

22)

Topic:- Cloning an online database using ONLINE/HOT BACKUP:- (@udofstamur)

Steps:-

- ① make sure database is in ArchiveLog mode and list all datafile location.
- ② create pfile and copy it to Clone Server along with password file.
- ③ put database in backup mode and copy all datafile to clone server.
- ④ End the backup.
- ⑤ Copy all newly created archived log file.
- ⑥ create a control file copy it to clone server modify and execute it.
- ⑦ testing the db.

56

SERVER 1: 192.168.1.100 (Prod db)  
SERVER 2: 192.168.1.101 (Cloned db)

Server 1

① \$ ping 192.168.1.101

\$ . oraenv  
(: Prod db)

\$ sqlplus / as sysdba.

\$ startup

SQL) select instance\_name, status from v\$instance;

SQL) create pfile = '/tmp/initclone.db.ora' from spfile;

SQL) alter database backup controlfile to trail as  
'/tmp/control.sql';

② SOLY!

```
$ scp /tmp/initClone.db.ora oracle@192.168.1.101:/u01...  
db5/
```

```
$ scp /tmp/control.sal oracle@192.168.1.101:/tmp/
```

```
$ cd $ORACLE_HOME/db5/
```

```
$ ll
```

```
$ scp oraqwdprod@ oracle@192.168.1.101:/u01.../db5/
```

Clone Server:-

57

```
$ vi /tmp/control.sal
```

```
STARTUP NOMOUNT
```

```
CREATE CONTROLFILE SET DATABASE "Clone.db" RESETLOGS
```

```
! 1, $ s## prod.db # Clone.db # g. (for change all names)  
From prod.db to Clone.db
```

```
CHARACTER SET - - -
```

```
;
```

```
! w@ (delete all lines below this)
```

\$ cd \$ORACLE\_HOME/dbs

\$ vi initClone.db.ora

! 1, \$ s#prod.db#Clone.db#

control\_files = 'u01/app/oracle/oradata/Clone.db/control01.ctl', 'u01/app/oracle/oradata/control02.ctl'

(Reduce memory for Clone server not more exceeded)  
i.e. memory-target

! wa

58

\$ cat initClone.db.ora

\$ mkdir -p /u01/app/oracle/admin/Clone.db/adump

\$ mkdir -p /u01/app/oracle/oradata/Clone.db/

\$ mkdir -p /u01/app/oracle/flash\_recovery\_area

Note: Software version must be same on both the server for cloning to work.

\$ vi /etc/oratab

Clone.db: /u01/app/oracle/product/11.2.0/db\_home-2: N

! wa

Now@ (prod.db) server 1 :-

\$ exit

SQL> select \* from v\$log;

SQL> select max (first\_change#) change from v\$log archived  
-log

[Save this change no]

SOL) Select name from V\$ datafile;

SOL) alter database begin backup;

SOL) Select \* from V\$ backup;

ACTIVE

SOL) !

\$ cd /u01/app/oracle/oradata/prodb/

\$ ls

\$ scp \*.ora oracle@192.168.1.101:/u01/app/oracle/oradata/clone

NOTE:- Remember to backup controlfile before creating new controlfile on clone server.

@clone server:-

\$ mv ora\_pwprod.ora ora\_pwclone.ora  
(Renaming password file).

@ ProdDb(server 1)

\$ exit

SOL) create table scott.test2 as select \* from scott.emp;

SOL) create table scott.test2 as select \* from scott.emp;

SOL) create table scott.test3 as select \* from scott.emp;

SOL) commit;

SOL) alter system switch logfile;

SOL) alter database end backup;

SOL) select \* from V\$ backup;

SOL) alter system archive log current;

SOL) select name from v\$archived\_log where first-

changeid >= ~~\$~~ changeid order by name;

SOL) !  
(Provide change no. previously (CPID))

\$ cd /u01/app/oracle/flash\_recovery\_area/proddb/

\$ scp -r <sup>archive.log</sup> / <Copy all archive logs to Clone Server>

oracle@kites /u01/... /flash\_recovery\_area/

Now @ Clone Server:-

60

\$ cd /u01/app/oracle/oradata/CloneDB/

\$ ll

\$ . /M-11 Control01.cel

\$ . oraenv

:CloneDB

\$ sqlplus / as sysdba

(Full Instance)

SOL) @ /tmp/Control.sql

Control file created

SOL) !

\$ cd /u01/app/oracle/oradata/CloneDB/

\$ ll

Control.cel

SOL) Recover database using backup control file  
until cancel;

Specify log: ↓

(give the location of archive logfile which we copied)  
(one by one)

from:- cd /u01/app/oracle/flash\_recovery\_area/  
(3 logs) copy past it

61

Specify log:-  
cancel

Media recovery completed

SOL) alter database open resetlogs;

SOL) <sup>select</sup> instance\_name, status from v\$instance;

SOL) select table\_name from dba\_tables where  
owner = 'SCOTT';

SOL) archive log list;

(no archive log)

SOL) Create SPfile from Pfile;

SOL) shut immediate;

SOL) Startup

SOL) ALTER TABLESPACE TEMP ADD TEMPFILE

'/u01/app/oracle/oradata/clone/db/Temp02.dbf'

Size 200M; (we need to add  
temp tablespace)