

Grid Installation

PREREQUISITES (From Root User on Both Nodes)

Disable Selinux

```
[root@asrblg-1 ~]# #disable selinux
[root@asrblg-1 ~]# getenforce
Enforcing
[root@asrblg-1 ~]# vi /etc/selinux/config
[root@asrblg-1 ~]# cat /etc/selinux/config
```

```
# 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=disabled
# SELINUXTYPE= can take one of three values:
#   targeted - Targeted processes are protected,
#   minimum - Modification of targeted policy. Only selected processes are protected.
#   mls - Multi Level Security protection.
SELINUXTYPE=targeted
```

Stop and Disable Firewall

```
[root@asrblg-1 ~]# systemctl stop firewalld
[root@asrblg-1 ~]# systemctl disable firewalld
```

```
Removed symlink /etc/systemd/system/multi-user.target.wants/firewalld.service.
Removed symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service.
```

Install the following Packages:

```
dnf -y wget screen zip unzip vim xorg-x11-apps xorg-x11-xauth oracleasm-support.x86_64 kmod-
oracleasm.x86_64 oracle-database-preinstall-19c.x86_64
```

Create Users and Groups and add users to Groups also change password for users and groups

```
[root@asrblg-1 ~]# groupadd -g 54327 asmdba
[root@asrblg-1 ~]# groupadd -g 54328 asmoper
[root@asrblg-1 ~]# groupadd -g 54329 asmadmin
[root@asrblg-1 ~]# useradd -u 54331 -g oinstall -G
dba,backupdba,dgdba,kmdba,racdba,asmdba,asmadmin,asmoper grid
```

```
[root@asrblg-1 ~]# passwd oracle
Changing password for user oracle.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@asrblg-1 ~]# passwd grid
Changing password for user grid.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
```

Create the Directories for Oracle Grid installation with relevant Owners and Permissions

```
[root@asrblg-1 ~]# mkdir -p /u01/app/grid/product/19/grid
[root@asrblg-1 ~]# chown -R grid:oinstall /u01/app/grid/
[root@asrblg-1 ~]# chmod -R 775 /u01/app/grid/
```

```
[root@db1a ~]# usermod -a -G asmdba oracle
[root@db1a ~]#
```

Unzip the grid binary to grid_home (From Grid User)

```
[grid@asrblg-1 ~]$ unzip -q -o LINUX.X64_193000_grid_home.zip -d /u01/app/grid/product/19/grid/
```

Create Passwordless SSH between both the nodes from Grid User and Oracle User

Node1

```
[grid@asrblg-1 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/grid/.ssh/id_rsa):
Created directory '/home/grid/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/grid/.ssh/id_rsa.
Your public key has been saved in /home/grid/.ssh/id_rsa.pub.
```

The key fingerprint is:

SHA256:M+R5roAAN1RegnYVhh8urzSUNBMfRsjd9g9hAZ4wTRs grid@asrblg-1.whale.net

The key's randomart image is:

```
+---[RSA 2048]-----+
| .++B@=E... |
| .o.O*o=++o |
| ..oo.*.o=o . |
| o.+ oo.o |
| ..o S.o |
| .o.. = . |
| ..o. . |
| . . . |
| . . . |
+-----[SHA256]-----+
```

```
[grid@asrblg-1 ~]$ ssh-copy-id grid@asrblg-2.whale.net
```

```
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/grid/.ssh/id_rsa.pub"
```

```
The authenticity of host 'asrblg-2.whale.net (192.168.12.12)' can't be established.
```

```
ECDSA key fingerprint is SHA256:TXEux/l3/KP1ScwXp9m/62Ac2a+FsFMwW415zKz8t7w.
```

```
ECDSA key fingerprint is MD5:05:fb:f9:c4:65:5c:6d:8c:6d:dc:ac:0b:81:5e:ae:0e.
```

```
Are you sure you want to continue connecting (yes/no)? yes
```

```
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
```

```
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
```

```
grid@asrblg-2.whale.net's password:
```

```
Number of key(s) added: 1
```

Now try logging into the machine, with: "ssh 'grid@asrblg-2.whale.net'"
and check to make sure that only the key(s) you wanted were added.

```
[grid@asrblg-1 ~]$ ssh grid
```

```
ssh: Could not resolve hostname grid: Name or service not known
```

```
[grid@asrblg-1 ~]$ ssh grid@asrblg-2.whale.net
```

```
Last login: Tue Apr 4 13:36:31 2023 from 172.24.4.33
```

```
[grid@asrblg-2 ~]$ exit
```

Node2

```
[grid@asrblg-2 ~]$ ssh-keygen
```

```
Generating public/private rsa key pair.
```

```
Enter file in which to save the key (/home/grid/.ssh/id_rsa):
```

```
Enter passphrase (empty for no passphrase):
```

```
Enter same passphrase again:
```

```
Your identification has been saved in /home/grid/.ssh/id_rsa.
```

```
Your public key has been saved in /home/grid/.ssh/id_rsa.pub.
```

```
The key fingerprint is:
```

```
SHA256:qQTzTqVD0lwoal3PubmwNUQK1hiXmtLxyxhQNJ79tfc grid@asrblg-2.whale.net
```

```
The key's randomart image is:
```

```
+---[RSA 2048]-----+
| o*==. |
| ..o*=o. |
| ..=oX.* o. |
| .o * B.B... |
| . . + O.S. . |
```

```
| . B B . . |
| * o E |
| .. |
| |
+----[SHA256]-----+
```

```
[grid@asrblg-2 ~]$ ssh-copy-id grid@asrblg-1.whale.net
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/grid/.ssh/id_rsa.pub"
The authenticity of host 'asrblg-1.whale.net (192.168.12.11)' can't be established.
ECDSA key fingerprint is SHA256:cx11Cfzl0ojc030Zpjkp8BnplLEumContF9a1fOXVxo.
ECDSA key fingerprint is MD5:d2:9c:5f:a7:dc:1f:2f:0f:7b:48:c1:8d:80:42:5d:0d.
Are you sure you want to continue connecting (yes/no)? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already
installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install
the new keys
grid@asrblg-1.whale.net's password:
```

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'grid@asrblg-1.whale.net'"
and check to make sure that only the key(s) you wanted were added.

```
[grid@asrblg-2 ~]$ ssh grid@asrblg-1.whale.net
Last login: Tue Apr 4 13:00:15 2023 from 172.24.4.33
[grid@asrblg-1 ~]$ exit
logout
Connection to asrblg-1.whale.net closed.
[grid@asrblg-2 ~]$
```

Node1(Oracle User)

```
[oracle@asrblg-1 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/oracle/.ssh/id_rsa):
Created directory '/home/oracle/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/oracle/.ssh/id_rsa.
Your public key has been saved in /home/oracle/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:RyZFDuT26DteWallcKrlrR7rLFwJllq3DBW9TrrIL58 oracle@asrblg-1.whale.net
The key's randomart image is:
+---[RSA 2048]-----+
| .o .o.o |
|o . . + |
|=. .. ++ |
|+..+o . * |
|+o=o S + . |
|o.=o.. o o + |
|=+.o . o o |
|++= . .o |
|+*+E .o. |
+----[SHA256]-----+
```

```
[oracle@asrblg-1 ~]$ ssh-copy-id oracle@192.168.12.12
/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/oracle/.ssh/id_rsa.pub"
The authenticity of host '192.168.12.12 (192.168.12.12)' can't be established.
ECDSA key fingerprint is SHA256:TXEux/l3/KP1ScwXp9m/62Ac2a+FsFMwW415zKz8t7w.
ECDSA key fingerprint is MD5:05:fb:f9:c4:65:5c:6d:8c:6d:dc:ac:0b:81:5e:ae:0e.
Are you sure you want to continue connecting (yes/no)? yes
/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already
installed
/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the
new keys
oracle@192.168.12.12's password:
```

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'oracle@192.168.12.12'"
and check to make sure that only the key(s) you wanted were added.

```
[oracle@asrblg-1 ~]$ ssh oracle@192.168.12.12
```

Node 2 (OracleUser)

```
[oracle@asrblg-2 ~]$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/oracle/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/oracle/.ssh/id_rsa.
Your public key has been saved in /home/oracle/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:tMCKFDdea9CveHqNyypcjDvBtjbVDpN4kYBug37LGBQ oracle@asrblg-2.whale.net
The key's randomart image is:
+---[RSA 2048]-----+
| .o.=.      |
| E...* +..  |
| o. ...+.+. |
| ..+ o+ ..  |
|o. o + =S.  |
| o.* X +    |
| =o.B * o   |
| . o0 .. .  |
| . +.oo.    |
+----[SHA256]-----+
```

```
[oracle@asrblg-2 ~]$ ssh-copy-id oracle@192.168.12.11
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/oracle/.ssh/id_rsa.pub"
The authenticity of host '192.168.12.11 (192.168.12.11)' can't be established.
ECDSA key fingerprint is SHA256:cx11Cfzl0ojc030Zpjkp8BnplLEumContF9a1f0XVxo.
ECDSA key fingerprint is MD5:d2:9c:5f:a7:dc:1f:2f:0f:7b:48:c1:8d:80:42:5d:0d.
Are you sure you want to continue connecting (yes/no)? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already
installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install
the new keys
oracle@192.168.12.11's password:
```

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'oracle@192.168.12.11'" and check to make sure that only the key(s) you wanted were added.

Create Entry for /etc/hosts on both nodes

Public

```
192.168.12.11 asrblg-1 asrblg-1.whale.net
192.168.12.12 asrblg-2 asrblg-2.whale.net
```

Private

```
192.168.14.24 asrblg-1-priv asrblg-1-priv.whale.net
172.24.14.25 asrblg-2-priv asrblg-2-priv.whale.net
```

VIP

```
192.168.12.30 asrblg-1-vip asrblg-1-vip.whale.net
192.168.12.31 asrblg-2-vip asrblg-2-vip.whale.net
```

SCAN

```
192.168.12.26 mdm-prod-scan mdm-prod-scan.whale.net
192.168.12.27 mdm-prod-scan mdm-prod-scan.whale.net
192.168.12.28 mdm-prod-scan mdm-prod-scan.whale.net
```

Create Partitions Out of RAW Disks

Get list of all the raw disks and crosscheck it in both the nodes and see if it's shared.

Node1			Node2		
NAME	SIZE	TYPE	NAME	SIZE	TYPE
sdb	500G	disk	sdb	500G	disk
sdc	500G	disk	sdc	500G	disk
sdd	20G	disk	sdd	20G	disk
sde	20G	disk	sde	20G	disk
sdf	20G	disk	sdf	20G	disk
sdg	500G	disk	sdg	500G	disk
sdh	500G	disk	sdh	500G	disk
sdi	500G	disk	sdi	500G	disk
sdj	500G	disk	sdj	500G	disk
sdk	500G	disk	sdk	500G	disk
sdl	500G	disk	sdl	500G	disk
sdm	500G	disk	sdm	500G	disk
sdn	500G	disk	sdn	500G	disk
sdo	500G	disk	sdo	500G	disk
sdp	500G	disk	sdp	500G	disk
sdq	500G	disk	sdq	500G	disk

Create partitions of all the RAW Disks:

```
[root@asrblg-1 ~]# fdisk /dev/sdd
Welcome to fdisk (util-linux 2.23.2).
```

Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.

Device does not contain a recognized partition table
Building a new DOS disklabel with disk identifier 0x04998915.

```
Command (m for help):
Command (m for help): n
Partition type:
  p  primary (0 primary, 0 extended, 4 free)
  e  extended
Select (default p): p
Partition number (1-4, default 1):
First sector (2048-41943039, default 2048):
Using default value 2048
Last sector, +sectors or +size{K,M,G} (2048-41943039, default 41943039):
Using default value 41943039
Partition 1 of type Linux and of size 20 GiB is set
```

```
Command (m for help): w
The partition table has been altered!
```

```
Calling ioctl() to re-read partition table.
Syncing disks.
```

Node2

```
[root@asrblg-2 ~]# oracleasm scandisks
Reloading disk partitions: done
Cleaning any stale ASM disks...
Scanning system for ASM disks...
```

```
[root@asrblg-2 ~]# cd /tmp/
```

```
[root@asrblg-2 tmp]# rpm -ivh cvuqdisk-1.0.10-1.rpm
Preparing... ##### [100%]
Using default group oinstall to install package
Updating / installing...
 1:cvuqdisk-1.0.10-1 ##### [100%]
```

