

Oracle® Database Appliance

Release Notes



Release 19.13 for Linux x86-64
F47976-01
December 2021

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

Oracle Database Appliance Release Notes, Release 19.13 for Linux x86-64

F47976-01

Copyright © 2013, 2021, Oracle and/or its affiliates.

Primary Author: Aparna Kamath

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface

Audience	vi
Documentation Accessibility	vi
Related Documents	vii
Conventions	vii

1 What's New in This Release

2 Component Versions for Oracle Database Appliance

Component Versions for Oracle Database Appliance X8-2 Models	2-1
Component Versions for Oracle Database Appliance X7-2 Models	2-2
Component Versions for X6-2S, X6-2M, and X6-2L Models	2-3
Component Versions for Oracle Database Appliance X6-2-HA Models	2-3
Component Versions for X5-2 Models	2-4

3 Oracle Database Appliance 19.13 Patches

Patching from Previous Releases	3-1
Minimum Software Version Requirements	3-3
Oracle Database Appliance Bare Metal System and KVM Patches	3-4
Oracle Database Appliance Virtualized Platform Patches	3-6

4 Known Issues with Oracle Database Appliance in This Release

Known Issues When Patching Oracle Database Appliance	4-1
Error in server patching	4-2
Error in patching on a newly-provisioned appliance	4-3
AHF error in prepatch report for the update-dbhome command	4-3
Error in running the update-dbhome command	4-4
Error in patching database	4-5
Error in patching prechecks report	4-6

Error when patching DB systems	4-6
Error in patching database	4-7
Error in listing patches	4-7
Error in updating dbhome	4-8
Error when patching DB systems	4-8
Error in server patching	4-9
Error in storage patching	4-11
Error in running the update-dbhome command	4-12
Error message displayed even when patching Oracle Database Appliance is successful	4-12
Error when running ORACheck or updating the server or database home	4-13
Error in patching database homes	4-14
Server status not set to Normal when patching	4-15
Error when patching to 12.1.0.2.190716 Bundle Patch	4-15
Patching of M.2 drives not supported	4-16
Known Issues When Deploying Oracle Database Appliance	4-16
Error in creating two DB systems using disk groups	4-17
Error in creating two DB systems	4-18
Error in creating db system	4-18
Error in registering a TDE-enabled database	4-19
Error when upgrading database from 12.1 or 19c	4-19
Error in recovering a database	4-20
Error in adding JBOD	4-21
Error in provisioning appliance after running cleanup.pl	4-21
Error in updating a database	4-21
Error in running tfactl diagcollect command on remote node	4-23
Error when upgrading database from 11.2.0.4 to 12.1 or 12.2	4-23
Error when upgrading 12.1 single-instance database	4-24
Failure in creating RECO disk group during provisioning	4-24
Simultaneous creation of two Oracle ACFS Databases fails	4-25
Error encountered after running cleanup.pl	4-26
Errors in clone database operation	4-27
Clone database operation fails	4-27
Known Issues When Managing Oracle Database Appliance	4-28
Error in back up of database	4-30
OpenSSH command vulnerability	4-31
Error in bare metal CPU pool association	4-31
Cannot configure system settings using BUI for multi-user access enabled systems	4-32
Error in display of component status	4-32
AHF permissions error	4-33
Error in cleaning up a deployment	4-33
Error in odacli modify-dbfileattributes job status	4-34

Error in TDE wallet management	4-34
Error in TDE wallet management	4-34
Error in display of file log path	4-35
Error in configuring Oracle Data Guard	4-35
Error in configuring Oracle Data Guard on DB System	4-35
Error in reinstating on Oracle Data Guard	4-36
Error in attaching when running reinstate operation on Oracle Data Guard	4-37
Error in switchover of Oracle Data Guard	4-38
Error in viewing Oracle Data Guard status	4-38
Error in reinstate operation on Oracle Data Guard	4-39
Error in running concurrent database or database home creation jobs	4-39
Error in deleting a standby database	4-39
Error in Oracle Data Guard failover operation for 18.14 database	4-40
Error in Oracle Active Data Guard operations	4-41
Error in the enable apply process after upgrading databases	4-42
Error in creating Oracle Data Guard status	4-43
Error in registering a database	4-44
Error in registering a database	4-44
Error in recovering a TDE-enabled Oracle RAC or Oracle RAC One Node database	4-45
Error in Reinstating Oracle Data Guard	4-46
Failure in Reinstating Oracle Data Guard	4-47
Error in updating Role after Oracle Data Guard operations	4-47
Error when recovering a single-instance database	4-48
Job history not erased after running cleanup.pl	4-48
Inconsistency in ORAchk summary and details report page	4-49
Missing DATA, RECO, and REDO entries when dbstorage is rediscovered	4-49
The odaeraser tool does not work if oakd is running in non-cluster mode	4-49
Issues with the Web Console on Microsoft web browsers	4-50
Unrecognized Token Messages Appear in /var/log/messages	4-50

Preface

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

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

Audience

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

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

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

Documentation Accessibility

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

Access to Oracle Support

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

Related Documents

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

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

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

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

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

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

Conventions

The following text conventions are used in this document:

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

1

What's New in This Release

Oracle Database Appliance release 19.13 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 19.13. You can also create and patch Oracle Database Appliance DB systems. You can also provision and patch Oracle Database Appliance virtualized platforms. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.13.

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 for provisioning of bare metal deployments, and patching of Oracle Database Appliance bare metal deployments from Oracle Database Appliance release 19.9 and later.

Oracle Database Appliance provides support for out of place patching. The patches for Oracle Grid Infrastructure and Oracle Database are available as clone files. It is mandatory to run the `odacli create-prepatchreport` command before you patch your server. You must fix the errors displayed in the report before you proceed with the patching operation. Ensure that you follow the sequence of steps for patching your appliance as described in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Provisioning and Patching of Oracle Database Appliance Virtualized Platform**
This release supports for provisioning of virtualized platform, and patching of virtualized platform from Oracle Database Appliance releases 19.9 and 19.8. Note that this the final release for Oracle Database Appliance Virtualized Platform.

See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Provisioning and Patching of Oracle Database Appliance KVM and DB Systems**
This release supports for provisioning of KVM and DB Systems, and patching of DB Systems from Oracle Database Appliance release 19.11 or later.

See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Support for Oracle Database 21c and 19c databases on Oracle Database Appliance DB Systems**

Oracle Database Appliance release 19.13 supports creation of databases of Oracle Database releases 21.4, 21.3, 19.13, 19.12, and 19.11 on DB systems. The Oracle Grid Infrastructure software installed is of the same version as the Oracle Database version you install. The version is specified in the database system JSON payload, with the attribute `version` for `database`.

For details on the JSON file changes for creating Oracle Database 21c databases on DB systems, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Enabling Multi-User Access on Oracle Database Appliance During Provisioning**

In this release, Oracle Database Appliance supports enabling multi-user access during provisioning of the appliance. Multi-user access can enhance the security of your appliance and provide an efficient mechanism for role separation. With multi-user access, you have the option of providing separate access to database administrators to manage databases. Display of resources within the Browser User Interface are also filtered as per user role. When you enable multi-user access, you create multiple users with different roles that restrict them from accessing resources created by other users and restrict the set of operations they can perform using ODA CLI commands or Browser User Interface (BUI). Oracle Database Appliance supports management of multi-user access systems through ODA CLI commands and the BUI.

Note that you can enable multi-user access only at the time of provisioning Oracle Database Appliance and cannot rollback multi-user access after you provision and deploy your appliance.

! Important:

The Oracle Database Appliance administration model changes when you deploy the Multi-User Access feature. Evaluate your role separation requirements before using this feature. Deploying on a test system first can help with the evaluation and assessment of the new administration model.

See the chapter *Implementing Multi-User Access on Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **CIS Compliance for Oracle Linux 7 on Oracle Database Appliance**
Oracle Database Appliance provides support for Center for Internet Security (CIS) Benchmarks for secure configuration of a target system.

Oracle Database Appliance bundles the CIS script `cis.py` with the product for both bare metal and Virtualized Platform, in the directory `/opt/oracle/oak/bin/`.

See the *Oracle Database Appliance Security Guide* for more information.

- **Parameter Repository for Bare Metal System**
Oracle Database Appliance provides the capability for Oracle RDBMS or Oracle ASM instances to fetch the value of a parameter from a repository as well as from the server parameter file (`SPFILE`), thus ensuring scalability in the mass update of a parameter across multiple instances. The `odacli update-agentconfig-parameters` and `odacli delete-agentconfig-parameters` commands provide new options to manage these parameters.

