Oracle 12c RAC

Lab Module 2

Module 02 Lab: Using SRVCTL

SRVCTL (Server Control) is important utility on RAC Databases for Oracle DBA. You can start and stop the database and instances and move or remove instances and services very easily.

Prerequisite:

Run following command in the terminal on the "ol7-122-rac2" node to use the correct the ORACLE_SID values:

export ORACLE_SID=cdbrac2

Also, update the ORACLE_SID setting in the "/home/oracle/db_env".

1. Status commands

Verify that cluster is up and running. DBA can also use "**ps -ef | grep d.bin**" to check cluster status.

1) Set the environment to the database home
   a. . grid_env
   b. su # switch to root user
2) Use srvctl to check the status of the database
   a. srvctl status database –d cdbrac
3) Use srvctl to check the status of ASM
   a. srvctl status asm
4) Use srvctl to check the status of the instance on ol7-122-rac1
   a. srvctl status instance –d cdbrac –i cdbrac1
   b. **Task:** Send invalid instance name and verify output.
      a. –i orclcdb1
5) Check the configuration of the database
   a. srvctl config database –d cdbrac
6) Check the status of the node applications
   a. srvctl status nodeapps
      Check the status of nodeapps on ol7-122-rac2
   b. srvctl status nodeapps –n ol7-122-rac2

Note: All of the services below while be running if you have running cluster, you can also check with status commad before running start commands.

2. Start Node applications running on nodes:
To start node applications running on a node, enter the following command, where node is the name of the node where the applications are running

[grid@ol7-122-rac1 bin]$ srvctl start nodeapps -n ol7-122-rac1

[grid@ol7-122-rac1 bin]$ srvctl status nodeapps -n ol7-122-rac1

VIP ol7-122-rac1-vip is enabled
VIP ol7-122-rac1-vip is running on node: ol7-122-rac1
Network is enabled
Network is running on node: ol7-122-rac1
GSD is disabled
GSD is not running on node: ol7-122-rac1
ONS is enabled
ONS daemon is running on node: ol7-122-rac1

DBA has to execute this command for each node to start Real Application Clusters Cluster database.

3. Start All ASM instances from all nodes:
Next DBA has to start all ASM instances which are used to access database, enter the following command, where node is the name of the node where the ASM instance has to start.
[grid@ol7-122-rac1 bin]$ srvctl start asm -n ol7-122-rac1
[grid@ol7-122-rac1 bin]$ srvctl status asm -n ol7-122-rac1
ASM is running on ol7-122-rac1

DBA has to start ASM instance on all database nodes.

4. Start RAC Database Instances on all nodes:
Now, We will start database instances on database nodes to access data.

[grid@ol7-122-rac1 bin]$ srvctl start database -d cdbrac

[grid@ol7-122-rac1 bin]$ srvctl status database -d cdbrac

Instance cdbrac1 is running on node ol7-122-rac1
Instance cdbrac2 is running on node ol7-122-rac2

Now database is up and running on both DB nodes.

5. Start Oracle Home process accessing database:

let's start listener to allow users to connect to the database.

[grid@ol7-122-rac1 bin]$ srvctl start listener -n ol7-122-rac1

[grid@ol7-122-rac1 bin]$ srvctl status listener -n ol7-122-rac1

Listener LISTENER is enabled on node(s): ol7-122-rac1
Listener LISTENER is running on node(s): ol7-122-rac1

Task

Run all of the above commands on other node and verify output.

Advanced RAC Database Operations

Shutdown RAC Database

You can shutdown all instances of any database as follows.

```
srvctl stop database -d db_name [-o stop_options]

srvctl stop database -d DB_NAME

srvctl stop database -d DB_NAME -o normal

srvctl stop database -d DB_NAME -o immediate

srvctl stop database -d DB_NAME -o transactional

srvctl stop database -d DB_NAME -o abort



[oracle@cdbracdbadm01 ~]$ srvctl stop database -d cdbrac
```

Startup RAC Database

You can start all instances of any database as follows.

```
srvctl start database -d db_name [-o start_options]

srvctl start database -d DB_NAME

srvctl start database -d DB_NAME -o nomount

srvctl start database -d DB_NAME -o mount

srvctl start database -d DB_NAME -o open



[oracle@cdbracdbadm01 ~]$ srvctl start database -d cdbrac
```

Shutdown An Instance

You can shutdown only specific Instance of RAC database as follows.

```
srvctl stop instance -d db_unique_name [-i "instance_name_list"]} [-o stop_options] [-f]

srvctl stop instance -d DB_NAME -i INSTANCE_NAME



[oracle@cdbracdbadm01 ~]$ srvctl stop instance -d cdbrac -i cdbrac1
```

Startup and Status An Instance

You can startup only specific Instance(s) of RAC database as follows.

```
srvctl start instance -d db_unique_name [-i "instance_name_list"} [-o start_options]

srvctl start instance -d DB_NAME -i INSTANCE_NAME

[oracle@cdbracdbadm01 ~]$ srvctl start instance -d cdbrac -i cdbrac1
```