ORACLE 19C-RAC DBMS INSTALLATION

Environment Details:

No. of servers : 2 (node 1 ,node2).
Version : Oracle linux 7.9
ASM configuration : Yes , refer steps from :
https://www.linkedin.com/posts/umesh-shinde-989187209_oracle-grid-setup-activity-7144377605201231874-owGr?utm_source=share&utm_medium=member_desktop

Ssh and network configuration complted on both the node.
Linux 7.9 installation :
Follow the steps for configuring Network between two node RAC from below mentioned link:

https://www.linkedin.com/posts/umesh-shinde-989187209_oracle-linux-installation-activity-7141727733537046528-OGsK?utm_source=share&utm_medium=member_desktop

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- **Database Installation**
- **Database configuration**
- **Creating CDB and PDB database.**

Setting up directories.

mkdir -p /oracle/app/oracle
mkdir -p /oracle/app/oracle/product/19.0.0/db_home
chown -R oracle:oinstall /oracle

1. Setting up bash profile

Node 1:

```
if [ -f ~/.bashrc ]; then
. ~/.bashrc
fi
ORACLE_SID=PRODCDB1; export ORACLE_SID
```

```
ORACLE_BASE=/oracle/app/oracle; export ORACLE_BASE
ORACLE_HOME=/oracle/app/oracle/product/19.0.0/db_home; export ORACLE_HOME
ORACLE_TERM=xterm; export ORACLE_TERM
JAVA_HOME=/usr/bin/java; export JAVA_HOME
TNS_ADMIN=$ORACLE_HOME/network/admin; export TNS_ADMIN
PATH=.:${JAVA_HOME}/bin:${PATH}:$HOME/bin:$ORACLE_HOME/bin
PATH=${PATH}:/usr/bin:/bin:/usr/local/bin
export PATH

LD_LIBRARY_PATH=$ORACLE_HOME/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:$ORACLE_HOME/oracm/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:/lib:/usr/lib:/usr/local/lib
export LD_LIBRARY_PATH

CLASSPATH=$ORACLE_HOME/JRE:$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib:$ORACLE_HOM
E/network/jlib
export CLASSPATH

TEMP=/tmp ;export TMP
TMPDIR=$tmp ; export TMPDIR

umask 022
```

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Node 2:

```
if [ -f ~/.bashrc ]; then
. ~/.bashrc
fi
ORACLE_SID=PRODCDB2; export ORACLE_SID
ORACLE_BASE=/oracle/app/oracle; export ORACLE_BASE
ORACLE_HOME=/oracle/app/oracle/product/19.0.0/db_home; export ORACLE_HOME
ORACLE_TERM=xterm; export ORACLE_TERM
JAVA_HOME=/usr/bin/java; export JAVA_HOME
TNS_ADMIN=$ORACLE_HOME/network/admin; export TNS_ADMIN
PATH=.:${JAVA_HOME}/bin:${PATH}:$HOME/bin:$ORACLE_HOME/bin
PATH=${PATH}:/usr/bin:/bin:/usr/local/bin
export PATH

LD_LIBRARY_PATH=$ORACLE_HOME/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:$ORACLE_HOME/oracm/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:/lib:/usr/lib:/usr/local/lib
export LD_LIBRARY_PATH

CLASSPATH=$ORACLE_HOME/JRE:$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib:$ORACLE_HOM
E/network/jlib
export CLASSPATH
```

TEMP=/tmp ;export TMP
TMPDIR=$tmp ; export TMPDIR

umask 022

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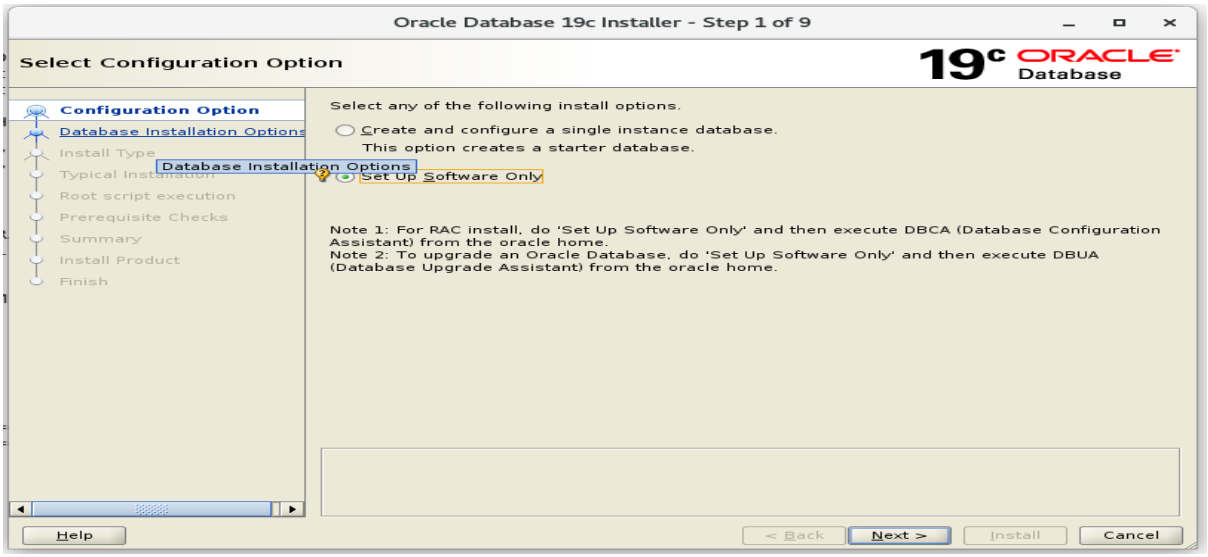
2. Install and Configure Oracle 19c Software binary

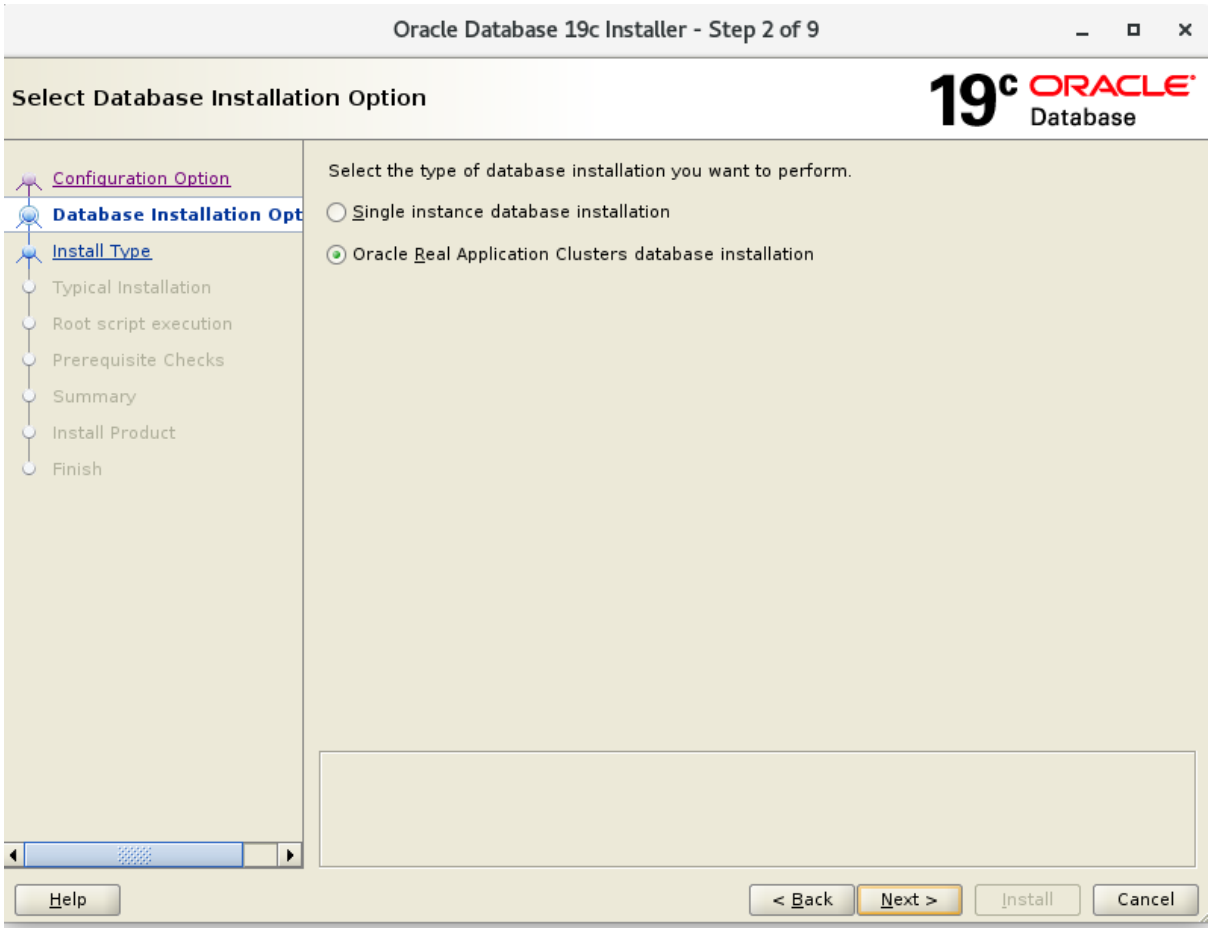
- copy the database zip file in $ORACLE_HOME location and then unzip it.

