

# <u>Grid Installation</u>

## 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 kmodoracleasm.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... 1.0.0\*0=++0 0.+00.0 |...oS.o| | .o.. = . | Т ..... I Т . . .

T +----[SHA256]----+

T

[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/I3/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:qQTzTqVD0Iwoal3PubmwNUQK1hiXmtLxyxhQNJ79tfc grid@asrblg-2.whale.net The key's randomart image is: +---[RSA 2048]----+ o\*==. Т l..o=\*=o. l..=oX.\* o. l.o \* B.B... l. . + 0.S. . 



| .BB.. | \*o E | I Т . . I I +----[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: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 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)

|+\*+E .o.

+----[SHA256]----+

[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:RyZFDuT26DteWallcKrIrR7rLFwJIIq3DBW9TrrIL58 oracle@asrblq-1.whale.net The key's randomart image is: +---[RSA 2048]----+ 0.0. 0...+ =....++ T +..+0 .\* T +0=0 S+. 0.=0.. 0 0 + =+.0.00 ++= . .0 



[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/I3/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 <u>oracle@192.168.12.12</u>

### 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.... |

| E... +.. | | o. ..+.+. | | ..+ o+ .. | | o. o + =S. | | o. \* X + | | =o.B \* o | | . 00 ..+. | | . +.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	L		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/



## Install Grid

## Start gridsetup

#### /u01/app/grid/product/19/grid

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





🛓 Oracle Grid Infrastructure 19c Ins	staller - Step 2 of 9@p - X
Select Cluster Configura	tion 19° CRACLE Grid Infrastructure
Configuration Option Cluster Configuration Operating System Groups Installation Location Root script execution Prerequisite Checks Summary Install Product Finish	Choose the required cluster configuration.  Choose the required cluster configuration.  Configure an Oracle Standalone Cluster  Configure an Oracle Member Cluster for Oracle Databases Configure an Oracle Member Cluster for Applications  Oracle Extended clusters are special purpose clusters that constitute nodes which span across multiple sites. Specify a minimum of 3 site names and a maximum of 5 (e.g., siteA, siteB, siteC). Configure as an Oracle Extended cluster  Site names.
Help	< Back Next > Install Cancel

🛃 Oracle Grid Infrastructure 19c Inst	taller - Step 3 of 17@	jet	- 0 X
Grid Plug and Play Inform	ation		19° Grid Infrastructure
Cluster Configuration	to the cluster as a whole. Cl cluster node.	SCAN) allows clients to use one nai lient connect requests to the SCAN	me in connection strings to connect name can be handled by any
Grid Plug and Play	Create Local SCAN		
Cluster Node Information		h-cluster	
<ul> <li>Network Interface Usage</li> </ul>	SCAN Name:	d-scanl	
Storage Option	SCAN Port 1521		
Create Grid Infrastructure Ma	O Use Shared SCAN		
Grid Infrastructure Managem	SCAN Client Data:		BTOMES
Create ASM Disk Group	Configure GNS		
<ul> <li>Network Interface Usage</li> <li>Storage Option</li> <li>Create Grid Infrastructure Ma Grid Infrastructure Managem</li> <li>Create ASM Disk Group</li> <li>ASM Password</li> <li>Operating System Groups</li> <li>Installation Location</li> <li>Prerequisite Checks</li> <li>Summary</li> <li>Install Product</li> </ul>	Configure nodes Virt	ual IPs as assigned by the Dynamic	Networks
<ul> <li>Operating System Groups</li> </ul>	Create a new GNS		
installation Location			
Root script execution	GNS <u>V</u> IP Address:		
Prerequisite Checks	GNS Sub Domain:		
Summary	O Use Shared GNS		
🍦 Install Product	GNS Client Data		1.68
Pinish	inite Sherr Eara.		Browse
5	1		
Help		< Back	Next > Install Cancel



🕌 Oracle Grid Infrastructure 19c Insta	aller - Step 4 of 17@p	et		-		×
Cluster Node Information			<b>19</b> °	Grid Inf		ture
Cluster Configuration Grid Plug and Play	Provide the list of nodes to be and Virtual Hostname. Public Hostna ndb-1. net			h their Public Hostname net	Hostnam	ie
Network Interface Usage         Storage Option         Create Grid Infrastructure Me         Grid Infrastructure Managem         Create ASM Disk Group         ASM Password         Operating System Groups         Installation Location         Roat script execution         Prerequisite Checks         Summary         Install Product         Finish	SSH connectivity	및se Cluster Co	nfiguration File	Add Edit	Bema	ove
Help			Back Next >	[ Install	Cane	cel

