

Oracle® Database

Release Notes

12c Release 1 (12.1) for IBM AIX on POWER Systems (64-Bit)

E52118-06

July 2017

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:

- [Certification Information](#)
- [Latest Upgrade Information](#)
- [Product Support](#)
- [Unsupported Products](#)
- [Content Specific to Oracle Database 12c Release 1 \(12.1.0.1\)](#)
- [Content Specific to Oracle Database 12c Release 1 \(12.1.0.2\)](#)
- [Documentation Accessibility](#)

1 Certification Information

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

<https://support.oracle.com>

AIX 7.2 TL 0 SP 1

Starting with Oracle Database 12c Release 1 (12.1.0.2), AIX 7.2 TL 0 SP 1 is certified on IBM AIX on POWER Systems (64-Bit) 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 Product Support

The list of products and features supported for Oracle Database 12c are as follows:

Database Smart Flash Cache Support

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

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

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

<https://support.oracle.com>

Oracle ASM Filter Driver Support

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

4 Unsupported Products

In addition to the items listed in section 2.2, “Features Not Available or Restricted in This Release of Oracle Database 12.1.0.2,” in *Oracle Database Readme*, the following products and features are not supported:

ASMLIB Support

ASMLIB is not supported.

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

The following content is specific to release 12.1.0.1:

- [Installation, Configuration, and Upgrade Issues for Release 12.1.0.1](#)
- [Other Known Issues for Release 12.1.0.1](#)

5.1 Installation, Configuration, and Upgrade Issues for Release 12.1.0.1

- [Oracle Grid Infrastructure Installation Issue](#)
- [Cluster Verification Utility \(CVU\) Prerequisite Check Issue](#)
- [Automatic SSH Configuration Issue](#)

5.1.1 Oracle Grid Infrastructure Installation Issue

When installing Oracle Grid Infrastructure on an IPv6 enabled host, `root.sh` may fail with the following errors:

```
CLSRSC-180: An error occurred while executing the command
'/Grid/12.1.0/grid/bin/srvctl start nodeapps -n stuzg06-ipv6'
CLSRSC-287: FirstNode configuration failed
```

Workaround:

Run the following command before running the `root.sh` file:

```
sudo autoconf6
```

This issue is tracked with Oracle bug 16523490.

5.1.2 Cluster Verification Utility (CVU) Prerequisite Check Issue

The CVU installer prerequisite check incorrectly flags the following operating system patches, though they are not required.

AIX 6.1

IV45070 - use alternate glink file when -bbitoc is used
IV44766 - new version of glink using 2-instruction TOC accesses

AIX 7.1

IV45070 - use alternate glink file when -bbitoc is used
IV30579 - new version of glink using 2-instruction TOC accesses

Workaround:

Ignore the error.

This issue is tracked with Oracle bug 17814858.

5.1.3 Automatic SSH Configuration Issue

You must install the Bash shell before performing automatic SSH configuration with Oracle Universal Installer.

This issue is tracked with Oracle bug 16044765.

5.2 Other Known Issues for Release 12.1.0.1

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

- [Bad Address Issue on AIX 6.1 TL7 SP5](#)
- [OCLUMON Tool Issue](#)
- [File Permissions Commands Do Not Work in a Snapshot](#)
- [Role Permissions Issue with X Terminal](#)
- [Cluster Health Monitor \(CHM\) Command Issue](#)
- [COBOL Precompiler Issue](#)
- [Issue Related to SQL*Module for Ada Demonstration Programs](#)
- [Highly Available Virtual IP Fails to Start](#)
- [root.sh Fails to Start Oracle Cluster Synchronization Services \(CSS\)](#)
- [Cluster Health Monitor \(CHM\) Command Does Not Display Correct Metrics for Huge Pages](#)
- [Cluster Health Monitor \(CHM\) Command Does Not Display Metrics for Swap Memory](#)

5.2.1 Bad Address Issue on AIX 6.1 TL7 SP5

On AIX 6.1 TL7 SP5 or equivalent TL/SP combinations, the Cluster Health Monitor executable, `osysmond.bin`, fails with the following error when calling the internal API, `perfstat_netinterface`:

```
ERROR: errno=14
ERROR: errno means : Bad address
```

Workaround:

Upgrade your system to AIX 6.1 TL7 SP6 or AIX 7.1 TL1 SP6.

This issue is tracked with Oracle bug 16697958.

