Oracle® Database

Release Notes

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

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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, see 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
- Supported Operating Systems
- Unsupported Products
- Preinstallation Requirements
- ASMLib Package Requirements
- Installation, Configuration, and Upgrade Issues
- Grant Additional Privileges to the Oracle Enterprise Manager Repository User
- Other Known Issues
- Documentation Corrections and Additions
- 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 Supported Operating Systems

This release is supported with the following operating systems:

- Red Hat Enterprise Linux 3.0 (Update 4 or later). The required kernel version is 2.4.21-27.EL.

- Red Hat Enterprise Linux 4.0

- SUSE Linux Enterprise Server 9.0

The following packages (or later versions) must be installed on Red Hat Enterprise Linux 4.0:

```
binutils-2.15.92.0.2-10.EL4
compat-db-4.1.25-9
control-center-2.8.0-12
gcc-3.4.3-9.EL4
gcc-c++-3.4.3-9.EL4
glibc-2.3.4-2
glibc-common-2.3.4-2
gnome-libs-1.4.1.2.90-44.1
libstdc++-3.4.3-9.EL4
libstdc++-devel-3.4.3-9.EL4
make-3.80-5
pdksh-5.2.14-30
sysstat-5.0.5-1
xscreensaver-4.18-5.rhel4.2
```

Note:

openmotif21-2.1.30-11.RHEL4.2 is required to install Oracle demos.

GNU Compiler Collection (GCC) 2.96 is not supported on Red Hat Enterprise Linux 4.0.

The following packages (or later versions) must be installed on SUSE Linux Enterprise Server 9.0:

```
binutils-2.15.90.0.1.1-32.5
gcc-3.3.3-43.24
gcc-c++-3.3.3-43.24
glibc-2.3.3-98.28
gnome-libs-1.4.1.7-671.1
libstdc++-3.3.3-43.24
libstdc++-devel-3.3.3-43.24
make-3.80-184.1
pdksh-5.2.14-780.1
sysstat-5.0.1-35.1
xscreensaver-4.16-2.6
```

See Also: *Oracle Database Installation Guide for Linux x86* for more information about operating system requirements

3 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.

4 Preinstallation Requirements

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

5 ASMLib Package Requirements

Install `oracleasm-support` package version 2.0.1 or higher to use ASMLib on Red Hat Enterprise Linux 4.0 Advanced Server or SUSE Linux Enterprise Server 9.

6 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
- Adding a Node to a Shared Oracle Clusterware Configuration
- Installing Enterprise Security Manager
- Upgrading to Oracle Clusterware 10.2
- extjob Executable Required Directory Permissions
- Modifying a Virtual IP Address Node Application

6.1 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.

6.2 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.

6.3 Installing Enterprise Security Manager

To install Enterprise Security Manager (ESM), install Oracle Client and choose the Administrator installation type.

6.4 Upgrading to Oracle Clusterware 10.2

When upgrading from 10.1.*x* to 10.2, if the host name directory under `/etc/oracle/scls_scr` includes the domain name, then you will see the following error message when running `rootupgrade.sh` and the Oracle Clusterware stack will 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 directory `/etc/oracle/scls_scr/`*hostname.domain_name* to `/etc/oracle/scls_scr/`*hostname* and rerun `rootupgrade.sh`.

This issue is tracked with Oracle bug 4472284.

6.5 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`.

6.6 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.

7 Grant Additional Privileges to the Oracle Enterprise Manager Repository User

If you are using Oracle Enterprise Manager Java Console to manage your database, then you must grant the following privileges to the repository user and create the repository:

```
CREATE CLUSTER
CREATE DATABASE LINK
CREATE SEQUENCE
ALTER SESSION
CREATE SYNONYM
CREATE TABLE
CREATE VIEW
```

> **Note:** Oracle Enterprise Manager Java Console is available on the Oracle Database Client installation media.

Complete the following steps to create a repository user and grant privileges:

1. Start the standalone Java Console.

2. Double-click the database node in the navigator tree and connect to the database as a user with the `NORMAL` role.

3. Select **Create** from the Object menu.

    The Create window appears.

4. Expand the database node in the Create window and select **User**. Then click the **Create** button.

    The Create User property sheet appears.

5. On the General page, enter the name of the user and the password, and select `OEM_REPOSITORY` as the default tablespace and `TEMP` as the temporary tablespace.

6. On the Role page, grant the `CONNECT` and `SELECT_CATALOG_ROLE` roles to the repository user.

7. On the System Privileges page grant the `CREATE TRIGGER`, `CREATE PROCEDURE`, `EXECUTE ANY PROCEDURE`, `CREATE TYPE`, `EXECUTE ANY TYPE`, `SELECT ANY TABLE`, `CREATE CLUSTER`, `CREATE DATABASE LINK`, `CREATE SEQUENCE`, `ALTER SESSION`, `CREATE SYNONYM`, `CREATE TABLE`, `CREATE VIEW` privileges to the repository user.

8. On the Quota page, specify unlimited for `OEM_REPOSITORY` and `TEMP`.

9. On Create User property sheet, click the **Create** button.

8 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
- European Language Locale
- Oracle Clusterware Files Issues
- Cluster Verification Utility Issues
- VLM Window Size on Red Hat Enterprise Linux 4.0
- Oracle C++ Call Interface Compiler Support
- Oracle XML Developer's Kit Compiler Support

8.1 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.

8.2 European Language Locale

If your system uses a European language, then you must not use the UTF-8 locale. For example, if your system uses German, set the `LANG` and `LC_ALL` environment variables to `de_DE` instead of `de_DE.UTF-8`.

This issue is tracked with Oracle bug 3957096.

8.3 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
```

8.4 Cluster Verification Utility Issues

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.

- 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
  ```

8.5 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
```

8.6 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.

> **Note:** For updates on GCC support, refer to the OCCI home page on OTN:
>
> http://www.oracle.com/technology/tech/oci/occi/index.html

8.7 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).

9 Documentation Corrections and Additions

This section lists corrections to *Oracle Database Installation Guide for Linux x86*.

- In the "Configuring Kernel Parameters" section of Chapter 2, the names of the last four parameters should be:

  ```
  net.core.rmem_default
  net.core.rmem_max
  net.core.wmem_default
  net.core.wmem_max
  ```

- In Appendix D, "Managing Oracle Database Port Numbers," the "Oracle XDB" references in the sections "Port Numbers and Protocols of Oracle Components" and "Changing the Oracle XDB Ports" are incorrect. The correct name is "Oracle XML DB," not "Oracle XDB."

- The database installation directory on the installation media in Chapter 3 and Appendix A of *Oracle Database Installation Guide* is referred to as `db`. This directory should be referred to as `database`.

10 Documentation Accessibility

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