Oracle® Database

Release Notes

11*g* Release 1 (11.1) for Linux

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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*.

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/

For additional information about this release, refer to the readme files located in the <code>\$ORACLE_HOME/relnotes</code> directory.

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 1 (11.1) is available on 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.



4 Installation, Configuration, and Upgrade Issues

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

- Error in Copying Files While Upgrading Oracle Database 10g Release 2 to Oracle Database 11g
- The /etc/oratab File Lists Multiple Automatic Storage Management Instances
- The ORA-12157 Error Message is Displayed When Using Shared Oracle Home on OCFS2
- Installation, Configuration, and Upgrade Issues on Linux x86
- Installation, Configuration, and Upgrade Issues on Linux x86-64

4.1 Error in Copying Files While Upgrading Oracle Database 10*g* Release 2 to Oracle Database 11*g*

When you start upgrading second node from Oracle Database 10g Release 2 to Oracle Database 11g, an error message is displayed while copying files during the upgrade process.

Workaround: Run the upgrade session from the node on which you initially installed Oracle RAC.

This issue is tracked with Oracle bug 6501871.

4.2 The /etc/oratab File Lists Multiple Automatic Storage Management Instances

If you install Oracle Clusterware on shared Oracle home, the /etc/oratab file lists multiple Automatic Storage instances.

When Automatic Storage Management Oracle home is installed in shared file system to create Automatic Storage Management instances from Oracle Universal Installer, multiple Automatic Storage Management instances are listed in the /etc/oratab file.

Workaround: Oracle Universal Installer detects this issue during the prerequisite checks. You can edit the /etc/oratab file in each node and remove the entries that are not part of that node. The alternative is to install the software, run the root.sh script on all nodes and create Automatic Storage Management instance by running Database Configuration Assistant.

The issue is tracked with Oracle bug 5942123.

4.3 The ORA-12157 Error Message is Displayed When Using Shared Oracle Home on OCFS2

When you install Oracle RAC in a shared Oracle home on OCFS2, the ORA-12157 error message is displayed for multiple files.

The health check of Oracle database instances and Automatic Storage Management instances by Oracle Clusterware (CRS) does not work correctly if the Oracle database home is installed on a filesystem that does not support memory mapped files, such as OCFS2 on Linux.

Workaround: Oracle Clusterware (CRS) and Oracle Enterprise Manager agent try to access the \$ORACLE_HOME/dbs/hc_SID. dat file and the Automatic Storage Management instance tries to access the

\$ORACLE_HOME/dbs/ab_SID. dat file by using the mmap function. This means that the \$ORACLE HOME/dbs/hc SID. dat and

\$ORACLE_HOME/dbs/ab_SID. dat files must be moved to a filesystem that supports the mmap functions on all nodes in the cluster. Complete the following procedure to use a location on the local disk drive to store the file:

1. Use commands similar to the following on all nodes in the cluster, to copy the files to a local drive:

```
cp $ORACLE_HOME/dbs/hc_SID.dat /local_dir/hc_SID.dat
cp $ORACLE_HOME/dbs/ab_SID.dat /local_dir/ab_SID.dat
```

2. Use commands similar to the following to remove the file from the cluster filesystem:

```
rm $ORACLE_HOME/dbs/hc_SID.dat
rm $ORACLE_HOME/dbs/ab_SID.dat
```

3. Use commands similar to the following to create a symbolic link to the file in the \$ORACLE HOME/dbs directory:

```
ln -s /local_dir/hc_SID.dat $ORACLE_HOME/dbs/hc_SID.dat
ln -s /local_dir/ab_SID.dat $ORACLE_HOME/dbs/ab_SID.dat
```

See Also: Frequently asked question number 49 from the http://oss.oracle.com/projects/ocfs2/dist/documentation/ocfs2_faq.html#RAC link for more information about OCFS2

This issue is tracked with Oracle bug 4961541.

