Oracle® Database Appliance Release Notes





Oracle Database Appliance Release Notes, Release 19.10 for Linux x86-64

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Preface

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

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

Audience

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

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

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

Documentation Accessibility

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

Access to Oracle Support

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



Related Documents

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

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

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

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

For more information about Oracle Integrated Lights Out Manager 3.2, see https://docs.oracle.com/cd/E37444_01/.

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

Conventions

The following text conventions are used in this document:



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



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What's New in This Release

Oracle Database Appliance release 19.10 supports Oracle Database 19c functionality on Oracle Database Appliance hardware models.

New Features

This release supports Oracle Database Appliance models X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, X7-2S, X6-2S, X6-2M, X6-2L, X6-2-HA, and X5-2. You can create a bare metal deployment on Oracle Database Appliance or patch your existing bare metal deployment to Oracle Database Appliance release 19.10. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.10.

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

The following new features are available in this release:

Provisioning and Patching of Oracle Database Appliance Bare Metal Deployments

This release supports provisioning of bare metal deployments, and patching of bare metal deployments from Oracle Database Appliance releases 19.6 and later.

MySQL Server for Storing DCS Agent Metadata

Starting with Oracle Database Appliance release 19.10, DCS Agent uses MySQL server as its metadata store. MySQL server is automatically installed and configured, during provisioning, when creating the appliance. Similarly, during patching, the odacli update-dcscomponents command automatically installs and configures MySQL server. MySQL server processes do not run with root operating system user account. Instead, MySQL server processes run with a new operating system user account called odamysql. Note that the odamysql operating system user is created only for ownership purposes and the odamysql user account owns only the MySQL directories. The odamysql operating system user cannot log into the appliance. The odamysql operating system user account for MySQL ensures role separation between the user owning Oracle databases on the appliance and the metadata used for DCS operations.

Support for KVM-based Database Systems on Oracle Database Appliance

You can create and manage KVM-based Database Systems on Oracle Database Appliance.

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

Database Security Assessment Tool in Browser User Interface

You can generate Database Security Assessment reports from the Browser User Interface to assess the security risks for your databases.

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

Support for Restore Archivelog Feature

Oracle Database Appliance supports restore of archivelog for a database. You can choose to restore archivelog from one SCN to another SCN, or from one timestamp to another timestamp.

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

ODACLI Command Enhancements

There are new odacli commands and new options for existing odacli commands to manage KVM deployments.

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

Support for Oracle Enterprise Manager Plug-in with Oracle Database Appliance Release 19.10

You must install certain patches before you can use Oracle Enterprise Manager plug-in with Oracle Database Appliance release 19.10.

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

Access to Oracle Database Appliance documentation from the Browser User Interface

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

Oracle Grid Infrastructure and Oracle Database Updates

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

- 19.10.0.0.210119
- 18.13.0.0.210119
- 12.2.0.1.210119
- 12.1.0.2.210119
- **-** 11.2.0.4.210119

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

See the chapter *Oracle Database Appliance Release 19.10 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 19.10 from the drop down list.

- Oracle Database Appliance 19.10.0.0.0 Server Patch for ODACLI/DCS stack:
 Use patch 32351355 to update your bare metal deployment to Oracle Database
 Appliance release 19.10.
- Oracle Database Appliance 19.10.0.0.0 GI Clone for ODACLI/DCS stack:
 Use patch 30403673 to perform an initial deployment of Oracle Database

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

- Oracle Database Appliance 19.10.0.0.0 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 19.10.0.0.210119 Software Clone file to create 19.10.0.0.210119 Oracle Database homes. Patch 30403662 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- Oracle Database Appliance 18.13.0.0.0 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 18.13.0.0.210119 Software Clone file to create 18.13.0.0.210119 Oracle Database homes. Patch 27604558 provides the database clone for this update. This patch is forall Oracle Database Appliance Hardware Models (bare metal).
- Oracle Database Appliance 12.2.0.1 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 12.2.0.1.210119 Software Clone file to create 12.2.0.1.210119 database homes. Patch 27119402 provides the database clone for this update.
- Oracle Database Appliance 12.1.0.2 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 12.1.0.2.210119 Software Clone file to create 12.1.0.2.210119 database homes. Patch 23494992 provides the database clone for this update.
- Oracle Database Appliance 11.2.0.4 RDBMS Clone File for ODACLI/DCS stack: Use the Oracle RDBMS 11.2.0.4.210119 Software Clone file to create 11.2.0.4.210119 database homes. Patch 23494997 provides this update.
- Oracle Database Appliance KVM Database System Template: Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance. Patch 32451228 provides the database clone for this update.

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

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

Related Topics

- Oracle Database Appliance Checklists
- Oracle Database Appliance Command Line Interface Reference
- Oracle Database Appliance Command Line Interface for KVM
- Generating and Viewing Database Security Assessment Reports in the Browser User Interface
- Managing an Oracle Database Appliance KVM Deployment
- Managing Database Systems in KVM Deployment



- Restoring Archivelog with the CLI
- About the Browser User Interface
- Using Oracle Data Guard for Disaster Management and Recovery on Oracle Database Appliance
- Known Issues with Oracle Database Appliance in This Release
 The following are known issues deploying, updating, and managing Oracle
 Database Appliance in this release.



2

Component Versions for Oracle Database Appliance

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

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

Component Versions for Oracle Database Appliance X8-2 Models

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

Table 2-1 Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.10

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



Table 2-1 (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.10

Component Name	X8-2-HA	X8-2S and X8-2M
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.7.0.1	2.4.7.0.1
Oracle Linux	7.9	7.9
MySQL	8.0.22	8.0.22
Kernel	kernel- uek-4.14.35-2025.404.1.1.el7uek.x8 6_64	kernel- uek-4.14.35-2025.404.1.1.el7uek.x8 6_64
GI_HOME	19.10.0.0.210119	19.10.0.0.210119
DB_HOME	19.10.0.0.210119	19.10.0.0.210119
Oracle Auto Service Request (Oracle ASR)	20.3.0	20.3.0

Component Versions for Oracle Database Appliance X7-2 Models

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

Table 2-2 Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.10

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	QDV1RF30
OS Disk (SSD firmware version)	0121	0121
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.a.r138015	5.0.1.21.a.r138015
BIOS	41080800	41080800
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.7.0.1	2.4.7.0.1
Oracle Linux	7.9	7.9
MySQL	8.0.22	8.0.22



Table 2-2 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.10

Component Name	Х7-2-НА	X7-2S and X7-2M
Kernel	kernel- uek-4.14.35-2025.404.1.1.el7uek.x8 6_64	kernel- uek-4.14.35-2025.404.1.1.el7uek.x8 6_64
GI_HOME	19.10.0.0.210119	19.10.0.0.210119
DB_HOME	19.10.0.0.210119	19.10.0.0.210119
Oracle Auto Service Request (Oracle ASR)	20.3.0	20.3.0

