Oracle Database 11gR2 (11.2.0.3) installation on Oracle Linux 6.6

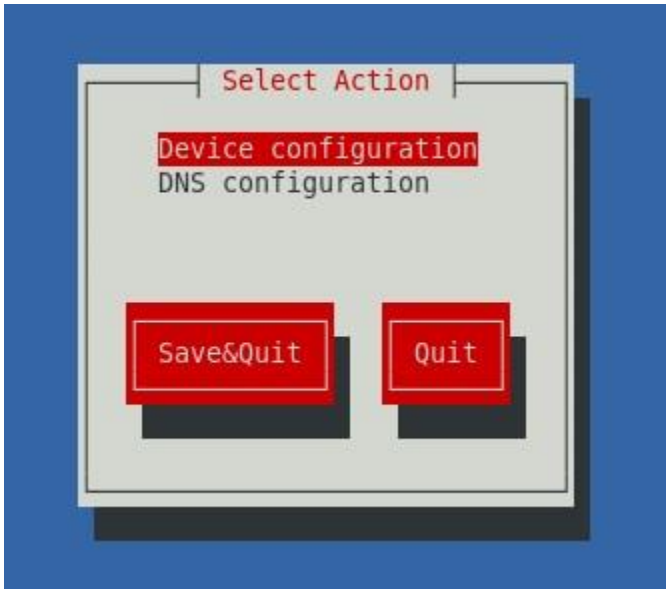
As we have already installed our operating system Oracle Enterprise Linux 6.6 in the previous document. Before starting oracle database installing we need to complete some pre-installation task in OS level.

1. Open a command prompt terminal, and run "setup" command to set IP address.

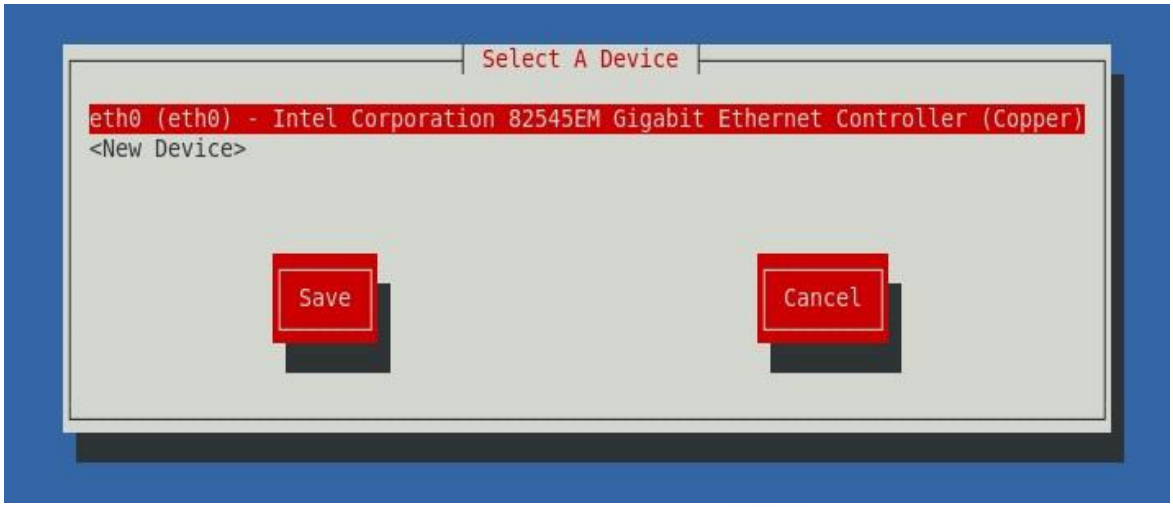
```
[root@localhost Desktop]# setup
```

2. When this tab appears, go to "Network configuration" using down arrow and press "Enter" button.

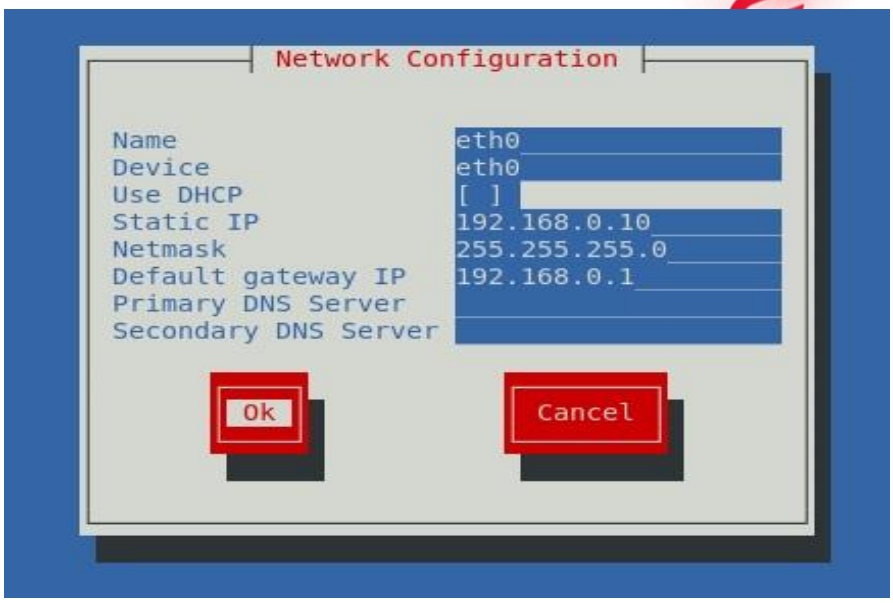
3. When following tab appears, go to "Device Configuration" and press "Enter" button.



4. Here select "eth0"(NIC Card) , and press "Enter" to continue.

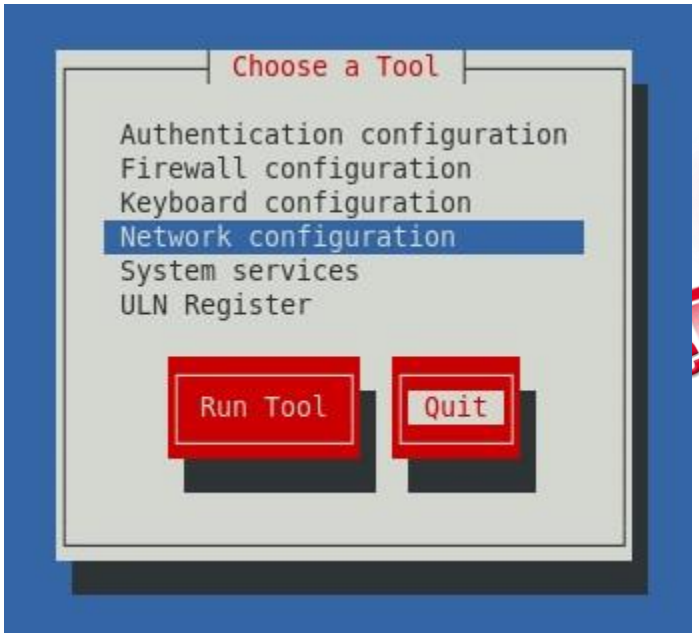


5. In this screen, deselect the "Use DHCP", set the IP Address as per your network. Then select "OK" button using "TAB" and press "Enter".



6. Now select "Save" using "TAB" and press "Enter".

7. Here select "Quit" using "TAB" and press enter.



8. After that we need to modify some parameter in "/etc/sysconfig/network-scripts/ifcfg-eth0" file.

```
File  Edit  View  Search  Terminal  Help
[root@localhost Desktop]# vi /etc/sysconfig/network-scripts/ifcfg-eth0
```

9. Modify the black marked line.

```
File  Edit  View  Search  Terminal  Help
DEVICE=eth0
HWADDR=00:0c:29:30:f5:ac
TYPE=Ethernet
UUID=fbced695-5e75-4ef6-9051-92c7449e9fc4
#ONBOOT=no
ONBOOT=yes
#NM_CONTROLLED=yes
NM_CONTROLLED=no
BOOTPROTO=none
IPADDR=192.168.0.10
NETMASK=255.255.255.0
GATEWAY=192.168.0.1
IPV6INIT=no
USERCTL=no
~
~
```

10. Now here we stop "NetworkManager" service. Disable auto-startup of "NetworkManaer" during OS boot. Then we restart the "network" service. Test the network setting using ping command.

```
File  Edit  View  Search  Terminal  Help
[root@localhost Desktop]# vi /etc/sysconfig/network-scripts/ifcfg-eth0
[root@localhost Desktop]# service NetworkManager stop
Stopping NetworkManager daemon:                            [  OK  ]
[root@localhost Desktop]# chkconfig NetworkManager off
[root@localhost Desktop]# service network restart
Shutting down loopback interface:                          [  OK  ]
Bringing up loopback interface:                            [  OK  ]
Bringing up interface eth0:  Determining if ip address 192.168.0.10 is already in use for device eth0...
                                                           [  OK  ]
[root@localhost Desktop]# ping 192.168.0.10
PING 192.168.0.10 (192.168.0.10) 56(84) bytes of data.
64 bytes from 192.168.0.10: icmp_seq=1 ttl=64 time=0.028 ms
64 bytes from 192.168.0.10: icmp_seq=2 ttl=64 time=0.029 ms
```

11. Now we will set the hostname of the server editing the "/etc/sysconfig/network" file.

```
[root@localhost Desktop]# vi /etc/sysconfig/network
```

12. Edit the file as per your server name.

```
File  Edit  View  Search  Terminal  Help
NETWORKING=yes
HOSTNAME=dbserver.example.com
~
~
```

13. Now we will edit that host file "/etc/hosts".

```
[root@localhost Desktop]# vi /etc/hosts
```

14. Edit the file as per your need.

```
File  Edit  View  Search  Terminal  Help
127.0.0.1   localhost localhost.localdomain localhost4 localhost4.localdomain4
::1         localhost localhost.localdomain localhost6 localhost6.localdomain6
192.168.0.10    dbserver.example.com    dbserver
~
~
```

15. Here test hosts file entry using ping command with hostname.

```
[root@localhost Desktop]# ping dbserver
PING dbserver.example.com (192.168.0.10) 56(84) bytes of data.
64 bytes from dbserver.example.com (192.168.0.10): icmp_seq=1 ttl=64 time=0.045 ms
64 bytes from dbserver.example.com (192.168.0.10): icmp_seq=2 ttl=64 time=0.032 ms
64 bytes from dbserver.example.com (192.168.0.10): icmp_seq=3 ttl=64 time=0.034 ms
64 bytes from dbserver.example.com (192.168.0.10): icmp_seq=4 ttl=64 time=0.032 ms
```

16. Now here we disable the "SELINUX" in "/etc/sysconfig/selinux" file.

```
File  Edit  View  Search  Terminal  Help
[root@localhost Desktop]# getenforce
Enforcing
[root@localhost Desktop]# setenforce 0
[root@localhost Desktop]# getenforce
Permissive
[root@localhost Desktop]# vi /etc/sysconfig/selinux
```

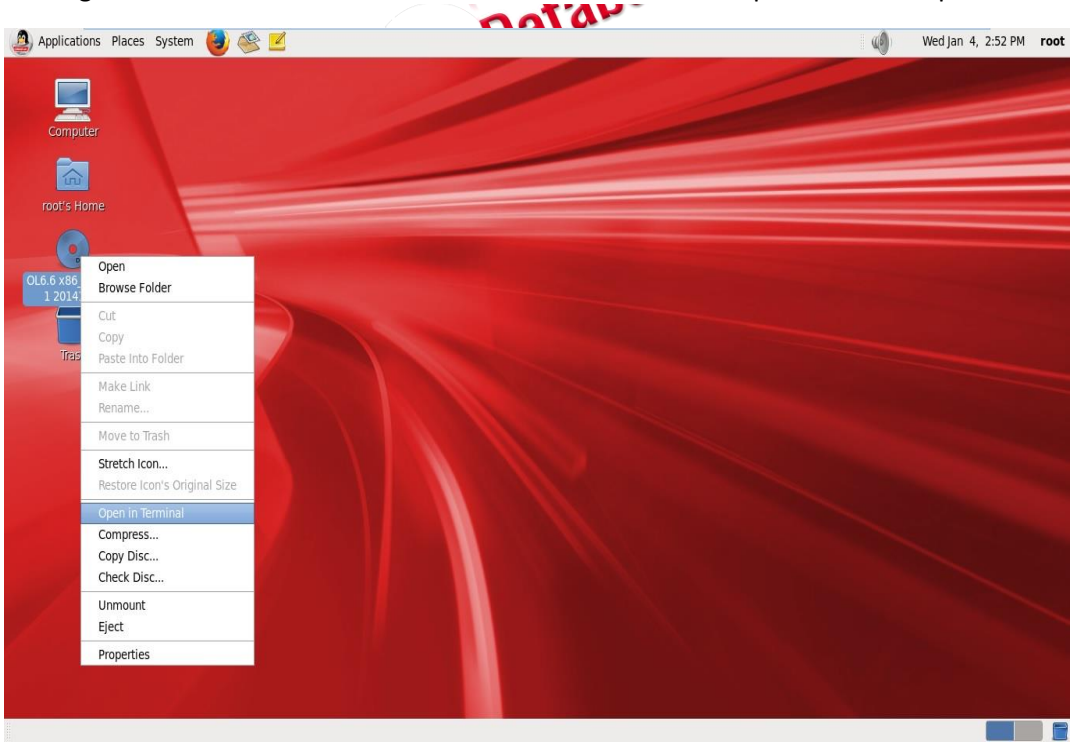
17. Edit the file as per "black marked"

```
File  Edit  View  Search  Terminal  Help

# This file controls the state of SELinux on the system.
# SELINUX= can take one of these three values:
#     enforcing - SELinux security policy is enforced.
#     permissive - SELinux prints warnings instead of enforcing.
#     disabled - No SELinux policy is loaded.
#SELINUX=enforcing
SELINUX=disabled
# SELINUXTYPE= can take one of these two values:
#     targeted - Targeted processes are protected,
#     mls - Multi Level Security protection.
SELINUXTYPE=targeted
```

