

## Standalone Database Creation

We can create oracle database using graphical method,silent method and Manual method

### Pre-Checks :

#### Oracle Installation Prerequisites

Perform either the Automatic Setup or the Manual Setup to complete the basic prerequisites. The Additional Setup is required for all installations.

**1. Oracle Database Software should be installed on the server.**

**2. Automatic Setup**

If our plan to use the "oracle-database-preinstall-19c" package to perform all your prerequisite setup, issue the following command.

```
yum install -y oracle-database-preinstall19c
```

**3. Sufficient space should be there on the server.**

**4. RAM, SWAP and TEMP memory as per below**

RAM	2GB is recommended by oracle	-	-
SWAP	Swap space allocation relative to RAM RAM 1GB to 2 GB RAM 1.5 times the size of the RAM	RAM 2GB to 16 GB Equal to the size of the RAM	RAM 16GB SWAP 16GB
TEMP	568 MB recommended by oracle	-	-

**5. Space for ORACLE database as per below.**

ORACLE INVENTORY	53 MB recommended by oracle
ORACLE_HOME	6.5 GB recommended by oracle
DATAFILES(FRA,admin,logs)	4.5 GB recommended by oracle

6. Set the default file mode creation mask (umask) to 022 in the shell startup file.
7. Set the DISPLAY environment variable --> export DISPLAY=:0.0

```
[oracle@swatos ~]$  
[oracle@swatos ~]$  
[oracle@swatos ~]$ which sqlplus  
/u01/app/oracle/product/19.3.0/db_1/bin/sqlplus  
[oracle@swatos ~]$  
[oracle@swatos ~]$ sqlplus -v  
  
SQL*Plus: Release 19.0.0.0.0 - Production  
Version 19.3.0.0.0  
  
[oracle@swatos ~]$  
[oracle@swatos ~]$ env|grep ORA  
ORACLE_SID=orcl  
ORACLE_HOME=/u01/app/oracle/product/19.3.0/db_1  
[oracle@swatos ~]$  
[oracle@swatos ~]$ echo $PATH  
/u01/app/oracle/product/19.3.0/db_1/bin:/u01/app/oracle/product/19.3.0/db_1/OPatch:/usr/local/bin:/usr/bin:/usr/local/sbin:  
[oracle@swatos ~]$  
[oracle@swatos ~]$  
[oracle@swatos ~]$ cd $ORACLE_HOME/bin  
[oracle@swatos bin]$  
[oracle@swatos bin]$ ./dbca  
DISPLAY not set.  
Set DISPLAY environment variable, then re-run.  
[oracle@swatos bin]$  
[oracle@swatos bin]$  
[oracle@swatos bin]$  
[oracle@swatos bin]$  
[oracle@swatos bin]$ export DISPLAY=:0.0  
[oracle@swatos bin]$  
[oracle@swatos bin]$ ./dbca
```

Now we can start the actual database installation now,

## 1. Set the ENVIRONMENT VARIABLES

ORACLE\_HOME, PATH, ORACLE\_BASE etc.

```
export ORACLE_BASE=  
export ORACLE_HOME=  
export PATH=$ORACLE_HOME/bin:$PATH
```

