Oracle® Database Appliance
Release Notes

Release 19.21 for Linux x86-64

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Oracle Database Appliance Release Notes, Release 19.21 for Linux x86-64

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Preface

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

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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.

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.

1
What's New in This Release

Oracle Database Appliance release 19.21 supports Oracle Database 19*c* functionality on Oracle Database Appliance hardware models.

New Features

This release supports Oracle Database Appliance models 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 19.21. You can also create and patch or upgrade 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 19.21.

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 of Oracle Database Appliance bare metal deployments, KVM, and DB systems**
  This release supports provisioning of bare metal deployments, KVM, and DB systems with Oracle Database Appliance release 19.21 on 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.

- **Upgrading Oracle Database Appliance to Oracle Linux 8 on Oracle Database Appliance X9-2, X8-2, and X7-2 on Bare Metal Systems and DB Systems**

  Starting with Oracle Database Appliance release 19.21, the operating system is Oracle Linux 8 for Oracle Database Appliance X9, X8, and X7 hardware models. All deployments must upgrade the operating system in this release.
  See the chapter *Upgrading Oracle Database Appliance to Release 19.21 Using Data Preserving Reprovisioning* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Provisioning and Patching of Oracle Database Appliance Bare Metal Systems, KVM, and DB Systems on Oracle Database Appliance X10**
  You can provision and patch Oracle Database Appliance Bare Metal systems, KVM, and DB systems on Oracle Database Appliance X10 to Oracle Database Appliance release 19.21.

  See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance X10 Deployment and User's Guide*.

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

  This release supports creation of databases of Oracle Database releases 21.8, 19.21, 19.20, 19.19, 19.18, and 19.17 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 and 19c databases on DB systems, see the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

*   **Storage Expansion on Oracle Database Appliance X10**

    You can now configure additional storage on Oracle Database Appliance X10 when you deploy your appliance.
    See the chapter *Managing Storage* in the *Oracle Database Appliance X10 Deployment and User's Guide*.

*   **Use of HTTPS in Oracle ASR configuration**

    Starting with Oracle Database Appliance release 19.21, Oracle Database Appliance does not use SNMP protocol to send alerts to Oracle ASR. Instead, test alerts and disk alerts are sent as XML payload to Oracle ASR manager running on the HTTPS port.
    See the chapter *Configuring and Using Oracle ASR* in 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 (October 2023 Oracle Database Release Update) for bare metal systems are available in this release:

    –   19.21.0.0.231017

Additionally, note that the release also includes Oracle Grid Infrastructure and Oracle Database 21.8 updates (October 2022 Oracle Database Release Update 21.8.0.0.221018) for DB systems. Note that to update your databases on Oracle Database Appliance to releases later than Oracle Database 21.8 in the Oracle Database 21c release, you must use out-of-cycle patching functionality.

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

See the chapter *Oracle Database Appliance Release 19.21 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 19.21 from the drop down list.

- **Oracle Database Appliance 19.21.0.0.0 Server Patch for Bare Metal Systems:** Use patch 35938481 to update your bare metal deployment to Oracle Database Appliance release 19.21. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.21.

- **Oracle Database Appliance 19.21.0.0.0 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 19.21.0.0.231017 Software Clone file to create 19.21.0.0.231017 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 19.21.0.0.0 DB System Image Download for KVM:** Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance release 19.21. Patch 32451228 provides the software for this update.

- **Oracle Database Appliance 19.21.0.0.0 OS ISO Image for all Platforms:** Use this patch to reimage the operating system for Oracle Database Appliance 19.21. Patch 30403643 provides the software for this update.

- **Oracle Database Appliance 21.8.0.0.221018 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 21.8.0.0.221018 Database Clone File for DB Systems:** Use the Oracle Database 21.8.0.0.221018 Software Clone file to create 21.8.0.0.221018 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.

Related Topics

- Oracle Database Appliance Checklists
- Provisioning Oracle Database Appliance Bare Metal System
- Patching Oracle Database Appliance X10
- Upgrading Oracle Database Appliance to Release 19.21 Using Data Preserving Reprovisioning

- Oracle Database Appliance Command-Line Interface
- Configuring and Using Oracle Auto Service Request (Oracle ASR)
- Troubleshooting Data Preserving Reprovisioning Upgrades
- Viewing Oracle Database Appliance Error Correlation Reports
- Known Issues with Oracle Database Appliance in This Release
  The following are known issues deploying, updating, and managing Oracle
  Database Appliance in this release.
- FAQs on Data Preserving Reprovisioning

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 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 X10 Models

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

Table 2-1   Component Versions for X10-HA, X10-L, and X10-S in Oracle Database Appliance Release 19.21