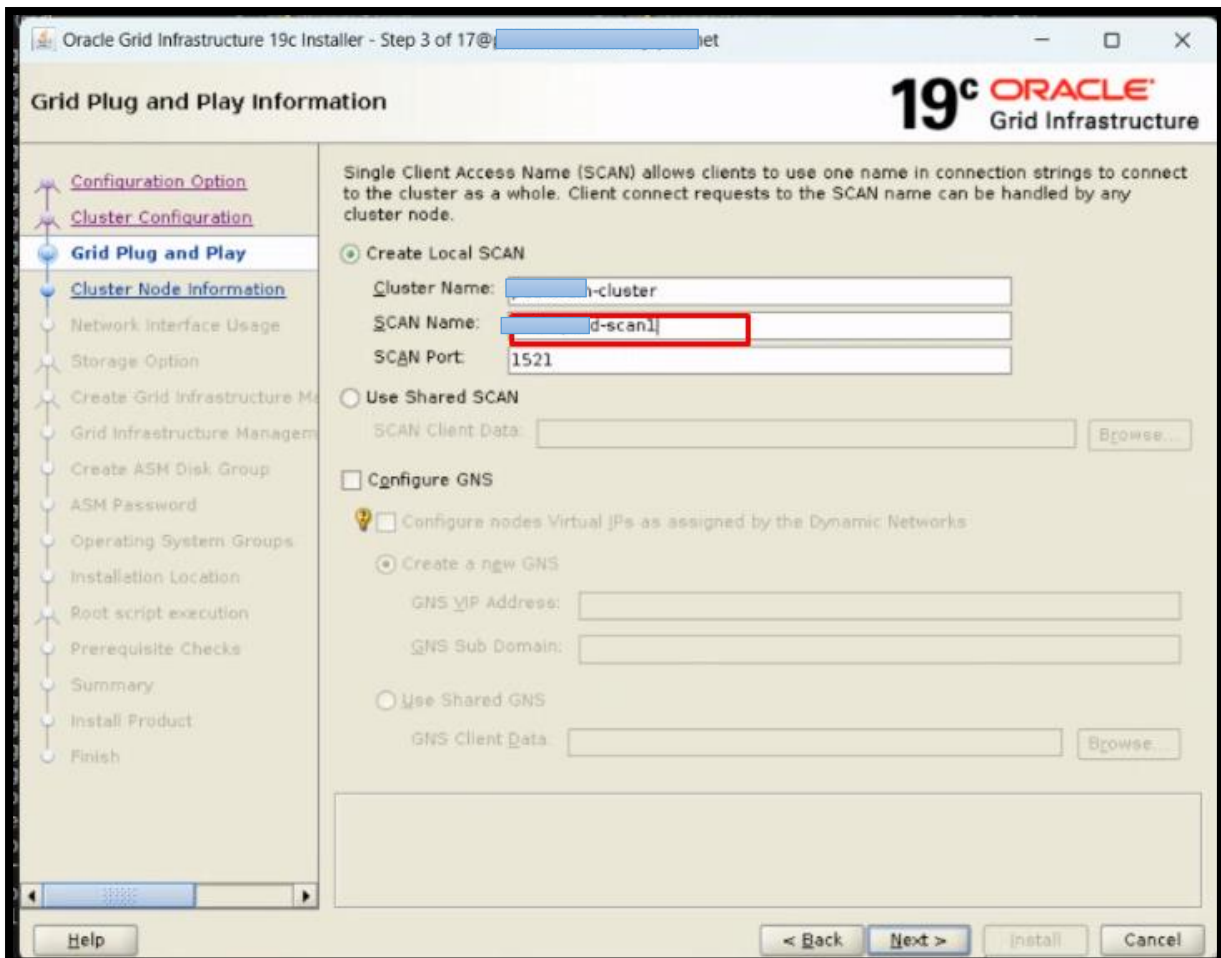
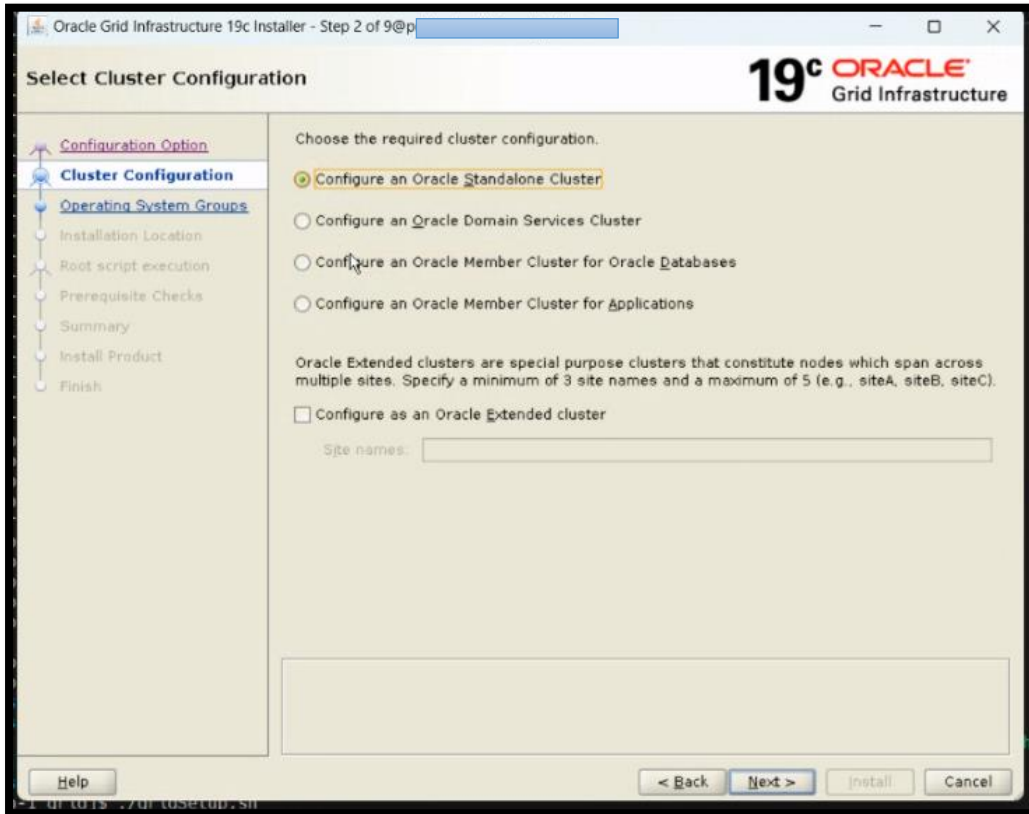
Install Grid

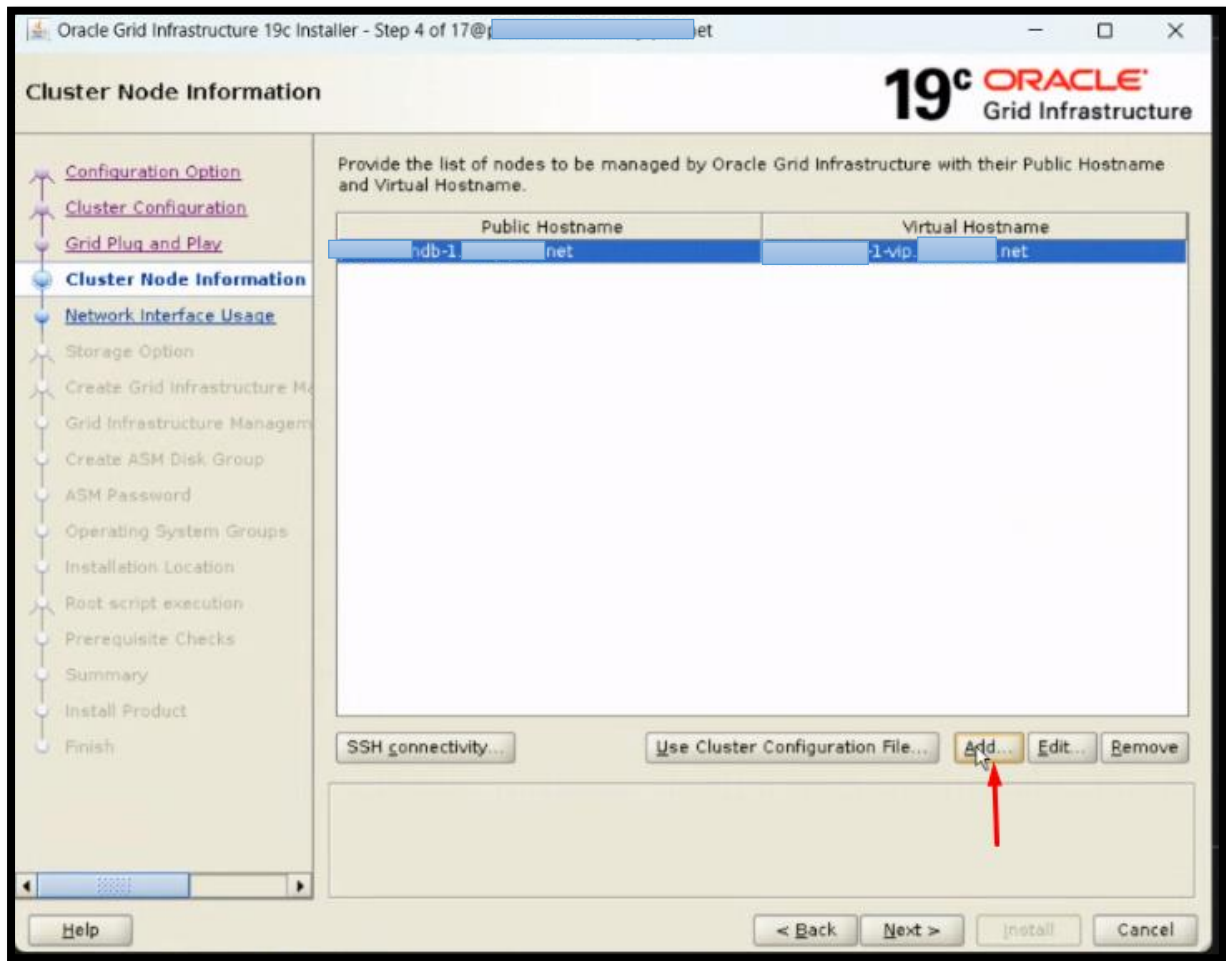
Start gridsetup

```
/u01/app/grid/product/19/grid
```

```
[grid@asrblg-1 grid]$ ./gridSetup.sh
```







Add another node entries

Oracle Grid Infrastructure 19c Installer - Step 4 of 17@p[redacted].it

19c ORACLE Grid Infrastructure

Cluster Node Information

Provide the list of nodes to be managed by Oracle Grid Infrastructure with their Public Hostname and Virtual Hostname.

Public Hostname	Virtual Hostname
[redacted].net	[redacted]-1~vip.[redacted].net

Add Cluster Node Information@p[redacted].it

Add a single node

Specify the name for the public host name. If you want to configure virtual host name manually, then you will be prompted for the virtual IP address.

Public Hostname:

Virtual Hostname:

Add a range of nodes

Specify the node range expression for the required nodes. You can use the following patterns to build the expression: Constant strings such as "myhostname", single character ranges such as "[a-z]" and multi-character sequences such as "[abcd].".

Public Hostname Expression:

Virtual Hostname Suffix:

Nodes to be generated: 0

db-1 ~]# reboot

Unexpectedly closed network connection

Subscribing to the professional edition here: http://www.oracle.com/technetwork/middleware/...

Add Cluster Node Information@t

Add a single node

Specify the name for the public host name. If you want to configure virtual host name manually, then you will be prompted for the virtual IP address.

Public Hostname: db-2.d.net

Virtual Hostname: db-2-vip.d.net

Add a range of nodes

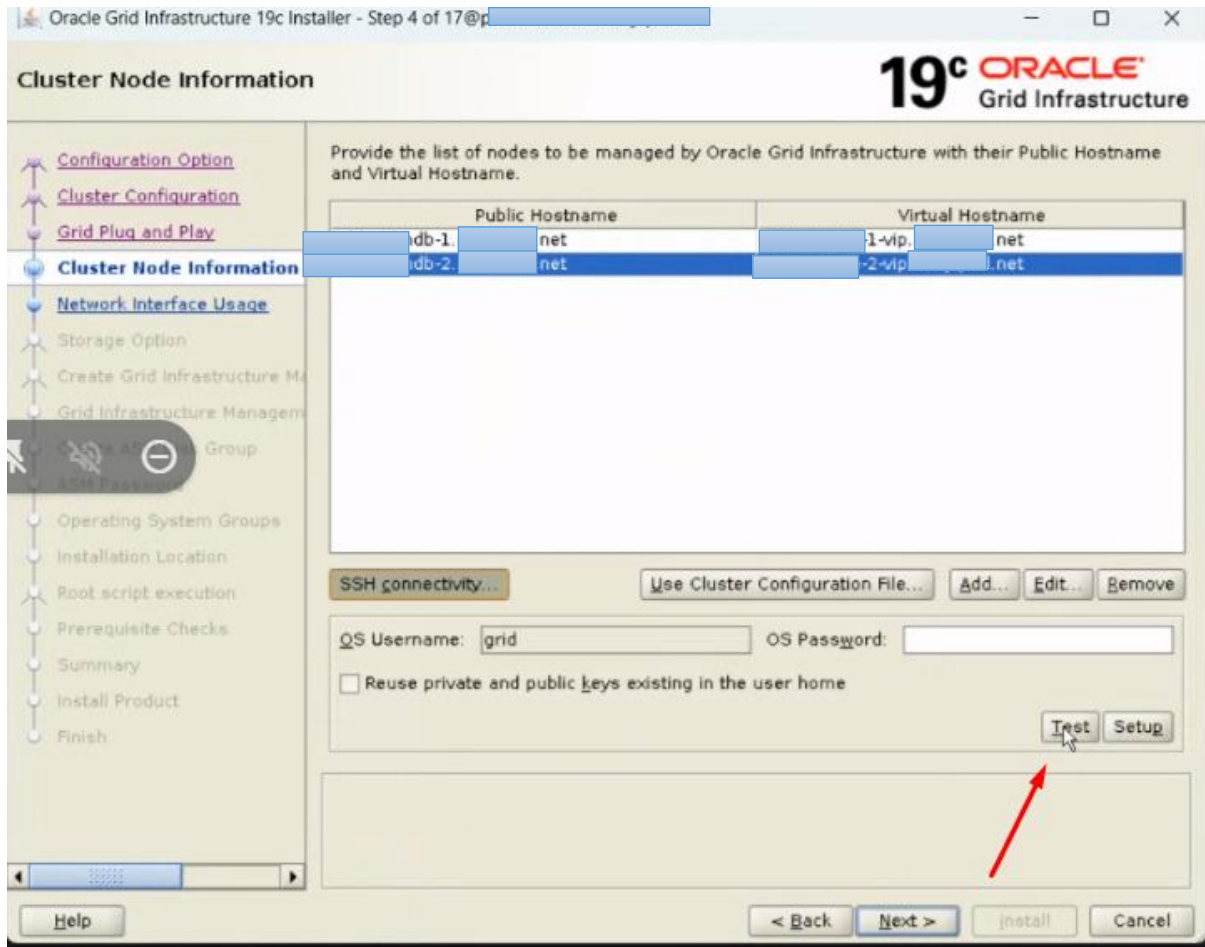
Specify the node range expression for the required nodes. You can use the following patterns to build the expression: constant strings such as "myhostname", single character ranges such as "[a-z]" and multi-character sequences such as "[ab]cd..".

