

ORACLE®

Enterprise Manager Cloud Control 12c Release3 (12.1.0.3)

Upgrade

-Akanksha Sheoran
Product Management

ORACLE® 12^c
ENTERPRISE MANAGER

Total Cloud Control



Program Agenda

- **Upgrade Path** (10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3)
 - What's New
 - Things to Watch out for
- **Upgrade Path** (12.1.0.1 (with bp1), 12.1.0.2 → 12.1.0.3)
 - What's New
 - Things to Watch out for
 - Additional OMS upgrade
 - Standby OMS upgrade
 - Agent Upgrade Console
 - What's New
 - Use cases
 - How to push agent /plug-in patches while doing Agent upgrade
 - Agent Upgrade using emcli (new in 12.1.0.3)
 - Log file and Documentation

ORACLE

Upgrade paths to EM 12.1.0.3

- Following are the upgrade paths supported:
 - a) 10.2.0.5 → 12.1.0.3
 - b) 11.1.0.1 → 12.1.0.3
 - c) 12.1.0.1 (with bp1 patches) → 12.1.0.3 *bp1 is mandatory*
 - d) 12.1.0.2 → 12.1.0.3
- EM binaries for all the platforms are available (No need to wait for platforms)
- OMS to Agent versions compatibility

Agent→ OMS↓	12.1.0.1	12.1.0.2	12.1.0.3
12.1.0.1			
12.1.0.2			
12.1.0.3			

ORACLE

UPGRADE PATH

- A. 10.2.0.5 → 12.1.0.3
- B. 11.1.0.1 → 12.1.0.3



ORACLE

Upgrade Path

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

- The Upgrade process remains same :
 - 1-system Upgrade
 - 2-system Upgrade
 - 1-system Upgrade on diff host
- You have to download the pre-upgrade console patch from OTN
- Go through the steps from pre-upgrade console
- Follow the steps from Post upgrade console
- Refer the Upgrade guide for details

ORACLE

2-System Upgrade: Things to watch out for

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

- If your database domain name has any characters other than A-Z (letters), 0-9 (numerals), _ (underscore), # (hash), \$ (dollar), . (period), or @ (at the rate), then you will see the following error, and the creation of the database link or the switchover of the Management Agents can fail later in the upgrade process. For example, a database domain name with a hyphen (-) can result in this issue.

ORA-20000: Found exception Error Message :ORA-02083: database name has illegal character '-' Error Number :-2083

Follow the instructions from Upgrade guide to remove hyphen (-) in domain name and additional steps required

- Before starting the upgrade, If you have any running or scheduled deployment procedures then you should stop them or wait for completion. Follow the steps from Upgrade guide how to stop deployment procedure

ORACLE

2-System Upgrade: Things to watch out for

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

- Accrued Data Migration process does not migrate any of the following changes if they were done **after the Management Repository was backed up**. If you want these changes in the upgraded EM, you must manually redo these changes after upgrade.
 - Security data (new users created, passwords changed)
 - Jobs created, deleted, or submitted
 - Customized deployment procedures
 - Patches
 - Targets added or deleted
 - Reports created, modified, or deleted
 - Software Library configuration changes
 - Templates created, modified, or deleted
 - User-defined metrics

ORACLE

2-System Upgrade: Things to watch out for

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

Resuming/Restarting Deferred Data Migration (DDMP) Jobs

- In some cases DDMP job might fail or not completed; you need to re-submit to make them completed. Follow below steps:
 - You need to remove the EM-Job
 - Update status to initial state
 - Resubmit the job from Post Upgrade Console
 - Example of above steps using metric ddmp failure:
 - `mgmt_jobs.delete_job('POST_UGC.METRIC_REPOS_JOB','SYSMAN');`
 - `update EM_POST_UGC_REPO_JOBS set status=NULL where comp_name = 'METRIC';`
 - Re-submit the job from Post-Upgrade Console for Metric DDMP
- DDMP Jobs are expensive in nature; they work on high volume of Data e.g. Metric related data, Configuration related data. DDMP job may take time to complete. If you are not sure about anything pls contact Oracle Support and log an SR

ORACLE

2-System Upgrade: Things to watch out for

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

Accrued Data Migration (ADMP)

- You must not cancel and resubmit a Switch-over job for same agents immediately; it hampers ADMP sessions.
- All ADMPs must be completed before upgrade to 12.1.0.x version
- The ADMPs are fired via agent-bound job at EM-runtime to do the data-migration from old repository

Issue : Accrued data migration jobs not started after the agent switch over.

