

## Introduction

This document contains information that was not included in the platform-specific or product-specific documentation for this release. This document supplements *Oracle Database Readme*.

This document may be updated after it is released. You can check for updates to this document and view other Oracle documentation at

<https://docs.oracle.com/en/database/index.html>

This document contains the following topics:

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## Certification Information

The latest certification information for Oracle Database 12c Release 2 (12.2) is available on My Oracle Support at <https://support.oracle.com/>

## Certification Information for Oracle Linux 8 and Red Hat Enterprise Linux 8 on Linux x86-64

Oracle Database 12c Release 2 (12.2) supports Oracle Linux 8.2 and Red Hat Enterprise Linux 8.2 on Linux x86-64 systems.

## Supported Oracle Linux 8 and Red Hat Enterprise Linux 8 Distributions for x86-64

Use the following information to check supported Oracle Linux 8 and Red Hat Enterprise Linux 8 distributions on Oracle Database 12c Release 2 (12.2).

- Supported Oracle Linux 8 Distributions for 12.2 on x86-64
- Supported Red Hat Enterprise Linux 8 Distributions for 12.2 on x86-64

## Installing Oracle Database 12c Release 2 (12.2) on Oracle Linux 8 and Red Hat Enterprise Linux 8

To install Oracle Database 12c Release 2 (12.2) on Oracle Linux 8.2 and Red Hat Enterprise Linux 8.2, apply the `DBPSU 12.2.0.1.211019 patch 33261817` using the following procedure:

1. Download the Oracle Database 12c Release 2 (12.2) software binaries from the Oracle Software Delivery Cloud portal (edelivery):  
<https://edelivery.oracle.com/>
2. Unzip the 12.2.0.1.0 database binaries.
3. Set the environment variable `CV_ASSUME_DISTID` to `OL7`.  

```
$ export CV_ASSUME_DISTID=OL7
```
4. Perform a software-only installation of Oracle Database 12c Release 2 (12.2):  
Running Oracle Universal Installer to Install Oracle Database
5. Download and apply the `DBPSU 12.2.0.1.211019 patch 33261817` from My Oracle Support:  
<https://support.oracle.com/>

### Note:

Use OPatch utility version 12.2.0.1.27 or later to apply the `DBPSU 12.2.0.1.211019 patch`. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

6. Create a database using Oracle Database Configuration Assistant (Oracle DBCA).

## Installing Oracle RAC 12c Release 2 (12.2) on Oracle Linux 8 and Red Hat Enterprise Linux 8

To install Oracle RAC 12c Release 2 (12.2) on Oracle Linux 8.2 or Red Hat Enterprise Linux 8.2, first install Oracle Grid Infrastructure 19c release update (RU) 19.13 or later followed by Oracle RAC 12c Release 2 (12.2).

1. Download the 19.3 Oracle Grid Infrastructure software binaries from Oracle Technology Network (OTN):

<https://www.oracle.com/database/technologies/oracle19c-linux-downloads.html>

2. Unzip the 19.3 Grid Infrastructure binaries.
3. Apply the 19.13 or later release updates (RUs) during the Oracle Grid Infrastructure installation or upgrade process using 19.13GIRU Patch 33182768:

```
$ ./gridSetup.sh -applyRU 19.13GIRU_Patch_33182768_location
```

The Oracle Grid Infrastructure installation is now complete.

4. Repeat steps 1 to 6 from the preceding section to install Oracle Database 12c Release 2 (12.2).

## Installing Oracle Database Client 12c Release 2 (12.2) on Oracle Linux 8 or Red Hat Enterprise Linux 8

Oracle Database Client 12c Release 2 (12.2) supports both 32-bit and 64-bit versions on Oracle Linux 8.2 and Red Hat Enterprise Linux 8.2.

