

Oracle® Enterprise Manager Cloud Control Release Notes



13c Release 4
F25607-07
June 2020

ORACLE®

F25607-07

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Preface

Oracle Enterprise Manager Cloud Control Release Notes provides information specific to this release.

Audience

Oracle Enterprise Manager Cloud Control Release Notes is intended for systems administrators who want to install or upgrade to Enterprise Manager 13c Release 4.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Oracle Enterprise Manager Cloud Control Release Notes 13c Release 4

Oracle Enterprise Manager Cloud Control is a management solution providing centralized monitoring, administration, and lifecycle management functionality for the complete IT infrastructure. This document provides information specific to this release to assist you in installing or upgrading to Enterprise Manager Cloud Control 13c Release 4.

Updates to this document may occur after its original release. Check for updates to this document and view other Oracle documentation, including other versions of documentation at [Enterprise Manager Documentation](#).

This document contains the following sections:

- [Acquiring the Software](#)
- [Plug-ins Included In This Release](#)
- [Installation and Upgrade References For This Release](#)
- [Installing Oracle Enterprise Manager Cloud Control 13c Release 4](#)
- [Upgrading To Oracle Enterprise Manager Cloud Control 13c Release 4](#)

Acquiring the Software

You can get the installation software from the product DVD or from Oracle Software Downloads at:

<http://www.oracle.com/downloads/>

For more details on how you can obtain the Enterprise Manager Cloud Control software, refer to the Procuring Enterprise Manager Cloud Control Software section of the *Enterprise Manager Cloud Control Advanced Installation and Configuration Guide*.

Note:

Verify that the file size of your downloaded installation software matches the file size displayed on Oracle Software Downloads. After downloading the software, run the `cksum` command against the downloaded file to ensure that the file size of the downloaded software is the same as the file size on Oracle Software Downloads.

Plug-ins Included In This Release

The following plug-ins are deployed by default with Oracle Enterprise Manager Cloud Control 13.4.0.0.0:

- Oracle Cloud Framework 13.4.1.0.0
- Oracle Database 13.4.1.0.0
- Oracle Exadata 13.4.1.0.0
- Oracle Fusion Middleware 13.4.1.0.0
- Systems Infrastructure 13.4.1.0.0

In addition, the following plug-ins are also available with Oracle Enterprise Manager Cloud Control:

- Apache Tomcat 13.2.1.0.0
- Cloud Services Management 13.4.1.0.0
- Microsoft Active Directory 13.1.1.0.0
- Microsoft IIS 13.1.1.0.0
- Oracle Audit Vault and Database Firewall 13.4.0.0.0
- Oracle Big Data Appliance 13.4.1.0.0
- Oracle Cloud Application 13.4.1.0.0
- Oracle Consolidation Planning and Chargeback 13.4.1.0.0
- Oracle Fusion Applications 13.4.1.0.0
- Oracle ORAchk Healthchecks 13.4.1.0.0
- Oracle Siebel 13.4.1.0.0
- Oracle Storage Management Framework 13.4.1.0.0
- Oracle Virtual Infrastructure 13.4.1.0.0
- Oracle Virtualization 13.4.1.0.0
- Zero Data Loss Recovery Appliance 13.4.1.0.0

You can deploy the latest plug-ins as part of the process of installing or upgrading to Enterprise Manager Cloud Control 13c Release 4. To deploy plug-ins during installation, follow the process outlined in the Installing an Enterprise Manager System for a Production Site (Advanced Configuration) chapter in the *Enterprise Manager Cloud Control Basic Installation Guide*.

Installation and Upgrade References For This Release

The following documents are related to installing and/or upgrading to Enterprise Manager Cloud Control 13c Release 4.

All of these documents can be downloaded from the Enterprise Manager Cloud Control Documentation Library at the following URL:

<http://docs.oracle.com/en/enterprise-manager/>

- [Oracle Enterprise Manager Cloud Control Release Notes](#), 13c Release 4 (this document):
The Release Notes document provides instructions on installing, upgrading, or uninstalling the software. It also includes a list of known issues related to installation and upgrade, as well as post-installation configuration.
- Oracle Enterprise Manager Cloud Control Basic Installation Guide, 13c Release 4:

This document provides detailed instructions on performing a fresh installation of Enterprise Manager Cloud Control and Management Agents.

- Oracle Enterprise Manager Cloud Control Advanced Installation and Configuration Guide, 13c Release 4:

This document provides detailed instructions on advanced installation scenarios, including silent installation and deinstallation of Cloud Control components. It also provides guidelines on post-installation configuration tasks, including high availability configuration.

- Oracle Enterprise Manager Cloud Control Upgrade Guide, 13c Release 4:

This document provides detailed instructions on upgrading an existing Enterprise Manager installation to the latest release.

Installing Oracle Enterprise Manager Cloud Control 13c Release 4

These instructions assume that you will install a complete Enterprise Manager Cloud Control system using an existing certified Oracle Database on which the Oracle Management Repository can be configured.

See the Installing Enterprise Manager System chapter in the *Enterprise Manager Cloud Control Basic Installation Guide 13c* for installation and post-install configuration instructions.

Generic Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Creating the SYSMAN User Account Password

The SYSMAN account password must begin with a letter. It can only contain uppercase or lowercase letters, numbers, and the characters like \$, #, _.

Examples of valid passwords:

Yourpw1, oracle_User

Examples of invalid passwords:

Welcome!, 123oracle, #Oracle

(Bug 22879000)

Nm2user Limitation in IBswitch Firmware Version 2.2.7 and Above

Starting from Enterprise Manager 13c Release 3, if IBswitch (FW 2.2.7 +) is discovered as `nm2user`, the following metrics will throw the metric collection errors and will not be collected:

- Switch InfiniBand PKey-GUID Membership
- Switch InfiniBand PKey Configuration
- Network Datalinks

You must use `ilom-admin` user to get data for these above mentioned metrics.