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
NVMe (firmware version)	9CV1R410	9CV1R410
ILOM (Oracle Integrated Lights Out Manager)	5.1.2.20.a.r153118	5.1.2.20.a.r153118
BIOS	84030200	84030200
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.9.0.601	2.4.9.0.601
Oracle Linux	8.8	8.8

Table 2-1   (Cont.) Component Versions for X10-HA, X10-L, and X10-S in Oracle Database Appliance Release 19.21

Component Name	X10-HA	X10-S and X10-L
AHF (Oracle Autonomous Health Framework)	23.5.0	23.5.0
MySQL	8.0.35	8.0.35
Kernel	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64
GI_HOME	19.21.0.0.231017	19.21.0.0.231017
DB_HOME	19.21.0.0.231017	19.21.0.0.231017
Oracle Auto Service Request (Oracle ASR)	23.2.0	23.2.0

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 2-2   Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.21

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	XC311132
ILOM (Oracle Integrated Lights Out Manager)	5.1.1.23.r151958	X9-2S: 5.1.1.23.r151958 X9-2L: 5.1.1.23.r151958
BIOS	62090300	X9-2S: 62090300 X9-2L: 62090300
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.9.1.601	2.4.9.1.601
Oracle Linux	8.8	8.8
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.35	8.0.35

Table 2-2   (Cont.) Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.21

Component Name	X9-2-HA	X9-2S and X9-2L
Kernel	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64
GI_HOME	19.21.0.0.231017	19.21.0.0.231017
DB_HOME	19.21.0.0.231017	19.21.0.0.231017
Oracle Auto Service Request (Oracle ASR)	23.2.0	23.2.0

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 2-3   Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.21

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	VDV1RL06
OS Disk (SSD firmware version)	N2010121 or XC311132	N2010121
ILOM (Oracle Integrated Lights Out Manager)	5.1.3.20.r153621	X8-2S: 5.1.3.20.r153621 X8-2M: 5.1.3.20.r153621
BIOS	52110200	X8-2S: 52110200 X8-2M: 52110200
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.9.1.601	2.4.9.1.601
Oracle Linux	8.8	8.8
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.35	8.0.35
Kernel	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64
GI_HOME	19.21.0.0.231017	19.21.0.0.231017
DB_HOME	19.21.0.0.231017	19.21.0.0.231017

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Table 2-3   (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.21

Component Name	X8-2-HA	X8-2S and X8-2M
Oracle Auto Service Request (Oracle ASR)	23.2.0	23.2.0

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 2-4   Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.21

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)	N2010121	N2010121
ILOM (Oracle Integrated Lights Out Manager)	5.1.3.20.r153596	5.1.3.20.r153596
BIOS	41140200	41140200
IPMI (Intelligent Platform Management Interface)	1.8.18.0	1.8.18.0
HMP (Oracle Hardware Management Pack)	2.4.9.1.601	2.4.9.1.601
Oracle Linux	8.8	8.8
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.35	8.0.35
Kernel	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64	kernel-uek-5.4.17-2136.324.5.2.el8uek.x86_64
GI_HOME	19.21.0.0.231017	19.21.0.0.231017
DB_HOME	19.21.0.0.231017	19.21.0.0.231017
Oracle Auto Service Request (Oracle ASR)	23.2.0	23.2.0

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3
Oracle Database Appliance 19.21 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...)
19.21.0.0	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
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

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...)
19.13.0.0	For bare metal systems: • 19.12.0.0 • 19.11.0.0 • 19.10.0.0 • 19.9.0.0 For virtualized platform deployments: • 19.9.0.0 • 19.8.0.0
19.12.0.0	For bare metal systems: • 19.11.0.0 • 19.10.0.0 • 19.9.0.0 • 19.8.0.0
19.11.0.0	For bare metal systems: • 19.10.0.0 • 19.9.0.0 • 19.8.0.0 • 19.7.0.0
19.10.0.0	For bare metal systems: • 19.9.0.0 • 19.8.0.0 • 19.7.0.0 • 19.6.0.0
19.9.0.0	For bare metal systems: • 19.8.0.0 • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: • 19.8.0.0
19.8.0.0	For bare metal systems: • 19.7.0.0 • 19.6.0.0 • 19.5.0.0 For virtualized platform deployments: • 18.8.0.0
19.7.0.0	• 19.6.0.0 • 19.5.0.0
19.6.0.0	• 18.8.0.0
18.8.0.0	• 18.7.0.0 • 18.5.0.0 • 18.3.0.0