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

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

Table 2-3 Component Versions for Oracle Database Appliance X6-2S, X6-2M, and X6-2L in Oracle Database Appliance Release 19.10

Component Name	Version
Controller	4.650.00-7176
NVMe (firmware version)	KPYAIR3Q
OS Disk	OR3Q
ILOM (Oracle Integrated Lights Out Manager)	X6-2SM: 5.0.1.21.r136383
	X6-2L: 5.0.1.21.r136383
BIOS	X6-2SM:38320100
	X6-2L:39320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.7.0.1
Oracle Linux	7.9
MySQL	8.0.22
Kernel	kernel-uek-4.14.35-2025.404.1.1.el7uek.x86_64
GI_HOME	19.10.0.0.210119
DB_HOME	19.10.0.0.210119
Oracle Auto Service Request (Oracle ASR)	20.3.0

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

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



Table 2-4 Component Versions for Oracle Database Appliance X6-2-HA in Oracle Database Appliance Release 19.10

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	16.00.08.00
Expander	0310
SSD_LOCAL	OR3Q
SSD_SHARED	A29A
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.r136383
BIOS	38320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.7.0.1
Oracle Linux	7.9
MySQL	8.0.22
Kernel	kernel-uek-4.14.35-2025.404.1.1.el7uek.x86_64
GI_HOME	19.10.0.0.210119
DB_HOME	19.10.0.0.210119
Oracle Auto Service Request (Oracle ASR)	20.3.0

Component Versions for X5-2 Models

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

Table 2-5 Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.10

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	16.00.08.00
Expander	001E
SSD_LOCAL	n/a
SSD_SHARED	A29A
HDD_LOCAL	A7E0
HDD_SHARED	A3A0, PAG1, PD51
ILOM (Oracle Integrated Lights Out Manager)	5.0.1.21.r136383
BIOS	30320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.7.0.1
Oracle Linux	7.9



Table 2-5 (Cont.) Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.10

Component Name	Version
MySQL	8.0.22
Kernel	kernel-uek-4.14.35-2025.404.1.1.el7uek.x86_64
GI_HOME	19.10.0.0.210119
DB_HOME	19.10.0.0.210119
Oracle Auto Service Request (Oracle ASR)	20.3.0



Oracle Database Appliance 19.10 Patches

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

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

Patching from Previous Releases

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

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

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

Oracle Database Appliance Release (To patch to this release)	Earliest Supported Release To Patch From (Your deployment must be on this release)
19.10.0.0	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:
40.000	• 19.8.0.0
19.8.0.0	For bare metal systems:
	• 19.7.0.0
	19.6.0.019.5.0.0
	For virtualized platform deployments:
	 18.8.0.0
19.7.0.0	• 19.6.0.0
19.7.0.0	• 19.5.0.0
19.6.0.0	• 18.8.0.0
18.8.0.0	• 18.7.0.0
10.0.0.0	• 18.5.0.0
	• 18.3.0.0
18.7.0.0	• 18.5.0.0
	• 18.3.0.0
18.5.0.0	• 18.3.0.0
18.3.0.0	• 12.2.1.4.0
	• 12.2.1.3.0
	• 12.2.1.2.0
	• 12.1.2.12
12.2.1.4.0	• 12.2.1.3.0
	• 12.2.1.2.0
	• 12.1.2.12
12.2.1.3.0	• 12.2.1.2.0
	• 12.1.2.12
12.2.1.2.0	• 12.1.2.12
	Note: 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



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

Oracle Database Appliance Release (To patch to this release)	Earliest Supported Release To Patch From (Your deployment must be on this release)
2.1.2.11	• 12.1.2.10
	• 12.1.2.9
	• 12.1.2.8
	• 12.1.2.7
2.1.2.10	• 12.1.2.9
	• 12.1.2.8
	• 12.1.2.7
	• 12.1.2.6
2.1.2.9	• 12.1.2.8
	• 12.1.2.7
	• 12.1.2.6
2.1.2.5	12.1.2.0 to 12.1.2.4
2.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
.2.0.0.0	2.1.0.3.1 or earlier

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

Minimum Software Version Requirements

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

You can provision Oracle Database Appliance release 19.10 on Oracle Database Appliance bare metal systems. You can patch your bare metal systems to Oracle Database Appliance release 19.10 from Oracle Database Appliance release 19.6 or later.

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

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



Table 3-2 Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32351355	Use the server patch to update your deployment to Oracle Database Appliance release 19.10	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.10.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack to create 19.10 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack		Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-2 (Cont.) Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack	23494997	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.10 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 19.10. 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 19.10.	Managing DB Systems in KVM Deployment

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

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



Table 3-3 Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32351355	Use the server patch to update your deployment to Oracle Database Appliance release 19.10	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.10.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack to create 19.10 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack		Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-3 (Cont.) Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack	23494997	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.10 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 19.10. 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 19.10.	Managing DB Systems in KVM Deployment

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

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



Table 3-4 Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32351355	Use the server patch to update your deployment to Oracle Database Appliance release 19.10	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.10.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack to create 19.10 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-4 (Cont.) Oracle Database Appliance X6-2S, X6-2M, and X6-2L Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack	23494997	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.10 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 19.10. 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 19.10.	Managing DB Systems in KVM Deployment

Oracle Database Appliance X6-2-HA Patches

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

Table 3-5 Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32351355	Use the server patch to update your deployment to Oracle Database Appliance release 19.10	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.10.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack to create 19.10 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-5 (Cont.) Oracle Database Appliance X6-2-HA Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack	23494997	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.10 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 19.10. 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 19.10.	Managing DB Systems in KVM Deployment

Oracle Database Appliance X5-2 Patches

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

Table 3-6 Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	32351355	Use the server patch to update your deployment to Oracle Database Appliance release 19.10	Patching Oracle Database Appliance
Oracle Database Appliance GI Clone for ODACLI/DCS stack	30403673	Use to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after reimaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.10.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance RDBMS Clone 19.10.0.0.210119 for ODACLI/DCS stack to create 19.10 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack	27604558	Use Oracle Database Appliance RDBMS Clone 18.13.0.0.210119 for ODACLI/DCS stack to create 18c database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.210119 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files



Table 3-6 (Cont.) Oracle Database Appliance X5-2 Patches for Oracle Database Appliance Release 19.10

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.210119 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.10 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack	23494997	Use Oracle Database Appliance RDBMS Clone 11.2.0.4.210119 for ODACLI/DCS stack to create 11.2.0.4 database homes for the 19.10 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 19.10. 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 19.10.	Managing DB Systems in KVM Deployment



