Release Notes for Cisco Service Control Subscriber Manager, Release 4.0.x

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Note This document supports all 4.0.x releases.

Contents

This document consists of the following sections:

Introduction

The release notes for the Cisco Service Control Subscriber Manager describe the enhancements provided in Cisco SCMS Subscriber Manager Release 4.0.x.

This document outlines the issues that have been resolved in Cisco Service Control Subscriber Manager Release 4.0.x.

For information about the features that were added and issues that were resolved in the Release 3.8xtrain, see:

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

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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 4.0.0

This section describes the functional enhancements, interoperability of the APIs, and resolved issues in Cisco Service Control Subscriber Manager Release 4.0.0:

Information About New Features

Cisco Service Control Subscriber Manager Release 4.0.0 contains the following new features:

Enhancements

- The RDR formatter is moved to the Cisco Service Control Quota Manager from the EM-Agent. This improves the quota RDR handling rate.
- The Radius Listener LEG in the Cisco Service Control Subscriber Manager is enhanced to enforce single mapping for a subscriber in a Cisco SCE.
- The Cisco Service Control Quota Manager is enhanced to support add and set quota operations for breached subscribers in a multiple SCE configuration.
- The Cisco Service Control Quota Manager is enhanced to persist all quota profiles in Cisco Service Control Database even if the Cisco Service Control Quota Manager is configured with a large number of quota profiles.
- The Cisco Service Control Quota Manager is enhanced to support monthly aggregation period with penalty profiles without sliding window features.
- The DHCPv6 Lease Query LEG is enhanced to support multiple DHCPv6 server configuration in Active/Active mode.
- The Cisco Service Control Subscriber Manager is enhanced to support Veritas Cluster Server versions 5.x and 6.0 on Solaris and Red-Hat Linux machines.

API Interoperability

Table 1 shows the Cisco Service Control Subscriber Manager Release 4.0.0 and Cisco SCE Release 4.0.0 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 4.0.0	Cisco SM 4.0.0
SM C/C++ API	—	3.7.2, 3.8.x, 4.0.0
SM Java API	—	3.7.2, 3.8.x, 4.0.0
Cisco SCE Subscriber API	3.7.2, 3.8.x, 4.0.0	—
CNR LEG[1]	—	3.7.2, 3.8.x, 4.0.0

1. CNR LEG=Cisco Network Registrar Login Event Generator

Resolved Caveats, Release 4.0.0

This section describes the caveats resolved in Cisco Service Control Subscriber Manager Release 4.0.0.

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.

This issue is resolved.

CSCuc90683

If a higher value is used as quota threshold in Cisco Service Control Quota Manager, there is a considerable loss in last dosage.

This issue is resolved.

CSCpu14164

The Cisco Service Control Subscriber Manager receives a pull request even after the subscriber is logged out.

This issue is resolved.

CSCts66524

The Cisco SCE drops quota RDRs if there are more number of short-lived subscribers in Cisco SCE.

This issue is resolved.

CSCud95021

If multiple buckets are configured, the remaining quota for nonbreached buckets is not correctly updated in Cisco SCE.

This issue is resolved.

CSCue67737

If you upgrade from Cisco Service Control Subscriber Manager, Release 3.8.5 to a later version in cluster setup with DHCP enabled, 128-bit IPv6 addresses are not stored in database and the upgrade fails.

This issue is resolved.

CSCug07102

If there are more number breached subscribers in Cisco Service Control Subscriber Manager, high CPU usage is noticed in the Subscriber Manager server.

This issue is resolved.

CSCug74278

The Cisco Service Control Subscriber Manager receives an invalid RDR for subscribers with IPv6 address starting from 9000. This results in failed login.

This issue is resolved.

CSCug71663

The Cisco SCE incorrectly learns overlapping bonding groups as separate vlinks.

This issue is resolved.

CSCuf35075

If the dynamic bonding group feature is enabled, the Cisco SCE incorrectly learns the PIR value of upstream vlinks.

This issue is resolved.

CSCuf24785

During topology learning, the Cisco SCE shows an error message if the number of bonding groups in a vlink is more than 100.

This issue is resolved.

CSCug55921

The Cisco SCE does not correctly learn the number of upstream vlinks in Cisco CMTSs.

This issue is resolved.

CSCug17862

The RDR formatter in Cisco Service Control Subscriber Manager does not work in Cisco Service Control Subscriber Manager cluster setup.

This issue is resolved.

CSCuf31010

While upgrading from Cisco Service Control Subscriber Manager Release 3.8.5 to 4.0.0, quota is replenished for active subscribers.

This issue is resolved.

