Oracle® Database Appliance

Release Notes

Release 19.26 for Linux x86-64

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Oracle Database Appliance Release Notes, Release 19.26 for Linux x86-64

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Contents

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

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 customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

Related Documents

For more information about Oracle Database Appliance, go to `http://www.oracle.com/goto/oda/docs` and click the appropriate release.

For more information about using Oracle Database, go to http://docs.oracle.com/database/ and select the database release from the menu.

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

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

Conventions

The following text conventions are used in this document:

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

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What's New in This Release

Oracle Database Appliance release 19.26 supports Oracle Database 19*c* functionality on Oracle Database Appliance hardware models.

New Features

This release supports Oracle Database Appliance models X11-HA, X11-L, X11-S, X10-HA, X10-L, X10-S, X9-2-HA, X9-2L, X9-2S, X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, and X7-2S. You can create a bare metal deployment on Oracle Database Appliance or patch or upgrade your existing bare metal deployment to Oracle Database Appliance release 19.26. You can also create and patch Oracle Database Appliance DB systems. Read the chapter *Known Issues with Oracle Database Appliance in This Release* for critical fixes before deploying Oracle Database Appliance release 19.26.

For Oracle Database 19c and Oracle Database 23ai 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:

- **Support for multiple standby databases with Oracle Data Guard on Oracle Database Appliance**
  This release supports a maximum configuration of two standby databases with Oracle Data Guard on Oracle Database Appliance. This configuration provides a higher level of data protection and flexibility to support deployment scenarios such as use of one standby for disaster recovery and another local standby for patching, reporting, or testing.

  See the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Support for enhanced automation for Oracle Data Guard on Oracle Database Appliance**
  This release supports enhanced automation for Oracle Data Guard on Oracle Database Appliance. Configuration, registration, and deconfiguration of Oracle Data Guard are run as DCS jobs similar to other Oracle Database Appliance tasks, thus simplifying management, reducing errors, and optimizing time.

  See the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Support for changing TDE password for database configured using Oracle Key Vault**

  This release supports changing the TDE password for database configured using Oracle Key Vault.
  For more information, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Support for configuring and managing Oracle Data Guard on Oracle Database Appliance using Browser User Interface (BUI)**

  You can configure and manage Oracle Data Guard on Oracle Database Appliance using BUI.
  For more information, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Availability of Oracle Database Appliance Configuration Collection Utility**

  Oracle Database Appliance configuration collection collects configuration information for all components in the appliance. The utility assists in debugging issues on the appliance and provides a comprehensive record of all object versions and configuration details at a specific date and time. Additionally, it serves as a valuable reference for tracking configuration changes over time.
  For more information, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Provisioning and patching of Oracle Database Appliance bare metal deployments, KVM, and DB systems**
  This release supports provisioning and patching of bare metal deployments, KVM, and DB systems with Oracle Database Appliance release 19.26 on X11-HA, X11-L, X11-S, X10-HA, X10-HA, X10-L, X10-S, X9-2-HA, X9-2L, X9-2S, X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, and X7-2S.

  See the chapter *Provisioning Oracle Database Appliance Bare Metal System* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Support for Oracle Database 23ai and 19c databases on Oracle Database Appliance DB systems**

  This release supports creation of databases of Oracle Database 23ai and 19c databases on DB systems. The version is specified in the DB system JSON payload, with the attribute `version` for `database`. When you provision DB system of release 23ai, then you cannot provision any other database versions, such as 19c in the DB system at the same time.
  For details on the JSON file changes for creating Oracle Database 23ai and 19c databases on DB systems, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **ODACLI Command Enhancements**
  There are changes to ODACLI command options in this release. Use the `--help` option with a command to view the supported options for the command in this release.

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

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

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

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

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

  The following Oracle Grid Infrastructure and Oracle Database updates (January 2025 Oracle Database Release Update) for bare metal systems are available in this release:

- 19.26.0.0.250121

  Oracle Grid Infrastructure and Oracle Database Update 23.7.0.25.01 for DB system are also available with this release.

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

See the chapter *Oracle Database Appliance Release 19.26 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 19.26 from the drop down list.

- **Oracle Database Appliance 19.26.0.0.0 Server Patch for Bare Metal Systems:** Use patch 37536686 to update your bare metal deployment to Oracle Database Appliance release 19.26. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.26.
- **Oracle Database Appliance 19.26.0.0.0 GI Clone for ODACLI/DCS Stack:** Use patch 30403673 to update your deployment to this Oracle Database Appliance release. 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 RDBMS Clone for ODACLI/DCS Stack:** Use the Oracle Database 19.26.0.0.250121 Software Clone file to create 19.26.0.0.250121 Oracle Database homes. Patch 30403662 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal systems).
- **Oracle Database Appliance 19.26.0.0.0 DB System Image Download for KVM:** Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance release 19.26. Patch 32451228 provides the software for this update.
- **Oracle Database Appliance 23ai DB System Image Download for KVM:** Use the KVM Database System template to deploy KVM-based virtualization for DB system of version 23ai. Patch 36524660 provides the software for this update.
- **Oracle Database Appliance 23ai GI Clone for DB Systems:** Use patch 36524627 to perform an initial deployment of Oracle Database Appliance on DB Systems for creating Oracle Database 23ai databases. This patch is for Oracle Database Appliance hardware models with DB systems only.
- **Oracle Database Appliance 23ai Database Clone File for DB Systems:** Use the Oracle Database 23ai Software Clone file to create 23ai Oracle Database homes. Patch 36524642 provides the database clone for this update. This patch is for Oracle Database Appliance hardware models with DB systems only.
- **Oracle Database Appliance 23ai DB System Server Patch:** Use the KVM DB System template to patch 23ai KVM-based virtualization for Oracle Database Appliance 19.26. Patch 37536692 provides this update. This patch is for Oracle Database Appliance hardware models with DB systems only.
- **Oracle Database Appliance 19.26.0.0.0 OS ISO Image for all Platforms:** Use this patch to reimage the operating system for Oracle Database Appliance 19.26. Patch 30403643 provides the software for this update.

Related Topics

- Provisioning Oracle Database Appliance X11 Bare Metal System
- Storing Transparent Database Encryption Keys on Oracle Key Vault Server

- Checking for STIG Compliance on Oracle Database Appliance
- Modifying Oracle ASM Listener Port After Deployment
- Patching Oracle Database Appliance
- Oracle Database Appliance Command-Line Interface

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 X11 Models
  The matrix displays the component versions available for Oracle Database Appliance for X11-S, X11-L, and X11-HA.
- Component Versions for Oracle Database Appliance X10 Models
  The matrix displays the component versions available for Oracle Database Appliance for X10-S, X10-L, and X10-HA.
- Component Versions for Oracle Database Appliance X9-2 Models
  The matrix displays the component versions available for Oracle Database Appliance for X9-2S, X9-2L, and X9-2-HA.
- Component Versions for Oracle Database Appliance X8-2 Models
  The matrix displays the component versions available for Oracle Database Appliance for X8-2S, X8-2M, and X8-2-HA.
- Component Versions for Oracle Database Appliance X7-2 Models
  The matrix displays the component versions available for Oracle Database Appliance for X7-2S, X7-2M, and X7-2-HA.

Component Versions for Oracle Database Appliance X11 Models

The matrix displays the component versions available for Oracle Database Appliance for X11-S, X11-L, and X11-HA.