Solution: Jobs status of ADMPKICKOFF jobs was “Suspended: Agent Unreacheable”, following query was used to check the status.

```
SELECT * FROM mgmt$job_step_history WHERE job_name like 'ADMPKICKOFF_SYSJOB%';
```

It was found that DBMS scheduler was not enabled in this env, because of this no jobs were executed. ADMP job was submitted after enabling the DBMS scheduler.

ORACLE

2-System Upgrade: Things to watch out for

10.2.0.5 → 12.1.0.3 and 11.1.0.1 → 12.1.0.3

Accrued Data Migration (ADMP)

Issue : Accrued data migration job continues to be in running state.

Workaround: In such cases, we need to verify the data to see if the data migration was successful. If the accrued data migration has not happened, we can set the the ADMP job status as failure and we can submit the job from ADMP page.

Ex: Following query can be used to set the ADMP job status as “failed” for config
`update EM_POST_UPG_SCOMP_ADMP_STATUS set status=1 where status=2 and subcomp_id=2;`
`commit;`

After executing the above sql, ADMP jobs will be shown as Failed, then user can resubmit the ADMP jobs for config. Note: If the accrued data migration was successful but the status was not update as completed, then we can set the status as completed.

Ex: Following query updates the ADMP status for config as “completed”.
`update EM_POST_UPG_SCOMP_ADMP_STATUS set status=0 where status=2 and subcomp_id=1;`

ORACLE

UPGRADE PATH

- a) 12.1.0.1 (with bp1) → 12.1.0.3
- b) 12.1.0.2 → 12.1.0.3



ORACLE

Upgrade Path

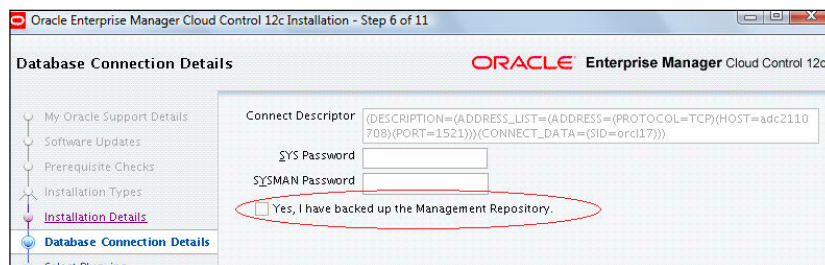
12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

- Upgrading from 12.1.0.1 (with bp1) / 12.1.0.2 to 12.1.0.3 is an EM upgrade with downtime
- Upgrade options supported : **1-System only**
- High level steps:
 - Step 1:** Bring down your 12.1.0.1 (with bp1) /12.1.0.2 OMS and invoke EM 12.1.0.3 runInstaller
 - Step 2:** Upgrade your OMS and repository (Use1-system option in Installer)
 - Step 3:** You will get Agent upgrade console (AUC) in the EM 12.1.0.3 console
 - Step 4:** Use AUC to upgrade your 12.1.0.1 (with bp1), 12.1.0.2 agents to 12.1.0.3

ORACLE

EM Upgrade **What's new**

- EM 12.1.0.3 installer will ensure database back up is taken during upgrade



- If user ignores the checkbox and click next he will get a warning
- Log file will have entry for this selection

EM Upgrade **What's new**

- While upgrading from EM 12.1.0.1 without BP1 then installer will not let you proceed and will throw a warning.
 - If you have OMS 12.1.0.1 (with out BP1) with Plug-in versions on OMS before BP1 then you get this warning:

Incompatible Plug-in Versions Deployed on the OMS:

Error:

Unable to proceed with the upgrade. The following unsupported plug-ins were found on your OMS.

