## Step#01:

======

## Download 19c grid setup

mkdir /u01/app/19c/grid
chown grid:oinstall /u01/app/19c/grid
chown grid:oinstall /u01/app/19c/
unzip /u01/media/V982588-01.zip -d /u01/app/19c/grid

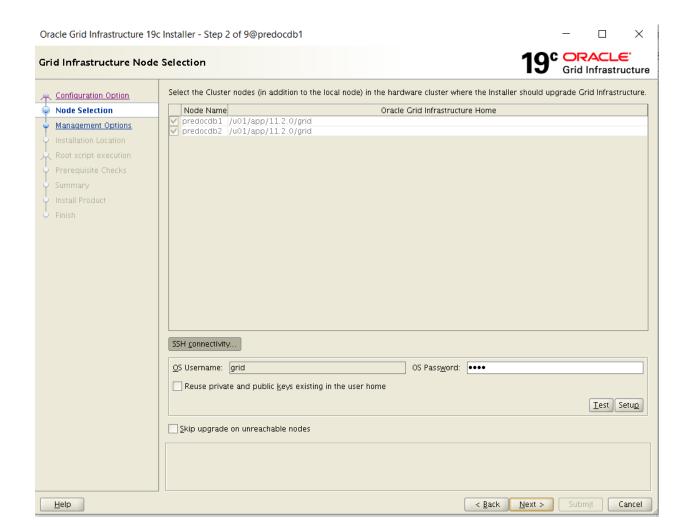
cd /u01/app/19c/grid

## Perform Above same steps In Node 2 as well

On node 1 run the setup to install grid infrastructure

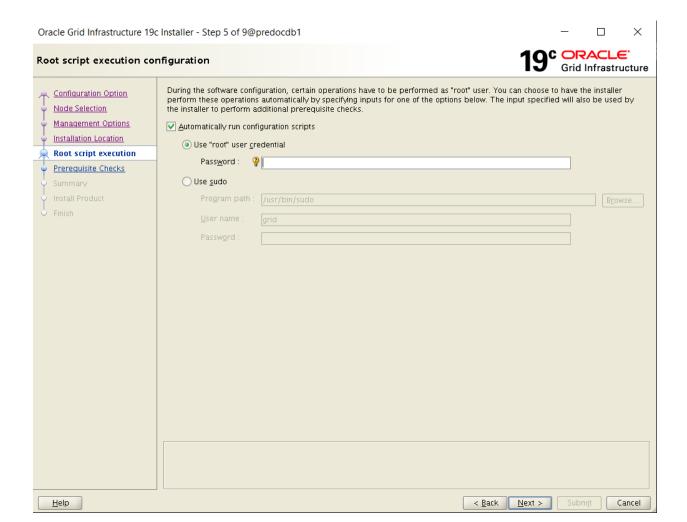
./gridSetup.sh

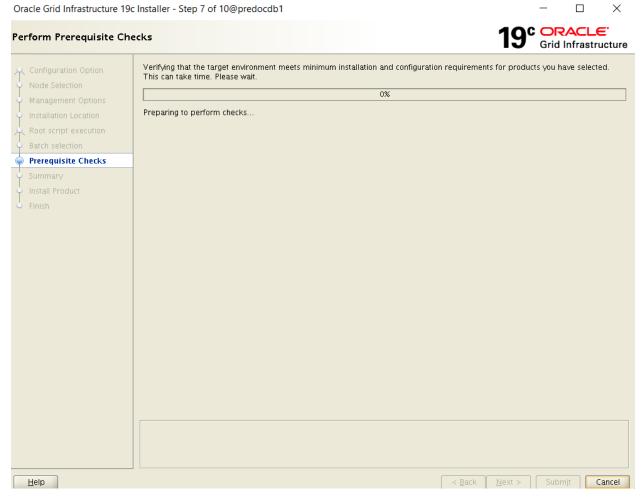
Oracle Grid Infrastructure 19c Installer - Step 1 of 9@predocdb1  $\times$ Select Configuration Option **Grid Infrastructure** Configuration Option Select an option to configure the software. The wizard will register the home in the central inventory and then perform the selected Node Selection Management Options
Installation Location Oconfigure Oracle Grid Infrastructure for a New Cluster  $\bigcirc$  Configure Oracle Grid Infrastructure for a Standalone Server (Oracle <u>R</u>estart) Upgrade Oracle Grid Infrastructure O Set Up Software Only <u>H</u>elp < <u>B</u>ack <u>N</u>ext > Subm<u>i</u>t Cancel

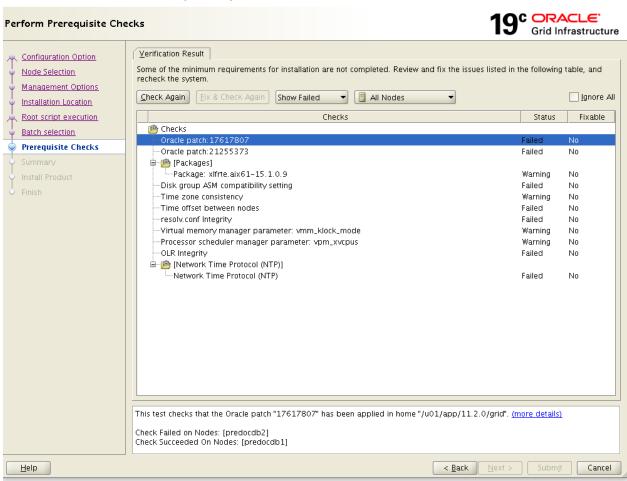


Oracle Grid Infrastructure 1	9c Installer - Step 3 of 9@predocdb1			) ×
Specify Management Op	otions	19°	Grid Infrastructure	
Configuration Option Node Selection Management Options Installation Location Root script execution Prerequisite Checks Summary Install Product Finish	You can configure to have this instance of Oracle Grid Infrastructure and Oracle Enterprise Manager Cloud Control. Specify the details of the Cloud Control configure with Enterprise Manager (EM) Cloud Control  OMS host:  OMS port:  EM Admin User Name:  EM Admin Password:			naged by
<u>H</u> elp		< Back Next >	Subm <u>i</u> t	Cancel

