Oracle® Database Appliance Release Notes



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ORACLE

Oracle Database Appliance Release Notes, Release 19.15 for Linux x86-64

F54419-02

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Preface

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

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

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

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

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

Documentation Accessibility

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

Access to Oracle Support

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



Related Documents

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

- Oracle Database Appliance Release Notes
- Oracle Database Appliance Licensing Information User Manual
- Oracle Database Appliance Security Guide
- Oracle Database Appliance Accessibility Guide
- Oracle Database Appliance X8-2 Deployment and User's Guide
- Oracle Database Appliance X7-2 Deployment and User's Guide
- Oracle Database Appliance X6-2-HA Deployment and User's Guide
- Oracle Database Appliance X6-2S/M/L Deployment and User's Guide
- Oracle Database Appliance X5-2 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.



1 What's New in This Release

Oracle Database Appliance release 19.15 supports Oracle Database 19c functionality on Oracle Database Appliance hardware models.

New Features

This release supports Oracle Database Appliance models X9-2-HA, X9-2L, X9-2S, 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 19.15. You can also create and patch Oracle Database Appliance DB systems. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.15.

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:

- Deployment of Oracle Database Appliance X9-2 Hardware Models This release supports Oracle Database Appliance X9-2-HA, X9-2L, X9-2S. For provisioning and patching your appliance, see the Oracle Database Appliance X9-2 Deployment and User's Guide.
- **Provisioning and Patching of Oracle Database Appliance Bare Metal Deployments** This release supports for provisioning of bare metal deployments, and patching of Oracle Database Appliance bare metal deployments from Oracle Database Appliance release 19.10 and later.

Oracle Database Appliance provides support for out of place patching. The patches for Oracle Grid Infrastructure and Oracle Database are available as clone files. It is mandatory to run the odacli create-prepatchreport command before you patch your server. You must fix the errors displayed in the report before you 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.

 Provisioning and Patching of Oracle Database Appliance KVM and DB Systems This release supports for provisioning of KVM and DB Systems, and patching of DB Systems from Oracle Database Appliance release 19.11 or later.

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

 Support for Oracle Database 21c and 19c databases on Oracle Database Appliance DB Systems

Oracle Database Appliance release 19.15 supports creation of databases of Oracle Database releases 21.6, 21.5, 21.4, 21.3, 19.15, 19.14, 19.13, 19.12, and 19.11 on DB systems. The Oracle Grid Infrastructure software installed is of the same version as the



Oracle Database version you install. The version is specified in the database system JSON payload, with the attribute version for database. For details on the JSON file changes for creating Oracle Database 21c databases on DB systems, see the Oracle Database Appliance Deployment and User's Guide for your hardware model.

• Upgrading Oracle Database Appliance using Data Preserving Reprovisioning You can upgrade your appliance from Oracle Database Appliance releases 12.1.2.12, 12.2.1.4, 18.3, 18.5, 18.7, and 18.8 to the latest release without upgrading to the intermediate releases using Data Preserving Reprovisioning.

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

Modifying the Memory Size on DB Systems

You can create DB systems with customized memory size and increase the memory on existing DB systems. The size of the new DB system must be greater than the default memory size of the DB system.

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

OVM to KVM migration on Oracle Database Appliance

You can now migrate the databases in your Oracle Database Appliance deployment from virtualized platform to Oracle ASM on the bare metal system. You can then manually move the databases to DB systems.

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

• Support for -local option when patching the server or database home on Oracle Database Appliance High-Availability models

To minimize downtime, use the --local option with the odacli update-server and odacli update-dbhome commands. Update the DCS components and then run the odacli create-prepatchreport command. There is no downtime during this process. After analyzing the prepatch report, use the --local option to continue patching Oracle Database Appliance.

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

• Support for High-Availability for Oracle Database Enterprise Edition singleinstance databases on Oracle Database Appliance You can enable or disable high-availability for Enterprise Edition Oracle Database 19.15 and 21.6 single-instance databases when creating databases on Oracle Database Appliance using the BUI or ODACLI commands.

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

• Registering Oracle Data Guard on Oracle Database Appliance You can migrate existing Oracle Data Guard configuration and register with Oracle Database Appliance using ODACLI commands.

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

• Specifying the Redundancy for Oracle ASM Flex Disk Group on Oracle Database Appliance

The odacli create-dbstorage command has a new option --db-redundancy, -rd to specify the database redundancy.

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

Browser User Interface (BUI) Enhancements

Oracle Database Appliance release 19.15 supports the following in the BUI:

- TDE Wallet Management features such as resetting the master key, changing the TDE wallet management, and changing the TDE password.
- Adding and modifying DB System memory size
- Specifying the node for patching the appliance and database homes
- Enabling or disabling high-availability for Oracle Database Enterprise Edition singleinstance databases when creating databases on Oracle Database Appliance
- Specifying dynamic default parameters

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

 Support for Oracle Enterprise Manager Plug-in with Oracle Database Appliance Release 19.15

You can install and configure Oracle Enterprise Manager plug-in for Oracle Database Appliance. Oracle Enterprise Manager plug-in releases 13.2.4 and 13.4.2 require a patch to run on Oracle Database Appliance release 19.10 and later. Oracle Enterprise Manager plug-in release 13.4.3 does not require additional patch.

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.

There is a search box at the top right hand corner of the BUI. Search results are links to documentation pages shown as a new window in the BUI. When you click the **Help** button, links from the documentation relevant to the context of the tab are displayed. Along with the search results from the Oracle Database Appliance documentation pages, BUI also provides relevant Frequently Asked Questions (FAQs) for the search query. Additionally, you can also search on DCS error codes such as DCS-10001, DCS-10032, and so on in the search box and get the links to documentation pages containing these error codes. When you specify the search query, relevant documentation, FAQs, and DCS error codes links are displayed in a new window in the BUI.

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 2022 Oracle Database Release Update) for bare metal systems are available in this release:

- 19.15.0.0.220419
- 12.1.0.2.220419

Additionally, the release also includes Oracle Grid Infrastructure and Oracle Database 21.6 updates (April 2022 Oracle Database Release Update 21.6.0.0.220419) for DB systems.



