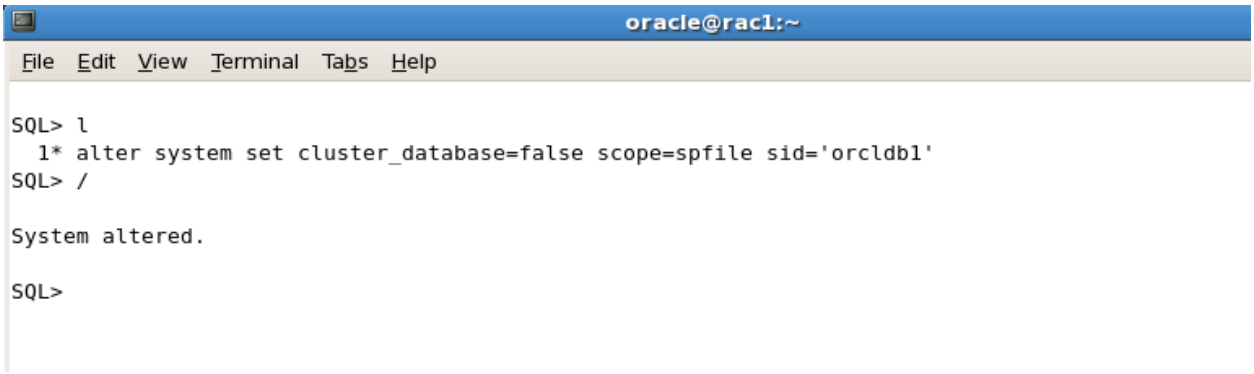
Oracle 12c RAC

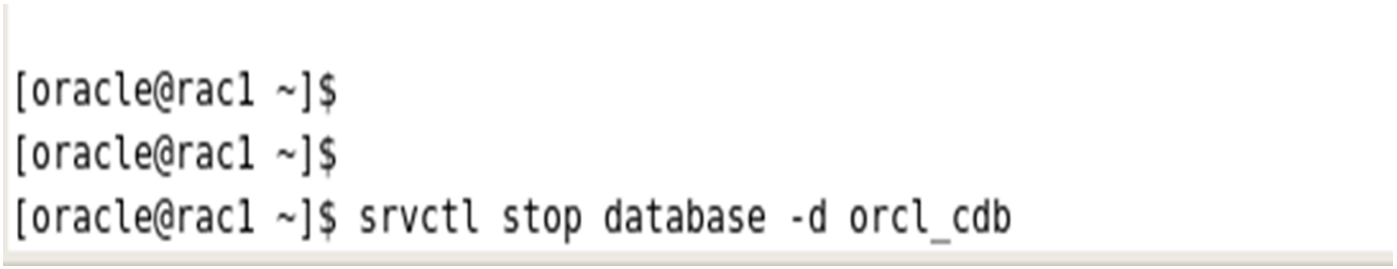
Lab Module 4

Module 4 Lab: Backup the RAC database

1) Place the database in archivelog mode
   a. $. oraenv
   b. cdbrac
   c. sqlplus system/ fenago @cdbrac
   d. alter system set cluster_database=false scope=spfile sid=' cdbrac1';



2) Shutdown the database
   a. srvctl stop database –d cdbrac



3) Start the instance on rac1 in mount mode
   a. srvctl start instance –d cdbrac –I orclcdb1 –o mount

```
[oracle@rac1 ~]$ srvctl status database -d orcl_cdb
Instance orclcdb1 is not running on node rac1
Instance orclcdb2 is not running on node rac2
[oracle@rac1 ~]$ srvctl status database -d orcl_cdb
Instance orclcdb1 is not running on node rac1
Instance orclcdb2 is not running on node rac2
[oracle@rac1 ~]$ srvctl start instance -d orcl_cdb -i orclcdb1 -o mount
[oracle@rac1 ~]$
```

4) Use sqlplus to place the database in archivelog mode
   a. sqlplus sys/fenago@cdbrac as sysdba
   b. alter database archivelog

```
[oracle@rac1 ~]$ sqlplus sys/password1@orcl_cdb as sysdba

SQL*Plus: Release 12.1.0.2.0 Production on Tue Apr 7 15:45:10 2015

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Connected to:
Oracle Database 12c Enterprise Edition Release 12.1.0.2.0 - 64bit Production
With the Partitioning, Real Application Clusters, Automatic Storage Management,
OLAP,
Advanced Analytics and Real Application Testing options

SQL> alter database archivelog;
```