## 2. Verify the software details using below commands

```
which sqlplus  
  
sqlplus -v
```

## 3. Now go to the bin directory and start database creation using dbca (graphical method)

```
Cd $ORACLE_HOME/bin
```

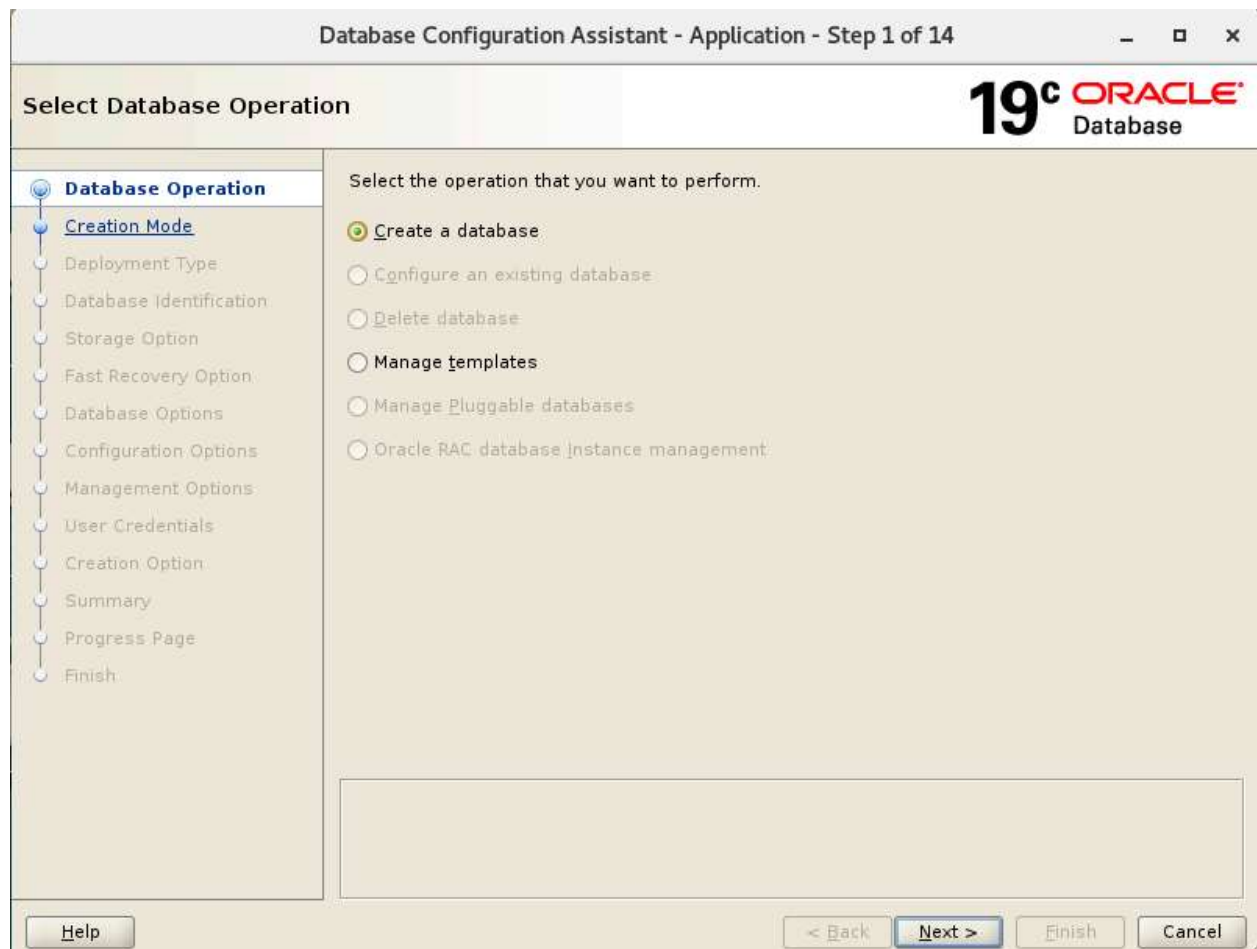
```
./dbca
```

## 1. Step 1

The installer asks to provide an email address to get the latest security issues and updates. We can **ignore** it by clicking the **Next button**

## 2. Step 2

In step 2, the Oracle installer asks whether we want to **create database** and manage templates. Because we are installing the Oracle database for the first time, **choose option 1** and **click the Next** button.



### 3. Step 3

in this step we can

- (1) Chose Database Name, storage type (ASM or File System),
- (2) Choose the folder on which Oracle database will be installed,
- (3) Global database name and password,
- (4) pluggable database name.(Optional)