Public Hostname Expression:

Virtual Hostname Suffix:

Nodes to be generated: 0

OK Cancel



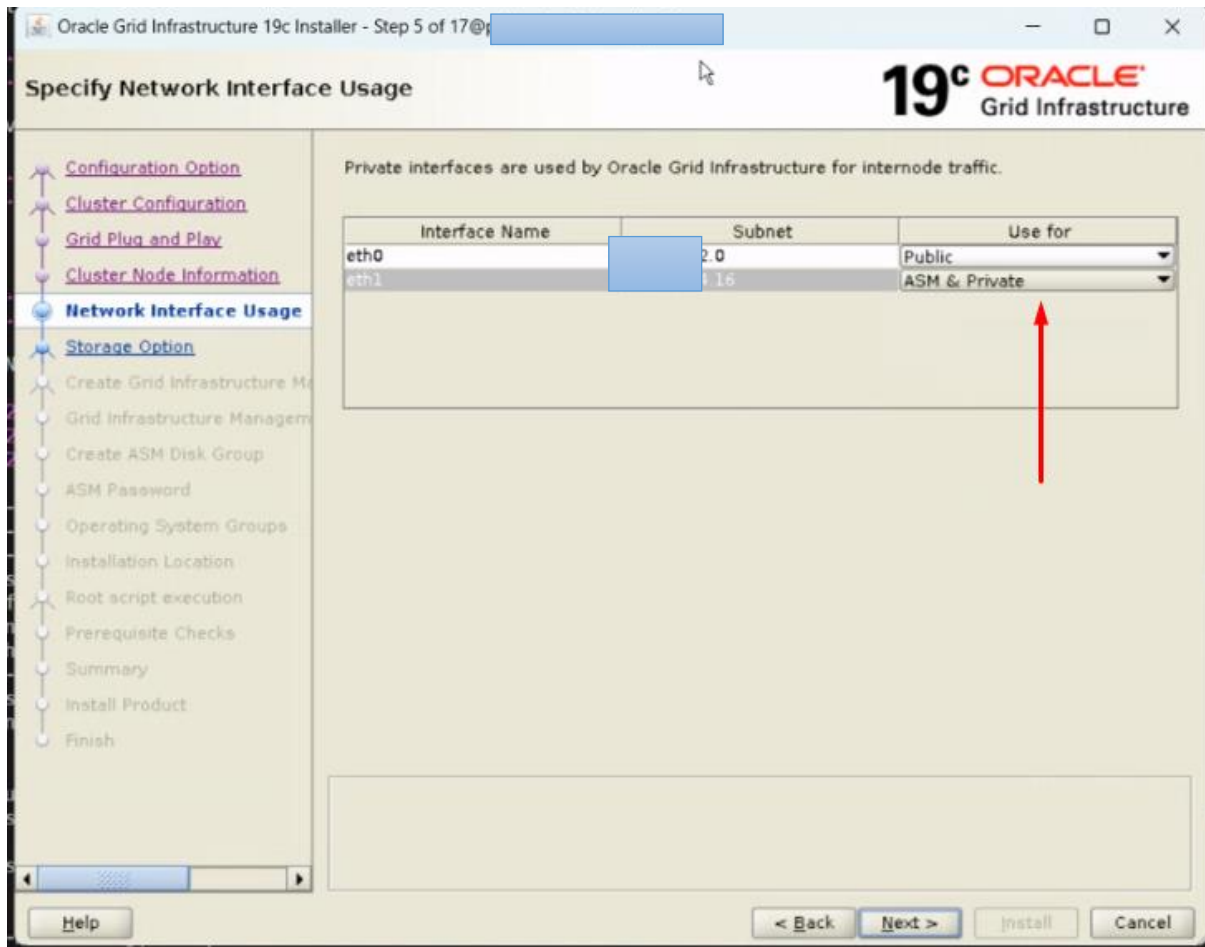
The screenshot shows the Oracle Grid Infrastructure 19c Installer window at Step 4 of 17. The main window title is "Oracle Grid Infrastructure 19c Installer - Step 4 of 17@...". The "Cluster Node Information" section is active, displaying a table of nodes to be managed. A message box is overlaid on the window, stating: "Passwordless SSH connectivity between the selected nodes already established." The message box has an information icon and an "OK" button. The background window shows a table with columns for "Public Hostname" and "Virtual Hostname". Below the table, there are fields for "OS Username" (set to "grid") and "OS Password", and a checkbox for "Reuse private and public keys existing in the user home". Navigation buttons like "Back", "Next", "Install", and "Cancel" are visible at the bottom.

Public Hostname	Virtual Hostname
ndb-1 [redacted].net	-1-vip [redacted].net
ndb-2 [redacted].net	-2-vip [redacted].net

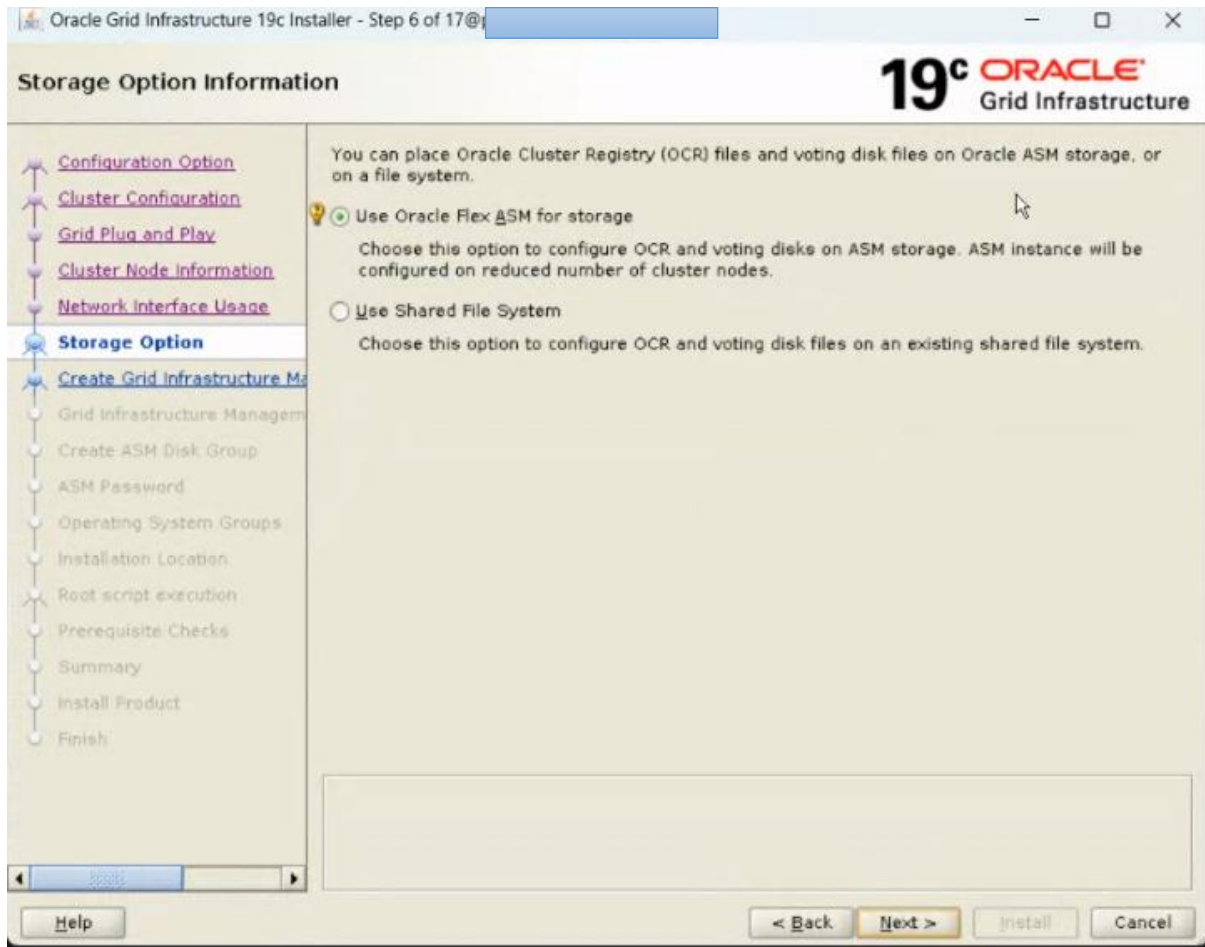
OS Username: OS Password:

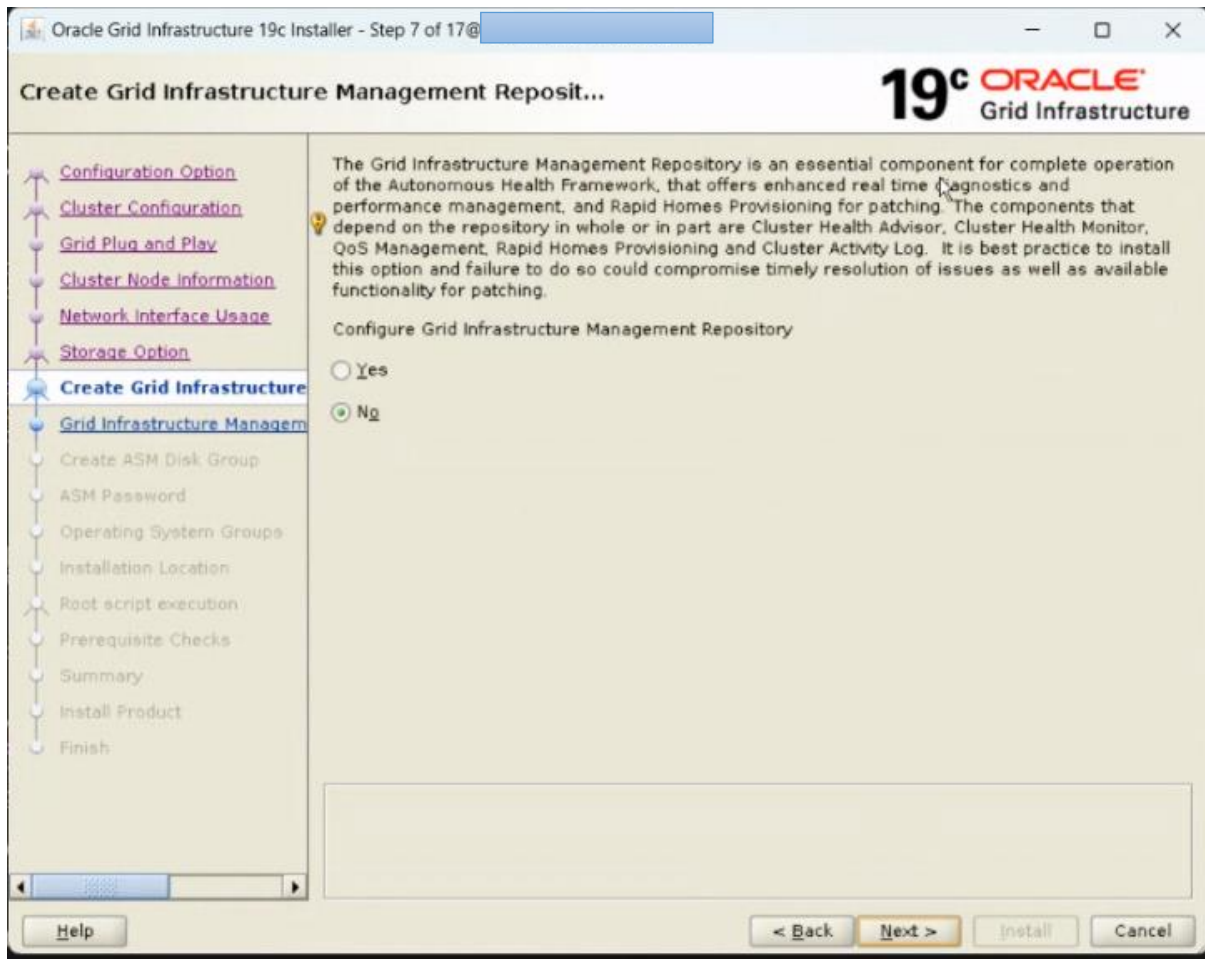
Reuse private and public keys existing in the user home

