

Oracle 11g 单实例静默安装

环境说明

环境简介	
服务器环境	Red Hat Enterprise Linux Server release 6.9 (Santiago)
Oracle 版本	Oracle Database 11g Enterprise Edition Release 11.2.0.4.0
grid 软件版本	11g Enterprise Edition Release 11.2.0.4.0
目的	搭建单点 ASM 数据库

版本说明

版本号	修订日期	修订人	批准人	修改内容
0.0.1	2020/11/09	jan		初稿

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一、 文档综述

1 文档说明

本文档包含 Oracle 单实例所对应 grid 软件、ASM 配置、数据库软件及数据库部署全过程。
本文档效果预期：Oracle 实施人员仅凭本文档，便可完成实施工作。
本文档需要日常工作中不断维护改进，以增强全面性。
本文档需要基于严格的测试评审。

2 读者范围

本文档主要供 Oracle 数据库运维人员参考，在 Oracle ASM 单实例部署全生命周期过程中，必须严格遵循本系列文档。

3 术语说明

序号	全称	缩写

4 输入输出

输入条件	
	网络技术博客
	Oracle 官方网站
输出条件	
	Oracle ASM 单实例 搭建全过程

二、 建立数据库

1 虚拟机建立共享盘

```
[root@jandb ~]# fdisk -l
```

```
Disk /dev/sda: 8589 MB, 8589934592 bytes
255 heads, 63 sectors/track, 1044 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00057041
```

Device	Boot	Start	End	Blocks	Id	System
/dev/sda1	*	1	26	204800	83	Linux
Partition 1 does not end on cylinder boundary.						
/dev/sda2		26	287	2097152	82	Linux swap / Solaris
Partition 2 does not end on cylinder boundary.						
/dev/sda3		287	1045	6085632	83	Linux

```
Disk /dev/sdb: 10.7 GB, 10737418240 bytes
255 heads, 63 sectors/track, 1305 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00000000
```

```
[root@jandb ~]# ls -al /dev/sd*
```

```
brw-rw----. 1 root disk 8,  0 Nov  4 05:21 /dev/sda
brw-rw----. 1 root disk 8,  1 Nov  4 05:21 /dev/sda1
brw-rw----. 1 root disk 8,  2 Nov  4 05:21 /dev/sda2
brw-rw----. 1 root disk 8,  3 Nov  4 05:21 /dev/sda3
brw-rw----. 1 root disk 8, 16 Nov  4 05:21 /dev/sdb
```

```
[root@jandb ~]# fdisk /dev/sdb
```

```
[root@jandb ~]# fdisk -l
```

```
Disk /dev/sda: 8589 MB, 8589934592 bytes
255 heads, 63 sectors/track, 1044 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```

Disk identifier: 0x00057041

Device	Boot	Start	End	Blocks	Id	System
/dev/sda1	*	1	26	204800	83	Linux
Partition 1 does not end on cylinder boundary.						
/dev/sda2		26	287	2097152	82	Linux swap / Solaris
Partition 2 does not end on cylinder boundary.						
/dev/sda3		287	1045	6085632	83	Linux

Disk /dev/sdb: 10.7 GB, 10737418240 bytes

255 heads, 63 sectors/track, 1305 cylinders

Units = cylinders of 16065 * 512 = 8225280 bytes

Sector size (logical/physical): 512 bytes / 512 bytes

I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk identifier: 0xf207b5b8

Device	Boot	Start	End	Blocks	Id	System
/dev/sdb1		1	654	5253223+	83	Linux
/dev/sdb2		655	1305	5229157+	83	Linux

2 创建组和用户

```
groupadd -g 1000 oinstall
```

```
groupadd -g 1001 dba
```

```
groupadd -g 1002 oper
```

```
groupadd -g 1003 asmadmin
```

```
groupadd -g 1004 asmdba
```

```
groupadd -g 1005 asmoper
```

```
useradd -u 2000 -g oinstall -G asmadmin,asmdba,asmoper,dba -d /home/grid grid
```

```
useradd -u 2001 -g oinstall -G asmdba,asmadmin,dba,oper -d /home/oracle oracle
```

