**[Renaming A Datafile In A Physical Standby Environment](http://learnwithme11g.wordpress.com/2012/02/20/renaming-a-datafile-in-a-physical-standby-environment/" \o "Permanent link to Renaming A Datafile In A Physical Standby Environment)**

Posted by Srikrishna Murthy Annam on February 20, 2012

In this article we will see how to rename a datafile in a physical standby setup. Most structural changes made to a primary database are automatically propagated through redo data to a physical standby database. Some structural and configuration changes at primary database requires manual intervention at a physical standby database.

When you rename one or more datafiles in the primary database, the change is not propagated to the standby database. Therefore, if you want to rename the same datafiles on the standby database, you must manually make the equivalent modifications on the standby database because the modifications are not performed automatically, even if the STANDBY\_FILE\_MANAGEMENT initialization parameter is set to AUTO.

1. Verify primary and standby databases and also change the initialization parameter STANDBY\_FILE\_MANAGEMENT from AUTO to MANUAL.

**On Primary :**

SQL> select name,db\_unique\_name,database\_role,switchover\_status from v$database;

NAME      DB\_UNIQUE\_NAME                 DATABASE\_ROLE    SWITCHOVER\_STATUS  
——— —————————— —————- ——————–  
ORCL      orcl                           PRIMARY          TO STANDBY

SQL> archive log list  
Database log mode              Archive Mode  
Automatic archival             Enabled  
Archive destination            /home/oracle/app/oracle/flash\_recovery\_area/orcl/  
Oldest online log sequence     524  
Next log sequence to archive   526  
Current log sequence           526  
SQL> select database\_role,switchover\_status from v$database;

DATABASE\_ROLE    SWITCHOVER\_STATUS  
—————- ——————–  
PRIMARY          TO STANDBY

SQL> sho parameter STANDBY\_FILE\_MANAGEMENT

NAME                                 TYPE        VALUE  
———————————— ———– ——————————  
standby\_file\_management              string      AUTO  
**SQL> ALTER SYSTEM SET STANDBY\_FILE\_MANAGEMENT=MANUAL;**

System altered.

SQL> sho parameter STANDBY\_FILE\_MANAGEMENT

NAME                                 TYPE        VALUE  
———————————— ———– ——————————  
standby\_file\_management              string      MANUAL

**On Standby :**

SQL> select name,db\_unique\_name,database\_role,switchover\_status from v$database;

NAME      DB\_UNIQUE\_NAME                 DATABASE\_ROLE    SWITCHOVER\_STATUS  
——— —————————— —————- ——————–  
ORCL      sbyorcl                        PHYSICAL STANDBY NOT ALLOWED

SQL> archive log list  
Database log mode              Archive Mode  
Automatic archival             Enabled  
Archive destination            /home/oracle/app/oracle/flash\_recovery\_area/sbyorcl/  
Oldest online log sequence     524  
Next log sequence to archive   0  
Current log sequence           526  
SQL> select database\_role,switchover\_status from v$database;

DATABASE\_ROLE    SWITCHOVER\_STATUS  
—————- ——————–  
PHYSICAL STANDBY NOT ALLOWED

SQL> SELECT SEQUENCE#,APPLIED FROM V$ARCHIVED\_LOG ORDER BY SEQUENCE#;

SEQUENCE# APPLIED  
———- ———  
517 YES  
518 YES  
519 YES  
520 YES  
521 YES  
522 YES  
523 YES  
524 YES  
525 IN-MEMORY

9 rows selected.

SQL> sho parameter STANDBY\_FILE\_MANAGEMENT

NAME                                 TYPE        VALUE  
———————————— ———– ——————————  
standby\_file\_management              string      AUTO  
**SQL> ALTER SYSTEM SET STANDBY\_FILE\_MANAGEMENT=MANUAL;**

System altered.

SQL> sho parameter STANDBY\_FILE\_MANAGEMENT

NAME                                 TYPE        VALUE  
———————————— ———– ——————————  
standby\_file\_management              string      MANUAL  
SQL>

2. Verify the tablespace to which the datafile belongs and make it offline. This step is performed on primary database.

SQL> select file\_name from dba\_data\_files where tablespace\_name=’EXAMPLE’;

FILE\_NAME  
——————————————————————————–  
/home/oracle/app/oracle/oradata/orcl/example01.dbf

**SQL> alter tablespace example offline;**

Tablespace altered.

3. Rename the datafile to new location and bring tablespace back online. This step is performed on primary database.

[oracle@dgaskmpri01 OPatch]$ mv /home/oracle/app/oracle/oradata/orcl/example01.dbf  /tmp/askm/example01\_temp.dbf  
[oracle@dgaskmpri01 OPatch]$ sqlplus ‘/as sysdba’

SQL\*Plus: Release 11.2.0.2.0 Production on Tue Nov 22 05:47:17 2011

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Connected to:  
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 – Production  
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> alter tablespace example rename datafile ‘/home/oracle/app/oracle/oradata/orcl/example01.dbf’ to ‘/tmp/askm/example01\_temp.dbf’;

Tablespace altered.

**SQL> alter tablespace example online;**

Tablespace altered.

SQL> select file\_name from dba\_data\_files where tablespace\_name=’EXAMPLE’;

FILE\_NAME  
——————————————————————————–  
/tmp/askm/example01\_temp.dbf

SQL>

4. Verify the same  tablespace on standby database.

SQL> select ts#,name from v$tablespace where name=’EXAMPLE’;

TS# NAME  
———- ——————————  
6 EXAMPLE

SQL> select name from v$datafile where ts#=6;

NAME  
——————————————————————————–  
/home/oracle/app/oracle/oradata/sbyorcl/example01.dbf

SQL>

5. Stop recovery on standby database and shut it down.

**SQL> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE CANCEL;**

Database altered.

SQL> shut immediate  
ORA-01109: database not open

Database dismounted.  
ORACLE instance shut down.  
SQL>

6. Rename the datafile on standby database.

[oracle@dgaskmsby01 askm]$ mv /home/oracle/app/oracle/oradata/sbyorcl/example01.dbf /tmp/askm/example01\_temp.dbf  
[oracle@dgaskmsby01 askm]$ sqlplus ‘/as sysdba’

SQL\*Plus: Release 11.2.0.2.0 Production on Tue Nov 22 05:53:49 2011

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Connected to an idle instance.

SQL> startup mount  
ORACLE instance started.

Total System Global Area  456146944 bytes  
Fixed Size                  1344840 bytes  
Variable Size             343935672 bytes  
Database Buffers          104857600 bytes  
Redo Buffers                6008832 bytes  
Database mounted.  
SQL> alter database rename file ‘/home/oracle/app/oracle/oradata/sbyorcl/example01.dbf’ to ‘/tmp/askm/example01\_temp.dbf’;

Database altered.

SQL> select name from v$datafile where ts#=6;

NAME  
——————————————————————————–  
/tmp/askm/example01\_temp.dbf

7. Keep standby database in recovery mode.

SQL> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE USING CURRENT LOGFILE DISCONNECT FROM SESSION;

Database altered.

8. Set initialization parameter STANDBY\_FILE\_MANAGEMENT value back to AUTO.

**On Primary :**

**SQL> ALTER SYSTEM SET STANDBY\_FILE\_MANAGEMENT=AUTO;**

System altered.

**On Standby :**

**SQL> ALTER SYSTEM SET STANDBY\_FILE\_MANAGEMENT=AUTO;**

System altered.