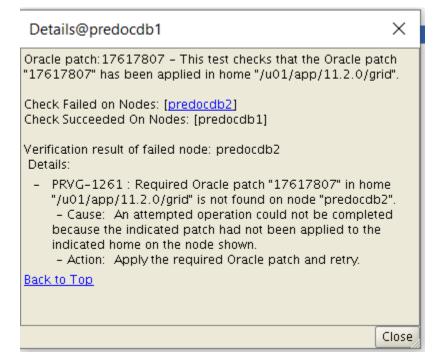


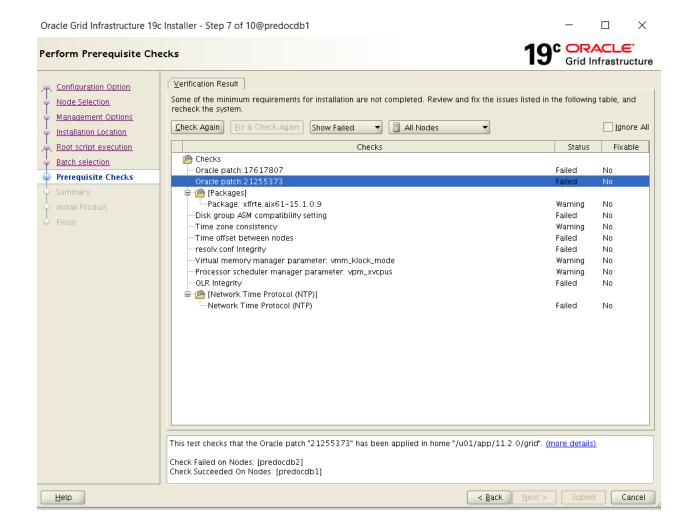






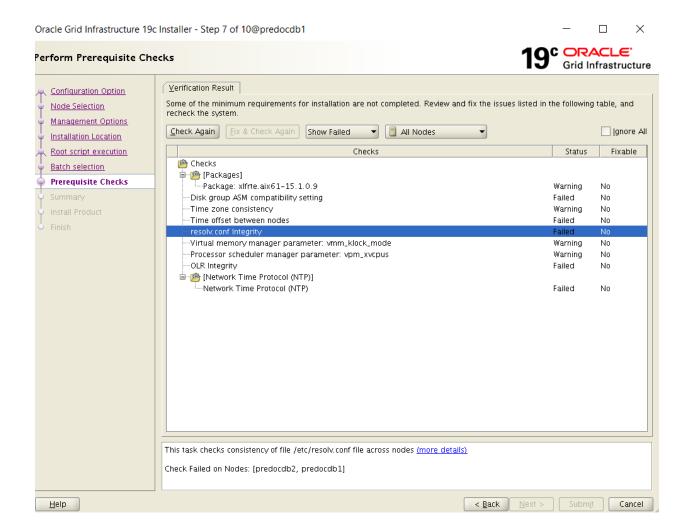
X





First two errors resolved by applying patch :(PSU)

Patch 22646198



Time Offset issue Is Resolved by applying below commands

On Both Nodes time was changed As the operating system is AIX below command will work

date 042219132025

## X Details@predocdb1 Oracle patch:21255373 - This test checks that the Oracle patch "21255373" has been applied in home "/u01/app/11.2.0/grid". Check Failed on Nodes: [predocdb2] Check Succeeded On Nodes: [predocdb1] Verification result of failed node: predocdb2 Details: - PRVG-1261: Required Oracle patch "21255373" in home "/u01/app/11.2.0/grid" is not found on node "predocdb2". - Cause: An attempted operation could not be completed because the indicated patch had not been applied to the indicated home on the node shown. - Action: Apply the required Oracle patch and retry. Back to Top Close

#### Disk ASM Groups compatibles issue resolved by below commands

sqlplus / as sysasm

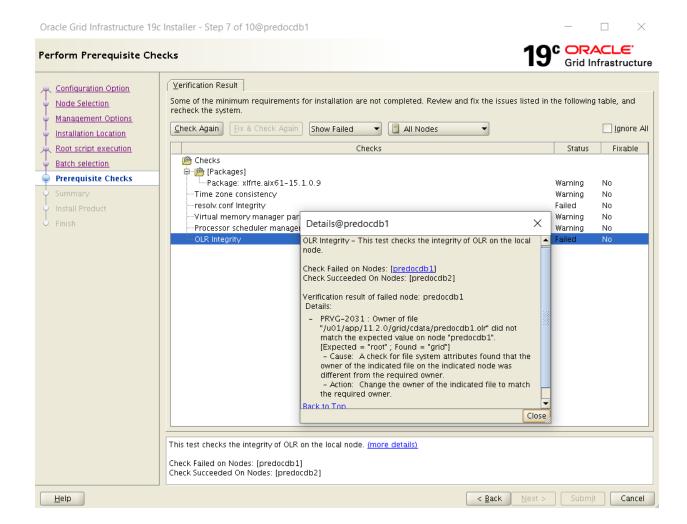
# For disk group "RECO"

SQL > asmcmd setattr -G RECO compatible.asm 11.2.0.2.0

# For disk group "OCRVOT"

SQL > asmcmd setattr -G OCRVOT compatible.asm 11.2.0.2.0

SQL > SELECT name, compatibility, database\_compatibility FROM v\$asm\_diskgroup;



#### **OLR Integrity Issue**

#### Solution:

The output should show root as the owner. If it shows grid, proceed to Step 2.

ls -l /u01/app/11.2.0/grid/cdata/predocdb1.olr

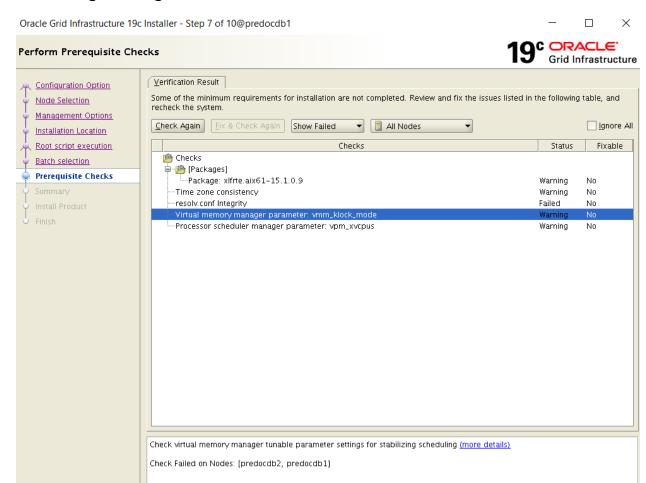
-rw----- 1 grid oinstall 272756736 Apr 22 16:17 predocdb1.olr

