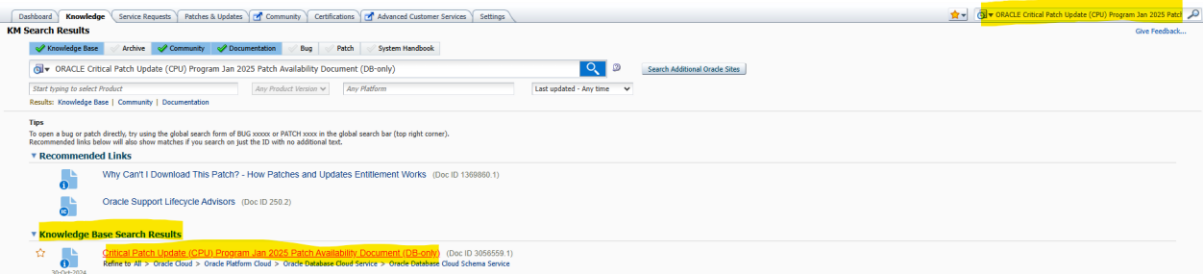# ORACLE Critical Patch Update (CPU) Program Jan 2025 Patch Availability Document (DB-only)

1. Download the patch from oracle support:

2. Go to section patch availability for oracle products and go under oracle databases:

Patch Simple Search Results

Filters: Patch Name or Number is 37257886;

Table ▾   View ▾   Detach   Share Link

Patch Name	Description	Release	Platform (Language)	Recommended	Classification	Product		Updated	Size	Download Access
37257886	GI RELEASE UPDATE 19.26.0.0.0 [System Patch]	19.0.0.0.0	Linux x86-64 (American English)		Security	Oracle Database - Enterprise Edition (More...)		12 days ago	3.3 GB	Software

3. Understand the readme for *Patch Numbers Installed as Part of this Bundle Patch and Opatch version details:*

Table 1-2 lists the various patches by patch number that are installed as part of this bundle patch.

Table 1-2 Patch Numbers Installed as Part of this Bundle Patch

Patch Number	Description	Applicable Homes
37260974	Database Release Update 19.26.0.0.250121	Only Oracle home for non-Oracle RAC setup. Both Oracle home and Grid home for Oracle RAC setup.
37268031	OCW Release Update 19.26.0.0.250121	Both Oracle home and Grid home.
37266638	ACFS Release Update 19.26.0.0.250121 Footnote 2	Only Grid home.
37461387	Tomcat Release Update 19.0.0.0.0 Footnote 2	Only Grid home.
36758186	DBWLM Release Update 19.0.0.0.0 Footnote 2	Only Grid home.

2.1.1.1 OPatch Utility Information

You must use the OPatch utility version 12.2.0.1.44 or later to apply this patch. Oracle recommends that you use the latest released OPatch version for 12.2 which is available for download from My Oracle Support patch 6880880 by selecting the ARU link for the 12.2.0.1.0 OPatch release. It is recommended that you download the OPatch utility and the patch to a shared location in order to access them from any node in the cluster for the patch application on each node.

When patching the Grid home, a shared location on Oracle ACFS only needs to be unmounted on the node where the Grid home is being patched.

The new OPatch utility should be updated in all of the Oracle RAC database homes and the Grid home that are being patched.

For each Oracle RAC database home and the Oracle Grid Infrastructure home that are being patched, as the respective home owner, extract the OPatch utility.

For exact instructions to install OPatch, follow the readme included with the tool download.

A new feature has been added to OPatch to increase performance by deleting inactive patches. See My Oracle Support document 2942102.1 *OPatch 12.2.0.1.37+ Introduces a New Feature to Delete Inactive Patches* in the ORACLE_HOME/.patch_storage directory.

For information about OPatch documentation, including any known issues, see My Oracle Support document 293369.1 *Primary Note For OPatch*.