- cd $ORACLE_HOME
  Now run runinstaller for database installation.
- ./runInstaller

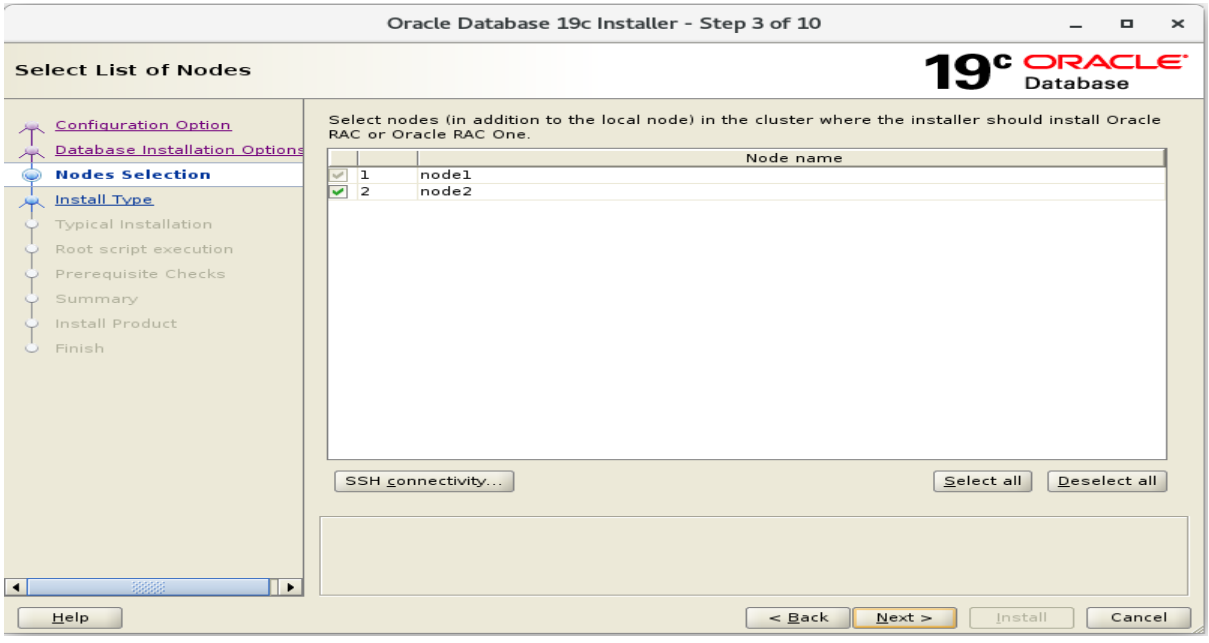
1. Choose 2nd option **Install database software only** option and click **Next**.



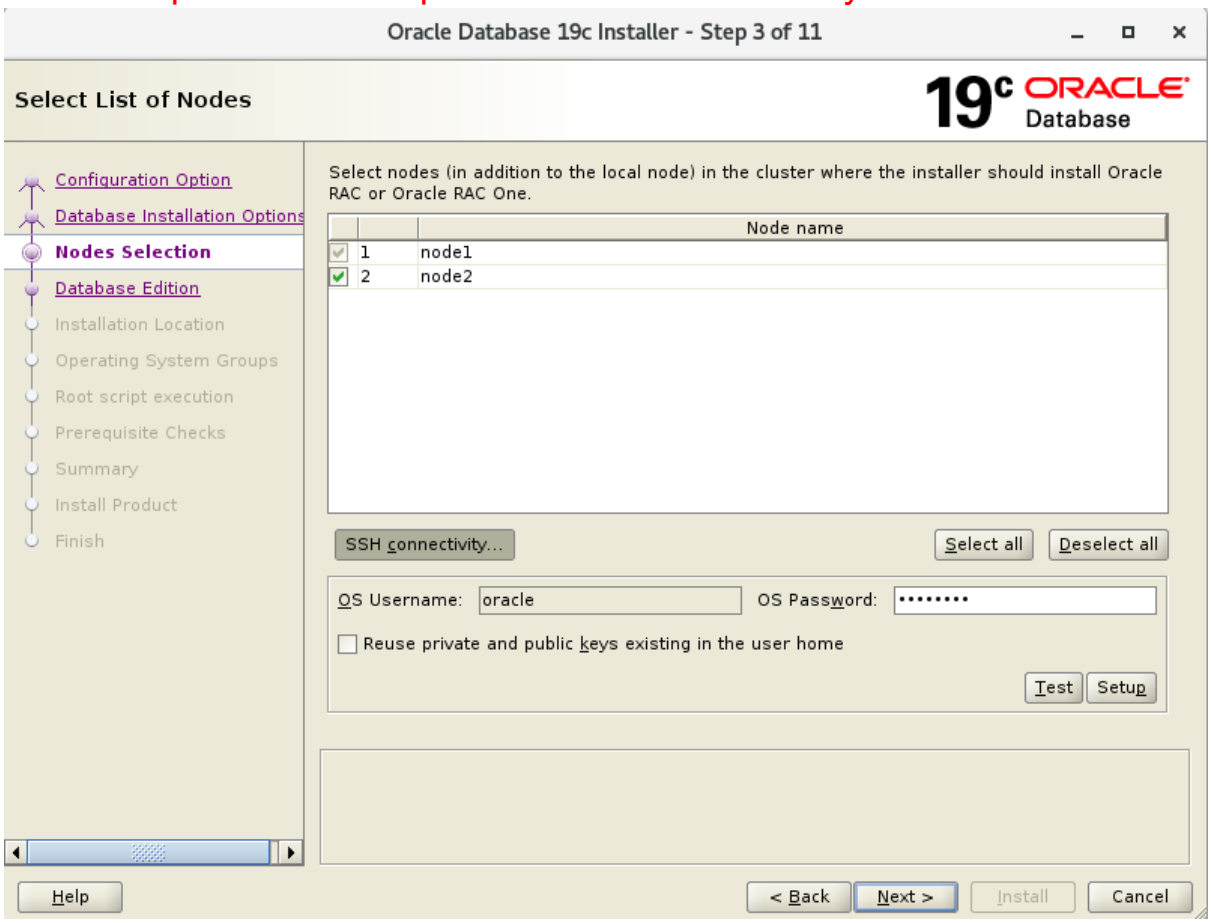
2. Choose 2nd option Oracle Real Application Clusters database installation and click Next.



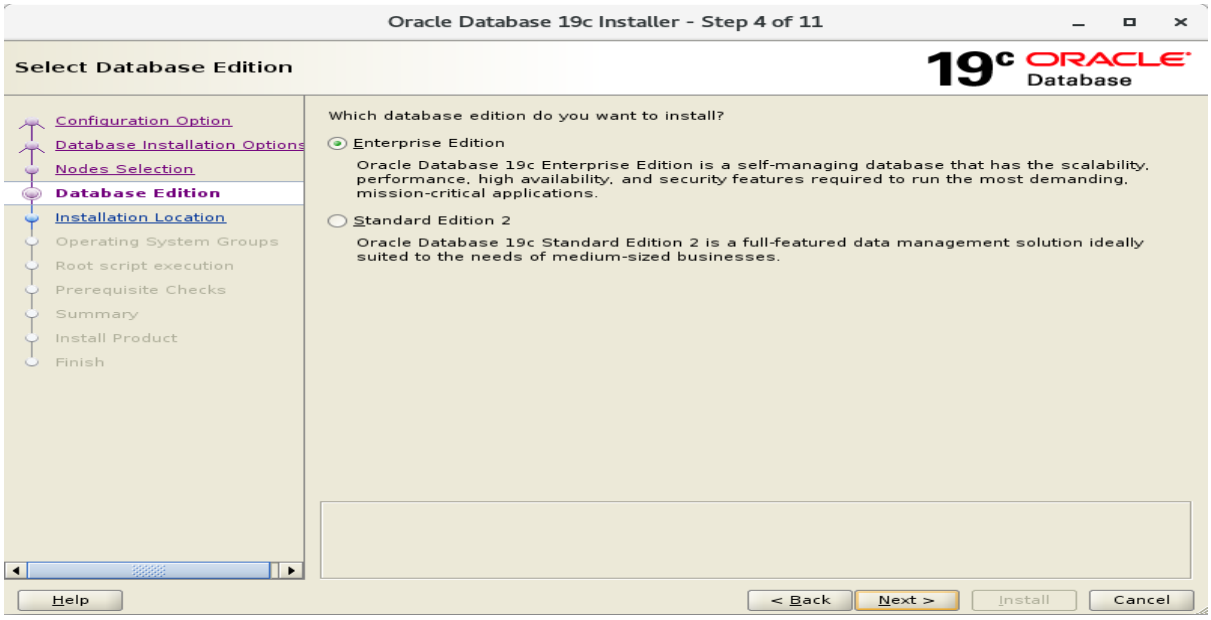
3. Make sure all the nodes are selected otherwise software will only install in single nodes and click on SSH connectivity to create password less connections between the nodes



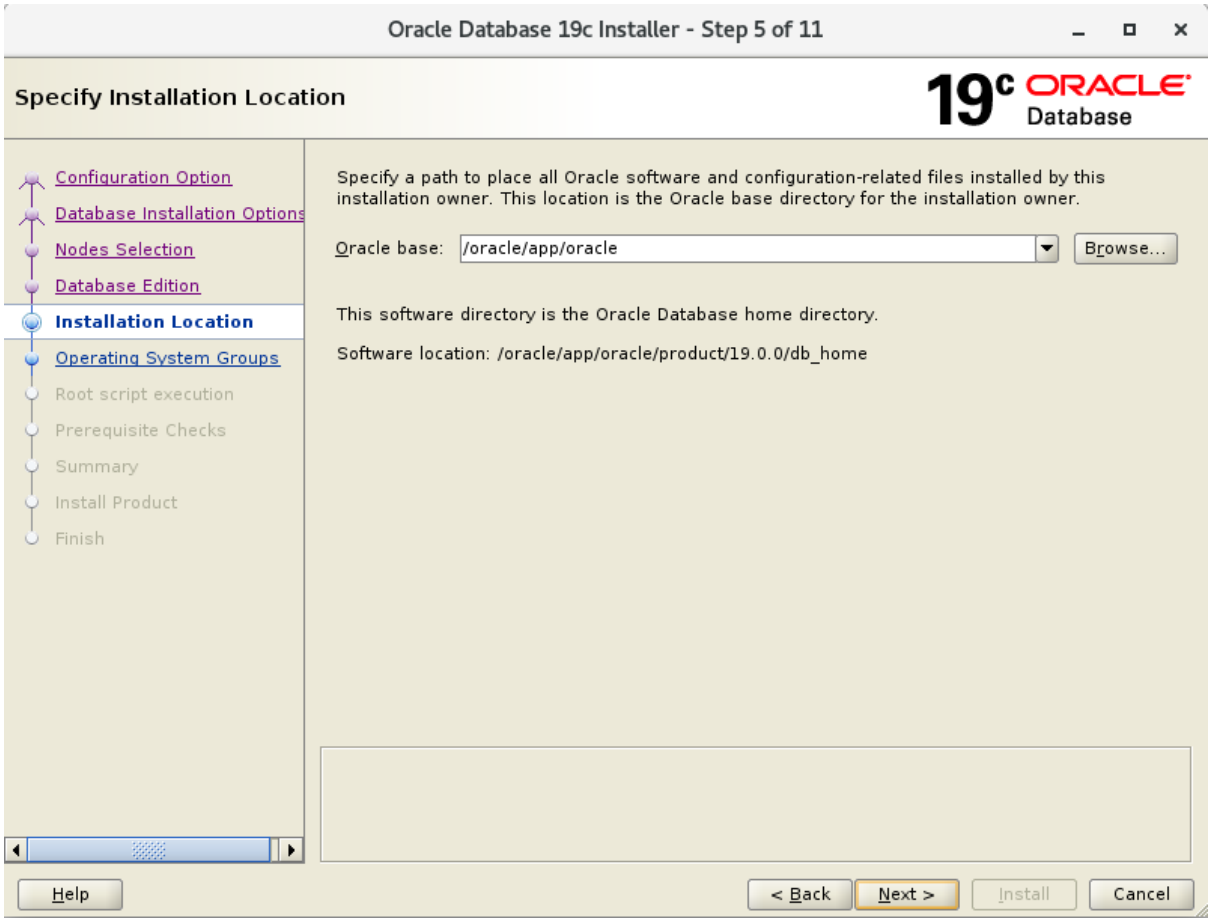
4. Give the Oracle password which you have created and click on setup to create the password less connectivity.