#### Add another node entries



Cluster Configuration			ublic Hostname
	Public Hostname	Virtual Hostnam	ne
Grid Plug and Play	d.net	-1-vip .net	
Cluster Node Information			
Network Interface Usage			
Storage Option	107		
Create Grid Infrastructure Ma	Add Cluster Node Information@p	et	×
Grid Infrastructure Managem			
Create ASM Disk Group			
ASM Password	Contraction of		
Operating System Groups	Add a single node		
Installation Location	Specify the name for the public host name		
	host name manually, then you will be pro-		
Installation Location			
Installation Location Root script execution Prerequisite Checks	host name manually, then you will be prov Public Hostname		
Installation Location Root script execution Prerequisite Checks Summary	Public Hostname		
Installation Location Root script execution Prerequisite Checks	host name manually, then you will be prov Public <u>H</u> ostname:	npted for the virtual IP addres required nodes. You can use Constant strings such as	sthe ernove
Installation Location Root script execution Prerequisite Checks Summary Install Product	Add a range of noges  SS Specify the node range expression for the following patterns to build the expression "myhostname", single character ranges a sequences such as "[abjcdj]".  Public Hostname Expression	npted for the virtual IP addres required nodes. You can use Constant strings such as	sthe ernove
Installation Location Root script execution Prerequisite Checke Summary Install Product Finish	host name manually, then you will be prov Public Hostname: Virtual Hostname: Add a range of nodes SS Specify the node range expression for the following patterns to build the expression "myhostname", single character ranges a sequences such as "[ab]cd]]".	npted for the virtual IP addres required nodes. You can use Constant strings such as	sthe ernove

## ASRBLOGGER.com

		t	
Add a single node			
Specify the name for the public h host name manually, then you w			
Public <u>H</u> ostname:	db-2.	d.net	
Yirtual Hostname:	db-2-vip.	d.net	
O Add a range of nodes			
and the state of t	and Provide Street and Street	and the second second management of the second	
Specify the node range expression following patterns to build the ex- "myhostname", single character sequences such as "[ab[cd]]".	pression: Consta	int strings such as	
following patterns to build the ex "myhostname", single character	pression: Consta	int strings such as	
following patterns to build the ex "myhostname", single character sequences such as "[ab[cd]]".	pression: Consta	int strings such as	
following patterns to build the ex "myhostname", single character sequences such as "[ab[cd]]". Public Hostname Expression	pression: Consta	int strings such as	
following patterns to build the ex "myhostname", single character sequences such as "[ab[cd]]". Public Hostname Expression Virtual Hostname Suffix	pression: Donsta ranges such as '	int strings such as "[a-z]" and multi-chara	



Cluster Node Information       Provide the list of nodes to be managed by Oracle Grid Infrastructure with their Public Hostname         Cluster Configuration       Provide the list of nodes to be managed by Oracle Grid Infrastructure with their Public Hostname         Cluster Node Information       Public Hostname         Operating System Groups       SHI connectivity:         Install Brodut       SHI connectivity:       Use Cluster Configuration File         Preceduate Checks       Summary       Reuse private and public Leys existing in the user home       Inget Setup         Install Produt       Finish       Inget Setup       Inget Setup       Inget Setup	🕌 Oracle Grid Infrastructure 19c Inst	taller - Step 4 of 17@p			- 0 X
Configuration Option       and Virtual Hostname.         Grid Plug and Play       idb-1.         Cluster Rode Information       idb-2.         Cluster Rode Information       idb-2.         Idb-2.       ret         Virtual Hostname       idb-2.         Cluster Rode Information       idb-2.         Idb-1.       net         Idb-2.       ret         Cluster Rode Information       idb-2.         Idb-1.       net         Idb-2.       ret         Idb-3.	Cluster Node Information			19	Grid Infrastructure
Grid Play     db-1     net     1-Mp.     net       Cluster Node Information     db-2     net     -2000     ret       Network Interface Usage     Storage Option     Create Grid Infrastructure Magem       Grid Infrastructure Managem     Group     Group       Operating System Groups     Installation Location       Root script execution     Prerequisite Checks       Summary     Install Product       Finish     Image	S Deserve and the second se	and Virtual Hostnam	ie.		
Cluster Node Information     Idb22     net     2400       Network Interface Usage     Storage Option     Create Grid Infrastructure Menagem       Create Grid Infrastructure Menagem       Operating System Groups       Installation Location       Root script execution       Prerequisite Checks       Summary       Install Product       Finish	Grid Plug and Play				
Network Interface Usage         Storage Option         Create Grid Infrastructure Managem         Operating System Groups         Installation Location         Root script execution         Prerequisite Checks         Summary         Install Product         Finish					
	Storage Option Create Grid Infrastructure Me Grid Infrastructure Managem Group Operating System Groups Installation Location Root script execution Prerequisite Checks Summary Install Product	<u>O</u> S Username: gr	id	OS Password:	
				Rack Next -	Cancel