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

Oracle Database Appliance Release (To patch to this release...)	Earliest Supported Release To Patch From (Oracle recommends this release...)
18.7.0.0	• 18.5.0.0 • 18.3.0.0
18.5.0.0	• 18.3.0.0
18.3.0.0	• 12.2.1.4.0 • 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.4.0	• 12.2.1.3.0 • 12.2.1.2.0 • 12.1.2.12
12.2.1.3.0	• 12.2.1.2.0 • 12.1.2.12
12.2.1.2.0	• 12.1.2.12 **Note:** 12.2.1.2.0 is not supported on virtualized platform.
12.1.2.12	• 12.1.2.11 • 12.1.2.10 • 12.1.2.9 • 12.1.2.8
12.1.2.11	• 12.1.2.10 • 12.1.2.9 • 12.1.2.8 • 12.1.2.7
12.1.2.10	• 12.1.2.9 • 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.9	• 12.1.2.8 • 12.1.2.7 • 12.1.2.6
12.1.2.5	12.1.2.0 to 12.1.2.4
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
2.2.0.0.0	2.1.0.3.1 or earlier

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

Related Topics

• Patching Oracle Database Appliance

Minimum Software Version Requirements

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

You can provision and patch to Oracle Database Appliance release 19.21 on Oracle Database Appliance X10 bare metal systems from Oracle Database Appliance release 19.20.0.1. You can also provision and patch Oracle Database Appliance DB systems on KVM to release 19.21.

For Oracle Database Appliance X9-2 and earlier, you can provision and upgrade to Oracle Database Appliance release 19.21 on from Oracle Database Appliance releases 19.20, 19.19, 19.18, and 19.17. You can also provision and patch Oracle Database Appliance DB systems on KVM to release 19.21.

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 19.21 from the release list.

Table 3-2   Oracle Database Appliance Patches for Oracle Database Appliance Release 19.21

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for Bare Metal Systems	35938481	Use the server patch to update your deployment to Oracle Database Appliance release 19.21. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.21.	For X10: Patching Oracle Database Appliance For X9-2 and Earlier: Upgrading Oracle Database Appliance
Oracle Database Appliance 19.21.0.0.0 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 19.21.	Provisioning Oracle Database Appliance Software

Table 3-2   (Cont.) Oracle Database Appliance Patches for Oracle Database Appliance Release 19.21

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance RDBMS Clone for ODACLI/DCS Stack	30403662	Use Oracle Database Appliance Database Clone 19.21.0.0.231017 for ODACLI/DCS stack to create 19.21.0.0.0 database homes for the ODACLI/DCS stack.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance 19.21.0.0.0 OS ISO Image for all Platform	30403643	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.21. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance 19.21.0.0.0 DB System Image Download for KVM	32451228	Use the KVM DB System template to deploy KVM-based virtualization for Oracle Database Appliance 19.21.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.8.0.0.221018 GI Clone for DB Systems	33152235	Use the Oracle Grid Infrastructure 21c clone file to deploy Oracle Grid Infrastucture 21c on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.8.0.0.221018 Database Clone for DB Systems	33152237	Use the Oracle Database Appliance 21c clone file to deploy Oracle Database 21c database on DB system.	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 updating the operating system when patching the server
  When patching the server, the operating system may not be updated.

- Error in precheck during Data Preserving Reprovisioning
  When upgrading your deployment, an error may be encountered when running the prechecks.

- Incorrect job status during Data Preserving Reprovisioning
  When upgrading your deployment, an error may be encountered.

- Error updating the registry
  When running the `odacli update-registry` command, 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 server to Oracle Database Appliance release 19.16, the `odacli describe-component` command does not display the correct Intel Model 0x1528 Ethernet Controller version, if the current version is 8000047B or 8000047C.

- Detaching of databases with additionally configured services not supported by odacli detach-node
  When running `odacli detach-node` in the Data Preserving Reprovisioning process, if there are additionally configured services, then databases cannot be detached.

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

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

- Error messages in log entries in Data Preserving Reprovisioning
  In the Data Preserving Reprovisioning process, during node restore, the log
  entries may display error messages though the overall status of the job is
  displayed as SUCCESS.

- Error in running prechecks for patching
  When patching the Oracle Database Appliance server, an error may be
  encountered.

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

- AHF error in prepatch report for the update-dbhome command
  When you patch server to Oracle Database Appliance release 19.21, 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.

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

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

Error in updating the operating system when patching the server

When patching the server, the operating system may not be updated.

The following error message is displayed:

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

Run the following command:

```
rpm -q kernel-uek
```

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Remove the following RPMs:

```
# yum remove kernel-uek-4.14.35-1902.11.3.1.el7uek.x86_64
# yum remove kernel-uek-4.14.35-1902.301.1.el7uek.x86_64
```

This issue is tracked with Oracle bug 34154435.