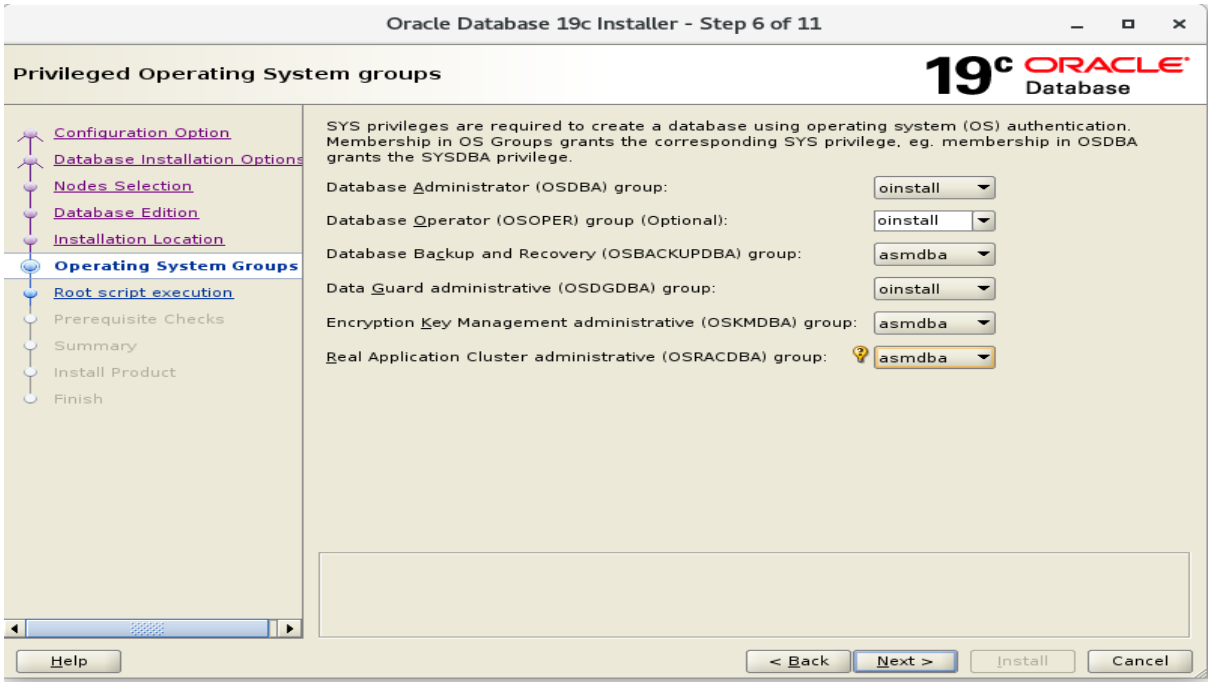
5. Choose **Enterprise Edition** and click **Next**.



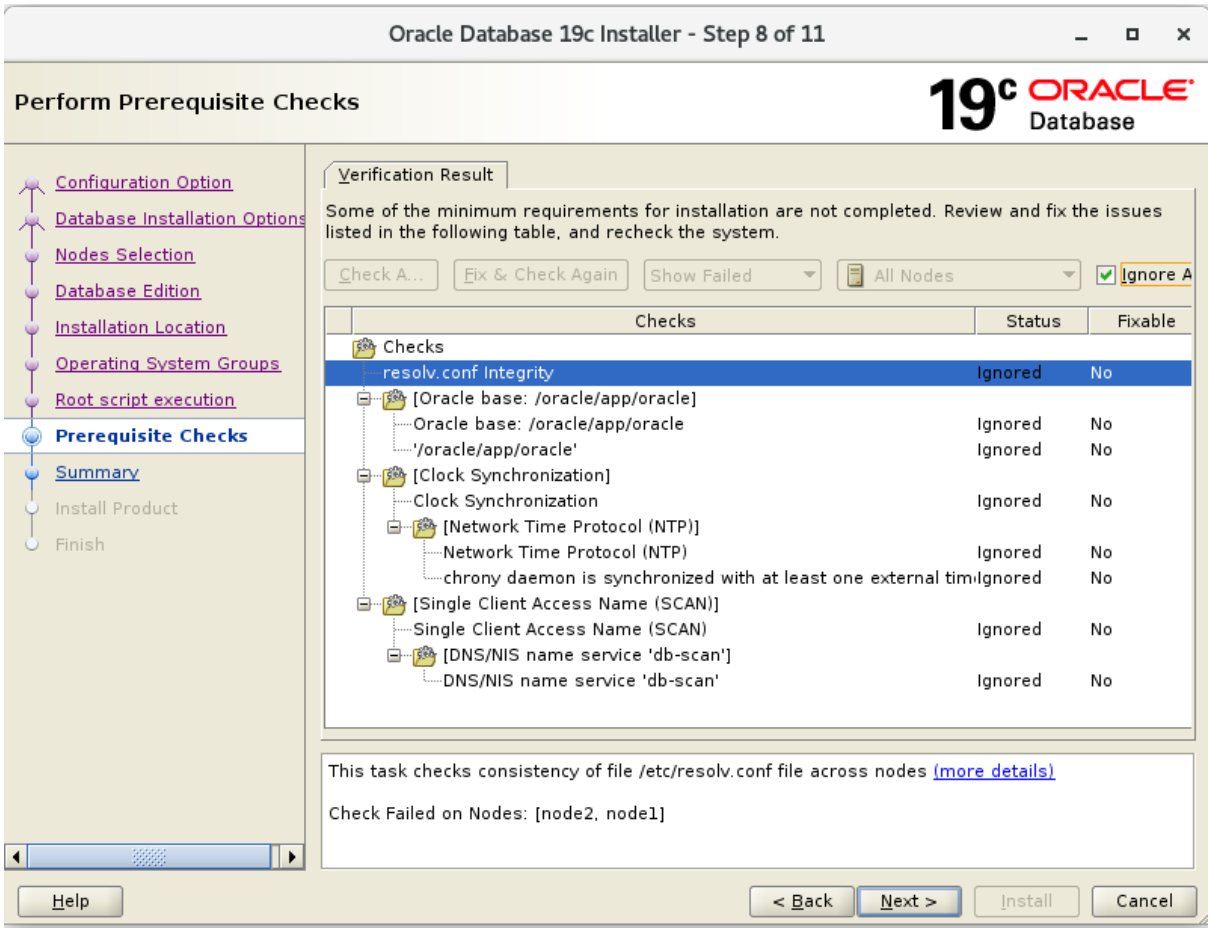
6. Choose the **location** for **Oracle base** and **Software location** as per the requirement.



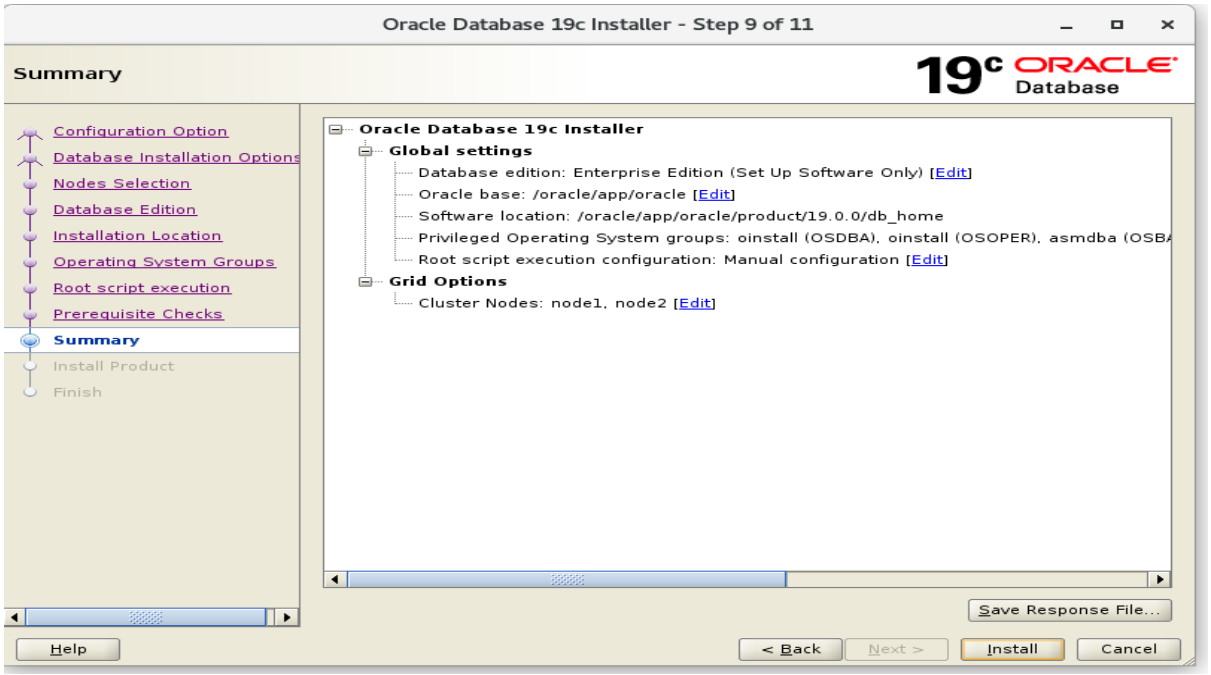
7. Give the **privilegedOperating system groups** as per your requirement.