5.2.2 OCLUMON Tool Issue

The Cluster Health Monitor command, `oclumon dumpnodeview`, may intermittently fail on some nodes with the following error:

```
CRS-09104: No data available for the given nodes
```

In addition, the daemon log file shows the following:

```
[   CRFM][1029]crfm_connect_to: Wait failed with gipcret: 16 for conaddr
[ GIPCNET][1286] gipcmodNetworkProcessAccept: slosdep : Bad file number (9)
```

Workaround:

Rerun the `oclumon dumpnodeview` command on the failing node. If the command still fails, then restart Oracle Clusterware stack.

This issue is tracked with Oracle bug 16621227.

5.2.3 File Permissions Commands Do Not Work in a Snapshot

If you use the `chmod` or `chown` commands with the `-R` option in a snapshot, these commands do not work.

This issue is fixed in AIX Service Packs released with the last component, -1334. For example:

```
7100-02-03-1334
```

Patches are available for the `chmod` and `chown` commands. See the IBM web pages at

<http://www-01.ibm.com/support/docview.wss?uid=isg1IV31203>

<http://www-01.ibm.com/support/docview.wss?uid=isg1IV31603>

This issue is tracked with Oracle bug 16401138.

5.2.4 Role Permissions Issue with X Terminal

When starting a new X terminal session (or using the associated commands, such as `uxterm` and `aixterm`), the `oracle_devmgt` role necessary for the administration of Oracle Automatic Storage Management Cluster File System and Oracle Automatic Storage Management Dynamic Volume Manager is not properly set.

Workaround:

Start a new X terminal session, and run the following command:

```
$ swrole oracle_devmgt
```

This issue is tracked with Oracle bug 10040892.

5.2.5 Cluster Health Monitor (CHM) Command Issue

The CHM command does not display any of the I/O device metrics:

```
ocolumn dumpnodeview -v
```

Workaround:

None. Use the vendor operating system commands to display the I/O device metrics. This issue is tracked with Oracle bug 16436459.

5.2.6 COBOL Precompiler Issue

When you compile Pro*COBOL applications using the SQL Plan Management options on 32-bit AIX-based systems, with high system load of the SQL commands that are running, the `procob` binary may stop, and fail to generate the COBOL file.

Workaround:

On 32-bit systems, relink the `procob` binary to use a separate memory model by using the option, `-bmaxdata:0xD0000000/dsa` during linking.

This issue is tracked with Oracle bug 16847656.

5.2.7 Issue Related to SQL*Module for Ada Demonstration Programs

If you provide trailing spaces in the passwords while logging into Modada applications, the following error occurs:

```
ORA-1017: Invalid username/password; login denied
```

This issue is tracked with Oracle bug 16996851.

5.2.8 Highly Available Virtual IP Fails to Start

Highly available virtual IP may fail to start when you run `root.sh` or `rootupgrade.sh` using `sudo` command or when you start Oracle Grid Infrastructure using the following command:

```
sudo crsctl start crs
```

Workaround:

Log in as `root` and then run the `root.sh`, `rootupgrade.sh`, or the following command:

```
sudo crsctl start crs
```

This issue is tracked with Oracle bug 16445624.

5.2.9 root.sh Fails to Start Oracle Cluster Synchronization Services (CSS)

The `root.sh` script fails to start `ora.cssd` if the library path environment variable, `LIBPATH`, in the `root's .kshrc` file does not contain the correct `Grid_home/lib` value.

Workaround:

Do not specify `LIBPATH` in the `root's .kshrc` file, or ensure that the correct `Grid_home/lib` value is included in the `LIBPATH`.

This issue is tracked with Oracle bug 16438264.

5.2.10 Cluster Health Monitor (CHM) Command Does Not Display Correct Metrics for Huge Pages

The CHM command does not display correct `hugepagetotal`, `hugepagefree`, and `hugepagesize` metrics:

```
oclumon dumpnodeview -v
```

Workaround:

None. Use the vendor operating system commands to display the Huge Page metrics. This issue is tracked with Oracle bug 16683232.

5.2.11 Cluster Health Monitor (CHM) Command Does Not Display Metrics for Swap Memory

The CHM command does not display `swapfree` and `swaptotal` metrics:

```
oclumon dumpnodeview
```

Or

```
oclumon dumpnodeview -v
```

Workaround:

None. Use the vendor operating system commands to display the Swap metrics. This issue is tracked with Oracle bug 16655032.