Error in precheck during Data Preserving Reprovisioning

When upgrading your deployment, an error may be encountered when running the prechecks.

Problem Description

Oracle RAC One databases that were registered using the `odacli register-database` command have the `dbTargetNodeNumber` as null and Data Preserving Reprovisioning precheck `Validate Database Status` may fail with a null error.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Run `odacli update-registry -n DB -u` *db_unique_name* to discover the the `dbTargetNodeNumber` field.

Bug Number

This issue is tracked with Oracle bug 36081324.

Incorrect job status during Data Preserving Reprovisioning

When upgrading your deployment, an error may be encountered.

Problem Description

When a job is marked as `Success`, it means that all of its tasks have completed successfully and none of them are still running. However, there may be cases where the `odacli describe-job` command result incorrectly displays a task in a running state, even though the job itself has successfully completed.

Command Details

```
# odacli describe-job
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

None. Ignore the error.

Bug Number

This issue is tracked with Oracle bug 35970784.

Error updating the registry

When running the `odacli update-registry` command, an error may be encountered.

Failure Message

The following error message may be displayed:

```
DCS-10140:Oracle home '[home_directories]' cannot be discovered
because the metadata does not exist.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Comment out all database homes with `Removed="T"` attached, and comment out all non-database homes and non-Grid Infrastructure entries, such as Oracle Enterprise Manager agent home, before you run the `odacli update-registry` command. After the registry update completes successfully, restore the commented out entries to the original state.

Bug Number

This issue is tracked with Oracle bug 36008985.

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 server to Oracle Database Appliance release 19.16, 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.

Detaching of databases with additionally configured services not supported by `odacli detach-node`

When running `odacli detach-node` in the Data Preserving Reprovisioning process, if there are additionally configured services, then databases cannot be detached.

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Additional services must be deleted to complete the detach operation by running the command `srvctl remove service`. If these services are required, then before removing the service, the metadata must be captured manually and then the services must be recreated on the system running Oracle Database Appliance release 19.17 or later using the `srvctl` command from the appropriate database home.

This issue is tracked with Oracle bug 33593287.

Error in restore node process in Data Preserving Reprovisioning

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

This issue is tracked with Oracle bug 34140344.

Error in restore node process in Data Preserving Reprovisioning

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

The following error message may be displayed:

```
DCS-10045: groupNames are not unique.
```

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

This issue is tracked with Oracle bug 34042493.

Error messages in log entries in Data Preserving Reprovisioning

In the Data Preserving Reprovisioning process, during node restore, the log entries may display error messages though the overall status of the job is displayed as `SUCCESS`.

For Oracle Database Appliance running the DCS stack starting with Oracle Database Appliance release 12.2.1.4.0, the command `odacli restore-node -d` performs a set of ignorable tasks. Failure of these tasks does not affect the status of the overall job. The output of the command `odacli describe-job` may report such failures. These tasks are:

```
Restore of user created networks
Restore of object stores
Restore of NFS backup locations
Restore of backupconfigs
Relinking of backupconfigs to databases
Restore of backup reports
```

In the sample output above, even if these tasks fail, the overall status of the job is marked as `SUCCESS`.

Hardware Models

All Oracle Database Appliance hardware models being upgraded using the Data Preserving Reprovisioning process

Workaround

Investigate the failure using the `dcs-agent.log`, fix the errors, and then retry the command `odacli restore-node -d`.
This issue is tracked with Oracle bug 34512193.

Error in running prechecks for patching

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

Problem Description

When patching Oracle Database Appliance, an error message may be displayed.

If the number of open PDBs in a container database is not in between `0.1 times the value of target_pdb parameter + 1` and `10 times the value of target_pdbs parameter - 1`, and if the prepatchreport is generated before updating the CDB or updating DB home containing the CDB, then an error is encountered.

Failure Message

When the `odacli update-server` command is run, the following error message is displayed in the prechecks report:

```
AHF-6563: Database parameter target_pdbs is not set within best practice
thresholds
```

Command Details

```
# odacli create-prepatchreport
```

Hardware Models

Oracle Database Appliance hardware models X10-HA, X10-S, X9-2-HA, X9-2S, X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, and X7-2S

Workaround

Follow these steps:

1. Connect to the SQL*Plus prompt:
   a. Switch to the DB user. For example, if the DB user is `oracle`, then run the following command:

      ```
      su - oracle
      ```

b. Run `.oraenv` and set `ORACLE_SID`.

```
. oraenv
        ORACLE_SID = [lowcdb2] ? lowcdb1
        The Oracle base remains unchanged with the
value /u01/app/odaorabase/odaadmin
```

c. Connect to SQL*Plus. be executing 'sqlplus / as sysdba' command.

```
sqlplus / as sysdba

        SQL*Plus: Release 19.0.0.0.0 - Production on Mon XXX
XX XX:XX:XX XXXX
        Version 19.19.0.0.0

        Copyright (c) 1982, 2022, Oracle.  All rights reserved.

        Connected to:
        Oracle Database 19c Enterprise Edition Release
19.0.0.0.0 - Production
        Version 19.19.0.0.0

        SQL>
```

2. Identify the number of open PDBs in the CDB:

```
SQL> select count(*) from v$pdbs where name not like 'PDB$SEED' and
open_mode like 'READ WRITE';

    COUNT(*)
  ----------
           1
```

3. Set the `target_pdbs` parameter to a value which is `10 times the number of open PDBs - 1`. For example, if number of open PDBs is 1, then the value of `target_pdbs` must be set to 9 (1x10 - 1). Note that for Oracle RAC databases, the 't`target_pdbs` parameter must be set on both nodes.

```
SQL> alter system set target_pdbs=<10 x number_of_open_pdbs-1>
scope=spfile sid='*';
```

4. Exit from the SQL prompt:

```
SQL> exit
    Disconnected from Oracle Database 19c Enterprise Edition
Release 19.0.0.0.0 - Production
    Version 19.19.0.0.0
```

5. Stop the database by running the `srvctl stop database -db` *db_unique_name* command.

6. Start the database by running the `srvctl start database -db` *db_unique_name* command.

Bug Number

This issue is tracked with Oracle bug 35587396.

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 19.21, if the Security Technical Implementation Guidelines (STIG) V1R2 is already deployed, then when you patch to 19.21 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 19.21, 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 19.21.0.0.0 -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 19.21.0.0.0 -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 19.21.0.0.0
^[[ADCS-10008:Failed to update DCScomponents: 19.21.0.0.0
Internal error while patching the DCS components :
DCS-10231:Cannot proceed. Pre-checks for update-dcscomponents failed. Refer
to /opt/oracle/dcs/log/-dcscomponentsPreCheckReport.log on node 1 for
details.
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

This issue is tracked with Oracle bug 32553519.

Server status not set to Normal when patching

When patching Oracle Database Appliance, an error is encountered.

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

1. Run the command:

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

2. Ignore the following two warnings:

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

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

3. Run the command again till the output displays only the two warnings above. The status of Oracle Custerware status should be `Normal` again.

4. You can verify the status with the command:

   Grid_home/bin/crsctl query crs activeversion -f

   This issue is tracked with Oracle bug 30099090.

Error when patching to 12.1.0.2.190716 Bundle Patch

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

The ODACLI job displays the following error:

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

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

Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

Workaround

Install the same patch again.

This issue is tracked with Oracle bugs 30026438 and 30155710.

Patching of M.2 drives not supported

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

These drives are displayed when you run the `odacli describe-component` command. Patching of neither of the two known versions 0112 and 0121 of the M.2 disk is supported.

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

- Error in upgrading the DB System
  When upgrading a DB system on an Oracle Database Appliance, an error may be encountered.

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

- Error when upgrading DB systems with Data Preserving Reprovisioning
  When upgrading your DB systems during Data Preserving Reprovisioning, an error may be encountered.

- 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 creating DB system
  When creating a DB system on Oracle Database Appliance, an error may be 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 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 upgrading the DB System

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

Problem Description

The `odacli update-dbsystem` command may fail to run.

Failure Message

The following error message may be displayed:

```
DCS-10502:Resource 'dbvm_name' encountered errors while trying to
start: CRS-29208: Unable to communicate with libvirt daemon: .
For details refer to "(:CLSN00107:)" in "/u01/app/oracle/diag/crs/
<hostname>/crs/trace/crsd_orarootagent_root.trc".
```

The following error message may be displayed in the `dcs-agent.log` file:

```
privnetX: No such device error in the CRS-29208

CRS-5017: The resource action "<dbvm_name>.kvm start" encountered the
following error:
CRS-29208: Unable to communicate with libvirt daemon:
Cannot get interface MTU on 'privnet3': No such device
```

Command Details

```
# odacli upgrade-dbsystem
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Retry upgrading the DB system. In some cases, you may need to retry the operation several times.

Bug Number

This issue is tracked with Oracle bug 36153991.

Error in creating a DB system

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

Problem Description

When creating a DB system, the following errors may be encountered:

- The `odacli create-dbsystem` job may be stuck in the `running` status for a long time.
- Other DB system or application VM lifecycle operations such as create, start, or stop VM jobs may be stuck in the `running` status for a long time.
- Any `virsh` command such as `virsh list` command process may not respond.
- The command `ps -ef | grep libvirtd` displays that there are two `libvirtd` processes. For example:

```
# ps -ef |grep libvirtd
root       5369      1  0 05:27 ?        00:00:03 /usr/sbin/libvirtd
root      27496  5369  0 05:29 ?        00:00:00 /usr/sbin/libvirtd  <<<
```

The second `libvirtd` process (pid 27496) is stuck and causes the job hang.

Command Details

```
# odacli create-dbsystem
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Delete the second `libvirtd`, that is, the one spawned by the first `libvirtd`, for example, pid: 27496 in the above example.

