



# **Red Hat Subscription Management All Subscription Docs**

## **Troubleshooting Subscription Manager in Red Hat Enterprise Linux**

to respond to problems with Red Hat Subscription Manager and Subscription Asset  
Manager

Edition 3



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Edition 3

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## Abstract

Troubleshoot problems with the subscription-manager tool in Red Hat Enterprise Linux.

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## 1. TROUBLESHOOTING RED HAT SUBSCRIPTION MANAGER

Because of differences in other services, features in Red Hat Subscription Manager, and environments, there are some bugs or limits to functionality for Red Hat Subscription Manager. This section contains some workarounds and troubleshooting information from some of these issues.

### 1.1. Red Hat Enterprise Linux 5.9

#### 1.1.1. Guest Fact Shows UUID Unknown

For virtual guests, the Subscription Manager daemons use **dmidecode** to read the System Management BIOS (SMBIOS) value, which is used to retrieve the guest UUID. On 64-bit Intel architecture, the SMBIOS information is controlled by the Intel firmware and stored in a read-only binary entry. Therefore, it is not possible to retrieve the UUID or set a new and readable UUID.

Because the guest UUID is unreadable, running the **facts** command on the guest system shows a value of *Unknown* in the **virt.facts** file for the system (**virt.uuid: Unknown**). This means that the guest does not have any association with the host machine and, therefore, does not inherit some subscriptions.

The facts used by Subscription Manager can be edited manually to add the UUID:

1. Obtain the guest name or guest ID.
2. On the virtual host, use **virsh** to retrieve the guest UUID. For example, for a guest named **rhel5server\_virt1**:

```
virsh domuuid rhel5server_virt1
```

3. On the guest, manually create a facts file:

```
vim /etc/rhsm/facts/virt.facts
```

4. Add a line which contains the given UUID.

```
{  
  "virt.uuid": "$VIRSH_UUID"  
}
```

Creating the facts file and inserting the proper UUID means that Subscription Manager properly identifies the guest rather than using an Unknown value.

### 1.2. Red Hat Enterprise Linux 6.2

#### 1.2.1. Manually Setting a Preferred Operating System Release

Beginning in Red Hat Enterprise Linux 6.3, Red Hat Subscription Manager could set a preferred operating system version to use to limit automatic updates for a system. This is one of several

preferences that can be set to use for autoattaching subscriptions. However, it is not possible to set a preferred operating system through Red Hat Subscription Manager on older versions of Red Hat Enterprise Linux.

The system can be restricted to a certain operating system version on Red Hat Enterprise Linux 6.2 by editing the `yum` configuration. For example, to limit `yum` updates to 6.2-version packages:

```
[root@server ~]# echo 6.2 > /etc/yum/vars/releasever
```

## 2. TROUBLESHOOTING SUBSCRIPTION ASSET MANAGER

Because of differences in other services, features in Red Hat Subscription Manager, and environments, there are some bugs or limits to functionality for Red Hat Subscription Manager. This section contains some workarounds and troubleshooting information from some of these issues.

### 2.1. Subscription Asset Manager 1.3

#### 2.1.1. Required Upgrades for Instance-Based Subscription Changes

A new model of pricing and counting subscriptions coincident with the Subscription Asset Manager 1.3 release. Subscription Asset Manager 1.3 (and updated Red Hat Subscription Manager) can properly parse and apply these updated subscriptions as well as the former subscription structure. Older versions of Subscription Asset Manager cannot.



#### IMPORTANT

If any subscriptions will be purchased after October 1, 2013, those subscriptions will use the new instance-based model. All Subscription Asset Manager servers must be upgraded to version 1.3 in order to use those new subscriptions. Older versions of Subscription Asset Manager are not compatible with the new instance-based subscriptions.

Additionally, it is strongly recommended that the local Red Hat Subscription Manager packages be updated on all local systems in order to use the new instance-based subscriptions.

The upgrade process requires backing up Subscription Asset Manager and its databases and managing indexes, along with updating packages. The full upgrade procedure is covered in the *Using Subscription Asset Manager* guide in the [subscription documentation set](#).

#### 2.1.2. Common Problems with Enhanced Reporting

**Q:** Why are no systems displayed in the report?

**A:** This means that the information is not being pulled into the reporting database, and there are several potential points of failure:

The information isn't being pulled from the Satellite server.

The information is being corrupted or improperly formatted when it is sent to the Subscription Asset Manager server.

The information is not being properly transmitted from Subscription Asset Manager into the reporting database.

The information is not being properly stored in the database.

The information stored in Subscription Asset Manager is outdated.

First, make sure that the sync script is running by checking the history in the sync tool log, **/var/log/splice/spacewalk\_splice\_tool.log**.

Then, make sure that the Mongo service is running and listening on port 27017. If the Mongo service is not running, then the Subscription Asset Manager services cannot start.

```
[root@sam-server ~]# service mongod status
[root@sam-server ~]# telnet localhost 27017
```

If the service is running, check the Mongo database to look for sync entries. For example:

```
[root@sam-server ~]# mongo checkin_service --eval
"printjson(db.marketing_product_usage.count())"
```

If neither of those reveal a problem, or if they do not have relevant entries, then run the reporting debug script:

```
[root@sam-server ~]# /usr/bin/splice-debug
```

This collects all relevant configuration and log files for the reporting server and exports the data to a file in the **/tmp** directory name **splice-debug-YYYY-MM-DD-TIME**. For example, **/tmp/splice-debug-2013-06-14-T15-22-19**.

That directory can be zipped and sent to support if necessary.

**Q: I tried to create a new report, but I got the error *Validation failed: A server name has not been defined in the database. The backend splice tool must execute at least one time.***

**A:** The initial run of the **spacewalk-splice-checkin** utility on the Subscription Asset Manager server pulls the data out of the Satellite server and into the Subscription Asset Manager database. Without that run, there is no Satellite information and the report cannot be set up with the required Satellite server and organizations.

**Q: Why are all systems marked as invalid?**

**A:** Check that a manifest has been imported. The manifest tells Subscription Asset Manager what subscriptions the Satellite server has attached to it; without the manifest, reporting assumes that no subscriptions are available.

**Q: I updated subscriptions for a system or my Satellite server in Subscription Asset Manager, but those changes are not being reflected in the report.**

**A:** The sync script runs every four hours, so it may not have synchronized the changes yet. Run the script by hand (which may take several minutes to finish):

```
[root@sam-server ~]# su - splice -s /bin/bash
[splice@sam-server ~]$ spacewalk-splice-checkin
```



**Q:** The link to the Satellite 5.6 UI in the report results is returning an HTTP 404 error.

**A:** Check that the `rhn-search` process is running on the Satellite 5.6 machine.

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**Q:** I had other organizations and systems registered with my Subscription Asset Manager server, but they have disappeared from the UI. What happened?

**A:** If a Subscription Asset Manager instance used in enhanced reporting has non-Satellite organizations added to it, those organizations may be overwritten and removed in the Subscription Asset Manager database as part of the sync process.



#### **WARNING**

A Subscription Asset Manager instance used for enhanced reporting can *only* be used as a reporting server for Satellite. It cannot be used a regular Subscription Asset Manager instance to manage systems or data could be lost.

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### **3. REVISION HISTORY**

**Revision 1.3-6**

**January 24, 2018**

**Anni Bond**

Updated title and how to create a documentation bug in Bugzilla.

**Revision 1.3-5**

**September 18, 2013**

**Deon Ballard**

New content and reorganization for the SAM 1.3 release.