This document contains 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. You can check for updates to this document and view other Oracle documentation at http://docs.oracle.com/en/database/database.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)
- Content Specific to Oracle Database 11g Release 2 (11.2.0.4)
- Documentation Accessibility

1 Certification Information

The latest certification information for Oracle Database 11g Release 2 (11.2) is available on My Oracle Support (formerly OracleMetaLink) at https://support.oracle.com

Oracle Solaris 11 Support

Starting with Oracle Database 11g Release 2 (11.2.0.3), Oracle Database is also supported on Oracle Solaris 11.

See Also: Oracle Database Installation Guide for Oracle Solaris for more information about operating system requirements

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 OracleMetaLink) that links to the "Oracle 11gR2 Upgrade Companion" page at
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 ACFS replication and tagging
- Oracle ACFS security and encryption

Database Smart Flash Cache Support

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

ASMLIB Support

ASMLIB is not supported.

4 Content Specific to Oracle Database 11g 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 Oracle Solaris 10

4.1.1 Setting Kernel Parameters on Oracle Solaris 10

On Oracle 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:

```bash
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:

```shell
$ 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:

```shell
% 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
- 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 Upgrade from Release 10.2.0.4 to Release 11.2
- Oracle Database Vault Configuration Assistant (DVCA) Fails When Adding Languages
- Global Services Daemon Synchronization Issue

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

If you install an Oracle RAC 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 11g 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 Oracle9i to Oracle Database 11g Release 2 (11.2)

When you install Oracle Grid Infrastructure (Oracle Clusterware and Oracle ASM) on clusters created using Sun Clusterware and Oracle9i 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 Oracle9i Oracle RAC is installed. If you select only a subset of the nodes that are part of your existing Oracle 9i Oracle RAC installation, then the existing Oracle 9i 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 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 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.

4.2.9 Global Services Daemon Synchronization Issue

If you enable Global Services Daemon and start Oracle Grid Infrastructure on all nodes, then it may start on one node and fail to start on the other nodes of a cluster. 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 Other Known Issues for Release 11.2.0.1

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

■ Help Files Translation Issue for Spanish and French
■ Incorrect Reverse Ping Command from Oracle Management Service

4.3.1 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.

4.3.2 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.

5 Content Specific to Oracle Database 11g 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

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 you enable Global Services Daemon and start Oracle Grid Infrastructure on all nodes, then it may start on one node and fail to start on the other nodes of a cluster.
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, 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.

5.3 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 11g 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. Additional
   preinstallation requirements include the following:

   ■ Incorrect Memory Report During Database Installation on Oracle Solaris 10
     Update 9 or Earlier

6.1.1 Incorrect Memory Report During Database Installation on Oracle Solaris 10
      Update 9 or Earlier

   During Oracle Database Installation on Solaris 10 Update 9 or earlier, Oracle Universal
   Installer displays the following message:

   WARNING: Unexpected error while performing check: Available Physical Memory.

   Workaround:

   Apply patch 146808-01 before installing the database.

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:

   ■ Passwordless SSH Issue During Oracle Clusterware Installation on Oracle Solaris
     11
   ■ Oracle Universal Installer Not Displayed When Installing Oracle Database on
     Oracle Solaris 11
   ■ Operating System Locale Issue on Oracle Solaris 11
   ■ Oracle Enterprise Manager Database Control Error
   ■ CVU IPMP Group Consistency Check Failure
- Error Message Appears During Oracle ASM Upgrade to Oracle Grid Infrastructure
- Global Services Daemon Synchronization Issue
- Oracle Cluster Registry Integrity Check Fails After Oracle Grid Infrastructure Upgrade

6.2.1 Passwordless SSH Issue During Oracle Clusterware Installation on Oracle Solaris 11

Passwordless SSH setup fails on Oracle Solaris 11 during the Oracle Clusterware installation.

**Workaround:**

Follow these steps before configuring SSH using Oracle Clusterware release 11.2.0.3 on Oracle Solaris on x86-64 (64-bit):

1. Edit `/etc/ssh/sshd_config` on the target hosts and add a cipher list which includes the CTR Ciphers and the longer AES key lengths before the CBC Ciphers. For example:
   ```
   Ciphers
   aes128-ctr,aes192-ctr,aes256-ctr,aes128-cbc,aes192-cbc,aes256-cbc,3des-cbc,blowfish-cbc
   ```

2. Restart the `sshd` daemon on the target host using the following command:
   ```
   # svcadm restart ssh
   ```

This issue is tracked with Oracle bug 10039955.

Manually setup SSH connectivity between the nodes on Oracle Solaris on SPARC (64-bit).

This issue is tracked with Oracle bug 13035076.

6.2.2 Oracle Universal Installer Not Displayed When Installing Oracle Database on Oracle Solaris 11

When installing Oracle Database 11.2.0.3, Oracle Universal Installer may not appear on Oracle Solaris 11.

**Workaround:**

Set the `AWT_TOOLKIT` environment variable to `XToolkit`.

This issue is tracked with Oracle bug 12657154.

6.2.3 Operating System Locale Issue on Oracle Solaris 11

When installing on a Japanese locale (`LANG=ja_JP.eucJP` or `ja_JP.pck`), Oracle Universal Installer may show unnecessary characters on Solaris 11.

**Workaround:**

Either set the locale to Japanese using the UTF-8 encoding (`LANG=ja_JP.UTF8`) or use an English locale.

This issue is tracked with Oracle bugs 13707754 and 13853207.
6.2.4 Oracle Enterprise Manager Database Control Error

The Oracle Enterprise Manager Database Control home page may show the following error if the dynamic properties evaluation is not complete:

java.lang.Exception: No Such Target - wait_bottlenecks

Workaround:

Run these `emctl` commands on the 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 the Oracle RAC instance and Oracle RAC on the master agent host using the following commands:

```bash
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 `emd.properties` file 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:

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

This issue is tracked with Oracle bug 12907579.

6.2.5 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 Oracle Solaris IPMP group fail-over consistency may fail.

Workaround:

Ignore this failure and perform the following steps:

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

   ```bash
   'srvctl modify nodeapps -S
   subnet/netmask[/if1[/if2]...]'
   
   where `if1` and `if2` are the IPMP NIC names.
   ```

2. Classify all network interfaces in the IPMP group as public by using the following command syntax:

   ```bash
   oifcfg setif -global if_name/subnet:public
   
   where `if_name` is the interface name and `subnet` is the subnet.
   ```

   For example:

   ```bash
   # 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
   ```
This issue is tracked with Oracle bug 12939432.

6.2.6 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.

6.2.7 Global Services Daemon Synchronization Issue
If you enable Global Services Daemon and start Oracle Grid Infrastructure on all nodes, then it may start on one node and fail to start on the other nodes of a cluster. You can verify the daemon state by running the following command:

Workaround:
Run the following command on any one node in Oracle Grid Infrastructure for a cluster to start the daemon on all the nodes:
srvc1 start nodeapps

This issue is tracked with Oracle bug 9075123.

6.2.8 Oracle Cluster Registry Integrity Check Fails After Oracle Grid Infrastructure Upgrade
When the Cluster Verification Utility performs the OCR check after upgrading Oracle Grid Infrastructure release 10.2.0.5 to release 11.2.0.3, the check may fail with the following error:

PRVF-4162: Size of the OCR location 'ocr_location' could not be determined...

Workaround:
Run the OCRCHECK utility as a privileged user to verify the contents of OCR.
This issue is tracked with Oracle bug 13011520.

6.3 Other Known Issues for Release 11.2.0.3
The following section contains information about issues related to Oracle Database 11g 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 Infrastructure 11g 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 Content Specific to Oracle Database 11g Release 2 (11.2.0.4)

The following content is specific to release 11.2.0.4:

- Preinstallation Requirements for Release 11.2.0.4
- Installation, Configuration, and Upgrade Issues for Release 11.2.0.4
- Other Known Issues for Release 11.2.0.4

7.1 Preinstallation Requirements for Release 11.2.0.4

Refer to the installation guides for the preinstallation requirements.

7.2 Installation, Configuration, and Upgrade Issues for Release 11.2.0.4

Review the following sections for information about issues that affect Oracle Database installation, configuration, and upgrade:
7.2.1 Operating System Locale Issue on Oracle Solaris 11
When installing on a Japanese locale (LANG=ja_JP.eucJP or ja_JP.pck), Oracle Universal Installer may show unnecessary characters on Solaris 11.

Workaround:
Either set the locale to Japanese using the UTF-8 encoding (LANG=ja_JP.UTF8) or use an English locale.
This issue is tracked with Oracle bug 13853207.

7.2.2 Passwordless SSH Issue During Oracle Clusterware Installation on Oracle Solaris 11
Passwordless SSH setup fails on Oracle Solaris 11 during the Oracle Clusterware installation.

Workaround:
Follow these steps before configuring SSH using Oracle Clusterware release 11.2.0.3 on Oracle Solaris on x86-64 (64-bit):

1. Edit /etc/ssh/sshd_config on the target hosts and add a cipher list which includes the CTR Ciphers and the longer AES key lengths before the CBC Ciphers. For example:

   Ciphers
   aes128-ctr,aes192-ctr,aes256-ctr,aes128-cbc,aes192-cbc,aes256-cbc,3des-cbc,blowfish-cbc

2. Restart the sshd daemon on the target host using the following command:

   # svcadm restart ssh

This issue is tracked with Oracle bug 10039955.
Manually setup SSH connectivity between the nodes on Oracle Solaris on SPARC (64-bit).
This issue is tracked with Oracle bug 13035076.

7.2.3 Oracle Enterprise Manager Database Control Error
The Oracle Enterprise Manager Database Control home page may show the following error if the dynamic properties evaluation is not complete:

   java.lang.Exception: No Such Target - wait_bottlenecks

Workaround:
Run these `emctl` commands on the 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 the Oracle RAC instance and Oracle RAC on the 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 `emd.properties` file 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
eemctl reload agent dynamicproperties rac_instance_target_name:oracle_database
eemctl reload agent dynamicproperties rac_database_target_name:rac_database
```

This issue is tracked with Oracle bug 12907579.

### 7.2.4 Global Services Daemon Synchronization Issue

If you enable Global Services Daemon and start Oracle Grid Infrastructure on all nodes, then it may start on one node and fail to start on the other nodes of a cluster. You can verify the daemon state by running the following command:

```
srvcctl 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:

```
srvcctl start nodeapps
```

This issue is tracked with Oracle bug 9075123.