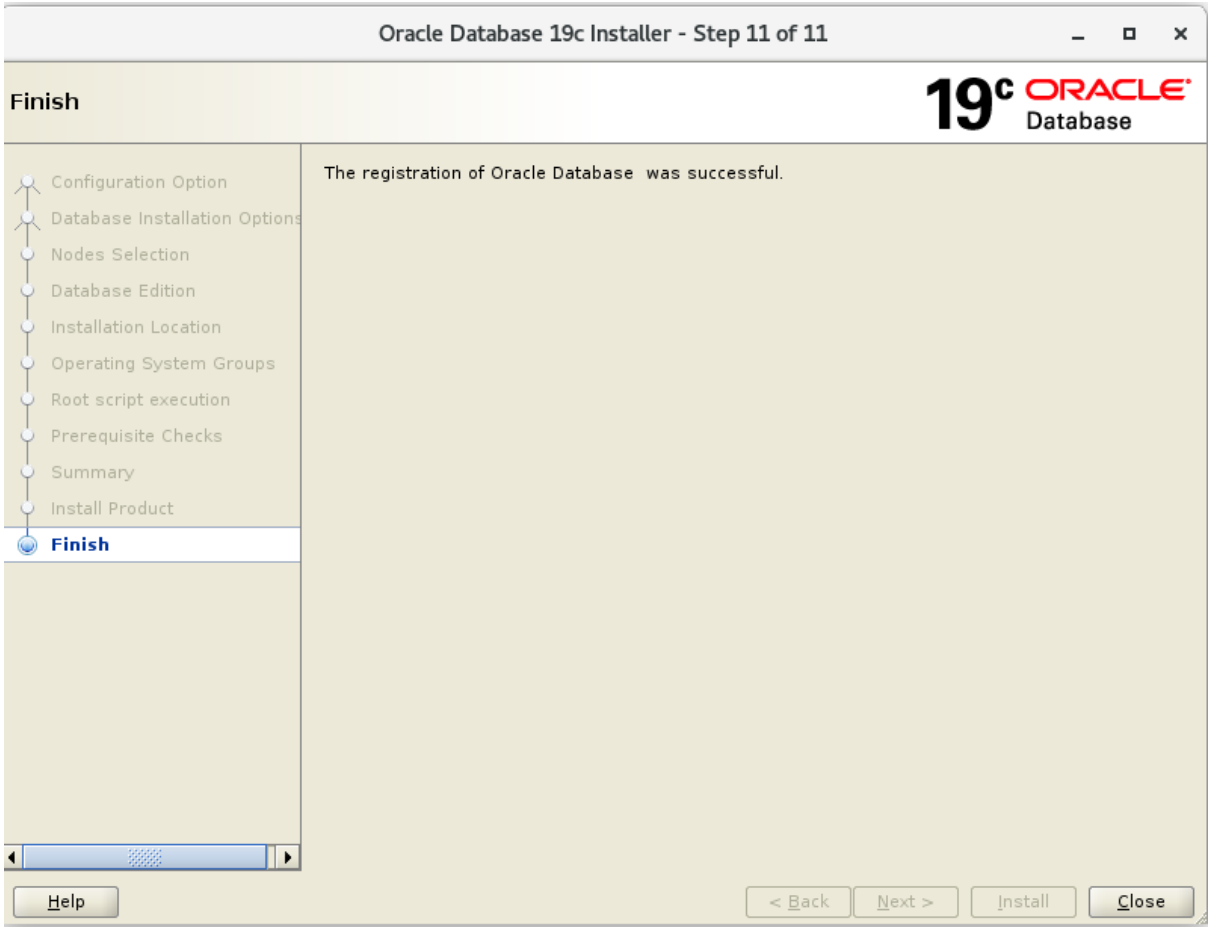


8. Uncheck auto execution of root Script >NEXT>
9. Ignore all and next



10. Check the **Summary and click on Next to proceed** with the installation.





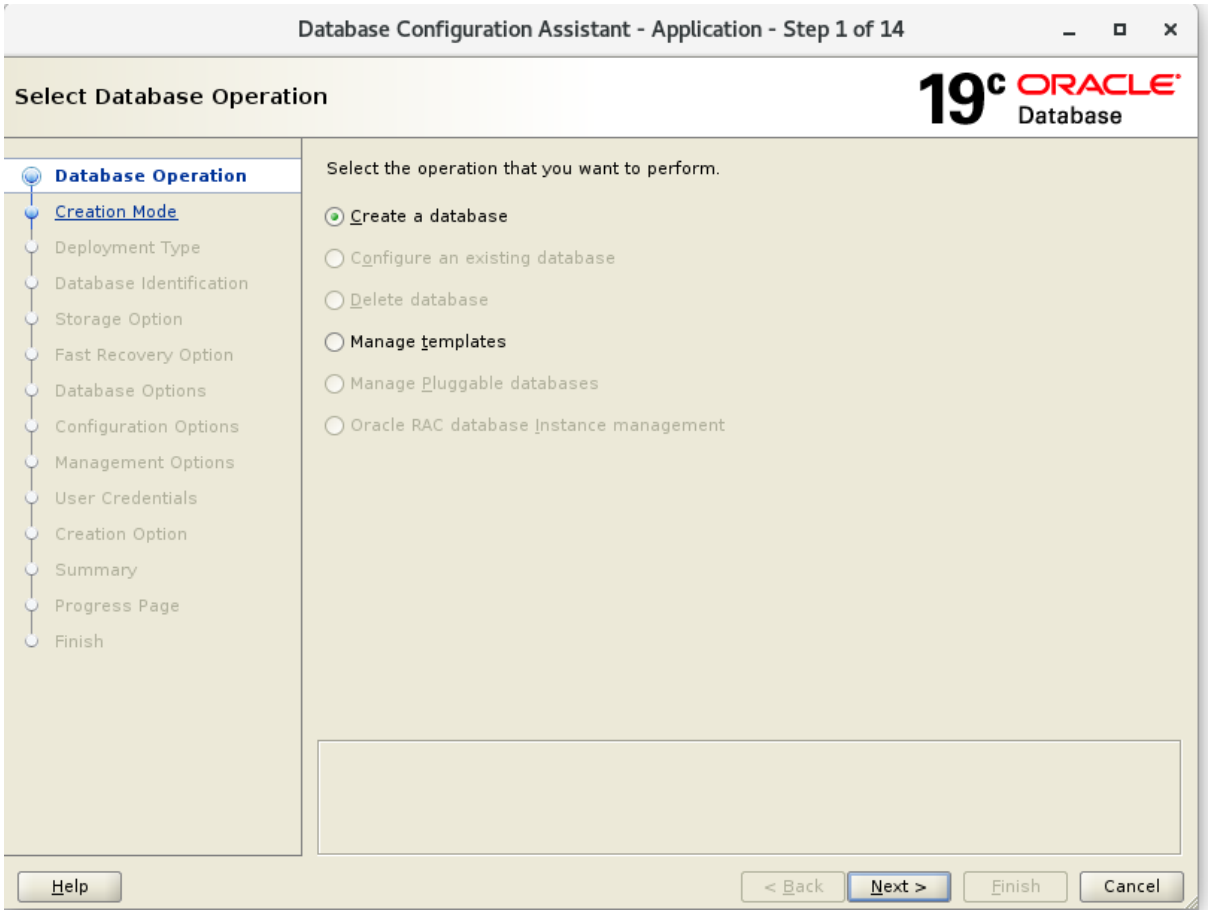
Database Installation Completed.

Database Creation Steps:

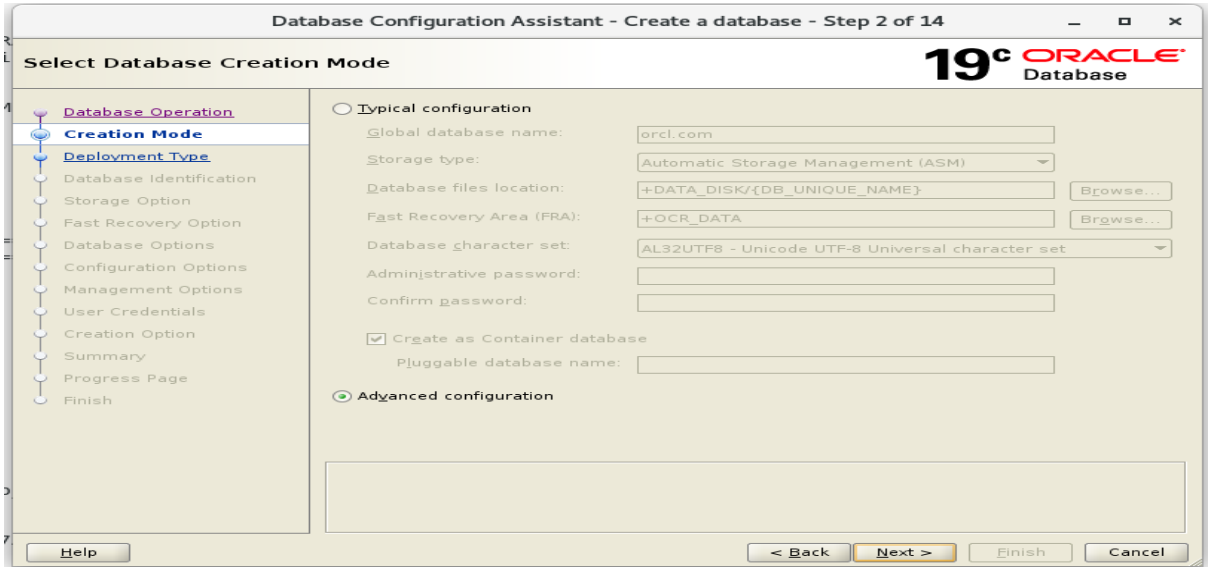
1. Login as oracle User and go to ORACLE_HOME/bin direcotry and execute ./dbca command.

```
oracle   15433  5697  0 11:25 pts/0    00:00:00 (
[oracle@node1 db_home]$
[oracle@node1 db_home]$
[oracle@node1 db_home]$ dbca
```

