



Database Patching for DBAs

Patch smarter, not harder

Virtual Classroom Seminar #27 - March 2026

Oracle

DBAs

run the world





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Virtual Classroom Seminars

Slides

Episode 16

(replaces Episode 1 from Feb 2021)

[Oracle Database Release and Patching Strategy for 19c and 23c](#)

115 minutes – May 10, 2023



Episode 17

[From SR to Patch – Insights into the Oracle Database Development](#)

[process](#)

55 minutes – June 22, 2023



Episode 18

[Cross Platform Migration – Transportable Tablespaces to the Extreme](#)

145 min – February 22, 2024



Episode 19

[Move to Oracle Database 23ai – Everything you need to know about](#)

[Multitenant PART 1](#)

145 min – May 16, 2024



Episode 20

[Move to Oracle Database 23ai – Everything you need to know about](#)

[Multitenant PART 2](#)

100 min – June 28, 2024



Episode 21

[One-Button Patching with AutoUpgrade – Easing every DBA's life](#)

55 min – October 24, 2024



Recorded Web Seminars

<https://MikeDietrichDE.com/videos>

More than 40 hours of technical content,
on-demand, anytime, anywhere

Hurray, it's patching day!!





How often do you apply patches?

<https://www.oracle.com/security-alerts>

Critical Patch Updates

Critical Patch Updates provide security patches for supported Oracle on-premises products. They are available to customers with valid support contracts. Critical Patch Updates are released on the third Tuesday of January, April, July, and October. The next four dates are:

- 21 April 2026
- 21 July 2026
- 20 October 2026
- 19 January 2027

A pre-release announcement will be published on the Thursday preceding each Critical Patch Update release.

The Critical Patch Updates released since 2021 are listed in the following table. Critical Patch Updates released before 2021 are available [here](#).

Critical Patch Update	Latest Version/Date
Critical Patch Update - January 2026	Rev 3, 02 February 2026
Critical Patch Update - October 2025	Rev 1, 21 October 2025
Critical Patch Update - July 2025	Rev 4, 28 July 2025
Critical Patch Update - April 2025	Rev 2, 21 April 2025
Critical Patch Update - January 2025	Rev 2, 11 February 2025
Critical Patch Update - October 2024	Rev 2, 25 November 2024

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Oracle Critical Patch Update Advisory - January 2026

Description

A Critical Patch Update is a collection of patches for multiple security vulnerabilities. These patches address vulnerabilities in Oracle code and in third party components included in Oracle products. These patches are usually cumulative, but each advisory describes only the security patches added since the previous Critical Patch Update Advisory. Thus, prior Critical Patch Update advisories should be reviewed for information regarding earlier published security patches. Refer to [“Critical Patch Updates, Security Alerts and Bulletins”](#) for information about Oracle Security advisories.

Oracle continues to periodically receive reports of attempts to maliciously exploit vulnerabilities for which Oracle has already released security patches. In some instances, it has been reported that attackers have been successful because targeted customers had failed to apply available Oracle patches. Oracle therefore strongly recommends that customers remain on actively-supported versions and apply Critical Patch Update security patches without delay.

This Critical Patch Update contains 337 new security patches across the product families listed below. Please note that an MOS note summarizing the content of this Critical Patch Update and other Oracle Software Security Assurance activities is located at [January 2026 Critical Patch Update: Executive Summary and Analysis](#).

Affected Products and Patch Information

Security vulnerabilities addressed by this Critical Patch Update affect the products listed below.

Please click on the links in the Patch Availability Document column below to access the documentation for patch availability information and installation instructions.

Affected Products and Versions	Patch Availability Document
JD Edwards EnterpriseOne Tools, versions 9.2.0.0-9.2.26.0	JD Edwards

Oracle Communications Network Integrity, versions 11.10, 11.10, 11.10, 11.10	Oracle Communications Network Integrity
Oracle Communications Operations Monitor, versions 5.2, 6.0, 6.1	Oracle Communications Operations Monitor
Oracle Communications Order and Service Management, versions 7.5.0, 8.0.0	Oracle Communications Order and Service Management
Oracle Communications Policy Management, version 15.0.0.0	Oracle Communications Policy Management
Oracle Communications Pricing Design Center, versions 15.0.0.0.0, 15.0.1.0.0, 15.1.0.0.0	Oracle Communications Pricing Design Center
Oracle Communications Session Border Controller, versions 9.3.0, 10.0.0	Oracle Communications Session Border Controller
Oracle Communications Session Report Manager, versions 9.0.0-9.0.4	Oracle Communications Session Report Manager
Oracle Communications Unified Assurance, versions 6.1.0-6.1.1	Oracle Communications Unified Assurance
Oracle Communications Unified Inventory Management, versions 7.7.0, 7.8.0, 8.0.0	Oracle Communications Unified Inventory Management
Oracle Data Integrator, versions 12.2.1.4.0, 14.1.2.0.0	Fusion Middleware
Oracle Database Server, versions 19.3-19.29, 21.3-21.20, 23.4.0-23.26.0	Database
Oracle E-Business Suite, versions 12.2.5-12.2.15	Oracle E-Business Suite
Oracle Enterprise Communications Broker, versions 4.1.0, 4.2.0, 5.0.0	Oracle Enterprise Communications Broker
Oracle Enterprise Manager Base Platform, versions 13.5, 24.1	Oracle Enterprise Manager
Oracle Essbase, version 21.8.0.0.0	Database
Oracle Financial Services Compliance Studio, version 2.6.0	Oracle Financial Services Compliance Studio
Oracle Financial Services Model Management and Governance, version 8.1.3.2	Oracle Financial Services Model Management and Governance
Oracle FLEXCUBE Investor Servicing, versions 14.5.0.15.0, 14.7.0.8.0, 14.8.0.1.0	Contact Support
Oracle FLEXCUBE Universal Banking, versions 14.0.0.0.0-14.8.0.0.0	Contact Support
Oracle Fusion Middleware, versions 12.2.1.4.0, 14.1.2.0.0	Fusion Middleware
Oracle Global Lifecycle Management NextGen OUI Framework, version 15.1.1.0.0	Fusion Middleware
Oracle GoldenGate, versions 19.1.0.0.0-19.29.0.0.251021, 21.3-21.20, 23.4-23.10	Database
Oracle GoldenGate Big Data and Application Adapters, versions 19.1.0.0.0-19.1.0.0.20, 21.3-21.20, 23.4-23.10	Database
Oracle GoldenGate Stream Analytics, versions 19.1.0.0.0-19.1.0.0.13	Database
Oracle GoldenGate Studio, versions 23.8.0-23.9.0	Database

Oracle Critical Patch Update Advisory - January 2026

CVE ID	Component	Package and/or Privilege Required	Protocol	Remote Exploit without Auth.?	CVSS VERSION 3.1 RISK (see Risk Matrix Definitions)									Supported Versions Affected	Notes
					Base Score	Attack Vector	Attack Complex	Privs Req'd	User Interact	Scope	Confidentiality	Integrity	Availability		
CVE-2025-12383	Fleet Patching and Provisioning (Eclipse Jersey)	None	HTTP	Yes	7.4	Network	High	None	None	Un-changed	High	High	None	23.4.0-23.26.0	
CVE-2026-21939	SQLcl	None	None	No	7.0	Local	High	None	Required	Un-changed	High	High	High	23.4.0-23.26.0	
CVE-2025-8194	RDBMS (Python)	Authenticated User	None	No	6.7	Local	Low	High	None	Un-changed	High	High	High	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-67735	Oracle Graal Development Kit for Micronaut (Nimbus JOSE+JWT)	Authenticated User	Oracle Net	Yes	6.5	Network	Low	None	None	Un-changed	Low	Low	None	19.3-19.29, 23.4.0-23.26.0	
CVE-2026-21975	Java VM	Authenticated User	Oracle Net	No	4.5	Network	Low	High	Required	Un-changed	None	None	High	19.3-19.29, 21.3-21.20	
CVE-2025-61755	GraalVM Multilingual Engine	Create Session	Multiple	No	3.1	Network	High	Low	None	Un-changed	Low	None	None	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-54874	Oracle Spatial and Graph (OpenJPEG)	None	None	No	2.8	Local	Low	Low	Required	Un-changed	None	None	Low	23.4.0-23.26.0	



Oracle Critical Patch Update Advisory - January 2026

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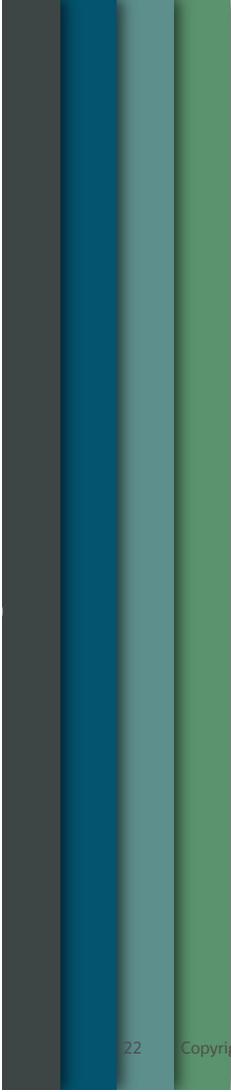


Be sure to [subscribe](#) to email notifications

- Critical Patch Updates and Security Alerts

Just as easy as patching your smart phone

AutoUpgrade's mission for patching Oracle AI Database



Patching Oracle AI Database

1

DOWNLOAD

2

INSTALL

3

PATCH

4

FINALIZE

Download



Finding and downloading the right patches





Release Updates are the primary vehicle for delivering patches

- Include security fixes

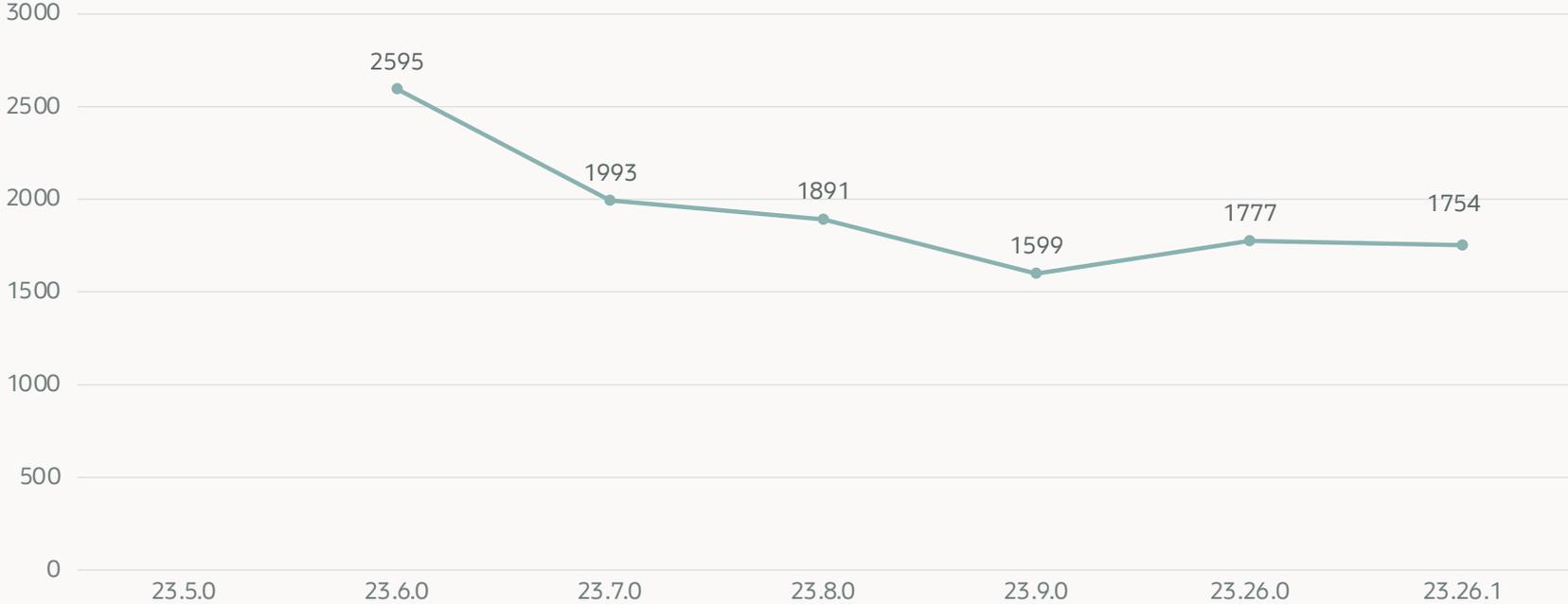
Release Update Contents – Oracle Database 19c