(Bug 27880372)

OMS Install Fails During Repository Configuration

Enterprise Manager 13c Release 4 OMS install fails during repository configuration with the following error: `ORA-38818: illegal reference to editioned object SYSMAN.AQ$_MGMT_ADMINMSG_BUS_V` when using the following databases to host the Management Repository:

- Oracle Database 18.0.0.0.0 RU 18.0.0.0.191015 (Bug 30112122)
- Oracle Database 12.2.0.1.0 with latest PSU 12.2.0.1.191015 (Bug 30138470)

To resolve this issue, apply the corresponding one-off patch to the database and restart the Enterprise Manager installation process from scratch.

(Bug 30565734)

Installation Prerequisite Checks

The installation prerequisite checks does not explicitly check for Fusion Middleware 12.2.1.3 operating system requirements. Be sure to first check the Enterprise Manager 13c Release 4 My Oracle Support (MOS) certification matrix to see the supported OS platforms for install or upgrade. Also, check the requirements listed in [System Requirements for Fusion Middleware 12.2.1.3](#)

(Bugs: 30771732, 30771756, 30771610, 30328481, 30646023)

Optimizer Adaptive Features Requirements for Enterprise Manager Installation

As a general rule, Oracle recommends that when you do a fresh install you also apply all Enterprise Manager one-off patches available via auto-download as well as the latest Release Updates available. Patch [30912308](#) is one such patch that addresses some Optimizer Adaptive Features fixes. Note that patch 30912308 is available with automatic updates and it is also part of Enterprise Manager 13.4 Release Update 1 (13.4.0.1). For a better experience, Oracle recommends applying this patch during the installation process using one of the methods below:

- Download the patch automatically during the installation process as part of the Enterprise Manager Cloud Control Installation Wizard using your My Oracle Support (MOS) credentials.
- If you are not connected to My Oracle Support, manually download and apply the Release Update1 during the installation process.

Before proceeding with either method you must first perform the following:

- If the Management Repository is using Oracle Database **12.1.0.2.0** and **database patch 22652097 has not been applied**, ensure that you disable the optimizer adaptive features by connecting to the database as `SYSDBA` and running the following:

```
alter system set optimizer_adaptive_features=false scope=both;
```

To verify that the changes have taken effect, run the following command:

```
show parameter adaptive;
```

You should see the following output:

NAME	TYPE	VALUE
optimizer_adaptive_features	boolean	FALSE

- If the Management Repository is using Oracle Database **12.1.0.2 with database patch 22652097** applied, connect to the database as SYSDBA and run the following:

```
alter system set "_optimizer_nlj_hj_adaptive_join"= FALSE scope=both
sid='*';
alter system set "_optimizer_strans_adaptive_pruning" = FALSE
scope=both sid='*';
alter system set "_px_adaptive_dist_method" = OFF scope=both sid='*';
alter system set "_sql_plan_directive_mgmt_control" = 0 scope=both
sid='*';
alter system set "_optimizer_dsdir_usage_control" = 0 scope=both
sid='*';
alter system set "_optimizer_use_feedback" = FALSE scope=both sid='*';
alter system set "_optimizer_gather_feedback" = FALSE scope=both
sid='*';
alter system set "_optimizer_performance_feedback" = OFF scope=both
sid='*';
```

- If the Management Repository is using Oracle Database **12.2, 18.x or 19.x**, there's no need to set any parameters since they will be addressed when applying the patch [30912308](#) during the installation process.

Otherwise, if you plan not to follow any of the above recommended methods to apply the patch 30912308 during the installation process then you must to connect to the database as SYSDBA and run the following:

```
alter system set "_optimizer_nlj_hj_adaptive_join"= FALSE scope=both
sid='*';
alter system set "_optimizer_strans_adaptive_pruning" = FALSE
scope=both sid='*';
alter system set "_px_adaptive_dist_method" = OFF scope=both sid='*';
alter system set "_sql_plan_directive_mgmt_control" = 0 scope=both
sid='*';
alter system set "_optimizer_dsdir_usage_control" = 0 scope=both
sid='*';
alter system set "_optimizer_use_feedback" = FALSE scope=both sid='*';
alter system set "_optimizer_gather_feedback" = FALSE scope=both
sid='*';
alter system set "_optimizer_performance_feedback" = OFF scope=both
sid='*';
```

Then, perform the Enterprise Manager installation process using one of the methods described below to apply the patch 30912308:

- Let the Enterprise Manager Cloud Control Installation Wizard (Oracle Installer) download automatically the patch [30912308](#) using your My Oracle Support (MOS) credentials during the Enterprise Manager installation process. This is an auto download patch which requires Internet connection to MOS. For more details about this method, see step 2 from Installing an Enterprise Manager System for a Production Site (Advanced Configuration).

- Manually download and apply the bundle patch along with the Enterprise Manager installation process. It doesn't require Internet connection to MOS. For more details, see *Apply Bundle Patch* under step 30 from Installing an Enterprise Manager System Using Software Only Install Along With Plugins and Configuring Later.

After installing the Enterprise Manager 13c Release 4, if the Management Repository is using Oracle Database **12.2, 18.x or 19.x** and you have not applied patch **30912308** via any of the two recommended methods described above during the installation process then Oracle recommends to reset the optimizer adaptive features parameters by connecting to the database as SYSDBA and running the following:

```
alter system reset "_optimizer_nlj_hj_adaptive_join" scope=both sid='*';
alter system reset "_optimizer_strans_adaptive_pruning" scope=both sid='*';
alter system reset "_px_adaptive_dist_method" scope=both sid='*';
alter system reset "_sql_plan_directive_mgmt_control" scope=both sid='*';
alter system reset "_optimizer_dsdire_usage_control" scope=both sid='*';
alter system reset "_optimizer_use_feedback" scope=both sid='*';
alter system reset "_optimizer_gather_feedback" scope=both sid='*';
alter system reset "_optimizer_performance_feedback" scope=both sid='*';
```

(Bug 25679612, 30912308)

Installation of Additional OMS Fails If Primary OMS Was Installed in Silent Mode

If you installed the primary OMS in silent mode, adding another OMS using the graphical interface (using a deployment procedure) will fail.