To install Oracle Database Client on Oracle Linux 8.2 or Red Hat Enterprise Linux 8.2:

1. Set the environment variable `CV_ASSUME_DISTID` to `OL7`.

```
$ export CV_ASSUME_DISTID=OL7
```

2. Install Oracle Database Client 12.2 using the standard procedure: Running Oracle Universal Installer to Install Oracle Database Client

## Installing Oracle Database 12c Release 2 (12.2) on Oracle Linux 8.8

Oracle recommends that you install Oracle Database 12c Release 2 `DBPSU 12.2.0.1.240716 patch 36650048` on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

 **Note:**

Oracle Grid Infrastructure Release 12c Release 2 (12.2.0.1) is not supported on Oracle Linux 8. To install Oracle Real Applications Clusters (Oracle RAC) 12c Release 2 (12.2.0.1) on Oracle Linux 8, first install Oracle Grid Infrastructure 19c and then install Oracle RAC 12.2.0.1.

To install Oracle Database 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7, apply the `DBPSU 12.2.0.1.240716 patch 36650048` using the following procedure:

**Installing Oracle RAC 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7**

1. Download the 19.3 Oracle Grid Infrastructure software binaries from the Oracle website.
2. Unzip the 19.3 Grid Infrastructure binaries.
3. Copy the OPatch utility version 12.2.0.1.42 or later. It is available at My Oracle Support patch 6880880 by selecting the 19.0.0.0 release.
4. Install Oracle Grid Infrastructure by running `gridSetup.sh` with `applyRU` to create and install Oracle Grid Infrastructure 19.24 by running the following command from the 19.3 GI home:

```
gridSetup.sh -applyRU 19.24 GIRU Patch 36582629 location
```

5. Download the Oracle Database 12c Release 2 (12.2) software binaries from the Oracle website.
6. Unzip the 12.2.0.1.0 database binaries.
7. Set the environment variable `CV_ASSUME_DISTID` to OL7:

```
$ export CV_ASSUME_DISTID=OL7
```

8. Perform a software-only installation of Oracle Database 12c Release 2 (12.2): Running Oracle Universal Installer to Install Oracle Database
9. Download and apply the `DBPSU 12.2.0.1.240716 patch 36650048` from My Oracle Support:  
<https://support.oracle.com/>

 **Note:**

Use OPatch utility version 12.2.0.1.42 or later to apply the `DBPSU 12.2.0.1.240716 patch`. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

10. Create a database using Oracle Database Configuration Assistant (Oracle DBCA).

## Installing Oracle Restart with Single-instance Oracle Database 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7

1. Download the 19.3 Oracle Grid Infrastructure software binaries from the Oracle website.
2. Unzip the 19.3 Grid Infrastructure binaries.
3. Copy the OPatch utility version 12.2.0.1.42 or later. It is available at My Oracle Support patch 6880880 by selecting the 19.0.0.0.0 release.
4. Install Oracle Grid Infrastructure by running `gridSetup.sh` with `applyRU` to create and install Oracle Grid Infrastructure 19.24 by running the following command from the 19.3 GI home:

```
gridSetup.sh -applyRU 19.24 GIRU Patch 36582629 location
```

5. Download the Oracle Database 12c Release 2 (12.2) software binaries from the Oracle website.
6. Unzip the 12.2.0.1.0 database binaries.
7. Set the environment variable `CV_ASSUME_DISTID` to `OL7`:

```
$ export CV_ASSUME_DISTID=OL7
```

8. Perform a software-only installation of Oracle Database 12c Release 2 (12.2): Running Oracle Universal Installer to Install Oracle Database
9. Download and apply the `DBPSU 12.2.0.1.240716 patch 36650048` from My Oracle Support:  
<https://support.oracle.com/>

### Note:

Use OPatch utility version 12.2.0.1.42 or later to apply the `DBPSU 12.2.0.1.240716` patch. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

10. Create a database using Oracle DBCA.

## Installing Oracle Single Instance Database 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7

1. Download the Oracle Database 12c Release 2 (12.2) software binaries from the Oracle website.
2. Unzip the 12.2.0.1.0 database binaries.
3. Set the environment variable `CV_ASSUME_DISTID` to `OL7`.

```
$ export CV_ASSUME_DISTID=OL7
```

4. Perform a software-only installation of Oracle Database 12c Release 2 (12.2):

## Running Oracle Universal Installer to Install Oracle Database

5. Download and apply the DBPSU 12.2.0.1.240716 patch 36650048 from My Oracle Support:  
<https://support.oracle.com/>

### Note:

Use OPatch utility version 12.2.0.1.42 or later to apply the DBPSU 12.2.0.1.240716 patch. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

