

# Oracle® Database Appliance

## Release Notes



Release 19.20 for Linux x86-64

F82544-02

August 2023

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

ORACLE®

Oracle Database Appliance Release Notes, Release 19.20 for Linux x86-64

F82544-02

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# Preface

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

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

## Audience

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

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

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

## Documentation Accessibility

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

### Access to Oracle Support

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

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

# 1

## What's New in This Release

Oracle Database Appliance release 19.20 supports Oracle Database 19c functionality on Oracle Database Appliance hardware models.

### New Features

This release supports Oracle Database Appliance models X9-2-HA, X9-2L, X9-2S, X8-2-HA, X8-2M, X8-2S, X7-2-HA, X7-2M, and X7-2S. You can create a bare metal deployment on Oracle Database Appliance or patch your existing bare metal deployment to Oracle Database Appliance release 19.20. 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 19.20.

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

The following new features are available in this release:

- **Provisioning and Patching of Oracle Database Appliance Bare Metal Deployments**  
This release supports for provisioning of bare metal deployments, and patching of Oracle Database Appliance bare metal deployments from Oracle Database Appliance release 19.16 and later.  
  
Oracle Database Appliance provides support for out of place patching. The patches for Oracle Grid Infrastructure and Oracle Database are available as clone files. It is mandatory to run the `odacli create-prepatchreport` command before you patch the Oracle Database Appliance server and databases. You must fix the errors displayed in the report before you proceed with the patching operation. Ensure that you follow the sequence of steps for patching your appliance as described in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.  
  
See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Provisioning and Patching of Oracle Database Appliance KVM and DB Systems**  
This release supports provisioning of KVM and DB Systems, and patching of DB Systems from Oracle Database Appliance release 19.16 or later.  
  
See the chapter *Patching Oracle Database Appliance* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.
- **Support for Oracle Database 21c and 19c databases on Oracle Database Appliance DB Systems**  
  
This release supports creation of databases of Oracle Database releases 19.20, 19.19, 19.18, 19.17, and 19.16, and 21.8, 21.7, 21.6, and 21.5 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.



- **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.

The following ODACLI commands are deprecated in Oracle Database Appliance release 19.20 and will be deprecated in a future release.

- `odacli update-agentconfig-parameters`
- `odacli update-asr`
- `odacli update-backupconfig`
- `odacli update-cpucore`
- `odacli update-dgstorage`
- `odacli update-network`
- `odacli update-objectstoreswift`
- `odacli update-osconfigurations`
- `odacli update-schedule`

The following are new ODACLI commands in Oracle Database Appliance release 19.20 that provide the same functionality as the above-mentioned deprecated commands.

- `odacli modify-agentconfig-parameters`
- `odacli modify-asr`
- `odacli modify-backupconfig`
- `odacli modify-cpucore`
- `odacli modify-dgstorage`
- `odacli modify-network`
- `odacli modify-objectstoreswift`
- `odacli modify-osconfigurations`
- `odacli modify-schedule`

For the `odacli create-vm` command, the `-os-type` option is desupported 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.

- **Upgrading a Database Manually Using AutoUpgrade**

You can use AutoUpgrade to manually upgrade an earlier release of Oracle database on Oracle Database Appliance.

For more information, see the topic *Upgrading a Database Manually Using Auto Upgrade* in the *Oracle Database Appliance Deployment and User's Guide* for your hardware model.

- **Support for Oracle Enterprise Manager Plug-in with Oracle Database Appliance Release 19.20**

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

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

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

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

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

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

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

The following Oracle Grid Infrastructure and Oracle Database updates (July 2023 Oracle Database Release Update) for bare metal systems are available in this release:

- 19.20.0.0.230720

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 19.20 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 19.20 from the drop down list.

- **Oracle Database Appliance 19.20.0.0.0 Server Patch for Bare Metal Systems:** Use patch 35524739 to update your bare metal deployment to Oracle Database Appliance release 19.20. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.20.
- **Oracle Database Appliance 19.20.0.0.0 Grid Infrastructure Clone for Bare Metal Systems:** Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.20. You also use this patch to perform an initial deployment of Oracle Database Appliance. The bundle contains the latest Oracle Grid Infrastructure components for deployment on an Oracle Database Appliance in the "shipped from factory" state, or an Oracle Database Appliance that has been re-imaged using the

operating system ISO Image. This patch is for all Oracle Database Appliance Hardware Models (bare metal).