6 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](#)

6.1 Preinstallation Requirements for Release 12.1.0.2

Refer to the installation guides for the preinstallation requirements.

6.2 Installation, Configuration, and Upgrade Issues for Release 12.1.0.2

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

- [Automatic SSH Configuration Issue](#)
- [Oracle Database Configuration Assistant Fails to Create a Database](#)
- [Directory Permissions Issue](#)
- [Workload Partition Configuration Issue for Pseudo Terminals](#)

6.2.1 Automatic SSH Configuration Issue

You must install the Bash shell before performing automatic SSH configuration with Oracle Universal Installer.

This issue is tracked with Oracle bug 16044765.

6.2.2 Oracle Database Configuration Assistant Fails to Create a Database

Oracle Database Configuration Assistant fails to create a database from the working copy on Oracle ACFS snapshot if AIX OS level is less than 6100-09-03-1415 or 7100-03-03-1415.

Workaround:

Ensure that AIX OS level is 6100-09-03-1415 or 7100-03-03-1415 to create a database from the working copy Oracle ACFS.

This issue is tracked with Oracle bug 19584188.

6.2.3 Directory Permissions Issue

If you start Oracle Universal Installer for installing Oracle Database release 10.2.0.1, the permission for the logs directory in oraInventory changes causing problems for other OS users installing the software.

drwxrwx--- changes to drwxr-x---

Workaround:

Change the permissions back to drwxrwx--- for the logs directory after Oracle Database release 10.2.0.1 software installation.

This issue is tracked with Oracle bug 19391835.

6.2.4 Workload Partition Configuration Issue for Pseudo Terminals

While installing a single-instance database with Oracle Multitenant on a workload partitioned system, the following error displays when you start Oracle Database Configuration Assistant:

```
Database Configuration Assistance failed to detect options for this Oracle
Installation.
ORA-00443: background process "MMAN" did not start
```

Due to this failure some database Configuration Assistant features will not be available. Do you want to continue?

Workaround:

Set the total pseudo terminals to unlimited using the smitty tool.

This issue is tracked with Oracle bug 19443754.

6.3 Other Known Issues for Release 12.1.0.2

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

- [Role Permissions Issue with X Terminal](#)
- [File Permissions Commands Do Not Work in a Snapshot](#)
- [Cluster Health Monitor \(CHM\) Command Issue](#)
- [OCLUMON Tool Issue](#)
- [Cluster Health Monitor \(CHM\) Command Does Not Display Metrics for Swap Memory](#)
- [Bad Address Issue on AIX 6.1 TL7 SP5](#)

- [COBOL Precompiler Issue](#)
- [Input/Output Error Displayed During Oracle Grid Infrastructure Shutdown If Any Oracle ACFS is Offline](#)
- [INS-32131 Error with SSH](#)
- [Restriction for Oracle ACFS Mounts](#)
- [CPU Utilization Values Inconsistent in the CHM and topas Tools](#)
- [Issue Related to SQL*Module for Ada Demonstration Programs](#)

6.3.1 Role Permissions Issue with X Terminal

When starting a new X terminal session (or using the associated commands, such as `uxterm` and `aixterm`), the `oracle_devmgmt` role necessary for the administration of Oracle Automatic Storage Management Cluster File System and Oracle Automatic Storage Management Dynamic Volume Manager is not properly set.

Workaround:

Start a new X terminal session, and run the following command:

```
$ swrole oracle_devmgmt
```

This issue is tracked with Oracle bug 10040892.

6.3.2 File Permissions Commands Do Not Work in a Snapshot

If you use the `chmod` or `chown` commands with the `-R` option in a snapshot, these commands do not work.

This issue is fixed in AIX Service Packs released with the last component, -1334. For example:

```
7100-02-03-1334
```

Patches are available for the `chmod` and `chown` commands. See the IBM web pages at

<http://www-01.ibm.com/support/docview.wss?uid=isg1IV31203>

<http://www-01.ibm.com/support/docview.wss?uid=isg1IV31603>

This issue is tracked with Oracle bug 16401138.

6.3.3 Cluster Health Monitor (CHM) Command Issue

The CHM command does not display any of the I/O device metrics:

```
oclumon dumpnodeview -v
```

Workaround:

None. Use the vendor operating system commands to display the I/O device metrics.