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 Registering TDE-Enabled Databases**

You can migrate and register TDE-enabled databases created outside the Oracle Database Appliance framework into your Oracle Database Appliance deployment using the `odacli register-database` command. In this release, after successful registration of TDE-enabled database, the lifecycle management of such databases and TDE wallets is supported, similar to any TDE database that is created using Oracle Database Appliance.

See the *About Registering TDE-Enabled Databases* topic in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model for more information.

- **Enhancements to the commands `odacli describe-prepatchreport` and `odacli describe-component`**

The patching pre-checks generated by the `odacli describe-prepatchreport` command now indicates whether Oracle Database Appliance server patching can be rolling or not.

The `odacli describe-component` command displays the local and shared storage component details and the updates required for them separately.

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 19.13**

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

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

- **Access to Oracle Database Appliance documentation from the Browser User Interface**

You can access the Oracle Database Appliance documentation set for this release from the Browser User Interface.

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

For the latest updates to the documentation for a release, see the online Oracle Database Appliance documentation library at <https://docs.oracle.com/en/engineered-systems/oracle-database-appliance/index.html>.

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

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

- 19.13.0.0.211019

- 12.2.0.1.211019
- 12.1.0.2.211019

Additionally, the release also includes Oracle Grid Infrastructure and Oracle Database 21.4 updates (October 2021 Oracle Database Release Update 21.4.0.0.211019) for DB systems.

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

See the chapter *Oracle Database Appliance Release 19.13 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 19.13 from the drop down list.

- **Oracle Database Appliance 19.13.0.0.0 Server Patch for ODACLI/DCS stack:** Use patch 33518928 to update your bare metal deployment to Oracle Database Appliance release 19.13. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.13.
- **Oracle Database Appliance 19.13.0.0.0 Grid Infrastructure Clone for ODACLI/DCS stack:** Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.13. You also use this patch to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure components for deployment on an Oracle Database Appliance in the "shipped from factory" state, or an Oracle Database Appliance that has been re-imaged using the operating system ISO Image. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- **Oracle Database Appliance 19.13.0.0.0 Database Clone File for ODACLI/DCS stack:** Use the Oracle Database 19.13.0.0.211019 Software Clone file to create 19.13.0.0.211019 Oracle Database homes. Patch 30403662 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- **Oracle Database Appliance 12.2.0.1 Database Clone File for ODACLI/DCS stack:** Use the Oracle Database 12.2.0.1.211019 Software Clone file to create 12.2.0.1.211019 database homes. Patch 27119402 provides the database clone for this update.
- **Oracle Database Appliance 12.1.0.2 Database Clone File for ODACLI/DCS stack:** Use the Oracle RDBMS 12.1.0.2.211019 Software Clone file to create 12.1.0.2.211019 database homes. Patch 23494992 provides the database clone for this update.
- **Oracle Database Appliance KVM Database System Template:** Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance. Patch 32451228 provides the database clone for this update.
- **Oracle Database Appliance 21.4.0.0.211019 GI Clone for DB Systems:** Use patch 33152235 to perform an initial deployment of Oracle Database Appliance on DB Systems for creating Oracle Database 21c databases. This patch is for Oracle Database Appliance Hardware Models with DB systems only.
- **Oracle Database Appliance 21.4.0.0.211019 Database Clone File for DB Systems:** Use the Oracle Database 21.4.0.0.211019 Software Clone file to create 21.4.0.0.211019 Oracle Database homes. Patch 33152237 provides the database

clone for this update. This patch is for Oracle Database Appliance Hardware Models with DB systems only.

- **Oracle Database Appliance 19.13.0.0.0 Patch Bundle for all VM Platform:** Use patch 33518912 to update your Virtualized Platform to Oracle Database Appliance release 19.13.
- **Oracle Database Appliance 19.13.0.0.0 ISO Image (Virtualized Platform):** Use patch 16186163 to re-image the server with an operating system that includes virtualization capabilities. After re-imaging, use the VM Template to deploy ODA_BASE for the Virtualized Platform. The bundle contains the latest Grid Infrastructure components for deployment.
- **Oracle Database Appliance 19.13.0.0.0 VM Template (ODA_BASE) for Virtualized Platform:** Use patch 16186172 to deploy ODA_BASE for the Virtualized Platform.
- **Oracle Database Appliance 19.13.0.0.0 RDBMS Clone for Virtualized Platform:** Use the Oracle RDBMS 19.13.0.0.211019 Software Clone file to create 19.13.0.0.211019 database homes for Virtualized Platform. Patch 30403653 provides this update.
- **Oracle Database Appliance 12.2.0.1 RDBMS Clone File for Virtualized Platform:** Use the Oracle RDBMS 12.2.0.1.211019 Software Clone file to create 12.2.0.1.211019 database homes for Virtualized Platform. Patch 27449599 provides the database clone for this update.
- **Oracle Database Appliance 12.1.0.2 RDBMS Clone File for Virtualized Platform:** Use the Oracle RDBMS 12.1.0.2.211019 Software Clone file to create 12.1.0.2.211019 database homes for Virtualized Platform. Patch 19520042 provides the database clone for this update.

Related Topics

- Oracle Database Appliance Checklists
- Patching Oracle Database Appliance
- Oracle Database Appliance Command Line Interface Reference
- Oracle Database Appliance Command Line Interface for KVM
- Implementing Multi-User Access on Oracle Database Appliance
- Upgrading Oracle Database Appliance
- About CIS Benchmarks Implementation on Oracle Database Appliance
- Managing an Oracle Database Appliance KVM Deployment
- ODACLI Command Changes with Multi-User Access on Oracle Database Appliance
- About the Browser User Interface
- About Registering a TDE-Enabled Database
- [Known Issues with Oracle Database Appliance in This Release](#)
The following are known issues deploying, updating, and managing Oracle Database Appliance in this release.
- Enterprise Manager Plugin for Oracle Database Appliance

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 19.13

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 or 1132	0121
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466	5.0.1.28.r140682
BIOS	52050300	52040600

Table 2-1 (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.13

Component Name	X8-2-HA	X8-2S and X8-2M
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600	2.4.8.0.600
Oracle Linux	7.9	7.9
MySQL	8.0.25	8.0.25
Kernel	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64
GI_HOME	19.13.0.0.211019	19.13.0.0.211019
DB_HOME	19.13.0.0.211019	19.13.0.0.211019
Oracle Auto Service Request (Oracle ASR)	21.2.0	21.2.0

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 19.13

Component Name	X7-2-HA	X7-2S and X7-2M
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	A170 For the HDD/SSD option: A374/A087	A170
NVMe (firmware version)	Not applicable	QDV1RF32
OS Disk (SSD firmware version)	0121	0121
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466	5.0.2.24.r141466
BIOS	41100500	41100500
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600	2.4.8.0.600
Oracle Linux	7.9	7.9
MySQL	8.0.25	8.0.25

Table 2-2 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.13

Component Name	X7-2-HA	X7-2S and X7-2M
Kernel	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64
GI_HOME	19.13.0.0.211019	19.13.0.0.211019
DB_HOME	19.13.0.0.211019	19.13.0.0.211019
Oracle Auto Service Request (Oracle ASR)	21.2.0	21.2.0

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 19.13

Component Name	Version
Controller	4.650.00-7176
NVMe (firmware version)	KPYAJR3Q
OS Disk	OR3Q
ILOM (Oracle Integrated Lights Out Manager)	X6-2SM: 5.0.1.21.r136383 X6-2L: 5.0.2.24.r141466
BIOS	X6-2SM:38350200 X6-2L:39350200
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9
MySQL	8.0.25
Kernel	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64
GI_HOME	19.13.0.0.211019
DB_HOME	19.13.0.0.211019
Oracle Auto Service Request (Oracle ASR)	21.2.0

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 19.13

Component Name	Version
Controller_INT	4.650.00-7176
Controller_Ext	16.00.08.00
Expander	0310
SSD_LOCAL	OR3Q
SSD_SHARED	A29A
ILOM (Oracle Integrated Lights Out Manager)	5.0.2.24.r141466
BIOS	38320100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9
MySQL	8.0.25
Kernel	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64
GI_HOME	19.13.0.0.211019
DB_HOME	19.13.0.0.211019
Oracle Auto Service Request (Oracle ASR)	21.2.0

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 19.13

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)	5.0.2.24.r141466
BIOS	30350100
IPMI (Intelligent Platform Management Interface)	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.8.0.600
Oracle Linux	7.9

Table 2-5 (Cont.) Component Versions for Oracle Database Appliance X5-2 for Oracle Database Appliance Release 19.13

Component Name	Version
MySQL	8.0.25
Kernel	kernel-uek-4.14.35-2047.508.3.2.el7uek.x86_64
GI_HOME	19.13.0.0.211019
DB_HOME	19.13.0.0.211019
Oracle Auto Service Request (Oracle ASR)	21.2.0

3

Oracle Database Appliance 19.13 Patches

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

- [Patching from Previous Releases](#)
Understand the minimum versions for patching Oracle Database Appliance to later releases.
- [Minimum Software Version Requirements](#)
Review the minimum software version requirements for installing this release of Oracle Database Appliance.
- [Oracle Database Appliance Bare Metal System and KVM Patches](#)
Download the patches available for Oracle Database Appliance in My Oracle Support, get information on the prerequisites, and how to apply the patches.
- [Oracle Database Appliance Virtualized Platform Patches](#)
Download the patches available for an Oracle Database Appliance virtualized platform in My Oracle Support, get information on the prerequisites, and how to apply the patches.