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

See the chapter *Oracle Database Appliance Release 19.15 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 19.15 from the drop down list.

- Oracle Database Appliance 19.15.0.0.0 Server Patch for ODACLI/DCS stack: Use patch 34069644 to update your bare metal deployment to Oracle Database Appliance release 19.15. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.15.
- Oracle Database Appliance 19.15.0.0.0 Grid Infrastructure Clone for ODACLI/DCS stack: Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.15. You also use this patch 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 19.15.0.0.0 Database Clone File for ODACLI/DCS stack: Use the Oracle Database 19.15.0.0.220419 Software Clone file to create 19.15.0.0.220419 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 12.1.0.2 Database Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 12.1.0.2.220419 Software Clone file to create 12.1.0.2.220419 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.
- Oracle Database Appliance 21.6.0.0.220419 GI Clone for DB Systems: Use patch 33152235 to perform an initial deployment of Oracle Database Appliance on DB Systems for creating Oracle Database 21c databases. This patch is for Oracle Database Appliance Hardware Models with DB systems only.
- Oracle Database Appliance 21.6.0.0.220419 Database Clone File for DB Systems: Use the Oracle Database 21.6.0.0.220419 Software Clone file to create 21.6.0.0.220419 Oracle Database homes. Patch 33152237 provides the database clone for this update. This patch is for Oracle Database Appliance Hardware Models with DB systems only.
- Oracle Database Appliance Upgrade Utility for 12.1.2.12, 12.2.1.4, 18.3, 18.5, 18.7, 18.8 OAK/DCS Stack: Use the Oracle Database Appliance upgrade utility to update your deployment to Oracle Database Appliance release 19.15. You must download the utility to run the first step of Data Preserving Reprovisioning feature. Patch 33594115 provides the utility.

Related Topics

Oracle Database Appliance Checklists



- Patching Oracle Database Appliance
- Oracle Database Appliance Command Line Interface Reference
- Registering Oracle Data Guard on Oracle Database Appliance
- About Enterprise Edition High Availability for Oracle Database Appliance
- Upgrading Oracle Database Appliance Using Data Preserving Reprovisioning
- Migrating from Virtualized Platform to KVM on Oracle Database Appliance
- Troubleshooting Data Preserving Reprovisioning 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.
- Enterprise Manager Plugin for Oracle Database Appliance
- Data Preserving Reprovisioning FAQs



2 Component Versions for Oracle Database Appliance

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

- Component Versions for Oracle Database Appliance X9-2 Models The matrix displays the component versions available for Oracle Database Appliance for X9-2S, X9-2L, and X9-2-HA.
- 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 X9-2 Models

The matrix displays the component versions available for Oracle Database Appliance for X9-2S, X9-2L, and X9-2-HA.

Table 2-1Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database ApplianceRelease 19.15

Х9-2-НА	X9-2S and X9-2L
16.00.08.00	Not applicable
0310	Not applicable
RXA0	Not applicable
Not applicable	2CV1RC30
1132	1132
	16.00.08.00 0310 RXA0 Not applicable



Component Name	Х9-2-НА	X9-2S and X9-2L
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.23.r141538	5.0.2.23.r141538
BIOS	62040500	62040500
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.601	2.4.8.0.601
Oracle Linux	7.9	7.9
AHF (Oracle Autonomous Health Framework)	22.1	22.1
MySQL	8.0.27	8.0.27
Kernel	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64
GI_HOME	19.15.0.0.220419	19.15.0.0.220419
DB_HOME	19.15.0.0.220419	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0	22.1.0

Table 2-1 (Cont.) Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle DatabaseAppliance Release 19.15

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 2-2Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database ApplianceRelease 19.15

Component Name	Х8-2-НА	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 or 1132	0121
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466	5.0.1.28.r140682
BIOS	52050300	52040600
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
		·

Component Name	Х8-2-НА	X8-2S and X8-2M
HMP (Oracle Hardware Management Pack)	2.4.8.0.601	2.4.8.0.601
Oracle Linux	7.9	7.9
AHF (Oracle Autonomous Health Framework)	22.1	22.1
MySQL	8.0.27	8.0.27
Kernel	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64
GI_HOME	19.15.0.0.220419	19.15.0.0.220419
DB_HOME	19.15.0.0.220419	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0	22.1.0

Table 2-2(Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle DatabaseAppliance Release 19.15

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 2-3Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database ApplianceRelease 19.15

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
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466	5.0.2.24.r141466
BIOS	41100500	41100500
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.601	2.4.8.0.601
Oracle Linux	7.9	7.9
AHF (Oracle Autonomous Health Framework)	22.1	22.1

Component Name	Х7-2-НА	X7-2S and X7-2M
MySQL	8.0.27	8.0.27
Kernel	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64	kernel- uek-4.14.35-2047.512.6.el7uek.x86_ 64
GI_HOME	19.15.0.0.220419	19.15.0.0.220419
DB_HOME	19.15.0.0.220419	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0	22.1.0

Table 2-3 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle DatabaseAppliance Release 19.15

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 2-4Component Versions for Oracle Database Appliance X6-2S, X6-2M, and X6-2L inOracle Database Appliance Release 19.15

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: 5.0.2.24.r141466
BIOS	X6-2SM:38350200
	X6-2L:39350200
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.601
Oracle Linux	7.9
AHF (Oracle Autonomous Health Framework)	22.1
MySQL	8.0.27
Kernel	kernel-uek-4.14.35-2047.512.6.el7uek.x86_64
GI_HOME	19.15.0.0.220419
DB_HOME	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0



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 2-5Component Versions for Oracle Database Appliance X6-2-HA in Oracle DatabaseAppliance Release 19.15

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)	5.0.2.24.r141466
BIOS	38320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.601
Oracle Linux	7.9
AHF (Oracle Autonomous Health Framework)	22.1
MySQL	8.0.27
Kernel	kernel-uek-4.14.35-2047.512.6.el7uek.x86_64
GI_HOME	19.15.0.0.220419
DB_HOME	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0

Component Versions for X5-2 Models

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

Table 2-6Component Versions for Oracle Database Appliance X5-2 for Oracle DatabaseAppliance Release 19.15

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



Table 2-6	(Cont.) Component Versions for Oracle Database Appliance X5-2 for Oracle Database
Appliance	Release 19.15

Component Name	Version
HDD_SHARED	A3A0, PAG1, PD51
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466
BIOS	30350100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.601
Oracle Linux	7.9
Oracle Autonomous Health Framework (AHF)	22.1
MySQL	8.0.27
Kernel	kernel-uek-4.14.35-2047.512.6.el7uek.x86_64
GI_HOME	19.15.0.0.220419
DB_HOME	19.15.0.0.220419
Oracle Auto Service Request (Oracle ASR)	22.1.0

3

Oracle Database Appliance 19.15 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 Bare Metal System and KVM Patches Download the patches available for Oracle Database Appliance 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.