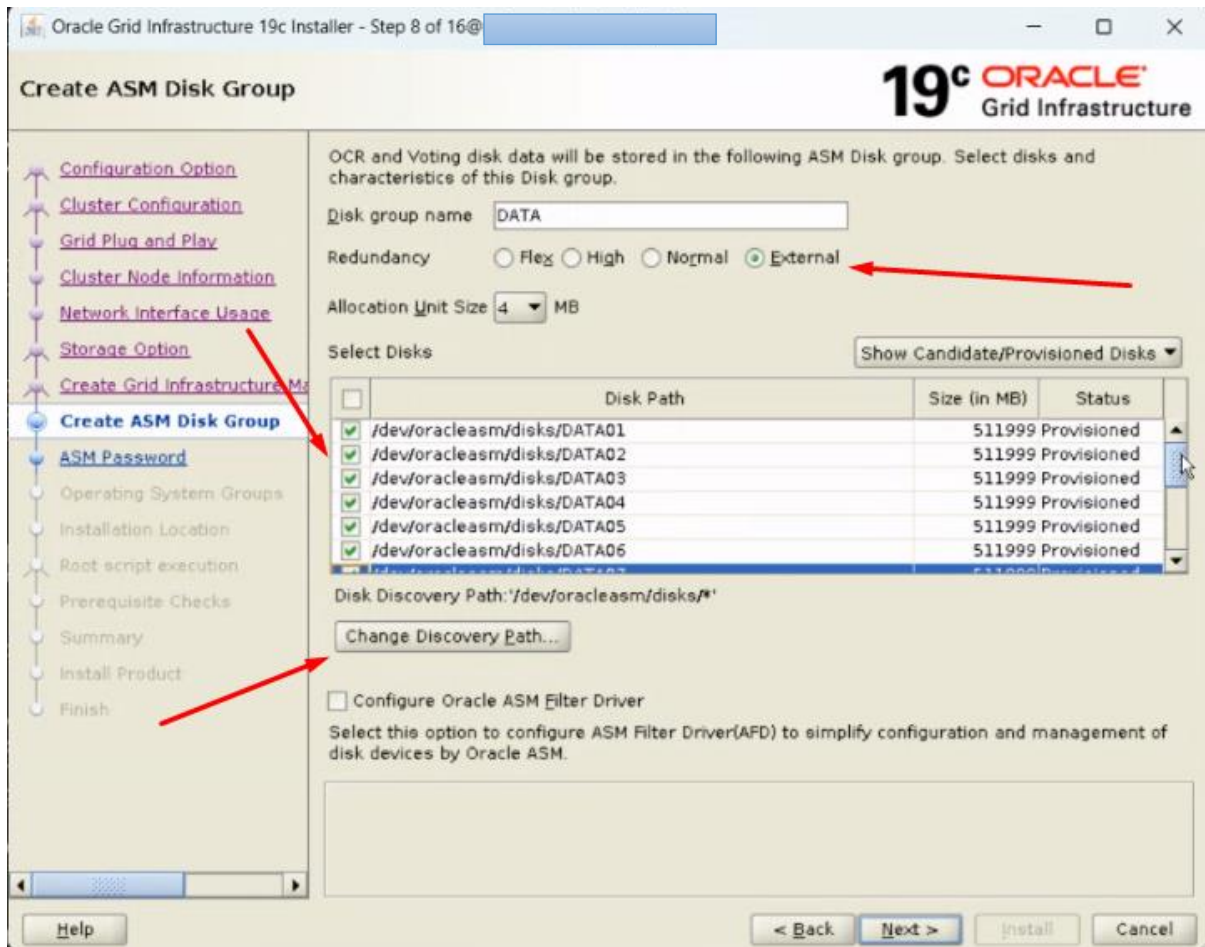
Buttons: Help, < Back, Next >, Install, Cancel



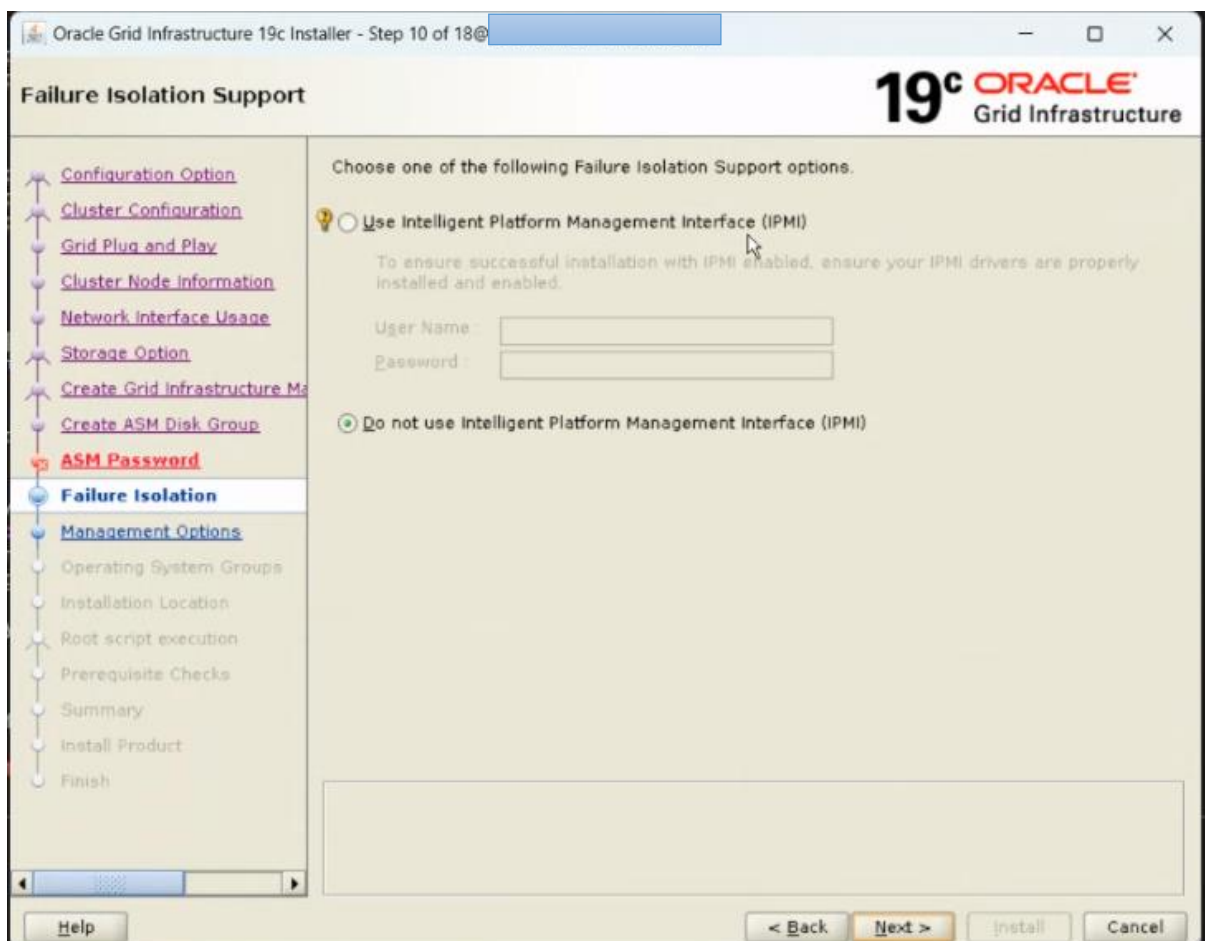
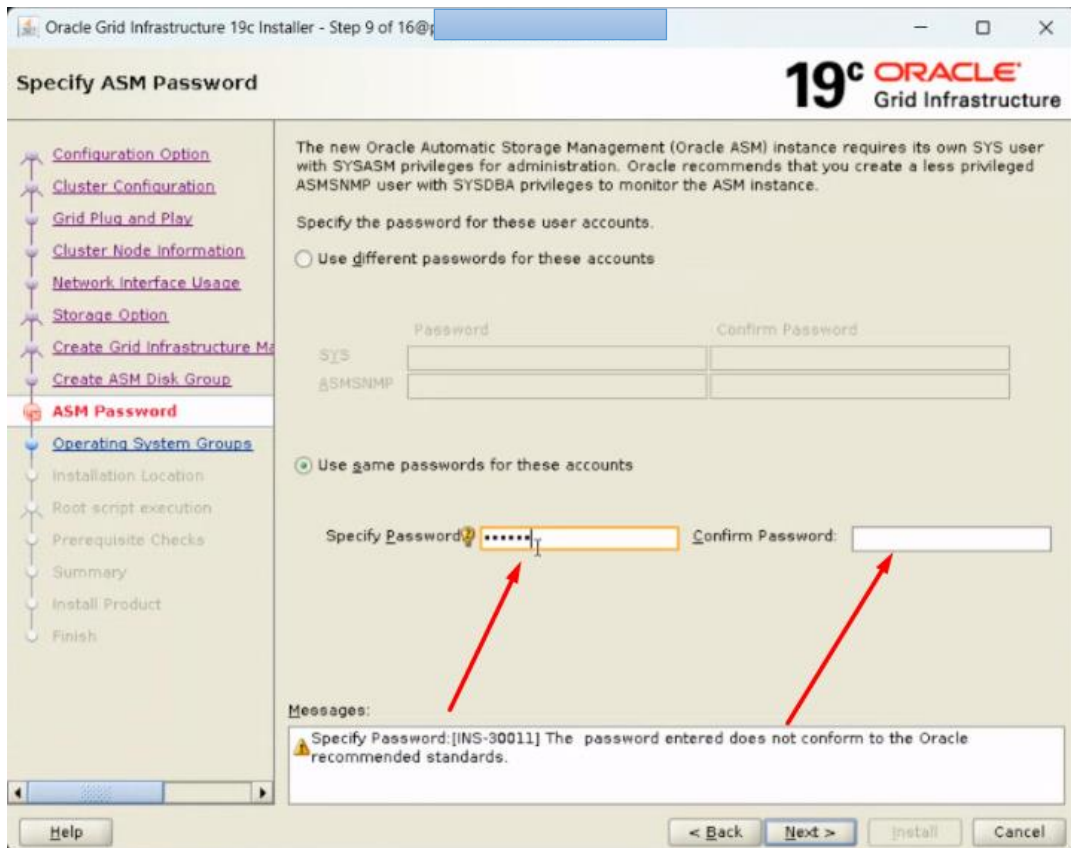
Change the eth1 to asm and private

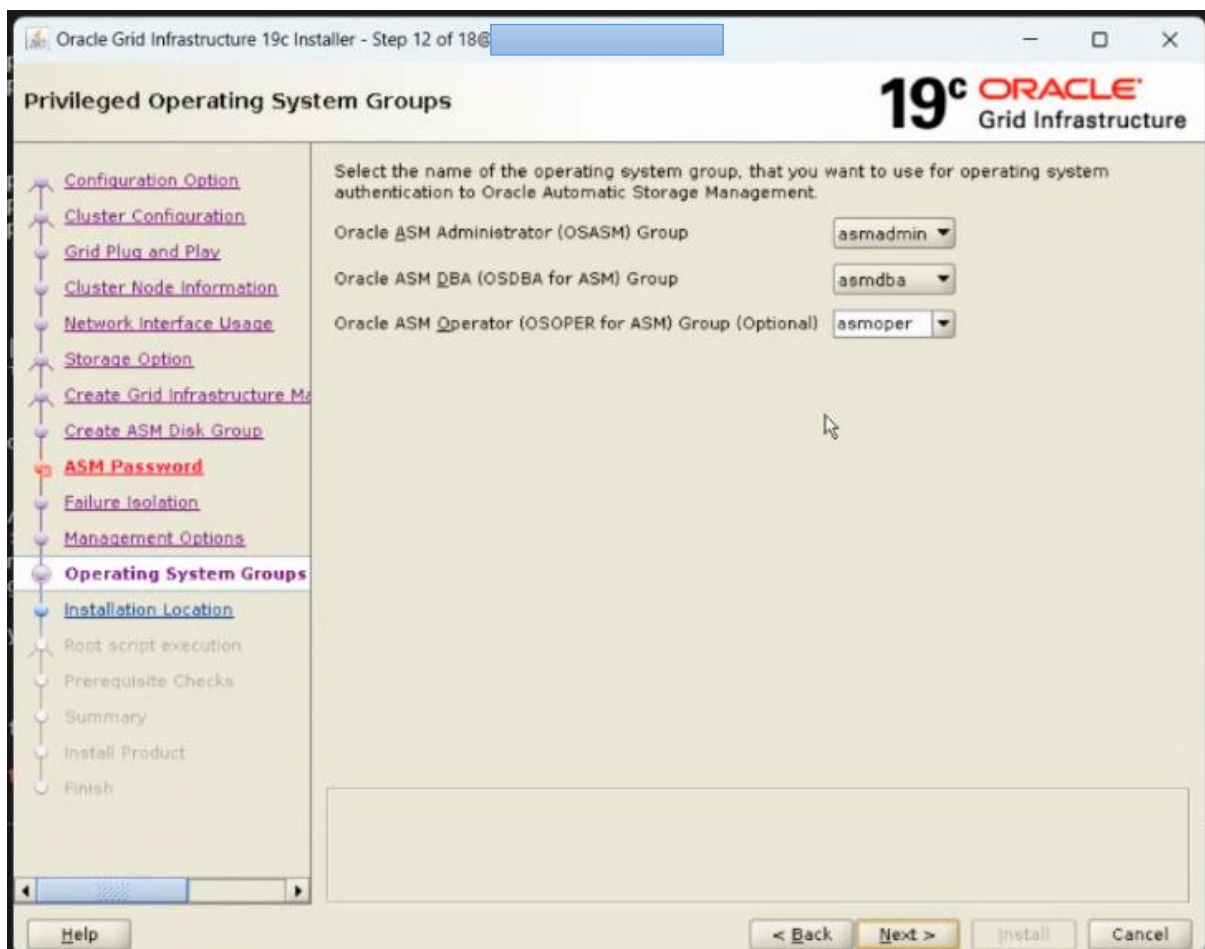
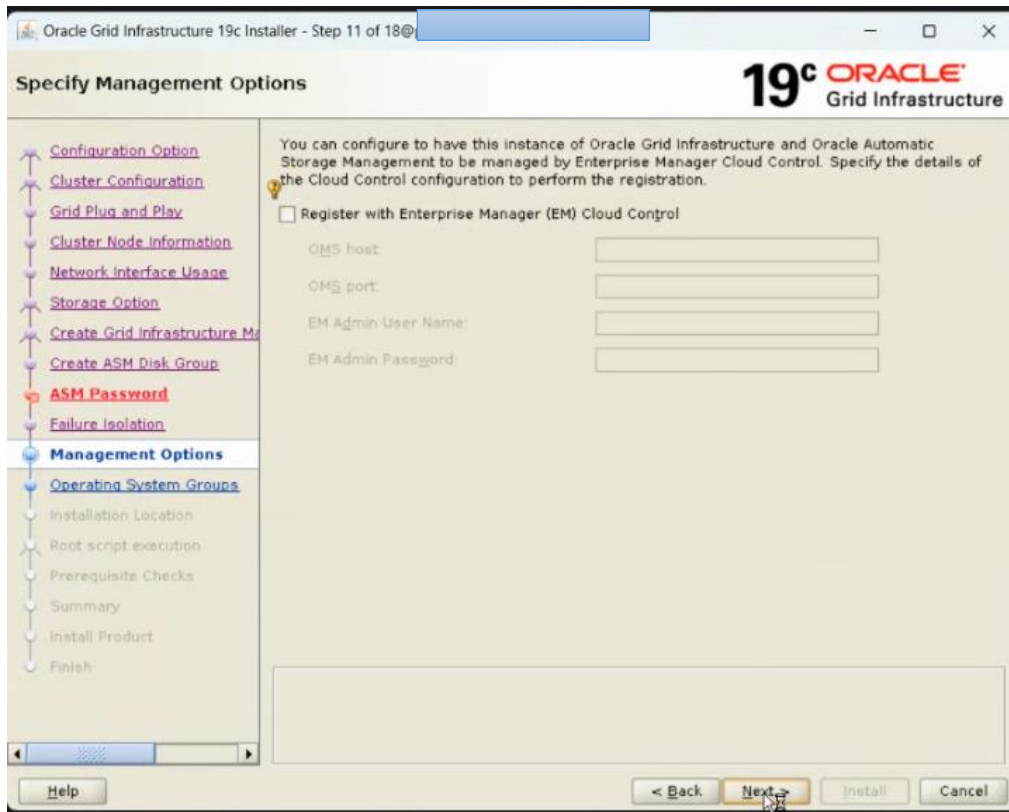




