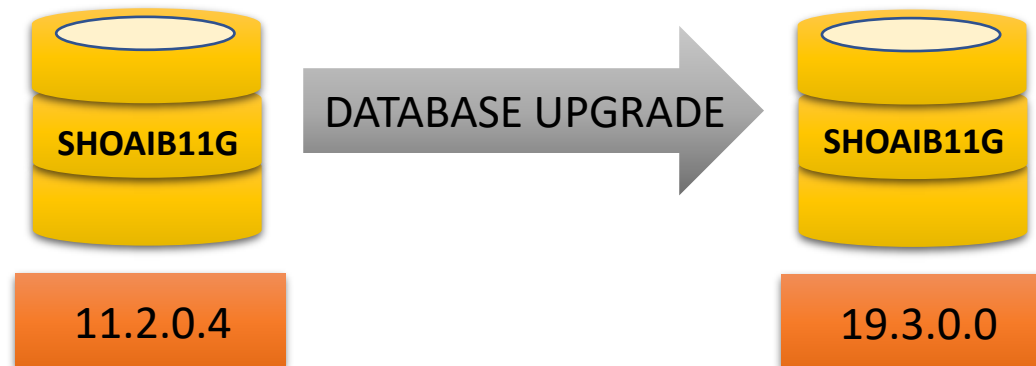


This Online Webinar is organized by SCHOLAR IT Solutions

- SCHOLAR IT is IT Solutions provider
- SCHOLAR IT is a group of Professionals with Technical and Domain Expertise
- SCHOLAR IT has experienced and robust team of efficient people serving its clients (entire USA) and It is one of the best company in US.
- You can follow Scholar IT on social networking sites like Facebook, YouTube and LinkedIn.

WEBINAR ON ORACLE DATABASE UPGRADE

ORACLE DATABASE UPGRADE



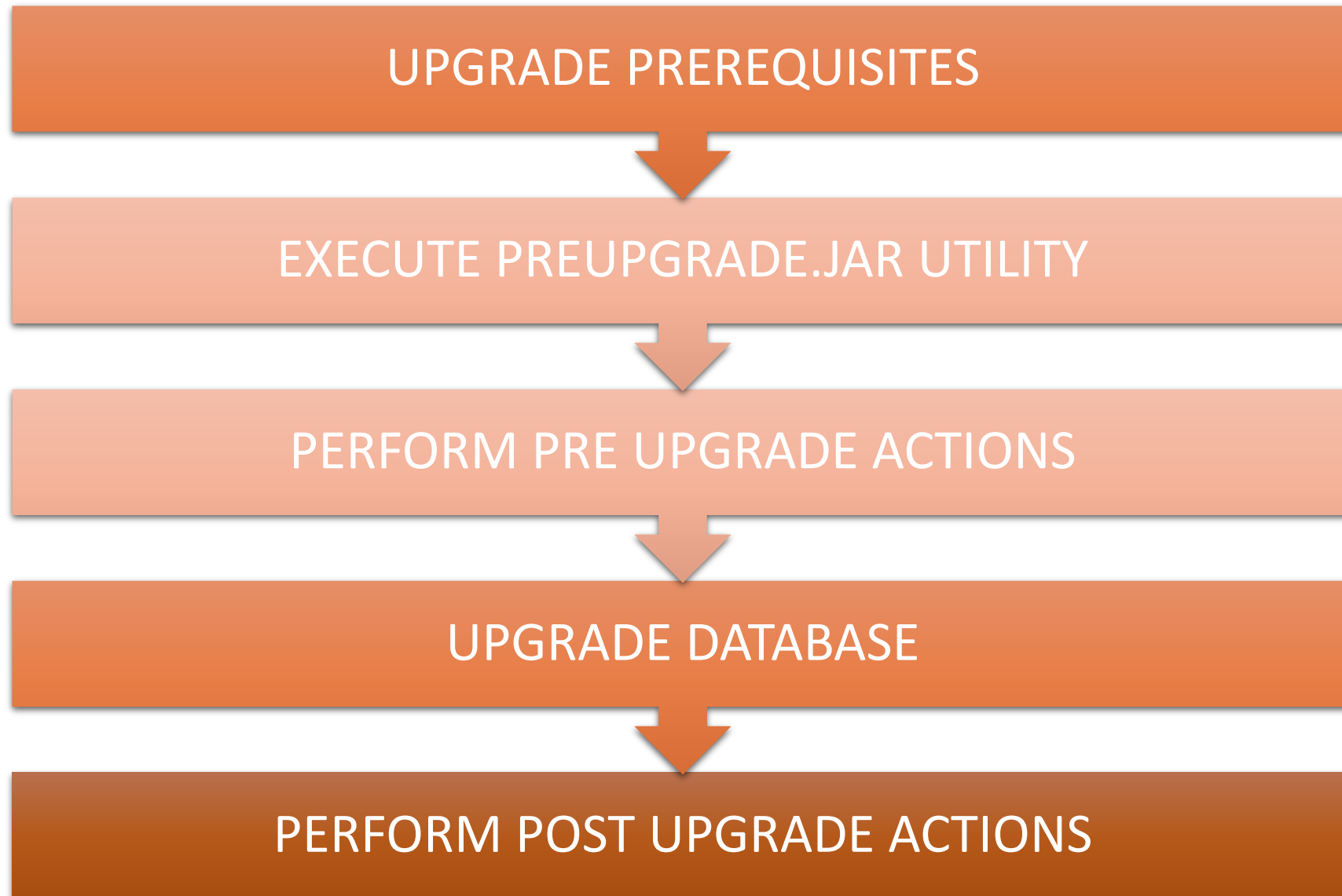
DATABASE UPGRADE ASSISTANT (DBUA)

