**Parameters in Primary Database (orcl1):**

alter system set DB\_NAME=orcl scope=spfile;  
alter system set DB\_UNIQUE\_NAME=orcl1 scope=spfile;  
alter system set SERVICE\_NAMES=orcl scope=spfile;  
alter system set LOG\_ARCHIVE\_CONFIG='DG\_CONFIG=(orcl1,orcl2,orcl3)' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_1= 'LOCATION=/archives/orcl/ VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=orcl1' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_2= 'SERVICE=orcl2 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl2' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_3= 'SERVICE=orcl3 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl3' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_1=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_2=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_3=ENABLE scope=spfile;  
alter system set REMOTE\_LOGIN\_PASSWORDFILE=EXCLUSIVE scope=spfile;  
alter system set FAL\_SERVER=orcl2 scope=spfile;  
alter system set FAL\_CLIENT=orcl scope=spfile;  
alter system set STANDBY\_FILE\_MANAGEMENT=AUTO scope=spfile;

**Parameters in Primary Database (orcl2):**

alter system set DB\_NAME=orcl scope=spfile;  
alter system set DB\_UNIQUE\_NAME=orcl2 scope=spfile;  
alter system set SERVICE\_NAMES=orcl scope=spfile;  
alter system set LOG\_ARCHIVE\_CONFIG='DG\_CONFIG=(orcl1,orcl2,orcl3)' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_1= 'LOCATION=/archives/orcl/ VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=orcl2' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_2= 'SERVICE=orcl1 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl1' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_3= 'SERVICE=orcl3 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl3' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_1=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_2=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_3=ENABLE scope=spfile;  
alter system set REMOTE\_LOGIN\_PASSWORDFILE=EXCLUSIVE scope=spfile;  
alter system set FAL\_SERVER=orcl1 scope=spfile;  
alter system set FAL\_CLIENT=orcl scope=spfile;  
alter system set STANDBY\_FILE\_MANAGEMENT=AUTO scope=spfile;

**Parameters in Primary Database (orcl3):**

alter system set DB\_NAME=orcl scope=spfile;  
alter system set DB\_UNIQUE\_NAME=orcl3 scope=spfile;  
alter system set SERVICE\_NAMES=orcl scope=spfile;  
alter system set LOG\_ARCHIVE\_CONFIG='DG\_CONFIG=(orcl1,orcl2,orcl3)' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_1= 'LOCATION=/archives/orcl/ VALID\_FOR=(ALL\_LOGFILES,ALL\_ROLES) DB\_UNIQUE\_NAME=orcl3' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_2= 'SERVICE=orcl1 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl1' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_3= 'SERVICE=orcl3 VALID\_FOR=(ONLINE\_LOGFILES,PRIMARY\_ROLE) DB\_UNIQUE\_NAME=orcl3' scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_1=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_2=ENABLE scope=spfile;  
alter system set LOG\_ARCHIVE\_DEST\_STATE\_3=ENABLE scope=spfile;  
alter system set REMOTE\_LOGIN\_PASSWORDFILE=EXCLUSIVE scope=spfile;  
alter system set FAL\_SERVER=orcl1 scope=spfile;  
alter system set FAL\_CLIENT=orcl scope=spfile;  
alter system set STANDBY\_FILE\_MANAGEMENT=AUTO scope=spfile;

**Oracle Database Version:**

db10g1.oraworld.com> **select \* from v$version;**

BANNER  
----------------------------------------------------------------  
Oracle Database 10g Enterprise Edition Release 10.2.0.1.0 - Prod  
PL/SQL Release 10.2.0.1.0 - Production  
CORE 10.2.0.1.0 Production  
TNS for Linux: Version 10.2.0.1.0 - Production  
NLSRTL Version 10.2.0.1.0 - Production

**Current Configuration:**

**db10g1**.oraworld.com - Primary Database  
**db10g2**.oraworld.com - Physical Standby Database  
**db10g3**.oraworld.com - Physical Standby Database

**Let's see if the configuration is working well before start the switchover:**

**db10g1**.oraworld.com> archive log list;  
Database log mode Archive Mode  
Automatic archival Enabled  
Archive destination /archives/orcl/  
Oldest online log sequence 5  
Next log sequence to archive 7  
Current log sequence 7  
db10g1.oraworld.com>

**db10g2**.oraworld.com> **select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;**

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 3 YES YES  
1 4 YES YES  
1 5 YES YES  
1 6 YES YES

db10g2.oraworld.com>

**db10g3**.oraworld.com> select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 3 YES YES  
1 4 YES YES  
1 5 YES YES  
1 6 YES YES

The configuration is working well, the Standby Databases are applying the redo information and they are synchronised, now we can go ahead and perform the switchover.

**db10g1**.oraworld.com> **SELECT SWITCHOVER\_STATUS FROM V$DATABASE;**

SWITCHOVER\_STATUS  
--------------------  
SESSIONS ACTIVE  <---- This was the only weird thing I found in 10g LOL

I didn't have other session in another terminal. So who had that session?

**db10g1**.oraworld.com> **SELECT SID, PROCESS, PROGRAM FROM V$SESSION WHERE TYPE = 'USER' AND SID <> (SELECT DISTINCT SID FROM V$MYSTAT);**

SID PROCESS PROGRAM  
---------- ------------ ------------------------------------------------  
150 6853 oracle@db10g1.oraworld.com (J000)  <---- Oh! I see, it is a job process...

**db10g1**.oraworld.com> alter system set job\_queue\_processes=0 scope=both;

System altered.

Since I am a gentleman, I allowed the job finish its work.

