|  |  |  |
| --- | --- | --- |
|  | PRIMARY | STANDBY |
| DB\_NAME | EXA1DB | EXA1DB |
| DB\_UNIQUE\_NAME | EXA1DB | EXA2DB |
| COMPUTER NODES | EXA1NODE1, EXA1NODE2 | EXA2NODE1, EXA2NODE2 |
| SCAN ADDRESS |  |  |
| IP’s |  |  |
|  |  |  |
|  |  |  |

CONFIGURE STATIC LISTENERS ON 4 nodes EXA1NODE, EXA1NODE2, EXA2NODE1, EXA2NODE2

vi $ORACLE\_HOME/network/admin/listener.ora

**SID\_LIST\_LISTENER =**

**(SID\_LIST =**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA1DB.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA1DB1)**

**)**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA1DB\_DG.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA1DB1)**

**)**

**)**

**SID\_LIST\_LISTENER =**

**(SID\_LIST =**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA1DB.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA1DB2)**

**)**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA1DB\_DG.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA1DB2)**

**)**

**)**

**SID\_LIST\_LISTENER =**

**(SID\_LIST =**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA2DB.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA2DB1)**

**)**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA2DB\_DG.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA2DB1)**

**)**

**)**

**SID\_LIST\_LISTENER =**

**(SID\_LIST =**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA2DB.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA2DB2)**

**)**

**(SID\_DESC =**

**(GLOBAL\_DBNAME = EXA2DB\_DG.trevdom.lab)**

**(ORACLE\_HOME=/u01/app/oracle/product/19.0.0/dbhome\_1)**

**(SID\_NAME = EXA2DB2)**

**)**

**)**

RELOAD THE 4 LISTENERS:

**lsnrctl reload**

CONFIGURE TNSNAMES FOR 4 NODES

***EXA1DB =***

***(DESCRIPTION =***

***(ADDRESS = (PROTOCOL = TCP)(HOST = exa1node-scan.trevdom.lab)(PORT = 1521))***

***(CONNECT\_DATA =***

***(SERVER = DEDICATED)***

***(SERVICE\_NAME = EXA1DB)***

***)***

***)***

***EXA2DB =***

***(DESCRIPTION =***

***(ADDRESS = (PROTOCOL = TCP)(HOST = exa2node-scan.trevdom.lab)(PORT = 1521))***

***(CONNECT\_DATA =***

***(SERVER = DEDICATED)***

***(SERVICE\_NAME = EXA2DB)***

***)***

***)***

##This is only for node where restore will be performed.

**EXA2DB\_DUP =**

**(DESCRIPTION =**

**(ADDRESS = (PROTOCOL = TCP)(HOST = exa2node1)(PORT = 1521))**

**(CONNECT\_DATA =**

**(SERVER = DEDICATED)**

**(SERVICE\_NAME = EXA2DB.trevdom.lab)**

**)**

**)**

ON PRIMARY

**ALTER DATABASE ARCHIVELOG; --In mount mode;**

**ALTER DATABASE FORCE LOGGING;**

**alter database flashback ON;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 1 SIZE 200M;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 1 SIZE 200M;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 1 SIZE 200M;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 2 SIZE 200M;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 2 SIZE 200M;**

**ALTER DATABASE ADD STANDBY LOGFILE THREAD 2 SIZE 200M;**

**alter system set LOG\_ARCHIVE\_CONFIG='DG\_CONFIG=(EXA1DB,EXA2DB)' scope=both sid='\*';**

**alter system set LOG\_ARCHIVE\_DEST\_1= 'LOCATION=USE\_DB\_RECOVERY\_FILE\_DEST VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=EXA1DB' scope=both sid='\*';**

**alter system set LOG\_ARCHIVE\_DEST\_2= 'SERVICE=EXA2DB ASYNC VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=EXA2DB' scope=both sid='\*';**

**alter system set REMOTE\_LOGIN\_PASSWORDFILE=EXCLUSIVE scope=spfile sid='\*';**

**alter system set LOG\_ARCHIVE\_FORMAT='%d\_%t\_%s\_%r.arc' scope=spfile sid='\*';**

**alter system set LOG\_ARCHIVE\_MAX\_PROCESSES=8 scope=both sid='\*';**

**#FOR TRANSITIONING TO STANDBY MODE scope=both;**

**alter system set FAL\_SERVER=EXA2DB scope=both sid='\*';**

**alter system set DB\_FILE\_NAME\_CONVERT='+DG\_DATA','+DGDATA','+DG\_RECO','+DGRECO' scope=spfile sid='\*';**

**alter system set LOG\_FILE\_NAME\_CONVERT='+DG\_DATA','+DGDATA','+DG\_RECO','+DGRECO' scope=spfile sid='\*';**

**alter system set STANDBY\_FILE\_MANAGEMENT=AUTO scope=both sid='\*';**

**alter database flashback ON;**

AS grid user get password file an copy to standby hosts:

**asmcmd pwget --dbuniquename 'EXA1DB'**

**+DGDATA/EXA1DB/PASSWORD/pwdexa1db.270.1032198029**

**asmcmd pwcopy +DGDATA/EXA1DB/PASSWORD/pwdexa1db.270.1032198029 /tmp**

**copying +DGDATA/EXA1DB/PASSWORD/pwdexa1db.270.1032198029 -> /tmp/pwdexa1db.270.1032198029**

**chmod 777 /tmp/pwdexa1db.270.1032198029**

as oracle user

**scp /tmp/pwdexa1db.270.1032198029 exa2node1:$ORACLE\_HOME/dbs/orapwEXA2DB1**

**scp /tmp/pwdexa1db.270.1032198029 exa2node2:$ORACLE\_HOME/dbs/orapwEXA2DB2**

STARTUP INSTANCE ON FIRST NODE- EXA2NODE1

**Cat $ORACLE\_HOME/dbs/initEXA2DB1.ora**

**Db\_name=’exa1db’**

With SID as EXA2DB1

*Startup nomount*

Create audit\_file\_dest on both standby nodes:

*Mkdir -p /u01/app/oracle/admin/EXA2DB/adump'*

Begin the active duplicate:

**rman target sys/Bobos\_123@exa1node-scan:1521/EXA1DB AUXILIARY sys/Bobos\_123@EXA2DB\_DUP**

**run{**

**duplicate target database for standby from active database**

**spfile**

**set db\_unique\_name='EXA2DB'**

**set instance\_name='EXA2DB1'**

**set instance\_number='1'**

**set control\_files='+DG\_DATA','+DG\_RECO'**

**set db\_file\_name\_convert='+DGDATA','+DG\_DATA','+DGRECO','+DG\_RECO'**

**set log\_file\_name\_convert='+DGDATA','+DG\_DATA','+DGRECO','+DG\_RECO'**

**set db\_recovery\_file\_dest='+DG\_RECO'**

**set LOG\_ARCHIVE\_CONFIG='DG\_CONFIG=(EXA2DB,EXA1DB)'**

**set DB\_CREATE\_ONLINE\_LOG\_DEST\_1='+DG\_DATA'**

**set DB\_CREATE\_ONLINE\_LOG\_DEST\_2='+DG\_RECO'**

**set DB\_CREATE\_ONLINE\_LOG\_DEST\_3='+DG\_RECO'**

**set audit\_file\_dest='/u01/app/oracle/admin/EXA2DB/adump'**

**set fal\_server='EXADB1N'**

**set log\_archive\_dest\_1='LOCATION=USE\_DB\_RECOVERY\_FILE\_DEST VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=EXA2DB'**

**set log\_archive\_dest\_2='SERVICE=EXA1DB ASYNC VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=EXA1DB'**

**;**

}

***Starting Duplicate Db at 17-FEB-20***

***using channel ORA\_AUX\_DISK\_1***

***contents of Memory Script:***

***{***

***backup as copy reuse***

***passwordfile auxiliary format '/u01/app/oracle/product/19.0.0/dbhome\_1/dbs/orapwEXA2DB1' ;***

***restore clone from service 'exa1node-scan:1521/EXA1DB' spfile to***

***'/u01/app/oracle/product/19.0.0/dbhome\_1/dbs/spfileEXA2DB1.ora';***

***sql clone "alter system set spfile= ''/u01/app/oracle/product/19.0.0/dbhome\_1/dbs/spfileEXA2DB1.ora''";***

***}***

***executing Memory Script***

***Starting backup at 17-FEB-20***

***allocated channel: ORA\_DISK\_1***

***channel ORA\_DISK\_1: SID=127 instance=EXA1DB1 device type=DISK***

***Finished backup at 17-FEB-20***

***Starting restore at 17-FEB-20***

***using channel ORA\_AUX\_DISK\_1***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: restoring SPFILE***

***output file name=/u01/app/oracle/product/19.0.0/dbhome\_1/dbs/spfileEXA2DB1.ora***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:02***

