



Release Notes for Cisco Service Control Subscriber Manager, Release 3.8.x

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Note

This document supports all 3.8.x releases.

Contents

This document consists of the following sections:

- [Introduction, page 1](#)
- [Cisco Service Control Subscriber Manager Release 3.8.5, page 2](#)
- [Cisco Service Control Subscriber Manager Release 3.8.0, page 6](#)
- [Obtaining Documentation and Submitting a Service Request, page 10](#)

Introduction

The release notes for the Cisco Service Control Subscriber Manager describe the enhancements provided in Cisco SCMS Subscriber Manager Release 3.8.x.

This document outlines the issues that have been resolved in Cisco Service Control Subscriber Manager Release 3.8.0 and Cisco Service Control Subscriber Manager Release 3.8.5.

For information about the features that were added and issues that were resolved in the Release 3.7x train, see:

[Release Notes for Cisco Service Control Management Suite Subscriber Manager, Release 3.7.x](#)



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

To access the Cisco Service Control Subscriber Manager documentation site, follow these instructions:

1. From Cisco.com, go to the following page:
<http://www.cisco.com/cisco/web/psa/default.html?mode=prod>
2. Choose **Products > Service Exchange > Cisco Service Control > Cisco Service Control Management Suite > Cisco Service Control Subscriber Manager**.

Cisco Service Control Subscriber Manager Release 3.8.5

This section describes the functional enhancements, interoperability of the APIs, and resolved issues in Cisco Service Control Subscriber Manager Release 3.8.5:

- [Information About New Features, page 6](#)
- [API Interoperability, page 7](#)
- [Resolved Caveats, Release 3.8.5, page 3](#)
- [Open Caveats, Release 3.8.5, page 4](#)

Information About New Features

Cisco Service Control Subscriber Manager Release 3.8.5 contains the following new features:

Enhancements to IPv6 support

- Introduced new LEG—DHCPv6 Lease Query LEG
- Updated Subscriber Manager API
- Updated Cisco SCE subscriber API
- Introduced new CLU commands
- CMTS awareness
 - Enhanced IPDR LEG
 - IPv4 and IPv6 mapping using DHCP Lease Query LEGs
 - Enhanced SNMP bonding group
- Storage of only 64 MSB of IPv6 addresses
- Support for dual-stack subscribers

The management IP addresses of the Cisco SCE Solution network entities, such as, Cisco Service Control Subscriber Manager, Cisco Service Control Collection Manager, Cisco SCA BB, Cisco SCE, RADIUS Client (NAS), and CMTS, is supported only on IPv4, except the DHCP server in the DHCP LEG implementation.

Introduced new configuration options in IPDR LEG to ignore the IP mappings and logout notifications.

High Availability—Supports Veritas Cluster Server Version 5.x on Solaris and Red Hat Linux machines.



Note

From Cisco Service Control Subscriber Manager Release 3.8.5, to enable support for IPv6, we recommend that you use only 64-bit platforms.

API Interoperability

Table 1 shows the Cisco Service Control Subscriber Manager Release 3.8.5 and Cisco SCE Release 3.8.5 software components along with corresponding versions of the Cisco SCMS Subscriber Manager C/C++ API, Cisco Service Control Subscriber Manager Java API, and the Cisco SCE Subscriber API with which they are compatible.

Table 1 API Interoperability

API	Cisco SCE 3.8.5	Cisco SCMS SM 3.8.5
SM C/C++ API	—	3.7.x, 3.8.0, 3.8.5
SM Java API	—	3.7.x, 3.8.0, 3.8.5
Cisco SCE Subscriber API	3.7.x, 3.8.0, 3.8.5	—
CNR LEG ¹	—	3.7.x, 3.8.0, 3.8.5

1. CNR LEG=Cisco Network Registrar Login Event Generator

Resolved Caveats, Release 3.8.5

This section describes the caveats resolved in Cisco Service Control Subscriber Manager Release 3.8.5.

CSCuc06530

After updating a subscriber using the updateSubscriberDetails SOAP API, the Package Id was updated for the corresponding subscriber, but the subscriber was moved to the default domain "subscribers".