Fill all above details and click on **NEXT Button**

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.org

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

## 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:

devdb

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}

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

&lt; Back

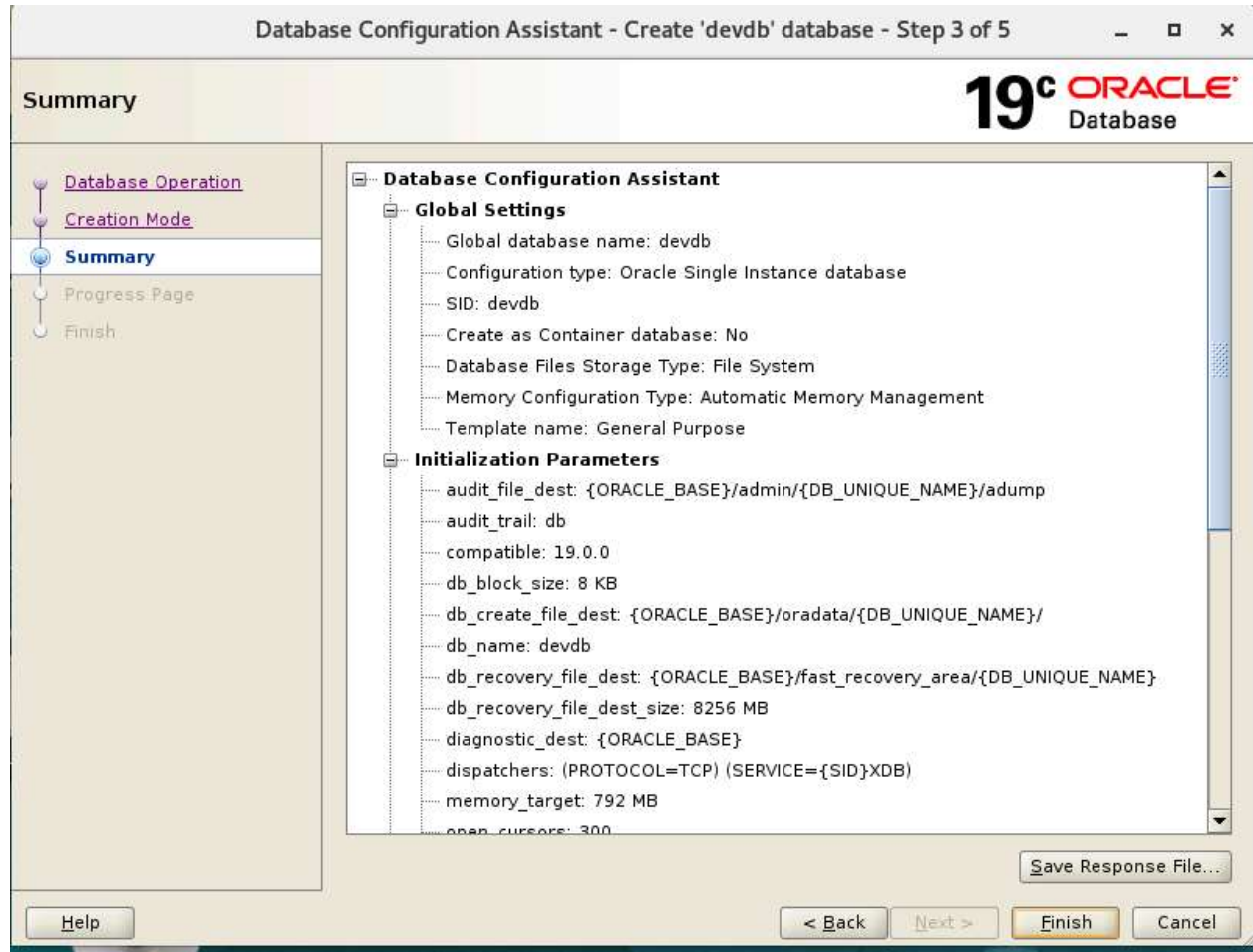
Next &gt;

