

# Oracle® Database Appliance

## Release Notes



Release 19.6 for Linux x86-64  
F29261-02  
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ORACLE®

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# Preface

Oracle Database Appliance is an optimized, prebuilt database system that is easy to deploy, operate, and manage. By integrating hardware and software, Oracle Database Appliance eliminates the complexities of nonintegrated, manually assembled solutions. Oracle Database Appliance reduces the installation and software deployment times from weeks or months to just a few hours while preventing configuration and setup errors that often result in suboptimal, hard-to-manage database environments.

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

## Audience

This guide is intended for anyone who configures, maintains, or uses Oracle Database Appliance:

- System administrators
- Network administrators
- Database administrators
- Application administrators and users

This book does not include information about Oracle Database architecture, tools, management, or application development that is covered in the main body of Oracle Documentation, unless the information provided is specific to Oracle Database Appliance. Users of Oracle Database Appliance software are expected to have the same skills as users of any other Linux-based Oracle Database installations.

## 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.

## Related Documents

For more information about Oracle Database Appliance, go to <http://www.oracle.com/goto/oda/docs> and click the appropriate release. The following documents are published in the Oracle Database Appliance online documentation library:

- *Oracle Database Appliance Release Notes*
- *Oracle Database Appliance Licensing Information User Manual*
- *Oracle Database Appliance Security Guide*
- *Oracle Database Appliance Accessibility Guide*
- *Oracle Database Appliance X8-2 Deployment and User's Guide*
- *Oracle Database Appliance X7-2 Deployment and User's Guide*
- *Oracle Database Appliance X6-2-HA Deployment and User's Guide*
- *Oracle Database Appliance X6-2S/M/L Deployment and User's Guide*
- *Oracle Database Appliance X5-2/X4-2 Deployment and User's Guide*
- Oracle Database Appliance Setup Posters and Booklets (a full-size printed copy ships with Oracle Database Appliance)
- *Oracle Database Appliance Owner's Guide*
- *Oracle Database Appliance Service Manual*
- *Oracle Database Appliance Series Safety and Compliance Guide*

For more information about using Oracle Database, go to <http://docs.oracle.com/en/database/> and select the database release from the menu. See the following documents in the Oracle Database online documentation library:

- *Oracle Database Security Guide*
- *Oracle Database Administrator's Guide*
- *Oracle Database SQL Language Quick Reference*
- *Oracle Database Backup and Recovery User's Guide*
- *Oracle Database Backup and Recovery Reference*
- *Oracle Database Utilities*
- *Oracle Automatic Storage Management Administrator's Guide*

For more information about Oracle Integrated Lights Out Manager 3.2, see [https://docs.oracle.com/cd/E37444\\_01/](https://docs.oracle.com/cd/E37444_01/).

For more details about other Oracle products that are mentioned in Oracle Database Appliance documentation, see the Oracle Documentation home page at <http://docs.oracle.com>.

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action or terms defined in the text.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.
# prompt	The pound (#) prompt indicates a command that is run as the root user.



# 1

## What's New in This Release

Oracle Database Appliance release 19.6 supports Oracle Database 19c functionality on Oracle Database Appliance hardware models.

### New Features

This release supports Oracle Database Appliance models X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, X7-2S, X6-2S, X6-2M, X6-2L, X6-2-HA, and X5-2. You can either create a bare metal deployment on Oracle Database Appliance or patch your existing bare metal deployment to Oracle Database Appliance release 19.6. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.6.

For Oracle Database 19c features, see the Oracle Database Documentation Library at <https://docs.oracle.com/en/database/oracle/oracle-database/index.html>.

The following new features are available in this release:

- **ODACLI Command Enhancements**

The functionality for `odacli modify-database` command now includes options to configure backup options and attach and detach networks. The `odacli update-database` command is deprecated and will be desupported in a future release. Instead, use the command `odacli move-database` to move databases from one Oracle Database home to another.

See the *Oracle Database Appliance Command Line Reference* chapter in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model for more information.

- **Oracle Flex Redundancy Support for Oracle ACFS Disk Groups**

With earlier releases, Oracle Database Appliance supported database creation with Oracle Flex redundancy on Oracle ASM disk groups. With this release, the support for database creation with Oracle Flex redundancy is available with Oracle ACFS disk groups. You can specify the redundancy when you create a database at the time of creating the appliance, or when you create a database in your deployment, using ODACLI commands.

For more information, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Support for Standard Edition High Availability**

Oracle Database Appliance supports Standard Edition High Availability solution with Oracle Grid Infrastructure that provides cluster-based failover for Oracle Database 19c Standard Edition.

With Standard Edition High Availability, when there is an instance or a node failure, the database automatically fails over to the other node, after attempting to restart on the local node. The database is restarted on the surviving node, thereby providing high availability for Oracle Standard Edition databases.

For more information about this feature, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Network Enhancements**

With this release, for High Availability deployments of Oracle Database Appliance, you can specify SCAN (Oracle Single Client Access Name) and VIP (Virtual IP Address) for network connections for your databases. This provides enhanced management of network resources to better control service levels, improve availability, and segment database workloads based on network requirements.

For information about how the SCAN and VIP work to provide high-availability in a cluster, see the *Oracle Real Application Clusters Administration Guide* in the *Oracle Database Documentation Library*.

- **Oracle Linux 7 on Oracle Database Appliance Bare Metal Systems**

Oracle Linux 7.7 is supported with this release of Oracle Database Appliance. You must upgrade the operating system before applying server patches.

For more information about upgrading the operating system prior to applying the server patches, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Deprecation Notice for Oracle Java Development Kit (Oracle JDK), available in the /bin/java directory**

Starting with Oracle Database Appliance Release 19.6, Java is installed in a new location. Java Runtime environment (JRE) is installed in the `/opt/oracle/dcs/java/` directory, and is updated during patching of Oracle Database Appliance. Patching of Oracle Java Development Kit (Oracle JDK), available in the `/bin/java` directory, during the Oracle Database Appliance server patching process is not supported. Oracle Java Development Kit (Oracle JDK), available in the `/bin/java` directory, is deprecated.

- **Oracle Grid Infrastructure and Oracle Database Updates**

The following Oracle Grid Infrastructure and Oracle Database updates (January 2020 Oracle Database Release Update) for bare metal systems are available in this release:

- 19.6.0.0.200114
- 18.9.0.0.200114
- 12.2.0.1.200114
- 12.1.0.2.200114
- 11.2.0.4.200114

### **Oracle Grid Infrastructure Clone, Oracle Database Clone, and ISO Image Patches**

See the chapter *Oracle Database Appliance Release 19.6 Patches* for patch details and links.

Oracle Database Appliance patches are available in My Oracle Support. When selecting a patch, ensure that you select Oracle Database Appliance release 19.6 from the drop down list.

- **Oracle Database Appliance 19.6.0.0.0 Server Patch for ODACLI/DCS stack:**

Use patch 31010832 to update your bare metal deployment to Oracle Database Appliance release 19.6.

- **Oracle Database Appliance 19.6.0.0.0 GI Clone for ODACLI/DCS stack:**

Use patch 30403673 to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure components

for deployment on an Oracle Database Appliance in the "shipped from factory" state, or an Oracle Database Appliance that has been re-imaged using the operating system ISO Image. This patch is for all Oracle Database Appliance Hardware Models (bare metal).

- **Oracle Database Appliance 19.6.0.0.0 RDBMS Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 19.6.0.0.200114 Software Clone file to create 19.6.0.0.200114 Oracle Database homes. Patch 30403662 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- **Oracle Database Appliance 18.9.0.0.0 RDBMS Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 18.9.0.0.200114 Software Clone file to create 18.9.0.0.200114 Oracle Database homes. Patch 27604558 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- **Oracle Database Appliance 12.2.0.1 RDBMS Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 12.2.0.1.200114 Software Clone file to create 12.2.0.1.200114 database homes. Patch 27119402 provides the database clone for this update.
- **Oracle Database Appliance 12.1.0.2 RDBMS Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 12.1.0.2.200114 Software Clone file to create 12.1.0.2.200114 database homes. Patch 23494992 provides the database clone for this update.
- **Oracle Database Appliance 11.2.0.4 RDBMS Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 11.2.0.4.200114 Software Clone file to create 11.2.0.4.200114 database homes. Patch 23494997 provides this update.
- **Oracle Database Appliance 19.6.0.0.0 ISO Image (Bare Metal):** Use patch 30403643 to perform a bare metal restore (re-image) of the operating system. Bare metal is a non-virtualized Oracle Database Appliance configuration. Use only when you must re-image the operating system.