MANUAL UPGRADE

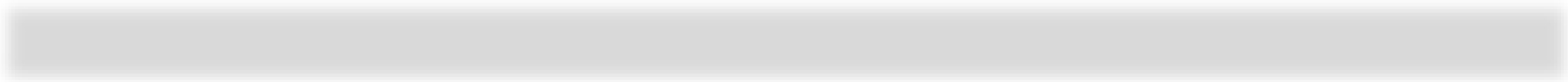
TRANSPORT TABLESPACE

DATAPUMP EXPORT/IMPORT

GOLDENGATE REPLICATION



	SOURCE	TARGET
HOSTNAME/SERVER NAME	OMMAC1	OMMAC1
OS	Red Hat Enterprise Linux Server release 7.9 (Maipo)	Red Hat Enterprise Linux Server release 7.9 (Maipo)
DATABASE VERSION	11.2.0.4	19.3
DATABASE NAME	SHOAIB11g	SHOAIB11g
SINGLE INSTANCE / RAC	SINGLE INSTANCE	SINGLE INSTANCE
ORACLE HOME	/u01/app/oracle/product/11.2.0.4/db_1	/u02/app/oracle/product/19.0.0/dbhome_1



11g BINARIES INSTALLATION



11g Binaries
Install



11g DATABASE CONFIGURATION



11g Database
Install



INSTALL 19C BINARIES



DATABASE RMAN BACKUP OR CREATE RESTORE POINT



ORACLE IMPORTANT FILES BACKUP



GATHER STATS / EMPTY RECYCLEBIN / INVALID OBJECTS

INSTALL 19c BINARIES



19c Binaries Install



LISTENER.ORA FILE

TNSNAMES.ORA FILE

SQLNET.ORA FILE

SPFILE<<SID>>.ORA
FILEORAPW<<SID>>.ORA
FILE

```
[oracle@OMmac1 ~]$ mkdir -p /u01/11g_files_backup
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/network/admin/listener.ora /u01/11g_files_backup/listener.ora.bkp
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/network/admin/tnsnames.ora /u01/11g_files_backup/tnsnames.ora.bkp
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/network/admin/sqlnet.ora /u01/11g_files_backup/sqlnet.ora.bkp
cp: cannot stat '/u01/app/oracle/product/11.2.0.4/db_1/network/admin/sqlnet.ora': No such file or directory
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/dbs/spfileshoaib11g.ora /u01/11g_files_backup/spfileshoaib11g.ora.bkp
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/dbs/orapwshoaib11g /u01/11g_files_backup/orapwshoaib11g.bkp
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ ls -lrrth /u01/11g_files_backup/
total 16K
-rw-r--r--. 1 oracle oinstall 333 Jun  5 17:38 listener.ora.bkp
-rw-r-----. 1 oracle oinstall 345 Jun  5 17:38 tnsnames.ora.bkp
-rw-r-----. 1 oracle oinstall 3.5K Jun  5 17:38 spfileshoaib11g.ora.bkp
-rw-r-----. 1 oracle oinstall 1.5K Jun  5 17:38 orapwshoaib11g.bkp
[oracle@OMmac1 ~]$
```

```
SQL> select name,open_mode,database_role from v$database;
```

NAME	OPEN_MODE	DATABASE_ROLE
SHOAIB11	READ WRITE	PRIMARY

```
SQL> EXEC DBMS_STATS.GATHER_DICTIONARY_STATS;
```

PL/SQL procedure successfully completed.

```
SQL> PURGE DBA_RECYCLEBIN;
```

DBA Recyclebin purged.

```
SQL> select count(*) from dba_objects where status='INVALID';
```

COUNT (*)
0

PREUPGRADE.JAR

```
[oracle@OMmac1 ~]$  
[oracle@OMmac1 ~]$ mkdir -p /u01/11g19cUpgradeSpool/preupgrade  
[oracle@OMmac1 ~]$
```

```
[oracle@OMmac1 ~]$  
[oracle@OMmac1 ~]$ $ORACLE_HOME/jdk/bin/java -jar /u02/app/oracle/product/19.0.0/dbhome_1/rdbms/admin/preupgrade.jar FILE DIR /u01/11g19cUpgradeSpool/preupgrade
```

=====

PREUPGRADE SUMMARY

=====

```
/u01/11g19cUpgradeSpool/preupgrade/preupgrade.log  
/u01/11g19cUpgradeSpool/preupgrade/preupgrade_fixups.sql  
/u01/11g19cUpgradeSpool/preupgrade/postupgrade_fixups.sql
```

Execute fixup scripts as indicated below:

Before upgrade:

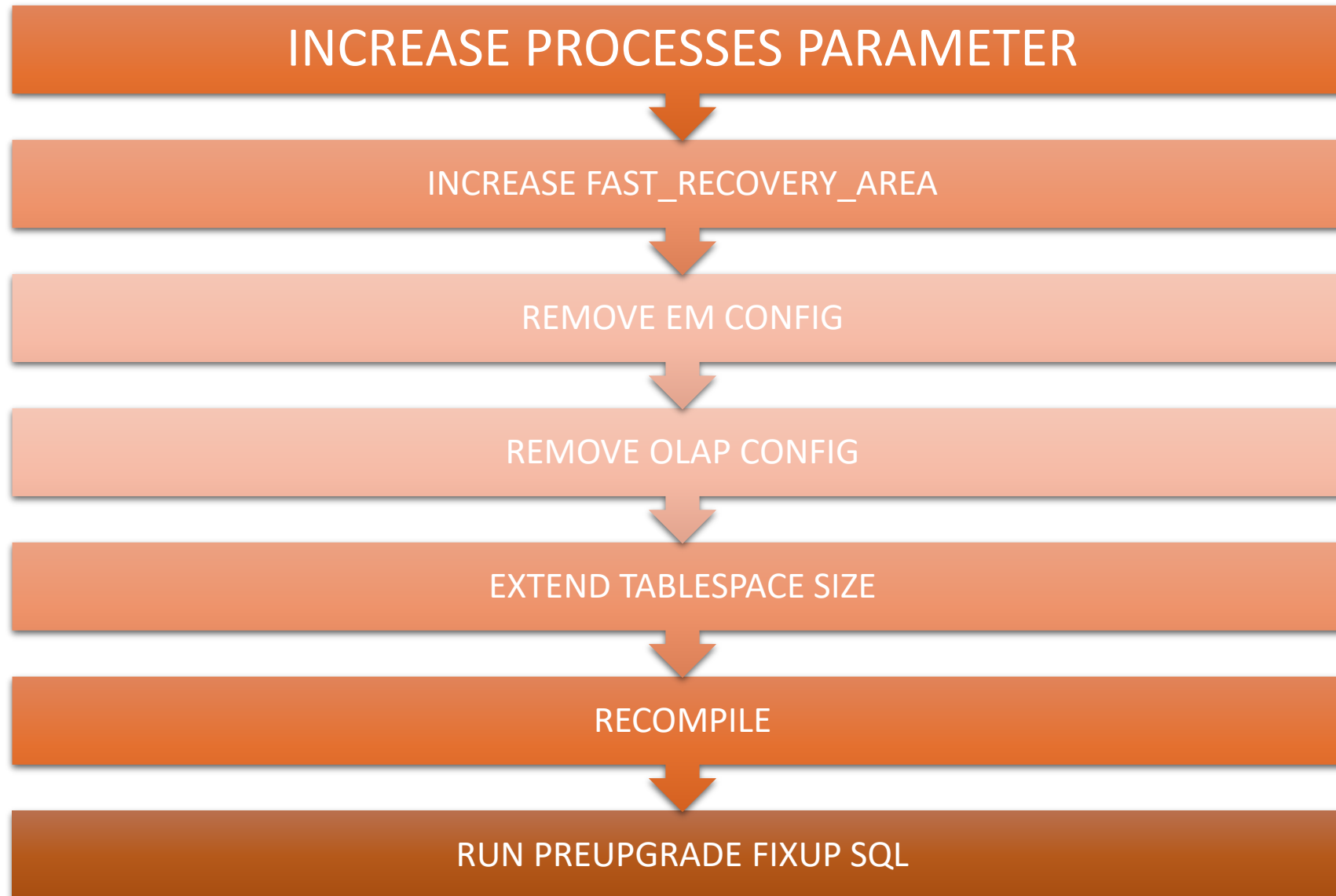
```
Log into the database and execute the preupgrade fixups  
@/u01/11g19cUpgradeSpool/preupgrade/preupgrade_fixups.sql
```

After the upgrade:

```
Log into the database and execute the postupgrade fixups  
@/u01/11g19cUpgradeSpool/preupgrade/postupgrade_fixups.sql
```

Preupgrade complete: 2022-06-05T18:14:55

```
[oracle@OMmac1 ~]$
```



```
SQL> show parameter processes
```

NAME	TYPE	VALUE
aq_tm_processes	integer	1
db_writer_processes	integer	1
gcs_server_processes	integer	0
global_txn_processes	integer	1
job_queue_processes	integer	1000
log_archive_max_processes	integer	4
processes	integer	150

```
SQL>  
SQL>  
SQL> alter system set processes=300 scope=spfile;
```

System altered.

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

```
SQL>  
SQL> startup  
ORACLE instance started.
```

```
Total System Global Area 3607691264 bytes  
Fixed Size                  2258480 bytes  
Variable Size               838863312 bytes  
Database Buffers            2751463424 bytes  
Redo Buffers                 15106048 bytes  
Database mounted.  
Database opened.
```

```
SQL>  
SQL> show parameter processes
```

NAME	TYPE	VALUE
aq_tm_processes	integer	1
db_writer_processes	integer	1
gcs_server_processes	integer	0
global_txn_processes	integer	1
job_queue_processes	integer	1000
log_archive_max_processes	integer	4
processes	integer	300

```
SQL>
```

```
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> show parameter db_recovery_file

NAME                                TYPE                                VALUE
-----                                -                                -
db_recovery_file_dest                string                             /u01/app/oracle/fast_recovery_
area
db_recovery_file_dest_size           big integer                         4182M
SQL>
SQL> alter system set db_recovery_file_dest_size=8214M scope=spfile;

System altered.

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

Total System Global Area 3607691264 bytes
Fixed Size                  2258480 bytes
Variable Size               771754448 bytes
Database Buffers            2818572288 bytes
Redo Buffers                 15106048 bytes
Database mounted.
Database opened.
SQL> show parameter db_recovery_file

NAME                                TYPE                                VALUE
-----                                -                                -
db_recovery_file_dest                string                             /u01/app/oracle/fast_recovery_
area
db_recovery_file_dest_size           big integer                         8214M
SQL> 
```

```
[oracle@OMmac1 ~]$ sqlplus "/ as sysdba"

SQL*Plus: Release 11.2.0.4.0 Production on Sun Jun 5 19:58:16 2022

Copyright (c) 1982, 2013, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> @$ORACLE_HOME/olap/admin/catnoamd.sql

Synonym dropped.

Synonym dropped.

Synonym dropped.

Synonym dropped.

Type dropped.

Type dropped.

PL/SQL procedure successfully completed.

Role dropped.

PL/SQL procedure successfully completed.

1 row deleted.

SQL> 
```

```
SQL> set lines 300
SQL> set pages 20
SQL> col name for a50
SQL> select name,BYTES/1024/1024 "Size MB" from v$datafile
       2 union
       3 select name,BYTES/1024/1024 "Size MB" from v$tempfile;
```

