Oracle® Database

Release Notes

11*g* Release 2 (11.2) for Oracle Solaris

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This document contains important information that was not included in the platform-specific or product-specific documentation for this release. This document supplements *Oracle Database Readme*.

This document may be updated after it is released. To check for updates to this document and to view other Oracle documentation, refer to the Documentation section on the Oracle Technology Network (OTN) Web site:

http://www.oracle.com/technetwork/indexes/documentation/index.html

This document contains the following topics:

- Certification Information
- Latest Upgrade Information
- Unsupported Products
- Content Specific to Oracle Database 11g Release 2 (11.2.0.1)
- Content Specific to Oracle Database 11g Release 2 (11.2.0.2)
- Content Specific to Oracle Database 11g Release 2 (11.2.0.3)
- Documentation Accessibility

1 Certification Information

The latest certification information for Oracle Database 11*g* Release 2 (11.2) is available on My Oracle Support (formerly Oracle*MetaLink*) at:

https://support.oracle.com

2 Latest Upgrade Information

For late-breaking updates and best practices about preupgrade, postupgrade, compatibility, and interoperability discussions, refer to Note 785351.1 on My Oracle Support (formerly Oracle*MetaLink*) that links to the "Oracle 11gR2 Upgrade Companion" page.

```
https://support.oracle.com
```

3 Unsupported Products

In addition to the items listed in Section 2, "Features Not Available or Restricted in This Release," in *Oracle Database Readme*, the following products or features are not supported:

ORACLE®

- Oracle ACFS replication and tagging

- Oracle ACFS security and encryption

Database Smart Flash Cache Support

Database Smart Flash Cache is supported on Solaris and Oracle Linux only. For release 11.2.0.1 on Oracle Linux, you must install the 8974084 patch.

Oracle Automatic Storage Management Dynamic Volume Manager Support

Starting with Oracle Database 11*g* Release 2 (11.2.0.2), Oracle ACFS and Oracle ADVM are only supported on Solaris 10 Update 6 or later for Oracle Solaris on SPARC (64-bit) and Oracle Solaris on x86-64 (64-bit). Oracle ACFS and Oracle ADVM are not supported on Oracle Solaris containers.

ASMLIB Support

ASMLIB is not supported.

4 Content Specific to Oracle Database 11*g* Release 2 (11.2.0.1)

The following content is specific to release 11.2.0.1:

- Preinstallation Requirements for Release 11.2.0.1

- Installation, Configuration, and Upgrade Issues for Release 11.2.0.1

- Other Known Issues for Release 11.2.0.1

4.1 Preinstallation Requirements for Release 11.2.0.1

Refer to the installation guides for the preinstallation requirements. Additional preinstallation requirements include the following:

- Setting Kernel Parameters on Solaris 10

4.1.1 Setting Kernel Parameters on Solaris 10

On Solaris 10, setting kernel parameters in `/etc/system` is deprecated. However, if you set shared memory using project settings, then you may encounter the following error:

```
ORA-27102: out of memory
```

Workaround:

Set memory, both by using allocations with project commands, and continue to provide memory settings in `/etc/system`. For example,

To set memory to 4 GB:

1. Open `/etc/system` with a text editor, and set the following values:

   ```
   set shmsys:shminfo_shmmax=4294967295
   set shmsys:shminfo_shmmni=100
   set shmsys:shminfo_shmseg=10
   set semsys:seminfo_semmni=70
   set semsys:seminfo_semmns=200
   set shmsys:shminfo_shmmin=1
   ```

2. Set project memory settings in the kernel similar to the following:

   ```
   $ prctl -n project.max-shm-memory -r -v 4G -i project 3
   ```

```
$ projmod -sK "project.max-shm-memory=(privileged,4G,deny)" default
```

3. Create the project in `/etc/project` for the Oracle Database installation owner, `oracle`, and OSDBA group, `dba`, using projects -l so that the value persists after system restarts:

```
% projects -l ... ... OASB projid : 3 comment: "" users : oracle groups :
dba attribs: project.max-shm-memory=(privileged,4294967295,deny)
```

This issue is tracked with Oracle bug 8929233.

