

# Oracle® Database

Release Notes

10g Release 2 (10.2) for Linux on POWER

**B25146-08**

September 2008

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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* and 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/technology/documentation/>

For additional information about this release, refer to the readme files located in the \$ORACLE\_HOME/relnotes directory.

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**Note:** The Database Quick Installation Guides are no longer available in printed format. These documents are available with the media in the same location as the software and on Oracle Technology Network.

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This document contains the following topics:

- [Certification Information](#)
- [Unsupported Products](#)
- [Preinstallation Requirements](#)
- [Installation, Configuration, and Upgrade Issues](#)
- [Other Known Issues](#)
- [Documentation Corrections and Additions](#)
- [Documentation Accessibility](#)

## 1 Certification Information

The latest certification information for Oracle Database 10g release 2 (10.2) is available on *OracleMetaLink* at:

<http://metalink.oracle.com>

### JDK 5 Certification

Starting Oracle 10g release 2 (10.2.0.2), JDK 5 is supported for JDBC applications.

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## Linux Certification

Starting with Oracle Database 10g release 2 (10.2.0.4), the following operating systems are supported in addition to the list documented in *Oracle Database Installation Guide for Linux on POWER*:

- Asianux 2.0
- Red Hat Enterprise Linux 5
- SUSE Linux Enterprise Server 10

## 2 Unsupported Products

The following products are not supported with Oracle Database 10g release 2 (10.2):

- Grid Control Support  
Oracle Database 10g release 2 (10.2) can be managed as a target by Grid Control 10.1.0.4. However, Oracle Database 10g release 2 is not supported by Grid Control 10.1.0.4 as a repository.
- COBOL  
Oracle Database 10g release 2 (10.2) does not support COBOL on Red Hat Enterprise Linux 4.0.
- Messaging Gateways with MQseries 5.3  
Oracle Database 10g release 2 (10.2) does not support Messaging Gateways with MQseries 5.3.  
This issue is tracked with Oracle bug 4737821.
- Verity  
Verity filters used for Oracle Text are not supported

## 3 Preinstallation Requirements

You must review the following sections before installing Oracle Database 10g release 2:

- [libaio Before Installing or Upgrading](#)
- [oracleasm-support to use ASMLib](#)
- [Oracle HTTP Server on Red Hat Enterprise Linux 4.0](#)

### 3.1 libaio Before Installing or Upgrading

Before upgrading to or installing Oracle Database 10g release 2, install the `libaio` package.

### 3.2 oracleasm-support to use ASMLib

Install `oracleasm-support` package version 2.0.0.1 or higher to use ASMLib on Red Hat Enterprise Linux 4.0 Advanced Server or SUSE Linux Enterprise Server 9.

### 3.3 Oracle HTTP Server on Red Hat Enterprise Linux 4.0

If you intend to use Oracle HTTP server, which is included in Companion CD of Oracle Database 10g Release 2 (10.2) Media pack, refer to the *MetaLink* note 317085.1 for more information on using Oracle HTTP server on Red Hat Enterprise Linux 4.0.

## 4 Installation, Configuration, and Upgrade Issues

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

- [Latest Upgrade Information](#)
- [Adding a Node to a Shared Oracle Clusterware Configuration](#)
- [Installing Enterprise Security Manager](#)
- [extjob Executable Required Directory Permissions](#)
- [Modifying a Virtual IP Address Node Application](#)
- [Raw Devices on Red Hat Enterprise Linux 4.0](#)

### 4.1 Latest Upgrade Information

For late-breaking updates and best practices about preupgrades, postupgrades, compatibility, and interoperability discussions refer to note 466181.1 on *OracleMetaLink* (<https://metalink.oracle.com/>) that links to "10g Upgrade Companion" Page.

### 4.2 Adding a Node to a Shared Oracle Clusterware Configuration

Before running `root.sh` in the first node of a shared Oracle Clusterware home, add the following line in the `$ORA_CRS_HOME/opmn/conf/ons.config` file:

```
usesharedinstall=true
```

This issue is tracked with Oracle bug 4454562.