This issue is resolved.

CSCuc18403

The login of subscribers via the SOAP LEG failed. When the SOAP server was deployed using Java, the server code caused a compilation issue.

This issue is resolved.

CSCuc53070

When quota reached its threshold value or when a quota depletion occurred within 10 seconds of quota provisioning, the Cisco Service Control Subscriber Manager ignored the notification. In a multibucket scenario, when both the buckets got depleted, the Cisco Service Control Subscriber Manager considered only one notification. Hence, only one bucket was updated. The second bucket never got updated.

This issue is resolved.

CSCuc72993

The PIR of the virtual link was not updated correctly. This occurred when a virtual link was provisioned for the first time from the Cisco Service Control Subscriber Manager to Cisco SCE.

This issue is resolved.

CSCuc06243

Some of the Error Codes were not displayed for the respective API methods in the C API and Java API. Error codes that were not applicable to certain API methods were documented against those API methods.

This issue is resolved.

Open Caveats, Release 3.8.5

This section describes the open caveats in Cisco Service Control Subscriber Manager Release 3.8.5.

CSCud07221

In a multiple Cisco SCE scenario, fast traffic on one Cisco SCE and slow traffic on the second Cisco SCE impacts the quota management penalty process.

Workaround:

There is no known workaround.

CSCud66249

If the Cisco Service Control Quota Manager is configured with a large number of quota profiles, typically more than 25, the Cisco Service Control Subscriber Manager may not persist all the quota profiles in the Cisco Service Control Subscriber Manager DB due to database limitations. This may lead to quota replenish while restarting or upgrading the Subscriber Manager.

Workaround:

Always configure less than 25 quota profiles at a time.

CSCuf93680

In a cluster configuration, the Cisco Service Control Subscriber Manager fails to replicate the IPv6 addresses in the Standby Cisco Service Control Subscriber Manager after an upgrade from the Cisco Service Control Subscriber Manager, Release 3.8.0 to Release 3.8.5.

Workaround:

-
- Step 1** On the active Subscriber Manager, pause the replication:
`p3db --rep-pause`
 - Step 2** On the standby Subscriber Manager, stop the local VCS:
`/opt/VRTSvcs/bin/hastop -local`
 - Step 3** Stop replication:
`p3db --rep-stop`
 - Step 4** Drop the replication scheme:
`p3db --drop-rep-scheme`
 - Step 5** Upgrade the cluster in the standby Subscriber Manager:
`./cluster-upgrade.sh -1`
 - Step 6** Start the VCS in the standby machine:
`/opt/VRTSvcs/bin/hastart`
 - Step 7** Wait for the machine to become the standby Subscriber Manager

- Step 8** Set the replication in the Standby Subscriber Manager:
- ```
p3db --set-rep-scheme
```
- Step 9** Run the replication agent in the active Subscriber Manager:
- ```
p3db --rep-continue
```
- Step 10** Verify the replication status on both the active and the standby Subscriber Managers. Confirm that both the Subscriber Managers shows start status with data replicated from active to standby.
- Step 11** Perform a failover by moving the standby Subscriber Manager to the active, and the active Subscriber Manager to the standby.
- Step 12** On the active Subscriber Manager, pause the replication:
- ```
p3db --rep-pause
```
- Step 13** On the standby Subscriber Manager, stop the VCS local:
- ```
/opt/VRTSvcs/bin/hastop -local
```
- Step 14** Stop replication:
- ```
p3db --rep-stop
```
- Step 15** Drop the replication scheme:
- ```
p3db --drop-rep-scheme
```
- Step 16** Upgrade the cluster in the standby machine:
- ```
./cluster-upgrade.sh -2
```
- Step 17** Start the VCS in the standby machine:
- ```
/opt/VRTSvcs/bin/hastart
```
- Step 18** Wait until the machine becomes the stand-by Subscriber Manager.
-

Cisco CMTS Caveats

The following known caveats in Cisco CMTSs may cause partial or no Vlink mappings for subscriber:

- CSCtw80211—Channel Set ID may not be mapped to the upstream channels in the docsIf3UsChSetChList.
- CSCtx03129—docsIf3DsChSetChList may not populate the channel set of the bonding group.
- CSCto47157—The Cisco CMTS router generates a CPE 'stop' IPDR messages (<RecType> 2 </RecType>) for the affected CPE, and no login messages (<RecType> 3 </RecType>) corresponding to that CPE are generated during dynamic channel changes.