Bug Number

This issue is tracked with Oracle bug 34715675.

Error when upgrading DB systems with Data Preserving Reprovisioning

When upgrading your DB systems during Data Preserving Reprovisioning, an error may be encountered.

Problem Description

If you created DB systems on Oracle Database Appliance release 19.16 or earlier, and patched your DB systems to Oracle Database Appliance release 19.19 or 19.20 without patching to 19.17 or 19.18, and upgraded your bare metal system to Oracle Database Appliance release 19.21, you may encounter an error when updating the DCS admin on the DB system during the DB system upgrade using Data Preserving Reprovisioning.

Failure Message

When upgrading DB systems using Data Preserving Reprovisioning, the following error message is displayed:

```
DCS-10001:Internal error encountered: Failed to update dcs-
admin-19.21.0.0.0_LINUX.X64_DATE.x86_64.rpm on node NODENAME
Found RPM release version: 19.21.0.0.0
Validating dcs-admin version
/bin/sh: /opt/oracle/oak/pkgrepos/dcsadmin/19.21.0.0.0/
dcsadminversioncheck.sh: Permission denied
Current verison 19.20.0.0.0 cannot be patched to 19.21.0.0.0
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Update the `/etc/exports` file on the bare metal system as follows:

1. Check the IP address in the `/etc/exports` file with the incorrect export options
   The IP address with the issue do not contain the `no_root_squash` export option.
   For example, `ASM_IP1:/opt/oracle/oak/pkgrepos`.

2. Unexport `ASM_IP1`.

   a. Locate the string to unexport:

      ```
      grep "/opt/oracle/oak/pkgrepos" /var/lib/nfs/etab |awk -F "(" ' \
      {print $1}'| awk '\{print $2":"$1}'| grep ASM_IP1
      ```

      The line is in the format `192.168.17.X:/opt/oracle/oak/pkgrepos`.

   b. Run an unexport with the IP address:

      ```
      exportfs -u ASM_IP1:/opt/oracle/oak/pkgrepos
      ```

3. Modify the `/etc/exports` file and add `no_root_squash` option. Edit the `/etc/exports` file and find the row which has `ASM_IP1`. Modify the export options for particular line from `(ro,sync,no_subtree_check,crossmnt)` to `(ro,sync,no_subtree_check,crossmnt,no_root_squash)`.

4. Export the `ASM_IP1` again.

```
 exportfs ASM_IP1:/opt/oracle/oak/pkgrepos
```

Bug Number

This issue is tracked with Oracle bug 36124601.

Error in starting the DB System

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

Problem Description

For a DB system with custom memory size, if you modified the CPU pool size or ran the `odacli remap-cpupool` command, then the DB system may fail to start.

Failure Message

The `virsh` console displays kernel panic with `out-of-memory` error. The following error message may be displayed:

```
[Wait DB System VM DCS Agent bootstrap :
JobId=300b6dea-aaab-411b-897f-46c93a336c0f] []
c.o.d.a.k.c.KvmCommandExecutor: Got result from execution of '/usr/bin/nc -zv
IP_address 7071 -w 1':
KvmCommandExecutor.KvmCommandResult(executedCmd=/usr/bin/nc -zv IP_address
7071 -w 1, returnCode=1, output=, error=Ncat:
Version 7.50 ( https://nmap.org/ncat )
Ncat: Connection timed out
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Retrieve the VM name associated with the DB system using the `odacli describe-dbsytem` command.

2. Retrieve the memory size of the DB system with the `odacli describe-dbsystem` command and convert it to KB. For example, if the memory size is 64G, when converted to KiB, the size is 67108864 KiB.

3. Stop the DB system with the `odacli stop-dbsystem` command. For high-availability systems, the process may take up to 20 minutes.