Cluster Node Information  Cluster Node Information  Configuration Option  Cluster Hode Information  Public Hostname  Virtual Hostname  Vir	Cracle Grid Infrastructure 19c Ins	taller - Step 4 of 17@p	- 0 X
And Virtual Hostname.	Cluster Node Information		19° ORACLE Grid Infrastructure
Internet Stringt Chatter     QS Username: grid     OS Password:       Summery     Reuse private and public keys existing in the user home       Test Setup	Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Continues (Science) Create Abrillion The Science (Creater Abrillion (Creater Continues (Cre	and Virtual Hostname.  Public Hostname  ndb-1 net net  Grid Infrastructure 19c Installer@p	Virtual Hostname
Help Cancel	Frenkjungste Checks Summary Install Problem		g in the user home



🔬 Oracle Grid Infrastructure 19c In	staller - Step 5 of 17@p		-	
Specify Network Interfac	ce Usage	14	19° ORAC	Structure
Configuration Option	Private interfaces are used by Or	acle Grid Infrastructure for Subnet	internode traffic. Use for	
Grid Plug and Play	eth0	2.0	Public	-
Cluster Node Information	eth1	1.16	ASM & Private	-
🍦 Network Interface Usage				
Storage Option				
Create Grid Infrastructure Ma				
Grid Infrastructure Managem				
Create ASM Disk Group				
ASM Pasoword			1. <b>1.</b> 1. <b>1</b> . <b>1</b>	
Operating System Groups				
instaliation Location				
Root script execution				
Prerequisite Checks				
Summary				
🔍 Install Product				
5 Finish				
Help		< Back	<u>N</u> ext > install	Cancel

Change the eth1 to asm and private



🔬 Oracle Grid Infrastructure 19c li	taller - Step 6 of 17@) - D X
Storage Option Informat	on 19° ORACLE' Grid Infrastructure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option	You can place Oracle Cluster Registry (OCR) files and voting disk files on Oracle ASM storage, or on a file system. Solution (OCR) files and voting disk files on Oracle ASM storage, or Choose this option to configure OCR and voting disks on ASM storage. ASM instance will be configured on reduced number of cluster nodes. Solution Use Shared File System Choose this option to configure OCR and voting disk files on an existing shared file system.
Create Grid Infrastructure M Grid Infrastructure Manager Create ASM Disk Group ASM Password Operating System Groups Installation Location Root script execution Prerequisite Checks Summary Install Product Finish	
۲ Help	< Back Next > Install Cancel



Gracle Grid Infrastructure 19c II	staller - Step 7 of 17@	- 0 X
Create Grid Infrastructu	re Management Reposit	19° ORACLE Grid Infrastructure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure Grid Infrastructure Manager Create ASM Disk Group ASM Password Operating System Groups Installation Location Prerequisite Checks Summary Install Product Finish	( No	nhanced real time & agnostics and sioning for patching. The components that ister Health Advisor, Cluster Health Monitor, luster Activity Log. It is best practice to install imely resolution of issues as well as available
Help		< Back Next > Install Cancel



Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information	OCR and Voting disk data will be stored in the following characteristics of this Disk group. Disk group name DATA Redundancy OFlex OHigh Normal Ext Allocation Unit Size	) ASM Disk group. Select disl	ACLE Infrastruct	
<u>Network Interface Usage</u>	Select Disks	Show Candidate/Prov	isioned Diske	5 •
Create Grid Infrastructure	Disk Path	Size (in MB)	Status	T
Create ASM Disk Group	/dev/oracleasm/disks/DATA01	511999	Provisioned	-
ASM Password	/dev/oracleasm/disks/DATA02		Provisioned	
	/dev/oracleasm/disks/DATA03	511999	Provisioned	
Operating System Groups	✓ /dev/oracleasm/disks/DATA04	511999	Provisioned	
Installation Location	/dev/oracleasm/disks/DATA05		Provisioned	
Root script execution	/dev/oracleasm/disks/DATA06	511999	Provisioned	
Prerequisite Checks Summary Install Product Finish	Disk Discovery Path:'/dev/oracleasm/disks/*' Change Discovery Path Configure Oracle ASM Elter Driver Select this option to configure ASM Filter Driver(AFD) to disk devices by Oracle ASM.	simplify configuration and n	nanagement	of