Oracle Database Appliance Release (To patch to this release)	Earliest Supported Release To Patch From (Oracle recommends this release)
19.15.0.0	For bare metal systems:
	• 19.14.0.0
	• 19.13.0.0
	• 19.12.0.0
	• 19.11.0.0
19.14.0.0	For bare metal systems:
	• 19.13.0.0
	• 19.12.0.0
	• 19.11.0.0
	• 19.10.0.0

Table 3-1	Minimum Patch Rec	uirements for Oracle	Database Appliance Releases
			Balabaoo / appliance neloacoo



Oracle Database Appliance Release (To patch to this release)	Earliest Supported Release To Patch From (Oracle recommends this release)		
19.13.0.0	For bare metal systems:		
	• 19.12.0.0		
	• 19.11.0.0		
	• 19.10.0.0		
	• 19.9.0.0		
	For virtualized platform deployments:		
	• 19.9.0.0		
	• 19.8.0.0		
19.12.0.0	For bare metal systems:		
	• 19.11.0.0		
	• 19.10.0.0		
	• 19.9.0.0		
	• 19.8.0.0		
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		
	• 19.7.0.0		
	• 19.6.0.0		
19.9.0.0	For bare metal systems:		
	• 19.8.0.0		
	• 19.7.0.0		
	• 19.6.0.0		
	• 19.5.0.0		
	For virtualized platform deployments:		
	• 19.8.0.0		
19.8.0.0	For bare metal systems:		
	• 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	• 18.7.0.0		
	• 18.5.0.0		
	• 18.3.0.0		

Table 3-1 (Cont.) Minimum Patch Requirements for Oracle Database ApplianceReleases



Oracle Database Appliance Release (To patch to this release)	Earliest Supported Release To Patch From (Oracle recommends this release)		
18.7.0.0	•	18.5.0.0	
	•	18.3.0.0	
18.5.0.0	•	18.3.0.0	
18.3.0.0	•	12.2.1.4.0	
	•	12.2.1.3.0	
	•	12.2.1.2.0	
	•	12.1.2.12	
12.2.1.4.0	•	12.2.1.3.0	
	•	12.2.1.2.0	
	•	12.1.2.12	
12.2.1.3.0	•	12.2.1.2.0	
	•	12.1.2.12	
12.2.1.2.0	•	12.1.2.12	
	No	te: 12.2.1.2.0 is not supported on virtualized platform.	
12.1.2.12	•	12.1.2.11	
	•	12.1.2.10	
	•	12.1.2.9	
	•	12.1.2.8	
12.1.2.11	•	12.1.2.10	
	•	12.1.2.9	
	•	12.1.2.8	
	•	12.1.2.7	
12.1.2.10	•	12.1.2.9	
	•	12.1.2.8	
	•	12.1.2.7	
	•	12.1.2.6	
12.1.2.9	•	12.1.2.8	
	•	12.1.2.7	
	•	12.1.2.6	
12.1.2.5	12.	1.2.0 to 12.1.2.4	
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0		
2.2.0.0.0	2.1	.0.3.1 or earlier	

Table 3-1	(Cont.) Minimum Patch Requirements for Oracle Database Appliance
Releases	

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 19.15 on Oracle Database Appliance bare metal systems. You can patch your bare metal systems to Oracle Database Appliance release 19.15 from Oracle Database Appliance release 19.11 or later. You can also patch Oracle Database Appliance DB systems on KVM to release 19.15.

Oracle Database Appliance Bare Metal System and KVM Patches

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

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.15 from the release list.

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	34069644	Use the server patch to update your deployment to Oracle Database Appliance release 19.15. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.15.	Patching Oracle Database Appliance
Oracle Database Appliance Grid Infrastructure Clone for ODACLI/DCS stack	30403673	Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.15. You also use this patch 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 with the Oracle Database Appliance ISO Image for release 19.15.	Provisioning Oracle Database Appliance Software

Table 3-2Oracle Database Appliance Patches for Oracle Database ApplianceRelease 19.15



Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Database Clone 19.15.0.0.220419 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance Database Clone 19.15.0.0.220419 for ODACLI/DCS stack to create 19.15 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance Database Clone 12.1.0.2.220419 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance Database Clone 12.1.0.2.220419 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.15 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 19.15. 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 19.15.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.6.0.0.220419 GI Clone for DB Systems	33152235	Use the Oracle Grid Infrastructure 21c clone file to deploy Oracle Database 21c database on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.6.0.0.220419 Database Clone for DB Systems	33152237	Use the Oracle Database Appliance 21.6.0.0.220419 clone file to deploy Oracle Database 21c database on DB system.	Managing DB Systems in KVM Deployment

Table 3-2(Cont.) Oracle Database Appliance Patches for Oracle DatabaseAppliance Release 19.15



Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Upgrade Utility for 12.1.2.12, 12.2.1.4, 18.3, 18.5, 18.7, 18.8 OAK/DCS Stack	33594115	Use the Oracle Database Appliance upgrade utility to update your deployment to Oracle Database Appliance release 19.15. You must download the utility to run the first step of Data Preserving Reprovisioning feature.	Upgrading Oracle Database Appliance Using Data Preserving Reprovisioning

Table 3-2	(Cont.) Oracle Database Appliance Patches for Oracle Database
Appliance Release 19.15	

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.