4. Backup and update the XML file on the VM at the following path. For high-availability systems, perform this step for both VMs.

```
/u05/app/sharedrepo/dbsystem_name/.ACFS/snaps/vm_vm_name.xml
```

For Oracle Database Appliance hardware models with one socket, for example, Small, modify the XML as follows. Replace xxxxxx in the example with the memory size from step 2 in KiB unit. For example, 67108864 for memory size of 64G.

```
<description>DB System VM</description>
  <memory unit='KiB'>xxxxxx</memory>  <<<
  <currentMemory unit='KiB'>xxxxxx</currentMemory>  <<<
...
  <cpu mode='host-passthrough' check='none'>
    <topology sockets='1' cores='4' threads='1'/>
    <feature policy='force' name='invtsc'/>
    <feature policy='require' name='arch-capabilities'/>
    <numa>
      <cell id='0' cpus='0-3' memory='xxxxxx' unit='KiB'/>  <<<
    </numa>
  </cpu>
```

For Oracle Database Appliance hardware models that have two sockets, for example, Medium, Large, HA, modify the XML as follows. Replace xxxxxx in the example with the memory size from step 2 in KiB unit. For example, 67108864 for 64G memory. Divide the memory size in KB by 2 and use it to replace the yyyyyy value below. For example, if memory is 64G or 67108864KiB, replace yyyyyy with 33554432.

```
<description>DB System VM</description>
  <memory unit='KiB'>xxxxxx</memory>    <<<
  <currentMemory unit='KiB'>xxxxxx</currentMemory>  <<<
...
    <numa>
      <cell id='0' cpus='0-1' memory='yyyyyy' unit='KiB'> <<<
        <distances>
          <sibling id='0' value='10'/>
          <sibling id='1' value='21'/>
        </distances>
      </cell>
      <cell id='1' cpus='2-3' memory='yyyyyy' unit='KiB'> <<<
        <distances>
          <sibling id='0' value='21'/>
          <sibling id='1' value='10'/>
        </distances>
      </cell>
    </numa>
```

5. Use the `virsh` list to confirm that the VM is stopped, then use the `virsh` command to undefine the VM. Run the command on both bare metal system hosts for high-availability deployments.

```
virsh list
virsh undefine vm_name
```

6. Start the DB system:

```
odacli start-dbsystem -n dbsystem_name
```

Bug Number

This issue is tracked with Oracle bug 35360741.

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 creating DB system

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

1. Manually bring the offline resources online:

```
crsctl start res -all
```

2. Run the `odacli create-dbsystem` command.

This issue is tracked with Oracle bug 33784937.

Error in 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 configuring Oracle Data Guard in a multi-user access enabled deployment
  When configuring Oracle Data Guard in a multi-user access enabled deployment, 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 recovery of database
  When recovering an Oracle Database Enterprise Edition High Availability database from node 0, with target node as 1, an error may be encountered.

- Error in configuring Oracle Data Guard
  When running the command `odacli configure-dataguard` on Oracle Database Appliance, an error may be encountered at the `upload password file to standby database` step.

- Error in backup of database
  When backing up a database 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 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 reinstate operation on Oracle Data Guard
  When running the command `odacli reinstate-dataguard` on Oracle Data Guard 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.

- 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.

- 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 configuring Oracle Data Guard in a multi-user access enabled deployment

When configuring Oracle Data Guard in a multi-user access enabled deployment, an error may be encountered.

Problem Description

When you configure Oracle Data Guard in a multi-user access enabled deployment as the `ODA-ADMINISTRATOR` user, the operation may fail at step `Configure Standby database (Standby site)`.

Failure Message

The following error message may be displayed:

```
DCS-10001:Internal error encountered: Unable to populate standby
database metadata.
```

Command Details

```
odacli configure-dataguard
```

Hardware Models

All Oracle Database Appliance hardware models in a multi-user access enabled deployment

Workaround

On a multi-user access enabled deployment, configure Oracle Data Guard with the role of `ODA-DB` and user type as `System`, for example, yoracle as in the following procedure. If the primary system is multi-user access enabled, make sure the primary database is created with this user. If the standby system is multi-user access enabled, make sure the standby database is restored with this user.