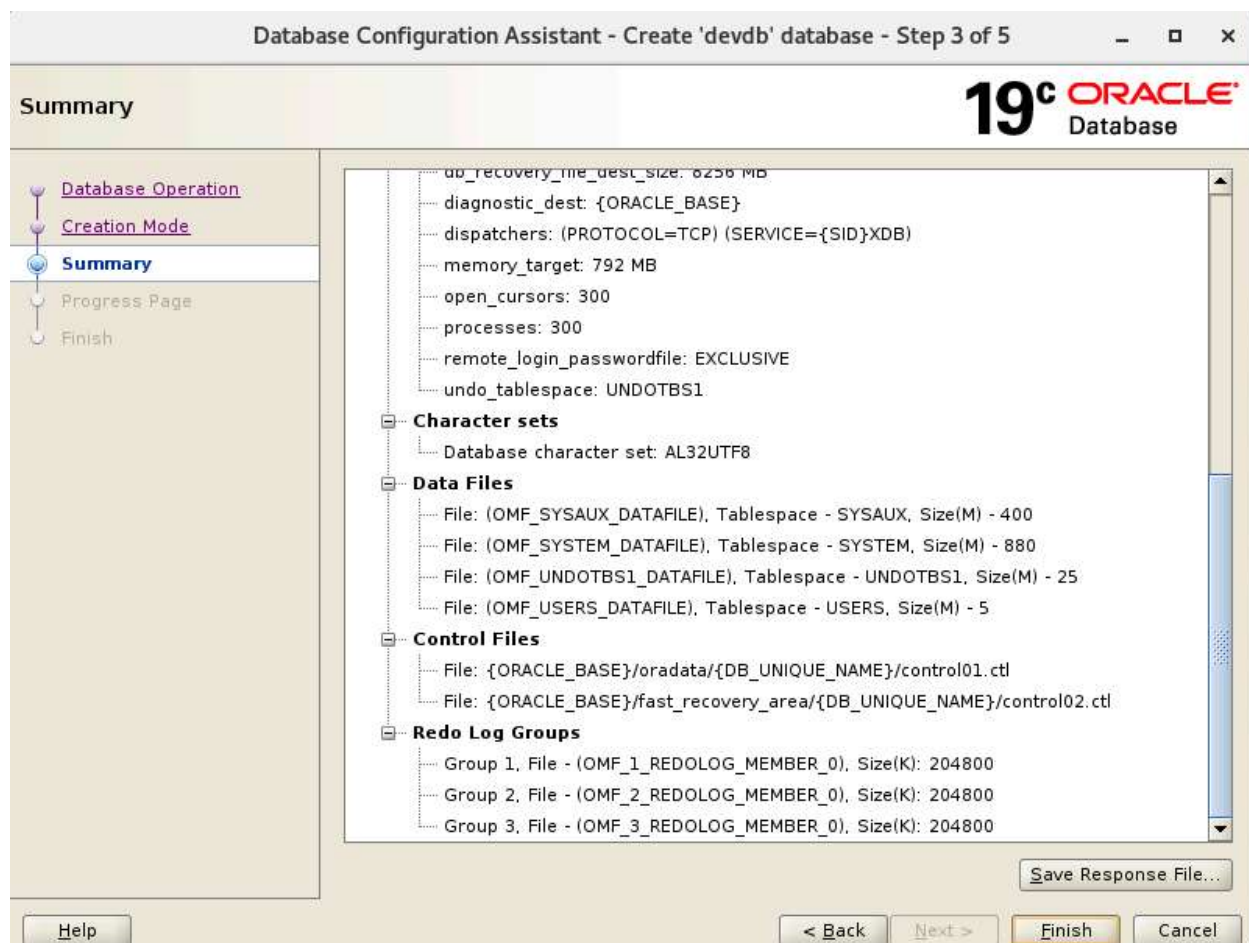
Finish

Cancel

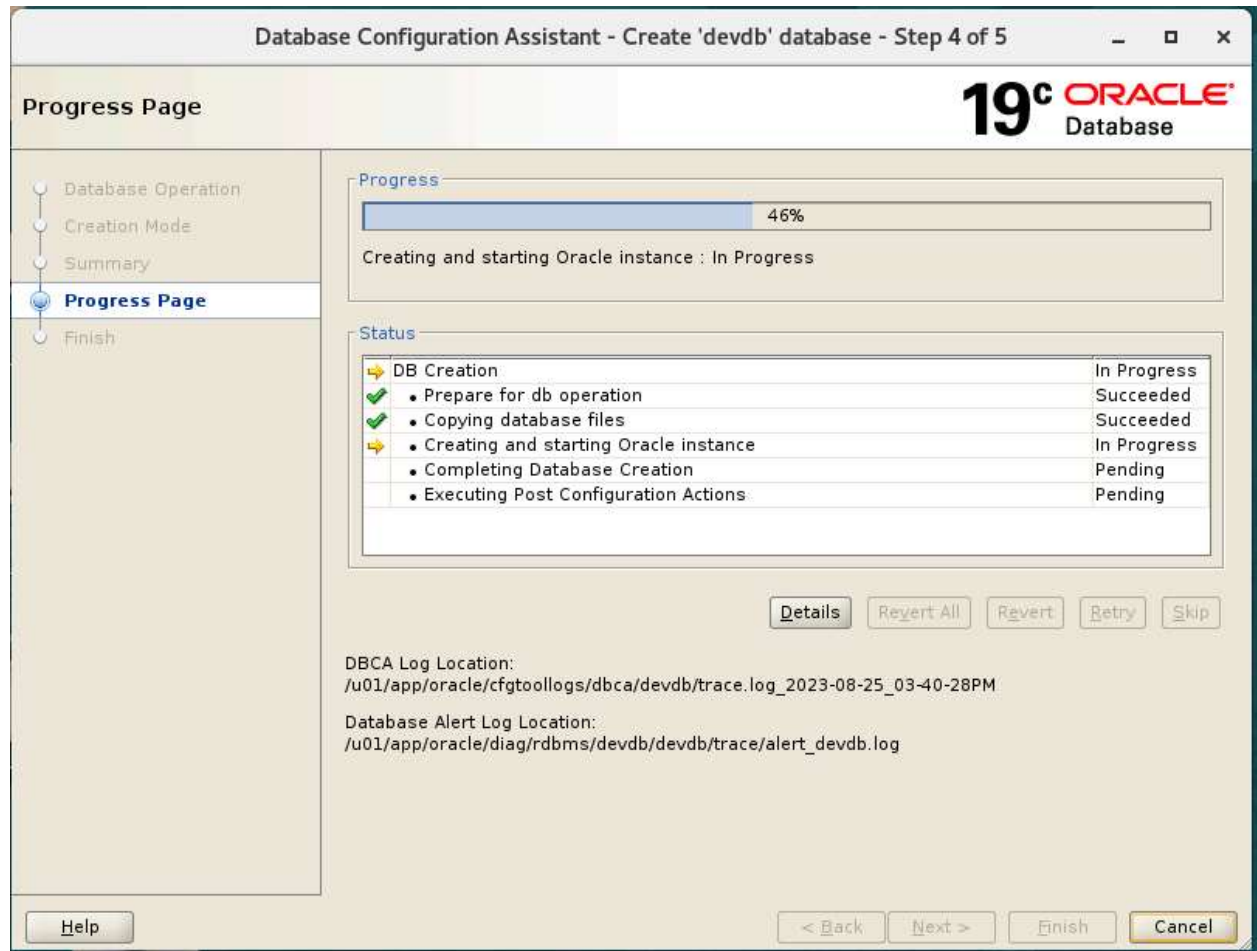
#### 4. Step 4

The installer shows us the summary of the information such as global settings, database information, etc. We need to review the information and **click the Finish button** if everything is fine.



