# Release Notes for Cisco Service Control Management Suite Collection Manager (SCMS CM) 3.0.6

**March, 2007**

Release Notes for Cisco Service Control Management Suite Collection Manager (SCMS CM) 3.0.6

Covers: SCMS CM 3.0.6, SCMS CM 3.0.5, SCMS CM 3.0.3, SCMS CM 3.0.0

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These release notes for the Cisco SCMS CM describe the enhancements provided in Cisco Release SCMS CM 3.0.6. These release notes are updated as needed.

For a list of the caveats that apply to Cisco Collection Manager (SCMS CM) 3.0.6, see *Open Caveats* (on page 18).

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# Contents

# Introduction

Cisco is proud to release version 3.0.6 of its Service Control Management Suite Collection Manager component.

The Cisco SCSM CM is an implementation of RDR-collection software. It receives data-records (RDRs) from Cisco SCE devices, performs pre-aggregation and persistency into a database and/or text-files in CSV format.

This document outlines the new features and states known caveats. For additional information, please refer to the related Cisco documentation of the Cisco Service Control Management Suite.

This document is updated for revision 3.0.6 of the Collection Manager.

It is to be used with SCA BB release 3.0.6.

# SCMS CM Release 3.0.6

## Resolved Caveats

### U.S. Daylight Saving Time Policy Changes

- Cisco number: CSCsh20239

  From March 2007, Daylight Saving Time (DST) in the U.S. will start three weeks earlier and end one week later. The start date will change from the first Sunday in April to the second Sunday in March. The end date will change from the last Sunday in October to the first Sunday in November.

  This issue is fixed in the CM in release 3.0.6.

### PRPC Authentication does not work when there is NAT/Firewall between the SCA BB Console and the SM/SCE/CM

- Cisco number: CSCsh39763

  SCA BB Console authentication will fail when trying to connect to the SCE/SM/CM if there is a device located between the console and the SM/CM/SCE that changes their IP addresses; for example a NAT. The problem occurs when the PRPC security level on the SM/SCE/CM is configured to "semi" or "full".

  In addition, unauthenticated RPC sessions at the SM/CM/SCE are not closed.

  This issue is fixed in release 3.0.6. The SM, SCE, CM, and the SCA BB Console must be upgraded to 3.0.6 to fix the problem.

# SCMS CM Release 3.0.5

## Functional Enhancements

The following functional enhancements are included in SCMS CM 3.0.5. See the *Cisco Service Control Management Suite Collection Manager User Guide* for a complete description.

- The Collection Manager now supports PRPC authentication.

## Resolved Caveats

### Periodic system health monitor fails

- CSCsd61859

  The `~scmscm/setup/monitor/setup-monitor.sh` script runs successfully (without error), but the CM user gets an error in his maibox instead of the monitoring output:

  Your "cron" job on <*hostname*>

  ~scmscm/setup/monitor/monitor.sh -a

  produced the following output:

  sh: ~scmscm/setup/monitor/monitor.sh: not found

  This error is fixed in CM 3.0.5.

### The script dbfree.sh for CM with the bundled Sybase database always returns 99%

- CSCse16676

  When checking the free space of the bundled Sybase DB using the `dbfree.sh` script, the returned value is always 99% regardless of the actual value.

  This error is fixed in CM 3.0.5.

### The script alive.sh always says the CM is down when installed on Red Hat 4

- CSCse78654

  When checking whether the CM is up or down using the `alive.sh` script, the answer is always "not functioning" regardless of the CM's actual status.

```
-bash-3.00$ ./setup/alive.sh
DC not functioning
exiting...
-bash-3.00$.
```

This error is fixed in CM 3.0.5.

## CM/Sybase installer failure due to long disk device names

- CSCse66187

  The installation script fails to verify the available disk space on long disk device names and therefore the entire installation fails.

  This error is fixed in CM 3.0.5.

## Some Columns have Wrong Types in MySQL External DB

- CSCsf18079

  RPT_TOPS_PERIOD1.AGG_PERIOD - data type is too small.

  This error is fixed in CM 3.0.5.

- CSCsf18226

  INI_VALUES.VALUE - data type is too small.

  This error is fixed in CM 3.0.5.

- CSCsf18181

  Minimal String type length is too small.

  This error is fixed in CM 3.0.5.

  See *Database Tables* (on page 8) in order to understand what changes you need to make when upgrading the existing installation with an external MySQL DB to 3.0.5.

# Installation Notes

## Database Tables

This section presents the changes in the table structure made for the 3.0.5 release. Use these tables when upgrading an existing installation with an external MySQL database to 3.0.5.