The workaround is to install an additional OMS, on a secondary host, in silent mode and configure it manually as follows:

Prerequisites: Ensure that the software library and BIP are configured. The software library and BIP shared storage must be mounted and accessible from the secondary host.

1. Install software-only only on the secondary host by running the EM installer from the shared stage. Follow the steps outlined in Installing the Enterprise Manager Cloud Control 13c Release Software Binaries in Silent Mode.
2. Run root.sh on the secondary host as outlined in Running the Root Script.
3. Connect to the Management Repository and run the following SQL query to retrieve a list of plug-ins installed on the primary OMS.

```
SELECT epv.plugin_id, epv.version, epv.rev_version FROM
em_plugin_version epv, em_current_deployed_plugin ecp WHERE
epv.plugin_type NOT IN ('BUILT_IN_TARGET_TYPE', 'INSTALL_HOME') AND
ecp.dest_type='2' AND epv.plugin_version_id = ecp.plugin_version_id;
```

4. Perform the plug-ins deployment using silent mode method as follows:

```
<OMS_HOME>/sysman/install/PluginInstall.sh -silent
PLUGIN_SELECTION="{<plug-in internal name 1>, <plug-in internal name
2>, ...}"
```

For example, if the query from your repository returns the following plug-ins:
oracle.sysman.emas,oracle.sysman.si,oracle.em.satc,oracle.sysman.csm,o

racle.em.smad,oracle.em.smis,oracle.em.savf,oracle.sysman.bda,oracle.sysman.ssa,oracle.sysman.cfw,oracle.sysman.db,oracle.sysman.xa,oracle.sysman.emct,oracle.sysman.emfa,oracle.sysman.orhc,oracle.sysman.empa,oracle.sysman.smf,oracle.sysman.vi,oracle.sysman.vt,oracle.sysman.am you would run the following:

```
<OMS_HOME>/sysman/install/PluginInstall.sh -silent PLUGIN_SELECTION="
{oracle.sysman.emas,oracle.sysman.si,oracle.em.satc,oracle.sysman.csm,
oracle.em.smad,oracle.em.smis,oracle.em.savf,oracle.sysman.bda,oracle.
sysman.ssa,oracle.sysman.cfw,oracle.sysman.db,oracle.sysman.xa,oracle.
sysman.emct,oracle.sysman.emfa,oracle.sysman.orhc,oracle.sysman.empa,o
racle.sysman.smf,oracle.sysman.vi,oracle.sysman.vt,oracle.sysman.am}"
```

5. Use EM UI to install an Oracle Management Agent on the secondary host and run root.sh. See more details at [Installing a Standalone Oracle Management Agent Using Add Host Targets Wizard](#) or EM CLI.

For any additional OMS installs, use the EM Add OMS Deployment Procedure. For more details, see [Adding Additional Oracle Management Services](#).

(Bug 30682423)

Configure Oracle Configuration Manager Manually After Enterprise Manager Installation

During Enterprise Manager 13c Release 4 installation process, Oracle Configuration Manager (OCM) setup is optional and done through My Oracle Support Details screen.

If there is no connectivity to `ccr.oracle.com` when providing My Oracle Support credentials for OCM configuration, you will get exception errors similar to the following:

```
Exception in thread "AWT-EventQueue-0" java.lang.NoClassDefFoundError:
oracle/ewt/lwAWT/LWComponent
at
oracle.sysman.install.oneclick.ocm.EMGCOCMPProxy.mkMllLabel(EMGCOCMPProxy.java:1433)
at
oracle.sysman.install.oneclick.ocm.EMGCOCMPProxy.createUI(EMGCOCMPProxy.java:488)
at
oracle.sysman.install.oneclick.ocm.EMGCOCMPProxy.<init>(EMGCOCMPProxy.java:205)
at
oracle.sysman.install.oneclick.ocm.EMGCOCMUI.validateConnection(EMGCOCMUI.java:454)
at
oracle.sysman.install.oneclick.ocm.EMGCOCMUI.validateInputs(EMGCOCMUI.java:571)
at
oracle.sysman.install.oneclick.ocm.EMGCOCMInterfaceManager.validate(EMGCOCMInterfaceManager.java:246)
at
oracle.sysman.install.oneclick.EMGCOCMDialogonNext.actionsOnClickofNext(EMG
```

```
COCMDialogonNext.java:85)
...
```

To avoid the errors, do not provide your My Oracle Support email address or My Oracle Support password when you get to the My Oracle Support Details screen and configure Oracle Configuration Manager later.

