

# Oracle® Database

## Database Release Notes



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Oracle Database Database Release Notes, 20c

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# Preface

This document describes last-minute features and changes that are not included in the Oracle Database Documentation Library for Oracle Database 20c.

Starting with Oracle Database 18c, the readme and platform-specific release notes have been combined into one document. The second chapter of this document contains generic information. Subsequent chapters of this document contain platform-specific information. The last chapter of this document contains last-minute changes not included in the Oracle Database documentation library.

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

## Audience

This document is relevant only to Oracle Database 20c and documents new features, changes, unsupported products, preinstallation requirements, generic and platform-specific bug fixes, and known issues that are not included in the Oracle Database documentation library.

## Documentation Accessibility

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

### Access to Oracle Support

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

## Related Resources

Refer to the following documentation for more information related to this release:

- <http://docs.oracle.com/en/database/database.html>
- For licensing information, refer to *Oracle Database Licensing Information User Manual*.

- Additional readme or release notes files also exist. Refer to [Other Readmes](#), [Release Notes](#), or [Installation Guides](#).

## 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 text or the glossary.
<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.

# 1

## Purpose of These Release Notes

This topic briefly describes the purpose of these release notes.

Updates to this document can occur after it is released. Check for updates to this document and view other Oracle documentation at:

<http://docs.oracle.com/en/database/database.html>

For licensing information, refer to *Oracle Database Licensing Information User Manual*.

Additional readme or release notes files also exist. Refer to the [Other Readmes, Release Notes, or Installation Guides](#).

# 2

## Issues Affecting All Platforms for Oracle Database 20c

These topics contain last-minute features and changes that affect all platforms for Oracle Database 20c.

- [Features Not Available or Restricted in This Release of Oracle Database 20c \(20.3\)](#)  
This topic describes features that are not available or are restricted for Oracle Database 20c (20.3).
- [Deprecated and Desupported Features for Oracle Database 20c](#)  
This topic describes deprecated and desupported features for Oracle Database 20c.
- [Other Readmes, Release Notes, or Installation Guides](#)  
There are additional documents for Oracle products that are associated with this Oracle Database release.

### Features Not Available or Restricted in This Release of Oracle Database 20c (20.3)

This topic describes features that are not available or are restricted for Oracle Database 20c (20.3).

- Only available for non-Oracle RAC Virtual Machine (VM) database systems.
- Preview software is not available for bare metal systems, Exadata systems, or Virtual Machines using Oracle RAC.
- Uses Logical Volume Manager (LVM) storage management software only. Oracle Automatic Storage Management (Oracle ASM) is not available.
- Patching and database version upgrades (including upgrades to the general audience release of the preview software) are not available.
- Out-of-place restores (creating a new database system from backup) are not available.
- Standalone backups cannot be created.
- Oracle Data Guard is not available.
- Only available on Oracle Linux x64 platform.

### Deprecated and Desupported Features for Oracle Database

This topic describes deprecated and desupported features for Oracle Database 20c.

Oracle Database 20c introduces behavior changes for your database in addition to new features. Changes in behavior include deprecated and desupported initialization

parameters, options, syntax, and the deprecation and desupport of features and components. For more information, see the *Oracle Database Upgrade Guide*.

## Other Readmes, Release Notes, or Installation Guides

There are additional documents for Oracle products that are associated with this Oracle Database release.

Refer to the following Oracle products and the location of their associated readme, release notes, or installation guide for additional information:

**Table 2-1 Other Oracle Products Documentation**

<b>Product</b>	<b>Document</b>
Oracle Application Express	<i>Oracle Application Express Release Notes</i> and the <i>Oracle Application Express Installation Guide</i> .
Oracle Multimedia	<code>ORACLE_HOME/ord/im/admin/README.txt</code>
Oracle ODBC Driver	<i>ODBC Driver Release Notes</i>
Oracle SQL Developer	<code>ORACLE_HOME/sqldeveloper/readme.html</code>
Pro*C	<i>Pro*C/C++ Release Notes</i>
Pro*COBOL	<i>Pro*COBOL Release Notes</i>
SQL*Plus	<i>SQL*Plus Release Notes</i>



# 3

## Open Bugs Affecting All Platforms

This section describes known bugs in Oracle Database 20c that affect all platforms.

- [Oracle Universal Installer Known Bugs](#)  
These are the Oracle Universal Installer (OUI) bugs in Oracle Database 20c.
- [JavaScript Object Notation Known Bugs](#)  
These are the JavaScript Object Notation (JSON) bugs in Oracle Database 20c.
- [Oracle Database Enterprise Edition Known Bugs](#)  
These are the Oracle Database Enterprise Edition bugs in Oracle Database 20c.

