

Step by Step Install Oracle 19c Release 3 on Linux 7.8

Pre-requisites already been taken care like memory, swap, kernel parameters, add groups, profile and users...etc

Table of Contents

1. Hardware Requirements
 2. Verify OS version
 3. Download 19c db software
 4. Unzip
 5. Oracle Installation Prerequisites
 6. Set the DISPLAY Environment
 7. Invoke ./runInstaller
 8. Verify
-

1. Hardware Requirements:

The first thing we need to verify the hardware requirements for an Oracle 19c Release 3

— Check Physical RAM.

```
# grep MemTotal /proc/meminfo
```

We need at least 8192 MB of physical RAM. <----

— Check Swap Space.

```
# grep SwapTotal /proc/meminfo/*
```

RAM up to 1024MB then swap = 2 times the size of RAM

RAM between 2049MB and 8192MB then swap = equal to the size of RAM

RAM more than 8192MB then swap size = 0.75 times the size of RAM

We need at least 8192 MB of swap <----

— Check space available in /tmp

```
# df -h /tmp/*
```

You need to have at least 2048 MB of space in the /tmp directory. <---

— Check space for Oracle Software and pre-configured database.

```
# df -h
```

Space requirement for Oracle 19c Software:

Enterprise Edition 10G <---- Minimum

```
[oracle@rac1 19.0.0]$ du -sh dbhome_1
```

```
9.9G dbhome_1
[oracle@rac1 19.0.0]$
```

— To determine whether the system architecture can run the software, enter the following command:

```
# grep "model name" /proc/cpuinfo
```

This command displays the processor type. Verify that the processor architecture matches the Oracle software release that you want to install. If you do not see the expected output, then you cannot install the software on this system.

2. Verify OS version:

```
[oracle@rac1 ~]$ cat /etc/redhat-release
Red Hat Enterprise Linux Server release 7.8
[oracle@rac1 ~]$
```

3. Download Software:

Download the Oracle software from OTN or MY ORACLE SUPPORT (MOS).

<https://www.oracle.com/database/technologies/oracle19c-linux-downloads.html>

4. Unzip Software:

NOTE: You can't edit oracle home location while installation using OUI. It will pickup automatically ORACLE HOME location, where you have unzipped database binaries. Hence directly unzip in ORACLE HOME location and then start ./runInstaller

After unzip, it will NOT keep all files in single directory like 10g,11g and 12c.

```
[oracle@pr dbhome_1]$ pwd
/u01/app/oracle/product/19.0.0/dbhome_1
[oracle@pr dbhome_1]$ ls -ltr
-rwxrwxr-x. 1 oracle oinstall 3059705302 APR 20 20:25 LINUX.X64_193000_db_home.zip
[oracle@pr dbhome_1]$
```

```
[oracle@pr dbhome_1]$ unzip LINUX.X64_193000_db_home.zip
```

```
[oracle@pr ~]$ cd /u01/app/oracle/product/19.0.0/dbhome_1/
[oracle@pr dbhome_1]$ ls -lrth
total 2.9G
-rw-r--r--. 1 oracle oinstall 852 Aug 18 2015 env.ora
-rw-r--r--. 1 oracle oinstall 2.9K Oct 14 2016 schagent.conf
```

-rwxr-x---	1 oracle oinstall	1.8K Mar 8 2017	runInstaller
drwxr-x---	14 oracle oinstall	4.0K Apr 12 2019	OPatch
drwxr-x---	7 oracle oinstall	4.0K Apr 17 2019	xdk
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	wwg
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	usm
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	suptools
drwxr-xr-x.	6 oracle oinstall	4.0K Apr 17 2019	srvm
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	sqlj
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	sqldeveloper
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	slax
-rw-r-----.	1 oracle oinstall	10 Apr 17 2019	root.sh.old.1
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	relnotes
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	racg
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	R
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	perl
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	owm
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	oss
drwxr-xr-x.	6 oracle oinstall	4.0K Apr 17 2019	ord
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	oracore
drwxr-xr-x.	7 oracle oinstall	4.0K Apr 17 2019	opmn
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	olap
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	nls
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	mgw
drwxr-xr-x.	9 oracle oinstall	4.0K Apr 17 2019	md
drwxr-xr-x.	10 oracle oinstall	4.0K Apr 17 2019	ldap
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	has
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	dv
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	diagnostics
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	demo
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	dbjava
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	data
drwxr-xr-x.	7 oracle oinstall	4.0K Apr 17 2019	cv
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	css
drwxr-xr-x.	6 oracle oinstall	4.0K Apr 17 2019	crs
drwxr-xr-x.	6 oracle oinstall	4.0K Apr 17 2019	plsqli
drwxr-xr-x.	2 oracle oinstall	4.0K Apr 17 2019	db
drwxr-xr-x.	2 oracle oinstall	4.0K Apr 17 2019	utl
drwxr-xr-x.	2 oracle oinstall	4.0K Apr 17 2019	instantclient
drwxr-xr-x.	13 oracle oinstall	4.0K Apr 17 2019	dms
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	ucp
drwxr-xr-x.	3 oracle oinstall	4.0K Apr 17 2019	jdbc
drwxr-xr-x.	2 oracle oinstall	4.0K Apr 17 2019	QOpatch
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	ords
drwxr-xr-x.	5 oracle oinstall	4.0K Apr 17 2019	sd
drwxr-xr-x.	6 oracle oinstall	4.0K Apr 17 2019	apex
drwxr-xr-x.	8 oracle oinstall	4.0K Apr 17 2019	odbc
drwxr-xr-x.	2 oracle oinstall	4.0K Apr 17 2019	jlib
drwxr-xr-x.	4 oracle oinstall	4.0K Apr 17 2019	drdaas
drwxr-xr-x.	11 oracle oinstall	4.0K Apr 17 2019	ctx
-rwx-----.	1 oracle oinstall	786 Apr 17 2019	root.sh.old

```

drwxr-xr-x. 10 oracle oinstall 4.0K Apr 17 2019 network
drwxr-xr-x. 5 oracle oinstall 4.0K Apr 17 2019 hs
drwxr-xr-x. 9 oracle oinstall 4.0K Apr 17 2019 assistants
drwxr-xr-x. 6 oracle oinstall 4.0K Apr 18 2019 sqlplus
-rwx-----. 1 oracle oinstall 638 Apr 18 2019 root.sh
drwxr-xr-x. 8 oracle oinstall 4.0K Apr 18 2019 oui
drwxr-xr-x. 5 oracle oinstall 4.0K Apr 18 2019 deinstall
drwxr-xr-x. 4 oracle oinstall 4.0K Apr 18 2019 clone
drwxr-xr-x. 2 oracle oinstall 4.0K Apr 18 2019 addnode
drwxr-xr-x. 4 oracle oinstall 4.0K Apr 18 2019 sqlpatch
drwxr-xr-x. 13 oracle oinstall 4.0K Apr 18 2019 rdbms
drwxr-xr-x. 6 oracle oinstall 4.0K Apr 18 2019 precomp
drwxr-xr-x. 4 oracle oinstall 12K Apr 18 2019 lib
drwxr-xr-x. 6 oracle oinstall 4.0K Apr 18 2019 jdk
drwxr-xr-x. 8 oracle oinstall 4.0K Apr 18 2019 javavm
drwxr-xr-x. 13 oracle oinstall 4.0K Apr 18 2019 inventory
drwxr-xr-x. 2 oracle oinstall 4.0K Apr 18 2019 bin
drwxr-xr-x. 10 oracle oinstall 4.0K Apr 18 2019 install
-rw-r--r--. 1 root root 2.9G Apr 22 22:07 LINUX.X64_193000_db_home.zip
[oracle@pr dbhome_1]$

```

5. Oracle Installation Prerequisites:

```

[root@pr ~]# yum install -y oracle-database-preinstall-19c
Loaded plugins: langpacks, ulninfo
Resolving Dependencies
--> Running transaction check
---> Package oracle-database-preinstall-19c.x86_64 0:1.0-3.el7 will be installed
--> Finished Dependency Resolution

```

Dependencies Resolved

```

=====
=====
=====
Package Arch Version
Repository Size
=====
=====
=====
Installing:
oracle-database-preinstall-19c x86_64 1.0-3.el7
ol7_latest 27 k