***Finished restore at 17-FEB-20***

***sql statement: alter system set spfile= ''/u01/app/oracle/product/19.0.0/dbhome\_1/dbs/spfileEXA2DB1.ora''***

***contents of Memory Script:***

***{***

***sql clone "alter system set db\_unique\_name =***

***''EXA2DB'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set instance\_name =***

***''EXA2DB1'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set instance\_number =***

***1 comment=***

***'''' scope=spfile";***

***sql clone "alter system set control\_files =***

***''+DG\_DATA'', ''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set db\_file\_name\_convert =***

***''+DGDATA'', ''+DG\_DATA'', ''+DGRECO'', ''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set log\_file\_name\_convert =***

***''+DGDATA'', ''+DG\_DATA'', ''+DGRECO'', ''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set db\_recovery\_file\_dest =***

***''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_1 =***

***''+DG\_DATA'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_2 =***

***''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_3 =***

***''+DG\_RECO'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set audit\_file\_dest =***

***''/u01/app/oracle/admin/EXA2DB/adump'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set fal\_server =***

***''EXADB1N'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set log\_archive\_dest\_1 =***

***''LOCATION=USE\_DB\_RECOVERY\_FILE\_DEST VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=EXA2DB'' comment=***

***'''' scope=spfile";***

***sql clone "alter system set log\_archive\_dest\_2 =***

***''SERVICE=EXA1DB ASYNC VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=EXA1DB'' comment=***

***'''' scope=spfile";***

***shutdown clone immediate;***

***startup clone nomount;***

***}***

***executing Memory Script***

***sql statement: alter system set db\_unique\_name = ''EXA2DB'' comment= '''' scope=spfile***

***sql statement: alter system set instance\_name = ''EXA2DB1'' comment= '''' scope=spfile***

***sql statement: alter system set instance\_number = 1 comment= '''' scope=spfile***

***sql statement: alter system set control\_files = ''+DG\_DATA'', ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set db\_file\_name\_convert = ''+DGDATA'', ''+DG\_DATA'', ''+DGRECO'', ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set log\_file\_name\_convert = ''+DGDATA'', ''+DG\_DATA'', ''+DGRECO'', ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set db\_recovery\_file\_dest = ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_1 = ''+DG\_DATA'' comment= '''' scope=spfile***

***sql statement: alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_2 = ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set DB\_CREATE\_ONLINE\_LOG\_DEST\_3 = ''+DG\_RECO'' comment= '''' scope=spfile***

***sql statement: alter system set audit\_file\_dest = ''/u01/app/oracle/admin/EXA2DB/adump'' comment= '''' scope=spfile***

***sql statement: alter system set fal\_server = ''EXADB1N'' comment= '''' scope=spfile***

***sql statement: alter system set log\_archive\_dest\_1 = ''LOCATION=USE\_DB\_RECOVERY\_FILE\_DEST VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=EXA2DB'' comment= '''' scope=spfile***

***sql statement: alter system set log\_archive\_dest\_2 = ''SERVICE=EXA1DB ASYNC VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=EXA1DB'' comment= '''' scope=spfile***

***Oracle instance shut down***

***connected to auxiliary database (not started)***

***Oracle instance started***

***Total System Global Area 3070227080 bytes***

***Fixed Size 8901256 bytes***

***Variable Size 687865856 bytes***

***Database Buffers 2365587456 bytes***

***Redo Buffers 7872512 bytes***

***contents of Memory Script:***

***{***

***sql clone "alter system set control\_files =***

***''+DG\_DATA/EXA2DB/CONTROLFILE/current.265.1032610857'', ''+DG\_RECO/EXA2DB/CONTROLFILE/current.257.1032610857'' comment=***

***''Set by RMAN'' scope=spfile";***

***restore clone from service 'exa1node-scan:1521/EXA1DB' standby controlfile;***

***}***

***executing Memory Script***

***sql statement: alter system set control\_files = ''+DG\_DATA/EXA2DB/CONTROLFILE/current.265.1032610857'', ''+DG\_RECO/EXA2DB/CONTROLFILE/current.257.1032610857'' comment= ''Set by RMAN'' scope=spfile***

***Starting restore at 17-FEB-20***

***allocated channel: ORA\_AUX\_DISK\_1***

***channel ORA\_AUX\_DISK\_1: SID=62 instance=EXA2DB1 device type=DISK***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: restoring control file***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:02***

