# QUICK START GUIDE



## Cisco Service Control Management Suite Collection Manager Quick Start Guide, Release 3.5.5

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# 1   Getting the Collection Manager Software

To download the collection manager software:

**Step 1**   Logon 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

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**Note**   Each package consists of multiple parts.

- SCMSCM_CD_Linux_3.5.5 for Red Hat Linux EL platform version 4 or 5 using the bundled Sybase database.
- SCMSCM_CD_Solaris_3.5.5 for Solaris platform version 9 or 10 using the bundled Sybase database.
- SCMSCM_CD_3.5.5 if you are not using the bundled Sybase database on either of the above platforms.

If there is a single file package go to Step 4.

**Step 3**   Ensure the names of the files reflect their order (e.g. cm_part1, cm_part2, etc.).

**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
```

**Step 6**   If you are upgrading from a previous version, go to Upgrading the CM (Omit if Full Install).

# 2 Checking System Prerequisites (Clean Install Only)

The CM distribution contains a script, check_prerequisites.sh, to determine whether a system meets the requirements for installing a CM and the bundled Sybase database.

The main prerequisites checked are:

- CPU speed—Minimum 500 MHz CPU (Solaris), minimum 800 MHz CPU (Linux)
- Amount of RAM—Minimum 1 GB RAM per CPU
- Operating System version—Solaris 9 or 10, 32-bit versions of Red Hat Enterprise Linux 4 or 5 or 64-bit versions of Red Hat Enterprise Linux 5
- Required or additional packages
- Python executable on the path
- Free space for CM and Sybase home directories—One hard disk, at least 18 GB, for the CM. A second hard disk, at least 18 GB, for the bundled Sybase database.
- Names for all NICs
- Sybase kernel parameters
- Locale and time zone formats

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

If the maximum shared memory check of the check_prerequisites.sh script fails, an auxiliary script, set_shmmax.sh, runs to set the maximum shared memory.

For Solaris the script updates /etc/system with shmsys:shminfo_shmmax = 512000000.

For Linux the script updates /etc/sysctl.conf with kernel.shmmax = 512000000.

If you have problems running this script, see the "System Requirements" section in the "Installing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

# 3 Installing Bundled Sybase Database (Clean Install Only)

This module describes how to install the bundled Sybase database.

The CM distribution packages with a Linux or Solaris suffix contain a bundled Sybase database suitable for that platform. This database can be easily installed by running the installsyb.sh script.

**Note** Installing the Sybase database can take up to three hours.

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

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

If you do not want to install the Sybase database, go to Installing the CM (Clean Install Only).

## installsyb.sh Script Usage

The script usage is as follows:

```
installsyb.sh --sybhome=SYBHOME --datadir=DATADIR
```

- **SYBHOME** is the home directory of the Sybase user (and should have 1 GB free). This directory must not exist prior to script execution.
- Select one of the following data location options:
  - Specify **--datadir=DATADIR**, where **DATADIR** is a directory in which all Sybase data is stored.

    This location should be in a partition with at least 15 GB free and must exist prior to script execution.

If you have problems installing Sybase, see the "Installing the Sybase Database" section in the "Installing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

## Installing the Bundled Sybase Database

To install the bundled Sybase database:

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

**Step 2**　Run the installsyb.sh script

```
# installsyb.sh
```

**Step 3**　After the script completes, set a password for the sybase user

Use the **passwd** command as follows:

```
# passwd sybase
```

# 4　Installing the CM (Clean Install Only)

This section describes the procedure to install the Collection Manager (CM).

If you have problems installing the CM, see the "Installing the Collection Manager Software" section in the "Installing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

To install the CM:

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

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

```
# install-cm.sh -d <CM home dir>
```

**Step 3**　After the script completes, set a password for the scmscm user

Use the **passwd** command as follows:

```
# passwd scmscm
```

Be sure to record the password that you choose.

# 5 Upgrading the CM (Omit if Full Install)

This module describes the procedure to upgrade the Collection Manager (CM).

If you have problems upgrading the CM, see the "Installing the Collection Manager Software" section in the "Installing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

To upgrade the CM:

**Step 1**   Get the CM software as described in Getting the Collection Manager Software

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

**Step 3**   As the scmscm user, stop the CM server

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

**Step 4**   As the root user, run the install-cm.sh script

```
# ./install-cm.sh -o
```

**Step 5**   As the scmscm user, start the CM server

```
$ ~scmscm/cm/bin/cm start
```

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**Note**   If you upgrade from version 3.0.5 or 3.0.6, the PRPC users file is deleted. You must log in to the CM and redefine the PRPC users.

# 6 Getting the CM Working

This section describes how to get the Collection Manager (CM) software working.

## Configuring the Database (External DB Only)

The following is a list of supported external databases:

- Sybase—Version 12.5.1 and higher
- Oracle—Versions 9.2, 10g, and 11g
- MySQL—Version 4.1 and higher

To configure the database, use the ~scmscm/scripts/dbconf.sh script. For further information see the *Cisco Service Control Management Suite Collection Manager User Guide*, the Managing the Collection Manager chapter, the "Configuring Databases" section.

# Starting the Database

If you are using an external database, start it according to the instructions supplied by the database vendor.

For further information about starting the bundled Sybase database, see the "How to Monitor the Collection Manager" section in the "Managing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

To start the database:

**Step 1**   As the root user, run the **sybase start** command