#### **Change File Ownership**

sudo chown root:system /u01/app/11.2.0/grid/cdata/predocdb1.olr

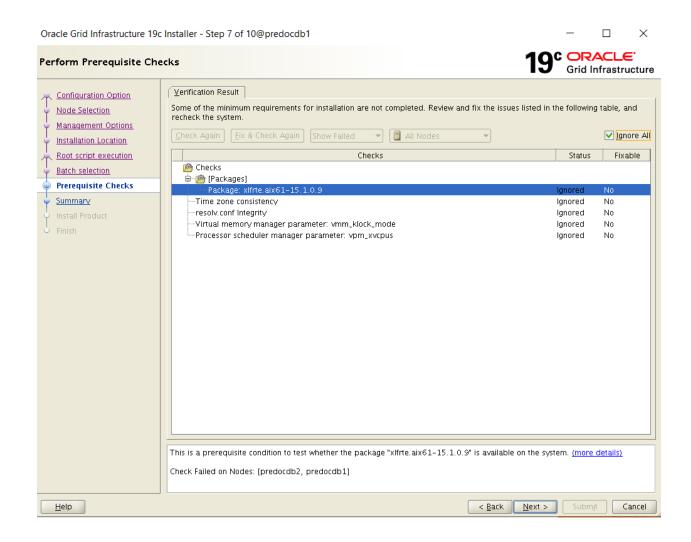
## Remaining warning/Errors

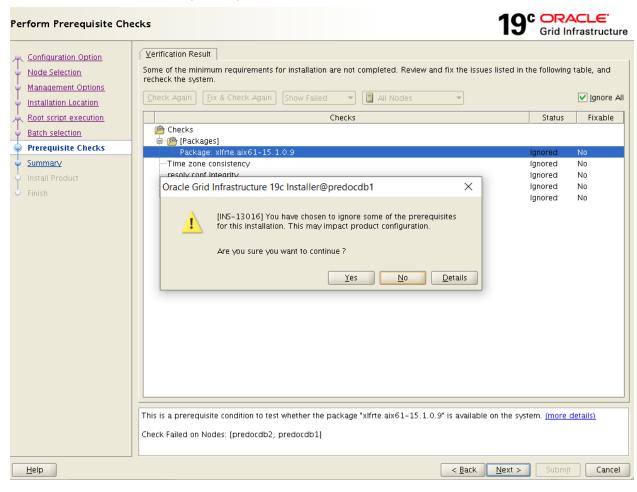
<u>H</u>elp

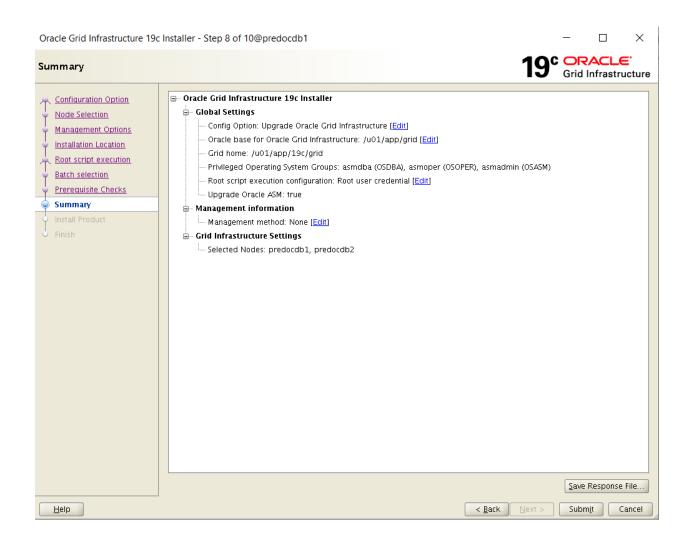


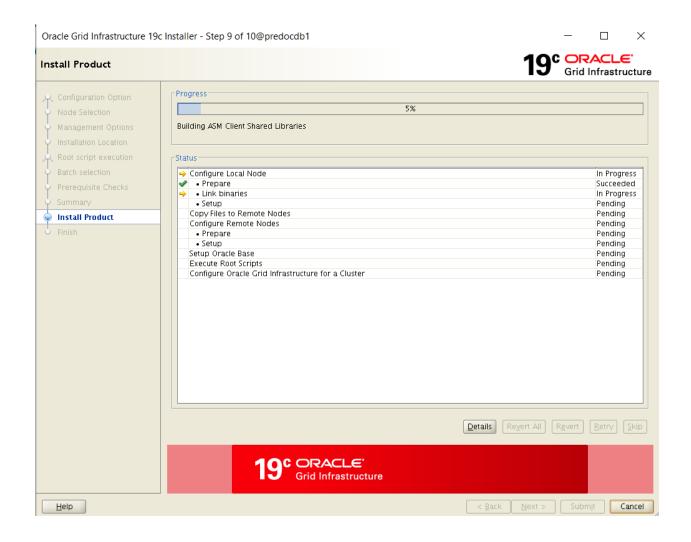
< Back Next > Submit Cancel

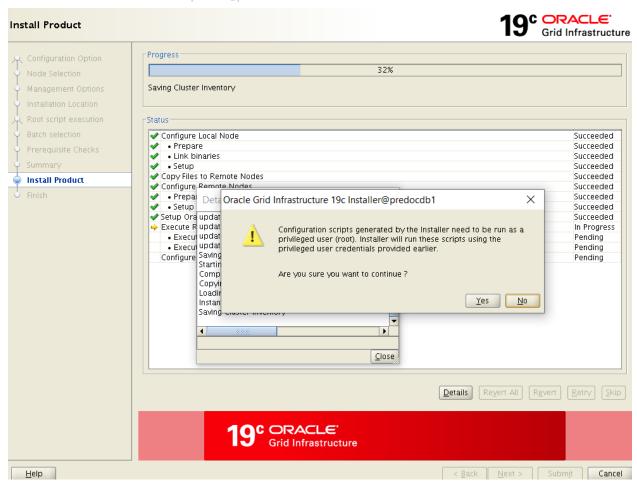
## Because they can safely ignore so check ignored all and proceed next