- **Oracle Database Appliance 19.20.0.0.0 Database Clone File for Bare Metal Systems:** Use the Oracle Database 19.20.0.0.230720 Software Clone file to create 19.20.0.0.230720 Oracle Database homes. Patch 30403662 provides the database clone for this update. This patch is for all Oracle Database Appliance Hardware Models (bare metal).
- **Oracle Database Appliance KVM Database System Template:** Use the KVM Database System template to deploy KVM-based virtualization for Oracle Database Appliance. Patch 32451228 provides the database clone for this update.
- **Oracle Database Appliance 21.8.0.0.221018 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.
- **Oracle Database Appliance Upgrade Utility for 12.1.2.12, 12.2.1.4, 18.3, 18.5, 18.7, 18.8 OAK/DCS Stack:** Use the Oracle Database Appliance upgrade utility to update your deployment to Oracle Database Appliance release 19.20. You must download the utility to run the first step of Data Preserving Reprovisioning feature. Patch 33594115 provides the utility.

### Related Topics

- Oracle Database Appliance Checklists
- Patching Oracle Database Appliance
- Oracle Database Appliance Command-Line Interface
- Upgrading a Database Manually Using AutoUpgrade
- Viewing Oracle Database Appliance Error Correlation Reports
- About Updating Databases and Database Homes
- About Enabling Linux Kernel Core Extractor for Troubleshooting
- [Known Issues with Oracle Database Appliance in This Release](#)  
The following are known issues deploying, updating, and managing Oracle Database Appliance in this release.
- Enterprise Manager Plugin for Oracle Database Appliance
- Data Preserving Reprovisioning FAQs

# 2

## Component Versions for Oracle Database Appliance

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

- [Component Versions for Oracle Database Appliance X9-2 Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X9-2S, X9-2L, and X9-2-HA.
- [Component Versions for Oracle Database Appliance X8-2 Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X8-2S, X8-2M, and X8-2-HA.
- [Component Versions for Oracle Database Appliance X7-2 Models](#)  
The matrix displays the component versions available for Oracle Database Appliance for X7-2S, X7-2M, and X7-2-HA.

### Component Versions for 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 2-1 Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.20**

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)	2.4.9.0.601	2.4.9.0.601
Oracle Linux	7.9	7.9

**Table 2-1 (Cont.) Component Versions for X9-2-HA, X9-2L, and X9-2S in Oracle Database Appliance Release 19.20**

Component Name	X9-2-HA	X9-2S and X9-2L
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.33-1	8.0.33-1
Kernel	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64
GI_HOME	19.20.0.0.230720	19.20.0.0.230720
DB_HOME	19.20.0.0.230720	19.20.0.0.230720
Oracle Auto Service Request (Oracle ASR)	23.1.0	23.1.0

## 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 2-2 Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.20**

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)	5.1.1.23.r151750	X8-2S: 5.1.1.23.r151750 X8-2M: 5.1.1.23.r151750
BIOS	52100600	X8-2S: 52100600 X8-2M: 52100600
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	7.9	7.9
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.33-1	8.0.33-1

**Table 2-2 (Cont.) Component Versions for X8-2-HA, X8-2M, and X8-2S in Oracle Database Appliance Release 19.20**

Component Name	X8-2-HA	X8-2S and X8-2M
Kernel	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64
GI_HOME	19.20.0.0.230720	19.20.0.0.230720
DB_HOME	19.20.0.0.230720	19.20.0.0.230720
Oracle Auto Service Request (Oracle ASR)	23.1.0	23.1.0

## 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 2-3 Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.20**

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)	5.1.1.23.r151785	5.1.1.23.r151785
BIOS	41130600	41130600
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	7.9	7.9
AHF (Oracle Autonomous Health Framework)	23.2.0	23.2.0
MySQL	8.0.33-1	8.0.33-1
Kernel	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64	kernel-uek-4.14.35-2047.525.1.el7uek.x86_64
GI_HOME	19.20.0.0.230720	19.20.0.0.230720
DB_HOME	19.20.0.0.230720	19.20.0.0.230720

**Table 2-3 (Cont.) Component Versions for X7-2-HA, X7-2M, and X7-2S in Oracle Database Appliance Release 19.20**

<b>Component Name</b>	<b>X7-2-HA</b>	<b>X7-2S and X7-2M</b>
Oracle Auto Service Request (Oracle ASR)	23.1.0	23.1.0

# 3

## Oracle Database Appliance 19.20 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...)
19.20.0.0	For bare metal systems: <ul style="list-style-type: none"><li>• 19.19.0.0</li><li>• 19.18.0.0</li><li>• 19.17.0.0</li><li>• 19.16.0.0</li></ul>