```
# ~scmscm/setup/sybase start
```

**Step 2**   Wait several minutes and run the **alive.sh** script

```
# ~scmscm/setup/alive.sh
```

Make sure the output does not contain the phrase "Sybase not functioning".

# Configuring the Adapters to Use

An adapter can be defined to turn on when the CM starts by removing the comment character at the start of the appropriate line in the cm.conf file. This configuration file is located in **~scmscm/cm/config/**.

For further information, see the "Configuring the Collection Manager" section in the "Managing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

To configure the adapters to use:

**Step 1**   Open the **cm.conf** configuration file

**Step 2**   Locate the [**adapter**] section of the configuration file

**Step 3**   Set which adapters to use

```
adapter.1 = com.cisco.scmscm.adapters.jdbc.JDBCAdapter
adapter.2 = com.cisco.scmscm.adapters.topper.TAAdapter
#adapter.3 = com.cisco.scmscm.adapters.CSVAdapter
#adapter.4 = com.cisco.scmscm.adapters.rag.RAGAdapter
```

**Note**   The value of the **adapter.<number>** must match the **adapter_id** parameter value defined in the **queue.conf file** for the corresponding adapter. See Configuring the Categorizer.

**Step 4**   Save your changes

# Configuring the Categorizer

A Raw Data Record (RDR) can be routed to a specific adapter by adding its RDR tag to the **tags** parameter (a comma-separated list of RDR tags) of the adapter. This configuration is contained in the **queue.conf** file, which is located in **~scmscm/cm/config/**.

To configure the categorizer:

**Step 1**  Open the **queue.conf** file

**Step 2**  Configure the RDR tags to be sent to the adapter

The following example configures the RDR tags **4042321920** and **4042321922** to be sent to the Topper/Aggregator Adapter.

```
# Topper/Aggregator Adapter
[topper-hi]
adapter_id=3
priority=3
warning_size=40000
maximum_size=50000
tags=4042321920,4042321922
```

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**Note**  The value of the **adapter_id** parameter must match the **adapter.<number>** defined in the **cm.conf** file for the corresponding adapter. See Configuring the Adapters to Use.

**Step 3**  Save your changes

# Starting the Collection Manager

To start the collection manager:

**Step 1**  As the scmscm user run the **cm start** command

**$ ~scmscm/cm/bin/cm start**

**Step 2**  Wait 1-2 minutes to ensure that all the database tables have been created

You can check they have all been created by running the following command:

**$ ~scmscm/scripts/dbtables.sh**

For further information, see the "Listing the Database Tables" section in the "Managing Databases and the Comma Separated Value Repository" chapter of the *Cisco SCMS Collection Manager User Guide*.

# Setting the Time Zone

It is necessary to set the time zone for the CM to be the same as the time zone in which the SCE is located.

To set the time zone:

**Step 1**  Use the **jselect-sce-tz.sh** script to set the CM time zone

For example, if the SCE device is located in GMT+2, run the following command as the scmscm user:

**$ ~scmscm/cm/bin/jselect-sce-tz.sh --offset=120**

## Activating Periodic Delete

Periodic delete is a data reduction mechanism that is used to prevent the database becoming full. It is supported for both the bundled Sybase database and external databases.

For further information, see the "Installing the Collection Manager Software" section in the "Installing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.

To activate periodic delete:

**Step 1**   After starting the CM (see Starting the Collection Manager), as the scmscm user run the **create_periodic_del_procs.sh** script:

```
$~scmscm/db_maint/create_periodic_del_procs.sh
```

**Step 2**   Activate the automatic invocation of the periodic delete procedures

Run the following command:

```
$~scmscm/scripts/dbperiodic.py --load
```

This will load the default data retention settings defined in **~scmscm/db_maint/dbperiodic.conf**.

For advanced information, see the "Managing the Periodic Deletion of Old Records" section in the "Managing Databases and the Comma Separated Value Repository" chapter of the *Cisco SCMS Collection Manager User Guide*.


## Activating Health Monitoring

The CM contains a script to monitor the system and to issue alerts for predefined, potentially problematic conditions (**~scmscm/setup/monitor/setup-monitor.sh**).

To activate health monitoring:

**Step 1**   As the scmscm user, run the **setup-monitor.sh** script

The following example will run all available tests every 12 hours and send the test results to the OS system log subsystem:

```
$ ~scmscm/setup/monitor/setup-monitor.sh -a install -i 12h
```

For further information, see the "Monitoring System Health" section in the "Managing the Collection Manager" chapter of the *Cisco SCMS Collection Manager User Guide*.


## Defining PRPC Users

PRPC users are used to perform the actions on the CM from the SCA BB Console; for example, checking the online status of the CM.

To define PRPC users:

**Step 1**   Use the **p3rpc** CLU to add a PRPC user:

```
$ ~scmscm/cm/bin/p3rpc --set-user --username=cisco --password=password
```

# 7 Post Installation Actions

This section describes the actions necessary after installing the Collection Manager (CM).

## Apply Service Configuration

In order to generate reports from the CM database, it is necessary to apply the service configuration on the SCE whose RDR Formatter is configured to send raw data records to the CM.

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**Note**    If you do not apply the service configuration, you will not be able to run reports based on the data in the CM database.

# 8 Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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

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