Patch 6880880

Simple Search   Advanced Search   Quick Links   Saved Searches

Description	OPatch 12.2.0.1.45 for DB 23.0.0.0.0 (Jan 2025)
Product	Oracle Global Lifecycle Management OPatch
Select a Release	OPatch for DB 23.0.0.0.0 ▾
Platform or Language ⓘ	Linux x86 ▾
Last Updated	20-JAN-2025
Size	23M (25051279 bytes)
Entitlement Class ⓘ	Software
Classification ⓘ	General

Download   View Readme   View Digest

Patchsets known to include or supersede Patch 6880880 ⓘ

No information available from the patch repository

Download Notes

4. Download the transferred it to your local machine:

```
[oracle@oraclelab1 PATCH_RU26]$ ls -lrth
total 3.3G
-rw-r--r-- 1 oracle oinstall 3.3G Feb  3 15:39 p37257886_190000_Linux-x86-64.zip
-rw-r--r-- 1 oracle oinstall  24M Feb  3 15:51 p6880880_230000_LINUX.zip
[oracle@oraclelab1 PATCH_RU26]$ pwd
/home/oracle/Patches/PATCH_RU26
[oracle@oraclelab1 PATCH_RU26]$ hostname
oraclelab1.localdomain.com
[oracle@oraclelab1 PATCH_RU26]$
```

5. Take your oracle home and orainventory backup before proceeding:

```
tar -zcvf /home/oracle/Patches/PATCH_RU26/19.0.0.0_bkp.tar 19.0.0.0
tar -zcvf /home/oracle/Patches/PATCH_RU26/oraInventory_bkp.tar /u01/app/oraInventory
```

```
[oracle@oraclelab1 PATCH_RU26]$ ll
total 6585500
-rw-r--r-- 1 root    root    3205477505 Feb  3 16:32 19.0.0.0_bkp.tar
-rw-r--r-- 1 root    root       705286 Feb  3 16:40 oraInventory_bkp.tar
-rw-r--r-- 1 oracle oinstall 3512303969 Feb  3 15:39 p37257886_190000_Linux-x86-64.zip
-rw-r--r-- 1 oracle oinstall  25051279 Feb  3 15:51 p6880880_230000_LINUX.zip
[oracle@oraclelab1 PATCH_RU26]$ pwd
/home/oracle/Patches/PATCH_RU26
[oracle@oraclelab1 PATCH_RU26]$
```

6. As per readme need to upgrade Opatch version to proceed with patching:

```
Current Version: 12.2.0.1.17

mv Opatch Opatch_bkp_DDMMYY and unzip the Opatch version upgrade patch
```

```
[oracle@oraclelab1 PATCH_RU26]$ pwd
/home/oracle/Patches/PATCH_RU26
[oracle@oraclelab1 PATCH_RU26]$ export PATH=$ORACLE_HOME/OPatch:$PATH
[oracle@oraclelab1 PATCH_RU26]$ echo $ORACLE_HOME
/u01/app/oracle/product/19.0.0.0/dbhome_1
[oracle@oraclelab1 PATCH_RU26]$ which opatch
/u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/opatch
[oracle@oraclelab1 PATCH_RU26]$ opatch version
OPatch Version: 12.2.0.1.17

OPatch succeeded.
[oracle@oraclelab1 PATCH_RU26]$
```

```
[oracle@oraclelab1 dbhome_1]$ pwd
/u01/app/oracle/product/19.0.0.0/dbhome_1
[oracle@oraclelab1 dbhome_1]$ mv OPatch OPatch_bkp_030225
[oracle@oraclelab1 dbhome_1]$ cd /home/oracle/Patches/PATCH_RU26/
[oracle@oraclelab1 PATCH_RU26]$ ll
total 6585500
-rw-r--r-- 1 root     root      3205477505 Feb  3 16:32 19.0.0.0_bkp.tar
-rw-r--r-- 1 root     root         705286 Feb  3 16:40 oraInventory_bkp.tar
-rw-r--r-- 1 oracle oinstall 3512303969 Feb  3 15:39 p37257886_190000_Linux-x86-64.zip
-rw-r--r-- 1 oracle oinstall   25051279 Feb  3 15:51 p6880880_230000_LINUX.zip
[oracle@oraclelab1 PATCH_RU26]$ unzip p6880880_230000_LINUX.zip /u01/app/oracle/product/19.0.0.0/dbhome_1
Archive:  p6880880_230000_LINUX.zip
caution: filename not matched:  /u01/app/oracle/product/19.0.0.0/dbhome_1
[oracle@oraclelab1 PATCH_RU26]$ unzip p6880880_230000_LINUX.zip -d /u01/app/oracle/product/19.0.0.0/dbhome_1
Archive:  p6880880_230000_LINUX.zip
   creating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/
  inflating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/opatchauto
   creating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/ocm/
   creating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/ocm/doc/
   creating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/ocm/bin/
   creating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/ocm/lib/
 extracting: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/ocm/generic.zip
  inflating: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/emdpatch.pl
 extracting: /u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/version.txt
```

