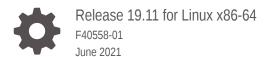
Oracle® Database Appliance Release Notes





Oracle Database Appliance Release Notes, Release 19.11 for Linux x86-64

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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=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 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/.

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
boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in the text.
italic	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



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What's New in This Release

Oracle Database Appliance release 19.11 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 create a bare metal deployment on Oracle Database Appliance or patch your existing bare metal deployment to Oracle Database Appliance release 19.11. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.11.

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:

Provisioning and Patching of Oracle Database Appliance Bare Metal Deployments
 This release supports provisioning of bare metal deployments, and patching of bare
 metal deployments from Oracle Database Appliance releases 19.7 and later.

Starting with Oracle Database Appliance release 19.11, Oracle Database Appliance uses Oracle Fleet Patching and Provisioning (Oracle FPP) for patching and provisioning. Oracle FPP (formerly known as Oracle Rapid Home Provisioning) is a software lifecycle management method for provisioning and maintaining Oracle homes. The patches for Oracle Grid Infrastructure are available as images.

With this release of Oracle Database Appliance, there are a few changes to the patching procedure. It is now mandatory to run the odacli create-prepatchreport command before you patch your server. You must fix the errors displayed in the report before you can proceed with the patching operation. Ensure that you follow the sequence of steps for patching your appliance as described in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

chronyd for Network Time Synchronization
 Starting with Oracle Database Appliance release 19.11, if you configure NTP servers, then the network time synchronization service used is chronyd, which is the default on Oracle Linux 7.

Support for KVM-based Database System on Oracle Database Appliance

In this release, Oracle Database Appliance supports the following on DB system:

- Backup and restore
- Oracle Data Guard
- Scale up DB system shapes
- New type of CPU pool for DB sysems

- Separate virtual network for DB system other than the default pubnet
- Flex disk group. You can select Mirror or HIGH for database redundancy.
- Delete DB system and database using the odacli delete-dbsystem with the
 --force option.

See the chapter Managing an Oracle Database Appliance KVM Deployment in the Oracle Database Appliance Deployment and User's Guide for your hardware model.

Database Homes on Oracle ACFS

Starting with this release, Oracle Database homes are no longer created on the local disk. New Oracle Database homes are created on an Oracle ACFS-managed file system.

See the topic *About Creating Database Homes on Oracle ACFS Storage* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model for more information.

FIPS 140-2 Compliance on Oracle Database Appliance

Starting with Oracle Database Appliance release 19.11, the Linux kernel used by Oracle Database Appliance running on bare metal and KVM Database Systems is compliant with the United States Federal Information Processing Standard 140-2 (FIPS 140-2) level one. In accordance with the FIPS standard, the algorithms used by the secure shell (SSH) are limited to those permitted by the standard. FIPS 140-2 is supported in both newly provisioned systems and patched systems. When a system is updated, FIPS support is automatically enabled. No user intervention is needed.

Support for Adaptive Classification and Redaction (ACR)

Adaptive Classification and Redaction (ACR) sanitizes sensitive information such as IP address, MAC address, host name, database name, and so on, from the diagnostic collections collected using Oracle Trace File Analyzer (Oracle TFA). Oracle Database Appliance supports enabling and disabling of ACR across all nodes, using ODACLI commands and Browser User Interface.

See the topic *Enabling Adaptive Classification and Redaction (ACR)* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model for more information.

Browser User Interface (BUI) Enhancements

Oracle Database Appliance BUI supports KVM-based database systems, Database Homes on ACFS, and Adaptive Classification and Redaction (ACR).

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

ODACLI Command Enhancements

There are new odacli commands and new options for existing odacli commands to manage storage on bare metal systems and modify KVM deployments.

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.

Support for Oracle Enterprise Manager Plug-in with Oracle Database Appliance Release 19.11

You must install certain patches before you can use Oracle Enterprise Manager plug-in with Oracle Database Appliance release 19.11.



See the Oracle Enterprise Manager Plugin for Oracle Database Appliance Release Notes for more information.

 Access to Oracle Database Appliance documentation from the Browser User Interface

You can access the Oracle Database Appliance documentation set for this release from the Browser User Interface. For the latest updates to the documentation for a release, see the online Oracle Database Appliance documentation library at https://docs.oracle.com/en/engineered-systems/oracle-database-appliance/index.html.

Oracle Grid Infrastructure and Oracle Database Updates

The following Oracle Grid Infrastructure and Oracle Database updates (April 2021 Oracle Database Release Update) for bare metal systems are available in this release:

- 19.11.0.0.210420
- 18.14.0.0.210420
- 12.2.0.1.210420
- 12.1.0.2.210420

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

See the chapter *Oracle Database Appliance Release 19.11 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 19.11 from the drop down list.

- Oracle Database Appliance 19.11.0.0.0 Server Patch for ODACLI/DCS stack: Use patch 32790643 to update your bare metal deployment to Oracle Database Appliance release 19.11.
- Oracle Database Appliance 19.11.0.0.0 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 19.11.0.0.0 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 19.11.0.0.210420 Software Clone file to create 19.11.0.0.210420 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 18.14.0.0.0 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 18.14.0.0.210420 Software Clone file to create 18.14.0.0.210420 Oracle Database homes. Patch 27604558 provides the database clone for this update. This patch is forall 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 12.2.0.1.210420 Software Clone file to create 12.2.0.1.210420 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 12.1.0.2.210420 Software Clone file to create 12.1.0.2.210420 database homes. Patch 23494992 provides the database clone for this update.



Oracle Database Appliance KVM Database System Template: Use the KVM
Database System template to deploy KVM-based virtualization for Oracle
Database Appliance. Patch 32451228 provides the database clone for this update.

Desupport Notice for the --local option for the odacli update-server command

In this release of Oracle Database Appliance, when patching the server, the --local option is not available with the odacli update-server command.

Desupport 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 <code>/opt/oracle/dcs/java/directory</code>, and is updated during patching of Oracle Database Appliance. Patching of Oracle Java Development Kit (Oracle JDK), available in the <code>/bin/java</code> directory, during the Oracle Database Appliance server patching process is not supported. Oracle Java Development Kit (Oracle JDK), available in the <code>/bin/java</code> directory, is desupported.

Related Topics

- Oracle Database Appliance Checklists
- Patching Oracle Database Appliance
- Oracle Database Appliance Command Line Interface Reference
- Oracle Database Appliance Command Line Interface for KVM
- About Creating Database Homes on Oracle ACFS Storage
- Managing an Oracle Database Appliance KVM Deployment
- Managing Database Systems in KVM Deployment
- About the Browser User Interface
- Using Oracle Data Guard for Disaster Management and Recovery on Oracle Database Appliance
- Known Issues with Oracle Database Appliance in This Release
 The following are known issues deploying, updating, and managing Oracle
 Database Appliance in this release.
- odacli configure-dbhome-storage
- odacli list-dbhome-storages
- odacli describe-dbhome-storage
- odacli modify-dbhome-storage
- Enterprise Manager Plugin for Oracle Database Appliance



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 19.11

Component Name	X8-2-HA	X8-2S and X8-2M
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	A959	Not applicable
NVMe (firmware version)	Not applicable	VDV1RL04
OS Disk (SSD firmware version)	0121	0121
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.a.r138015	5.0.1.21.a.r138015
BIOS	52030400	52030400

Table 2-1 (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.11

Component Name	X8-2-HA	X8-2S and X8-2M
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600	2.4.8.0.600
Oracle Linux	7.9	7.9
MySQL	8.0.23	8.0.23
Kernel	kernel- uek-4.14.35-2047.502.4.1.el7uek.x8 6_64	kernel- uek-4.14.35-2047.502.4.1.el7uek.x8 6_64
GI_HOME	19.11.0.0.210420	19.11.0.0.210420
DB_HOME	19.11.0.0.210420	19.11.0.0.210420
Oracle Auto Service Request (Oracle ASR)	20.3.0	20.3.0

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 19.11

Component Name	Х7-2-НА	X7-2S and X7-2M
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	A170	A170
	For the HDD/SSD option: A374/A087	
NVMe (firmware version)	Not applicable	QDV1RF32
OS Disk (SSD firmware version)	0121	0121
LOM (Oracle Integrated Lights Out Manager)	5.0.1.21.a.r138015	5.0.1.21.a.r138015
BIOS	41080800	41080800
PMI (Intelligent Platform lanagement Interface)	1.8.18.0	1.8.18.0
IMP (Oracle Hardware Management lack)	2.4.8.0.600	2.4.8.0.600
Dracle Linux	7.9	7.9
MySQL	8.0.23	8.0.23



Table 2-2 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.11

Component Name	Х7-2-НА	X7-2S and X7-2M
Kernel	kernel- uek-4.14.35-2047.502.4.1.el7uek.x8 6_64	kernel- uek-4.14.35-2047.502.4.1.el7uek.x8 6_64
GI_HOME	19.11.0.0.210420	19.11.0.0.210420
DB_HOME	19.11.0.0.210420	19.11.0.0.210420
Oracle Auto Service Request (Oracle ASR)	20.3.0	20.3.0