### 4.3 Installing Enterprise Security Manager

To install Oracle Security Manager, install Oracle Client and then select the Administrator installation type.

### 4.4 extjob Executable Required Directory Permissions

To enable the `extjob` executable to locate required libraries, the `$ORACLE_HOME/lib` directory and all of its parent directories must have execute permissions for `group` and `other`.

### 4.5 Modifying a Virtual IP Address Node Application

When modifying the name, IP address, or netmask of an existing virtual IP address (VIP) resource, use the following command:

```
srvctl modify nodeapps
```

and include the existing interfaces for the VIP in the `-A` argument. For example:

```
srvctl modify nodeapps -n mynode1 -A 100.200.300.40/255.255.255.0/eth0
```

This issue is tracked with Oracle bug 4500688.

## 4.6 Raw Devices on Red Hat Enterprise Linux 4.0

When you restart a Red Hat Enterprise Linux 4.0 system, raw devices revert to their original owners and permissions by default. If you are using raw devices with this operating system for your Oracle files, for example, for ASM storage or Oracle Clusterware files, you need to override this default behavior. To do this, add an entry to the `/etc/rc.d/rc.local` file for each raw device containing the `chmod` and `chown` commands required to reset them to the required values.

As an example, here are sample entries in a `/etc/rc.d/rc.local` file that control the restart behavior of raw devices for two ASM disk files (`/dev/raw/raw6` and `/dev/raw/raw7`), two Oracle Cluster Registry files (`/dev/raw/raw1` and `/dev/raw/raw2`), and three Oracle Clusterware voting disks (`/dev/raw/raw3`, `/dev/raw/raw4`, and `/dev/raw/raw5`):

```
# ASM
chown oracle:dba /dev/raw/raw6
chown oracle:dba /dev/raw/raw7
chmod 660 /dev/raw/raw6
chmod 660 /dev/raw/raw7
# OCR
chown root:oinstall /dev/raw/raw1
chown root:oinstall /dev/raw/raw2
chmod 660 /dev/raw/raw1
chmod 660 /dev/raw/raw2
# Voting Disks
chown oracle:oinstall /dev/raw/raw3
chown oracle:oinstall /dev/raw/raw4
chown oracle:oinstall /dev/raw/raw5
chmod 644 /dev/raw/raw3
chmod 644 /dev/raw/raw4
chmod 644 /dev/raw/raw5
```

## 5 Other Known Issues

The following sections contain information about issues related to Oracle Database 10g and associated products:

- [Encoding Information Not Present in Translated Help Files](#)
- [Oracle Clusterware Files Issues](#)
- [VLM Window Size on Red Hat Enterprise Linux 4.0](#)
- [Oracle C++ Call Interface Compiler Support](#)
- [Oracle XML Developer's Kit Compiler Support](#)
- [Link Error During genorasdksh on Red Hat Enterprise Linux 4.0](#)
- [Removing Metrics for Wait Classes Removes Them Permanently](#)
- [Interim Fix for the IBM XL C/C++ Advanced Edition V7.0 for Linux Runtime Environment Component](#)

- [Relink of Database 10g Release 2 Fails](#)
- [Blank Help Pages for Oracle Universal Installer](#)
- [Error While Installing 10.2.0.1](#)

## 5.1 Encoding Information Not Present in Translated Help Files

If the system uses a European language, you might see corrupted characters in Table of Contents of database tools, such as Database Configuration Assistant.

This issue is tracked with Oracle bug 3957096.

**Workaround:** If the system uses a European language, do not use the `.UTF-8` locale. For example, if the system uses German, set the `LANG` and `LC_ALL` environment variables to `de_DE` instead of `de_DE.UTF-8`.

## 5.2 Oracle Clusterware Files Issues

The following note applies if you are using Red Hat Enterprise Linux 4.0 and using raw devices to store the Oracle Cluster Registry (OCR) and the voting disk for Oracle Clusterware, or using raw devices for Automatic Storage Management (ASM) database files. For each raw device used for the purposes listed, you must add two entries in the `/etc/rc.d/rc.local` file after running the `root.sh` script following the installation of Oracle Clusterware.