**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: <ul style="list-style-type: none"> <li>• 19.18.0.0</li> <li>• 19.17.0.0</li> <li>• 19.16.0.0</li> <li>• 19.15.0.0</li> </ul>
19.18.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.17.0.0</li> <li>• 19.16.0.0</li> <li>• 19.15.0.0</li> <li>• 19.14.0.0</li> </ul>
19.17.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.16.0.0</li> <li>• 19.15.0.0</li> <li>• 19.14.0.0</li> <li>• 19.13.0.0</li> </ul>
19.16.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.15.0.0</li> <li>• 19.14.0.0</li> <li>• 19.13.0.0</li> <li>• 19.12.0.0</li> </ul>
19.15.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.14.0.0</li> <li>• 19.13.0.0</li> <li>• 19.12.0.0</li> <li>• 19.11.0.0</li> </ul>
19.14.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.13.0.0</li> <li>• 19.12.0.0</li> <li>• 19.11.0.0</li> <li>• 19.10.0.0</li> </ul>
19.13.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.12.0.0</li> <li>• 19.11.0.0</li> <li>• 19.10.0.0</li> <li>• 19.9.0.0</li> </ul> For virtualized platform deployments: <ul style="list-style-type: none"> <li>• 19.9.0.0</li> <li>• 19.8.0.0</li> </ul>
19.12.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.11.0.0</li> <li>• 19.10.0.0</li> <li>• 19.9.0.0</li> <li>• 19.8.0.0</li> </ul>

**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: <ul style="list-style-type: none"> <li>• 19.10.0.0</li> <li>• 19.9.0.0</li> <li>• 19.8.0.0</li> <li>• 19.7.0.0</li> </ul>
19.10.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.9.0.0</li> <li>• 19.8.0.0</li> <li>• 19.7.0.0</li> <li>• 19.6.0.0</li> </ul>
19.9.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.8.0.0</li> <li>• 19.7.0.0</li> <li>• 19.6.0.0</li> <li>• 19.5.0.0</li> </ul> For virtualized platform deployments: <ul style="list-style-type: none"> <li>• 19.8.0.0</li> </ul>
19.8.0.0	For bare metal systems: <ul style="list-style-type: none"> <li>• 19.7.0.0</li> <li>• 19.6.0.0</li> <li>• 19.5.0.0</li> </ul> For virtualized platform deployments: <ul style="list-style-type: none"> <li>• 18.8.0.0</li> </ul>
19.7.0.0	<ul style="list-style-type: none"> <li>• 19.6.0.0</li> <li>• 19.5.0.0</li> </ul>
19.6.0.0	<ul style="list-style-type: none"> <li>• 18.8.0.0</li> </ul>
18.8.0.0	<ul style="list-style-type: none"> <li>• 18.7.0.0</li> <li>• 18.5.0.0</li> <li>• 18.3.0.0</li> </ul>
18.7.0.0	<ul style="list-style-type: none"> <li>• 18.5.0.0</li> <li>• 18.3.0.0</li> </ul>
18.5.0.0	<ul style="list-style-type: none"> <li>• 18.3.0.0</li> </ul>
18.3.0.0	<ul style="list-style-type: none"> <li>• 12.2.1.4.0</li> <li>• 12.2.1.3.0</li> <li>• 12.2.1.2.0</li> <li>• 12.1.2.12</li> </ul>
12.2.1.4.0	<ul style="list-style-type: none"> <li>• 12.2.1.3.0</li> <li>• 12.2.1.2.0</li> <li>• 12.1.2.12</li> </ul>
12.2.1.3.0	<ul style="list-style-type: none"> <li>• 12.2.1.2.0</li> <li>• 12.1.2.12</li> </ul>
12.2.1.2.0	<ul style="list-style-type: none"> <li>• 12.1.2.12</li> </ul>

**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	<ul style="list-style-type: none"> <li>• 12.1.2.11</li> <li>• 12.1.2.10</li> <li>• 12.1.2.9</li> <li>• 12.1.2.8</li> </ul>
12.1.2.11	<ul style="list-style-type: none"> <li>• 12.1.2.10</li> <li>• 12.1.2.9</li> <li>• 12.1.2.8</li> <li>• 12.1.2.7</li> </ul>
12.1.2.10	<ul style="list-style-type: none"> <li>• 12.1.2.9</li> <li>• 12.1.2.8</li> <li>• 12.1.2.7</li> <li>• 12.1.2.6</li> </ul>
12.1.2.9	<ul style="list-style-type: none"> <li>• 12.1.2.8</li> <li>• 12.1.2.7</li> <li>• 12.1.2.6</li> </ul>
12.1.2.5	12.1.2.0 to 12.1.2.4
12.1.2.0.0	2.2.0.0.0 to 2.10.0.0.0
2.2.0.0.0	2.1.0.3.1 or earlier

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

**Related Topics**

- Patching Oracle Database Appliance

## Minimum Software Version Requirements

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

You can provision Oracle Database Appliance release 19.20 on Oracle Database Appliance bare metal systems. You can patch your bare metal systems to Oracle Database Appliance release 19.20 from Oracle Database Appliance release 19.16 or later. You can also provision and patch Oracle Database Appliance DB systems on KVM to release 19.20.