After the Enterprise Manager 13c Release 4 installation process completed, you can configure Oracle Configuration Manager manually by running the following on each OMS instance:

1. Stop OMS
 2. Run `setupCCR /configCCR` without `ORACLE_CONFIG_HOME` environment variable set:
For Linux: `$ORACLE_HOME/oracle_common/ccr/bin/setupCCR /configCCR -a`
For Windows: `$ORACLE_HOME/oracle_common/ccr/bin/setupCCR /configCCR.exe -a`
 3. Start OMS
- (Bug 30812916)

Create User Using EM CLI Results in 'An internal error occurred'

After installing Enterprise Manager Cloud Control 13c Release 4, you will get an error with `emcli create_user` command when running the following:

```
emcli create_user -name=<new_user> -password=<password> -
privilege=SUPER_USER
```

You will get the following error: 'An internal error occurred'

The workaround is to connect to the OMS and do the following:

1. Open the file `<INSTANCE_HOME>/user_projects/domains/GCDomain/config/fmwconfig/ovd/default/adapters.os_xml`
2. Search for `<ns3:ldap...>` section. If that section contains `<ns3:serverType>WLS_OVD</ns3:serverType>` tag then proceed with the next step.
3. Within the same `<ns3:ldap...>` section from step 2, find `<ns3:cipherSuites/>` tag and replace it with following:

```
<ns3:cipherSuites>
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384</ns3:cipher>
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_CBC_SHA384</ns3:cipher>
  <ns3:cipher>SSL_RSA_WITH_AES_256_CBC_SHA256</ns3:cipher>
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_CBC_SHA384</ns3:cipher>
  <ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_CBC_SHA384</ns3:cipher>
  <ns3:cipher>SSL_DHE_RSA_WITH_AES_256_CBC_SHA256</ns3:cipher>
  <ns3:cipher>SSL_DHE_DSS_WITH_AES_256_CBC_SHA256</ns3:cipher>
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_CBC_SHA</ns3:cipher>
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>
  <ns3:cipher>SSL_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_CBC_SHA</ns3:cipher>
```

```

<ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_256_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_128_CBC_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_128_CBC_SHA</ns3:cipher>
<ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_128_GCM_SHA256</ns3:cipher>
</ns3:cipherSuites>

```

4. Restart the OMS.

(Bug 30435489)

AIX Based Systems Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Verifying UDP and TCP Kernel Parameters

Enterprise Manager Cloud Control 13c Release 4 has specific Operating System requirements for AIX. Ensure that the lower range for TCP/IP and UDP/IP ports is set to at least 11000, to avoid Well Known ports, and to avoid ports that are used by Enterprise Manager Cloud Control 13c Release 4. Set the upper range for TCP/IP and UDP/IP ports to no more than 65000.

Use the following command to check your current range for ephemeral ports.

```

# /usr/sbin/no -a | fgrep ephemeral
tcp_ephemeral_low = 11000
tcp_ephemeral_high = 65000

```

```
udp_ephemeral_low = 11000
udp_ephemeral_high = 65000
```

In the preceding example, the TCP and UDP ephemeral ports are set to the required ranges for Enterprise Manager Cloud Control 13c Release 4.

If the output above contains ranges such that the 'low' value is below '11000' or the 'high' range is above 65000, then you need to execute these commands, as the AIX super user.

```
# /usr/sbin/no -p -o tcp_ephemeral_low=11000 -o tcp_ephemeral_high=65500
# /usr/sbin/no -p -o udp_ephemeral_low=11000 -o udp_ephemeral_high=65500
```

(Bug 22242359)

HP-UX Itanium Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Linux Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Configuring Kernel Parameters for Linux

Unless otherwise specified, the kernel parameter and shell limit values shown in the following table are minimum values only. For production Enterprise Manager systems, Oracle recommends that you tune these values to optimize the performance of the system. See the operating system documentation for more information about tuning kernel parameters.

Minimum Parameter Settings for Installation

Review the following table to set the values manually:

Parameter	Value	File
ip_local_port_range	Minimum: 11000 Maximum: 65000 See Setting UDP and TCP Kernel Parameters Manually	/proc/sys/net/ipv4/ ip_local_port_range
nproc	4098 or higher	/etc/security/limits.conf

Displaying and Changing Kernel Parameter Values

Enter the commands shown in the following table to display the current values of the kernel parameters. Note these values and identify any values that you must change:

Parameter	Command
ip_local_port_range	# /sbin/sysctl -a grep ip_local_port_range This command displays a range of port numbers.

This command displays a range of port numbers.

If the value of any kernel parameter is different from the minimum value, then perform the following steps:

1. Using any text editor, create or edit the `/etc/sysctl.conf` file, and add or edit lines similar to the following.

 **Note:**

Include lines only for the kernel parameter values to change. For the semaphore parameters (`kernel.sem`), you must specify all four values. If any of the current values are larger than the minimum value, then specify the larger value.

For example:

```
net.ipv4.ip_local_port_range = 11000 65000
```

By specifying the values in the `/etc/sysctl.conf` file, they persist when you restart the system. On SUSE Linux Enterprise Server systems, enter the following command to ensure that the system reads the `/etc/sysctl.conf` file when it restarts:

```
# /sbin/chkconfig boot.sysctl on
```

2. Enter the following command to change the current values of the kernel parameters:

```
# /sbin/sysctl -p
```

Review the output from this command to verify that the values are correct. If the values are incorrect, edit the `/etc/sysctl.conf` file, then enter this command again.

3. Enter the command `/sbin/sysctl -a` to confirm that the values are set correctly.
4. After updating the values of the kernel parameters in the `/etc/sysctl.conf` file, either restart the computer, or run the command `sysctl -p` to make the changes in the `/etc/sysctl.conf` file available in the active kernel memory.

Microsoft Windows x64 Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Installing an Additional OMS Not Supported on Windows

Installing an additional OMS on a Windows platform is not currently supported.

Set IOCP Status

While upgrading to Enterprise Manager 13c Release 4 on AIX platform, you must make sure that I/O Completion Port (IOCP) Status is shown as **Available**.

Run the following command to check the IOCP Status:

```
/usr/sbin/lsdev -c iocp -F status
```

If the IOCP Status is not **Available**, then see [Checking I/O Completion Port \(IOCP\) settings](#) to change the status.

Restart Installation Updates Not Supported On Windowsx64

Restart installation updates are not supported on the Windows x64 platform. Due to this issue, any restart install patches available on My Oracle Support cannot be applied during installation time on WindowsX64.

There is no workaround for this issue.