Table 2-1 Component Versions for X11-HA, X11-L, and X11-S in Oracle Database Appliance Release 19.26

Component Name	X11-HA	X11-S and X11-L
External HBA Silverthorn EXT-B	23.00.01.00	23.00.01.00
OS Disk Micron 7450 NVME M.2 SSD 480GB (Max)	E2MU200	E2MU200
Disks (SSD/HDD)	Samsung 7.5T SDD: RXG0/RXA0 WDC 22T HDD: A7B0	Not applicable
NVMe (firmware version)	Intel NVMe: 9CV1R490 Samsung NVMe: GDB7302Q	Samsung NVMe: MPPA6R5Q and GDB7302Q
Expander	DE3-24C: IOMv2 - 2431	Not applicable
ILOM (Oracle Integrated Lights Out Manager)	5.1.4.23.a.r161530	5.1.4.23.a.r161530
BIOS	90010600	90010600

Table 2-1 (Cont.) Component Versions for X11-HA, X11-L, and X11-S in Oracle Database Appliance Release 19.26

Component Name	X11-HA	X11-S and X11-L
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.10.1.600-4	2.4.10.1.600-4
Oracle Linux	8.10	8.10
AHF (Oracle Autonomous Health Framework)	24.8.0	24.8.0
MySQL	8.0.40	8.0.40
Kernel	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64
GI_HOME	19.26.0.0.250121	19.26.0.0.250121
DB_HOME	19.26.0.0.250121	19.26.0.0.250121
Oracle Auto Service Request (Oracle ASR)	24.2.0	24.2.0

Component Versions for Oracle Database Appliance X10 Models

The matrix displays the component versions available for Oracle Database Appliance for X10-S, X10-L, and X10-HA.

Table 2-2 Component Versions for X10-HA, X10-L, and X10-S in Oracle Database Appliance Release 19.26

Component Name	X10-HA	X10-S and X10-L
External HBA Silverthorn EXT-B	23.00.01.00	23.00.01.00
OS Disk Micron 7450 NVME M.2 SSD 480GB (Max)	E2MU200	E2MU200
Disks (SSD/HDD)	Samsung 7.5T SDD: RXG0/RXA0 WDC 22T HDD: A7B0	Not applicable
NVMe (firmware version)	Intel NVMe: 9CV1R490 Samsung NVMe: MPPA6R5Q	Intel NVMe: 9CV1R490 Samsung NVMe: MPPA6R5Q
Expander	IOMv1: 0310	Not applicable
ILOM (Oracle Integrated Lights Out Manager)	5.1.4.25.b.r161634	5.1.4.25.b.r161634
BIOS	84080500	84080500
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.10.1.600-4	2.4.10.1.600-4
Oracle Linux	8.10	8.10
AHF (Oracle Autonomous Health Framework)	24.8.0	24.8.0

Table 2-2 (Cont.) Component Versions for X10-HA, X10-L, and X10-S in Oracle Database Appliance Release 19.26

Component Name	X10-HA	X10-S and X10-L
MySQL	8.0.40	8.0.40
Kernel	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64
GI_HOME	19.26.0.0.250121	19.26.0.0.250121
DB_HOME	19.26.0.0.250121	19.26.0.0.250121
Oracle Auto Service Request (Oracle ASR)	24.2.0	24.2.0

Component Versions for Oracle Database Appliance X9-2 Models

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

Table 2-3 Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.26

Component Name	X9-2-HA	X9-2S and X9-2L
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	RXG0	Not applicable
NVMe (firmware version)	Not applicable	2CV1RC51
OS Disk (SSD firmware version)	XC311132 or XC311151	XC311132 or XC311151
ILOM (Oracle Integrated Lights Out Manager)	5.1.4.25.a.r161043	X9-2S: 5.1.4.25.a.r161043 X9-2L: 5.1.4.25.a.r161043
BIOS	62110100	X9-2S: 62110100 X9-2L: 62110100
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.10.1.600-4	2.4.10.1.600-4
Oracle Linux	8.10	8.10
AHF (Oracle Autonomous Health Framework)	24.8.0	24.8.0
MySQL	8.0.40	8.0.40
Kernel	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64
GI_HOME	19.26.0.0.250121	19.26.0.0.250121
DB_HOME	19.26.0.0.250121	19.26.0.0.250121

Table 2-3 (Cont.) Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.26

Component Name	X9-2-HA	X9-2S and X9-2L
Oracle Auto Service Request (Oracle ASR)	24.2.0	24.2.0

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 2-4 Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.26

Component Name	X8-2-HA	X8-2S and X8-2M
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	A967	Not applicable
NVMe (firmware version)	Not applicable	VDV1RL06
OS Disk (SSD firmware version)	N2010121 or XC311132	N2010121
ILOM (Oracle Integrated Lights Out Manager)	5.1.4.25.r160118	X8-2S: 5.1.4.25.r160118 X8-2M: 5.1.4.25.r160118
BIOS	52140100	X8-2S: 52140100 X8-2M: 52140100
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.10.1.600-4	2.4.10.1.600-4
Oracle Linux	8.10	8.10
AHF (Oracle Autonomous Health Framework)	24.8.0	24.8.0
MySQL	8.0.40	8.0.40
Kernel	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64
GI_HOME	19.26.0.0.250121	19.26.0.0.250121
DB_HOME	19.26.0.0.250121	19.26.0.0.250121
Oracle Auto Service Request (Oracle ASR)	24.2.0	24.2.0

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 2-5 Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.26

Component Name	X7-2-HA	X7-2S and X7-2M
Controller	16.00.08.00	Not applicable
Expander	0310	Not applicable
SSD	A17D For the HDD/SSD option: A374/A087	A17D
NVMe (firmware version)	Not applicable	X7-2M: QDV1RF32 X7-2S: QDV1RF35
OS Disk (SSD firmware version)	N2010121	N2010121
ILOM (Oracle Integrated Lights Out Manager)	5.1.4.25.r160118	5.1.4.25.r160118
BIOS	41170100	41170100
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.10.1.600-4	2.4.10.1.600-4
Oracle Linux	8.10	8.10
AHF (Oracle Autonomous Health Framework)	24.8.0	24.8.0
MySQL	8.0.40	8.0.40
Kernel	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64	kernel-uek-5.4.17-2136.339.5.el8uek.x86_64
GI_HOME	19.26.0.0.250121	19.26.0.0.250121
DB_HOME	19.26.0.0.250121	19.26.0.0.250121
Oracle Auto Service Request (Oracle ASR)	24.2.0	24.2.0

3

Oracle Database Appliance 19.26 Patches

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

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

Patching from Previous Releases

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

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

> **See Also:**
>
> For supported Oracle Database releases on Oracle Database Appliance, see *My Oracle Support Note* 2757884.1 at https://support.oracle.com/rs?type=doc&id=2757884.1.

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...)
19.26.0.0	For bare metal systems: • 19.25.0.0 • 19.24.0.0 • 19.23.0.0 • 19.22.0.0

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...)
19.25.0.0	For bare metal systems: • 19.24.0.0 • 19.23.0.0 • 19.22.0.0 • 19.21.0.0
19.24.0.0	For bare metal systems: • 19.23.0.0 • 19.22.0.0 • 19.21.0.0 • 19.20.0.0 **Note:** If your deployment is on Oracle Database Appliance release 19.20, then use Data Provisioning Reprovisioning to upgrade your appliance. If your deployment is on Oracle Database Appliance release 19.22 or 19.21, then patch your appliance.
19.23.0.0	For bare metal systems: • 19.22.0.0 • 19.21.0.0 • 19.20.0.0 • 19.19.0.0 **Note:** If your deployment is on Oracle Database Appliance release 19.19 or 19.20, then use Data Provisioning Reprovisioning to upgrade your appliance. If your deployment is on Oracle Database Appliance release 19.22 or 19.21, then patch your appliance.
19.22.0.0	For bare metal systems: • 19.21.0.0 • 19.20.0.0 • 19.19.0.0 • 19.18.0.0 **Note:** If your deployment is on Oracle Database Appliance release 19.18, 19.19, or 19.20, then use Data Provisioning Reprovisioning to upgrade your appliance. If your deployment is on Oracle Database Appliance release 19.21, then patch your appliance.
19.21.0.0	For bare metal systems: • 19.20.0.0 • 19.19.0.0 • 19.18.0.0 • 19.17.0.0 Only for Oracle Database Appliance X10, patch from 19.20.0.1 on bare metal systems.
19.20.0.0	For bare metal systems: • 19.19.0.0 • 19.18.0.0 • 19.17.0.0 • 19.16.0.0