***output file name=+DG\_DATA/EXA2DB/CONTROLFILE/current.263.1032610861***

***output file name=+DG\_RECO/EXA2DB/CONTROLFILE/current.259.1032610861***

***Finished restore at 17-FEB-20***

***contents of Memory Script:***

***{***

***sql clone 'alter database mount standby database';***

***}***

***executing Memory Script***

***sql statement: alter database mount standby database***

***RMAN-05529: warning: DB\_FILE\_NAME\_CONVERT resulted in invalid ASM names; names changed to disk group only.***

***contents of Memory Script:***

***{***

***set newname for tempfile 1 to***

***"+DG\_DATA";***

***switch clone tempfile all;***

***set newname for datafile 1 to***

***"+DG\_DATA";***

***set newname for datafile 3 to***

***"+DG\_DATA";***

***set newname for datafile 4 to***

***"+DG\_DATA";***

***set newname for datafile 5 to***

***"+DG\_DATA";***

***set newname for datafile 7 to***

***"+DG\_DATA";***

***restore***

***from nonsparse from service***

***'exa1node-scan:1521/EXA1DB' clone database***

***;***

***sql 'alter system archive log current';***

***}***

***executing Memory Script***

***executing command: SET NEWNAME***

***renamed tempfile 1 to +DG\_DATA in control file***

***executing command: SET NEWNAME***

***executing command: SET NEWNAME***

***executing command: SET NEWNAME***

***executing command: SET NEWNAME***

***executing command: SET NEWNAME***

***Starting restore at 17-FEB-20***

***using channel ORA\_AUX\_DISK\_1***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: specifying datafile(s) to restore from backup set***

***channel ORA\_AUX\_DISK\_1: restoring datafile 00001 to +DG\_DATA***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:35***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: specifying datafile(s) to restore from backup set***

***channel ORA\_AUX\_DISK\_1: restoring datafile 00003 to +DG\_DATA***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:25***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: specifying datafile(s) to restore from backup set***

***channel ORA\_AUX\_DISK\_1: restoring datafile 00004 to +DG\_DATA***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:08***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: specifying datafile(s) to restore from backup set***

***channel ORA\_AUX\_DISK\_1: restoring datafile 00005 to +DG\_DATA***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:03***

***channel ORA\_AUX\_DISK\_1: starting datafile backup set restore***

***channel ORA\_AUX\_DISK\_1: using network backup set from service exa1node-scan:1521/EXA1DB***

***channel ORA\_AUX\_DISK\_1: specifying datafile(s) to restore from backup set***

***channel ORA\_AUX\_DISK\_1: restoring datafile 00007 to +DG\_DATA***

***channel ORA\_AUX\_DISK\_1: restore complete, elapsed time: 00:00:02***

***Finished restore at 17-FEB-20***

***sql statement: alter system archive log current***

***contents of Memory Script:***

***{***

***switch clone datafile all;***

***}***

***executing Memory Script***

***datafile 1 switched to datafile copy***

***input datafile copy RECID=6 STAMP=1032610949 file name=+DG\_DATA/EXA2DB/DATAFILE/system.262.1032610869***

***datafile 3 switched to datafile copy***

***input datafile copy RECID=7 STAMP=1032610949 file name=+DG\_DATA/EXA2DB/DATAFILE/sysaux.256.1032610905***

***datafile 4 switched to datafile copy***

***input datafile copy RECID=8 STAMP=1032610949 file name=+DG\_DATA/EXA2DB/DATAFILE/undotbs1.261.1032610931***

***datafile 5 switched to datafile copy***

***input datafile copy RECID=9 STAMP=1032610949 file name=+DG\_DATA/EXA2DB/DATAFILE/undotbs2.260.1032610939***

***datafile 7 switched to datafile copy***

***input datafile copy RECID=10 STAMP=1032610949 file name=+DG\_DATA/EXA2DB/DATAFILE/users.259.1032610941***

***Finished Duplicate Db at 17-FEB-20***

CONFIGURE THE STANDBY INSTANCE

Set DB\_CREATE\_FILE\_DEST and instance initialization parameters.