```
passwd grid
```

```
passwd oracle
```

3 创建目录

```
mkdir -p /oracle/app/grid
```

```
mkdir -p /oracle/app/11.2.0/grid
```

```
chown -R grid:oinstall /oracle
```

```
mkdir -p /oracle/app/oracle
```

```
chown -R oracle:oinstall /oracle/app/oracle
```

```
chmod -R 775 /oracle
```

4 修改内核参数

首先注销掉配置文件最后 6 行内容，然后添加下面 8 行内容。

```
[root@jandb ~]# vim /etc/sysctl.conf
```

```
#####11g#####
```

```
net.core.rmem_max=4194304
net.core.wmem_max=1048576
net.core.rmem_default=262144
net.core.wmem_default=262144
net.ipv4.ip_local_port_range =9000 65500
fs.file-max = 6815744
fs.aio-max-nr =1048576
kernel.shmmni =4096
net.ipv4.ipfrag_low_thresh = 943718400
net.ipv4.ipfrag_high_thresh = 1073741824
net.ipv4.ipfrag_time = 90
net.core.rmem_max = 16777216
net.core.wmem_max = 16777216
```

```
[root@jandb ~]# sysctl -p
```

5 修改最大限制

```
[root@jandb ~]# vim /etc/profile
```

```
if [ $USER = "oracle" ]||[ $USER = "grid" ]; then
    if [ $SHELL = "/bin/ksh" ]; then
        ulimit -p 16384
        ulimit -n 65536
    else
        ulimit -u 16384 -n 65536
    fi
fi
umask 022
```

```
[root@jandb ~]# vim /etc/security/limits.conf
```

grid	soft	nproc	2047
grid	hard	nproc	16384
grid	soft	nofile	1024
grid	hard	nofile	65536
oracle	soft	nproc	2047
oracle	hard	nproc	16384
oracle	soft	nofile	1024
oracle	hard	nofile	65536

```
[root@jandb ~]# vim /etc/pam.d/login
session    required    pam_limits.so
```

6 设置环境变量

Grid 用户：添加如下内容

```
[root@jandb ~]# vim /home/grid/.bash_profile
export EDITOR=vi
export ORACLE_SID=+ASM
export ORACLE_BASE=/oracle/app/grid
export ORACLE_HOME=/oracle/app/11.2.0/grid
export ORACLE_OWNER=grid
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib:/lib:/usr/lib:/usr/local/lib
export NLS_LANG="simplified chinese" _china.zhs16gbk
export PATH=$PATH:$HOME/bin:$ORACLE_HOME/bin
unset USERNAME
umask 022
```

```
[root@jandb ~]# vim /home/oracle/.bash_profile
export ORACLE_UNQNAME=prod
export ORACLE_SID=prod
export ORACLE_BASE=/oracle/app/oracle
export ORACLE_HOME=/oracle/app/oracle/product/11.2.0/db_1
export ORACLE_OWNER=oracle
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib:/lib:/usr/lib:/usr/local/lib
export NLS_LANG="simplified chinese" _china.zhs16gbk
export PATH=$PATH:$HOME/bin:$ORACLE_HOME/bin
unset USERNAME
umask 022

[root@jandb ~]# source /home/grid/.bash_profile
[root@jandb ~]# source /home/oracle/.bash_profile
```

7 配置裸设备

```
[root@jandb oracle]# cat /etc/udev/rules.d/60-raw.rules
# Enter raw device bindings here.
#
# An example would be:
#   ACTION=="add", KERNEL=="sda", RUN+="/bin/raw /dev/raw/raw1 %N"
# to bind /dev/raw/raw1 to /dev/sda, or
```

```
# ACTION=="add", ENV{MAJOR}=="8", ENV{MINOR}=="1", RUN+="/bin/raw
/dev/raw/raw2 %M %m"
```

to bind /dev/raw/raw2 to the device with major 8, minor 1.

