Oracle® Communications Session Monitor

Upgrade Guide

Release 4.1
F14013-03
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Oracle Communications Session Monitor Upgrade Guide, Release 4.1

F14013-03

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About this Guide

This guide provides guidelines and recommendations for setting up Oracle Communications Session Monitor in a secure configuration. The Oracle Communications Session Monitor product family includes the following products:

- Operations Monitor
- Enterprise Operations Monitor
- Fraud Monitor
- Control Plane Monitor

Revision History

Date	Description
February 2019	Initial release.
March 2019	Updated the following sections: • Upgrading from Release 3.4 to Release 4.1 through PSA • Upgrading from Release 3.4 to Release 4.1 through ACLI
March 2019	Updated the following section: • Configuring Proxies and Repos
October 2019	• Added procedure for modifying database tables for upgrading to 4.1p6 and later to "Upgrading Session Monitor."

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Upgrading Session Monitor

This document provides instructions for upgrading Oracle Communications Session Monitor from a previous version 3.x and 4.x to version 4.1.

Supported Upgrade Paths

This release has been tested for upgrades from specific prior releases. Verify that your current installed release is listed on a valid upgrade path. The possible upgrade paths to Session Monitor 4.1 are listed in Table 1-1.

Table 1-1 Supported Upgrade Paths

From	To	Mechanism
3.3	4.1	Migrate from 3.3 to 3.4 and then upgrade to 4.1 through RPM
3.4	4.1	RPM Upgrade
4.0	4.1	RPM Upgrade

Pre-requisites

Before beginning with the process of upgrading, perform the following pre-requisites.

Configuring Proxies and Repos

You are required to configure the proxies and repos.

Configure the http proxy in **/etc/yum.conf** file and also export the same to environment by doing the following.

In **/etc.yum.conf**, add the following line:

```
proxy=<Your_Proxy>
```

where, <*your_proxy*> is the proxy server details.

Run the following command to export to the environment:

```
export http_proxy=<Your_Proxy> export https_proxy=<Your_Proxy>
```

Run the following command to enable the required proxies in **yum.conf** file before upgrade:

```
curl -O https://yum.oracle.com/public-yum-ol7.repo mv public-yum-ol7.repo /etc/
yum.repos.d/public-yum-ol7.repo yum-config-manager --enable ol7_latest ol7_UEKR4
ol7_developer_EPEL ol7_optional_latest ol7_addons ol7_UEKR3 ol7_UEKR5
```

Creating a Backup before Upgrading

You must create a backup of Mediation Engine (ME) and Mediation Engine Connector (MEC) before you begin upgrade.

For ME

Session Monitor provides the feature of backing up the configuration of Mediation Engine (ME) servers by using Configuration Savepoints.

For more information, see Configuration Savepoints section in Settings chapter of *Operations Monitor User's Guide*.

For MEC

> **Note:**
>
> Backup procedure is not available for probes or Mediation Engine Connector (MEC).

Perform the following to collect present data for comparing incase of any issues:

- Take Platform Setup Application (PSA) Screenshots

  Go through each page of PSA and make screenshots of the page for comparing with post-upgrade in case of issues.
- Potential Customized Files

  Ensure to make a backup cpy of all the following potential customized files:

  – **/etc/mysql** - Configuration files for MySQL stored in this directory. Make a copy of the entire directory. This is not required for probes.

  – **/etc/iptego** for version 3.3 or **/opt/oracle/ocsm//etc/iptego** for version 3.4 and later - Configuration files for Session Monitor services are stored here. Make a copy of the entire directory.
- Any other configuration files that you consider to have changed on the server.
- Capture current system diagnostics with MySQL dumps and all the hardware system configuration.

Altering Database Tables Before Upgrading To 4.1p6

For any upgrade from 3.4 to 4.1 P6 or from 4.0 to 4.1 P6, the following steps need to be followed.

The following steps need to followed before upgrading to 4.1 P6. This has to be applied to all the nodes (Mediation Engine/Mediation Engine Connector/Fraud Monitor).

1. Download the “db_update_script.sh” script delivered with RPM.
2. Set permissions to 777 for script:

   ```
   chmod 777 db_update_script.sh
   ```
3. Run the db upgrade script "db_update_script.sh".

```
./db_update_script.sh
```

> **Note:**
>
> This script execution may take time, from a few minutes to several hours based on the number of database entries. As this runs, the GUI will be accessible. Some functions like downloading pcap, message flow, and pdf download may not work in calls page.

4. Follow the normal upgrade procedure once script execution is successful as mentioned in "Upgrading Session Monitor."

Upgrading Session Monitor

> **Note:**
>
> It is not possible to upgrade from Session Monitor version 3.3 to Session Monitor version 3.4, 4.0, or 4.1 directly as versions 3.4 and 4.x are Oracle Linux - based, and version 3.3 is Debian-based. To upgrade from 3.3 to 3.4 or 4.x, a re-install is required.

To upgrade Session Monitor:

1. Upgrade from Session Monitor release 3.3 to 3.4 or release 4.0 by referring to the Migration Guide provided in the 3.4, and 4.0 product documentation page on the Oracle Help Center.

   With this migration procedure, you can perform upgrade without losing historic calls/data.
2. After upgrading to Session Monitor release 3.4/4.0, upgrade to Session Monitor release 4.1 either by PSA or ACLI.
   - Upgrading from Release 3.4 to Release 4.1 through PSA
   - Upgrading from Release 3.4 to Release 4.1 through ACLI

Upgrading from Release 3.4 to Release 4.1 through PSA

To upgrade from release 3.4 to release 4.1:

1. Open the PSA page of the ME by entering the URL address in the web browser: https://<IPofME>/setup/

   Where, <*IPofME*> is IP address of the ME.