```

Transaction Summary

```

=====
=====
=====
Install 1 Package

```

Total download size: 27 k
Installed size: 76 k
Downloading packages:
oracle-database-preinstall-19c-1.0-3.el7.x86_64.rpm
| 27 kB 00:00:02
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : oracle-database-preinstall-19c-1.0-3.el7.x86_64
1/1
Verifying : oracle-database-preinstall-19c-1.0-3.el7.x86_64
1/1

Installed:
oracle-database-preinstall-19c.x86_64 0:1.0-3.el7

Complete!

```
root@pr:~  
[root@pr ~]# yum install -y oracle-database-preinstall-19c  
Loaded plugins: langpacks, ulninfo  
Resolving Dependencies  
--> Running transaction check  
--> Package oracle-database-preinstall-19c.x86_64 0:1.0-3.el7 will be installed  
--> Finished Dependency Resolution  
  
Dependencies Resolved  
  
=====
```

Package	Arch	Version	Repository	Size
Installing: oracle-database-preinstall-19c	x86_64	1.0-3.el7	ol7_latest	27 k

```
=====
```

Transaction Summary

=====

Install 1 Package

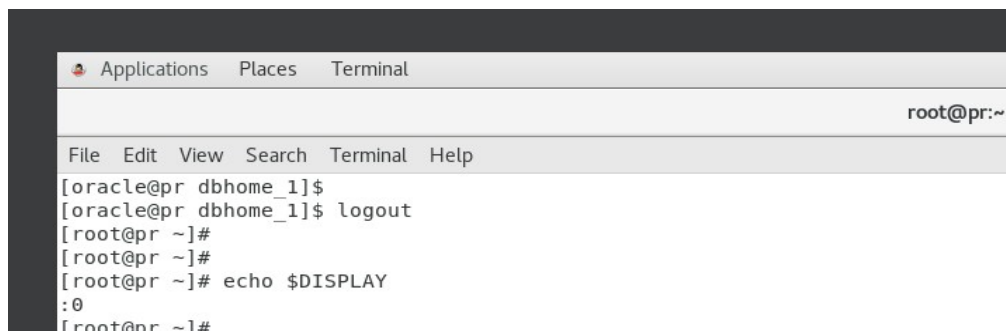
Total download size: 27 k
Installed size: 76 k
Downloading packages:
oracle-database-preinstall-19c-1.0-3.el7.x86_64.rpm | 27 kB 00:00:02
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : oracle-database-preinstall-19c-1.0-3.el7.x86_64 1/1
Verifying : oracle-database-preinstall-19c-1.0-3.el7.x86_64 1/1

Installed:
oracle-database-preinstall-19c.x86_64 0:1.0-3.el7

Complete!
[root@pr ~]#

6. Set the DISPLAY Environment:

Log into the oracle user. If you are using X emulation then set the DISPLAY environmental variable. Set the environment same in root user for oracle user.

A terminal window titled 'Applications Places Terminal' with a menu bar 'File Edit View Search Terminal Help'. The prompt is 'root@pr:~'. The commands and output are: '[oracle@pr dbhome_1]\$', '[oracle@pr dbhome_1]\$ logout', '[root@pr ~]#', '[root@pr ~]#', '[root@pr ~]# echo \$DISPLAY', ':0', and '[root@pr ~]#'.

```
Applications Places Terminal
root@pr:~
File Edit View Search Terminal Help
[oracle@pr dbhome_1]$
[oracle@pr dbhome_1]$ logout
[root@pr ~]#
[root@pr ~]#
[root@pr ~]# echo $DISPLAY
:0
[root@pr ~]#
```

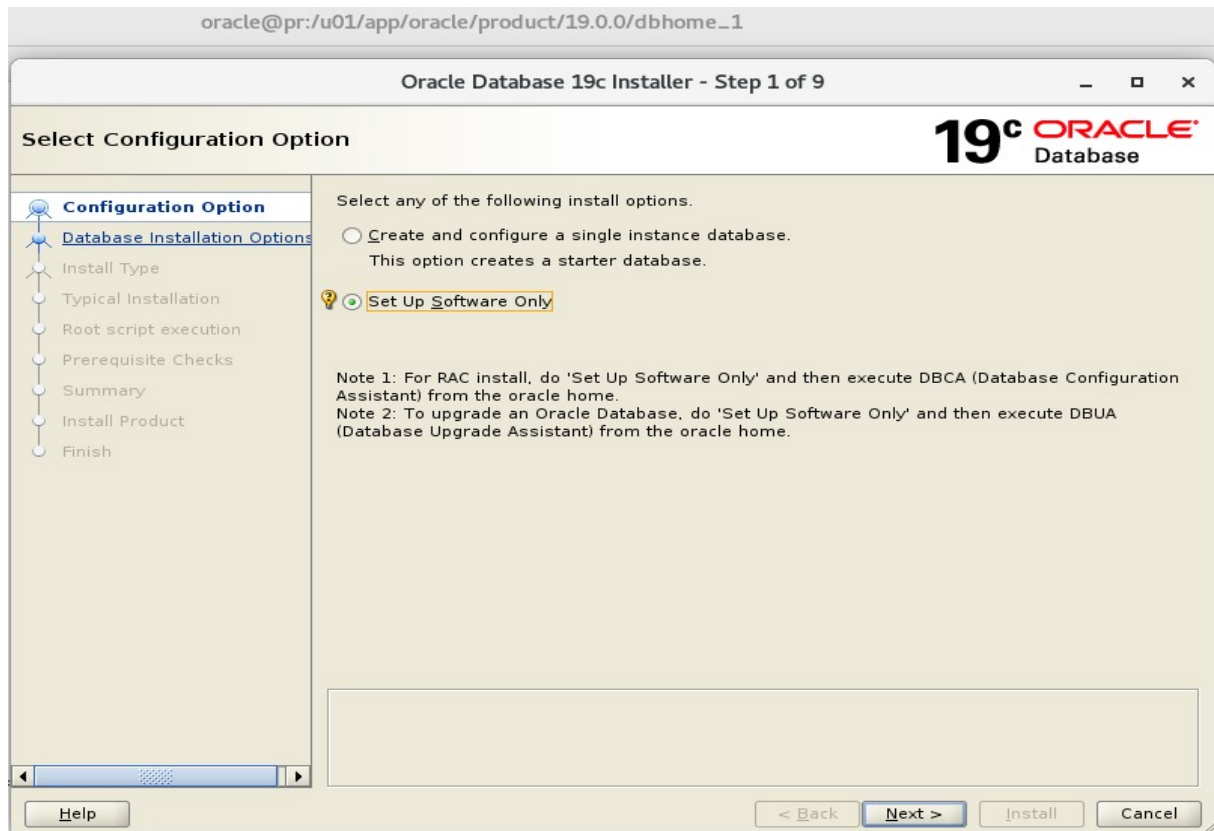
```
/u01/app/oracle/product/19.0.0/dbhome_1
[oracle@pr dbhome_1]$
[oracle@pr dbhome_1]$ export DISPLAY=:0;
```