NAME	Size MB
/u01/app/oracle/oradata/shoaibllg/sysaux01.dbf	640
/u01/app/oracle/oradata/shoaibllg/system01.dbf	790
/u01/app/oracle/oradata/shoaibllg/temp01.dbf	20
/u01/app/oracle/oradata/shoaibllg/undotbs01.dbf	255
/u01/app/oracle/oradata/shoaibllg/users01.dbf	5

```
SQL> █
```

```
SQL> alter database datafile '/u01/app/oracle/oradata/shoaibllg/sysaux01.dbf' resize 800M;
alter database datafile '/u01/app/oracle/oradata/shoaibllg/system01.dbf' resize 1200M;
alter database tempfile '/u01/app/oracle/oradata/shoaibllg/temp01.dbf' resize 150M;
alter database datafile '/u01/app/oracle/oradata/shoaibllg/undotbs01.dbf' resize 446M;
```

```
Database altered.
```

```
SQL>
Database altered.
```

```
SQL>
Database altered.
```

```
SQL>
Database altered.
```

```
SQL> █
```

```
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ sqlplus "/ as sysdba"

SQL*Plus: Release 11.2.0.4.0 Production on Sun Jun 5 21:19:24 2022

Copyright (c) 1982, 2013, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> @$ORACLE_HOME/rdbms/admin/utlrp.sql

TIMESTAMP
-----
COMP_TIMESTAMP UTLRP_BGN 2022-06-05 21:20:27

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

ERRORS DURING RECOMPILATION
-----
0

Function created.

PL/SQL procedure successfully completed.

Function dropped.

... (21:20:38) Starting validate_apex for APEX_200100
... (21:20:38) Checking missing sys privileges
... (21:20:38) Re-generating APEX_200100.wwv_flow_db_version
... wwv_flow_db_version is up to date
... (21:20:38) Checking invalid public synonyms
... (21:20:38) Key object existence check
... (21:20:38) Setting DBMS Registry for APEX to valid
... (21:20:38) Exiting validate_apex

PL/SQL procedure successfully completed.

SQL> 
```

```
SQL>
SQL> set pages 100
SQL> SET SERVEROUTPUT ON;
SQL> EXECUTE DBMS_PREUP.INVALID_OBJECTS;
SYS/SYSTEM INVALID OBJECTS
OWNER                                |OBJECT_NAME
|OBJECT_TYPE
-----
NON SYS/SYSTEM INVALID OBJECTS
OWNER                                |OBJECT_NAME
|OBJECT_TYPE
-----

PL/SQL procedure successfully completed.

SQL> 
```

```
SQL>
SQL> @/u01/11g19cUpgradeSpool/preupgrade/preupgrade_fixups.sql
Executing Oracle PRE-Upgrade Fixup Script

Auto-Generated by:      Oracle Preupgrade Script
                        Version: 19.0.0.0.0 Build: 1
Generated on:           2022-06-05 18:14:53

For Source Database:    SHOAI11
Source Database Version: 11.2.0.4.0
For Upgrade to Version: 19.0.0.0.0

Preup                               Preupgrade
Action                               Issue Is
Number  Preupgrade Check Name      Remedied  Further DBA Action
-----
1.  min_recovery_area_size        YES       None.
2.  parameter_min_val             YES       None.
3.  em_present                    YES       None.
4.  amd_exists                    YES       None.
5.  apex_manual_upgrade           YES       None.
6.  trgowner_no_admndbtrg         YES       None.
7.  pre_fixed_objects            YES       None.
8.  tablespaces_info              NO        Informational only.
                                           Further action is optional.
9.  exf_rul_exists                NO        Informational only.
                                           Further action is optional.
10. rman_recovery_version          NO        Informational only.
                                           Further action is optional.

The fixup scripts have been run and resolved what they can. However,
there are still issues originally identified by the preupgrade that
have not been remedied and are still present in the database.
Depending on the severity of the specific issue, and the nature of
the issue itself, that could mean that your database is not ready
for upgrade. To resolve the outstanding issues, start by reviewing
the preupgrade_fixups.sql and searching it for the name of
the failed CHECK NAME or Preupgrade Action Number listed above.
There you will find the original corresponding diagnostic message
from the preupgrade which explains in more detail what still needs
to be done.

PL/SQL procedure successfully completed.

SQL> 
```



```
[oracle@OMmac1 ~]$ ps -ef|grep -i tns
root      16      2  0 00:41 ?        00:00:00 [netns]
oracle    4068    1  0 16:21 ?        00:00:01 /u01/app/oracle/product/11.2.0.4/db_1/bin/tnslnsr LISTENER11G -inherit
oracle    8533    453  0 21:50 pts/1    00:00:00 grep --color=auto -i tns
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ lsnrctl status LISTENER11G
```

LSNRCTL for Linux: Version 11.2.0.4.0 - Production on 05-JUN-2022 21:51:05

Copyright (c) 1991, 2013, Oracle. All rights reserved.

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP) (HOST=OMMAC1.localdomain) (PORT=1521)))
STATUS of the LISTENER

```
-----
Alias                LISTENER11G
Version              TNSLSNR for Linux: Version 11.2.0.4.0 - Production
Start Date           05-JUN-2022 16:21:44
Uptime                0 days 5 hr. 29 min. 21 sec
Trace Level           off
Security              ON: Local OS Authentication
SNMP                  OFF
Listener Parameter File /u01/app/oracle/product/11.2.0.4/db_1/network/admin/listener.ora
Listener Log File     /u01/app/oracle/diag/tnslsnr/OMmac1/listener11g/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp) (HOST=OMmac1) (PORT=1521)))
Services Summary...
Service "shoaibllg" has 1 instance(s).
  Instance "shoaibllg", status READY, has 1 handler(s) for this service...
Service "shoaibllgXDB" has 1 instance(s).
  Instance "shoaibllg", status READY, has 1 handler(s) for this service...
The command completed successfully
```

```
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ lsnrctl stop LISTENER11G
```

LSNRCTL for Linux: Version 11.2.0.4.0 - Production on 05-JUN-2022 21:51:11

Copyright (c) 1991, 2013, Oracle. All rights reserved.

