Rapid Platform Update with Oracle Enterprise Manager 13c Release 5 Update 5 (13.5.0.5)
Purpose statement

This document provides an overview of steps for Patching Enterprise Manager 13c Release 5 Update 5 or higher using the Rapid Platform Update method. It is intended solely to help you assess the high-level steps for Patching using this method.

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# Table of contents

1. Introduction to Rapid Platform Update  
2. How Rapid Platform Update works  
3. Prerequisites for patching through Rapid Platform Update  
4. Applying a Patch to EM 13.5 with Rapid Platform Update  
5. Checking the status of patching operation  
6. Rolling back changes made by deploy  
7. Resume Patching from a point of failure  
8. Rolling back the Patch  
9. Troubleshooting  
10. FAQ  
11. Example of Patching a multi-OMS setup  
12. Conclusion
Introduction to Rapid Platform Update

Oracle Enterprise Manager (EM) Rapid Platform Update (RPU) provides an agile, online patching solution for customers to quickly adopt new features and product fixes at regular intervals through release updates. It also greatly reduces the maintenance window for patching when compared with previous releases thus increasing the monitoring of critical targets during planned maintenance.

Applying Release Updates or one-off patches on the Oracle Management Service (OMS) requires downtime of OMS during the patching activity. This has a larger impact on the users and requires significant planning. OMS patching activity with Release Update patches can take between 30 minutes to 90 minutes of down time depending on the system size and resources. During this downtime, the system is unavailable to all the users. There was a requirement to apply patches with minimal downtime so as to keep the impact on users as low as possible.

Rapid Platform Update introduces a new method to patch the OMS with the system being up during most of the patching activity. The EM Administrator gets the flexibility to bring down the OMS at a time that minimizes impact on the users and finish the patching activity. Given that this takes a minimal downtime, the impact is also expected to be low.

Note: Rapid Platform Update is not the default mode. Conventional OMS patching that requires full down-time remains the default option.

How Rapid Platform Update works

Rapid Platform Update creates a clone home of the existing Middleware home to which the patch is initially applied. This method takes advantage of the Edition-Based Redefinition (EBR) of the repository database that ensures uninterrupted availability of the EM application. The changes to the repository are done on the new edition that is created by the patching, which is later switched to the current edition, during the downtime. The changes to the Middleware home and the repository database are done when the OMS is restarted.

The Rapid Platform Update goes through the following stages:

- **Deploy operation – Pre-Downtime (OMS will be up)**
  - Create a clone home of the existing Middleware home
  - The patch is applied on the cloned OMS home
  - A new edition (Patch Edition) is created in the repository database
  - RU changes are applied to the Patch Edition
- Update operation - Downtime (The OMS will be shutdown)
  - Shut down the OMS
  - Apply changes to the OMS home
  - Prompt for backing up the repository database
  - Switch to the Patch Edition in the repository database
  - OMS is UP (Downtime end)
  - Additional OMS(s) are patched via MultiOMSPatcher job (or a script)
Prerequisites for patching through Rapid Platform Update

Before running an OMSPatcher patching session, you must ensure the following configuration and inventory-based prerequisites are satisfied:

- The Enterprise Manager Software library must be configured.
- The Oracle WebLogic Administration Server that controls the OMS instance (currently to be patched) through a managed server must be up and running.
- Ensure that the Oracle Database, which houses the OMS Management Repository, and its listener are up and running.
- Ensure that you have the latest version of the OMSPatcher in the OMS platform home of each host.
- Ensure that you have the latest version of the OPatch in the OMS platform home of each host.
- Ensure there is a 25GB of free space available on the same file system as the OMS. This space is used for cloning the OMS home.
- The OMS Base directory should be owned by the same user as the OMS. Example: If /u01/app/OMS is the OMS_HOME, /u01/app should be owned by the same user as the OMS.
- Repository database should be at a minimum of 19c with RU12 or higher.
- The existing Enterprise Manager OMS should be on Release Update (RU) 3 or higher.
- It is recommended to back up the repository database during the “omspatcher update” operation where the OMS downtime is initiated. We recommend using a restore point for backing up the repository DB as this will minimize the downtime.
- Admin server password (Weblogic password) and repository database sys password are needed for patching.
- For OMS installed on Windows, ensure that the one-off patch 33053642 is applied on the OMS.
- While patching a Multi-OMS environment, make sure:
  - The patch is staged on a shared mount point, preferably the software library.
  - The central agents on the additional OMSs are up and running.
- Check your patch README to determine whether there are any specific prerequisites to be executed based on patch and patching methodologies.
Applying a Patch to EM 13.5 with Rapid Platform Update

1) It is mandatory to upgrade the OMSPatcher and OPatch on the OMS_HOME to the latest available version. Refer to the following documents for the latest version information and the installation instructions:

   - How to Upgrade OPatch to the latest on the OMS (Doc ID 2728285.1)
   - How To Upgrade EM 13.5 OMSPatcher Utility to Version (Doc ID 2809842.1)

2) Download the Release Update that needs to be applied and stage it on the OMS host as per: Enterprise Manager 13.5 Main Release Update List (Includes Plug-ins) (Doc ID 2760230.2)

3) Unzip the patch. Here PATCH_TOP_DIR is the absolute path where the patch will be unzipped.