18. Now check the iptables status, flush the iptables rules, save ipatbles rules, restart the iptables service, stop the the iptables service. And finally disable the auto-startup of iptables during OS boot.

```
File  Edit  View  Search  Terminal  Help
[root@localhost Desktop]# iptables -nL
Chain INPUT (policy ACCEPT)
target     prot opt source               destination
ACCEPT     all  --  0.0.0.0/0            0.0.0.0/0           state RELATED,ESTABLISHED
ACCEPT     icmp --  0.0.0.0/0            0.0.0.0/0
ACCEPT     all  --  0.0.0.0/0            0.0.0.0/0
ACCEPT     tcp  --  0.0.0.0/0            0.0.0.0/0           state NEW tcp dpt:22
REJECT     all  --  0.0.0.0/0            0.0.0.0/0           reject-with icmp-host-prohibited

Chain FORWARD (policy ACCEPT)
target     prot opt source               destination
REJECT     all  --  0.0.0.0/0            0.0.0.0/0           reject-with icmp-host-prohibited

Chain OUTPUT (policy ACCEPT)
target     prot opt source               destination
[root@localhost Desktop]# iptables -F
[root@localhost Desktop]# service iptables save
iptables: Saving firewall rules to /etc/sysconfig/iptables:[  OK  ]
[root@localhost Desktop]# service iptables restart
iptables: Setting chains to policy ACCEPT: filter          [  OK  ]
iptables: Flushing firewall rules:                         [  OK  ]
iptables: Unloading modules:                               [  OK  ]
iptables: Applying firewall rules:                         [  OK  ]
[root@localhost Desktop]# service iptables stop
iptables: Setting chains to policy ACCEPT: filter          [  OK  ]
iptables: Flushing firewall rules:                         [  OK  ]
iptables: Unloading modules:                               [  OK  ]
[root@localhost Desktop]# chkconfig iptables off
[root@localhost Desktop]# iptables -nL
Chain INPUT (policy ACCEPT)
target     prot opt source               destination

Chain FORWARD (policy ACCEPT)
target     prot opt source               destination

Chain OUTPUT (policy ACCEPT)
target     prot opt source               destination
[root@localhost Desktop]#
```

19. Now we will configure "YUM" for installing packages are required to install Oracle Database 11gr2. Click right button on the DVD-ROOM that is mounted in Desktop. Then click "Open Terminal"



20. "pwd" command shows you the present working directory location. 'ls' command shows the list of files/folders in your present working directory. Now make a directory "/var/ftp/pub" where we will copy the "Packages" folder of Linux OS DVD. Then we will go to "/etc/yum.repos.d" directory and delete the default repository files. And create our own repository file configuring "YUM".

```
File  Edit  View  Search  Terminal  Help
[root@dbserver OL6.6 x86_64 Disc 1 20141018]# pwd
/media/OL6.6 x86_64 Disc 1 20141018
[root@dbserver OL6.6 x86_64 Disc 1 20141018]# ls
EFI         GPL              LoadBalancer  README-en.html          RELEASE-NOTES-x86_64-en.html  ResilientStorage    Server
EULA        HighAvailability media.repo    RELEASE-NOTES-en       RELEASE-NOTES-x86-en          RPM-GPG-KEY         supportinfo
eula.en_US  images           Packages      RELEASE-NOTES-en.html  RELEASE-NOTES-x86-en.html     RPM-GPG-KEY-oracle  TRANS.TBL
eula.py     isolinux         README-en     RELEASE-NOTES-x86_64-en repodata                     ScalableFileSystem  UEK3
[root@dbserver OL6.6 x86_64 Disc 1 20141018]# mkdir -p /var/ftp/pub
[root@dbserver OL6.6 x86_64 Disc 1 20141018]# cp -r Packages /var/ftp/pub/
[root@dbserver OL6.6 x86_64 Disc 1 20141018]# cd /etc/yum.repos.d/
[root@dbserver yum.repos.d]# ls
packagekit-media.repo  public-yum-ol6.repo
[root@dbserver yum.repos.d]# rm -rf *
[root@dbserver yum.repos.d]# ls
[root@dbserver yum.repos.d]# vi ocp.repo
```

21. Enter the following parameters and values in the "/etc/yum.repos.d/ocp.repo" file.

```
File  Edit  View  Search  Terminal  Help
[ocp]
name=ocp
baseurl=file:///var/ftp/pub/Packages
gpgcheck=0
~
~
~
```

22. Then we will go to "/var/ftp/pub/Packages" directory and install 3 packages with rpm command that are required to configure "YUM". Then import the GPG key and test the "YUM" with "yum list all".

```
File  Edit  View  Search  Terminal  Help
[root@dbserver yum.repos.d]# cd /var/ftp/pub/Packages/
[root@dbserver Packages]# rpm -ivh deltarpm-3.5-0.5.20090913git.el6.x86_64.rpm
warning: deltarpm-3.5-0.5.20090913git.el6.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID ec551f03: NOKEY
Preparing...                ########################################### [100%]
   1:deltarpm               ########################################### [100%]
[root@dbserver Packages]# rpm -ivh python-deltarpm-3.5-0.5.20090913git.el6.x86_64.rpm
warning: python-deltarpm-3.5-0.5.20090913git.el6.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID ec551f03:
Preparing...                ########################################### [100%]
   1:python-deltarpm        ########################################### [100%]
[root@dbserver Packages]# rpm -ivh createrepo-0.9.9-22.el6.noarch.rpm
warning: createrepo-0.9.9-22.el6.noarch.rpm: Header V3 RSA/SHA256 Signature, key ID ec551f03: NOKEY
Preparing...                ########################################### [100%]
   1:createrepo             ########################################### [100%]
[root@dbserver Packages]# createrepo --database /var/ftp/pub/Packages
Spawning worker 0 with 3850 pkgs
Workers Finished
Gathering worker results

Saving Primary metadata
Saving file lists metadata
Saving other metadata
Generating sqlite DBs
Sqlite DBs complete
[root@dbserver Packages]# rpm --import /etc/pki/rpm-gpg/RPM-GPG-KEY-oracle
[root@dbserver Packages]# yum list all
[root@dbserver Packages]# yum install gcc* -y
```

23. Here we install packages yum command that are needed to install Oracle Database 11gr2.

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# yum install binutils* glibc* compat* elfutils* gcc* ksh* libaio* libgcc* libstdc* make* sysstat* numactl* openmotif* java* libXp* libXext* lib
Xtst* redhat-lsb-core* uln-internal-setup* unix* -y
```

24. Now open the "/etc/sysctl.conf" file.

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# vi /etc/sysctl.conf
```

25. Add the following lines at the end of the file.

```
fs.suid_dumpable = 1
fs.aio-max-nr = 1048576
fs.file-max = 6815744
kernel.shmmni = 4096
# semaphores: semmsl, semmns, semopm, semmni
kernel.sem = 250 32000 100 128
net.ipv4.ip_local_port_range = 9000 65500
net.core.rmem_default=262144
net.core.rmem_max=4194304
net.core.wmem_default=262144
net.core.wmem_max=1048586
```

26. "sysctl -a" command applies the recent changes that are made in the file. "sysctl -p" shows the current value.

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# sysctl -a
[root@dbserver Packages]# sysctl -p
net.ipv4.ip_forward = 1
net.ipv4.conf.default.rp_filter = 1
net.ipv4.conf.default.accept_source_route = 0
kernel.sysrq = 0
kernel.core_uses_pid = 1
net.ipv4.tcp_syncookies = 1
error: "net.bridge.bridge-nf-call-ip6tables" is an unknown key
error: "net.bridge.bridge-nf-call-iptables" is an unknown key
error: "net.bridge.bridge-nf-call-arptables" is an unknown key
kernel.msgmnb = 65536
kernel.msgmax = 65536
kernel.shmmax = 68719476736
kernel.shmall = 4294967296
fs.suid_dumpable = 1
fs.aio-max-nr = 1048576
fs.file-max = 6815744
kernel.shmmni = 4096
kernel.sem = 250 32000 100 128
net.ipv4.ip_local_port_range = 9000 65500
net.core.rmem_default = 262144
net.core.rmem_max = 4194304
net.core.wmem_default = 262144
net.core.wmem_max = 1048586
[root@dbserver Packages]#
```

27. Open the "/etc/security/limits.conf".

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# vi /etc/security/limits.conf
```

28. Add the following lines at the end of the file.

```
oracle              soft    nproc   16384
oracle              hard    nproc   16384
oracle              soft    nofile  4096
oracle              hard    nofile  65536
oracle              soft    stack   10240
# End of file
```

29. Now we create the following groups and user that are needed to install Oracle Database 11gr2. And set the password of oracle user.

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# groupadd -g 1111 oinstall
[root@dbserver Packages]# groupadd -g 1112 dba
[root@dbserver Packages]# groupadd -g 1113 oper
[root@dbserver Packages]# groupadd -g 1114 asmadmin
[root@dbserver Packages]# groupadd -g 1115 asmdba
[root@dbserver Packages]# groupadd -g 1116 asmoper
[root@dbserver Packages]# useradd -u 2222 -g oinstall -G dba,asmdba,oper oracle
[root@dbserver Packages]# passwd oracle
Changing password for user oracle.
New password:
BAD PASSWORD: it is based on a dictionary word
BAD PASSWORD: is too simple
Retype new password:
passwd: all authentication tokens updated successfully.
[root@dbserver Packages]# su - oracle
[oracle@dbserver ~]$
```

30.

```
File  Edit  View  Search  Terminal  Help
[root@dbserver Packages]# mkdir -p /u01/app/oracle/product/11.2.0.3/dbhome_1
[root@dbserver Packages]# mkdir -p /u02/soft
[root@dbserver Packages]# chown -R oracle:oinstall /u01
[root@dbserver Packages]# chown -R oracle:oinstall /u02
[root@dbserver Packages]# chmod -R 775 /u01
[root@dbserver Packages]# chmod -R 775 /u02
```

31. We go to the "/u02/soft" folder where we have copied Oracle Software Zip files. And unzip the files.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver Desktop]$ cd /u02/soft/
[oracle@dbserver soft]$ ls
p10404530_112030_Linux-x86-64_1of7.zip  p10404530_112030_Linux-x86-64_2of7.zip
[oracle@dbserver soft]$ unzip p10404530_112030_Linux-x86-64_1of7.zip
[oracle@dbserver soft]$ unzip p10404530_112030_Linux-x86-64_2of7.zip
```

32. After extracting the zip files, we see that there a folder named "database" is created. We go to "database" folder and run the oracle universal installer(OUI) with "./runInstaller".