Patching from Previous Releases

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

Oracle recommends that you patch your Oracle Database Appliance deployment to within the previous four releases. There may be a minimum patch-level requirement for upgrades to certain releases. With this release of Oracle Database Appliance, there are a few changes to the patching procedure. Ensure that you follow the sequence of steps for patching your appliance as described in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

Use the following table as an indicator for minimum requirements for patching to a release.

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

Oracle Database Appliance Release (To patch to this release...)	Earliest Supported Release To Patch From (Oracle recommends this release...)
19.13.0.0	For bare metal systems: <ul style="list-style-type: none">• 19.12.0.0• 19.11.0.0• 19.10.0.0• 19.9.0.0 For virtualized platform deployments: <ul style="list-style-type: none">• 19.9.0.0• 19.8.0.0

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 (Oracle recommends this release...)
19.12.0.0	For bare metal systems: <ul style="list-style-type: none"> • 19.11.0.0 • 19.10.0.0 • 19.9.0.0 • 19.8.0.0
19.11.0.0	For bare metal systems: <ul style="list-style-type: none"> • 19.10.0.0 • 19.9.0.0 • 19.8.0.0 • 19.7.0.0
19.10.0.0	For bare metal systems: <ul style="list-style-type: none"> • 19.9.0.0 • 19.8.0.0 • 19.7.0.0 • 19.6.0.0
19.9.0.0	For bare metal systems: <ul style="list-style-type: none"> • 19.8.0.0 • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: <ul style="list-style-type: none"> • 19.8.0.0
19.8.0.0	For bare metal systems: <ul style="list-style-type: none"> • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: <ul style="list-style-type: none"> • 18.8.0.0
19.7.0.0	<ul style="list-style-type: none"> • 19.6.0.0 • 19.5.0.0
19.6.0.0	<ul style="list-style-type: none"> • 18.8.0.0
18.8.0.0	<ul style="list-style-type: none"> • 18.7.0.0 • 18.5.0.0 • 18.3.0.0
18.7.0.0	<ul style="list-style-type: none"> • 18.5.0.0 • 18.3.0.0
18.5.0.0	<ul style="list-style-type: none"> • 18.3.0.0
18.3.0.0	<ul style="list-style-type: none"> • 12.2.1.4.0 • 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12

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 (Oracle recommends this release...)
12.2.1.4.0	<ul style="list-style-type: none"> 12.2.1.3.0 12.2.1.2.0 12.1.2.12
12.2.1.3.0	<ul style="list-style-type: none"> 12.2.1.2.0 12.1.2.12
12.2.1.2.0	<ul style="list-style-type: none"> 12.1.2.12 <p>Note: 12.2.1.2.0 is not supported on virtualized platform.</p>
12.1.2.12	<ul style="list-style-type: none"> 12.1.2.11 12.1.2.10 12.1.2.9 12.1.2.8
12.1.2.11	<ul style="list-style-type: none"> 12.1.2.10 12.1.2.9 12.1.2.8 12.1.2.7
12.1.2.10	<ul style="list-style-type: none"> 12.1.2.9 12.1.2.8 12.1.2.7 12.1.2.6
12.1.2.9	<ul style="list-style-type: none"> 12.1.2.8 12.1.2.7 12.1.2.6
12.1.2.5	12.1.2.0 to 12.1.2.4
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
2.2.0.0.0	2.1.0.3.1 or earlier

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

Related Topics

- Patching Oracle Database Appliance

Minimum Software Version Requirements

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

You can provision Oracle Database Appliance release 19.13 on Oracle Database Appliance bare metal systems. You can patch your bare metal systems to Oracle Database Appliance release 19.13 from Oracle Database Appliance release 19.9 or later. You can also patch Oracle Database Appliance DB systems on KVM to release 19.13.

For virtualized platforms, you can provision Oracle Database Appliance release 19.13 or patch from Oracle Database Appliance release 19.8.

Oracle Database Appliance Bare Metal System and KVM Patches

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

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.13 from the release list.

Table 3-2 Oracle Database Appliance Patches for Oracle Database Appliance Release 19.13

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for ODACLI/DCS Stack	33518928	Use the server patch to update your deployment to Oracle Database Appliance release 19.13. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.13.	Patching Oracle Database Appliance
Oracle Database Appliance Grid Infrastructure Clone for ODACLI/DCS stack	30403673	Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.13. You also use this patch to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure and database components for deployment on an Oracle Database Appliance after re-imaging Oracle Database Appliance with the Oracle Database Appliance ISO Image for release 19.13.	Provisioning Oracle Database Appliance Software

Table 3-2 (Cont.) Oracle Database Appliance Patches for Oracle Database Appliance Release 19.13

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Database Clone 19.13.0.0.211019 for ODACLI/DCS stack	30403662	Use Oracle Database Appliance Database Clone 19.13.0.0.211019 for ODACLI/DCS stack to create 19.13 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance Database Clone 12.2.0.1.211019 for ODACLI/DCS stack	27119402	Use Oracle Database Appliance Database Clone 12.2.0.1.211019 for ODACLI/DCS stack to create 12.2.0.1 database homes for the 19.13 ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance Database Clone 12.1.0.2.211019 for ODACLI/DCS stack	23494992	Use Oracle Database Appliance Database Clone 12.1.0.2.211019 for ODACLI/DCS stack to create 12.1.0.2 database homes for the 19.13 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 19.13. 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 19.13.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.4.0.0.211019 GI Clone for DB Systems	33152235	Use the Oracle Grid Infrastructure 21c clone file to deploy Oracle Database 21c database on DB system.	Managing DB Systems in KVM Deployment

Table 3-2 (Cont.) Oracle Database Appliance Patches for Oracle Database Appliance Release 19.13

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance 21.4.0.0.211019 Database Clone for DB Systems	33152237	Use the Oracle Database Appliance 21.4.0.0.211019 clone file to deploy Oracle Database 21c database on DB system.	Managing DB Systems in KVM Deployment

Oracle Database Appliance Virtualized Platform Patches

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

When downloading a patch from My Oracle Support, select Oracle Database Appliance release 19.13 from the release list.



Note:

The patches in the table are only applicable to an Oracle Database Appliance Virtualized Platform.

Table 3-3 Oracle Database Appliance Patches for Virtualized Platform

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for Virtualized Platforms	33518912	Use the server patch to update your deployment to Oracle Database Appliance release 19.13.	Patching Oracle Database Appliance Virtualized Platform
VM ISO Image (DOM0)	16186163 From the drop-down list, select 19.13.	Use to reimage Oracle Database Appliance as a Virtualized Platform.	Deploying an Oracle Database Appliance Virtualized Platform

Table 3-3 (Cont.) Oracle Database Appliance Patches for Virtualized Platform

Patch Type	Patch Number	Description	Resources
VM Template (ODA_BASE)	16186172 From the drop-down list, select 19.13.	Use to deploy ODA_Base for the virtualized platform. Includes the GI + Database clone files for deployment. Before deploying the VM Template, reimage the system with the Oracle Database Appliance Virtualized Platform ISO (patch 16186163.)	Deploying an Oracle Database Appliance Virtualized Platform
Oracle Database Appliance RDBMS Clone 19.13.0.0.211019 for Virtualized Platform	30403653	Use Oracle Database Appliance RDBMS Clone 19.13.0.0.211019 for Virtualized Platform to create 19.13 database homes for Virtualized Platform.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.2.0.1.211019 for Virtualized Platforms	27449599	Use Oracle Database Appliance RDBMS Clone 12.2.0.1.211019 for Virtualized Platform to create 12.2.0.1 database homes for the 19.13 Virtualized Platform.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance RDBMS Clone 12.1.0.2.211019 for Virtualized Platform	19520042	Use Oracle Database Appliance RDBMS Clone 12.1.0.2.211019 for Virtualized Platform to create 12.1.0.2 database homes for the 19.13 Virtualized Platform.	Updating Oracle Database Appliance Repository with Database Clone Files

4

Known Issues with Oracle Database Appliance in This Release

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

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

Known Issues When Patching Oracle Database Appliance

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

- [Error in server patching](#)
When patching Oracle Database Appliance which already has STIG V1R2 deployed, an error may be encountered.
- [Error in patching on a newly-provisioned appliance](#)
When applying the patch for Oracle Database Appliance release 19.13 to a newly-provisioned system, an error may be encountered.
- [AHF error in prepatch report for the update-dbhome command](#)
When you patch server to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.
- [Error in running the update-dbhome command](#)
When you patch database homes to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.
- [Error in patching database](#)
When you patch Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database, an error is encountered.
- [Error in patching prechecks report](#)
The patching prechecks report may display an error.
- [Error when patching DB systems](#)
When patching DB systems on Oracle Database Appliance, an error may be encountered.
- [Error in patching database](#)
When you patch Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database, an error is encountered.