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP) (HOST=OMMAC1.localdomain) (PORT=1521)))
The command completed successfully

```
[oracle@OMmac1 ~]$
```

```
[oracle@OMmac1 ~]$ sqlplus "/ as sysdba"

SQL*Plus: Release 11.2.0.4.0 Production on Sun Jun 5 21:58:52 2022

Copyright (c) 1982, 2013, Oracle. All rights reserved.

Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.4.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> select name,open_mode,database_role from v$database;

NAME          OPEN_MODE          DATABASE_ROLE
-----
SHOAIB11      READ WRITE         PRIMARY

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



```
[oracle@OMmac1 ~]$  
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/dbs/spfileshoaibllg.ora /u02/app/oracle/product/19.0.0/dbhome_1/dbs/spfileshoaibllg.ora  
[oracle@OMmac1 ~]$ cp /u01/app/oracle/product/11.2.0.4/db_1/dbs/orapwshoaibllg /u02/app/oracle/product/19.0.0/dbhome_1/dbs/orapwshoaibllg  
[oracle@OMmac1 ~]$  
[oracle@OMmac1 ~]$  
[oracle@OMmac1 ~]$ ls -lrth /u02/app/oracle/product/19.0.0/dbhome_1/dbs/  
total 12K  
-rw-r--r--. 1 oracle oinstall 3.1K May 14 2015 init.ora  
-rw-r-----. 1 oracle oinstall 3.5K Jun 5 22:13 spfileshoaibllg.ora  
-rw-r-----. 1 oracle oinstall 1.5K Jun 5 22:14 orapwshoaibllg  
[oracle@OMmac1 ~]$
```

```
[oracle@OMmac1 ~]$ 19ce
[oracle@OMmac1 ~]$ echo $ORACLE_HOME
/u02/app/oracle/product/19.0.0/dbhome_1
[oracle@OMmac1 ~]$
[oracle@OMmac1 ~]$ . oraenv
ORACLE_SID = [shoaib11g] ?
The Oracle base remains unchanged with value /u02/app/oracle
[oracle@OMmac1 ~]$ sqlplus "/" as sysdba"

SQL*Plus: Release 19.0.0.0.0 - Production on Sun Jun 5 22:29:55 2022
Version 19.3.0.0.0

Copyright (c) 1982, 2019, Oracle. All rights reserved.

Connected to an idle instance.

SQL> startup upgrade
ORACLE instance started.

Total System Global Area 3623876800 bytes
Fixed Size 8902848 bytes
Variable Size 721420288 bytes
Database Buffers 2885681152 bytes
Redo Buffers 7872512 bytes
Database mounted.
Database opened.
SQL> set lines 300
SQL> select name,open_mode,database_role,cdb,version,status from v$database,v$instance;
```

NAME	OPEN_MODE	DATABASE_ROLE	CDB	VERSION	STATUS
SHOAIB11	READ WRITE	PRIMARY	NO	19.0.0.0.0	OPEN MIGRATE

```
SQL>
```

```
[oracle@OMmacl ~]$ cd $ORACLE_HOME/bin
[oracle@OMmacl bin]$ pwd
/u02/app/oracle/product/19.0.0/dbhome_1/bin
[oracle@OMmacl bin]$
[oracle@OMmacl bin]$ ./dbupgrade -n 6

Argument list for [/u02/app/oracle/product/19.0.0/dbhome_1/rdbms/admin/catctl.pl]
For Oracle internal use only A = 0
Run in c = 0
Do not run in C = 0
Input Directory d = 0
Echo OFF e = 1
Simulate E = 0
Forced cleanup F = 0
Log Id i = 0
Child Process I = 0
Log Dir l = 0
Priority List Name L = 0
Upgrade Mode active M = 0
SQL Process Count n = 6
SQL PDB Process Count N = 0
Open Mode Normal o = 0
Start Phase p = 0
End Phase P = 0
Reverse Order r = 0
AutoUpgrade Resume R = 0
Script s = 0
Serial Run S = 0
RO User Tablespaces T = 0
Display Phases y = 0
Debug catcon.pm z = 0
Debug catctl.pl Z = 0

catctl.pl VERSION: [19.0.0.0.0]
STATUS: [Production]
BUILD: [RDBMS_19.3.0.0.0DBRU_LINUX.X64_190417]

/u02/app/oracle/product/19.0.0/dbhome_1/rdbms/admin/orahome = [/u02/app/oracle/product/19.0.0/dbhome_1]
/u02/app/oracle/product/19.0.0/dbhome_1/bin/orabasehome = [/u02/app/oracle/product/19.0.0/dbhome_1]
catctlGetOraBaseLogDir = [/u02/app/oracle/product/19.0.0/dbhome_1]

Analyzing file /u02/app/oracle/product/19.0.0/dbhome_1/rdbms/admin/catupgrd.sql

Log file directory = [/tmp/cfgtoollogs/upgrade20220605223421]
```

```
[oracle@OMmac1 ~]$ 19ce
[oracle@OMmac1 ~]$ echo $ORACLE_HOME
/u02/app/oracle/product/19.0.0/dbhome_1
[oracle@OMmac1 ~]$ . oraenv
ORACLE_SID = [shoaib11g] ?
The Oracle base remains unchanged with value /u02/app/oracle
[oracle@OMmac1 ~]$ sqlplus "/" as sysdba"
```