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



🔬 Oracle Grid Infrastructure 19c In	staller - Step 9 of 16@g	- 0 X
Specify ASM Password		19° ORACLE Grid Infrastructure
Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure M Create ASM Disk Group	with SYSASM privileges for administration. Orac ASMSNMP user with SYSDBA privileges to monit Specify the password for these user accounts. Use different passwords for these accounts Password	t (Oracle ASM) instance requires its own SYS user cle recommends that you create a less privileged tor the ASM instance. Confirm Password
ASM Password	B2W20Mb	
Operating System Groups Installation Location Root script execution	Use game passwords for these accounts	
Prerequisite Checks Summery	Specify <u>P</u> assword <sup>®</sup> ········ <mark>1</mark>	Confirm Password:
install Product Finish		
	Messages: Specify Password:[INS-30011] The password recommended standards.	entered does not conform to the Oracle

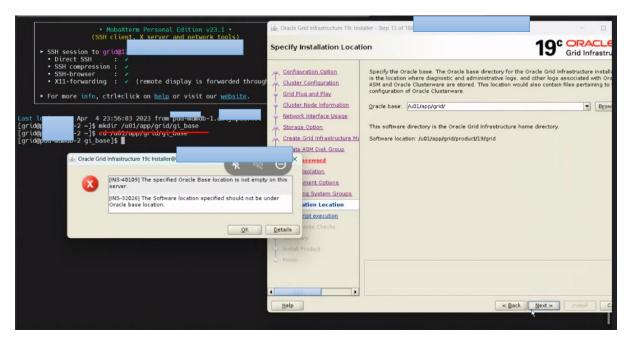
🔬 Oracle Grid Infrastructure 19c In	staller - Step 10 of 18@ X
Failure Isolation Support	19° ORACLE Grid Infrastructure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure Ma Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Groups Installation Location Root script execution Prerequisite Checks Summary Install Product Finish	Choose one of the following Failure Isolation Support options.
Help	< Back Next > Install Cancel



A Oracle Grid Infrastructure 19c Ins	taller - Step 11 of 18@		- 0	×	
Specify Management Opt	tions	19	Grid Infrastruc	ture	
Configuration Option	You can configure to have this Storage Management to be m the Cloud Control configuration	instance of Oracle Grid infrastructure and anaged by Enterprise Manager Cloud Contr n to perform the registration.	Oracle Automatic ol. Specify the details	of	
Grid Plug and Play	Register with Enterprise Ma	nager (EM) Cloud Control			
Cluster Node Information	OMS host				
Vetwork Interface Usage	OMS port:				
T Storage Option	EM Admin User Name				
Create Grid Infrastructure Ma	EM Admin Password				
Create ASM Disk Group	Cri wasant Pasagord.				
Failure Isolation					
Management Options					
Operating System Groups					
Installation Location					
Root script execution					
Prerequisite Checks					
Summary					
install Product					
Finish					
Help		< Back Next	Install Can	icel	
Ge Oracle Grid Infrastructure	19c Installer - Step 12 of 18@			-	o ×
Privileged Operating	System Groups		19°	Grid Infra	Structure
Configuration Option	Select the name of	the operating system group, that yo racle Automatic Storage Managemen	u want to use for c	Grid Infra	structure
Configuration Option	Select the name of authentication to O		u want to use for c	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play	Select the name of authentication to O Oracle <u>A</u> SM Admini-	racle Automatic Storage Managemen atrator (OSASM) Group	u want to use for o	Grid Infra	structure
Configuration Option	Select the name of authentication to O Oracle <u>A</u> SM Admini-	racle Automatic Storage Managemen	u want to use for o	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play	Select the name of authentication to O Oracle <u>A</u> SM Adminie Oracle ASM <u>D</u> BA (O	racle Automatic Storage Managemen atrator (OSASM) Group	u want to use for o asmadmin • asmdba •	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information	Select the name of authentication to O Oracle <u>A</u> SM Adminie Oracle ASM <u>D</u> BA (O	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin • asmdba •	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usag	Select the name of authentication to O Oracle <u>ASM</u> Admini- Oracle ASM <u>D</u> BA (O <u>e</u> Oracle ASM <u>O</u> perate	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin • asmdba •	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Informatio Network Interface Usag Storage Option	Select the name of authentication to Or Oracle <u>A</u> SM Admini- Oracle ASM <u>D</u> BA (O <u>e</u> Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin • asmdba •	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure	Select the name of authentication to Or Oracle <u>A</u> SM Admini- Oracle ASM <u>D</u> BA (O <u>e</u> Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Informatio Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password	Select the name of authentication to Or Oracle <u>A</u> SM Admini- Oracle ASM <u>D</u> BA (O <u>e</u> Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Failure Isolation	Select the name of authentication to Or Oracle <u>A</u> SM Admini- Oracle ASM <u>D</u> BA (O <u>e</u> Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usag Storage Option Create Grid Infrastructo Create ASM Disk Group ASM Password Failure Isolation Management Options	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Informatio Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Failure Isolation Management Options	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Informatio Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructs Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location Root script execution	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Informatio Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usag Storage Option Create Grid Infrastructs Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location Root script execution	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usag Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location Prereguisite Checks	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructur Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Grid Installation Location Root script execution Prerequisite Checks Summary	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructs Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Gri Installation Location Prerequisite Checks Summary Install Product	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructs Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Gri Installation Location Prerequisite Checks Summary Install Product	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructs Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Gri Installation Location Prerequisite Checks Summary Install Product	Select the name of authentication to O Oracle ASM Adminis Oracle ASM <u>D</u> BA (O © Oracle ASM <u>O</u> perat	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o asmadmin v asmdba v I) asmoper v	Grid Infra	structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructu Create ASM Disk Group ASM Password Eailure Isolation Management Options Operating System Grid Installation Location Prerequisite Checks Summary Install Product Finish	Select the name of authentication to Or Oracle ASM Admini- Oracle ASM DBA (O e Oracle ASM Operation ure Ma	racle Automatic Storage Managemen atrator (OSASM) Group SDBA for ASM) Group	u want to use for o	Grid Infra	structure