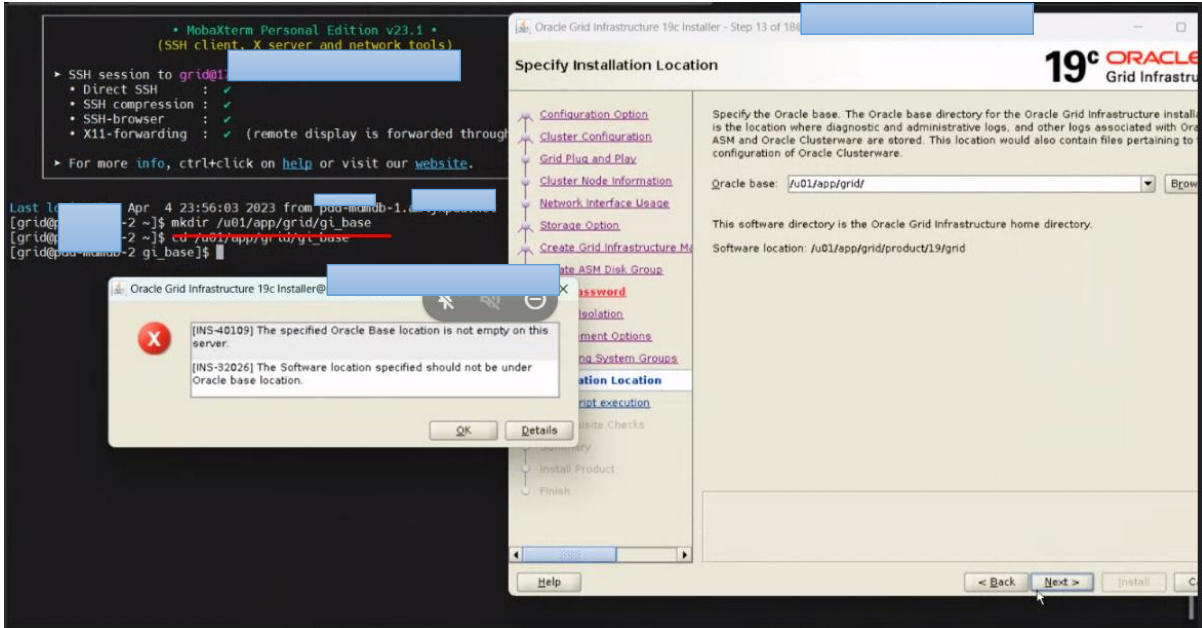


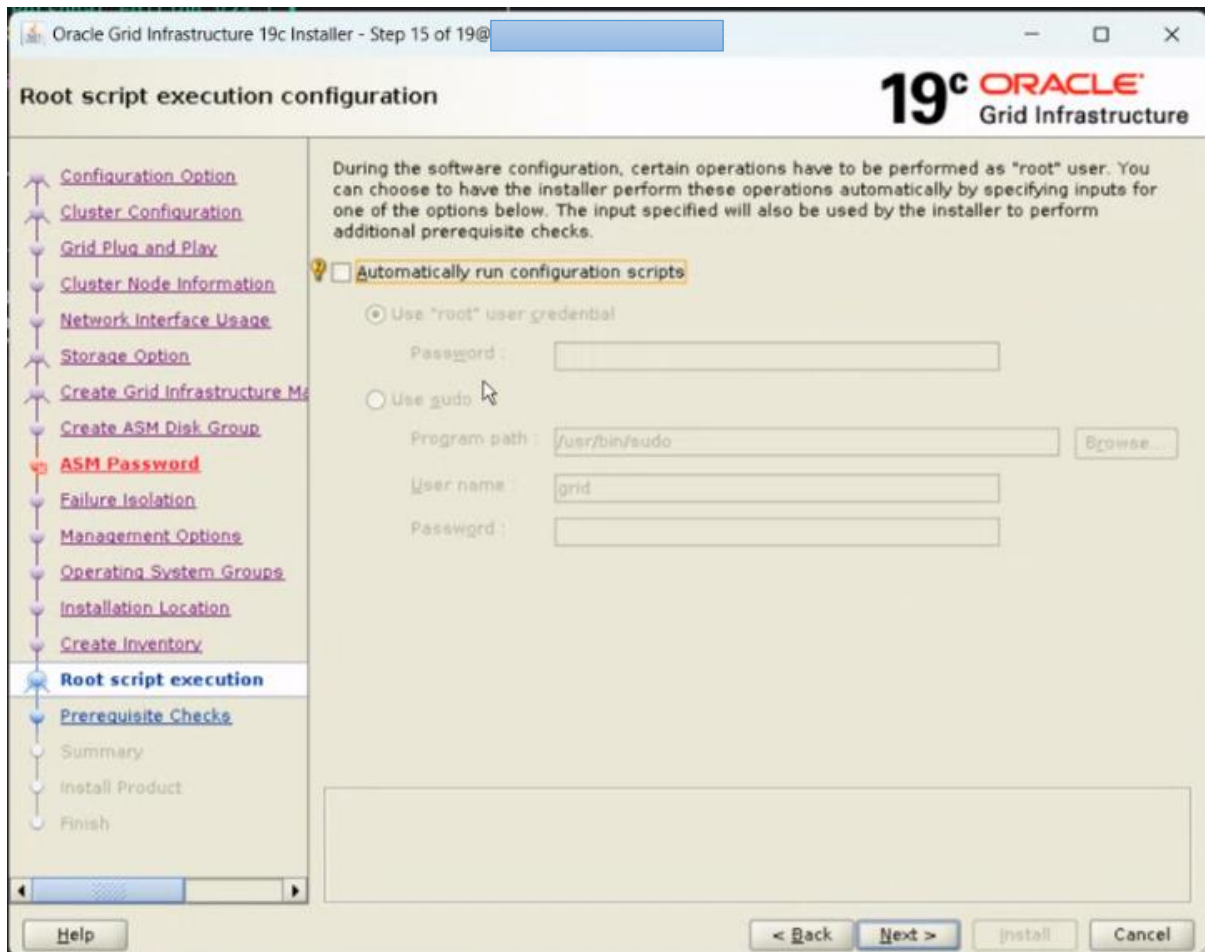
Change Redundancy to external, change discovery path and then select DATA Disks





The workaround for below error is to create a different directory gi_base





Oracle Grid Infrastructure 19c Installer - Step 16 of 19@ [redacted]

Perform Prerequisite Checks

19c ORACLE
Grid Infrastructure

[Configuration Option](#)
[Cluster Configuration](#)
[Grid Plug and Play](#)
[Cluster Node Information](#)
[Network Interface Usage](#)
[Storage Option](#)
[Create Grid Infrastructure M...](#)
[Create ASM Disk Group](#)
ASM Password
[Failure Isolation](#)
[Management Options](#)
[Operating System Groups](#)
[Installation Location](#)
[Create Inventory](#)
[Root script execution](#)
Prerequisite Checks
[Summary](#)
 Install Product
 Finish

Verification Result

Some of the minimum requirements for installation are not completed. Review and fix the issues listed in the following table, and recheck the system.

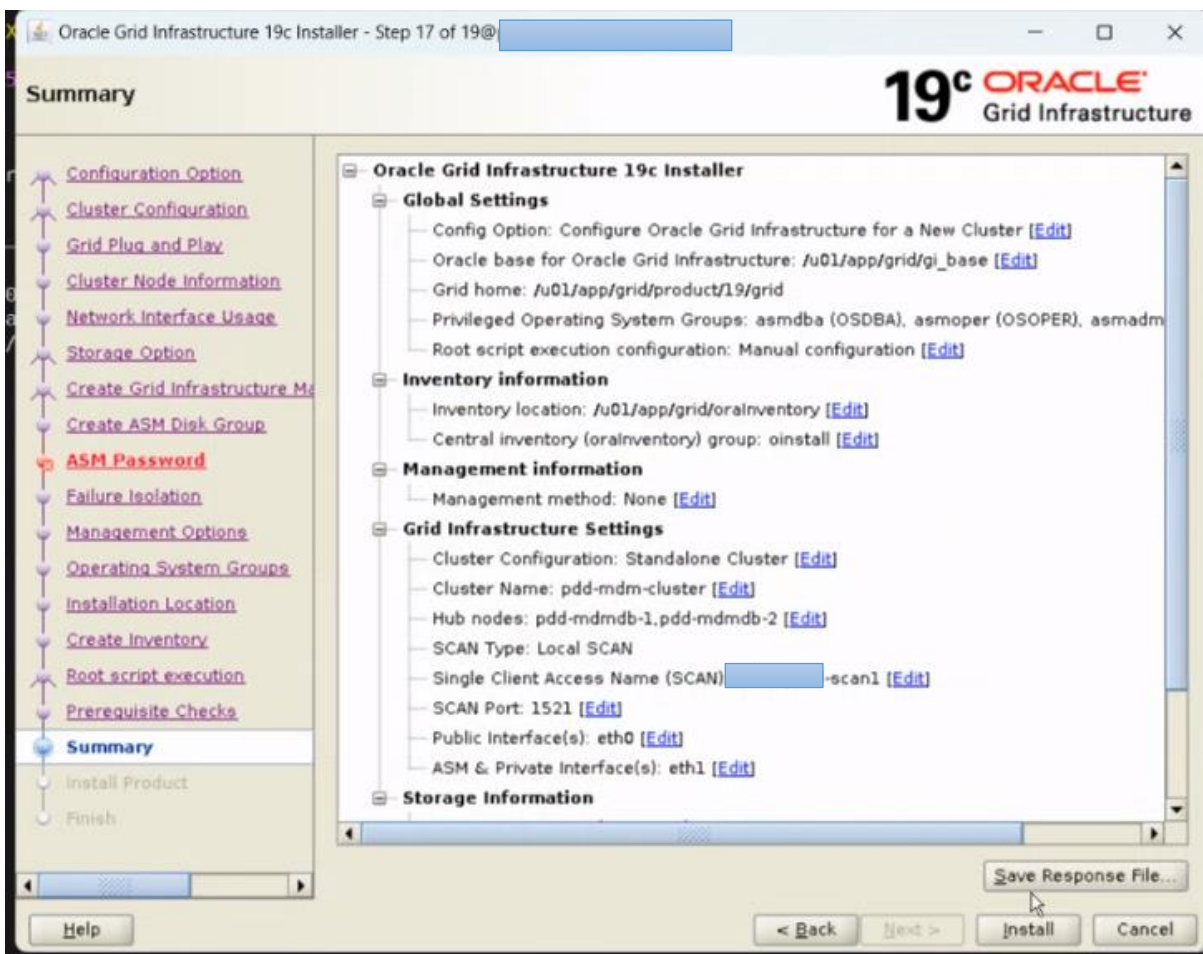
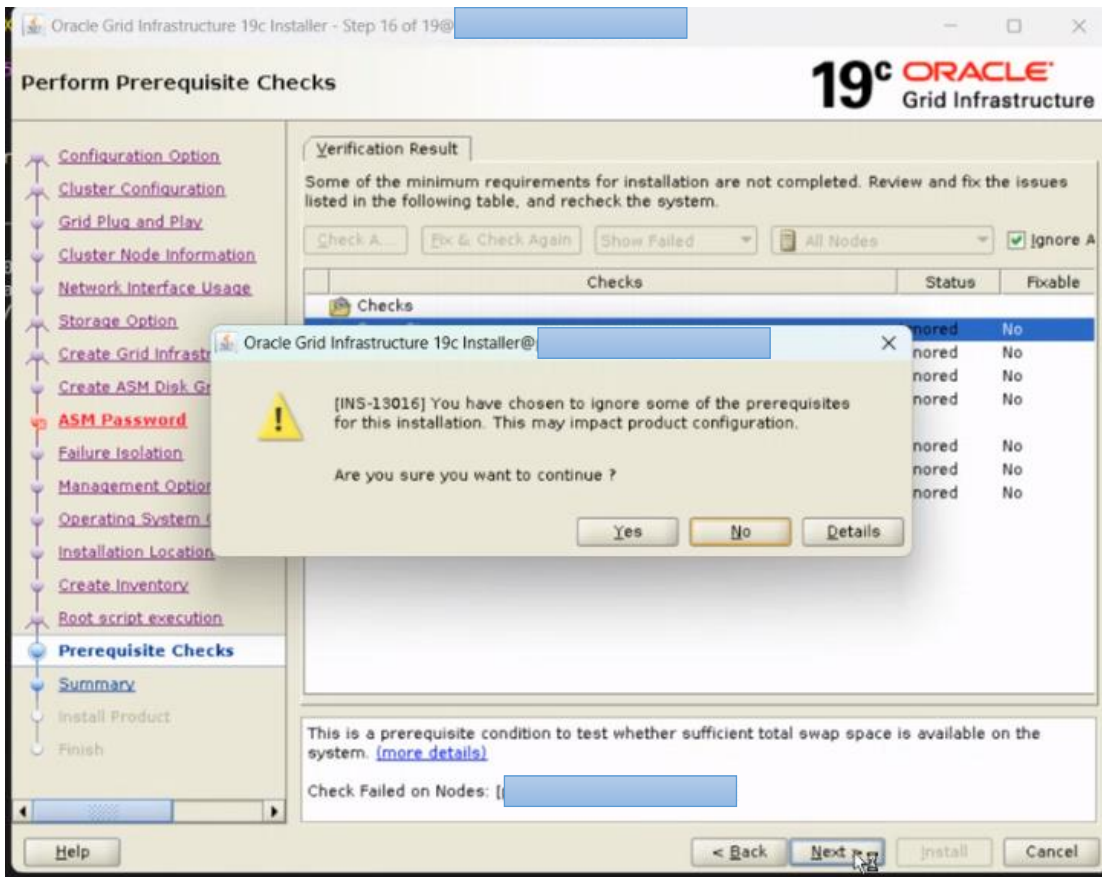
Check A... Fix & Check Again Show Failed All Nodes Ignore A

