (`en_US`).

## CentOS Linux Requirements

You can install the Collection Manager Version 3.6.5 or later on any i386 that runs CentOS Linux and conforms to the requirements listed in these sections:

- [Hardware, page 3-7](#)
- [Software and Environment, page 3-7](#)

### Hardware

- Minimum 800-MHz CPU
- Minimum 1-GB RAM per CPU
- Hard disk:
  - One hard disk, at least 18 GB
  - For bundled installations, a second hard disk of at least 30 GB is recommended to store Sybase data.
- 100BASE-T network interface

### Software and Environment

- CentOS Linux 5.x:
  - `kernel-2.6.18-8.el5`
  - `glibc-2.5-12`

- compat-libstdc++-33-3.2.3-61



**Note**

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CentOS is only supported on Cisco Collection Manager releases 3.6.5 and higher.

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## Distribution Content

The Collection Manager installation kit contains scripts for installing the Collection Manager and the Sybase database.

It also contains:

- Scripts to support file gathering
- Scripts for periodic Sybase maintenance

## Default Configuration Settings

Configure settings for the Collection Manager during installation. These settings include the adapters to enable and their locations, Priority Queue parameters, the target adapters for each type of RDR (by RDR tag value), and various logging policies. Permit only qualified personnel to change these settings.



# How to Install the Collection Manager

This section describes how to install Collection Manager Version 3.1.0 or later and the Sybase database on a computer running Solaris, Red Hat, or CentOS Linux.

- [Getting the Cisco Collection Manager Software, page 3-9](#)
- [Collection Manager Software Ports, page 3-9](#)
- [Installing the Bundled Sybase Database, page 3-10](#)
- [Installing Collection Manager Software, page 3-12](#)

## Getting the Cisco Collection Manager Software

To download the Cisco Collection Manager software:

- 
- Step 1** Log in to Cisco CCO <http://www.cisco.com/cgi-bin/tablebuild.pl/sccm>. Enter your Cisco CCO password when prompted.
- Step 2** Download the relevant package. Each package consists of multiple parts.
- `scms-cm-v37X-bXYZ-bundle-solaris-tar.partX`
  - `scms-cm-v37X-bXYZ-bundle-linux-tar.partX`
  - `scms-cm-v37X-bXYZ-unbundled-solaris-linux.tar`
- If there is a single file package, go to [Step 4](#).
- Step 3** Ensure the names of the files reflect their order (for example, `cm_part1`, `cm_part2`, and so on).
- Step 4** Place the downloaded files on the target machine and join them into a single `.tar` file.
- For example:
- ```
# cat cm_part1 cm_part2 >/usr/tmp/cm_full_package.tar
```
- Step 5** Extract the complete package into a temporary directory.
- For example:
- ```
# mkdir /usr/tmp/cm_install_temp
# cd /usr/tmp/cm_install_temp
# tar xvf ../cm_full_package.tar
```
- 

## Collection Manager Software Ports

[Table 3-5](#) describes the TCP/UDP ports on which the Collection Manager software and associated components (such as the Sybase database) listen. This table helps a network administrator to understand the behavior of the software and its adherence to the security policy.

**Table 3-5** Ports on Which the Collection Manager Listens Constantly

Port Number	Description
33000	Used by the SCE devices to send RDRs for data collection.
21	Used by the legacy SCAS Reporter (before Version 3.0) to authenticate the Collection Manager user on the Collection Manager machine.
33001	Internal collection manager. <b>Note</b> Access is required only from the local machine; external access can be blocked.
9092	HTTP technician interface.
4100	Sybase database connectivity through ODBC/JDBC. Required for access to the database (for installations with bundled Sybase).
1099—1120	RMI. Used as the management interface between the data collector and the Service Control management server.
22000	FTP server of the Collection Manager. <b>Note</b> FTP transactions can listen on other ports (22001 - 22100) for data transfer, as negotiated by the protocol.
7787	Internal logging of the management user log. <b>Note</b> Access is required only from the local machine; external access can be blocked.
14375	Used by the Cisco Service Control Application Suite for Broadband (SCA BB) Console to send symbol definitions ( <b>values.ini</b> ) to the Collection Manager.

The device listens constantly on the ports in the table. If you do not enable access on these port numbers, certain operations can fail. Some operations (such as file transfer) cause a device to open temporarily ports other than the listed ports. However, these ports close automatically when the operation ends.

## Installing the Bundled Sybase Database

If you do not want to install Sybase (for example, when working in unbundled mode), see the [“Installing Collection Manager Software”](#) section on page 3-12.