The workaround for below error is to create a different directory gi\_base



🛓 Oracle Grid Infrastructure 19c Inst	aller - Step 14 of 19@p			-	
Create Inventory			19	Grid Infr	astructure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure Ma Create ASM Disk Group ASM Password Eailure Isolation Management Options Operating System Groups Installation Location Create Inventory	for each product typically Inventory <u>Directory</u> .	I log files). This directory bdirectories for each pro- y requires 150 kilobytes L/app/grid/oralnventory g operating system grou y (oralnventory).	y is called the "inventory oduct to contain inventory	directory". Th y data. The su	e installer ibdirectory Browse
Root script execution					
Prerequisite Checks					
install Product	[				
5 Finish					
Help			< Back Next >	Install	Cancel
Help			< Back Next >	Install	Cancel



Gracie Grid Infrastructure 19c Ins	taller - Step 15 of 19@		- 0	×
Root script execution cor	nfiguration		19° ORACLE Grid Infrastru	E ucture
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information	can choose to have the i one of the options below additional prerequisite of 2Automatically run con	figuration scripts	automatically by specifying inputs	
Network Interface Usage	⊙ Use "root" user <u>c</u>	redential		
Storage Option	Password :			
Create Grid Infrastructure Me	🔘 Use gudo 🗟			
Create ASM Disk Group	Program path :			58
ASM Password	User name	arid		
Failure Isolation	Password :			
Management Options     Operating System Groups		L		
Installation Location				
Create Inventory				
Root script execution				
Prerequisite Checks				
Summary				
install Product				
Finish				
•				
Help		< Back	Next > Install C	ancel



🔬 Oracle Grid Infrastructure 19c Inst	aller - Step 16 of 19@ -	o x
Perform Prerequisite Che	ecks 19° ORAC Grid Infra	Structure
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure Ma Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Groups Installation Location Create Inventory Root script execution Prerequisite Checks Summary	Yerification Result         Some of the minimum requirements for installation are not completed. Review and fix the listed in the following table, and recheck the system.         Check A       Ex & Check Again         Show Failed       Image: All Nodes         Checks       Status         Checks       Ignored         OS Kernel Version       Ignored         Port Availability for component "Oracle Remote Method Invocation (OFIgnored         RPM Package Manager database       Ignored         Image: Network Time Protocol (NTP)       Ignored         Daemon 'ntpd'       Ignored         Daemon 'chronyd'       Ignored	re Issues Fixable No No No No No No No No
Finish	This is a prerequisite condition to test whether sufficient total swap space is available of system. (more details) Check Failed on Nodes: [ 1]	on the
Help	< Back Next > Install	Cancel