(Bug 22142768, 22071620)

Agent Patch using Agent Patch Plan with Opatch Upgrade Option Fails

Running the agent patch using agent patch plan with Opatch upgrade option fails with the following message:

```
[23_01_2020_08_52_52]Obtaining patch information for patch(es)... from  
Software Library.  
[23_01_2020_08_52_52] Obtaining OPatch information from Software Library.  
Check if the applicable OPatch component exists in Software Library.  
Check complete. The overall result of this check is: Failed <<<<  
ERROR: Unable to find the OPatch component version in the Oracle Home of  
the target " {0}" of type "{1}".  
ACTION: Refresh the configuration of the Oracle Home target at which the  
target "hostname.example.com:1831" is installed.
```

The workaround is to deselect the Opatch upgrade option when running the agent patch using a patch plan during your very first agent core/platform patch.

(Bug 30800421)

Oracle Solaris on x86-64 (64-bit) Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Setting UDP and TCP Kernel Parameters Manually

Enterprise Manager Cloud Control 13c has specific Solaris Kernel requirements for the TCP/IP ephemeral port range. This range is configured using the NDD. Ensure that the lower range is set to at least 11000 or higher, to avoid ports used by Enterprise Manager Cloud Control 13c. The highest range must also be set maximum to 65000. If

the lower value of the range you have is greater than 11000, or the upper range is greater than 65000, then these values must be changed.

Use the following commands to check your current range for ephemeral ports:

On Oracle Solaris 11, use the following `ipadm` command:

```
# ipadm show-prop -p smallest_anon_port,largest_anon_port tcp
```

PROTO	PROPERTY	PERM	CURRENT	PERSISTENT	DEFAULT	POSSIBLE
tcp	smallest_anon_port	rw	11000	--	11000	1024-65535
tcp	largest_anon_port	rw	65000	--	65000	32768-65535

In the preceding examples, the ephemeral ports are set to the default range to the minimum requirements for Enterprise Manager Cloud Control 13c.

If these values are not set correctly, update the UDP and TCP ephemeral port range, For example:

On Oracle Solaris 11

```
# ipadm set-prop -p smallest_anon_port=11000 tcp
# ipadm set-prop -p largest_anon_port=65000 tcp
# ipadm set-prop -p smallest_anon_port=11000 udp
# ipadm set-prop -p largest_anon_port=65000 udp
```

Oracle recommends that you make these settings permanent. Refer to your system administration documentation for information on how to automate this ephemeral port range alteration on system restarts.

(Bug 22242417)

Oracle Solaris on SPARC (64-bit) Known Installation Issues

This section covers issues related to installing Enterprise Manager Cloud Control 13c Release 4.

Setting UDP and TCP Kernel Parameters Manually

Enterprise Manager Cloud Control 13c has specific Solaris Kernel requirements for the TCP/IP ephemeral port range. This range is configured using the NDD. Ensure that the lower range is set to at least 11000 or higher, to avoid ports used by Enterprise Manager Cloud Control 13c. The highest range must also be set maximum to 65000. If the lower value of the range you have is greater than 11000, or the upper range is greater than 65000, then these values must be changed.

Use the following commands to check your current range for ephemeral ports:

On Oracle Solaris 11, use the following `ipadm` command:

```
# ipadm show-prop -p smallest_anon_port,largest_anon_port tcp
```

PROTO	PROPERTY	PERM	CURRENT	PERSISTENT	DEFAULT	POSSIBLE
tcp	smallest_anon_port	rw	11000	--	11000	1024-65535
tcp	largest_anon_port	rw	65000	--	65000	32768-65535

In the preceding examples, the ephemeral ports are set to the default range to the minimum requirements for Enterprise Manager Cloud Control 13c.

If these values are not set correctly, update the UDP and TCP ephemeral port range,
For example:

On Oracle Solaris 11

```
# ipadm set-prop -p smallest_anon_port=11000 tcp
# ipadm set-prop -p largest_anon_port=65000 tcp
# ipadm set-prop -p smallest_anon_port=11000 udp
# ipadm set-prop -p largest_anon_port=65000 udp
```

Oracle recommends that you make these settings permanent. Refer to your system administration documentation for information on how to automate this ephemeral port range alteration on system restarts.

(Bug 22242417)

Idmpower Fails to Return Expected Results on T7/M7/S7/T8/M8 based Systems

PM is disabled by default at the LDom layer on T7/M7/S7/T8/M8 based systems with S11.3, SRU 29, and later. For these systems Enterprise Manager Cloud Control does not monitor power consumption on Oracle VM Server for SPARC.

While deploying EM agent on such systems, the prerequisite check shows a warning **Enterprise Manager will not monitor Oracle VM Server for SPARC Power consumption**. This does not affect the agent deployment process and the monitoring for the rest of the Oracle VM Server metrics.

(Bug 28561189)

Upgrading To Oracle Enterprise Manager Cloud Control 13c Release 4

Before beginning an upgrade process, Oracle recommends that you back up the Oracle Management Service (OMS) Oracle Home, the Management Agent Oracle Home, the Oracle Inventory directory, and the Software Library. You should also back up the Management Repository database, as upgrade changes made to the Repository cannot be rolled back. For details, see the Backing Up Enterprise Manager chapter in the *Enterprise Manager Cloud Control Advanced Installation and Configuration Guide*.

See the Enterprise Manager Cloud Control Upgrade Guide for upgrade prerequisites and instructions.

 **Note:**

The upgrade process will upgrade only the Management Repository (sysman) schema and will create the new Metadata Services (sysman_mds) schema within the database. It will not impact any other data within the database. Yet, a database backup is strongly recommended.

In case of Microsoft Edge browser, you may notice browser specific issues while viewing engineering system targets. It is recommended to use Internet Explorer, Firefox, Chrome, or Safari web browser.