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...)
19.19.0.0	For bare metal systems: • 19.18.0.0 • 19.17.0.0 • 19.16.0.0 • 19.15.0.0
19.18.0.0	For bare metal systems: • 19.17.0.0 • 19.16.0.0 • 19.15.0.0 • 19.14.0.0
19.17.0.0	For bare metal systems: • 19.16.0.0 • 19.15.0.0 • 19.14.0.0 • 19.13.0.0
19.16.0.0	For bare metal systems: • 19.15.0.0 • 19.14.0.0 • 19.13.0.0 • 19.12.0.0
19.15.0.0	For bare metal systems: • 19.14.0.0 • 19.13.0.0 • 19.12.0.0 • 19.11.0.0
19.14.0.0	For bare metal systems: • 19.13.0.0 • 19.12.0.0 • 19.11.0.0 • 19.10.0.0
19.13.0.0	For bare metal systems: • 19.12.0.0 • 19.11.0.0 • 19.10.0.0 • 19.9.0.0 For virtualized platform deployments: • 19.9.0.0 • 19.8.0.0
19.12.0.0	For bare metal systems: • 19.11.0.0 • 19.10.0.0 • 19.9.0.0 • 19.8.0.0

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...)
19.11.0.0	For bare metal systems: • 19.10.0.0 • 19.9.0.0 • 19.8.0.0 • 19.7.0.0
19.10.0.0	For bare metal systems: • 19.9.0.0 • 19.8.0.0 • 19.7.0.0 • 19.6.0.0
19.9.0.0	For bare metal systems: • 19.8.0.0 • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: • 19.8.0.0
19.8.0.0	For bare metal systems: • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: • 18.8.0.0
19.7.0.0	• 19.6.0.0 • 19.5.0.0
19.6.0.0	• 18.8.0.0
18.8.0.0	• 18.7.0.0 • 18.5.0.0 • 18.3.0.0
18.7.0.0	• 18.5.0.0 • 18.3.0.0
18.5.0.0	• 18.3.0.0
18.3.0.0	• 12.2.1.4.0 • 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.4.0	• 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.3.0	• 12.2.1.2.0 • 12.1.2.12
12.2.1.2.0	• 12.1.2.12 **Note:** 12.2.1.2.0 is not supported on virtualized platform.

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...)
12.1.2.12	• 12.1.2.11 • 12.1.2.10 • 12.1.2.9 • 12.1.2.8
12.1.2.11	• 12.1.2.10 • 12.1.2.9 • 12.1.2.8 • 12.1.2.7
12.1.2.10	• 12.1.2.9 • 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.9	• 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.5	12.1.2.0 to 12.1.2.4
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
2.2.0.0.0	2.1.0.3.1 or earlier

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

Related Topics

- Patching Oracle Database Appliance

Minimum Software Version Requirements

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

You can patch to Oracle Database Appliance release 19.26 on Oracle Database Appliance bare metal systems and DB systems from Oracle Database Appliance release 19.22, 19.23, 19.24, and 19.25. You can also provision and patch Oracle Database Appliance bare metal systems and DB systems on KVM to release 19.26.

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 19.26 from the release list.

Table 3-2 Oracle Database Appliance Patches for Oracle Database Appliance Release 19.26

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance 19.26.0.0.0 Server Patch for Bare Metal Systems	37536686	Use the server patch to update your deployment to Oracle Database Appliance release 19.26. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.26.	For patching to Oracle Database Appliance release 19.26: Patching Oracle Database Appliance
Oracle Database Appliance 19.26.0.0.0 GI Clone for ODACLI/DCS Stack	30403673	Use patch 30403673 to update your deployment to this Oracle Database Appliance release. 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 19.26.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance 19.26.0.0.0 RDBMS Clone for ODACLI/DCS Stack	30403662	Use Oracle Database Appliance Database Clone 19.26.0.0.250121 for ODACLI/DCS stack to create 19.26.0.0.0 database homes for the ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance 19.26.0.0.0 OS ISO Image for all Platform	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.26. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance 23ai DB System Image Download for KVM	36524660	Use the 23ai DB System template to deploy KVM-based virtualization for Oracle Database Appliance 23ai DB system.	Managing DB Systems in KVM Deployment

Table 3-2 (Cont.) Oracle Database Appliance Patches for Oracle Database Appliance Release 19.26

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance 23ai GI Clone for DB Systems	36524627	Use the Oracle Grid Infrastructure 23ai clone file to deploy Oracle Grid Infrastucture 23ai on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 23ai Database Clone for DB Systems	36524642	Use the Oracle Database Appliance 23ai clone file to deploy Oracle Database 23ai database on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 19.26.0.0.0 DB System Image Download for KVM	32451228	Use the KVM DB System template to deploy 19c KVM-based virtualization for Oracle Database Appliance 19.26.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 23ai DB System Server Patch	37536692	Use the KVM DB System template to patch 23ai KVM-based virtualization for Oracle Database Appliance 19.26.	Managing DB Systems in KVM Deployment

4

Known Issues with Oracle Database Appliance in This Release

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

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

Known Issues When Patching Oracle Database Appliance

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

- Error in attaching a vdisk after DB system patching
  After upgrading a DB system on Oracle Database Appliance, the vdisks attached to the DB system may not continue to be attached.
- Error in patching multi-user access enabled systems
  When running the `odacli update-server -l` command on Oracle Database Appliance, an error may be encountered.
- Error in server patching
  When running the `odacli update-dcscomponents` command on Oracle Database Appliance, an error may be encountered.
- Free space issue during database patching
  When patching the database on Oracle Database Appliance, an error may be encountered.
- Error in patching prechecks report
  When patching Oracle Database Appliance, an error may be encountered.
- Error in server patching
  When patching the server on Oracle Database Appliance, an error may be encountered.
- Error in updating database
  When updating the database on Oracle Database Appliance, an error may be encountered.
- Error in updating Oracle RAC One database
  When updating an Oracle RAC One database on Oracle Database Appliance, an error may be encountered.
- Error in server patching
  When patching the server on Oracle Database Appliance, an error may be encountered.

- Error in upgrading a database
  When upgrading a database, an error may be encountered.
- Error in database patching
  When patching a database on Oracle Database Appliance, an error may be encountered.
- Component version not updated after patching
  After patching the Oracle Database Appliance server, the `odacli describe-component` command does not display the correct Intel Model 0x1528 Ethernet Controller version, if the current version is 8000047B or 8000047C.
- Error in server patching
  When patching Oracle Database Appliance which already has STIG V1R2 deployed, an error may be encountered.
- AHF error in prepatch report for the update-dbhome command
  When you patch server to Oracle Database Appliance release 19.26, the `odacli update-dbhome` command may fail.
- Errors when running ORAchk or the odacli create-prepatchreport command
  When you run ORAchk or the `odacli create-prepatchreport` command, an error is encountered.
- Error in patching prechecks report
  The patchung prechecks report may display an error.
- Error message displayed even when patching Oracle Database Appliance is successful
  Although patching of Oracle Database Appliance was successful, an error message may be displayed.
- Server status not set to Normal when patching
  When patching Oracle Database Appliance, an error is encountered.
- Patching of M.2 drives not supported
  Patching of M.2 drives (local disks SSDSCKJB48 and SSDSCKJB480G7) is not supported.

Error in attaching a vdisk after DB system patching

After upgrading a DB system on Oracle Database Appliance, the vdisks attached to the DB system may not continue to be attached.

Problem Description

After DB system upgrade, the existing vdisks are not attached. Only the vdisk metadata associated with the DB system is preserved. The virtual device name may be different from the name before you run the `odacli upgrade-dbsystem` command.

Command Details

```
# odacli upgrade-dbsystem
```

Hardware Models

All Oracle Database Appliance hardware models X9-2, X8-2, and X7-2

Workaround

Detach the vdisk manually with the `--force` option from the VM to reconcile the metadata. Then, attach the vdisk to the respective VM. Then, manually mount the file system on the device in the DB system.

Bug Number

This issue is tracked with Oracle bug 36885595.

Error in patching multi-user access enabled systems

When running the `odacli update-server -l` command on Oracle Database Appliance, an error may be encountered.

Problem Description

When patching a multi-user access or multi-user access passwordless-enabled DB system from Oracle Database Appliance release 19.21, 19.22, 19.23, or 19.24 to release 19.26, an error is encountered. The error occurs when you run the `odacli update-server -l` command on the second node.