🔬 Oracle Grid Infrastructure 19c Insta	aller - Step 16 of 19@ - C X	
Perform Prerequisite Che	cks 19° ORACLE Grid Infrastructure	
. Configuration Option	Verification Result	
Cluster Configuration	Some of the minimum requirements for installation are not completed. Review and fix the issues	
Grid Plug and Play	listed in the following table, and recheck the system.	
Cluster Node Information	Check A.   Ebx & Check Again   Show Failed V   All Nodes V   Ignore A	
Vetwork Interface Usage	Checks Status Fixable	
Storage Option	Checks No	
Create Grid Infrastr	Grid Infrastructure 19c Installer® × nored No nored No	
Create ASM Disk Gr	[INS-13016] You have chosen to ignore some of the prerequisites nored No	
ASM Password	for this installation. This may impact product configuration.	
Failure Isolation	Are you sure you want to continue ? nored No	
Management Option	nored No	
Operating System ( Installation Location	Yes No Details	
Create Inventory		
Root script execution		
Prerequisite Checks		
Summary		
Install Product		
5 Finish	This is a prerequisite condition to test whether sufficient total swap space is available on the system. (more details)	
	Check Failed on Nodes: [	
Help	< Back Next Rai Install Cancel	
🛓 Oracle Grid Infrastructure 19c I	Installer - Step 17 of 19@ - D	×
Summary	19° ORACLE Grid Infrastructu	re
and the second		-
The Configuration Option	Oracle Grid Infrastructure 19c Installer	1
Cluster Configuration	Global Settings — Config Option: Configure Oracle Grid Infrastructure for a New Cluster (Edit)	
Grid Plug and Play	Oracle base for Oracle Grid Infrastructure: /u01/app/grid/gi_base [Edit]	
Cluster Node Information	- Grid home: /u01/app/grid/product/19/grid	
Network Interface Usage	- Privileged Operating System Groups: asmdba (OSDBA), asmoper (OSOPER), asmadm	
Storage Option	- Root script execution configuration: Manual configuration [Edit]	
Create Grid Infrastructure M	Inventory information     Inventory location: /u01/app/grid/oralnventory [Edit]	
Create ASM Disk Group	Central inventory (orainventory) group: oinstall [Edit]	
ASM Password	Management information	1
Failure Isolation	Management method: None [Edit]	
Management Options	G - Grid Infrastructure Settings	
Operating System Groups	Cluster Configuration: Standalone Cluster [Edit]     Cluster Name: pdd-mdm-cluster [Edit]	
Installation Location	Hub nodes: pdd-mdmdb-1,pdd-mdmdb-2 [Edit]	
Create Inventory	- SCAN Type: Local SCAN	
STORE HIPETROLE		
Root script execution	- Single Client Access Name (SCAN) -scan1 [Edit]	
	- SCAN Port: 1521 [Edit]	
Root script execution	- SCAN Port: 1521 [Edit] - Public Interface(s): eth0 [Edit]	
Prerequisite Checks	SCAN Port: 1521 [Edit] Public Interface(s): eth0 [Edit] ASM & Private Interface(s): eth1 [Edit]	
Root script execution Prerequisite Checks Summary	<ul> <li>SCAN Port: 1521 [Edit]</li> <li>Public Interface(s): eth0 [Edit]</li> <li>ASM &amp; Private Interface(s): eth1 [Edit]</li> <li>Storage Information</li> </ul>	•
Root script execution Prerequisite Checks Summary Install Product	SCAN Port: 1521 [Edit] Public Interface(s): eth0 [Edit] ASM & Private Interface(s): eth1 [Edit] Storage Information	
Root script execution Prerequisite Checks Summary Install Product Finish	<ul> <li>SCAN Port: 1521 [Edit]</li> <li>Public Interface(s): eth0 [Edit]</li> <li>ASM &amp; Private Interface(s): eth1 [Edit]</li> <li>Storage Information</li> </ul>	



nstall Product	* 1	9° ORACLE Grid Infrastructu
Configuration Option Cluster Configuration Grid Plug and Play Cluster Node Information Network Interface Usage Storage Option Create Grid Infrastructure Mi Create ASM Disk Group ASM Password Failure Isolation Management Options Operating System Groups Installation Location Create Inventory Root script execution	Progress       5%         Saving inventory       5%         Status       Configure Local Node         Configure Local Node       •         • Configure Local Node       •         • Orepare       •         • Link binaries       •         • Setup       •         Copy Files to Remote Nodes       •         Configure Remote Nodes       •         • Setup       •         Setup Oracle Base       •         Execute Root Scripts       •         Configure Oracle Grid Infrastructure for a Cluster	In Progress Succeeded Succeeded In Progress Pending Pending Pending Pending Pending Pending Pending
Prerequisite Checks Summary Install Product Phrish	Details Revert A	II] Rgvert] (Betry) (Ski