Generic Known Upgrade Issues

This section covers issues related to upgrading to Enterprise Manager Cloud Control 13c Release 4:

Creating the SYSMAN User Account Password

The SYSMAN account password must begin with a letter. It can only contain uppercase or lowercase letters, numbers, and the characters like \$, #, _.

Examples of valid passwords:

Yourpw1, oracle_User

Examples of invalid passwords:

Welcome!, 123oracle, #Oracle

(Bug 22879000)

Oracle Home Data Not Collected Correctly After Management Agent Update

Oracle Home data may not be collected correctly for Management Agents that were deployed as Gold Images, that no longer match the Gold Image configuration after plug-ins or patches were applied.

You can address this issue by either running the Oracle Home collections manually or waiting for the Oracle Home collections to be run automatically.

(Bug 21757085)

Repository Upgrade Fails

If repository upgrade fails with `ORA-21700 PS4 HA EM 13.2 upgrade`, you must make the RAC DB to single-instance DB during EM upgrade and bounce the running instance.

Following are the steps to make the RAC DB to single-instance DB during EM upgrade and bounce the running instance:

1. Log in to all but one instance as `sys` using individual connect-descriptor and shut it down by running the following command:

```
from SQL*Plus run 'shutdown immediate'
```

2. Log in to the running instance as `sys` and bounce it by running the following command:

```
from SQL*Plus run 'shutdown immediate', 'startup'
```

If you have not started the upgrade, follow the above steps and use the individual connect-descriptor of the running instance or RAC connect-descriptor in EM Installer's Interview-page.

(Bug 23532666)

Transparent Data Encryption Page Unavailable After Upgrade From Previous Versions of Enterprise Manager

After performing an upgrade from either Enterprise Manager Cloud Control Release 3 (12.1.0.3) or Enterprise Manager Cloud Control Release 4 (12.1.0.4) to Enterprise Manager Release 13c, you may not be able to view or access the Transparent Data Encryption (TDE) functionality under the Security menu in the context of a target database (specifically version 11.1.0.7).

Perform the following steps to reach the Transparent Data Encryption home page:

1. From the Oracle Database page, navigate to the Security home page by choosing **Security** from the Oracle Database home page.
2. From the Security menu, choose **Home**.
3. On the Security home page, scroll down to the **Encryption, Redaction and Masking** section.

In this section you will find high level information related to Transparent Data Encryption (if the keystore was previously configured).

4. If the keystore is not configured, click on the home icon in the **Oracle Advanced Security** section to navigate to the TDE home page.

TDE home page is displayed.

This issue occurs primarily with target Database version 11.1.0.7.

(Bug 22231728)

Delete TaaS and ASR Reports

TaaS and ASR reports are obsolete starting with Enterprise Manager Release 13c Release 4. They are no longer available during fresh install. They need to be manually deleted after upgrading to Enterprise Manager Release 13c Release 4 since all previous reports are copied over.

To delete the reports, connect to the BI Publisher UI, click on **Catalog** and select the respective report to be deleted under Enterprise Manager Cloud Control Directory.

For every report, click on **More** and then **Delete**.

(Bug 30540518)

Optimizer Adaptive Features Requirements for Enterprise Manager Upgrade

As a general rule, Oracle recommends that when you do an upgrade you also apply all Enterprise Manager one-off patches available via auto-download as well as the latest

Release Updates available. Patch [30912308](#) is one such patch that addresses some Optimizer Adaptive Features fixes. Note that patch 30912308 is available with automatic updates and it is also part of Enterprise Manager 13.4 Release Update 1 (13.4.0.1). For a better experience, Oracle recommends applying this patch during the upgrade process using one of the methods below:

- Download the patch automatically during the upgrade process as part of the Enterprise Manager Cloud Control Installation Wizard using your My Oracle Support (MOS) credentials.
- If you are not connected to My Oracle Support, manually download and apply the Release Update1 during the upgrade process.

Before proceeding with either method you must first perform the following:

- If the Management Repository is using Oracle Database **12.1.0.2.0 and database patch 22652097 has not been applied**, ensure that you disable the optimizer adaptive features by connecting to the database as SYSDBA and running the following:

```
alter system set optimizer_adaptive_features=false scope=both;
```

To verify that the changes have taken effect, run the following command:

```
show parameter adaptive;
```

You should see the following output:

NAME	TYPE	VALUE
optimizer_adaptive_features	boolean	FALSE

- If the Management Repository is using Oracle Database **12.1.0.2 with database patch 22652097 applied**, connect to the database as SYSDBA and run the following:

```
alter system set "_optimizer_nlj_hj_adaptive_join"= FALSE scope=both
sid='*';
alter system set "_optimizer_strans_adaptive_pruning" = FALSE
scope=both sid='*';
alter system set "_px_adaptive_dist_method" = OFF scope=both sid='*';
alter system set "_sql_plan_directive_mgmt_control" = 0 scope=both
sid='*';
alter system set "_optimizer_dmdir_usage_control" = 0 scope=both
sid='*';
alter system set "_optimizer_use_feedback" = FALSE scope=both sid='*';
alter system set "_optimizer_gather_feedback" = FALSE scope=both
sid='*';
alter system set "_optimizer_performance_feedback" = OFF scope=both
sid='*';
```

- If the Management Repository is using Oracle Database **12.2, 18.x or 19.x**, there's no need to set any parameters since they will be addressed when applying the patch [30912308](#) during the upgrade process.