1. Obtain the ODA-DB user name on the multi-user access enabled system:

```
[odaadmin@scaoda9l006 ~]$ odacli list-users

ID                                     DCS User Name   OS User
Name    Role(s)     Account Status User Type
-------------------------------------- ---------------
--------------------------------------------------
...
8564aba2-94b9-4607-8c4f-2cda3bdc6cb5    odaadmin        odaadmin
ODA-ADMINISTRATOR   Active    System
d9ae7f70-b294-42c1-881a-5f619ec2a851    yoracle         yoracle
ODA-DB              Active    System
```

2. Switch to the ODA-DB user and configure Oracle Data Guard on the primary and standby systems:

```
[yoracle@oda1 ~] su - yoracle
[yoracle@oda1 ~]$ odacli create-database -n test -u ptest -bn f1 -bp
[yoracle@oda1 ~]$ odacli create-backup -bt Regular-L0 -n test
[yoracle@oda1 ~]$ odacli irestore-database -r backup_report.json -ro
STANDBY -bp -on f1 -u stest
[yoracle@oda1 ~]$ odacli configure-dataguard
Standby site address: oda2
BUI username for Standby site. If Multi-user Access is disabled on
Standby
site, enter 'oda-admin'; otherwise, enter the name of the user who has
irestored the Standby database (default: oda-admin): yoracle
BUI password for Standby site:
Database name for Data Guard configuration: test
Primary database SYS password:
****************************************************************************
****
*************
Data Guard default settings
Primary site network for Data Guard configuration: Public-network
Standby site network for Data Guard configuration: Public-network
Primary database listener port (TCP): 1521
Standby database listener port (TCP): 1521
Transport type: ASYNC
Protection mode: MAX_PERFORMANCE
Data Guard configuration name: ptest_stest
Active Data Guard: disabled
Do you want to edit this Data Guard configuration? (Y/N, default:N):
Standby database's SYS password will be set to Primary database's after
Data
Guard configuration. Ignore warning and proceed with Data Guard
configuration? (Y/N, default:N): y
****************************************************************************
****
*************
Configure Data Guard ptest_stest started
****************************************************************************
****
*************
Step 1: Validate Data Guard configuration request (Primary site)
...
****************************************************************************
****
*************
Step 11: Create Data Guard status (Standby site)
Description: DG Status operation for db test - NewDgconfig
Job ID: e6b13275-9450-4650-8187-b33f2dd6480f
Started May 16, 2023 00:52:33 AM IST
Create Data Guard status
Finished May 16, 2023 00:52:35 AM IST
****************************************************************************
****
*************
```

```
Configure Data Guard ptest_stest completed
************************************************************************
**********
*************
```

Bug Number

This issue is tracked with Oracle bug 35389339.

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 recovery of database

When recovering an Oracle Database Enterprise Edition High Availability database from node 0, with target node as 1, an error may be encountered.

Failure Message

The following error message is displayed:

```
DCS-10001:Internal error encountered: null
```

Command Details

```
# odacli recover-database
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Retry the operation from the target node number of the database.

Bug Number

This issue is tracked with Oracle bug 34785410.

Error in configuring Oracle Data Guard

When running the command `odacli configure-dataguard` on Oracle Database Appliance, an error may be encountered at the `upload password file to standby database` step.

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

```
ORA-16783: cannot resolve gap for database tgtpodpgtb
```

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Manually copy the password file from primary to standby system and retry the command `odacli configure-dataguard` with the `--skip-password-copy` option.

1. On the primary system, locate the password file:

   ```
   srvctl config database -d dbUniqueName | grep -i password
   ```

   If the output is the Oracle ASM directory, then copy the password from the Oracle ASM directory to the local directory.

   ```
   su - grid
   asmcmd
   ASMCMD> pwcopy +DATA/tiger2/PASSWORD/orapwtiger /tmp/orapwtiger
   ```

   If the output is empty, then check the directory at /*dbHome*/dbs/orapw*dbName*. For example, the `orapwd` file can be at `/u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/orapwtiger`

2. Copy the password file to the standby system. Back up the original password file.

   ```
   /u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/orapwtiger
   /u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/orapwtiger.ori
   scp
   ```

```
root@primaryHost:/u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/
orapwtiger
/u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/orapwtiger
```

3. Change the standby `orapwd` file permission.

```
chown -R oracle /u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/
orapwtiger
chgrp oinstall /u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/
orapwtiger
```

4. Check the password file location on the standby system and copy to the Oracle ASM directory, if necessary.

```
srvctl config database -d tiger2 | grep -i password
Password file: +DATA/tiger2/PASSWORD/orapwtiger
```

In this example, copy the password from the local directory to the Oracle ASM directory.

```
su - grid
asmcmd
ASMCMD> pwcopy /u01/app/oracle/product/19.0.0.0/dbhome_1/dbs/
orapwtiger
+DATA/tiger2/PASSWORD/orapwtiger
```

This issue is tracked with Oracle bug 34484209.

Error in backup of database

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

Follow these steps:

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

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

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

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

This issue is tracked with Oracle bug 33181168.

Error in 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 reinstate operation on Oracle Data Guard

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

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

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

Hardware Models

All Oracle Database Appliance hardware models

Workaround

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

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

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

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

This issue is tracked with Oracle bug 32367676.

Error in 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.

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.

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.