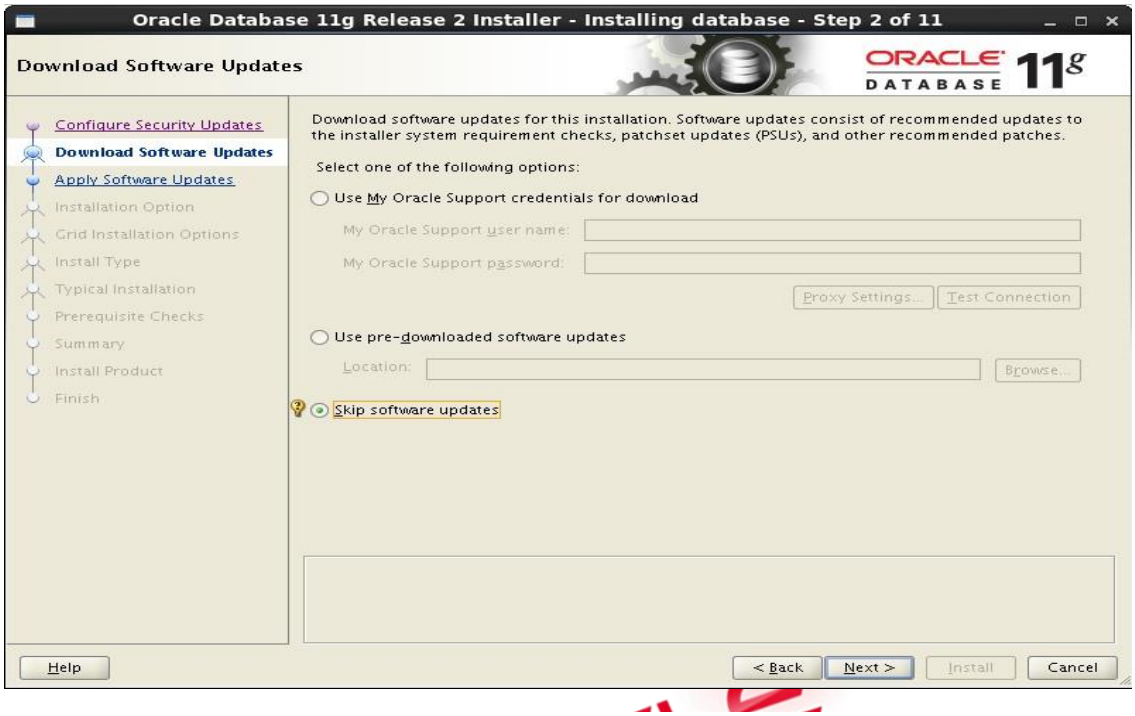
```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver soft]$ ls
database  p10404530_112030_Linux-x86-64_1of7.zip  p10404530_112030_Linux-x86-64_2of7.zip
[oracle@dbserver soft]$ cd database/
[oracle@dbserver database]$ ls
doc  install  readme.html  response  rpm  runInstaller  sshsetup  stage  welcome.html
[oracle@dbserver database]$ ./runInstaller
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 120 MB.   Actual 75848 MB    Passed
Checking swap space: must be greater than 150 MB.   Actual 4095 MB    Passed
Checking monitor: must be configured to display at least 256 colors.    Actual 16777216    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2017-01-04_05-21-58PM. Please wait ...
```

33.Here the welcome page appears.

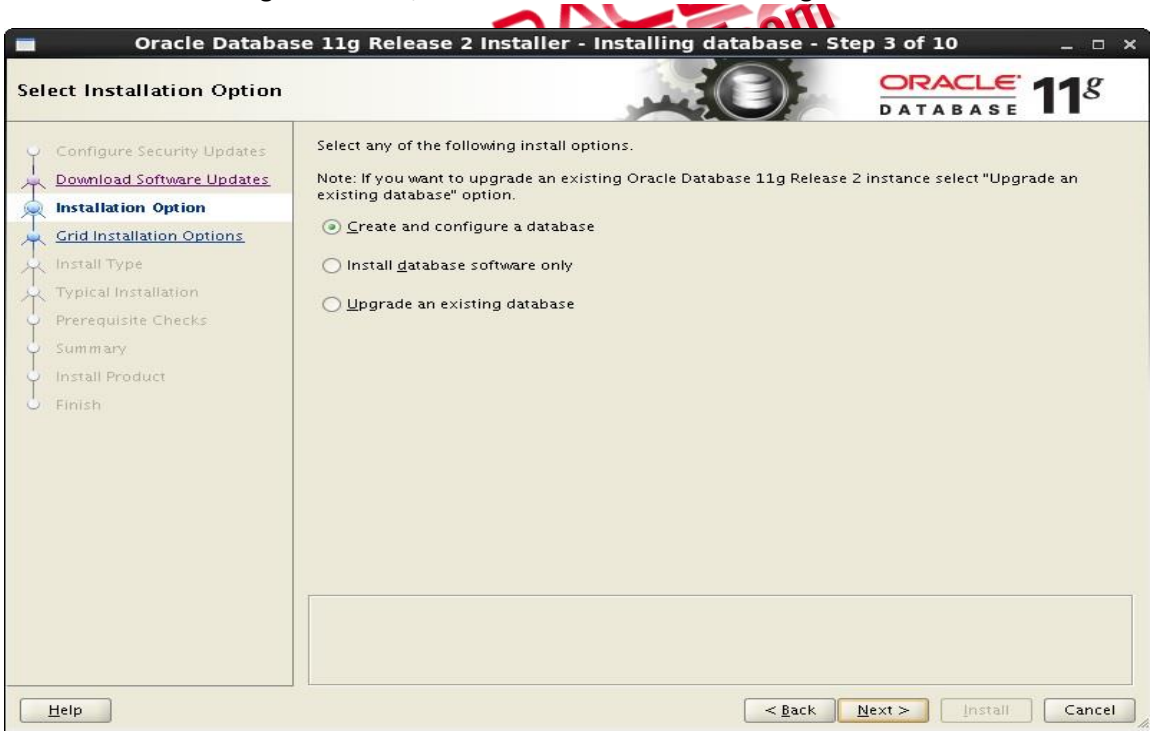
34. We uncheck the radio button "I wish to receive security updates vi My Oracle Support" and click next to continue the installation process.

35. When this alert appears just click "YES" as we did not provide any email address.

36. We select the "Skip software updates" and click "Next" to continue.

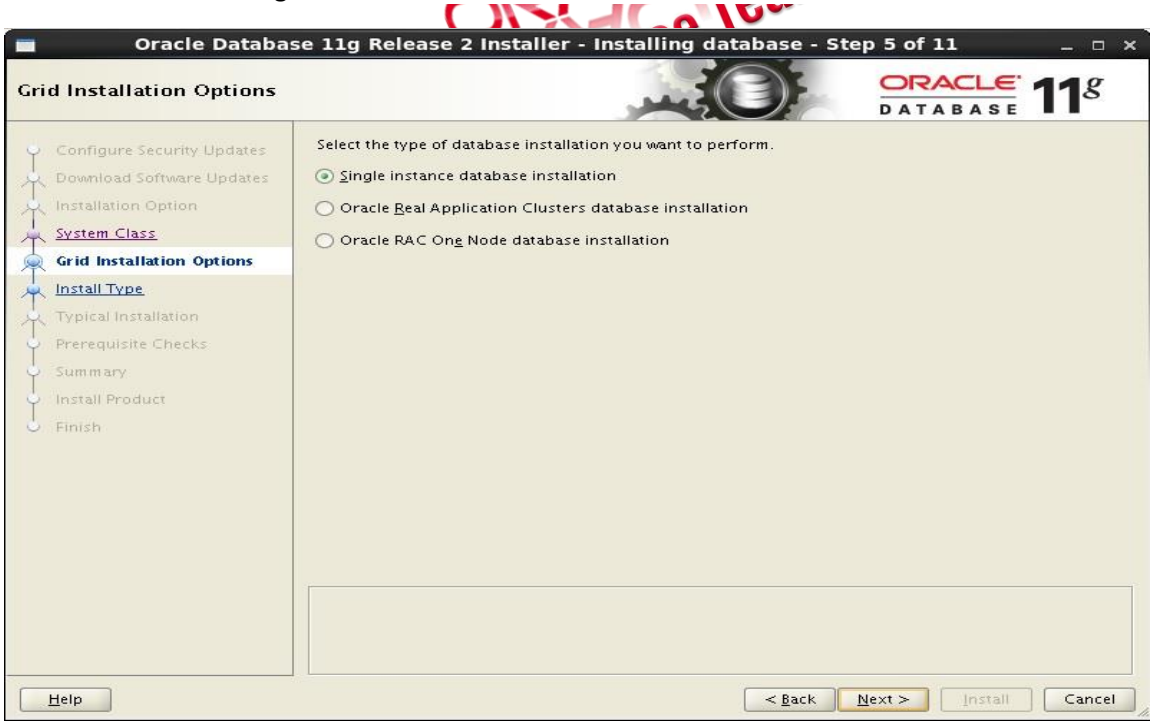


37. As we are installing it first time, we will select "Create and configure a database" and click "Next".

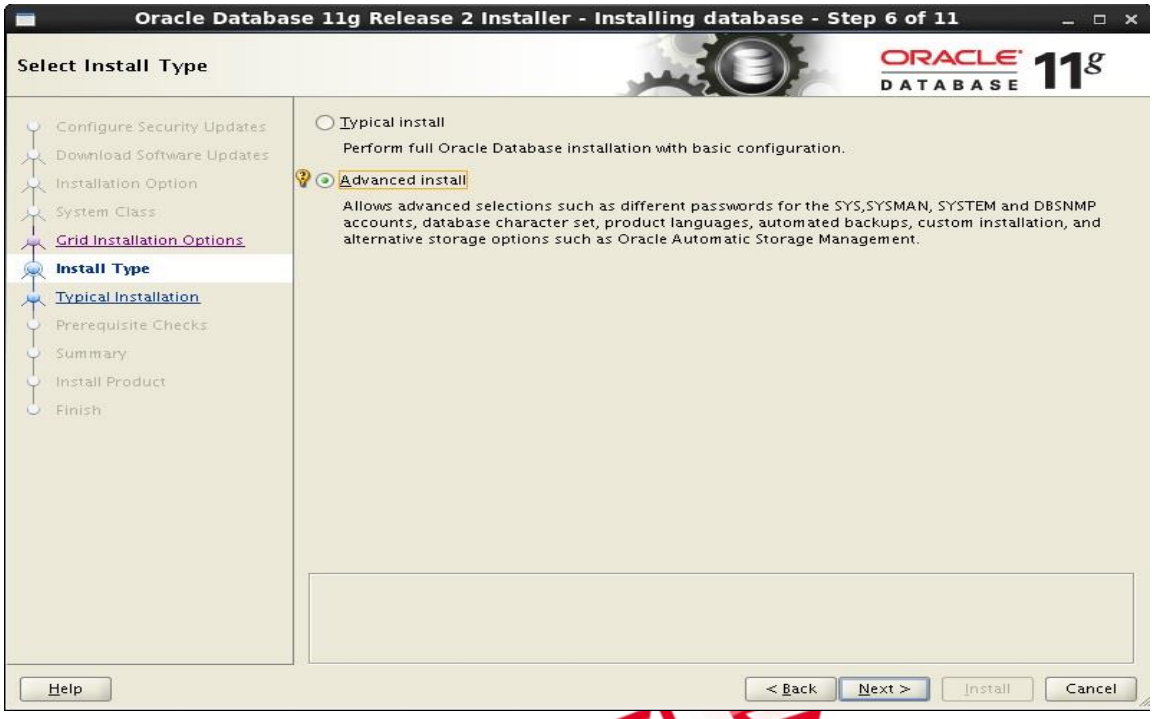


38. Here we select "Server Class" and click "Next".

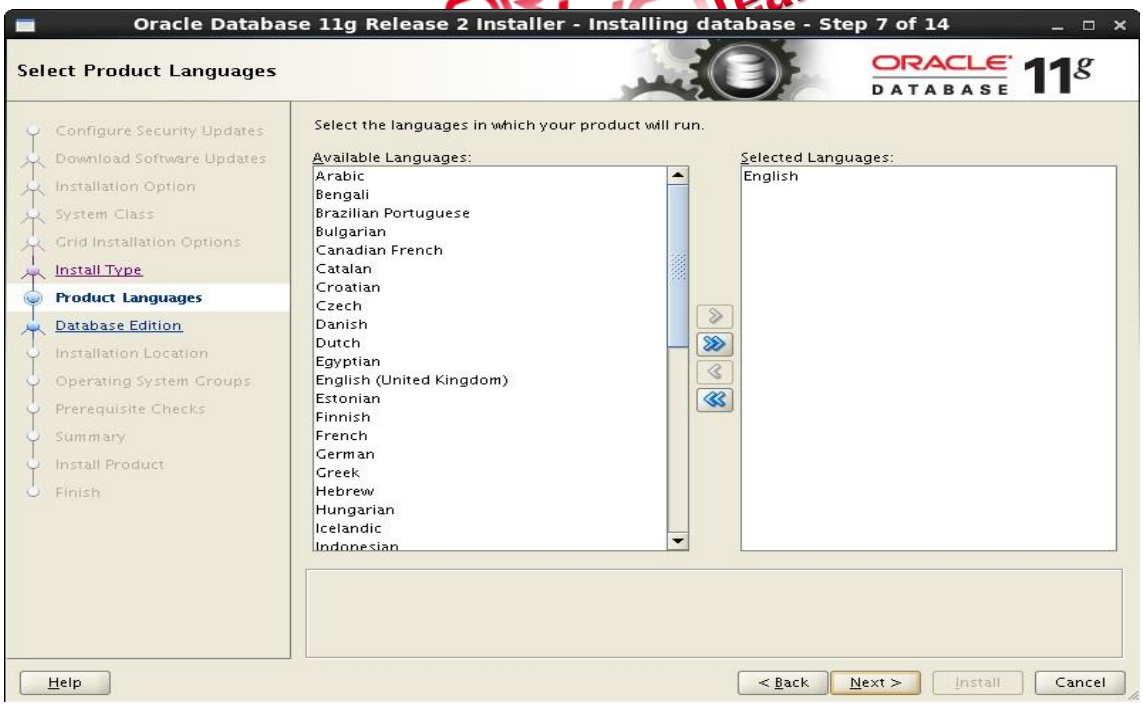
39. Here we select "Single instance database installation" and click "Next".