7. Invoke ./runInstaller:

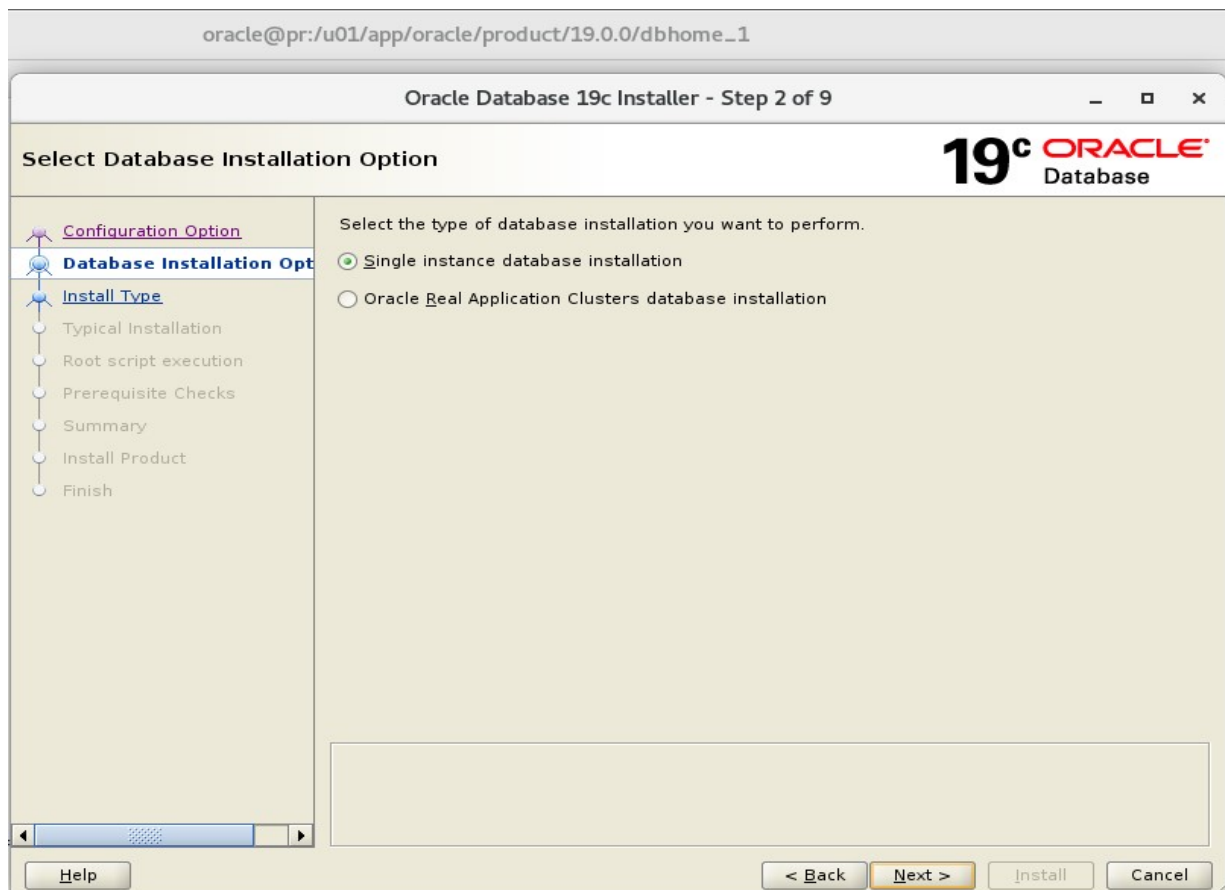
Start the Oracle Universal Installer (OUI) by issuing the following command.



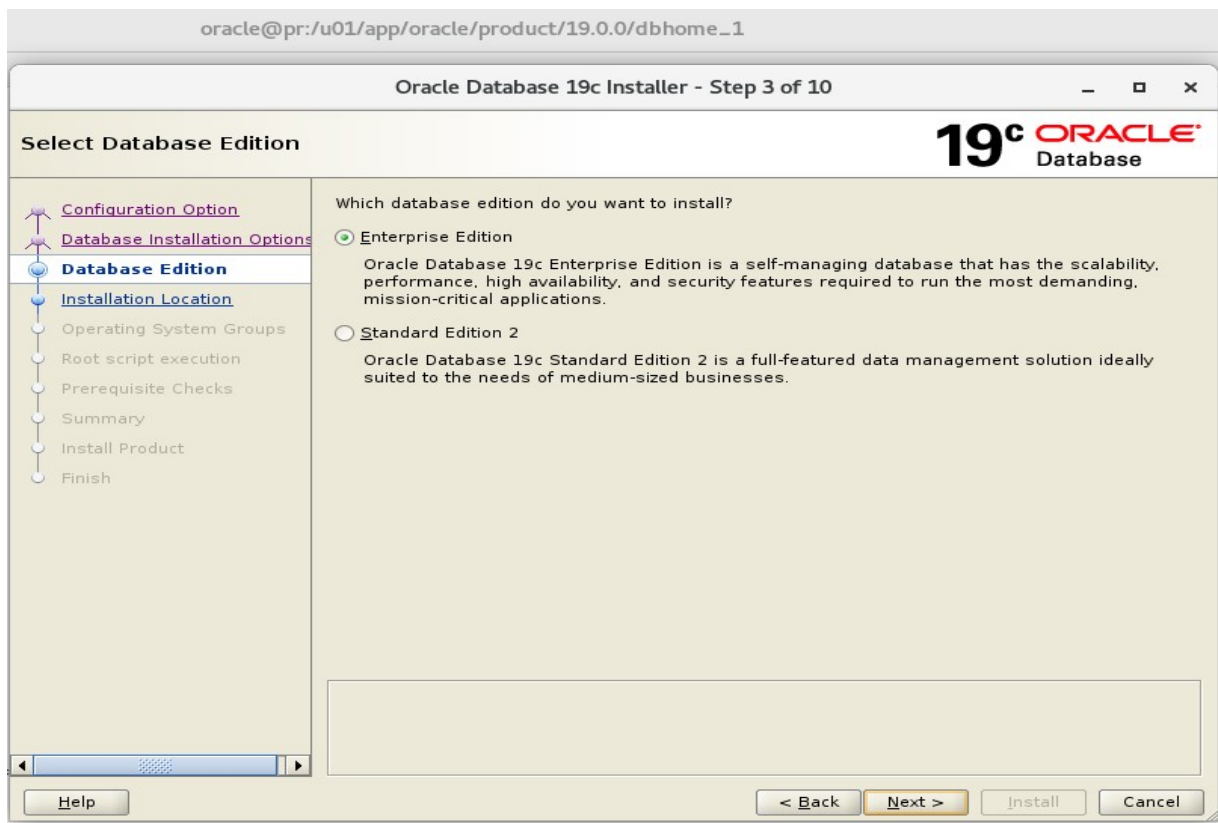
- Choose 2nd option Install Database Software & Click Next.



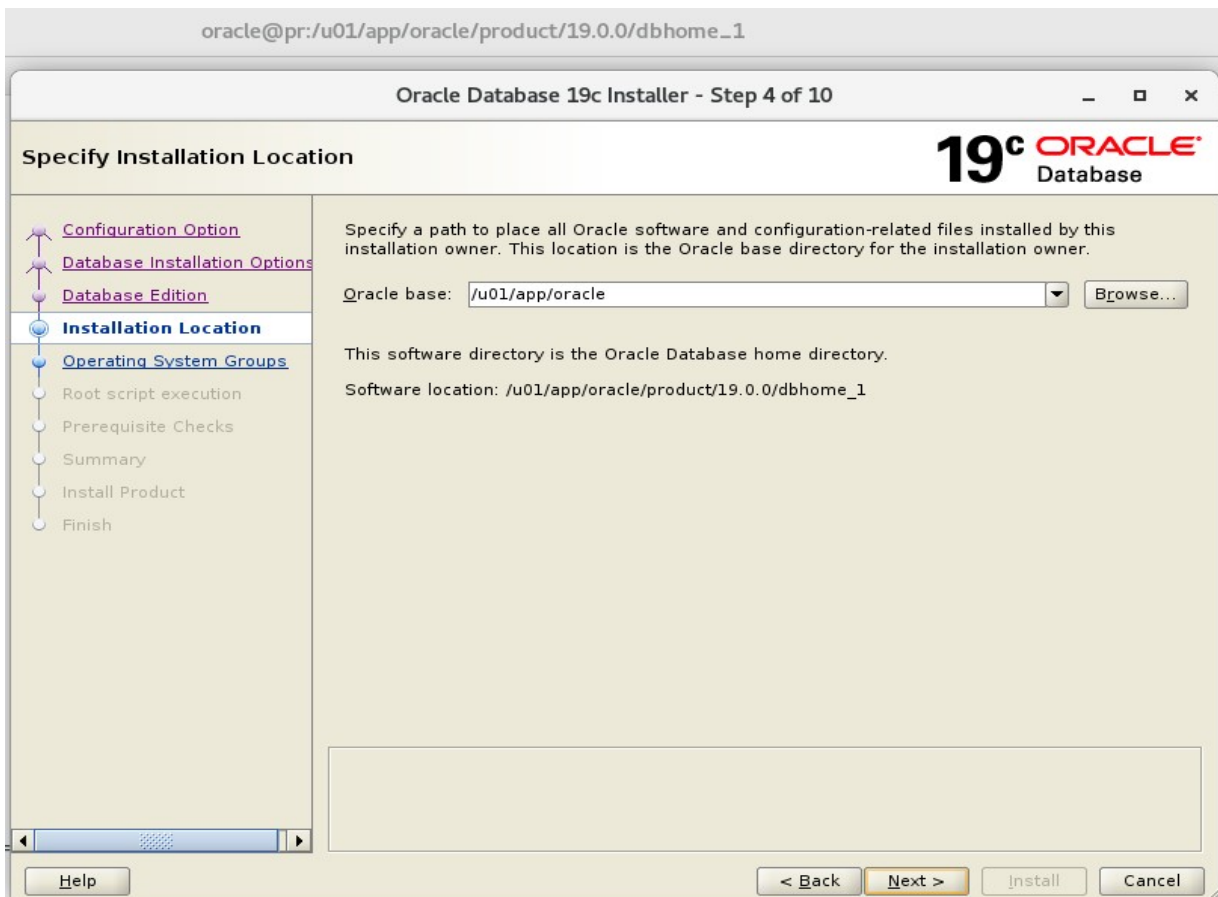
- Choose 1st option Single instance database installation & Click Next.