7. Opatch version upgraded to version 12.2.0.1.45

```
[oracle@oraclelab1 PATCH_RU26]$ export PATH=$ORACLE_HOME/OPatch:$PATH
[oracle@oraclelab1 PATCH_RU26]$ echo $ORACLE_HOME
/u01/app/oracle/product/19.0.0.0/dbhome_1
[oracle@oraclelab1 PATCH_RU26]$ which opatch
/u01/app/oracle/product/19.0.0.0/dbhome_1/OPatch/opatch
[oracle@oraclelab1 PATCH_RU26]$ opatch version
OPatch Version: 12.2.0.1.45

OPatch succeeded.
[oracle@oraclelab1 PATCH_RU26]$
```

8. Unzip and Verify the RU patch at unzip location:

```
[oracle@oraclelab1 Patches]$ ll
total 2600
drwxr-x--- 8 oracle oinstall    4096 Jan 20 14:03 37257886
drwxr-xr-x 2 oracle oinstall     132 Feb  3 16:41 PATCH_RU26
-rw-rw-r-- 1 oracle oinstall 2654673 Jan 21 21:28 PatchSearch.xml
[oracle@oraclelab1 Patches]$ cd 37257886
[oracle@oraclelab1 37257886]$ ls -lrth
total 164K
drwxr-x--- 5 oracle oinstall   62 Jan 20 14:03 37268031
drwxr-x--- 5 oracle oinstall   62 Jan 20 14:04 37266638
drwxr-x--- 4 oracle oinstall   48 Jan 20 14:05 37461387
drwxr-x--- 5 oracle oinstall   81 Jan 20 14:05 37260974
drwxr-x--- 4 oracle oinstall   48 Jan 20 14:05 36758186
-rw-r--r-- 1 oracle oinstall    0 Jan 20 14:08 README.txt
drwxr-x--- 2 oracle oinstall 4.0K Jan 20 14:08 automation
-rw-rw-r-- 1 oracle oinstall 5.7K Jan 20 20:04 bundle.xml
-rw-r--r-- 1 oracle oinstall 149K Jan 21 15:38 README.html
[oracle@oraclelab1 37257886]$ pwd
/home/oracle/Patches/37257886
[oracle@oraclelab1 37257886]$
```

9. Verify current patch version:

```
[oracle@oraclelab1 37257886]$ opatch lspatches
29585399;OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
29517242;Database Release Update : 19.3.0.0.190416 (29517242)

OPatch succeeded.
[oracle@oraclelab1 37257886]$ opatch lsinv | grep applied
Patch  29585399     : applied on Thu Apr 18 12:51:33 IST 2019
Patch  29517242     : applied on Thu Apr 18 12:51:17 IST 2019
[oracle@oraclelab1 37257886]$
```