4

Known Issues with Oracle Database Appliance in This Release

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

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

Known Issues When Patching Oracle Database Appliance

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

- DCS Agent unavailable due to time zone errors when provisioning or patching Oracle Database Appliance to release 19.10 or when creating a DB System on KVM
 - Understand if bug 32629684 affects your deployment, and the workaround to apply.
- Error in stopping Oracle Grid Infrastructure when patching Oracle Database Appliance
 - If you create an Oracle Data Guard or Oracle Database with type network using odacli create-network, then there is an error in stopping Grid Infrastructure during patching.
- Error in upgrading from Oracle Linux 6 to Oracle Linux 7 during Oracle Database Appliance patching
 - During upgrade of Oracle Linux 6 to Oracle Linux 7 during Oracle Database Appliance upgrade from release 18.8 to 19.x, an error is encountered.
- Error in updating DCS components when patching Oracle Database Appliance
 When updating DCS components when patching Oracle Database Appliance, an
 error is encountered.
- Error in updating DCS components after updating DCS admin when patching Oracle Database Appliance
 - When patching Oracle Database Appliance, if you run the odacli updatedcscomponents command before DCS admin is completely updated, then an error is encountered.



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

Patching of Oracle Database homes of version 19.9.0.0.201018 to Oracle Database home version 19.10.0.0.210119 may fail.

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

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

Error message displayed even when patching Oracle Database Appliance is successful

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

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

Error in running ORAchk

When running the command odacli create-prepatchreport during patching, an error is encountered.

Error in prepatch report

When running the command odacli create-prepatchreport during patching, an error is encountered.

Error in Oracle Grid Infrastructure upgrade
 Oracle Grid Infrastructure upgrade fails, though the rootupgrade.sh script ran
 successfully.

• Error when running ORAChk or updating the server or database home When running Oracle ORAchk or the commands odacli create-prepatchreport, odacli update-server, odacli update-dbhome, an error is encountered.

• Errors when running ORAchk or the odacli create-prepatchreport command When you run ORAchk or the odacli create-prepatchreport command, an error is encountered.

Error in patching database homes

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

Error in server patching

An error is encountered when patching the server.

Server status not set to Normal when patching
 When patching Oracle Database Appliance, an error is encountered.

Error when patching to 12.1.0.2.190716 Bundle Patch

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

Patching of M.2 drives not supported

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

11.2.0.4 databases fail to start after patching

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



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

DCS Agent unavailable due to time zone errors when provisioning or patching Oracle Database Appliance to release 19.10 or when creating a DB System on KVM

Understand if bug 32629684 affects your deployment, and the workaround to apply.

Oracle Database Appliance Patches affected by Bug 32629684

Bug 32629684 affects the following patches, if you downloaded them before March 22, 2021:

- Patch 32351355 Oracle Database Appliance Server Patch for ODACLI/DCS Stack
- Patch 30403643 Oracle Database Appliance ISO Image
- Patch 32451228 Oracle Database Appliance KVM Database System Template

Bug 32629684 is fixed. If you downloaded the above-mentioned patches after March 22, 2021, then the workaround mentioned in the following sections do not apply to your deployment.

To check if your deployment is affected by bug 32629684, run the following command:

```
# rpm -qa | grep dcs
dcs-agent-19.10.0.0.0_LINUX.X64_210222.4-1.x86_64
dcs-admin-19.10.0.0.0_LINUX.X64_210222.4-1.x86_64
dcs-controller-19.10.0.0.0_LINUX.X64_210222.4-1.x86_64
dcs-cli-19.10.0.0.0_LINUX.X64_210222.4-1.x86_64
```

If the DCS software version is 210222.4-1, then bug 32629684 does not apply to your deployment.

If the DCS software version is 210222-1, then you must apply the workaround described in the following section.

If your Oracle Database Appliance release 19.10 deployment has DCS software version 210222-1 and you have already applied the workaround, then no additional steps are required.

Error Description for Bug 32629684 if your DCS software version is 210222-1:

When provisioning or patching Oracle Database Appliance to release 19.10 or creating a DB System on KVM, the default time zone is set to PDT, and an error is encountered.

MySQL server connection fails, and the dcs-agent.log file contains the following error entry:

```
2021-03-14 11:09:49,844 ERROR [main] [] o.h.e.j.s.SqlExceptionHelper: Unable to start the Universal Connection Pool: oracle.ucp.UniversalConnectionPoolException: Cannot get Connection
```



from

Datasource: java.sql.SQLException: The server time zone value 'PDT' is unrecognized or represents more than one time zone. You must configure either the server or JDBC driver (via the 'serverTimezone' configuration property) to use a more specific time zone value if you want to utilize time zone support.

There is an error in connecting to the DCS agent, and ODACLI commands fail with the following error message:

```
# /opt/oracle/dcs/bin/odacli ping-agent
DCS-10001:Internal error encountered: Fail to start hand shake to
localhost:7070.
```

During patching, the command odacli update-dcscomponents may fail because the migration utility may encounter the above connection failure. The following error message is displayed:

```
DCS-10008:Failed to update DCScomponents: 19.10.0.0.0 Internal error while patching the DCS components: DCS-10001:Internal error encountered: DCS-10001:Internal error encountered: Metadata migration failed on hostname: Please refer /opt/oracle/dcs/log/jobfiles/job-id/migration.log on hostname
```

This error occurs because MySQL cannot recognize any abbreviated time zone such PDT, CST, or others with the exception of UTC. Hence, named time zones must be used instead of abbreviated time zones in the MySQL configuration file, <code>/opt/oracle/dcs/mysql/etc/mysqldb.cnf</code>. For example, use <code>America/Los_Angeles</code> instead of PDT or PST to specify the time zone.

This error occurs immediately after provisioning or patching Oracle Database Appliance to release 19.10 or creating a DB System on KVM. Use the workaround described in the following section to resolve this time zone issue.

Hardware Models

All Oracle Database Appliance hardware models with DCS software version 210222-1

Workaround for DB Systems on KVM

Download and use the latest Patch 32451228 - Oracle Database Appliance KVM Database System Template released on March 22, 2021.

Workaround for Provisioning and Patching Bare Metal Systems

If your DCS software version 210222-1, then you must apply the workaround described in this section. Follow these steps:

1. Stop the DCS agent:

systemctl stop initdcsagent



2. Stop MySQL server:

```
# systemctl stop oda-mysql
```

3. Set the time zone by updating the default-time-zone field in Oracle database Appliance MySQL configuration file /opt/oracle/dcs/mysql/etc/mysqldb.cnf and save changes.