- Choose Enterprise Edition & Click Next.



- Choose the location for Oracle base Software location & Click Next.



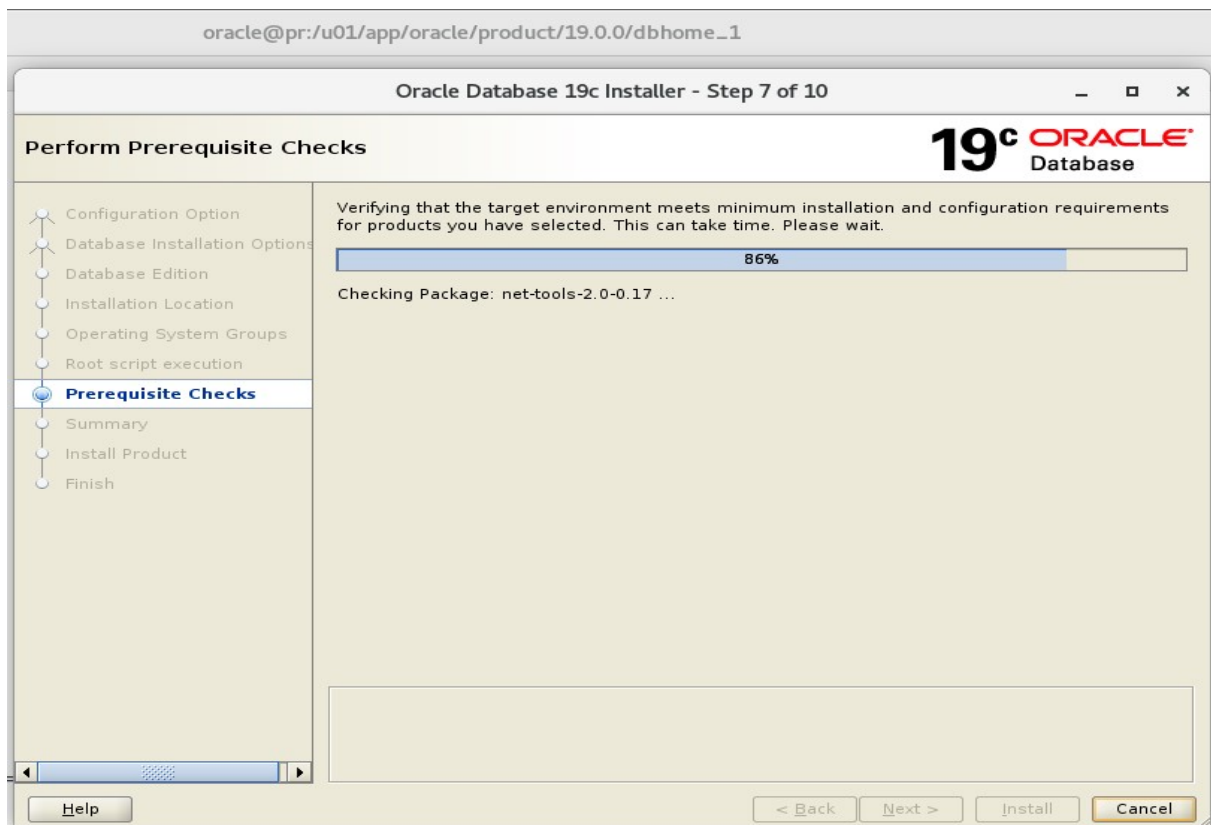
- Give the privileges Operating systems groups as per requirement & Click Next.

The screenshot shows the 'Privileged Operating System groups' window in the Oracle Database 19c Installer. The window title is 'Oracle Database 19c Installer - Step 5 of 10'. The left sidebar contains a navigation tree with the following items: Configuration Option, Database Installation Options, Database Edition, Installation Location, Operating System Groups (selected), Root script execution, Prerequisite Checks, Summary, Install Product, and Finish. The main content area explains that SYS privileges are required for OS authentication and lists several groups with their corresponding privileges: Database Administrator (OSDBA) group: dba, Database Operator (OSOPER) group (Optional): oper, Database Backup and Recovery (OSBACKUPDBA) group: dba, Data Guard administrative (OSDGDBA) group: dba, Encryption Key Management administrative (OSKMDBA) group: dba, and Real Application Cluster administrative (OSRACDBA) group: dba. At the bottom, there are buttons for Help, < Back, Next >, Install, and Cancel.

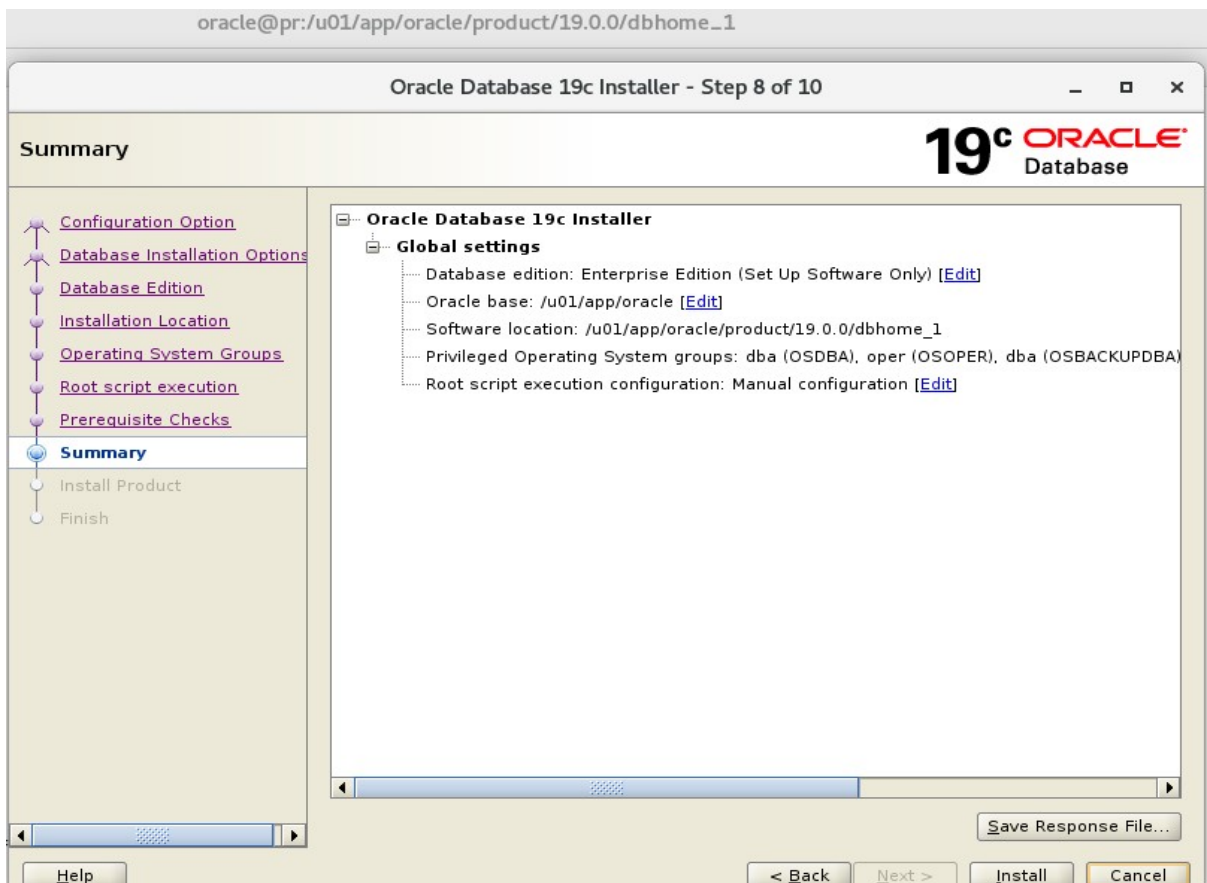
- Uncheck the Automatically run configuration scripts & Click Next.