**Note**

The maximum database size supported by the bundled Sybase database is 50GB. For database support larger than 50GB, use an external database.


**Note**

Installing the Sybase database can require as many as 3 hours.


**Note**

According to the Sybase license, you can install the Collection Manager with the bundled Sybase database on a server with a maximum of four CPU cores.

During installation, if you want to reverse the Sybase installation actions (for example, if an installation is interrupted because of a power failure), do the following:

1. Log in as the root user.
2. Run the `/install-scripts/uninstall.sh --sybase` script.

## Actions Performed by `installsyb.sh`

The `installsyb.sh` script installs the Sybase database. The script performs the following actions:

- Verifies the `shmem` setting for Sybase in `/etc/system` (for Solaris) or `/etc/sysctl.conf` (for Red Hat Linux). If the setting is not there, the script inserts it and reboots (after prompting you).
- Adds a user `sybase` and group `sybase`.
- Runs the Sybase installer for your platform.
- Builds a Sybase server including Sybase users and passwords.
- Starts Sybase.
- Runs SQL scripts to create the Collection Manager database structure. This process is lengthy and requires restarting Sybase several times.

## Prerequisites

Log in as the root user and make the distribution kit contents available on your system or local network.

**Step 1** Change directory to **sybase** in the distribution kit root.

**Step 2** Run the script **installsyb.sh**. Enter the script as follows:

```
installsyb.sh --sybhome=SYBHOME {-datadir=DATADIR} {--y|--n}
```

- **SYBHOME** is the home directory of the Sybase user (have 4 GB free for Solaris and 3 GB free for Linux)
- Select one of the following data location options:
  - Specify **--datadir=DATADIR**, where **DATADIR** is a directory in which to store all Sybase data.

Use a location in a partition in which at least 30 GB is free.

- If you specify a **DATADIR**, all Sybase data is stored as normal files in that directory, with default sizes of 20 GB for data, 6 GB for logs, and 2 GB for Sybase temporary storage. During installation, ownership of the directory changes to the Sybase user.
- You can customize the Sybase installation during the installation sequence for RDR and NetFlow by selecting yes/no during the Sybase installation.
- Maximum size for the NetFlow will be the remaining size left after the RDR size was specified. Reserve some space in the **DATADIR** if you are also creating a schema for NetFlow.
- During the Sybase installation process, you need to enter the size of the Sybase database.
- The following message is displayed to enter the database size:

```
Please enter SIZE in 2K blocks of file to be used for the "data[maximum is 102657160;
minimum is 5242798]" device. NOTE - the actual size required will include a 1.05 overhead
on the amount you specify. SIZE in 2K blocks:
```



### Note

If the User is opting to use an external database, such as MySQL or Oracle, then it is mandatory to create a Schema and DB USER with the required privileges. The Cisco Collection Manager should be reconfigured to the database using **~scmscm/scripts/dbconf.sh --nf script option**.

## Installing Collection Manager Software

This section describes the how to install the Collection Manager.

### Information About the **install-cm.sh** Script

To install the Collection Manager server, use the **install-cm.sh** script.

#### **install-cm.sh** Options

The usage message for the **install-cm.sh** script is:

```
Usage: install-cm.sh [-h] (-d CMDIR | -o)
```

```
Options: -d CMDIR    select directory for ~scmscm
                  (must not exist and must be on 8 GB free partition)
          -o          upgrade the existing installation
```

```

while preserving the current configuration
(can't be used with -d)
-h print this help and exit

```

#### Description of the options:

```

-d CMDIR
    Used to designate the directory of the newly created
    scmscm user's home. Should be the name of a
    non-existing directory, whose parent resides on a
    partition where at least 8 GB is free.
    As an alternate to this option, you can specify -o :

-o
    Use this option when you wish to upgrade the existing
    installation while preserving the current configuration.
    (can't be used with -d)

```

#### Actions Performed by install-cm.sh

The **install-cm.sh** script performs the following actions:

- If needed, creates an scmscm user and an scmscm group
- Optionally, creates the home for this user
- Populates the home of scmscm with Collection Manager files and scripts
- Installs the extra component private JRE in **~scmscm/cm/lib**
- Creates boot script symbolic links for the sybase and scmscm users in /etc/init.d and /etc/rcX.d



#### Note

All the Cisco Collection Manager scripts run in the Bash Unix shell environment. No other shells are supported.