## 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 19.20 from the release list.

**Table 3-2 Oracle Database Appliance Patches for Oracle Database Appliance Release 19.20**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance Server Patch for Bare Metal Systems	<a href="#">35524739</a>	Use the server patch to update your deployment to Oracle Database Appliance release 19.20. You must download the Server Patch, Oracle Grid Infrastructure clone file, and the Oracle Database clone file to update your deployment to release 19.20.	Patching Oracle Database Appliance
Oracle Database Appliance Grid Infrastructure Clone for Bare Metal Systems	<a href="#">30403673</a>	Use patch 30403673 to update your deployment to Oracle Database Appliance release 19.20. 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 19.20.	Provisioning Oracle Database Appliance Software
Oracle Database Appliance Database Clone 19.20.0.0.230720 for Bare Metal Systems	<a href="#">30403662</a>	Use Oracle Database Appliance Database Clone 19.20.0.0.230720 for ODACLI/DCS stack to create 19.20 database homes for the ODACLI/DCS stack.	Updating Oracle Database Appliance Repository with Database Clone Files
Oracle Database Appliance ISO Image	<a href="#">30403643</a>	Use the ISO image to re-image the operating system for Oracle Database Appliance 19.20. Re-imaging a server installs the new operating system on the local disks on that server.	Re-imaging Oracle Database Appliance
Oracle Database Appliance KVM DB System Template	<a href="#">32451228</a>	Use the KVM DB System template to deploy KVM-based virtualization for Oracle Database Appliance 19.20.	Managing DB Systems in KVM Deployment

**Table 3-2 (Cont.) Oracle Database Appliance Patches for Oracle Database Appliance Release 19.20**

Patch Type	Patch Number	Description	Resources
Oracle Database Appliance 21.8.0.0.221018 GI Clone for DB Systems	<a href="#">33152235</a>	Use the Oracle Grid Infrastructure 21c clone file to deploy Oracle Grid Infrastructure 21c on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance 21.8.0.0.221018 Database Clone for DB Systems	<a href="#">33152237</a>	Use the Oracle Database Appliance 21c clone file to deploy Oracle Database 21c database on DB system.	Managing DB Systems in KVM Deployment
Oracle Database Appliance Upgrade Utility for 12.1.2.12, 12.2.1.4, 18.3, 18.5, 18.7, 18.8 OAK/DCS Stack	<a href="#">33594115</a>	Use the Oracle Database Appliance upgrade utility to update your deployment to Oracle Database Appliance release 19.20. You must download the utility to run the first step of Data Preserving Reprovisioning feature.	Upgrading Oracle Database Appliance Using Data Preserving Reprovisioning

# 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 server patching](#)  
When patching the Oracle Database Appliance server, an error may be encountered.
- [Error in running prechecks for server patching](#)  
When patching the Oracle Database Appliance server, an error may be encountered.
- [Error in database home patching](#)  
When patching the database home, an error may be encountered.
- [Error in generating core dump and LKCE report during patching](#)  
When patching the database home, an error may be encountered.
- [Error in running prechecks for patching](#)  
When patching the Oracle Database Appliance server, an error may be encountered.
- [Error in running jobs](#)  
When upgrading a database, 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.
- [Error in server patching](#)  
When patching the Oracle Database Appliance server, an error may be encountered.
- [Error in server patching during DB system patching](#)  
When patching the server during DB system patching to Oracle Database Appliance release 19.15, an error may be encountered.