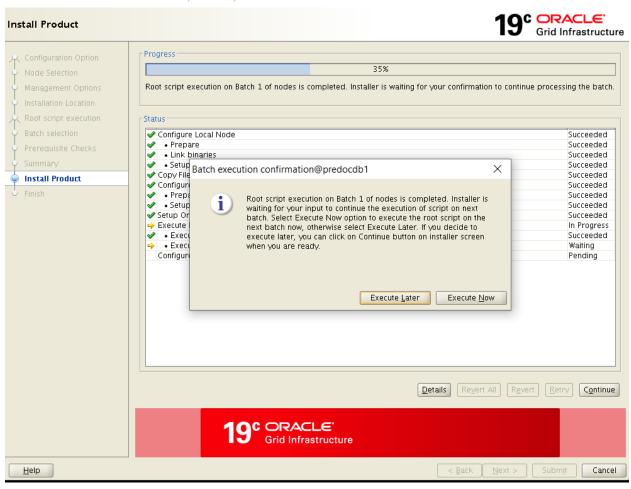


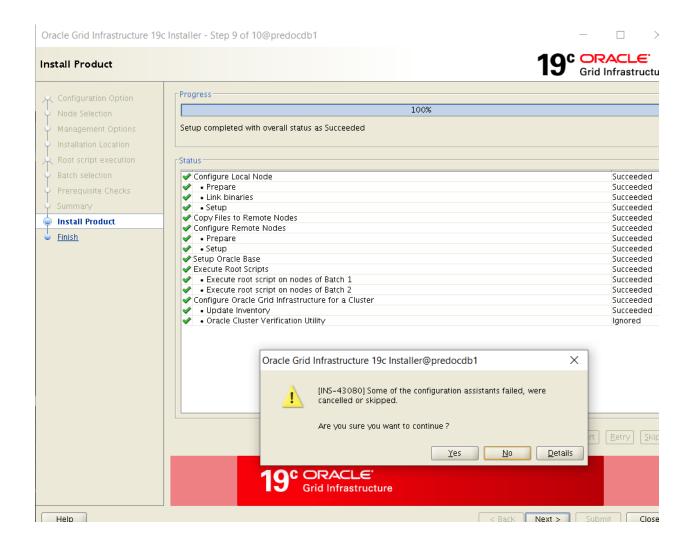






 $\times$ 







## **Now Verification**

## Update asm.env file

#### From

```
export ORACLE_HOME=/u01/app/11.2.0/grid
export PATH=$ORACLE_HOME/bin:$PATH
export ORACLE_SID=+ASM1
export
PATH=/u01/app/oracle/product/11.2.0/dbhome_1/OPatch:$PATH:$ORACLE_HOME/bin:$ORA_CRS_HOME/bin:.
```

#### To

```
export ORACLE_HOME=/u01/app/19c/grid

export PATH=$ORACLE_HOME/bin:$PATH

export ORACLE_SID=+ASM1

export PATH=/u01/app/19c/grid/OPatch:$PATH:$ORACLE_HOME/bin:$ORA_CRS_HOME/bin:
```

## bash-4.2\$ sqlplus / as sysasm

SQL\*Plus: Release 19.0.0.0.0 - Production on Tue Apr 22 21:27:51 2025

Version 19.3.0.0.0

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

#### Connected to:

Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production Version 19.3.0.0.0

## ps -ef | grep d.bin

bash-4.2\$ \$ORACLE_HOME/bin/crsctl stat res -t							
Name	Target	State	Server	State details			
Local Resource	Local Resources						
ora.LISTENER.lsnr							
	ONLINE	ONLINE	predocdb1	STABLE			
	ONLINE	ONLINE	predocdb2	STABLE			
ora.net1.netwo							
		ONLINE	predocdb1	STABLE			
	ONLINE	ONLINE	predocdb2	STABLE			
ora.ons	ONI THE	ONLINE	predocdb1	STABLE			
	ONLINE		predocdb1 predocdb2	STABLE			
ora.proxy advm		UNLINE	predocubz	STABLE			
ora.proxy_aaviii		OFFLINE	predocdb1	STABLE			
	OFFLINE	OFFLINE	predocdb2	STABLE			
Cluster Resour	Cluster Resources						
ora.ASMNET1LSN	R ASM.lsı	nr(ora.asmgro	up)				
1	ONLINE	ONLINE	predocdb1	STABLE			
2	ONLINE	ONLINE	predocdb2	STABLE			
ora.DATA.dg(ora.asmgroup)							
1		ONLINE	predocdb1	STABLE			
2	ONLINE		predocdb2	STABLE			
_	ora.LISTENER_SCAN1.lsnr						
1	ONLINE		predocdb2	STABLE			
ora.LISTENER_S	ONLINE		predocdb1	STABLE			
ora.LISTENER_S			predocab1	STABLE			
1	ONLINE		predocdb1	STABLE			
_	ora.OCRVOT.dg(ora.asmgroup)						
1	ONLINE		predocdb1	STABLE			
2	ONLINE	ONLINE	predocdb2	STABLE			
ora.RECO.dg(ora.asmgroup)							
1	ONLINE	ONLINE	predocdb1	STABLE			

Z	UNLINE	UNLINE	predocabz	STABLE			
ora.asm(ora.asmgroup)							
1	ONLINE	ONLINE	predocdb1	STABLE			
2	ONLINE	ONLINE	predocdb2	STABLE			
ora.asmnet1.as	ora.asmnet1.asmnetwork(ora.asmgroup)						
1		ONLINE	predocdb1	STABLE			
2	ONLINE	ONLINE	predocdb2	STABLE			
ora.cvu							
1	ONLINE	ONLINE	predocdb2	STABLE			
ora.edocdb.db							
1	ONLINE	ONLINE	predocdb1	Open,HOME=/u01/app/o racle/product/11.2.0 /dbhome_1,STABLE			
2	ONLINE	ONLINE	predocdb2	Open,HOME=/u01/app/o racle/product/11.2.0 /dbhome 1,STABLE			
ora.predocdb1.	vip						
1	ONLINE	ONLINE	predocdb1	STABLE			
ora.predocdb2.	vip						
1	ONLINE	ONLINE	predocdb2	STABLE			
ora.qosmserver							
1	ONLINE	ONLINE	predocdb2	STABLE			
ora.scan1.vip							
1	ONLINE	ONLINE	predocdb2	STABLE			
ora.scan2.vip	ONII THE	ONL THE	n na da a dh 1	CTADLE			
1	UNLINE	ONLINE	predocdb1	STABLE			
ora.scan3.vip	ONLINE	ONLINE	predocdb1	STABLE			
1	ONLINE	ONLINE	predocabi	STABLE			
bash-4.2\$							

#### crsctl check cluster -all

crsctl query crs activeversion -f

bash-4.2\$ crsctl query crs activeversion of Oracle Clusterware active version on the cluster is [19.0.0.0.0]. The cluster upgrade state is [UPGRADE FINAL]. The cluster active patch level is [2676783881].