```
ACTION=="add", KERNEL=="sdc1", RUN+="/bin/raw /dev/raw/raw1 %N"
```

```
ACTION=="add", KERNEL=="sdc2", RUN+="/bin/raw /dev/raw/raw2 %N"
```

```
[root@jandb oracle]# cat /etc/rc.local
```

```
#!/bin/sh
```

```
#
```

```
# This script will be executed *after* all the other init scripts.
```

```
# You can put your own initialization stuff in here if you don't
```

```
# want to do the full Sys V style init stuff.
```

```
touch /var/lock/subsys/local
```

```
/bin/raw /dev/raw/raw1 /dev/sdb1
```

```
/bin/raw /dev/raw/raw2 /dev/sdb2
```

```
sleep 3s
```

```
chown grid:asmadmin /dev/raw/raw*
```

```
chmod 660 /dev/raw/raw*
```

配置设备参数文件，重启服务器

三、 安装grid

1 下载依赖包

```
yum install -y compat-libstdc++-33* elfutils-libelf* elfutils-libelf-devel* gcc gcc-c++* glibc*  
glibc-common* glibc-devel* glibc-headers* libaio* libaio-devel* libgcc* libstdc++*  
libstdc++-devel* libXp* make* sysstat* unixODBC* unixODBC-devel* compat-libcap1*  
compat-libstdc++-33* elfutils-libelf-devel* ksh*
```

2 脚本修改内核参数

```
grid 的包是 : p10404530_112030_Linux-x86-64_3of7.zip  
[root@jandb /]# unzip p10404530_112030_Linux-x86-64_1of7.zip  
[root@jandb /]# unzip p10404530_112030_Linux-x86-64_2of7.zip  
[root@jandb /]# cd /soft/grid/rpm/  
[root@jandb rpm]# rpm -ivh cvuqdisk-1.0.9-1.rpm  
[root@jandb /]# chown grid:oinstall grid/* -R  
[grid@jandb grid]$  
./runcluvfy.sh stage -pre crsinst -n jandb -fixup -verbose
```

3 修改安装文件 grid_install.rsp

```
[grid@jandb response]$ sed -i 's/^#.*$//g' *.rsp  
[grid@jandb response]$ sed -i '/^$/d' *.rsp  
ORACLE_HOSTNAME=jandb  
INVENTORY_LOCATION=/oracle/app/oraInventory  
SELECTED_LANGUAGES=en,zh_CN  
oracle.install.option=HA_CONFIG  
ORACLE_BASE=/oracle/app/grid  
ORACLE_HOME=/oracle/app/11.2.0/grid  
oracle.install.asm.OSDBA=asmdba  
oracle.install.asm.OSOPER=asmoper  
oracle.install.asm.OSASM=asmadmin  
oracle.install.crs.config.gnp.scanName=  
oracle.install.crs.config.gnp.scanPort=  
oracle.install.crs.config.clusterName=  
oracle.install.crs.config.gnp.configureGNS=false
```

```

oracle.install.crs.config.gnpn.gnsSubDomain=
oracle.install.crs.config.gnpn.gnsVIPAddress=
oracle.install.crs.config.autoConfigureClusterNodeVIP=
oracle.install.crs.config.clusterNodes=
oracle.install.crs.config.storageOption= ASM_STORAGE
oracle.install.crs.config.sharedFileSystemStorage.diskDriveMapping=
oracle.install.crs.config.sharedFileSystemStorage.votingDiskLocations=
oracle.install.crs.config.sharedFileSystemStorage.votingDiskRedundancy=NORMAL
oracle.install.crs.config.sharedFileSystemStorage.ocrLocations=
oracle.install.crs.config.sharedFileSystemStorage.ocrRedundancy=NORMAL
oracle.install.crs.config.useIPMI=false
oracle.install.crs.config.ipmi.bmcUsername=
oracle.install.crs.config.ipmi.bmcPassword=
oracle.install.asm.SYSASMPassword=oracle
oracle.install.asm.diskGroup.name=DATA1
oracle.install.asm.diskGroup.redundancy=EXTERNAL
oracle.install.asm.diskGroup.disks=/dev/raw/raw1
oracle.install.asm.diskGroup.diskDiscoveryString=/dev/raw/raw*
oracle.install.asm.monitorPassword=oracle
oracle.install.crs.upgrade.clusterNodes=
oracle.install.asm.upgradeASM=false
oracle.installer.autoupdates.option=SKIP_UPDATES
oracle.installer.autoupdates.downloadUpdatesLoc=
AUTOUPDATES_MYORACLESUPPORT_USERNAME=
AUTOUPDATES_MYORACLESUPPORT_PASSWORD=
PROXY_HOST=
PROXY_PORT=
PROXY_USER=
PROXY_PWD=
PROXY_REALM=

```

4 开始静默安装