- Error in updating the DCS agent when patching Oracle Database Appliance When patching the server to Oracle Database Appliance release 19.15, an error may be encountered.
- Alert message in prepatch report during database patching When patching database home on Oracle Database Appliance, the prepatch report may display an alert.
- Error in updating the operating system when patching the server When patching the server to Oracle Database Appliance release 19.15, the operating system may not be updated.
- Error in server patching during DB system patching When patching the server during DB system patching to Oracle Database Appliance release 19.15, an error may be encountered.
- Detaching of databases with additionally configured services not supported by odaugradeutil
 When running odaugradeutil in the Data Preserving Reprovisioning process, if there are

additionally configured services, then databases cannot be detached.

 Additionally configured database storage not restored during Data Preserving Reprovisioning
 In the Data Preserving Reprovisioning process, if there are any additionally config

In the Data Preserving Reprovisioning process, if there are any additionally configured database storages, an error in restoring the storage may occur.

 DCS agent not stopped on remote node during cleanup in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, DCS agent is not stopped on the remote node when running the cleanup script.



- Error in restore node process in Data Preserving Reprovisioning In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.
- Error due to group names in restore node process in Data Preserving Reprovisioning
 In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.
- Error in restore node process in Data Preserving Reprovisioning In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.
- Error in DB system patching When performing operations within the DB system such as patching, an error may be encountered.
- Error in database home patching on DB system When patching database home on DB system, an error may be encountered.
- Error in server patching When patching Oracle Database Appliance which already has STIG V1R2 deployed, an error may be encountered.
- AHF error in prepatch report for the update-dbhome command When you patch server to Oracle Database Appliance release 19.15, the odacli update-dbhome command may fail.
- Error in patching prechecks report The patchung prechecks report may display an error.
- Error message displayed even when patching Oracle Database Appliance is successful Although patching of Oracle Database Appliance was successful, an error message may be displayed.
- 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.

Error in updating the DCS agent when patching Oracle Database Appliance

When patching the server to Oracle Database Appliance release 19.15, an error may be encountered.

The command odacli update-dcsagent may fail. The following error message is displayed:

DCS-12015:Could not find the user credentials in the DCS agent wallet.



Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 34158809.

Alert message in prepatch report during database patching

When patching database home on Oracle Database Appliance, the prepatch report may display an alert.

The following error message may be displayed:

```
Rolling patching is not possible,: The database patching cannot be completed
in a rolling manner because the target patched home at
"/u01/app/odaorahome/oracle/product/12.1.0.2/dbhome_2" contains non-rolling
bug fixes "33613829,33808385" compared to the
source home at "/u01/app/odaorahome/oracle/product/12.1.0.2/dbhome 1".
```

The error may be encountered when patching database homes to Oracle Database release 19.15 or Oracle Database release 21.6.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

The bug numbers listed in the warning may be any of the following:

```
30432118 (DSTV32-34)
31335037 (DST V35)
32327201 (DST V36)
33613829 (DST V37)
33808367 (OJVM)
33808385 (OJVM)
```

If the prepatch report contains only a combination of one or more bug numbers from the above-mentioned list and not any other bug numbers, then ignore the alert message, and continue updating the database home to the latest release either in the rolling or non-rolling mode. Use the odacli update-dbhome command with the --local option to update the database home in the rolling mode.

This issue is tracked with Oracle bug 34071355.



Error in updating the operating system when patching the server

When patching the server to Oracle Database Appliance release 19.15, the operating system may not be updated.

The following error message is displayed:

DCS-10001:Internal error encountered: Failed to patch OS.

Run the following command:

rpm -q kernel-uek

If the output of this command displays multiple RPM names, then perform the workaround.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Remove the following RPMs:

yum remove kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64
yum remove kernel-uek-4.14.35-1902.301.1.el7uek.x86 64

This issue is tracked with Oracle bug 34154435.

Error in server patching during DB system patching

When patching the server during DB system patching to Oracle Database Appliance release 19.15, an error may be encountered.

The following error message is displayed:

ORA-12559: Message 12559 not found; product=RDBMS; facility=ORA

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Retry server patching on the DB system.

This issue is tracked with Oracle bug 34153158.



Detaching of databases with additionally configured services not supported

by odaugradeutil

When running <code>odaugradeutil</code> in the Data Preserving Reprovisioning process, if there are additionally configured services, then databases cannot be detached.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Additional services must be deleted to complete the detach operation by running the command srvctl remove service. If these services are required, then before removing the service, the metadata must be captured manually and then the services must be recreated on the system running Oracle Database Appliance release 19.15 using the srvctl command from the appropriate database home.

This issue is tracked with Oracle bug 33593287.

Additionally configured database storage not restored during Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, if there are any additionally configured database storages, an error in restoring the storage may occur.

Additionally configured database storages, that is, those which are not being used by an active database are not restored in the metadata. The underlying volume and file system are restored but when running the command odacli list-dbstorages does not display these entities.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

The volume and file system are present and can still be viewed with Oracle Clusterware commands such as srvctl config volume and srvctl config filesystem. But they cannot be added into the DCS metadata with ODACLI commands. An attempt to recreate a database storage with the same configuration fails since the volumes and file systems already exist with Oracle Clusterware. If the volume and file system are not required to be preserved, they can be deleted using CRS commands (srvctl and asmcmd commands). Following this, an identical database storage can be created using the command odacli create-dbstorage.

This issue is tracked with Oracle bug 33848933.



DCS agent not stopped on remote node during cleanup in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, DCS agent is not stopped on the remote node when running the cleanup script.