For example, to set the time zone to America/Los_Angeles, update the MySQL configuration file /opt/oracle/dcs/mysql/etc/mysqldb.cnf as follows:

```
[mysqld]
port=3306
default-time-zone=America/Los_Angeles
...
```

4. Start MySQL server:

```
# systemctl start oda-mysql
```

5. Start the DCS agent:

```
# systemctl start initdcsagent
```

6. Verify that the DCS agent run correctly:

```
# odacli ping-agent
Agent is ready to serve the requests.
```

This issue is tracked with Oracle bug 32629684.

Error in stopping Oracle Grid Infrastructure when patching Oracle Database Appliance

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

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

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

Hardware Models

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



Workaround

Step the Virtual IP and listener manually before patching to Oracle Database Appliance release 19.10, and then ignore this error during patching.

This issue is tracked with Oracle bug 32224312.

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

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

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

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

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

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

This issue is tracked with Oracle bug 31881957.



Error in updating DCS components when patching Oracle Database Appliance

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

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

java.io.IOException: No space left on device

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 32534150.

Error in updating DCS components after updating DCS admin when patching Oracle Database Appliance

When patching Oracle Database Appliance, if you run the odacli updated descomponents command before DCS admin is completely updated, then an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Check the Zookeeper status before running the odacli update-dcscomponents command:

On single-node Oracle Database Appliance systems, the status must be standalone:

/opt/zookeeper/bin/zkServer.sh status
ZooKeeper JMX enabled by default
Using config: /opt/zookeeper/bin/../conf/zoo.cfg
Mode: standalone

On high-availability Oracle Database Appliance systems, the status must be follower:

/opt/zookeeper/bin/zkServer.sh status
ZooKeeper JMX enabled by default
Using config: /opt/zookeeper/bin/../conf/zoo.cfg
Mode: follower



This issue is tracked with Oracle bug 32531539.

Error when patching Database homes to Oracle Database Appliance release 19.10

Patching of Oracle Database homes of version 19.9.0.0.201018 to Oracle Database home version 19.10.0.0.210119 may fail.

Following is the error message:

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

This error occurs only when patching Oracle Database homes of version 19.9.0.0.201018 to Oracle Database home version 19.10.0.0.210119.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

If the command odacli update-dbhome -v 19.10.0.0.0 -i DB_Home_ID fails, then run datapatch manually on all databases that run in the database home with the -pdbs option, and provide the list of all PDBs including CDB\$ROOT.

1. Get all the PDB names from following query:

```
SQL> select name from v$containers where OPEN_MODE='READ WRITE';

NAME

-----

CDB$ROOT

PDB1

SQL> exit;
```

2. Run datapatch manually on all databases that run in the database home with the -pdbs option:

```
$ORACLE_HOME/OPatch/datapatch -pdbs CDB$ROOT,PDB1
```

3. Run the odacli update-dbhome -v 19.10.0.0.0 -i DB_Home_ID command again.

This issue is tracked with Oracle bug 32438382.

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

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

Following are the scenarios when this error may occur:



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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

This issue is tracked with Oracle bug 32498178.

Error message displayed even when patching Oracle Database Appliance is successful

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

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

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

Hardware Models

details.

All Oracle Database Appliance hardware models



Workaround

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

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

This issue is tracked with Oracle bug 32553519.

Error in updating storage when patching Oracle Database Appliance

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

The following error is displayed:

```
# odacli describe-job -i 765c5601-f4ad-44f0-a989-45a0b7432a0d
```

Job details

ID: 765c5601-f4ad-44f0-a989-45a0b7432a0d

Description: Storage Firmware Patching

Status: Failure

Created: February 24, 2021 8:15:21 AM PST Message: ZK Wait Timed out. ZK is Offline

Task Name Start Time End
Time Status

Storage Firmware Patching February 24, 2021 8:18:06 AM PST February 24, 2021 8:18:48 AM PST Failure task:TaskSequential_140 February 24, 2021 8:18:06 AM PST February 24, 2021 8:18:48 AM PST Failure Applying Firmware Disk Patches February 24, 2021 8:18:28 AM PST February 24, 2021 8:18:48 AM PST Failure

Hardware Models

Oracle Database Appliance X5-2 hardware models with InfiniBand

Workaround

Follow these steps:

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

This issue is tracked with Oracle bug 32550378.



Error in running ORAchk

When running the command odacli create-prepatchreport during patching, an error is encountered.

Following is the error in the server prepatch report.

AHF-4819: The vm.min_free_kbytes configuration is not set as recommended

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ignore the error.

This issue is tracked with Oracle bug 32418503.

Error in prepatch report

When running the command odacli create-prepatchreport during patching, an error is encountered.

Following is the error in the prepatch report.

Command execution test failed: Value returned -root, expected -null.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ignore the error if the instance is not provisioned. This validation error may occur when attempting to patch an Oracle Database Appliance system where the <code>oracle</code> or <code>grid</code> user is already created.

This issue is tracked with Oracle bug 32491470.

Error in Oracle Grid Infrastructure upgrade

Oracle Grid Infrastructure upgrade fails, though the rootupgrade.sh script ran successfully.

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

```
ERROR: The clusterware active state is UPGRADE_AV_UPDATED INFO: ** Refer to the release notes for more information ** INFO: ** and suggested corrective action **
```



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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

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

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

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

This issue is tracked with Oracle bug 31546654.

Error when running ORAChk or updating the server or database home

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

The following messages may be displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

2. The output should be similar to the following:

TABLE_NAME	SEGMEN	
FGA_LOG\$	AUTO	
AUD\$	AUTO	
If one or both of the AUI	OS or FGA LOGS tables	return "MANUAL", use



```
the
DBMS_AUDIT_MGMT package to move them to the SYSAUX tablespace:

BEGIN
DBMS_AUDIT_MGMT.set_audit_trail_location(audit_trail_type =>
DBMS_AUDIT_MGMT.AUDIT_TRAIL_AUD_STD,--this moves table AUD$
audit_trail_location_value => 'SYSAUX');
END;

BEGIN
DBMS_AUDIT_MGMT.set_audit_trail_location(audit_trail_type =>
DBMS_AUDIT_MGMT.AUDIT_TRAIL_FGA_STD,--this moves table FGA_LOG$
audit_trail_location_value => 'SYSAUX');
END;
```

This issue is tracked with Oracle bug 27856448.

Errors when running ORAchk or the odacli create-prepatchreport command

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

The following error messages may be seen:

One or more log archive destination and alternate log archive destination settings are not as recommended Software home check failed

Hardware Models

Oracle Database Appliance hardware models bare metal deployments

Workaround

Run the odacli update-dbhome, odacli create-prepatchreport, odacli update-server commands with the -sko option. For example:

```
odacli update-dbhome -j -v 19.10.0.0.0 -i dbhome_id -sko
```

This issue is tracked with Oracle bugs 30931017, 31631618, and 31921112.