<plugin name> : <version>

<plugin name> : <version>

Recommendation:

First, patch your OMS with Bundle Patch 1, and upgrade your OMS plug-ins and Management Agent plug-ins to the versions available on Bundle Patch 1. Then, retry upgrading the patched OMS to 12.1.0.3.

For instructions to upgrade to Bundle Patch 1, see Oracle Enterprise Manager Bundle Patch 1 Application Guide. For instructions to upgrade to 12.1.0.3, see Oracle Enterprise Manager Cloud Control Upgrade Guide.

ORACLE

EM Upgrade **What's new**

- If you have any agent 12.1.0.1 (with out BP1) with Plug-in versions BP1 then you get below warning:

Incompatible Plug-in Versions Deployed on Some of the Agents:

Error:

Unable to proceed with the upgrade. The following unsupported plug-ins were found on some of your Management Agents:

<plugin name> : <version>

<plugin name> : <version>

Recommendation:

First, upgrade these Management Agent plug-ins to the following minimum versions. Then, retry upgrading the OMS to 12.1.0.3.

<plugin name> : <version>

<plugin name> : <version>

To view the complete list of Management Agents that have these unsupported plug-in versions, access the file <file_path>. To view the supported plug-in versions, see the certification matrix on My Oracle Support. For instructions to upgrade the Management Agent plug-ins, see Oracle Enterprise Manager Bundle Patch 1 Application Guide.

ORACLE

EM Upgrade **What's new**

12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

- You cannot upgrade 12c Release 1 (12.1.0.1) without Bundle Patch 1 to 12c Release 3 (12.1.0.3) directly. To upgrade such a release, follow these steps:
 1. Patch the OMS with Bundle Patch 1.
 2. Upgrade the OMS plug-ins to Bundle Patch 1 plug-in version.
 3. Upgrade the Management Agent plug-ins to Bundle Patch 1 plug-in version.
 4. Upgrade the OMS patched with Bundle Patch 1 to 12c Release 3 (12.1.0.3).
- For Step (1) to Step (4), follow the instructions outlined in Oracle Enterprise Manager Bundle Patch 1 Application Guide :
http://docs.oracle.com/cd/E24628_01/doc.121/e35229/toc.htm
- For Step (4), follow the instructions in 12.1.0.3 Upgrade guide

ORACLE

EM Upgrade **What's new**

- EM 12.1.0.3 gc_inst directory is outside the middleware home so while doing EM Upgrade from 12.1.0.1 (with bp1) / 12.1.0.2 to 12.1.0.3, the new middleware home will not have gc_inst under it

EM 12.1.0.2 → Upgrade → EM 12.1.0.3

<pre><EM 12.1.0.2 middleware_home> ___wlsrver_10.3 ___jdk16 ___oms ___plugins ___gc_inst ___Oracle_WT ___oracle_common ___utils ___logs ___modules ___user_projects ___ocm.rsp ___registry.dat ___domain-registry.xml ___registry.xml</pre>	<pre> ___gc_inst <EM 12.1.0.3 middleware_home> ___wlsrver_10.3 ___jdk16 ___oms ___plugins ___Oracle_WT ___oracle_common ___utils ___logs ___modules ___user_projects ___ocm.rsp ___registry.dat ___domain-registry.xml ___patch_wls1036 ___registry.xml</pre>
--	--

ORACLE

EM Upgrade **What's new**

- Plug-ins installed in 12.1.0.1(bp1) / 12.1.0.2 EM will be Upgraded when newer version of plug-in exists during upgrade
- New Plug-ins will be installed by default if any of the plug-ins that will be upgraded has a dependency.
- User can select new plug-ins for deployment during OMS upgrade.