This issue is tracked with Oracle bug 16436459.

6.3.4 OCLUMON Tool Issue

The Cluster Health Monitor command, `oclumon dumpnodeview`, may intermittently fail on some nodes with the following error:

```
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In addition, the daemon log file shows the following:

```
[ CRFM][1029]crfm_connect_to: Wait failed with gipcret: 16 for conaddr  
[ GIPCNET][1286] gipcmmodNetworkProcessAccept: slosdep : Bad file number (9)
```

Workaround:

Rerun the `oclumon dumpnodeview` command on the failing node. If the command still fails, then restart Oracle Clusterware stack.

This issue is tracked with Oracle bug 16621227.

6.3.5 Cluster Health Monitor (CHM) Command Does Not Display Metrics for Swap Memory

The CHM command does not display `swapfree` and `swaptotal` metrics:

```
oclumon dumpnodeview
```

Or

```
oclumon dumpnodeview -v
```

Workaround:

None. Use the vendor operating system commands to display the Swap metrics.

This issue is tracked with Oracle bug 16655032.

6.3.6 Bad Address Issue on AIX 6.1 TL7 SP5

On AIX 6.1 TL7 SP5 or equivalent TL/SP combinations, the Cluster Health Monitor executable, `osysmond.bin`, fails with the following error when calling the internal API, `perfstat_netinterface`:

```
ERROR: errno=14  
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```

Workaround:

Upgrade your system to AIX 6.1 TL7 SP6 or AIX 7.1 TL1 SP6.

This issue is tracked with Oracle bug 16697958.

6.3.7 COBOL Precompiler Issue

When you compile Pro*COBOL applications using the SQL Plan Management options on 32-bit AIX-based systems, with high system load of the SQL commands that are running, the `procob` binary may stop, and fail to generate the COBOL file.

Workaround:

On 32-bit systems, relink the `procob` binary to use a separate memory model by using the option, `-bmaxdata:0xD0000000/dsa` during linking.

This issue is tracked with Oracle bug 16847656.

6.3.8 Input/Output Error Displayed During Oracle Grid Infrastructure Shutdown If Any Oracle ACFS is Offline

Before shutting down Oracle Grid stack, if any Oracle ACFS is reported offline by the command, `acfsutil info fs`, or is reported stale by the command, `srvctl status filesystem`, then bring it online. If you are not able to bring the file system online, then restart the node. This ensures that no processes are active on an offline Oracle ACFS resulting in the input/output error.

When Cluster Ready Services Oracle Root Agent, `orarootagent`, attempts to clean up the error, it cannot determine which processes are still accessing the file system and so, cannot stop them. As a result, `orarootagent` cannot dismount the file system and clean up the active resources.

The fix is a revised AIX `fuser` utility from IBM that is part of all the Technical Levels of AIX 7.1. For AIX 6.1 users, Oracle recommends that you install the appropriate minimum Service Pack for your TL from this list:

TL4/SP11
TL5/SP7
TL6/SP6
TL7/any
TL8/any
TL9/any

This issue is tracked with Oracle bug 17357831.

6.3.9 INS-32131 Error with SSH

The specified root privilege password fails with INS-32131 error if the maximum number of failed authentication attempts in SSH during a specific time interval is low.

INS-32131: Specified user ('*string*') doesnt have permission to execute configuration script using Sudo option.

Workaround:

Increase the number of failed authentication or login attempts in SSH for a specific time interval.

This issue is tracked with Oracle bug 19596509.

6.3.10 Restriction for Oracle ACFS Mounts

Mounting more than 200 Oracle ACFSs may result in system failure and the following message may appear in the OKS log file:

Persistent log thread creation failed.

Workaround:

Do not attempt to mount more than 100 Oracle ACFSs.

This issue is tracked with Oracle bug 18422045.

6.3.11 CPU Utilization Values Inconsistent in the CHM and topas Tools

The Cluster Health Monitor (CHM) tool shows the CPU usage based on the actual CPU usage x number of CPUs which is different from the common utilities such as the TOPAS tool.

Workaround:

None

This issue is tracked with Oracle bug 14654261.

6.3.12 Issue Related to SQL*Module for Ada Demonstration Programs

If you provide trailing spaces in the passwords while logging into Modada applications, the following error occurs:

ORA-1017: Invalid username/password; login denied

This issue is tracked with Oracle bug 16996851.

7 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

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