Error in patching database homes

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

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

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



All Oracle Database Appliance hardware models with High-Availability deployments

Workaround

Follow these steps:

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

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

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

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

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

```
dbhomeLocation/OPatch/datapatch
```

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

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

This issue is tracked with Oracle bug 31654816.

Error in server patching

An error is encountered when patching the server.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

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



This issue is tracked with Oracle bug 31125258.

Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

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

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 -
qi upqrade -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.".



All Oracle Database Appliance hardware models bare metal deployments

Workaround

Install the same patch again.

This issue is tracked with Oracle bugs 30026438 and 30155710.

Patching of M.2 drives not supported

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

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

Hardware Models

Oracle Database Appliance bare metal deployments

Workaround

None

This issue is tracked with Oracle bug 30249232.

11.2.0.4 databases fail to start after patching

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

Hardware Models

All Oracle Database Appliance Hardware models

Workaround

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

Start the databases with the command:

srvctl start database -db db_unique_name

This issue is tracked with Oracle bug 28815716.



Error in patching Oracle Database Appliance

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

Error Encountered When Patching Bare Metal Systems:

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

Please stop TFA before server patching.

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

Error Encountered When Patching Virtualized Platform:

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

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

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

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

ERROR: date_time_stamp: TFA is running on one or more nodes. WARNING: date_time_stamp: Shutdown TFA and then restart patching INFO: date_time_stamp: Read the Release Notes for additional information.

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

On Oracle Database Appliance Virtualized Platform, do the following:

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

This issue is tracked with Oracle bug 30260318.



Known Issues When Deploying Oracle Database Appliance

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

- Creating dbysystem with database shape above 16 not supported When creating a dbsystem with database shape above 16, an error is encountered.
- Error in registering database
 When registering a database, an error is encountered.
- Error when creating the appliance for dbsystem
 When creating a dbsystem, the copy cacerts step in the create-appliance job
 fails with a permission denied error.
- Error when creating the appliance
 When creating a dbsystem, the copy truststore.jks step in the create-appliance job fails with a permission denied error.
- Error in creating Database System on KVM
 When creating a dbsystem on KVM, an error is encountered.
- Error in creating a virtual machine on KVM
 When creating a VM on Oracle Database Appliance on KVM, an error is
 encountered.
- Error when creating or restoring 11.2.0.4 database
 An error is encountered when creating or restoring 11.2.0.4 databases.
- TFA disabled after patching Oracle Database Appliance
 After patching Oracle Database Appliance, TFA status shows as disabled.
- Error when upgrading database from 11.2.0.4 to 12.1 or 12.2 When upgrading databases from 11.2.0.4 to 12.1 or 12.2, an error is encountered.
- Error when upgrading 12.1 single-instance database
 When upgrading 12.1 single-instance database, a job failure error is encountered.
- Failure in creating RECO disk group during provisioning
 When provisioning Oracle Database Appliance X8-2-HA with High Performance
 configuration containing default storage and expansion shelf, creation of RECO
 disk group fails.
- Simultaneous creation of two Oracle ACFS Databases fails
 If you try to create two Oracle ACFS databases on a system where there is no database or database storage already created, then database creation fails for one of the databases with an error.
- Database creation hangs when using a deleted database name for database creation
 - The accelerator volume for data is not created on flash storage, for database created during provisioning of appliance.
- Error encountered after running cleanup.pl
 Errors encountered in running odacli commands after running cleanup.pl.
- Accelerator volume for data is not created on flash storage
 The accelerator volume for data is not created on flash storage, for databases created during provisioning of appliance.



- Errors in clone database operation
 Clone database operation fails due to errors.
- Clone database operation fails

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

Creating dbysystem with database shape above 16 not supported

When creating a dbsystem with database shape above 16, an error is encountered.

The following error message is displayed:

DCS-10045: Validation error encountered: DB System shape 'odb20' is not available on this ODA platform.

Hardware Models

All Oracle Database Appliance hardware models non-high-availability platforms

Workaround

None.

This issue is tracked with Oracle bug 32517584.

Error in registering database

When registering a database, an error is encountered.

If you configured multiple ports for the database listener, before registering the database, then the command odacli register-database fails to register that database.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Configure only one port for the database listener, before registering the database with the command odacli register-database. After the database is registered, configure the other listener ports.

This issue is tracked with Oracle bug 30095060.

Error when creating the appliance for dbsystem

When creating a dbsystem, the copy cacerts step in the create-appliance job fails with a permission denied error.

The following error message is displayed:

odacli describe-job -i 74b4a402-dc74-4ec3-89f9-18603129cbc3 Job details

ID: 74b4a402-dc74-4ec3-89f9-18603129cbc3

Description: Provisioning service creation



Status: Failure

Created: February 19, 2021 8:24:49 PM GMT

Message: DCS-10001:Internal error encountered: failed

to

copy DCS certificate : DCS-10001:Internal error encountered: Failed to

scp

file /opt/oracle/dcs/dcscli/cacerts to /tmp/@<Private IP of Node 0>.

Permission

denied, please try again.

Permission denied, please try again

Task Name Start

Time

End Time Status

Provisioning service creation February 19, 2021 8:24:50 PM

GMT

February 19, 2021 9:34:36 PM GMT Failure

. .

Restart DCS Agent February 19, 2021 9:34:35 PM

GMT

February 19, 2021 9:34:36 PM GMT Failure

Provisioning service creation February 19, 2021 9:34:35 PM

GMT

February 19, 2021 9:34:36 PM GMT Failure

remote copy file February 19, 2021 9:34:35 PM

 GMT

February 19, 2021 9:34:36 PM GMT Failure

Hardware Models

All Oracle Database Appliance hardware models bare metal and KVM-based DB System deployments

Workaround

- Run the touch command touch /opt/oracle/dcs/conf/.agent_upgraded on both the nodes.
- 2. Stop DCS agent and Zookeeper on both the nodes.
- 3. Start Zookeeper on both the nodes and then start DCS agent on both the nodes.

This issue is tracked with Oracle bug 32423290.



Error when creating the appliance

When creating a dbsystem, the copy truststore. jks step in the create-appliance job fails with a permission denied error.