The following error message is displayed:

```
# /opt/oracle/dcs/bin/odacli restore-node -g -j
Enter new system password:
Retype new system password:
DCS-10060:Validation fails, so skip running the rest task flow. System
has
already undergone provisioning with status 'FAILED'
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

- 1. Run the command systemctl stop initdcsagent on both nodes.
- 2. Run cleanup.pl on Node0, and then run it on Node1.

DCS agent on both nodes must be stopped prior to cleaning up Node0, and then Node1. The sync service does not synchronize job reports from the metadata store as the DCS agent is not running.

This issue is tracked with Oracle bug 34090256.

Error in restore node process in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.

If incorrect VIP names or VIP IP addresses are configured, then the detach completes successfully but the command odacli restore-node -g displays a validation error. This is because the earlier releases did not validate VIP names or VIP IP addresses before provisioning.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

Manually edit the file /opt/oracle/oak/restore/metadata/provisionInstance.json with the correct VIP names or VIP IP addresses. Retry the command odacli restore-node -g. For fixing VIP names or VIP IP addresses, nslookup can be used to query hostnames and IP addresses.



This issue is tracked with Oracle bug 34140344.

Error due to group names in restore node process in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.

The following error message may be displayed:

DCS-10045: groupNames are not unique.

This error occurs if the source Oracle Database Appliance is an OAK version. This is because on the DCS stack, the same operating system group is not allowed to be assigned two or more roles.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

Manually edit the file /opt/oracle/oak/restore/metadata/provisionInstance.json with unique group names for each role. Retry the command odacli restore-node -g.

This issue is tracked with Oracle bug 33790836.

Error in restore node process in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, during node restore, an error may be encountered.

The following error message may be displayed:

DCS-10045: groupNames are not unique.

This error occurs if the source Oracle Database Appliance is an OAK version. This is because on the DCS stack, the same operating system group is not allowed to be assigned two or more roles.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

Manually edit the file /opt/oracle/oak/restore/metadata/provisionInstance.json with unique group names for each role. Retry the command odacli restore-node -g.

This issue is tracked with Oracle bug 34042493.



Error in DB system patching

When performing operations within the DB system such as patching, an error may be encountered.

The database alert.log displays the error:

```
ORA-00600 [kfnRConnect!ascname]
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Add the following in the etc/udev/rules.d/70-names.rules file in the DB system:

ACTION=="add|change", KERNEL=="sd*", OPTIONS:="nowatch"

- 2. Reload the udev rules in DB system:
 - # udevadm control --reload
 # udevadm trigger --type=devices --action=change
- 3. Retry the operations.

This issue is tracked with Oracle bug 34064882.

Error in database home patching on DB system

When patching database home on DB system, an error may be encountered.

The following error message may be displayed:

```
start database -d U7iNbvm7U
PRCR-1079 : Failed to start resource ora.u7inbvm7u.db
CRS-5017: The resource action "ora.u7inbvm7u.db start" encountered the
following error:
ORA-03113: end-of-file on communication channel
Process ID: 47474
Session ID: 26 Serial number: 37622
. For details refer to "(:CLSN00107:)" in
"/u01/app/ogrid/diag/crs/scaoda807c5n2/crs/trace/
crsd_oraagent_ooracle.trc".
CRS-2674: Start of 'ora.u7inbvm7u.db' on 'scaoda807c5n2' failed
```

```
CRS-2674: Start of 'ora.u/inbvm/u.db' on 'scaoda807c5n2' failed
CRS-2632: There are no more servers to try to place resource
'ora.u7inbvm7u.db' on that would satisfy its placement policy
```



The database alert.log displays the error:

ORA-00600 [kfnRConnect!ascname]

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Add the following in the etc/udev/rules.d/70-names.rules file in the DB system:

ACTION=="add|change", KERNEL=="sd*", OPTIONS:="nowatch"

2. Reload the udev rules in DB system:

```
# udevadm control --reload
# udevadm trigger --type=devices --action=change
```

- 3. Start the database involved in the patch, running the srvctl command as the oracle user.
- 4. As the oracle user, manually apply datapatch:

dest dbhome/OPatch/datapatch

This issue is tracked with Oracle bug 34030999.

Error in server patching

When patching Oracle Database Appliance which already has STIG V1R2 deployed, an error may be encountered.

On an Oracle Database Appliance deployment with release earlier than 19.15, if the Security Technical Implementation Guidelines (STIG) V1R2 is already deployed, then when you patch to 19.15 or earlier, and run the command odacli update-server -f version, an error may be displayed.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

The STIG V1R2 rule OL7-00-040420 tries to change the permission of the file /etc/ssh/ ssh_host_rsa_key from '640' to '600' which causes the error. During patching, run the command chmod 600 /etc/ssh/ssh_host_rsa_key command on both nodes.

This issue is tracked with Oracle bug 33168598.



AHF error in prepatch report for the update-dbhome command

When you patch server to Oracle Database Appliance release 19.15, the <code>odacli</code> update-dbhome command may fail.

The following error message is displayed in the pre-patch report:

Verify the Alternate Archive Failed AHF-4940: One or more log archive Destination is Configured to destination and alternate log archive Prevent Database Hangs destination settings are not as recommended

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Run the odacli update-dbhome command with the -f option.

```
/opt/oracle/dcs/bin/odacli update-dbhome --dbhomeid 7c67c5b4-
f585-4ba9-865f-c719c63c0a6e -v 19.15.0.0.0 -f
```

This issue is tracked with Oracle bug 33144170.

Error in patching prechecks report

The patchung prechecks report may display an error.

The following error message may be displayed:

Failure in the pre-patch report caused by "AHF-5190: operating system boot device order is not configured as recommended"

Hardware Models

Oracle Database Appliance X-7 hardware models

Workaround

Run the odacli update-server or odacli update-dbhome command with the -f option.

This issue is tracked with Oracle bug 33631256.