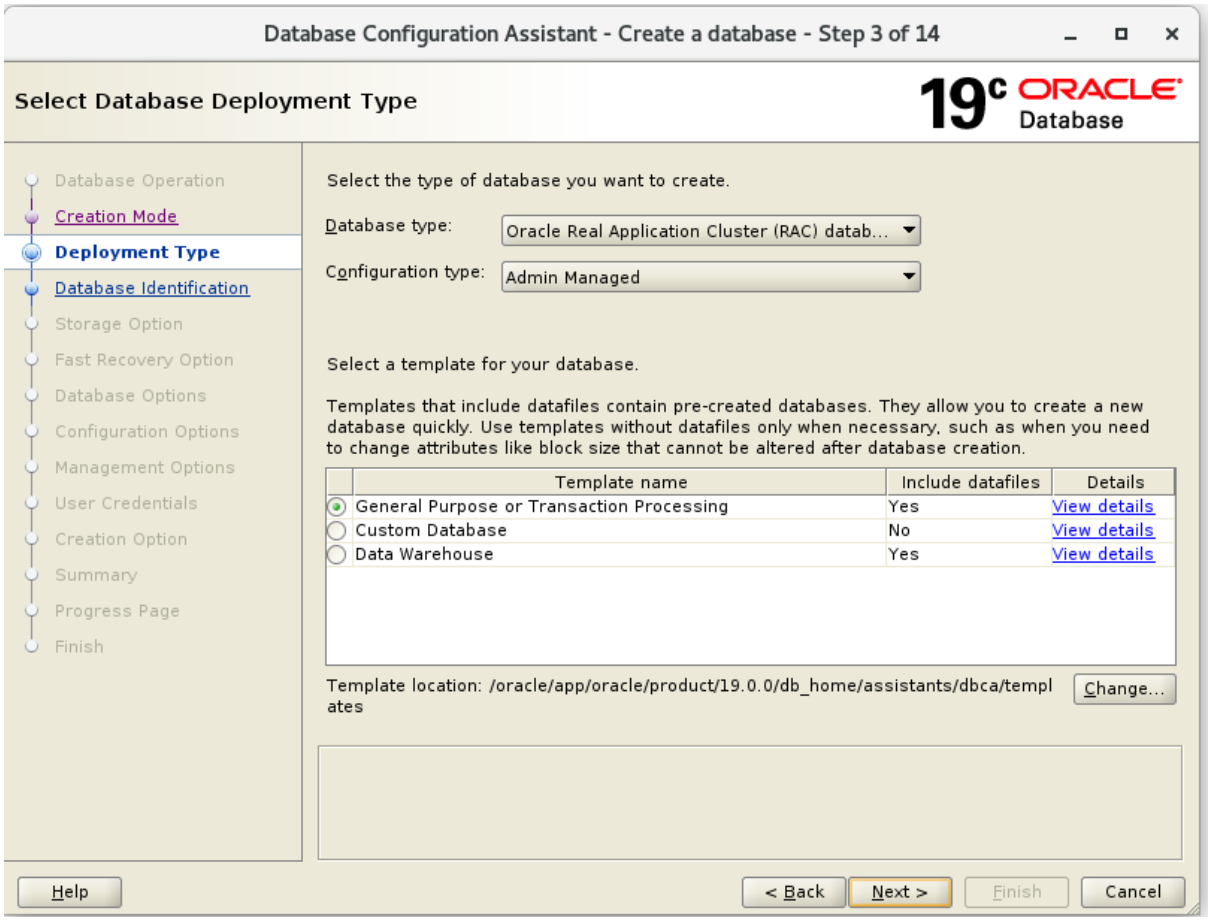
1. Choose the **Create a Database** Option and Click on **Next** button.



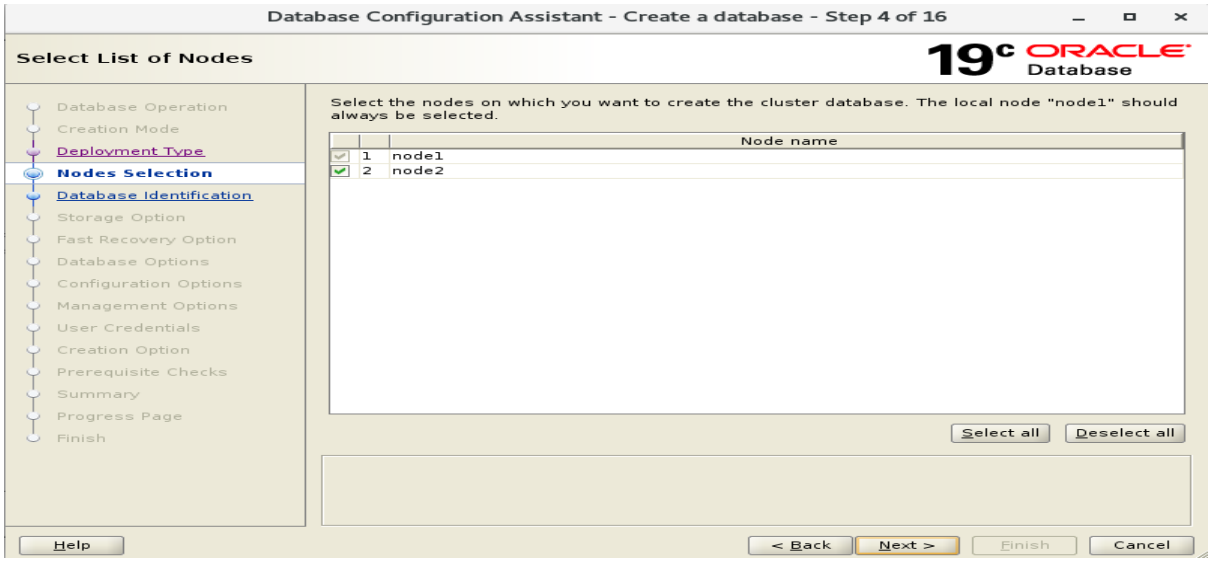
2. Choose Option **Advanced Configuration** and Click on **Next** Button.