Cisco Service Control Subscriber Manager Release 3.8.0

This section describes the functional enhancements, interoperability of the APIs, and resolved issues in Cisco Service Control Subscriber Manager Release 3.8.0:

- [Information About New Features, page 6](#)
- [API Interoperability, page 7](#)
- [Resolved Caveats, Release 3.8.0, page 7](#)
- [Open Caveats, Release 3.8.0, page 7](#)

Information About New Features

Cisco Service Control Subscriber Manager Release 3.8.0 contains the following new features:

- **VLM Ignores Periodic Device Query Learning**

Prior to Release 3.8.0, VLM periodically sent SNMP queries. This provides information on the interfaces and bandwidth from the configured CMTS. It allows creating the virtual links in context of the learned physical interfaces and mapping tables. It can then provision the virtual links to the Cisco Service Control Engine (SCE).

Release 3.8.0 adds an option to disable the periodic SNMP query for topology learning. This applies to the specific CMTS. It only allows processing of the subscriber information (IPDR messages/DHCP messages) from the CMTS.
- **Times Ten Additional Disk Support**

Oracle Times Ten guidelines recommend different disks for better application performance. This applies to checkpoint transaction logs (.log, .res files), timesten checkpoint file (.ds0, .ds1) and the application log files. Release 3.8.0 adds additional disk support for this application.
- **Convergence of Subscriber's VLINK Associations**

Release 3.8.0 adds a scheduler task. This queries the DB in a periodic basis for partial/no vlink mappings. It also adds the subscribers in the primary queue of the SNMP BG process. This allows the Cisco Subscriber Manager to query the CMTS on an interval basis. All the subscribers with proper up and down vlink IDs converge.

API Interoperability

Table 2 shows the Cisco Service Control Subscriber Manager Release 3.8.0. and Cisco SCE Release 3.8.0. software components along with versions of the Cisco Service Control Subscriber Manager C/C++ API, Cisco Service Control Subscriber Manager Java API, and the Cisco SCE Subscriber API with which they are compatible.

Table 2 API Interoperability

API	Cisco SCE 3.8.0	Cisco SCMS SM 3.8.0
SM C/C++ API	—	3.7.x, 3.8.0
SM Java API	—	3.7.x, 3.8.0
Cisco SCE Subscriber API	3.7.x, 3.8.0	—
CNR LEG ¹	—	3.7.x, 3.8.0

1. CNR LEG=Cisco Network Registrar Login Event Generator

Resolved Caveats, Release 3.8.0

This section describes the caveats resolved in Cisco Service Control Subscriber Manager Release 3.8.0.

CSCty59940

When the Cisco Service Control Subscriber Manager is in the cluster mode, a connection to the CMTS is established from the active Cisco Service Control Subscriber Manager. In cases of failover, the collector-exporter connection from the Cisco Service Control Subscriber Manager in the standby mode should drop. The connection should be established from the active Cisco Service Control Subscriber Manager. However, during the failover, the connection from the standby Cisco Service Control Subscriber Manager does not drop.

CSCty80287

When Cisco Service Control Subscriber Managers are configured in a cluster mode, the Cisco Service Control Subscriber Manager loads; but the import.csv file and export.csv file from the configuration directory of the active Cisco Service Control Subscriber Manager is not copied to the remote Cisco Service Control Subscriber Manager.

Open Caveats, Release 3.8.0

This section describes the open caveats in Cisco Service Control Subscriber Manager Release 3.8.0.

CSCuc06243

Some of the Error Codes are not displayed for the respective API methods in the C API and Java API. Error codes not applicable to certain API methods are documented against those API methods.

Workaround:

There is no known workaround.