Error message displayed even when patching Oracle Database Appliance is successful

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

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

```
# time odacli update-dcscomponents -v 19.15.0.0.0
^[[ADCS-10008:Failed to update DCScomponents: 19.15.0.0.0
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.

Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Run the command:

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

2. Ignore the following two warnings:

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



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

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

Grid home/bin/crsctl query crs activeversion -f

This issue is tracked with Oracle bug 30099090.

Error when patching to 12.1.0.2.190716 Bundle Patch

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

The ODACLI job displays the following error:

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

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

Install the same patch again.

This issue is tracked with Oracle bugs 30026438 and 30155710.

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.



Known Issues When Deploying Oracle Database Appliance

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

ODACLI command output not included in system report

On Oracle Database Appliance which has multi-user access enabled, ODACLI command output is not included in the system report.

• Error in databaseconversion

When converting an Oracle RAC or Oracle RAC One Node Database to single-instance Oracle Database on a customized Oracle Database Appliance deployment, an error may be encountered.

• Error in creating DBVM

After patching a multi-user access enabled appliance to Oracle Database Appliance release, an error may be encountered when creating a DBVM.

Error in creating an Oracle ASM Database after patching
 After patching a multi-user access analysis appliance to Oracle Database

After patching a multi-user access enabled appliance to Oracle Database Appliance release, an error may be encountered when creating an Oracle Database on Oracle ASM storage.

- Error in creating two DB systems When creating two DB systems concurrently in two different Oracle ASM disk groups, an error is encountered.
- Error in reprovisioning DB system
 When reprovisioning a DB system on Oracle Database Appliance with the same name as the DB system that existed earlier and was deleted, an error may be encountered.
- Error in creating database When creating a database on Oracle Database Appliance, an error may be encountered.
- Error in creating DB system When creating a DB system on Oracle Database Appliance, an error may be encountered.
- Error in recovering a TDE-enabled database
 When recovering a TDE-enabled Oracle RAC One Node database from the remote node, after the database was shut down, an error may be encountered.
- Error in recovering a database When recovering a database on Oracle Database Appliance, an error is encountered.
- 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 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 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.
- 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

ODACLI command output not included in system report

On Oracle Database Appliance which has multi-user access enabled, ODACLI command output is not included in the system report.

The system report generated by Oracle Trace File Analyzer Collector does not have the output for ODACLI commands as the ODACLI commands do not run in the absence of required authentication.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Generate the output of the ODACLI commands separately and then provide the output to Oracle Support, if needed.

This issue is tracked with Oracle bug 33786157.

Error in databaseconversion

When converting an Oracle RAC or Oracle RAC One Node Database to singleinstance Oracle Database on a customized Oracle Database Appliance deployment, an error may be encountered.

When you run the command odacli modify-database, the following error message is displayed:

DCS-10001:Internal error encountered: Failed to convert database pFgeWo to SIDB.

The failure is caused because of file permission issues which may occur in a customized deployment. Run the workaround to address this issue.



Hardware Models

All Oracle Database Appliance high-availability hardware models

Workaround

Follow these steps:

- 1. The actual grid user must have write permissions to the custom grid directory.
- 2. Allow oinstall group members to write to the custom grid directory.
- 3. Run the command odacli modify-database again.

This issue is tracked with Oracle bug 33188928.

Error in creating DBVM

After patching a multi-user access enabled appliance to Oracle Database Appliance release, an error may be encountered when creating a DBVM.

The following error message may be displayed:

DCS-10816:User *DBVM name* cannot be authorized to perform the requested operation 'list-dgstorages'. Please contact the system administrator for being granted the role to perform this operation.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps on the appliance. For a high-availability appliance, run the command on the second node and then on the first node.

- 1. Stop the running instance of DCS agent by running the command systemctl stop initdcsagent logged in as the root user.
- 2. Connect to the MySQL database as schema dcsagentdb and then run the SQL statement:

```
'insert
into IDMEntitlementInfo_opsMap values((select entitlement_uuid from
idm_entitlement_info where entitlement_name='METADATA-MGMT'),now(),0,
(select
operation_uuid from idm_operation_info where
operation_name='list-dgstorages'),now()); followed by commit;'
```

- 3. Restart the DCS agent using the command command systemctl start initdcsagent logged in as the root user.
- 4. Recreate the DB system after cleaning up the failed DBVM instance.

This issue is tracked with Oracle bug 34157436.



Error in creating an Oracle ASM Database after patching

After patching a multi-user access enabled appliance to Oracle Database Appliance release, an error may be encountered when creating an Oracle Database on Oracle ASM storage.

An attempt to create an Oracle Database on Oracle ASM storage as the user odaadmin after patching a multi-user access enabled appliance, that was initially provisioned in Oracle Database Appliance release 19.13 with isRoleSeparated=false and two operating system groups, fails. The following error message may be displayed:

[FATAL] [DBT-05801] THERE ARE NO ASM DISK GROUPS DETECTED.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

The user odaadmin must be added to the operating system group corresponding to the groupRole=dba. This is a one-time activity that must be performed manually before reattempting to create an Oracle ASM database.

This issue is tracked with Oracle bug 34126894.

Error in creating two DB systems

When creating two DB systems concurrently in two different Oracle ASM disk groups, an error is encountered.

When attempting to start the DB systems, the following error message is displayed:

```
CRS-2672: Attempting to start 'vm_name.kvm' on 'oda_server'
CRS-5017: The resource action "vm_name.kvm start" encountered the
following
error:
CRS-29200: The libvirt virtualization library encountered the following
error:
Timed out during operation: cannot acquire state change lock (held by
monitor=remoteDispatchDomainCreate)
. For details refer to "(:CLSN00107:)" in
"/u01/app/grid/diag/crs/<oda_server>/crs/trace/
crsd_orarootagent_root.trc".
CRS-2674: Start of 'vm_name.kvm' on 'oda_server' failed
CRS-2679: Attempting to clean 'vm_name.kvm' on 'oda_server'
CRS-2681: Clean of 'vm_name.kvm' on 'oda_server' succeeded
CRS-4000: Command Start failed, or completed with errors.
```

Hardware Models

All Oracle Database Appliance hardware models



Do not create two DB systems concurrently. Instead, complete the creation of one DB system and then create the other.

This issue is tracked with Oracle bug 33275630.

Error in reprovisioning DB system

When reprovisioning a DB system on Oracle Database Appliance with the same name as the DB system that existed earlier and was deleted, an error may be encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Delete all non-OMF paths created with the earlier DB system before reprovisioning a DB system.

This issue is tracked with Oracle bug 33829611.

Error in creating database

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

The database creation job fails if the database name contains an underscore (for example, db_1). The following error message may be displayed:

```
DCS-10001:Internal error encountered: Failed to copy password file for database.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not use underscore in the database name.