```

[grid@jandb grid] ./runInstaller -responseFile /soft/grid/response/grid_install.rsp -silent
-ignorePrereq -showProgress

```

```

[grid@jandb grid]$ [WARNING] [INS-30011] The SYS password entered does not conform to
the Oracle recommended standards.

```

CAUSE: Oracle recommends that the password entered should be at least 8 characters in length, contain at least 1 uppercase character, 1 lower case character and 1 digit [0-9].

ACTION: Provide a password that conforms to the Oracle recommended standards.

```

[WARNING] [INS-30011] The ASMSNMP password entered does not conform to the Oracle

```

recommended standards.

CAUSE: Oracle recommends that the password entered should be at least 8 characters in length, contain at least 1 uppercase character, 1 lower case character and 1 digit [0-9].

ACTION: Provide a password that conforms to the Oracle recommended standards.

[WARNING] [INS-32018] The selected Oracle home is outside of Oracle base.

CAUSE: The Oracle home selected was outside of Oracle base.

ACTION: Oracle recommends installing Oracle software within the Oracle base directory.

Adjust the Oracle home or Oracle base accordingly.

You can find the log of this install session at:

/oracle/app/oraInventory/logs/installActions2020-11-05_08-38-55AM.log

Prepare in progress.

..... 9% Done.

Prepare successful.

Copy files in progress.

..... 14% Done.

..... 21% Done.

..... 26% Done.

..... 31% Done.

..... 36% Done.

..... 42% Done.

..... 49% Done.

..... 56% Done.

..... 61% Done.

..... 66% Done.

..... 71% Done.

.....

Copy files successful.

Link binaries in progress.

.....

Link binaries successful.

.....

Setup files in progress.

..... 76% Done.

..... 89% Done.

Setup files successful.

The installation of Oracle Grid Infrastructure 11g was successful.

Please check '/oracle/app/oraInventory/logs/silentInstall2020-11-05_08-38-55AM.log' for more details.

..... 94% Done.

Execute Root Scripts in progress.

As a root user, execute the following script(s):

1. [/oracle/app/oraInventory/orainstRoot.sh](#)
2. [/oracle/app/11.2.0/grid/root.sh](#)

..... 100% Done.

Execute Root Scripts successful.

As install user, execute the following script to complete the configuration.

1. [/oracle/app/11.2.0/grid/cfgtoollogs/configToolAllCommands](#)

[RESPONSE_FILE=<response_file>](#)

Note:

1. This script must be run on the same host from where installer was run.
2. This script needs a small password properties file for configuration assistants that require passwords (refer to install guide documentation).

Successfully Setup Software.

```
[root@jandb ~]# /oracle/app/oraInventory/orainstRoot.sh
```

Changing permissions of /oracle/app/oraInventory.

Adding read,write permissions for group.

Removing read,write,execute permissions for world.

Changing groupname of /oracle/app/oraInventory to oinstall.

The execution of the script is complete.