# Now Database upgradation from 11.2.0.4 to 19c using Autoupgrade utility

mkdir -p /u01/app/19c\_db/product/db\_home1

chown oracle:oinstall /u01/app/19c\_db/product/db\_home1

unzip 19c software in this home

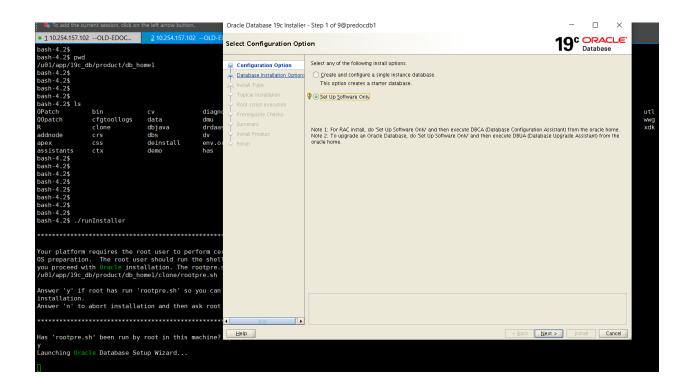
unzip V982583-01.zip -d /u01/app/19c\_db/product/db\_home1

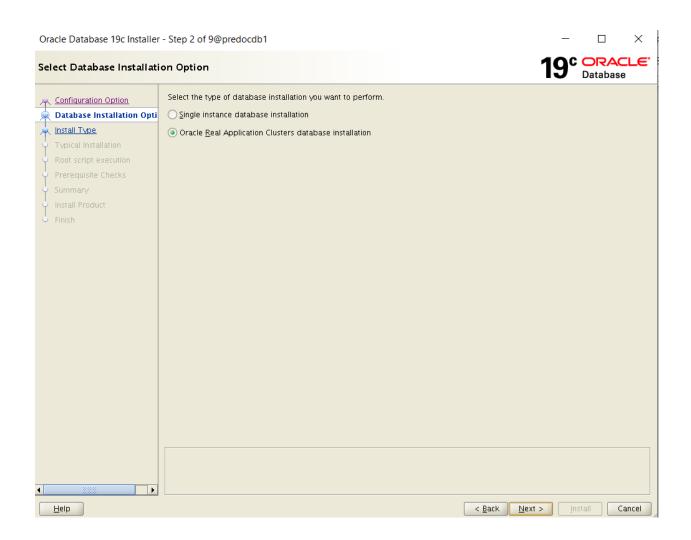
cd /u01/app/19c db/product/db home1

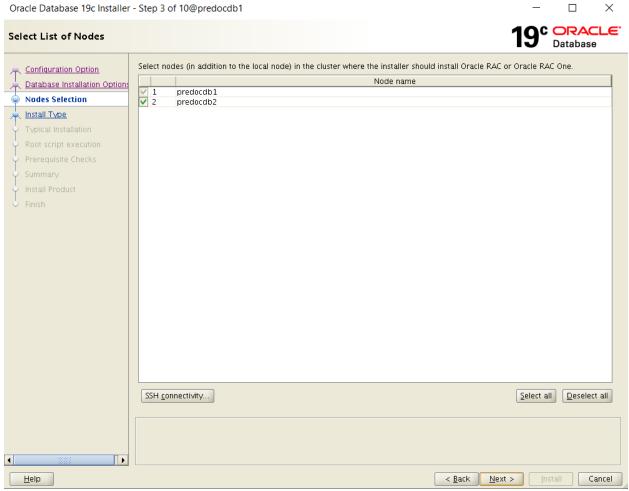
Do the same above commands in node 2 as well