***Table 1 Database Table Changes for MySQL***

| Table Name | Column Name | Change |
|---|---|---|
| RPT_TOPS_PERIOD1 | AGG_PERIOD | tinyint -> int |
| INI_VALUES.VALUE | VALUE | tinyint -> int |
| RPT_TR | All String columns of length less than 1024 | String (255) -> String (1024) |

# SCMS CM Release 3.0.3

## Installation Notes

### Supported platforms

The SCMS CM installation is supported on the following platforms:

- Sun SPARC machine running Solaris 8 or Solaris 9.
- IA32 machine running Red Hat Enterprise Linux 3.0 or Red Hat Enterprise Linux 4.0.

**Note** Other machine platform-OS version configurations, e.g. Intel architecture machine running Solaris or 64-bit Linux, are **not supported**.

## Functional Enhancements

The following functional enhancements are included in SCMS CM 3.0.3. See the *Cisco Service Control Management Suite Collection Manager User Guide* for a complete description.

- The Collection Manager now supports installation on Red Hat Enterprise Linux 4.0.
- The bundled database on Linux is upgraded to Sybase ASE 15.0.
- There is a new prerequisite checker script.
- The bundled database installer has been made more robust.
- The “Legacy Mode” in the Sybase installer is now deprecated.
- There is a new monitoring/alerting framework in the CM. This currently supports checks for database capacity, persistent buffer overflows, and component availability.
- The CSV Adapter can optionally escape non-printable characters in CSV files.

# Resolved Caveats

## SML sends CR/LF characters in RDRs where they are not permitted/expected

- CSCsd61859

  As a workaround for this issue, the 3.0.3 CM's CSV Adapter can escape non-printable characters written to CSV files. This option is not enabled by default, as it incurs a performance hit on the adapter.

# SCMS CM Release 3.0.0

## New Features

- Nomenclature updated to reflect Cisco naming conventions—User name changed from 'pcube' to 'scmscm', 'pump' changed to 'cm', etc.
- Support for SCA BB 3.0.0—By default the CM is configured to accept SCA BB 3.0.0 RDRs
- Support for installation on Solaris 9
- The RAG Adapter can now aggregate RDRs on a per-SCE platform basis

For more information regarding the new features in the Cisco Service Control release 3.0.0 in general, please refer to the “New Features” section of the *Release Notes for Cisco Service Control Application Suite for Broadband (SCA BB) 3.0.0*, available on the same site as the current document.

## Resolved Caveats

### DB Adapter removed

The DB Adapter has been removed from the CM. It has been replaced by the JDBC Adapter.

This issue is fixed in CM 3.0.0.

### Obsolete unsupported components removed from the release

As the product evolved, various components became obsolete, and were not removed.

This issue is fixed in CM 3.0.0.

### "create periodic delete procedures" script - removed superfluous error messages

The “`create periodic delete procedures`" script had related superfluous error messages.

This issue is fixed in CM 3.0.0.

### RDRs dropped from the persistent buffer or read in incorrect order

In certain situations, RDRs were dropped from the persistent buffer or read in incorrect order.

This issue is fixed in CM 3.0.0.

### RDRs dropped from RAG Adapter with "class cast exception" in the log

In certain situations, RDRs were dropped from the RAG Adapter, and produced a "class cast exception" message in the log.

This issue is fixed in CM 3.0.0.

### TA Adapter would not come up after a reboot

In some cases, the TA Adapter would not come up after a reboot, due to slow response from Sybase.

This issue is fixed in CM 3.0.0.

### Database insertion rate dropped, causing lost RDRs

A Sybase bug caused the database insertion rate to drop significantly over long periods of time, causing lost RDRs.

This issue is fixed in CM 3.0.0.

## Installation Notes

### Upgrade Procedure from 2.5 to 3.0.0

Since the database structures have changed significantly for SCMS CM release 3.0.0, a special procedure should be followed in order to preserve the data while upgrading.

**Note** This procedure cannot be applied for a direct upgrade from release 2.1 to release 3.0.0.

To upgrade from SCMS CM 2.5 to SCMS CM 3.0.0, complete the following steps:

**Step 1.** Stop the CM.

**Step 2.** Make note of any configuration changes you have made to the CM so you can re-apply them later.

**Step 3.** Remove the *'pcube'* user.

**Step 4.** Install the new CM using the following script:

*install-cm.sh*

This will create the new '*scmscm*' user.