### Related Topics

- Oracle Database Appliance Checklists
- About Standard Edition High Availability for Oracle Database Appliance
- Managing Storage on Oracle Database Appliance X8-2
- Managing Storage on Oracle Database Appliance X7-2
- Managing Storage on Oracle Database Appliance X6-2-HA
- Patching Oracle Database Appliance Bare Metal Systems
- Managing Networks
- Using Oracle Autonomous Health Framework for Running Diagnostics

# 2

## Component Versions for Oracle Database Appliance

Review the component versions available for Oracle Database Appliance for supported hardware models for this release.

- [Component Versions for Oracle Database Appliance X8-2 Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X8-2S, X8-2M, and X8-2-HA.
- [Component Versions for Oracle Database Appliance X7-2 Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X7-2S, X7-2M, and X7-2-HA.
- [Component Versions for X6-2S, X6-2M, and X6-2L Models](#)  
The matrix display the component versions available for Oracle Database Appliance for X6-2S, X6-2M, and X6-2L.
- [Component Versions for Oracle Database Appliance X6-2-HA Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X6-2-HA.
- [Component Versions for X5-2 Models](#)  
The matrix display the component versions available for Oracle Database Appliance X5-2 hardware models.

## Component Versions for Oracle Database Appliance X8-2 Models

The matrix displays the component versions available for Oracle Database Appliance for X8-2S, X8-2M, and X8-2-HA.

**Table 2-1 Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.6**

Component Name	X8-2-HA	X8-2S and X8-2M
Controller	13.00.00.00	Not applicable
Expander	0306	Not applicable
SSD	A959	Not applicable
NVMe (firmware version)	Not applicable	VDV1RL02
OS Disk (SSD firmware version)	0121	0121
ILOM (Oracle Integrated Lights Out Manager)	4.0.4.51.r133528	4.0.4.51.r133528
BIOS	52021000	52021000

**Table 2-1 (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.6**

Component Name	X8-2-HA	X8-2S and X8-2M
IPMI (Intelligent Platform Management Interface)	1.8.15.0	1.8.15.0
HMP (Oracle Hardware Management Pack)	2.4.5.0.1	2.4.5.0.1
Oracle Linux	7.7	7.7
Kernel	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm
GI_HOME	19.6.0.0.200114	19.6.0.0.200114
DB_HOME	19.6.0.0.200114	19.6.0.0.200114
Oracle Auto Service Request (Oracle ASR)	20.1.0	20.1.0

## Component Versions for Oracle Database Appliance X7-2 Models

The matrix displays the component versions available for Oracle Database Appliance for X7-2S, X7-2M, and X7-2-HA.

**Table 2-2 Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.6**

Component Name	X7-2-HA	X7-2S and X7-2M
Controller	13.00.00.00	Not applicable
Expander	0306	Not applicable
SSD	A170 For the HDD/SSD option: A374/A087	A170
NVMe (firmware version)	Not applicable	QDV1RF30
OS Disk (SSD firmware version)	0121	0121
ILOM (Oracle Integrated Lights Out Manager)	4.0.4.52.r133103	4.0.4.52.r133103
BIOS	41060700	41060700
IPMI (Intelligent Platform Management Interface)	1.8.15.0	1.8.15.0
HMP (Oracle Hardware Management Pack)	2.4.5.0.1	2.4.5.0.1
Oracle Linux	7.7	7.7
Kernel	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm

**Table 2-2 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.6**

Component Name	X7-2-HA	X7-2S and X7-2M
GI_HOME	19.6.0.0.200114	19.6.0.0.200114
DB_HOME	19.6.0.0.200114	19.6.0.0.200114
Oracle Auto Service Request (Oracle ASR)	20.1.0	20.1.0

## Component Versions for X6-2S, X6-2M, and X6-2L Models

The matrix display the component versions available for Oracle Database Appliance for X6-2S, X6-2M, and X6-2L.

**Table 2-3 Component Versions for Oracle Database Appliance X6-2S, X6-2M, and X6-2L in Oracle Database Appliance Release 19.6**

Component Name	Version
Controller	4.650.00-7176
NVMe (firmware version)	KPYAIR3Q
OS Disk	OR3Q
ILOM (Oracle Integrated Lights Out Manager)	X6-2SM: 5.0.0.22.r132877 X6-2L:5.0.0.22.r132877
BIOS	X6-2SM:38310100 X6-2L:39310100
IPMI (Intelligent Platform Management Interface)	1.8.15.0
HMP (Oracle Hardware Management Pack)	2.4.5.0.1
Oracle Linux	7.7
Kernel	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm
GI_HOME	19.6.0.0.200114
DB_HOME	19.6.0.0.200114
Oracle Auto Service Request (Oracle ASR)	19.4.0

## Component Versions for Oracle Database Appliance X6-2-HA Models

The matrix displays the component versions available for Oracle Database Appliance for X6-2-HA.

**Table 2-4 Component Versions for Oracle Database Appliance X6-2-HA in Oracle Database Appliance Release 19.6**

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	13.00.00.00
Expander	0306
SSD_LOCAL	OR3Q
SSD_SHARED	A29A
ILOM (Oracle Integrated Lights Out Manager)	5.0.0.22.r132877
BIOS	38310100
IPMI (Intelligent Platform Management Interface)	1.8.15.0
HMP (Oracle Hardware Management Pack)	2.4.5.0.1
Oracle Linux	7.7
Kernel	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm
GI_HOME	19.6.0.0.200114
DB_HOME	19.6.0.0.200114
Oracle Auto Service Request (Oracle ASR)	20.1.0

## Component Versions for X5-2 Models

The matrix display the component versions available for Oracle Database Appliance X5-2 hardware models.

**Table 2-5 Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.6**

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	13.00.00.00
Expander	001E
SSD_LOCAL	n/a
SSD_SHARED	A29A
HDD_LOCAL	A7E0
HDD_SHARED	A3A0, PAG1, PD51
ILOM (Oracle Integrated Lights Out Manager)	4.0.4.52-es-r132805
BIOS	30300200
IPMI (Intelligent Platform Management Interface)	1.8.15.0
HMP (Oracle Hardware Management Pack)	2.4.5.0.1
Oracle Linux	7.7
Kernel	kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64.rpm

**Table 2-5 (Cont.) Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.6**

Component Name	Version
GI_HOME	19.6.0.0.200114
DB_HOME	19.6.0.0.200114
Oracle Auto Service Request (Oracle ASR)	20.1.0



# 3

## Oracle Database Appliance 19.6 Patches

Get information about Oracle Database Appliance patches for this release, the download locations, and how to apply the patches.

- [Patching from Previous Releases](#)  
Understand the minimum versions for patching Oracle Database Appliance to later releases.
- [Minimum Software Version Requirements](#)  
Review the minimum software version requirements for installing this release of Oracle Database Appliance.
- [Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches](#)  
Download the patches available for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.
- [Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches](#)  
Download the patches available for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.
- [Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches](#)  
Download the patches available for Oracle Database Appliance X6-2S, X6-2M, and X6-2L in My Oracle Support, get information on the prerequisites, and how to apply the patches.
- [Oracle Database Appliance X6-2-HA Patches](#)  
Download the patches available for Oracle Database Appliance X6-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.
- [Oracle Database Appliance X5-2 Patches](#)  
Download the patches available for Oracle Database Appliance X5-2 in My Oracle Support, get information on the prerequisites, and how to apply the patches.

### Patching from Previous Releases

Understand the minimum versions for patching Oracle Database Appliance to later releases.

Oracle recommends that you patch your Oracle Database Appliance deployment to within the previous four releases. There may be a minimum patch-level requirement for upgrades to certain releases. Use the following table as an indicator for minimum requirements for patching to a release.