   ```bash
   Unix: unzip -d <PATCH_TOP_DIR>/patch number_135000_Generic.zip
   ```
   For Windows: Unzip the patch using 7-zip for best results.

4) Set the ORACLE_HOME environment variable to the OMS home.

   ```bash
   Unix: export ORACLE_HOME=<OMS HOME>
   Windows: set ORACLE_HOME=<OMS_HOME>
   ```

5) **Analyze the patch:** From the location where the patch was unzipped, execute:

   ```bash
   cd <PATCH_TOP_DIR>
   $ORACLE_HOME/OMSPatcher/omspatcher deploy -analyze
   ```
   This command will provide the details on the compatibility of the patch with the OMS.

6) **Deploy the patch (Pre Downtime):** If the analyze is successful, execute:

   ```bash
   cd <PATCH_TOP_DIR>
   $ORACLE_HOME/OMSPatcher/omspatcher deploy
   ```
   You will be prompted to provide the Admin Server details and SYS password. Executing this command will invoke the patching on the OMS.

7) **Update the patch on OMS (Downtime):** This phase can be performed only when the previous “omspatcher deploy” phase has been completed successfully.

   ```bash
   cd <PATCH_TOP_DIR>
   $ORACLE_HOME/OMSPatcher/omspatcher update
   ```

**Note:** In case of a multi-OMS environment, the above steps need to be executed only on the Primary OMS. A MultiOMS_Patching job is submitted by the update operation to patch all the additional OMS(s) once the primary OMS is started. If the agent on these additional OMSs are down or in unreachable status, the job may fail and in such cases, it can be resumed by following the steps in EM13.5: How to Resubmit the Failed Job When Patching Failed on Additional OMS (Doc ID 2853410.1)
Checking the status of patching operation

To verify the status of the patching activity on the OMS (using Rapid Platform Update), use the command “omspatcher status”. This command will list the “Deploy” status and the “Update” status of the patching.

```
$ORACLE_HOME/OMSPatcher/omspatcher status
OMSPatcher Automation Tool
Copyright (c) 2017, Oracle Corporation. All rights reserved.
OMSPatcher version : 13.9.5.3.0
OUI version : 13.9.4.0.0
Running from : /u03/OEM135
Log file location : /u03/OEM135/cfgtoollogs/omspatcher/opatch2022-03-17_17-40-51PM_1.log

Patch ID: 33870480
Patch location: /u02/13SRU/RU05/33870480
Omspatcher Deploy Status: Pre-downtime completed
Omspatcher Update Status: Update (Downtime) operation pending

OMSPatcher succeeded.
```

Rolling back changes made by deploy

When the pre-downtime operation using “omspatcher deploy” is complete and the system is ready for the “omspatcher update”, if there is a need to perform a rollback, use the command “omspatcher rollback deploy”.

```
$ORACLE_HOME/OMSPatcher/omspatcher rollback deploy
```

This is an online operation and does not require any downtime. The changes made to the clone home and the new edition are rolled back while the OMS is up.

Resume Patching from a point of failure

If a failure occurs during the “omspatcher deploy” or “omspatcher update” phases, you can resume the patching process by executing “omspatcher resume”.

```
$ORACLE_HOME/OMSPatcher/omspatcher resume
```

Executing this command will resume the patching from the point of failure.

Rolling back the Patch

Rolling back the patch on the OMS cannot be done in online mode and you will need to follow the steps in the Patch README. The rollback procedure requires complete downtime.
Troubleshooting

<table>
<thead>
<tr>
<th>PATCHING STEPS</th>
<th>LOG FILE LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>analyze</td>
<td>&lt;MW_HOME&gt;/cfgtoollogs/omspatcher/SystemPatch &lt;Cloned_MW_HOME&gt;/cfgtoollogs/omspatcher/SystemPatch &lt;MW_HOME&gt;/cfgtoollogs/omspatcher/&lt;timestamp&gt;<em>SystemPatch</em>&lt;patch&gt;</td>
</tr>
<tr>
<td>update</td>
<td>&lt;Cloned_MW_HOME&gt;/cfgtoollogs/omspatcher/&lt;timestamp&gt;<em>SystemPatch</em>&lt;patch&gt; &lt;MW_HOME&gt;/cfgtoollogs/omspatcher/&lt;timestamp&gt;<em>SystemPatch</em>&lt;patch&gt;</td>
</tr>
<tr>
<td>rollback</td>
<td>&lt;MW_HOME&gt;/cfgtoollogs/omspatcher/SystemPatch</td>
</tr>
</tbody>
</table>

FAQ

1) Does Rapid Platform Update apply a patch with zero downtime?
   Rapid Platform Update patches the OMS with minimal downtime.