### Oracle Universal Installer Known Bugs

These are the Oracle Universal Installer (OUI) bugs in Oracle Database 20c.

You should also review [Compatibility, Upgrading, Downgrading, and Installation](#) for other issues related to installation and upgrades.

- [Bug 18336219](#)
- [Bug 27080535](#)
- [Bug 27120934](#)

#### Bug 18336219

Oracle Database installer does not check if the password specified for `ASMSNMP` on the Specify Management Options screen is correct. If you proceed with the configuration and specify an incorrect password, then Oracle Enterprise Manager Cloud Control cannot discover details and monitor the Oracle ASM instance.

##### **Workaround #1:**

Ensure that the correct password (the same password specified earlier during the Oracle Grid Infrastructure for a cluster installation) is specified in the Specify Management Options screen of Oracle Database installer.

##### **Workaround #2:**

On the Oracle Enterprise Manager Cloud Control portal, navigate to the Oracle ASM credentials screen and update the password for `ASMSNMP`. Once the password is saved on Oracle Enterprise Manager Cloud Control, the Oracle ASM monitoring starts working.

#### Bug 27080535

When deinstalling Oracle Grid Infrastructure for a standalone server home with an Oracle Management Server configuration, the `emConfig.txt` file in `ORACLE_BASE/admin/emca` is not deleted.

**Workaround:**

To remove the `emConfig.txt` file, run the following command:

```
rm -rf $ORACLE_BASE/admin/emca/emConfig.txt
```

During the last `ORACLE_HOME` deinstallation, to remove `ORACLE_BASE`, run the following command after the deinstallation tool exits:

```
rm -rf $ORACLE_BASE
```

## Bug 27120934

After downgrading Oracle Clusterware using the Grid Setup Wizard, from Oracle Database 20c to Oracle Clusterware release 12.1 or release 11.2, the unused data files of the Oracle Grid Infrastructure Management Repository (GIMR) of the 20c Oracle Grid Infrastructure home could still be present in the disk group.

**Workaround:**

Before starting the downgrade procedure using the Grid Setup Wizard, delete the GIMR database using the following command:

```
<Active_GI_HOME>/bin/dbca -silent -deleteDatabase -sourceDB -MGMTDB
```

## JavaScript Object Notation Known Bugs

These are the JavaScript Object Notation (JSON) bugs in Oracle Database 20c.

- [Bug 30896685](#)

## Bug 30896685

The `RETURNING DATE` clause for SQL functions `JSON_VALUE` and `JSON_TABLE` returns a `DATE` value with the time component zeroed out (truncated) in releases prior to Oracle Database 20c. The analogous `DATE ()` item method in the SQL/JSON path language has the same behavior.

**Workaround:**

In release 20c, this continues to be the default behavior for the `RETURNING DATE` clause. However, there is a new, optional behavior that preserves the time component of a `DATE` value for consistency with the Oracle `DATE` data type. This new behavior is expected to become the default in a future release.

The new behavior is now available using the `RETURNING DATE PRESERVE TIME` clause or using a new item method, `dateWithTime ()`. Time truncation, although the default in release 20c, can also be specified explicitly using the `RETURNING DATE TRUNCATE TIME` clause.

To minimize the impact to applications from the expected change in default behavior, Oracle Corporation recommends that, at least in new code, you explicitly use the

PRESERVE TIME or TRUNCATE TIME clause, as appropriate, and use the item method `dateWithTime ()` where appropriate.

For most use cases, the PRESERVE TIME clause and the item method `dateWithTime ()` are preferable. However, using the TRUNCATE TIME clause continues to ensure the same behavior that is the default in release 20c.

For an index to be used, the time handling (truncate or preserve) of the query and the index must match. An application time-handling change requires rebuilding any persistent objects that depend on it, such as indexes, materialized views, partitions, check constraints, and PL/SQL subprograms.

## Oracle Database Enterprise Edition Known Bugs

These are the Oracle Database Enterprise Edition bugs in Oracle Database 20c.

- [Bug 23569490](#)

### Bug 23569490

If you have a large number of collections and are working with clients earlier than Oracle Database 12c release 2 (12.2), then you need a larger object cache, due to a change in snapshot size and thus a need for collection image conversion.

**Workaround:**

The object cache size can be set using the `OBJECT_CACHE_OPTIMAL_SIZE` initialization parameter. This is set to a low value by default.