Oracle® Database

Release Notes

10*g* Release 2 (10.2) for AIX 5L Based Systems (64-Bit)

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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.

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 $ORACLE_HOME/relnotes directory.

This document contains the following topics:

- Certification Information
- Unsupported Products
- Preinstallation Requirements
- Documentation Corrections and Additions
- Software Contents on Installation Media
- 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

> **Note:**   The latest AIX 5L PTF and support information for this release is available in Oracle*MetaLink* document 282036.1.

JDK 5 Certification

Starting Oracle 10g release 2 (10.2.0.2), JDK 5 is supported for JDBC applications.

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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.

- JDBC 1.2 driver

  JDBC 1.2 driver is not supported on AIX 5.3

- Radius with the CHAP protocol

- Network Attached Storage (NAS) Devices

- Oracle ODBC Driver

3 Preinstallation Requirements

Refer to the installation guides for the preinstallation requirements.

4 Documentation Corrections and Additions

None

5 Software Contents on Installation Media

The following products and documentation are located on the first DVD:

- Oracle Database 10*g* release 2 (10.2) software and documentation

- Oracle Database Companion Products 10*g* release 2 (10.2) software and documentation

- Oracle Database 10*g* release 2 (10.2) Documentation Library

The following products and documentation are located on the second DVD:

- Oracle Clusterware 10*g* release 2 (10.2) software and documentation

- Oracle Database Client 10*g* release 2 (10.2) software and documentation

- Oracle Gateway 10*g* release 2 (10.2) software and documentation

- Oracle Database 10*g* release 2 (10.2) Documentation Library

6 Installation, Configuration, and Upgrade Issues

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

- Operating System Kernel Required for Oracle RAC

- Oracle RAC Support

- Upgrading of Oracle9i to Oracle Database 10g Release 2 on Raw Devices

- Installing Enterprise Security Manager

- Upgrading Oracle Cluster Ready Services (CRS) from Release 10.1.0.2
- Installing Standard Edition on Automated Storage Management (ASM)
- extjob Executable Required Directory Permissions
- Modifying a Virtual IP Address Node Application

6.1 Operating System Kernel Required for Oracle RAC

Oracle RAC on AIX 5.3 requires a 64-bit kernel. Refer to Oracle*MetaLink* Note 169426.1 for instructions for switching between the 32-bit and 64-bit AIX kernels.

6.2 Oracle RAC Support

The list of supported installation options and supported storage types for Oracle Clusterware, Oracle RAC, and vendor clusterware are described in this section. Oracle plans to support additional Oracle Clusterware and Oracle RAC configurations in the future. Please check for updates to this document for the latest list of supported installation scenarios on the OTN Web site at:

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

Supported Oracle RAC Configurations at the Time of This Publication

Oracle supports the software and storage configurations shown in the following table:

Oracle 10g (10.2) Software			Supported Configurations					
Product	Existing Cluster-ware	Home Storage	File Storage[1]	New Install	Upgrade from release 10.1	Upgrade from Oracle9i	Add Node	Delete Node
Oracle Cluster-ware	None	Local (not shared) CRS home	GPFS	Yes	Yes	N/A	Yes	Yes
			Raw	Yes	Yes	N/A	Yes	Yes
		Shared CRS home on GPFS	GPFS	Yes	Yes	N/A	Yes	Yes
	New Raw	Shared CRS home on GPFS	Raw	Yes	No	N/A	No	No
Oracle RAC	Oracle Cluster-ware	Local (not shared) Oracle home	ASM	Yes	No	N/A	Yes	No
			GPFS	Yes	Yes	N/A	No	No
			Raw	Yes	Yes	N/A	Yes	No
		Shared Oracle home on GPFS	ASM	Yes	Yes	N/A	No	Yes
			GPFS	Yes	Yes	N/A	No	No

Oracle 10*g* (10.2) Software			Supported Configurations					
Product	Existing Cluster-ware	Home Storage	File Storage[1]	New Install	Upgrade from release 10.1	Upgrade from Oracle9*i*	Add Node	Delete Node
Oracle RAC	Oracle Cluster-ware and HACMP	Local (not shared) Oracle home	ASM	Yes	No	N/A	Yes	Yes
			GPFS	Yes	Yes	Yes	No	Yes
			Raw	Yes	Yes	No	Yes	Yes
		Shared Oracle home on GPFS	ASM	Yes	Yes	N/A	Yes	No
			GPFS	Yes	Yes	No	Yes	Yes

[1] For Oracle Clusterware, the stored files are the OCR and voting disk. For RAC, the stored files are the database files.

> **Note:** Environment variables TMP and TMPDIR should not point to a shared file system. These variables must point to a local file system. Similar behavior exists in Oracle Database 10*g* release 1. This issue is tracked with Oracle bug 4553122.