2) What is the minimum OMS version requirement to use Rapid Platform Update patching?
   The existing OMS should be on Enterprise Manager 13c Release 5 Update 3 or higher and you may apply RU05 or higher using Rapid Platform Update.

3) What is the disk space requirement for patching using Rapid Platform Update?
   There is a minimum requirement of 25GB free space on the same file system as the OMS. This space can be freed up after the patching activity is completed.

4) How do you apply a patch on an OMS when there is no provision to add more disk space?
   You can apply the patch on the OMS using the standard (default) patching method which requires downtime.

5) Can you analyze the patch using Rapid Platform Update?
   The “patch analyze” functionality is the same for default and Rapid Platform Update (RPU) modes. There is, however, a slightly different syntax: For RPU mode, you must run the “deploy –analyze” command.

6) What patches can be applied using Rapid Platform Update?
   At present, only the OMS patches can be applied using Rapid Platform Update. Any other patches meant for other components of Enterprise Manager, will follow the standard patching method requiring downtime. Instructions to apply these patches can be found in the readme of the corresponding patch.
7) Can we still apply the OMS patches using the existing patching method (with complete downtime)?
   Yes, the existing patching method can also be used.

8) Can I use Rapid Platform Update if my OMS is on 13.5 Base Release or RU1 or RU2?
   No. You need to first apply the RU3 Patch using default Patching before you can use Rapid Platform Update. Alternatively, you can still apply patches using the default patching method.

9) What activities are NOT permitted while patching with the Rapid Platform Update?
   After the completion of the pre-downtime activity, the plugin deployment on the OMS will be locked and no changes can be made. It is also recommended NOT to apply any other patches on the OMS until the complete patching activity is done.

10) Does the Rapid Platform Update patching stop notifications?
    The "omspatcher deploy" operation is a runtime operation, so there is no impact on the notifications. However, during the "omspatcher update" operation, there will be a small downtime window where the notifications will not be sent.

11) Can the OMS be rebooted between the "deploy" and "update" operations?
    Yes, the OMS can be restarted between the two phases.

12) Can Rapid Platform Update patching be done using silent mode?
    Currently, silent mode is not supported for patching using Rapid Platform Update.

13) What is the preferred method of repository database backup?
    To keep the downtime shorter, it is recommended that you create a guaranteed restore point on the repository database. Other backup methods are allowed as well, but the time required to complete the repository backup can be more which will increase the downtime.

14) Does Rapid Platform Update take care of upgrading the OMSPatcher and OPatch by itself?
    No, the OMSPatcher and OPatch should be upgraded prior to applying the patch using Rapid Platform Update. However, in case of a multi-OMS, upgrading the OMSPatcher and OPatch on the primary OMS would be sufficient. The multi-OMS patching job will ensure that the same is upgraded on the additional OMSs.

15) Will there be a clone of additional OMS homes during the Rapid Platform Update patching?
    No, only the primary OMS home will be cloned.

16) How much time is allowed between "omspatcher deploy" and "omspatcher update"?
    There is no defined time limit between the two activities.

17) Can the user control the downtime required by this patching?
    Yes, once the pre-downtime patching is done, running "omspatcher update" can be scheduled during the maintenance window.

18) How does "rollback deploy" differ from "rollback" operation?
Rollback deploy – undoes all the changes made to the cloned home and the new edition in the repository database. This operation does not require a downtime and it’s an online operation; whereas Rollback – is to rollback the patch from the OMS HOME. This operation requires a full downtime.

19) Once the patching is completed, can we remove the clone home?
   Yes, the clone home can be removed after the “omspatcher update” operation is completed. Use this command to remove the clone home:
   `<CLONED_OMS_HOME>/oui/bin/detachHome.sh`

20) Does Agent Patching have any similar patching method like Rapid Platform Update?
   Rapid Platform Update is currently supported only for OMS Release Updates. Agent release updates are to be applied using the AgentPatcher utility as it exists today.

21) Is Rapid Platform Update free to use? Does it require any license?
   OMS Patching does not require any EM License. It comes with the base EM functionality.

22) Is there any impact on the running OMS during the pre-downtime operation of “omspatcher deploy”?
   The “omspatcher deploy” operation does not impact the running OMS as the change is entirely made to the cloned home and a new edition in the repository.

23) Does the repository need any additional space for patching using Rapid Platform Update?
   No additional space is required on the repository database.