Failure Message

The following error message is displayed:

```
InternalError
```

Command Details

```
# odacli update-server -l
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. As the `root` user, restart the DCS agent on the second node:

   ```
   systemctl restart initdcsagent
   ```

2. As the `root` user, run the `odacli update-server --local` command on the second node.

Bug Number

This issue is tracked with Oracle bug 37626937.

Error in server patching

When running the `odacli update-dcscomponents` command on Oracle Database Appliance, an error may be encountered.

Problem Description

The `odacli update-dcscomponents` command may fail to run after the Apply Metadata Change step, and running the command again may cause an error.

Failure Message

The following error message is displayed:

```
DCS-10008: Failed to update DCScomponents: 19.26.0.2.0
DCS-10001: Internal error encountered: Failed to execute action with
exception:
DCS-10001: Internal error encountered: Failed to apply metadata change using
script '/opt/oracle/dcs/log/jobfiles/02fb42de-8a98-463f-9621-5b1f7f2be912/
apply_metadata_change.sh'.
Please check the detailed log at: /opt/oracle/dcs/log/jobfiles/
02fb42de-8a98-463f-9621-5b1f7f2be912/apply_metadata_change.log.
Metadata schema rollback is done.
```

Command Details

```
# odacli update-dcscomponents
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps on the bare metal and DB system. For high-availability systems, run the procedure on both nodes.

1. As the `root` user, stop the DCS agent on all nodes:

   ```
   systemctl stop initdcsagent
   ```

2. As the `root` user, log in to MySQL:

   ```
   /opt/oracle/dcs/mysql/bin/mysql --defaults file=/opt/oracle/dcs/mysql/etc/
   mysqldb.cnf
   ```

3. Run the following commands to remove the procedure `ModifyLogCleanupSummaryRows`, if it exists.

   ```
   mysql> use dcsagentdb;
   mysql> DROP PROCEDURE IF EXISTS ModifyLogCleanupSummaryRows;
   mysql> exit;
   ```

4. Perform steps 2 and 3 on the first node, and then run the steps on the second node.

5. As the `root` user, start the DCS agent on both nodes:

   ```
   systemctl start initdcsagent
   ```

6. Run the `odacli ping-agent` command till it displays the message `Agent is ready to serve the requests`.
7. Only from the first node, run the `odacli update-dcscomponents --version` *`version`* command, where `version` is the target Oracle Database Appliance release, for example, 19.26.0.0.0. Note that if run this command again, you must repeat all the steps in this procedure.

Bug Number

This issue is tracked with Oracle bugs 37612491 and 37612515.

Free space issue during database patching

When patching the database on Oracle Database Appliance, an error may be encountered.

Problem Description

When patching the database or dbhome on Oracle Database Appliance, the datapatch sanity check or the datapatch application may fail because of insufficient free space for TEMP tablespace.

Failure Message

The following error message may be displayed in the `sqlpatch_debug.log`:

```
ORA-01652: unable to extend temp segment by 128 in tablespace TEMP_ENC
```

Or, in the `sanity_checks.log`:

```
Check: Tablespace Status - ERROR
```

Command Details

```
# odacli update-dbhome
# odacli update-database
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Extend tablespace `TEMP_ENC` and then resume the patching operation using the command `odacli update-database`.

```
alter database tempfile 4 resize 400M;
alter session set container=CHSTPDB;
alter database tempfile 5 resize 400M;
```

Bug Number

This issue is tracked with Oracle bug 37616088.

Error in patching prechecks report

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

Problem Description

When patching Oracle Database Appliance, there may be an error in creating the patching prechecks report.

Failure Message

The following error message is displayed:

```
PRKH-1001 : HASContext Internal Error
PRKH-3003 : An attempt to communicate with the CSS daemon failed
```

Command Details

```
# odacli create-prepatchreport -db
# odacli create-prepatchreport -d
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Ignore this error and run the `odacli update-dbhome` or the `odacli update-database` command with the `-f` option to continue with the the patching operation.

Bug Number

This issue is tracked with Oracle bug 37616138.

Error in server patching

When patching the server on Oracle Database Appliance, an error may be encountered.

Problem Description

When patching the server on Oracle Database Appliance, the kdump may fail to start during node restart, and an error message may be displayed.

Failure Message

There may be an error locating the `modules.dep` for the newly installed kernel, and the following error message is displayed:

```
# systemctl status kdump -l
 kdump.service - Crash recovery kernel arming
   Loaded: loaded (/usr/lib/systemd/system/kdump.service; enabled; vendor
```

```
preset: enabled)
   Active: failed (Result: exit-code) since Tue 2024-10-15 11:51:15 IST; 8min
ago
  Process: 6280 ExecStart=/usr/bin/kdumpctl start (code=exited, status=1/
FAILURE)
 Main PID: 6280 (code=exited, status=1/FAILURE)

Oct 15 11:51:12 systemd[1]: Starting Crash recovery kernel arming...
Oct 15 11:51:12 kdumpctl[6471]: kdump: No kdump initial ramdisk found.
Oct 15 11:51:12 kdumpctl[6471]: kdump: Rebuilding /boot/
initramfs-5.4.17-2136.335.4.el8uek.x86_64kdump.img
Oct 15 11:51:13 kdumpctl[6566]: kdump: Warning: There might not be enough
space to save a vmcore.
Oct 15 11:51:13 kdumpctl[6566]: kdump:          The size of /dev/mapper/
VolGroupSys-LogVolRoot should be greater than 393610208 kilo bytes.
Oct 15 11:51:15 dracut[8055]: Executing: /usr/bin/dracut --add kdumpbase --
quiet --hostonly --hostonly-cmdline --hostonly-i18n --hostonly-mode strict --
hostonly-nics  -o "plymouth dash resume ifcfg earlykdump" --compress=xz --
mount "/dev/mapper/VolGroupSys-LogVolRoot /sysroot ext4 rw,relatime,nofail,x-
systemd.before=initrd-fs.target" --no-hostonly-default-device --add-
device /dev/md0 -f /boot/initramfs-5.4.17-2136.335.4.el8uek.x86_64kdump.img
5.4.17-2136.335.4.el8uek.x86_64
Oct 15 11:51:15 kdumpctl[7997]: dracut: /lib/modules/
5.4.17-2136.335.4.el8uek.x86_64//modules.dep is missing. Did you run depmod?
Oct 15 11:51:15 dracut[8055]: /lib/modules/5.4.17-2136.335.4.el8uek.x86_64//
modules.dep is missing. Did you run depmod?
Oct 15 11:51:15 kdumpctl[6471]: kdump: mkdumprd: failed to make kdump initrd
Oct 15 11:51:15 kdumpctl[6471]: kdump: Starting kdump: [FAILED]
Oct 15 11:51:15 systemd[1]: kdump.service: Main process exited, code=exited,
status=1/FAILURE
Oct 15 11:51:15 systemd[1]: kdump.service: Failed with result 'exit-code'.
Oct 15 11:51:15 systemd[1]: Failed to start Crash recovery kernel arming.
```

Command Details

```
# odacli update-server
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Restart the kdump service:

```
# systemctl restart kdump

# systemctl status kdump -l
kdump.service - Crash recovery kernel arming
   Loaded: loaded (/usr/lib/systemd/system/kdump.service; enabled; vendor
preset: enabled)
   Active: active (exited) since Sat 2024-10-19 09:34:23 IST; 8s ago
  Process: 2028 ExecStart=/usr/bin/kdumpctl start (code=exited, status=0/
SUCCESS)
 Main PID: 2028 (code=exited, status=0/SUCCESS)
```