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 19.11

Component Name	Version
Controller	4.650.00-7176
NVMe (firmware version)	KPYAJR3Q
OS Disk	OR3Q
ILOM (Oracle Integrated Lights Out Manager)	X6-2SM: 5.0.1.21.r136383
	X6-2L: 5.0.1.21.r136383
BIOS	X6-2SM:38320100
	X6-2L:39320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9
MySQL	8.0.23
Kernel	kernel-uek-4.14.35-2047.502.4.1.el7uek.x86_64
GI_HOME	19.11.0.0.210420
DB_HOME	19.11.0.0.210420
Oracle Auto Service Request (Oracle ASR)	20.3.0

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 19.11

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	16.00.08.00
Expander	0310
SSD_LOCAL	OR3Q
SSD_SHARED	A29A
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.r136383
BIOS	38320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9
MySQL	8.0.23
Kernel	kernel-uek-4.14.35-2047.502.4.1.el7uek.x86_64
GI_HOME	19.11.0.0.210420
DB_HOME	19.11.0.0.210420
Oracle Auto Service Request (Oracle ASR)	20.3.0

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 19.11

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	16.00.08.00
Expander	001E
SSD_LOCAL	n/a
SSD_SHARED	A29A
HDD_LOCAL	A7E0
HDD_SHARED	A3A0, PAG1, PD51
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.r136383
BIOS	30320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9



Table 2-5 (Cont.) Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.11

Component Name	Version
MySQL	8.0.23
Kernel	kernel-uek-4.14.35-2047.502.4.1.el7uek.x86_64
GI_HOME	19.11.0.0.210420
DB_HOME	19.11.0.0.210420
Oracle Auto Service Request (Oracle ASR)	20.3.0



Oracle Database Appliance 19.11 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. With this release of Oracle Database Appliance, there are a few changes to the patching procedure. Ensure that you follow the sequence of steps for patching your appliance as described in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

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

19.11.0.0 For bare metal systems: 19.10.0.0 19.9.0.0 19.8.0.0 19.7.0.0 19.10.0.0 For bare metal systems: 19.9.0.0 19.8.0.0 19.8.0.0 19.8.0.0 19.9.0.0 For bare metal systems: 19.9.0.0 19.9.0.0 For bare metal systems: 19.8.0.0 19.7.0.0 19.6.0.0 For virtualized platform deployments: 19.8.0.0 For bare metal systems: 19.8.0.0 For virtualized platform deployments: 19.8.0.0 For virtualized platform deployments: 19.8.0.0 For virtualized platform deployments: 19.7.0.0 19.6.0.0 19.5.0.0 For virtualized platform deployments: 18.8.0.0 19.7.0.0 19.6.0.0 19.5.0.0 19.6.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0 18.8.0.0	
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• 12.2.1.3.0	
400400	
• 12.2.1.2.0	
• 12.1.2.12	
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• 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	
Note: 12.2.1.2.0 is not supported on virtualized platform.	



Table 3-1 (Cont.) 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)
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.

Related Topics

Patching Oracle Database Appliance

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 19.11 on Oracle Database Appliance bare metal systems. You can patch your bare metal systems to Oracle Database Appliance release 19.11 from Oracle Database Appliance release 19.7 or later.

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.



Table 3-2 Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32790643	Use the server patch to update your deployment to Oracle Database Appliance release 19.11	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	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 reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.11.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack to create 19.11 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack		Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-2 (Cont.) Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack		Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance ISO Image	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.11. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance KVM Database System Template	32451228	Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance 19.11.	Managing DB Systems in KVM Deployment

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.

Table 3-3 Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32790643	Use the server patch to update your deployment to Oracle Database Appliance release 19.11	Patching Oracle Database Appliance



Table 3-3 (Cont.) Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	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 19.11.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack to create 19.11 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance ISO Image	30403643	Use the ISO image to re- image the operating system for Oracle Database Appliance 19.11. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance



Table 3-3 (Cont.) Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance KVM Database System Template	32451228	Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance 19.11.	Managing DB Systems in KVM Deployment

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.

Table 3-4 Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32790643	Use the server patch to update your deployment to Oracle Database Appliance release 19.11	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	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 reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.11.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack to create 19.11 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 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance ISO Image	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.11. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance KVM Database System Template	32451228	Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance 19.11.	Managing DB Systems in KVM Deployment

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.



Table 3-5 Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32790643	Use the server patch to update your deployment to Oracle Database Appliance release 19.11	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	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 reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.11.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack to create 19.11 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.11 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 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance ISO Image	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.11. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance KVM Database System Template	32451228	Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance 19.11.	Managing DB Systems in KVM Deployment

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.

Table 3-6 Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32790643	Use the server patch to update your deployment to Oracle Database Appliance release 19.11	Patching Oracle Database Appliance



Table 3-6 (Cont.) Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.11

			_
Patch Type	Patch Number	Description	Resources
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	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 reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.11.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.11.0.0.210420 for ODACLI/DCS stack to create 19.11 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.14.0.0.210420 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210420 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210420 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.11 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-6 (Cont.) Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.11

Patch Type	Patch	Description	Resources
r aton Type	Number	Description	Resources
Oracle Database Appliance ISO Image	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.11. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance KVM Database System Template	32451228	Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance 19.11.	Managing DB Systems in KVM Deployment



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.

- Retrying update-server command after odacli update-server command fails
 When you patch Oracle Database Appliance release 19.11, the odacli update-server command fails.
- Retrying odacli update-dbhome command with -imp option after update fails
 When you patch database homes to Oracle Database Appliance release 19.11, the
 odacli update-dbhome command fails.
- Error in stopping Oracle Grid Infrastructure when patching Oracle Database Appliance
 If you create an Oracle Data Guard or Oracle Database with type network using odacli
 create-network, then there is an error in stopping Grid Infrastructure during patching.
- Error in running the update-dbhome command
 When you patch database homes to Oracle Database Appliance release 19.11, the odacli update-dbhome command fails.
- Error in upgrading from Oracle Linux 6 to Oracle Linux 7 during Oracle Database
 Appliance patching
 During upgrade of Oracle Linux 6 to Oracle Linux 7 during Oracle Database Appliance
 upgrade from release 18.8 to 19.x, an error is encountered.
- Error in updating DCS components when patching Oracle Database Appliance
 When updating DCS components when patching Oracle Database Appliance, an error is encountered.
- Error when patching 11.2.0.4 Database homes to Oracle Database Appliance release 19.10
 - Patching of database home of versions 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to version 11.2.0.4.210119 may fail.

Error message displayed even when patching Oracle Database Appliance is successful

Although patching of Oracle Database Appliance was successful, an error message is displayed.

- Error in updating storage when patching Oracle Database Appliance
 When updating storage during patching of Oracle Database Appliance, an error is encountered.
- Error in Oracle Grid Infrastructure upgrade
 Oracle Grid Infrastructure upgrade fails, though the rootupgrade.sh script ran
 successfully.
- Error when running ORAChk or updating the server or database home When running Oracle ORAchk or the commands odacli create-prepatchreport, odacli update-server, odacli update-dbhome, an error is encountered.
- Error in patching database homes
 An error is encountered when patching database homes on databases that have
 Standard Edition High Availability enabled.
- Error in server patching
 An error is encountered when patching the server.
- 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.
- Patching of M.2 drives not supported
 Patching of M.2 drives (local disks SSDSCKJB48 and SSDSCKJB480G7) is not supported.
- 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.
- Error in patching Oracle Database Appliance
 When applying the server patch for Oracle Database Appliance, an error is encountered.

Retrying update-server command after odacli update-server command fails

When you patch Oracle Database Appliance release 19.11, the odacli update-server command fails.

Even when the odacli update-server job is successful, odacli describe-job output may show a message about missing patches on the source home. For example:

Message: Contact Oracle Support Services to request patch(es) "bug #". The patched "OraGrid191100" is missing the patches for bug "bug#" which is present in the source "OraGrid19000"

For release 19.11, a missing patch error for bug number 29511771 is expected. This patch contains Perl version 5.28 for the source grid home. Oracle Database Appliance



release 19.11 includes the later Perl version 5.32 in the Oracle Grid Infrastructure clone files, and hence, you can ignore the error. For any other missing patches reported in the odacli describe-job command output, contact Oracle Support to request the patches for Oracle Clusterware release 19.11.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Database Appliance release 19.11

Workaround

Review the error messages reported in the odacli describe-job command output for any missing patches other than the patch with bug number 29511771, and contact Oracle Support to request the patches for Oracle Clusterware release 19.11.

This issue is tracked with Oracle bug 32973488.

Retrying odacli update-dbhome command with -imp option after update fails

When you patch database homes to Oracle Database Appliance release 19.11, the odacli update-dbhome command fails.

