Oracle® Database

Release Notes

12*c* Release 1 (12.1) for Linux

E51263-09

May 2015

This document contains 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. You can check for updates to this document and view other Oracle documentation at

http://docs.oracle.com/en/database/database.html

This document contains the following topics:

1 Certification Information

The latest certification information for Oracle Database 12*c* is available on My Oracle Support at

https://support.oracle.com

Oracle Linux 7 and Red Hat Enterprise Linux 7 Support Information on Linux x86-64

Starting with Oracle Database 12*c* Release 1 (12.1.0.2), Oracle Linux 7 and Red Hat Enterprise Linux 7 are supported on Linux x86-64 systems.

2 Latest Upgrade Information

For late-breaking updates and best practices about preupgrade, postupgrade, compatibility, and interoperability discussions, refer to Note 1462240.1 on My Oracle Support that links to the "Upgrade Companion" page at

https://support.oracle.com

3 Unsupported Products

A list of unavailable features and products is available in section, "Features Not Available or Restricted in Oracle Database 12*c*," in *Oracle Database Readme*.

In addition to the items listed in Section 2, "Features Not Available or Restricted in Oracle Database 12*c*," in *Oracle Database Readme*, the following products or features are not supported:

- Oracle Workload Manager is not supported on IBM: Linux on System z.

Database Smart Flash Cache Support

Database Smart Flash Cache is supported on Oracle Solaris and Oracle Linux only.

Oracle Automatic Storage Management Cluster File System (Oracle ACFS) and Oracle Automatic Storage Management Dynamic Volume Manager (Oracle ADVM) Support

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

For the latest information about supported platforms and releases, see the Note 1369107.1 on My Oracle Support at

`https://support.oracle.com`

Linking Applications with Oracle Client Libraries

You must use the dynamic Oracle client libraries to link the client code on Linux. Do not link the static Oracle client libraries.

ORAchk Audit Tool Support

ORAchk (Oracle RAC Configuration Audit Tool) is not supported on Oracle Linux 7 and Red Hat Enterprise Linux 7.

Oracle ASM Filter Driver Support

Oracle Automatic Storage Management Filter Driver (Oracle ASMFD) is supported on Linux x86-64 only.

4 Content Specific to Oracle Database 12c Release 1 (12.1.0.1)

The following content is specific to release 12.1.0.1:

4.1 Preinstallation Requirements for Release 12.1.0.1

Refer to the installation guides for the preinstallation requirements. Additional preinstallation requirements include the following:

4.1.1 Oracle Configuration Manager Support for SUSE Linux Enterprise Server 11

You must install the following packages to use Oracle Configuration Manager on SUSE 11:

```
glibc-devel-32bit-2.11.1-0.17.4
libgcc43-32bit-4.3.4_20091019-0.7.35
gcc-32bit-4.3-62.198
```

```
glibc-32bit-2.11.1-0.17.4
glibc-profile-32bit-2.11.1-0.17.4
glibc-locale-32bit-2.11.1-0.17.4
gcc43-32bit-4.3.4_20091019-0.7.35
```

4.2 Installation, Configuration, and Upgrade Issues for Release 12.1.0.1

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

- INS-10008 Error During Database Installation

4.2.1 INS-10008 Error During Database Installation

While performing Oracle Grid Infrastructure installation, if the Grid Naming Service (GNS) and Dynamic Host Configuration Protocol (DHCP) options are selected and automatic execution of root script is enabled, the installation may fail with the following error:

```
[INS-10008] Session Initialization failed
```

Workaround:

Remove the directory *GI_HOME* recursively before clicking the Install button on the summary page.

This issue is tracked with Oracle bug 16196582.

4.3 Other Known Issues for Release 12.1.0.1

The following section contains information about issues related to Oracle Database 12*c* and associated products:

- Oracle ACFS and Oracle ADVM May Not Mount After System Restart
- Issues in Creating Oracle ACFS Volume

4.3.1 Oracle ACFS and Oracle ADVM May Not Mount After System Restart

Rarely, Oracle ACFS and Oracle ADVM devices in `/dev/asm` are set to the `root` group ID while the `udev` rules file, `/etc/udev/rules.d/55-usm.rules`, specifies a different group ID. As a result, Oracle ACFS and Oracle ADVM may not mount after system restart.

Workaround:

Edit the `/etc/rc.local` file and add the following entry:

```
/sbin/start_udev
```

Oracle ACFS and Oracle ADVM devices are created with the expected settings according to the `udev` rules file.

This issue is tracked with Oracle bug 13653789.

4.3.2 Issues in Creating Oracle ACFS Volume

Oracle Automatic Storage Management Configuration Assistant cannot be used to create Oracle ACFS volume with stripe column 1.

Workaround:

Use the `asmcmd volcreate` command or the `ALTER DISKGROUP` SQL statement to create the volume. After the volume is created, you can use Oracle Automatic Storage Management Configuration Assistant to create Oracle ACFS file system.

This issue is tracked with Oracle bug 16347687.

5 Content Specific to Oracle Database 12c Release 1 (12.1.0.2)

The following content is specific to release 12.1.0.2:

- Preinstallation Requirements for Release 12.1.0.2
- Installation, Configuration, and Upgrade Issues for Release 12.1.0.2
- Other Known Issues for Release 12.1.0.2

5.1 Preinstallation Requirements for Release 12.1.0.2

Refer to the installation guides for the preinstallation requirements.