```
Oct 19 09:34:21 dracut[2762]:  rd.lvm.lv=VolGroupSys/LogVolRoot
Oct 19 09:34:21 dracut[2762]:  rd.md.uuid=1e7140f4:2f5386a9:3093dd8d:ee3b9b29
Oct 19 09:34:22 dracut[2762]: *** Install squash loader ***
Oct 19 09:34:22 dracut[2762]: *** Squashing the files inside the initramfs ***
Oct 19 09:34:23 dracut[2762]: *** Squashing the files inside the initramfs
done ***
Oct 19 09:34:23 dracut[2762]: *** Creating image file '/boot/
initramfs-5.4.17-2136.335.4.el8uek.x86_64kdump.img' ***
Oct 19 09:34:23 dracut[2762]: *** Creating initramfs image file '/boot/
initramfs-5.4.17-2136.335.4.el8uek.x86_64kdump.img' done ***
Oct 19 09:34:23 kdumpctl[2104]: kdump: kexec: loaded kdump kernel
Oct 19 09:34:23 kdumpctl[2104]: kdump: Starting kdump: [OK]
Oct 19 09:34:23 systemd[1]: Started Crash recovery kernel arming.
```

Bug Number

This issue is tracked with Oracle bug 36998253.

Error in updating database

When updating the database on Oracle Database Appliance, an error may be encountered.

Problem Description

When updating the database on Oracle Database Appliance after a previously run `odacli update-dbhome` command failed with the error `DCS-10274`, then an error message may be displayed.

The failure occurs on DB systems with the following conditions:

- DB system is on Oracle Database Appliance release 19.25 or later
- No prepatch report for database was generated prior to the failed `update-dbhome` job
- The `update-dbhome` job failed after the database was moved to the destination DB home.

Failure Message

The following error message is displayed:

```
DCS-10274:Prepatchreport is not present for database: database_ID, source
database home: source_dbhome_ID, destination database home:
destination_dbhome_ID, components: [orachk, db], on node: node_name
```

Command Details

```
# odacli update-database
```

Hardware Models

All Oracle Database Appliance hardware models with DB systems on Oracle Database Appliance release 19.25 or later

Workaround

Comment out the corresponding DB entry in `/opt/oracle/oak/pkgrepos/orapkgs/clones/clonemetadata.xml`:

```
supported version="destination version of target-to-patch database"
clone="xxx"  min_gi_version="23.0" max_gi_version="23.99" size="1.5"
agent_version="23.xxxx"  ignore_patches="xxx" platform="VM"/
```

After the `update-database` job succeeds, restore the DB entry in the file.

Bug Number

This issue is tracked with Oracle bug 37566140.

Error in updating Oracle RAC One database

When updating an Oracle RAC One database on Oracle Database Appliance, an error may be encountered.

Problem Description

When updating an Oracle RAC One database on Oracle Database Appliance, an error message may be displayed.

The failure occurs if the database name contains uppercase letters.

Failure Message

The following error message is displayed:

```
DCS-10001:Internal error encountered: PRGH-1106 : null.
DCS-10001:Internal error encountered: PRGH-1106 : could not connect to
database.
ORA-12162: TNS:net service name is incorrectly specified
```

Command Details

```
# odacli update-database
```

Hardware Models

All high-availability Oracle Database Appliance hardware models

Workaround

1. Apply datapatch by running the following two commands:

   ```
   odacli create-prepatchreport -dp -dbid target_to_patch_database_ID
   ```

   ```
   odacli update-database -dp -i target_to_patch_database_ID
   ```

2. Remove the checkpoint for Rapid Home Provisioning for the incomplete patch on both nodes:

```
[root@ ~]# /opt/oracle/dcs/mysql/bin/mysql -hlocalhost -uroot --
socket=/opt/oracle/dcs/mysql/log/mysqldb.sock
      mysql> use GHSUSER23;
      mysql> select ID,cast(NAME as char(100000) character set
utf8),SRCWC,SRCHOME,DSTWC,DSTHOME,CLUSTERNAME from MOVE;
      Remove ALL entries in the table that match {source and destination
dbhomes}
      mysql> commit;
```

3. Update the checkpoint for DCS for the incomplete patch on both nodes:

```
[root@ ~]# /opt/oracle/dcs/mysql/bin/mysql -hlocalhost -uroot --
socket=/opt/oracle/dcs/mysql/log/mysqldb.sock
      mysql> use dcsagentdb;
      mysql> select * from UnfinishedDbPatch;
      locate the SINGLE entry that matches {databaseId, sourceDbHomeId,
and destinationDbHomeId}, and update the entry as below,
      mysql> update UnfinishedPatch set rhpFailure=false where
id='<entry_id>';
      mysql> commit;
```

4. Run the `odacli update-database -i` *`database_ID`* `-to` *`destination_dbhome_ID`* command to resume the job from the failure point.
5. If you encounter bug 37566140, that is, error code `DCS-10274` when running step 4, apply the workaround for bug 37566140.

Bug Number

This issue is tracked with Oracle bug 37594043.

Error in server patching

When patching the server on Oracle Database Appliance, an error may be encountered.

Problem Description

When patching the server on Oracle Database Appliance, and the DCS agent loads, the scheduler service may fail to start and an error message may be displayed.

Failure Message

The `dcs-agent.log` file displays the following error message:

```
-----------------------
2024-07-29 14:24:30,351 WARN [backgroundjob-zookeeper-pool-7-thread-2] []
o.j.s.JobZooKeeper: JobRunr encountered a problematic exception. Please
create a bug report (if possible, provide the code to reproduce this and the
stacktrace) - Processing will continue.
java.lang.NullPointerException: null
        at
org.jobrunr.server.zookeeper.tasks.ZooKeeperTask.pollIntervalInSecondsTimeBoxI
sAboutToPass(ZooKeeperTask.java:93)
```

```
        at
org.jobrunr.server.zookeeper.tasks.ZooKeeperTask.getJobsToProcess(ZooKeeperTas
k.java:84)
        at
org.jobrunr.server.zookeeper.tasks.ZooKeeperTask.processJobList(ZooKeeperTask.
java:57)
        at
org.jobrunr.server.zookeeper.tasks.ProcessOrphanedJobsTask.runTask(ProcessOrph
anedJobsTask.java:29)
        at
org.jobrunr.server.zookeeper.tasks.ZooKeeperTask.run(ZooKeeperTask.java:47)
        at
org.jobrunr.server.JobZooKeeper.lambda$runMasterTasksIfCurrentServerIsMaster$
0(JobZooKeeper.java:76)
        at java.util.Arrays$ArrayList.forEach(Arrays.java:3880)
        at
org.jobrunr.server.JobZooKeeper.runMasterTasksIfCurrentServerIsMaster(JobZooKe
eper.java:76)
        at org.jobrunr.server.JobZooKeeper.run(JobZooKeeper.java:56)
-----------------------
```

Command Details

```
# odacli update-server
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Restart the DCS agent:

   ```
   systemctl restart initdcsagent
   ```

2. Verify that the DCS agent is running:

   ```
   odacli ping-agent
   odacli list-jobs
   odacli describe-component
   ```

Bug Number

This issue is tracked with Oracle bug 36896020.

Error in upgrading a database

When upgrading a database, an error may be encountered.

Problem Description

When you create Oracle ASM databases, the RECO directory may not have been created on systems provisioned with the OAK stack. This directory is created when the first RECO record is written. After successfully upgrading these systems using Data Preserving Reprovisioning to

Oracle Database Appliance release 19.15 or later, if you attempt to upgrade the database, an error message may be displayed.

Failure Message

When the `odacli upgrade-database` command is run, the following error message is displayed:

```
# odacli upgrade-database -i 16288932-61c6-4a9b-beb0-4eb19d95b2bd -to
b969dd9b-f9cb-4e49-8e0d-575a0940d288
DCS-10001:Internal error encountered: dbStorage metadata not in place:
DCS-12013:Metadata validation error encountered: dbStorage metadata missing
Location info for database database_unique_name..
```

Command Details

```
# odacli upgrade-database
```

Hardware Models

All Oracle Database Appliance X6-2HA and X5-2 hardware models

Workaround

1. Verify that the `odacli list-dbstorages` command displays `null` for the redo location for the database that reported the error. For example, the following output displays a null or empty value for the database unique name `F`.