```
[root@jandb ~]# /oracle/app/11.2.0/grid/root.sh
```

Check /oracle/app/11.2.0/grid/install/root_jandb_2020-11-05_09-51-12.log for the output of root script

```
[root@jandb ~]# tail -f /oracle/app/11.2.0/grid/install/root_jandb_2020-11-05_09-51-12.log
```

Creating trace directory

LOCAL ADD MODE

Creating OCR keys for user 'grid', privgrp 'oinstall'..

Operation successful.

LOCAL ONLY MODE

Successfully accumulated necessary OCR keys.

Creating OCR keys for user 'root', privgrp 'root'..

Operation successful.

CRS-4664: Node jandb successfully pinned.

Adding Clusterware entries to upstart

jandb 2020/11/05 09:53:36

/oracle/app/11.2.0/grid/cdata/jandb/backup_20201105_095336.olr

Successfully configured Oracle Grid Infrastructure for a Standalone Server

```
[grid@jandb grid]$ ./runInstaller -responseFile /soft/grid/response/grid_install.rsp -silent
```

```
-ignorePrereq -showProgress
```

```
[grid@jandb bin]$ ./crs_stat -t
```

```
-----  
ora.cssd            ora.cssd.type  OFFLINE    OFFLINE  
ora.diskmon         ora....on.type OFFLINE    OFFLINE  
ora.evmd            ora.evm.type   ONLINE     ONLINE     jandb  
ora.ons             ora.ons.type   OFFLINE    OFFLINE
```

```
[grid@jandb bin]$ /oracle/app/11.2.0/grid/cfgtoollogs/configToolAllCommands
```

```
RESPONSE_FILE=/oracle/soft/grid/response/grid_install.rsp
```

```
Setting the invPtrLoc to /oracle/app/11.2.0/grid/oraInst.loc
```

```
perform - mode is starting for action: configure
```

```
perform - mode finished for action: configure
```

You can see the log file:

/oracle/app/11.2.0/grid/cfgtoollogs/oui/configActions2020-11-05_09-57-46-AM.log

到这里整个 grid 安装成功

四、 建立ASM

1 检查 has,css,evm 都是 online

```
[grid@jandb grid]$ crsctl check has
CRS-4638: Oracle 高可用性服务联机
```

```
[grid@jandb grid]$ crsctl check css
CRS-4529: 集群同步服务联机
```

```
[grid@jandb grid]$ crsctl check evm
CRS-4533: 事件管理器联机
```

2 创建密码文件

```
[grid@jandb grid]$ cd $ORACLE_HOME/dbs
[grid@jandb dbs]$ orapwd file=orapw+ASM password=oracle entries=10 ignorecase=y
```

3 配置 RESPONSE_FILE

grid 用户执行配置

```
[grid@jandb dbs]$ /oracle/app/11.2.0/grid/cfgtoollogs/configToolAllCommands
RESPONSE_FILE=/oracle/soft/grid/response/grid_install.rsp
Setting the invPtrLoc to /oracle/app/11.2.0/grid/oraInst.loc
```

perform - mode is starting for action: configure

perform - mode finished for action: configure

You can see the log file:

/oracle/app/11.2.0/grid/cfgtoollogs/oui/configActions2020-11-08_06-05-25-AM.log

4 配置 ASM 的 pfile

```
[grid@jandb dbs]$ ll
```

```
total 8
```

```
-rw-r--r-- 1 grid oinstall 2851 May 15 2009 init.ora
```

```
-rw-r----- 1 grid oinstall 2560 Nov 8 06:04 orapw+ASM
```

```
[grid@jandb dbs]$ pwd
```

```
/oracle/app/11.2.0/grid/dbs
```

```
[grid@jandb dbs]$ vi init+ASM.ora
```

```
[grid@jandb dbs]$ cat init+ASM.ora
```

```
INSTANCE_TYPE=ASM
```

```
DB_UNIQUE_NAME=+ASM
```

```
ASM_POWER_LIMIT=1
```

```
ASM_DISKSTRING=/dev/raw/raw*
```

```
ASM_DISKGROUPS=data1
```

```
LARGE_POOL_SIZE=16M
```

启动到 nomount

```
[grid@jandb dbs]$ sqlplus / as sysasm
```

```
SQL> startup nomount pfile='$ORACLE_HOME/dbs/init+ASM.ora'
```

```
set linesize 1000
```

```
col path for a20
```

```
col name for a10
```

```
col FAILGROUP for a15
```

```
select GROUP_NUMBER, DISK_NUMBER, MOUNT_STATUS, NAME, FAILGROUP,  
CREATE_DATE, PATH from v$asm_disk;
```