24) If, after completing pre-downtime activities, you suddenly find that you need to deploy a plugin on the OMS (prior to running “omspatcher update”), how do you deploy the plugin?
   In such cases, roll back the pre-downtime changes on the OMS by running “omspatcher rollback deploy” and deploy the plugin on the OMS.
Example of Patching a multi-OMS setup

a. Analyze the patch:

```
$ORACLE_HOME/OMSPatcher/omspatcher deploy -analyze
OMSPatcher.OMS_DISABLE_HOST_CHECK=true
OMSPatcher Automation Tool
Copyright (c) 2017, Oracle Corporation. All rights reserved.
OMSPatcher version : 13.9.5.4.0
OUI version : 13.9.4.0.0
Running from : /u03/OEM135
Log file location : /u03/OEM135/cfgtoollogs/omspatcher/opatch2022-02-21_15-02-36PM_1.log
OMSPatcher log file: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-02-21_1502-48PM_analyze.log
Please enter OMS weblogic admin server URL(https://omshost.oracle.com:7102):>
Please enter OMS weblogic admin server username(weblogic):> Please enter OMS weblogic admin server password:

Enter SYS Password :
Checking if current repository database is a supported version Current repository database version is supported

Prereq "checkComponents" for patch 33567409 passed.
Prereq "checkComponents" for patch 33567476 passed.
Prereq "checkComponents" for patch 33424187 passed.
Prereq "checkComponents" for patch 33567457 passed.
Prereq "checkComponents" for patch 32972412 passed.
Prereq "checkComponents" for patch 33567462 passed.
Prereq "checkComponents" for patch 33567414 passed.
Prereq "checkComponents" for patch 33567421 passed.
Prereq "checkComponents" for patch 33567433 passed.
Prereq "checkComponents" for patch 33567441 passed.
Prereq "checkComponents" for patch 33567426 passed.
Prereq "checkComponents" for patch 33567454 passed.
Prereq "checkComponents" for patch 33567450 passed.
Prereq "checkComponents" for patch 33567414 passed.
Prereq "checkComponents" for patch 33567462 passed.
Prereq "checkComponents" for patch 33567433 passed.

Configuration Validation: Success

Running apply prerequisite checks for sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,33567454,33567457,33567426,33567462,33567433" and Oracle Home "/u03/OEM135"

Sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,33567454,33567457,33567426,33567462,33567433" are successfully analyzed for Oracle Home "/u03/OEM135"
```
Complete Summary
============
All log file names referenced below can be accessed from the directory
"/u03/OEM135/cfgtoollogs/omspatcher/2022-02-21_15-02-36PM_SystemPatch_33715883_1" Prerequisites
analysis summary:
---------------------------------

The following sub-patch(es) are applicable:

<table>
<thead>
<tr>
<th>Featureset</th>
<th>Sub-patches</th>
<th>Log file</th>
</tr>
</thead>
<tbody>
<tr>
<td>oracle.sysman.top.oms</td>
<td>33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,33567454,33567457,33567426,33567462,33567433</td>
<td>opatch2022-02-21_15-0248PM_1.log</td>
</tr>
</tbody>
</table>

The following sub-patches are incompatible with components installed in the OMS system: 33567429

Log file location: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-02-21_15-0248PM_analyze.log

OMSPatcher succeeded.

b. Deploy the patch:

$ORACLE_HOME/OMSPatcher/omspatcher deploy OMSPatcher.OMS_DISABLE_HOST_CHECK=true OMSPatcher Automation Tool
Copyright (c) 2017, Oracle Corporation. All rights reserved.

OMSPatcher version : 13.9.5.3.0
OUI version : 13.9.4.0.0
Running from : /u03/OEM135
Log file location : /u03/OEM135/cfgtoollogs/omspatcher/omspatcher2022-02-22_17-15-22PM_1.log
OMSPatcher log file: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-0222_17-15-51PM_apply.log

Please enter OMS weblogic admin server URL(t3s://omshost.oracle.com:7102):>
Please enter OMS weblogic admin server username(weblogic):> Please enter OMS weblogic admin server password:>

Enter SYS Password :
Checking if current repository database is a supported version
Current repository database version is supported
The below additional oms will be patched along with the primary oms:
Omshost2.oracle.com

The software library configured location: /u02/swlib/: The patch location /u02/135RU/33715883 is not staged in the software library.
Ensure the patch location: '/u02/135RU/33715883' is available in the software library or shared mount point that is accessible from all the additional OMS instances.

Do you want to proceed? [y|n] y

User Responded with: Y

Prereq "checkComponents" for patch 33567409 passed.
Prereq "checkComponents" for patch 33567476 passed.
Prereq "checkComponents" for patch 33424187 passed.
Prereq "checkComponents" for patch 33567457 passed.
Prereq "checkComponents" for patch 32972412 passed.
Prereq "checkComponents" for patch 33567462 passed.
Prereq "checkComponents" for patch 33567414 passed.
Prereq "checkComponents" for patch 33567421 passed.
Prereq "checkComponents" for patch 33567433 passed.
Prereq "checkComponents" for patch 33567441 passed.
Prereq "checkComponents" for patch 33567426 passed.
Prereq "checkComponents" for patch 33567454 passed.
Prereq "checkComponents" for patch 33567414 passed.
Prereq "checkComponents" for patch 33567462 passed.
Prereq "checkComponents" for patch 33567433 passed.
Prereq "checkComponents" for patch 33567454 passed.