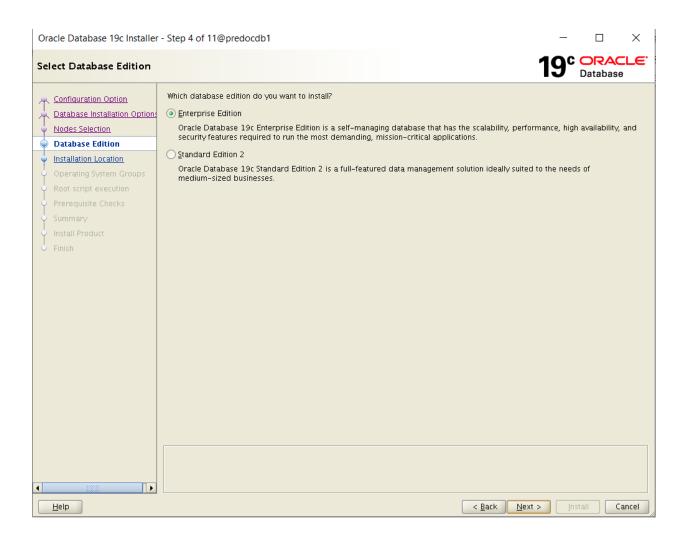
**Now On NODE1** 

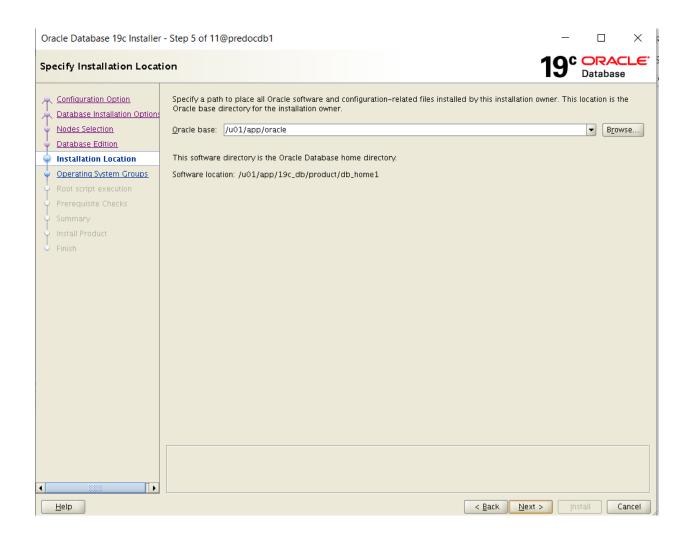
./runInstaller

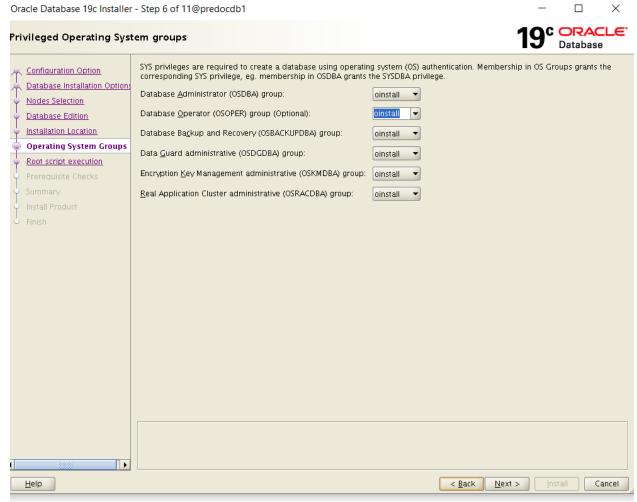


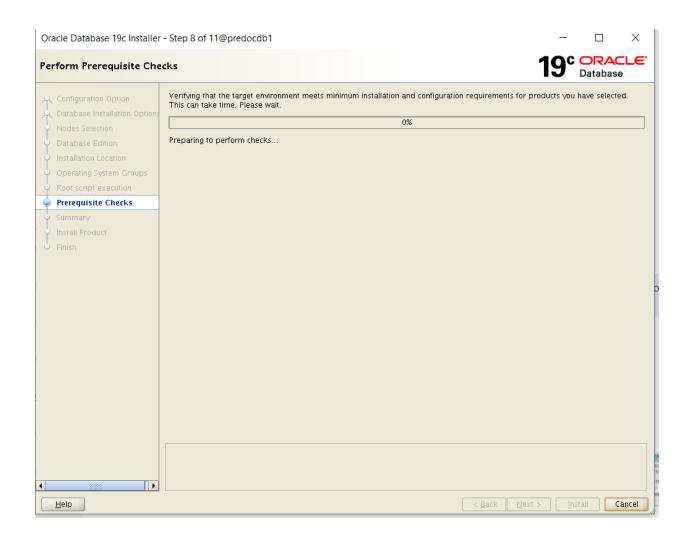


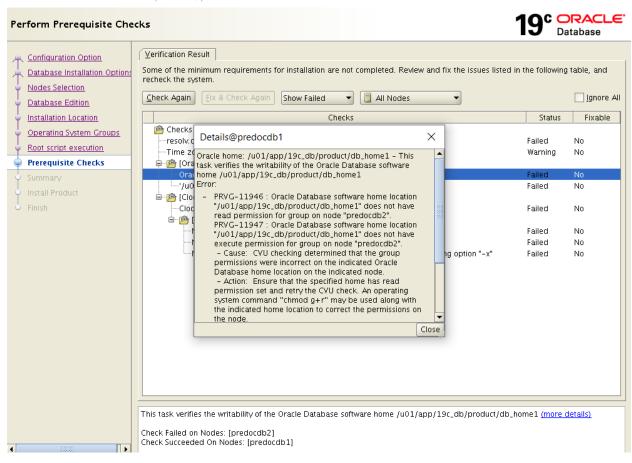










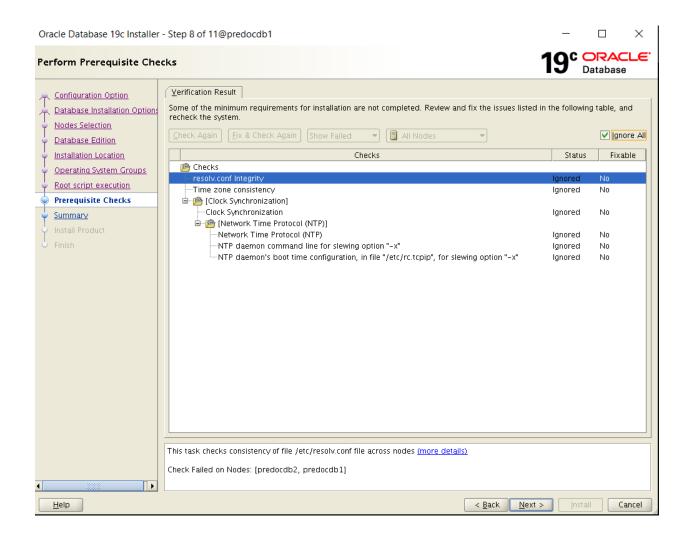


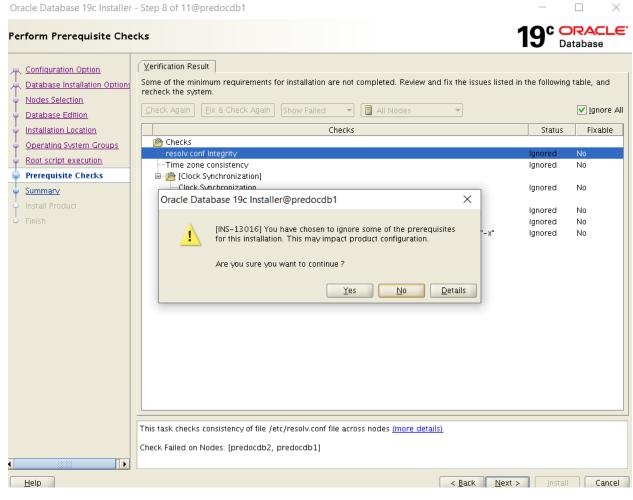
#### Solution:

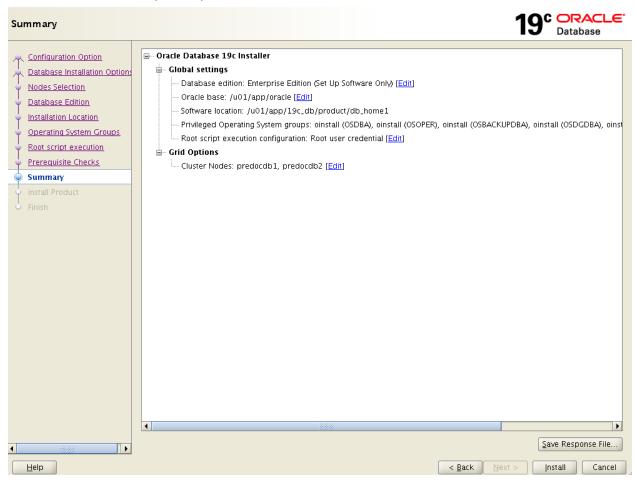
Run the following command on predocdb2 as root