**Table 3-1 Minimum Patch Requirements for Oracle Database Appliance Releases**

Oracle Database Appliance Release (To patch to this release...)	Earliest Supported Release To Patch From (Your deployment must be on this release)
19.6.0.0	• 18.8.0.0
18.8.0.0	• 18.7.0.0 • 18.5.0.0 • 18.3.0.0
18.7.0.0	• 18.5.0.0 • 18.3.0.0
18.5.0.0	• 18.3.0.0
18.3.0.0	• 12.2.1.4.0 • 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.4.0	• 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.3.0	• 12.2.1.2.0 • 12.1.2.12
12.2.1.2.0	• 12.1.2.12 <b>Note:</b> 12.2.1.2.0 is not supported on virtualized platform.
12.1.2.12	• 12.1.2.11 • 12.1.2.10 • 12.1.2.9 • 12.1.2.8
12.1.2.11	• 12.1.2.10 • 12.1.2.9 • 12.1.2.8 • 12.1.2.7
12.1.2.10	• 12.1.2.9 • 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.9	• 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.5	12.1.2.0 to 12.1.2.4
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
2.2.0.0.0	2.1.0.3.1 or earlier

Release 12.2.1.1.0 is only supported on X7–2 models and hence is not listed in the table.

## Minimum Software Version Requirements

Review the minimum software version requirements for installing this release of Oracle Database Appliance.

You can provision Oracle Database Appliance release 19.6 on Oracle Database Appliance bare metal systems. You can also patch your bare metal systems to Oracle Database Appliance release 19.6 from Oracle Database Appliance release 18.8.

## Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches

Download the patches available for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.6 from the release list.

**Table 3-2 Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	<a href="#">31010832</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.6.	Patching Oracle Database Appliance
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance release 19.6. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	<a href="#">30403673</a>	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the 19.6 ISO Image.	Provisioning Oracle Database Appliance Software

**Table 3-2 (Cont.) Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack	<a href="#">30403662</a>	Use Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack	<a href="#">27604558</a>	Use Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack	<a href="#">27119402</a>	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack	<a href="#">23494992</a>	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack	<a href="#">23494997</a>	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

# Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches

Download the patches available for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.6 from the release list.

**Table 3-3 Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	<a href="#">31010832</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.6.	Patching Oracle Database Appliance
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance release 19.6. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	<a href="#">30403673</a>	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the 19.6 ISO Image.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack	<a href="#">30403662</a>	Use Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

**Table 3-3 (Cont.) Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack	<a href="#">27604558</a>	Use Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack	<a href="#">27119402</a>	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack	<a href="#">23494992</a>	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack	<a href="#">23494997</a>	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

## Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches

Download the patches available for Oracle Database Appliance X6-2S, X6-2M, and X6-2L in My Oracle Support, get information on the prerequisites, and how to apply the patches.

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.6 from the release list.

**Table 3-4 Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	<a href="#">31010832</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.6.	Patching Oracle Database Appliance
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance release 19.6. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	<a href="#">30403673</a>	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.6 .	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack	<a href="#">30403662</a>	Use Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack	<a href="#">27604558</a>	Use Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

**Table 3-4 (Cont.) Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack	<a href="#">27119402</a>	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack	<a href="#">23494992</a>	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack	<a href="#">23494997</a>	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

## Oracle Database Appliance X6-2-HA Patches

Download the patches available for Oracle Database Appliance X6-2-HA in My Oracle Support, get information on the prerequisites, and how to apply the patches.

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.6 from the release list.

**Table 3-5 Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	<a href="#">31010832</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.6	Patching Oracle Database Appliance



**Table 3-5 (Cont.) Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance GI Clone for ODACLI/DCS stack	<a href="#">30403673</a>	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.6.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack	<a href="#">30403662</a>	Use Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack	<a href="#">27604558</a>	Use Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack	<a href="#">27119402</a>	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack	<a href="#">23494992</a>	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files

**Table 3-5 (Cont.) Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack	<a href="#">23494997</a>	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.6 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.6. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance

## Oracle Database Appliance X5-2 Patches

Download the patches available for Oracle Database Appliance X5-2 in My Oracle Support, get information on the prerequisites, and how to apply the patches.

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.6 from the release list.

**Table 3-6 Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	<a href="#">31010832</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.6.	Patching Oracle Database Appliance

**Table 3-6 (Cont.) Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance GI Clone for ODACLI/DCS stack	<a href="#">30403673</a>	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.6.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack	<a href="#">30403662</a>	Use Oracle Database Appliance RDBMS Clone 19.6.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack	<a href="#">27604558</a>	Use Oracle Database Appliance RDBMS Clone 18.9.0.0.200114 for ODACLI/DCS stack to create 19.6 database homes for the ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack	<a href="#">27119402</a>	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.200114 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.6 ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack	<a href="#">23494992</a>	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.200114 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.6 ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software

**Table 3-6 (Cont.) Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.6**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack	<a href="#">23494997</a>	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.200114 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.6 ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.6. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance

# 4

## Known Issues with Oracle Database Appliance in This Release

The following are known issues deploying, updating, and managing Oracle Database Appliance in this release.

- [Known Issues When Patching Oracle Database Appliance](#)  
Understand the known issues when patching Oracle Database Appliance to this release.
- [Known Issues When Deploying Oracle Database Appliance](#)  
Understand the known issues when provisioning or deploying Oracle Database Appliance.
- [Known Issues When Managing Oracle Database Appliance](#)  
Understand the known issues when managing or administering Oracle Database Appliance.

### Known Issues When Patching Oracle Database Appliance

Understand the known issues when patching Oracle Database Appliance to this release.

- [TFA not running after server or database patching](#)  
Oracle TFA does not run after server or database patching.
- [Error when updating DCS components during patching of Oracle Database Appliance](#)  
When updating DCS components during patching of Oracle Database Appliance, an error is encountered.
- [Error in patching Oracle Database Appliance server](#)  
When patching Oracle Database Appliance, an error is encountered.
- [Error when running the odacli create-prepatchreport command after operating system upgrade](#)  
An error is encountered when running the `odacli create-prepatchreport` command after operating system upgrade.
- [Disk firmware not updated after patching](#)  
After patching Oracle Database Appliance, disk firmware is not updated on some Oracle Database Appliance hardware models.
- [Error after upgrading to Oracle Linux 7](#)  
After upgrading to Oracle Linux 7, an error is encountered.
- [Error when upgrading to Oracle Linux 7](#)  
When upgrading to Oracle Linux 7, an error is encountered.
- [Error in network interface connection after operating system upgrade](#)  
After operating system upgrade, an error in network interface connection is encountered.

- [Error encountered when running upgrade script](#)  
When upgrading Oracle Database Appliance, an error is encountered.
- [Error when upgrading database from 11.2.0.4 to 12.1 or 12.2](#)  
When upgrading databases from 11.2.0.4 to 12.1 or 12.2, an error is encountered.
- [Server status not set to Normal when patching](#)  
When patching Oracle Database Appliance, an error is encountered.
- [Error when patching to 12.1.0.2.190716 Bundle Patch](#)  
When patching Oracle Database release 12.1.0.2 to Oracle Database 12.1.0.2.190716 Bundle Patch, an error is encountered.
- [Error in patching NVMe disks to the latest version](#)  
Patching of NVMe disks to the latest version may not be supported on some Oracle Database Appliance hardware models.
- [Patching of M.2 drives not supported](#)  
Patching of M.2 drives (local disks disks SSDSCKJB48 and SSDSCKJB480G7) is not supported.
- [Versions of some components not updated after cleaning up and reprovisioning Oracle Database Appliance](#)  
Oracle Auto Service Request (ASR), or Oracle TFA Collector, or Oracle ORAchK versions are not updated after cleaning up and reprovisioning Oracle Database Appliance.
- [11.2.0.4 databases fail to start after patching](#)  
After patching Oracle Database Appliance to release 18.3, databases of version 11.2.0.4 fail to start.

## TFA not running after server or database patching

Oracle TFA does not run after server or database patching.

TFA is shut down during patching of Oracle Database and Oracle Database Appliance.

### Hardware Models

All Oracle Database Appliance bare metal deployments

### Workaround

Run `tfactl start` to start TFA manually.

This issue is tracked with Oracle bug 31091006.

## Error when updating DCS components during patching of Oracle Database Appliance

When updating DCS components during patching of Oracle Database Appliance, an error is encountered.