For each OCR file, the entries should look as follows, where `oinstall` is the Oracle install group and `/dev/raw/rawn` is an individual device file:

```
chown root:oinstall /dev/raw/rawn
chmod 640 /dev/raw/rawmar
```

For each voting disk file, the entries should look as follows, where `oracle` is the Oracle user, `oinstall` is the Oracle install group, and `/dev/raw/rawn` is an individual device file:

```
chown oracle:oinstall /dev/raw/rawn
chmod 644 /dev/raw/rawmar
```

For each ASM file, the entries should look as follows, where `oracle` is the Oracle user, `oinstall` is the Oracle install group, and `/dev/raw/rawn` is an individual device file:

```
chown oracle:oinstall /dev/raw/rawn
chmod 660 /dev/raw/rawmar
```

## 5.3 Cluster Verification Utility

This section lists the issues with Cluster Verification Utility on Red Hat Enterprise Linux 4.0 and SUSE Linux Enterprise Server 9:

- The preinstallation stage verification checks for Oracle Clusterware and Oracle Real Applications Clusters and reports missing packages. Ignore the following missing packages and continue with the installation:

```
compat-libstdc++-devel-7.3-2.96.128
```

## 5.4 VLM Window Size on Red Hat Enterprise Linux 4.0

To use hugepages or to accommodate the VLM window size on Red Hat Enterprise Linux 4.0, you must increase the default maximum size of the per-process locked memory. To increase the per-process max locked memory limit, add the following lines to the `/etc/security/limits.conf` file, where `oracle` is the user that administers the database:

```
oracle soft memlock 3145728
oracle hard memlock 3145728
```

## 5.5 Oracle C++ Call Interface Compiler Support

On Red Hat Enterprise Linux 4.0, Oracle C++ Call Interface (OCCI) does not yet support GCC 3.4.3. The current GNU C++ compiler version that OCCI supports with Red Hat Enterprise Linux 4.0 is GCC 3.2.3.

**Workaround:** Install Red Hat Enterprise Linux 4 with GCC 3.2.3.

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**Note:** For updates on GCC support, refer to the OCCI home page on OTN:

<http://www.oracle.com/technology/tech/oci/occi/index.html>

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## 5.6 Oracle XML Developer's Kit Compiler Support

On Red Hat Enterprise Linux 4.0, Oracle XML Developer's Kit (XDK) is not supported with GCC. XDK is supported with Intel C++ compiler (ICC).

## 5.7 Link Error During `genorasdksh` on Red Hat Enterprise Linux 4.0

Installing Oracle Database 10g release 2 (10.2.0.1) on Red Hat Enterprise Linux 4.0 Update 1 (2.6.9-11.ELsmp) produces a link error during creation of `liborasdkbase.so.10.2`. The following error message is thrown:

```
INFO: gcc:
INFO: /usr/lib/libstdc++.so.5: No such file or directory
INFO:
INFO: $OH/bin/genorasdksh: Failed to link liborasdkbase.so.10.2
```

This is because Oracle Database 10g release 2 (10.2) requires Red Hat Enterprise Linux 3.0 libraries (`/usr/lib/libstdc++.so.5`).

**Workaround:** Install the compatible libraries as follows:

```
rpm -q1 compat-libstdc++-33-3.2.3-47.3
```

This issue is tracked with Oracle bug 4605635.

## 5.8 Removing Metrics for Wait Classes Removes Them Permanently

Do not remove the key values for the wait class metrics. Doing so removes them permanently and currently there is no easy way to recover them.

This issue is tracked with Oracle bug 4602952.

## 5.9 Interim Fix for the IBM XL C/C++ Advanced Edition V7.0 for Linux Runtime Environment Component

You must install the IBM XL C/C++ Advanced Edition V7.0 for Linux Runtime Environment Component and XL Optimization Libraries component from the following link:

[http://www.ibm.com/support/docview.wss?rs=2030&context=SSJT9L&context=SSENT9&context=SSEP5D&dc=D400&dc=D410&dc=D420&dc=D430&q1=Run-time+Environment+Component&uid=swg24007906&loc=en\\_US&cs=utf-8&lang=en](http://www.ibm.com/support/docview.wss?rs=2030&context=SSJT9L&context=SSENT9&context=SSEP5D&dc=D400&dc=D410&dc=D420&dc=D430&q1=Run-time+Environment+Component&uid=swg24007906&loc=en_US&cs=utf-8&lang=en)

This URL contains information and installation instructions. All the above installations must to be done before installing Oracle database.

