# Oracle® Database

Release Notes

10*g* Release 2 (10.2) for Linux x86-64

**B15666-04**

April 2006

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.

This document may be updated after it is released. To check for updates to this document and to view other Oracle documentation, select the Documentation link or the Software & Patches link on the Oracle Database 10*g* release 2 Beta Program Web site.

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.

This document contains the following topics:

- Certification Information
- Unsupported Products
- Preinstallation Requirements
- Documentation Corrections and Additions
- Installation, Configuration, and Upgrade Issues
- Other Known Issues
- Documentation Accessibility

## 1 Certification Information

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

`http://metalink.oracle.com`

#### Products and Components Not Certified at the Time of This Publication

At the time of this publication, Oracle Cluster File System version 2 is not certified on Red Hat Enterprise Linux 4.0 and SUSE Linux Enterprise Server 9.

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## 2 Unsupported Products

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

- Grid Control Support

  Oracle Database 10*g* release 2 (10.2) can be managed as a target by Grid Control 10.1.0.4. However, Oracle Database 10*g* release 2 is not supported by Grid Control 10.1.0.4 as a repository.
- Oracle Procedural Gateway for APPC
- Oracle Procedural Gateway for WebSphere MQ
- Oracle Clustered File System version 2
- Oracle ODBC driver
- Pro*COBOL

## 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
- Red Hat Enterprise Linux 4.0
- Oracle Lite
- Configuring Kernel Parameters

### 3.1 libaio Before Installing or Upgrading

Before upgrading to or installing Oracle Database 10*g* 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 Red Hat Enterprise Linux 4.0

Before installing Oracle Database 10*g* release 2 on Red Hat Enterprise Linux 4.0 Update 1, install the following packge:

```
binutils-2.15.92.0.2-13.0.0.0.2.x86_64
```

This package can be downloaded from the following link:

http://oss.oracle.com/projects/compat-oracle/dist/files/RedHat/binutils-2.15.92.0.2-13.0.0.0.2.x86_64.rpm

This issue is tracked with Oracle bug 4619031

### 3.4 Oracle Lite

Before installing Oracle lite, ensure that the following package is installed:

```
libxml2-2.5.10-7.i386.rpm
```

### 3.5 Configuring Kernel Parameters

After updating the values of kernel parameters in the `/etc/sysctl.conf` file, ensure that you either reboot the computer or run the `sysctl -p` command to make the changes of the `/etc/sysctl.conf` file available in the active kernel memory.

On SUSE Linux Enterprise Server 9.0, ensure that you set the following kernel parameter:

```
disable_cap_mlock = 1
```

## 4 Documentation Corrections and Additions

This section lists the following corrections to the installation guides for Linux x86-64.

In the "Software Requirements" section of quick installation guides and Chapter 2 of installation guides, the following should be the list of packages for Red Hat Enterprise Linux 3.0:

```
make-3.79.1-17
compat-db 4.0.14-5.1
control-center-2.2.0.1-13
gcc-3.2.3-47
gcc-c++-3.2.3-47
gdb-6.1post-1.20040607.52
glibc-2.3.2-95.30
glibc-common-2.3.2-95.30
glibc-devel-2.3.2-95.30
glibc-devel-2.3.2-95.20 (32 bit)
compat-db-4.0.14-5
compat-gcc-7.3-2.96.128 (32 bit)
compat-gcc-c++-7.3-2.96.128 (32 bit)
compat-libstdc++-7.3-2.96.128 (32 bit)
compat-libstdc++-devel-7.3-2.96.128 (32 bit)
gnome-libs-1.4.1.2.90-34.2 (32 bit)
libstdc++-3.2.3-47
libstdc++-devel-3.2.3-47
openmotif-2.2.3-3.RHEL3
sysstat-5.0.5-5.rhel3
setarch-1.3-1
libaio-0.3.96-3
libaio-devel-0.3.96-3
```

## 5 Installation, Configuration, and Upgrade Issues

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

- Upgrading Oracle Real Application Clusters Release 9.2
- Installing Enterprise Security Manager

- Upgrading Oracle Clusterware 10.1.x to Oracle Clusterware 10.2
- extjob Executable Required Directory Permissions
- Modifying a Virtual IP Address Node Application
- Raw Devices on Red Hat Enterprise Linux 4.0

## 5.1 Upgrading Oracle Real Application Clusters Release 9.2

If you are upgrading a 9.2 RAC environment to Oracle Database 10*g* release 2 on Red Hat Linux 3.0, then you must apply a patch to `GLIBC` before proceeding with the Oracle Clusterware installation. Follow the instructions documented in Oracle*MetaLink* note 284535.1.

This issue is tracked with Oracle bug 3006854.

## 5.2 Installing Enterprise Security Manager

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

## 5.3 Upgrading Oracle Clusterware 10.1.*x* to Oracle Clusterware 10.2

When upgrading from 10.1.*x* to 10.2, if the host name directory under the `/etc/oracle/scls_scr` directory includes the domain name, then the following error message is displayed when you run the `rootupgrade.sh` script and the Oracle Clusterware stack does not start:

```
A file or directory in the path name does not exist.
/etc/init.cssd[509]: /etc/oracle/scls_scr/host_name/root/cssrun: 0403-005
Cannot create the specified file.
```

**Workaround**: Move the `/etc/oracle/scls_scr/`*`hostname.domain_name`* directory to `/etc/oracle/scls_scr/`*`hostname`* and rerun the `rootupgrade.sh` script.

This issue is tracked with Oracle bug 4472284.

## 5.4 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`.

## 5.5 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.

## 5.6 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
```

# 6 Other Known Issues

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

- Building Pro*C Applications if PostgreSQL is Installed
- Encoding Information Not Present in Translated Help Files
- Oracle Clusterware Files Issues
- Removing Metrics for Wait Classes Removes Them Permanently
- Support for 64-Bit JDBC
- Patch for CRS Configuration with Voting Disk on Network Attached Storage

## 6.1 Building Pro*C Applications if PostgreSQL is Installed

If the `postgresql-devel` package is installed on the system, then you must add the following directory to the beginning of the `sys_include` parameter in the `$ORACLE_HOME/precomp/admin/pcscfg.cfg` file before building Pro*C applications:

```
$ORACLE_HOME/precomp/public
```

If you do not make this change, then you may encounter errors similar to the following when linking the applications:

```
/tmp/ccbXd7v6.o(.text+0xc0): In function `drop_tables':
: undefined reference to `sqlca'
```

This issue is tracked with Oracle bug 3933309.

## 6.2 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 Assitant.

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`.

## 6.3 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/raw`*n* is an individual device file:

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

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/raw`*n* is an individual device file:

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

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/raw`*n* is an individual device file:

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

## 6.4 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:

- Cluster Verification Utility (CVU) does not support shared checks for raw disks used for Oracle Cluster File System version 2 on Red Hat Enterprise Linux 4.0 and SUSE Linux Enterprise Server 9.

- Cluster Verification Utility (CVU) does not detect SMP-Kernel rpms for the hosts and displays the "Kernel check failed" message. In verbose mode, the status for kernel is dislpayed as "missing".

  This issue is tracked with Oracle bug 4685951.

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

## 6.5 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.

## 6.6 Support for 64-Bit JDBC

For Oracle Database 10g release 2 on Linux x86-64, 64-bit JDBC (using JDK 5) is supported.

## 6.7 Patch for CRS Configuration with Voting Disk on Network Attached Storage

To resolve the CRS configuration issue when voting disk is on Network Attached Storage, you need to apply the patch tracked through Oracle bug 4697432.

# 7 Documentation Accessibility

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