After some seconds there wasn't any job process:

**db10g1**.oraworld.com> **SELECT SID, PROCESS, PROGRAM FROM V$SESSION WHERE TYPE = 'USER' AND SID <> (SELECT DISTINCT SID FROM V$MYSTAT);**

no rows selected

**db10g1**.oraworld.com> **SELECT SWITCHOVER\_STATUS FROM V$DATABASE;**

SWITCHOVER\_STATUS

--------------------

TO STANDBY

Why not using "WITH SESSION SHUTDOWN"? Since I was pretty sure that I didn't have more sessions to that database I wanted to know: Why that message, who has the session and how to resolve it.

**db10g1**.oraworld.com> **ALTER DATABASE COMMIT TO SWITCHOVER TO PHYSICAL STANDBY;**

Database altered.

**b10g1**.oraworld.com> **SHUTDOWN IMMEDIATE;**  
ORA-01507: database not mounted

ORACLE instance shut down.  
**db10g1**.oraworld.com> **STARTUP MOUNT;**  
ORACLE instance started.

Total System Global Area 905969664 bytes  
Fixed Size 1222552 bytes  
Variable Size 239077480 bytes  
Database Buffers 662700032 bytes  
Redo Buffers 2969600 bytes  
Database mounted.  
db10g1.oraworld.com>

**db10g2**.oraworld.com> **SELECT SWITCHOVER\_STATUS FROM V$DATABASE;**

SWITCHOVER\_STATUS  
--------------------  
TO PRIMARY

**db10g2**.oraworld.com> **ALTER DATABASE COMMIT TO SWITCHOVER TO PRIMARY;**

Database altered.

**db10g2**.oraworld.com> **shutdown immediate;**  
ORA-01109: database not open

Database dismounted.  
ORACLE instance shut down.  
**db10g2**.oraworld.com> **startup**  
ORACLE instance started.

Total System Global Area 905969664 bytes  
Fixed Size 1222552 bytes  
Variable Size 234883176 bytes  
Database Buffers 666894336 bytes  
Redo Buffers 2969600 bytes  
Database mounted.  
Database opened.  
db10g2.oraworld.com>

Just further information:

**db10g1**.oraworld.com> select incarnation#, RESETLOGS\_TIME , status from v$database\_incarnation;

INCARNATION# RESETLOGS STATUS  
------------ --------- -------  
1 30-JUN-05 PARENT  
2 13-OCT-14 CURRENT

db10g1.oraworld.com>

**db10g2**.oraworld.com> select incarnation#, RESETLOGS\_TIME , status from v$database\_incarnation;

INCARNATION# RESETLOGS STATUS  
------------ --------- -------  
1 30-JUN-05 PARENT  
2 13-OCT-14 CURRENT

db10g2.oraworld.com>

**db10g3**.oraworld.com> select incarnation#, RESETLOGS\_TIME , status from v$database\_incarnation;

INCARNATION# RESETLOGS STATUS  
------------ --------- -------  
1 30-JUN-05 PARENT  
2 13-OCT-14 CURRENT

db10g3.oraworld.com>

Let's do some logfile switches in the new Primary Database:

**db10g2**.oraworld.com> alter system switch logfile;

System altered.

**db10g2**.oraworld.com> alter system switch logfile;

System altered.

**db10g2**.oraworld.com> alter system switch logfile;

System altered.

**db10g2**.oraworld.com> alter system switch logfile;

System altered.

was the switchover successful?

db10g1.oraworld.com> select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 7 YES YES  
1 8 YES YES  
1 8 YES YES  
1 8 YES YES  
1 9 YES YES  
1 9 NO YES  
1 9 NO YES  
1 10 NO YES  <--Received but not applied.  
1 11 NO YES <--Received but not applied.  
1 12 NO YES <--Received but not applied.  
1 13 NO YES <--Received but not applied.

25 rows selected.

**db10g3**.oraworld.com> select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 3 YES YES  
1 4 YES YES  
1 5 YES YES  
1 6 YES YES  
1 7 YES YES  
1 8 YES YES  
1 9 YES YES  
1 10 NO YES <--Received but not applied.  
1 11 NO YES  
1 12 NO YES  
1 13 NO YES

11 rows selected.

It is not a big deal..

**db10g1**.oraworld.com> **ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT FROM SESSION;**

Database altered.

db10g1.oraworld.com>

**db10g3**.oraworld.com> **ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT FROM SESSION;**

Database altered.

db10g3.oraworld.com>

**db10g1**.oraworld.com> select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 3 NO YES  
1 3 YES YES  
1 3 NO YES  
1 4 YES YES  
1 4 YES YES  
1 4 NO YES  
1 5 YES YES  
1 5 NO YES  
1 5 NO YES  
1 6 YES YES  
1 6 YES YES  
1 6 YES YES  
1 7 YES YES  
1 7 YES YES  
1 7 YES YES  
1 8 YES YES  
1 8 YES YES  
1 8 YES YES  
1 9 YES YES  
1 9 NO YES  
1 9 NO YES  
1 10 YES YES  
1 11 YES YES  
1 12 YES YES  
1 13 YES YES

25 rows selected.

**db10g3**.oraworld.com> select thread#,sequence#, applied, archived from v$archived\_log order by 1,2;

THREAD# SEQUENCE# APP ARC  
---------- ---------- --- ---  
1 3 YES YES  
1 4 YES YES  
1 5 YES YES  
1 6 YES YES  
1 7 YES YES  
1 8 YES YES  
1 9 YES YES  
1 10 YES YES  
1 11 YES YES  
1 12 YES YES  
1 13 YES YES

11 rows selected.