List of New plug-ins in EM 12.1.0.3

Plugin ID	Plug-in	Version
oracle.sysman.ssa	Oracle Cloud Application	12.1.0.6.0
oracle.sysman.smf	Storage Management Framework	12.1.0.2.0
oracle.sysman.mos	Oracle MOS (My Oracle Support)	12.1.0.5.0
oracle.sysman.empa	Oracle Siebel	12.1.0.3.0
oracle.sysman.emfa	Oracle Fusion Applications	12.1.0.4.0
oracle.sysman.emas	Oracle Fusion Middleware	12.1.0.4.0
oracle.sysman.xa	Oracle Exadata	12.1.0.4.0
oracle.sysman.vt	Oracle Virtualization	12.1.0.5.0
oracle.sysman.bda	Oracle Big Data Appliance	12.1.0.2.0
oracle.sysman.emct	Oracle Consolidation Planning and Chargeback	12.1.0.4.0
oracle.sysman.db	Oracle Database	12.1.0.4.0
oracle.em.sovn	Oracle Virtual Networking	12.1.0.1.0
oracle.em.soee	Exalogic Elastic Cloud Infrastructure'	12.1.0.2.0
oracle.em.soav	Oracle Audit Vault	12.1.0.4.0
oracle.em.smss	Microsoft SQL Server Plug-in	12.1.0.3.0
oracle.em.smis	Microsoft IIS	12.1.0.2.0
oracle.em.smdn	Microsoft .NET Framework Plug-in	12.1.0.2.0
oracle.em.satc	Apache Tomcat Plug-in	12.1.0.2.0

ORACLE

Upgrade Path: Things to watch out for

12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

- **(CRITICAL MANDATORY STEP)** If you have the Management Repository configured in Oracle Database 11g Release 1 (11.1.0.7) or 11g Release 2 (11.2.0.1), then make sure you apply the following patches on the database. If you do not apply these patches, you will run into upgrade failures.

For Oracle Database 11 Release 1 (11.1.0.7)

- On Unix platforms, apply patches 8405205
- On Microsoft Windows (32 bit) platforms, apply patch 9082702
- On Microsoft Windows (64 bit) platforms, apply patch 9082709

For Oracle Database 11g Release 2 (11.2.0.1)

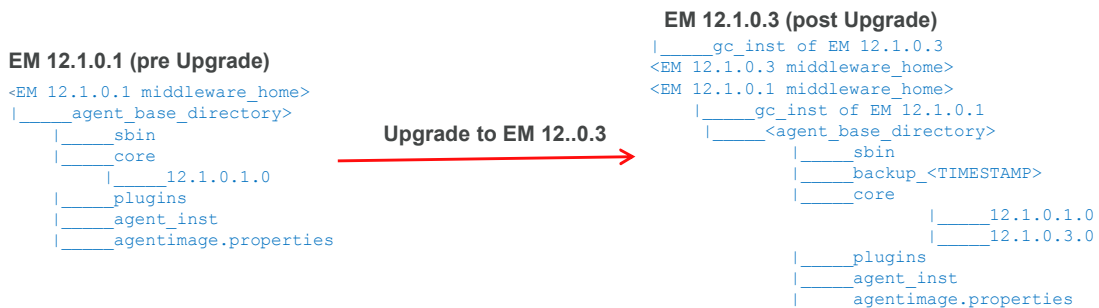
- On Unix platforms, apply PSU 9352237 (11.2.0.1.1 Patch Set Update for Oracle Database).
If you are on Linux platform, you have an option of applying patch 8405205 instead of PSU 9352237. If you have already applied patch 8405205 on the Linux platform, then you need not apply PSU 9352237. The PSU contains patch 8405205. Note that patch 8405205, as a standalone patch, is available only for Linux platform, and not for other Unix platforms.
- On Microsoft Windows (32 bit) platforms, apply patch 9595784 and 9352237
- On Microsoft Windows (64 bit) platforms, apply patch 9595786 and 9352237