ClonedHome retrieved for this session: /u03/cloneOMSHome_13500
The Clonehome does not exist or is not a valid one. Creating one now
Clone home creation started -- Start Time(2022-02-22_17:26:51)
Checking if the required space is available
Creating the home for the patching -- Start Time (2022-02-22_17:27:10)
Copy the bits from /u03/OEM135 to /u03/cloneOMSHome_13500

Completed the bits copy to /u03/cloneOMSHome_13500
Completed creating clone home /u03/cloneOMSHome_13500 -- End Time(2022-02-22_17:40:26)

Configuration Validation: Success
Running apply prerequisite checks for sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,33567454,33567457,33567426,33567462,33567433" and Oracle Home "/u03/OEM135"

Sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,33567454,33567457,33567426,33567462,33567433" are successfully analyzed for Oracle Home "/u03/OEM135"
Do you want to proceed? [y/n] y
User Responded with: Y Applying sub-patch(es)

"32972412,33424187,33567409,33567414,33567421,33567426,33567433,33567441,33567450,33567454,33567457,33567462,33567469,33567476"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/opatch/opatch2022-02-22_17-4031PM_1.log
Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567409_Jan_24_2022_01_06_08/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.cfw.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33424187_Dec_14_2021_22_47_10/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.smf.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567457_Jan_24_2022_01_13_12/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.vt.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/32972412_Nov_12_2021_20_22_17/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.empa.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567462_Jan_24_2022_01_13_21/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.si.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567414_Jan_24_2022_01_13_37/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.emas.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567421_Jan_24_2022_01_14_06/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567433_Jan_24_2022_01_14_33/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.bda.oms.plugin_13.5.1.0.0" Updating repository with RCU reference file
"/u03/cloneOMSHome_13500/.omspatcher_storage/33567441_Jan_24_2022_01_14_38/original_patch" for plugin home
"/u03/cloneOMSHome_13500/plugins/oracle.sysman.emct.oms.plugin_13.5.1.0.0"
Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/sysman/metadata/targetType/oracle_emd.xml" for plugin id as "core"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-17-51PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.si.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/33567462/network_hw/oracle_ib/oracle_si_switch_oracle_ib_snmp.xml" for plugin id as "oracle.sysman.si"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-20-52PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.emas.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/32971629/websphere_j2eeserver.xml" for plugin id as "oracle.sysman.emas"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-22-49PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/32835412/oracle_cloud_atp.xml" for plugin id as "oracle.sysman.db"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-23-32PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.bda.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/33567433/oracle_bda_nosqldb_admin.xml" for plugin id as "oracle.sysman.bda"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-43-50PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.emfa.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/33424208/oracle_si_server.xml" for plugin id as "oracle.sysman.emfa"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-44-22PM.log

Registering service "targetType" with register file

"/u03/cloneOMSHome_13500/plugins/oracle.sysman.vi.oms.plugin_13.5.1.0.0/patched_metadata/1 3.5.1.0.0/targetType/33424208/oracle_si_server.xml" for plugin id as "oracle.sysman.vi"
Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-44-49PM.log

Registering service "targetType" with register file

Please monitor log file: /u03/cloneOMSHome_13500/cfgtoollogs/omspatcher/2022-02-22_17-1522PM_SystemPatch_33715883_1/emctl_register_targetType_2022-02-22_19-17-51PM.log
OMSPatcher succeeded.

Complete Summary

Artifacts Log file
--------- -------
SQL rcu_applypatch_original_patch_2022-02-22_18-27-25PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-43-50PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-46-39PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-49-44PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-53-17PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-55-34PM.log
SQL rcu_applypatch_original_patch_2022-02-22_18-57-29PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-17-51PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-20-52PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-22-18PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-22-49PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-23-32PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-43-50PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-44-22PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-44-49PM.log
MRS-targetType emctl_register_targetType_2022-02-22_19-45-22PM.log
MRS-storeTargetType emctl_register_storeTargetType_2022-02-22_19-45-49PM.log
MRS-storeTargetType emctl_register_storeTargetType_2022-02-22_19-46-19PM.log
MRS-storeTargetType emctl_register_storeTargetType_2022-02-22_19-46-49PM.log
MRS-gccompliance emctl_register_gccompliance_2022-02-22_19-56-35PM.log

Log file location: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-02-22_17-1551PM_apply.log

OMSPatcher succeeded.
c. Update the patch:

```bash
$ORACLE_HOME/OMSPatcher/omspatcher update OMSPatcher.OMS_DISABLE_HOST_CHECK=true OMSPatcher
```

Copyright (c) 2017, Oracle Corporation. All rights reserved.
OMSPatcher version : 13.9.5.3.0
OUI version : 13.9.4.0.0
Running from : /u03/OEM
Log file location : /u03/OEM135/cfgtoollogs/omspatcher/opatch2022-02-22_20-25-12PM_1.log Executing
downtime patch apply

1. The update operation will bring down the OMS(s), at which point we will prompt you to backup the repository DB,
   which is mandatory.
2. It's important to take a backup while the OMS(s) are down, so keep the backup steps handy.
3. If the update operation fails, you can restore the database from a backup to bring the EM system up for
   monitoring.