4.4 Installation, Configuration, and Upgrade Issues on Linux x86

The following are the Linux x86-specific issues that affect Oracle Database installation, configuration, and upgrade:

- Oracle Database Configuration Assistant Does not Respond After Specifying Backup and Recovery Options
- Oracle Universal Installer Shows Oracle Database Configuration Assistant Status as Failed

Note: The issues mentioned in this section are observed only on Linux x86.

4.4.1 Oracle Database Configuration Assistant Does not Respond After Specifying Backup and Recovery Options

If you are creating a database without using Automatic Storage Management and specify Automatic Storage Management to store backup and recovery data, then Oracle Database Configuration Assistant stops responding.

Workaround: Select **Do not enable Automated Backups** while creating the database and finish the installation process. After the installation process has

finished, run Oracle Database Configuration Assistant and configure Backup and Recovery storage.

This issue is tracked with Oracle bug 6417211.

4.4.2 Oracle Universal Installer Shows Oracle Database Configuration Assistant Status as Failed

Oracle Universal Installer intermittently displays Oracle Database Configuration Assistant status as failed even after it finishes the installation process successfully.

This behavior is seen intermittently if you leave Oracle Database installation running for a long time without acknowledging the confirmation dialog shown by Oracle Database Configuration Assistant at the end of the database creation. The configured Oracle database and Oracle Database Control function normally. This error can be safely ignored.

This issues is tracked with Oracle bug 6238219.

4.5 Installation, Configuration, and Upgrade Issues on Linux x86-64

The following are the Linux x86-64 specific issues that affect Oracle Database installation, configuration, and upgrade:

- Error When Installing Oracle Database 11g on Asianux Server 3
- Oracle Universal Installer May Alert for Incorrect Value
- The Oracle Home Directory Structure is Changed for Instant Client

Note: The issues mentioned in this section are not observed on Linux x86.

4.5.1 Error When Installing Oracle Database 11g on Asianux Server 3

When installing Oracle Database 11*g* on Asianux Server 3, the Product-Specific Prerequisite Checks screen reports that the operating system requirement checks fail.

Workaround: Change the contents of /etc/asianux-release from Asianux Server 3 (Quartet) to Asianux release 3 (Quartet).

This issue is tracked with Oracle bug 6457598.

4.5.2 Oracle Universal Installer May Alert for Incorrect Value

The Product-Specific Prerequisite Checks screen may alter about incorrect value for the rmem_default variable.

Workaround: If you have set the value for the variable according to the installation guide, you can ignore this alert by selecting the check box available against it and continue with the installation process.

This issue is tracked with Oracle bug 6445078.

4.5.3 The Oracle Home Directory Structure is Changed for Instant Client

In the earlier releases, the \$ORACLE_HOME/lib directory contained all the libraries. However, when installing Oracle Database Instant Client, the 32-Bit

libraries are missing from the installation. To resolve this issue, \$ORACLE_HOME/lib32 directory is added to the directory structure to store the 32-Bit libraries.

This issue is tracked with Oracle bug 6338225.

5 Other Known Issues

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

- Collecting CPU Usage Metric Displays an Error
- Error While Loading Shared Library When SELinux is Enforcing on Oracle Enterprise Linux 5.0 and Red Hat Enterprise Linux 5.0
- Host Administration Tab on Oracle Enterprise Manager Database Control Fails on Oracle Enterprise Linux 5
- Linking Applications With Oracle Client Libraries
- Pro*C Does not Support all C99 Syntax
- The rstora File Linking Fails
- The Uploading Patches Feature Crashes in Mozilla Firefox 1.5 on Linux
- Using Block Devices
- Using Raw Logical Volumes
- Known Issues on Linux x86-64

5.1 Collecting CPU Usage Metric Displays an Error

If Oracle Enterprise Manager Database Control is running on Oracle Enterprise Linux 5 or Red Hat Enterprise Linux 5, Metric Collection Error is displayed for the CPU Usage metric. Due to this issue, the CPU usage information for the host is not displayed. Therefore, you cannot set alert threshold on the host CPU usage.