- [Error in listing patches](#)
When running the command `odacli list-availablepatches`, an error is encountered.
- [Error in updating dbhome](#)
When you patch database homes to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.
- [Error when patching DB systems](#)
When patching DB systems on Oracle Database Appliance, an error may be encountered.
- [Error in server patching](#)
When patching Oracle Database Appliance, errors may be encountered.
- [Error in storage patching](#)
When patching Oracle Database Appliance, errors are encountered.
- [Error in running the update-dbhome command](#)
When you patch database homes to Oracle Database Appliance release 19.11, the `odacli update-dbhome` command fails.
- [Error message displayed even when patching Oracle Database Appliance is successful](#)
Although patching of Oracle Database Appliance was successful, an error message may be displayed.
- [Error when running ORACheck or updating the server or database home](#)
When running Oracle ORACheck or the commands `odacli create-prepatchreport`, `odacli update-server`, `odacli update-dbhome`, an error is encountered.
- [Error in patching database homes](#)
An error is encountered when patching database homes on databases that have Standard Edition High Availability enabled.
- [Server status not set to Normal when patching](#)
When patching Oracle Database Appliance, an error is encountered.
- [Error when patching to 12.1.0.2.190716 Bundle Patch](#)
When patching Oracle Database release 12.1.0.2 to Oracle Database 12.1.0.2.190716 Bundle Patch, an error is encountered.
- [Patching of M.2 drives not supported](#)
Patching of M.2 drives (local disks SSDSCKJB48 and SSDSCKJB480G7) is not supported.

Error in server patching

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

On an Oracle Database Appliance deployment with release earlier than 19.13, if the Security Technical Implementation Guidelines (STIG) V1R2 is already deployed, then when you patch to 19.13 or earlier, and run the command `odacli update-server -f version`, an error may be displayed.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 33168598.

Error in patching on a newly-provisioned appliance

When applying the patch for Oracle Database Appliance release 19.13 to a newly-provisioned system, an error may be encountered.

The following error message may be displayed:

```
DCS-10001:Internal error encountered: Cluster ware is not running to get the resource details.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Restart the node. For high-availability systems, restart both nodes.
2. Run the `odacli update-server` command again.

This issue is tracked with Oracle bug 33641038.

AHF error in prepatch report for the update-dbhome command

When you patch server to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

```
/opt/oracle/dcs/bin/odacli update-dbhome --dbhomeid 7c67c5b4-
f585-4ba9-865f-c719c63c0a6e -v 19.13.0.0.0 -f
```

This issue is tracked with Oracle bug 33144170.

Error in running the update-dbhome command

When you patch database homes to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.

For Oracle Database Appliance release 19.13, when you run the `odacli update-dbhome` command, due to the inclusion of the non-rolling DST patch, the job waits for 12,000 seconds (around 3.5 hours). The following error message is displayed:

```
PRCC-1021 : One or more of the submitted commands did not execute
successfully.
PRCC-1025 : Command submitted on node <node_name> timed out after
12,000 seconds.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

```
db_home_path_the_database_is_running_on/OPatch/datapatch
```

2. If the database is an Oracle ACFS database that was patched from a release earlier than 19.11, then run the `odacli list-dbstorages` command, and locate the corresponding entries by `db_unique_name`. Check the DATA and RECO destination location if they exist in the result.
3. For DATA destination location, the value should be similar to the following:

```
/u02/app/oracle/oradata/db_unique_name
```

4. For RECO, pre-process the values from the beginning to the last forward slash (/). For example:

```
/u03/app/oracle
addlFS = /u01/app/odaorahome,/u01/app/odaorabase0(for single-node
systems)
addlFS = /u01/app/odaorahome,/u01/app/odaorabase0, /u01/app/
odaorabase1(for high availability systems)
```

5. Run the `srvctl` command `db_home_path_the_database_is_running_on/bin/srvctl modify database -d db_unique_name -acfspath $data, $reco, $addlFS -diskgroup DATA`. For example:

```
srvctl modify database -d provDb0 -acfspath
/u02/app/oracle/oradata/provDb0,/u03/app/oracle/,/u01/app/
```

```
odaorahome,/u01/app/  
odaorabase0 -diskgroup DATA
```

This issue is tracked with Oracle bug 32740491.

Error in patching database

When you patch Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database, an error is encountered.

The following error message is displayed:

```
PRGH-1106 : NULL
```

Hardware Models

All Oracle Database Appliance hardware models high-availability systems

Workaround

Before patching the database home, restart the Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database:

```
srvctl stop database -database db_unique_name  
srvctl start database -database db_unique_name
```

When the error is encountered during patching, do the following:

1. Manually apply the datapatch:

```
db_home_path_the_database_is_running_on/OPatch/datapatch
```

2. If you are patching an Oracle ACFS database from an Oracle Database Appliance release earlier than 19.11 to the latest release, then run the command `odacli list-dbstorages` and locate the corresponding entries by `db_unique_name`. From the results, identify the DATA and RECO destination location if they exist. For DATA destination location, the value must be as follows:

```
/u02/app/oracle/oradata/db_unique_name
```

For RECO, pre-process the value from the beginning to the last `/`.

For RECO destination location after pre-process:

```
/u03/app/oracle
```

```
add1FS = /u01/app/odaorahome,/u01/app/odaorabase0 (for Oracle Database  
Appliance single-node system)  
add1FS = /u01/app/odaorahome,/u01/app/odaorabase0, /u01/app/  
odaorabase1(for Oracle Database Appliance high-availability system)
```

Run the following command:

```
db_home_path_the_database_is_running_on/bin/srvctl modify database -  
d  
db_unique_name -acfspath <$data, $reco, $addlFS> -diskgroup DATA
```

For example, on Oracle Database Appliance high-availability system:

```
srvctl modify database -d provDb0 -acfspath  
/u02/app/oracle/oradata/provDb0,/u03/app/oracle/,/u01/app/  
odaorahome,/u01/app/  
odaorabase0 -diskgroup DATA
```

This issue is tracked with Oracle bug 33367771.

Error in patching prechecks report

The patchung prechecks report may display an error.

The following error message may be displayed:

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

Hardware Models

Oracle Database Appliance X-7 hardware models

Workaround

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

This issue is tracked with Oracle bug 33631256.

Error when patching DB systems

When patching DB systems on Oracle Database Appliance, an error may be encountered.

When patching a DB system to Oracle Database Appliance 19.13, the following error message may be displayed:

```
Task failure:  
KVM infra update_KvmLockContainer_25915  December 2, 2021 1:10:08 PM  
CET  
December 2, 2021 1:10:08 PM CET      InternalError
```

The `dcs-agent.log` file may contain the following entry:

```
com.oracle.dcs.commons.exception.DcsException: DCS-10001:Internal error  
encountered: Zookeeper is down.
```

This is because of an error in Zookeeper reconnection.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the `odacli update-server` command within the DB system again.

This issue is tracked with Oracle bug 33631056.

Error in patching database

When you patch Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database, an error is encountered.

Hardware Models

All Oracle Database Appliance hardware models high-availability systems

Workaround

Before patching the database home, restart the Oracle Database 19c Standard Edition single-instance or Oracle RAC One Node database:

```
srvctl stop database -database db_unique_name
srvctl start database -database db_unique_name
```

This issue is tracked with Oracle bug 33178198.

Error in listing patches

When running the command `odacli list-availablepatches`, an error is encountered.