The following error message is displayed:

```
# odacli describe-job -i 2a3952bc-a264-449b-a844-cac7862308bb
 Job details
                   ID: 2a3952bc-a264-449b-a844-cac7862308bb
          Description: Provisioning service creation
               Status: Failure
              Created: March 1, 2021 3:56:21 PM GMT
              Message: DCS-10001:Internal error encountered: failed
to
copy Trust store : DCS-10001:Internal error encountered: Failed to scp
file
/opt/zookeeper/conf/truststore.jks to /tmp/@Private IP of Node 0.
Warning:
Permanently added 'ip' (ECDSA) to the list of known hosts.
! Permission denied, please try again.
Task Name
                                     Start
Time
End Time
_____
-----
------ -----
Provisioning service creation
                                    March 1, 2021 3:56:22 PM
GMT
March 1, 2021 5:10:47 PM GMT
                               Failure
Provisioning service creation
                                     March 1, 2021 5:10:39 PM
GMT
March 1, 2021 5:10:47 PM GMT
                                Failure
Create Trust Store
                                     March 1, 2021 5:10:39 PM
GMT
March 1, 2021 5:10:45 PM GMT
                                Success
Delete Trust Store
                                     March 1, 2021 5:10:45 PM
GMT
March 1, 2021 5:10:45 PM GMT
                                Success
Create Trust Store
                                     March 1, 2021 5:10:45 PM
GMT
March 1, 2021 5:10:47 PM GMT
                                Failure
```



All Oracle Database Appliance hardware models bare metal and KVM-based DB System deployments

Workaround

- 1. Copy the /opt/zookeeper/conf/truststore.jks file from Node 1 to Node 0.
- 2. Stop DCS agent and Zookeeper on both the nodes.
- 3. Start Zookeeper on both the nodes and then start DCS agent on both the nodes.

This issue is tracked with Oracle bug 32543488.

Error in creating Database System on KVM

When creating a dbsystem on KVM, an error is encountered.

This error occurs when creating Database System on KVM with the same virtual function (for virtual networks on Infiniband-based systems) being used for Oracle ASM and interconnect networks.

Hardware Models

All Oracle Database Appliance hardware models non-high-availability platforms

Workaround

- 1. Stop the dbsystem and delete it.
- 2. Restart the DCS agent.
- 3. Recreate the dbsystem.

This issue is tracked with Oracle bug 32509478.

Error in creating a virtual machine on KVM

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

The odacli create-vm command fails if the preferred node is specified and this node is different from the node where the the odacli create-vm command is run.

Hardware Models

All Oracle Database Appliance hardware models high-availability deployments

Workaround

Run the odacli create-vm command from the preferred node.

This issue is tracked with Oracle bug 32537904.



Error when creating or restoring 11.2.0.4 database

An error is encountered when creating or restoring 11.2.0.4 databases.

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the commands without enabling DB Console.

This issue is tracked with Oracle bug 31017360.

TFA disabled after patching Oracle Database Appliance

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

This issue is tracked with Oracle bug 32058933.

Error when upgrading database from 11.2.0.4 to 12.1 or 12.2

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

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

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

Hardware Models

All Oracle Database Appliance bare metal deployments

Workaround

1. Refer to the Database Upgrade Guide for manual steps for fixing the time zone.



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:

 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 <code>local_listener</code> to the desired value:

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

This issue is tracked with Oracle bugs 31202775 and 31214657.

Failure in creating RECO disk group during provisioning

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

Hardware Models

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

Workaround

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

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

Check that all first JBOD disks have the status online, good in oakd, and CACHED in Oracle ASM.



- **6.** Power on the storage expansion shelf (second JBOD), wait for a few minutes for the operating system and other subsystems to recognize it.
- 7. Run the following command from the master node to add the storage expansion shelf disks (two JBOD setup) to oakd and Oracle ASM.

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

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

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.

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

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

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

Hardware Models

All Oracle Database Appliance high-availability environments

Workaround

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



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

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

This issue is tracked with Oracle bug 28916487.

Error encountered after running cleanup.pl

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

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

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

This issue is tracked with Oracle bug 29038717.

Accelerator volume for data is not created on flash storage

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

Hardware Models

Oracle Database Appliance high capacity environments with HDD disks

Workaround

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

This issue is tracked with Oracle bug 28836461.

Errors in clone database operation

Clone database operation fails due to errors.

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



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

Hardware Models

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

Workaround

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

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

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

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

Clone database operation fails

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

Hardware Models

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

Workaround

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

1. Change the parameter value.

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

2. Shut down the database.

```
SQL> SHUTDOWN IMMEDIATE
```

3. Start the database.

```
SQL> Startup
```

4. Verify the parameter for the new value.

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

This issue is tracked with Oracle bug 30309914.



Known Issues When Managing Oracle Database Appliance

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

- Error in reinstate operation on Oracle Data Guard
 When running the command odacli reinstate-dataguard on Oracle Data Guard
 an error is encountered.
- Error in starting a database from a bare metal CPU pool
 When starting a database after patching to Oracle Database Appliance release
 19.10, an error is encountered.
- Error in restoring a database
 When restoring a database on Oracle Database Appliance, an error is encountered.
- Error in running concurrent database or database home creation jobs
 When running concurrent database or database home creation jobs, an error is encountered.
- SEHA disabled by default when creating Database System with single-instance Standard Edition Oracle Database
 Standard Edition High-Availability (SEHA) is disabled by default when creating Database System with single-instance Standard Edition Oracle Database.
- Inconsistency in command output
 When running the odacli recover-database command, there is inconsistency in
 the odacli describe-database and odacli list-cpupool output.
- Only local CPU Pool supported for single-instance and Enterprise Edition Oracle Database
 Non-local CPU pool is not supported for single-instance and Enterprise Edition
- Error in restoring a standby database for 11.2.0.4 database
 When performing an iRestore operation on a standby database of version
 11.2.0.4. an error is encountered.

Oracle Database.

- Error in cloning a database on KVM
 When cloning a database on Oracle Database Appliance on KVM, an error is
 encountered.
- Error in cloning a virtual machine on KVM
 When cloning a VM on Oracle Database Appliance on KVM, an error is encountered.
- Error in creating a KVM guest VM on Windows systems
 When cloning a database on Oracle Database Appliance on KVM, an error is encountered.
- Error in Configuring Oracle Data Guard on Oracle ASM Database
 When configuring Oracle Data Guard on Oracle Database Appliance, an error is encountered.
- Error in restoring a database
 When restoring a database on Oracle Database Appliance, an error is encountered.



Error in restoring of TDE-enabled database

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

Error in backup of TDE-enabled database

When perfoming back up of a TDE-enabled database on Oracle Database Appliance, an error is encountered.

Error in Reinstating Oracle Data Guard

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

Error in Configuring Oracle Data Guard

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

Failure in Reinstating Oracle Data Guard

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

• Failure in Reinstating Oracle Data Guard

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

Error in running other operations when modifying database with CPU pool When modifying a database with CPU pool, an error is encountered with other operations.

Error in restoring a TDE-enabled database

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

Error 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.

• Error when rebooting the appliance

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

· Job history not erased after running cleanup.pl

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

Inconsistency in ORAchk summary and details report page

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

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

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

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

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

Issues with the Web Console on Microsoft web browsers.