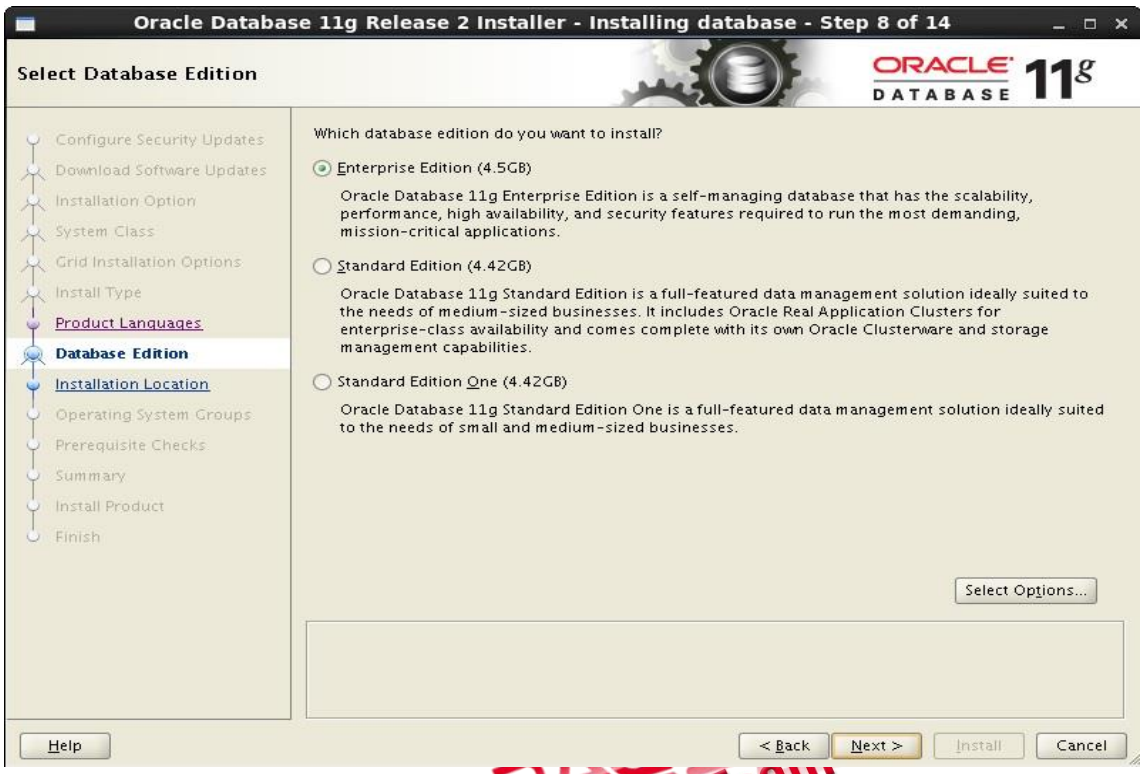
40. Now we select the "Advanced install" and click "Next".



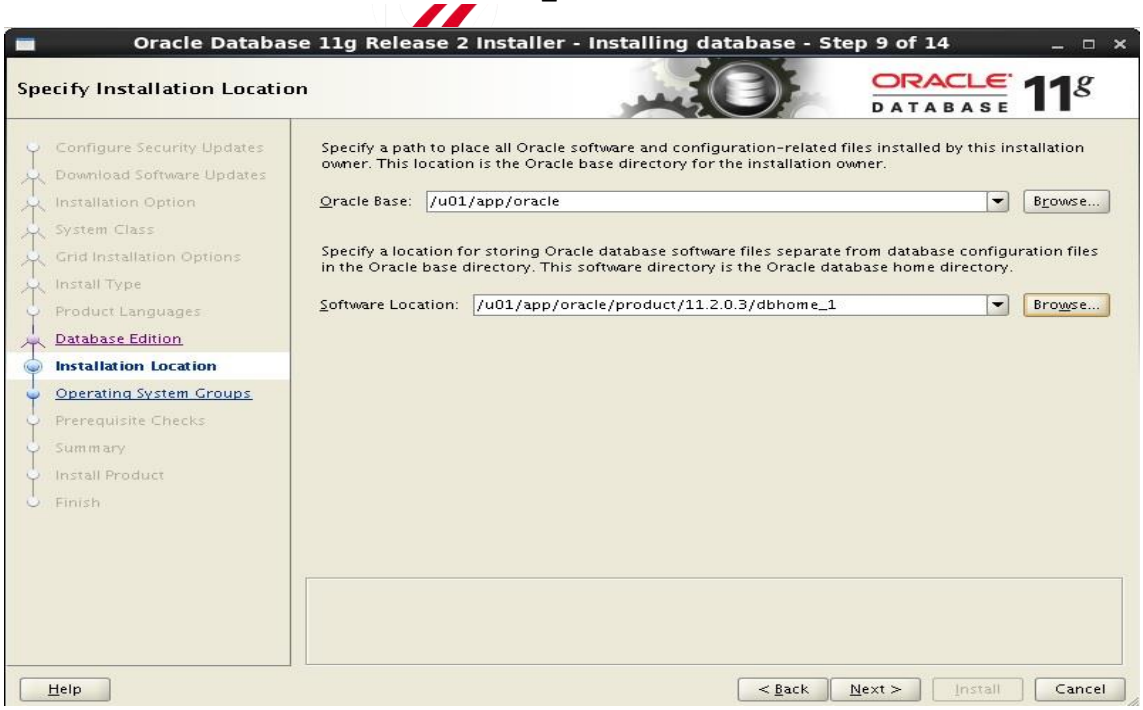
41. Here we select "English" and click "Next".



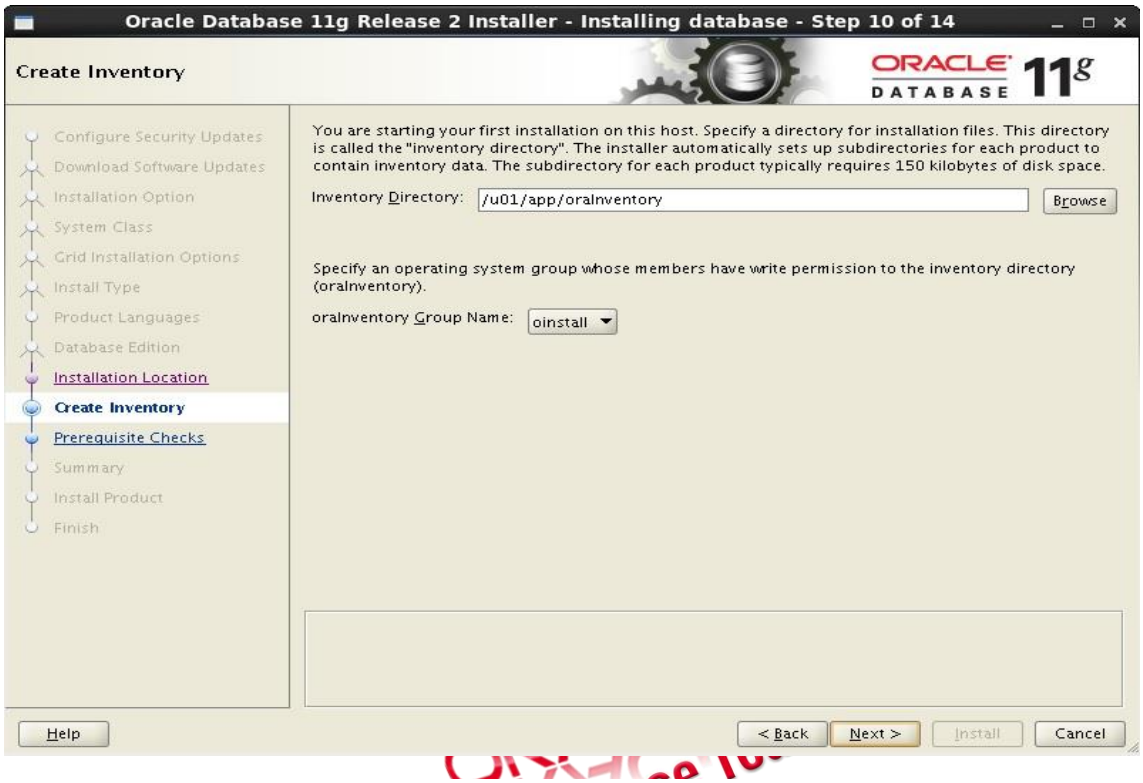
42. Here we select "Enterprise Edition" and click "Next".



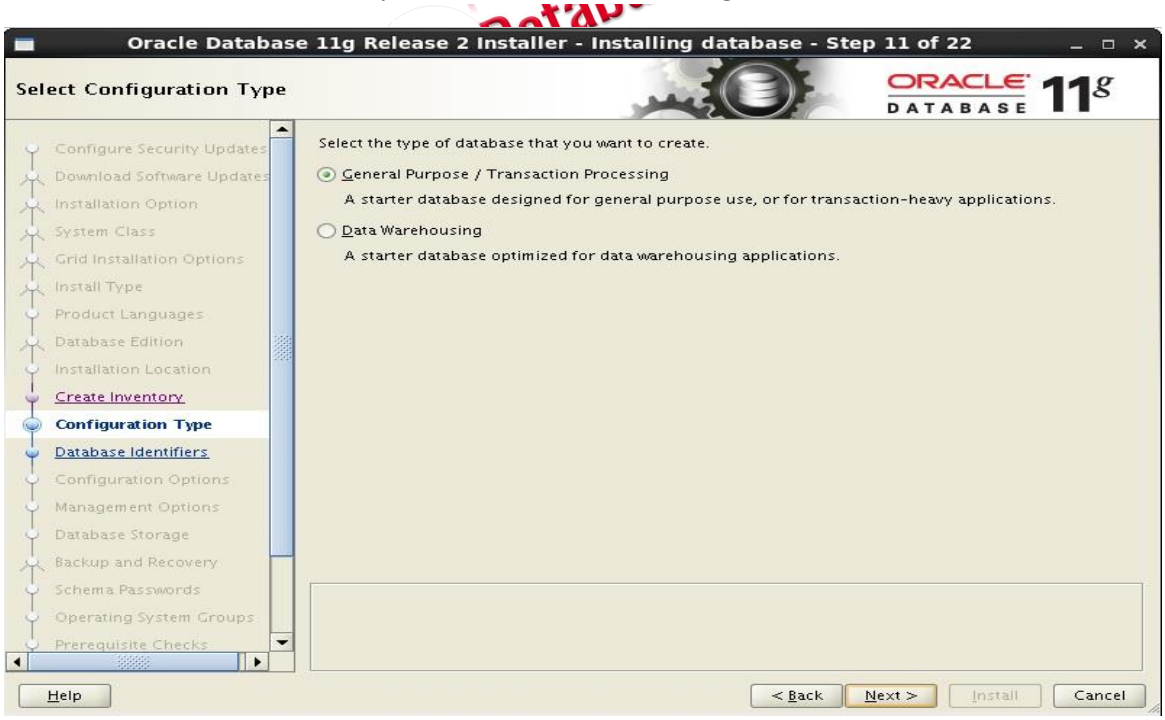
43. Here we provide the Software location "/u01/app/oracle/product/11.2.0.3/dbhome1" that was created earlier. This location is called ORACLE_HOME.