- [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 `odaupgradeutil`](#)  
When running `odaupgradeutil` in the Data Preserving Re provisioning process, if there are additionally configured services, then databases cannot be detached.
- [Error in restore node process in Data Preserving Re provisioning](#)  
In the Data Preserving Re provisioning process, during node restore, an error may be encountered.
- [Error in restore node process in Data Preserving Re provisioning](#)  
In the Data Preserving Re provisioning process, during node restore, an error may be encountered.
- [Error messages in log entries in Data Preserving Re provisioning](#)  
In the Data Preserving Re provisioning process, during node restore, the log entries may display error messages though the overall status of the job is displayed as `SUCCESS`.
- [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 19.20, the `odacli update-dbhome` command may fail.
- [Error in patching prechecks report](#)  
The patchung prechecks report may display an error.
- [Error message displayed even when patching Oracle Database Appliance is successful](#)  
Although patching of Oracle Database Appliance was successful, an error message may be displayed.
- [Server status not set to Normal when patching](#)  
When patching Oracle Database Appliance, an error is encountered.
- [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 server patching

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

### Failure Message

When the `odacli update-server` command is run, the following error message may be displayed:

```
DCS-10057:Failed to run command systemctl restart kdump
```

### Command Details

```
# odacli update-server
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

1. Update the kernel version to V4.14.35-2047.524.2 or later as follows:

- a. Check the current version of the kernel.

```
# uname -r
```

- b. If the current kernel version is earlier than V4.14.35-2047.524.2, then update the kernel on both nodes.

```
rpm -ivh
```

- c. Locate the kernel RPM on the local system at `/opt/oracle/oak/pkgrepos/os/19.20/osrpms`. For example:

```
rpm -ivh
/opt/oracle/oak/pkgrepos/os/19.20/osrpms/kernel-
uek-4.14.35-2047.524.5.el7uek.x86_64.rpm
```



- d. Restart the nodes.
  2. Modify the `grub.conf` file and run `grub2-mkconfig` as follows:
    - a. Edit the `/etc/default/grub.conf` file and modify the `crashkernel` value:

```
"crashkernel=1G-64G:512M, 64G-:1024M"
```
    - b. Run `grub2-mkconfig`:

```
grub2-mkconfig -o /boot/efi/EFI/redhat/grub.cfg
```
    - c. Restart the nodes.
  3. Run the `odacli update-server` command:

```
/opt/oracle/dcs/bin/odacli update-server -v 19.20
```

### Bug Number

This issue is tracked with Oracle bug 35446758.

## Error in running prechecks for server patching

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

### Problem Description

When patching the database home on an Oracle Database Appliance that has Oracle Data Guard configured, an error message may be displayed.

### Failure Message

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

```
DCS-10001:Internal error encountered: One or more pre-checks failed.  
Run describe-prepatchreport for more details.
```

### Command Details

```
# odacli create-prepatchreport
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

If your database home has databases configured with Oracle Data Guard and the protection mode is set to MAX PROTECTION or MAX AVAILABILITY, then patch the databases separately.

For the databases, run the prechecks and update the database as follows:

```
odacli create-prepatchreport -dbid databaseId -to destination_dbhomeid -db
odacli update-database -i databaseId -to destination_dbhomeid
```

When any password-related error occurs on the standby system, copy the password file from the primary to the standby database.

### Bug Number

This issue is tracked with Oracle bug 35516049.

## Error in database home patching

When patching the database home, an error may be encountered.

### Problem Description

When patching the database home on an Oracle Database Appliance that has Oracle Data Guard configured, an error message may be displayed.

### Failure Message

If your database home has databases configured with Oracle Data Guard and the protection mode is set to MAX PROTECTION or MAX AVAILABILITY, then the following error message may be displayed when you patch the database home:

```
PRCD-1199: The stop request on instance {0} of standby database {1} was
rejected to prevent termination of the primary database
```

### Command Details

```
# odacli update-database -i databaseId -to destination_dbhomeid
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

If your database home has databases configured with Oracle Data Guard and the protection mode is set to MAX PROTECTION or MAX AVAILABILITY, then set the protection mode to MAX PERFORMANCE.

1. Before patching the DB home, for each associated database with Oracle Data Guard configured with protection mode MAX PROTECTION or MAX AVAILABILITY, run the following DGMGRL command:

```
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXPERFORMANCE;
```

2. Patch the DB home.

3. After the DB home patching is completed, set the Oracle Data Guard protection mode as needed. Set to MAX AVAILABILITY:

```
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXAVAILABILITY;
```

Or, set to MAX PROTECTION:

```
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXAVAILABILITY;  
DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXPROTECTION;
```

### Bug Number

This issue is tracked with Oracle bug 35332834.

## Error in generating core dump and LKCE report during patching

When patching the database home, an error may be encountered.

### Problem Description

The core dump and LKCE reports may not be generated for patched environment. In the console log, the entries for `mdraid` cannot be found and `dracut-initqueue timeout` entries are found.

### Failure Message

The following error message may be displayed:

```
Warning: dracut-initqueue timeout - starting timeout scripts
```

### Command Details

```
# odacli update-server
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Regenerate the `kdump` `initramfs` after the node restarts after patching.

```
# touch /etc/kdump.conf  
# systemctl restart kdump
```

### Bug Number

This issue is tracked with Oracle bug 35661634.