CSCuc72993

The PIR of the virtual link is not updated correctly. This occurs when you provision a virtual link for the first time from the Cisco Service Control Subscriber Manager to Cisco SCE.

Workaround:

A manual resynchronization resolves the issue. Use the **p3vlink--resync-all** command

CSCuc18403

The login of subscribers via the SOAP LEG fails. When the SOAP server is deployed using Java, the server code causes a compilation issue.

Workaround:

In the deploy.wsdd file, change the line

```
<service name="QueryServiceSoap" provider="java:RPC" style="document" use="literal">
```

to

```
<service name="QueryServiceSoap" provider="java:RPC" style="rpc" use="encoded">
```

CSCuc06530

While updating a subscriber using the updateSubscriberDetails SOAP API, the Package Id for the subscriber is updated correctly, but the subscriber is always moved to the default domain “subscribers” even if the subscriber belongs to a different domain.

Workaround:

Configure the default domain name (subscribers) in the p3sm.cfg file.

CSCub89640

Updating the online status of the Cisco Service Control Subscriber Manager through Cisco SCA BB cause issues to occur randomly when the value of the security_level parameter under the [RPC.Server] section is set to semi.

Workaround:

Set the security_level parameter value as none, and then set the Online Status of the Cisco Service Control Subscriber Manager.

CSCtx71082

The Cisco Service Control Subscriber Manager collector connects with the CMTS exporter even if the start_exporter parameter in the IPDR Exporter section of the ipdr.cfg file is set to no.

Workaround:

Comment out all the lines of the respective IPDR Exporter section and run the **p3sm --load-config** CLU command.

CSCsw41184

The next IP removal time is incorrect.

Workaround:

- For static devices, there is no known workaround.
- For dynamic devices, use the **p3vlink --remove-device -d <devicename>** CLU to remove the dynamic device.

CSCtj01171

If interim aging is enabled while using the RADIUS Listener and RADIUS Sniffer LEGs, the VPN subscriber mapping is not removed after the interim aging interval.

Workaround:

There is no known workaround.

CSCtg77699

When the RADIUS event rate is very high (number of incoming RADIUS packets at the maximum rate) and the CPU deals with other Subscriber Manager operations, the Subscriber Manager Java process memory size increases gradually and reaches the maximum memory usage limit.

When the process hits maximum memory size, Java triggers Full Garbage Collection (FGC) to free up some unused object space for the process to continue using the memory without any issues. During this period, Java FGC pauses all the process application threads. RADIUS Listener, being a UDP-based multithreaded component, stops processing packets during this Java FGC and this leads to packet drops.

Workaround:

There is no known workaround.

CSCtx09852

From Cisco Service Control Subscriber Manager Release 3.7.2, synchronization between Cisco Service Control Subscriber Manager and Cisco SCE will not be triggered during Cisco Service Control Subscriber Manager restart or when Cisco Service Control Subscriber Manager moves from the standby state to the active state in a cluster as expected.

The following is the **p3net --show** command output for all the Cisco SCEs connected to Cisco Service Control Subscriber Manager, when the latter is restarted:

```
p3net --show-all --detail
```

```
=====
| Name           | Host           | Conn-   | Sync-   | Domain           |
|               |               | Status  | Status  |                 |
|-----|-----|-----|-----|-----|
| sce8k          | 10.78.241.211 | up      | not-done | Cisco            |
| sce8k          | 10.78.242.212 | up      | not-done | cisco1           |
|-----|-----|-----|-----|-----|
```

The sync-status moves to done only after a manual synchronization or after a successful auto synchronization. Synchronization is automatically triggered if the Cisco SCE connection goes down and gets reconnected to Cisco Service Control Subscriber Manager, except during Cisco Service Control Subscriber Manager restart.

Workaround:

Perform a manual synchronization, if required.

CSCty77154

The virtual links created by the virtual link API gets deleted when Cisco SCE is reloaded.

Workaround:

Before reloading Cisco SCE, execute the following command in order to retain the virtual links when Cisco SCE is up:

```
:copy running-config startup-config
```

Cisco CMTS Caveats

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Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at:

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