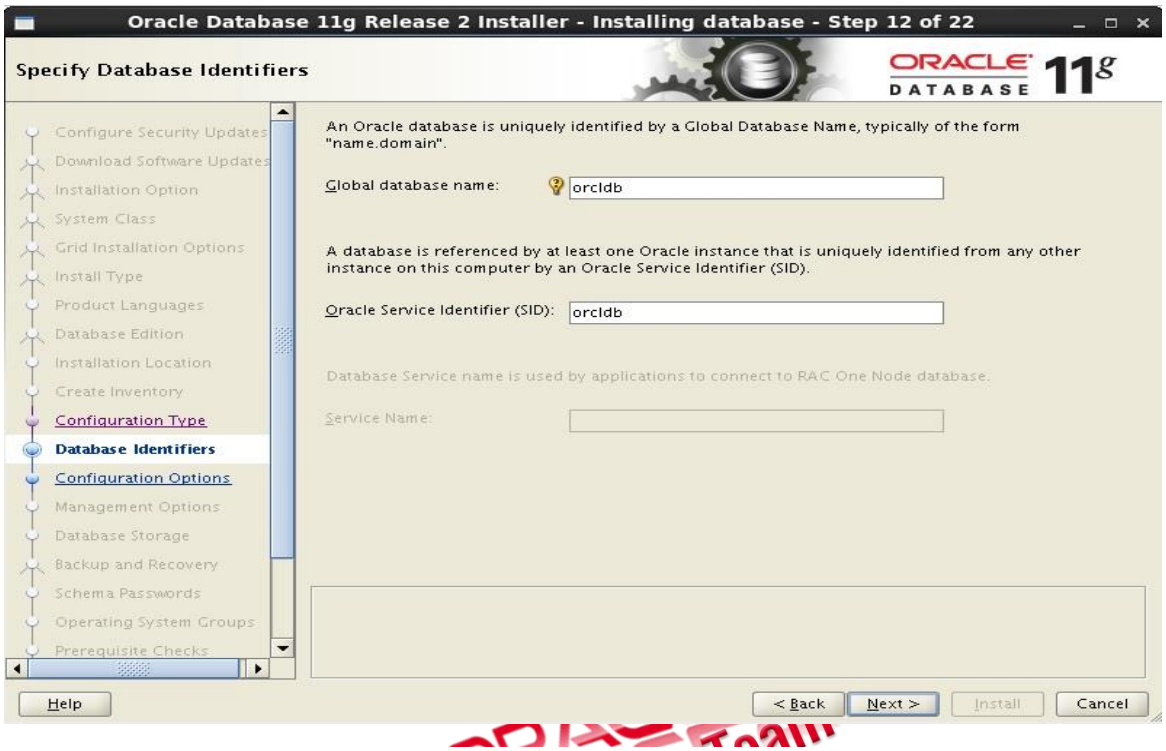
44. "Inventory Directory" will be automatically selected. And "oraInventory Group Name" will also be selected automatically as we have already created the "oinstall" group.



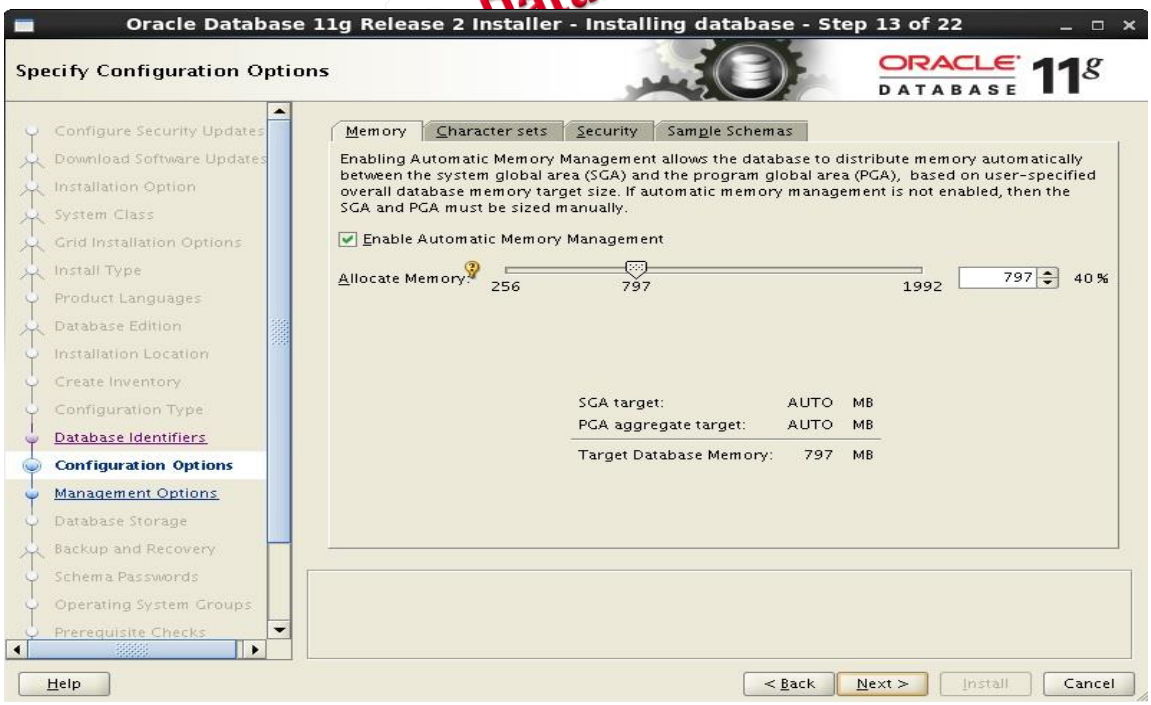
45. Here we select "General Purpose / Transaction Processing" and click "Next" to continue.



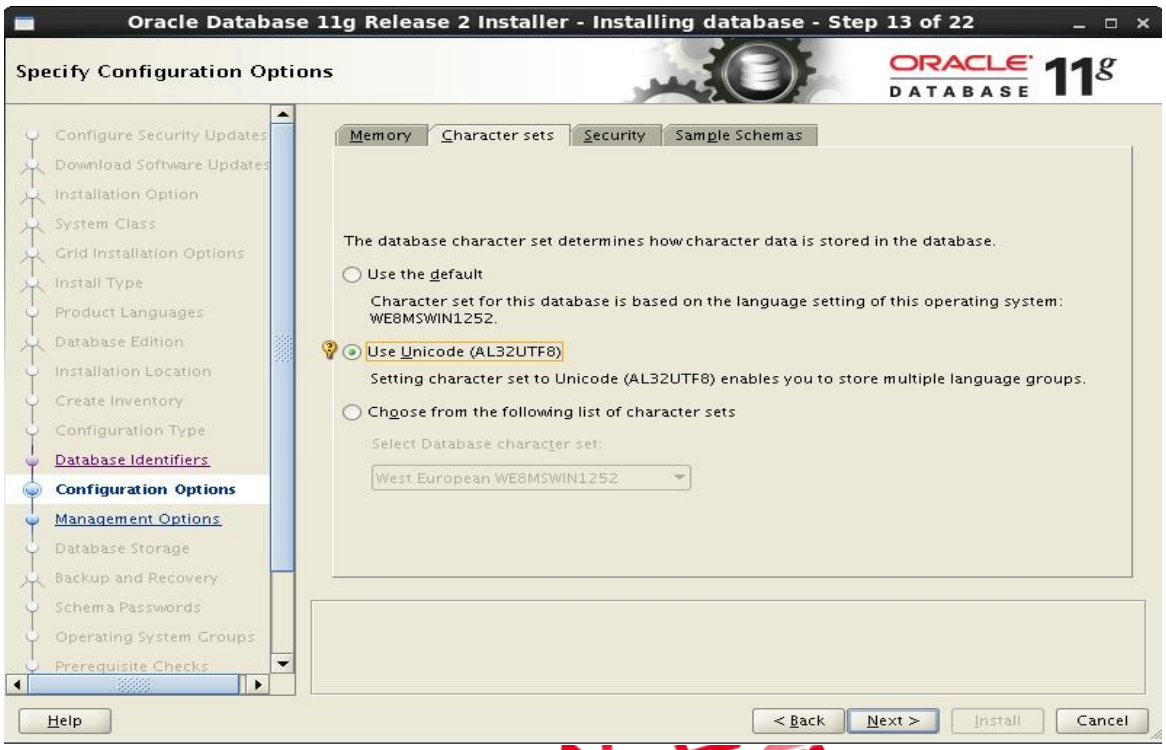
46. Here we provide the Global Database Name and Oracle Service Identifier(SID). Normally they are same in the single instance database.



47. In this tab we will check "Enable Automatic Memory Management" and set the value of total memory that will be used by the database.

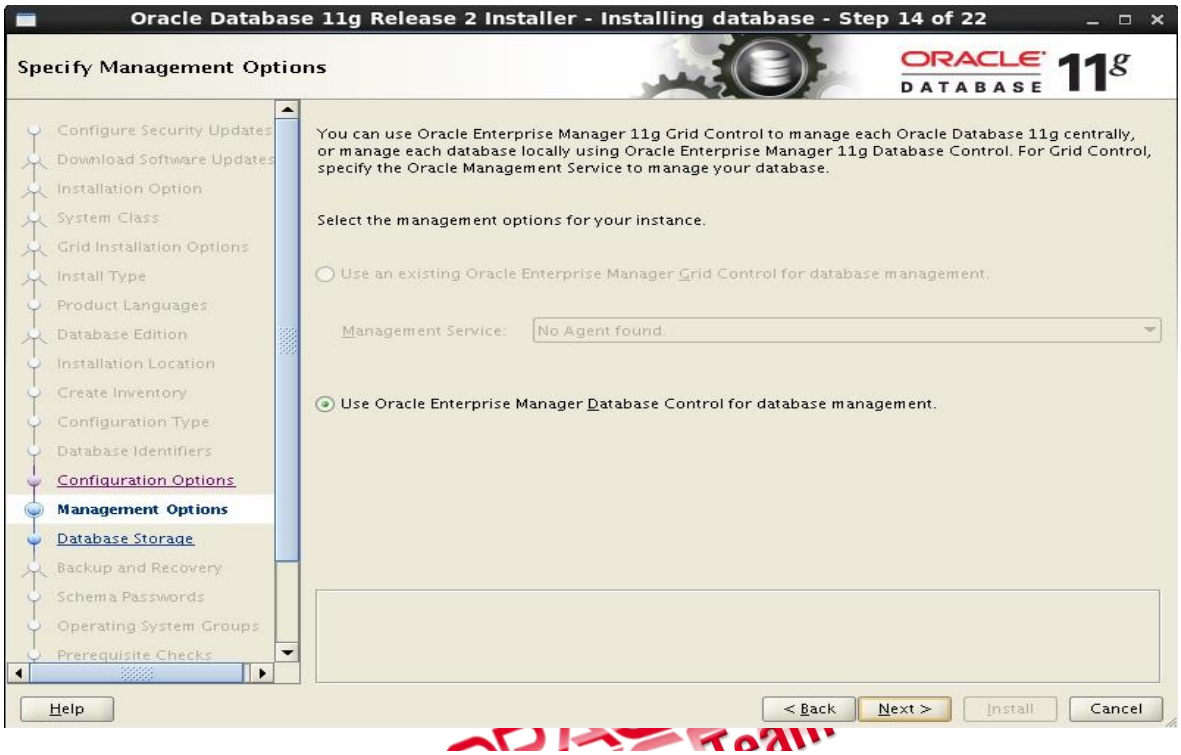


48. In this "TAB" we will select "Use Unicode(AL32UTF8)" as our character set.

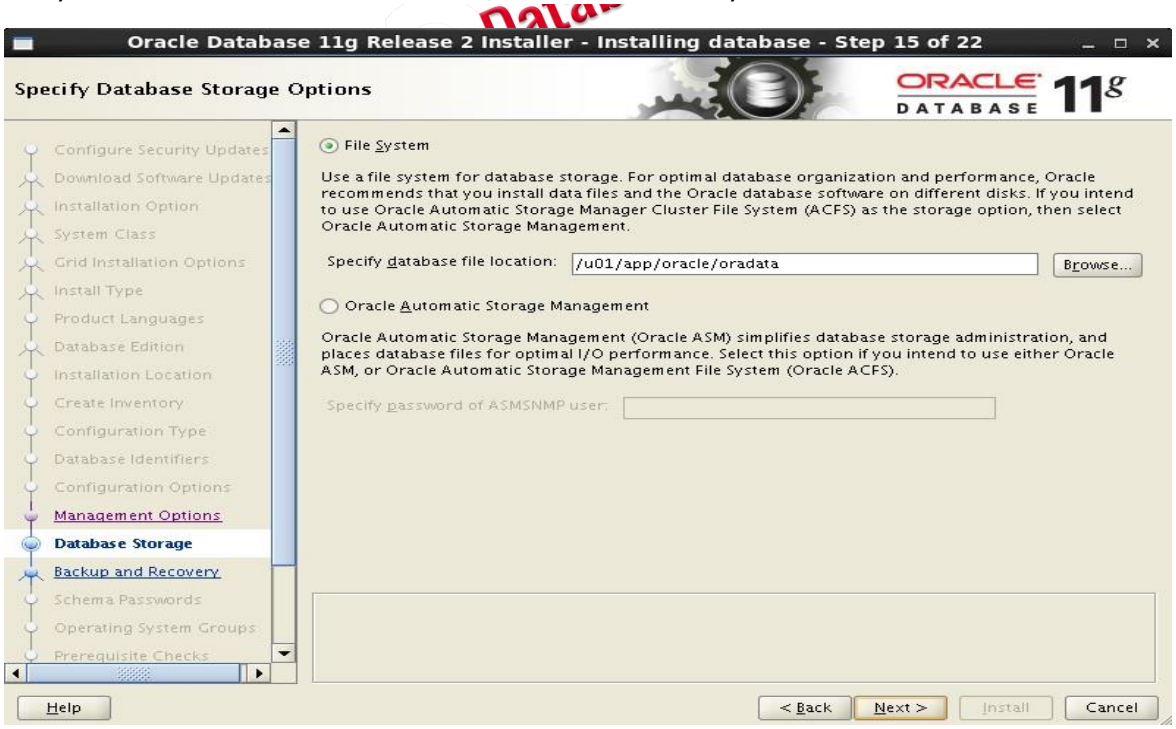


49. This "TAB" is optional , if we want to install sample schema to practice then we check "Create database with sample schemas" and click "Next".