6.3 Upgrading of Oracle9*i* to Oracle Database 10*g* Release 2 on Raw Devices

Use the following upgrade process if the database files are created on plain raw devices not using Logical Volume Manager (LVM). These steps are needed due to the skip offset differences between Oracle9*i* release 2 and Oracle Database 10*g* release 2. The skip offset for Oracle9*i* release 2 is 4k bytes. Starting with Oracle Database 10*g* release 2, the skip offset is 0 bytes.

1. Back up the database.

2. Back up each of the database file on the plain raw disks to a file using following command:

   ```
   # dd if=db_disk_name of=backup_file_name bs=512  skip=8
   ```

3. Restore the backed up database file to the disk using following commands:

   ```
   # dd if=backup_file_name of=db_disk_name bs=512
   ```

4. Follow the manual upgrade steps documented in Oracle Database Upgrade Guide.

6.4 Installing Enterprise Security Manager

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

6.5 Upgrading Oracle Cluster Ready Services (CRS) from Release 10.1.0.2

This section lists the additional steps required when running the `preupdate` and `rootupgrade` scripts:

- When upgrading Oracle Cluster release 10.1 to 10.2, run the following command as the `root` user after running the `preupdate.sh` script and then complete the Oracle Clusterware release 10.2 installation:

  ```
  /usr/sbin/slibclean
  ```

- When upgrading Oracle Clusterware release 10.1.0.2, activate the volume group before running the `rootupgrade` script. Use the following command to activate the volume group:

  ```
  /usr/sbin/vgchange -a s vg1
  ```

  where *vg1* is the volume group that stores the OCR and voting disks.

6.6 Installing Standard Edition on Automated Storage Management (ASM)

When installing Standard Edition and the starter database on Oracle Automated Storage Management (ASM), the **Email enabled notification** check box on the Select Database Management Option page is disabled.

This issue is tracked with Oracle bug 4553151.

6.7 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`.

6.8 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 srvctl modify nodeapps command 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 Other Known Issues

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

- Performance Issues with Generic Connectivity
- Importing a User Certificate Into Oracle Wallet Using Oracle Wallet Manager
- Removing Metrics for Wait Classes Removes Them Permanently
- Hitachi HDLM for Storage

7.1 Performance Issues with Generic Connectivity

There is a performance issue with Generic Connectivity (hsodbc). On the first query of a new connection, there could be significant delay up to several minutes. All subsequent SQL issued through the same dblink session will proceed without delay.

Check Oracle bug 4549924 for patch availability.

7.2 Cluster Verification Utility

Third Party Clusterware

If your deployment environment does not use HACMP, ignore the HACMP version and patches errors reported by Cluster Verification Utility (CVU). On AIX 5L version 5.2, the expected patch for HACMP v5.2 is IY60759. On AIX 5L version 5.3, the expected patches for HACMP v5.2 are IY60759, IY61034, IY61770, and IY62191.

If your deployment environment does not use GPFS, ignore the GPFS version and patches errors reported by Cluster Verification Utility (CVU). On AIX 5L version 5.2 and version 5.3, the expected patches for GPFS 2.3.0.3 are IY63969, IY69911, and IY70276.

Check Kernel Parameter Settings

CVU does not check kernel parameter settings.

This issue is tracked with Oracle bug 4565046.

Missing Patch Error Message

When CVU finds a missing patch, it reports a `xxxx patch is unknown` error. This should be read as `xxxx patch is missing`.

This issue is tracked with Oracle bug 4566437.

Verify GPFS is Installed

Use the following commands to check for GPFS:

```
cluvfy stage -pre cfs -n node_list -s storageID_list  [-verbose]
cluvfy stage -post cfs -n node_list  -f file_system   [-verbose]
```

This issue is tracked with Oracle bug 456039.

7.3 Importing a User Certificate Into Oracle Wallet Using Oracle Wallet Manager

Oracle Wallet Manager will fail to recognize the user certificate as valid if you capture the user certificate contents from the Oracle Certificate Authority site and save this as a flat file. This is because when saving as a flat file, all the lines of the user certificate are run together with no line breaks.

Workaround: Edit the user certificate. Insert a new line after `-----BEGIN CERTIFICATE-----` and a new line before `-----END CERTIFICATE-----`.

7.4 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.

7.5 Hitachi HDLM for Storage

If you use Hitachi HDLM (dmlf devices) for storage, then automatic storage instances do not automatically identify the physical disk. Instead, the instances identify only the logical volume manager (LVM). This is because teh physical disks can only be opened by programs running as root.

Physical disks have path names similar to the following:

- `/dev/rdlmfdrv8`

- `/dev/rdlmfdrv9`

8 Documentation Accessibility

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http://www.oracle.com/accessibility/.

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