CSCue40838

If SOAP LEG is enabled, importing subscribers from CMTS to Cisco Service Control Subscriber Manager Release 4.0.0 using the **p3vlink --import-subs-into-db** command fails to add subscriber giaddr properties.

This issue is resolved.

CSCue32417

If auto logout is set in pull mode, the Cisco Service Control Subscriber Manager introduces IPv6 subscribers to Cisco SCE even after the lease period.

This issue is resolved.

CSCud95021

If multiple buckets are configured, after a quota breach, the remaining quota in the nonbreached bucket is not correctly updated in the penalty profile.

This issue is resolved.

CSCue87223

In multiple post penalty profiles, the Cisco Service Control Quota Manager doesn't match single criteria for post penalty package switch.

This issue is resolved.

CSCuf01496

When quota replenish and penalty switch happen at the same time, quota update may happen twice leading to additional quota on penalty profile.

This issue is resolved.

CSCue61433

In a multiple SCE setup with multiple buckets configured, quota update is triggered incorrectly in provision mode.

This issue is resolved.

CSCug76511

If you enable both DHCP and DHCPv6 Sniffer LEGs and run the **p3sm --load-config** command in Cisco Service Control Subscriber Manager, the DHCP tunnables are not updated in Cisco SCE and the device hangs.

This issue is resolved.

CSCuf54767

An external package switch causes the Cisco Service Control Subscriber Manager to show an error message if profiles are configured with different aggregation periods.

This issue is resolved.

Open Caveats, Release 4.0.0

This section describes the open caveats in Cisco Service Control Subscriber Manager Release 4.0.0.

CSCug24931

If you run the **p3subsdb --clear-all-states** command to clear all the quota information from the Cisco Service Control Quota Manager, you might see Cisco Service Control Database error messages. This also leads to Quota provisioning issues.

Workaround:

Run the **p3subsdb --clear-all-states** command in a maintenance window after moving all the subscribers to the non-Quota profile with Cisco Service Control Quota Manager disabled.

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 3.7.2, to Release 4.0.0.

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.

Note If you upgrade from Cisco Service Control Subscriber Manager, Release 3.8.5 to Release 4.0.0, there may be data loss during the first cluster upgrade. We recommend that you perform the upgrade when there is minimal or no subscriber activity.

CSCud07221

In a multiple SCE configuration, using the tunable rem_quota_on_penalty_switch_with_history does not deduct over consumption of base profile in penalty profile if one Cisco SCE gets faster traffic and the other Cisco SCE slower traffic.

Workaround

Set the value of the periodic RDR to one minute or throttle the Cisco SCE with faster traffic.

CSCug82068

If the sliding window feature is used, the **p3qm --show-subs-in-breach** command shows subscribers who are already replenished and exited from breach state.

Workaround

There is no workaround.

CSCuf20443

While importing the OnOnlyProcess.cf, SubscriberManager.cf, TimesTenRep.cf files in Veritas Cluster Server GUI, this error message appears:

```
VCS ERROR V-16-10-70
?haattr ?default TimesTenRep ResourceRecipients? command failed to execute
Now Quitting
```

Workaround

There is no workaround. The import is successful.

CSCub89640

When you change the online status of the Cisco Service Control Subscriber Manager to semi using the Cisco SCA BB console, an error message similar to the following is displayed:

```
Extracting info from "SM device [10.66.86.171]": Failed to extract info: socket closed
```

Workaround

Perform the following steps:

Step 1 Set the parameter security_level to none in p3sm.cfg under [RPC.Server] section.

```
security_level=none
```

Step 2 Reload the Cisco Service Control Subscriber Manager configuration file.

```
p3sm --load-config
```

Alternatively, you can also perform these steps as a workaround:

Step 1 Log in to the operating systems as root user.

Step 2 Install the Cisco Service Control Subscriber Manager 4.0.0 if you have not already installed it.

Step 3 Create a file named rpc_issue_fix.sh and paste the following text in the file.

```
echo "SM_JAVA_FLAGS=\"-XX:+UseParallelGC -Djava.security.egd=file:/dev/./urandom\"" >>
~pcube/sm.sh
```

Note If you have installed the Cisco Service Control Subscriber Manager in a directory other than the default directory, change the installation path in the **rpc_issue_fix.sh** file.

Step 4 Run the **rpc_issue_fix.sh** file.

```
[root@locallan1 pcube]# ./rpc_issue_fix.sh
```

Step 5 As pcube user, start Cisco Service Control Subscriber Manager.

```
[pcube@locallan1 bin]$ ./p3sm --start
```

If the Cisco Service Control Subscriber Manager is already running, restart it.

```
[pcube@locallan1 bin]$ ./p3sm --restart
```

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

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