3. Choose **General purpose or Transaction processing** Option and Click on **Next** button.

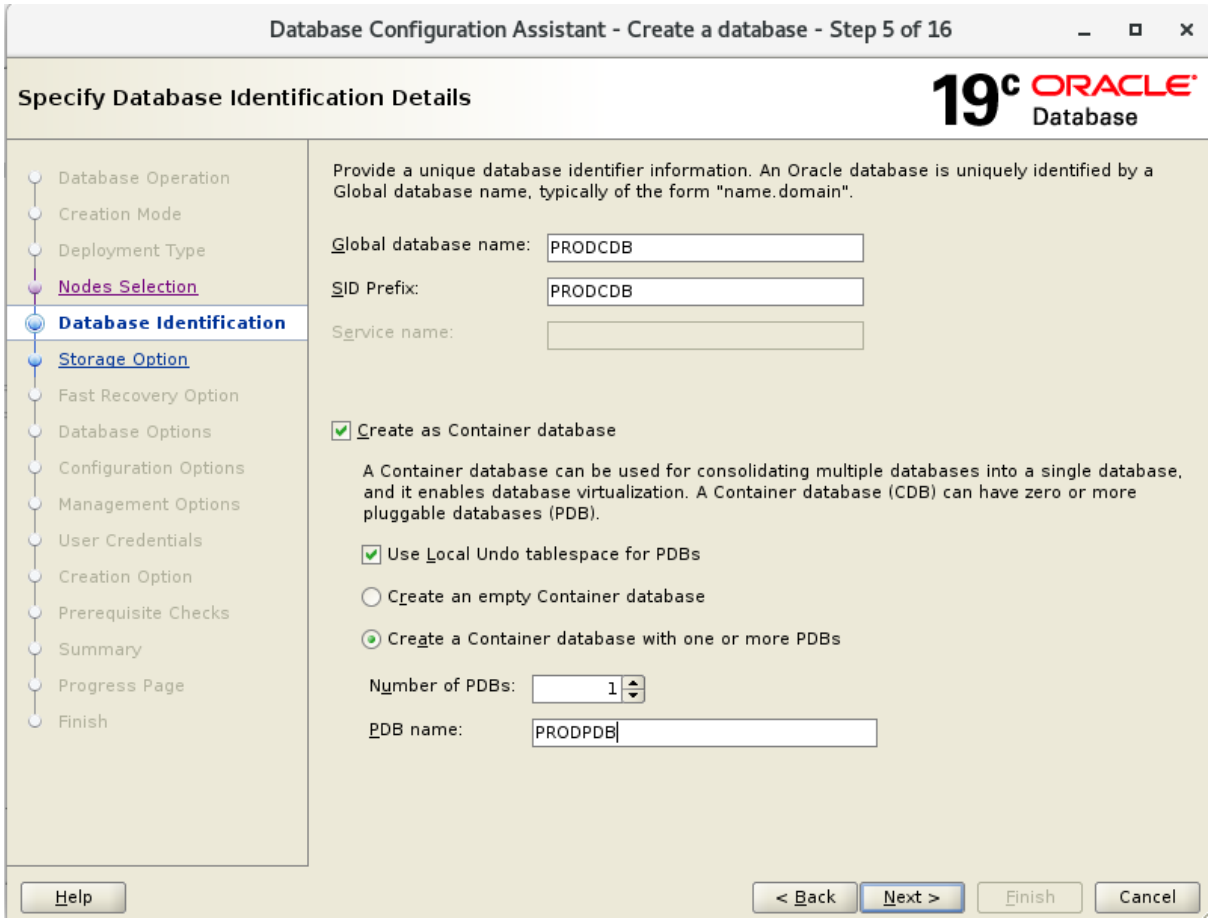


4. Select **all the nodes** and click on **Next.**

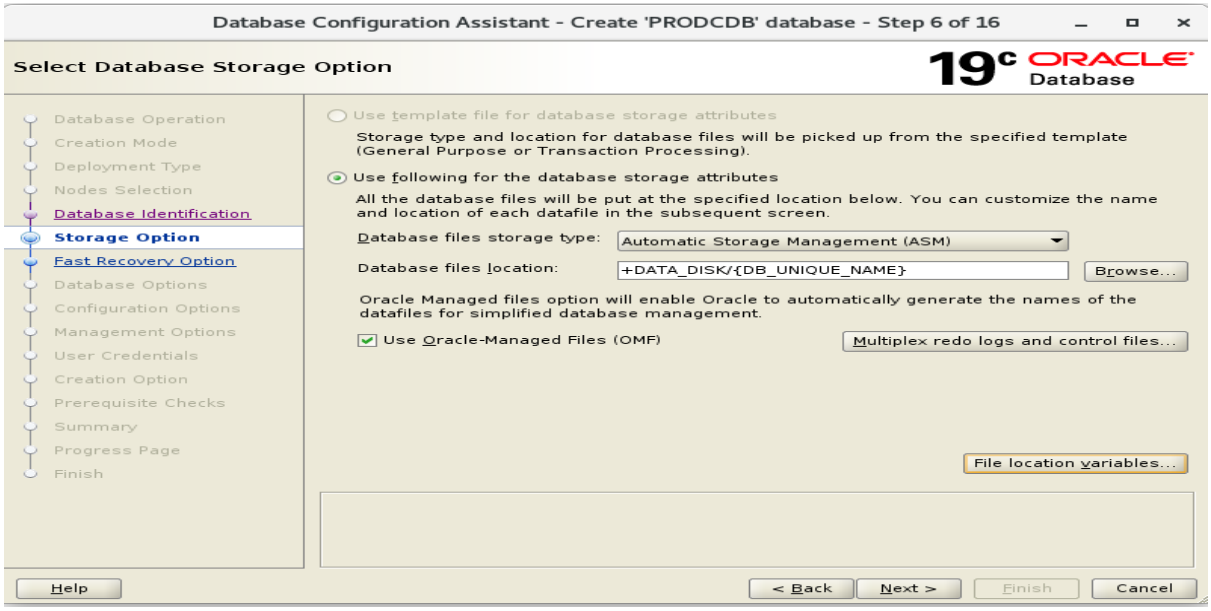


5. Choose your **Global Database name** and select both the nodes.

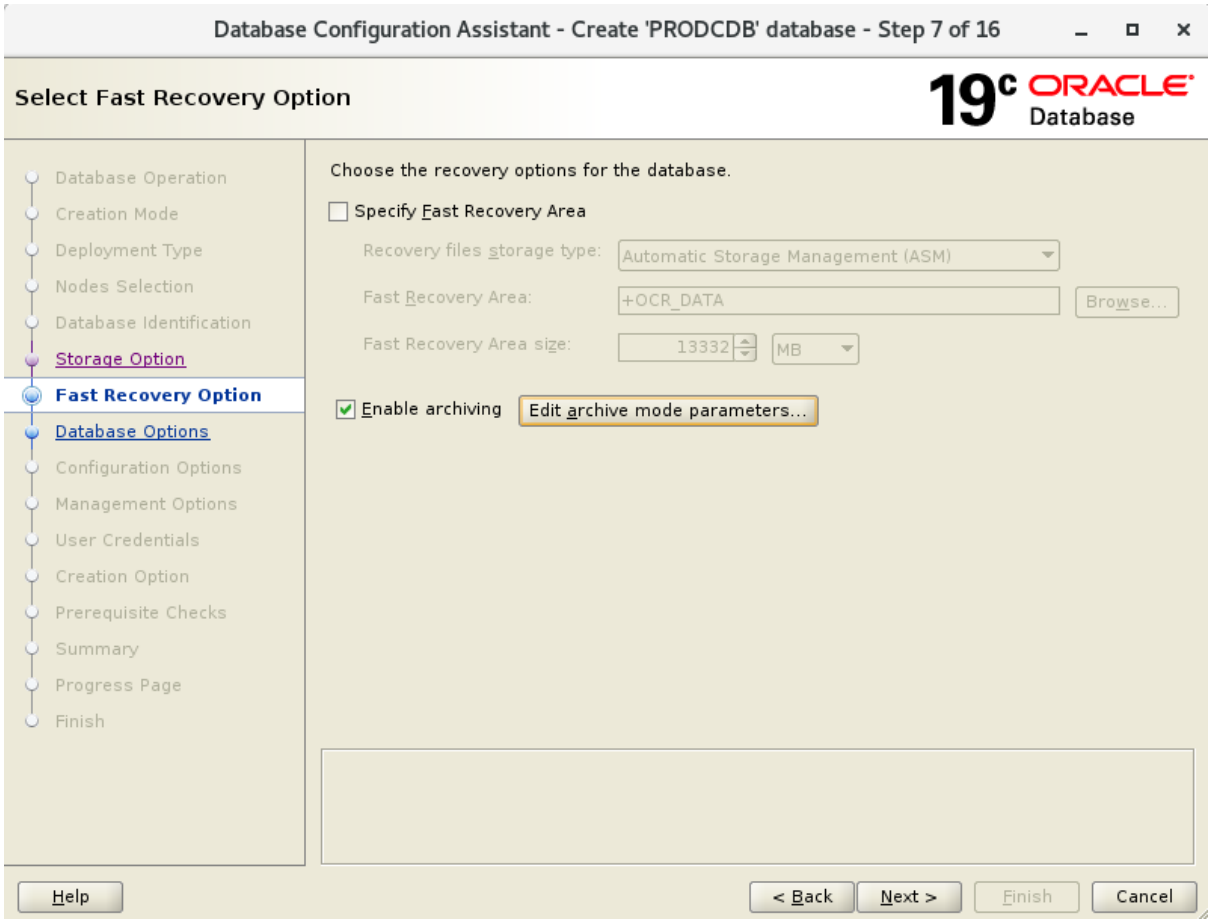
Note: Here we are creating container database with one Pluggable database.



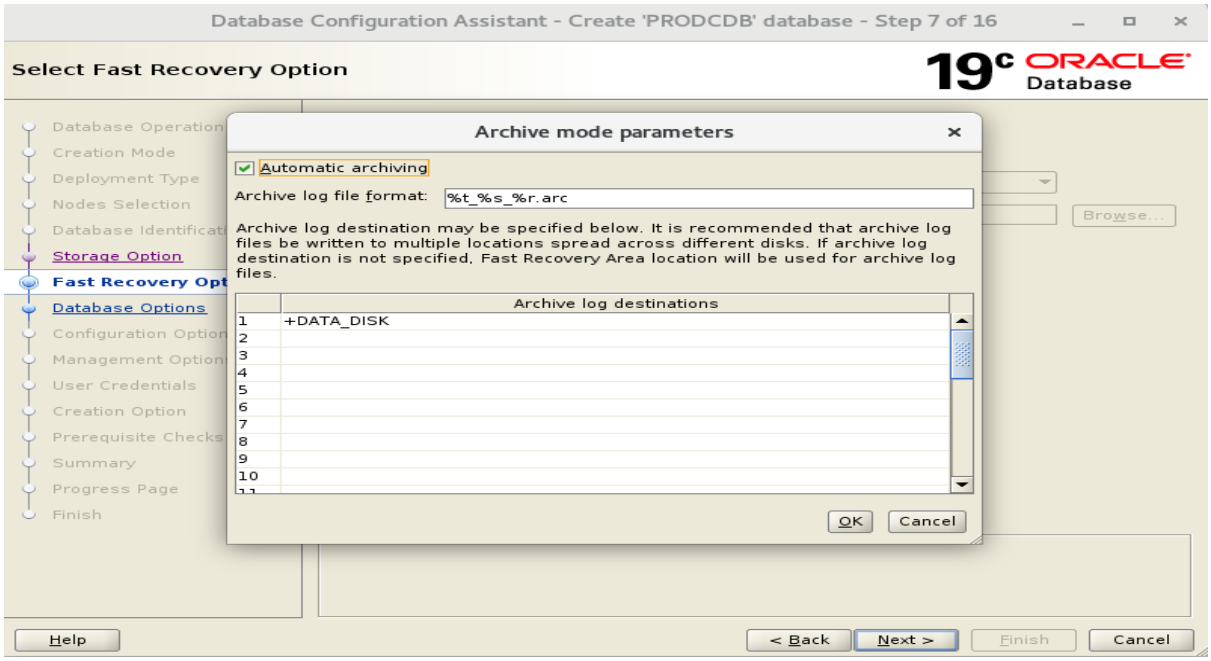
6. Choose **ASM** as a storage type and click on **Next** button



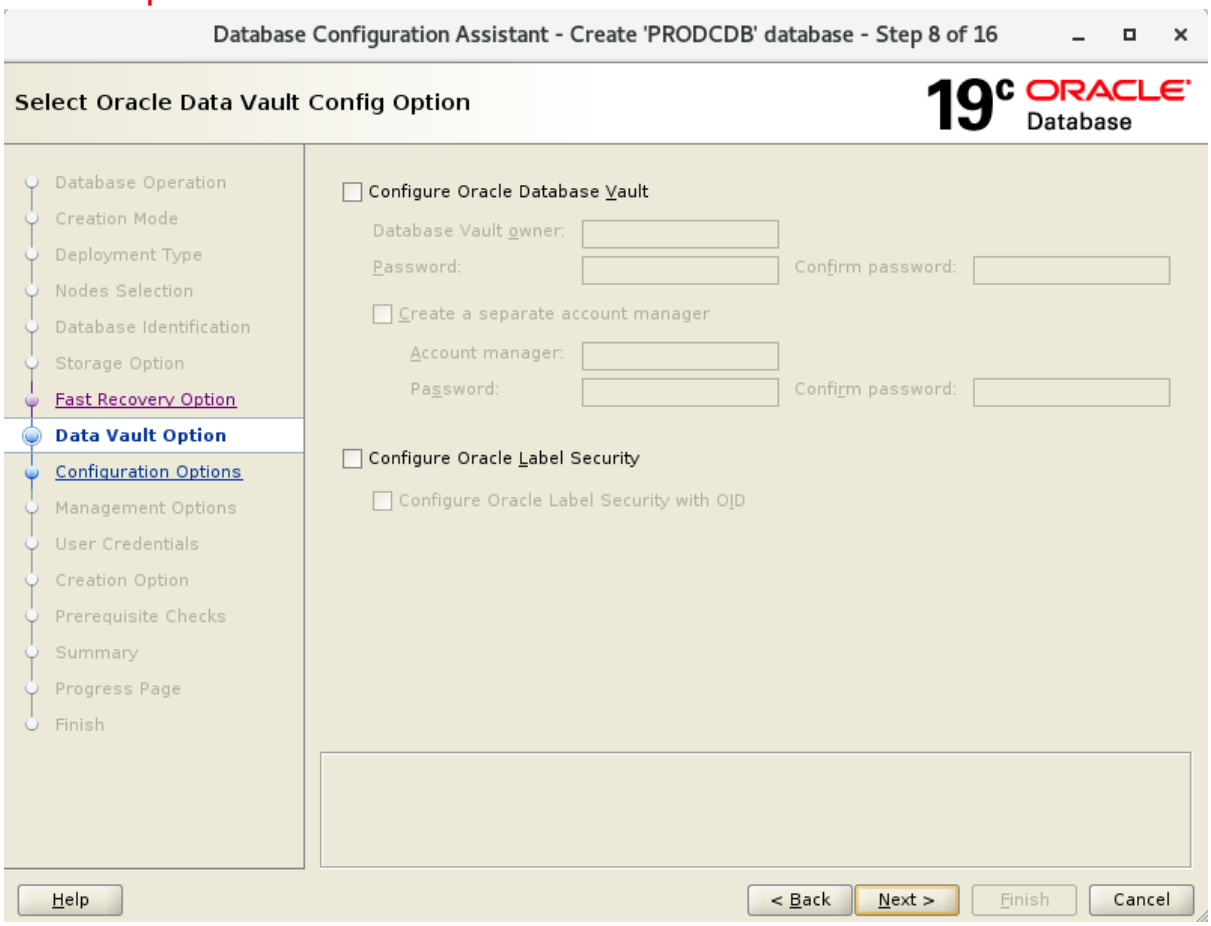
7. Select the **FRA**as per your requirement