```
SQL>
```

```
GROUP_NUMBER DISK_NUMBER MOUNT_STATUS NAME          FAILGROUP  
CREATE_DATE  PATH
```

```
-----  
          2          0 CACHED   DATA2_0000 DATA2_0000    08-NOV-20  
/dev/raw/raw2  
          1          0 CACHED   DATA1_0000 DATA1_0000    08-NOV-20  
/dev/raw/raw1
```

```
SQL> select GROUP_NUMBER, NAME, TYPE, TOTAL_MB, FREE_MB,
USABLE_FILE_MB from v$asm_diskgroup;
no rows selected
SQL> create diskgroup DATA1 external REDUNDANCY disk '/dev/raw/raw1';
Diskgroup created.
SQL> create diskgroup DATA2 external REDUNDANCY disk '/dev/raw/raw2';
Diskgroup created.
SQL> select group_number,name,total_mb/1024 total_G,free_mb/1024 free_G,state,type from
v$asm_diskgroup;
```

GROUP_NUMBER	NAME	TOTAL_G	FREE_G	STATE	TYPE
1	DATA1	5.00976563	4.9609375	MOUNTED	EXTERN
2	DATA2	4.98632813	4.9375	MOUNTED	EXTERN

5 ASM 服务加入集群

```
[grid@jandb dbs]$ srvctl add asm
[grid@jandb dbs]$ crsctl stat res -t
```

NAME	TARGET	STATE	SERVER
STATE_DETAILS			

Local Resources

ora.LISTENER.lsnr			
	ONLINE	ONLINE	jandb
ora.asm			
	OFFLINE	OFFLINE	jandb
ora.ons			
	OFFLINE	OFFLINE	jandb

Cluster Resources

ora.cssd			
1	ONLINE	ONLINE	jandb
ora.diskmon			


```

1          OFFLINE OFFLINE
ora.evmd
1          ONLINE  ONLINE          jandb

```

6 创建 spfile

```

[grid@jandb dbs]$ sqlplus / as sysasm
SQL> create spfile from pfile;
SQL> shutdown immediate;
SQL> startup

```

```

[grid@jandb ~]$ crsctl stat res -t

```

```

-----
NAME          TARGET  STATE          SERVER
STATE_DETAILS
-----
Local Resources
-----
ora.DATA1.dg
          ONLINE  ONLINE          jandb
ora.LISTENER.lsnr
          ONLINE  ONLINE          jandb
ora.asm
          ONLINE  ONLINE          jandb          Started
ora.ons
          OFFLINE OFFLINE          jandb
-----
Cluster Resources
-----
ora.cssd
1          ONLINE  ONLINE          jandb
ora.diskmon
1          OFFLINE OFFLINE
ora.evmd
1          ONLINE  ONLINE          jandb

```

五、 安装数据库软件

1 修改应答文件 db_install.rsp

```
[root@jandb soft]# chown oracle:oinstall database/ -R
[root@jandb soft]# su - oracle
[oracle@jandb response]$ sed -i 's/^#.*$/g' *.rsp
[oracle@jandb response]$ sed -i '/^$/d' *.rsp

oracle.install.option=INSTALL_DB_SWONLY
ORACLE_HOSTNAME=prod
UNIX_GROUP_NAME=oinstall
INVENTORY_LOCATION=/oracle/app/oracle/oraInventory
SELECTED_LANGUAGES=en,zh_CN
ORACLE_HOME=/oracle/app/oracle/product/11.2.0/db_1
ORACLE_BASE=/oracle/app/oracle
oracle.install.db.InstallEdition=EE
oracle.install.db.DBA_GROUP=dba
oracle.install.db.OPER_GROUP=oinstall
oracle.install.db.config.starterdb.characterSet=AL32UTF8
oracle.install.db.config.starterdb.storageType=ASM_STORAGE
oracle.install.db.config.starterdb.fileSystemStorage.dataLocation=DATA1
oracle.install.db.config.starterdb.fileSystemStorage.recoveryLocation=
DECLINE_SECURITY_UPDATES=true //一定要设为 true
```

2 开始安装软件

```
[oracle@jandb response]$ pwd
/soft/database/response
[oracle@jandb response]$ ./runInstaller -silent -responseFile
/soft/database/response/db_install.rsp -ignorePrereq -ignoreDiskWarning -ignoreSysPrereqs
-ignorePrereq
Starting Oracle Universal Installer...