   ```
   # odacli list-dbstorages

   ID                                       Type   DBUnique Name  Status
   Destination Location  Total      Used       Available
   ---------------------------------------- ------ --------------------
   ...
   ...
   ...
   198678d9-c7c7-4e74-9bd6-004485b07c14     ASM    F              CONFIGURED
   DATA    +DATA/F  4.89 TB    1.67 GB    4.89
   TB
   REDO    +REDO/F  183.09 GB  3.05 GB    180.04
   GB

   RECO             8.51 TB
   ...
   ...
   ...
   ```

   In the above output, the RECO record has a null value.

2. Manually create the RECO directory for this database. If the database unique name is `dbuniq`, then run the `asmcmd` command as the `grid` user.

   ```
   asmcmd
   ```

3. Run the `mkdir` command.

```
asmcmd> mkdir +RECO/dbuniq
```

4. Verify that the `odacli list-dbstorages` command output does not display a null or empty value for the database.
5. Rerun the `odacli upgrade-database` command.

Bug Number

This issue is tracked with Oracle bug 34923078.

Error in database patching

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

Problem Description

When applying the datapatch during patching of database on Oracle Database Appliance, an error message may be displayed.

Failure Message

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

```
Failed to execute sqlpatch for database …
```

Command Details

```
# odacli update-database
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Run the following SQL*Plus command:

```
alter system set nls_sort='BINARY' SCOPE=SPFILE;
```

2. Restart the database using srvctl command.
3. Retry applying the datapatch with *dbhome*`/OPatch/datapatch -verbose -db` *dbUniqueName*.

Bug Number

This issue is tracked with Oracle bug 35060742.

Component version not updated after patching

After patching the Oracle Database Appliance server, the `odacli describe-component` command does not display the correct Intel Model 0x1528 Ethernet Controller version, if the current version is 8000047B or 8000047C.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Manually update the Ethernet controllers to 00005DD or 800005DE using the `fwupdate` command.

This issue is tracked with Oracle bug 34402352.

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 19.26, if the Security Technical Implementation Guidelines (STIG) V1R2 is already deployed, then when you patch to 19.26 or earlier, and run the command `odacli update-server -f version`, an error may be displayed.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

This issue is tracked with Oracle bug 33168598.

AHF error in prepatch report for the update-dbhome command

When you patch server to Oracle Database Appliance release 19.26, 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
Prevent Database Hangs                    destination settings are not as
recommended
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

```
/opt/oracle/dcs/bin/odacli update-dbhome --dbhomeid 7c67c5b4-
f585-4ba9-865f-c719c63c0a6e -v 19.26.0.0.0 -f
```

This issue is tracked with Oracle bug 33144170.

Errors when running ORAchk or the odacli create-prepatchreport command

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

The following error messages may be seen:

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

Hardware Models

Oracle Database Appliance hardware models bare metal deployments

Workaround

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

```
odacli update-dbhome -j -v 19.26.0.0.0 -i dbhome_id -sko
```

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

Error in patching prechecks report

The patchung prechecks report may display an error.

The following error message may be displayed:

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

Hardware Models

Oracle Database Appliance X-7 hardware models

Workaround

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

This issue is tracked with Oracle bug 33631256.

Error message displayed even when patching Oracle Database Appliance is successful

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

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

```
# time odacli update-dcscomponents -v 19.26.0.0.0
^[[ADCS-10008:Failed to update DCScomponents: 19.26.0.0.0
Internal error while patching the DCS components :
DCS-10231:Cannot proceed. Pre-checks for update-dcscomponents failed. Refer
to /opt/oracle/dcs/log/-dcscomponentsPreCheckReport.log on node 1 for
details.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

This issue is tracked with Oracle bug 32553519.

Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Run the command:

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

2. Ignore the following two warnings:

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

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

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

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

This issue is tracked with Oracle bug 30099090.

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.

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 Oracle AFD-enabled DB system
  When creating a DB system with Oracle ASM Filter Driver (Oracle AFD), an error may be encountered.
- Error in rekeying a TDE-enabled database
  When rekeying a TDE-enabled database on Oracle Database Appliance, an error may be encountered.
- Error in creating database
  When creating a database on Oracle Database Appliance, an error may be encountered.
- Error in changing the password of a TDE-enabled database
  When changing the password of a TDE-enabled database on Oracle Database Appliance, an error may be encountered.
- Error in switchover operation on Oracle Data Guard with Oracle Database 23ai
  When running the `odacli switchover-dataguard` command on Oracle Database Appliance configured with Oracle Data Guard, an error may be encountered.
- Error in enabling high-availability on a TDE-enabled database
  When enabling high-availability on a TDE-enabled database on Oracle Database Appliance, an error may be encountered.
- Error in creating DB system
  When creating a DB system, an error may be encountered.

- Error in Oracle Data Guard operation after modifying the Oracle ASM port
  When running the `odacli modify-asmport` command on Oracle Database Appliance configured with Oracle Data Guard, an error may be encountered.
- Error in database creation on multi-user access enabled system
  When creating a database on multi-user access enabled system on Oracle Database Appliance, an error may be encountered.
- Error in configuring Oracle ASR
  When configuring Oracle ASR, an error may be encountered when registering Oracle ASR Manager due to an issue while contacting the transport server.
- Error in starting the DB System
  When starting a DB system on an Oracle Database Appliance, an error may be encountered.
- Error in creating database
  When creating a database on Oracle Database Appliance, an error may be encountered.
- Error in creating two DB systems
  When creating two DB systems concurrently in two different Oracle ASM disk groups, an error is encountered.
- Error in adding JBOD
  When you add a second JBOD to your Oracle Database Appliance deployment on which a DB system is running, an error is encountered.
- Error in provisioning appliance after running cleanup.pl
  Errors encountered in provisioning applince after running `cleanup.pl`.
- Error 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.

Error in creating Oracle AFD-enabled DB system

When creating a DB system with Oracle ASM Filter Driver (Oracle AFD), an error may be encountered.

Problem Description

When you create a DB system with Oracle AFD on Oracle Database Appliance release 19.22, with Oracle Grid Infrastructure or Oracle Database release 19.21 or earlier, then an error may be encountered at the "`Install DB System`" step.

Failure Message

The following error message is displayed in the `database alert.log`:

```
WARNING: group 2 (RECO) has missing disks
ORA-15040: diskgroup is incomplete
WARNING: group 2 is being dismounted
```

Command Details

```
# odacli create-dbsystem
```

Hardware Models

All Oracle Database Appliance hardware models running Oracle Grid Infrastructure 19.21

Workaround

This issue is fixed in Oracle Grid Infrastructure 19.22 Release Update (RU). Create the DB system using Oracle Grid Infrastructure and Oracle Database release 19.22.

You can create DB system without enabling Oracle AFD by specifying `enableAFD=false` in the DB system JSON file during DB system creation.

Do not patch or upgrade the existing Oracle AFD-enabled DB system with Oracle Grid Infrastructure or Oracle Database release 19.21 till the fix for bug 36114443 is available in the Oracle Grid Infrastructure and Oracle Database clone files.

Bug Number

This issue is tracked with Oracle bug 36300713.

Error in rekeying a TDE-enabled database

When rekeying a TDE-enabled database on Oracle Database Appliance, an error may be encountered.

Problem Description

When you rekey a TDE-enabled database configured using Oracle Key Vault keystore, the rekey operation may fail after changing the TDE password of the database, and an error message is displayed.

Failure Message

```
DCS-10164:Failed to configure TDE: Failed to set TDE Master Encryption key:
PL/SQL procedure successfully completed.   PL/SQL procedure successfully
completed.  begin * ERROR at line 1: ORA-46627: keystore password mismatch
ORA-06512: at line 3
```

Command Details

```
# odacli modify-database -n dbname -rkt
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

After changing the TDE password, follow these steps. For Oracle RAC database, run the steps on the first node only.

1. Switch to the database user and set the environment variables for the database.

```
$su - oracle
$. oraenv
```

```
ORACLE_SID = Enter the SID of the database
ORACLE_HOME = Enter the dbhome location of the database
```

2. Restart the database.

```
$srvctl stop database -d dbUniqueName
$srvctl start database -d dbUniqueName
```

3. Check the status of the wallet by connecting to SQL*Plus. The command output should show `Open` status for `OKV` wallet type.