[Database 19 Release Updates and Revisions Bugs Fixed Lists \(Doc ID 2523220.1\)](#)



Release Update Contents – Oracle AI Database 26ai



Source: oradiff.oracle.com





If you don't apply a recent Release Update, you will miss **thousands** of fixes

- Almost 15,000 fixes on 19c
- Almost 11,000 fixes on 26ai



Oracle delivers security fixes via Release Updates

- Occasionally, also via Monthly Recommended Patches



The easiest way you can download patches is using AutoUpgrade

- Always use the latest version of AutoUpgrade
- Available via direct download from oracle.com or [KB123450](https://kb123450)

```
wget https://download.oracle.com/otn-pub/otn_software/autoupgrade.jar
```

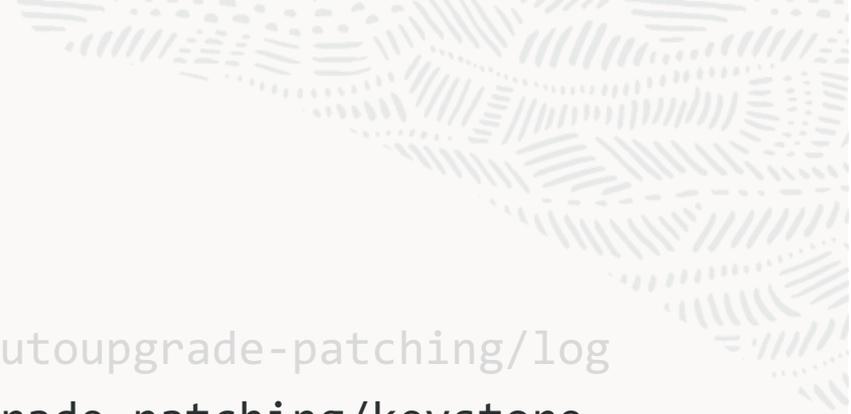




One single tool for everything
- on all platforms

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
```





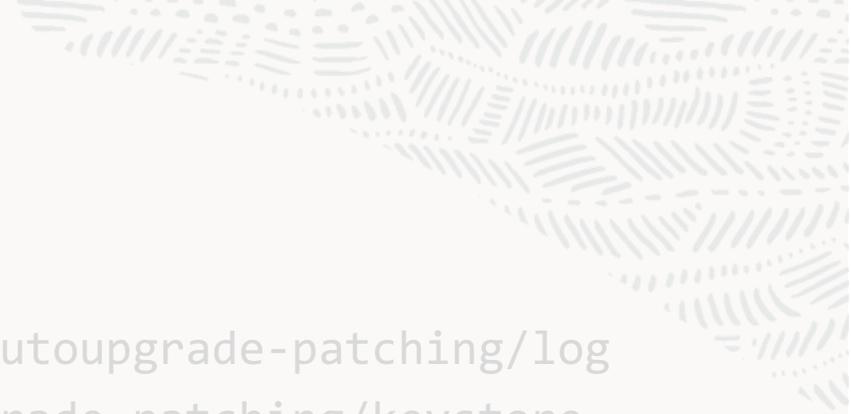
```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
```





Learn how to configure the keystore in our previous webinar

- [One-Button Patching – makes life easier for every Oracle DBA](#)



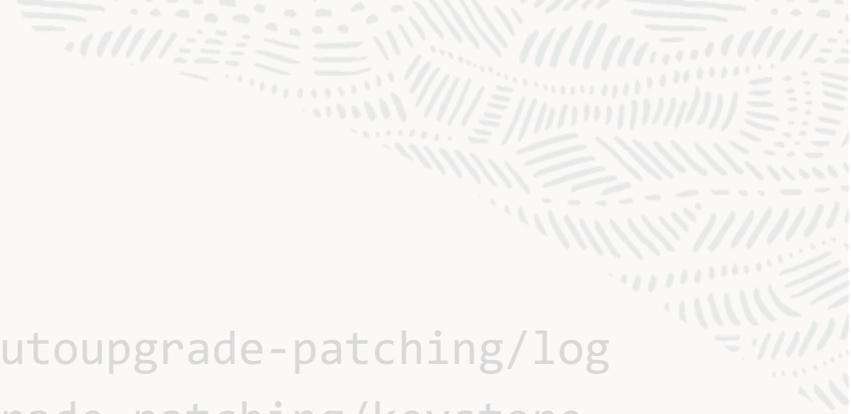
```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
```





```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=RU
```



```
$ opatch apply
```

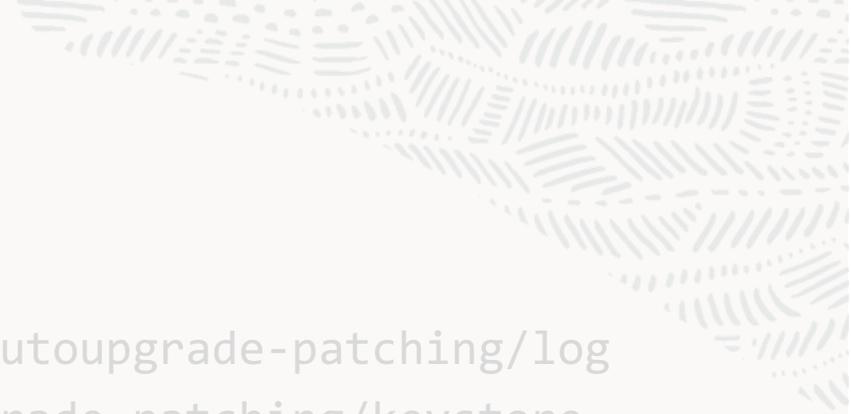
```
Oracle Interim Patch Installer version 12.2.0.1.17  
Copyright (c) 2025, Oracle Corporation. All rights reserved.
```

```
...
```

```
The OPatch being used has version 12.2.0.1.17 while the following patch(es)  
require higher versions:
```

```
Patch 38291812 requires OPatch version 12.2.0.1.47.
```

```
Please download latest OPatch from My Oracle Support.
```



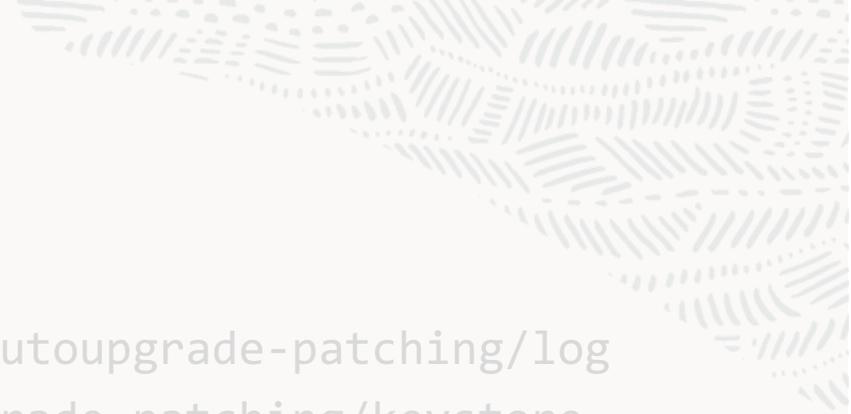
```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=OPATCH,RU
```





Optionally, follow an N-1 approach



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=OPATCH, RU:19.29
```





Stay fully up-to-date with
the most important one-off patches

Oracle Database 19c and Oracle AI Database 26ai Important Recommended One- off Patches

KB188772

Last Updated
Feb 4, 2026

Service
Oracle Database - Enterprise
Edition



1.9

Applies To

All Users

Summary

This note provides a list of important recommended patches that resolve issues affecting Database and Grid Infrastructure 19c and 23ai software homes. These patches resolve issues that have a high likelihood of occurring or that can cause significant impact if they do occur.

This document was MOS Document ID: 555.1 in Legacy MOS.

Solution

NOTE: Unless there is an urgent fix, this document will be updated once a week on Tuesdays at 9AM EST if any new patch is identified.

Through our review of service requests, we often find that issues encountered are the result of customers being on an older Release Update (RU) or Monthly Recommended Patch (MRP). Many issues will have been fixed in the latest updates, which we always recommend.

As noted in the RU-specific tables below, fixes for known issues are targeted for inclusion in the next available MRP and RU. You can always find the latest RUs, MRPs, other patches, lists of fixed bugs and known issues in [KB106822](#) Identifying and installing the latest updates (patches) helps ensure you are using the most current content for security, functional, regression and bug fixes, as well as minor enhancements and any emergency one-offs.

Note:

Oracle encourages customers to install the latest MRP whenever possible. MRPs deliver the safest, fully-tested path to receive the fixes in this document. Refer to [FAQ2283](#) for further details.

In addition to the relevant patches listed below, you should apply patches based on the specific RU after reviewing the following My Oracle Support knowledge documents:

1. [Database PSU/BP/Update/Revision - Known Issues Primary Note](#)[Database PSU/BP/Update/Revision - Known Issues Primary Note](#) KB260868)
2. [Oracle Database Patches to Consider for 19c \(Doc ID KA912\)](#) which contains patches to consider for specific areas such as Data Guard, Data Pump, GoldenGate.

Recommended Patches for 19.30 DB Home

Below is the list of important patches to consider applying on top of 19.30.

Bug	KM Article	Fixed in RU	Fixed in MRP	Description	Patches	RAC Rolling Installable	Database Online Installable	Added
38854064	PALRT2888			[RAC] (DB55) RAC rolling database update when fix 34352668 is present may cause data/redo corruption	PATCH 38854064	YES	NO	28-JAN-2026
37690446	KI40534	Not Eligible	Not Eligible	[SQL EXECUTION] ORA-600 [ktatmkref-rs] errors in the alert log post-patch 37260974 (19.26.0.0.250121 dbu and above) - Workarounds Available	PATCH 37690446	NO	NO	23-SEP-2025
34672698 (replaces 34286265)	KI54797	Not Eligible	Not Eligible	[VOS] DB50: ORA-800: soft external error, arguments: [set priority failed], [vktm] , dism(16)	PATCH 34672698	YES	NO	22-FEB-2024
34774667	KI36203	Not Eligible	Not Eligible	[AQ] ORA-7445 in Purge Queue Table / High CPU usage in SVCSB Service	PATCH 34774667	NO	NO	11-JUL-2023
29213893	KI24589	Not Eligible	Not Eligible	[QRY OPTIMIZER] DBMS_STATS Failing With Error Ora-1422 When Gathering Stats for User\$ Table	PATCH 29213893	NO	NO	01-SEP-2021

Version DB 19.30_555.1: [38854064](#), [37690446](#), [34672698](#), [34774667](#), [29213893](#)

Recommended Patches for 19.30 GI Home

Below is the list of important patches to consider applying on top of 19.30. *Only one OCW (Oracle Clusterware) patch should be applied to GI homes. Ensure you apply the patch starting with X8M if you are on an X8M system.*