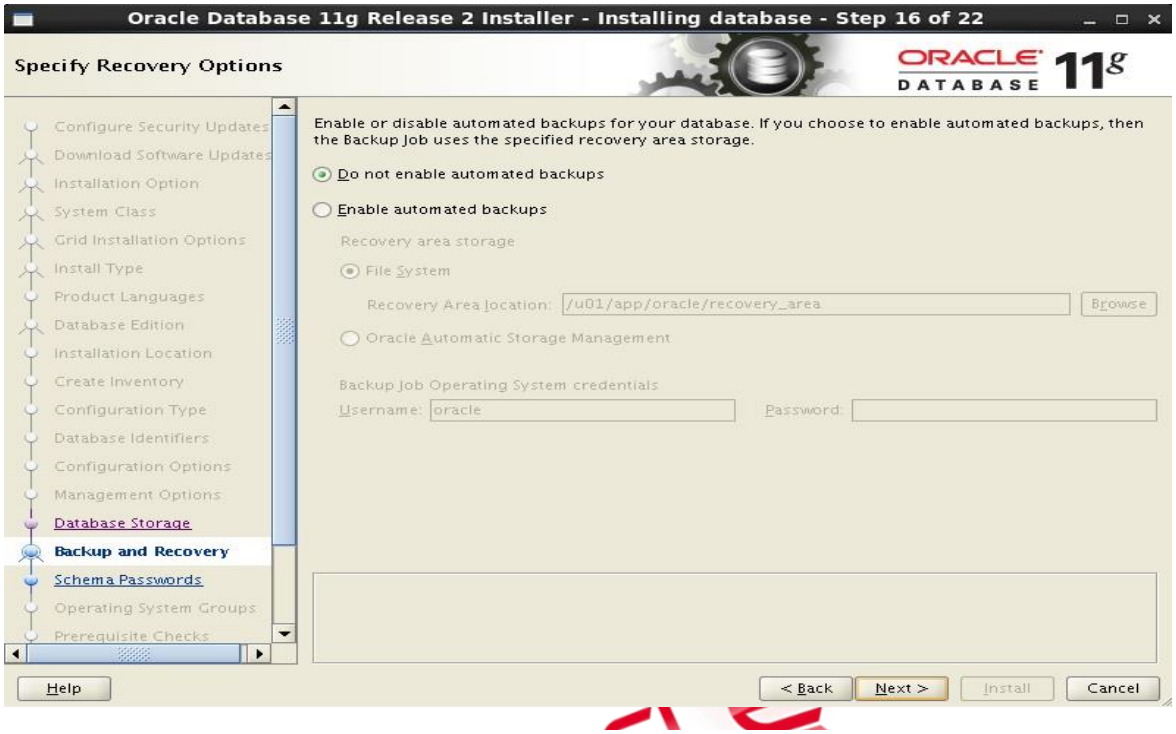
50. If we want to install the Oracle Enterprise manager then we need to check "Use Oracle Enterprise Database Control for database management" and click "Next".



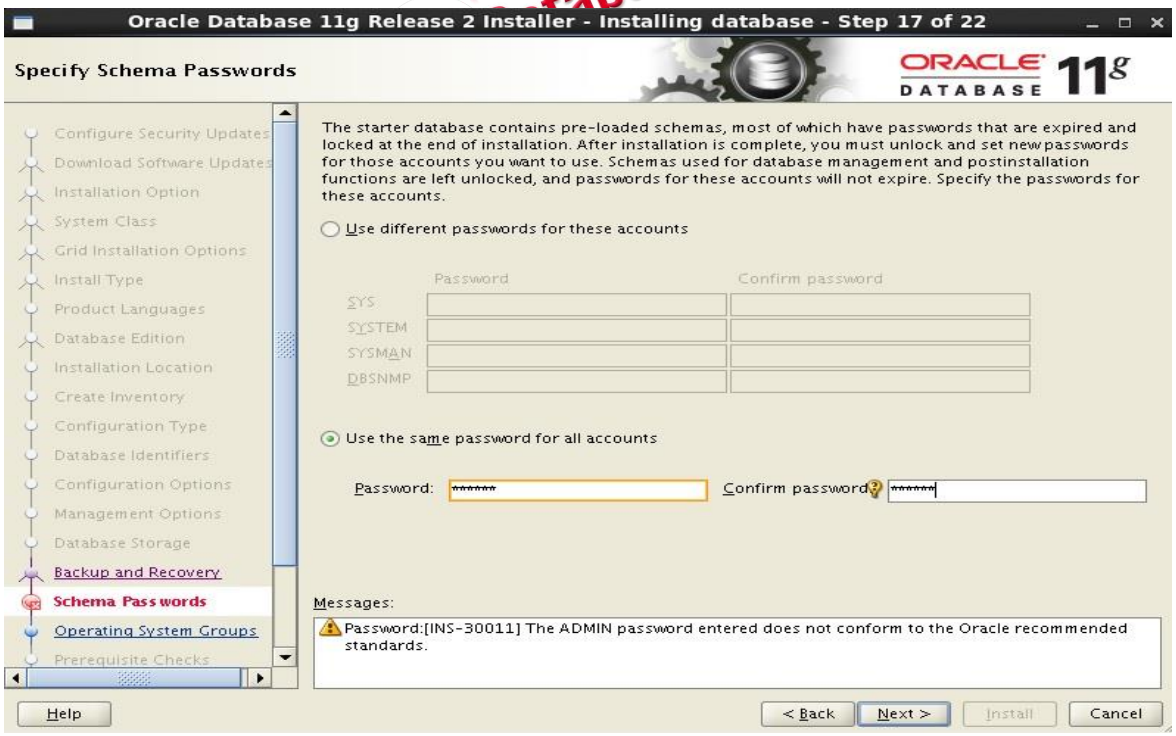
51. We need to specify the location where our datafiles , redologs will be stored. As we are using local file system of the server to store the files, so we select "File System" and set the location.



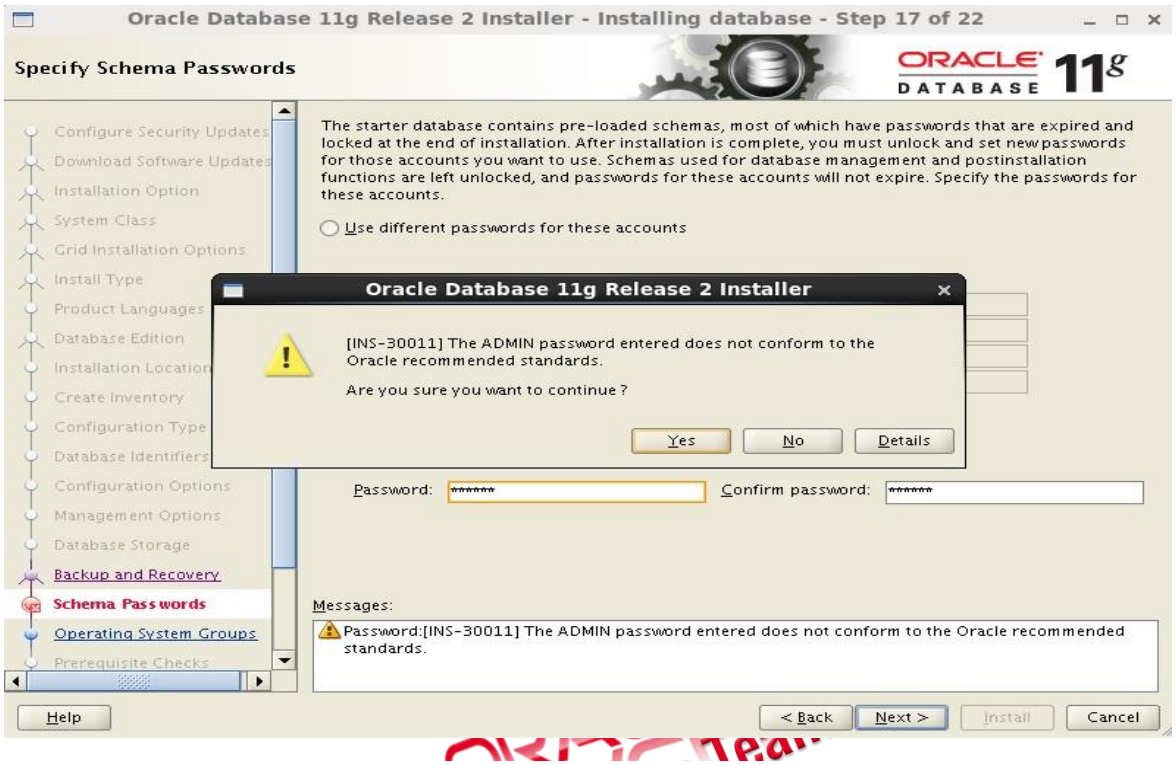
52. Here we select "Do not enable automated backups" and click "Next" to continue.



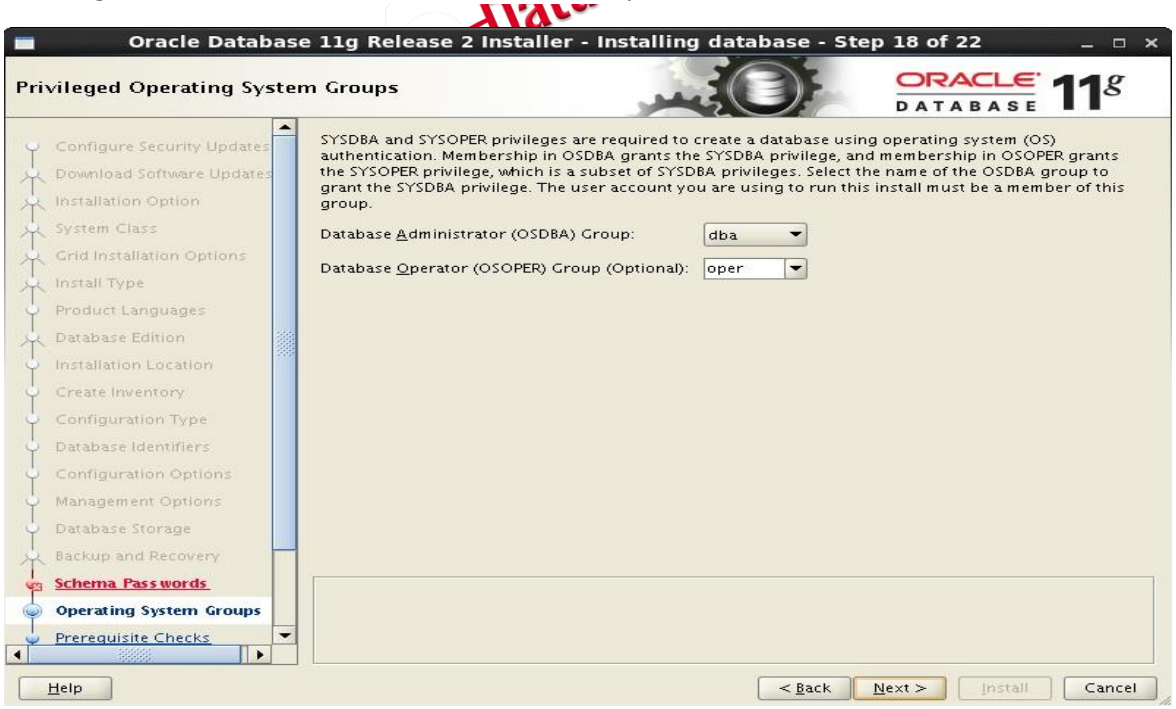
53. Here we provide the password of the "SYS,SYSTEM,SYSMAN,DBSNMP" users. There oracle database user with administrative privileges. Here we set same password for all the users. If needed we can set different password for each user.