If Oracle Database Appliance release 19.6.0.0 version patches are present in repository, then the following error message is displayed:

```
# odacli list-availablepatches
DCS-10001:Internal error encountered: For input string: ""
```

Hardware Models

All Oracle Database Appliance hardware models high-availability systems

Workaround

In the `/opt/oracle/oak/pkgrepos/System/19.6.0.0/patchmetadata.xml` file, modify the database patch information and add `targetVersion` as follows:

```
<component baseversion="19.0.0.0" name="DB" repotag="19.6.0.0.200114"
            targetVersion="19.6.0.0.200114"> </component>
<component baseversion="18.0.0.0" name="DB" repotag="18.9.0.0.200114"
            targetVersion="18.9.0.0.200114"></component>
<component baseversion="12.2.0.1" name="DB" repotag="12.2.0.1.200114"
```



```
targetVersion="12.2.0.1.200114"></component>
<component baseversion="12.1.0.2" name="DB" repotag="12.1.0.2.200114"
targetVersion="12.1.0.2.200114"></component>
<component baseversion="11.2.0.4" name="DB" repotag="11.2.0.4.200114"
targetVersion="11.2.0.4.200114"></component>
```

This issue is tracked with Oracle bug 33600951.

Error in updating dbhome

When you patch database homes to Oracle Database Appliance release 19.13, the `odacli update-dbhome` command may fail.

The following error message is displayed:

```
PRGH-1153 : RPHelper call to get running nodes failed for DB: "GIS_IN"
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ensure that the database instances are running before you run the `odacli update-dbhome` command. Do not manually stop the database before updating it.

This issue is tracked with Oracle bug 33114855.

Error when patching DB systems

When patching DB systems on Oracle Database Appliance, an error may be encountered.

When a DB system node, which has Oracle Database Appliance 19.13, reboots, the ora packages repository is not mounted automatically. The DCS Agent does not mount the repositories causing a failure in operations that needs repository access, such as patching.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

When you restart the bare metal system, the DCS Agent on the bare metal system restarts NFS on both nodes. Follow these steps to remount the repository on the DB system:

1. On the VM mount `pkgrepos` directory, on the first node, run these steps:

```
cp /opt/oracle/oak/pkgrepos/System/VERSION /opt/oracle/oak/conf/
VERSION
mount 192.168.17.2:/opt/oracle/oak/pkgrepos /opt/oracle/oak/pkgrepos
```

For InfiniBand environments:

```
mount 192.168.16.24:/opt/oracle/oak/pkgrepos /opt/oracle/oak/pkgrepos
```

2. On the VM mount `pkgrepos` directory, on the second node, run these steps:

```
cp /opt/oracle/oak/pkgrepos/System/VERSION /opt/oracle/oak/conf/VERSION
mount 192.168.17.3:/opt/oracle/oak/pkgrepos /opt/oracle/oak/pkgrepos
```

For InfiniBand environments:

```
mount 192.168.16.25:/opt/oracle/oak/pkgrepos /opt/oracle/oak/pkgrepos
```

3. Patch the DB system with the same steps as when patching the bare metal system:

```
odacli update-dcsadmin -v 19.13.0.0.0
odacli update-dcscomponents -v 19.13.0.0.0
odacli update-dcsagent -v 19.13.0.0.0
odacli create-prepatchreport -v 19.13.0.0.0 -s
odacli update-server -v 19.13.0.0.0
odacli create-prepatchreport -v 19.13.0.0.0 -d -i id
odacli update-dbhome -v 19.13.0.0.0 -i id -f -imp
```

This issue is tracked with Oracle bug 33217680.

Error in server patching

When patching Oracle Database Appliance, errors may be encountered.

The `odacli update-server` command may fail with the following message:

```
Fail to patch GI with RHP : DCS-10001:Internal error encountered: PRGH-1057
: failure during move of an Oracle Grid Infrastructure home
...
...
RCZ-4001 : failed to execute command
"/u01/app/19.13.0.0/grid/crs/install/rootcrs.sh" using the
privileged execution plugin "odaexec" on nodes "xxxxxxx"
within 36,000 seconds
PRCZ-2103 : Failed to execute command
"/u01/app/19.13.0.0/grid/crs/install/rootcrs.sh" on node "xxxxxxx"
as user
"root". Detailed error: Using configuration parameter file:
/u01/app/19.13.0.0/grid/crs/install/crsconfig_params
The log of current session can be found at:
/u01/app/grid/crsdata/<node_name>/crsconfig/
crs_postpatch_apply_oop_node_name_timestamp.log
```

This error shows that during the move of Oracle Grid Infrastructure stack to the new home location, stopping the Clusterware on the earlier Oracle home fails. Confirm that it is the same error by checking the error log for the following entry:

```
"Error unmounting '/opt/oracle/oak/pkgrepos/orapkgs/clones'. Possible
busy file system. Verify
the logs.Retrying unmount
CRS-2675: Stop of 'ora.data.acfsclone.acfs' on
'nodel' failed
CRS-2679: Attempting to clean 'ora.data.acfsclone.acfs' on 'nodel'
Clean action is about to exhaust maximum waiting time
CRS-2678: 'ora.data.acfsclone.acfs' on 'nodel' has experienced an
unrecoverable failure
CRS-0267: Human intervention required to resume its availability.
CRS-2679: Attempting to clean 'ora.data.acfsclone.acfs' on 'nodel'
Clean action is about to exhaust maximum waiting time
CRS-2680: Clean of 'ora.data.acfsclone.acfs' on 'nodel'
failed
...
..."
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps on both nodes:

1. Restart the Clusterware manually from the old grid home that is, the 19.10 or 19.11 home.
2. Locate all export points of `/opt/oracle/oak/pkgrepos`:

```
# cat /var/lib/nfs/etab
/opt/oracle/oak/pkgrepos
192.168.17.4(ro, sync, wdelay, hide, crossmnt, secure, root_squash, no_all_
squash, no_subtree_check, secure_locks, acl, no_pnfs, anonuid=65534, anong
id=65534, sec=sys, ro, secure, root_squash, no_all_squash)
```

3. Clear references to export of clones:

```
# exportfs -u host:/opt/oracle/oak/pkgrepos
# exportfs -u 192.168.17.4:/opt/oracle/oak/pkgrepos
```

4. After running steps 1-3 on both nodes, run the `odacli update-server` command and patch your appliance.

This issue is tracked with Oracle bug 33284607.

Error in storage patching

When patching Oracle Database Appliance, errors are encountered.

The `odacli update-storage` command may fail with the following message:

```
DCS-10001:Internal error encountered: Failed to stop cluster
```

This error shows that stopping the Clusterware may fail. Confirm that it is the same error by checking the error log for the following entry:

```
"Error unmounting '/opt/oracle/oak/pkgrepos/orapks/clones'. Possible busy
file system. Verify
the logs.Retrying unmount
CRS-2675: Stop of 'ora.data.acfsclone.acfs' on
'nodel' failed
CRS-2679: Attempting to clean 'ora.data.acfsclone.acfs' on 'nodel'
Clean action is about to exhaust maximum waiting time
CRS-2678: 'ora.data.acfsclone.acfs' on 'nodel' has experienced an
unrecoverable failure
CRS-0267: Human intervention required to resume its availability.
CRS-2679: Attempting to clean 'ora.data.acfsclone.acfs' on 'nodel'
Clean action is about to exhaust maximum waiting time
CRS-2680: Clean of 'ora.data.acfsclone.acfs' on 'nodel'
failed
...
..."
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps on both nodes:

1. Restart the Clusterware manually from the old grid home that is, the 19.10 or 19.11 home.
2. Locate all export points of `/opt/oracle/oak/pkgrepos`:

```
# cat /var/lib/nfs/etab
/opt/oracle/oak/pkgrepos
192.168.17.4(ro, sync, wdelay, hide, crossmnt, secure, root_squash, no_all_squash
, no_subtree_check, secure_locks, acl, no_pnfs, anonuid=65534, anongid=65534, sec
=sys, ro, secure, root_squash, no_all_squash)
```

3. Clear references to export of clones:

```
# exportfs -u host:/opt/oracle/oak/pkgrepos
# exportfs -u 192.168.17.4:/opt/oracle/oak/pkgrepos
```

4. After running steps 1-3 on both nodes, run the `odacli update-storage` command and patch the storage.

This issue is tracked with Oracle bug 33284607.

Error in running the update-dbhome command

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

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

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

The `rhpf.log` file contains the following entries:

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

Hardware Models

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

Workaround

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

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

This issue is tracked with Oracle bug 32801095.

Error message displayed even when patching Oracle Database Appliance is successful

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

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

```
# time odacli update-dcscomponents -v 19.13.0.0.0  
^[[ADCS-10008:Failed to update DCscomponents: 19.13.0.0.0  
Internal error while patching the DCS components :  
DCS-10231:Cannot proceed. Pre-checks for update-dcscomponents failed.  
Refer
```

to `/opt/oracle/dcs/log/-dcscomponentsPreCheckReport.log` on node 1 for details.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

This issue is tracked with Oracle bug 32553519.

Error when running ORACHK or updating the server or database home

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

The following messages may be displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

2. The output should be similar to the following:

```
TABLE_NAME                                SEGMENT
-----
FGA_LOG$                                  AUTO
AUD$                                       AUTO
```

If one or both of the AUD\$ or FGA_LOG\$ 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.

Error in patching database homes

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

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

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

Hardware Models

All Oracle Database Appliance hardware models with High-Availability deployments

Workaround

Follow these steps:

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

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

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

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

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

```
dbhomeLocation/OPatch/datapatch
```

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

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

This issue is tracked with Oracle bug 31654816.

Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Run the command:

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

2. Ignore the following two warnings:

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

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

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

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

This issue is tracked with Oracle bug 30099090.

Error when patching to 12.1.0.2.190716 Bundle Patch

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

The ODACLI job displays the following error:

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

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

Install the same patch again.

This issue is tracked with Oracle bugs 30026438 and 30155710.

Patching of M.2 drives not supported

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

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

Hardware Models

Oracle Database Appliance bare metal deployments

Workaround

None

This issue is tracked with Oracle bug 30249232.

Known Issues When Deploying Oracle Database Appliance

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

- [Error in creating two DB systems using disk groups](#)
When creating two or more DB systems in parallel using different disk groups on Oracle Database Appliance X5-2 high-availability, high-capacity systems, an error is encountered.
- [Error in creating two DB systems](#)
When creating two DB systems concurrently in two different Oracle ASM disk groups, an error is encountered.
- [Error in creating db system](#)
The command `odacli create-dbsystem` operation fails due to errors.
- [Error in registering a TDE-enabled database](#)
When registering a TDE-enabled database that was created using RMAN, an error is encountered.
- [Error when upgrading database from 12.1 or 19c](#)
When upgrading databases from 12.1 to 19c, an error is encountered.
- [Error in recovering a database](#)
When recovering a database on Oracle Database Appliance, an error is encountered.

- [Error in adding JBOD](#)
When you add a second JBOD to your Oracle Database Appliance deployment on which a DB system is running, an error is encountered.
- [Error in provisioning appliance after running cleanup.pl](#)
Errors encountered in provisioning appliance after running `cleanup.pl`.
- [Error in updating a database](#)
When updating a database on Oracle Database Appliance, an error is encountered.
- [Error in running tfactl diagcollect command on remote node](#)
When running the `tfactl diagcollect` command on Oracle Database Appliance, an error is encountered.
- [Error when upgrading database from 11.2.0.4 to 12.1 or 12.2](#)
When upgrading databases from 11.2.0.4 to 12.1 or 12.2, an error is encountered.
- [Error when upgrading 12.1 single-instance database](#)
When upgrading 12.1 single-instance database, a job failure error is encountered.
- [Failure in creating RECO disk group during provisioning](#)
When provisioning Oracle Database Appliance X8-2-HA with High Performance configuration containing default storage and expansion shelf, creation of RECO disk group fails.
- [Simultaneous creation of two Oracle ACFS Databases fails](#)
If you try to create two Oracle ACFS databases on a system where there is no database or database storage already created, then database creation fails for one of the databases with an error.
- [Error encountered after running cleanup.pl](#)
Errors encountered in running `odacli` commands after running `cleanup.pl`.
- [Errors in clone database operation](#)
Clone database operation fails due to errors.
- [Clone database operation fails](#)
For Oracle Database release 12.1 databases, the database clone creation may fail because the default compatible version from Oracle binaries was set to 12.0.0.0

Error in creating two DB systems using disk groups

When creating two or more DB systems in parallel using different disk groups on Oracle Database Appliance X5-2 high-availability, high-capacity systems, an error is encountered.

MySQL timeouts may occur during DDL queries on the first DCS agent bootstrap within the DB system.

Hardware Models

Oracle Database Appliance X5-2 high-availability, high-capacity systems

Workaround

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

This issue is tracked with Oracle bug 33546843.

Error in creating two DB systems

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 33275630.

Error in creating db system

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

The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

```
systemctl restart initdcsagent
```

This issue is tracked with Oracle bug 32740754.

Error in registering a TDE-enabled database

When registering a TDE-enabled database that was created using RMAN, an error is encountered.

The following error message is displayed:

```
DCS-10107:Tde wallet does not exist at location :  
/opt/oracle/dcs/commonstore/wallets/tde/DB_UNIQUE_NAME>.Please copy the  
wallet to proceed.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the following commands:

1. Log in as the `oracle` user.

```
su - oracle
```

2. Navigate to the `/opt/oracle/dcs/commonstore/wallets/tde/` directory.

```
cd /opt/oracle/dcs/commonstore/wallets/tde/
```

3. Create the `DB_UNIQUE_NAME` using uppercase letters.

```
mkdir DB_UNIQUE_NAME
```

4. Copy the TDE wallets to the `DB_UNIQUE_NAME` directory.
5. Retry database registration.

This issue is tracked with Oracle bug 28080413.

Error when upgrading database from 12.1 or 19c

When upgrading databases from 12.1 to 19c, an error is encountered.

The error message is:

```
ERROR : Ran '/bin/su oracle -c  
"/u01/app/oracle/product/19.0.0.0/dbhome_1/bin/dbua -silent -performFixUp  
true -dbName db121"'
```

The logs directory at `/u01/app/oracle/cfgtoollogs/dbua/upgradetimestamp` shows the following entry:

```
SEVERE: Oct 25, 2021 7:20:36 AM  
oracle.assistants.dbua.prereq.PreUpgradeDriverJob runFixUps
```

```
SEVERE: ORA-29284: file read error
ORA-06512: at "SYS.UTL_FILE", line 106
ORA-06512: at "SYS.UTL_FILE", line 746
ORA-06512: at "SYS.DBMS_PREUP", line 3437
ORA-06512: at "SYS.DBMS_PREUP", line 11227
ORA-06512: at line 4
```

Check whether this issue is related to the preupgrade steps. The traces file shows the following entry:

```
SEVERE: Oct 25, 2021 7:20:37 AM
oracle.assistants.dbua.prereq.PrereqChecker
logPrereqResults
SEVERE: An error occurred while executing the preupgrade auto fixups.
FIXABLE: MANUAL
```

Hardware Models

All Oracle Database Appliance virtualized platform deployments

Workaround

Run fixup scripts manually. Check the file `preupgrade_fixups.sql` in the directory generated under `$ORACLE_BASE/cfgtoollogs/dbua/upgradeDATA_TIME_STAMP`. After running the fixup script, run the `odacli upgrade-database` command.

This issue is tracked with Oracle bug 33473842.

Error in recovering a database

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

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

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

Hardware Models

All Oracle Database Appliance high-availability hardware models

Workaround

Run the following commands:

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

This issue is tracked with Oracle bug 32928688.

Error in adding JBOD

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

The following error message is displayed:

```
ORA-15333: disk is not visible on client instance
```

Hardware Models

All Oracle Database Appliance hardware models bare metal and dbssystem

Workaround

Shut down dbssystem before adding the second JBOD.

```
systemctl restart initdcsagent
```

This issue is tracked with Oracle bug 32586762.

Error in provisioning appliance after running cleanup.pl

Errors encountered in provisioning appliance after running cleanup.pl.

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

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

This issue is tracked with Oracle bug 32707387.

Error in updating a database

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

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

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

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

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

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

Hardware Models

All Oracle Database Appliance high-availability hardware models

Workaround

Run the following commands:

1. Stop the MMON process:

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

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

```
# kill -9 71220
```

2. Manually run datapatch on target database:

- a. Locate the database home where the target database is running:

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

- b. Locate the database home location:

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

- c. On the running node of the target database:

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

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

```
`${ORACLE_HOME}/OPatch/datapatch
```

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

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

- f. Exit SQL*Plus and run the following:

```
$ORACLE_HOME/OPatch/datapatch -pdbs  
pdb_names_gathered_by_the_SQL_statement_in_step_e_separated_by_comma
```

This issue is tracked with Oracle bug 32827353.

Error in running tfactl diagcollect command on remote node

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

Hardware Models

All Oracle Database Appliance hardware models KVM and bare metal systems

Workaround

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

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

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

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

```
tfactl syncnodes
```

This issue is tracked with Oracle bug 32921859.

Error when upgrading database from 11.2.0.4 to 12.1 or 12.2

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

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

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

Hardware Models

All Oracle Database Appliance bare metal deployments

Workaround

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

2. After manually completing the database upgrade, run the following command to update DCS metadata:

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

This issue is tracked with Oracle bug 31125985.

Error when upgrading 12.1 single-instance database

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

Use the following workaround:

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

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

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

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

This issue is tracked with Oracle bugs 31202775 and 31214657.