For Oracle Database Appliance release 19.11, when you run the odacli update-dbhome command, the following error message is displayed:

DCS-10001:Internal error encountered: Contact Oracle Support Services to request patch(es) "bug#". Then supply the --ignore-missing-patch|-imp to retry the command.

You need not contact Oracle Support for the following bug numbers in the error message:

- 27138071 and 30508171, applicable to Oracle Database release 12.1
- 28581244 and 30508161, applicable to Oracle Database release 12.2
- 28628507 and 31225444, applicable to Oracle Database release 18c
- 29511771, applicable to Oracle Database release 19c

These patches contain the earlier versions of Perl 5.26 and Perl 5.28 for the source database home. Oracle Database Appliance release 19.11 includes the later Perl version 5.32 in the database clone files, and hence, you can ignore the error. You must rerun the odacli update-dbhome command again with the -imp option.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Database Appliance release 19.11

Workaround

Rerun the odacli update-dbhome command again with the -imp option:

```
# /opt/oracle/dcs/bin/odacli update-dbhome --dbhomeid 7c67c5b4-
f585-4ba9-865f-c719c63c0a6e -v 19.11.0.0.0 -imp
```



This issue is tracked with Oracle bug 32915897.

Error in stopping Oracle Grid Infrastructure when patching Oracle Database Appliance

If you create an Oracle Data Guard or Oracle Database with type network using odacli create-network, then there is an error in stopping Grid Infrastructure during patching.

Following are the errors reported when trying to stop the clusterware:.

```
CRS-2673: Attempting to stop 'test_vip.vip' on 'test' CRS-2677: Stop of 'test_vip.vip' on 'test' succeeded CRS-2675: Stop of 'test_vip.vip' on 'test' failed CRS-2677: Stop of 'vm2.kvm' on 'test' succeeded CRS-2673: Attempting to stop 'ora.data.vs1.acfs' on 'test'
```

Hardware Models

All Oracle Database Appliance hardware models with Oracle Database Appliance release 19.6 or later

Workaround

Stop the Virtual IP and listener manually before patching to Oracle Database Appliance release 19.11, and then ignore this error during patching.

This issue is tracked with Oracle bug 32224312.

Error in running the update-dbhome command

When you patch database homes to Oracle Database Appliance release 19.11, the odacli update-dbhome command fails.

For Oracle Database Appliance release 19.11, when you run the odacli update-dbhome command, due to the inclusion of the non-rolling DST patch, the job waits for 12,000 seconds (around 3.5 hours). The following error message is displayed:

```
DCS-10001:Internal error encountered: PRCC-1021:
One or more of the submitted commands did not execute successfully.
PRCC-1025: Command submitted on node cdb1 timed out after 12,000 seconds..
```

The rhp.log file contains the following entries:

"PRGO-1693 : The database patching cannot be completed in a rolling manner because the target patched home at "/u01/app/odaorahome/oracle/product/19.0.0.0/dbhome_4" contains non-rolling bug fixes "32327201" compared to the source home at "/u01/app/oracle/product/19.0.0.0/dbhome_1"



Hardware Models

All Oracle Database Appliance hardware models with Oracle Database Appliance release 19.11

Workaround

Shut down and restart database the failed database and run the datapatch script manually to complete the database update.

/u01/app/odaorahome/oracle/product/19.0.0.0/dbhome_4/OPatch/datapatch

This issue is tracked with Oracle bug 32801095.

Error in upgrading from Oracle Linux 6 to Oracle Linux 7 during Oracle Database Appliance patching

During upgrade of Oracle Linux 6 to Oracle Linux 7 during Oracle Database Appliance upgrade from release 18.8 to 19.x, an error is encountered.

Following are the errors reported when running the odacli update-server command:

```
DCS-10059:Clusterware is not running on all nodes
```

The log file /u01/app/grid/diag/asm/+asm/+ASM1/trace/+ASM1_ora_25383.trc has the following error:

```
KSIPC: ksipc_open: Failed to complete ksipc_open at process startup!!
KSIPC: ksipc_open: ORA-27504: IPC error creating OSD context
```

This is because, the STIG Oracle Linux 6 rules deployed on an Oracle Database Appliance system due to RDS/RDS_TCP not being loaded (due to OL6-00-000126 rule).

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

- 1. Edit the /etc/modprobe.d/modprobe.conf file.
- Comment the following lines:

```
# The RDS protocol is disabled
# install rds /bin/true
```

- 3. Restart the nodes.
- 4. Run the the odacli update-server command again.

This issue is tracked with Oracle bug 31881957.



Error in updating DCS components when patching Oracle Database Appliance

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

If the /opt directory is full, then the following error is seen when running the odacli update-dcscomponents command:

java.io.IOException: No space left on device

Hardware Models

All Oracle Database Appliance hardware models

Workaround

All patches and clone files are stored in the <code>/opt</code> directory. Use the command <code>odaclicleanup-patchrepo</code> and remove unnecessary patches. Retry the operation after cleaning up the directory.

This issue is tracked with Oracle bug 32534150.

Error when patching 11.2.0.4 Database homes to Oracle Database Appliance release 19.10

Patching of database home of versions 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to version 11.2.0.4.210119 may fail.

Following are the scenarios when this error may occur:

- When DCS Agent version is 19.9, and you patch database homes from 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to 11.2.0.4.201020 (which was the Database home version released with Oracle Database Appliance release 19.9)
- When DCS Agent version is 19.10, and you patch database homes from 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to 11.2.0.4.210119 (which was the Database home version released with Oracle Database Appliance release 19.9)
- When DCS Agent version is 19.10, and you patch database homes from 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to 11.2.0.4.200114 (which was the Database home version released with Oracle Database Appliance release 19.6)

This error occurs only when patching Oracle Database homes of versions 11.2.0.4.180717, or 11.2.0.4.170814, or 11.2.0.4.180417 to Oracle Database home using 19.10.0.0.0 version DCS Agent.

Hardware Models

All Oracle Database Appliance hardware models



Workaround

Patch your 11.2.0.4 Oracle Database home to any version earlier than 11.2.0.4.210119 (the version released with Oracle Database Appliance release 19.10) so that the DCS Agent is of version earlier than 19.10.0.0.0, and then update the DCSAgent to 19.10.

Note that once you patch DCS Agent to 19.10.0.0.0, then patching of these old 11.2.0.4 homes will fail.

This issue is tracked with Oracle bug 32498178.

Error message displayed even when patching Oracle Database Appliance is successful

Although patching of Oracle Database Appliance was successful, an error message is displayed.

The following error is seen when running the odacli update-dcscomponents command:

```
# time odacli update-dcscomponents -v 19.10.0.0.0
^[[ADCS-10008:Failed to update DCScomponents: 19.10.0.0.0
Internal error while patching the DCS components:
DCS-10231:Cannot proceed. Pre-checks for update-dcscomponents failed. Refer to /opt/oracle/dcs/log/-dcscomponentsPreCheckReport.log on node 1 for details.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

This is a timing issue with setting up the SSH equivalence.

Run the odacli update-dcscomponents command again and the operation completes successfully.

This issue is tracked with Oracle bug 32553519.

Error in updating storage when patching Oracle Database Appliance

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

The following error is displayed:



Message: ZK Wait Timed out. ZK is Offline

Task Name

Start Time

Status

Storage Firmware Patching

February 24, 2021 8:18:06 AM PST

February 24, 2021 8:18:48 AM PST

February 24, 2021 8:18:06 AM PST

February 24, 2021 8:18:48 AM PST

Failure

Hardware Models

Oracle Database Appliance X5-2 hardware models with InfiniBand

Workaround

Follow these steps:

- 1. Check the private network (ibbond0) and ping private IPs from each node.
- If the private IPs are not ping-able, then restart the private network interfaces on both nodes and retry.
- 3. Check the zookeeper status.
- **4.** On Oracle Database Appliance high availability deployments, if the zookeeper status is not in the leader of follower mode, then continue to the next job.

This issue is tracked with Oracle bug 32550378.

Error in Oracle Grid Infrastructure upgrade

Oracle Grid Infrastructure upgrade fails, though the ${\tt rootupgrade.sh}$ script ran successfully.

The following messages are logged in the grid upgrade log file located under /opt/oracle/oak/log/<NODENAME>/patch/19.8.0.0.0/.

This is because when the root upgrade scripts run on the last node, the active version is not set to the correct state.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:



1. As root user, run the following command on the second node:

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

After the command completes, verify that the active version of the cluster is updated to UPGRADE FINAL.