**Step 5.** Assign a password to the '*scmscm*' user.

**Step 6.** If applicable, re-apply the configuration changes from **Step 2**.

**Step 7.** If you are using the bundled Sybase database, complete this step, otherwise go to **Step 8**:

If you want to preserve the pre-3.0.0 content in the database tables:

a. Run the following script, available in the */install-scripts/* directory of the installation distribution:

*dbrename_25_300.sh*

This script renames your old tables to be used with the legacy Reporter, creates new database tables in 3.0.0 format, and modifies your Periodic Delete configuration accordingly.

The script should be run by the '*scmscm'* user.

b. On the PC where the legacy Reporter is run, apply the *TemplateUpdate* patch to modify the SCAS BB templates to use the old pre-3.0.0 tables.

c. Create a '*pcube*' user, specifically for authentication of the legacy 2.5 Reporter, using the following commands: (this user will be needed only as long as the 2.5 Reporter is being used)

**`/usr/sbin/useradd pcube`** (to be run as **root**)

**`passwd pcube`** (to be run as **root**)

Otherwise, if you do not want to preserve pre-3.0.0 data in the database

d. Remove the 2.5 tables, using the command

*droptable.sh -f ALLTABLES*

The tables will be re-created automatically when the CM comes up for the first time.

Go to **Step 9**.

**Step 8.** When using an un-bundled database:

If you want to preserve the pre-3.0.0 content in the database tables:

a) Refer to *Database Tables* (on page 14), and make the necessary changes in your database schema.

Otherwise, if you do not want to preserve pre-3.0.0 data in the database:

e. Remove the 2.5 tables from your database

The tables will be re-created automatically when the CM comes up for the first time.

**Step 9.** If desired, start the CM now. Alternatively start it later as appropriate.

## Database Tables

This section presents the changes in table structure made for the 3.0.0 release. Use these tables when upgrading to 3.0.0 and installing an unbundled-database.

In the tables below, note the following conventions:

- Columns marked with '*' are new columns in release 3.0.0
- Columns marked with '**' are columns that have been deleted in release 3.0.0

Please refer to the appropriate table:

- Using Sybase in 3.0.0—*Database Table Changes for 2.5 DBAdapter to 3.0.0 Sybase*
- Using Sybase in 3.0.0—*Database Table Changes for 2.5 JDBCAdapter to 3.0.0 Sybase*
- Using Oracle—*Database Table Changes for Oracle*
- Using MySQL—*Database Table Changes for MySQL*

***Table 2 Database Table Changes for 2.5 DBAdapter to 3.0.0 Sybase***

| Table Name | Column Name | Change |
|---|---|---|
| RPT_LUR | GENERATOR_ID | int -> smallint |
| RPT_LUR | LINK_ID | int -> smallint |
| RPT_MALUR | ATTACKS | smallint -> int |
| RPT_MALUR | **ATTACK_ID_HIGH | dropped column |
| RPT_MALUR | **ATTACK_ID_LOW | dropped column |
| RPT_MALUR | *ATTACK_ID | new column - int |
| RPT_MALUR | ATTACK_TYPE | int -> real |
| RPT_MALUR | IP_PROTOCOL | int -> smallint |
| RPT_MALUR | *OTHER_IP | new column - double |
| RPT_MALUR | ATTACK_IP | real -> double |
| RPT_MALUR | *PORT_NUMBER | new column - int |
| RPT_MALUR | SIDE | int -> smallint |
| RPT_PUR | GENERATOR_ID | int -> smallint |
| RPT_SUR | BREACH_STATE | int -> smallint |
| RPT_SUR | MONITORED_OBJECT_ID | int -> smallint |
| RPT_SUR | PACKAGE_ID | int -> smallint |
| RPT_SUR | REASON | int -> smallint |
| RPT_TR | DOWNSTREAM_VOLUME | int -> real |
| RPT_TR | UPSTREAM_VOLUME | int -> real |
| RPT_TR | *FLAVOR_ID | new column - int |
| RPT_TR | *FLOW_CLOSE_MODE | new column - smallint |

| | | |
|---|---|---|
| RPT_TR | INITIATING_SIDE | int -> smallint |
| RPT_TR | IP_PROTOCOL | int -> smallint |
| RPT_TR | PACKAGE_ID | int -> smallint |
| RPT_TR | PEER_IP | int -> double |
| RPT_TR | PROTOCOL_ID | int -> smallint |
| RPT_TR | *PROTOCOL_SIGNATURE | new column - int |
| RPT_TR | SOURCE_IP | int -> double |
| RPT_TR | TIME_FRAME | int -> smallint |
| RPT_TR | *ZONE_ID | new column - int |