If repository DB backup cannot be taken during the 'update' operation, then reschedule your patching again. Do
you want to continue (Y/N)? y
User Responded with: Y
OMSPatcher log file: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-02-22_2025-
31PM_apply.log
Please enter OMS weblogic admin server URL(t3s://omshost.oracle.com:7102):>
Please enter OMS weblogic admin server username(weblogic):> Please
enter OMS weblogic admin server password:> Enter SYS Password :
Prereq "checkComponents" for patch 33567409 passed.
Prereq "checkComponents" for patch 33567476 passed.
Prereq "checkComponents" for patch 33424187 passed.
Prereq "checkComponents" for patch 33567457 passed.
Prereq "checkComponents" for patch 32972412 passed.
Prereq "checkComponents" for patch 33567462 passed.
Prereq "checkComponents" for patch 33567414 passed.
Prereq "checkComponents" for patch 33567421 passed.
Prereq "checkComponents" for patch 33567433 passed.
Prereq "checkComponents" for patch 33567441 passed.
Prereq "checkComponents" for patch 33567426 passed.
Prereq "checkComponents" for patch 33567454 passed.
Prereq "checkComponents" for patch 33567450 passed.
Prereq "checkComponents" for patch 33567469 passed.
Running apply prerequisite checks for sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,335
67454,33567457,33567426,33567462,33567433" and Oracle Home "/u03/OEM135"... Sub-patch(es)
"33567469,33567409,32972412,33567441,33567476,33567414,33424187,33567450,33567421,335
67454,33567457,33567426,33567462,33567433" are successfully analyzed for Oracle Home "/u03/OEM135"
To continue, OMSPatcher will do the following:

[Patch and deploy artifacts] : Apply sub-patch(es) 

32972412 33424187 33567409 33567414 
33567421 33567426 33567433 33567441 33567450 33567454 33567457 33567462 33567469 33567476

Register MRS artifact "commands";
Register MRS artifact "omsPropertyDef";
Register MRS artifact "jobTypes";
Register MRS artifact "SecurityClassManager";
Register MRS artifact "swlib";
Register MRS artifact "procedures";
Register MRS artifact "discovery";
Register MRS artifact "EcmMetadataOnlyRegistration";
Register MRS artifact "CredstoreMetadata";
Register MRS artifact "namedQuery";
Register MRS artifact "eventSpecificCustmzn";

Register MRS artifact "derivedAssocs"

Stopping the OMS....
Please monitor log file: /u03/OEM135/cfgtoollogs/omspatcher/2022-02-22-20-4644PM_SystemPatch_33715883_6/stop_oms_2022-02-22-20-46-44PM.log Applying sub-patch(es)
"32972412,33424187,33567409,33567414,33567421,33567426,33567433,33567441,33567450,33567454,33567457,33567462,33567469,33567476"

Please monitor log file: /u03/OEM135/cfgtoollogs/opatch/opatch2022-02-22-20-26-40PM_1.log

Starting the OMS in disconnected mode ...

Stopping the add oms : omshost2.oracle.com:4889_Management_Service
Please monitor log file: /u03/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/stop_addoms_2022-02-22-21-24-51PM.log

The OMS(s) are down. Take a backup of the repository DB now Press 'Y' = Once you are done with repository DB backup.
Press 'N' = For omspatcher to list the available options.
Do you want to continue (Y/N)?
Could not recognize input. Please re-enter.
Y
User Responded with: Y
Registering service "commands" with register file
"/u03/OEM135/sysman/metadata/commands/CScommand.xml" for plugin id as "core"...
Please monitor log file: /u03/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-24-51PM_SystemPatch_33715883_9/emctl_register_commands_2022-02-22-21-26-16PM.log
Registering service "commands" with register file
"/u03/OEM135/plugins/oracle.sysman.oms.plugin_13.5.1.0.0/metadata/commands/pca/vt_pca_s
ync_job_commands.xml" for plugin id as "oracle.sysman.vt"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_jobTypes_2022-02-22-21-27-22PM.log Registering service "commands" with register file

"/u03/OEM135/plugins/oracle.sysman.xa.oms.plugin_13.5.1.0.0/metadata/commands/commands.x ml" for plugin id as "oracle.sysman.xa"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_commands_2022-02-22-21-24-49PM.log Registering service "commands" with register file

"/u03/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/omsProperties/definition/NotificationOMSPropDefinition.xml" for plugin id as "oracle.sysman.db"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_omsPropertyDef_2022-02-22-21-28-40PM.log Registering service "omsPropertyDef" with register file

"/u03/OEM135/sysman/metadata/omsProperties/definition/NotificationOMSPropDefinition.xml" for plugin id as "core"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_commands_2022-02-22-21-29-04PM.log Registering service "commands" with register file

"/u03/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/omsProperties/definition/DBPropDefinition.xml" for plugin id as "oracle.sysman.db"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_commands_2022-02-22-21-29-42PM.log Registering service "commands" with register file

"/u03/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/omsProperties/definition/DBPropDefinition.xml" for plugin id as "oracle.sysman.db"...