6. Create a database using Oracle DBCA.

## Installing Oracle Database Client 64-bit 12c Release 2 (12.2) on Oracle Linux 8.8

Oracle recommends that you install Oracle Database Client 64-bit 12c Release 2 (12.2) or later on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

Oracle Database Client 12c Release 2 (12.2) supports 64-bit version on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

To install Oracle Database Client on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

### Installing Oracle Database Client 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7

1. Set the environment variable CV\_ASSUME\_DISTID to OL7:

```
$ export CV_ASSUME_DISTID=OL7
```

2. Install Oracle Database Client 12.2 using the standard procedure:  
Running Oracle Universal Installer to Install Oracle Database Client
3. Download and apply the DBPSU 12.2.0.1.240716 patch 36650048 from My Oracle Support:  
<https://support.oracle.com/>

### Note:

Use OPatch utility version 12.2.0.1.42 or later to apply the DBPSU 12.2.0.1.240716 patch. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

# Installing Oracle Database Global Service Manager 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7

Oracle Database Global Service Manager 12c Release 2 (12.2) supports 64-bit version on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

To install Oracle Database Global Service Manager on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

1. Set the environment variable `CV_ASSUME_DISTID` to OL7:

```
$ export CV_ASSUME_DISTID=OL7
```

2. Install Oracle Database Global Service Manager 12.2 using the standard procedure.
3. Download and apply the `DBPSU 12.2.0.1.240716 patch 36650048` from My Oracle Support:  
<https://support.oracle.com/>

## Note:

Use OPatch utility version 12.2.0.1.42 or later to apply the `DBPSU 12.2.0.1.240716 patch`. Oracle recommends that you use the latest released OPatch version for 12c, which is available for download from My Oracle Support patch 6880880 by selecting the 12.2.0.1.0 release.

## Unsupported Products for Oracle Database 12c Release 2 (12.2)

The following products are not supported on Oracle Database 12c Release 2 (12.2):

### Oracle ACFS

Oracle Real Applications Cluster (Oracle RAC) 12c Release 2 (12.2) on 19c Oracle Automatic Storage Management Cluster File System (Oracle ACFS) is not supported on Oracle Linux 8.2 and Red Hat Enterprise Linux 8.2.

### Oracle Enterprise Manager Database Express

Adobe Flash has reached end-of-life (EOL) support. As such, Oracle Enterprise Manager Database Express (EM Express) does not work on Oracle Database 12c Release 2 (12.2) and later. For alternate options and more information, see My Oracle Support Note 2723592.1:

<https://support.oracle.com/epmos/faces/DocContentDisplay?id=2723592.1>

# Known Issues for Oracle Linux 8 and Red Hat Enterprise Linux 8 for Release 12.2

This topic contains information about issues related to Oracle Linux 8 and Red Hat Enterprise Linux 8 on Oracle Database 12c Release 2 (12.2):

## Bug 31188038

Installing Oracle Database Instant Client 12c Release 2 (12.2) on Oracle Linux 8

### Workaround

When you install Oracle Database Instant Client 12c Release 2 (12.2) on Oracle Linux 8.2, manually install the `libnsl` package before using the Instant Client libraries or tools.

```
$ sudo dnf install libnsl
```

## Bug 33355628

During the Oracle Database 12c Release 2 (12.2) installation process, you may receive the following error:

```
[INS-13001] Environment does not meet minimum requirements.
```

### Workaround

Set the environment variable `CV_ASSUME_DISTID` to `OL7` before you run `runInstaller`.

## Bug 33386276

`compat-libcap1-1.10` package missing error during Oracle Database, Oracle Database Examples, Oracle Database Gateways, Global Service Managers (GSM), and Oracle Database Client x86-64 installations on Red Hat Enterprise Linux 8.

### Workaround

In the Perform Prerequisite Checks screen, for the `compat-libcap1-1.10` missing check, select **Ignore All**, and click **install** to continue with the installation.