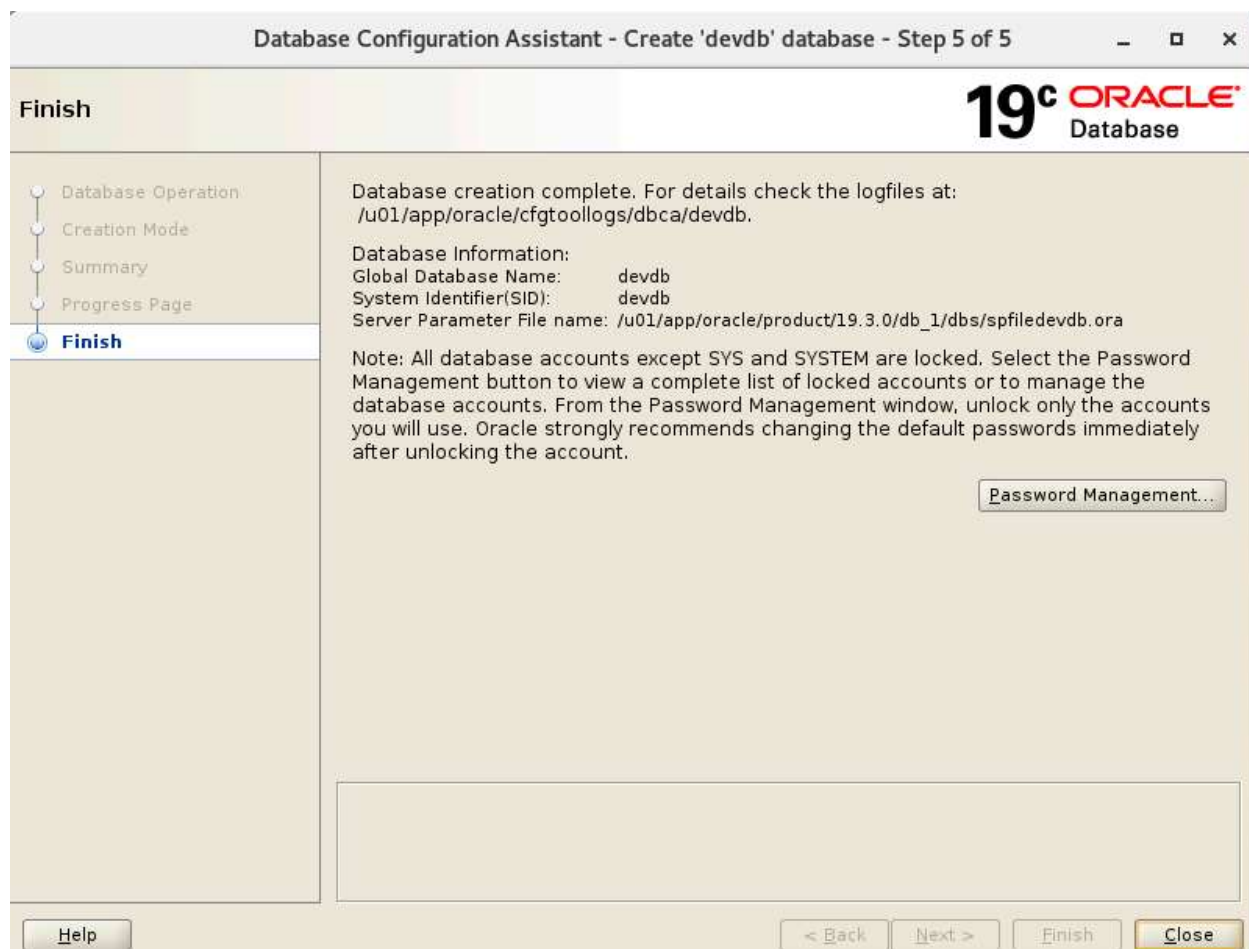


The installer starts installing the Oracle database. It will take a few minutes to complete, depending on our computer.



We will see the Database Configuration Assistant window. Click the *Password management...* button to enter the password for Oracle database accounts.





Enter the password for SYS and SYSTEM accounts and then **click the OK button.**

**Password Management**

Lock / unlock database user accounts and / or change the default passwords:

User Name	Lock Account? ▲	New Password	Confirm Password
SYS			
SYSTEM			
AUDSYS	✓		
GSMUSER	✓		
SPATIAL_WFS_ADMIN_USR	✓		
SPATIAL_CSW_ADMIN_USR	✓		
APEX_PUBLIC_USER	✓		
SYSDG	✓		
DIP	✓		
SYSBACKUP	✓		
MDDATA	✓		
GSMCATUSER	✓		
YSKM	✓		
ORACLE_OCM	✓		
OLAPSYS	✓		
SI_INFORMTN_SCHEMA	✓		

OK Cancel

5. Now connect to the database and check details.

```
export ORACLE_SID=
sqlplus / as sysdba
```

```
[oracle@swatos bin]$ export ORACLE_SID=devdb
[oracle@swatos bin]$
[oracle@swatos bin]$ sqlplus / as sysdba

SQL*Plus: Release 19.0.0.0.0 - Production on Fri Aug 25 17:05:53 2023
Version 19.3.0.0.0

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

SQL>
SQL> select name,open_mode,log_mode,status from v$database,v$instance;

NAME          OPEN_MODE          LOG_MODE          STATUS
-----
DEVDB         READ WRITE         NOARCHIVELOG      OPEN
```