**Step 1** Change directory to **install-scripts** under the distribution kit root.

**Step 2** Run the **install-cm.sh** script.

After running the script, a user-driven configuration manager presents the user with options for the basic configuration of the Collection Manager.

**Step 3** Choose one of the options provided by the configuration manager:

Please select one of the following options:

```

1 - Install CM:RDR
2 - Install CM:Netflow
3 - Install CM:RDR-and-CM:Netflow
4 - Exit

```

- Option 1 is chosen when the Collection Manager will operate with the Cisco SCE Service Control Engine.
- Option 2 is chosen when the Collection Manager will operate with the Cisco ASR 1000 Series Aggregation Services Routers.
- Option 3 is chosen when the Collection Manager will operate with both the Cisco SCE Service Control Engine and the Cisco ASR 1000 Series Aggregation Services routers.
- Option 4 is chosen to exit the Collection Manager installation.

**Step 4** Choose 1 - `Install CM:RDR` when working with only the Cisco SCE Service Control Engine and not both platforms:

**Step 5** Choose whether to enable or not enable the real-time aggregating (RAG) adapter. For more information on the RAG adapter, see the [“Real-Time Aggregating Adapter” section on page 2-8](#).

Do you want to enable the RAG Adapter? (yes/no):

**Step 6** You may choose to set up the CM:RDR database at the time of installation or configure it at a later time.

Would you like to configure the database?: yes

**Step 7** If you choose to configure the CM:RDR database:

- a. Select the number corresponding to the relational database management system of the connecting database.

```
Enter the DB type:
1 - Oracle
2 - MySQL
3 - Sybase
4 - exit
Enter your choice:
```

- b. Enter the following server information or press enter to leave at the default shown.

```
Enter DB server host (default localhost):
Enter DB server listening port (default port no) :
Enter DB server instance id (default schema) :
Enter DB schema user name (default user_id) :
Enter DB schema user password (default password) :
```

You will see the following text:

```
PASS:db is up
DB connection succeeded.
```




---

**Note** A failed connection results in the user being prompted to re-enter the db information.

---




---

**Note** After the user configures the requested database options, the dbinfo.vm file updates for either the RDR database configuration details, the Flexible NetFlow database configuration details, or the configuration details of both the RDR database and the Flexible NetFlow database.

---

**Step 8** Choose option 3 - Install RDR CM and Net flow CM when working with both the Cisco SCE Service Control Engine and the Cisco ASR 1000 Series Aggregation Services router platforms:

- a. The user-driven configuration manager will first guide you through setting up the Cisco SCE Service Control Engine. Follow steps 5 through 7 of this procedure to complete the process.
- b. The user-driven configuration manager will next guide you through setting up the Cisco ASR 1000 Series Aggregation Services router. Follow steps 6 and 7 of this procedure to complete the process.




---

**Note** The Cisco best practice is to set up separate databases for each platform.

---

**Step 9** Set a password for the scmsem user.

Run the following command to set the password for the scmsem user:

```
passwd scmsem
```




---

**Note** Be sure to record the password that you choose.

---

**Step 10** Increase the amount of memory allocated to the topper/aggregator (TA) adapter.

If you intend to run an application that uses the TA Adapter, you might need to increase the amount of memory allocated to this adapter. The need to increase memory depends on the number of subscribers Collection Manager manages. To increase the memory allocation:

- a. Open the file `~scmscm/cm/config/cm.conf`.
- b. Locate the setting containing **TAAdapter** in the `[adapter_mem]` section.
- c. Change the default value (512 MB) to a larger value.  
For example, to allocate 1024 MB of memory, set the value to **-Xmx1024M**.
- d. Save and close the file.

**Note**

For information about calculating the TA Adapter memory, see the [“TA Adapter Memory Requirements” section on page 2-7](#).

**Step 11** Increase the amount of memory allocated to the real-time aggregating adapter.

If you intend to run an application that uses the real-time aggregating (RAG) adapter, you might need to increase the amount of memory allocated to this adapter. The need to increase memory depends on the number of subscribers Collection Manager manages and on the RAG Adapter configuration. To change the setting:

- a. Open the file `~scmscm/cm/config/cm.conf`.
- b. Locate the setting containing **RAGAdapter** in the `[adapter_mem]` section.
- c. Change the default value (512 MB) to a larger value.  
For example, to allocate 1024 MB of memory, set the value to **-Xmx1024M**.
- d. Save and close the file.

**Note**

To use an external database, configure a *dbpack* to enable the Collection Manager to connect to the database. See [Chapter 5, “Managing Databases and the Comma Separated Value Repository”](#) for instructions.