## 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_pdb` 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_pdb is not set within best practice thresholds
```

### Command Details

```
# odacli create-prepatchreport
```

### Hardware Models

All Oracle Database Appliance high-availability hardware models

### 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$pdb where name not like 'PDB$SEED' and
open_mode like 'READ WRITE';
```

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

**3. Set the `target_pdb` 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_pdb` must be set to 9 (1x10 - 1). Note that for Oracle RAC databases, the `target_pdb` parameter must be set on both nodes.**

```
SQL> alter system set target_pdb=<10 x number_of_open_pdb-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 running jobs

When upgrading a database, an error may be encountered.

**Problem Description**

When running jobs, the DCS agent may not be registered correctly during bootstrap and the job may fail with error DCS-10058.

### Failure Message

The following error message is displayed:

```
DCS-10058:DCS Agent is not running on all nodes.
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

1. Restart the DCS agent service with the following command on both nodes in sequential order, starting from the first node:

```
# systemctl restart initdcsagent
```

2. Retry the command that failed earlier.

### Bug Number

This issue is tracked with Oracle bug 35056432.

## 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 Provisioning 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.

## Error in server patching

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

### Problem Description

When converting Oracle Clusterware resource type on KVM virtual machines, an error message may be displayed.

### Failure Message

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

```
DCS-10001:Internal Error encountered: (...), caused by:  
CRS-2510: Resource 'ora.data.acfs_resource.acfs' used in dependency 'hard'
```



```
does not exist or is not registered.  
CRS-2514: Dependency attribute specification 'hard' is invalid in  
resource  
'vm_resource.kvm'  
CRS-4000: Command Add failed, or completed with errors.
```

### Command Details

```
# odacli update-server
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

1. List and identify DB systems with `FAILED` status:

```
# odacli list-dbsystems
```

2. Delete the DB systems with `FAILED` status:

```
# odacli delete-dbsystem -n dbsystem_name -f
```

3. Retry the command that failed earlier.

### Bug Number

This issue is tracked with Oracle bug 35060579.

## Error in server patching during DB system patching

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

The following error message is displayed:

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

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Retry server patching on the DB system.

This issue is tracked with Oracle bug 34153158.

## 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 `odaupgradeutil`

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

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

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

This issue is tracked with Oracle bug 33593287.

## 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 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 19.20, if the Security Technical Implementation Guidelines (STIG) V1R2 is already deployed, then when you patch to 19.20 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 19.20, 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 19.20.0.0.0 -f
```

This issue is tracked with Oracle bug 33144170.

## Error in patching prechecks report

The patching 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 19.20.0.0.0  
^[[ADCS-10008:Failed to update DCScomponents: 19.20.0.0.0  
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 a DB system](#)  
When creating a DB system, an error may be encountered.
- [Error in creating vnetwork on a DB System](#)  
When creating a vnetwork on a DB system, an error may be encountered.
- [Error in detaching vnetwork on a DB System](#)  
When detaching a vnetwork on a DB system, an error may be encountered.
- [Error in running odacli modify-dbsystem on a DB System](#)  
When running the `odacli modify-dbsystem` command on a DB system, an error may be encountered.
- [Error in attaching vnetwork on a DB System](#)  
When attaching a vnetwork that was previously attached on a DB system, an error may be encountered.
- [Error in DB System creation](#)  
When creating a DB system with mixed-case letters in the `oracle` user name, 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 appliance after running `cleanup.pl`.
- [Error when upgrading database from 11.2.0.4 to 12.1 or 12.2](#)  
When upgrading databases from 11.2.0.4 to 12.1 or 12.2, an error is encountered.
- [Error when upgrading 12.1 single-instance database](#)  
When upgrading 12.1 single-instance database, a job failure error is encountered.
- [Error encountered after running cleanup.pl](#)  
Errors encountered in running `odacli` commands after running `cleanup.pl`.
- [Errors in clone database operation](#)  
Clone database operation fails due to errors.
- [Clone database operation fails](#)  
For Oracle Database release 12.1 databases, the database clone creation may fail because the default compatible version from Oracle binaries was set to 12.0.0.0

## Error in creating 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 in creating vnetwork on a DB System

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

### Problem Description

When creating a vnetwork with name length of 14 or 15 without providing a bridge name, an error message may be displayed.