10. Check for patch conflict:

```
opatch prereq CheckConflictAgainstOHWithDetail -phBaseDir /home/oracle/Patches/37257886/37260974 -oh
/u01/app/oracle/product/19.0.0.0/dbhome_1

opatch prereq CheckConflictAgainstOHWithDetail -phBaseDir /home/oracle/Patches/37257886/37268031 -oh
/u01/app/oracle/product/19.0.0.0/dbhome_1
```

```
[oracle@oraclelab1 Patches]$ opatch prereq CheckConflictAgainstOHWithDetail -phBaseDir /home/oracle/Patches/37257886/37260974 -oh /u01/app/oracle/product/19.0.0.0/db
home_1
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.

PREREQ session

Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-31-16PM_1.log

Invoking prereq "checkconflictagainstohwithdetail"

Prereq "checkConflictAgainstOHWithDetail" passed.

OPatch succeeded.
[oracle@oraclelab1 Patches]$ opatch prereq CheckConflictAgainstOHWithDetail -phBaseDir /home/oracle/Patches/37257886/37268031 -oh /u01/app/oracle/product/19.0.0.0/db
home_1
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.

PREREQ session

Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-31-43PM_1.log

Invoking prereq "checkconflictagainstohwithdetail"

Prereq "checkConflictAgainstOHWithDetail" passed.

OPatch succeeded.
[oracle@oraclelab1 Patches]$
```

11. Check for System space:

```
opatch prereq CheckSystemSpace -phBaseDir /home/oracle/Patches/37257886/37260974 -oh
/u01/app/oracle/product/19.0.0.0/dbhome_1

opatch prereq CheckSystemSpace -phBaseDir /home/oracle/Patches/37257886/37268031 -oh
/u01/app/oracle/product/19.0.0.0/dbhome_1
```

```
[oracle@oraclelab1 Patches]$ opatch prereq CheckSystemSpace -phBaseDir /home/oracle/Patches/37257886/37268031 -oh /u01/app/oracle/product/19.0.0.0/dbhome_1
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.

PREREQ session

Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-38-50PM_1.log

Invoking prereq "checksystemspace"

Prereq "checkSystemSpace" passed.

OPatch succeeded.
[oracle@oraclelab1 Patches]$ opatch prereq CheckSystemSpace -phBaseDir /home/oracle/Patches/37257886/37260974 -oh /u01/app/oracle/product/19.0.0.0/dbhome_1
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.

PREREQ session

Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-38-55PM_1.log

Invoking prereq "checksystemspace"

Prereq "checkSystemSpace" passed.

OPatch succeeded.
[oracle@oraclelab1 Patches]$
```

12. Shutdown DB services:

```
SQL> shutdown immediate
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL>
```

```
[oracle@oraclelab1 37257886]$ lsnrctl stop listener

LSNRCTL for Linux: Version 19.0.0.0.0 - Production on 03-FEB-2025 17:23:08

Copyright (c) 1991, 2019, Oracle.  All rights reserved.

Connecting to (ADDRESS=(PROTOCOL=tcp)(HOST=)(PORT=1521))
The command completed successfully
[oracle@oraclelab1 37257886]$
```

```
[oracle@oraclelab1 ~]$ ps -ef|grep pmon
oracle    9501  4061  0 17:24 pts/3    00:00:00 grep --color=auto pmon
[oracle@oraclelab1 ~]$ ps -ef|grep tns
root        23     2  0 16:12 ?        00:00:00 [netns]
oracle    9506  4061  0 17:24 pts/3    00:00:00 grep --color=auto tns
[oracle@oraclelab1 ~]$
```

