

Oracle® Database

Release Notes

10g Release 2 (10.2) for Linux Itanium

B15673-04

December 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.

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 10g release 2 (10.2) is available on *OracleMetalink* at:

<http://metalink.oracle.com>

Pro*Cobol Certification

Pro*Cobol with Micro Focus Server Express 4.0 SP2 is supported on Red Hat Linux 4.0. However, to work with Pro*Cobol, install the 5037378 patch.

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.

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 Documentation Corrections and Additions

This section lists the following corrections to installation guides for Linux Itanium.

In the "Software Requirements" section of quick installation guides and Chapter 2 of installation guides, the following should be the list of the supported operating systems:

- Red Hat Enterprise Linux AS/ES 3.0 (Update 4 or later)
- Red Hat Linux 4.0 (Update 1 or later)
- SUSE Linux Enterprise Server 9.0 with SP2 or later

SUSE Linux Enterprise Server 8.0 is not supported with this release.

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](#)
- [Adding a Node to a Shared Oracle Clusterware Configuration](#)

- [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 10g 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 *OracleMetaLink* note 284535.1.

This issue is tracked with Oracle bug 3006854.

5.2 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.

5.3 Installing Enterprise Security Manager

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

5.4 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.

5.5 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.

5.6 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.

5.7 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 10g and associated products:

- [Building Pro*C Applications if PostgreSQL is Installed](#)
- [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](#)
- [cvuqdisk-1.0.1-1.rpm \(i386 rpm\) Does not Work as Expected](#)
- [JDK Restriction](#)
- [ONS Needs to be Started from Database Oracle Home Before Apache Standalone Installation](#)

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 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`.

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/rawn` 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/rawn` is an individual device file:

```
chown oracle:oinstall /dev/raw/rawn
```

```
chmod 644 /dev/raw/rawmmar
```

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/rawmmar
```

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.
- 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 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
```

6.6 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>

6.7 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).

6.8 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.

6.9 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.

6.10 cvuqdisk-1.0.1-1.rpm (i386 rpm) Does not Work as Expected

`cvuqdisk-1.0.1-1.rpm` (i386 rpm) does not work as expected in Linux Itanium. You need to install `cvuqdisk-1.0.1-1.ia64.rpm` for cluster verification utility to verify the sharedness check of raw disks for 10.2 Linux Itanium.

6.11 JDK Restriction

When you use Oracle Universal Installer or Database Configuration Assistant in Japanese environment, you must set the `LANG` environment variable to `C`.

This issue is tracked with Oracle bug 4764895.

6.12 ONS Needs to be Started from Database Oracle Home Before Apache Standalone Installation

If you plan to install Oracle HTML DB with Oracle HTTP Server from companion CD on the system where Oracle Database 10g has already been installed, you need to start ONS before you start the companion CD installation. This is required to prevent the companion CD installation from allocating the ports already allocated to ONS Server in the Database installation.

This issue is tracked with Oracle bug 4701821.

7 Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of

assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at <http://www.oracle.com/accessibility/>.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

Oracle Database Release Notes, 10g Release 2 (10.2) for Linux Itanium
B15673-04

Copyright © 1996, 2006, Oracle. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software—Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.