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



Unrecognized Token Messages Appear in /var/log/messages
 After updating Oracle Database Appliance, unrecognized token messages appear in /var/log/messages.

Error in reinstate operation on Oracle Data Guard

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

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

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

This issue is tracked with Oracle bug 32367676.

Error in starting a database from a bare metal CPU pool

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

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

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



All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

2. Start cgconfig.service:

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

3. Enable cgconfig.service:

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

4. Check cgconfig.service status:

```
# systemctl status cgconfig.service
cgconfig.service - Control Group configuration service
  Loaded: loaded (/usr/lib/systemd/system/cgconfig.service;
enabled; vendor
preset: disabled)
  Active: active (exited) since Mon 2021-02-22 23:03:34 CST; 3min
40s ago
Main PID: 16594 (code=exited, status=0/SUCCESS)
```

5. Restart the failed database.

This issue is tracked with Oracle bug 31907677.

Error in restoring a database

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

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

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



All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 31907677.

Error in running concurrent database or database home creation jobs

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

SEHA disabled by default when creating Database System with singleinstance Standard Edition Oracle Database

Standard Edition High-Availability (SEHA) is disabled by default when creating Database System with single-instance Standard Edition Oracle Database.

Hardware Models

All Oracle Database Appliance hardware models high-availability deployments

Workaround

Use the command odacli modify-database -sh to disable SEHA on the database. This issue is tracked with Oracle bugs 32444191, 32444195, and 32444190.

Inconsistency in command output

When running the odacli recover-database command, there is inconsistency in the odacli describe-database and odacli list-cpupool output.

For Standard Edition High Availability single-instance databases on high-availability deployments, when the database is on one node and you run the odacli recoverdatabase command from the other node, there is inconsistency in the odacli describe-database and odacli list-cpupool output.

For example:

odacli describe-database -in test
Execution on node 0:
Database details



```
ID: 59c357dc-9088-41bb-b152-31f1ab751485
           Description: test
              DB Name: test
            DB Version: 19.10.0.0.210119
               DB Type: SI
   DB Target Node Name: node2 ----> Node 1
          CPU Pool Name: Test3 ----> describe-db option shows
cpupool as Test3
# odacli list-cpupools
        Type Configured on Cores Associated resources
Name
Created Updated
Test1
         BM
            node1,
                                       db1, test,
---> In the list cpupool option, test db is listed under Test1
```

All Oracle Database Appliance hardware models bare metal deployments

Workaround

Run the odacli recover-database command with the -cpupool option for single-instance database from the same node where the database is running. Avoid running the command from the other node.

This issue is tracked with Oracle bug 32559396.

Only local CPU Pool supported for single-instance and Enterprise Edition Oracle Database

Non-local CPU pool is not supported for single-instance and Enterprise Edition Oracle Database.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Use local CPU pool for single-instance and Enterprise Edition Oracle Database. This issue is tracked with Oracle bug 32086625.

Error in restoring a standby database for 11.2.0.4 database

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

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

Hardware Models

All Oracle Database Appliance hardware models



Workaround

Follow these steps:

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

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

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

This issue is tracked with Oracle bug 32473071.

Error in cloning a database on KVM

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

The odacli clone-vm command fails if the command is run from the remote node. For example, if the VM to clone is on Node0 before being stopped and the odacliclone-vm command is run from Node1, then the clone operation fails.

Hardware Models

All Oracle Database Appliance hardware models high-availability deployments

Workaround

Run the odacli clone-vm command from the same node where the VM was running.

This issue is tracked with Oracle bug 32141864.

Error in cloning a virtual machine on KVM

When cloning a VM on Oracle Database Appliance on KVM, an error is encountered.

The odacli clone-vm command fails if the VM to be cloned has virtual disks attached.

Hardware Models

All Oracle Database Appliance hardware models high-availability deployments

Workaround

Detach any virtual disks before cloning and attach them after the clone operation has completed.

This issue is tracked with Oracle bug 32489225.



Error in creating a KVM guest VM on Windows systems

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

For steps to configure KVM guest machines on Windows, refer to the My Oracle Support Note 2748946.1 at:

https://support.oracle.com/rs?type=doc&id=2748946.1

This issue is tracked with Oracle bug 32433940.

Error in Configuring Oracle Data Guard on Oracle ASM Database

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

Oracle Data Guard configuration for Oracle ASM Database fails at - Step 6: Configure Standby database (Standby site) - with the following error:

DCS-10001:Internal error encountered: Unable to create Redo Logs.

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the standby site, run the following command:

- 2. Run the Oracle Data Guard configuration as normal.
- **3.** On the standby site, run the following command:

4. On the standby site, run the following command:

```
ASMCMD> chown dbUser
+DATA/dbUniqName/PASSWORD/orapwdbName
```



This issue is tracked with Oracle bug 32569611.

Error in restoring a database

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

Job to restore a database with the same Database Unique Name as one of the previously deleted database in the system, fails with the following error message:

DCS-10001:Internal error encountered: Failed to run command Failed to create FileGroupDBUNIQUENAME_9999 on DiskGroupRECO

Hardware Models

All Oracle Database Appliance hardware models

Workaround

When restoring a database, provide the Database Name and Database Unique Name such that they have not been used by any database in the system.

This issue is tracked with Oracle bug 32586509.

Error in restoring of TDE-enabled database

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

Error 1: Job to restore TDE-enabled Oracle ASM database may fail with the following error message:

DCS-10001:Internal error encountered: Failed to copy TDE Wallet to backup location.

Error 2: Jobs to restore TDE wallet of Oracle ASM database and recover TDE-enabled Oracle ASM database may fail with the following error messages:

```
DCS-10001:Internal error encountered: Failed to create autologin software keystore.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps for the workaround for **Error 1**:

1. Disable the Access Control.

```
# su - grid
Last login: *** *** 4 :01:35 ** 20**
[grid@nodel ~]$ sqlplus / as sysasm
```



```
SQL*Plus: Release 19.0.0.0.0 - Production on Thu Mar 4 **:**:**
20**

Version 19.10.0.0.0

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Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 -

Production

Version 19.10.0.0.0

SQL> alter diskgroup DATA set attribute 'access_control.enabled'
='false';

Diskgroup altered.
```

2. Start the iRestore job.

3. Enable the Access Control immediately after the successful completion of "Auto login TDE Wallet creation" task in the above iRestore job. The following example shows the successful completion of "Auto login TDE Wallet creation" task.