This issue is tracked with Oracle bug 33816343.

Error in creating DB system

When creating a DB system on Oracle Database Appliance, an error may be encountered.

When running the odacli create-dbsystem command, the following error message may be displayed:

DCS-10001:Internal error encountered: ASM network is not online in all nodes

Hardware Models

All Oracle Database Appliance hardware models



Follow these steps:

1. Manually bring the offline resources online:

crsctl start res -all

2. Run the odacli create-dbsystem command.

This issue is tracked with Oracle bug 33784937.

Error in recovering a TDE-enabled database

When recovering a TDE-enabled Oracle RAC One Node database from the remote node, after the database was shut down, an error may be encountered.

When attempting to start the TDE-enabled Oracle RAC One Node database from the remote node, that is, the node other than node mentioned in the dbTargetNodeNumber in the database object, then the following error message may be displayed:

```
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

Run the odacli recover-database command from the node mentioned in the dbTargetNodeNumber in the database object.

This issue is tracked with Oracle bug 33851593.

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



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 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



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 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 <code>oracle_user@host_box_name (MMON)</code>, 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_comma

This issue is tracked with Oracle bug 32827353.

Error in running tfactl diagcollect command on remote node

When running the tfact1 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 syncnodes



This issue is tracked with Oracle bug 32921859.

Error when upgrading database from 11.2.0.4 to 12.1 or 12.2

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

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

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

Hardware Models

All Oracle Database Appliance bare metal deployments

Workaround

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

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

This issue is tracked with Oracle bug 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:

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

ALTER SYSTEM SET LOCAL LISTENER='';

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

ALTER SYSTEM SET LOCAL LISTENER='-oracle-none-';

This issue is tracked with Oracle bugs 31202775 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

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

ps -aef | grep oakd

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

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.

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 back up of database
 When backing up a database on Oracle Database Appliance, an error is encountered.
- Error in configuring Oracle Data Guard
 When running the command odacli configure-dataguard on Oracle Database
 Appliance, an error may be encountered.



- Error in automatic back up of database
 When patching Oracle Database Appliance, there may be an error in automatic backup of database.
- OpenSSH command vulnerability
 OpenSSH command vulnerability issue detected in Qualys and Nessus scans.
- AHF permissions error When running the OERR tool in the AHF_HOME on Oracle Database Appliance, an error is encountered.
- Error in cleaning up a deployment When cleaning up a Oracle Database Appliance, an error is encountered.
- Error in TDE wallet management
 When changing the TDE wallet password or rekeying the TDE wallet of a database which has TDE Wallet Management set to the value EXTERNAL, an error is encountered.
- Error in display of file log path File log paths are not displayed correctly on the console but all the logs that were generated for a job have actually logged the correct paths.
- Error in configuring Oracle Data Guard When running the command odacli configure-dataguard on Oracle Database Appliance, an error may be encountered.
- Error in reinstating on Oracle Data Guard When running the command odacli reinstate-dataguard on Oracle Database Appliance, an error is encountered.
- Error in configuring Oracle Data Guard
- Error in viewing Oracle Data Guard status When viewing Oracle Data Guard status on Oracle Database Appliance, an error is encountered.
- 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 running concurrent database or database home creation jobs When running concurrent database or database home creation jobs, 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 creating Oracle Data Guard status When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.
- Error in restoring a database When restoring a database on Oracle Database Appliance, if the DB Home ID is provided in the command odacli irestore-database, then an error may be encountered.
- Error in registering a database When restoring a database on Oracle Database Appliance, if the NLS setting on the standby database is not America/American, then an error may be encountered.
- Error 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 when recovering a single-instance database When recovering a single-instance database, an error is encountered.
- 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.
- Unrecognized Token Messages Appear in /var/log/messages After updating Oracle Database Appliance, unrecognized token messages appear in /var/log/messages.

Error in back up of database

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

After successful failover, running the command odacli create-backup on new primary database fails with the following message:

```
DCS-10001:Internal error encountered: Unable to get the
rman command status commandid:xxx
output:STATUS
_______[COMPLETED WITH WARNINGS] error:.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. On the new primary database, connect to RMAN as oracle and edit the archivelog deletion policy.

```
rman target /
RMAN> CONFIGURE ARCHIVELOG DELETION POLICY TO BACKED UP 1 TIMES TO
'SBT TAPE';
```



2. On the new primary database, as the root user, take a backup:

odacli create-backup -in db_name -bt backup_type

This issue is tracked with Oracle bug 33181168.

Error in configuring Oracle Data Guard

When running the command odacli configure-dataguard on Oracle Database Appliance, an error may be encountered.

When running the command odacli configure-dataguard on Oracle Database Appliance, the following error message may be displayed at CONFIGUREDG - DCS-10001: UNABLE TO CONFIGURE BROKER DGMGRL> SHOW CONFIGURATION;:

ORA-16783: cannot resolve gap for database tgtpodpgtb

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps on the machine with the new primary database:

1. Disable the scheduled auto backup of primary database with the command:

odacli update-schedule

2. Restore archive log of the primary database.

odacli restore-archivelog

3. Configure Oracle Data Guard with the command odacli configure-dataguard.

This issue is tracked with Oracle bug 34008520.

Error in automatic back up of database

When patching Oracle Database Appliance, there may be an error in automatic backup of database.

The following message is displayed:

```
DCS-10001:Internal error encountered: 1.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

After the appliance is successfully patched, the automatic database backup processes complete successfully. This issue is tracked with Oracle bug 33699091.



OpenSSH command vulnerability

OpenSSH command vulnerability issue detected in Qualys and Nessus scans.

Qualys and Nessus both report a medium severity issue OPENSSH COMMAND INJECTION VULNERABILITY. Refer to CVE-2020-15778 for details.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None.

This issue is tracked with Oracle bug 33217970.

AHF permissions error

When running the OERR tool in the AHF_HOME on Oracle Database Appliance, an error is encountered.

After successful failover, running the command odacli create-backup on new primary database fails with the following message:

```
cd /opt/oracle/dcs/oracle.ahf/bin
../oerr
-bash: ./oerr: Permission denied
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the tool, with sh, as follows:

```
cd /opt/oracle/dcs/oracle.ahf/bin
sh oerr
Use AHF XXXX format... Exiting
```

This issue is tracked with Oracle bug 33293560.