Otherwise, if you plan not to follow any of the above recommended methods to apply the patch 30912308 during the upgrade process then you must to connect to the database as SYSDBA and run the following:

```
alter system set "_optimizer_nlj_hj_adaptive_join"= FALSE scope=both
sid='*';
alter system set "_optimizer_strans_adaptive_pruning" = FALSE
scope=both sid='*';
alter system set "_px_adaptive_dist_method" = OFF scope=both sid='*';
alter system set "_sql_plan_directive_mgmt_control" = 0 scope=both
sid='*';
alter system set "_optimizer_dmdir_usage_control" = 0 scope=both
sid='*';
alter system set "_optimizer_use_feedback" = FALSE scope=both sid='*';
alter system set "_optimizer_gather_feedback" = FALSE scope=both
sid='*';
alter system set "_optimizer_performance_feedback" = OFF scope=both
sid='*';
```

Then, perform the Enterprise Manager upgrade process using one of the methods described below to apply the patch 30912308:

- Let the Enterprise Manager Cloud Control Installation Wizard (Oracle Installer) download automatically the patch [30912308](#) using your My Oracle Support (MOS) credentials during the Enterprise Manager upgrade process. This is an auto download patch which requires Internet connection to MOS. For more details about this method, see step 2 from Installing an Enterprise Manager System for a Production Site (Advanced Configuration).
- Manually download and apply the bundle patch along with the Enterprise Manager upgrade process. It doesn't require Internet connection to MOS. For more details, see *Apply Bundle Patch* under step 30 from Installing an Enterprise Manager System Using Software Only Install Along With Plugins and Configuring Later.

After upgrading to Enterprise Manager 13c Release 4, if the Management Repository is using Oracle Database **12.2, 18.x or 19.x** and you have not applied patch [30912308](#) via any of the two recommended methods described above during the upgrade process, Oracle recommends to reset the optimizer adaptive features parameters by connecting to the database as SYSDBA and running the following:

```
alter system reset "_optimizer_nlj_hj_adaptive_join" scope=both sid='*';
alter system reset "_optimizer_strans_adaptive_pruning" scope=both sid='*';
alter system reset "_px_adaptive_dist_method" scope=both sid='*';
alter system reset "_sql_plan_directive_mgmt_control" scope=both sid='*';
alter system reset "_optimizer_dmdir_usage_control" scope=both sid='*';
alter system reset "_optimizer_use_feedback" scope=both sid='*';
alter system reset "_optimizer_gather_feedback" scope=both sid='*';
alter system reset "_optimizer_performance_feedback" scope=both sid='*';
```

(Bug 25679612, 30912308)

Agents Communication Issues After Upgrade from Enterprise Manager 13c Release 2 to 13c Release 4

Upon upgrade from 13c Release 2 to 13c Release 4 certain agent home pages display the following message:

```
Communication between the Oracle Management Service to the Agent is
unavailable. Any features or displayed information requiring this
communication will be unavailable.
```

This error occurs for Agent versions 13c Release 2 BP3 or below.

To resolve this issue, navigate to each agent version 13c Release 2 BP3 or below and perform the following:

1. Stop the agent: `emctl stop agent`

```
2.<AgentInstanceHome>/bin/emctl setproperty agent -name "SSLCipherSuites"
-value
"SSL_RSA_WITH_AES_128_CBC_SHA:SSL_RSA_WITH_AES_256_CBC_SHA:TLS_RSA_WITH_AE
S_128_CBC_SHA256:TLS_RSA_WITH_AES_256_CBC_SHA256:TLS_RSA_WITH_AES_128_GCM_
SHA256:TLS_RSA_WITH_AES_256_GCM_SHA384:TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA:
TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA:TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384:T
LS_ECDHE_RSA_WITH_AES_128_GCM_SHA256:TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
:TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256:TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SH
A:TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA:TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SH
A256:TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384:TLS_ECDHE_ECDSA_WITH_AES_128_
GCM_SHA256:TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384"
```

3. Start the agent: `<AgentInstanceHome>/bin/emctl start agent`

4. Check the agent to OMS communication: `<AgentInstanceHome>/bin/emctl pingOMS`

(Bug 30796644)

OMS Upgrade Fails During Repository Configuration

Enterprise Manager 13c Release 4 OMS upgrade fails during repository configuration with the following error: `ORA-38818: illegal reference to editioned object SYSMAN.AQ$_MGMT_ADMINMSG_BUS_V` when using the following databases to host the Management Repository:

- Oracle Database 18.0.0.0.0 RU 18.0.0.0.191015 (Bug 30112122)
- Oracle Database 12.2.0.1.0 with latest PSU 12.2.0.1.191015 (Bug 30138470)

To resolve this issue, apply the corresponding one-off patch to the database and restart the Enterprise Manager upgrade process from scratch.

(Bug 30565734)

Create User Using EM CLI Results in 'An internal error occurred'

After upgrading to Enterprise Manager Cloud Control 13c Release 4, you will get an error with `emcli create_user` command when running the following:

```
emcli create_user -name=<new_user> -password=<password> -  
privilege=SUPER_USER
```

You will get the following error: 'An internal error occurred'

The workaround is to connect to the OMS and do the following:

1. Open the file `<INSTANCE_HOME>/user_projects/domains/GCDomain/config/fmwconfig/ovd/default/adapters.os_xml`
2. Search for `<ns3:ldap...>` section. If that section contains `<ns3:serverType>WLS_OVD</ns3:serverType>` tag then proceed with the next step.
3. Within the same `<ns3:ldap...>` section from step 2, find `<ns3:cipherSuites/>` tag and replace it with following:

```
<ns3:cipherSuites>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_CBC_SHA384</ns3:cipher>  
  <ns3:cipher>SSL_RSA_WITH_AES_256_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_CBC_SHA384</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_CBC_SHA384</ns3:cipher>  
  <ns3:cipher>SSL_DHE_RSA_WITH_AES_256_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_DHE_DSS_WITH_AES_256_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_DHE_RSA_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_DHE_DSS_WITH_AES_256_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_DHE_RSA_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_DHE_DSS_WITH_AES_128_CBC_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_DHE_RSA_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_DHE_DSS_WITH_AES_128_CBC_SHA</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256</ns3:cipher>  
  <ns3:cipher>SSL_ECDHE_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
```

```

<ns3:cipher>SSL_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_256_GCM_SHA384</ns3:cipher>
<ns3:cipher>SSL_ECDHE_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_ECDSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_ECDH_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_RSA_WITH_AES_128_GCM_SHA256</ns3:cipher>
<ns3:cipher>SSL_DHE_DSS_WITH_AES_128_GCM_SHA256</ns3:cipher>
</ns3:cipherSuites>

```

4. Restart the OMS.

(Bug 30435489)

AIX Based Systems Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.