```
Job details
                  ID: 9617c289-3698-4d3e-84e5-6b15408b4143
          Description: Database service recovery with db name:
dharmtd6
               Status: Success
              Created: March 4, 2021 4:18:02 PM IST
              Message:
Task Name
                                    Start
Time
End Time
_____
______
Check if cluster ware is running
                                   March 4, 2021 4:18:12 PM
March 4, 2021 4:18:13 PM IST
                              Success
Check if cluster ware is running March 4, 2021 4:18:13 PM
March 4, 2021 4:18:13 PM IST
                               Success
                                    March 4, 2021 4:18:36 PM
Auxiliary Instance Creation
March 4, 2021 4:18:48 PM IST
                               Success
TDE Wallet directory creation
                                   March 4, 2021 4:18:48 PM
March 4, 2021 4:18:50 PM IST
                               Success
TDE Wallet Restore
                                    March 4, 2021 4:18:50 PM
March 4, 2021 4:18:53 PM IST
                               Success
Auto login TDE Wallet creation
                                March 4, 2021 4:18:53 PM
Access Control can be enabled as below:
[root@nodel bin]# su - grid
```



```
Last login: *** *** 4 :01:35 ** 20**
[grid@node2 ~]$ sqlplus / as sysasm

SQL*Plus: Release 19.0.0.0.0 - Production on *** *** 4 18:25:08
20**
Version 19.10.0.0.0

Copyright (c) 1982, 2020, Oracle. All rights reserved.

Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production
Version 19.10.0.0.0

SQL> alter diskgroup DATA set attribute 'access_control.enabled' = 'true';
Diskgroup altered.
```

Follow these steps for the workaround for Error 2:

 Delete the ewallet.p12 and cwallet.sso files (if present) in +DATA/ DBUNIQUENAME/tde path by connecting as grid_user.

```
# su - grid
Last login: *** *** 4 :01:35 ** 20**
[grid@scaoda***cln2 ~]$ asmcmd
ASMCMD> cd +DATA/MYDB/tde
ASMCMD> rm ewallet.p12 cwallet.sso
```

2. Disable the Access Control.

```
# su - grid
Last login: *** *** 4 :01:35 ** 20**
[grid@nodel ~]$ sqlplus / as sysasm

SQL*Plus: Release 19.0.0.0.0 - Production on Thu Mar 4 **:**:**
20**
Version 19.10.0.0.0
Copyright (c) 1982, 2020, Oracle. All rights reserved.
Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 -
Production
Version 19.10.0.0.0
SQL> alter diskgroup DATA set attribute 'access_control.enabled'
='false';
Diskgroup altered.
```

- 3. Start the iRestore TDE wallet job or Recover TDE database job.
- 4. Enable the Access Control.

```
[root@node1 bin]# su - grid
Last login: *** *** 4 :01:35 ** 20**
[grid@node2 ~]$ sqlplus / as sysasm
```



```
SQL*Plus: Release 19.0.0.0.0 - Production on *** *** 4 18:25:08 20**

Version 19.10.0.0.0

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Connected to:
Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production

Version 19.10.0.0.0

SQL> alter diskgroup DATA set attribute 'access_control.enabled' ='true';
Diskgroup altered.
```

This issue is tracked with Oracle bug 32573493.

Error in backup of TDE-enabled database

When perfoming back up of a TDE-enabled database on Oracle Database Appliance, an error is encountered.

Jobs to backup TDE-enabled Oracle ASM database and TDE wallet of Oracle ASM database may fail with the following error message:

DCS-10001:Internal error encountered: Failed to copy TDE Wallet to backup location.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Change the permission of $/u01/app/dbuser/diag/kfod/node_1_name$ and " $/u01/app/dbuser/diag/kfod/node_2_name$ directory to <dbuser> using the chown command. For single-node deployments, run the command on one node.

For example:

This issue is tracked with Oracle bug 32577203.

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:

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

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

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

This issue is tracked with Oracle bug 31884506.

Error in Configuring Oracle Data Guard

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

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

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

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

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration



Workaround

Follow these steps:

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

```
DGMGRL > remove
configuration;
```

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

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

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

This issue is tracked with Oracle bug 31880191.

Failure in Reinstating Oracle Data Guard

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

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

```
DCS-10001:Internal error encountered:
Unable enqueue Id and update DgConfig.
Use DGMGRL to show standby database has this error
GMGRL> show database xxxx
Database - xxxx
Role:
            PHYSICAL STANDBY
Intended State: APPLY-ON
Transport Lag: (unknown)
Apply Lag: 4 days 22 hours 1 minute 23 seconds (computed 1 second
ago)
 Average Apply Rate: 0 Byte/s
Real Time Query: OFF
 Instance(s):
 xxxx1 (apply instance)
 xxxx2
 Database Warning(s):
 ORA-16853: apply lag has exceeded specified threshold
 ORA-16856: transport lag could not be determined
Database Status:
WARNING
```

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

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

Oracle Clusterware is restarting database "xxxx" ...
```



```
Connected to "xxxx"

Continuing to reinstate database "xxxx" ...

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

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

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

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

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

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

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

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

This issue is tracked with Oracle bug 32041012.

Failure in Reinstating Oracle Data Guard

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

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

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



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

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 running other operations when modifying database with CPU pool

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

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

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

Hardware Models

All Oracle Database Appliance hardware models with bare metal configuration

Workaround

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

This issue is tracked with Oracle bug 32045674.



Error in restoring a TDE-enabled database

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

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

Failed to copy file from : source_location to: destination_location

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 31848183.

Error 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 <code>odacli describe-database</code> 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



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.

Error when rebooting the appliance

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

Hardware Models

Oracle Database Appliance X7-2-HA hardware models

Workaround

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

This issue is tracked with Oracle bug 31196452.

Job history not erased after running cleanup.pl

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

```
initctl stop initdcsagent
```

For Oracle Linux 7, run:

systemctl stop initdcsagent

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

This issue is tracked with Oracle bug 30529709.



Inconsistency in ORAchk summary and details report page

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

Hardware Models

Oracle Database Appliance hardware models bare metal deployments

Workaround

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

This issue is tracked with Oracle bug 30676674.

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

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

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

This issue is tracked with Oracle bug 30274477.

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

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

Hardware Models

All Oracle Database Appliance Hardware bare metal systems

Workaround

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

Use the command odaadmcli shutdown oak to stop oakd.

This issue is tracked with Oracle bug 28547433.



Issues with the Web Console on Microsoft web browsers

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

Following are issues with Microsoft web browsers:

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

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

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

Models

All Oracle Database Appliance Hardware Models bare metal deployments

Workaround

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

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

Unrecognized Token Messages Appear in /var/log/messages

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

Updating to Oracle Database Appliance 12.1.2.11.0 updates the Oracle VM Server version to 3.4.3. After updating, the following messages appear in $\protect\ensuremath{/\text{var/log/messages}}$:

```
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.



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

Workaround

Perform the following to remove the parameters:

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

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

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

This issue is tracked with Oracle bug 25985258.