4.2 Installation, Configuration, and Upgrade Issues for Release 11.2.0.1

Review the following sections for information about issues that affect Oracle Database installation, configuration, and upgrade:

- Oracle ASMFS Listed As a Storage Option When Installing Oracle RAC Database

- Error When Installing Oracle Grid Infrastructure with the Grid Naming Service (GNS) and the OCR and Voting Disks Stored on Oracle ASM

- Upgrading Oracle RAC from Oracle9i to Oracle Database 11g Release 2 (11.2)

- Incorrect SSH Location on Installation Media

- Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure

- Deinstallation Tool Fails to Remove Oracle Database Gateway When Run from Oracle Home

- Trace Files Show Error Message After Oracle RAC Database Upgrade from Release 10.2.0.4 to Release 11.2

- Oracle Database Vault Configuration Assistant (DVCA) Fails When Adding Languages

4.2.1 Oracle ASMFS Listed As a Storage Option When Installing Oracle RAC Database

If you install an Oracle RAC database after installing Oracle Grid Infrastructure for a cluster, then the Specify Database Storage Options screen indicates that "Automatic Storage Manager File System (ASMFS)" is a storage option for Oracle Database files.

Workaround:

Ignore this sentence. Either select a file system for storage, or select Automatic Storage Management.

This issue is tracked with Oracle bug 9032054.

4.2.2 Error When Installing Oracle Grid Infrastructure with the Grid Naming Service (GNS) and the OCR and Voting Disks Stored on Oracle ASM

When installing Oracle Grid Infrastructure for Oracle Database 11*g* Release 2 with GNS and the OCR and voting disks on Oracle ASM, `root.sh` may fail with error

```
PROT-1: Failed to initialize ocrconfig
```

The failing command is `ocrconfig -upgrade` *user group*, and TNS-12560 can be found in sqlnet log file.

Workaround:

Check the /etc/*group* entry for the group being used by OCR, temporarily reduce the number of users listed for this group, and restart the installation.

This issue is tracked with Oracle bug 8979500.

4.2.3 Upgrading Oracle RAC from Oracle9*i* to Oracle Database 11*g* Release 2 (11.2)

When you install Oracle Grid Infrastructure (Oracle Clusterware and Oracle ASM) on clusters created using Sun Clusterware and Oracle9*i* Oracle Real Application Clusters (Oracle RAC), then an issue on some systems may prevent the installer from detecting which nodes are cluster members of the existing cluster.

Workaround:

If the installer does not detect all nodes of the existing cluster, then you must select manually all the nodes where Oracle9*i* Oracle RAC is installed. If you select only a subset of the nodes that are part of your existing Oracle 9*i* Oracle RAC installation, then the existing Oracle 9*i* Oracle RAC installation will have problems.

This issue is tracked with Oracle bug 9040596.

4.2.4 Incorrect SSH Location on Installation Media

The SSH setup script, Disk1/sshsetup/sshUserSetup.sh, fails with the following errors as the installation media shows incorrect path:

```
./sshUserSetup.sh: /usr/local/bin/ssh: not found
./sshUserSetup.sh: /usr/local/bin/ssh-keygen: not found
```

Workaround:

Copy the executables to /usr/local/bin:

```
cp /usr/bin/ssh-keygen /usr/local/bin/ssh-keygen
cp /usr/bin/ssh        /usr/local/bin/ssh
```

This issue is tracked with Oracle bug 9044791.

4.2.5 Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure

The rootupgrade.sh script displays the following error while upgrading Oracle ASM from release 10.1.0.5 to Oracle Grid Infrastructure release 11.2:

```
Failure 3 at CSS context initialization
```

Workaround:

Ignore this error message and proceed with the upgrade.

This issue is tracked with Oracle bug 8853996.

4.2.6 Deinstallation Tool Fails to Remove Oracle Database Gateway When Run from Oracle Home

Use the standalone version of the deinstallation tool to remove Oracle Database Gateway, instead of running the deinstallation tool from the Oracle home.

This issue is tracked with Oracle bug 9039543.

4.2.7 Trace Files Show Error Message After Oracle RAC Database Upgrade from Release 10.2.0.4 to Release 11.2

Oracle Database Upgrade Assistant reports the following error message in the trace files after upgrading Oracle RAC database from release 10.2.0.5 to release 11.2:

```
PRKR-1078 : Database new of version 10.2.0.0.0 cannot be administered using
current version of srvctl.
```

Workaround:

Ignore this error message.

This issue is tracked with Oracle bug 8915673.

4.2.8 Oracle Database Vault Configuration Assistant (DVCA) Fails When Adding Languages

The command-line utility, DVCA, fails to add more languages to Oracle Database Vault giving the following error:

```
Exception in thread "main" java.lang.UnsatisfiedLinkError:
(path)/lib/libocijdbc11.so: ld.so.1: java: fatal:
(path)/lib/libocijdbc11.so: wrong ELF class: ELFCLASS64
```

Solution:

Add the -d64 option when starting DVCA:

```
dvca -d64 -action addlanguages
```

This issue is tracked with Oracle bug 9151315.