The screenshot shows the 'Root script execution configuration' window in the Oracle Database 19c Installer. The window title is 'Oracle Database 19c Installer - Step 6 of 10'. The left sidebar contains a navigation tree with the following items: Configuration Option, Database Installation Options, Database Edition, Installation Location, Operating System Groups, Root script execution (selected), Prerequisite Checks, Summary, Install Product, and Finish. The main content area explains that certain operations must be performed as 'root' user and offers two options: 'Automatically run configuration scripts' (unchecked) and 'Use "root" user credential' (selected). The 'Use "root" user credential' option has fields for Password, Program path (set to /usr/bin/sudo), User name (set to oracle), and Password. At the bottom, there are buttons for Help, < Back, Next >, Install, and Cancel.

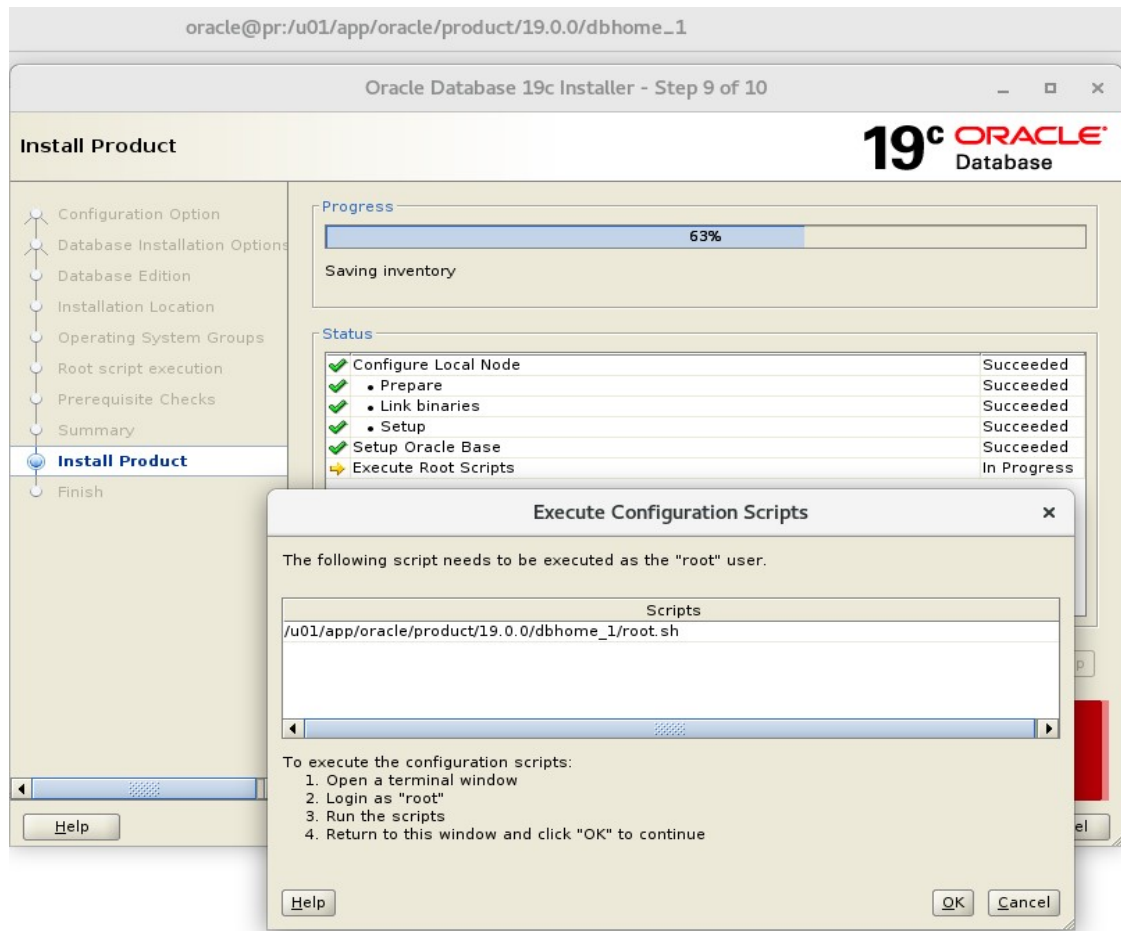
➤ Perform Prerequisite Checks:



➤ Check the summary & Next proceed with Installation.



➤ **Installation:**



➤ **Copy the scripts, run in the "root user" & return to that window and Click NEXT.**

```
Applications Places Terminal
root@pr:~

File Edit View Search Terminal Help
[root@pr ~]#
[root@pr ~]# /u01/app/oracle/product/19.0.0/dbhome_1/root.sh
Performing root user operation.

The following environment variables are set as:
  ORACLE_OWNER= oracle
  ORACLE_HOME= /u01/app/oracle/product/19.0.0/dbhome_1

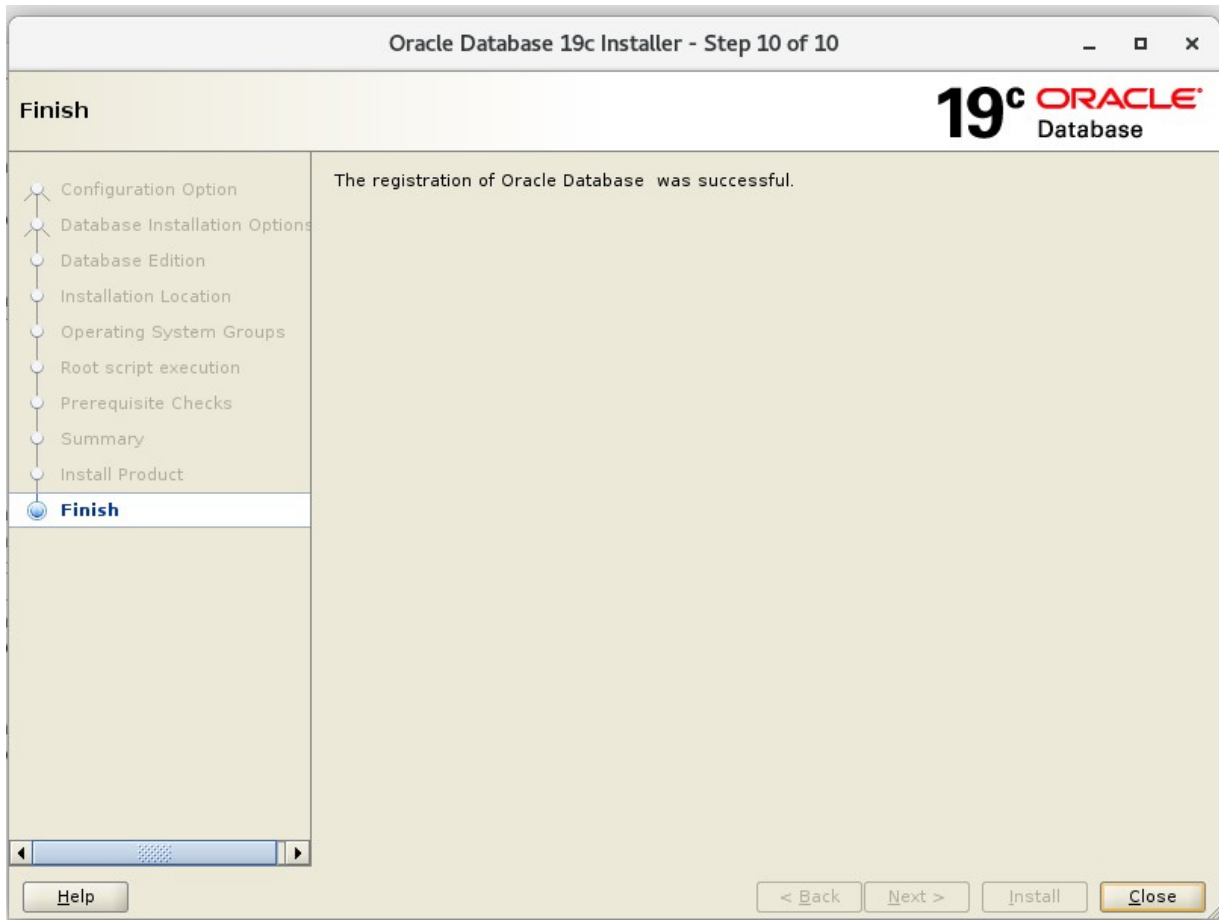
Enter the full pathname of the local bin directory: [/usr/local/bin]:
The contents of "dbhome" have not changed. No need to overwrite.
The file "oraenv" already exists in /usr/local/bin. Overwrite it? (y/n)
[n]: y
  Copying oraenv to /usr/local/bin ...
The file "coraenv" already exists in /usr/local/bin. Overwrite it? (y/n)
[n]: y
  Copying coraenv to /usr/local/bin ...

Entries will be added to the /etc/oratab file as needed by
Database Configuration Assistant when a database is created
Finished running generic part of root script.
Now product-specific root actions will be performed.
Oracle Trace File Analyzer (TFA - Standalone Mode) is available at :
  /u01/app/oracle/product/19.0.0/dbhome_1/bin/tfactl

Note :
1. tfactl will use TFA Service if that service is running and user has been granted access
2. tfactl will configure TFA Standalone Mode only if user has no access to TFA Service or TFA is not installed

[root@pr ~]#
```

