

Oracle® Database

Release Notes

11g Release 2 (11.2) for Linux

E10838-02

August 2009

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*.

This document 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/>

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 11g Release 2 (11.2) is available on My Oracle Support (formerly Oracle*MetaLink*) at:

<http://metalink.oracle.com>

2 Unsupported Products

A list of unavailable features and products is available in Section 2, "Features Not Available or Restricted in This Release," in *Oracle Database Readme*.

3 Preinstallation Requirements

Refer to the installation guides for the preinstallation requirements. The following are the additional requirements:

- [Operating System Requirements](#)
- [Swap Space Error Message](#)

- [ODBC Support for SUSE Linux Enterprise Server 11 on Linux x86](#)
- [ODBC Support for SUSE Linux Enterprise Server 11 on Linux x86-64](#)

3.1 Operating System Requirements

Red Hat Enterprise Linux 5 and Oracle Enterprise Linux 5 on Linux x86 and Linux x86-64 require Update 2.

The documents that shipped with the media have the incorrect operating system requirements. The documents have been updated on OTN.

<http://www.oracle.com/technology/documentation/>

3.2 Swap Space Error Message

If you encounter an Oracle Universal Installer error indicating inadequate swap space size, but your swap space meets the requirements listed in the *Oracle Database Installation Guide*, then you can ignore this error.

This issue is tracked with Oracle bug 7700929.

3.3 ODBC Support for SUSE Linux Enterprise Server 11 on Linux x86

You must install the following 32-bit ODBC RPMs on Linux x86 to use ODBC on SUSE 11:

```
unixODBC-32bit-2.2.12 (32-bit) or later  
unixODBC-devel-32bit-2.2.12 (32-bit) or later
```

3.4 ODBC Support for SUSE Linux Enterprise Server 11 on Linux x86-64

You must install the following 32-bit ODBC RPMs on Linux x86-64 to use ODBC on SUSE 11:

```
unixODBC-2.2.12 or later  
unixODBC-devel-2.2.12 or later  
unixODBC-32bit-2.2.12 (32-bit) or later
```

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](#)
- [Oracle Automatic Storage Management Cluster File System and Oracle Automatic Storage Management Dynamic Volume Manager Support](#)
- [Connection Load Balancing Issue](#)
- [Oracle Real Application Clusters Upgrade Error When Upgrading from Release 10.1.0.5 to 11.2](#)
- [Cluster Verification Utility Issue During Oracle Clusterware Upgrade](#)
- [RPM Errors with Oracle VM](#)
- [C++ XDK Demos and Pro*C++ Static Demos Linking Error](#)

- [Oracle RAC Database Installation Error on SUSE Linux Enterprise Server 11](#)
- [Error When Installing Oracle RAC Database on Oracle Enterprise Linux 5.0 Update 3](#)
- [Oracle Grid Infrastructure for a Standalone Server Installation Error on SUSE Linux Enterprise Server 10](#)
- [Oracle Database Reupgrade Issue on Linux x86-64](#)

4.1 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*) (<http://metalink.oracle.com/>) that links to "Oracle 11gR2 Upgrade Companion" page.

4.2 Oracle Automatic Storage Management Cluster File System and Oracle Automatic Storage Management Dynamic Volume Manager Support

Oracle Automatic Storage Management Cluster File System and Oracle Automatic Storage Management Dynamic Volume Manager are supported only on Oracle Enterprise Linux 5 and Red Hat Enterprise Linux 5 on Linux x86 and Linux x86-64.

Although Oracle Automatic Storage Management Dynamic Volume Manager supports raw disks in Oracle Automatic Storage Management disk groups, Oracle Automatic Storage Management Dynamic Volume Manager device special files created through `raw(8)` are not supported; Oracle Automatic Storage Management Dynamic Volume Manager only supports block device special files.

4.3 Connection Load Balancing Issue

A single Oracle Database Client can request only a specific SCAN listener to connect to a database using SCAN and easy connect method. As a result, load balancing by the DNS round-robin is not available.