Watch for conflicts



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
```

```
patch1.patch=OPATCH,RU,38854064,37690446,34672698,34774667,29213893
```



Monthly Recommended Patches

A collection of recommended one-off fixes
provided at monthly intervals
via a single downloadable patch

Quarterly Release Updates

	2023				2024				2025				2026		
	January	April	July	October	January	April	July	October	January	April	July	October	January	April	July
19c	19.18.0	19.19.0	19.20.0	19.21.0	19.22.0	19.23.0	19.24.0	19.25.0	19.26.0	19.27.0	19.28.0	19.29.0	19.30.0	19.31.0	19.32.0
21c	21.9.0	21.10.0	21.11.0	21.12.0	21.13.0	21.14.0	21.15.0	21.16.0	21.17.0	21.18.0	21.19.0	21.20.0	21.21.0	21.22.0	21.23.0
26ai							23.5.0	23.6.0	23.7.0	23.8.0	23.9.0	23.26.0	23.26.1	23.26.2	23.26.3



Monthly Recommended Patches

	2025						2026							
	July	August	September	October	November	December	January	February	March	April	May	June	July	August
19.28.0	19.28.0	MRP1	MRP2	MRP3	MRP4	MRP5	MRP6							
19.29.0				19.29.0	MRP1	MRP2	MRP3	MRP4	MRP5	MRP6				
19.30.0							19.30.0	MRP1	MRP2	MRP3	MRP4	MRP5	MRP6	
19.31.0										19.31.0	MRP1	MRP2	MRP3	MRP4
19.32.0													19.32.0	MRP1





MRPs are cumulative but only within one MRP line

- Linux only

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

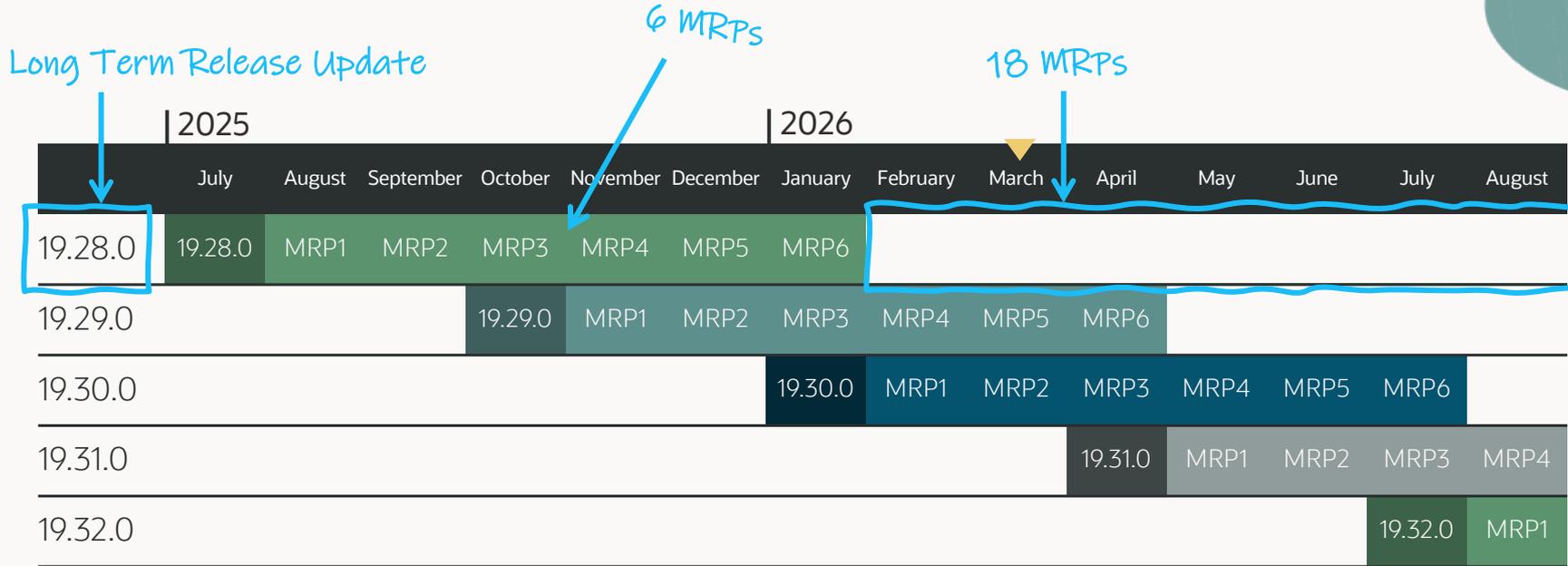
```
patch1.target_version=19
patch1.patch=OPATCH,RU,MRP
```





Long Term Release Updates

Monthly Recommended Patches





19.28 is the first **Long Term Release Update**

- Future announcements in [KB625385](#)

Long Term Release Updates

Content of MRPs:

- Standard MRP content
- Regression fixes
- RAC rolling fixes from [KB188772](#)
- Security fixes, if possible



Long Term Release Updates



- 1** Security and compliance for 18 months
- 2** Receive critical updates
- 3** Less changes, higher stability





Apply the OJVM bundle patch

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=OPATCH,RU,OJVM
```





OJVM is embedded in Release Updates

- No separate download
- Complete RAC Rolling patching support



Don't miss out on all the Data Pump fixes

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=OPATCH,RU,OJVM,DPBP
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=OPATCH,RU,OJVM,DPBP
patch1.patch=RECOMMENDED
```



Recommended Patches

`patch1.patch=RECOMMENDED`

OPATCH

The latest OPatch

RU

The latest Release Update

OJVM

OJVM bundle matching Release Update

DPBP

Data Pump bundle patch matching RU

AU

Latest version of AutoUpgrade





Apply product-specific bundle patches
based on your usage

Oracle Database Patches to Consider for 19c

KA912

Last Updated
Feb 17, 2026



1.4

Getting Started

Performance

Golden Gate

Oracle Text

Platform Specific

Data Guard High Availability

DN FS

Data Pump

Partitioning

Multitenant

General

Oracle Spatial

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Getting Started

When applying Database patches, Oracle recommends that you take a 3-tiered step-by-step approach.

LEVEL 1: Apply latest quarterly patches:

- Apply latest quarterly updates using [Master Note for Database Proactive Patch Program \(Doc ID KB106822\)](#)

LEVEL 2: Apply Critical/Recommended patches:

- For Exadata environments: [Exadata Critical Issues \(KB623062\)](#)
- For Database environments:
 - Customers on Linux x86-64 - Apply the latest [Monthly Recommended Patches - MRP \(FAQ2283\)](#) for the specific RU
 - For customers on other platforms, apply critical patches using [Oracle Database 19c Important Recommended One-off Patches \(KB858385\)](#)

LEVEL 3: Apply additional patches based on features or focus areas:

- Use the tabs in this document for quick access to additional feature based patches

Article Feedback



Rate this

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=RECOMMENDED, SDOBP
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=RECOMMENDED,SDOBP,TEXT
```





Apply other bundle patches
via patch number

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
```

```
patch1.patch=RECOMMENDED,SDOBP,TEXT,38879426
```





Any other bundle patch AutoUpgrade should download?

- Use the Q&A and drop us a note



Apply latest JDK patch

*"Why is the JDK in my brand-new Oracle home always **3 months old**, or even older?"*

```
$ORACLE_HOME/jdk/bin/java -version
```

```
java version "1.8.0_471"
```

```
Java(TM) SE Runtime Environment (build 1.8.0_471-b09)
```

```
Java HotSpot(TM) 64-Bit Server VM (build 25.471-b09, mixed mode)
```



JDK and PERL Patches for Oracle Database Home and Grid Home

KB118730

Last Updated

Feb 17, 2026

Service

Gen 2 Exadata Cloud at Customer, Generation 1 - Exadata Cloud at Customer (First Generation Cloud Machine), Oracle Cloud Infrastructure - Exadata Cloud Service, Oracle Database - Enterprise Edition, Oracle Database - Standard Edition



3.0

JDK and PERL Patches for Oracle Database Home and Grid Home

2.1 Latest JDK Patches for Database

Jan2026 Quarter

Version	Patch	Linux64	Windows64	WindowsNT	Sparc64	Solaris.x64	Linux32	AIX64	HPIA64	ZLinux64	ARM64
26ai	JDK11.0.30	Included in DBRU	***	***	***	***	***	***	***	***	Included in DBRU
21c	JDK8u481 38586761	Released	Released	*	*	*	*	*	*	*	*
19c	JDK8u481 38586770	Released	Released	Released	Released	Released	Released	Released	Released	Released	Released

* This platform is not planned for 21c, as 21c is an Innovation Release

** Some of the JDK's provided by Oracle are dependent on platform vendors. When those platform vendors provide Oracle with the JDK we then package it for Data base Customers, and document it in this table.

*** This platform is not planned for 26ai.

2.2 Latest Perl Patches for Database

As of January 2023, the latest PERL Patches are included with the quarterly security patches and are no longer provided separately.

3.0 Historical Patches

3.1 Historical JDK Patches for Database

Oct2025 Quarter

Version	Patch	Linux64	Windows64	WindowsNT	Sparc64	Solaris.x64	Linux32	AIX64	HPIA64	ZLinux64	ARM64
26ai	JDK11.0.29	Released	***	***	***	***	***	***	***	***	Included in DBRU

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=RU, JDK
```





Patch the OCW component

```
$ORACLE_HOME/OPatch/opatch lspatches
```

```
38632161;Database Release Update : 19.30.0.0.260120(REL-JAN260130) (38632161)  
29585399;OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
```





It is mandatory to update OCW with Oracle RAC Database and Oracle Restart

- In the database Oracle home

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=RECOMMENDED,OCW
```



```
$ORACLE_HOME/OPatch/opatch lspatches
```

```
38632161;Database Release Update : 19.30.0.0.260120(REL-JAN260130) (38632161)
```

```
38661284;OCW RELEASE UPDATE 19.30.0.0.0 (38661284)
```





AutoUpgrade downloads the GI RU
- use it to patch Grid Infrastructure



What about AutoUpgrade itself?

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.patch=AU
```





But there are other tools ...

COMING SOON

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log  
global.keystore=/home/oracle/autoupgrade-patching/keystore  
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19  
patch1.patch=AU,AHF,CVU,SQLCL
```





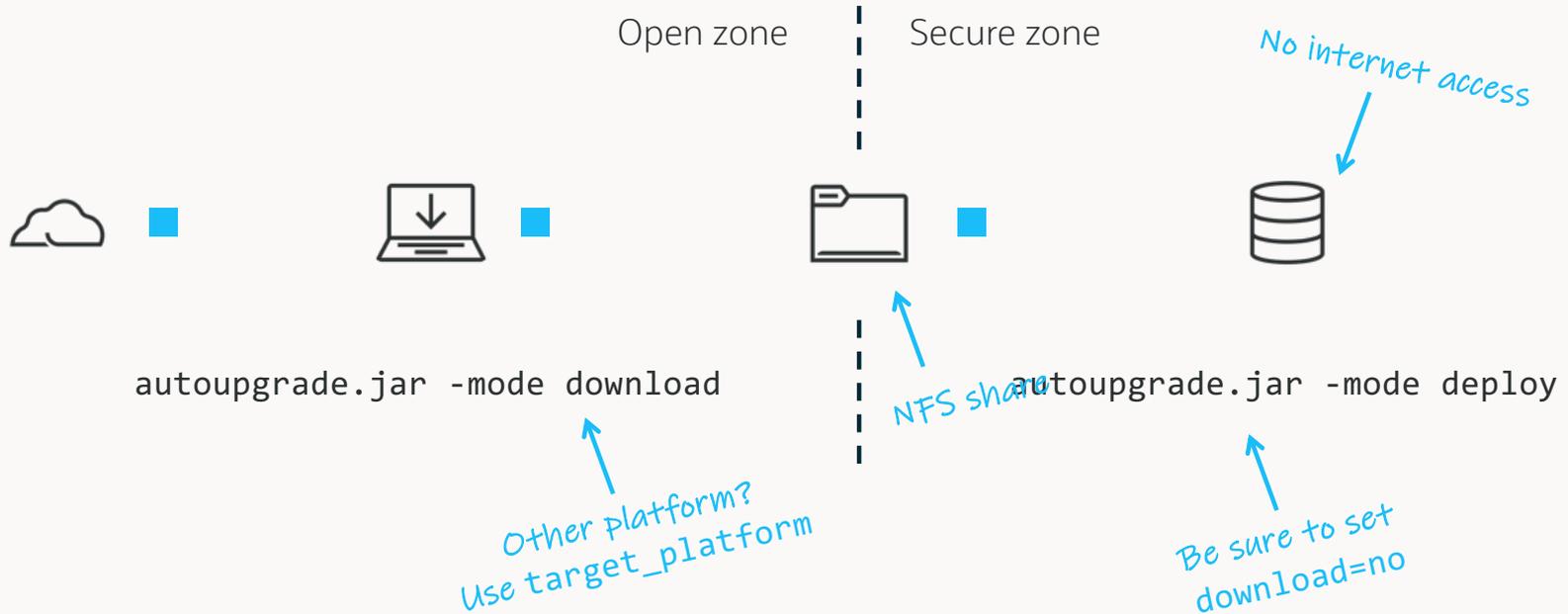
Any other tool AutoUpgrade should download?

- Use the Q&A and drop us a note



Your database host
doesn't have internet access?

Using Download Mode



Using Proxy to Download Patches