On SUSE Linux Enterprise Server 9, install the following components:

- The RTE component: `vacpp.rte.70.sles9.jan2006.update.tar.gz`
- The XL Optimization Libraries: `vac.lib.70.sles9.tar`

On Red Hat Enterprise Linux 4, install the following components:

- The RTE component: `vacpp.rte.70.rhel4.dec2005.update.tar.gz`
- The XL Optimization Libraries: `vac.lib.70.rhel4.tar`

## 5.10 Relink of Database 10g Release 2 Fails

Relink of Database 10g release 2 fails when you install Database 10g release 2 (10.2.0.1) on Red Hat Enterprise Linux 4 (Update 2 or later). To resolve this issue, you need to install the patch mentioned in Oracle bug 4767801 and retry linking.

## 5.11 Blank Help Pages for Oracle Universal Installer

Help pages for Oracle Universal Installer appear blank for Japanese language locale that has the following settings:

```
NLS_LANG=Japanese_Japan.JA16EUC  
LANG=ja_JP.eucJP
```

**Workaround:** Run the following command to start Oracle Universal Installer:

```
./runInstaller -J-Dibm.stream.nio=TRUE
```

This issue is tracked with Oracle bug 5106619.

## 5.12 Error While Installing 10.2.0.1

An error is generated while installing Oracle Database 10.2.0.1 on Red Hat Enterprise Linux 4.0 Update 2 or later and SUSE Linux Enterprise Server 9 with service pack 2 or later. Most of the times, the error is generated when you perform any of the following tasks:

- While installing Oracle Database 10.2.0.1 after a fresh and complete installation of Red Hat Enterprise Linux 4.0 Update 2
- While installing Oracle Database 10.2.0.1 after a fresh and complete installation of SUSE Linux Enterprise Server 9 with service pack 2 or later

- When you start dbca or netca from the command line or Oracle Universal Installer, if Standard installation is selected

**Workaround:** Before installing Oracle Database 10g release 2, verify the contents of the `/etc/resolv.conf` file. Edit the file to make the following change:

Change the line similar to:

```
domain=my.net.com
```

To:

```
search=my.net.com
```

The original `/etc/resolve.conf` file can be restored after the database installation is complete.

## 6 Documentation Corrections and Additions

This section lists the following corrections to the installation guides for Linux on POWER:

- In *Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide*, Chapter 2, "Preinstallation," in the section "Oracle Clusterware Home Directory," it incorrectly lists the path `/u01/app/oracle/product/crs` as a possible Oracle Clusterware home (or CRS home) path. This is incorrect. A default Oracle base path is `/u01/app/oracle`, and the Oracle Clusterware home must never be a subdirectory of the Oracle base directory.

A possible CRS home directory is in a path outside of the Oracle base directory. For example, if the Oracle base directory is `u01/app/oracle`, then the CRS home can be an option similar to one of the following:

```
u01/crs/  
/u01/crs/oracle/product/10/crs  
/crs/home
```

This issue is tracked with Oracle bug 5843155.

- The following text of the section 2.6.1, "IP Address Requirements," in Chapter 2, "Pre-Installation Tasks," of *Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide* states that the virtual IP address (VIP) should respond to a `ping` command:

During installation, OUI uses the `ping` command to ensure that the VIP is reachable.

The preceding statement is incorrect. Before installation, the VIP address should be configured in DHCP or `/etc/hosts`, or both, but it must not be assigned to a server that can respond to a `ping` command.

This issue is tracked with Oracle bug 6017001.

- Appendix H, "Database Limits" of *Oracle Database Administrator's Reference for UNIX-Based Operating Systems* states the incorrect maximum value (63) for the `MAXINSTANCES` variable. The correct maximum limit for the variable is 1055.

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