Set IOCP Status

While upgrading to Enterprise Manager 13c Release 4 on AIX platform, you must make sure that I/O Completion Port (IOCP) Status is shown as **Available**.

Run the following command to check the IOCP Status:

```
/usr/sbin/lsdev -c iocp -F status
```

If the IOCP Status is not **Available**, then see [Checking I/O Completion Port \(IOCP\) settings](#) to change the status.

HP-UX Itanium Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.

Linux Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.

Older agents on SunZFS Storage Devices Have Communication Issues After OMS Upgrade

After an OMS upgrade to version 13c Release 4, older version agents running on SUNZFS storage devices will not be able to communicate with the OMS. The SUNZFS Storage Synchronization job fails with the error `undefined symbol: Perl_xs_handshake`.

These agents are from earlier versions than 13c Release 4 trying to communicate to a 13c Release 4 OMS. As a result, there's broken communication between the Non-13c Release 4 Agents and the 13c Release 4 OMS.

To work around this issue, upgrade the agents that used to communicate with storage filers to 13c Release 4 along with the 13c Release 4 OMS upgrade. If the agent cannot be upgraded to 13c Release 4 immediately, then you need to remove those agents as the registered agent and add a 13c Release 4 agent instead.

(Bug 30649503)

Execution of root.sh Script Fails During Post Agent Install Using RPM Method

The execution of `root.sh` script fails during post Agent install using RPM method.

To fix the issue with the `root.sh` script, customer needs to update the `gcroot.sh` path in the `root.sh` script.

The `gcroot.sh` script file path should reference to `<AGENT_HOME>/install/unix/scripts/gcroot.sh`

Update the `root.sh` script with the correct `gcroot.sh` script and rerun the `root.sh` script.

(Bug 30683450)

Microsoft Windows x64 Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.

Agent Patch using Agent Patch Plan with Opatch Upgrade Option Fails

Running the agent patch using agent patch plan with opatch upgrade option fails with the following message:

```
[23_01_2020_08_52_52]Obtaining patch information for patch(es)... from
Software Library.
[23_01_2020_08_52_52] Obtaining OPatch information from Software Library.
Check if the applicable OPatch component exists in Software Library.
Check complete. The overall result of this check is: Failed <<<<
ERROR: Unable to find the OPatch component version in the Oracle Home of
the target " {0}" of type "{1}".
ACTION: Refresh the configuration of the Oracle Home target at which the
target "hostname.example.com:1831" is installed.
```

The workaround is to deselect the Opatch upgrade option when running the agent patch using a patch plan during your very first agent core/platform patch.

(Bug 30800421)

Upgrade OMS and Management Repository Using Software Only Along with Plug-ins

The recommended method to upgrade the OMS and the Management Repository to 13c Release 4 on Windows platform is Upgrading the OMS and the Management Repository to 13c Release 4 Using the Software-Only Method in Graphical Mode Along With Plug-ins.

Follow these steps:

1. Installing the Enterprise Manager Cloud Control 13c Release 4 Software Binaries in Graphical Mode Along with Plug-ins
2. Running the allroot.sh Script
3. Installing Additional Plug-ins
4. Configuring the Enterprise Manager Cloud Control 13c Release 4 Software Binaries Along With Plug-ins

During this step, you need to run the `ConfigureGC.bat` script with `INSTALL_SWONLY_WITH_PLUGINS=true`.

```
ConfigureGC.bat INSTALL_SWONLY_WITH_PLUGINS=true
```

For any additional OMS upgrade, use the following:

```
ConfigureGC.bat INSTALL_SWONLY_WITH_PLUGINS=true CONFIGURE_BIP=false
```

(Bug 30969819)

Additional OMS Upgrade fails during BI Publisher Configuration

When upgrading multiple OMS in parallel on Windows platform following the upgrade method: Upgrading the OMS and any Additional OMSs in Parallel using the Software-Only Method in Graphical Mode Along with Plug-ins, the additional OMS upgrade process fails during BI Publisher configuration.

The workaround is to follow the above upgrade method passing the `CONFIGURE_BIP` parameter, BI Publisher parameter, when running it on the additional OMS instances.

Follow these steps:

1. Perform Prerequisites .
2. Install the OMS Software Only.

During this step, you need to run the `setup_em13400_win64.exe` script.

On the additional OMS instances, run the following:

```
setup_em13400_win64.exe INSTALL_SWONLY_WITH_PLUGINS=true  
CONFIGURE_BIP=false
```

3. Run the allroot.sh Script.
4. Apply Required Patches on the OMS.

5. Upgrade the Admin OMS.

During this step, you need to run the `ConfigureGC.bat` script.

On the admin (primary) OMS, run the following:

```
ConfigureGC.bat INSTALL_SWONLY_WITH_PLUGINS=true
```

6. Perform Additional OMS Upgrades in Parallel.

During this step, you need to run the `ConfigureGC.bat` script.

On the additional OMS instances, run the following:

```
ConfigureGC.bat INSTALL_SWONLY_WITH_PLUGINS=true CONFIGURE_BIP=false
```

(Bug 31012883)

Oracle Solaris on x86-64 (64-bit) Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.

Oracle Solaris on SPARC (64-bit) Known Upgrade Issues

This section covers issues related to upgrading Enterprise Manager Cloud Control 13c Release 4.