13. Apply the RU patch:

```
opatch apply -oh /u01/app/oracle/product/19.0.0.0/dbhome_1 -local -silent
/home/oracle/Patches/37257886/37260974
```

```
[oracle@oraclelab1 Patches]$ opatch apply -oh /u01/app/oracle/product/19.0.0.0/dbhome_1 -local -silent /home/oracle/Patches/37257886/37260974
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.


Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-42-10PM_1.log

Verifying environment and performing prerequisite checks...


--------------------------------------------------------------------------------
Start OOP by Prereq process.
Launch OOP...

Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.


Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-42-57PM_1.log

Verifying environment and performing prerequisite checks...
OPatch continues with these patches:   37260974

Do you want to proceed? [y|n]
Y (auto-answered by -silent)
User Responded with: Y
All checks passed.

Please shutdown Oracle instances running out of this ORACLE_HOME on the local system.
(Oracle Home = '/u01/app/oracle/product/19.0.0.0/dbhome_1')


Is the local system ready for patching? [y|n]
Y (auto-answered by -silent)
User Responded with: Y
Backing up files...
```

```
Patching component oracle.jdk, 1.8.0.201.0...
Patch 37260974 successfully applied.
Sub-set patch [29517242] has become inactive due to the application of a super-set patch [37260974].
Please refer to Doc ID 2161861.1 for any possible further required actions.
Log file location: /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-42-57PM_1.log

OPatch succeeded.
[oracle@oraclelab1 Patches]$
```

```
opatch apply -oh /u01/app/oracle/product/19.0.0.0/dbhome_1 -local -silent
/home/oracle/Patches/37257886/37268031
```

```
[oracle@oraclelab1 Patches]$ opatch apply -oh /u01/app/oracle/product/19.0.0.0/dbhome_1 -local -silent /home/oracle/Patches/37257886/37268031
Oracle Interim Patch Installer version 12.2.0.1.45
Copyright (c) 2025, Oracle Corporation.  All rights reserved.


Oracle Home       : /u01/app/oracle/product/19.0.0.0/dbhome_1
Central Inventory : /u01/app/oraInventory
   from           : /u01/app/oracle/product/19.0.0.0/dbhome_1/oraInst.loc
OPatch version    : 12.2.0.1.45
OUI version       : 12.2.0.7.0
Log file location : /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-53-03PM_1.log

Verifying environment and performing prerequisite checks...
```

```
Patch 37268031 successfully applied.
Sub-set patch [29585399] has become inactive due to the application of a super-set patch [37268031].
Please refer to Doc ID 2161861.1 for any possible further required actions.
Log file location: /u01/app/oracle/product/19.0.0.0/dbhome_1/cfgtoollogs/opatch/opatch2025-02-03_17-53-43PM_1.log

OPatch succeeded.
[oracle@oraclelab1 Patches]$
```

14. Verified the applied patches:

```
[oracle@oraclelab1 Patches]$ opatch lspatches
37268031;OCW RELEASE UPDATE 19.26.0.0.0 (37268031)
37260974;Database Release Update : 19.26.0.0.250121 (37260974)


OPatch succeeded.
[oracle@oraclelab1 Patches]$ opatch lsinv |grep applied
Patch  37268031     : applied on Mon Feb 03 17:54:31 IST 2025
Patch  37260974     : applied on Mon Feb 03 17:48:47 IST 2025
[oracle@oraclelab1 Patches]$
```

15. Post RU patching start your DB services and apply patch on DB level:

```
[oracle@oraclelab1 OPatch]$ ./datapatch -verbose
SQL Patching tool version 19.26.0.0.0 Production on Mon Feb  3 18:09:00 2025
Copyright (c) 2012, 2025, Oracle.  All rights reserved.

Log file for this invocation: /u01/app/oracle/cfgtoollogs/sqlpatch/sqlpatch_19202_2025_02_03_18_09_00/sqlpatch_invocation.log

Connecting to database...OK
Gathering database info...done
Bootstrapping registry and package to current versions...done
Determining current state...done

Current state of interim SQL patches:
  No interim patches found

Current state of release update SQL patches:
  Binary registry:
    19.26.0.0.0 Release_Update 250118124854: Installed
  SQL registry:
    Applied 19.3.0.0.0 Release_Update 190410122720 successfully on 01-FEB-25 06.53.11.432646 PM

Adding patches to installation queue and performing prereq checks...done
Installation queue:
  No interim patches need to be rolled back
  Patch 37260974 (Database Release Update : 19.26.0.0.250121 (37260974)):
    Apply from 19.3.0.0.0 Release_Update 190410122720 to 19.26.0.0.0 Release_Update 250118124854
  No interim patches need to be applied

Installing patches...
Patch installation complete.  Total patches installed: 1

Validating logfiles...done
Patch 37260974 apply: SUCCESS
  logfile: /u01/app/oracle/cfgtoollogs/sqlpatch/37260974/26040769/37260974_apply_ORCL_2025Feb03_18_10_25.log (no errors)
SQL Patching tool complete on Mon Feb  3 18:25:46 2025
[oracle@oraclelab1 OPatch]$
```