4.3 Other Known Issues for Release 11.2.0.1

The following sections contain information about issues related to Oracle Database 11*g* and associated products:

- Global Services Daemon Synchronization Issue

- Help Files Translation Issue for Spanish and French

- Incorrect Reverse Ping Command from Oracle Management Service

- Help Pages Fail to Load for Oracle Database Client (32-Bit)

4.3.1 Global Services Daemon Synchronization Issue

If Global Services Daemon is enabled, then it may fail to start on all nodes of a cluster when Oracle Grid Infrastructure is started or when the nodes are restarted. You can verify the daemon state by running the following command:

```
srvctl status nodeapps
```

Workaround:

If required, run the following command on any one node in Oracle Grid Infrastructure for a cluster to start the daemon on all the nodes:

```
srvctl start nodeapps
```

This issue is tracked with Oracle bug 9075123.

4.3.2 Help Files Translation Issue for Spanish and French

Oracle Universal Installer does not copy the translated help files to Oracle home directory when you select the Spanish or French language.

Workaround:

On the Select Product Languages page, select both the Latin American Spanish and Spanish to get the help files translated in Spanish; and select both the Canadian French and French for the translated help files in French.

This issue is tracked with Oracle bug 9147106.

4.3.3 Incorrect Reverse Ping Command from Oracle Management Service

Oracle Management Service provides incorrect reverse ping command with Oracle Enterprise Manager Database Control. The `emoms.properties` file shows:

```
emdrep.ping.pingCommand=/usr/sbin/ping <hostname>
```

Workaround:

Change the property in the `emoms.properties` file to:

```
emdrep.ping.pingCommand=/usr/sbin/ping <hostname> 30
```

> **Note:** On all the computers using IPv6, you must specify `ping6` command (or an equivalent IPv6 command) instead of `ping` command.

This issue is tracked with Oracle bug 9211800.

4.3.4 Help Pages Fail to Load for Oracle Database Client (32-Bit)

Oracle Universal Installer does not find the `clientinstaller_help.map` file and fails to load the help pages for locales other than English.

Workaround:

Set `LANG=C` before running Oracle Universal Installer. This changes the installer locale to English and the help content is available.

This issue is tracked with Oracle bug 9474214.

5 Content Specific to Oracle Database 11*g* Release 2 (11.2.0.2)

The following content is specific to release 11.2.0.2:

- Preinstallation Requirements for Release 11.2.0.2

- Installation, Configuration, and Upgrade Issues for Release 11.2.0.2

- Other Known Issues for Release 11.2.0.2

5.1 Preinstallation Requirements for Release 11.2.0.2

Refer to the installation guides for the preinstallation requirements. Additional preinstallation requirements include the following.

- Restarting the Installation Fails After Selecting Software Updates

- ■ SSH Setup Issues

5.1.1 Restarting the Installation Fails After Selecting Software Updates

Restarting the installation fails if the user chooses to restart after selecting the software updates option during an Oracle Grid Infrastructure installation on a computer with vendor clusterware.

Workaround:

Set the `SKIP_ROOTPRE` environment variable to `TRUE` before starting Oracle Universal Installer.

This issue is tracked with Oracle bug 10078957.

5.1.2 SSH Setup Issues

Oracle Universal Installer fails to setup SSH if there is any deviation from the standard SSH path.

Workaround:

1. Copy the `/stage/properties/ssPaths_sol.properties` file to your local computer.

2. Modify the relevant SSH path. For example, `SSH_PATH=/bin/ssh`.

3. Start Oracle Universal Installer and specify the location of the local properties file from step 1.

   ```
   runInstaller -J-Doracle.sysman.prov.PathsPropertiesLoc=local_path_location
   ```

This issue is tracked with Oracle bug 9837487.

5.2 Installation, Configuration, and Upgrade Issues for Release 11.2.0.2

Review the following sections for information about issues that affect Oracle Database installation, configuration, and upgrade:

- ■ Installing Predownloaded Software Updates
- ■ Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure
- ■ PRVF-5150 Error on Oracle Grid Infrastructure
- ■ ORA-27102 Out of Memory Error
- ■ Global Services Daemon Synchronization Issue
- ■ Relinking Fails on 32-Bit Client Installations
- ■ Oracle Grid Infrastructure Fails to Start Automatically After a Node Restart
- ■ Performance Statistics Issue with Oracle Enterprise Manager Database Control

5.2.1 Installing Predownloaded Software Updates

By default, software updates are download to the `/tmp` directory. This directory is deleted at the end of an installation. If you do not download and install the software updates during the same installation session, then the software updates are not available.