## Bug 33386233

`compat-libcap1-1.10` and `compat-libstdc++-33-3.2.3` packages missing error during Oracle Database 12c Release 2 (12.2) 32-bit Client installation on Red Hat Enterprise Linux 8.

### Workaround

In the Perform Prerequisite Checks screen, for the `compat-libcap1-1.10` and `compat-libstdc++-33-3.2.3` missing checks, select **Ignore All**, and click **Install** to continue with the installation.

## Bug 33404219

CRS Integrity check error during 12.2 Oracle RAC installation with Oracle Clusterware 19c.

### Workaround

In the Perform Prerequisite Checks screen, for the CRS Integrity missing check, select **Ignore All**, and click **Install** to continue with the installation.

## Bug 33404400

PRVF-7590 error during 12.2 Oracle RAC installation with Oracle Clusterware 19c.

### Workaround

In the Perform Prerequisite Checks screen, for the PRVF-7590 missing check, select **Ignore All**, and click **Install** to continue with the installation.

## Bug 33404464

`resolv.config protocol` error during 12.2 Oracle RAC installation with Oracle Clusterware 19c.

### Workaround

In the Perform Prerequisite Checks screen, for the `resolv.config protocol` missing check, select **Ignore All**, and click **Install** to continue with the installation.

## Bug 33404505

PRVG-2002 error during 12.2 Oracle RAC installation with Oracle Clusterware 19c.

### Workaround

In the Perform Prerequisite Checks screen, for the PRVG-2002 missing check, select **Ignore All**, and click **Install** to continue with the installation.

## Bug 33404510

On Oracle Linux 8 or Red Hat Enterprise Linux 8, C++ applications built with `g++8` cannot be used with Oracle C++ Call Interface (OCCI).

### Workaround

To build applications with `g++8`, use the following compilation options:

```
-D_GLIBCXX_USE_CXX11_ABI=0 -Wno-narrowing
```

## Bug 33424834

Building Pro\*C applications

### Workaround

To build Pro\*C applications on Oracle Linux 8 and Red Hat Enterprise Linux 8, manually add the following content to the Pro\*C configuration file `pcscfg.cfg`:

```
sys_include=/usr/lib/gcc/x86_64-redhat-linux/8/include  
  
define=_MATH_H
```

#### Note:

Ensure that you fix all other checks and issues that are listed in the screen.

## Bug 36823580

All Pro\*C demos fail during compilation on 12c Release 2 (12.2) on 64-bit version of Oracle Linux 8.8.

### Workaround

To build Pro\*C applications on Oracle Linux 8, manually add the following content to the Pro\*C configuration file `pcscfg.cfg`:

```
sys_include=/usr/lib/gcc/x86_64-redhat-linux/8/include  
  
define=_MATH_H
```

#### Note:

Ensure that you fix all other checks and issues that are listed in the screen.

## Bug 36826072

Regenerating the Oracle Instant Client RPMs on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7 fails.

### Workaround

Oracle Instant Client is no longer supported on Oracle Database 12c Release 2 (12.2). Upgrade to Oracle Instant Client 19c or later.

## Bug 30389229

Flash cache fails on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

Download the patch `p30389229_12201240716DBJUL2024RU_Linux-x86-64.zip` and apply.

## Bug 36756861

Oracle Database Gateway for Websphere MQ Server component linking error occurs when installing Oracle Database Gateway 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

### Workaround

According to Oracle's official lifetime support document, support for Oracle Database 12c Release 2 (12.2) ended on May 31, 2022. Upgrade to Oracle Database Gateway 19c or later.

## Bug 36757082

APPC component error occurs when installing Oracle Database Gateway 12c Release 2 (12.2) on Oracle Linux 8.8 with the Unbreakable Enterprise Kernel 7.

### Workaround

According to Oracle's official lifetime support document, support for Oracle Database 12c Release 2 (12.2) ended on May 31, 2022. Upgrade to Oracle Database Gateway 19c or later.

## Bug 36740680

Pro\*C demos fail during compilation on Oracle Database 12c Release 2 (12.2) on 64-bit version of Oracle Linux 8.8.

### Workaround

Use client libraries starting Oracle Database 19c or later.

