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# Oracle Enterprise Manager Cloud Control 12.1.0.1 Bundle Patch1

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# Session Agenda

- Bundle Patch1 Overview
- Bundle Patch1 Use cases and Recommendations
- Bundle Patch1 Compatibility Matrix
- Bundle Patch1 Application
- Know Issues
- Documentation



# Bundle Patch1 Overview

- Released on 29 Feb 2012 for Linux 32 bit and Linux 64bit platform
- Its an Mandatory patch for EM12c
- It consist numerous bug fixes, performance improvements and new features that will improve your EM Cloud Control 12c experience
- It **does not** change the EM12c version 12.1.0.1 to 12.1.0.2
- Bundle Patch 1 is available through two different options:
  - New patched EM 12c binaries available on [OTN](#)

Enterprise Manager Cloud Control 12c Release 1 (12.1.0.1) **New!**

Enterprise Manager Base Platform  
(Full Installers for OMS, Agent, Repository, Management plug-ins)

**Important:** Please refer to My Oracle Support Note 1395505.1 for instructions on How to install Bundle Patch1 and update to 12.1.0.2 Plug-ins. This is a must-read note.

- ↓ for Linux x86 (32-bit) (With Bundle Patch 1)
- ↓ for Linux x86-64 (64-bit) (With Bundle Patch 1)
- ↓ for Solaris Operating System (SPARC)
- ↓ for Solaris Operating System (x86-64)
- ↓ for IBM AIX on POWER Systems (64-bit)

- Individual Bundle Patch 1 (BP1) patches for OMS and Agents on ARU

# Bundle Patch Tentative Schedule

Platform	Patched EM Cloud Control 12.1.0.1 Full Installer	OMS 12.1.0.1 Bundle Patch 1 (BP1)	Agent 12.1.0.1 Bundle Patch 1 (BP1)
<a href="#">Linux x86 32-bit</a>	Feb 2012	Feb 2012	Feb 2012
<a href="#">Linux x86 64-bit</a>	Feb 2012	Feb 2012	Feb 2012
Solaris x86 64-bit	Q2CY2012	Q2CY2012	Q2CY2012
Solaris SPARC 64-bit	Q2CY2012	Q2CY2012	Q2CY2012
IBM AIX 64-bit	Q3CY2012	Q3CY2012	Q3CY2012
HP-UX PA-RISC	<i>Not Planned</i>	<i>Not Planned</i>	Self-Update (online or offline) Q3CY2012
HP-UX Itanium	<i>Not Planned</i>	<i>Not Planned</i>	Self-Update (online or offline) Q3CY2012

# BP1: Fresh Install Use cases and Recommendations

Use case	Recommendation
If you are new to Enterprise Manager	Get the new EM12c binaries with BP1 included from OTN and do a fresh install. The installation will include BP1 and the latest plug-in release
If you already have an existing EM 12.1.0.1 in a non-production test or "sandbox" environment:	Analyze how much configuration setup you have done in EM and the number of Management Agents you have deployed. Based on that, if feasible, de-install the existing Cloud Control and do a fresh installation. . This also means that you have to re-install all of your existing Management Agents. This is the simplest way to get to the benefits and features of the latest patched Cloud Control release, which includes BP1 and the latest plug-in releases
If you have already downloaded and installed 12.1.0.1 release in a <b>Production</b> environment	Follow the instruction to: a) Apply BP1 on your OMS b) Upgrade your plug-in to 12.1.0.2 version on OMS and Agents c) Apply BP1 on you Agents. Open pro-active SR with support

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# BP1: Additional OMS Use case and Recommendations

Use case	Recommendation
<b>If you are planning to perform an additional OMS install</b>	
a) If your first OMS is deployed with new EM binaries with BP1 included or if you have applied the BP1 manually	<p>You can proceed with the additional OMS installations. The deployment procedure will clone the first OMS, so there will be no need to apply BP1 on the second OMS once the install is done.</p> <p>As a part of the additional OMS installation you will be required to deploy the Management Agent on the host where you plan to have the additional OMS. Get the latest Management Agent binaries from the Self Update feature, which have BP1 included for Management Agent deployment.</p>
a) If your first OMS has not been installed with new EM binaries including BP1, or if you have not applied the BP1 manually to the OMS	<p>Select one of the following options:</p> <p>Option 1:</p> <ol style="list-style-type: none"><li>i. Follow the BP1 application process on the first OMS and Agents</li><li>ii. Then do the additional OMS install</li></ol> <p>Option 2:</p> <ol style="list-style-type: none"><li>i. Do the additional OMS install</li><li>ii. Follow the BP1 application process on the first OMS and additional OMS together</li></ol>