### Failure Message

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

```
Device xxxxx does not seem to be present, delaying initialization.
```



### Command Details

```
# odacli create-vnetwork
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Use a vnetwork name with 13 or less characters or provide a bridge name with less than 15 characters

### Bug Number

This issue is tracked with Oracle bug 35668001.

## Error in detaching vnetwork on a DB System

When detaching a vnetwork on a DB system, an error may be encountered.

### Failure Message

The following error message may be displayed:

```
DCS-10001:Internal error encountered: Could not delete network  
'dbs_vlan': null.
```

The dbvm agent logs may contain the following entries:

```
PRCR-1028 : Failed to remove resource  
ora.SCAN_LISTENER2_SCAN1_NET2.lsnr  
PRCR-1072 : Failed to unregister resource  
ora.SCAN_LISTENER2_SCAN1_NET2.lsnr  
CRS-2586: Deletion of a running resource  
'ora.SCAN_LISTENER2_SCAN1_NET2.lsnr' requires the force option  
2023-07-21 03:28:28,092 ERROR [Remove listeners for network  
{dbs_vlan}] [] c.o.d.a.r.s.n.NetworkLifecycleUtils:  
PRCR-1028 : Failed to remove resource  
ora.SCAN_LISTENER2_SCAN1_NET2.lsnr
```

### Command Details

```
# odacli modify-dbsystem
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Run the `odacli modify-dbsystem` command again.

### Bug Number

This issue is tracked with Oracle bug 35628863.

## Error in running `odacli modify-dbsystem` on a DB System

When running the `odacli modify-dbsystem` command on a DB system, an error may be encountered.

### Failure Message

The following error message may be displayed:

```
DCS-10001:Internal error encountered: Invalid nodeId, the format is as  
'node_#'.
```

### Command Details

```
# odacli modify-dbsystem
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Do not run the `odacli modify-dbsystem` command in a failed state.

### Bug Number

This issue is tracked with Oracle bug 35630118.

## Error in attaching vnetwork on a DB System

When attaching a vnetwork that was previously attached on a DB system, an error may be encountered.

### Failure Message

The following error message may be displayed:

```
DCS-10045:Validation error encountered: The scan name specified is not  
consistent with the corresponding network {dbs_vlan} on node 1.
```

### Command Details

```
# odacli modify-dbsystem
```

### Hardware Models

All Oracle Database Appliance hardware models

**Workaround**

None. Contact Oracle Support.

**Bug Number**

This issue is tracked with Oracle bug 35630911.

## Error in DB System creation

When creating a DB system with mixed-case letters in the `oracle` user name, an error may be encountered.

**Failure Message**

The following error message may be displayed in the DBCA trace file:

```
ORA-15260: permission denied on ASM disk group
```

**Command Details**

```
# odacli create-dbsystem
```

**Hardware Models**

All Oracle Database Appliance hardware models

**Workaround**

Do not specify mixed-case letters in the `oracle` user name when you create a DB system.

**Bug Number**

This issue is tracked with Oracle bug 35647573.

## 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 appliance after running `cleanup.pl`.

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

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

### Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

### Workaround

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

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

This issue is tracked with Oracle bug 32707387.

## Error when upgrading database from 11.2.0.4 to 12.1 or 12.2

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

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

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

### Hardware Models

All Oracle Database Appliance bare metal deployments

### Workaround

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

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

This issue is tracked with Oracle bug 31125985.

## Error when upgrading 12.1 single-instance database

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

### Hardware Models

All Oracle Database Appliance hardware models bare metal deployments

### Workaround

Use the following workaround:

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

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

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

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

This issue is tracked with Oracle bugs 31202775 and 31214657.

## Error encountered after running cleanup.pl

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

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

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

### Hardware Models

All Oracle Database Appliance hardware models for bare metal deployments

### Workaround

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

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

This issue is tracked with Oracle bug 29038717.

## Errors in clone database operation

Clone database operation fails due to errors.

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

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

### Hardware Models

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

### Workaround

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

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

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

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

## Clone database operation fails

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

### Hardware Models

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

### Workaround

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

1. Change the parameter value.

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

2. Shut down the database.

```
SQL> SHUTDOWN IMMEDIATE
```

3. Start the database.