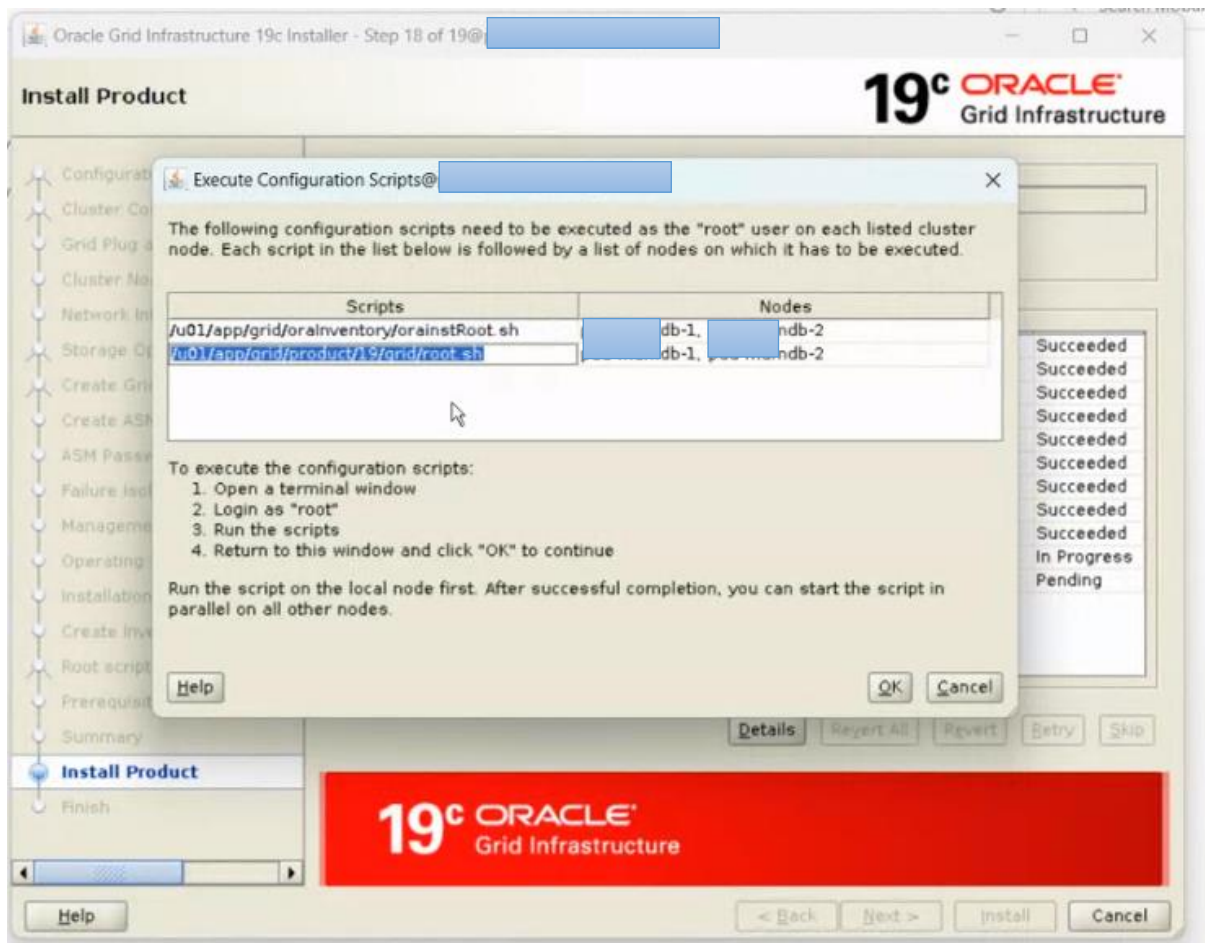
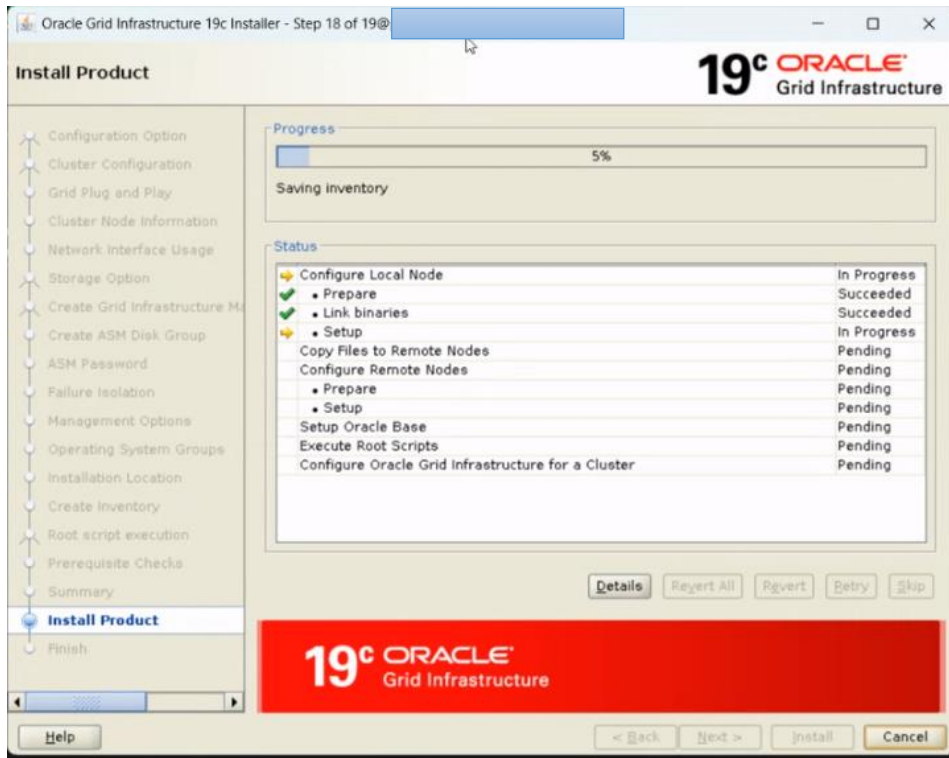
Checks	Status	Fixable
<ul style="list-style-type: none"> Swap OS Kernel Version Port Availability for component "Oracle Remote Method Invocation (O RPM Package Manager database [Network Time Protocol (NTP)] <ul style="list-style-type: none"> Network Time Protocol (NTP) Daemon 'ntpd' Daemon 'chronyd' 	Ignored	No

This is a prerequisite condition to test whether sufficient total swap space is available on the system. [more details](#)

Check Failed on Nodes: [redacted]

Help < Back Next > install Cancel





```
[root@asrblg-1 ~]# /u01/app/grid/orainventory/orainstRoot.sh
```

Changing permissions of /u01/app/grid/orainventory.
Adding read,write permissions for group.
Removing read,write,execute permissions for world.

Changing groupname of /u01/app/grid/orainventory to oinstall.
The execution of the script is complete.

```
[root@asrblg-1 ~]# /u01/app/grid/product/19/grid/root.sh
```

Performing root user operation.

The following environment variables are set as:
ORACLE_OWNER= grid
ORACLE_HOME= /u01/app/grid/product/19/grid

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.
Relinking oracle with rac_on option
Using configuration parameter file: /u01/app/grid/product/19/grid/crs/install/crsconfig_params
The log of current session can be found at:
/u01/app/grid/gi_base/crsdata/asrblg-1/crsconfig/rootcrs_asrblg-1_2023-04-05_00-23-13AM.log
2023/04/05 00:23:20 CLSRSC-594: Executing installation step 1 of 19: 'SetupTFA'.
2023/04/05 00:23:20 CLSRSC-594: Executing installation step 2 of 19: 'ValidateEnv'.
2023/04/05 00:23:20 CLSRSC-363: User ignored prerequisites during installation
2023/04/05 00:23:20 CLSRSC-594: Executing installation step 3 of 19: 'CheckFirstNode'.
2023/04/05 00:23:22 CLSRSC-594: Executing installation step 4 of 19: 'GenSiteGUIDs'.
2023/04/05 00:23:23 CLSRSC-594: Executing installation step 5 of 19: 'SetupOSD'.
2023/04/05 00:23:23 CLSRSC-594: Executing installation step 6 of 19: 'CheckCRSConfig'.
2023/04/05 00:23:23 CLSRSC-594: Executing installation step 7 of 19: 'SetupLocalGPNP'.
2023/04/05 00:23:42 CLSRSC-594: Executing installation step 8 of 19: 'CreateRootCert'.
2023/04/05 00:23:47 CLSRSC-4002: Successfully installed Oracle Trace File Analyzer (TFA)
Collector.
2023/04/05 00:23:47 CLSRSC-594: Executing installation step 9 of 19: 'ConfigOLR'.
2023/04/05 00:23:58 CLSRSC-594: Executing installation step 10 of 19: 'ConfigCHMOS'.
2023/04/05 00:23:58 CLSRSC-594: Executing installation step 11 of 19: 'CreateOHASD'.
2023/04/05 00:24:01 CLSRSC-594: Executing installation step 12 of 19: 'ConfigOHASD'.
2023/04/05 00:24:02 CLSRSC-330: Adding Clusterware entries to file 'oracle-ohasd.service'
2023/04/05 00:24:20 CLSRSC-594: Executing installation step 13 of 19: 'InstallAFD'.
2023/04/05 00:24:24 CLSRSC-594: Executing installation step 14 of 19: 'InstallACFS'.
2023/04/05 00:24:28 CLSRSC-594: Executing installation step 15 of 19: 'InstallKA'.
2023/04/05 00:24:31 CLSRSC-594: Executing installation step 16 of 19: 'InitConfig'.

ASM has been created and started successfully.

[DBT-30001] Disk groups created successfully. Check
/u01/app/grid/gi_base/cfgtoollogs/asmca/asmca-230405AM122501.log for details.

2023/04/05 00:25:58 CLSRSC-482: Running command: '/u01/app/grid/product/19/grid/bin/ocrconfig - upgrade grid oinstall'

CRS-4256: Updating the profile

Successful addition of voting disk 90fb29b74f4b4f34bf636d7aa5247360.

Successfully replaced voting disk group with +DATA.

CRS-4256: Updating the profile

CRS-4266: Voting file(s) successfully replaced

##	STATE	File Universal Id	File Name	Disk group
1.	ONLINE	90fb29b74f4b4f34bf636d7aa5247360 (/dev/oracleasm/disks/DATA01)	[DATA]	

Located 1 voting disk(s).