5) Place database back in cluster mode and restart the database
   a. alter system set cluster_database=true scope=spfile sid = '*';
   b. srvctl stop database –d cdbrac
   c. srvctl start database –d cdbrac

```
SQL> l
  1* alter system set cluster_database=true scope=spfile sid='*'
SQL> /

System altered.

SQL>
```

```
[oracle@rac1 ~]$ srvctl stop database -d orcl_cdb
[oracle@rac1 ~]$ srvctl start database -d orcl_cdb
```

6) Backup the container database
   a. Rman target sys/fenago@cdbrac
   b. Run { backup database;
      Backup archivelog all delete all input;}

```
RMAN> run
2> {backup database;
3> backup archivelog all delete all input;}

Starting backup at 07-APR-15

allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=52 instance=orclcdb2 device type=DISK
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00001 name=+DATA/ORCL_CDB/DATAFILE/system.258.876337061
input datafile file number=00003 name=+DATA/ORCL_CDB/DATAFILE/sysaux.257.876337015
input datafile file number=00004 name=+DATA/ORCL_CDB/DATAFILE/undotbs1.260.876337107
input datafile file number=00008 name=+DATA/ORCL_CDB/DATAFILE/undotbs2.268.876337397
input datafile file number=00006 name=+DATA/ORCL_CDB/DATAFILE/users.259.876337105
channel ORA_DISK_1: starting piece 1 at 07-APR-15
```

7) Backup the pluggable database
   a. rman target sys/fenago@rac-scan:1521/pdb1
   b. backup pluggable database pdb1;

```
[oracle@rac2 ~]$ rman target sys/password1@rac-scan:1521/orcl_pdb

Recovery Manager: Release 12.1.0.2.0 - Production on Tue Apr 7 16:01:12 2015

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connected to target database: ORCL_CDB (DBID=1941192319, not open)

RMAN>
```

```
RMAN>
RMAN> backup pluggable database orcl_pdb;

Starting backup at 07-APR-15
using channel ORA_DISK_1
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00010 name=+DATA/ORCL_CDB/1317605C811D56D8E0536502A8C075DB/DATAFILE/sysaux.273
.876337741
input datafile file number=00009 name=+DATA/ORCL_CDB/1317605C811D56D8E0536502A8C075DB/DATAFILE/system.272
.876337741
input datafile file number=00011 name=+DATA/ORCL_CDB/1317605C811D56D8E0536502A8C075DB/DATAFILE/users.275.
876337839
channel ORA_DISK_1: starting piece 1 at 07-APR-15
```

8) Show the configuration of the backup;

a. show all;

```
RMAN> show all;

RMAN configuration parameters for database with db_unique_name ORCL_CDB are:
CONFIGURE RETENTION POLICY TO REDUNDANCY 1; # default
CONFIGURE BACKUP OPTIMIZATION OFF; # default
CONFIGURE DEFAULT DEVICE TYPE TO DISK; # default
CONFIGURE CONTROLFILE AUTOBACKUP ON; # default
CONFIGURE CONTROLFILE AUTOBACKUP FORMAT FOR DEVICE TYPE DISK TO '%F'; # default
CONFIGURE DEVICE TYPE DISK PARALLELISM 1 BACKUP TYPE TO BACKUPSET; # default
CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default
CONFIGURE ARCHIVELOG BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default
CONFIGURE MAXSETSIZE TO UNLIMITED; # default
CONFIGURE ENCRYPTION FOR DATABASE OFF; # default
CONFIGURE ENCRYPTION ALGORITHM 'AES128'; # default
CONFIGURE COMPRESSION ALGORITHM 'BASIC' AS OF RELEASE 'DEFAULT' OPTIMIZE FOR LOAD TRUE ; # defa
ult
CONFIGURE RMAN OUTPUT TO KEEP FOR 7 DAYS; # default
CONFIGURE ARCHIVELOG DELETION POLICY TO NONE; # default
CONFIGURE SNAPSHOT CONTROLFILE NAME TO '/u01/app/oracle/product/12.1.0/dbhome_1/dbs/snapcf_orcl
cdb1.f'; # default

RMAN>
```

9) Enable controlfile autobackup

a. configure controlfile autobackup on

```
RMAN> configure controlfile autobackup on;

new RMAN configuration parameters:
CONFIGURE CONTROLFILE AUTOBACKUP ON;
new RMAN configuration parameters are successfully stored

RMAN>
```