➤ **Finish.**



DATABASE INSTALLATION COMPELETED.

➤ **Database Creation Steps:**

- Login as Oracle user and go to bin location & Run ./sqlplus
- Run ./dbca

```
[oracle@pr bin]$  
[oracle@pr bin]$ ./dbca  
[oracle@pr bin]$  
[oracle@pr bin]$
```

- Choose Creation option & Click Next.

root@pr:~

Database Configuration Assistant - Application - Step 1 of 14

19c ORACLE Database

Select Database Operation

Database Operation

Creation Mode

Deployment Type

Database Identification

Storage Option

Fast Recovery Option

Database Options

Configuration Options

Management Options

User Credentials

Creation Option

Summary

Progress Page

Finish

Select the operation that you want to perform.

☒ Create a database

☐ Configure an existing database

☐ Delete database

☐ Manage templates

☐ Manage pluggable databases

☐ Oracle RAC database instance management

Help

< Back

Next >

Finish

Cancel

- Choose Advanced Configuration Option & Click Next.

root@pr:~

Database Configuration Assistant - Create a database - Step 2 of 14

19c ORACLE Database

Select Database Creation Mode

Database Operation

Creation Mode

Deployment Type

Database Identification

Storage Option

Fast Recovery Option

Database Options

Configuration Options

Management Options

User Credentials

Creation Option

Summary

Progress Page

Finish

Typical configuration

Global database name: orcl.node1

Storage type: File System

Database files location: {ORACLE_BASE}/oradata/{DB_UNIQUE_NAME} Browse...

Fast Recovery Area (FRA): {ORACLE_BASE}/fast_recovery_area/{DB_UNIQUE_NAME} Browse...

Database character set: AL32UTF8 - Unicode UTF-8 Universal character set

Administrative password:

Confirm password:

☒ Create as Container database

Pluggable database name:

Advanced configuration

Help

< Back

Next >

Finish

Cancel

- Choose General Purpose Option & Click Next.

root@pr:~

Database Configuration Assistant - Create a database - Step 3 of 14

Select Database Deployment Type

19c ORACLE Database

Select the type of database you want to create.

Database type:

Configuration type:

Select a template for your database.

Templates that include datafiles contain pre-created databases. They allow you to create a new database quickly. Use templates without datafiles only when necessary, such as when you need to change attributes like block size that cannot be altered after database creation.

	Template name	Include datafiles	Details
<input type="radio"/>	Custom Database	No	View details
<input type="radio"/>	Data Warehouse	Yes	View details
<input checked="" type="radio"/>	General Purpose or Transaction Processing	Yes	View details

Template location: /u01/app/oracle/product/19.0.0/dbhome_1/assistants/dbca/templates

- Choose your Global Database name & Click Next.

root@pr:~

Database Configuration Assistant - Create a database - Step 4 of 14

Specify Database Identification Details

19c ORACLE Database

Provide a unique database identifier information. An Oracle database is uniquely identified by a Global database name, typically of the form "name.domain".

Global database name:

SID:

Service name:

☒ Create as Container database

A Container database can be used for consolidating multiple databases into a single database, and it enables database virtualization. A Container database (CDB) can have zero or more pluggable databases (PDB).

☒ Use Local Undo tablespace for PDBs

☐ Create an empty Container database

☒ Create a Container database with one or more PDBs

Number of PDBs:

PDB name:

- Choose File storage type (there is two option based on instances select the type) & Click Next.

root@pr:~

Database Configuration Assistant - Create 'orclpr' database - Step 5 of 14

19c ORACLE Database

Select Database Storage Option

- Database Operation
- Creation Mode
- Deployment Type
- Database Identification
- Storage Option**
- Fast Recovery Option
- Database Options
- Configuration Options
- Management Options
- User Credentials
- Creation Option
- Summary
- Progress Page
- Finish

☐ Use template file for database storage attributes
Storage type and location for database files will be picked up from the specified template (General Purpose or Transaction Processing).

☒ Use following for the database storage attributes
All the database files will be put at the specified location below. You can customize the name and location of each datafile in the subsequent screen.

Database files storage type: File System

Database files location: {ORACLE_BASE}/oradata/{DB_UNIQUE_NAME} Browse...

Oracle Managed files option will enable Oracle to automatically generate the names of the datafiles for simplified database management.

☒ Use Oracle-Managed Files (OMF) Multiplex redo logs and control files...

File location variables...

Help < Back Next > Finish Cancel

- Choose Fast recovery area & Click Next.

root@pr:~

Database Configuration Assistant - Create 'orclpr' database - Step 6 of 14

19c ORACLE Database

Select Fast Recovery Option

- Database Operation
- Creation Mode
- Deployment Type
- Database Identification
- Storage Option
- Fast Recovery Option**
- Database Options
- Configuration Options
- Management Options
- User Credentials
- Creation Option
- Summary
- Progress Page
- Finish

Choose the recovery options for the database.

☒ Specify Fast Recovery Area

Recovery files storage type: File System

Fast Recovery Area: {ORACLE_BASE}/fast_recovery_area/{DB_UNIQUE_} Browse...

Fast Recovery Area size: 12732 MB

☐ Enable archiving Edit archive mode parameters...

Help < Back Next > Finish Cancel

- Ignore all & Click Next.

root@pr:~

Database Configuration Assistant - Create 'orclpr' database - Step 7 of 14

Specify Network Configuration Details

19^c ORACLE Database

Database Operation
Creation Mode
Deployment Type
Database Identification
Storage Option
Fast Recovery Option
Network Configuration
Configuration Options
Management Options
User Credentials
Creation Option
Summary
Progress Page
Finish

Listener selection

Listeners from current Oracle home are listed below. Specify the listener name and port to create a new listener in current Oracle home.

Name	Port	Oracle home	Status
------	------	-------------	--------

☐ Create a new listener

Listener name:

Listener port:

Oracle home:

Help < Back Next > Finish Cancel

- Choose "Database Vault" and "Oracle Label Security" as per your requirement & Click Next.

root@pr:~

Database Configuration Assistant - Create 'orclpr' database - Step 8 of 15

Select Oracle Data Vault Config Option

19^c ORACLE Database

Database Operation
Creation Mode
Deployment Type
Database Identification
Storage Option
Fast Recovery Option
Network Configuration
Data Vault Option
Configuration Options
Management Options
User Credentials
Creation Option
Summary
Progress Page
Finish

☐ Configure Oracle Database Vault

Database Vault owner:

Password: Confirm password:

☐ Create a separate account manager

Account manager:

Password: Confirm password:

☐ Configure Oracle Label Security

☐ Configure Oracle Label Security with OJD

Help < Back Next > Finish Cancel

- Define Memory, Character sets, Connection mode, Sample schemes as per requirement & Click Next.