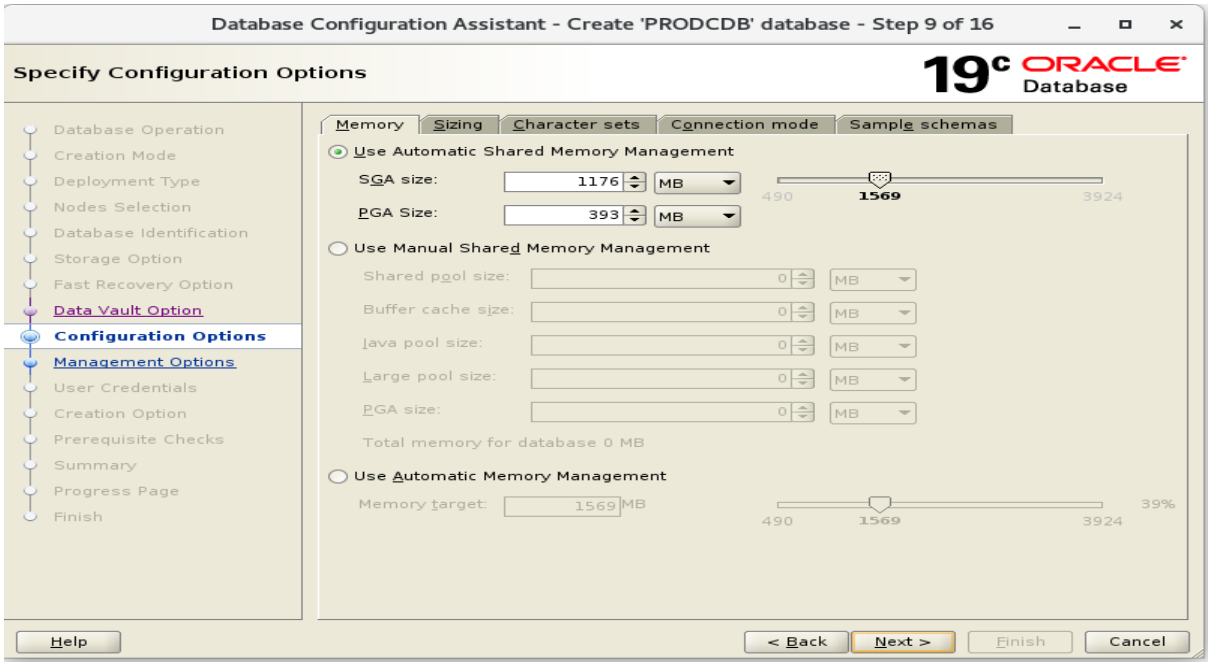
Change the archive file extention.



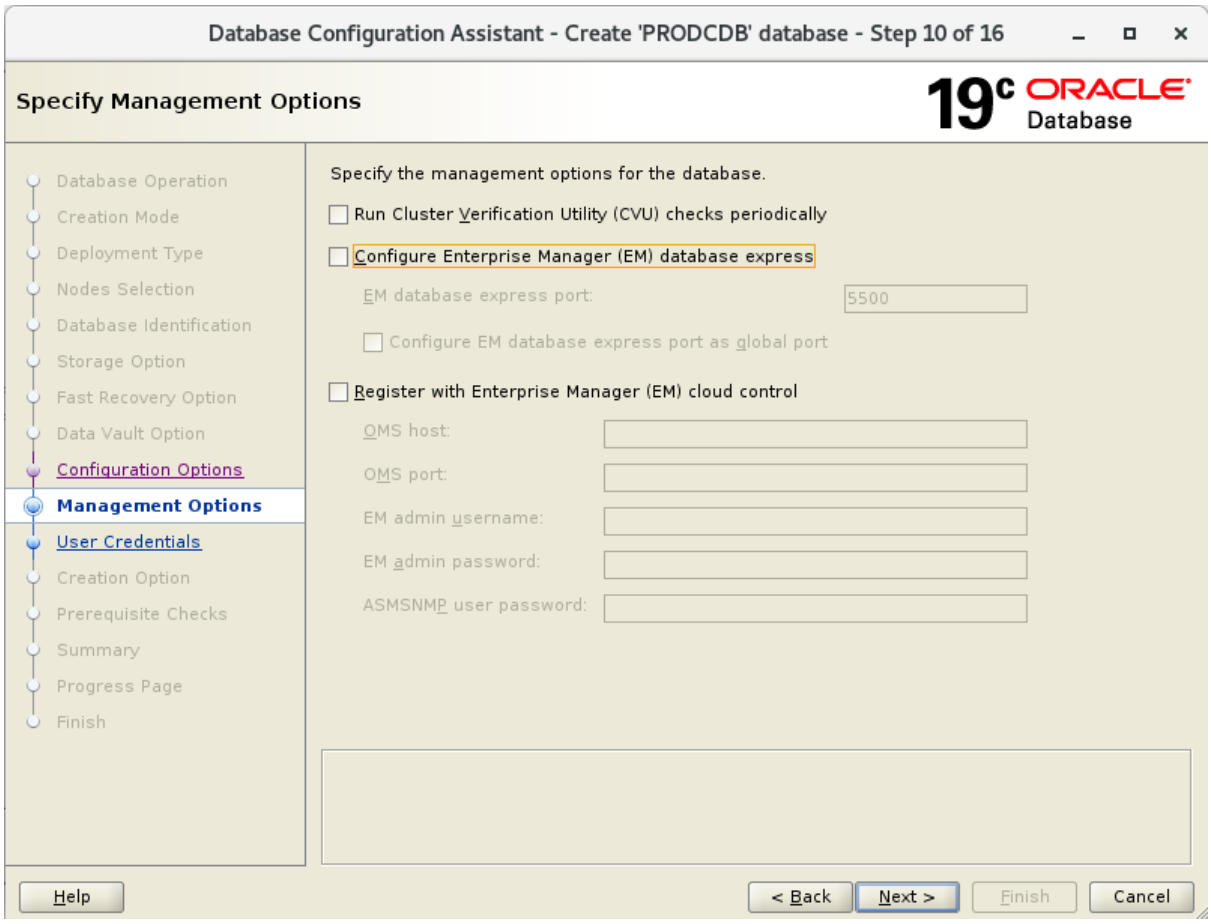
8. Choose **“Database Vault”** and **“Oracle Label Security”** as per your requirement



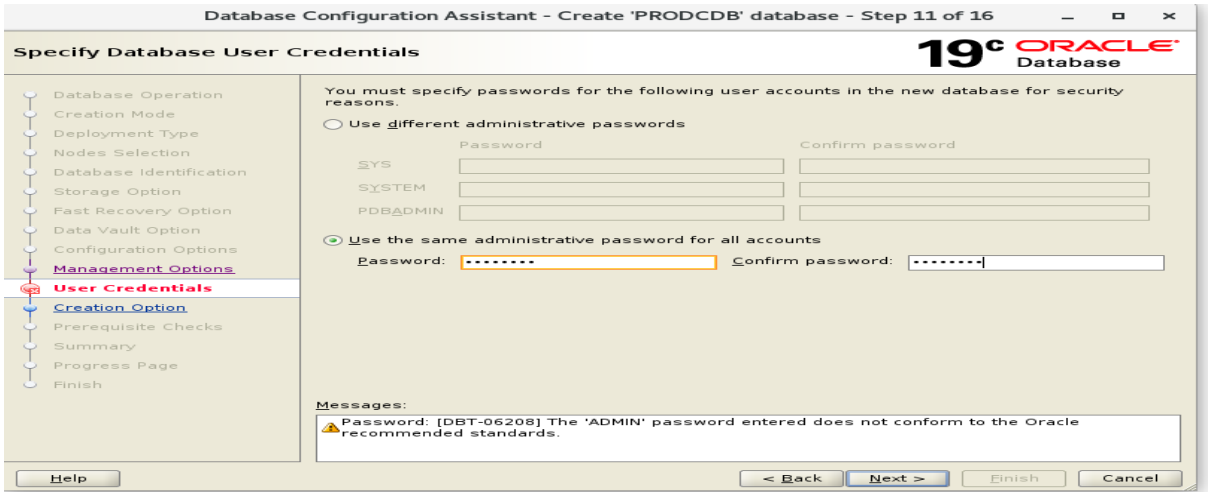
9. Define **Memory, Character sets, Connection mode, Sample schemas** as per your requirements.



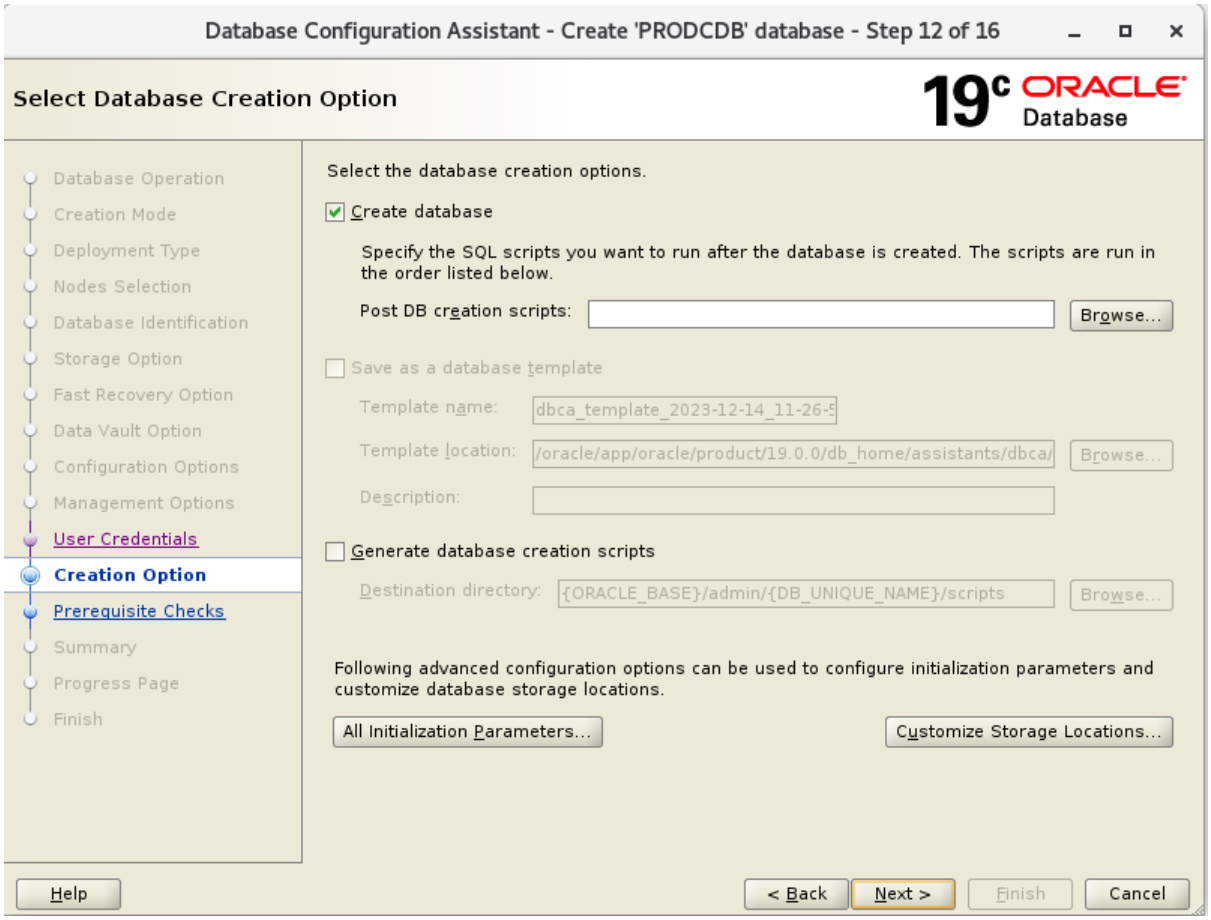
10. Choose EM options as per your requirement,