# BP1: Upgrade Use cases and Recommendations

Use case	Recommendation
<b>If you are upgrading from an EM Grid Control 10.2.0.5 or 11.1.0.1 release to EM12c</b>	
a) If your planning for upgrade	You can upgrade directly from 10.2.0.5 or 11.1.0.1 release to EM12c with BP1 included
b) If you have just applied the pre-upgrade console patch and haven't gone ahead with agent or OMS upgrade	Follow the blow steps: a) Get the new pre-upgrade console patch from OTN (you can rollback the old patch or redeploy the new patch) b) Get the new agent zip files from OTN c) Get the new 12.1.0.2 plug-in binaries from OTN d) Get the new EM12c binaries with BP1 included from OTN Note: New version of Pr-upgrade console patch will only work with EM12c binaries with BP1 included and agent binaries
c) If you have applied the pre-upgrade console patch and have gone ahead with agent or OMS upgrade	Finish your upgrade to EM12c and then follow the instruction to: a) Apply BP1 on your OMS b) Upgrade your plug-in to 12.1.0.2. version c) Apply BP1 on you Agents.

# Bundle Patch1 Compatibility Matrix

Oracle Management Service (OMS)	Target Agent without Bundle Patch1 applied and 12.1.0.1 plugins on target agent	Target Agent with Bundle Patch1 and 12.1.0.1 plugins on target agent	Target Agent without Bundle Patch1 and 12.1.0.2 plugins on target agent	Target Agent with Bundle Patch1 applied and 12.1.0.2 plugins on target agent
12.1.0.1 OMS without Bundle Patch1 applied	Yes	No	No	No
12.1.0.1 OMS with Bundle Patch1 applied and 12.1.0.1 plugins on OMS (no plugin upgrade)	Yes	Yes	No	No
12.1.0.1 OMS with Bundle Patch1 applied and 12.1.0.2 plugins on OMS (plug-in upgrade done)	Yes **	Yes	Yes	Yes *

\*This is the Fresh Install of EM12c with new EM12c binaries with BP1 included

\*\*An example for this usecase is: you have Solaris agents without BP1 applied and 12.1.0.1 plug-in pointing to Linux32 bit OMS with BP1 applied and 12.1.0.2 plug-in on OMS.



# EM12c Fresh Install With New Binaries

- Includes 12.1.0.2 plug-ins
- New agent binaries with BP1 included will be available through Self Update
- New Pre-Upgrade console patch is available on OTN
- Key points:
  - If you have existing EM12c deployed with Oct binaries then deinstall the EM
  - Re-install the database to house the EM repository
  - De-install the agents on targets

# EM12c Plug-in

- EM Plug-in version will always be different than EM12c version.
- With BP1 we have released
  - New versions of plug-in (12.1.0.2)
  - Revised version of 12.1.0.1 plug-in
- Use Self Update feature to obtain the latest plug-in version

Plug-in Name	Plug-in Version
Oracle Database	12.1.0.2
Oracle Exadata	12.1.0.2
Oracle Fusion Middleware	12.1.0.2
Oracle MOS (My Oracle Support)	12.1.0.2
EMC CLARiiON Array	12.1.0.2
EMC Celerra Storage	12.1.0.2
EMC Symmetrix Array	12.1.0.2
Exalogic Elastic Cloud Infrastructure	12.1.0.1
IBM DB2 Database	12.1.0.2
Oracle Audit Vault	12.1.0.2
Oracle Chargeback and Capacity Planning	12.1.0.2
Oracle Cloud Application	12.1.0.2
Oracle Exadata Healthchecks	12.1.0.2
Oracle Fusion Applications	12.1.0.2
Oracle Siebel	12.1.0.2
Oracle Virtualization	12.1.0.2
Sybase ASE Database	12.1.0.2



# Enterprise Manager Cloud Control 12c Release1 (12.1.0.1)

## Bundle Patch1 Application

# List of patches in Bundle Patch1

Recommendation	Impacted Target	Patch Numbers (Total =7)
<b>Mandatory</b>	OMS OMS OMS	<ul style="list-style-type: none"><li>• <a href="#">Patch 13242773</a> Bundle Patch 1 (BP1)</li><li>• <a href="#">Patch 13470978</a> JDeveloper</li><li>• <a href="#">Patch 12321965</a> Web Services Manager</li></ul>
<b>Mandatory</b>	Agent	<ul style="list-style-type: none"><li>• <a href="#">Patch 13242776</a> Bundle Patch 1 (BP1)</li><li>• <a href="#">Patch 13491785</a> Bundle Patch 1 (BP1)</li><li>• <a href="#">Patch 13550565</a> Bundle Patch 1 (BP1)</li><li>• <a href="#">Patch 13550561</a> Bundle Patch 1 (BP1)</li></ul>