```
SQL> Startup
```

4. Verify the parameter for the new value.

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

This issue is tracked with Oracle bug 30309914.

## Known Issues When Managing Oracle Database Appliance

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

- [Error in 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 scaling up database](#)  
When scaling up an Oracle Database Enterprise Edition database with High Availability enabled or disabled, if the job is run on the node where the database is not running, an error may be encountered.
- [Error in switchover operation on Oracle Data Guard](#)  
When running the `odacli switchover-dataguard` command, an error may be encountered.
- [Error in Oracle Data Guard operations on Oracle Database Appliance](#)  
When running switchover, failover, or reinstate operations on Oracle Data Guard, 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 configuring Oracle Data Guard](#)  
After upgrading the standby database from release 12.1 to 19.14, the following error message may be displayed at step `Enable redo transport and apply`.
- [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.
- [Error in creating Oracle Data Guard status](#)  
When configuring Oracle Active Data Guard on Oracle Database Appliance, an error is encountered.
- [Error in Reinstating Oracle Data Guard](#)  
When reinstating Oracle Data Guard on Oracle Database Appliance, an error is encountered.
- [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 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 scaling up database

When scaling up an Oracle Database Enterprise Edition database with High Availability enabled or disabled, if the job is run on the node where the database is not running, an error may be encountered.

### Failure Message

The following error message is displayed:

```
DCS-10001:Internal error encountered: Timeout waiting for event 'Check database dbname is running' after 300000 ms.
```

### Command Details

```
# odacli create-dbsystem
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Run the job on the node where the database is running.

### Bug Number

This issue is tracked with Oracle bug 35695194.

## Error in switchover operation on Oracle Data Guard

When running the `odacli switchover-dataguard` command, an error may be encountered.

### Problem Description

The `odacli switchover-dataguard` job sometimes fails at step "Postcheck switchover DataGuard" but switchover operation is in fact successful.

### Failure Message

The following error message is displayed:

```
DCS-10001:Internal error encountered: Index: 0, Size: 0
```

### Command Details

```
# odacli switchover-dataguard
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Ignore the error. Verify from DGMGRL to see if Oracle Data Guard switchover operation was successful.

```
DGMGRL> show configuration;
```

Run `odacli list-dataguardstatus` to update Oracle Data Guard status metadata.

### Bug Number

This issue is tracked with Oracle bug 35675411.

## Error in Oracle Data Guard operations on Oracle Database Appliance

When running switchover, failover, or reinstate operations on Oracle Data Guard, an error may be encountered.

### Problem Description

On Oracle Database Appliance high-availability deployments, for databases with dbType SI and RACOne, the `switchover-dataguard`, `failover-dataguard`, and

reinstate-dataguard job may fail at step "Check if DataGuard config is updated" after a waiting time.

### Failure Message

The following error message is displayed:

```
DCS-10001:Internal error encountered: Unable enqueue Id and update DgConfig.
```

### Command Details

```
# odacli switchover-dataguard
# odacli failover-dataguard
# odacli reinstate-dataguard
```

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

Ignore the error. Verify from DGMGRL to see if Oracle Data Guard switchover, failover, or reinstate operation was successful.

```
DGMGRL> show configuration;
```

Run `odacli list-dataguardstatus` to update Oracle Data Guard status metadata.

### Bug Number

This issue is tracked with Oracle bug 35676752.

## 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

Oracle Database Appliance hardware models with DB system and database version earlier than Oracle Database Appliance release 19.15

### 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/orapwdbName`. 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 archive log 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 configuring Oracle Data Guard

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

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

### Hardware Models

All Oracle Database Appliance hardware models

### Workaround

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

```
DGMGRL> Enable database tgpstdcnvo  
Enabled.
```

This issue is tracked with Oracle bug 33749492.

## 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.



## Error in creating Oracle Data Guard status

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

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

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

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

### Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

### Workaround

Follow these steps:

1. On the standby system, run the following:

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

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

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

```

```

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

```

This issue is tracked with Oracle bug 32719173.

## Error in Reinstating Oracle Data Guard

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

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

```
Unable to reinstate Dg. Reinstatement job was executed within 24hrs after failover job.
```

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

```
DGMGRL> Reinstating database "xxxx",
please wait...
Oracle Clusterware is restarting database "xxxx" ...
Connected to "xxxx"
Continuing to reinstate database "xxxx" ...
Error: ORA-16653: failed to reinstate database
```

### Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

### Workaround

Follow these steps:

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

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

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

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

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

This issue is tracked with Oracle bug 31884506.

## Failure in Reinstating Oracle Data Guard

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

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

Message:

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

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

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

### Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

### Workaround

Follow these steps:

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

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

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

This issue is tracked with Oracle bug 32047967.

## Error in updating Role after Oracle Data Guard operations

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

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

### Hardware Models

All Oracle Database Appliance hardware models with Oracle Data Guard configuration

### Workaround

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

This issue is tracked with Oracle bug 31378202.

## 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.