**Note**

By default, the JDBC (`jdbcadapter.conf`) and TA (`taadapter.conf`) adapter configuration files have their **app\_conf\_dir** values set to point to the most recent directory of the desired applications.



**Step 12** Install and activate the periodic delete procedures for the database tables.

(For information about configuring the behavior of periodic delete, see the “[Managing the CM:RDR Periodic Deletion of Old Records](#)” section on page 5-3.)

**Note**

If reports are sent to the database and you do not install and activate the periodic delete procedures, the second disk can overflow.

- a. Install the periodic delete procedures.

Log on as the scmscm user, start the Collection Manager, wait 1 - 2 minutes for the creation of the database tables, and then run the script:

```
~scmscm/db_maint/create_periodic_del_procs.sh --rdr
```

- b. Activate the automatic invocation of the periodic delete procedures.

Run the following command:

```
~scmscm/scripts/dbperiodic.sh --rdr --load
```

**Step 13** Start the Collection Manager by running the `~scmscm/cm/bin/cm start` command.

The script performs the following actions:

- Starts all the adapters enabled in the Collection Manager.
- Updates the CONF\_SE\_TZ\_OFFSET table with the timezone offset.
- Populates the IMEI\_DEVICETYPE table with default values if the table is not created and no records exist in the table.

## Configuring the External MySQL Server

You can configure the Cisco Collection Manager to operate with an external server operating MySQL Server 4.1, 5.0, or later versions. You must log into MySQL Server and manually create a schema and a user with necessary privileges before configuring the Cisco Collection Manager.

Log into the server using root privileges and execute the following MySQL commands to create **pqb\_admin** with root privileges:

```
create database apricot;
```

```
create user 'pqb_admin' identified by 'pqb_admin';
```

```
grant all privileges on *.* to 'pqb_admin'@'localhost' identified by 'pqb_admin' with grant option;
```

```
grant all privileges on *.* to 'pqb_admin'@'<CM_server_IP>' identified by 'pqb_admin' with grant option;
```

```
grant all privileges on *.* to 'pqb_admin'@'%' identified by 'pqb_admin' with grant option;
```

**Note**

Redefine the user privileges to restrict the user access.

# Uninstalling the Sybase Database and Collection Manager Software

The following sections describe how to uninstall the Sybase database and the Collection Manager:

- [Uninstalling Sybase, page 3-18](#)
- [Uninstalling the Collection Manager Software, page 3-18](#)

## Uninstalling Sybase

To uninstall the Sybase database, perform the following steps:

- 
- Step 1** Log in as the root user.
- Step 2** Uninstall Sybase.
- Change the directory to install-scripts under the distribution kit root directory, and enter:
- ```
./uninstall.sh --sybase
```
- Step 3** Edit `/etc/system` (for Solaris) or `/etc/sysctl.conf` (for Red Hat Linux) and remove the Sybase `shmem` setting.
- 

## Uninstalling the Collection Manager Software

To uninstall the Collection Manager software, perform the following steps:

- 
- Step 1** Log in as the root user.
- Step 2** Uninstall the Collection Manager software.
- Change the directory to install-scripts under the distribution kit root directory, and enter:
- ```
./uninstall.sh --cm
```
-

# Upgrading the Collection Manager to Version 3.7.2

To upgrade the CM:RDR database with 3.7.2 compatibility, perform the following steps:

**Step 1** Get the Cisco Collection Manager software as described in the [Getting the Cisco Collection Manager Software, page 3-9](#).

**Step 2** Change directory to `install-scripts` under the distribution kit root.

**Step 3** Login as `scmscm` user, stop the Cisco Collection Manager server.

```
$ ~scmscm/cm/bin/cm stop
```

**Step 4** Login as `root` user, run the `install-cm.sh` script.

**Step 5** `# ./install-cm.sh -o`Do you want to enable the CM:NetFlow ? (yes/no): `no`



**Note** Selecting the `yes` option enables Cisco NetFlow support.

**Step 6** Do you want to upgrade the RDR Tables to latest Schema? (yes/no): `yes`



**Note** If the `no` option is selected, the customer needs to manually run the `~scmscm/scripts/upgradeRDRTables.sh`.



**Note** The upgrade takes a longer time for a large amounts of data.

Use the `scmscm` user.

After the upgrade, when the Collection Manager comes up for the first time, the database tables that are new in Version 3.7.2 are created automatically.



**Note** You can upgrade to Version 3.7.2 *only* from Version 3.6.x.