chmod -R g+rx /u01/app/19c\_db/product/db\_home1

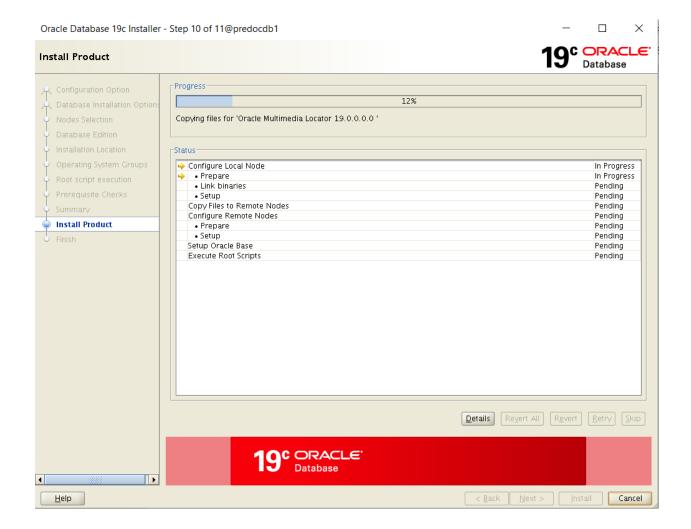
### Ignored remaining errors

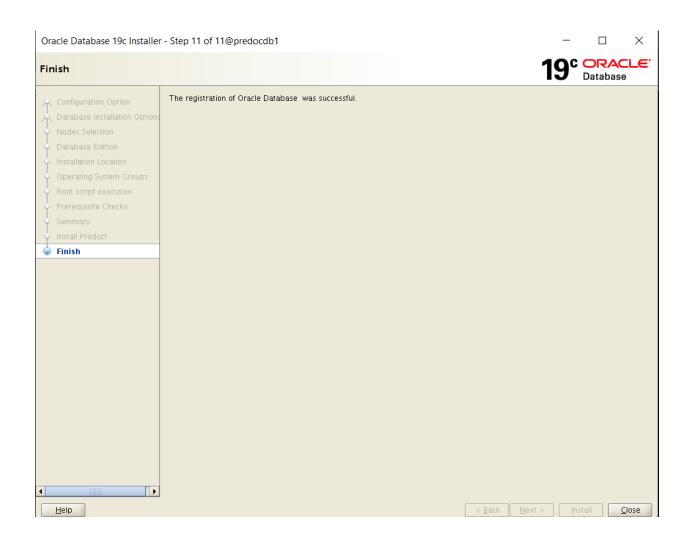






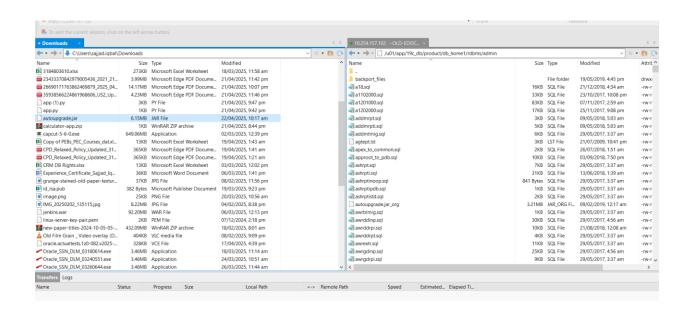
 $\square$   $\times$ 





# Download latest autoupgrade.jar file from oracle support and replace it old file as

cd /u01/app/19c\_db/product/db\_home1/rdbms/admin mv autoupgrade.jar autoupgrade.jar\_org



## 3. Create the config file

-----:

java -jar /u01/app/19c\_db/product/db\_home1/rdbms/admin/autoupgrade.jar -create\_sample\_file config

#### found error

```
bash-4.2$ java -jar /u01/app/19c_db/product/db_home1/rdbms/admin/autoupgrade.jar -create_sample_file config bash: java: command not found bash-4.2$ bash-4.2$
```

## Solution:

### Add following lines in .env file

export ORACLE\_HOME=/u01/app/19c\_db/product/db\_home1
export JAVA\_HOME=\$ORACLE\_HOME/jdk
export PATH=\$JAVA\_HOME/bin:\$PATH

### run command again

```
bash-4.2$ java -jar /u01/app/19c_db/product/db_home1/rdbms/admin/autoupgrade.jar -create_sample_file config Created sample configuration file /home/oracle/sample_config.cfg bash-4.2$
```

## Sample\_config.cfg File is created at /home/oracle

## Now change config.cfg file according to our requirements

```
bash-4.2$ vi sample config.cfg
```

#### updated file

```
source = /u01/app/oracle/product/11.2.0/dbhome_1
target = /u01/app/19c_db/product/db_home1
sid = edocdb1
sid2 = edocdb2
predocdb1.ptcl.net.pk
predocdb2.ptcl.net.pk
```

```
# build date 2025/02/12 18:51:30 +0000
# # Global configurations
# This directory will include the following:
# (1) Autolograde''s global directory
# (2) Any logs, not directly tied to a job
# (3) Config files
# (3) Any logs, not directly tied to a job
# (3) Config files
# (4) Programs; json and status.json
global.autoupplog_dir=/u01/app//ractle/cfgtoollogs/autoupgrade
# Database number 1 - Full DB/CDB upgrade
# upgl.log_dir=/u01/app/ractle/cfgtoollogs/autoupgrade/preedoc
# PRATH of the log directory for the upgrade job
upgl.science/nome=/u01/app/ractle/cfgtoollogs/autoupgrade/preedoc
# Spations and the source BB/CDB
upgl.science/nome=/u01/app/ractle/cfgtoollogs/autoupgrade/preedoc
# Spations and the source BB/CDB
upgl.science/nome=/u01/app/ractle/cfgtoollogs/autoupgrade/preedoc
# Spations and the source BB/CDB
# (5) Control of the source BB/CDB
upgl.science/nome=/u01/app/ractle/cfgtoollogs/autoupgrade/preedoc
# Spational. (No first of the source BB/CDB
# (5) Control of the source BB/CDB
# (6) Control of the source
```

## on node1:

mkdir -p /u01/app/cfgtoollogs/autoupgrade/preedoc

chown oracle:oinstall /u01/app/cfgtoollogs/autoupgrade/preedoc/chown oracle:oinstall /u01/app/cfgtoollogs/autoupgrade/

## on node2:

mkdir -p /u01/app/cfgtoollogs/autoupgrade/preedoc2

chown oracle:oinstall /u01/app/cfgtoollogs/autoupgrade/preedoc2/chown oracle:oinstall /u01/app/cfgtoollogs/autoupgrade/

### **Now Run**

cd /u01/app/19c\_db/product/db\_home1/rdbms/admin
java -jar autoupgrade.jar -config /home/oracle/sample\_config.cfg -mode analyze

#### Number of Jobs:1

#### Job ID:100

DB Name:edocdb

DB Version Before Upgrade:11.2.0.4.0
DB Version After Upgrade:19.3.0.0.0

### Autoupgrade Stage List

Stage Name	Status	Start Time	Duration	Log Directory	Detail
PRECHECKS	SUCCESS	2025-04-23 15:25:48	0:00:22	/u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/100/prechecks	Checks Report  Check passed and no manual intervention needed

#### Report Summary

N/A

```
File Edit Format View Help

Autoupgrade Summary Report

Autoupgrade Summary Report

Batel Wed Apr 23 15:26:10 PKT 2025

[Number of Jobs] 1

Batel Wed Apr 23 15:26:10 PKT 2025

[Number of Jobs] 1

Batel Wed Apr 23 15:26:10 PKT 2025

[Number of Jobs] 1

Batel Wed Apr 23 15:26:10 PKT 2025

[Star Indeed Summary Report

Batel Wed Apr 23 15:26:10 PKT 2025

[Stage Name] PRECHECKS

[Status] SUCCESS

[Status] SUCCESS

[Start Time] 2025-04-23 15:25:48

[Duration] 0:00:22

[Log Directory] /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/100/prechecks/edocdb_preupgrade.log Check passed and no manual intervention needed
```