ORACLE

Upgrade Path: Things to watch out for

12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

- After upgrading the central agent, if you find the agent base directory of the upgraded central agent in the old Oracle Middleware home, and if you want to move it outside that old Oracle Middleware home, then follow the instructions outlined in the My Oracle Support note 1520010.1
- a) If you upgraded from EM 12.1.0.1 to 12.1.0.3 and didn't move the central agent home outside the old OMS 12.1.0.1 home then you will have 12.1.0.3 central agent home under old oms home 12.1.0.1
- b) If you did a fresh install of 12.1.0.2 and then upgraded to 2.1.0.3. You don't have to manually move the central agent 12.1.0.3 outside old OMS 12.1.0.2 home. (This issue is fixed in 12.1.0.2)



ORACLE

Additional OMS Upgrade

12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

High-level step:

- Upgrade the first OMS (where the Admin Server is running), to find out Admin server detail run `$(OMS_HOME)/bin/emctl status oms -details`
- Stop all the associated OMS instances `$(OMS_HOME)/bin/emctl stop oms -all` (In EM 12.1.0.3 we validation of WLS credentials happens even when the Admin Server is down)
- After upgrading the first OMS in your system, on every other host where an additional OMS is running, invoke the EM Installation Wizard, and on the Installation Types screen →select Upgrade an Existing Enterprise Manager System→ One System Upgrade→ select the additional OMS home you want to upgrade
- **Note:** You can choose to upgrade your central agent (using Agent Upgrade Console) of first OMS after you have upgraded the first OMS Or you can upgrade the central agents of all the additional OMSes post all additional OMSes upgrades.

ORACLE

Standby OMS Upgrade

12.1.0.1 (with bp1 patches), 12.1.0.2 → 12.1.0.3

High-level step:

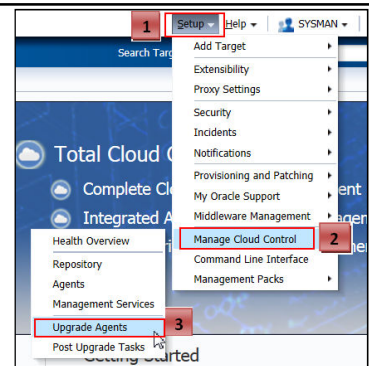
- Remove one by one all additional standby OMS instances :
`$<OMS_HOME>/bin/omsca delete -OMSNAME <oms_name>`
- Delete the OMS target associated with the each OMS from EM console
- Upgrade the primary OMS, both OMS and Management Agents.
- Re-create the standby OMSes (2 options available)
 - a) Use Add OMS DP : Ensure that you re-create them with a domain name that is different from the one used for the primary site and for the old standby site
 - b) Use either a Standby WebLogic Domain or storage replication. Important: If you use a Standby WebLogic Domain then ensure that you re-create with a domain name that is different from the one used for the primary site and for the old standby site.
- Refer Upgrade guide for detailed steps

ORACLE

Agent Upgrade console (AUC)

What is AUC?

- Single-window solution to mass-upgrade your existing agents across platform
- Make sure that agent software is downloaded using self update
- Upgrade an Agent from 12.1.0.1 to 12.1.0.x
- All deployed plug-ins on 12.1.0.x agent will be upgraded
- Central agent (default agent with OMS) is also upgraded using AUC
- You cannot upgrade a Management Agent in the following scenarios:
 - The Management Agent is not up and running
 - The Management Agent is not secure
 - The Management Agent is not reachable
 - The new Management Agent software (of the same version as the OMS version) is not present in Oracle Software Library (Software Library)
 - The Management Agent Oracle home property is missing



```

Before Upgrade
<agent_base_directory>
|   ___ sbin
|   ___ core
|   ___ 12.1.0.1.0
|   ___ plugins
|   ___ agent_inst
|   ___ agentimage.properties

After Upgrade
<agent_base_directory>
|   ___ sbin
|   ___ backup_<TIMESTAMP>
|   ___ core
|   ___ 12.1.0.1.0
|   ___ 12.1.0.3.0
|   ___ plugins
|   ___ agent_inst
|   ___ agentimage.properties
  
```

ORACLE

Agent Upgrade console (AUC)

What happens during Agent Upgrade ?