```
/u01/app/19.0.0.0/grid/bin/crsctl query crs activeversion -f
The cluster upgrade state is [UPGRADE FINAL]
```

3. Run Oracle Database Applaince server patching process again to upgrade Oracle Grid Infrastructure.

This issue is tracked with Oracle bug 31546654.

Error when running ORAChk or updating the server or database home

When running Oracle ORAchk or the commands odacli create-prepatchreport, odacli update-server, odacli update-dbhome, an error is encountered.

The following messages may be displayed:

- Table AUD\$[FGA_LOG\$] should use Automatic Segment Space Management

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. To verify the segment space management policy currently in use by the AUD\$ and FGA_LOG\$ tables, use the following SQL*Plus command:

```
select t.table_name,ts.segment_space_management from dba_tables t,
dba_tablespaces ts where ts.tablespace_name = t.tablespace_name and
t.table_name in ('AUD$','FGA_LOG$');
```

2. The output should be similar to the following:



```
DBMS_AUDIT_MGMT.AUDIT_TRAIL_FGA_STD,--this moves table FGA_LOG$
audit_trail_location_value => 'SYSAUX');
END:
```

This issue is tracked with Oracle bug 27856448.

Error in patching database homes

An error is encountered when patching database homes on databases that have Standard Edition High Availability enabled.

When running the command odacli update-dbhome -v release_number on database homes that have Standard Edition High Availability enabled, an error is encountered.

WARNING::Failed to run the datapatch as db <db_name> is not in running state

Hardware Models

All Oracle Database Appliance hardware models with High-Availability deployments

Workaround

Follow these steps:

1. Locate the running node of the target database instance:

```
srvctl status database -database dbUniqueName
```

Or, relocate the single-instance database instance to the required node:

```
odacli modify-database -g node_number (-th node_name)
```

2. On the running node, manually run the datapatch for non-CDB databases:

```
dbhomeLocation/OPatch/datapatch
```

3. For CDB databases, locate the PDB list using SQL*Plus.

```
select name from v$containers where open_mode='READ WRITE';
dbhomeLocation/OPatch/datapatch -pdbs
pdb_names_found_in_previous_step_divided_by_comma
```

This issue is tracked with Oracle bug 31654816.

Error in server patching

An error is encountered when patching the server.

When running the command odacli update-server -v release_number, the following error is encountered:

DCS-10001:Internal error encountered: patchmetadata for 19.6.0.0.0 missing target version for GI.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Change the file ownership temporarily to the appropriate grid user for the osdbagrp binary in the grid_home/bin location. For example:

```
$ chown -R grid:oinstall /u01/app/18.0.0.0/grid/bin/osdbagrp
```

2. Run either the update-registry -n gihome or the update-registry -n system command.

This issue is tracked with Oracle bug 31125258.

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:

 ${\tt DCS-10001:}$ 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.

Patching of M.2 drives not supported

Patching of M.2 drives (local 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.



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.

Error in patching Oracle Database Appliance

When applying the server patch for Oracle Database Appliance, an error is encountered.

Error Encountered When Patching Bare Metal Systems:

When patching the appliance on bare metal systems, the <code>odacli update-server</code> command fails with the following error:

```
Please stop TFA before server patching.
```

To resolve this issue, follow the steps described in the Workaround.

Error Encountered When Patching Virtualized Platform:

When patching the appliance on Virtualized Platform, patching fails with an error similar to the following:

```
INFO: Running prepatching on local node WARNING: errors seen during prepatch on local node ERROR: Unable to apply the patch 1
```

Check the prepatch log file generated in the directory /opt/oracle/oak/log/hostname/patch/18.8.0.0.0. You can also view the prepatch log for the last run with the command ls $-lrt\ prepatch_*.log$. Check the last log file in the command output.

In the log file, search for entries similar to the following:

```
ERROR: date_time_stamp: TFA is running on one or more nodes.

WARNING: date_time_stamp: Shutdown TFA and then restart patching

INFO: date_time_stamp: Read the Release Notes for additional information.
```



To resolve this issue, follow the steps described in the Workaround.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

On Oracle Database Appliance bare metal systems, do the following:

- 1. Run tfactl stop on all the nodes in the cluster.
- 2. Restart patching once Oracle TFA Collector has stopped on all nodes.

On Oracle Database Appliance Virtualized Platform, do the following:

- 1. Run /etc/init.d/init.tfa stop on all the nodes in the cluster.
- Restart patching once Oracle TFA Collector has stopped on all nodes.

This issue is tracked with Oracle bug 30260318.

Known Issues When Deploying Oracle Database Appliance

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

- Error in creating db system
 - The command odacli create-dbsystem operation fails due to errors.
- Error in modifying database shape for dbsystem
 When modifying the database shape in a dbsystem on Oracle Database
 Appliance, an error is encountered.
- Error in restoring a TDE-enabled database
 When restoring a TDE-enabled database on Oracle Database Appliance, an error is encountered.
- Error in creating a database
 - When creating a database on Oracle Database Appliance, an error is encountered.
- Error in recovering a database
 - When recovering a database on Oracle Database Appliance, an error is encountered.
- Error in creating a database
 - When creating a database on Oracle Database Appliance, an error is encountered.
- Db System options not available in Browser User Interface
 Some operations supported with ODACLI commands on dbsystems are not available in Browser User Interface.
- Error in adding JBOD
 - When you add a second JBOD to your Oracle Database Appliance deployment on which a DB system is running, an error is encountered.
- Error in provisioning appliance after running cleanup.pl
 Errors encountered in provisioning applince after running cleanup.pl.



- Error in registering a database
 - When registering a database on Oracle Database Appliance, an error is encountered.
- Error in updating a database

When updating a database on Oracle Database Appliance, an error is encountered.

- Error in running tfactl diagcollect command on remote node
 - When running the tfactl diagcollect command on Oracle Database Appliance, an error is encountered.
- Error in running tfactl diagcollect command

When running the tfactl diagcollect command on Oracle Database Appliance, an error is encountered.

- TFA disabled after patching Oracle Database Appliance
 After patching Oracle Database Appliance, TFA status shows as disabled.
- 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.
- 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.
- 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

Error in creating db system

The command odacli create-dbsystem operation fails due to errors.

The following error message is displayed:

DCS-10032:Resource of type 'Virtual Network' with name 'pubnet' is not found.

Hardware Models



Restart the DCS agent. For high-availability systems, restart the DCS agent on both nodes.

systemctl restart initdcsagent

This issue is tracked with Oracle bug 32740754.

Error in modifying database shape for dbsystem

When modifying the database shape in a dbsystem on Oracle Database Appliance, an error is encountered.

The command odacli modify-dbsystem does not modify the database with the new dbsystem shape.

Hardware Models

All Oracle Database Appliance hardware models with dbsystem deployments

Workaround

Modify the dbsystem database before running the command odacli modify-dbsystem with target dbshape in case of shape scale down.

Modify the dbsystem database after running the command odacli modify-dbsystem with target dbshape in case of shape scale up.

odacli modify-database -in db_name -s dbshape

This issue is tracked with Oracle bug 32705745.

Error in restoring a TDE-enabled database

When restoring a TDE-enabled database on Oracle Database Appliance, an error is encountered.

On a newly provisioned Oracle Database Appliance release 19.11 system, if you create the first database using iRestore and the database is a TDE-enabled database with Oracle ASM storage, then the iRestore job fails with the following error:

DCS-10001:Internal error encountered: Failed to set the ownership of the TDE Wallet.

This error does not occur if a database was already created on the newly provisioned system.

Hardware Models



 Login as the grid user and delete the directory corresponding to the failed database under DATA diskgroup.

```
# su - grid
Last login: *** *** ** **:**:** ***
$ asmcmd
ASMCMD> rm -rf +DATA/<DBUNIQUENAME>
ASMCMD> exit
```

2. As the grid user, start SQL*Plus connection with sysasm credentials:

```
$ sqlplus / as sysasm
    SQL*Plus: Release 19.0.0.0.0 - Production on Fri Oct 23 03:21:14 2020
    Version 19.11.0.0.0
    Copyright (c) 1982, 2020, Oracle. All rights reserved.
    Connected to:
    Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 -
Production
    Version 19.9.0.0.0
    SQL> alter diskgroup data add user 'oracle';
Diskgroup altered.
```

3. Delete the failed database and retry the iRestore operation.

This issue is tracked with Oracle bug 32861139.

Error in creating a database

When creating a database on Oracle Database Appliance, an error is encountered.

Oracle Database creation may fail if the first database is a single instance or Standard Edition High Availability database and the database home is located on the new database home location. The command odacli create-database fails with the following error:

```
{\tt ORA-49802:} missing read, write, or execute permission on specified ADR home directory
```

The trace file may contain the following entries:

```
ORA-00600: internal error code, arguments: [dbkc_init_bs_ctx-10], [48189], [], [], [], [], [], [], [], []
```

Hardware Models



If the ORACLE_HOME is $/u01/app/odaorahome/oracle/product/19.0.0.0/dbhome_1$, then run the following commands as the database user oracle, on the node that reported the error:

 $\label{local_model} $$ mv /u01/app/odaorabase/oracle/diag.ori $$ ORACLE_HOME/bin/diagsetup clustercheck=false $$ basedir=/u01/app/odaorabase/oracle oraclehome=$ORACLE_HOME $$ $$ oraclehome=$ORACLE_HOME $$ $$ oraclehome=$ORACLE_HOME $$ $$ oraclehome=$ORACLE_HOME $$ $$ oraclehome=$$ oraclehome $$

This issue is tracked with Oracle bug: 32903268.

Error in recovering a database

When recovering a database on Oracle Database Appliance, an error is encountered.

When you run the command odacli recover-database on a Standard Edition High Availability database, the following error message is displayed:

DCS-10001:Internal error encountered: Unable to get valid database node number to post recovery.

Hardware Models

All Oracle Database Appliance high-availability hardware models

Workaround

Run the following commands:

```
srvctl config database -db db_name | grep "Configured nodes" | awk
'{print $3}', whose output is nodeX,nodeY
srvctl modify database -db db_name -node nodeX
odacli recover-database
srvctl stop database -db db_name
srvctl modify database -db db_name -node nodeX,nodeY
srvctl start database -db db_name
```

This issue is tracked with Oracle bug 32928688.

Error in creating a database

When creating a database on Oracle Database Appliance, an error is encountered.

The command odacli create-database fails with the following error:

```
DCS-10001:Internal error encountered: Failed to set File systems dependency
```

This error occurs when you try to create an Oracle ASM database on an existing home located on the local file system.



Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not create a database on the local home /u01/app/<dbuser>/product/... You can create a new database home on the Oracle ACFS file system. Then create a database in the new Oracle home.

This issue is tracked with Oracle bug 32928462.

Db System options not available in Browser User Interface

Some operations supported with ODACLI commands on dbsystems are not available in Browser User Interface.

The Browser User Interface does not support operations for DB systems in the user interface options: Compute Instances, DB Systems, CPU Pool, Oracle ASR, and Create Network.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Use odacli commands for these operations on dbsystems.

This issue is tracked with Oracle bugs 32786024 and 32561609.

Error in adding JBOD

When you add a second JBOD to your Oracle Database Appliance deployment on which a DB system is running, an error is encountered.

The following error message is displayed:

ORA-15333: disk is not visible on client instance

Hardware Models

All Oracle Database Appliance hardware models bare metal and dbsystem

Workaround

Shut down dbsystem before adding the second JBOD.

systemctl restart initdcsagent

This issue is tracked with Oracle bug 32586762.



Error in provisioning appliance after running cleanup.pl

Errors encountered in provisioning applince after running cleanup.pl.

After running cleanup.pl, provisioning the appliance fails because of missing Oracle Grid Infrastructure image (IMGGI191100). The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

After running cleanup.pl, and before provisioning the appliance, update the repository as follows:

```
# odacli update-repository -f /**gi**
```

This issue is tracked with Oracle bug 32707387.

Error in registering a database

When registering a database on Oracle Database Appliance, an error is encountered.

In DB system, if you create a database manually, then it consumes HugePages if the parameter (use_large_pages=true) is set to use the HugePages for SGA.The command odacli register-database fails with the following error:

```
DCS-10045:Validation error encountered: Available Memory is less than SGA Size { Available : size\_in\_MB and SGA Size : size\_in\_MB }.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Start the database manually, and then disable the HugePages setting manually with the command SET use_large_pages=false, and after that register the database using the odacli register-database command.

This issue is tracked with Oracle bug 32847601.

Error in updating a database

When updating a database on Oracle Database Appliance, an error is encountered.

When you run the command odacli update-dbhome, the following error message is displayed:

PRGO-1069 :Internal error [# rhpmovedb.pl-isPatchUpg-1 #]..



To confirm that the MMON process occupies the lock, connect to the target database which failed to patch, and run the command:

```
SELECT s.sid, p.spid, s.machine, s.program FROM v$session s, v$process p
WHERE s.paddr = p.addr and s.sid = (
SELECT sid from v$lock WHERE id1= (
SELECT lockid FROM dbms_lock_allocated WHERE name = 'ORA$QP_CONTROL_LOCK'
));
```

If in the displayed result, s.program in the output is similar to to the format $oracle_user@host_box_name$ (MMON), then the error is caused by the MMON process. Run the workaround to address this issue.

Hardware Models

All Oracle Database Appliance high-availability hardware models

Workaround

Run the following commands:

1. Stop the MMON process:

```
# ps -ef | grep MMON
root    71220 70691    0 21:25 pts/0    00:00:00 grep --color=auto MMON
```

Locate the process ID from step (1) and stop it:

```
# kill -9 71220
```

- 2. Manually run datapatch on target database:
 - a. Locate the database home where the target database is running:

```
odacli describe-database -in db_name
```

b. Locate the database home location:

```
odacli describe-dbhome -i DbHomeID_found_in_step_a
```

c. On the running node of the target database:

```
[root@node1 ~]# sudo su - oracle
Last login: Thu Jun 3 21:24:45 UTC 2021
[oracle@node1 ~]$ . oraenv
ORACLE_SID = [oracle] ? db_instance_name
ORACLE_HOME = [/home/oracle] ? dbHome_location
```

d. If the target database is a non-CDB database, then run the following:

```
$ORACLE_HOME/OPatch/datapatch
```



e. If the target database is a CDB database, then run the following to find the PDB list:

select name from v\$containers where open_mode="READ WRITE";

f. Exit SQL*Plus and run the following:

```
$ORACLE_HOME/OPatch/datapatch -pdbs
pdb_names_gathered_by_the_SQL_statement_in_step_e_separated_by_co
mma
```

This issue is tracked with Oracle bug 32827353.

Error in running tfactl diagcollect command on remote node

When running the tfactl diagcollect command on Oracle Database Appliance, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models KVM and bare metal systems

Workaround

Prior to Oracle Autonomous Health Framework 21.2, if the certificates are generated on each node separately, then you must perform either of the following manual steps to fix this.

Run the following command on each node so that Oracle Trace File Analyzer generates new certificates and distributes to the other node:

```
tfactl syncnodes -remove -local
```

Connect using SSH with root credentials on one node and run the following.

```
tfactl synchodes
```

This issue is tracked with Oracle bug 32921859.

Error in running tfactl diagcollect command

When running the tfactl diagcollect command on Oracle Database Appliance, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the command both nodes separately with the -node local options:

tfactl diagcollect -node local



This issue is tracked with Oracle bug 32940358.

TFA disabled after patching Oracle Database Appliance

After patching Oracle Database Appliance, TFA status shows as disabled.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the odacli update-dbhome command with the -sko option:

odacli update-dbhome -j -v 19.9.0.0.0 -i dbhome_id -sko

This issue is tracked with Oracle bug 32058933.

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.
- 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 31125985.

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:



 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 and 31214657.

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

- 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
```

- 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 Perfomance 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 --nocp voldelete -G Data datdbname
```

For Oracle Database Appliance X8-2 High Perfomance 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 --nocp voldelete -G Reco rdodbname
```

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 --nocp voldelete -G Flash datdbname (if volume exists
in FLASH disk group)
GRID_HOME/bin/asmcmd --nocp 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 --nocp voldelete -G Flash rdodbname
```

This issue is tracked with Oracle bug 30750497.

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.

Known Issues When Managing Oracle Database Appliance

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

- Error in reinstate operation on Oracle Data Guard
 When running the command odacli reinstate-dataguard on Oracle Data Guard
 an error is encountered.
- Error in starting a database from a bare metal CPU pool When starting a database after patching to Oracle Database Appliance release 19.10, an error is encountered.
- Error in restoring a database
 When restoring a database on Oracle Database Appliance, an error is encountered.
- Error in running concurrent database or database home creation jobs When running concurrent database or database home creation jobs, an error is encountered.
- Error in restoring a database in dbsystem
 When restoring a database in dbsystem on Oracle Database Appliance, an error is encountered.
- Errors due to lack of space
 When running commands to patch or update database homes, an error is encountered.
- Directories not deleted on dbsystem After running the command odacli delete-dbsystem --force -n, certain empty non-Oracle Managed Files (OMF) directories under +diskgroup/dbuniquename are not deleted.
- Error in iRestore operation
 When restoring a database from NFS backup location on Oracle Database
 Appliance, an error is encountered.
- Error in iRestore operation on Standard Edition Database
 When restoring a Standard Edition Database on Oracle Database Appliance, an error is encountered.
- Error in restoring a standby database for 11.2.0.4 database When performing an iRestore operation on a standby database of version 11.2.0.4, an error is encountered.
- Error in deleting a standby database
 When deleting a standby database, an error is encountered.
- Error in configuring Oracle Active Data Guard
 When configuring Oracle Active Data Guard on Oracle Database Appliance, an
 error is encountered.



Error in Oracle Data Guard failover operation for 18.14 database

When running the odacli failover-dataguard command on a database of version 18.14, an error is encountered.

Error in Oracle Active Data Guard operations

When performing switchover, failover, and reinstate operations on Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.

Error in configuring Oracle Data Guard

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

• Error in the enable apply process after upgrading databases

When running the enable apply process after upgrading databases in an Oracle Data Guard deployment, an error is encountered.

Error in configuring Oracle Data Guard with cloned primary database

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

Error in configuring Oracle Data Guard on db system

When configuring Oracle Data Guard on db system, an error is encountered.