stall Prod	uct		19	Grid Infrastructu	ure
Configuration	Execute Configuration Scripts@			×	-
Grid Plug a	The following configuration scripts need to be exe node. Each script in the list below is followed by a				-
	Scripts		Nodes		_
Network In	/u01/app/grid/oralnventory/orainstRoot.sh	db-1,	ndb-2		-
Storage Or	/u01/app/grid/product/19/grid/root.sh	db-1,	ndb-2	Succeeded	
Create Gri				Succeeded	-11
Create ASh	2			Succeeded	
ASM Passe				Succeeded	
	To execute the configuration scripts:			Succeeded	-11
Failure Ind	<ol> <li>Open a terminal window</li> <li>Login as "root"</li> </ol>			Succeeded	-11
Manageme	3. Run the scripts			Succeeded	
Operating	<ol><li>Return to this window and click "OK" to continue to the second s</li></ol>	nue		In Progress	6
Installation	Run the script on the local node first. After succes	sful completion, y	ou can start the script	in Pending	
	parallel on all other nodes.				
Create Inve					
Root script	(mate)			Canad	
Frerequisit	Help		QK	Cancel	
			Details Revent 41	Revent Betry Ski	
Install Pro	duct				
Finish	10° ORAC				
_	Grid Infra	structure			



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

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

Changing groupname of /u01/app/grid/oralnventory 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.



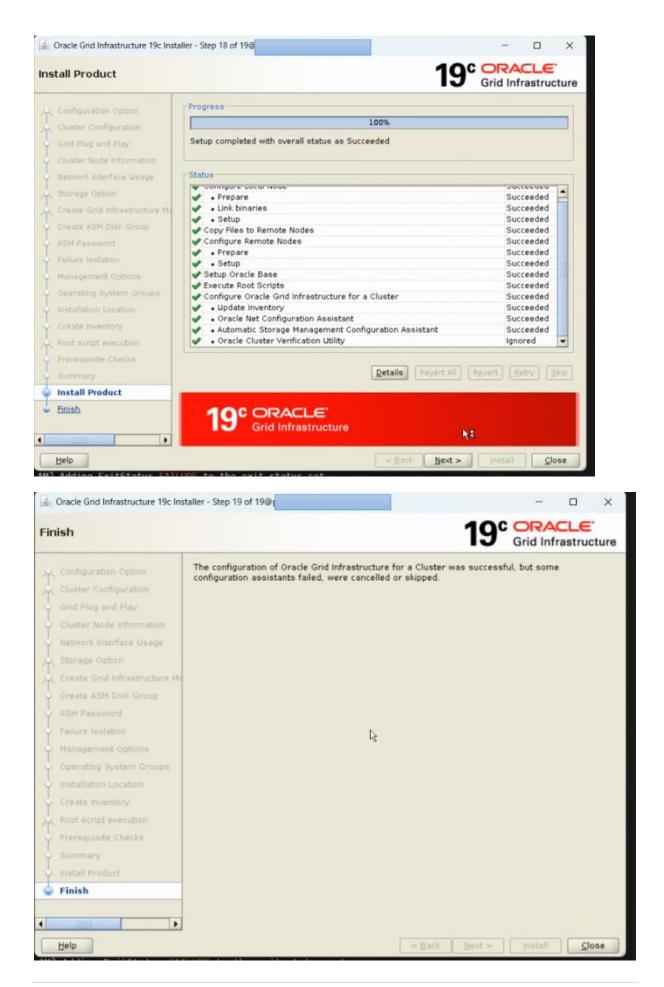
2023/04/05 00:25:58 CLSRSC-482: Running command: '/u01/app/grid/product/19/grid/bin/ocrconfig upgrade grid oinstall' CRS-4256: Updating the profile Successful addition of voting disk 90fb29b74f4b4f34bf636d7aa5247360. Successfully replaced voting disk group with +DATA. CRS-4256: Updating the profile CRS-4266: 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

		rid Infrastructu
Configuration Option	Progress 100%	
Cluster Configuration	100%	
Grid Flug and Flay	Setup completed with overall status as Failed	
Cluster Node Information		
Network Interface Usage	Status	
L Storage Option	Compare Local Hoae	oucceaded .
	• Prepare	Succeeded Succeeded
	e Grid Infrastructure 19c Installer@	Succeeded
Create ASM Disk Gr		Succeeded
ASM Password	[INS-20802] Oracle Cluster Verification Utility failed.	Succeeded
Failure Isolation		Succeeded
	2	Succeeded
Management Option		Succeeded Succeeded
Operating System (	QK. Details	Failed
Installation Location	✓ ■ Update Inventory	Succeeded
a second second second	<ul> <li>Oracle Net Configuration Assistant</li> </ul>	Succeeded
Create Inventory	<ul> <li>Automatic Storage Management Configuration Assistant</li> </ul>	Succeeded
Root script execution	<ul> <li>Oracle Cluster Verification Utility</li> </ul>	Failed
Prerequisite Checks		
Summary	Qetails Revert All Rev	ert <u>Betry</u> Skip
🧅 Install Product		
Einish	19° ORACLE	