After updating DCS components from 19.5 or 18.8 to 19.6, using the command `odacli update-dcscomponents -v 19.6.0.0.0`, the job to delete SSH keys may display as failed when running the command `odacli list-jobs`.

For example:

```
# odacli list-jobs
.....
8666377b-ef22-4e32-949a-d57ecef95a2b    SSH keys update    April 18,
2020 9:45:58 AM CST    Success
e8f317c2-8958-4939-a825-2cd69a505eb1    SSH key delete     April 18,
2020 9:46:03 AM CST    Success
2ebfc631-235e-4dee-8f3e-3a4d09eedd4e    SSH keys update    April 18,
2020 9:46:30 AM CST    Success
c336aab7-793a-4f1d-b256-84034345dbdf    SSH key delete     April 18,
2020 9:46:39 AM CST    Failure
```

The following error may display when running the command `odacli describe-job -i c336aab7-793a-4f1d-b256-84034345dbd`.

```
DCS-10110:Failed to complete the operation.
```

### Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

### Workaround

If SSH equivalence for the `root` user was not removed after the `odacli update-dcscomponents` job, then remove it manually. The subsequent jobs may not fail even if this SSH equivalence is not deleted.

This issue is tracked with Oracle bug 31194672.

## Error in patching Oracle Database Appliance server

When patching Oracle Database Appliance, an error is encountered.

When patching the appliance, Oracle Grid Infrastructure `clone.pl` failed to run.

### Hardware Models

All Oracle Database Appliance hardware models with custom grid user name which was migrated from OAKCLI to ODACLI stack in Oracle Database Appliance release 18.3

### Workaround

1. Remove the directory `/u01/app/19.0.0.0` on both nodes.
2. Create the directory `/u01/app/grid_user` on both nodes.
3. Set permissions to 755 for the directory created in step 2.
4. Set owner as `grid_user` for the directory created in step 2.
5. Retry patching by running the `odacli update-server` command.  
For example, for grid user `tmpgrid`, the steps are:

```
rm -rf /u01/app/19.0.0.0
mkdir /u01/app/tmpgrid
```

```
chmod 755 /u01/app/tmpgrid
chown tmpgrid /u01/app/tmpgrid
odacli update-server -v 19.6.0.0
```

This issue is tracked with Oracle bug 31111872.

## Error when running the odacli create-prepatchreport command after operating system upgrade

An error is encountered when running the `odacli create-prepatchreport` command after operating system upgrade.

The following error is displayed:

```
# /opt/oracle/dcs/bin/odacli create-prepatchreport -v 19.6.0.0.0 -j -
os
DCS-10001:Internal error encountered: Patch tag is null for component
os.
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

After successfully patching the operating system, run the `odacli create-prepatchreport` command without the `-os` option.

```
# /opt/oracle/dcs/bin/odacli create-prepatchreport -v 19.6.0.0.0 -j
```

This issue is tracked with Oracle bug 31024383.

## Disk firmware not updated after patching

After patching Oracle Database Appliance, disk firmware is not updated on some Oracle Database Appliance hardware models.

The `odacli describe-component` command shows available version for disks as 0112 but the `odacli update-storage` and `odacli update-server` commands do not update the disk firmware.

### Hardware Models

All Oracle Database Appliance X7-2-HA hardware models

### Workaround

None

This issue is tracked with Oracle bug 30841243.



## Error after upgrading to Oracle Linux 7

After upgrading to Oracle Linux 7, an error is encountered.

If your Oracle Database Appliance X7-2 HA system was provisioned with version prior to Oracle Database Appliance release 18.3, you can run into a potential issue where your system hostname is reset to oak0/oak1 and the DCS stack is reinitialized after upgrading the operating system to Oracle Linux 7.

### Hardware Models

Oracle Database Appliance X7-2 HA system provisioned with version prior to Oracle Database Appliance release 18.3

### Workaround

Before upgrading the operating system to Oracle Linux 7, manually run the following command:

```
# touch /root/.setupdcsfile
```

This issue is tracked with Oracle bug 31228390.

## Error when upgrading to Oracle Linux 7

When upgrading to Oracle Linux 7, an error is encountered.

The following error message is displayed:

```
[main] ERROR com.oracle.dcs.commons.utils.patching.CommonsPatchingUtils
-
getLVMMFreeSpace:
exception seen when calculating the actual value.
DCS-10001:Internal error encountered: Failed to get the LVM free space.
```

The error occurs due to any of the following reasons:

- Oracle Database Appliance Backup and Recovery (ODABR) tool is installed on the system.
- No ODABR snapshots are present on the node.
- You may have modified the NLS setting, which could return a numeric value in a format the code is expecting (nnnn.nn)

### Hardware Models

Oracle Database Appliance bare metal deployments

### Workaround

Use any of the following workarounds:

- Create the ODABR snapshots manually by running the command `/opt/odabr/odabr backup -snap`.

- At the command prompt, run:

```
$ LC_ALL=C
$ export LC_ALL
$ <execute command "odacli update-server ..."
```

This issue is tracked with Oracle bug 31214103.

## Error in network interface connection after operating system upgrade

After operating system upgrade, an error in network interface connection is encountered.

The following error message is displayed:

```
Em2 and em3 shows:
ethtool em3
Settings for em3:
    Supported ports: [ FIBRE ]
    ...
    Link detected: no
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Add customized options manually from the backup file at `/etc/sysconfig/network-scripts/bkupIfcfgUpg/ifcfg-*`. This issue is tracked with Oracle bug 31358688.

## Error encountered when running upgrade script

When upgrading Oracle Database Appliance, an error is encountered.

When upgrading Oracle Grid Infrastructure from Oracle Database Appliance release 18.8 to 19.6, during the execution of the rootupgrade script, the process hangs.

Check the PID process using the command:

```
grid PID PPID /bin/bash /sbin/weak-modules --verbose --dry-run --no-
initramfs --add-modules
```

Check if the CPU time for the PID process increases steadily.

### Hardware Models

Oracle Database Appliance bare metal deployments

### Workaround

Manually complete the Oracle Grid Infrastructure upgrade:

1. As the root user, run the root upgrade script. On High-Availability system, run the command on Node0 and then Node1.

```
/u01/app/19.0.0.0/grid/rootupgrade.sh
```

2. Ensure rootupgrade script has completed successfully on all the nodes in the cluster.

```
/u01/app/19.0.0.0/grid/bin/crsctl query crs activeversion -f

# /u01/app/19.0.0.0/grid/bin/crsctl query crs activeversion -f
Oracle Clusterware active version on the cluster is [19.0.0.0.0].
The cluster
upgrade state is [UPGRADE FINAL]. The cluster active patch level
is
[3225354603].
```

3. If the upgrade state is UPGRADE FINAL, then run the following command:

```
/u01/app/19.0.0.0/grid/gridSetup.sh -responseFile /tmp/
config_assists.rsp
-executeConfigTools -silent -ignorePrereqFailure
```

4. Create the /tmp/config\_assists.rsp file manually:

```
cp /opt/oracle/dcs/rdbaas/config/grid_config_resp_122 /tmp/
config_assists.rsp
```

5. Edit /tmp/config\_assists.rsp and make the following changes:

```
oracle.install.option=CRS_CONFIG to
oracle.install.option=CRS_CONFIG

oracle.install.asm.SYSASMPassword=welcomel to
oracle.install.asm.SYSASMPassword=WelCome#_123

oracle.install.asm.monitorPassword=welcomel to
oracle.install.asm.monitorPassword=WelCome#_123

oracle.install.config.emAdminPassword=welcomel to
oracle.install.config.emAdminPassword=WelCome#_123
```

6. Add the following lines to the end of the file:

```
oracle.assistants.asm|S_ASMPASSWORD=WelCome#_123
oracle.assistants.asm|S_ASMMONITORPASSWORD=WelCome#_123
oracle.crs|oracle_install_crs_MgmtDB_CDB=false
oracle.crs|oracle_install_crs_ConfigureMgmtDB=false
oracle.crs|oracle_install_crs_LaunchCluvfy=false
```

7. After gridSetup.sh runs successfully, run the command:

```
/u01/app/19.0.0.0/grid/bin/crsctl query crs activeversion -f
```

8. Check the output and confirm that the upgrade state is [NORMAL].

```
# /u01/app/19.0.0.0/grid/bin/crsctl query crs activeversion -f
Oracle Clusterware active version on the cluster is [19.0.0.0.0].
The cluster
upgrade state is [NORMAL]. The cluster active patch level is
[3225354603].
```

This issue is tracked with Oracle bug 31233647.