5.2 Installation, Configuration, and Upgrade Issues for Release 12.1.0.2

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

- 32-Bit Oracle Database Client Installation Fails on Linux x86

5.2.1 32-Bit Oracle Database Client Installation Fails on Linux x86

The 32-bit Oracle Database Client installation may fail on Oracle Linux 7 and Red Hat Enterprise Linux 7 on Linux x86 systems.

Workaround:

For Oracle Linux 7, install the `glibc-2.17-55.0.4.el7` package.

For Red Hat Enterprise Linux 7, the issue is tracked with Red Hat bugzilla 1150282. Contact Red Hat for a fix.

This issue is tracked with Oracle bug 19028658.

5.3 Other Known Issues for Release 12.1.0.2

The following sections contain information about issues related to Oracle Database 12*c* and associated products:

- Oracle ACFS and Oracle ADVM May Not Mount After System Restart
- Error When Running the acfsdriverstate Command
- Oracle Universal Installer Issue on Oracle Linux 7 and Red Hat Enterprise Linux 7
- Database Smart Flash Cache Error on Oracle Linux 7
- Intel C++ Compiler Error on Oracle Linux 7 and Red Hat Enterprise Linux 7
- Oracle ACFS is Not Supported

5.3.1 Oracle ACFS and Oracle ADVM May Not Mount After System Restart

Rarely, Oracle ACFS and Oracle ADVM devices in `/dev/asm` are set to the `root` group ID while the `udev` rules file, `/etc/udev/rules.d/55-usm.rules`, specifies a different

group ID. As a result, Oracle ACFS and Oracle ADVM may not mount after system restart.

Workaround:

Edit the `/etc/rc.local` file and add the following entry:

```
/sbin/start_udev
```

Oracle ACFS and Oracle ADVM devices are created with the expected settings according to the `udev` rules file.

This issue is tracked with Oracle bug 13653789.

5.3.2 Error When Running the acfsdriverstate Command

When running the `acfsdriverstate` command for Cluster Verification Utility (CVU), Oracle Universal Installer, or the root scripts, you may encounter a `permission denied` error if the current working directory is not accessible to the user.

Workaround:

Change the current working directory to a directory where the user running the command has access, such as the user's home directory or `/tmp`, before running the `acfsdriverstate` command.

This issue is tracked with Oracle bug 18364777.

5.3.3 Oracle Universal Installer Issue on Oracle Linux 7 and Red Hat Enterprise Linux 7

On Oracle Linux 7 (64-bit) and Red Hat Enterprise Linux 7 (64-bit), certain tools such as Oracle Universal Installer, Oracle Database Configuration Assistant, and Oracle Enterprise Manager Configuration Assistant cannot display the non-English multibyte character language messages. For example, languages such as Japanese, Chinese, and Korean are not displayed by these tools on Oracle Linux 7 (64-bit) and Red Hat Enterprise Linux 7 (64-bit).

Workaround:

Run the following commands for the Japanese language:

```
mkdir /usr/share/fonts/japanese/TrueType
cd /usr/share/fonts/japanese/TrueType
ln -s /usr/share/fonts/wqy-zenhei/wqy-zenhei.ttc sazanami-gothic.ttf
```

Run the following commands for the Chinese language:

```
mkdir /usr/share/fonts/chinese/TrueType
cd /usr/share/fonts/chinese/TrueType
ln -s /usr/share/fonts/wqy-zenhei/wqy-zenhei.ttc uming.ttf
```

Run the following commands for the Korean language:

```
mkdir /usr/share/fonts/korean/TrueType
cd /usr/share/fonts/korean/TrueType
ln -s /usr/share/fonts/wqy-zenhei/wqy-zenhei.ttc gulim.ttf
```

Next, start Oracle Universal Installer.

This issue is tracked with Oracle bug 19381563.

5.3.4 Database Smart Flash Cache Error on Oracle Linux 7

When using Database Smart Flash Cache on Oracle Linux 7, you may encounter an `ORA-439` error.

Workaround:

Download and install the patch associated with Oracle bug 19504946 when it is available on the My Oracle Support website.

This issue is tracked with Oracle bug 19504946.

5.3.5 Intel C++ Compiler Error on Oracle Linux 7 and Red Hat Enterprise Linux 7

When compiling C++ code on Oracle Linux 7 and Red Hat Enterprise Linux 7 with Intel C++ Compiler 12, you may encounter the following errors:

```
/usr/include/c++/4.8.2/ext/atomicity.h(49): error: identifier__ATOMIC_ACQ_REL" is
undefined { return __atomic_fetch_add(__mem, __val, __ATOMIC_ACQ_REL); }
/usr/include/c++/4.8.2/ext/atomicity.h(49): error: identifier "__atomic_fetch_add"
is undefined { return __atomic_fetch_add(__mem, __val, __ATOMIC_ACQ_REL); }
```

Workaround:

Upgrade to Intel C++ Compiler 13.0.

This issue is tracked with Oracle bug 19583928.

5.3.6 Oracle ACFS is Not Supported

Oracle Automatic Storage Management Cluster File System (Oracle ACFS) is not supported on Oracle Linux 7 and Red Hat Enterprise Linux 7.

Workaround:

Download and install the patch associated with Oracle bug 18321597 when it is available on the My Oracle Support website.

This issue is tracked with Oracle bug 18321597.

6 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

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