Failure in creating RECO disk group during provisioning

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

Hardware Models

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

Workaround

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

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

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

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

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

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

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

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

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

This issue is tracked with Oracle bug 30839054.

Simultaneous creation of two Oracle ACFS Databases fails

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

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

Hardware Models

All Oracle Database Appliance bare metal deployments

Workaround

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

For High Performance configuration, run the following commands:

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

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

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

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 rdodbnme
```

This issue is tracked with Oracle bug 30750497.

Error encountered after running cleanup.pl

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

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

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

This issue is tracked with Oracle bug 29038717.

Errors in clone database operation

Clone database operation fails due to errors.

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

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

Hardware Models

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

Workaround

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

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

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

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

Clone database operation fails

For Oracle Database release 12.1 databases, the database clone creation may fail because the default compatible version from Oracle binaries was set to 12.0.0.0

Hardware Models

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

Workaround

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

1. Change the parameter value.

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

2. Shut down the database.

```
SQL> SHUTDOWN IMMEDIATE
```

3. Start the database.

```
SQL> Startup
```

4. Verify the parameter for the new value.

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

This issue is tracked with Oracle bug 30309914.

Known Issues When Managing Oracle Database Appliance

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

- [Error in back up of database](#)
When backing up a database on Oracle Database Appliance, an error is encountered.
- [OpenSSH command vulnerability](#)
OpenSSH command vulnerability issue detected in Qualys and Nessus scans.
- [Error in bare metal CPU pool association](#)
After patching to Oracle Database Appliance release 19.13, bare metal CPU pool which is not NUMA allocated, can be associated to a database.
- [Cannot configure system settings using BUI for multi-user access enabled systems](#)
On an Oracle Database Appliance with multi-user access enabled, some system settings cannot be configured using the Browser User Interface (BUI).
- [Error in display of component status](#)
The `odacli describe-component` command may display `Not Available` even when the local controller is available.
- [AHF permissions error](#)
When running the OERR tool in the AHF_HOME on Oracle Database Appliance, an error is encountered.
- [Error in cleaning up a deployment](#)
When cleaning up a Oracle Database Appliance, an error is encountered.
- [Error in odacli modify-dbfileattributes job status](#)
When rerunning `odacli modify-dbfileattributes` command, the job status is set to `Created`.
- [Error in TDE wallet management](#)
When upgrading a database to Oracle Database 18c or later, and the database has `TDE Wallet Management` set to the value `EXTERNAL`, the `TDE Wallet Management` is not set to the value `ODA`.

- [Error in TDE wallet management](#)
When changing the TDE wallet password or rekeying the TDE wallet of a database which has `TDE Wallet Management` set to the value `EXTERNAL`, an error is encountered.
- [Error in display of file log path](#)
File log paths are not displayed correctly on the console but all the logs that were generated for a job have actually logged the correct paths.
- [Error in configuring Oracle Data Guard](#)
When running the command `odacli configure-dataguard` on Oracle Database Appliance, an error is encountered.
- [Error in configuring Oracle Data Guard on DB System](#)
When running the command `odacli configure-dataguard` on Oracle Database Appliance, an error is encountered.
- [Error in reinstating on Oracle Data Guard](#)
When running the command `odacli reinstate-dataguard` on Oracle Database Appliance, an error is encountered.
- [Error in attaching when running reinstate operation on Oracle Data Guard](#)
When running the command `odacli reinstate-dataguard` on Oracle Data Guard, an error is encountered.
- [Error in switchover of Oracle Data Guard](#)
When running the command `odacli switchover-dataguard` on Oracle Database Appliance, an error is encountered.
- [Error in viewing Oracle Data Guard status](#)
When viewing Oracle Data Guard status on Oracle Database Appliance, an error is encountered.
- [Error in reinstate operation on Oracle Data Guard](#)
When running the command `odacli reinstate-dataguard` on Oracle Data Guard an error is encountered.
- [Error in running concurrent database or database home creation jobs](#)
When running concurrent database or database home creation jobs, an error is encountered.
- [Error in deleting a standby database](#)
When deleting a standby database, an error is encountered.
- [Error in Oracle Data Guard failover operation for 18.14 database](#)
When running the `odacli failover-dataguard` command on a database of version 18.14, an error is encountered.
- [Error in Oracle Active Data Guard operations](#)
When performing switchover, failover, and reinstate operations on Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.
- [Error in the enable apply process after upgrading databases](#)
When running the enable apply process after upgrading databases in an Oracle Data Guard deployment, an error is encountered.
- [Error in creating Oracle Data Guard status](#)
When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.
- [Error in registering a database](#)
When registering a single instance database on Oracle Database Appliance, if the RAC option is specified in the `odacli register-database` command, an error is encountered.

- [Error in registering a database](#)
When restoring a database on Oracle Database Appliance, if the NLS setting on the standby database is not America/American, then an error may be encountered.
- [Error in recovering a TDE-enabled Oracle RAC or Oracle RAC One Node database](#)
When recovering a TDE-enabled Oracle RAC or Oracle RAC One Node database, an error may be encountered.
- [Error in Reinstating Oracle Data Guard](#)
When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.
- [Failure in Reinstating Oracle Data Guard](#)
When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.
- [Error in updating Role after Oracle Data Guard operations](#)
When performing operations with Oracle Data Guard on Oracle Database Appliance, an error is encountered in updating the Role.
- [Error when recovering a single-instance database](#)
When recovering a single-instance database, an error is encountered.
- [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 back up of database

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

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

```
DCS-10001:Internal error encountered: Unable to get the  
rman command status commandid:xxx  
output:STATUS
```

```
-----  
[COMPLETED WITH WARNINGS] error:.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

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

```
odacli create-backup -in db_name -bt backup_type
```

This issue is tracked with Oracle bug 33181168.

OpenSSH command vulnerability

OpenSSH command vulnerability issue detected in Qualys and Nessus scans.

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None.

This issue is tracked with Oracle bug 33217970.

Error in bare metal CPU pool association

After patching to Oracle Database Appliance release 19.13, bare metal CPU pool which is not NUMA allocated, can be associated to a database.

This is an error since the bare metal CPU pool does not follow NUMA allocation and thus the bare metal database do not run on appropriate physical CPUs.

Hardware Models

All Oracle Database Appliance hardware models that support release 19.13 and were patched from earlier 19.x release. New provisioning with 19.13 are not affected, since new bare metal CPU pools are NUMA allocated.

Workaround

Run the `odacli remap-cpupools` command and restart the bare metal database instances.

This issue is tracked with Oracle bug 31907677.

Cannot configure system settings using BUI for multi-user access enabled systems

On an Oracle Database Appliance with multi-user access enabled, some system settings cannot be configured using the Browser User Interface (BUI).

You cannot specify the token expiration duration, password expiration duration, maximum failed login attempts, and other details when you provision multi-user access enabled Oracle Database Appliance with BUI. You can specify these values when you use JSON file to provision your multi-user access enabled Oracle Database Appliance.

Hardware Models

Oracle Database Appliance hardware models with multi-user access enabled

Workaround

None.

This issue is tracked with Oracle bug 33571755.

Error in display of component status

The `odacli describe-component` command may display `Not Available` even when the local controller is available.

Hardware Models

Oracle Database Appliance hardware models with Mellanox InfiniBand network card ConnectX-3 or ConnectX-5

Workaround

None

This issue is tracked with Oracle bug 33601175.

AHF permissions error

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the tool, with `sh`, as follows:

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

This issue is tracked with Oracle bug 33293560.

Error in cleaning up a deployment

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

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

Hardware Models

All Oracle Database Appliance hardware models with DB systems

Workaround

Follow these steps:

1. Stop the NFS service on both nodes:

```
service nfs stop
```

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

This issue is tracked with Oracle bug 33289742.

Error in odacli modify-dbfileattributes job status

When rerunning `odacli modify-dbfileattributes` command, the job status is set to `Created`.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Restart the DCS agent:

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

All jobs with state `Created` are set to the state `Failure`. You can now submit other jobs.

This issue is tracked with Oracle bug 32945075.

Error in TDE wallet management

When upgrading a database to Oracle Database 18c or later, and the database has `TDE Wallet Management` set to the value `EXTERNAL`, the `TDE Wallet Management` is not set to the value `ODA`.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

After upgrading the database, change `TDE Wallet Management` from the value `EXTERNAL` to the value `ODA`.

```
odacli modify-database -in DB_NAME -ctm
```

Provide the TDE wallet password when prompted.

This issue is tracked with Oracle bug 33593582.

Error in TDE wallet management

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

The following message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 33278653.

Error in display of file log path

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

Hardware Models

All Oracle Database Appliance hardware models with virtualized platform

Workaround

None.

This issue is tracked with Oracle bug 33580574.