## Error when upgrading database from 11.2.0.4 to 12.1 or 12.2

When upgrading databases from 11.2.0.4 to 12.1 or 12.2, an error is encountered.

Database upgrade can cause the following warning in the UpgradeResults.html file, when upgrading database from 11.2.0.4 to 12.1 or 12.2:

```
Database is using a newer time zone file version than the Oracle home
```

### Hardware Models

All Oracle Database Appliance bare metal deployments

### Workaround

1. Refer to the *Database Upgrade Guide* for manual steps for fixing the time zone.
2. After manually completing the database upgrade, run the following command to update DCS metadata:

```
/opt/oracle/dcs/bin/odacli update-registry update-registry -n db -f
```

This issue is tracked with Oracle bug 31121016.

## Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

When patching the appliance, the odacli update-server command fails with the following error:

```
DCS-10001:Internal error encountered: Server upgrade state is not
NORMAL node_name
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

1. Run the command:

```
Grid_home/bin/cluvfy stage -post crsinst -collect cluster -
gi_upgrade -n all
```

2. Ignore the following two warnings:

```
Verifying OCR Integrity ...WARNING  
PRVG-6017 : OCR backup is located in the same disk group "+DATA" as  
OCR.
```

```
Verifying Single Client Access Name (SCAN) ...WARNING  
RVG-11368 : A SCAN is recommended to resolve to "3" or more IP
```

3. Run the command again till the output displays only the two warnings above. The status of Oracle Custerware status should be `Normal` again.
4. You can verify the status with the command:

```
Grid_home/bin/crsctl query crs activeversion -f
```

This issue is tracked with Oracle bug 30099090.

## Error when patching to 12.1.0.2.190716 Bundle Patch

When patching Oracle Database release 12.1.0.2 to Oracle Database 12.1.0.2.190716 Bundle Patch, an error is encountered.

The ODACLI job displays the following error:

```
DCS-10001:Internal error encountered: Failed to run SQL script:  
datapatch script.
```

The data patch log contains the entry "Prereq check failed, exiting without installing any patches."

### Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

### Workaround

Install the same patch again.

This issue is tracked with Oracle bugs 30026438 and 30155710.

## Error in patching NVMe disks to the latest version

Patching of NVMe disks to the latest version may not be supported on some Oracle Database Appliance hardware models.

On Oracle Database Appliance X8-2 hardware models, the NVMe controller 7361456\_ICRPC2DD2ORA6.4T is installed with higher version VDV1RL01/VDV1RL02. Patching of this controller is not supported on Oracle Database Appliance X8-2 hardware models. For other platforms, if the installed version is QDV1RE0F, or QDV1RE13, or QDV1RD09, or QDV1RE14 then when you patch the storage, the NVMe controller version is updated to qdv1rf30.

### Hardware Models

All Oracle Database Appliance hardware models

**Workaround**

None

This issue is tracked with Oracle bug 30287439.

## Patching of M.2 drives not supported

Patching of M.2 drives (local disks disks SSDSCKJB48 and SSDSCKJB480G7) is not supported.

These drives are displayed when you run the `odacli describe-component` command. Patching of neither of the two known versions 0112 and 0121 of the M.2 disk is supported. Patching the LSI controller version 13.00.00.00 to version 16.00.01.00 is also not supported. However, on some Oracle Database Appliance X8-2 models, the installed LSI controller version may be 16.00.01.00.

**Hardware Models**

Oracle Database Appliance bare metal deployments

**Workaround**

None

This issue is tracked with Oracle bug 30249232.

## Versions of some components not updated after cleaning up and reprovisioning Oracle Database Appliance

Oracle Auto Service Request (ASR), or Oracle TFA Collector, or Oracle ORAchk versions are not updated after cleaning up and reprovisioning Oracle Database Appliance.

When cleaning up and reprovisioning Oracle Database Appliance with release 19.6, the Oracle Auto Service Request (ASR), or Oracle TFA Collector, or Oracle ORAchk RPMs may not be updated to release 19.6. The components are updated when you apply the patches for Oracle Database Appliance release 19.6.

**Hardware Models**

All Oracle Database Appliance deployments

**Workaround**

Update to the latest server patch for the release.

This issue is tracked with Oracle bugs 28933900 and 30187516.

## 11.2.0.4 databases fail to start after patching

After patching Oracle Database Appliance to release 18.3, databases of version 11.2.0.4 fail to start.

### Hardware Models

All Oracle Database Appliance Hardware models

### Workaround

Databases of versions 11.2.0.4.170814 and 11.2.0.4.171017 must be manually started after patching to Oracle Database Appliance release 18.3.

Start the databases with the command:

```
srvctl start database -db db_unique_name
```

This issue is tracked with Oracle bug 28815716.

## Known Issues When Deploying Oracle Database Appliance

Understand the known issues when provisioning or deploying Oracle Database Appliance.

- [Error when creating database with ObjectStore backup option](#)  
When creating database with ObjectStore backup option, if the RMAN backup password is not provided, then an error is encountered.
- [Error when performing backup and recovery of Standard Edition High Availability Database](#)  
When performing backup and recovery of Standard Edition High Availability Database, an error is encountered.
- [Cannot create 11.2.0.4 and 12.1 Oracle ACFS databases with Oracle Flex redundancy](#)  
Creation of 11.2.0.4 and 12.1 Oracle ACFS databases with Oracle Flex redundancy fails.
- [Error when creating or restoring 11.2.0.4 database](#)  
An error is encountered when creating or restoring 11.2.0.4 databases.
- [Error in upgrading 12.1 Oracle Database](#)  
When upgrading 12.1 Oracle Database, either CDB, Oracle ACFS, or single-instance, an error is encountered.
- [Error when creating 19c single-instance database](#)  
When creating 19c single-instance database, an error is encountered.
- [Error when upgrading 12.1 single-instance database](#)  
When upgrading 12.1 single-instance database, a job failure error is encountered.
- [Failure in creating RECO disk group during provisioning](#)  
When provisioning Oracle Database Appliance X8-2-HA with High Performance configuration containing default storage and expansion shelf, creation of RECO disk group fails.

- [Simultaneous creation of two Oracle ACFS Databases fails](#)  
If you try to create two Oracle ACFS databases on a system where there is no database or database storage already created, then database creation fails for one of the databases with an error.
- [Database creation hangs when using a deleted database name for database creation](#)  
The accelerator volume for data is not created on flash storage, for database created during provisioning of appliance.
- [Error encountered after running cleanup.pl](#)  
Errors encountered in running `odacli` commands after running `cleanup.pl`.
- [Accelerator volume for data is not created on flash storage](#)  
The accelerator volume for data is not created on flash storage, for databases created during provisioning of appliance.
- [Errors in clone database operation](#)  
Clone database operation fails due to errors.
- [Clone database operation fails](#)  
For Oracle Database release 12.1 databases, the database clone creation may fail because the default compatible version from Oracle binaries was set to 12.0.0.0.0
- [Database creation fails for odb-01s DSS databases](#)  
When attempting to create an DSS database with shape odb-01s, the job may fail with errors.

## Error when creating database with ObjectStore backup option

When creating database with ObjectStore backup option, if the RMAN backup password is not provided, then an error is encountered.

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Use one of the following options:

- Do not specify the Objectstore backupconfig in the create database request. Once the database is created, then you can associate the required Objectstore backup configuration to the database.
- Associate the Objectstore backup configuration again. Specify the RMAN backup password when prompted. After successful association, take the backup.

This issue is tracked with Oracle bug 31010490.



## Error when performing backup and recovery of Standard Edition High Availability Database

When performing backup and recovery of Standard Edition High Availability Database, an error is encountered.

Associating a backup configuration to Standard Edition High Availability Database, and backup and recovery operations of Standard Edition High Availability Database fail with the following error:

```
DCS-10089:Database is in an invalid state 'NOT_RUNNING'. Database  
dbname must be running.
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

None.

This issue is tracked with Oracle bug 31173818.