Error in creating Oracle Data Guard status

When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.

Error in registering a database

When registering a single instance database on Oracle Database Appliance, if the RAC option is specified in the odacli register-database command, an error is encountered.

Nessus scan does not recognize the January 2021 CPU patch

The Nessus scan report on Oracle Database Appliance does not recognize the January 2021 CPU patch.

Error in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

Error in Configuring Oracle Data Guard

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

Failure in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

Failure in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

• Error in updating Role after Oracle Data Guard operations

When performing operations with Oracle Data Guard on Oracle Database Appliance, an error is encountered in updating the Role.

Error in running other operations when modifying database with CPU pool

When modifying a database with CPU pool, an error is encountered with other operations.

Error in restoring a TDE-enabled database

When restoring a TDE-enabled database on Oracle Database Appliance, an error is encountered.



- Error when recovering a single-instance database
 When recovering a single-instance database, an error is encountered.
- Job history not erased after running cleanup.pl After running cleanup.pl, job history is not erased.
- 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.
- Unrecognized Token Messages Appear in /var/log/messages
 After updating Oracle Database Appliance, unrecognized token messages appear in /var/log/messages.

Error in reinstate operation on Oracle Data Guard

When running the command odacli reinstate-dataguard on Oracle Data Guard an error is encountered.

Following are the errors reported in dcs-agent.log:

```
DCS-10001:Internal error encountered: Unable to reinstate Dg." and can further find this error "ORA-12514: TNS:listener does not currently know of service requested
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ensure that the database you are reinstating is started in MOUNT mode.

To start the database in MOUNT mode, run this command:

```
srvctl start database -d db-unique-name -o mount
```

After the command completes successfully, run the command odacli reinstate-dataguard job. If the database is already in MOUNT mode, this can be an temporary error. Check the Data Guard status again a few minutes later with odacli describe-dataguardstatus or odacli list-dataguardstatus, or check with DGMGRL> SHOW CONFIGURATION; to see if the reinstatement is successful.

This issue is tracked with Oracle bug 32367676.



Error in starting a database from a bare metal CPU pool

When starting a database after patching to Oracle Database Appliance release 19.10, an error is encountered.

After patching to Oracle Database Appliance release 19.10, the database using bare metal CPU pool fails to start after the system restarts. The service cgconfig.service is down.

```
# systemctl status cgconfig.service
cgconfig.service - Control Group configuration service
  Loaded: loaded (/usr/lib/systemd/system/cgconfig.service; disabled;
vendor
preset: disabled)
  Active: inactive (dead)
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Check the cgconfig.service status. If the status is disabled or inactive, then continue.

```
# systemctl status cgconfig.service
cgconfig.service - Control Group configuration service
   Loaded: loaded (/usr/lib/systemd/system/cgconfig.service; disabled;
vendor
preset: disabled)
   Active: inactive (dead)
```

2. Start cgconfig.service:

```
# systemctl start cgconfig.service
```

3. Enable cgconfig.service:

```
# systemctl enable cgconfig.service
Created symlink from
/etc/systemd/system/sysinit.target.wants/cgconfig.service to
/usr/lib/systemd/system/cgconfig.service.
```

4. Check cgconfig.service status:

```
# systemctl status cgconfig.service
cgconfig.service - Control Group configuration service
  Loaded: loaded (/usr/lib/systemd/system/cgconfig.service; enabled;
vendor
preset: disabled)
  Active: active (exited) since Mon 2021-02-22 23:03:34 CST; 3min 40s
```



```
ago
Main PID: 16594 (code=exited, status=0/SUCCESS)
```

Restart the failed database.

This issue is tracked with Oracle bug 31907677.

Error in restoring a database

When restoring a database on Oracle Database Appliance, an error is encountered.

iRestore operation fails when specifying a wrong backup location which does not point to the parent directory of the source database backup.

This is because there are multiple database IDs in the wrong location, leading to failure in RMAN.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not specify backup location, or provide the correct backup location pointing to the parent directory of the source database backup.

This issue is tracked with Oracle bug 31907677.

Error in running concurrent database or database home creation jobs

When running concurrent database or database home creation jobs, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not run concurrent database or database home creation job. This issue is tracked with Oracle bug 32376885.

Error in restoring a database in dbsystem

When restoring a database in dbsystem on Oracle Database Appliance, an error is encountered.

Manual restore of the database to dbsystem fails with the following error:

```
/u01/app/oracle/product/19.0.0.0/dbhome_1/bin/orapwd file=`+DATA/brtest/orapwdbrtest' password=xxxxxx entries=5 dbuniquename="BRTEST" force=y OPW-00014: Could not delete password file +DATA/brtest/orapwdbrtest. ORA-15056: additional error message ORA-06512: at line 4 ORA-15260: permission denied on ASM disk group
```



```
ORA-06512: at "SYS.X$DBMS_DISKGROUP", line 533 ORA-06512: at line 2
```

The odacli delete-dbsystem command did not completely delete some of the Oracle ASM files that belonged to the deleted database, the password file, in the above example. This can cause an error when trying to restore the database using the same name.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the asmcmd command from the Oracle Database Appliance host to manually delete the files that belong to the deleted database. See the *Automatic Storage Management Administrator's Guide* for the ascmd commands. Make sure you verify the database name first before deleting the files.

This issue is tracked with Oracle bug 32931078.

Errors due to lack of space

When running commands to patch or update database homes, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Locate the database homes that were provisioned but not used, and manually delete them in any of the following ways:

- If you tried to delete the database homes immediately after the command odacli update-dbhome failed, then run the command odacli list-dbhomes. The database homes that were provisioned but not used, are displayed as the last entry in the list result. The output of odacli list-dbhomes is displayed in the order of the create time.
- Compare the results of odacli list-databases and odacli list-dbhomes commands. The database homes whose IDs are not displayed in the output of odacli list-databases are those database homes that do not contain databases, and could be deleted to free up more space.

This issue is tracked with Oracle bug 32915967.

Directories not deleted on dbsystem

After running the command odacli delete-dbsystem --force -n, certain empty non-Oracle Managed Files (OMF) directories under +diskgroup/dbuniquename are not deleted.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Manually run the command asmcmd rm on the directory to manually delete it.



This issue is tracked with Oracle bug 32806915.

Error in iRestore operation

When restoring a database from NFS backup location on Oracle Database Appliance, an error is encountered.

The following error message is displayed:

```
DCS-10001:Internal error encountered: Failed to run Rman Script: /tmp/dcsfiles/duplicateRman2021-05-25_06-03-50.0840547.script. Please refer log at location: /u01/app/oracle/diag/rdbms/mydb/mydb/scaoda8s002/rman/bkup/rman_duplicate/2021 -05-25/rman_duplicate_2021-05-25_06-03-50.0864.log.Duplicate command execution failed.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

This issue occurs if NFS is configured so that the user ID of the user oracle and group ID of group asmadmin do not match, in the primary and backup systems, mac1 and mac2 respectively. However, even with the mismatch if iRestore from the NFS backup needs to be performed, then make sure the user or group of the oracle binary in mac2 is able to at least read the backup files in the NFS backup location $NFS_backup_location/orabackups/cluster_name/database/DBID/DbUniqueName/db of mac1.$

You can find the user or group of the oracle binary by running the ls -ltr command on the 'oracle' binary present at the DBHOME>/bin.

In the following example, the user and group of the \mbox{oracle} binary are \mbox{oracle} and $\mbox{asmadmin}$ respectively.

```
[root@****** bin]# ls -ltr /u01/app/oracle/product/19.0.0.0/
dbhome_3/bin/oracle
-rwsr-s--x 1 oracle asmadmin 448749536 *** 25 06:03 /u01/app/oracle/
product/19.0.0.0/dbhome_3/bin/oracle
```

If one cannot provide permission for either user or group of the oracle binary on mac2, then at least 'read' permission must be provided for 'others', that is**4 on mac1 to all the NFS backup files. For example:

```
[root@mac1 bin]#/scratch2/orabackups/scaoda8s002-c/database/2987837625/
mydb/db
-rwxr--r-- 1 oracle asmadmin 1097728 Jun 3 10:55
auto_cf_DBSE3_2116871228_0100fgpa_1_1_1_20210603_1074250538
-rwxr--r-- 1 oracle asmadmin 1097728 Jun 3 10:55
c-2116871228-20210603-00
```



This issue is tracked with Oracle bug 32422681.

Error in iRestore operation on Standard Edition Database

When restoring a Standard Edition Database on Oracle Database Appliance, an error is encountered.

The following error message is displayed:

DCS-10001:Internal error encountered: Failed to run sql in method: runRmanDuplicateDbFromDiskBackup.Unable to startup instance in nomount mode as output contains ora-

The /opt/oracle/dcs/log/dcs-agent.log contains the following entries:

```
ORACLE instance shut down.
ORA-00371: not enough shared pool memory, should be at least 1141769669 bytes
```

This issue occurs only if more than 8 CPUs are online on the appliance.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Apply the BLR corresponding to bug 32961939 and retry the operation.

This issue is tracked with Oracle bug 32957033.

Error in restoring a standby database for 11.2.0.4 database

When performing an iRestore operation on a standby database of version 11.2.0.4, an error is encountered.

iRestore to standby may fail for database of version 11.2.0.4 if the standby database control file checkpoint is more recent than duplication point-in-time.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. After taking backup and before performing the iRestore operation, delete control file autobackups in the directory shown as attribute backupLocation in the backup report:

```
c-3737675288-20210211-04
c-3737675288-20210211-05
c-3737675288-20210211-06
c-3737675288-20210212-00
c-3737675288-20210212-01
```



- 2. Perform the database iRestore operation.
- After successfully performing the iRestore operation, create a backup of the source database.

This issue is tracked with Oracle bug 32473071.

Error in deleting a standby database

When deleting a standby database, an error is encountered.

When you iRestore a database as standby database and then delete it and then again iRestore the same standby database with the same database unique name, the following error is displayed:

```
DCS-10001:Internal error encountered: Failed to run the asm command: [/u01/app/19.0.0.0/grid/bin/asmcmd, --nocp, rm, -rf, RECO/ABCDEU]
Error:ORA-29261: bad argument
ORA-06512: at line 4
ORA-15178: directory 'ABCDEU' is not empty; cannot drop this directory
ORA-15260: permission denied on ASM disk group
ORA-06512: at "SYS.X$DBMS_DISKGROUP", line 666
ORA-06512: at line 2 (DBD ERROR: OCIStmtExecute).
```

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration

Workaround

Run any of the following workarounds:

- After deleting the standby database and before recreating the same standby database, perform the following steps:
 - 1. After deleting the standby database and before recreating the same standby database, perform the following steps:
 - a. Log in as the oracle user:

```
su - oracle
```

b. Set the environment:

```
. oraenv
ORACLE_SID = null
ORACLE_HOME = dbhome_path (such as /u01/app/oracle/product/
19.0.0.0/dbhome_1)
3. cd dbhome_path/bin
4. asmcmd --privilege sysdba rm -rf +RECO/DBUNIQUENAME/
5. asmcmd --privilege sysdba rm -rf +DATA/DBUNIQUENAME/
arc10/
```



6. asmcmd --privilege sysdba rm -rf +DATA/DBUNIQUENAME/PASSWORD/

Recreate the standby database with a different database unique name.

This issue is tracked with Oracle bug 32871772.

Error in configuring Oracle Active Data Guard

When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.

When Oracle Data Guard configuration is enabled and protection mode is MAX_PROTECTION, the odacli configure-dataguard command fails at step EnableActivedg with the following error:

DCS-10001:Internal error encountered: Unable to restart standby db

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration

Workaround

Follow these steps:

- 1. Run odacli configure dataguard with MAX_PERFORMANCE protection mode, SYNC transport type and enable active dataguard setting.
- 2. Run the following DGMGRL command after successfully configuring Oracle Data Guard:

DGMGRL> edit configuration set protection mode as maxprotection;

This issue is tracked with Oracle bug 32852846.

Error in Oracle Data Guard failover operation for 18.14 database

When running the odacli failover-dataguard command on a database of version 18.14, an error is encountered.

The following error message is displayed:

DCS-10001:Internal error encountered: Unable to precheckFailoverDg11g Dg.

The error message can be viewed in the DCS agent log:

```
select DATABASE_ROLE, FORCE_LOGGING, FLASHBACK_ON from v$database
ERROR at line 1:
ORA-00600: internal error code, arguments: [kcbgtcr_17], [], [], [], [], [], [], [], [], []
```

Hardware Models



Follow these steps:

 Run the following DGMGRL statements on the system with the database to fail over to:

```
DGMGRL> SHOW CONFIGURATION;

DGMGRL> VALIDATE DATABASE '<DB_UQNIUE_NAME_to_failover_to>';

DGMGRL> FAILOVER TO '<DB_UQNIUE_NAME_to_failover_to>';

DGMGRL> SHOW CONFIGURATION;
```

2. After failover is successful, run the odacli describe-dataguardstatus -i *id* command several times to update the DCS metadata.

This issue is tracked with Oracle bug 32727379.

Error in Oracle Active Data Guard operations

When performing switchover, failover, and reinstate operations on Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.

When performing switchover, failover, and reinstate operations on Oracle Active Data Guard, upgrading primary database may fail at step Database Upgrade with the following error:

```
PRCZ-2103 : Failed to execute command "/u01/app/odaorahome/oracle/product/19.0.0.0/dbhome_1/bin/dbua" on node "node1" as user "oracle". Detailed error:
Logs directory:
/u01/app/odaorabase/oracle/cfgtoollogs/dbua/upgrade2021-05-06_01-31-16PM
```

The log contains the following message:

```
SEVERE: May 08, 2021 6:50:24 PM
oracle.assistants.dbua.prereq.PrereqChecker
logPrereqResults
SEVERE: Starting with Oracle Database 11.2, setting
JOB_QUEUE_PROCESSES=0
will disable job execution via DBMS_JOBS and DBMS_SCHEDULER. FIXABLE:
MANUAL
Database: ptdkjqt
Cause: The database has JOB_QUEUE_PROCESSES=0.
Action: Set the value of JOB_QUEUE_PROCESSES to a non-zero value, or remove
the setting entirely and accept the Oracle default.
```

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration



Follow these steps:

1. Use SQL*Plus to access the database and run the following command:

```
alter system set JOB_QUEUE_PROCESSES=1000;
```

2. Retry the upgrade command.

This issue is tracked with Oracle bug 32856214.

Error in configuring Oracle Data Guard

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

During Oracle Data Guard configuration, the odacli configure-dataguard command fails at step create-dataguardstatus with the following error:

```
Failed to persist newly created dataguard configuration -- null DCS-10001:Internal error encountered: Unable to add new dg config.
```

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration

Workaround

Check the letter case of dbUniqueName for consistency in the following:

- dbUniqueName in the odacli describe-database command output.
- dbUniqueName in the dataguard.json file used in the odacli configure-dataguard -r command.
- In the command output of show parameter db_unique_name.

If the dbUniqueName letter case is not consistent, then update them for consistency and then use the devmode command to create dataguardstatus on both primary and standby systems.

On the primary system:

```
DEVMODE=true odacli create-dataguardstatus -i dbid -r config_dg.json
```

On the standby system:

DEVMODE=true odacli create-dataguardstatus -i dbid -r config_dg.json -n dataguardstatus_id_of_primary

This issue is tracked with Oracle bug 32861273.



Error in the enable apply process after upgrading databases

When running the enable apply process after upgrading databases in an Oracle Data Guard deployment, an error is encountered.

The following error message is displayed:

```
Error: ORA-16664: unable to receive the result from a member
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Restart standby database in upgrade mode:

```
srvctl stop database -d <db_unique_name>
Run PL/SOL command: STARTUP UPGRADE;
```

- 2. Continue the enable apply process and wait for log apply process to refresh.
- 3. After some time, check the Data Guard status with the DGMGRL command:

```
SHOW CONFIGURATION;
```

This issue is tracked with Oracle bug 32864100.

Error in configuring Oracle Data Guard with cloned primary database

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

When configuring Oracle Data Guard with cloned primary database, the <code>odacli</code> configure-dataguard command fails at step <code>Configure Primary database (Primary site)</code> with the following error:

```
DCS-10001: FAILED TO CREATE BROKER CONFIG FILE DIRECTORY
```

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration

Workaround

Follow these steps:



1. On the system with the cloned primary database, run the following commands:

```
mkdir /u02/app/oracle/oradata/dbUniqueName chown oracle:oinstall /u02/app/oracle/oradata/dbUniqueName
```

2. Run the odacli configure-dataguard command.

This issue is tracked with Oracle bug 32906493.

Error in configuring Oracle Data Guard on db system

When configuring Oracle Data Guard on db system, an error is encountered.

When configuring Oracle Data Guard on db system with protection mode MAX_PROTECTION and SYNC transport type, the odacli configure-dataguard command fails at at step Configure and enable Data Guard (Primary site) with the following error:

DGMGRL> Error: ORA-16627: operation disallowed since no member would remain to support protection mode"

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Active Data Guard configuration

Workaround

Follow these steps:

- 1. Run odacli configure dataguard with MAX_PERFORMANCE protection mode and ASYNC transport type.
- Manually change protection mode and transport type after successfully configuring Oracle Data Guard:

```
su - oracle
DGMGRL> edit database primary_db_unique_name set property
'LogXptMode'='SYNC';
Property "LogXptMode" updated
DGMGRL> edit database standby_db_unique_name set property
'LogXptMode'='SYNC';
Property "LogXptMode" updated
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXAVAILABILITY;
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXAVAILABILITY;
```

This issue is tracked with Oracle bug 32891817.



Error in creating Oracle Data Guard status

When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.