## Now Final upgrade command

cd /u01/app/19c\_db/product/db\_home1/rdbms/admin
java -jar autoupgrade.jar -config /home/oracle/sample\_config.cfg -mode deploy

```
bash-4.2$ java -jar autoupgrade.jar -config /home/oracle/sample_config.cfg -mode deploy AutoUpgrade 25.1.250212 launched with default internal options
Processing config file ...
| Starting AutoUpgrade execution |
+-----
1 Non-CDB(s) will be processed
Type 'help' to list console commands
upg> tasks
  ID
                     NAME| Job#|
  --+-----
                            WAITING
        Signal Dispatcher
                               RUNNABLE
  24 Attach API wait loop
                               RUNNABLE
              event_loop|TIMED_WAITING|
console| RUNNABLE|
  73
  74
  75 j
                                WAITING
             queue_reader|
  77|
                    cmd-0
                                WAITING
                  StatUpg
  78 j
                                WAITING
               event_loop|TIMED_WAITING|
  79 j
  80
        ClassCache Reaper|
                                 WAITING
  82
            job_manager-0|
                                WAITING
                exec_loop|
exec_loop|
  87
                                WAITING
  88 j
                                WAITING
273
        edocdb1-puifxl0-0
                                WAITING
274
        edocdb1-puifxl0-1
                                WAITING
 275
        edocdb1-puifxl0-2
                                WAITING
276
        edocdb1-puifxl0-3
                                WAITING
277
        edocdb1-puifxl0-4
                                WAITING
278
        edocdb1-puifxl0-5
                                 WAITING
279
        edocdb1-puifxl0-6
                                WAITING
[280]
        edocdb1-puifxl0-7
                                WAITING
292
            sql-[32A770]
                               RUNNABLE
upg>
```

```
upg> status
Config
        User configuration file
                                   [/home/oracle/sample_config.cfg]
        General logs location
                                   [/u01/app/oracle/cfgtoollogs/autoupgrade/cfgtoollogs/upgrade/auto]
                                   [DEPLOY]
Jobs Summary
        Total databases in configuration file [1]
        Total Non-CDB being processed
        Total Containers being processed
                                              [0]
        Jobs finished successfully
                                              [0]
        Jobs finished/stopped
                                              [0]
        Jobs in progress
Progress
                                                              Progress |
        |Job|
                                                                ] 31 %|
        |101|[||||||||||
```

```
2025-84-23 15-41-94-080 1809 0801 results are being generated. Obselva secutor executed 128 2025-84-23 15-41-94.080 1809 O801 creating checklist if the or do (educub) - Obseks secutor executed 175 2025-84-23 15-41-94.080 1809 Creating checklist if the last finished for do (educub) - Obseks secutor.executed 175 2025-84-23 15-41-94.090 1809 Creating of checklist if the last finished for do (educub) - Obseks secutor.executed 175 2025-94-23 15-41-94.090 1809 Creating of checklist if the last finished for do (educub) - Obseks secutor.executed 175 2025-94-23 15-41-94.090 1800 Creating of checklist if the last finished for do (educub) - Obseks secutor.executed 175 2025-94-23 15-41-94.090 1800 Creating of checklist in educub in the last finished for do (educub) - Obseks secutor.executed 175 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.092 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.093 1800 Creating Checklist in educub - Obseks secutor.executed 196 2025-94-23 15-41-94.
```

## upg> status -job 101

```
upg> status -job 101
Details
          Job No
Oracle SID
                                101
                                edocdb1
          Start Time
                                25/04/23 15:32:29
         Elapsed (min):
End time:
                               N/A
Logfiles
          Logs Base:
                            /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1
                           /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/101
/u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/101/postfixups
/u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/temp
          Job logs:
          Stage logs:
TimeZone:
Remote Dirs:
Stages
          SETUP
                               <1 min
          GRP
                               <1 min
          PREUPGRADE
                               <1 min
          PRECHECKS
                               <1 min
          PREFIXUPS
                               7 min
          DRAIN
                               2 min
          DBUPGRADE
                               39 min
          DISPATCH
                               <1 min
          POSTCHECKS
                               <1 min
          DISPATCH
                               <1 min
          POSTFIXUPS
                               ~6 min (RUNNING)
          POSTUPGRADE
          SYSUPDATES
Stage-Progress Per Container
          |Database|POSTFIXUPS|
          edocdb1
```

```
upg> /
Details
                          101
        Job No
        Oracle SID
                          edocdb1
        Start Time
                          25/04/23 15:32:29
        Elapsed (min):
                          61
        End time:
                          N/A
Logfiles
        Logs Base:
                       /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1
                       /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/101
        Job logs:
                       /u01/app/oracle/cfg toollogs/autoup grade/preedoc/edocdb1/101/sy supdates
        Stage logs:
        TimeZone:
                       /u01/app/oracle/cfgtoollogs/autoupgrade/preedoc/edocdb1/temp
        Remote Dirs:
Stages
        SETUP
                          <1 min
        GRP
                          <1 min
                          <1 min
        PREUPGRADE
        PRECHECKS
                          <1 min
                          7 min
2 min
        PREFIXUPS
        DRAIN
        DBUPGRADE
                          39 min
        DISPATCH
                          <1 min
        POSTCHECKS
                          <1 min
        DISPATCH
                          <1 min
        POSTFIXUPS
                          8 min
        POSTUPGRADE
                          <1 min
        SYSUPDATES
                          ~1 min (RUNNING)
Stage-Progress Per Container
        |Database|SYSUPDATES|
                       1 % |
        edocdb1
upg>
```

```
Stages
              SETUP
                                          <1 min
              GRP
                                         <1 min
              PREUPGRADE
                                          <1 min
                                         <1 min
7 min
2 min
              PRECHECKS
              PREFIXUPS
              DRAIN
                                         39 min
<1 min
              DBUPGRADE
              DISPATCH
              POSTCHECKS
                                          <1 min
              DISPATCH
                                          <1 min
              POSTFIXUPS
POSTUPGRADE
                                         8 min
                                          <1 min
~8 min (RUNNING)
              SYSUPDATES
 Stage-Progress Per Container
              |Database|SYSUPDATES|
              | edocdb1|
 upg>
upg> Job 101 completed
       > Job 101 completed
----- Final Summary ---
per of databases [ 1 ]
Number of databases
Jobs finished
Jobs failed
Jobs restored
Jobs pending
                                                    [1]
[0]
[0]
---- Drop GRP at your convenience once you consider it is no longer needed ----
Drop GRP from edocdb1: drop restore point AUTOUPGRADE_9212_EDOCDB112040
Please check the summary report at: /u\theta1/app/oracle/cfgtoollogs/autoupgrade/cfgtoollogs/upgrade/auto/status/status.html/u\theta1/app/oracle/cfgtoollogs/autoupgrade/cfgtoollogs/upgrade/auto/status/status.logbash-4.2$ bash-4.2$
```

End upgrade Completed .