Please monitor log file: /u03/OEM135/fgtoollogs/omspotcher/2022-02-22-21-24-
51PM_SystemPatch_33715883_9/emctl_register_commands_2022-02-22-21-30-07PM.log Registering service "commands" with register file

"/u03/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/omsProperties/definition/DBPropDefinition.xml" for plugin id as "oracle.sysman.db"...
Registering service "jobTypes" with register file
"/u/OEM135/plugins/oracle.sysman.xa.oms.plugin_13.5.1.0.0/metadata/jobTypes/ExadataWarehousing.xml" for plugin id as "oracle.sysman.xa"
Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_jobTypes_2022-02-22-21-32-06PM.log
Registering service "SecurityClassManager" with register file
"/u/OEM135/sysman/metadata/security/SecurityClass/uifwk_dashboard_security_class.xml" for plugin id as "core"
Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_SecurityClassManager_2022-02-22-21-32-31PM.log
Registering service "swlib" with register file
"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/swlib/siteguard" for plugin id as "oracle.sysman.db"
Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_swlib_2022-02-22-21-34-08PM.log
Registering service "swlib" with register file
"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/swlib/common" for plugin id as "oracle.sysman.db"
Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_swlib_2022-02-22-21-35-00PM.log
Registering service "procedures" with register file
"/u/OEM135/plugins/oracle.sysman.xa.oms.plugin_13.5.1.0.0/metadata/procedures/CfwHostProvisioningDP.xml" for plugin id as "oracle.sysman.cfw"
Registering service "procedures" with register file
"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/procedures/CloudDataMigration.xml" for plugin id as "oracle.sysman.db"
Registering service "procedures" with register file
"/u/OEM135/plugins/oracle.sysman.ssa.oms.plugin_13.5.1.0.0/metadata/procedures/DBMoveDP.xml" for plugin id as "oracle.sysman.ssa"
Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_procedures_2022-02-22-21-37-00PM.log
Registering service "procedures" with register file
"/u/OEM135/plugins/oracle.sysman.xa.oms.plugin_13.5.1.0.0/metadata/procedures/Convert12ct
o13DatabaseMachinePreRequisiteCheck.xml" for plugin id as "oracle.sysman.xa"...

"/u/OEM135/plugins/oracle.sysman.si.oms.plugin_13.5.1.0.0/metadata/discovery/plugin_discovery.xml" for plugin id as "oracle.sysman.si"...

"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/discovery/db_discovery.xml" for plugin id as "oracle.sysman.db"...

Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_discovery_2022-02-22-21-38-18PM.log Registering service "EcmMetadataOnlyRegistration" with register file
"/u/OEM135/plugins/oracle.sysman.si.oms.plugin_13.5.1.0.0/metadata/snapshot/network_hw/arista/oracle_si_switch_arista_ssh_ecmdef.xml" for plugin id as "oracle.sysman.si"...

Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_EcmMetadataOnlyRegistration_2022-02-22-2138-43PM.log Registering service "EcmMetadataOnlyRegistration" with register file
"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/snapshot/pdb_init_params_config_ecm-metadata.xml" for plugin id as "oracle.sysman.db"...

Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_EcmMetadataOnlyRegistration_2022-02-22-2139-55PM.log Registering service "CredstoreMetadata" with register file
"/u/OEM135/sysman/metadata/security/CredstoreMetadata/jsonWebKeysCredstore.xml" for plugin id as "core"...

"/u/OEM135/plugins/oracle.sysman.xa.oms.plugin_13.5.1.0.0/metadata/security/CredstoreMetadata/ExadataWarehouseStripe.xml" for plugin id as "oracle.sysman.xa"...

"/u/OEM135/sysman/metadata/namedQuery/dashboards_named_query.xml" for plugin id as "core"...

Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_namedQuery_2022-02-22-21-41-22PM.log Registering service "eventSpecificCustmzn" with register file
"/u/OEM135/plugins/oracle.sysman.emas.oms.plugin_13.5.1.0.0/metadata/events/custmzn/metric_alert_oracle_end_user_service.xml" for plugin id as "oracle.sysman.emas"...

Please monitor log file: /u/OEM135/cfgtoollogs/omspatcher/2022-02-22-21-2451PM_SystemPatch_33715883_9/emctl_register_eventSpecificCustmzn_2022-02-22-21-4146PM.log Registering service "derivedAssocs" with register file
"/u/OEM135/plugins/oracle.sysman.db.oms.plugin_13.5.1.0.0/metadata/derivedAssocs/dg_assoc_rules.xml" for plugin id as "oracle.sysman.db"...