Database Configuration Assistant - Create 'orclpr' database - Step 9 of 15

Specify Configuration Options

19^c ORACLE Database

Database Operation
Creation Mode
Deployment Type
Database Identification
Storage Option
Fast Recovery Option
Network Configuration
Data Vault Option
Configuration Options
Management Options
User Credentials
Creation Option
Summary
Progress Page
Finish

Memory Sizing Character sets Connection mode Sample schemas

☒ Use Automatic Shared Memory Management

SGA size: 1176 MB

PGA Size: 393 MB

390 1569 2976

☐ Use Manual Shared Memory Management

Shared pool size: 0 MB

Buffer cache size: 0 MB

Java pool size: 0 MB

Large pool size: 0 MB

PGA size: 0 MB

Total memory for database 0 MB

☐ Use Automatic Memory Management

Memory target: 1190 MB

390 1190 2976 39%

Help < Back Next > Finish Cancel

- Choose EM option as per requirement & Click Next.

Database Configuration Assistant - Create 'orclpr' database - Step 10 of 15

Specify Management Options

19^c ORACLE Database

Database Operation
Creation Mode
Deployment Type
Database Identification
Storage Option
Fast Recovery Option
Network Configuration
Data Vault Option
Configuration Options
Management Options
User Credentials
Creation Option
Summary
Progress Page
Finish

Specify the management options for the database.

☒ Configure Enterprise Manager (EM) database express

EM database express port: 5500

☐ Configure EM database express port as global port

☒ Register with Enterprise Manager (EM) cloud control

OMS host:

OMS port:

EM admin username:

EM admin password:

Help < Back Next > Finish Cancel

- Set password for SYS & Click Next.

Database Configuration Assistant - Create 'orclpr' database - Step 11 of 15

Specify Database User Credentials

19c ORACLE Database

You must specify passwords for the following user accounts in the new database for security reasons.

☐ Use different administrative passwords

	Password	Confirm password
SYS	<input type="text"/>	<input type="text"/>
SYSTEM	<input type="text"/>	<input type="text"/>
PDBADMIN	<input type="text"/>	<input type="text"/>

☒ Use the same administrative password for all accounts

Password: Confirm password:

Help < Back Next > Finish Cancel

- Select "Create Database" option & Click Next.

Database Configuration Assistant - Create 'orclpr' database - Step 12 of 15

Select Database Creation Option

19c ORACLE Database

Select the database creation options.

☒ Create database

Specify the SQL scripts you want to run after the database is created. The scripts are run in the order listed below.

Post DB creation scripts: Browse...

☐ Save as a database template

Template name: dbca_template_2024-04-22_11-03-]

Template location: /u01/app/oracle/product/19.0.0/dbhome_1/assistants/dbca/t/ Browse...

Description:

☐ Generate database creation scripts

Destination directory: {ORACLE_BASE}/admin/{DB_UNIQUE_NAME}/scripts Browse...

Following advanced configuration options can be used to configure initialization parameters and customize database storage locations.

All Initialization Parameters... Customize Storage Locations...

Help < Back Next > Finish Cancel

- Check the summary report & Click Finish.

Database Configuration Assistant - Create 'orclpr' database - Step 13 of 15

Summary

19^c ORACLE Database

Database Configuration Assistant

Global Settings

- Global database name: orclpr
- Configuration type: Oracle Single Instance database
- SID: orclpr
- Create as Container database: Yes
- Pluggable Database Name: PRODPDB
- Number of Pluggable Databases: 1
- Use Local Undo tablespace for PDBs: Yes
- Database Files Storage Type: File System
- Memory Configuration Type: Automatic Shared Memory Management
- Template name: General Purpose

Initialization Parameters

- audit_file_dest: {ORACLE_BASE}/admin/{DB_UNIQUE_NAME}/adump
- audit_trail: db
- compatible: 19.0.0
- db_block_size: 8192 BYTES
- db_create_file_dest: {ORACLE_BASE}/oradata/{DB_UNIQUE_NAME}/
- db_name: orclpr
- db_recovery_file_dest: {ORACLE_BASE}/fast_recovery_area/{DB_UNIQUE_NAME}
- db_recovery_file_dest_size: 5000 MB
- diagnostic_dest: {ORACLE_BASE}

Save Response File...

Help < Back Next > Finish Cancel

- Ignore all & Click Next.

Database Configuration Assistant - Create 'orclpr' database - Step 14 of 15

Progress Page

19^c ORACLE Database

Progress

8%

Copying database files : In Progress

Status

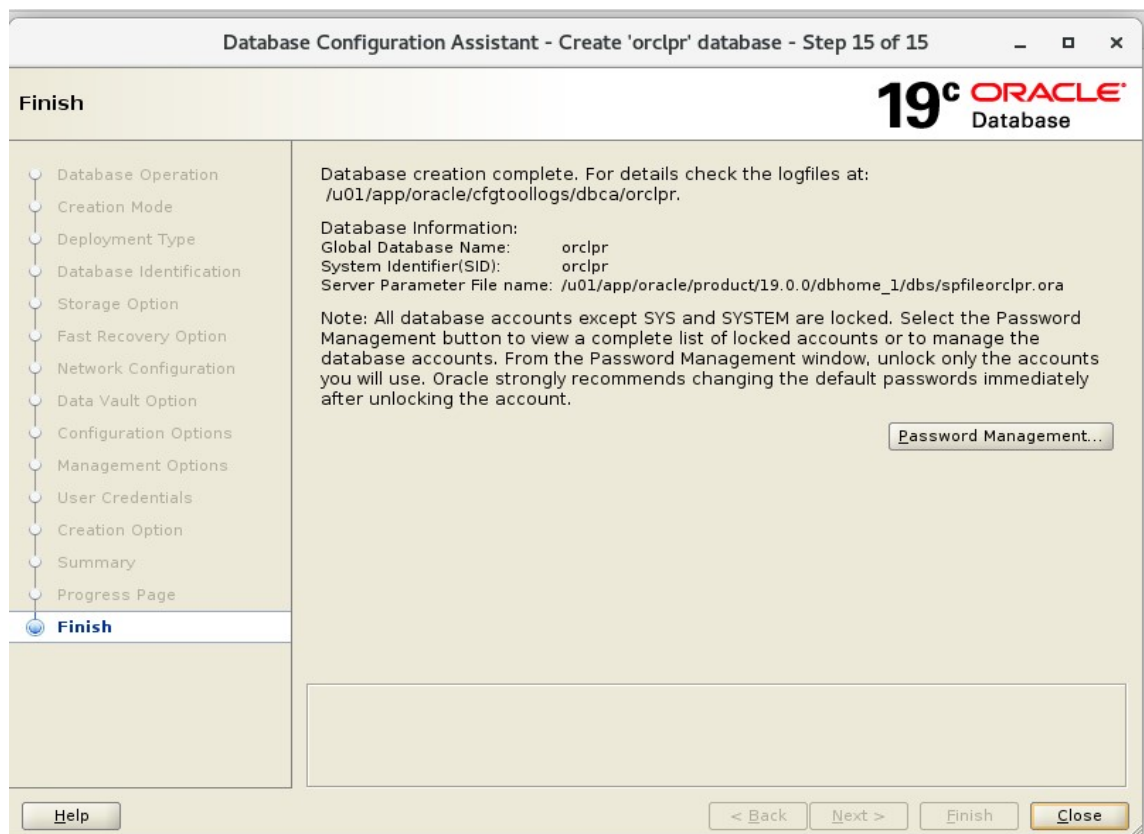
DB Creation	In Progress
• Prepare for db operation	Succeeded
• Copying database files	In Progress
• Creating and starting Oracle instance	Pending
• Completing Database Creation	Pending
• Creating Pluggable Databases	Pending
• Executing Post Configuration Actions	Pending

Details Revert All Revert Retry Skip

DBCA Log Location:
/u01/app/oracle/cfgtoollogs/dbca/orclpr/trace.log_2024-04-22_11-03-16PM

Help < Back Next > Finish Cancel

➤ **Finish.**



Database has been created successfully.