Workaround:

Connect to a database using the following configuration, specifying `LOAD_BALANCE=on`, in the `tnsnames.ora` file:

```
ORCL =
  (DESCRIPTION =
    (LOAD_BALANCE=on)
    (ADDRESS = (PROTOCOL = TCP)(HOST = stscan1)(PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = srv.world)
    )
  )
```

This issue is tracked with Oracle bug 8256753.

4.4 Oracle Real Application Clusters Upgrade Error When Upgrading from Release 10.1.0.5 to 11.2

When upgrading from Oracle Database release 10.1.0.5 on Linux x86-64, the following errors may occur in the Database Upgrade Assistant:

ERROR at line 1:

- ORA-00604: error occurred at recursive SQL level 3
- ORA-00060: deadlock detected while waiting for resource

Workaround: Complete the following steps before upgrading to avoid the errors:

1. Before starting the release 11.2 upgrade, purge the dba_recyclebin through SQL*Plus using the following command:

```
SQLPLUS> purge dba_recyclebin;
```

2. Disable the recycle bin using the following command:

```
ALTER SYSTEM set "_recyclebin"=FALSE;
```

3. Perform the upgrade.

4. Enable recycle bin after the release 11.2 upgrade using the following command:

```
ALTER SESSION SET recyclebin=ON;
```

This issue is tracked with Oracle bug 8475185.

4.5 Cluster Verification Utility Issue During Oracle Clusterware Upgrade

While upgrading Oracle Clusterware of a previous release to Oracle Grid Infrastructure 11g Release 2 (11.2.0.1.0), Cluster Verification Utility (CVU) may fail if the permission and ownership on the raw devices configured with Oracle Cluster Registry and Voting Disks are incorrect.

Workaround:

Check CVU's output in the installation log file and fix the permissions and ownership on the raw devices. Then, click Retry to run CVU again.

This issue is tracked with Oracle bug 8737732.

4.6 RPM Errors with Oracle VM

When Oracle Database is installed on a Linux environment configured with Oracle VM, Oracle Universal Installer may show package check failures, and the RPM command returns the following error:

```
# rpm
Floating point exception
```

Workaround:

Upgrade the RPM package to 4.4.2.3 or later.

This issue is tracked with Oracle bug 8626425.

4.7 C++ XDK Demos and Pro*C++ Static Demos Linking Error

The C++ XDK demos and Pro*C++ Static demos fail to link with the `-lstdc++` library giving the following error on Linux x86-64 with SUSE Linux Enterprise Server 10, SUSE Linux Enterprise Server 11, and Red Hat Enterprise Linux 5:

```
/usr/lib64/gcc/x86_64-suse-linux/4.1.0/../../../../
/x86_64-suse-linux/bin/ld: cannot find -lstdc++_nonshared
```

Workaround:

Contact your operating system vendor.

This issue is tracked with Oracle bug 8396301.

4.8 Oracle RAC Database Installation Error on SUSE Linux Enterprise Server 11

The following error occurs while performing an Oracle RAC database installation on SUSE Linux Enterprise Server 11:

Error securing Database Control, Database Control has not been brought up on nodes *remote_node(s)*. Please execute the following command(s) on nodes: *remote_node(s)*.

- 1) Set the environment variable ORACLE_UNQNAME to Database unique name
- 2) `/u01/app/aime/product/11.2.0/racdb/bin/emctl config emkey -repos -sysman_pwd Password_for_SYSMAN_user -host node -sid Database_unique_name`
- 3) `/u01/app/aime/product/11.2.0/racdb/bin/emctl secure dbconsole -sysman_pwd Password_for_SYSMAN_user -host node -sid Database_unique_name`
- 4) `/u01/app/aime/product/11.2.0/racdb/bin/emctl start dbconsole`

To secure Em Key, run `/u01/app/aime/product/11.2.0/racdb/bin/emctl config emkey -remove_from_repos -sysman_pwd Password_for_SYSMAN_user`

Workaround:

Follow the instructions shown in the error message.