```
SQL*Plus: Release 19.0.0.0.0 - Production on Sun Jun 5 23:38:50 2022
Version 19.3.0.0.0
```

```
Copyright (c) 1982, 2019, Oracle. All rights reserved.
```

```
Connected to an idle instance.
```

```
SQL> startup
ORACLE instance started.
```

```
Total System Global Area 3623876800 bytes
Fixed Size                  8902848 bytes
Variable Size               822083584 bytes
Database Buffers           2785017856 bytes
Redo Buffers                7872512 bytes
```

```
Database mounted.
```

```
Database opened.
```

```
SQL> set lines 300
```

```
SQL> select name,open_mode,database_role,cdb,version,status from v$database,v$instance;
```

NAME	OPEN_MODE	DATABASE_ROLE	CDB	VERSION	STATUS
SHOAIB11	READ WRITE	PRIMARY	NO	19.0.0.0.0	OPEN

```
SQL> 
```

```
SQL> set pages 50
SQL> col COMP_NAME for a50
SQL> Select comp_name,comp_id,version,status from dba_registry;
```

COMP_NAME	COMP_ID	VERSION	STATUS
Oracle Database Catalog Views	CATALOG	19.0.0.0.0	UPGRADED
Oracle Database Packages and Types	CATPROC	19.0.0.0.0	UPGRADED
JServer JAVA Virtual Machine	JAVAVM	19.0.0.0.0	UPGRADED
Oracle XDK	XML	19.0.0.0.0	UPGRADED
Oracle Database Java Packages	CATJAVA	19.0.0.0.0	UPGRADED
OLAP Analytic Workspace	APS	19.0.0.0.0	UPGRADED
Oracle Real Application Clusters	RAC	19.0.0.0.0	OPTION OFF
Oracle Workspace Manager	OWM	19.0.0.0.0	UPGRADED
Oracle Text	CONTEXT	19.0.0.0.0	UPGRADED
Oracle XML Database	XDB	19.0.0.0.0	UPGRADED
Oracle Multimedia	ORDIM	19.0.0.0.0	UPGRADED
Spatial	SDO	19.0.0.0.0	UPGRADED
Oracle OLAP API	XOQ	19.0.0.0.0	UPGRADED
Oracle Application Express	APEX	20.1.0.00.13	VALID

14 rows selected.

```
SQL> 
```

TIMEZONE CONFIGURATION



RUN CATUPPST.SQL



RUN UTLRP.SQL



CHECK INVALID OBJECTS



RUN POSTUPGRADE FIXUPS SQL

```
SQL> @/u01/11g19cUpgradeSpool/preupgrade/postupgrade_fixups.sql
```

```
Session altered.
```

```
PL/SQL procedure successfully completed.
```

```
PL/SQL procedure successfully completed.
```

```
PL/SQL procedure successfully completed.
```

```
Package created.
```

```
No errors.
```

```
Package body created.
```

```
PL/SQL procedure successfully completed.
```

```
No errors.
```

```
Package created.
```

```
No errors.
```

```
Package body created.
```

```
No errors.
```

```
Executing Oracle POST-Upgrade Fixup Script
```

```
Auto-Generated by: Oracle Preupgrade Script  
Version: 19.0.0.0.0 Build: 1  
Generated on: 2022-06-05 18:14:55
```

```
For Source Database: SHOAI11  
Source Database Version: 11.2.0.4.0  
For Upgrade to Version: 19.0.0.0.0
```

Preup Action Number	Preupgrade Check Name	Preupgrade Issue Is Remedied	Further DBA Action
11.	old_time_zones_exist	NO	Manual fixup recommended.
12.	dir_symlinks	YES	None.
13.	post_dictionary	YES	None.
14.	post_fixed_objects	NO	Informational only. Further action is optional.
15.	upg_by_std_upgrd	YES	None.

The fixup scripts have been run and resolved what they can. However, there are still issues originally identified by the preupgrade that have not been remedied and are still present in the database. Depending on the severity of the specific issue, and the nature of the issue itself, that could mean that your database upgrade is not fully complete. To resolve the outstanding issues, start by reviewing the postupgrade_fixups.sql and searching it for the name of the failed CHECK NAME or Preupgrade Action Number listed above. There you will find the original corresponding diagnostic message from the preupgrade which explains in more detail what still needs to be done.

```
PL/SQL procedure successfully completed.
```

```
Session altered.
```

```
SQL> █
```

```
SQL> select name,open_mode,database_role,cdb,version,status from v$database,v$instance;
```

NAME	OPEN_MODE	DATABASE_ROLE	CDB	VERSION	STATUS
SHOAIB11	READ WRITE	PRIMARY	NO	19.0.0.0.0	OPEN

```
SQL> SELECT * FROM v$timezone_file;
```

FILENAME	VERSION	CON_ID
timezlrgr_14.dat	14	0

```
SQL> shut immediate
```

Database closed.
Database dismounted.
ORACLE instance shut down.

```
SQL> startup upgrade
```

ORACLE instance started.

Total System Global Area 3623876800 bytes
Fixed Size 8902848 bytes
Variable Size 822083584 bytes
Database Buffers 2785017856 bytes
Redo Buffers 7872512 bytes
Database mounted.
Database opened.

```
SQL> SET SERVEROUTPUT ON
DECLARE
l_tz_version PLS_INTEGER;
BEGIN
l_tz_version := DBMS_DST.get_latest_timezone_version;
DBMS_OUTPUT.put_line('l_tz_version=' || l_tz_version);
DBMS_DST.begin_upgrade(l_tz_version);
END;
```

```
/SQL> 2 3 4 5 6 7 8
```

```
l_tz_version=32
```

An upgrade window has been successfully started.

PL/SQL procedure successfully completed.