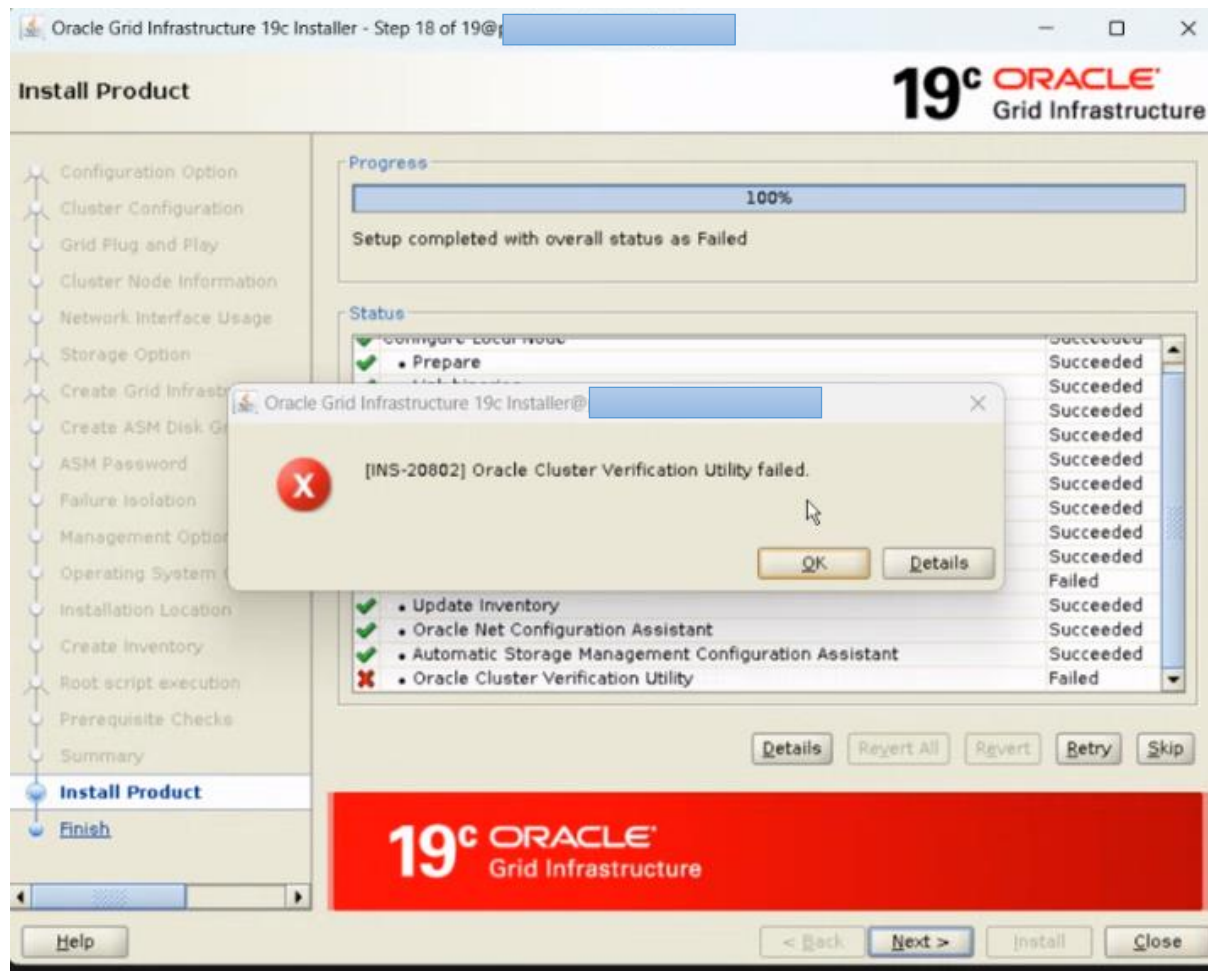
2023/04/05 00:27:09 CLSRSC-594: Executing installation step 17 of 19: 'StartCluster'.

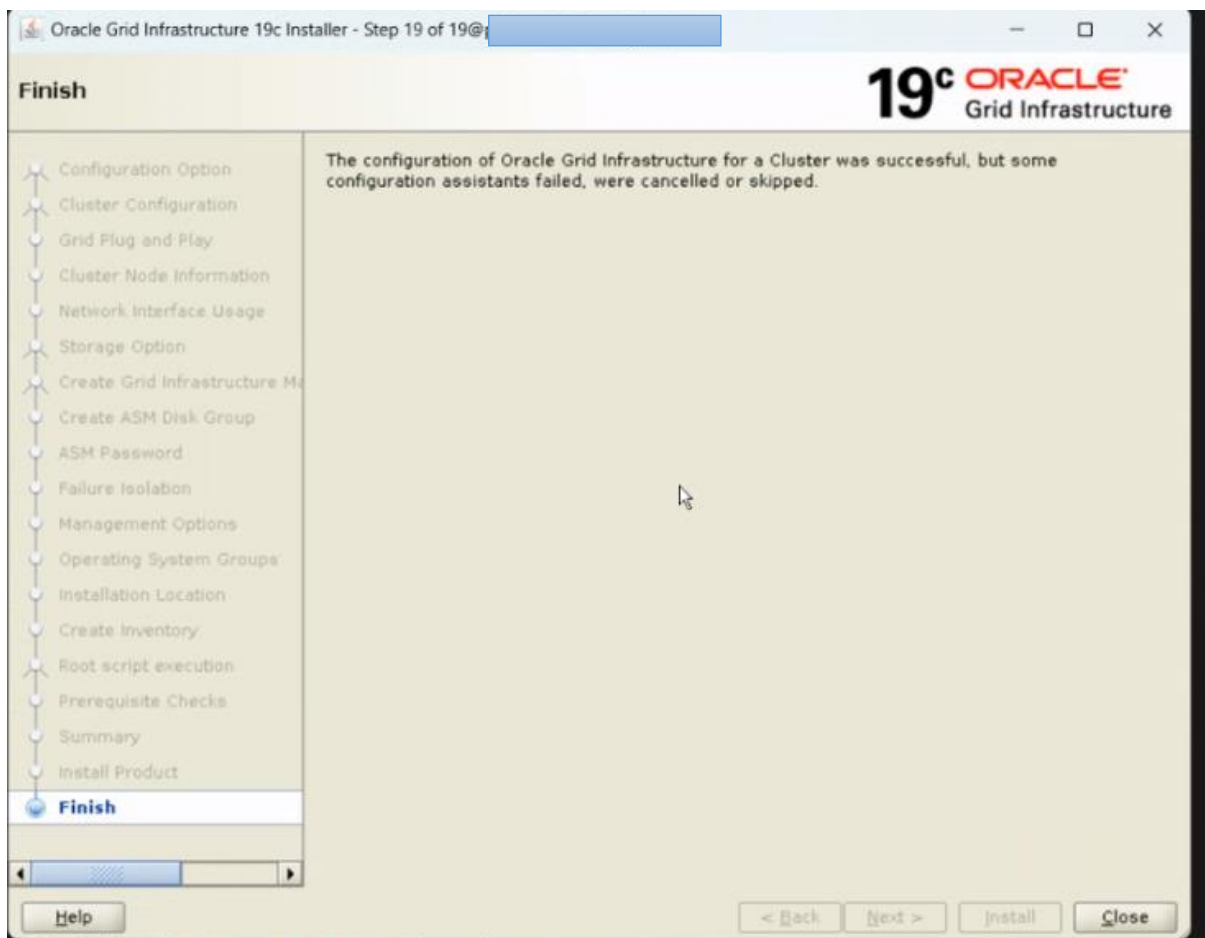
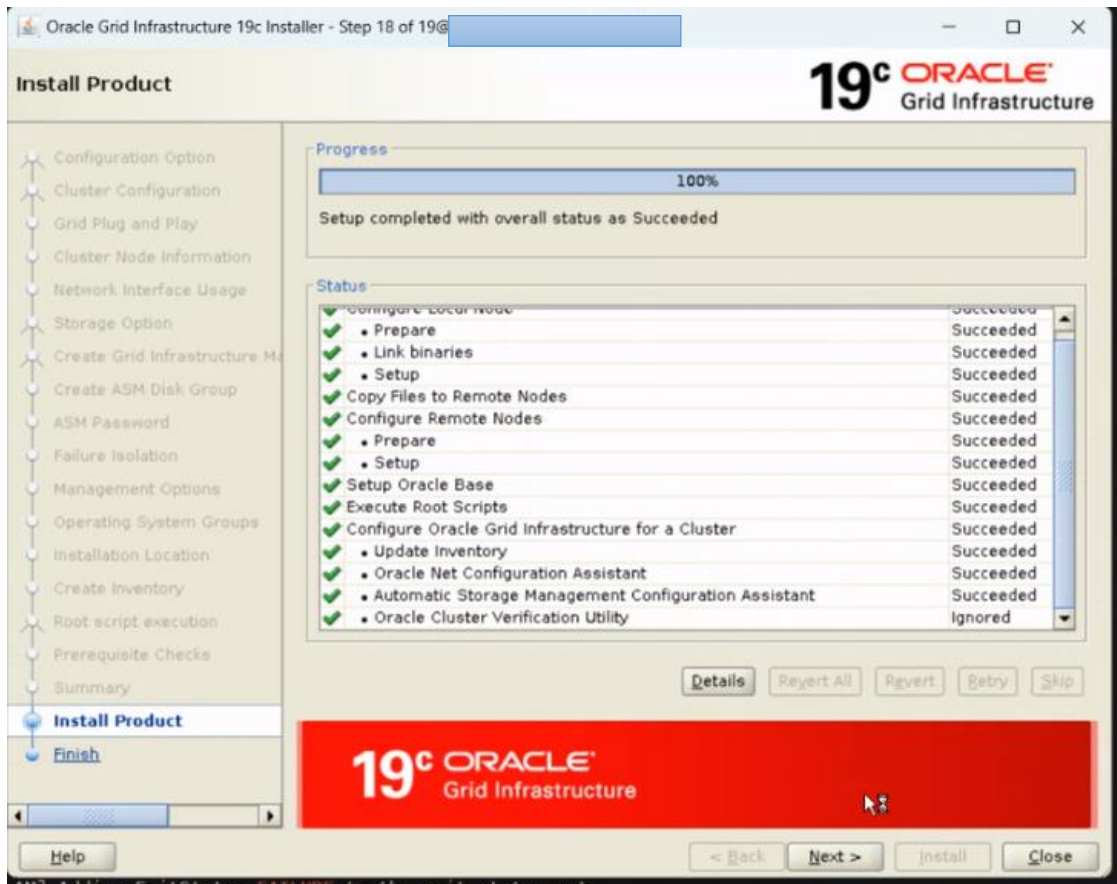
2023/04/05 00:28:11 CLSRSC-343: Successfully started Oracle Clusterware stack

2023/04/05 00:28:11 CLSRSC-594: Executing installation step 18 of 19: 'ConfigNode'.

2023/04/05 00:29:22 CLSRSC-594: Executing installation step 19 of 19: 'PostConfig'.