```
$ export https_proxy='https://proxy.example.com:8080'
```

```
$ java -jar autoupgrade.jar ... -mode download
```



DEMO

DEMO

Download patches via a proxy





Let's get those patches

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
```

```
patch1.platform=LINUX.X64
```

```
patch1.patch=RECOMMENDED,MRP,38854064,37690446,34672698,34774667,29213893,SDOBP,TEXT,JDK,OCW
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.platform=LINUX.X64
patch1.patch=RECOMMENDED,MRP,38854064,37690446,34672698,34774667,29213893,SDOBP,TEXT,JDK,OCW
```

```
patch2.target_version=19
patch2.platform=AIX.X64
patch2.patch=RECOMMENDED,JDK,OCW
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.target_version=19
patch1.platform=LINUX.X64
patch1.patch=RECOMMENDED,MRP,38854064,37690446,34672698,34774667,29213893,SDOBP,TEXT,JDK,OCW
```

```
patch2.target_version=19
patch2.platform=AIX.X64
patch2.patch=RECOMMENDED,JDK,OCW
```

```
patch3.target_version=26
patch3.platform=LINUX.X64
patch3.patch=RECOMMENDED,JDK,OCW
```



-- Start AutoUpgrade in download mode to get the patches specified in the config file

```
java -jar autoupgrade.jar -config get.cfg -patch -mode download
```



DEMO

Download patches

- Multiple releases
- Multiple platforms

 [Watch on YouTube](#)



AutoUpgrade stores patch information
in `patches_info.json`

- Useful for automation

```
{
  "patchFolder": "/home/oracle/autoupgrade/patches",
  "patches": [
    {
      "description": "DATABASE RELEASE UPDATE 19.30.0.0.0(REL-JAN260130)",
      "platform": "Linux x86-64",
      "releaseUpdate": "19.30.0.0.0",
      "files": [
        {
          "name": "p38632161_190000_Linux-x86-64.zip",
          "checksum": "E73FE7897401FFCF66C4B6C3D519C5740B7E477E",
          "checksum-256": "74BB470A435DE8EB129CD94D65AA7052F4998671053C29EFB60DBF510B83A8F5"
        }
      ]
    },
    ....
  ]
}
```



```
{
  "patchFolder": "/home/oracle/autoupgrade/patches",
  "patches": [
    {
      "description": "DATABASE RELEASE UPDATE 19.30.0.0.0(REL-JAN260130)",
      "platform": "Linux x86-64",
      "releaseUpdate": "19.30.0.0.0",
      "files": [
        {
          "name": "p38632161_190000_Linux-x86-64.zip",
          "checksum": "E73FE7897401FFCF66C4B6C3D519C5740B7E477E",
          "checksum-256": "74BB470A435DE8EB129CD94D65AA7052F4998671053C29EFB60DBF510B83A8F5"
        }
      ]
    },
    ....
  ]
}
```





AutoUpgrade verifies the integrity of downloaded files

- Files are deleted if checksums don't match



Where is my Release Update?

- Post Release Patches

Oracle Critical Patch Update Advisory - January 2026

Description

A Critical Patch Update is a collection of patches for multiple security vulnerabilities. These patches address vulnerabilities in Oracle code and in third party components included in Oracle products. These patches are usually cumulative, but each advisory describes only the security patches added since the previous Critical Patch Update Advisory. Thus, prior Critical Patch Update advisories should be reviewed for information regarding earlier published security patches. Refer to [“Critical Patch Updates, Security Alerts and Bulletins”](#) for information about Oracle Security advisories.

Oracle continues to periodically receive reports of attempts to maliciously exploit vulnerabilities for which Oracle has already released security patches. In some instances, it has been reported that attackers have been successful because targeted customers had failed to apply available Oracle patches. Oracle therefore strongly recommends that customers remain on actively-supported versions and apply Critical Patch Update security patches without delay.

This Critical Patch Update contains 337 new security patches across the product families listed below. Please note that an MOS note summarizing the content of this Critical Patch Update and other Oracle Software Security Assurance activities is located at [January 2026 Critical Patch Update: Executive Summary and Analysis](#).

Affected Products and Patch Information

Security vulnerabilities addressed by this Critical Patch Update affect the products listed below.

Please click on the links in the Patch Availability Document column below to access the documentation for patch availability information and installation instructions.

Affected Products and Versions	Patch Availability Document
JD Edwards EnterpriseOne Tools, versions 9.2.0.0-9.2.26.0	JD Edwards

Oracle Communications Network Integrity, versions 11.10, 11.10, 11.10, 11.10	Oracle Communications Network Integrity
Oracle Communications Operations Monitor, versions 5.2, 6.0, 6.1	Oracle Communications Operations Monitor
Oracle Communications Order and Service Management, versions 7.5.0, 8.0.0	Oracle Communications Order and Service Management
Oracle Communications Policy Management, version 15.0.0.0	Oracle Communications Policy Management
Oracle Communications Pricing Design Center, versions 15.0.0.0.0, 15.0.1.0.0, 15.1.0.0.0	Oracle Communications Pricing Design Center
Oracle Communications Session Border Controller, versions 9.3.0, 10.0.0	Oracle Communications Session Border Controller
Oracle Communications Session Report Manager, versions 9.0.0-9.0.4	Oracle Communications Session Report Manager
Oracle Communications Unified Assurance, versions 6.1.0-6.1.1	Oracle Communications Unified Assurance
Oracle Communications Unified Inventory Management, versions 7.7.0, 7.8.0, 8.0.0	Oracle Communications Unified Inventory Management
Oracle Data Integrator, versions 12.2.1.4.0, 14.1.2.0.0	Fusion Middleware
Oracle Database Server, versions 19.3-19.29, 21.3-21.20, 23.4.0-23.26.0	Database
Oracle E-Business Suite, versions 12.2.3-12.2.15	Oracle E-Business Suite
Oracle Enterprise Communications Broker, versions 4.1.0, 4.2.0, 5.0.0	Oracle Enterprise Communications Broker
Oracle Enterprise Manager Base Platform, versions 13.5, 24.1	Oracle Enterprise Manager
Oracle Essbase, version 21.8.0.0.0	Database
Oracle Financial Services Compliance Studio, version 2.6.0	Oracle Financial Services Compliance Studio
Oracle Financial Services Model Management and Governance, version 8.1.3.2	Oracle Financial Services Model Management and Governance
Oracle FLEXCUBE Investor Servicing, versions 14.5.0.15.0, 14.7.0.8.0, 14.8.0.1.0	Contact Support
Oracle FLEXCUBE Universal Banking, versions 14.0.0.0.0-14.8.0.0.0	Contact Support
Oracle Fusion Middleware, versions 12.2.1.4.0, 14.1.2.0.0	Fusion Middleware
Oracle Global Lifecycle Management NextGen OUI Framework, version 15.1.1.0.0	Fusion Middleware
Oracle GoldenGate, versions 19.1.0.0.0-19.29.0.0.251021, 21.3-21.20, 23.4-23.10	Database
Oracle GoldenGate Big Data and Application Adapters, versions 19.1.0.0.0-19.1.0.0.20, 21.3-21.20, 23.4-23.10	Database
Oracle GoldenGate Stream Analytics, versions 19.1.0.0.0-19.1.0.0.13	Database
Oracle GoldenGate Studio, versions 23.8.0-23.9.0	Database

Oracle Critical Patch Update (CPU) Jan 2026 for Oracle Database Products

CPU4

Last Updated
Feb 13, 2026

Service
Gen 2 Exadata Cloud at Customer, Oracle Cloud Infrastructure - Database Service, Oracle Database - Enterprise Edition, Oracle Database - Standard Edition



1.4

Critical Patch Update (CPU) Jan 2026 for Oracle Database Products

My Oracle Support CPU4

Released January 20, 2026

This document contains the following sections:

- [Critical Patch Update January 2026 Patch Availability Document \(PAD\)](#)
 - [1 Overview](#)
 - [1.1 How to Use This Document](#)
 - [1.2 Terminology in the Tables](#)
 - [1.3 On-Request Patches](#)
 - [1.4 CPU Program and My Oracle Support Patch Recommendations](#)
 - [1.5 My Oracle Support \(MOS\) Conflict Checker Tool](#)
 - [2 What's New in January 2026](#)
 - [2.1 Final CPU Information \(Error Correction Policies\)](#)
 - [2.2 Post Release Patches](#)
 - [2.3 Separate PADs for Separate Products](#)
 - [2.4 Monthly Recommended Patches \(MRPs\)](#)
 - [3 Patch Availability for Oracle Products](#)
 - [3.1 Oracle Database](#)
 - [3.2 Oracle Sun Middleware](#)
 - [3.3 Tools](#)
 - [4 Final CPU History](#)
 - [5 Sources of Additional Information](#)
 - [6 Modification History](#)
 - [7 Documentation Accessibility](#)

Quick Links: [Read Me First](#) [DB 19c](#)

Patch	Patch Number	Platform	Availability
19.30.0.0.260120 DB RU & COMBO	DB 38632161 Combo 38658587	Linux x86-64: All Others	Available To prevent impact to Database systems, the 19.30 DB and GI release update patches for LINUX.X64 have been Re-Released as of 02-FEB-2026. For more information, see MOS KB867473 . 20-Feb-2026
19.30.0.0.260120 GI RU & COMBO	GI 38629535 Combo 38658588	Linux x86-64: All Others	Available To prevent impact to Database systems, the 19.30 DB and GI release update patches for LINUX.X64 have been Re-Released as of 02-FEB-2026. For more information, see MOS KB867473 . 20-Feb-2026
19.30.0.0.260120 OJVM RU	38523609	ALL, Except Windows	20-Feb-2026
19.30.0.0.260120 WIN BP & OJVM	38597735	Windows 64-bit & Windows 32-bit Windows OJVM	20-Feb-2026
19.30 QFSDP for Exadata	38658589	Linux x86-64	Available
19.30 QFSDB for Exadata	38658589	Solaris x86-64	20-Feb-2026
21.21 QFSDP for Exadata	38658590	Linux x86-64	Available
23.26.1 QFSDP for Exadata	38658591	Linux x86-64	Available
Q1.2026 QFSDP	38658593	Supercluster	07-Mar-2026
GoldenGate for Distributed Applications and Analytics 23.26.1.0.0	38858328	Linux x86-64	13-Feb-2026
Oracle GoldenGate for Big Data 21.20.0.0.0 Microservices	38858517	Linux x86-64	20-Feb-2026
Oracle GoldenGate for Big Data			