**alter system set db\_create\_file\_dest='+DG\_DATA' scope=spfile sid='\*';**

**alter system set instance\_number=1 sid='EXA2DB1' scope=spfile;**

**alter system set instance\_number=2 sid='EXA2DB2' scope=spfile;**

**alter system set thread=1 sid='EXA2DB1' scope=spfile;**

**alter system set thread=2 sid='EXA2DB2' scope=spfile;**

**alter system set instance\_name='EXA2DB1' sid='EXA2DB1' scope=spfile;**

**alter system set instance\_name='EXA2DB2' sid='EXA2DB2' scope=spfile;**

**alter system set undo\_tablespace='UNDOTBS1' scope=spfile sid='EXA2DB1';**

**alter system set undo\_tablespace='UNDOTBS2' scope=spfile sid='EXA2DB2';**

CREATE SPFILE IN DISKGROUP:

**create pfile='xxx' from spfile;**

**create spfile='+DG\_DATA/EXA2DB/PARAMETERFILE/spfileEXA2DB1.ora' from pfile='xxx'**

**shut immediate;**

CREATE INIT FILES:

**echo "SPFILE='+DG\_DATA/EXA2DB/PARAMETERFILE/spfileEXA2DB1.ora'" > $ORACLE\_HOME/dbs/initEXA2DB1.ora**

**scp -p $ORACLE\_HOME/dbs/initEXA2DB1.ora exa2node2:$ORACLE\_HOME/dbs/initEXA2DB2.ora**

Remove the SPFILE from the file system as we have already moved the SPFILE to ASM.

**rm spfileEXADB2N1.ora**

Add the database and instances to the GI cluster

**srvctl add database -db EXA2DB -oraclehome $ORACLE\_HOME -role physical\_standby -startoption mount -spfile +DG\_DATA/EXA2DB/PARAMETERFILE/spfileEXA2DB1.ora**

**srvctl add instance -db EXA2DB -instance EXA2DB1 -node exa2node1**

**srvctl add instance -db EXA2DB -instance EXA2DB2 -node exa2node2**

**srvctl start database -d EXA2DB**

**srvctl status database -d EXA2DB**

**ALTER DATABASE RECOVER MANAGED STANDBY DATABASE USING CURRENT LOGFILE disconnect from session;**

**select PROCESS, PID, STATUS, THREAD#, SEQUENCE# from v$managed\_standby;**

ADDING DATA BROKER

EXA1DB

**asmcmd mkdir +DGDATA/dgbroker**

**alter system set LOG\_ARCHIVE\_DEST\_2='' scope=both;**

**alter system set dg\_broker\_start=false scope=both;**

**alter system set dg\_broker\_config\_file1='+DGDATA/dgbroker/dr1EXA1DB.dat' scope=both;**

**alter system set dg\_broker\_config\_file2='+DGDATA/dgbroker/dr2EXA1DB.dat' scope=both;**

**alter system set dg\_broker\_start=true scope=both;**

EXA2DB

**asmcmd mkdir +DG\_DATA/dgbroker**

**alter system set LOG\_ARCHIVE\_DEST\_2='' scope=both;**

**alter system set dg\_broker\_start=false scope=both;**

**alter system set dg\_broker\_config\_file1='+DG\_DATA/dgbroker/dr1EXA2DB.dat' scope=both;**

**alter system set dg\_broker\_config\_file2='+DG\_DATA/dgbroker/dr2EXA2DB.dat' scope=both;**

**alter system set dg\_broker\_start=true scope=both;**

**dgmgrl /**

**create configuration EXADBCONFIG as primary database is EXA1DB connect identifier is EXA1DB;**

**add database EXA2DB as connect identifier is EXA2DB maintained as physical;**

**enable configuration;**

**show configuration;**

**dgmgrl sys/password@exa1db**

**switchover to exa2db**

**show configuration;**

RMAN CONFIGURATION

**CONFIGURE SNAPSHOT CONTROLFILE NAME TO '+DGRECO/snapcf\_EXA1DB1.f';**

**CONFIGURE ARCHIVELOG DELETION POLICY TO BACKED UP 1 TIMES TO DISK APPLIED ON ALL STANDBY;**

**CONFIGURE ARCHIVELOG DELETION POLICY TO APPLIED ON ALL STANDBY BACKED UP 1 TIMES TO DISK;**

**configure retention policy to recovery window of 1 days;**

BACKUP

**BACKUP INCREMENTAL LEVEL 0 AS COMPRESSED BACKUPSET DATABASE PLUS ARCHIVELOG;**

**BACKUP INCREMENTAL LEVEL 1 AS COMPRESSED BACKUPSET DATABASE PLUS ARCHIVELOG;**

**BACKUP AS COMPRESSED BACKUPSET ARCHIVELOG all NOT BACKED UP 1 times;**