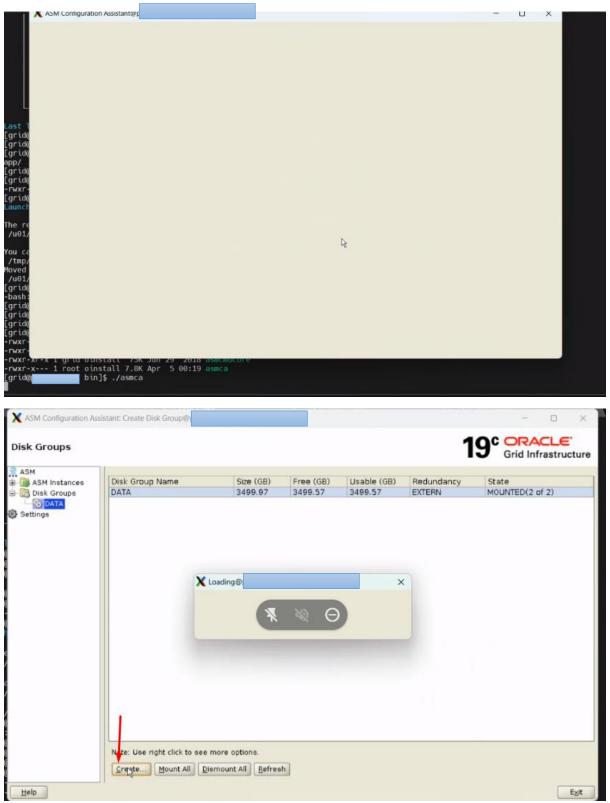






Configure Diskgroups:

Go to \$GRID\_HOME/bin





SM		-						
ASM Instances Disk Groups	Disk Group Name:	UNDO						
	Redundancy:	⊖ High ⊖ I	Normal 💿 Extern					
D DA	Allocation Unit Size (MB):	4 💌						
ttings	Contraction and the second							
	Show Eligible O Show	N All						Label disks usin
	Disk Path		Header St	Disk Name	Size (	Quorum	Site	
	/dev/oracleasm/d		PROVISIONED		20479	Г		
	/dev/oracleasm/d		PROVISIONED		20479			
	/dev/oracleasm/d		PROVISIONED		20479			
	/dev/oracleasm/d		PROVISIONED		511999			
	/dev/oracleasm/d		PROVISIONED		511999			
	/dev/oracleasm/d	lisks/UND001	PROVISIONED		511999	Г		
	Disk Discovery Path: /dev	woracleasm/dis		nced Options		ancel	Change D	isk Discovery <u>P</u> al

					1	OC ORACLE
)isk Groups						9° ORACLE Grid Infrastructur
ASM			1			
🗟 🐻 ASM Instances	Disk Group Name	Size (GB)	Free (GB)	Usable (GB)	Redundancy	State
Disk Groups	DATA	3499.97	3499.57	3499.57	EXTERN	MOUNTED(2 of 2)
- To DATA	FRA	999.99	999.85	999.85	EXTERN	MOUNTED(2 of 2)
- TRA	UNDO	500.00	499.87	499.87	EXTERN	MOUNTED(2 of 2)
	Note: Use right click to see	more options.				

ASRBLOGGER.com	١
----------------	---

isk Groups					1	9° ORACLE Grid Infrastructur
ASM	Disk Group Name	Size (GB)	Free (GB)	Usable (GB)	Deductors	State
ASM Instances		3499.97	3499.57	3499.57	Redundancy	MOUNTED(2 of 2)
Bisk Groups	DATA RECO	500.00	499.87	499.87	EXTERN	MOUNTED(2 of 2)
DATA						MOUNTED(2 of 2)
🔞 RECO	FRA	999.99	999.85	999.85	EXTERN	
- The FRA	UNDO	500.00	499.87	499.87	EXTERN	MOUNTED(2 of 2)
- lo UNDO	TEMP	500.00	499.87	499.87	EXTERN	MOUNTED(2 of 2)
TEMP	OCRVOTE	59.99	59.84	59.84	EXTERN	MOUNTED(2 of 2)
				R		

## 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 +0CRV0TE. CRS-4266: Voting file(s) successfully replaced