   Contact your Oracle Representative for credentials.
2. Click browse and upload the software downloaded from Oracle,

   For Release 4.1, the software is an .rpm file.
3. After the upload is complete, click **Install**.
4. Accept the license agreement. The installation begins.
5. (Optional) You will receive the following error message if there is no enough disk space.

â€œCannot update. Not enough disk space. Please contact Support". Please check the below document to know how to free up the disk space.

To free up the space, refer to the Document 1937398.1 in the Customer Support website.

The upgrade/installation may take 1 or more hours depending on the data on your machine. Once the installation gets completed, logout of the PSA page and re-login. Click Software Version from the right panel.

Result: The upgraded version is shown as Release 4.1.0.0.0 on the machine.

6. Run the following command after establishing an SSH session with the product.

   ```
   source/opt/oracle/ocsm_env.sh
   ```

Upgrading from Release 3.4 to Release 4.1 through ACLI

> **Note:**
>
> This section provides an example procedure for upgrading Mediation Engine (ME). The Procedure for other machine types like Probe , and Mediation Engine Connector is same.

To upgrade Session Monitor from release 3.4 to release 4.1 through ACLI:

1. Upload .rpm file under /root or any directory on the system through WINSCP or FTP. For example, ocsm-4.1.0.0.0-156.x86_64.rpm
2. Set the correct environment by running the following command:

   ```
   source /opt/oracle/ocsm/ocsm_env.sh
   ```

3. Run the following command to stop all the services on Operations Monitor:

   ```
   pld-systemctl stop
   ```

4. Run the following command:

   ```
   yum install <rpm filename>
   ```

   where, *<rpm filename>* is the name of the Session monitor software file. For example, *yum install ocsm-4.1.0.0.0-156.x86_64.rpm*.

5. Run the following command to start all services.

   ```
   pld-systemctl start
   ```

6. The upgrade is complete. Run the following command to verify the Session Monitor software version:

   ```
   cat /opt/oracle/ocsm/etc/iptego/display_version
   ```

   Result: The output should be latest Session Monitor version. For example, 4.1.0.0.0-148

7. Run the following command after establishing an SSH session with the product.

   ```
   source/opt/oracle/ocsm_env.sh
   ```

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Upgrading MySQL from Release 5.5.54 to Release 5.7.10

This chapter provides the instructions for upgrading MySQL from release 5.5.54 to 5.7.10.

> **Note:**
>
> Only Applicable to systems upgraded to version 4.1.0.0.0

> **Note:**
>
> Session Monitor version, 4.1.0.0.0 supports both MySQL versions, 5.5.54 and 5.7.10 If you have upgraded from a previous Session Monitor version, your system will be running MySQL 5.5.

Upgrading MySQL will not create any loss of data. But, all the services will be stopped during this upgrade. The upgrade time depends on the database size.

> **Note:**
>
> Before upgrading MySQL, configure proxies and repos as the *yum* command try to connect to the repos configured. Hence, it is recommend to configure the proxies and repos. Refer, Configuring Proxies and Repos.

To upgrade to MySQL 5.7.10 for the latest performance updates and improvements, perform the following steps in the maintenance window:

1. Log in to the Session Monitor server console as the root user and run the following command to load the environment variables.

   ```
   source /opt/oracle/ocsm/ocsm_env.sh
   ```

2. Run the following command to stop the Session monitor services:

   ```
   pld-systemctl stop
   ```

3. From MOS, download the below patch from Patches and Updates section:

   Patch 22322140: MySQL Database 5.7.10 RPM for Oracle Linux / RHEL 7 x86 (64bit)

4. Download the zip file and place it under /root or any directory on the system through WINSCP or FTP. For example, op22322140_570_Linux-x86-64.zip

5. Run the following command to Unzip and extract all rpms:

   ```
   [root@ocsm ~]# unzip p22322140_570_Linux-x86-64.zip
   ```

   Following is a sample log for reference that may appear on the screen:

   ```
   Archive: p22322140_570_Linux-x86-64.zip extracting: mysql-commercial-libs-
   compat-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   devel-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   server-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-embedded-
   compat-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   common-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   embedded-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   test-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-embedded-
   devel-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   libs-5.7.10-1.1.el7.x86_64.rpm extracting: mysql-commercial-
   client-5.7.10-1.1.el7.x86_64.rpm extracting: README.txt
   ```

6. Run the following command to install all the rpms extracted from the above zip file:

   ```
   yum install -y mysql-commercial*.rpm
   ```

7. 7. Run the following command to complete all the MySQL table migrations from release 5.5 to the latest release 5.7.10

   ```
   mysql_upgrade
   ```

   This command may take some time to complete depending on the DB size.

8. Once complete, run the following command to move MySQL configuration file, **my.cnf**:

   ```
   cp /opt/oracle/ocsm/etc/iptego/my-5.7.cnf /opt/oracle/ocsm/etc/iptego/my.cnf
   ```

9. Run the following command to restart mysqld services to complete installation:

   ```
   systemctl restart mysqld.service
   ```

10. Run the following command to start Session Monitor services:

    ```
    pld-systemctl start
    ```

11. (Optional) To verify MySQL version installed on the machine, run the following command:

    ```
    mysql --version
    ```

Following is an example log:

```
[[root@localhost ~]# mysql --version mysql Ver 14.14 Distrib 5.7.10, for Linux
(x86_64) using EditLine wrapper[root@localhost ~]#
```