When configuring Oracle Data Guard, the odacli configure-dataguard command fails at step NewDgconfig with the following error on the standby system:

```
ORA-16665: TIME OUT WAITING FOR THE RESULT FROM A MEMBER
```

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the standby system, run the following:

```
export DEMODE=true;
odacli create-dataguardstatus -i dbid -n
dataguardstatus_id_on_primary -r configdg.json
export DEMODE=false;
configdg.json example
```

Example configdg.json file for a single-node system:

```
"name": "test1_test7",
"protectionMode": "MAX_PERFORMANCE",
 "replicationGroups": [
    "sourceEndPoints": [
        "endpointType": "PRIMARY",
        "hostName": test_domain1",
        "listenerPort": 1521,
        "databaseUniqueName": "test1",
        "serviceName": "test",
        "sysPassword": "***",
        "ipAddress": "test_IPaddress"
      },
       ],
    "targetEndPoints": [
        "endpointType": "STANDBY",
        "hostName": "test_domain2",
        "listenerPort": 1521,
        "databaseUniqueName": "test7",
        "serviceName": "test",
        "sysPassword": "***",
```



This issue is tracked with Oracle bug 32719173.

Error in registering a database

When registering a single instance database on Oracle Database Appliance, if the RAC option is specified in the odacli register-database command, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Create a single-instance database using Oracle Database Configuration Assistance (DBCA) and then register the database using the odacli register-database command with the RAC option.

This issue is tracked with Oracle bug 32853078.

Nessus scan does not recognize the January 2021 CPU patch

The Nessus scan report on Oracle Database Appliance does not recognize the January 2021 CPU patch.

Nessus scan was performed on Oracle Database Appliance provisioned with release 19.11, with 'Nessus scanner' Linux version 8.14.0 and 'Plugin Set' feed versions earlier than 202105051730. Nessus scan scan fails to recognize the 'Jan 2021 CPU' patch on the system while it recognizes April, 2021 patch and despite them being cumulative in nature. The scan report describes it as follows:

```
Severity : HIGH

CVSS 2.0 Score : 7.5

Plugin : 145266

Issue Description : Oracle Database Server Multiple Vulnerabilities

(Jan 2021 CPU)
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

As per the analysis, the issue is considered to be 'False Positive' from the Tenable Support team and they have provided the fix in 'Plugin Set' feed version 202105051730. Perform Nessus scan with Linux version 8.14.0 and 'Plugin Set' feed version 202105051730 or later.

This issue is tracked with Oracle bug 32844858.



Error in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

The odacli reinstate-dataguard command fails with the following error:

Unable to reinstate Dg. Reinstate job was executed within 24hrs after failover job.

The dcs-agent.log file has the following error entry:

```
DGMGRL> Reinstating database "xxxx", please wait...

Oracle Clusterware is restarting database "xxxx" ...

Connected to "xxxx"

Continuing to reinstate database "xxxx" ...

Error: ORA-16653: failed to reinstate database
```

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the primary machine, get the standby_became_primary_scn:

2. On the old primary database, flashback to this SCN with RMAN with the backup encryption password:

```
RMAN> set decryption identified by 'rman_backup_password'; executing command: SET decryption
RMAN> FLASHBACK DATABASE TO SCN 3522449;
...
Finished flashback at 24-SEP-20
RMAN> exit
```

3. On the new primary machine, run the odacli reinstate-dataguard command.

This issue is tracked with Oracle bug 31884506.



Error in Configuring Oracle Data Guard

When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.

The odacli configure-dataguard command fails with the following error:

DCS-10001:Internal error encountered: Unable to pass postcheckDgStatus. Primary database has taken a non-Archivelog type backup between irestore standby database and configure-dataguard.

Verify the status of the job with the odacli list-jobs command.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the primary machine, remove the Oracle Data Guard configuration:

```
DGMGRL > remove
configuration;
```

- 2. On the standby machine, delete the standby database.
- 3. On the primary machine, disable the database backup schedule:

```
odacli update-schedule -i ID -d
```

- 4. Start the Oracle Data Guard configuration steps.
- Enable primary database backup schedule after Oracle Data Guard configuration is successful.

This issue is tracked with Oracle bug 31880191.

Failure in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

The odacli reinstate-dataguard command fails with the following error:

```
DCS-10001:Internal error encountered:
Unable enqueue Id and update DgConfig.
Use DGMGRL to show standby database has this error
GMGRL> show database xxxx
Database - xxxx
Role: PHYSICAL STANDBY
Intended State: APPLY-ON
Transport Lag: (unknown)
Apply Lag: 4 days 22 hours 1 minute 23 seconds (computed 1 second ago)
Average Apply Rate: 0 Byte/s
```



```
Real Time Query: OFF
Instance(s):
    xxxx1 (apply instance)
    xxxx2
Database Warning(s):
    ORA-16853: apply lag has exceeded specified threshold
    ORA-16856: transport lag could not be determined
Database Status:
WARNING
```

The dcs-agent.log file has the following error entry:

```
DGMGRL> Reinstating database "xxxx", please wait...
Oracle Clusterware is restarting database "xxxx" ...
Connected to "xxxx"
Continuing to reinstate database "xxxx" ...
Error: ORA-16653: failed to reinstate database
```

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the new primary machine, get the standby_became_primary_scn:

```
SQL> select standby_became_primary_scn from v$database;
STANDBY_BECAME_PRIMARY_SCN
-----4370820
```

2. On the new primary database, check missing sequence after standby_became_primary_scn:

3. On the new primary machine, restore the missing sequence with RMAN.

```
$rman target/
RMAN> restore archivelog from logseq=1 until logseq=53;
```



4. On the new standby machine, check if current_scn is increasing, and check with DGMGRL> SHOW CONFIGURATION; to see if the apply lag is being resolved.

This issue is tracked with Oracle bug 32041012.

Failure in Reinstating Oracle Data Guard

When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.

The odacli reinstate-dataguard command fails with the following error:

Message:

DCS-10001:Internal error encountered: Unable to reinstate Dg.

The dcs-agent.log file has the following error entry:

 ${\tt ORA-12514:\ TNS:}$ listener does not currently know of service requested in connect descriptor

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. Make sure the database you are reinstating is started in MOUNT mode. To start the database in MOUNT mode, run this command:

```
srvctl start database -d db-unique-name -o mount
```

2. After the above command runs successfully, run the odacli reinstate-dataguard command.

This issue is tracked with Oracle bug 32047967.

Error in updating Role after Oracle Data Guard operations

When performing operations with Oracle Data Guard on Oracle Database Appliance, an error is encountered in updating the Role.

The dbRole component described in the output of the odacli describe-database command is not updated after Oracle Data Guard switchover, failover, and reinstate operations on Oracle Database Appliance.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Run odacli update-registry -n db --force/-f to update the database metadata. After the job completes, run the odacli describe-database command and verify that dbRole is updated.



This issue is tracked with Oracle bug 31378202.

Error in running other operations when modifying database with CPU pool

When modifying a database with CPU pool, an error is encountered with other operations.

Since modifying a database to attach or detach a CPU Pool needs a database restart, it may affect any other concurrent operation on the same database. For instance, the database backup job fails when you concurrently modify the same database with the CPU Pool option. The ODACLI job displays the following error:

```
# odacli create-backup -in dbName -bt Regular-L0
   DCS-10089:Database dbName is in an invalid state `{Node Name:closed}'
Hardware Models
```

Hardware Models

All Oracle Database Appliance hardware models with bare metal configuration

Workaround

Wait until the odacli modify-database completes before you perform any other operation on the same database.

This issue is tracked with Oracle bug 32045674.

Error in restoring a TDE-enabled database

When restoring a TDE-enabled database on Oracle Database Appliance, an error is encountered.

When a TDE-enabled database with Oracle ASM database storage is restored on an Oracle ACFS database storage, the following error message is displayed:

```
Failed to copy file from : source_location to: destination_location
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not change the database storage type when restoring a TDE-enabled database.

This issue is tracked with Oracle bug 31848183.



Error when recovering a single-instance database

When recovering a single-instance database, an error is encountered.

When a single-instance database is running on the remote node, and you run the operation for database recovery on the local node, the following error is observed:

DCS-10001:Internal error encountered: DCS-10001:Internal error encountered: Missing arguments: required sqlplus connection information is not provided

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Perform recovery of the single-instance database on the node where the database is running.

This issue is tracked with Oracle bug 31399400.

Job history not erased after running cleanup.pl

After running cleanup.pl, job history is not erased.

After running cleanup.pl, when you run /opt/oracle/dcs/bin/odacli list-jobs commands, the list is not empty.

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

1. Stop the DCS Agent by running the following commands on both nodes. For Oracle Linux 6, run:

```
initctl stop initdcsagent
```

For Oracle Linux 7, run:

```
systemctl stop initdcsagent
```

2. Run the cleanup script sequentially on both the nodes.

This issue is tracked with Oracle bug 30529709.



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.

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:

 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.