***Table 3 Database Table Changes for 2.5 JDBCAdapter to 3.0.0 Sybase***

| Table Name | Column Name | Change |
|---|---|---|
| RPT_LUR | ACTIVE_SUBSCRIBERS | real -> int |
| RPT_LUR | CONCURRENT_SESSIONS | real -> int |
| RPT_LUR | DOWNSTREAM_VOLUME | real -> int |
| RPT_LUR | SECONDS | real -> int |
| RPT_LUR | SESSIONS | real -> int |
| RPT_LUR | TOTAL_ACTIVE_SUBSCRIBERS | real -> int |
| RPT_LUR | UPSTREAM_VOLUME | real -> int |
| RPT_MALUR | **ATTACK_ID_HIGH | dropped column |
| RPT_MALUR | **ATTACK_ID_LOW | dropped column |
| RPT_MALUR | *ATTACK_ID | new column - int |
| RPT_MALUR | *OTHER_IP | new column - double |
| RPT_MALUR | *PORT_NUMBER | new column - int |
| RPT_MALUR | ATTACK_IP | real -> double |
| RPT_MALUR | ATTACK_TYPE | smallint -> real |
| RPT_MALUR | CONFIGURED_DURATION | real -> int |
| RPT_MALUR | DURATION | real -> int |
| RPT_MALUR | END_TIME | real -> int |
| RPT_MALUR | MALICIOUS_SESSIONS | real -> int |
| RPT_PUR | ACTIVE_SUBSCRIBERS | real -> int |
| RPT_PUR | CONCURRENT_SESSIONS | real -> int |
| RPT_PUR | DOWNSTREAM_VOLUME | real -> int |
| RPT_PUR | SECONDS | real -> int |

| | | |
|---|---|---|
| RPT_PUR | SESSIONS | real -> int |
| RPT_PUR | TOTAL_ACTIVE_SUBSCRIBERS | real -> int |
| RPT_PUR | UPSTREAM_VOLUME | real -> int |
| RPT_SUR | BREACH_STATE | int -> smallint |
| RPT_SUR | DOWNSTREAM_VOLUME | real -> int |
| RPT_SUR | MONITORED_OBJECT_ID | int -> smallint |
| RPT_SUR | PACKAGE_ID | int -> smallint |
| RPT_SUR | REASON | int -> smallint |
| RPT_SUR | SESSIONS | real -> int |
| RPT_SUR | UPSTREAM_VOLUME | real -> int |
| RPT_TR | *FLAVOR_ID | new column - int |
| RPT_TR | *FLOW_CLOSE_MODE | new column - smallint |
| RPT_TR | *PROTOCOL_SIGNATURE | new column - int |
| RPT_TR | *ZONE_ID | new column - int |
| RPT_TR | INITIATING_SIDE | int -> smallint |
| RPT_TR | PACKAGE_ID | int -> smallint |
| RPT_TR | TIME_FRAME | int -> smallint |

***Table 4 Database Table Changes for Oracle***

| Table Name | Column name | Change |
|---|---|---|
| RPT_MALUR | **ATTACK_ID_HIGH | dropped column |
| RPT_MALUR | **ATTACK_ID_LOW | dropped column |
| RPT_MALUR | *ATTACK_ID | new column - int |
| RPT_MALUR | *OTHER_IP | new column - int |
| RPT_MALUR | *PORT_NUMBER | new column - int |
| RPT_TR | *FLAVOR_ID | new column - int |
| RPT_TR | *FLOW_CLOSE_MODE | new column - int |
| RPT_TR | *PROTOCOL_SIGNATURE | new column - int |
| RPT_TR | *ZONE_ID | new column - int |