Patch	Patch Number	Platform	Availability
19.30.0.0.260120 DB RU & COMBO	DB 38632161 Combo 38658587	Linux x86-64: All Others	Available To prevent impact to Database systems, the 19.30 DB and GI release update patches for LINUX.X64 have been Re-Released as of 02-FEB-2026. For more information, see MOS KB867473 . 20-Feb-2026
19.30.0.0.260120 GI RU & COMBO	GI 38629535 Combo 38658588	Linux x86-64: All Others	Available To prevent impact to Database systems, the 19.30 DB and GI release update patches for LINUX.X64 have been Re-Released as of 02-FEB-2026. For more information, see MOS KB867473 . 20-Feb-2026
19.30.0.0.260120 OJVM RU	38523609	ALL, Except Windows	20-Feb-2026
19.30.0.0.260120 WIN BP & OJVM	38597731	Windows 64-bit & Windows 32-bit Windows OJVM	20-Feb-2026
19.30 QFSDP for Exadata	38658589	Linux x86-64	Available
19.30 QFSDB for Exadata	38658589	Solaris x86-64	20-Feb-2026
21.21 QFSDP for Exadata	38658590	Linux x86-64	Available
23.26.1 QFSDP for Exadata	38658591	Linux x86-64	Available
Q1.2026 QFSDP	38658593	Supercluster	07-Mar-2026
GoldenGate for Distributed Applications and Analytics 23.26.1.0.0	38858328	Linux x86-64	13-Feb-2026
Oracle GoldenGate for Big Data 21.20.0.0.0 Microservices	38858517	Linux x86-64	20-Feb-2026
Oracle GoldenGate for Big Data			

Further Information

Downloading Patches

- [Assistant: Download Reference for Oracle Database/GI Update, Revision, PSU, SPU\(CPU\), Bundle Patches, Patchsets and Base Releases \(KA958\)](#)
- [Oracle Database 19c and Oracle AI Database 26ai Important Recommended One-off Patches \(KB188772\)](#)
- [Oracle Database Patches to Consider for 19c \(KA912\)](#)
- [Things to Consider to Avoid SQL Performance Problems on 19c \(KB138000\)](#)
- [Long Term Support Model for 19c Database Release Updates \(KB625385\)](#)
- [ORAdiff](#)
- Blog post: [The Easiest Way to Download 19.27 Release Update](#)
- Blog post: [The Easiest Way To Download Patches for Oracle Grid Infrastructure](#)
- Blog post: [AutoUpgrade New Features: Patch OCW Component In Oracle Home](#)



Install



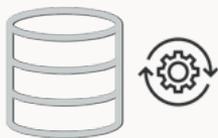
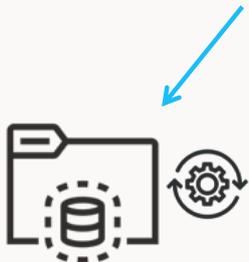
Creating Oracle home





In-Place Patching

Oracle Home, 19.30.0



```
$ORACLE_HOME/OPatch/opatch rollback -id ...
```



Out-of-Place Patching

Oracle Home, 19.29.0



SHUTDOWN IMMEDIATE



`$ORACLE_HOME/OPatch/datapatch`

New Oracle Home 19.30.0



Out-of-place Patching Benefits

- Less downtime
- Less risk
- Easier rollback
- Leaner Oracle home





Always patch Out-of-Place



But if you insist ...

```
du -sh $ORACLE_HOME/.patch_storage
```

```
14.2G    /u01/app/oracle/product/19/.patch_storage
```

```
-- Clean up Oracle home if you use in-place patching  
-- or use out-of-place patching with cloned Oracle homes.  
-- Delete obsolete files from $ORACLE_HOME/.patch_storage and trims OPatch XML files
```

```
./opatch util deleteinactivepatches
```





Create new Oracle home
- matching the current Oracle home

```
cat install19.cfg
```

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
```

```
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29 ← Settings
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.patch=RECOMMENDED
```

↑
Patches



```
cat install19.cfg
```

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log  
global.folder=/home/oracle/autoupgrade/patches  
patch1.source_home=/u01/app/oracle/product/dbhome_19_29  
patch1.target_home=/u01/app/oracle/product/dbhome_19_30  
patch1.patch=RECOMMENDED
```

```
java -jar autoupgrade.jar -config install19.cfg -patch -mode create_home
```





Override source home setting



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
patch1.patch=RECOMMENDED
patch1.home_settings.home_name=OraDbHome1930
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
patch1.patch=RECOMMENDED
patch1.home_settings.home_name=OraDbHome1930
patch1.home_settings.binopt.part=no
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
patch1.patch=RECOMMENDED
patch1.home_settings.home_name=OraDbHome1930
patch1.home_settings.binopt.part=no
patch1.home_settings.binopt.uniaud=yes
```





The [documentation](#) lists
all the Oracle home options



Are you using Oracle RAC Database? Also works for cluster Oracle homes!

- Automatically detected
- No additional configuration



Create new Oracle home
- on brand new server

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
install1.patch=RECOMMENDED
```

```
install1.target_version=26
```

```
install1.target_home=/u01/app/oracle/product/dbhome 26 1
```

```
install1.home_settings.oracle_base=/u01/app/oracle
```

```
install1.home_settings.edition=EE
```

```
install1.home_settings.inventory_location=/u01/app/oraInventory
```



DEMO

Install on brand-new server

 [Watch on YouTube](#)



Use placeholders in target home naming

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.sid=CDB19
```

```
patch1.patch=RECOMMENDED
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.sid=CDB19
```

```
patch1.patch=RECOMMENDED
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_%RELEASE%_%UPDATE%
```



Aliases

Example:

23.26.1.0.2

%RELEASE%	23
%UPDATE%	26.1



Aliases

Example:

23.26.1.0.2

%RELEASE%	23
%UPDATE%	26.1
%V1D%	23
%V2D%	26
%V3D%	1
%V4D%	0
%V5D%	2



DEMO

Using placeholders in target
Oracle home naming

 [Watch on YouTube](#)



AutoUpgrade runs `root.sh` script

- `oracle` user must have sudo privilege

Job 100 completed

----- Final Summary -----

Number of databases [1]

Jobs finished [1]

Jobs failed [0]

Jobs restored [0]

Jobs pending [0]

Run the root.sh script as root for the following jobs:

For create_home_1 -> /u01/app/oracle/product/dbhome_19_30/root.sh



```
$ cat rootsh/rootsh.json
```

```
{  
  "scripts": [  
    {  
      "rootScript": "/u01/app/oracle/product/dbhome_19_30/root.sh",  
      "hosts": [  
        "localhost"  
      ]  
    }  
  ]  
}
```



Further Information

Downloading Patches



- [\(KB104015\) OPatch 12.2.0.1.37+ Introduces a New Feature to Delete Inactive Patches in the ORACLE_HOME/.patch_storage Directory](#)
- Blog post: [AutoUpgrade New Features: Install Oracle Home on Brand-New, Empty Server](#)
- Blog post: [Cleaning up older patch artifacts – improving opatch performance](#)
- Hands-on lab: [Patch Me If You Can](#)



Patch

Patching Oracle AI Database





Start by performing a pre-patch analysis

Analyze

- Analyzes database for patch readiness
- Datapatch Sanity Checks
- Lightweight
- Non-intrusive
- Recommended, not required



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
patch1.sid=CDB19
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
patch1.sid=CDB19
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
$ java -jar autoupgrade.jar -config CDB19.cfg -mode analyze
```



```
=====
Autoupgrade Summary Report
=====
```

```
[Date] Tue Feb 24 07:51:45 GMT 2026
```

```
[Number of Jobs] 1
=====
```

```
[Job ID] 100
=====
```

```
[DB Name] cdb19
```

```
[Version Before Upgrade] 19.29.0.0.0
```

```
[Version After Upgrade] 19.30.0.0.0
-----
```

```
[Stage Name] PRECHECKS
```

```
[Status] SUCCESS
```

```
[Start Time] 2026-02-24 07:51:08
```

```
[Duration] 0:00:36
```

```
[Log Directory] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks
```

```
[Detail] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks/cdb19_preupgrade.log
```

```
Check passed and no manual intervention needed
-----
```



=====
Autoupgrade Summary Report
=====

[Date] Tue Feb 24 07:51:45 GMT 2026

[Number of Jobs] 1
=====

[Job ID] 100
=====

[DB Name] cdb19

[Version Before Upgrade] 19.29.0.0.0

[Version After Upgrade] 19.30.0.0.0

[Stage Name] PRECHECKS

[Status] SUCCESS

[Start Time] 2026-02-24 07:51:08

[Duration] 0:00:36

[Log Directory] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks

[Detail] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks/cdb19_preupgrade.log

Check passed and no manual intervention needed



```
=====
Autoupgrade Summary Report
=====
```

```
[Date] Tue Feb 24 07:51:45 GMT 2026
```

```
[Number of Jobs] 1
=====
```

```
[Job ID] 100
=====
```

```
[DB Name] cdb19
```

```
[Version Before Upgrade] 19.29.0.0.0
```

```
[Version After Upgrade] 19.30.0.0.0
-----
```

```
[Stage Name] PRECHECKS
```

```
[Status] SUCCESS
```

```
[Start Time] 2026-02-24 07:51:08
```

```
[Duration] 0:00:36
```

```
[Log Directory] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks
```

```
[Detail] /home/oracle/autoupgrade-patching/log/CDB19/100/prechecks/cdb19\_preupgrade.log
```

```
Check passed and no manual intervention needed
-----
```





Patch a single instance database

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
```

```
patch1.sid=CDB19
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
```

```
patch1.sid=CDB19
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.rman_catalog_connect_string=catalogdb
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
```

```
patch1.sid=CDB19
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.rman_catalog_connect_string=catalogdb
```

```
patch1.emcli_path=/u01/app/oracle/oem
```

```
patch1.em_target_name=ORCL_myhost.domain.int
```



```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
```

```
patch1.sid=CDB19
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
patch1.rman_catalog_connect_string=catalogdb
patch1.emcli_path=/u01/app/oracle/oem
patch1.em_target_name=ORCL_myhost.domain.int
patch1.before_action=/home/oracle/scripts/before_db.sh Y
patch1.after_action=/home/oracle/scripts/after_db.sh Y
```



-- Patch the database according to the specification in the config file
-- This takes care of all the necessary steps, including pre- and post-tasks

