

```
##### Standalone Database #####

##### restoring system datafile from autobackup#####

##### ##### ##### #####
```

Deleting SYSTEM datafile:

```
[oracle@localhost ORCL2]$ cd datafile/
[oracle@localhost datafile]$ ls -ltr
total 1853684
-rw-r----- 1 oracle oinstall 33562624 Oct 28 06:03 o1_mf_temp_lmslnnyz_.tmp
-rw-r----- 1 oracle oinstall 5251072 Oct 28 09:34 o1_mf_users_lmslly73_.dbf
-rw-r----- 1 oracle oinstall 954212352 Oct 28 11:25 o1_mf_system_lmslhqn2_.dbf
-rw-r----- 1 oracle oinstall 576724992 Oct 28 11:30 o1_mf_sysaux_lmslksth_.dbf
-rw-r----- 1 oracle oinstall 335552512 Oct 28 11:30 o1_mf_undotbs1_lmslly0v_.dbf
[oracle@localhost datafile]$ rm o1_mf_system_lmslhqn2_.dbf
```

***** Restoring SYSTEM dbf: *****

Change the state of the database to mount, or nomount, or shutdown before you restore the tablespaces or datafiles.

```
SQL> SHUTDOWN IMMEDIATE;
```

```
SQL> STARTUP MOUNT; or
```

```
SQL> STARTUP NOMOUNT;
```

List SYSTEM backup:

```
RMAN> list backup of tablespace system;
```

```
RMAN> alter database mount;
Statement processed
RMAN> list backup of tablespace system;

List of Backup Sets
=====
BS Key Type LV Size Device Type Elapsed Time Completion Time
-----
3 Full 787.38M DISK 00:00:13 28-OCT-23
BP Key: 3 Status: AVAILABLE Compressed: NO Tag: TAG20231028T082804
Piece Name: /u01/app/oracle/fast_recovery_area/ORCL2/backupset/2023_10_28/o1_mf_nnndf_TAG20231028T082804_lmszlodr_.bkp
List of Datafiles in backup set 3
File LV Type Ckp SCN Ckp Time Abs Fuz SCN Sparse Name
-----
1 Full 2297973 28-OCT-23 NO /u02/oradata/ORCL2/datafile/o1_mf_system_lmslhqn2_.dbf

RMAN>
```

***** restore the datafile *****

```
RMAN> restore datafile 1;
```

Check physical restore :

```
[oracle@localhost datafile]$
[oracle@localhost datafile]$ ls -ltr
total 1853684
-rw-r----- 1 oracle oinstall 33562624 Oct 28 06:03 o1_mf_temp_lmslnnyz_.tmp
-rw-r----- 1 oracle oinstall 5251072 Oct 28 09:34 o1_mf_users_lmslly73_.dbf
-rw-r----- 1 oracle oinstall 576724992 Oct 28 11:39 o1_mf_sysaux_lmslksth_.dbf
-rw-r----- 1 oracle oinstall 335552512 Oct 28 11:39 o1_mf_undotbs1_lmslly0v_.dbf
-rw-r----- 1 oracle oinstall 954212352 Oct 28 11:51 o1_mf_system_lmtcho35_.dbf
[oracle@localhost datafile]$
```

***** checks to see how much needs to be recovered*****

```
SQL>
select
  file#,checkpoint_change#, status, recover
from
  v$datafile_header;
```

```
RMAN> select
  file#,checkpoint_change#, status, recover
from
  v$datafile_header;2> 3> 4>
```

FILE#	CHECKPOINT_CHANGE#	STATUS	REC
1	2297973	ONLINE	
3	2301012	ONLINE	NO
4	2301012	ONLINE	NO
7	2301012	ONLINE	NO

RMAN>

From checkpoint number 2297973 to 2301012, he needs to recover the file. He attempts to recover and check the status of the file again:

(Consider first one is yes)

***** recover the datafile *****

```
RMAN> recover datafile 1;
```

```
RMAN> recover datafile 1;

Starting recover at 28-OCT-23
using channel ORA_DISK_1
using channel ORA_DISK_2

starting media recovery

archived log for thread 1 with sequence 9 is already on disk as file /u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_9_lmt3gos5_.arc
archived log for thread 1 with sequence 10 is already on disk as file /u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_10_lmt3gohs_.arc
archived log for thread 1 with sequence 11 is already on disk as file /u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_11_lmt3goos8_.arc
archived log file name=/u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_9_lmt3gos5_.arc thread=1 sequence=9
archived log file name=/u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_10_lmt3gohs_.arc thread=1 sequence=10
archived log file name=/u01/app/oracle/fast_recovery_area/ORCL2/archivelog/2023_10_28/ol_mf_1_11_lmt3goos8_.arc thread=1 sequence=11
media recovery complete, elapsed time: 00:00:01
Finished recover at 28-OCT-23
```

```
RMAN>
SQL>
select
  checkpoint_change#, status, recover FROM v$datafile_header;
```

```
RMAN> select
  file#,checkpoint_change#, status, recover
from
  v$datafile_header;2> 3> 4>
```

FILE#	CHECKPOINT_CHANGE#	STATUS	REC
1	2297973	ONLINE	
3	2301012	ONLINE	NO
4	2301012	ONLINE	NO
7	2301012	ONLINE	NO

RMAN>

No REC yes.

***** Alter database open: *****

```

RMAN> alter
      database open;2>
Statement processed
_RMAN>

```

***** check status of recovery *****

As can be seen, the recover=YES status of the file has been changed to NO, and the file is in sync with the rest of the files as well. Now Bob is ready to open the database safely as follows:

```

SQL> select open_mode from v$database;

OPEN_MODE
-----
READ WRITE
SQL>

```

***** end *****