Error in configuring Oracle Data Guard

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

When running the command `odacli configure-dataguard`, an error occurs at step `Step 9: Re-enable Data Guard (Primary site)`.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run the command `odacli restore-archivelog -in db_name` on the primary site and retry the command `odacli configure-dataguard`.

This issue is tracked with Oracle bug 33387213.

Error in configuring Oracle Data Guard on DB System

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

When running the command `odacli configure-dataguard` on an Oracle Database 21c DB system, the following error message is displayed at step `Configure and enable Data Guard (Primary site)`:

```
ORA-12154: TNS:could not resolve the connect identifier specified
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Remove the `tnsnames.ora` file in the directory `/u01/app/<dbUser>/homes/OraDB21000_home#/network/admin`.

```
mv /u01/app/<dbUser>/homes/OraDB21000_home#/network/admin/tnsnames.ora
/u01/app/<dbUser>/homes/OraDB21000_home#/network/admin/
tnsnames.ora.backup
```

This issue is tracked with Oracle bug 33579891.

Error in reinstating on Oracle Data Guard

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

The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Manually flashback old primary database.
Run the following commands:

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

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

2. On the old primary database, as `oracle` user, run the following.

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

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

This issue is tracked with Oracle bug 33190261.

Error in attaching when running reinstate operation on Oracle Data Guard

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

The following error message is displayed:

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

Following is the error reported in `dcs-agent.log`:

```
Failed to attach to dbUniqueName
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Check if reinstate is successful:

```
GMGRL > SHOW CONFIGURATION;
```

If successful, run `odacli list-dataguardstatus` on both sites to update role. Otherwise, manually flashback old primary database.

Run the following commands:

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

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

2. On the old primary database, as `oracle` user, run the following.

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

3. On the new primary database, run the `odacli reinstate-dataguard` command.
4. Run the `odacli list-dataguardstatus` command on both sites to check result.

This issue is tracked with Oracle bug 33559917.

Error in switchover of Oracle Data Guard

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

When running the command `odacli switchover-dataguard`, an error occurs at step Step 9: Re-enable Data Guard (Primary site), the error message is displayed:

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

Following is the error reported in `dcs-agent.log`:

```
Failed to attach to dbUniqueName
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ignore the error. Verify that the switchover is successful as follows:

1. Verify that the roles of databases are correctly switched over and that the Configuration Status is SUCCESS.

```
DGMGRL > SHOW CONFIGURATION;
```

2. Run the command `odacli list-dataguardstatus` on both primary and standby sites till the role is updated correctly.

This issue is tracked with Oracle bug 33465826.

Error in viewing Oracle Data Guard status

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

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

Hardware Models

All Oracle Database Appliance high-availability systems

Workaround

Use `DGMGRL` to verify Oracle Data Guard status.

This issue is tracked with Oracle bug 33411769.

Error in reinstate operation on Oracle Data Guard

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

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

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

This issue is tracked with Oracle bug 32367676.

Error in running concurrent database or database home creation jobs

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not run concurrent database or database home creation job.

This issue is tracked with Oracle bug 32376885.

Error in deleting a standby database

When deleting a standby database, an error is encountered.

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

```
DCS-10001:Internal error encountered: Failed to run the asm command: [/u01/app/19.0.0.0/grid/bin/asmcmd, --nocp, rm, -rf, RECO/ABCDEU]
```



```
Error:ORA-29261: bad argument
ORA-06512: at line 4
ORA-15178: directory 'ABCDEU' is not empty; cannot drop this directory
ORA-15260: permission denied on ASM disk group
ORA-06512: at "SYS.X$DBMS_DISKGROUP", line 666
ORA-06512: at line 2 (DBD ERROR: OCIStmtExecute).
```

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

Hardware Models

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

Workaround

Run any of the following workarounds:

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

```
su - oracle
```

- a. Set the environment:

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

- Recreate the standby database with a different database unique name.

This issue is tracked with Oracle bug 32871772.

Error in Oracle Data Guard failover operation for 18.14 database

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

The following error message is displayed:

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

```
DGMGRL> SHOW CONFIGURATION;
DGMGRL> VALIDATE DATABASE '<DB_UQNIUE_NAME_to_failover_to>';
DGMGRL> FAILOVER TO '<DB_UQNIUE_NAME_to_failover_to>';
DGMGRL> SHOW CONFIGURATION;
```

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

This issue is tracked with Oracle bug 32727379.

Error in Oracle Active Data Guard operations

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

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

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

The log contains the following message:

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

Hardware Models

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

Workaround

Follow these steps:

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

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

2. Retry the upgrade command.

This issue is tracked with Oracle bug 32856214.

Error in the enable apply process after upgrading databases

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

The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Restart standby database in upgrade mode:

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

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

```
SHOW CONFIGURATION;
```

This issue is tracked with Oracle bug 32864100.

Error in creating Oracle Data Guard status

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

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

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

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

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

1. On the standby system, run the following:

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

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

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

```

```
        "ipAddress": "test_IPaddress3"  
      },  
    ],  
    "transportType": "ASYNC"  
  }  
]  
}
```

This issue is tracked with Oracle bug 32719173.

Error in registering a database

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 32853078.

Error in registering a database

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None.

This issue is tracked with Oracle bug 32349703.

Error in recovering a TDE-enabled Oracle RAC or Oracle RAC One Node database

When recovering a TDE-enabled Oracle RAC or Oracle RAC One Node database, an error may be encountered.

This occurs when you attempt recovery after removing the `+DATA/DB_UNIQUE_NAME` folder. The following error is observed:

```
DCS-10001:Internal error encountered: Failed to create the empty keystore.  
Please check if a keystore 'ewallet.p12' is already present at: '+RECO/  
<DB_UNIQUE_NAME>/tdewallet'. Please remove or rename it if it does.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Switch to oracle user and create `DB_HOME/dbs/initoracle_sid.ora` file with the following parameters:

```
db_name=db_name  
db_unique_name=db_unique_name  
wallet_root=+DATA/DBUNIQUE_NAME  
tde_configuration='KEystore_CONFIGURATION=FILE'
```

2. Set the `ORACLE_SID` as per data type, for example, `DB_NAME_1` for Oracle RAC One Node database and `DB_NAME1` for Oracle RAC database. Run the command `startup nomount` on the database.
3. Restore the TDE wallet using `odacli restore-tdewallet -in dbname>`.
4. Restore SPFILE:

```
run{set dbid DBID; startup nomount;RESTORE SPFILE TO  
'DB_HOME/dbs/spfileoracle_sid.ora' FROM AUTOBACKUP RECOVERY AREA='+RECO'  
db_unique_name='db_unique_name';shutdown abort;}
```

5. Restore the control file:

```
run{set dbid DBID; startup nomount;restore controlfile from AUTOBACKUP  
validate;shutdown abort;}
```

6. Recover the database:

```
odacli recover-database
```

7. Delete the `DB_HOME/dbs/initoracle_sid.ora` file.

This issue is tracked with Oracle bug 33640512.

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. Reinstatement 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`:

```
SQL> select standby_became_primary_scn from v$database;  
STANDBY_BECAME_PRIMARY_SCN  
-----  
3522449
```

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

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

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

This issue is tracked with Oracle bug 31884506.

Failure in Reinstating Oracle Data Guard

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

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

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

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

```
ORA-12514: TNS:listener does not currently know of service requested in  
connect descriptor
```

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

Follow these steps:

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

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

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

This issue is tracked with Oracle bug 32047967.

Error in updating Role after Oracle Data Guard operations

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

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

Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

Workaround

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

This issue is tracked with Oracle bug 31378202.

Error when recovering a single-instance database

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 31399400.

Job history not erased after running cleanup.pl

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

```
initctl stop initdcsagent
```

For Oracle Linux 7, run:

```
systemctl stop initdcsagent
```

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

This issue is tracked with Oracle bug 30529709.

Inconsistency in ORAchk summary and details report page

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

Hardware Models

Oracle Database Appliance hardware models bare metal deployments

Workaround

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

This issue is tracked with Oracle bug 30676674.

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

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

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

This issue is tracked with Oracle bug 30274477.

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

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

Hardware Models

All Oracle Database Appliance Hardware bare metal systems

Workaround

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

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

This issue is tracked with Oracle bug 28547433.

Issues with the Web Console on Microsoft web browsers

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

Following are issues with Microsoft web browsers:

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

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

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

Models

All Oracle Database Appliance Hardware Models bare metal deployments

Workaround

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

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

Unrecognized Token Messages Appear in /var/log/messages

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

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

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

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

Hardware Models

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

Workaround

Perform the following to remove the parameters:

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

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

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

This issue is tracked with Oracle bug 25985258.