Workaround:

Specify a new download location for the software updates on the Download Software Updates screen.

This issue is tracked with Oracle bug 9975999.

5.2.2 Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure

The `rootupgrade.sh` script displays the following error while upgrading Oracle ASM from release 10.1.0.5 to Oracle Grid Infrastructure release 11.2:

```
Failure 3 at CSS context initialization
```

Workaround:

Ignore this error message and proceed with the upgrade.

This issue is tracked with Oracle bug 8853996.

5.2.3 PRVF-5150 Error on Oracle Grid Infrastructure

When installing Oracle Grid Infrastructure, if the Oracle ASM device path is not specified in the format `/dev/rdsk/cMtNdXsY` or `/dev/did/rdsk/dXsY` or `/dev/md/rawdg/rdsk/dX`, then the following error displays during the Oracle ASM device validation prerequisite check:

```
PRVF-5150: Path /dev/rdsk/link/raw11 is not a valid path on all nodes
```

Workaround:

Specify the character device name rather than the symbolic link name.

This issue is tracked with Oracle bug 10052786.

5.2.4 ORA-27102 Out of Memory Error

When creating a database on a computer with large physical memory, Oracle Universal Installer or Database Configuration may display an out of memory error.

Workaround:

Select the **Advanced Installation** type during installation, or run Database Configuration Assistant after a software only installation and reduce the memory allocated for Oracle based on the shared memory settings for your operating system.

This issue is tracked with Oracle bug 9811726.

5.2.5 Global Services Daemon Synchronization Issue

If Global Services Daemon is enabled, then it may fail to start on all nodes of a cluster when Oracle Grid Infrastructure is started or when the nodes are restarted. You can verify the daemon state by running the following command:

```
srvctl status nodeapps
```

Workaround:

If required, run the following command on any one node in Oracle Grid Infrastructure for a cluster to start the daemon on all the nodes:

```
srvctl start nodeapps
```

This issue is tracked with Oracle bug 9075123.

5.2.6 Relinking Fails on 32-Bit Client Installations

Relinking fails on 32-bit client installations because the relink script tries to load 64-bit libraries.

Workaround:

After installation, manually remove the `-d64` flag from `JRE_MEMORY_OPTIONS` in the `$ORACLE_HOME/oui/oraparam.ini` file.

This issue is tracked with Oracle bug 10027801.

5.2.7 Oracle Grid Infrastructure Fails to Start Automatically After a Node Restart

After you install Oracle Grid Infrastructure for a Cluster and Oracle RAC Database, if you restart one of the nodes, then Oracle Grid Infrastructure fails to start automatically.

Workaround:

Perform the following steps:

1. Add `/usr/bin` to the `PATH` environment variable.

2. Change `"LC_CTYPE=en_US.UTF-8"` to `"LC_CTYPE="` in file, `/etc/default/init`.

   Or, comment the line:

   `"#LC_CTYPE==en_US.UTF-8"`

3. Restart the server.

This issue is tracked with Oracle bug 10124517.

5.2.8 Performance Statistics Issue with Oracle Enterprise Manager Database Control

The summary chart on the Oracle Enterprise Manager Cluster Performance page does not show any data.

Workaround:

Perform the following steps:

1. Stop Oracle Enterprise Manager Database Control.

2. Add the following to the properties file, `$ORACLE_HOME/`*host_dbuniquename*`/sysman/config/emoms.properties`:

   `oracle.sysman.db.rac.useRemoteCollection=false`

3. Restart the Oracle Enterprise Manager Database Control

This issue is tracked with Oracle bug 10129539.

5.3 Other Known Issues for Release 11.2.0.2

There are no known issues at the time of this release.

6 Content Specific to Oracle Database 11*g* Release 2 (11.2.0.3)

The following content is specific to release 11.2.0.3:

- Preinstallation Requirements for Release 11.2.0.3

- Installation, Configuration, and Upgrade Issues for Release 11.2.0.3

- Other Known Issues for Release 11.2.0.3

6.1 Preinstallation Requirements for Release 11.2.0.3

Refer to the installation guides for the preinstallation requirements.