High level steps for user understanding :

1. Start blackout on old agent (not on targets)
2. Copy the binaries of 12.1.0.3 agent and plug-in on target boxes under /stage directory
3. Extract the agent and plug-in software
4. Execute pre-requisites
5. Detach the old agent home and its depended homes like plug-in, sbin home
6. Create new 12.1.0.3 agent home
7. Attach depended homes like plug-in, sbin home
8. Update the agent home dependencies in inventory

continued

ORACLE

Agent Upgrade console (AUC)

What happens during Upgrade Agent Step?

9. Runs agent upgrade configuration :
 - a) Stop the old agent
 - b) Run the agent upgrade utility
 - c) Run the agent upgrade collections
 - d) Run the plug-in upgrade utility
 - e) Update the plug-in lifecycle application inventory details in the repository
 - f) Perform sbin upgrade
 - g) Start the new agent
10. Apply agent and plug-in patches if required
11. Updates the /etc/oragchomelist file with the new home
12. Finish the blackout on old agent

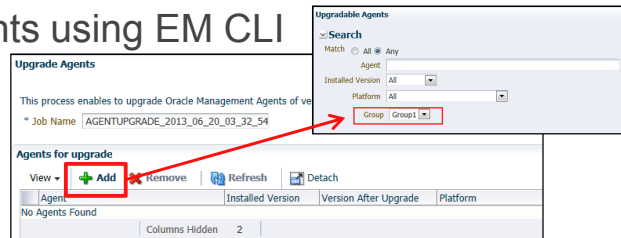


If agent upgrade fails due to any reason, we will automatically start the old agent so that there is no monitoring loss, min downtime and user can in parallel debug the issue. After fixing the issue. to retry the agent upgrade. you just have to submit a new session from AUC

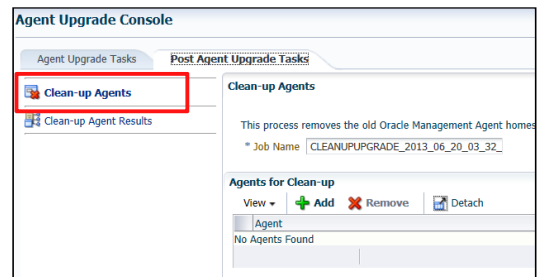
ORACLE

Agent Upgrade Console (AUC) - **What's new**

- Ability to upgrade multiple agents using EM CLI
- Ability to add agents in groups



- Sign-off / Clean-up of old Agent oracle home and targets from AUC
 - We don't use SSH
 - We use OMS- Agent communication through job system



ORACLE

Agent Upgrade Console (AUC) - **What's new**

- Agent upgrade is tolerant of the fact that if the old oracle home does not exist in the inventory - agent upgrade will automatically add old home in the inventory and continue with upgrade
- Agent upgrade detects plug-in homes which has ../ in its home path in inventory and registry.xml - fixes it automatically
- Supporting agent upgrade for environments where agent base directory and the agent instance home are same
- From EM 12.1.0.3, if the back up of inventory, sbin or agent instance home fails then we will fail the agent upgrade as agent restore can be a problem without backup. This backup is taken by agent upgrade process under:Agent_Base_dir/backup_<timestamp>

Error in Log: SEVERE: backup exception message:Directory copied from C:\Program Files\Oracle\Inventory\backup to C:\agent1bp1\backup_2013-05-22_06-06-18-AM\Inventory\backup failed (Permission Denied)

ORACLE

Agent Upgrade Console (AUC)

Different Use cases

- If your existing agent 12.1.0.1(with bp1) or 12.1.0.2 have any plug-ins that are unsupported on 12.1.0.3 agent then either un-deployed (or) the agent should be upgraded only when the supported version of the plug-in is certified with 12.1.0.3 and available in self update. You will get following warning:

"No certified version of the plugin Microsoft SQLServer Database is available for Enterprise Management Agent 12.1.0.3.0 . Plugin Microsoft SQLServer Database of version 12.1.0.3.0 or higher, which is certified on Oracle Solaris on x86-64 (64-bit), is required for upgrading this agent"

Then:

1. Un-deploy the plug-in using plug-in manager, follow instructions from Plug-in Manager chapter of Admin guide
2. Wait till the plug-in get certified certified with 12.1.0.3 and available in self update

ORACLE

Agent Upgrade Console (AUC)

Different Use cases

- If any NFS Agents (shared) and Cluster Agents are selected for upgrade then remaining agents part of NFS Master agent or Cluster agent will be selected automatically for upgrade. You no longer can upgrade just one agent of a NFS Agents (shared) and Cluster Agents to latest version leaving other behind on old version

Agent Upgrade is password less

- If you are not aware of agent install user credentials or do not have preferred privileged credentials set then also you can still do agent upgrade. You will see a warning in AUC – which you can ignore and move forward. We use existing OMS-AGENT communication to perform upgrade
- Later, you can log in to the Management Agent host as the root user, and run
 `$<AGENT_BASE_DIR>/core/12.1.0.3.0/root.sh` script.
 After running this script, ensure that you also run the
 `$<AGENT_BASE_DIR>/core/12.1.0.3.0/replacebins.sh`
- Sign off /Clean up of agents will also happen with out the credentials

ORACLE

How to push Agent and Plug-in patches while doing Fresh Agent Deployment or Agent Upgrade?

Agent Core patches

- Agent core patches can be applied as part of agent upgrade
- In case of multi-oms environment, user has to repeat the same steps on all the oms
- Steps to be followed:

1. After user has downloaded the agent one-offs from MOS, place them in a directory under OMS home

2. For any platform specific patches place them under :

`$OMS_HOME/install/oneoffs/<agent version>/<platform>`

Where :

<agent version> - points to the version of the agent for which the patches are applicable.

<platform> - points to the platform for which the patches are compatible

The platform value should be mentioned in a table with the following values

Platform OS	Platform Directory Name
Linux x86	linux
Linux x86-64	linux_x64
Oracle Solaris on SPARC (64-bit)	solaris
HP-UX PA-RISC (64-bit)	hpunix
HP-UX Itanium	hpi
IBM S/390 Based Linux (31-bit)	linux_zseries64
IBM AIX on POWER Systems (64-bit)	aix
IBM: Linux on POWER Systems	linux_ppc64
Microsoft Windows x64 (64-bit)	windows_x64
Oracle Solaris on x86-64 (64-bit)	solaris_x64
Microsoft Windows (32-bit)	win32

How to push Agent and Plug-in patches while doing Fresh Agent Deployment or Agent Upgrade?

Agent Core patches

3. For any Generic patches place them under :
 \$OMS_HOME/install/oneoffs/<agent version>/Generic
- For example, lets say if user has downloaded 3 patches applicable on top of 12.1.0.3 agent version.

11180406 - Generic patch
11878907 - Linux-x64 patch
11993573 - Linux-x64 patch

Then the user will put these patches in the following location:

\$OMS_HOME/install/oneoffs/12.1.0.3.0/Generic/11180406
\$OMS_HOME/install/oneoffs/12.1.0.3.0/linux_x64/11878907
\$OMS_HOME/install/oneoffs/12.1.0.3.0/linux_x64/11993573

ORACLE

How to push Agent and Plug-in patches while doing Fresh Agent Deployment or Agent Upgrade?