```
$sqlplus / as sysdba
SQL> select * from v$encryption_wallet;
```

4. Run the rekey operation for the database.

```
$odacli modify-database -n dbname -rkt
```

Bug Number

This issue is tracked with Oracle bug 37431957.

Error in creating database

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

Problem Description

When the bare metal system is configured with FLEX redundancy, the database creation uses file group templates, and you create an Oracle Database 23ai database of version 23.6 or earlier on an Oracle Database Appliance release 19.25 or earlier deployment, and the DB_SYSTEM_NAME and DB_ORACLE_USER_NAME together are greater than 22 characters, an error is encountered.

Failure Message

The following error message may be displayed:

```
ORA-01261: Parameter db_create_file_dest destination string cannot be
translated
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

In FLEX disk group environment, if the DB system version is Oracle Database Appliance 19.25 or earlier, with Oracle Database 23ai version 23.6 or earlier, then ensure that the DB_SYSTEM_NAME and DB_ORACLE_USER_NAME together are greater than 22 characters.

Bug Number

This issue is tracked with Oracle bug 37305833.

Error in changing the password of a TDE-enabled database

When changing the password of a TDE-enabled database on Oracle Database Appliance, an error may be encountered.

Problem Description

When you submit jobs to change the password for a TDE-enabled Oracle RAC One database configured using Oracle Key Vault keystore simultaneously for the same database, and an error message is displayed.

Failure Message

```
DCS-10001:Internal error encountered: Failed to relocate database.
```

Command Details

```
# odacli modify-database -n dbname -ctp
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None.

Bug Number

This issue is tracked with Oracle bug 37567042.

Error in switchover operation on Oracle Data Guard with Oracle Database 23ai

When running the `odacli switchover-dataguard` command on Oracle Database Appliance configured with Oracle Data Guard, an error may be encountered.

Problem Description

For Oracle Database 23ai databases, when you run the `odacli switchover-dataguard` command from the primary site and provide the primary database unique name with the -u option, then an error may be encountered.

Failure Message

The following error message may be displayed:

```
DCS-10001:Internal error encountered: Unable to create auto login wallet for
remote db.
```

Command Details

```
# odacli switchover-dataguard
```

Hardware Models

All Oracle Database Appliance hardware models running Oracle Database 23ai, versions 23.6 and 23.7 DB systems

Workaround

Run `odacli switchover-dataguard` from the primary site and provide the standby database unique name on the remote site for the Oracle Data Guard switchover operation.

Bug Number

This issue is tracked with Oracle bug 37622670.

Error in enabling high-availability on a TDE-enabled database

When enabling high-availability on a TDE-enabled database on Oracle Database Appliance, an error may be encountered.

Problem Description

When you enable high-availability on a TDE-enabled database that uses Oracle Key Vault to store TDE keys, an error message may be displayed.

Failure Message

```
DCS-12721:OKV command "okv admin endpoint create" failed to run: Failed to
create endpoint endpoint_name
```

Command Details

```
# odacli modify-database -n dbname -ha
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Instead of enabling high-availability after creating the database, enable high-availability during database creation itself.

Bug Number

This issue is tracked with Oracle bug 37182129.

Error in creating DB system

When creating a DB system, an error may be encountered.

Problem Description

When you create a DB system on Oracle Database Appliance, the following error may be encountered:

```
DCS-10001:THE CONNECTION IS CLOSED
```

This error may occur when the bare metal system is provisioned with NTP configured, or there is a time difference between bare metal system and the standard NTP server, or the DB system is created after NTP is configured.

Failure Message

```
[DB System n1 creation] -  DCS-10001:Internal error encountered: Job
'Provision DB System 'n1'' (f91fd1db-78ec-452d-bcdb-975947849370) failed.
```

Command Details

```
odacli create-dbsystem
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Provision the bare metal system without configuring NTP.

If there is a time difference between the bare metal system and the standard NTP server, then add several minutes to the current date.

Enable chrony.

1. Before enabling chrony, add or update the chrony configuration as follows:

```
--------
# cat /etc/chrony.conf
server 10.246.6.36 iburst
driftfile /var/lib/chrony/drift
makestep 1.0 -1
rtcsync
logdir /var/log/chrony
---------
```

2. Run the systemctl command to enable and start chronyd service:

```
date;
systemctl enable chronyd
systemctl start chronyd
systemctl status chronyd
```

```
sleep 10;
date;
```

3. Create DB system with NTP configured.

Bug Number

This issue is tracked with Oracle bug 37166091.

Error in Oracle Data Guard operation after modifying the Oracle ASM port

When running the `odacli modify-asmport` command on Oracle Database Appliance configured with Oracle Data Guard, an error may be encountered.

Problem Description

If you run the `odacli modify-asmport` command on an appliance configured with Oracle Data Guard that uses `MAX PROTECTION` mode, then this could cause a disruption in primary site due to the standby Oracle Clusterware being restarted as part of the Oracle ASM port change.

Failure Message

The following error message may be displayed in the alert logs for the database on the primary host:

```
ORA-16072: a minimum of one standby database destination is required
```

Followed by the message:

```
terminating the instance due to ORA error 16072
```

Task Level Failure Message

The job may fail at the `Stop CRS on DB System(s)` step. The complete details of the error are displayed in the Message section of the command output.

Command Details

```
# odacli modify-asmport
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Start the database instance on the primary host.

Bug Number

This issue is tracked with Oracle bug 36931905.

Error in database creation on multi-user access enabled system

When creating a database on multi-user access enabled system on Oracle Database Appliance, an error may be encountered.

Problem Description

When you create a database on a multi-user access enabled system, an error message may be displayed.

Failure Message

When the user name of database owner contains both lowercase and uppercase letters, the error message may be as follows:

```
[jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - [FATAL] Error in
Process: /u01/app/KvE16/product/19.0.0.0/dbhome_2/bin/orapwd
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - Enter password for SYS:
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - OPW-00010: Could not
create the password file.
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - ORA-00600: internal error
code, arguments: [kfzpCreate02], [0], [], [], [], [], [], [], [], [], []
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - ORA-15260: permission
denied on ASM disk group
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - ORA-06512: at
"SYS.X$DBMS_DISKGROUP", line 679
    [jobid-74f31148-ebe0-4507-9296-b9ad4ca7e03b] - ORA-06512: at line 2
```

When the user name of database owner begins with number digit, the error message may be as follows:

```
PRCZ-4001 : failed to execute command "/u01/app/6RXNI/product/19.0.0.0/
dbhome_15//bin/dbca" using the privileged execution plugin "odaexec" on nodes
"scaoda901c7n1" within 5,000 seconds
PRCZ-2103 : Failed to execute command "/u01/app/6RXNI/product/19.0.0.0/
dbhome_15//bin/dbca" on node "scaoda901c7n1" as user "6RXNI". Detailed error:
[FATAL] [DBT-05801] There are no ASM disk groups detected.
  CAUSE: ASM may not be configured, or ASM disk groups are not created yet.
  ACTION: Create ASM disk groups, or change the storage location to File
System.
[FATAL] [DBT-05801] There are no ASM disk groups detected.
  CAUSE: ASM may not be configured, or ASM disk groups are not created yet.
  ACTION: Create ASM disk groups, or change the storage location to File
System.
```

Command Details

```
# odacli create-database
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Do not start custom user name with number digit or have mixed-case letters in the custom user name.

Bug Number

This issue is tracked with Oracle bug 36878796.

Error in configuring Oracle ASR

When configuring Oracle ASR, an error may be encountered when registering Oracle ASR Manager due to an issue while contacting the transport server.

Failure Message

The following error message is displayed:

```
DCS-10045:Validation error encountered: Registration failed : Please check
the agent logs for details.
```

Command Details

```
# odacli configure-asr
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Retry configuring Oracle ASR using the `odacli configure-asr` command.

Bug Number

This issue is tracked with Oracle bug 36363437.

Error in starting the DB System

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

Problem Description

If DBVM is undefined using `virsh undefine` *`dbvm_name`*, then the `odacli start-dbsystem` command may fail to run.