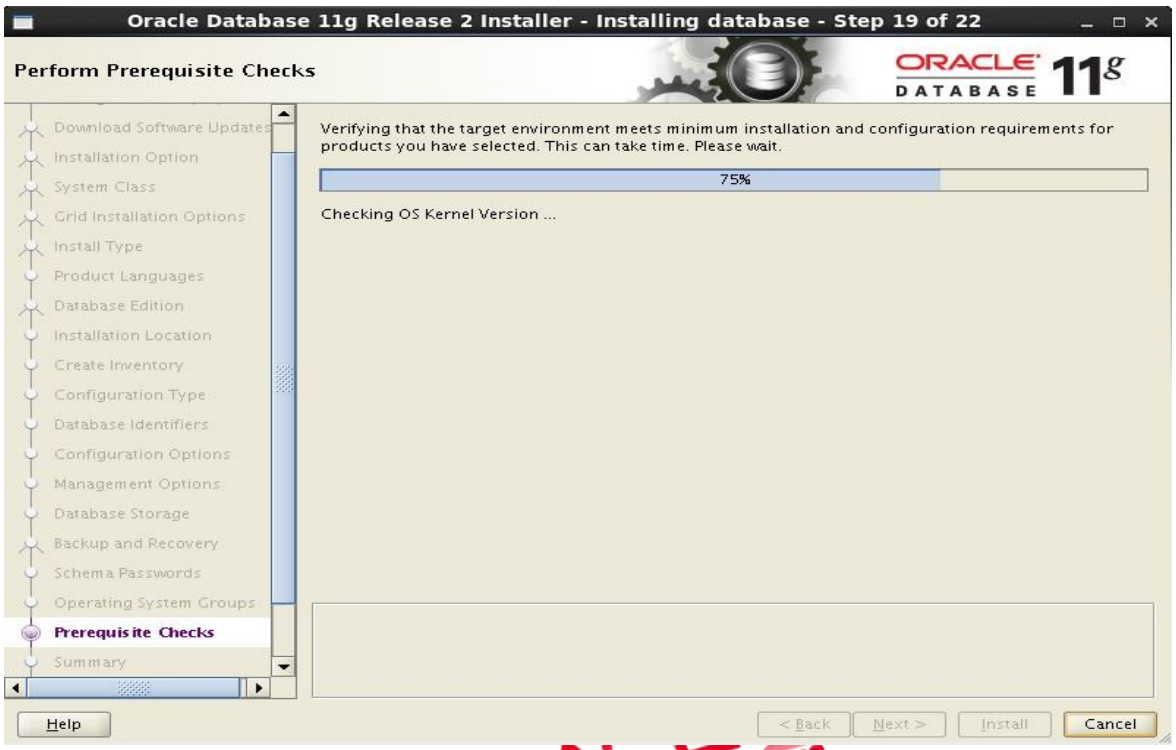
54. This alert says that we have given a week password that does not compile the oracle standard. Just click "Yes" to continue.



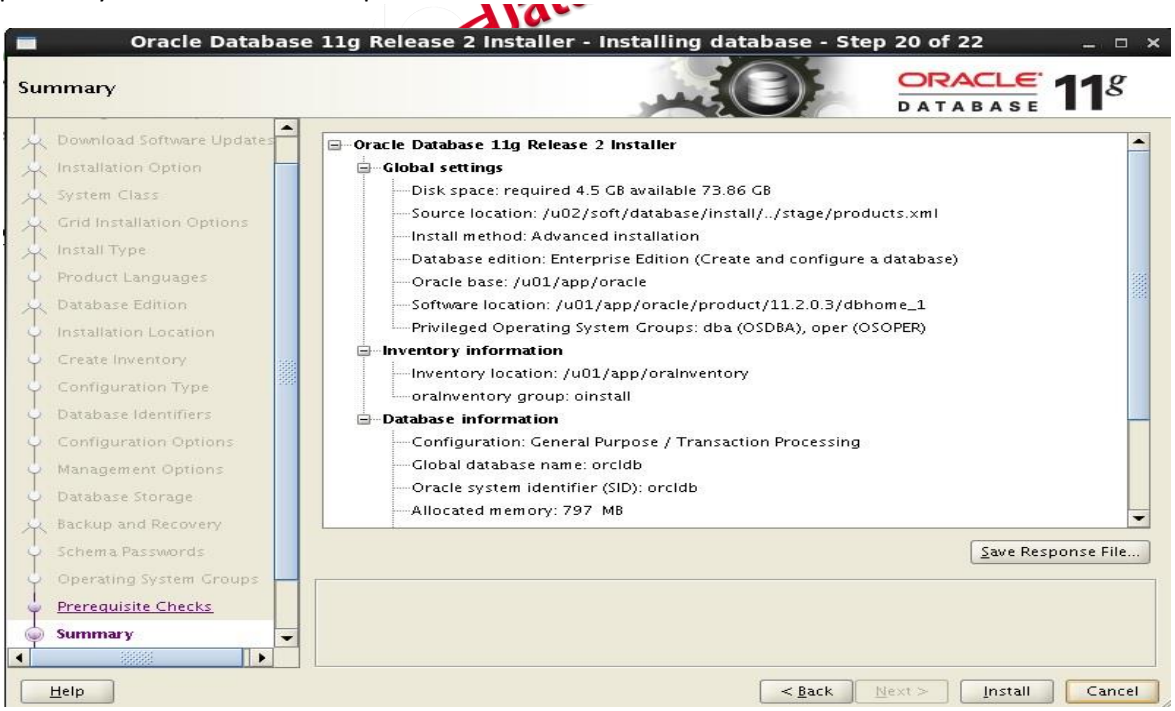
55. Here we need to specify "OSDBA" and "SYSOPER" group, if we created the "dba&oper" group before installing the database these values are automatically selected here. Just click "Next" to continue.



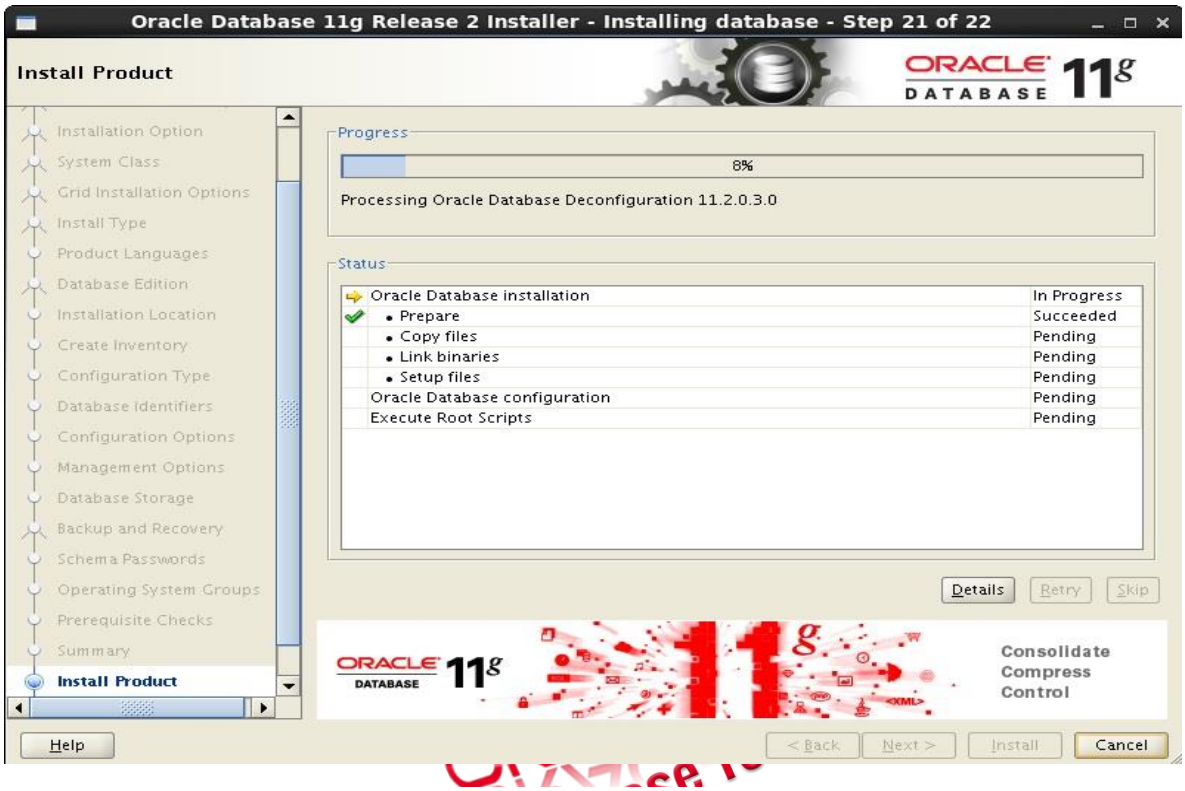
56. In this "TAB" oracle is checking the pre-requisites that are required to install oracle database 11gr2.



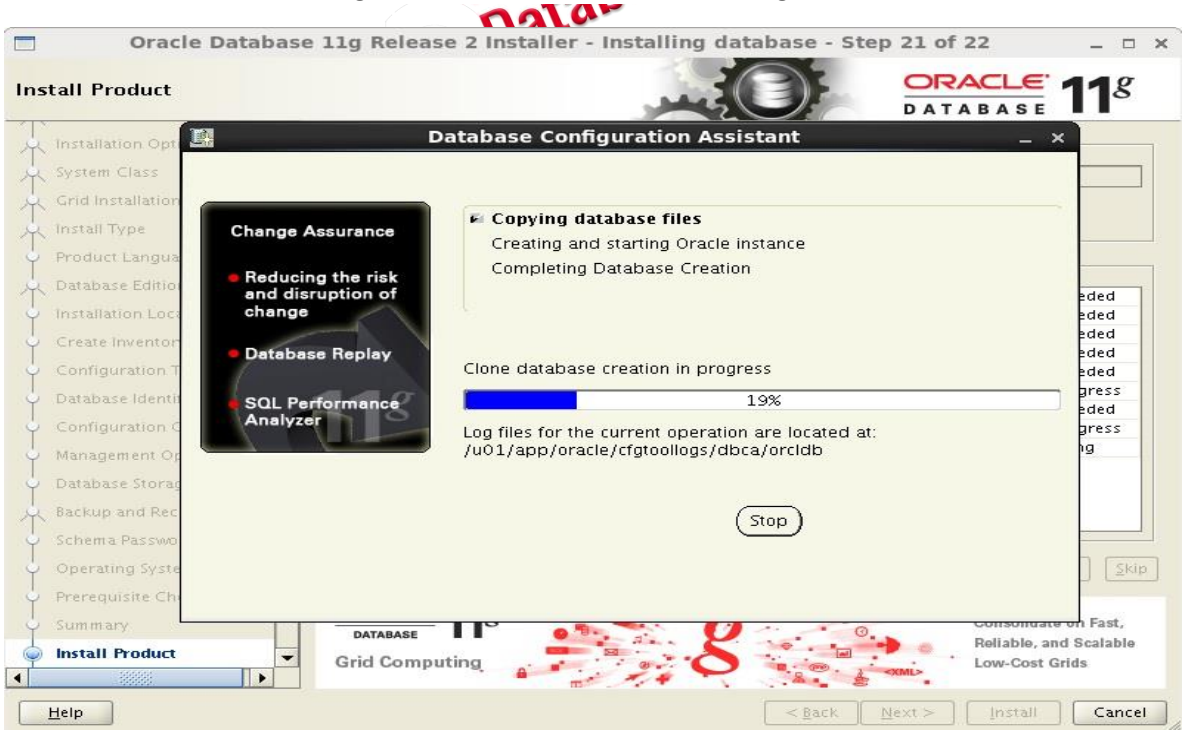
57. As we have done all the pre-requisites , so we did not get any error. If there were any pre-requisites that was not configured , oracle let you do task here and run the checking again. Even oracle also provide you an automated script to solve the issue. Now click "Install" to start the installation.



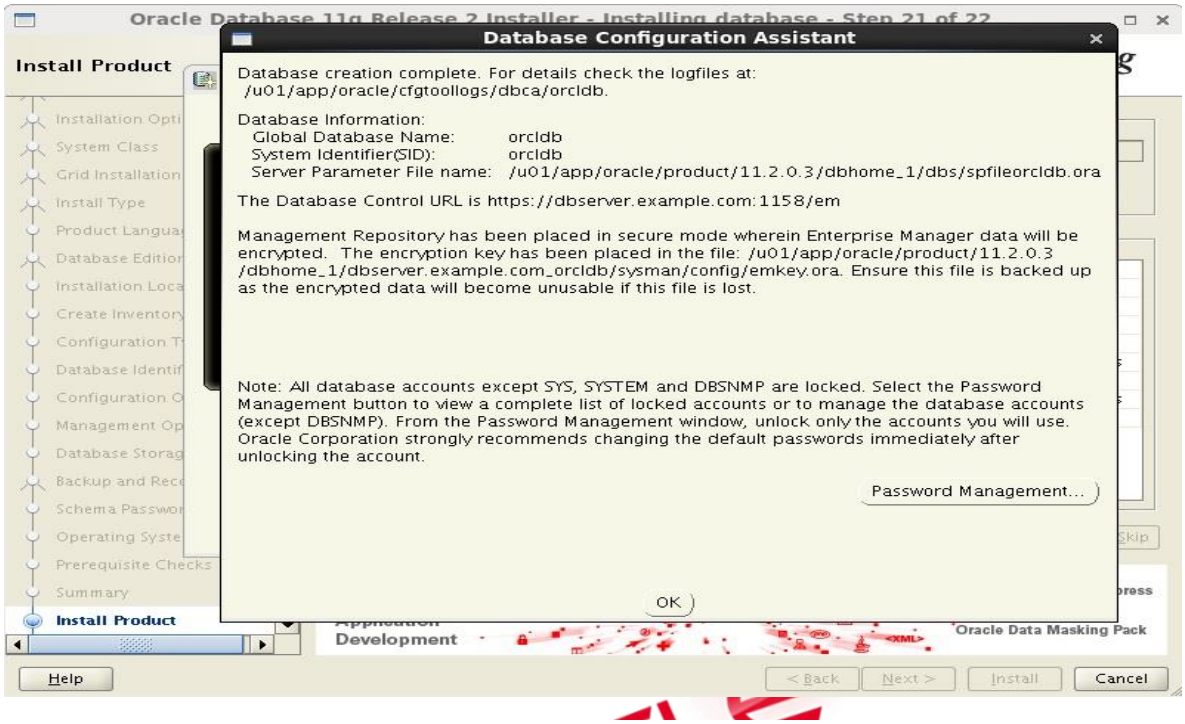
58. Here we can see status of installation. It will take several minutes to complete that depends on your server configuration.