This issue is tracked with Oracle bug 6316367.

5.2 Error While Loading Shared Library When SELinux is Enforcing on Oracle Enterprise Linux 5.0 and Red Hat Enterprise Linux 5.0

SQL*Plus and Oracle Call Interface (OCI) program calls fail with SELinux in the Enforcing mode on Oracle Enterprise Linux 5.0 and Red Hat Enterprise Linux 5.0. Refer to the Oracle MetaLink note 454196.1 for more details about the issue.

Workaround: Shift SELinux to Permissive mode on the system.

This issue is tracked with Oracle bugs 6140224 and 6342166.

5.3 Host Administration Tab on Oracle Enterprise Manager Database Control Fails on Oracle Enterprise Linux 5

When you click the Host Administration tab of the Oracle Enterprise Manager Database Control on Oracle Enterprise Linux 5, the following error is displayed:

This feature is only available on hosts running Red Hat Linux and SUSE Linux

```
Operating Systems.
```

Due to this issue, you cannot administer the host using Oracle Enterprise Manager Database Control on Oracle Enterprise Linux 5.

This issue is tracked with Oracle bug 6316469.

5.4 Linking Applications With Oracle Client Libraries

The use of the client static library is not supported.

5.5 Pro*C Does not Support all C99 Syntax

On Red Hat Enterprise Linux 5 and SUSE Linux Enterprise Server 10, standard C header files may contain symbols, such as __LDBL_REDIR1_DECL, which Pro*C parser fails to recognize.

Workaround: You can use one of the following code in the .pc files so that the header file does not get included during precompilation:

```
#ifndef ORA_PROC
#include <filename.h>
#endif

or
#ifdef ORA_PROC
#define _HEADERFILENAME_H__
#endif
```

This issue is tracked with Oracle bug 6142780.

5.6 The rstora File Linking Fails

When installing Oracle Database 11g, Oracle Universal Installer removes third party library paths from the LD_LIBRARY_PATH variable for security reasons. Due to this, the relinking of the rtsora file fails during installation. The rtsora file can be relinked by updating the LD_LIBRARY_PATH variable with the path where Cobol libraries are available and calling an appropriate make target. You can use the following commands to make the rstora file:

```
$ cd $ORACLE_HOME/precomp/lib
$ make -f ins_precomp.mk rtsora
```

5.7 The Uploading Patches Feature Crashes in Mozilla Firefox 1.5 on Linux

When uploading patches through Oracle Enterprise Manager Database Control using the Mozilla Firefox 1.5 Web browser on Linux, the Web browser window crashes.

Workaround: Start the Mozilla Firefox 1.5 Web browser client from a non-Linux environment or use an alternate Web browser, such as Internet Explorer.

This issue is tracked with Oracle bug 6008421.

5.8 Using Block Devices

Use the following procedure to create block device partitions:

- 1. Use fdisk to create disk partitions on block devices for database files
- 2. On each node, create or modify the permissions file in /etc/udev/permissions.d, to change the permissions of the datafiles from default root ownership. On Asianux 2, Oracle Enterprise Linux 4, and Red Hat Enterprise Linux 4, this file should be called 49-oracle.permissions, so that the kernel loads it before the 50-udev.permissions file. On Asianux Server 3, Oracle Enterprise Linux 5, Red Hat Enterprise Linux 5, and SUSE Linux Enterprise Server 10, this file should be called 51-oracle.permissions, so that the kernel loads it after the 50-udev.permissions file.

For each partition, use the following syntax in the xx-oracle.permissions to set access permissions:

devicepartition:oracle_db_install_owner:OSDBA:0660

5.9 Using Raw Logical Volumes

You can also use raw logical volumes as shared storage media for Oracle Database files. After you have created the required partitions, you must bind the partitions to raw devices on every node. However, you must first determine what raw devices are already bound to other devices. Refer to the "5.6.4 Using Raw Logical Volumes on Linux" section of Chapter 5, "Configuring Oracle Real Application Clusters Storage" in *Oracle Clusterware Installation Guide for Linux* for the procedure to be followed to use raw logical volumes as shared storage media for Oracle Database files.