## Cannot create 11.2.0.4 and 12.1 Oracle ACFS databases with Oracle Flex redundancy

Creation of 11.2.0.4 and 12.1 Oracle ACFS databases with Oracle Flex redundancy fails.

### Hardware Models

All Oracle Database Appliance hardware deployments

### Workaround

Optionally, create a 11.2.0.4 or 12.1 database home.

Create a 11.2.0.4 or 12.1 database based on an existing 11.2.0.4 or 12.1 database home.

This issue is tracked with Oracle bug 31016061.

## Error when creating or restoring 11.2.0.4 database

An error is encountered when creating or restoring 11.2.0.4 databases.

When you run the command `odacli create-database` or `odacli irestore-database` for 11.2.0.4 databases, the command fails to run at the Configuring DB Console step. This error may also occur when creating 11.2.0.4 databases using the Browser User Interface.

### Hardware Models

All Oracle Database Appliance hardware models

### **Workaround**

Run the commands without enabling DB Console.

This issue is tracked with Oracle bug 31017360.

## **Error in upgrading 12.1 Oracle Database**

When upgrading 12.1 Oracle Database, either CDB, Oracle ACFS, or single-instance, an error is encountered.

### **Hardware Models**

All Oracle Database Appliance hardware models

### **Workaround**

None.

This issue is tracked with Oracle bug 31214657.

## **Error when creating 19c single-instance database**

When creating 19c single-instance database, an error is encountered.

When creating a 19c single-instance database with different `dbName` and `dbUniqueName`, the password file is stored in the local storage instead of shared storage.

### **Hardware Models**

All Oracle Database Appliance hardware models

### **Workaround**

Use the same `dbName` and `dbUniqueName` when creating a 19c single-instance database.

This issue is tracked with Oracle bug 31194087.

## **Error when upgrading 12.1 single-instance database**

When upgrading 12.1 single-instance database, a job failure error is encountered.

### **Hardware Models**

All Oracle Database Appliance hardware models bare metal deployments

### **Workaround**

Use the following workaround:

1. Before upgrading the 12.1 single-instance database, run the following PL/SQL command to change the `local_listener` to an empty string:

```
ALTER SYSTEM SET LOCAL_LISTENER='';
```

2. After upgrading the 12.1 single-instance database successfully, run the following PL/SQL command to change the `local_listener` to the desired value:

```
ALTER SYSTEM SET LOCAL_LISTENER='-oracle-none-';
```

This issue is tracked with Oracle bugs 31202775, 31214657, 31210407, and 31178058.

## Failure in creating RECO disk group during provisioning

When provisioning Oracle Database Appliance X8-2-HA with High Performance configuration containing default storage and expansion shelf, creation of RECO disk group fails.

### Hardware Models

All Oracle Database Appliance X8-2-HA with High Performance configuration

### Workaround

1. Power off storage expansion shelf.
2. Reboot both nodes.
3. Proceed with provisioning the default storage shelf (first JBOD).
4. After the system is successfully provisioned with default storage shelf (first JBOD), check that `oakd` is running on both nodes in foreground mode.

```
# ps -aef | grep oakd
```

5. Check that all first JBOD disks have the status online, good in `oakd`, and `CACHED` in Oracle ASM.
6. Power on the storage expansion shelf (second JBOD), wait for a few minutes for the operating system and other subsystems to recognize it.
7. Run the following command from the master node to add the storage expansion shelf disks (two JBOD setup) to `oakd` and Oracle ASM.

```
#odaadmcli show ismaster
OAKD is in Master Mode

# odaadmcli expand storage -ndisk 24 -enclosure 1
Skipping precheck for enclosure '1'...
Check the progress of expansion of storage by executing
'odaadmcli
show disk'
Waiting for expansion to finish ...
#
```

8. Check that the storage expansion shelf disks (two JBOD setup) are added to `oakd` and Oracle ASM.

Replace `odaadmcli` with `oakcli` commands on Oracle Database Appliance Virtualized Platform in the procedure.

For more information, see the chapter *Managing Storage* in the *Oracle Database Appliance X8-2 Deployment Guide*.

This issue is tracked with Oracle bug 30839054.

## Simultaneous creation of two Oracle ACFS Databases fails

If you try to create two Oracle ACFS databases on a system where there is no database or database storage already created, then database creation fails for one of the databases with an error.

```
DCS-10001:Internal error encountered: Fail to run command Failed to  
create  
volume.
```

### Hardware Models

All Oracle Database Appliance bare metal deployments

### Workaround

Manually delete the DATA volume (and REDO volume, in case of Oracle Database Appliance X8-2) from the system.

For High Performance configuration, run the following commands:

```
su - GRID_USER  
export ORACLE_SID=+ASM1(in case of first node) /+ASM2(in case of second  
node);  
export ORACLE_HOME=GRID_HOME;  
GRID_HOME/bin/asmcmd --nocr voldelete -G Data datdbname
```

For Oracle Database Appliance X8-2 High Performance configuration, remove the REDO volume as follows:

```
su - GRID_USER  
export ORACLE_SID=+ASM1(in case of first node) /+ASM2(in case of second  
node);  
export ORACLE_HOME=GRID_HOME;  
GRID_HOME/bin/asmcmd --nocr voldelete -G Reco rdoddbname
```

For High Capacity configuration, run the following commands:

```
su - GRID_USER  
export ORACLE_SID=+ASM1(in case of first node) /+ASM2(in case of second  
node);  
export ORACLE_HOME=GRID_HOME;  
GRID_HOME/bin/asmcmd --nocr voldelete -G Flash datdbname (if volume  
exists in FLASH disk group)  
GRID_HOME/bin/asmcmd --nocr voldelete -G data datdbname (if volume  
exists in DATA disk group)
```

For Oracle Database Appliance X8-2 High Capacity configuration, remove the REDO volume as follows:

```
su - GRID_USER
export ORACLE_SID=+ASM1(in case of first node) /+ASM2(in case of second
node);
export ORACLE_HOME=GRID_HOME;
GRID_HOME/bin/asmcmd --nocrp voldelete -G Flash rdodbnme
```

This issue is tracked with Oracle bug 30750497.

## Database creation hangs when using a deleted database name for database creation

The accelerator volume for data is not created on flash storage, for database created during provisioning of appliance.

If you delete a 11.2.0.4 database, and then create a new database with same name as the deleted database, database creation hangs while unlocking the DBSNMP user for the database.

### Hardware Models

All Oracle Database Appliance high-availability environments

### Workaround

Before creating the 11.2.0.4 database with the same name as the deleted database, delete the DBSNMP user, if the user exists.

For example, the following command creates a database `testdb` with user `DBSNMP`.

```
/u01/app/18.0.0.0/grid/bin/crsctl delete wallet -type CVUDB -name
testdb -user DBSNMP
```

This issue is tracked with Oracle bug 28916487.

## Error encountered after running `cleanup.pl`

Errors encountered in running `odacli` commands after running `cleanup.pl`.

After running `cleanup.pl`, when you try to use `odacli` commands, the following error is encountered:

```
DCS-10042:User oda-cliadmin cannot be authorized.
```

### Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

### Workaround

Run the following commands to set up the credentials for the user `oda-cliadmin` on the agent wallet:

```
# rm -rf /opt/oracle/dcs/conf/.authconfig  
# /opt/oracle/dcs/bin/setupAgentAuth.sh
```

This issue is tracked with Oracle bug 29038717.

## Accelerator volume for data is not created on flash storage

The accelerator volume for data is not created on flash storage, for databases created during provisioning of appliance.

### Hardware Models

Oracle Database Appliance high capacity environments with HDD disks

### Workaround

Do not create the database when provisioning the appliance. This creates all required disk groups, including flash. After provisioning the appliance, create the database. The accelerator volume is then created.

This issue is tracked with Oracle bug 28836461.

## Errors in clone database operation

Clone database operation fails due to errors.

If the source database is single-instance or Oracle RAC One Node, or running on the remote node, the clone database operation fails, because the paths are not created correctly in the control file.

Clone database operation may also fail with errors if the source database creation time stamp is too close to the clone operation (at least within 60 minutes).

### Hardware Models

All Oracle Database Appliance high-availability hardware models for bare metal deployments

### Workaround

Create the clone database from the source database instance that is running on the same node from which the clone database creation is triggered.