### 7.2.5 Error When Installing Oracle Configuration Manager

During an Oracle Configuration Manager (OCM) installation, if the `JAVA_HOME` environment variable is set to JDK 1.5, you may encounter the following error:

```
bash-4.1$ ./setupCCR
JAVA_HOME does not contain a valid JDK/JRE
Redefine JAVA_HOME to refer to a JDK/JRE 1.2.2 or greater
```

**Workaround:**

Introduce a new `JAVA_HOME_CCR` environment variable and set it to JDK6, and proceed with the OCM installation.

This issue is tracked with Oracle bug 16444624.

### 7.2.6 Prerequisite Check May Fail When Installing Oracle Grid Infrastructure

When installing Oracle Grid Infrastructure, although the correct owner, group, or permissions are set for Oracle ASM, the prerequisite check may fail with the following errors:

```
PRVF-9991 :tt Owner of device "device name" did not match the expected owner
PRVF-9992 : Group of device "device name" did not match the expected group
```
PRVF-9993: Permission of device "device name" did not match the expected

Workaround:
Ignore the error.

This issue is tracked with Oracle bug 17274371.

7.2.7 Bug 29292821
When installing Oracle Database 11g Release 4 (11.2.0.4) on Oracle Solaris, changes to
the environment variable TZ (time zone) triggers the following error:

The timestamps in CRS and database trace files and logs do not match the date and
time as seen by Oracle Solaris date command.

Workaround:
When installing Oracle Database 11g Release 4 (11.2.0.4) on Oracle Solaris, set export
TZ = localtime in the terminal that runs the runInstaller command.

7.3 Other Known Issues for Release 11.2.0.4
The following sections contain information about issues related to Oracle Database 11g
and associated products:

■ Linking Issue on Oracle Solaris on x86-64 (64-Bit)
■ Oracle Enterprise Manager Database Control Fails to Start
■ Oracle Inventory Group Issue When Running acfsroot install

7.3.1 Linking Issue on Oracle Solaris on x86-64 (64-Bit)
If you attempt to link Pro*COBOL applications on Oracle Solaris 10 update 10, then
the application may not link, and the link editor may report the following error:

make: Fatal error: Command failed for target 'build'

Workaround:
Upgrade to Oracle Solaris 10 Update 11.

Workaround 2:
Edit the object file before running the link editor as follows:

% elfdump -cN.eh_frame foo

Section Header[4]: sh_name: .eh_frame
    sh_addr: 0x400378 sh_flags: [ SHF_ALLOC ]
    sh_size: 0x6b8 sh_type: [ SHT_PROGBITS ]
    sh_offset: 0x378 sh_entsize: 0
    sh_link: 0 sh_info: 0
    sh_addralign: 0x8
% elfedit -e 'shdr:sh_type .eh_frame sht_amd64_unwind' foo
% elfdump -cN.eh_frame foo

Section Header[4]: sh_name: .eh_frame
    sh_addr: 0x400378 sh_flags: [ SHF_ALLOC ]
    sh_size: 0x6b8 sh_type: [ SHT_AMD64_UNWIND ]
    sh_offset: 0x378 sh_entsize: 0
    sh_link: 0 sh_info: 0
This issue is tracked with Oracle bug 15827517.

### 7.3.2 Oracle Enterprise Manager Database Control Fails to Start

Oracle Enterprise Manager Database Control may fail to start on Solaris 11 systems with high memory configuration, (12 GB or more) and may give errors during the following operations:

- Install Oracle Database software with Create Database option
- Create database using Oracle Database Configuration Assistant and select Oracle Database Control configuration
- Run Oracle Enterprise Manager Configuration Assistant to configure Oracle Enterprise Manager
- Run any `emctl` command

The following is the error:

```
Error occurred during initialization of VM
Could not reserve enough space for code cache
```

**Workaround:**

Set the environment variable, `EM_SOL_JAVA` to `-d64` before performing any of the above operations.

This issue is tracked with Oracle bug 17246576.

### 7.3.3 Oracle Inventory Group Issue When Running acfsroot install

When running `acfsroot install` on each node of a cluster and the default Oracle Inventory group, `oinstall`, is only available through NIS, then the devices are created with the group owner of `oinstall`, which is correct. However, if you restart the system and reload the device drivers, the device permissions are set to `root:sys`, which is incorrect. The problem manifests when the `crsuser` attempts to manage the devices, and errors similar to the following appear:

```
ERROR at line 1:
ORA-15032: not all alterations performed
ORA-15477: cannot communicate with the volume driver
```

**Workaround:**

Add the Oracle Inventory group `oinstall` or the primary group of the installation owner to `/etc/group` before running `acfsroot install`, or before rebooting the server and reloading the drivers.

This issue is tracked with Oracle bug 16534869.

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