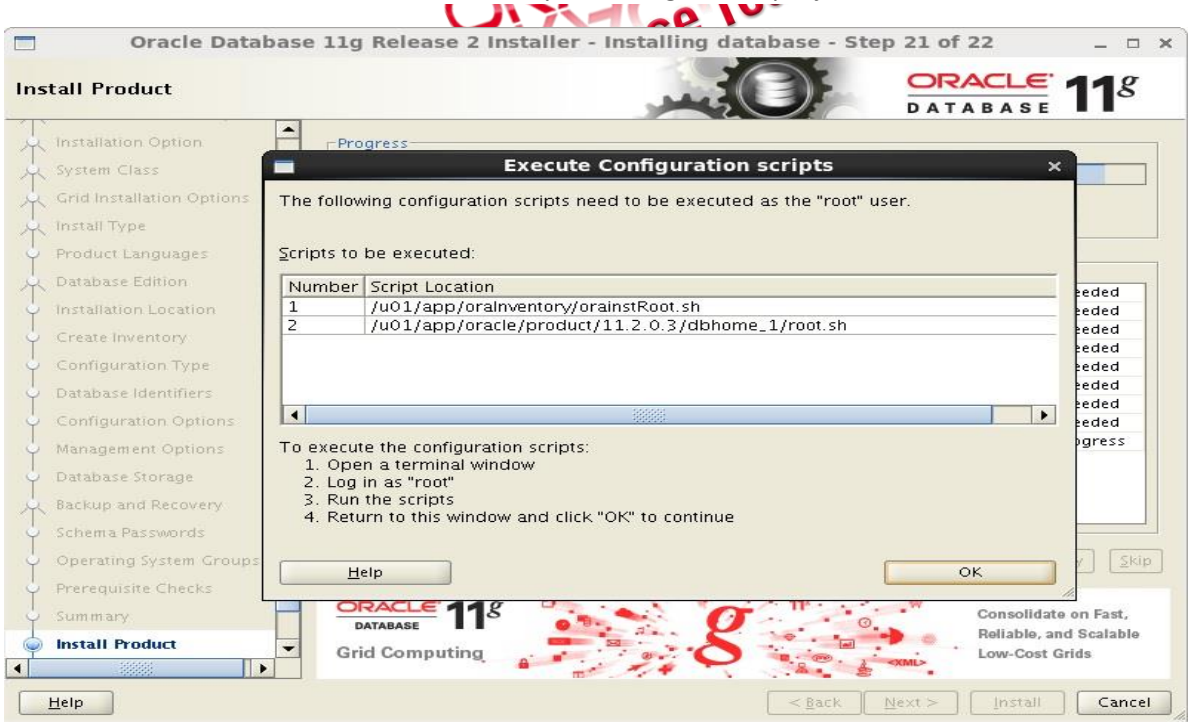
59. Now Installation is creating the database with Database Configuration Assistance.



60. When this screen appears , our database installation is almost done. Click "OK".



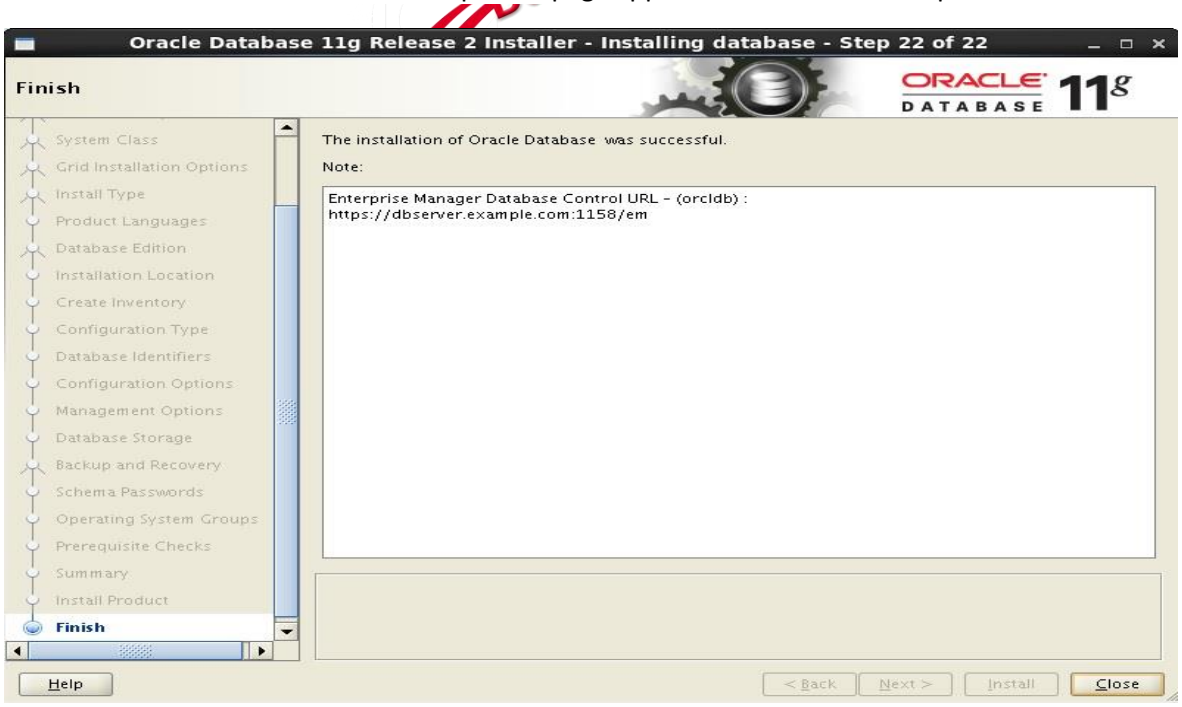
61. Here oracle provides two scripts to run as root user for completing the installation. Run the scripts from a terminal as root user. After successfully executing the scripts just click "ON".



62. Here we execute the scripts as root user.

```
File  Edit  View  Search  Terminal  Tabs  Help
oracle@dbserver:/u02/soft/database
[oracle@dbserver database]$ su -
Password:
[root@dbserver ~]# /u01/app/oraInventory/orainstRoot.sh
Changing permissions of /u01/app/oraInventory.
Adding read,write permissions for group.
Removing read,write,execute permissions for world.

Changing groupname of /u01/app/oraInventory to oinstall.
The execution of the script is complete.
[root@dbserver ~]# /u01/app/oracle/product/11.2.0.3/dbhome_1/root.sh
Performing root user operation for Oracle 11g

The following environment variables are set as:
    ORACLE_OWNER= oracle
    ORACLE_HOME=  /u01/app/oracle/product/11.2.0.3/dbhome_1

Enter the full pathname of the local bin directory: [/usr/local/bin]:
   Copying dbhome to /usr/local/bin ...
   Copying oraenv to /usr/local/bin ...
   Copying coraenv to /usr/local/bin ...


Creating /etc/oratab file...
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.
Finished product-specific root actions.
[root@dbserver ~]#
```

63. Here the database installation completion page appears. Click close to complete the installation.



64. Now to login to database with sqlplus prompt from a terminal we need to set environment variable. Every time we login to database with new terminal we must set the environment variable.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver ~]$ . oraenv
ORACLE_SID = [oracle] ? orcldb
The Oracle base has been set to /u01/app/oracle
[oracle@dbserver ~]$ sqlplus / as sysdba

SQL*Plus: Release 11.2.0.3.0 Production on Wed Jan 4 18:55:50 2017

Copyright (c) 1982, 2011, Oracle.  All rights reserved.


Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> select name,open_mode from v$database;

NAME      OPEN_MODE
--------- --------------------
ORCLDB    READ WRITE

SQL>
```

65. As we did not set environment variable in this terminal sqlplus command is not working here.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver database]$ sqlplus / as sysdba
bash: sqlplus: command not found
[oracle@dbserver database]$
```

66. To avoid setting environment variable each time, we can set environment variable permanently in "/home/oracle/.bash_profile" or "/home/oracle/.bash_rc" file. So that we do not need to set environment variable all times.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver ~]$ cd /home/oracle/
[oracle@dbserver ~]$ pwd
/home/oracle
[oracle@dbserver ~]$ vi .bash_profile
```

67. Add following lines at the end of the file as per your configuration.

```
# Oracle Settings
TMP=/tmp; export TMP
TMPDIR=$TMP; export TMPDIR
ORACLE_HOSTNAME=dbserver.example.com; export ORACLE_HOSTNAME
ORACLE_UNQNAME=orcldb; export ORACLE_UNQNAME
ORACLE_BASE=/u01/app/oracle; export ORACLE_BASE
ORACLE_HOME=$ORACLE_BASE/product/11.2.0.3/dbhome_1; export ORACLE_HOME
ORACLE_SID=orcldb; export ORACLE_SID
PATH=/usr/sbin:$PATH; export PATH
PATH=$ORACLE_HOME/bin:$PATH; export PATH
LD_LIBRARY_PATH=$ORACLE_HOME/lib:/lib:/usr/lib; export LD_LIBRARY_PATH
CLASSPATH=$ORACLE_HOME/jlib:$ORACLE_HOME/rdbms/jlib; export CLASSPATH
```

68. After inserting variables in "/home/oracle/.bash_profile", you need to load the file manually. But after reboot the environment variable will be loaded automatically.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver ~]$ cd /home/oracle/
[oracle@dbserver ~]$ pwd
/home/oracle
[oracle@dbserver ~]$ vi .bash_profile
[oracle@dbserver ~]$ . .bash_profile
[oracle@dbserver ~]$ sqlplus / as sysdba

SQL*Plus: Release 11.2.0.3.0 Production on Wed Jan 4 19:02:50 2017

Copyright (c) 1982, 2011, Oracle.  All rights reserved.


Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> select name,open_mode from v$database;

NAME      OPEN_MODE
--------- --------------------
ORCLDB    READ WRITE

SQL>
```

69. After installation a default listener is created and started automatically.

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver ~]$ lsnrctl status

LSNRCTL for Linux: Version 11.2.0.3.0 - Production on 04-JAN-2017 19:03:58

Copyright (c) 1991, 2011, Oracle.  All rights reserved.

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC1521)))
STATUS of the LISTENER
------------------------
Alias                     LISTENER
Version                   TNSLSNR for Linux: Version 11.2.0.3.0 - Production
Start Date                04-JAN-2017 18:40:27
Uptime                    0 days 0 hr. 23 min. 31 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Listener Parameter File   /u01/app/oracle/product/11.2.0.3/dbhome_1/network/admin/listener.ora
Listener Log File         /u01/app/oracle/diag/tnslsnr/dbserver/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=dbserver.example.com)(PORT=1521)))
Services Summary...
Service "orcldb" has 1 instance(s).
  Instance "orcldb", status READY, has 1 handler(s) for this service...
Service "orcldbXDB" has 1 instance(s).
  Instance "orcldb", status READY, has 1 handler(s) for this service...
The command completed successfully
[oracle@dbserver ~]$
```

70. Here we can see, Oracle Enterprise Manager

```
File  Edit  View  Search  Terminal  Help
[oracle@dbserver ~]$ emctl status dbconsole
Oracle Enterprise Manager 11g Database Control Release 11.2.0.3.0
Copyright (c) 1996, 2011 Oracle Corporation.  All rights reserved.
https://dbserver.example.com:1158/em/console/aboutApplication
Oracle Enterprise Manager 11g is running.
------------------------------------------------------------------
Logs are generated in directory /u01/app/oracle/product/11.2.0.3/dbhome_1/dbserver.example.com_orcldb/sysman/log
[oracle@dbserver ~]$
```

71. From here we can login in the enterprise manager from browser.

Congratulations!! You have successfully installed oracle database 11g on oracle enterprise linux 6.6.