```
SQL> shutdown immediate
```

Database closed.
Database dismounted.
ORACLE instance shut down.

```
SQL> startup
```

ORACLE instance started.

Total System Global Area 3623876800 bytes
Fixed Size 8902848 bytes
Variable Size 822083584 bytes
Database Buffers 2785017856 bytes
Redo Buffers 7872512 bytes
Database mounted.
Database opened.

```
SQL>
```

```
SQL> SET SERVEROUTPUT ON
```

```
DECLARE
```

```
l_failures PLS_INTEGER;
```

```
BEGIN
```

```
DBMS_DST.upgrade_database(l_failures);
```

```
DBMS_OUTPUT.put_line('DBMS_DST.upgrade_database : l_failures=' || l_failures);
```

```
DBMS_DST.end_upgrade(l_failures);
```

```
DBMS_OUTPUT.put_line('DBMS_DST.end_upgrade : l_failures=' || l_failures);
```

```
END;
```

```
/SQL> 2 3 4 5 6 7 8 9
```

```
Table list: "MDSYS"."SDO_DIAG_MESSAGES_TABLE"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_QS_RANDOM_NAMES"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_WORKSHEET_NOTIFY"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_FEEDBACK"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_FEEDBACK_FOLLOWUP"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_ACTIVITY_LOG1$"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_ACTIVITY_LOG2$"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_DEBUG_MESSAGES"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_DEBUG_MESSAGES2"
```

```
Number of failures: 0
```

```
Table list: "APEX_200100"."WWV_FLOW_ISSUE_NOTIFICATIONS"
```

```
Number of failures: 0
```

```
Table list: "GSMADMIN_INTERNAL"."AQ$_CHANGE_LOG_QUEUE_TABLE_S"
```

```
Number of failures: 0
```

```
Table list: "GSMADMIN_INTERNAL"."AQ$_CHANGE_LOG_QUEUE_TABLE_L"
```

```
Number of failures: 0
```

```
DBMS_DST.upgrade_database : l_failures=0
```

```
DBMS_OUTPUT.put_line('DBMS_DST.upgrade_database : l_failures=0');
```

```
DBMS_DST.end_upgrade : l_failures=0
```

PL/SQL procedure successfully completed.

SQL> @?/rdbms/admin/catuppst.sql

TIMESTAMP

COMP_TIMESTAMP	DBRESTART		2022-06-06 00:24:34
DBUA_TIMESTAMP	DBRESTART	FINISHED	2022-06-06 00:24:34
DBUA_TIMESTAMP	DBRESTART	NONE	2022-06-06 00:24:34

TIMESTAMP

DBUA_TIMESTAMP	CATUPPST	STARTED	2022-06-06 00:24:34
----------------	----------	---------	---------------------

TIMESTAMP

COMP_TIMESTAMP	POSTUP_BGN		2022-06-06 00:24:34
DBUA_TIMESTAMP	POSTUP_BGN	FINISHED	2022-06-06 00:24:34
DBUA_TIMESTAMP	POSTUP_BGN	NONE	2022-06-06 00:24:34

TIMESTAMP

COMP_TIMESTAMP	CATREQ_BGN		2022-06-06 00:24:34
DBUA_TIMESTAMP	CATREQ_BGN	FINISHED	2022-06-06 00:24:34
DBUA_TIMESTAMP	CATREQ_BGN	NONE	2022-06-06 00:24:34

catrequtlmg: b_StatEvt = TRUE
 catrequtlmg: b_SelProps = FALSE
 catrequtlmg: b_UpgradeMode = FALSE
 catrequtlmg: b_InUtlMig = FALSE

TIMESTAMP

COMP_TIMESTAMP	CATREQ_END		2022-06-06 00:24:35
DBUA_TIMESTAMP	CATREQ_END	FINISHED	2022-06-06 00:24:35
DBUA_TIMESTAMP	CATREQ_END	NONE	2022-06-06 00:24:35

```

catuppst: Dropping library DBMS_DDL_INTERNAL_LIB
catuppst: Dropping view _CURRENT_EDITION_OBJ_MIG
catuppst: Dropping view _ACTUAL_EDITION_OBJ_MIG
catuppst: Dropping view DBA_PART_KEY_COLUMNS_V$_MIG
catuppst: Dropping view DBA_SUBPART_KEY_COLUMNS_V$_MIG
catuppst: Dropping table OBJ$MIG
catuppst: Dropping table USER$MIG
catuppst: Dropping table COL$MIG
catuppst: Dropping table CLU$MIG
catuppst: Dropping table CON$MIG
catuppst: Dropping table BOOTSTRAP$MIG
catuppst: Dropping table TAB$MIG
catuppst: Dropping table TS$MIG
catuppst: Dropping table IND$MIG
catuppst: Dropping table ICOL$MIG
catuppst: Dropping table LOB$MIG
catuppst: Dropping table COLTYPE$MIG
catuppst: Dropping table SUBCOLTYPE$MIG
catuppst: Dropping table NTAB$MIG
catuppst: Dropping table REFCON$MIG
catuppst: Dropping table OPQTYPE$MIG
catuppst: Dropping table ICOLDEP$MIG
catuppst: Dropping table VIEWTRCOL$MIG
catuppst: Dropping table ATTRCOL$MIG
catuppst: Dropping table TYPE_MISC$MIG
catuppst: Dropping table LIBRARY$MIG
catuppst: Dropping table ASSEMBLY$MIG
catuppst: Dropping table TSQ$MIG
catuppst: Dropping table FET$MIG
  
```

TIMESTAMP

COMP_TIMESTAMP	POSTUP_END		2022-06-06 00:24:35
DBUA_TIMESTAMP	POSTUP_END	FINISHED	2022-06-06 00:24:35
DBUA_TIMESTAMP	POSTUP_END	NONE	2022-06-06 00:24:35

TIMESTAMP

COMP_TIMESTAMP	CATUPPST		2022-06-06 00:24:35
DBUA_TIMESTAMP	CATUPPST	FINISHED	2022-06-06 00:24:35
DBUA_TIMESTAMP	CATUPPST	NONE	2022-06-06 00:24:35

SQL>