```
java -jar autoupgrade.jar -config CDB19.cfg -mode deploy
```





AutoUpgrade fully supports Oracle Restart

- No additional configuration





You can also patch individual PDBs
- also using refreshable clone PDBs



Patching Data Guard



Reduce downtime to the time it takes
to perform a switchover

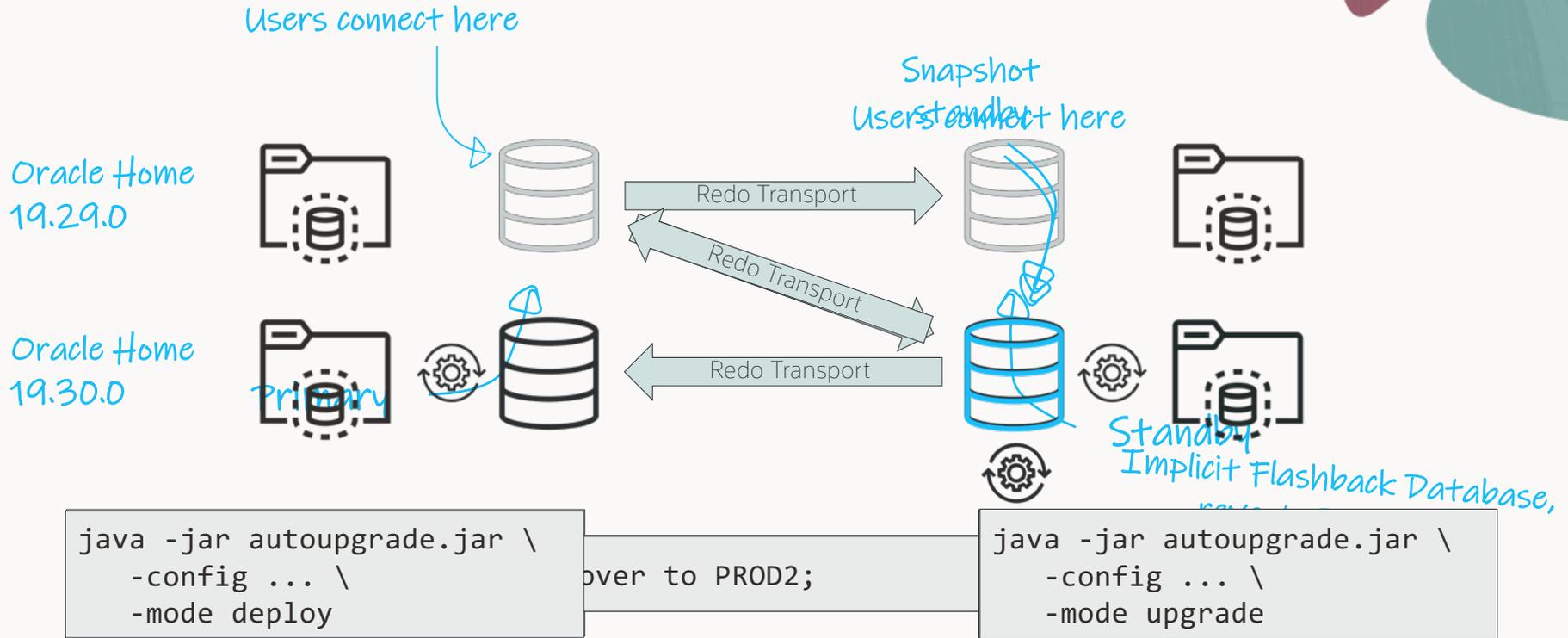




Safely test and verify patches with Standby-First Patch Apply



Standby-First Patching



DEMO

Patch Data Guard

 [Watch on YouTube](#)



Patch must Standby-First installable

- Check the patch readme

Data Guard Patching



Primary



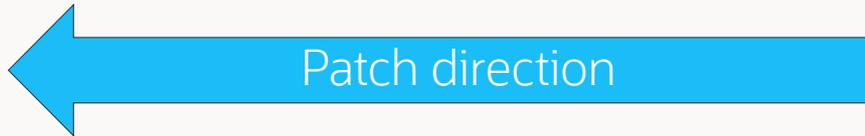
Far sync



Standby



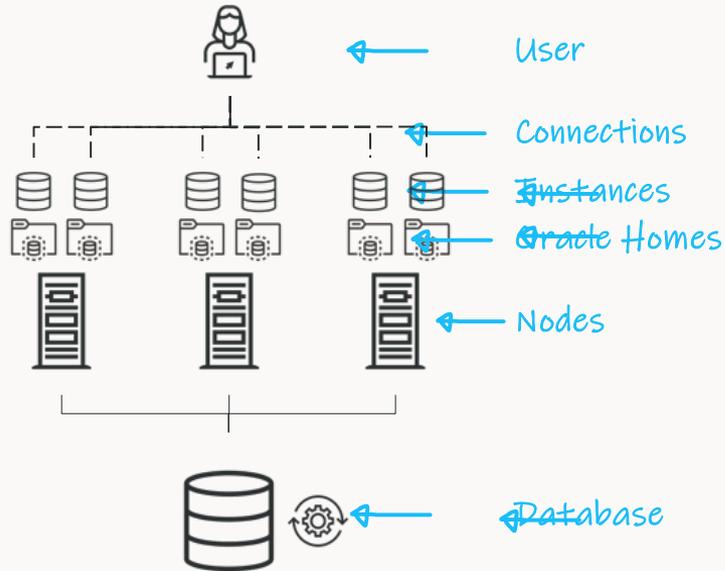
Cascading standby





Rolling patch apply on Oracle RAC Database

RAC Rolling Patching



- New DB home

```
autoupgrade.jar ... -mode create_home
```

- Move to new home

```
autoupgrade.jar ... -mode deploy
```

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
```

```
patch1.sid=CDB191
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.rac_rolling=auto
```


Default value



DEMO

Patch Oracle RAC Database

- Using AutoUpgrade
- Rolling

 [Watch on YouTube](#)

patch1.rac_rolling

DISABLED

Patch using non-rolling method
(outage)

REQUIRED

Patch using rolling method or stop
if non-rolling patches are detected

AUTO

Automatically detects the best approach
([default](#))

FORCE

Force using rolling method





AutoUpgrade stops the service
using the default drain timeout

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
```

```
patch1.sid=CDB191
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.rac_rolling=auto
```

```
patch1.drain_timeout=300
```





But my application doesn't drain ...

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
```

```
patch1.sid=CDB191
```

```
patch1.source_home=/u01/app/oracle/product/dbhome_19_29
```

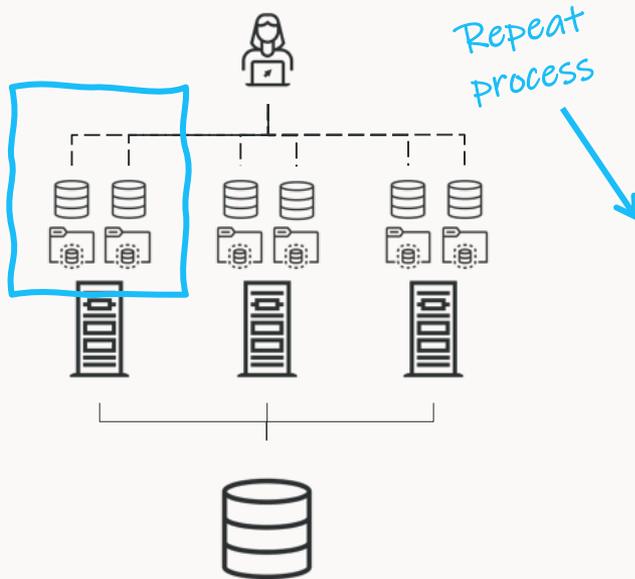
```
patch1.target_home=/u01/app/oracle/product/dbhome_19_30
```

```
patch1.rac_rolling=auto
```

```
patch1.drain_timeout=WAIT
```



Controlling the Draining



```
autoupgrade.jar ... -mode deploy
```

```
srvctl relocate service \  
-stopoption TRANSACTIONAL \  
-drain_timeout 2592000 ...
```

```
upg> proceed -job 101
```

```
srvctl srvctl stop instance \  
-stopoption IMMEDIATE \  
-drain_timeout 0 ...
```



drain_timeout

```
patch1.drain_timeout = WAIT
```

```
srvctl relocate service  
-oldinst node1  
-stopoption TRANSACTIONAL  
-drain_timeout 2592000  
-wait yes  
-verbose
```

```
> proceed -job 101
```

```
srvctl stop instance  
-instance node1  
-stopoption IMMEDIATE  
-drain_timeout 0  
-failover  
-verbose  
-force
```

```
patch1.drain_timeout = 120
```

```
srvctl stop instance  
-instance node1  
-stopoption IMMEDIATE  
-drain_timeout 120  
-failover  
-verbose  
-force
```

```
patch1.drain_timeout (unset)
```

```
srvctl stop instance  
-instance node1  
-stopoption IMMEDIATE  
-failover  
-verbose  
-force
```

↑
*When unset, value used
will be the MAX drain
of all running services
on that instance.*



Don't forget about distributed patching

- Significantly speed up patching



Introducing Oracle Update Advisor

Oracle Update Advisor



- 1 Software health status
- 2 Patch recommendations
- 3 Gold image download



Oracle Update Advisor

AutoUpgrade

+



Gold image download

Update Advisor





If we have your image in stock,
you'll just download that image

- Else, we create it for you

Oracle Update Advisor

```
patch1.patch=RU:19.30,OPATCH,OJVM,OCW
```

Oracle Support

- Download Release Update 19.30
- Download OJVM bundle patch
- Download GI bundle patch
- Extract base release
- Install Oracle home
- Apply Release Update 19.30
- Apply OJVM bundle patch
- Apply OCW patch

Update Advisor

- Download gold image
- Extract gold image
- Install Oracle home



Oracle Update Advisor

Daniel	patch=RU:19.30,OCW,OJVM,38854064,37690446,3467261
Mike	patch=RU:19.30,OCW,OJVM,34774667,29213893
Alex	patch=RU:19.30,OCW,OJVM,38854064,37690446
Rodrigo	patch=RU:19.30,OCW,OJVM,3467261
Alejandro	patch=RU:19.30,OCW,OJVM

Download as gold image



Oracle Update Advisor

Daniel	patch=RU:19.30,OCW,OJVM,38854064,37690446,3467261
Mike	patch=RU:19.30,OCW,OJVM,34774667,29213893
Alex	patch=RU:19.30,OCW,OJVM,38854064,37690446
Rodrigo	patch=RU:19.30,OCW,OJVM,3467261
Alejandro	patch=RU:19.30,OCW,OJVM

Download and install

```
global.global_log_dir=/home/oracle/autoupgrade-patching/log
global.keystore=/home/oracle/autoupgrade-patching/keystore
global.folder=/home/oracle/autoupgrade/patches
```

```
patch1.platform=LINUX.X64
patch1.patch=RU:19.30,OJVM,OCW,MRP,38854064,37690446
patch1.gold_image=auto
```


Default



Oracle Update Advisor

gold_image=auto



Linux + CSI in keystore

- Download download gold image
- Download one-offs from MOS
- Apply one-offs

Else

- Manually download base image (19c)
- Download all patches from MOS
- Apply all patches



DEMO

AutoUpgrade + Update Advisor

- Download gold image

 [Watch on YouTube](#)



CSI no longer needed

- AutoUpgrade 26.3 will implement this change

19c

The 19c base image is no longer needed when using the `gold_image` option

AutoUpgrade | Download Methods

Individual Patches

`gold_image=no`

Download from MOS

Patches are ready for download

Extra time to apply all patches

No CSI required in AutoUpgrade

Base Release required (< 26ai)

Gold Image

`gold_image=yes`

Download from Oracle Update Advisor

Wait for Gold Image generation

Oracle Home is ready and zipped

CSI is required in AutoUpgrade

Base Release is not required



Gold Image | Parameter values

gold_image

1. **NO**

2. YES

3. AUTO

4. ALL

- Gold Image is not used
- All patches are downloaded from MOS and applied
- Requires Base Release (for releases before 26ai)



gold_image=YES
gold_image=AUTO



gold_image=ALL



Gold Image | Parameter values

gold_image

1. NO
- 2. YES**
3. AUTO
4. ALL

- Download the Gold Image for specified patches (except one-offs)
- Only one-offs are downloaded from MOS and applied
- Requires MOS CSI to be loaded into the keystore



Gold Image | Parameter values

gold_image

1. NO
2. YES
3. **AUTO**
4. ALL

- Will automatically decide if YES or NO
- Condition for NO (any):
 - Oracle Update Advisor connection fails
 - MOS CSI not loaded in keystore
 - Requested platform not LINUX.X64
 - Requested RU not available on the Oracle Update Advisor



Gold Image | Parameter values

gold_image

1. NO
2. YES
3. AUTO
4. **ALL**

- Download the Gold Image for all patches
- Patch combination may not be cached in Oracle Update Advisor
- MOS CSI required into the keystore