Checking Temp space: must be greater than 120 MB.    Actual 6390 MB    Passed
Checking swap space: must be greater than 150 MB.    Actual 2222 MB    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2020-11-08_06-39-56AM.
Please wait ...[oracle@jandb response]$ You can find the log of this install session at:
```

/oracle/app/oraInventory/logs/installActions2020-11-08_06-39-56AM.log

[oracle@jandb response]\$ The installation of Oracle Database 11g was successful.
Please check '/oracle/app/oraInventory/logs/silentInstall2020-11-08_06-39-56AM.log' for more details.

As a root user, execute the following script(s):

1. [/oracle/app/oracle/product/11.2.0/db_1/root.sh](#)

[Successfully Setup Software.](#)

3 执行脚本

[\[oracle@jandb ~\]\\$ /oracle/app/oracle/product/11.2.0/db_1/root.sh](#)

六、 建立数据库

1 修改应答文件 dbca.resp

```
[oracle@jandb response]$ sed -i 's/^#.*$/g' *.resp
```

```
[oracle@jandb response]$ sed -i '/^$/d' *.resp
```

```
[oracle@jandb response]$ pwd
```

```
/soft/database/response
```

```
[oracle@jandb response]$ cat dbca.resp
```

```
[GENERAL]
```

```
RESPONSEFILE_VERSION = "11.2.0"
```

```
OPERATION_TYPE = "createDatabase"
```

```
[CREATEDATABASE]
```

```
GDBNAME = "prod"
```

```
SID = "prod"
```

```
TEMPLATENAME = "General_Purpose.dbc"
```

```
STORAGETYPE=ASM
```

```
DATAFILEDESTINATION=DATA1
```

```
RECOVERYAREADESTINATION=
```

```
CHARACTERSET = "AL32UTF8"
```

```
NATIONALCHARACTERSET= "AL16UTF16"
```

```
LISTENERS=LISTENER
```

```
TOTALMEMORY = "700"
```

```
SYSPASSWORD = "oracle"
```

```
SYSTEMPASSWORD = "oracle"
```

```
[oracle@jandb response]$ dbca -silent -createDatabase -responseFile
```

```
/soft/database/response/dbca.resp
```

```
Copying database files
```

```
1% complete
```

```
35% complete
```

```
Creating and starting Oracle instance
```

```
37% complete
```

```
58% complete
```

```
Registering database with Oracle Restart
```

```
64% complete
```

```
Completing Database Creation
```

```
100% complete
```

```
Look at the log file "/oracle/app/oracle/cfgtoollogs/dbca/prod/prod.log" for further details.
```

2 Mount 所有磁盘组

```
[grid@jandb ~]$ sqlplus / as sysasm
```

```
SQL> select group_number,name,total_mb/1024 total_G,free_mb/1024 free_G,state,type from  
v$asm_diskgroup;
```

GROUP_NUMBER	NAME	TOTAL_G	FREE_G	STATE	TYPE
1	DATA1	5.00976563	4.9609375	MOUNTED	EXTERN
0	DATA2	0	0	DISMOUNTED	

```
SQL> alter diskgroup DATA2 mount;
```

```
Diskgroup altered.
```

```
SQL> col name for a10
```

```
SQL> col state for a10
```

```
SQL> select group_number,name,total_mb/1024 total_G,free_mb/1024 free_G,state,type from  
v$asm_diskgroup;
```

GROUP_NUMBER	NAME	TOTAL_G	FREE_G	STATE	TYPE
1	DATA1	5.00976563	4.9609375	MOUNTED	EXTERN
2	DATA2	4.98632813	4.93652344	MOUNTED	EXTERN