```
SQL>
SQL> @?/rdbms/admin/utlrp.sql

TIMESTAMP
-----
COMP_TIMESTAMP UTLRP_BGN          2022-06-06 00:27:15
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
DOC>    number should decrease with time.
DOC>      SELECT COUNT(*) FROM obj$ WHERE status IN (4, 5, 6);
DOC>
DOC> 2. Query showing jobs created by UTL_RECOMP
DOC>      SELECT job_name FROM dba_scheduler_jobs
DOC>      WHERE job_name like 'UTL_RECOMP_SLAVE_%';
DOC>
DOC> 3. Query showing UTL_RECOMP jobs that are running
DOC>      SELECT job_name FROM dba_scheduler_running_jobs
DOC>      WHERE job_name like 'UTL_RECOMP_SLAVE_%';
DOC>#

TIMESTAMP
-----
COMP_TIMESTAMP UTLRP_END          2022-06-06 00:35:48
DOC> The following query reports the number of invalid objects.
DOC>
DOC> If the number is higher than expected, please examine the error
DOC> messages reported with each object (using SHOW ERRORS) to see if they
DOC> point to system misconfiguration or resource constraints that must be
DOC> fixed before attempting to recompile these objects.
DOC>#

OBJECTS WITH ERRORS
-----
3
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

SQL> SQL>
SQL> █
```

```
SQL> @/u01/11g19cUpgradeSpool/preupgrade/postupgrade_fixups.sql
```

```
No errors.
```

```
No errors.
```

```
No errors.
```

```
No errors.
```

```
Executing Oracle POST-Upgrade Fixup Script
```

```
Auto-Generated by:      Oracle Preupgrade Script  
                       Version: 19.0.0.0.0 Build: 1  
Generated on:           2022-06-05 18:14:55
```

```
For Source Database:    SHOAIB11  
Source Database Version: 11.2.0.4.0  
For Upgrade to Version: 19.0.0.0.0
```

Preup Action Number	Preupgrade Check Name	Preupgrade Issue Is Remedied	Further DBA Action
11.	old_time_zones_exist	YES	None.
12.	dir_symlinks	YES	None.
13.	post_dictionary	YES	None.
14.	post_fixed_objects	NO	Informational only. Further action is optional.
15.	upg_by_std_upgrd	YES	None.

The fixup scripts have been run and resolved what they can. However, there are still issues originally identified by the preupgrade that have not been remedied and are still present in the database. Depending on the severity of the specific issue, and the nature of the issue itself, that could mean that your database upgrade is not fully complete. To resolve the outstanding issues, start by reviewing the postupgrade_fixups.sql and searching it for the name of the failed CHECK NAME or Preupgrade Action Number listed above. There you will find the original corresponding diagnostic message from the preupgrade which explains in more detail what still needs to be done.

```
SQL> █
```

```
SQL> set pages 50
SQL> col COMP_NAME for a50
SQL> Select comp_name,comp_id,version,status from dba_registry;
```

COMP_NAME	COMP_ID	VERSION	STATUS
Oracle Database Catalog Views	CATALOG	19.0.0.0.0	VALID
Oracle Database Packages and Types	CATPROC	19.0.0.0.0	VALID
JServer JAVA Virtual Machine	JAVAVM	19.0.0.0.0	VALID
Oracle XDK	XML	19.0.0.0.0	VALID
Oracle Database Java Packages	CATJAVA	19.0.0.0.0	VALID
OLAP Analytic Workspace	APS	19.0.0.0.0	VALID
Oracle Real Application Clusters	RAC	19.0.0.0.0	OPTION OFF
Oracle Workspace Manager	OWM	19.0.0.0.0	VALID
Oracle Text	CONTEXT	19.0.0.0.0	VALID
Oracle XML Database	XDB	19.0.0.0.0	VALID
Oracle Multimedia	ORDIM	19.0.0.0.0	VALID
Spatial	SDO	19.0.0.0.0	VALID
Oracle OLAP API	XOQ	19.0.0.0.0	VALID
Oracle Application Express	APEX	20.1.0.00.13	VALID

```
SQL> 
```

```
SQL> show parameter compatible;
```

NAME	TYPE	VALUE
compatible	string	11.2.0.4.0
noncdb_compatible	boolean	FALSE

```
SQL>
```

```
SQL> ALTER SYSTEM SET COMPATIBLE = '19.0.0' SCOPE=SPFILE;
```

```
SQL>
```

```
SQL> shut immediate
```

```
Database closed.
```

```
Database dismounted.
```

```
ORACLE instance shut down.
```

```
SQL>
```

```
SQL> startup
```

```
ORACLE instance started.
```

```
Total System Global Area 3623876800 bytes
```

```
Fixed Size 8902848 bytes
```

```
Variable Size 822083584 bytes
```

```
Database Buffers 2785017856 bytes
```

```
Redo Buffers 7872512 bytes
```

```
Database mounted.
```

```
Database opened.
```

```
SQL>
```

```
SQL> show parameter compatible;
```

NAME	TYPE	VALUE
compatible	string	19.0.0
noncdb_compatible	boolean	FALSE

```
SQL> █
```

THANKS !!