This issue is tracked with Oracle bug 6485149.

4.9 Error When Installing Oracle RAC Database on Oracle Enterprise Linux 5.0 Update 3

When installing Oracle RAC database on Oracle Enterprise Linux 5 Update 3, the Perform Prerequisite Checks screen reports Node Connectivity failure.

Workaround:

Check **Ignore All** to ignore this error and proceed with the installation.

This issue is tracked with Oracle bug 8753154.

4.10 Oracle Grid Infrastructure for a Standalone Server Installation Error on SUSE Linux Enterprise Server 10

The root.sh script displays the following error when installing Oracle grid infrastructure for a standalone server on SUSE Linux Enterprise Server 10:

```
/bin/env: Command not found
```

Workaround:

Ignore this error and proceed with the installation.

This issue is tracked with Oracle bug 8732857.

4.11 Oracle Database Reupgrade Issue on Linux x86-64

When you reupgrade Oracle Database release 10.2 to release 11.2, after an initial upgrade to release 11.2 and a subsequent downgrade to release 10.2, the upgrade process hangs at 80% with Database Configuration Assistant. For manual upgrades, the hang may be seen in the spooled log while the c1101000.sql upgrade script is running.

This issue is tracked with Oracle bug 8742500.

5 Other Known Issues

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

- [Insufficient Memory Target Errors](#)

5.1 Insufficient Memory Target Errors

On Linux systems, if the operating system `/dev/shm` mount size is too small for the Oracle system global area (SGA) and program global area (PGA), then you encounter the following error:

```
ORA-00845: MEMORY_TARGET not supported on this system.
```

The cause of this error is an insufficient `/dev/shm` allocation. The total memory size of the SGA and PGA, which sets the initialization parameter `MEMORY_TARGET` or `MEMORY_MAX_TARGET`, cannot be greater than the shared memory file system (`/dev/shm`) on your operating system.

Background

Automatic Memory Management (AMM) has been updated in Oracle ASM 11g Release 2. It manages both the SGA and PGA together. It is managed by the Memory Manager Process (MMAN). In this release, note the following changes to AMM:

- It uses `MEMORY_TARGET` instead of `SGA_TARGET`
- It uses `MEMORY_MAX_TARGET` instead of `SGA_MAX_SIZE` (defaults to `MEMORY_TARGET`)
- It uses memory allocated by `/dev/shm`

If the value of `max_target` is set to a value greater than the allocation for the `/dev/shm` size, then you may encounter the error `ORA-00845: MEMORY_TARGET not supported on this system`.

Note: An ORA-00845 error can also occur if `/dev/shm` is not properly mounted. To rule out this possibility, run the command `df -k` to ensure that `/dev/shm` is mounted. For example:

```
$ df -k
```

```
Filesystem 1K-blocks Used Available Use% Mounted on
shmfs 6291456 832356 5459100 14% /dev/shm
```

Solution

Increase the `/dev/shm` mountpoint size.

For example:

```
# mount -t tmpfs shmfs -o size=7g /dev/shm
```

To make this change persistent across system restarts, add an entry in `/etc/fstab` similar to the following:

```
shmfs /dev/shm tmpfs size=7g 0
```

6 Documentation Corrections and Additions

The updated installation guides on OTN include the information from [Section 3.1, "Operating System Requirements."](#)

<http://www.oracle.com/technology/documentation/>

7 Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. 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.

Deaf/Hard of Hearing Access to Oracle Support Services

To reach Oracle Support Services, use a telecommunications relay service (TRS) to call Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at

<http://www.fcc.gov/cgb/consumerfacts/trs.html>, and a list of phone numbers is available at <http://www.fcc.gov/cgb/dro/trsphonebk.html>.

Oracle Database Release Notes, 11g Release 2 (11.2) for Linux
E10838-02

Copyright © 2009, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. 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, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.