For Oracle Database 12c and later, synchronize the source database before the clone operation, by running the command:

```
SQL> alter system checkpoint;
```

This issue is tracked with Oracle bugs 29002563, 29002004, 29001906, 29001855, 29001631, 28995153, 28986643, 30309971, and 30228362.

## Clone database operation fails

For Oracle Database release 12.1 databases, the database clone creation may fail because the default compatible version from Oracle binaries was set to 12.0.0.0.0

### Hardware Models

All Oracle Database Appliance high-availability hardware models for bare metal deployments

### Workaround

Set the compatible value to that of the source database. Follow these steps:

1. Change the parameter value.

```
SQL> ALTER SYSTEM SET COMPATIBLE = '12.1.0.2.0' SCOPE=SPFILE;
```

2. Shut down the database.

```
SQL> SHUTDOWN IMMEDIATE
```

3. Start the database.

```
SQL> Startup
```

4. Verify the parameter for the new value.

```
SQL> SELECT name, value, description FROM v$parameter WHERE name  
='compatible';
```

This issue is tracked with Oracle bug 30309914.

## Database creation fails for odb-01s DSS databases

When attempting to create an DSS database with shape odb-01s, the job may fail with errors.

```
CRS-2674: Start of 'ora.test.db' on 'example_node' failed  
CRS-5017: The resource action "ora.test.db start" encountered the  
following  
error:  
ORA-03113: end-of-file on communication channel  
Process ID: 0  
Session ID: 0 Serial number: 0  
. For details refer to "(:CLSN00107:)" in  
"/u01/app/grid/diag/crs/example_node/crs/trace/  
crsd_oraagent_oracle.trc".
```

### Hardware Models

Oracle Database Appliance X6-2-HA and X5-2

### Workaround

There is no workaround. Select an alternate shape to create the database.

This issue is tracked with Oracle bug 27768012.

## Known Issues When Managing Oracle Database Appliance

Understand the known issues when managing or administering Oracle Database Appliance.

- [Errors when running ORAchk or the odacli create-prepatchreport command](#)  
When you run ORAchk or the `odacli create-prepatchreport` command, an error is encountered.
- [Database ID incorrectly displayed in odacli describe-database output](#)  
Database ID is incorrectly displayed in the output of the command `odacli describe-database`.
- [Error when rebooting the appliance](#)  
When rebooting Oracle Database Appliance, the user interactive screen is displayed.
- [Error encountered when relocating database](#)  
When relocating a database, an error is encountered.
- [Error encountered when disabling High Availability](#)  
When disabling High Availability for a Standard Edition High Availability database, an error is encountered.
- [Inconsistency in available and current system firmware](#)  
The current system firmware may be different from the available firmware after applying the latest patch.
- [Inconsistency in ORAchk summary and details report page](#)  
ORAchk report summary on the Browser User Interface may show different counts of Critical, Failed, and Warning issues than the report detail page.
- [Missing DATA, RECO, and REDO entries when dbstorage is rediscovered](#)  
Running the `odacli update-registry` command with `-n all --force` or `-n dbstorage --force` option can result in metadata corruption.
- [The odaeraser tool does not work if oakd is running in non-cluster mode](#)  
After cleaning up the deployment, the Secure Eraser tool does not work if oakd is running in non-cluster mode.
- [Issues with the Web Console on Microsoft web browsers](#)  
Oracle Database Appliance Web Console has issues on Microsoft Edge and Microsoft Internet Explorer web browsers.
- [Disk space issues due to Zookeeper logs size](#)  
The Zookeeper log files, `zookeeper.out` and `/opt/zookeeper/log/zkMonitor.log`, are not rotated, when new logs are added. This can cause disk space issues.
- [Error after running the cleanup script](#)  
After running the `cleanup.pl` script, the following error message appears:  
DCS-10001:Internal error encountered: Fail to start hand shake.



- [Old configuration details persisting in custom environment](#)  
The configuration file `/etc/security/limits.conf` contains default entries even in the case of custom environments.
- [Incorrect SGA and PGA values displayed](#)  
For online transaction processing (OLTP), In-Memory (IMDB), and decision support services (DSS) databases created with odb36 database shape, the PGA and SGA values are displayed incorrectly.
- [Unrecognized Token Messages Appear in /var/log/messages](#)  
After updating Oracle Database Appliance, unrecognized token messages appear in `/var/log/messages`.

## Errors when running ORAchk or the odacli create-prepatchreport command

When you run ORAchk or the `odacli create-prepatchreport` command, an error is encountered.

The following error messages may be seen:

```
Table AUD$[FGA_LOG$] should use Automatic Segment Space Management  
diagsnap or pstack are configured to collect first failure diagnostic  
Initialization parameter RESOURCE_MANAGER_PLAN should be set.  
One or more log archive destination and alternate log archive  
destination settings are not as recommended  
Software home check failed
```

### Hardware Models

Oracle Database Appliance hardware models bare metal deployments

### Workaround

Ignore the error messages and continue the deployment.

This issue is tracked with Oracle bug 30931017.

## Database ID incorrectly displayed in odacli describe-database output

Database ID is incorrectly displayed in the output of the command `odacli describe-database`.

The ID field in the output of the command `odacli describe-database` wrongly displays the databaseId instead of db object ID.

### Hardware Models

All Oracle Database Appliance bare metal deployments

### Workaround

Run the `odacli list-databases` command to view the correct ID. You can also view the correct ID details using the Browser User Interface.

This issue is tracked with Oracle bug 31121016.

## Error when rebooting the appliance

When rebooting Oracle Database Appliance, the user interactive screen is displayed.

### Hardware Models

Oracle Database Appliance X7-2-HA hardware models

### Workaround

From the system console, select or highlight the kernel using the Up or Down arrow keys and then press Enter to continue with the reboot of the appliance.

This issue is tracked with Oracle bug 30931017.

## Error encountered when relocating database

When relocating a database, an error is encountered.

The following error messages may be seen:

```
java.lang.NullPointerException
```

### Hardware Models

Oracle Database Appliance hardware models bare metal deployments

### Workaround

Download and install the Oracle Database (RDBMS) patch from bug 31114977.

This issue is tracked with Oracle bug 31225790.

## Error encountered when disabling High Availability

When disabling High Availability for a Standard Edition High Availability database, an error is encountered.

### Hardware Models

Oracle Database Appliance hardware models bare metal deployments

### Workaround

Download and install the Oracle Database (RDBMS) patch from bug 31114977.

This issue is tracked with Oracle bug 31231043.

## Inconsistency in available and current system firmware

The current system firmware may be different from the available firmware after applying the latest patch.

Oracle Database Appliance X8-2 with expander model ORACLE/DE3-24C are at version 0309 but patching of expander firmware from earlier versions to 0309 is not

supported in this release. Oracle Database Appliance Release 18.8 contains the patch for expander version 0306, so when you run `odacli describe-component` command, the available expander version is displayed as 0306.

Oracle Database Appliance X8-2 with controller model LSI Logic/0x0097 are at version 16.00.00.00 but patching of controller firmware from earlier versions to 16.00.00.00 is not supported in this release. Oracle Database Appliance Release 18.8 contains the patch for controller version 13.00.00.00, so when you run `odacli describe-component` command, the available expander version is displayed as 13.00.00.00.

#### **Hardware Models**

Oracle Database Appliance X8-2 hardware models

#### **Workaround**

Ignore this inconsistency, since this is a display issue and does not affect the installed firmware version.

This issue is tracked with Oracle bug 30787910.

## Inconsistency in ORAchk summary and details report page

ORAchk report summary on the Browser User Interface may show different counts of Critical, Failed, and Warning issues than the report detail page.

#### **Hardware Models**

Oracle Database Appliance hardware models bare metal deployments

#### **Workaround**

Ignore counts of Critical, Failed, and Warning issues in the ORAchk report summary on the Browser User Interface. Check the report detail page.

This issue is tracked with Oracle bug 30676674.

## Missing DATA, RECO, and REDO entries when dbstorage is rediscovered

Running the `odacli update-registry` command with `-n all --force` or `-n dbstorage --force` option can result in metadata corruption.

#### **Hardware Models**

All Oracle Database Appliance hardware models bare metal deployments

#### **Workaround**

Run the `-all` option when all the databases created in the system use OAKCLI in migrated systems. On other systems that run on DCS stack, update all components other than dbstorage individually, using the `odacli update-registry -n component_name_to_be_updated_excluding_dbstorage`.