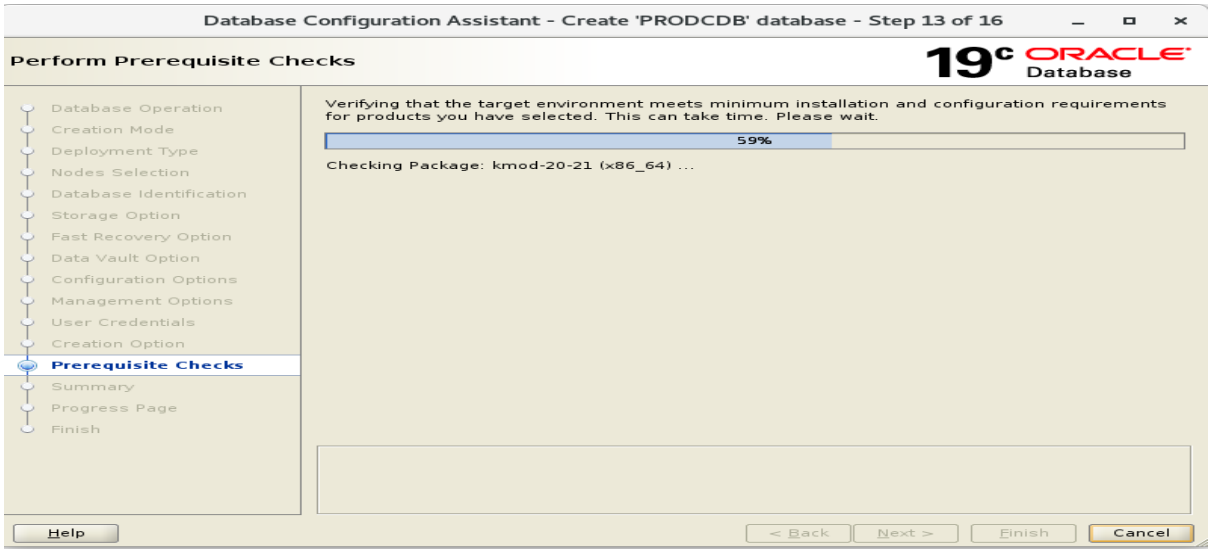


11. Set the password of **SYS**

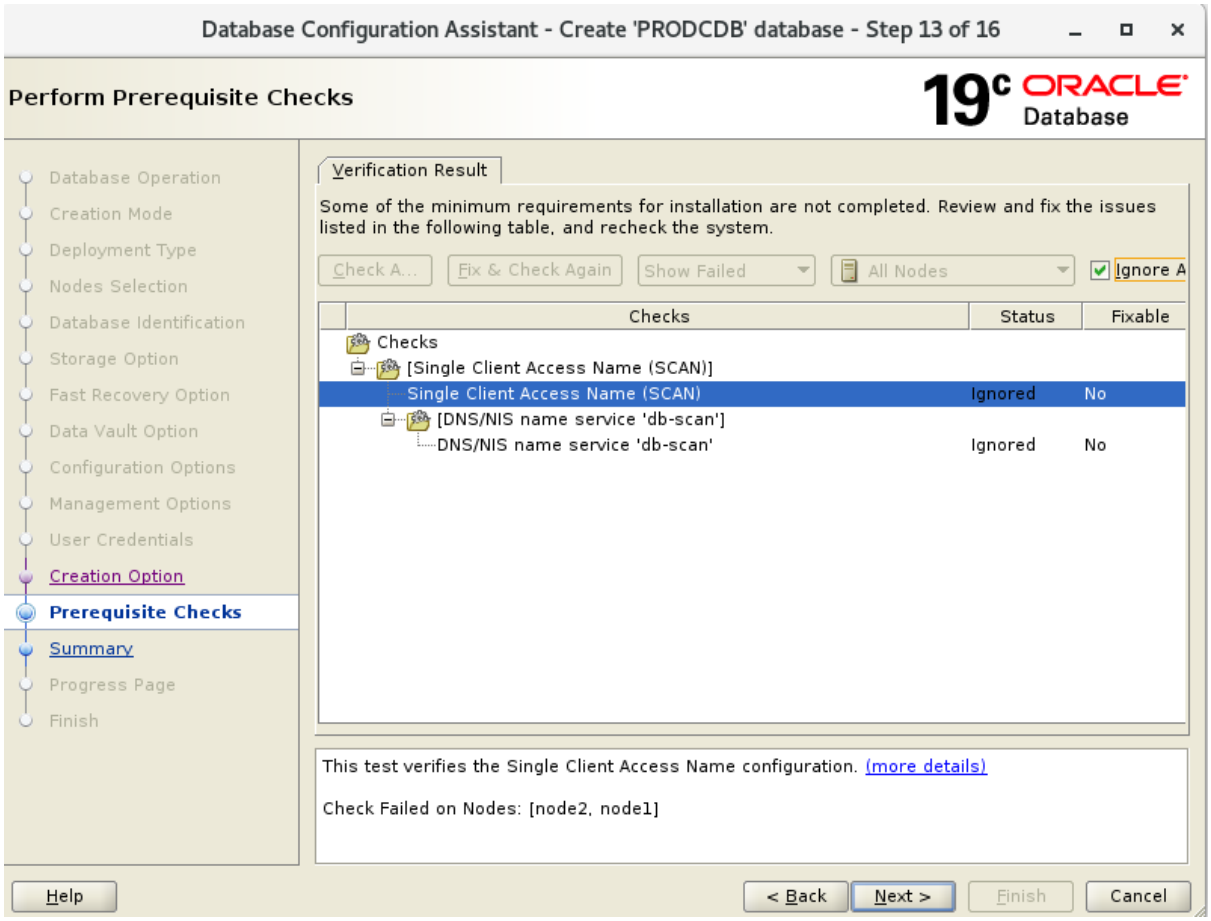


12. Select “CREATE DATABASE “ option.

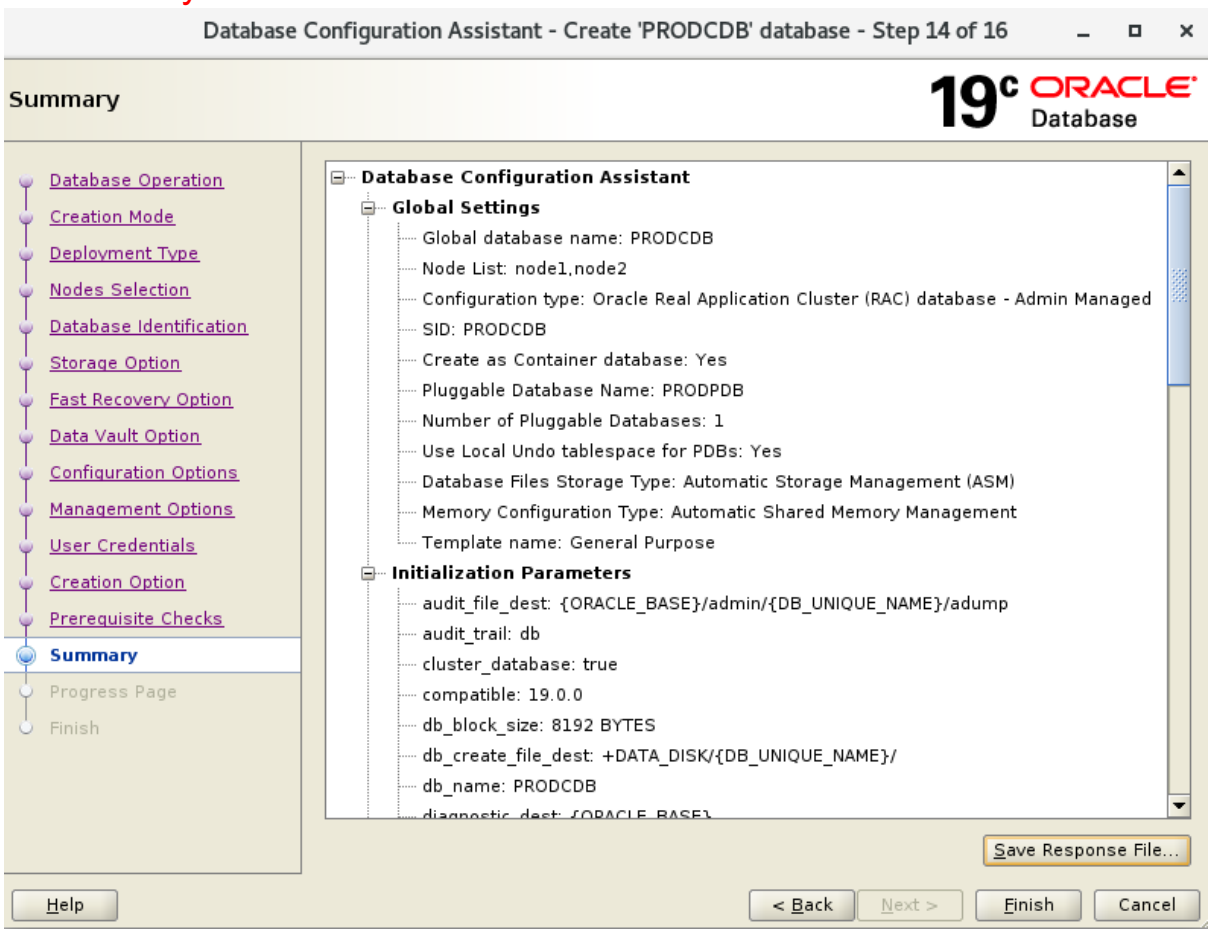




13. Click Ignore all and next > .



14. Check the Summary report, if something went wrong you can rectify and resolve it.



After Progress page complete the configuration by clicking on >FINISH.

Database has been created successfully

Connect to server as oracle oracle:

- Sqlplus / as sysdba.

```
SQL> show pdbs

    CON_ID CON_NAME                       OPEN MODE  RESTRICTED
---------- ------------------------------ ---------- ----------
         2 PDB$SEED                       READ ONLY  YES
         3 PRODPDB                        READ WRITE YES
SQL>
```

Container Database PRODCDB with pluggable database PRODPDB has been created.

---------- **FINISH** ----------