Be aware:

If your Gold Image isn't on stock, it may take two hours until the download is ready

- Don't quit AutoUpgrade



How to generate the config file

```
$ env | grep ORA
```

```
ORACLE_SID=CDB19
```

```
ORACLE_BASE=/u01/app/oracle
```

```
ORACLE_HOME=/u01/app/oracle/product/19
```

```
$ java -jar autoupgrade.jar -auto_config
```



DEMO

Generate config file

 [Watch on YouTube](#)

AutoUpgrade Composer

Marcus Vinicius Miguel Pedro
Practice Director LATAM at Accenture



AutoUpgrade Composer

STABLE

v.25.6-2

Generate your Oracle AutoUpgrade Config Easily

Created by [Marcus Vinicius Miguel Pedro](#) | [Oracle ACE Director](#) | [Blog](#)

LOAD CONFIGURATION

Global Options

Operation Type:

- Upgrade Database
- Patch Database

Global Log Directory:

/home/oracle/autoupgrade-patching/log

Database Configurations

patch1



Generated Config

```
# Created by AutoUpgrade Composer
# Patch, ExecMode: Deploy

global.global_log_dir=/home/oracle/autoupgrade-patching/log

patch1.sid=DB1
patch1.log_dir=/home/oracle/autoupgrade-patching/DB1/log
patch1.source_home=/u01/app/oracle/product/19.15/dbhome_1
patch1.target_home=/u01/app/oracle/product/19.28/dbhome_1
patch1.restoration=YES
patch1.folder=/home/oracle/autoupgrade/patches
patch1.patch=RU,OPATCH
patch1.download=NO
```

DOWNLOAD CONFIG FILE

COPY TO CLIPBOARD

DEMO

Use AutoUpgrade composer

- Generate config value
- Explore options

 [Watch on YouTube](#)

Further Information

Patching Database

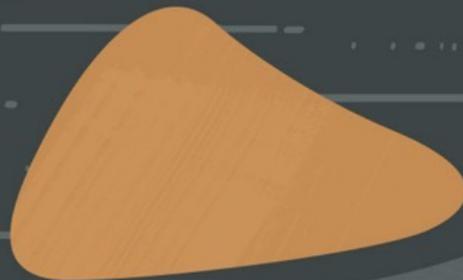
- [Oracle Patch Assurance - Data Guard Standby-First Patch Apply \(KB137118\)](#)
- Blog post: [Upgrade RMAN Catalog Schema](#)
- Blog post: [Update Enterprise Manager Configuration](#)
- Blog post: [Introduction to Patching Oracle Data Guard](#)
- Blog post: [Downloading and using Gold Image with AutoUpgrade](#)
- Blog post: [RAC Rolling mode in AutoUpgrade](#)
- Blog post: [How to patch Oracle Database using controlled RAC Rolling with AutoUpgrade](#)
- Blog post: [Announcing Oracle Update Advisor](#)
- Hands-on lab: [Patch Me If You Can](#)



Finalize



A few things more ...





Don't forget the clients

Security Bug Fixes in Clients

CPU	Clients Affected
Jan 2026	Client-only, SQLcl
Oct 2025	Client-only, SQLcl
Jul 2025	Client-only, JDBC
Apr 2025	Client-only, SQLcl
Jan 2025	
Oct 2024	Client-only
Jul 2024	Client-only
Apr 2025	SQLcl
Jan 2025	
Oct 2024	



Oracle Critical Patch Update Advisory - January 2026

Description

A Critical Patch Update is a collection of patches for multiple security vulnerabilities. These patches address vulnerabilities in Oracle code and in third party components included in Oracle products. These patches are usually cumulative, but each advisory describes only the security patches added since the previous Critical Patch Update Advisory. Thus, prior Critical Patch Update advisories should be reviewed for information regarding earlier published security patches. Refer to [“Critical Patch Updates, Security Alerts and Bulletins”](#) for information about Oracle Security advisories.

Oracle continues to periodically receive reports of attempts to maliciously exploit vulnerabilities for which Oracle has already released security patches. In some instances, it has been reported that attackers have been successful because targeted customers had failed to apply available Oracle patches. Oracle therefore strongly recommends that customers remain on actively-supported versions and apply Critical Patch Update security patches without delay.

This Critical Patch Update contains 337 new security patches across the product families listed below. Please note that an MOS note summarizing the content of this Critical Patch Update and other Oracle Software Security Assurance activities is located at [January 2026 Critical Patch Update: Executive Summary and Analysis](#).

Affected Products and Patch Information

Security vulnerabilities addressed by this Critical Patch Update affect the products listed below

Oracle Database Server Risk Matrix

This Critical Patch Update contains 7 new security patches, plus additional third party patches noted below, for Oracle Database Products. 2 of these vulnerabilities may be remotely exploitable without authentication, i.e., may be exploited over a network without requiring user credentials.

1 of these patches is applicable to client-only installations, i.e., installations that do not have the Oracle Database Server installed. The English text form of this Risk Matrix can be found [here](#).

CVE ID	Component	Package and/or Privilege Required	Protocol	Remote Exploit without Auth.?	CVSS VERSION 3.1 RISK (see Risk Matrix Definitions)									Supported Versions Affected	Notes
					Base Score	Attack Vector	Attack Complex	Privs Req'd	User Interact	Scope	Confidentiality	Integrity	Availability		
CVE-2025-12383	Fleet Patching and Provisioning (Eclipse Jersey)	None	HTTP	Yes	7.4	Network	High	None	None	Unchanged	High	High	None	23.4.0-23.26.0	
CVE-2026-21939	SQLcl	None	None	No	7.0	Local	High	None	Required	Unchanged	High	High	High	23.4.0-23.26.0	
CVE-2025-8194	RDBMS (Python)	Create Session	None	No	6.7	Local	Low	High	None	Unchanged	High	High	High	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-67735	Oracle Graal Development Kit for Micronaut (Nimbus JOSE+JWT)	Create Session	Oracle Net	Yes	6.5	Network	Low	None	None	Unchanged	Low	Low	None	19.3-19.29, 23.4.0-23.26.0	
CVE-2026-21975	Java VM	Create Session	Oracle Net	No	4.5	Network	Low	High	Required	Unchanged	None	None	High	19.3-19.29, 21.3-21.20	
CVE-2025-61755	GraalVM Multilingual Engine	Create Session	Multiple	No	3.1	Network	High	Low	None	Unchanged	Low	None	None	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-54874	Oracle Spatial and Graph (OpenJPEG)	None	None	No	2.8	Local	Low	Low	Required	Unchanged	None	None	Low	23.4.0-23.26.0	

Oracle Database Server Risk Matrix

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					Base Score	Attack Vector	Attack Complex	Privs Req'd	User Interact	Scope	Confidentiality	Integrity	Availability		
CVE-2025-12383	Fleet Patching and Provisioning (Eclipse Jersey)	None	HTTP	Yes	7.4	Network	High	None	None	Un-changed	High	High	None	23.4.0-23.26.0	
CVE-2026-21939	SQLcl	None	None	No	7.0	Local	High	None	Required	Un-changed	High	High	High	23.4.0-23.26.0	
CVE-2025-8194	RDBMS (Python)	Create Session	None	No	6.7	Local	Low	High	None	Un-changed	High	High	High	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-67735	Oracle Graal Development Kit for Micronaut (Nimbus JOSE+JWT)	Create Session	Oracle Net	Yes	6.5	Network	Low	None	None	Un-changed	Low	Low	None	19.3-19.29, 23.4.0-23.26.0	
CVE-2026-21975	Java VM	Create Session	Oracle Net	No	4.5	Network	Low	High	Required	Un-changed	None	None	High	19.3-19.29, 21.3-21.20	
CVE-2025-61755	GraalVM Multilingual Engine	Create Session	Multiple	No	3.1	Network	High	Low	None	Un-changed	Low	None	None	21.3-21.20, 23.4.0-23.26.0	
CVE-2025-54874	Oracle Spatial and Graph (OpenJPEG)	None	None	No	2.8	Local	Low	Low	Required	Un-changed	None	None	Low	23.4.0-23.26.0	



Every quarter, you should evaluate the need for client patching

- Establish a structured process



Create a process for patching your clients

- Automation is key
- Also useful for upgrading clients



Database clients are generally very stable

Patching Client-Only

- [Download](#) server Release Update
- Update with `opatch apply`



Patching Other Clients

- Update JDBC from [Maven Central Repository](#)
 - Alternatively, download directly from [oracle.com](#)
 - Update from IDE
- Update ODP.NET from [NuGet Gallery](#)
 - Update from IDE
- Update Instant Client from [oracle.com](#)
 - Overwrite existing files
- Update ODAC from [oracle.com](#)
 - Follow instructions to unpack





Ask your software vendor about their
embedded client patching practices



How can you tell which clients connect?

Client / Server Interoperability

Client Version	Server Version						
	26ai	21c	19c	18c	12.2.0	12.1.0	11.2.0
26ai#11	Yes	Yes	Yes	No	No	No	No
21c	Yes	Yes	Yes	Was	Was	Yes#12	No
19c	Yes	Yes	Yes	Was	Was	Yes#12	Yes#9
18c	No	Was	Was	Was	Was	Was	Was#9
12.2.0	No	Was	Was	Was	Was	Was	Was
12.1.0	No	Yes#12	Yes#12	Was	Was	Yes#12	Yes#12
11.2.0	No	No	Yes#9	Was#9	Was	Yes#12	Yes#9

[KB141043 - Client / Server Interoperability Support Matrix](#)



```
--List current connections and their driver details.  
--All drivers list the driver release, and most also the patch level  
--Join to gv$session for more details.
```

```
select * from gv$session_connect_info;
```





To maintain plan stability certain optimizer fixes are installed but disabled

- Automatic Fix Control Persistence

```
int optimGenerateCost(char *sql) {  
    n = getBaseSost(sql);  
    n = n * 2;  
    n = n + 10;  
    n = n / 3;  
    n = n - 5;  
    return n;  
}
```



```
int optimGenerateCost(char *sql) {
    n = getBaseSost(sql);
    n = n * 2;

    if (fixEnabled(32854286)) {
        // fixed code
        n = n + 8;
    } else {
        // original code
        n = n + 10;
    }

    n = n / 3;
    n = n - 5;
    return n;
}
```



```
int optimGenerateCost(char *sql) {
    n = getBaseSost(sql);
    n = n * 2;

    if (fixEnabled(32854286)) {
        // fixed code
        n = n + 8;
    } else {
        // original code
        n = n + 10;
    }

    n = n / 3;
    n = n - 5;
    return n;
}
```

```
int optimGenerateCost(char *sql) {  
    n = getBaseSost(sql);  
    n = n * 2;  
  
    if (fixEnabled(32854286)) {  
        // fixed code  
        n = n + 8;  
    } else {  
        // original code  
        n = n + 10;  
    }  
  
    n = n / 3;  
    n = n - 5;  
    return n;  
}
```



```
int optimGenerateCost(char *sql) {
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    } else {
        // original code
        n = n + 10;
    }

    n = n / 3;
    n = n - 5;
    return n;
}
```



The fix is installed, but disabled

```
-- Selectively enable a specific optimizer fix

exec dbms_optim_bundle.set_fix_controls(
  fix_control_string      => '32854286',
  scope                  => 'BOTH',
  current_setting_precedence => 'NO'
);
```



```
-- List all optimizer fixes
```

```
set serveroutput on;
```

```
exec dbms_optim_bundle.getBugsforBundle;
```



- Home
- Parameters
- Users, Roles, etc
- Privileges
- Included Fixes
 - List of Fixes
 - Total Fixes
 - Search Fixes
 - List of CVEs
 - CPU Explore
 - Fix Control
- Oracle Database Ho...
- Objects
- Fixed Objects
- Audit
- System