The following artifact(s) have been successfully deployed:

32972412, 32972412,

Patching Complete Summary
============

Patching Summary:
-----------------

Binaries of the following sub-patch(es) have been applied successfully:

<table>
<thead>
<tr>
<th>Featureset</th>
<th>Sub-patches</th>
</tr>
</thead>
<tbody>
<tr>
<td>oracle.sysman.top.oms_13.5.0.0.0</td>
<td>32972412,33424187,33567409,33567414,33567421,33567426,33567433,33567441,33567450,33567457,33567462,33567469,33567476</td>
</tr>
<tr>
<td></td>
<td>32972412,33424187,33567409,33567414,33567421,33567426,33567433,33567441,33567450,33567457,33567462,33567469,33567476</td>
</tr>
<tr>
<td></td>
<td>32972412,33424187,33567409,33567414,33567421,33567426,33567433,33567441,33567450,33567457,33567462,33567469,33567476</td>
</tr>
<tr>
<td></td>
<td>opatch2022-02-22_20-26-40PM_1.log</td>
</tr>
</tbody>
</table>

The following sub-patches are incompatible with components installed in the OMS system: 33567429

Deployment summary:
-----------------

The following artifact(s) have been successfully deployed:

<table>
<thead>
<tr>
<th>Artifacts</th>
<th>Log file</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRS-commands</td>
<td>emctl_register_commands_2022-02-22_21-26-16PM.log</td>
</tr>
<tr>
<td>MRS-commands</td>
<td>emctl_register_commands_2022-02-22_21-26-49PM.log</td>
</tr>
<tr>
<td>MRS-commands</td>
<td>emctl_register_commands_2022-02-22_21-27-22PM.log</td>
</tr>
<tr>
<td>MRS-commands</td>
<td>emctl_register_commands_2022-02-22_21-27-47PM.log</td>
</tr>
<tr>
<td>MRS-omsPropertyDef</td>
<td>emctl_register_omsPropertyDef_2022-02-22_21-28-10PM.log</td>
</tr>
<tr>
<td>MRS-omsPropertyDef</td>
<td>emctl_register_omsPropertyDef_2022-02-22_21-28-40PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-29-04PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-29-42PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-30-07PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-30-34PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-31-01PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-31-41PM.log</td>
</tr>
<tr>
<td>MRS-jobTypes</td>
<td>emctl_register_jobTypes_2022-02-22_21-32-06PM.log</td>
</tr>
<tr>
<td>MRS-SecurityClassManager</td>
<td>emctl_register_SecurityClassManager_2022-02-22_21-3231PM.log</td>
</tr>
<tr>
<td>MRS-slib</td>
<td>emctl_register_slib_2022-02-22_21-32-58PM.log</td>
</tr>
<tr>
<td>MRS-slib</td>
<td>emctl_register_slib_2022-02-22_21-33-35PM.log</td>
</tr>
<tr>
<td>MRS-slib</td>
<td>emctl_register_slib_2022-02-22_21-34-08PM.log</td>
</tr>
<tr>
<td>MRS-slib</td>
<td>emctl_register_slib_2022-02-22_21-35-00PM.log</td>
</tr>
<tr>
<td>MRS-procedures</td>
<td>emctl_register_procedures_2022-02-22_21-35-28PM.log</td>
</tr>
<tr>
<td>MRS-procedures</td>
<td>emctl_register_procedures_2022-02-22_21-35-55PM.log</td>
</tr>
<tr>
<td>MRS-procedures</td>
<td>emctl_register_procedures_2022-02-22_21-36-20PM.log</td>
</tr>
<tr>
<td>MRS-procedures</td>
<td>emctl_register_procedures_2022-02-22_21-37-00PM.log</td>
</tr>
<tr>
<td>MRS-procedures</td>
<td>emctl_register_procedures_2022-02-22_21-37-27PM.log</td>
</tr>
</tbody>
</table>
Multi-OMS Patching Job successfully submitted. Job details below:

The job name is MultiOMS_Patching_apply_2022-02-22-21-43-25

Execute the command: emcli get_jobs -name="MultiOMS_Patching_apply_2022-02-22-21-43-25" to check the status of the job

Successfully created the add oms script

Successfully completed Primary OMS patching. The EM console will be accessible, however, to fully monitor and utilize all features you must wait until all other additional OMSs are patched.

The following patches could not be applied during OPatch execution:

Patch Reason

33567429 The Plugin or Core Component "oracle.sysman.am.oms.plugin with version 13.5.1.0.0" for which the patch is intended is not deployed in your Enterprise Manager system.

Log file location: /u03/OEM135/cfgtoollogs/omspatcher/33715883/omspatcher_2022-02-22-20-2531PM_apply.log

OMSPatcher succeeded
Conclusion

The Rapid Platform Update is a paradigm shift in the patching world for Enterprise Manager users that introduces the ability to keep their EM system up and running while it is getting patched. Therefore, it provides monitoring insights to the critical targets and helps the administrators to meet the SLAs during planned maintenance. The RPU feature also brings in agility in the process that enables administrators to quickly adopt new features and bug fixes that improves the product quality and keeps the Enterprise Manager stable, performant and highly available. Adopt the Rapid Platform Update feature today with confidence for a predictable and stress-free patching tomorrow.

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