16. Database Post checks:

Checking SQL Patches Applied to the Database:

```
 PATCH_ID STATUS          ACTION_TIME             DESCRIPTION
---------- --------------- ----------------------- --------------------------------------------------------
 29517242 SUCCESS         01-FEB-25 06.53.11.432646 PM  Database Release Update : 19.3.0.0.190416 (29517242)
 37260974 SUCCESS         03-FEB-25 06.25.02.744213 PM  Database Release Update : 19.26.0.0.250121 (37260974)

SQL> !echo $ORACLE_SID
orcl
```

Run utlrp to compile if any invalid objects:

```
SQL> @?/rdbms/admin/utlprp.sql 16

Session altered.


TIMESTAMP
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
----------
COMP_TIMESTAMP UTLRP_BGN           2025-02-03 18:33:33

DOC>   The following PL/SQL block invokes UTL_RECOMP to recompile invalid
DOC>   objects in the database. Recompilation time is proportional to the
DOC>   number of invalid objects in the database, so this command may take
DOC>   a long time to execute on a database with a large number of invalid
DOC>   objects.
DOC>
DOC>   Use the following queries to track recompilation progress:
DOC>
DOC>   1. Query returning the number of invalid objects remaining. This
```

```
OBJECTS WITH ERRORS
-------------------
                0

DOC> The following query reports the number of exceptions caught during
DOC> recompilation. If this number is non-zero, please query the error
DOC> messages in the table UTL_RECOMP_ERRORS to see if any of these errors
DOC> are due to misconfiguration or resource constraints that must be
DOC> fixed before objects can compile successfully.
DOC> Note: Typical compilation errors (due to coding errors) are not
DOC>       logged into this table: they go into DBA_ERRORS instead.
DOC>#

ERRORS DURING RECOMPILATION
---------------------------
                       0


Function created.


PL/SQL procedure successfully completed.


Function dropped.


PL/SQL procedure successfully completed.

SQL>
```

Checking Installed Database Components:

```
COMP_NAME                                  VERSION        STATUS
------------------------------------------ -------------- ----------------
Oracle Database Catalog Views              19.0.0.0.0     VALID
Oracle Database Packages and Types         19.0.0.0.0     VALID
Oracle Real Application Clusters           19.0.0.0.0     OPTION OFF
JServer JAVA Virtual Machine               19.0.0.0.0     VALID
Oracle XDK                                 19.0.0.0.0     VALID
Oracle Database Java Packages              19.0.0.0.0     VALID
OLAP Analytic Workspace                    19.0.0.0.0     VALID
Oracle XML Database                        19.0.0.0.0     VALID
Oracle Workspace Manager                   19.0.0.0.0     VALID
Oracle Text                                19.0.0.0.0     VALID
Oracle Multimedia                          19.0.0.0.0     VALID

COMP_NAME                                  VERSION        STATUS
------------------------------------------ -------------- ----------------
Spatial                                    19.0.0.0.0     VALID
Oracle OLAP API                            19.0.0.0.0     VALID
Oracle Label Security                      19.0.0.0.0     VALID
Oracle Database Vault                      19.0.0.0.0     VALID

15 rows selected.
```