Version Selector

Source Release 19c	Source Patch Level 19.3.0 (Base Release)
Target Release 19c	Target Patch Level 19.30.0

List Mode

V_\$SYSTEM_FIX_CONTROL

Added Removed Modified

BUGNO	VALUE	SQL_FEATURE	DESCRIPTION	OPTIMIZER_FEATURE_ENABLE	EVENT	IS_DEFAULT
9876287	0	QKSFM_PQ_9876287	Fix perf slowdown due to wait event PXNSQ:PQLOADINFOQUERY		0	1
10123661	0	QKSFM_CURSOR_SHARING_10123661	Enable cursor sharing for AS OF queries		0	1
17295505	0	QKSFM_OBJ_EXT_17295505	allow stateful-access to image operator for ODCI table function		0	1
18101156	0	QKSFM_PARTITION_18101156	no RowCR for global index access on partitioned table		0	1

- Home
- Parameters
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BUGNO	VALUE	SQL_FEATURE	DESCRIPTION	OPTIMIZER_FEATURE_ENABLE	EVENT	IS_DEFAULT
			table			
29487407	0	QKSFM_SQL_CODE_GENERATOR_29487407	Streamline traversal of CAST_PSR operator		0	1
29499077	0	QKSFM_CBO_29499077	correct sel for LIKE preds with char binds holding numeric data		0	1
29590666	0	QKSFM_ALL_29590666	Do not perform xmlexists(fn:not) rewrite		0	1
29651517	0	QKSFM_COMPILATION_29651517	do not mark load into CDT as multi-start with result cache		0	1
29653132	0	QKSFM_ALL_29653132	Force the usage of BLOB in XMLAGG and XMLELEMENT		0	1
29657973	0	QKSFM_ACCESS_PATH_29657973	for update: force VC base column into row vector for top qbc onl		0	1
29687220	0	QKSFM_CBO_29687220	improve costing for indexes with empty statistics.		0	1
29696242	0	QKSFM_ACCESS_PATH_29696242	use only the best auto index for access path analysis		0	1
29712727	0	QKSFM_DYNAMIC_SAMPLING_29712727	analysis of skipped non-empty table partitions		0	1

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The Release Update should fix it.
Why does it still fail?

- Check for a matching fix control

Should You Enable Optimizer Fixes?

PATCHING



Selective enable optimizer fixes
Enable all, if you can properly test

NEW DATABASE



Enable all optimizer fixes
Perform testing



Further Information

Optimizer Fixes



- [Managing "installed but disabled" bug fixes in Database Release Updates using DBMS_OPTIM_BUNDLE \(KB148297\)](#)
- [ORAdiff - Fix Control](#)
- Blog post: [Should you enable _fix_controls with DBMS_OPTIM_BUNDLE?](#)





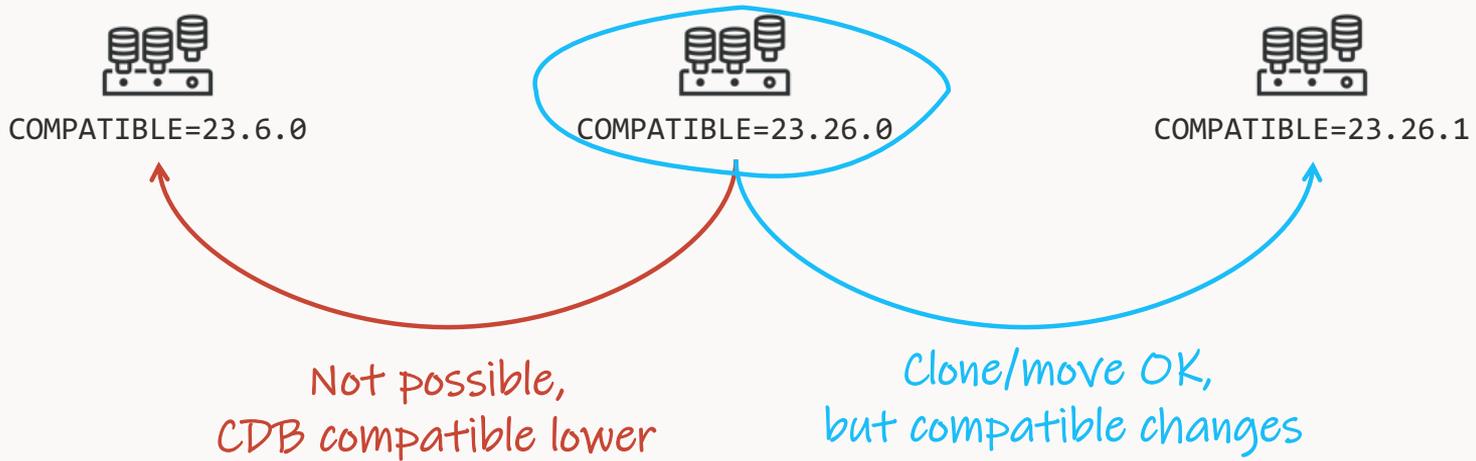
Don't raise COMPATIBLE when you patch



In rare cases, new functionality requires that you raise **COMPATIBLE** after patching

- Vector functionality
- Blockchain and immutable tables

Compatible





- You can now update the COMPATIBLE parameter without a restart
- Works within a release, e.g., from 23.9.0 to 23.26.0
- Cross-release changes, e.g., 19.0.0 to 23.9.0, still requires a restart

```
alter database set downgrade compatibility to '23.9.0';
```





Purge old rollback scripts from the data dictionary

Rollback Scripts



Apply/rollback scripts

```
$ORACLE_HOME/sqlpatch/.../nnn_apply.sql  
$ORACLE_HOME/sqlpatch/.../nnn_rollback.sql
```



Rollback scripts:

```
INSERT INTO REGISTRY$SQLPATCH  
VALUES ... ;
```

```
INSERT INTO REGISTRY$SQLPATCH_RU_INFO  
VALUES ... ;
```



PATCH_ID	RU_VERSION	RU_BUILD_TS	LOB_SIZE_MB
29517242	19.3.0.0.0	04/10/2019 12:27:20	4
30125133	19.5.0.0.0	09/09/2019 18:05:49	18
30557433	19.6.0.0.0	12/17/2019 15:50:04	24
30869156	19.7.0.0.0	04/04/2020 03:50:18	30
31281355	19.8.0.0.0	07/03/2020 03:15:01	37
31771877	19.9.0.0.0	09/30/2020 18:32:49	43
32218454	19.10.0.0.0	01/08/2021 18:50:17	51
32545013	19.11.0.0.0	04/13/2021 00:40:09	59
32904851	19.12.0.0.0	07/16/2021 14:18:10	67
33192793	19.13.0.0.0	10/04/2021 16:50:50	75
33515361	19.14.0.0.0	12/25/2021 12:21:23	83
34133642	19.16.0.0.0	07/03/2022 02:22:23	99
34419443	19.17.0.0.0	09/24/2022 22:40:51	108
34765931	19.18.0.0.0	01/11/2023 17:17:38	116
35643107	19.21.0.0.0	09/30/2023 15:19:51	141

15 rows selected.



```
CON_ID  LOB_SIZE_MB
```

```
-----
```

```
1      953
```

```
2      953
```

```
3      953
```

```
...
```

```
4098   953
```



--Available since 19.28.0. Purges no longer needed zip files.

--Run in off-peak period after patching

`./datapatch -purge_old_metadata`



Major retailer in
the US

Saved **20 TB/year** in total:

- *5000 DBs*
- *5 PDBs (3 PDBs + Root + Seed)*
- *200 Mb in each per patch*
- *4 patches annually*



Datapatch Purge

- Removes the rollback scripts for all patches (except the currently applied)
- Doesn't prevent rolling back the currently applied patches
- Doesn't remove the patching history, just the rollback scripts





Working on updates 27%
Don't turn off your PC. This will take a while.

Your PC will restart several times.

Patch smarter, not harder

– MS Windows Special Edition

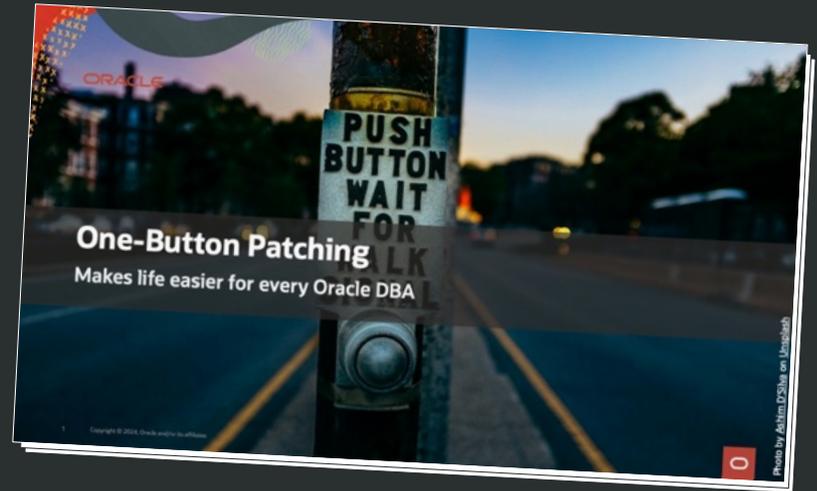
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Webinar

One-Button Patching

Makes life easier for every Oracle DBA

Recording on [YouTube](#)
Get the [slides](#)



Hands-on Lab

Patch Me If You Can

It's better to fail in our lab, than in production



[Access lab on Oracle Live Labs](#)

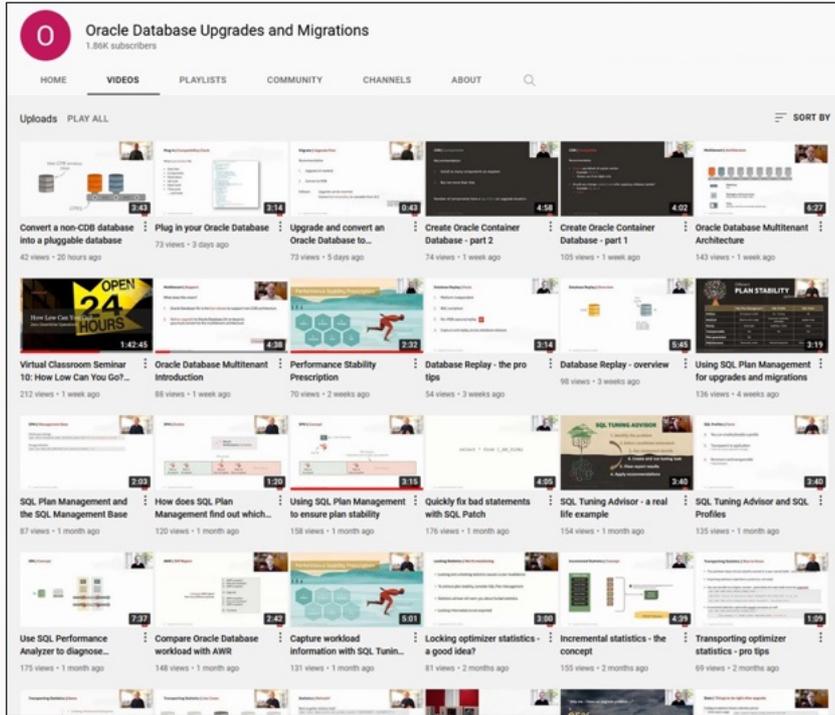
Oracle

DBAs

run the world



YouTube Channel



<https://www.youtube.com/@upgradenow>

- 300+ videos
- New videos every week
- No marketing
- No buzzword
- All tech



Key Learnings



- 1 Download with AutoUpgrade
- 2 Install with AutoUpgrade
- 3 Patch with AutoUpgrade



Thank You