***Table 5 Database Table Changes for MySQL***

| Table Name | Column Name | Change |
|---|---|---|
| RPT_LUR | LINK_ID | smallint -> tinyint |
| RPT_LUR | GENERATOR_ID | smallint -> tinyint |
| RPT_LUR | UPSTREAM_VOLUME | bigint -> int |
| RPT_LUR | DOWNSTREAM_VOLUME | bigint -> int |
| RPT_LUR | SESSIONS | bigint -> int |
| RPT_LUR | SECONDS | bigint -> int |
| RPT_LUR | CONCURRENT_SESSIONS | bigint -> int |
| RPT_LUR | ACTIVE_SUBSCRIBERS | bigint -> int |
| RPT_LUR | TOTAL_ACTIVE_SUBSCRIBERS | bigint -> int |
| RPT_PUR | GENERATOR_ID | smallint -> tinyint |
| RPT_PUR | UPSTREAM_VOLUME | bigint -> int |
| RPT_PUR | DOWNSTREAM_VOLUME | bigint -> int |
| RPT_PUR | SESSIONS | bigint -> int |
| RPT_PUR | SECONDS | bigint -> int |
| RPT_PUR | CONCURRENT_SESSIONS | bigint -> int |
| RPT_PUR | ACTIVE_SUBSCRIBERS | bigint -> int |
| RPT_PUR | TOTAL_ACTIVE_SUBSCRIBERS | bigint -> int |
| RPT_SUR | PACKAGE_ID | int -> smallint |
| RPT_SUR | MONITORED_OBJECT_ID | int -> smallint |
| RPT_SUR | BREACH_STATE | int -> smallint |
| RPT_SUR | REASON | int -> smallint |
| RPT_MALUR | ATTACK_TYPE | smallint -> bigint |
| RPT_MALUR | SIDE | smallint -> tinyint |
| RPT_MALUR | CONFIGURED_DURATION | bigint -> int |
| RPT_MALUR | DURATION | bigint -> int |
| RPT_MALUR | END_TIME | bigint -> int |
| RPT_MALUR | ATTACKS | smallint -> tinyint |
| RPT_MALUR | MALICIOUS_SESSIONS | bigint -> int |
| RPT_MALUR | **ATTACK_ID_HIGH | dropped column |
| RPT_MALUR | **ATTACK_ID_LOW | dropped column |
| RPT_MALUR | *ATTACK_ID | new column - int |
| RPT_MALUR | *OTHER_IP | new column - bigint |

| | | |
|---|---|---|
| RPT_MALUR | *PORT_NUMBER | new column - int |
| RPT_TR | *FLAVOR_ID | new column - int |
| RPT_TR | *FLOW_CLOSE_MODE | new column - smallint |
| RPT_TR | *PROTOCOL_SIGNATURE | new column - int |
| RPT_TR | *ZONE_ID | new column - int |
| RPT_TR | PACKAGE_ID | int -> smallint |
| RPT_TR | INITIATING_SIDE | int -> tinyint |
| RPT_TR | TIME_FRAME | int -> tinyint |

# Open Caveats

## Collection Manager Software

### Slow execution of script sceconf.py

- Cisco number: CSCsd82231

  When there are numerous SCE connections to the CM, execution of the script sceconf.py can take a long time.

### Connection to bundled Sybase cannot be opened

- Cisco number: CSCse05441

  Under Solaris, when using ASE 12.5, in rare circumstances the database will not accept incoming connections from the CM or from scripts (such as dbtables.sh or the periodic delete process). This can result in loss of RDRs.

  The indication for this situation is the “cannot open connection, not enough connections” message in the Sybase log.

  **Workaround:** As a short-term workaround, restart Sybase and then restart the CM. If possible, upgrade Sybase to version 15.0 available in the CM distribution.

## Warning message in the output of the ./dbperiodic.py --load

- Cisco number: n/a

  When running `./dbperiodic.py --load` the following warning message can appear:

  **warning - could not read existing crontab. proceeding anyway...**

  Workaround: None. Ignore the message.

## US English locale required

- Cisco number: n/a

  For correct SCMS CM and Sybase operation, English locale must be used.

  **Workaround:** To set the locale, place the following line in the */etc/TIMEZONE* configuration file

  ```
  LANG=en_US
  ```

  The system must be rebooted after the change is made and Solaris must have support for this locale installed. You can verify the Solaris support by checking that the directory */usr/lib/locale/en_US* exists. If it does not exist, install the locale from the Solaris installation CDs.

## POSIX format for time zone not recommended

- Cisco number: n/a

  Setting the OS time zone as offset from GMT in POSIX format is not recommended and may lead to problems in future versions.

  **Workaround:** Set the time zone in the */etc/TIMEZONE* configuration file by (supported) country name, for example:

  ```
  TZ=Japan
  ```

  To verify that the country name is supported as a time zone setting, check that it is listed in the directory */usr/share/lib/zoneinfo*.

  If GMT offset must be used, use the `zoneinfo` format with the `:Etc` prefix, for example:

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

# Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at any time, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to *http://www.cisco.com*.

## Technical Assistance Center

The Cisco Technical Assistance Center (TAC) website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

### Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website *http://www.cisco.com/tac*.

P3 and P4 level problems are defined as follows:

- P3—Your network is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for *Cisco.com* (on page 20), go to *http://tools.cisco.com/RPF/register/register.do*.

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool *at http://www.cisco.com/tac/caseop*en.

## Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to *http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml*.

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.