5.10 Known Issues on Linux x86-64

The following are the Linux x86-64 specific known issues:

- Junk Characters Displayed in the Locale Builder Screen
- Reactivate the OC4JADMIN User for Oracle Ultra Search
- Syntax Error in the demo_rdbms32.mk File

Note: The issues mentioned in this section are not observed on Linux x86.

5.10.1 Junk Characters Displayed in the Locale Builder Screen

If you use ZH_TW, ZH_CN, or KO_KR locales, the locale builder screen may display multibyte words as square boxes. This is a known JDK font issue for the east Asian languages.

This issue is tracked with Oracle bug 6446186.

5.10.2 Reactivate the OC4JADMIN User for Oracle Ultra Search

The OC4JADMIN user is deactivated during the Oracle Database 11g installation process. After the installation is complete, you must modify the $\protect\pr$

```
<user deactivated="true">
<name>oc4jadmin</name>
<display-name>OC4J Administrator</display-name>
<description>OC4J Administrator</description>
```

with:

```
<user>
<name>oc4jadmin</name>
<display-name>OC4J Administrator</display-name>
<description>OC4J Administrator</description>
```

Use the following commands to restart the Oracle Ultra Search middle tier in the Oracle Database:

```
$ $ORACLE_HOME/bin/searchctl stop
$ $ORACLE_HOME/bin/searchctl start
```

5.10.3 Syntax Error in the demo_rdbms32.mk File

When compiling 32-bit demonstrations using the \$ORACLE_HOME/rdbms/demo/demo_rdbms32.mk file, the make utility displays the following error message:

demo_rdbms32.mk:302: *** missing separator (did you mean TAB instead of 8
spaces?).
Stop.

Workaround: Complete the following procedure to resolve this issue:

- 1. Open the demo_rdbms32.mk file in a text editor, such as vi editor.
- **2.** Replace 8 spaces in the beginning of lines 302 and 305 with a Tab space.

This issue is tracked with Oracle bug 6432737.

6 Documentation Corrections and Additions

This section contains the corrections and additions to the content available in the documentation set available with this release.

- The following products are required if you want to use PRO*COBOL. These products are missing in the list available in the Oracle Database Client installation and quick installation guides:
 - Acucorp ACUCOBOL-GT 6.2
 - Micro Focus Server Express 4.0 SP2
- The following kernel parameters should be added to the lists available in the Configuring Kernel Parameters section in the Oracle Database installation and quick installation guides:
 - The table listing the recommended values for the kernel parameters in the section should contain the following rows:

Parameter	Value	File
tcp_wmem_default	262144	/proc/sys/net/ipv4/tcp_wmem_default
tcp_wmem_max	262144	/proc/sys/net/ipv4/tcp_wmem_max

Parameter	Value	File
tcp_rmem_default	262144	/proc/sys/net/ipv4/tcp_rmem_default
tcp_rmem_max	4194304	/proc/sys/net/ipv4/tcp_rmem_max

- The table listing the commands to display the values of the kernel parameters in the section should contain the following rows:

Parameter	Command
tcp_wmem_default	# /sbin/sysctl -a grep tcp_wmem_default
tcp_wmem_max	# /sbin/sysctl -a grep tcp_wmem_max
tcp_rmem_default	# /sbin/sysctl -a grep tcp_rmem_default
tcp_rmem_max	# /sbin/sysctl -a grep tcp_rmem_max

The list of parameters and their values in the /etc/sysctl.conf file should also contain the following entries:

```
net.ipv4.tcp_wmem_default = 262144
net.ipv4.tcp_wmem_max = 262144
net.ipv4.tcp_rmem_default = 262144
net.ipv4.tcp_rmem_max = 4194304
```

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