8. Verify:

```
[oracle@pr dbhome_1]$  
[oracle@pr dbhome_1]$ cd bin/  
[oracle@pr bin]$  
[oracle@pr bin]$ export ORACLE_HOME=/u01/app/oracle/product/19.0.0/dbhome_1  
[oracle@pr bin]$  
[oracle@pr bin]$ ./sqlplus  
  
SQL*Plus: Release 19.0.0.0.0 - Production on Mon Apr 22 23:43:05 2024  
Version 19.3.0.0.0  
  
Copyright (c) 1982, 2019, Oracle. All rights reserved.  
Enter user-name: █
```

➤ Configuration of listener.ora & tnsnames.ora Entries

oracle@pr:/u01/app/oracle/product/19.0.0/dbhome_1/network/admin

```
[oracle@pr admin]$
```

```
[oracle@pr admin]$ cat listener.ora
```

```
# listener.ora Network Configuration File:/u01/app/oracle/product/12.1.0.2.0/dbhome_1/network/admin/listener.ora
# Generated by Oracle configuration tools.
```

```
LISTENER =
  (DESCRIPTION_LIST =
    (DESCRIPTION =
      (ADDRESS = (PROTOCOL = IPC) (KEY = EXTPROC1))
      (ADDRESS = (PROTOCOL = TCP) (HOST = 172.20.10.6) (PORT = 1521))
    )
  )
```

```
SID_LIST_LISTENER =
  (SID_LIST =
    (SID_DESC =
      (GLOBAL_DBNAME = orclpr)
      (ORACLE_HOME = /u01/app/oracle/product/19.0.0/dbhome_1)
      (SID_NAME = orclpr)
    )
  )
```

```
[oracle@pr admin]$
```

```
[oracle@pr admin]$ cat tnsnames.ora
```

```
# tnsnames.ora Network Configuration File: /u01/app/oracle/product/12.1.0.2.0/dbhome_1/network/admin/tnsnames.ora
# Generated by Oracle configuration tools.
```

```
LISTENER = (ADDRESS = (PROTOCOL = TCP) (HOST = 172.20.10.6) (PORT = 1521))
```

```
ORCLPR =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP) (HOST = 172.20.10.6) (PORT = 1521))
    )
    (CONNECT_DATA =
      (SERVICE_NAME = orclpr)
    )
  )
```

```
PRODPDB =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP) (HOST = 172.20.10.6) (PORT = 1521))
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SERVICE_NAME = orclpr)
    )
  )
```

```
[oracle@pr admin]$
```


➤ To Start the listener after Configuration of listener.ora & tnsnames.ora.

```
[oracle@pr admin]$ lsnrctl start
```

LSNRCTL for Linux: Version 19.0.0.0.0 - Production on 23-APR-2024 21:47:46

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

Starting /u01/app/oracle/product/19.0.0/dbhome_1/bin/tnslsnr: please wait...

TNSLSNR for Linux: Version 19.0.0.0.0 - Production

System parameter file is /u01/app/oracle/product/19.0.0/dbhome_1/network/admin/listener.ora

Log messages written to /u01/app/oracle/diag/tnslsnr/pr/listener/alert/log.xml

Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1)))

Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=172.20.10.6)(PORT=1521)))

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC1)))

STATUS of the LISTENER

Alias LISTENER

Version TNSLSNR for Linux: Version 19.0.0.0.0 - Production

Start Date 23-APR-2024 21:47:47

Uptime 0 days 0 hr. 0 min. 1 sec

Trace Level off

Security ON: Local OS Authentication

SNMP OFF

Listener Parameter File /u01/app/oracle/product/19.0.0/dbhome_1/network/admin/listener.ora

Listener Log File /u01/app/oracle/diag/tnslsnr/pr/listener/alert/log.xml

Listening Endpoints Summary...

(DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1)))

(DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=172.20.10.6)(PORT=1521)))

Services Summary...

Service "orclpr" has 1 instance(s).

Instance "orclpr", status UNKNOWN, has 1 handler(s) for this service...

The command completed successfully

➤ Status of listener.

```
oracle@pr:/u01/app/oracle/product/19.0.0/dbhome_1/network/admin

Total System Global Area 1241510080 bytes
Fixed Size                  9134272 bytes
Variable Size               318767104 bytes
Database Buffers            905969664 bytes
Redo Buffers                 7639040 bytes
Database mounted.
Database opened.
SQL>
SQL>
SQL> exit
Disconnected from Oracle Database 19c Enterprise Edition Release 19.0.0.0.0 - Production
Version 19.3.0.0.0
[oracle@pr admin]$ lsnrctl status

LSNRCTL for Linux: Version 19.0.0.0.0 - Production on 23-APR-2024 21:49:57

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

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC) (KEY=EXTPROC)))
STATUS of the LISTENER
-----
Alias                     LISTENER
Version                   TNSLSNR for Linux: Version 19.0.0.0.0 - Production
Start Date                23-APR-2024 21:47:47
Uptime                    0 days 0 hr. 2 min. 11 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Listener Parameter File   /u01/app/oracle/product/19.0.0/dbhome_1/network/admin/listener.ora
Listener Log File         /u01/app/oracle/diag/tnslsnr/pr/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc) (KEY=EXTPROC)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp) (HOST=172.20.10.6) (PORT=1521)))
Services Summary...
Service "16b447bb05687db8e063060a14acbd2d" has 1 instance(s).
  Instance "orclpr", status READY, has 1 handler(s) for this service...
Service "86b637b62fdf7a65e053f706e80a27ca" has 1 instance(s).
  Instance "orclpr", status READY, has 1 handler(s) for this service...
Service "orclpr" has 2 instance(s).
  Instance "orclpr", status UNKNOWN, has 1 handler(s) for this service...
  Instance "orclpr", status READY, has 1 handler(s) for this service...
Service "orclprXDB" has 1 instance(s).
  Instance "orclpr", status READY, has 1 handler(s) for this service...
Service "prodpdb" has 1 instance(s).
  Instance "orclpr", status READY, has 1 handler(s) for this service...
The command completed successfully
[oracle@pr admin]$
[oracle@pr admin]$
```

- Connect to server as oracle:
- sqlplus / as sysdba.

```

oracle@pr:/u01/app/oracle/product/19.0.0/dbhome_1/bin
[oracle@pr bin]$
[oracle@pr bin]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Mon Apr 22 23:44:49 2024
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

SQL> select name,open_mode from gv$database;

NAME          OPEN_MODE
-----
ORCLPR        READ WRITE

SQL> show pdbs

      CON_ID CON_NAME                                OPEN MODE  RESTRICTED
-----
          2 PDB$SEED                                READ ONLY   NO
          3 PRODPDB                                READ WRITE  NO

SQL> show parameter name

NAME                                     TYPE        VALUE
-----
cdb_cluster_name                       string
cell_offloadgroup_name                 string
db_file_name_convert                   string
db_name                                string      orclpr
db_unique_name                         string      orclpr
global_names                           boolean     FALSE
instance_name                          string      orclpr
lock_name_space                        string
log_file_name_convert                  string
pdb_file_name_convert                  string
processor_group_name                    string

NAME                                     TYPE        VALUE
-----
service_names                          string      orclpr
SQL>

```



```

oracle@pr:u01/app/oracle/product/19.0.0/dbhome_1/network/admin
[oracle@pr admin]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Tue Apr 23 22:05:18 2024
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

SQL> show pdbs

  CON_ID CON_NAME          OPEN MODE  RESTRICTED
-----
      2 PDB$SEED            READ ONLY  NO
      3 PRODPDB            READ WRITE NO

SQL>
SQL> alter session set container=PRODPDB;

Session altered.

SQL> show pdbs

  CON_ID CON_NAME          OPEN MODE  RESTRICTED
-----
      3 PRODPDB            READ WRITE NO

SQL>
SQL> COLUMN NETWORK_NAME FOR A35
SQL> COLUMN PDB FOR A15
SQL> COLUMN CON_ID FOR 999
SQL> SELECT PDB, NETWORK_NAME, CON_ID FROM CDB_SERVICES WHERE PDB IS NOT NULL AND CON_ID > 2 ORDER BY PDB;

PDB          NETWORK_NAME          CON_ID
-----
PRODPDB      PRODPDB                3

SQL>

```

Normal Database “ORCLPR” with pluggable database “PRODPDB” has been created.

~~~~~**END**~~~~~