Note: Its mandatory to apply all the agent patches listed above

# Steps to apply Bundle Patch1

Follow the below steps in the strict order (do not deviate) :

Step 1: Apply Bundle Patch1 on Oracle Management Service

Step 2 :Update all deployed Plug-ins to the 12.1.0.2 version in a single go on OMS and Target Agent

Step 3: Apply Bundle Patch1 on Target Management Agents

## Note:

- If the OMS patch is not applied before applying this Bundle Patch, then the metadata version will not be registered with the OMS, and the OMS will block the patched Management Agents from uploading data.
- 12.1.0.2 plug-ins will only work with OMS with BP1 applied

# Pr-requisites for applying Bundle Patch1

- **(IMPORTANT)** Before you apply the Bundle Patch 1, ensure that you back up the following:
  - Oracle Inventory
  - Management Repository Database
  - Middleware Home
  - Instance Home where OMS is installed
  - Software Library

If you don't have back up of above components and you run into any issues/errors during the BP1 application process then the only option you will have is to do a clean fresh Install of EM12c with new binaries

- Ensure that you have the correct version of OPatch 11.1. The minimum OPatch version required for installing Bundle Patch 1, should be 11.1.0.9.x where x is 4 or higher. **Do not use OPatch 11.2.x.**

## Pr-requisites for applying Bundle Patch1 (Cond)

- Setup Software Library
- Setup the My Oracle Support credentials
- If you have JvMD deployed then shut it down till the BP1 is applied
- Upgrade all of your 12.1.0.1 plug-ins to 12.1.0.2 version in a single go
- Check for Invalid objects in repository
- Make sure that DBMS jobs are running

# Steps to apply Bundle Patch1 on OMS

- Download and extract the 13242773 Patch zip from ARU
- Set the ORACLE\_HOME environment variable to OMS oracle home
- Stop the OMS (In case of a multi-OMS environment, shut down all OMS instances)
- Bounce your Repository Database
- Navigate to the <PATCH\_TOP\_DIR>/13242773 directory
- Run the command *\$ opatch apply*
- Run the script from *\$ <PATCH\_TOP\_DIR>/13242773/post\_deploy.sh*
- In case of a multi-OMS environment, Run the following command from the Bundle Patch 1 directory on all other OMS instances:

```
$ <PATCH_TOP_DIR>/13242773/MultiOms_post_deploy.sh
```



# Steps to Upgrade Plug-in to 12.1.0.2 version

- Go to the Self Update page and select the Plug-in entity
- Download the required Plug-in updates
- Apply the new plug-in on OMS and target agents
- You can download the plug-in in Online or Offline mode

# Steps to apply Bundle Patch1 on Agent

- Search the patches 13242776, 13491785, 13550565, 13550561 from Patch updates
- Use Patch plan to apply the patches
- Perform the validations, runs pre-requisite checks and also patch conflicts
- Deploy the patch plan

## Know Issues

- Using wrong version of Opatch (specifically 11.2)
- JVM process is running while doing the Plug-in Upgrade
- Post\_deploy.sh script failing
  - The log generated by post\_deploy.sh is underneath the directory containing the script post\_deploy.sh. It is in:  
\$SCRIPT\_ROOT\_DIRECTORY/log  
For example, it might be in /shared\_storage/omsscript/log
- Not using the latest version of Pre-upgrade console with 12.1.0.2 plug-in
- Not applying all 4 agents patches

# Recovery during the Plug-in Upgrade failure

While doing the plug-in upgrade to version 12.1.0.2, there are 2 phases where you can run into issues:

## **Phase1: Failure in pre-requisites of plug-in upgrade**

- For any failure in Phase1, user can solve the issues and continue
- For example, in the below screen you can see that plug-in upgrade is complaining about the Opatch version not correct. User can get the correct version of Opatch and continue further

## **Phase2: Failure while deploying/upgrading the metadata**

- For any failure in Phase2 , follow the below steps in the order:
- Restore the Middleware Oracle Home and Repository database from the backup that you had taken before starting the BP1 application process.
- Make sure that JVMD is shutdown
- Start the Bundle Patch1 application process from the start including applying the BP1 patches on OMS home and Agent homes.
- Make sure that you upgrade all of your 12.1.0.1 plug-ins to 12.1.0.2 version at the same time.

# Documentation

- Starting Point for user :
  - Announcing Enterprise Manager Cloud Control 12c Release 12.1.0.1 Bundle Patch 1(BP1) and 12.1.0.2 Plug-ins (Doc ID 1395505.1)
  - Refer to the Cookbook for step by step instructions to apply BP1 (MOS note 1393173.1) **MUST READ**
  - Enterprise Manager Cloud Control 12.1.0.1 Bundle Patch 1 Known Issues (Doc ID 1395640.1)

# Q&A

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