6.2 Installation, Configuration, and Upgrade Issues for Release 11.2.0.3

Review the following sections for information about issues that affect Oracle Database installation, configuration, and upgrade:

- Oracle Enterprise Manager Database Control Error During Upgrades
- CVU IPMP Group Consistency Check Failure
- Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure

6.2.1 Oracle Enterprise Manager Database Control Error During Upgrades

When upgrading Oracle RAC from release 10.2.0.5 to 11.2, the Oracle Enterprise Manager Database Control home page may show the following error:

```
java.lang.Exception: No Such Target - wait_bottlenecks
```

Workaround:

The No Such Target error may occur because of dynamic property timeouts.

Run these `emctl` commands on master agent. Go to the cluster database home page and click View All Properties link to identify the master agent host. Recompute dynamic properties for Oracle RAC instance and Oracle RAC database on master agent host using the following commands:

```
emctl reload agent dynamicproperties rac_instance_target_name:oracle_database
emctl reload agent dynamicproperties rac_database_target_name:rac_database
```

If the error persists, then increase the timeout for dynamic properties for the target by editing the file emd.properties located at $ORACLE_HOME/host_dbname/config, and providing a larger value for timeout_value. Increase the timeout value on all the nodes of the cluster. For example:

```
dynamicPropsComputeTimeout_oracle_database=timeout_value
dynamicPropsComputeTimeout_rac_database=timeout_value
emctl reload agent
emctl reload agent dynamicproperties rac_instance_target_name:oracle_database
emctl reload agent dynamicproperties rac_database_target_name:rac_database
```

This issue is tracked with Oracle bug 12907579.

6.2.2 CVU IPMP Group Consistency Check Failure

If you install Oracle Grid Infrastructure on a cluster that has Active-Passive IPMP configured, then the prerequisite check for Solaris IPMP group fail-over consistency may fail.

Workaround:

Ignore this failure. After installation, log in as `root` and use the following command syntax to add the standby NICs to the network resource:

```
'srvctl modify nodeapps -S
 subnet/netmask[/if1[/if2|...]'
```

Here, `if1` and `if2` are the IPMP NIC names. Then, classify all network interfaces in the IPMP group as public by using the following command syntax:

```
oifcfg setif -global if_name/subnet:public
```

Here, `if_name` is the interface name and `subnet` is the subnet.

For example:

```
# srvctl modify nodeapps -S '192.0.2.0/255.255.255.0/eth3|eth5'
# oifcfg setif -global eth3/192.0.2.0:public
# oifcfg setif -global eth5/192.0.2.0:public
```

> **Note:** The default IP address of the standby NIC is `0.0.0.0`. When
> you enter the `oifcfg` command to classify the standby NIC as public,
> you must set the subnet to the same subnet as the active NIC.

This issue is tracked with Oracle bug 12939432.

6.2.3 Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure

The `rootupgrade.sh` script displays the following error while upgrading Oracle ASM from release 10.1.0.5 to Oracle Grid Infrastructure release 11.2:

```
Failure 3 at CSS context initialization
```

Workaround:

Ignore this error message and proceed with the upgrade.

This issue is tracked with Oracle bug 8853996.

6.3 Other Known Issues for Release 11.2.0.3

The following section contains information about issues related to Oracle Database 11*g* and associated products:

- OPatch Commands Give Warning Message
- Using Projects with Oracle Grid Infrastructure Systems

6.3.1 OPatch Commands Give Warning Message

When you run OPatch commands, you may see the following warning message:

```
whereis: not found
```

Workaround:

Update the `PATH` environment variable by adding `/usr/ucb`.

This issue is tracked with Oracle bug 12793552.

6.3.2 Using Projects with Oracle Grid Infrastructure Systems

If you are installing Oracle Grid Infrastructure11*g* Release 2 (11.2.0.3), and you want to use Oracle Solaris Projects to manage system resources, then you must ensure that all Oracle installation owners are using the same default project. Use the `/usr/bin/projects -d` command to check that the default Project for the Oracle Grid

Infrastructure installation owner (`grid`) and the default Project for Oracle Database installation owners (`oracle`, `oracle1`, `oracle2`, and so on) are the same Project.

For example, if you have an Oracle Grid Infrastructure owner called `grid`, and you have two Oracle Database installation owners called `oracle1` and `oracle2`, and the default Project for the grid installation owner is `mygridproj`, then enter commands similar to the following:

```
$ cd /usr/bin
$ projects -d grid
mygridproj
$ projects -d oracle1
mygridproj
$ projects -d grid
mygridproj
```

In the preceding example, the default project for the installation owners `grid`, `oracle1` and `oracle2` is `mygridproj`.

Refer to your Oracle Solaris documentation for more information about configuring resources using Projects.

This issue is tracked with Oracle bug 11776492.

7 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 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.