Plug-in patches

- Select a test Management Agent on which the preferred plug-ins are already deployed and apply required patches
- Create a custom plug-in update using the following command:

```
emcli create_custom_plugin_update  
-agent_name="agent_name"  
-plugin_id="plugin_id"  
[-overwrite]
```

- Custom plug-in update will be for each plug-in type, it zips up the plug-in home on the target agent
- One can see a list of all custom plug-in updates created:

```
emcli list_custom_plugin_updates
```

ORACLE

How to push Agent and Plug-in patches while doing Fresh Agent Deployment or Agent Upgrade?

Plug-in patches

- Custom plug-in update will appear in plug-in manager home page

The screenshot displays the Oracle Database plug-in manager interface. It features a 'General' tab and a 'Recent Deployment Activities' section. The 'General' section shows details for the 'oracle.sysman.db' plug-in, including its version on the management server (12.1.0.4.0) and the latest available version (12.1.0.5.0). A 'Custom Plug-in update' notification is visible, indicating that a newer version (12.1.0.5.0) is available. A red arrow points from the text 'Custom plug-in update exists. Click to view details.' to the notification. The notification details include the creation date (May 6, 2013 8:47:29 PM PDT), the source (Agent slc05gfm.us.oracle.com:3872), and the plug-in Oracle Home Patch Inventory at creation time. The inventory details show the Oracle Home path, the Central Inventory location, the OPatch version (11.1.0.10.0), and the OUI version (11.1.0.11.0). The installed top-level products list includes the Enterprise Manager plug-in for Oracle Database 12.1.0.4.0, and the interim patches list includes Patch 11218022, which was applied on Mon May 06 21:25:55 PDT 2013.

- OMS will always have latest customer plug-in update, use `-overwrite` to replace it.

Agent Upgrade Console (AUC) using EM CLI

- Allows you to upgrade multiple agent (diff platform) using emcli
- Commands for Agent upgrade
 - emcli get_upgradable_agents
 - emcli upgrade_agents
 - emcli get_agent_upgrade_status
- Commands Sign Off (clean up of old agents)
 - emcli get_signoff_agents
 - emcli signoff_agents
 - emcli get_signoff_status
- To view syntax and example for any verb use : emcli help < verb>

ORACLE

Agent Upgrade Console – Logs location

- Any link not working on the Agent upgrade status / results page :

`$<OMS_Instance_home>/user_projects//user_projects/domains/EMGC_DOMAIN/servers/EMGC_OMS1/logs/*.out`

`$<OMS_Instance_home>/user_projects//user_projects/domains/EMGC_DOMAIN/servers/EMGC_OMS1/logs/*.log`

- Job step hanging, getting executing multiple times etc.,

`$<OMS_Instance_home>/em/EMGC_OMS1/sysman/log/*.trc`

- Agent side logs to know why a step that got executed on agent failed.

`$<AgentBaseDir>/backup_<timestamp>/newAgt/install/logs`

`$<AgentBaseDir>/backup_<timestamp>/newAgt/sysman/log`

`$<New_Agent_oracle_home>/cfgtoollogs/agentDeploy/*.log`

- EMCLI logs

`$<New_Agent_oracle_home>/EMGC_OMS1/sysman/emcli/setup/.emcli`

- All logs are documented in upgrade guide.

ORACLE

Documentation

- Upgrade guide is the single source of truth
- Always refer to the Upgrade guide
- You can get the Install guide from:
<http://www.oracle.com/technetwork/indexes/documentation/index.html#em>
- Installation and Upgrade collateral page on OTN
<http://www.oracle.com/technetwork/oem/install-upgrade-496677.html>
- Agent Upgrade using EM CLI video :
<http://www.oracle.com/technetwork/oem/install-upgrade-496677.html>

The Oracle logo is centered within a black rectangular border. It consists of the word "ORACLE" in a bold, red, sans-serif font. The letter "O" is a simple circle. The "R" has a distinctive shape with a vertical stem and a curved top. The "A" is a simple triangle. The "C" is a simple curve. The "L" is a simple vertical bar with a horizontal base. The "E" is a simple horizontal bar with three vertical stems. A registered trademark symbol (®) is located to the upper right of the letter "E".

ORACLE®