## Unsupported Products

In addition to the list of unavailable products or features in section, "Features Not Available or Restricted in This Release of Oracle Database 12c Release 2 (12.2.0.1)" in *Oracle Database Readme*, the following products and features are not supported:

## Oracle Database Quality of Service Support

Oracle Database Quality of Service Management is not supported on IBM: Linux on System z.

## Product Support

The list of supported products or features for Oracle Database 12c Release 2 (12.2.0.1) are as follows:

### Database Smart Flash Cache Support

Database Smart Flash Cache is supported only on Oracle Solaris and Oracle Linux.

### Oracle Automatic Storage Management Cluster File System (Oracle ACFS) and Oracle Automatic Storage Management Dynamic Volume Manager (Oracle ADVM) Support

Although Oracle ADVM supports raw disks in Oracle Automatic Storage Management disk groups, Oracle ADVM device special files created through raw(8) are not supported; Oracle ADVM only supports block device special files.

For the latest information about supported platforms and releases, see the Note 1369107.1 on My Oracle Support at

<https://support.oracle.com>

### Oracle ASM Filter Driver Support

Oracle Automatic Storage Management Filter Driver (Oracle ASMFDF) is supported only on Linux x86-64.

### Share-based Instance Caging

Share-based Instance Caging is supported only on Oracle Solaris and Oracle Linux.

### IPv6 Networks Support

The IPv6 based IP addresses to configure the private networks for a cluster is not supported on IBM: Linux on System z. It is currently under testing and the support will be announced after testing is successfully complete.

## Linking Applications with Oracle Client Libraries

You must use the dynamic Oracle client libraries to link the client code on Linux. Do not link the static Oracle client libraries.

## Preinstallation Requirements for Release 12.2

Refer to the installation guides for the preinstallation requirements.

## Installation, Configuration, and Upgrade Issues for Release 12.2

There are no installation, configuration, and upgrade issues at the time of this release.

## Other Known Issues for Release 12.2

The following section contains information about issues related to Oracle Database 12c and associated products:

- [DBCA Displays Incorrect Memory of the Host Server](#)
- [Oracle R Enterprise Fails Due to Libtiff Library Version Mismatch](#)
- [Oracle Grid Infrastructure Installer Prerequisite Check May Fail Due to Incorrect RPM Versions](#)

### DBCA Displays Incorrect Memory of the Host Server

When creating a database on Linux Container, Database Configuration Assistant (DBCA) incorrectly shows the available memory of the host server instead of the Linux Container on the Specify Configuration Options page. When you choose to allocate the percentage of memory based on the value shown, the database creation may fail in the case where total consumable memory for that Linux Container is less than the allocated memory.

**Workaround:**

You must allocate physical memory for the database according to the configuration of the Linux Container system.

This issue is tracked with Oracle bug 21546793.

### Oracle R Enterprise Fails Due to Libtiff Library Version Mismatch

The Cairo package in Oracle R Enterprise fails to load on SUSE Linux Enterprise Server 12 when the `libtiff.so.3` version is missing.

**Workaround:**

Create a symlink for `libtiff.so.3` from `libtiff5.so.5`.

This issue is tracked with Oracle bug 24939744.

## Oracle Grid Infrastructure Installer Prerequisite Check May Fail Due to Incorrect RPM Versions

The Oracle Grid Infrastructure installer prerequisite check for 12c Release 2 (12.2) may fail if you use the `e2fsprogs-1.42.8-1.0.2 (x86_64)` and `e2fsprogs-libs-1.42.8-1.0.2 (x86_64)` packages.

### Workaround:

1. Ensure that you meet the following minimum RPM version requirements:  
`e2fsprogs-1.41.12-14.el6 (x86_64)` or later  
`e2fsprogs-libs-1.41.12-14.el6 (x86_64)` or later
2. Ignore the `e2fsprogs` and `e2fsprogs-libs` failure notifications and proceed with the Oracle Grid Infrastructure installation.

This issue is tracked with Oracle bug 25232262.

## 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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Oracle Database Release Notes, 12c Release 2 (12.2) for Linux  
E85828-03

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