This issue is tracked with Oracle bug 30274477.

## The odaeraser tool does not work if oakd is running in non-cluster mode

After cleaning up the deployment, the Secure Eraser tool does not work if oakd is running in non-cluster mode.

### Hardware Models

All Oracle Database Appliance Hardware bare metal systems

### Workaround

After cleanup of the deployment, oakd is started in the non-cluster mode, and it cannot be stopped using "odaadmcli stop oak" command. In such a case, if the Secure Erase tool is run, then the odaeraser command fails.

Use the command `odaadmcli shutdown oak` to stop oakd.

This issue is tracked with Oracle bug 28547433.

## Issues with the Web Console on Microsoft web browsers

Oracle Database Appliance Web Console has issues on Microsoft Edge and Microsoft Internet Explorer web browsers.

Following are issues with Microsoft web browsers:

- Oracle Database Appliance Web Console does not display correctly on Microsoft Edge and Microsoft Internet Explorer web browsers.
- Advanced Information for the appliance does not display on Microsoft Internet Explorer web browser.
- Job activity status does not refresh in the Web Console on Microsoft Internet Explorer web browser.
- After configuring the oda-admin password, the following error is displayed:

```
Failed to change the default user (oda-admin) account password.  
Status Code: 500 DCS-10001: DCS-10001:Internal error encountered:  
User not authorized
```

**Workaround:** Close the Microsoft Internet Explorer browser session and open another browser session.

### Models

All Oracle Database Appliance Hardware Models bare metal deployments

### Workaround

To access the Web Console, use either Google Chrome or Firefox.

This issue is tracked with Oracle bugs 30077007, 30099089, and 29887027.

## Disk space issues due to Zookeeper logs size

The Zookeeper log files, `zookeeper.out` and `/opt/zookeeper/log/zkMonitor.log`, are not rotated, when new logs are added. This can cause disk space issues.

### Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

### Workaround

Rotate the zookeeper log file manually, if the log file size increases, as follows:

1. Stop the DCS-agent service for zookeeper on both nodes.

```
initctl stop initdcsagent
```

2. Stop the zookeeper service on both nodes.

```
/opt/zookeeper/bin/zkServer.sh stop
```

3. Clean the zookeeper logs after taking the backup, by manually deleting the existing file or by following steps 4 to 10.

4. Set the `ZOO_LOG_DIR` as an environment variable to a different log directory, before starting the zookeeper server.

```
export ZOO_LOG_DIR=/opt/zookeeper/log
```

5. Switch to `ROLLINGFILE`, to set the capability to roll.

```
export ZOO_LOG4J_PROP="INFO, ROLLINGFILE"
```

Restart the zookeeper server, for the changes to take effect.

6. Set the following parameters in the `/opt/zookeeper/conf/log4j.properties` file, to limit the number of backup files, and the file sizes.

```
zookeeper.log.dir=/opt/zookeeper/log
zookeeper.log.file=zookeeper.out
log4j.appender.ROLLINGFILE.MaxFileSize=10MB
log4j.appender.ROLLINGFILE.MaxBackupIndex=10
```

7. Start zookeeper on both nodes.

```
/opt/zookeeper/bin/zkServer.sh start
```

8. Check the zookeeper status, and verify that zookeeper runs in leader/follower/standalone mode.

```
/opt/zookeeper/bin/zkServer.sh status
ZooKeeper JMX enabled by default
```

```
Using config: /opt/zookeeper/bin/../conf/zoo.cfg
Mode: follower
```

9. Start the dcs agent on both nodes.

```
initctl start initdcsagent
```

10. Purge the zookeeper monitor log, `zkMonitor.log`, in the location `/opt/zookeeper/log`. You do not have to stop the zookeeper service.

This issue is tracked with Oracle bug 29033812.

## Error after running the cleanup script

After running the `cleanup.pl` script, the following error message appears:  
DCS-10001:Internal error encountered: Fail to start hand shake.

The error is caused when you run the following steps:

1. Run `cleanup.pl` on the first node (Node0). Wait until the cleanup script finishes, then reboot the node.
2. Run `cleanup.pl` on the second node (Node1). Wait until the cleanup script finishes, then reboot the node.
3. After both nodes are started, use the command-line interface to list the jobs on Node0. An internal error appears.

```
# odacli list-jobs
DCS-10001:Internal error encountered: Fail to start hand shake to
localhost:7070
```

### Hardware Models

Oracle Database Appliance X7-2-HA

### Workaround

1. Verify the zookeeper status on the both nodes before starting `dcsagent`:

```
/opt/zookeeper/bin/zkServer.sh status
```

For a single-node environment, the status should be: leader, or follower, or standalone.

2. Restart the `dcsagent` on Node0 after running the `cleanup.pl` script.

```
# systemctl stop initdcsagent
# systemctl start initdcsagent
```

## Old configuration details persisting in custom environment

The configuration file `/etc/security/limits.conf` contains default entries even in the case of custom environments.

On custom environments, when a single user is configured for both grid and oracle, the default grid user entries for the image are not removed from the `/etc/security/limits.conf` file.

### Models

Oracle Database Appliance X7-2-HA, X7-2S, and X7-2M

### Workaround

This issue does not affect the functionality. Manually edit the `/etc/security/limits.conf` file and remove invalid entries.

This issue is tracked with Oracle bug 26978354.

## Incorrect SGA and PGA values displayed

For online transaction processing (OLTP), In-Memory (IMDB), and decision support services (DSS) databases created with odb36 database shape, the PGA and SGA values are displayed incorrectly.

For OLTP databases created with odb36 shape, following are the issues:

- `sga_target` is set as 128 GB instead of 144 GB
- `pga_aggregate_target` is set as 64 GB instead of 72 GB

For DSS databases created with with odb36 shape, following are the issues:

- `sga_target` is set as 64 GB instead of 72 GB
- `pga_aggregate_target` is set as 128 GB instead of 144 GB

For IMDB databases created with Odb36 shape, following are the issues:

- `sga_target` is set as 128 GB instead of 144 GB
- `pga_aggregate_target` is set as 64 GB instead of 72 GB
- `inmemory_size` is set as 64 GB instead of 72 GB

### Models

Oracle Database Appliance X7-2-HA, X7-2S, and X7-2M

### Workaround

Reset the PGA and SGA sizes manually

This issue is tracked with Oracle bug 27036374.

## Unrecognized Token Messages Appear in /var/log/messages

After updating Oracle Database Appliance, unrecognized token messages appear in /var/log/messages.

Updating to Oracle Database Appliance 12.1.2.11.0 updates the Oracle VM Server version to 3.4.3. After updating, the following messages appear in /var/log/messages:

```
Unrecognized token: "max_seq_redisc"  
Unrecognized token: "rereg_on_guid_migr"  
Unrecognized token: "aguid_inout_notice"  
Unrecognized token: "sm_assign_guid_func"  
Unrecognized token: "reports"  
Unrecognized token: "per_module_logging"  
Unrecognized token: "consolidate_ipv4_mask"
```

You can ignore the messages for these parameters, they do not impact the InfiniBand compliant Subnet Manager and Administration (opensm) functionality. However, Oracle recommends removing the parameters to avoid flooding /var/log/messages.

### Hardware Models

Oracle Database Appliance X6-2-HA and X5-2 with InfiniBand

### Workaround

Perform the following to remove the parameters:

1. After patching, update the /etc/opensm/opensm.conf file in bare metal deployments and in Dom0 in virtualized platform environment to remove the parameters.

```
cat /etc/opensm/opensm.conf | egrep -w  
'max_seq_redisc|rereg_on_guid_migr|aguid_inout_notice|  
sm_assign_guid_func|repo  
rts|per_module_logging|consolidate_ipv4_mask' | grep -v ^#  
max_seq_redisc 0  
rereg_on_guid_migr FALSE  
aguid_inout_notice FALSE  
sm_assign_guid_func uniq_count  
reports 2  
per_module_logging FALSE  
consolidate_ipv4_mask 0xFFFFFFFF
```

2. Reboot. The messages will not appear after rebooting the node.

This issue is tracked with Oracle bug 25985258.



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