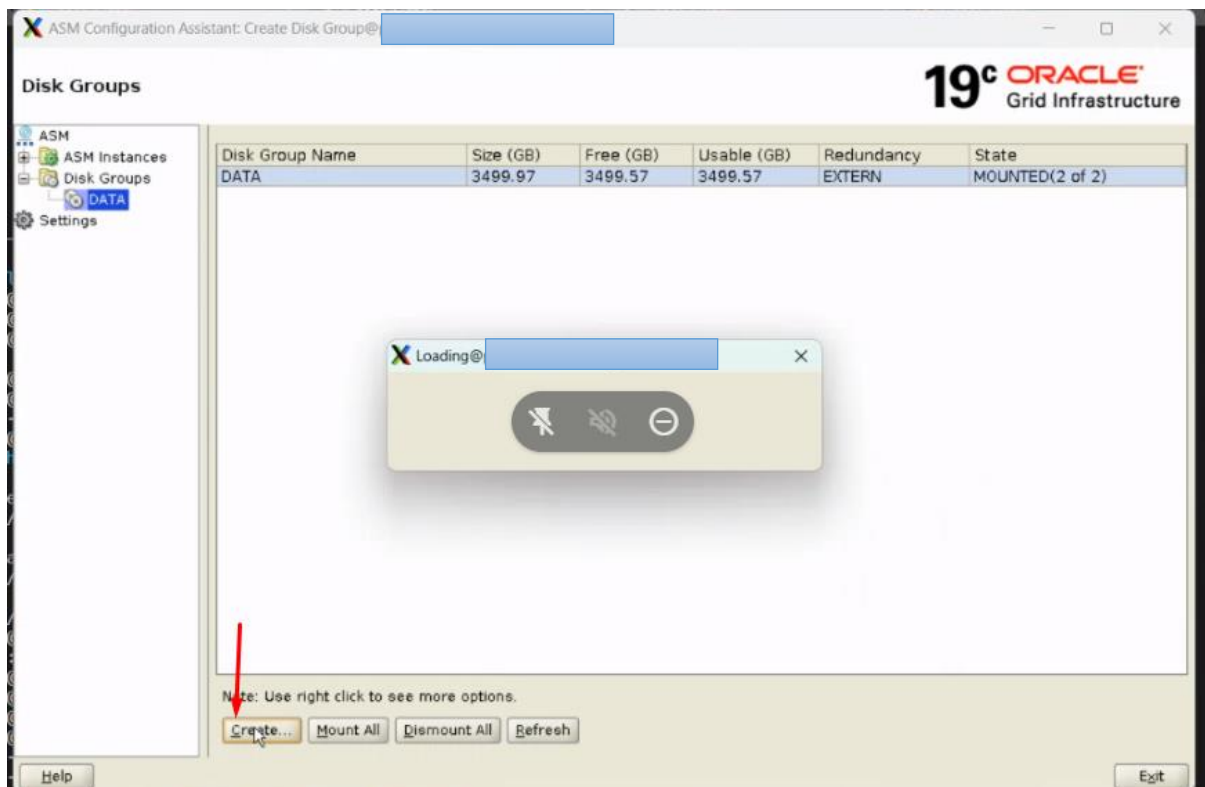
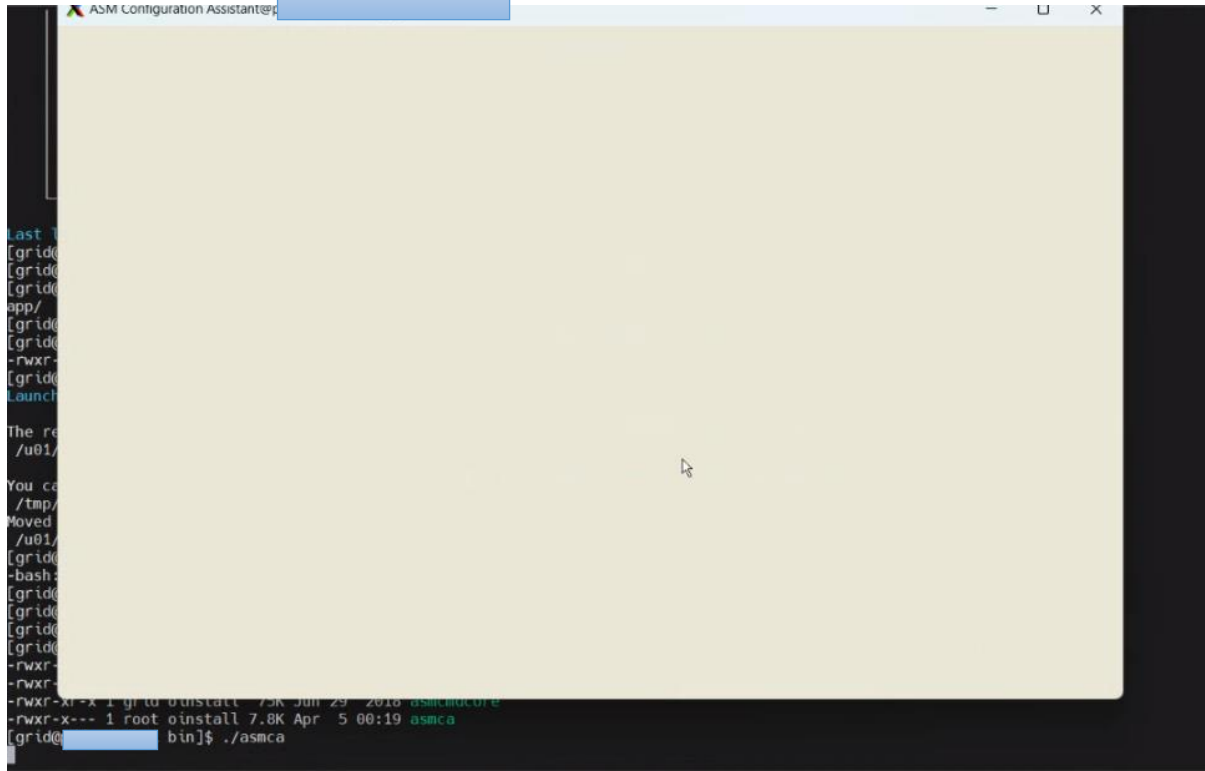
2023/04/05 00:29:43 CLSRSC-325: Configure Oracle Grid Infrastructure for a Cluster ... succeeded

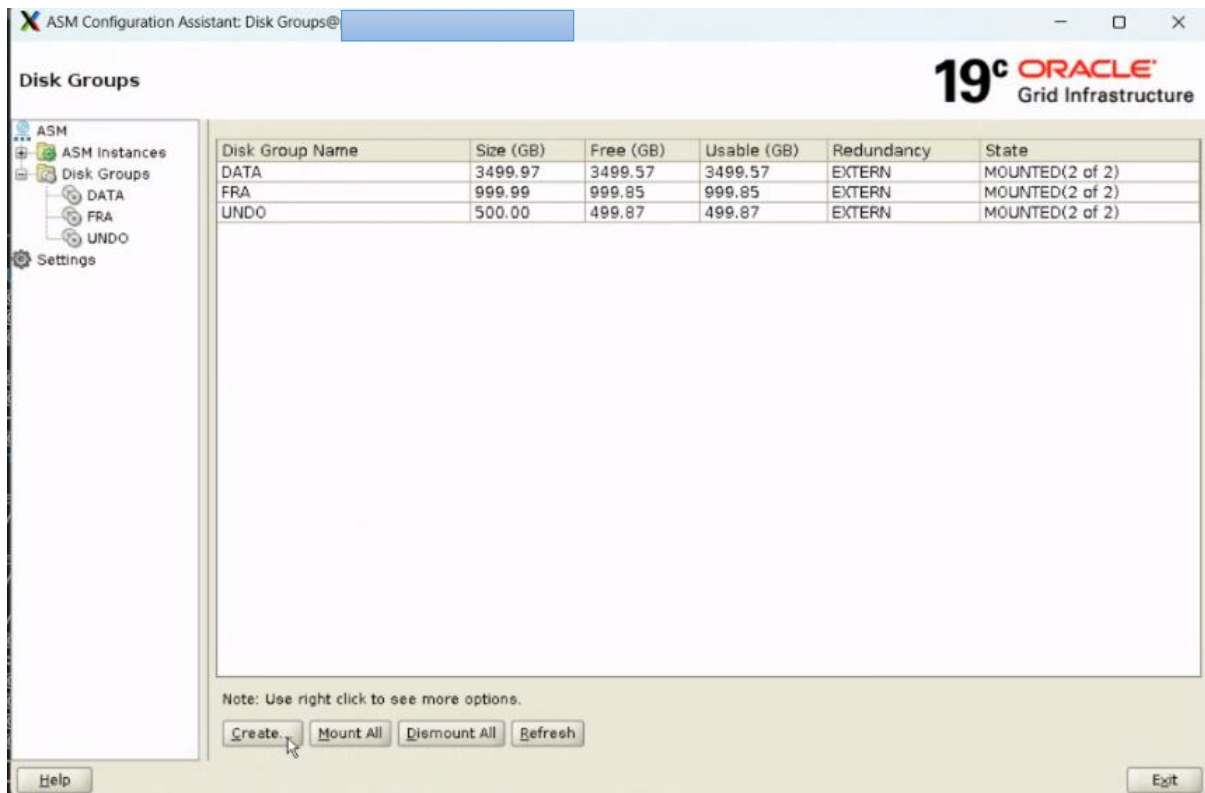
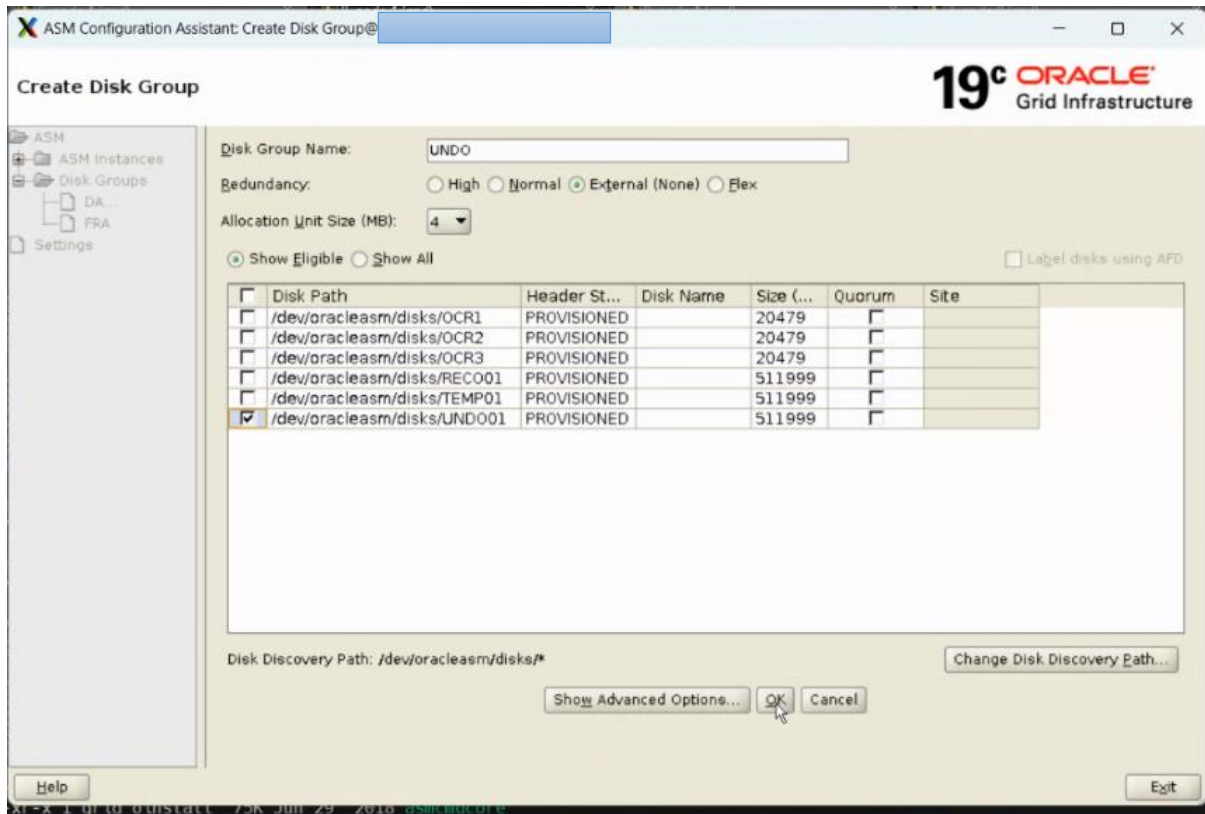


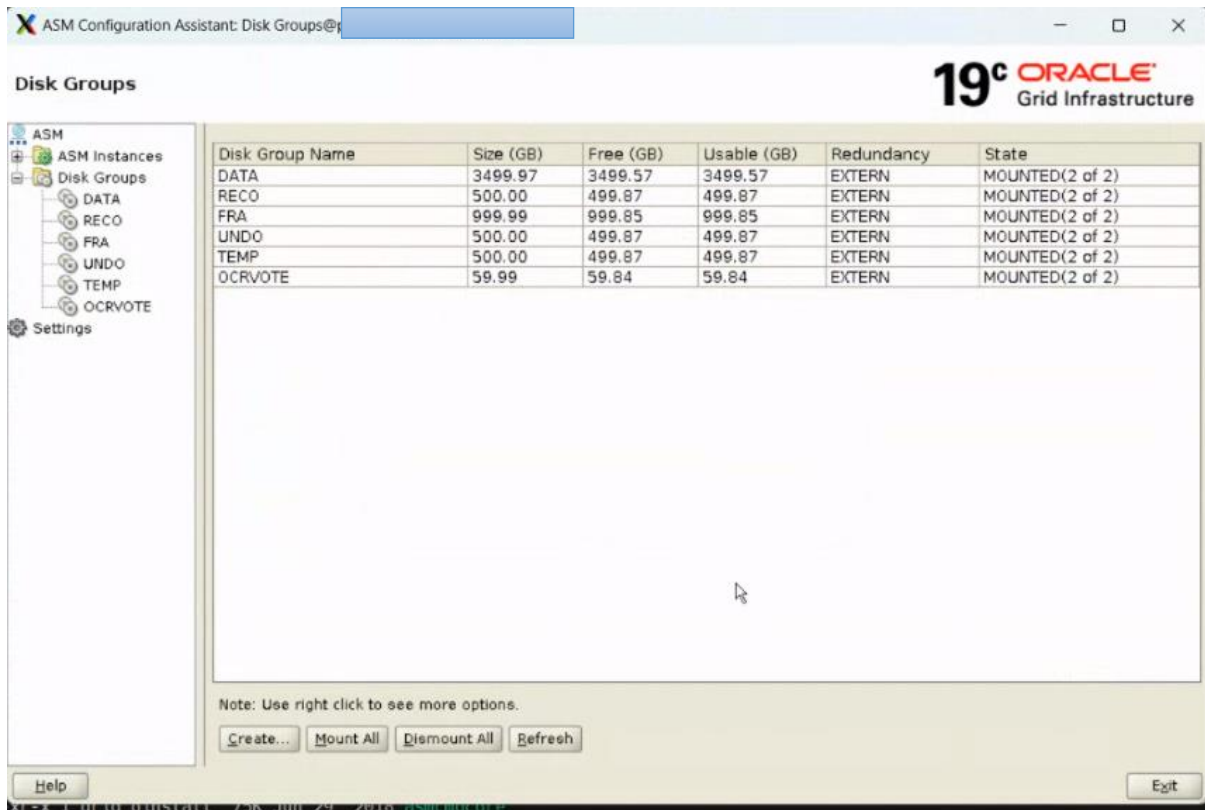


Configure Diskgroups:

Go to \$GRID_HOME/bin







Change OCR Vote from +DATA to +OCRVOTE

```
[root@asrblg-1 ~]# . oraenv
ORACLE_SID = [root] ? +ASM1
The Oracle base has been set to /u01/app/grid/gi_base
```

```
[root@asrblg-1 ~]# $ORACLE_HOME/bin/ocrconfig -add +OCRVOTE
```

```
[root@asrblg-1 ~]# $ORACLE_HOME/bin/ocrconfig -delete +DATA
```

```
[root@asrblg-1 ~]# $ORACLE_HOME/bin/crsctl replace votedisk +OCRVOTE
```

```
Successful addition of voting disk 9e0c102ca44f4f93bfcf82b805a8de50.
Successful deletion of voting disk 90fb29b74f4b4f34bf636d7aa5247360.
Successfully replaced voting disk group with +OCRVOTE.
CRS-4266: Voting file(s) successfully replaced
```