Error in cleaning up a deployment

When cleaning up a Oracle Database Appliance, an error is encountered.

During cleanup, shutdown of Clusterware fails because the NFS export service uses Oracle ACFS-based clones repository.

Hardware Models

All Oracle Database Appliance hardware models with DB systems



Follow these steps:

1. Stop the NFS service on both nodes:

service nfs stop

2. Clean up the bare metal system. See the *Oracle Database Appliance Deployment and User's Guide* for your hardware model for the steps.

This issue is tracked with Oracle bug 33289742.

Error in TDE wallet management

When changing the TDE wallet password or rekeying the TDE wallet of a database which has TDE Wallet Management set to the value EXTERNAL, an error is encountered.

The following message is displayed:

DCS-10089:Database DB_NAME is in an invalid state 'NOT_RUNNING'.Database
DB NAME must be running

Hardware Models

All Oracle Database Appliance hardware models

Workaround

NONE. The operations such as changing the TDE wallet password or rekeying the TDE wallet is not supported on a database which has TDE Wallet Management set to the value EXTERNAL.

This issue is tracked with Oracle bug 33278653.

Error in display of file log path

File log paths are not displayed correctly on the console but all the logs that were generated for a job have actually logged the correct paths.

Hardware Models

All Oracle Database Appliance hardware models with virtualized platform

Workaround

None.

This issue is tracked with Oracle bug 33580574.



Error in configuring Oracle Data Guard

When running the command odacli configure-dataguard on Oracle Database Appliance, an error may be encountered.

When running the command odacli configure-dataguard on Oracle Database Appliance, the following error message may be displayed at step Restore missing archivelog (Primary site):

DCS-10114:Failed to acquire exclusive access

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

- 1. Before running the command odacli configure-dataguard, disable auto-backup schedules for the primary database and verify that the existing backup jobs are completed.
 - a. Check the database backup schedule for the primary database:

odacli list-schedules

b. Disable the backup schedules for database and archive logs of the primary database:

odacli update-schedule -i schedule id -d

- 2. Run the command odacli configure-dataguard.
- 3. After the command odacli configure-dataguard completes successfully, reenable auto backup for the primary database, if desired.

odacli update-schedule -i *schedule id* -e

This issue is tracked with Oracle bug 33724368.

Error in reinstating on Oracle Data Guard

When running the command odacli reinstate-dataguard on Oracle Database Appliance, an error is encountered.

The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models



Manually flashback old primary database. Run the following commands:

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 old primary database, as oracle user, run the following.

```
rman target /
RMAN> set decryption identified by 'password'
RMAN> FLASHBACK DATABASE TO SCN STANDBY BECAME PRIMARY SCN;
```

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

This issue is tracked with Oracle bug 33190261.

Error in configuring Oracle Data Guard

After upgrading the standby database from release 12.1 to 19.14, the following error message may be displayed at step Enable redo transport and apply:

Warning: ORA-16629: database reports a different protection level from the protection mode *standbydb* - Physical standby database (disabled)

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Enable the standby database again by running the following DGMGRL command:

DGMGRL> Enable database tgtptdcnvo Enabled.

This issue is tracked with Oracle bug 33749492.

Error in viewing Oracle Data Guard status

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

Oracle Data Guard status is not shown on the remote node of Oracle Database Appliance high-availability systems causing Oracle Data Guard switchover, failover, and reinstate jobs to fail at the task Check if DataGuard config is updated. Oracle Data Guard operations, though, are successful.



Hardware Models

All Oracle Database Appliance high-availability systems

Workaround

Use DGMGRL to verify Oracle Data Guard status.

This issue is tracked with Oracle bug 33411769.

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 reinstatedataguard 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 describedataguardstatus 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 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 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/SQL 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 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": "***",
          "ipAddress": "test IPaddress3"
        },
      ],
      "transportType": "ASYNC"
    }
 ]
}
```

This issue is tracked with Oracle bug 32719173.

Error in restoring a database

When restoring a database on Oracle Database Appliance, if the DB Home ID is provided in the command odacli irestore-database, then an error may be encountered.

The following error message is displayed:

```
odacli irestore-database -r dbs2_check.json -n name2 -dh
3462a80c-0c6a-419b-82e1-c3944ded892
Enter SYS user password:
Retype SYS user password:
DCS-10001:Internal error encountered: java.lang.NullPointerException.
```



Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Unmount the NFS client location.

umount NFS client location

2. Add the no root squash option in the /etc/export file against the NFS server location.

nfs_server_locationIP_address_of_NFS_Client(rw,syn,no_root_squash)

3. Restart the NFS server at the NFS server machine.

/bin/systemctl restart nfs.service

4. Remount the NFS client.

mount -t nfs IP_address_of_NFS_server:NFS_server_location
NFS client location

- 5. Perform irestore of database from NFS backup.
- 6. Unmount the NFS client location.

umount NFS client location

7. Remove no root squash option in the /etc/export file against the NFS server location.

nfs_server_location IP_address_of_NFS_Client(rw,sync)

8. Perform steps 3 and step 4 again.

This issue is tracked with Oracle bug 34149711.

Error in registering a database

When restoring a database on Oracle Database Appliance, if the NLS setting on the standby database is not America/American, then an error may be encountered.

An error occurs when running the RMAN duplicate task. The RMAN log described in the error message may show RMAN-06136 and ORA-00907 errors.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None.

This issue is tracked with Oracle bug 32349703.



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.



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:

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 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.

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.

Unrecognized Token Messages Appear in /var/log/messages

After updating Oracle Database Appliance, unrecognized token messages appear in $\mbox{/var/log/messages}.$

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

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

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

Hardware Models

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

Workaround

Perform the following to remove the parameters:



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

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

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

This issue is tracked with Oracle bug 25985258.