Failure Message

The following error message may be displayed:

```
DCS-10001:Internal error encountered: error: failed to get domain 'dbvm_name'
```

Hardware Models

All Oracle Database Appliance hardware models running Oracle Database Appliance release 19.21

Workaround

Run `virsh define /u05/app/sharedrepo/dbsystem/.ACFS/snaps/vm_dbvm_name/dbvm_name.xml` to define the VM. Then start the DB system.

Bug Number

This issue is tracked with Oracle bug 36051738.

Error in creating database

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

Problem Description

When creating a database on Oracle Database Appliance, the operation may fail after the `createDatabaseByRHP` task. However, the `odacli list-databases` command displays the status as CONFIGURED for the failed database in the job results.

Failure Message

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

```
DCS-10001:Internal error encountered: Failed to clear all listeners from
database
```

Command Details

```
# odacli create-database
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Check the job description of the `odacli create-database` command using the `odacli describe-job` command. Fix the issue for the task failure in the `odacli create-database` command. Delete the database with the command `odacli delete-database -n db_name` and retry the `odacli create-database` command.

Bug Number

This issue is tracked with Oracle bug 34709091.

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 adding JBOD

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

The following error message is displayed:

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

Hardware Models

All Oracle Database Appliance hardware models bare metal and dbsystem

Workaround

Shut down dbsystem before adding the second JBOD.

```
systemctl restart initdcsagent
```

This issue is tracked with Oracle bug 32586762.

Error in provisioning appliance after running cleanup.pl

Errors encountered in provisioning applince after running `cleanup.pl`.

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

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

Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

Workaround

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

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

This issue is tracked with Oracle bug 32707387.

Error 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.

Known Issues When Managing Oracle Database Appliance

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

- Error in interconnect network
  DCS agent may not be able to run jobs because of an interconnect network issue.
- Error in upgrading Oracle Data Guard
  When upgrading Oracle Data Guard, an error may be encountered.
- Error in relocating and re-keying a TDE-enabled database
  When relocating and re-keying a TDE-enabled database on Oracle Database Appliance, an error may be encountered.
- Error in deleting a TDE-enabled database
  When deleting a TDE-enabled database on Oracle Database Appliance, an error may be encountered.
- Error in deleting database home
  When deleting a database home on Oracle Database Appliance, an error may be encountered.
- Error in configuring Oracle Data Guard
  When configuring Oracle Data Guard on Oracle Database Appliance, an error may be encountered.
- Error in cleaning up a deployment
  When cleaning up a Oracle Database Appliance, 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 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 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.

- 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.
- 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.

Error in interconnect network

DCS agent may not be able to run jobs because of an interconnect network issue.

Problem Description

When you run the `odacli ping-agent` command, an error may be encountered.

Failure message

```
DCS-10033:Service DCS agent is down.
```

Command Details

```
# odacli ping-agent
```

Hardware Models

All Oracle Database Appliance hardware models with high-availability

Workaround

Do the following:

1. Validate that the issue is due to interconnect not working. From the first node, run the command:

   ```
   # arping -I icbond0 192.168.16.25 -c 10
   ```

   The output is similar to the following:

   ```
   ARPING 192.168.16.25 from 192.168.16.24 icbond0
   Sent 10 probes (10 broadcast(s))
   Received 0 response(s)
   ```

2. On both nodes, modify the `/etc/sysconfig/network-scripts/ifcfg-icbond0` file to add `arp_interval=100 to BONDING_OPTS`. The update is as follows:

   ```
   BONDING_OPTS="mode=active-backup miimon=100 primary=p1p1 arp_interval=100"
   ```

3. On both nodes, restart the network:

   ```
   # systemctl restart network
   ```

4. On both nodes, restart the agent and wait for a few minutes:

```
# systemctl restart initdcsagent
```

Bug Number

This issue is tracked with Oracle bug 37611921.

Error in upgrading Oracle Data Guard

When upgrading Oracle Data Guard, an error may be encountered.

Problem Description

If you configured Oracle Data Guard on a multi-user access enabled Oracle Database Appliance release 19.19 system, as odaadmin user, then this Oracle Data Guard configuration may not display when you run the odacli list-dataguardstatus command. If you upgrade this system to Oracle Database Appliance release 19.23 using Data Preserving Reprovisioning, then the Validate Database Service presence step in the the create-preupgradereport precheck may fail for the Oracle Data Guard database.

The following error message is displayed:

```
One or more pre-checks failed for [DB]
```

Command Details

```
# odacli create-preupgradereport


# odacli describe-preupgradereport
```

Task Level Failure message

```
"The following services [TDG1yn_ro, TDG1yn_rw, Y6Z_ro, Y6Z_rw] created on
database
'TDG1yn' can result in a failure in 'detach-node'
```

Hardware Models

All Oracle Database Appliance hardware models X9-2, X8-2, and X7-2

Workaround

For each service listed, do the following:

1. Stop the service reported:

```
srvctl stop service -d db_unique_name -service service_name
```

2. Remove the service:

```
srvctl remove service -d db_unique_name -service service_name
```

Bug Number

This issue is tracked with Oracle bug 36610040.

Error in relocating and re-keying a TDE-enabled database

When relocating and re-keying a TDE-enabled database on Oracle Database Appliance, an error may be encountered.

Problem Description

When you relocate a TDE-enabled database that uses Oracle Key Vault to store TDE keys with the option `--target-node,-tn`, and re-key with the option `--rekey-tde,-rkt`, at the same time, an error may be encountered when setting the TDE master encryption key.

Failure Message

```
DCS-10164:Failed to configure TDE: Failed to set TDE Master Encryption key
```

Command Details

```
# odacli modify-database -n dbname -rkt -tn target_node_name
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Perform the relocation and re-key operations separately, one after another.

Bug Number

This issue is tracked with Oracle bug 37155404.

Error in deleting a TDE-enabled database

When deleting a TDE-enabled database on Oracle Database Appliance, an error may be encountered.

Problem Description

When you delete a TDE-enabled database that uses Oracle Key Vault release 21.8 to store TDE keys, then an error message may be displayed during the `OKV delete` task.

Failure Message

```
DCS-10001:Internal error encountered: Failed to delete Wallet <wallet_name> :
okv.log.0 (Permission denied)
{
"result" : "Failure",
"message" : "Insufficient privileges on wallet"
}.
```

Command Details

```
# odacli delete-database -n db_name
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Log into as the Oracle Key Vault administrator to the Oracle Key Vault server where the Oracle Key Vault wallet is present.
2. Navigate to the **Keys & Wallets** tab.
3. Click the edit icon for the wallet that you want to delete.
4. In the Select Endpoint/User Group section, select the Type as **Users** from the drop down list.
5. Select the user that owns the Oracle Key Vault wallet.
6. In the Select Access Level section, select **Read and Modify**, and then **Manage Wallet**.
7. Click **Save**.
8. Delete the database.

Bug Number

This issue is tracked with Oracle bug 36640379.

Error in deleting database home

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

Problem Description

When you delete a database home, the database home is not deleted completely. The subfolders and files exist in the corresponding database home location and the database home entry exists in the `/u01/app/oraInventory/ContentsXML/inventory.xml` file.

Failure Message

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

```
Failed to execute sqlpatch for database …
```

Command Details

```
# odacli delete-dbhome
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Before you run the `odacli delete-dbhome` command, confirm that the `wOraDBversion_homeidx` exists in the `/opt/oracle/rhp/RHPCheckpoints/` location on the same node where you run the command.

Bug Number

This issue is tracked with Oracle bug 36864228.

Error in configuring Oracle Data Guard

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

Problem Description

When you configure Oracle Data Guard on the second node of the standby system on an Oracle Database Appliance high-availability deployment, the operation may fail at step `Configure Standby database (Standby site)` in the task `Reset Db sizing and hidden parameters for ODA best practice`.

Command Details

```
odacli configure-dataguard
```

Hardware Models

All Oracle Database Appliance hardware models high-availability deployments

Workaround

Run odacli configure-dataguard on the first node of the standby system in the high-availability deployment

Bug Number

This issue is tracked with Oracle bug 33401667.

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 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 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 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.

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.

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.