

Step 3

Recover the **DR** database using the SCN number from step 1.

```
Rman target /

run{
  set until scn = 13744139628436;
  recover database;
}

starting media recovery

archived log for thread 1 with sequence 38829 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38829.166971.1128917511
archived log for thread 1 with sequence 38830 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38830.27092.1128940915
archived log for thread 1 with sequence 38831 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38831.164418.1128961141
archived log for thread 1 with sequence 38840 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38840.188964.1128993799
archived log for thread 1 with sequence 38841 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38841.103151.1129006869
archived log for thread 1 with sequence 38842 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38842.160353.1129029809
archived log for thread 1 with sequence 38843 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38843.79393.1129045903
archived log for thread 1 with sequence 38844 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38844.177649.1129066559
archived log for thread 1 with sequence 38845 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38845.50333.1129080435
archived log for thread 1 with sequence 38846 is already on disk as file /bkp_test01
/prd_14022023/new/thread_1_seq_38846.251658.1129093275
archived log for thread 2 with sequence 21176 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21176.61231.1128917513
archived log for thread 2 with sequence 21181 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21181.81982.1128993801
archived log for thread 2 with sequence 21182 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21182.113652.1129006869
archived log for thread 2 with sequence 21183 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21183.196317.1129066561
archived log for thread 2 with sequence 21184 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21184.154076.1129080433
archived log for thread 2 with sequence 21185 is already on disk as file /bkp_test01
/prd_14022023/new/thread_2_seq_21185.30268.1129093277
media recovery complete, elapsed time: 00:00:00
Finished recover at 19-FEB-23

Ignore this for now, as this recovery is incomplete, and the PROD database are still spooling
log files after the ones we recovered just now

Oracle Error:
ORA-01547: warning: RECOVER succeeded but OPEN RESETLOGS would get error below
ORA-01194: file 1 needs more recovery to be consistent
ORA-01110: data file 1: '+DATAC1/bkp_test01/DATAFILE/system.9485.1128930931'
```



Step 4

The command below shows that 6 logfiles from production database are still required.

Running the command “ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT FROM SESSION;” from the DR database, also points to more logs required from the production database.

```
RMAN>
RMAN> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT FROM SESSION;

PR00 (PID:345417): FAL: Failed to request gap sequence
PR00 (PID:345417): GAP - thread 1 sequence 38823-38828
PR00 (PID:345417): DBID 903867048 branch 1110820357
PR00 (PID:345417): FAL: All defined FAL servers have been attempted
```

Step 5

Sync the missing files from the production database. On the production database run the following command:-

```
SQL> select name from v$sarchived_log where SEQUENCE# between 38823 and 38828;

NAME
-----
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38823.214115.1128875639
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38824.14516.1128875639
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38825.94200.1128876189
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38826.15567.1128881273
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38827.242053.1128883975
+RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38828.254974.1128898609

6 rows selected.

SQL>
```

Copy the identified archivelog files from production ASM directory to a shared volume

```
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38823.214115.1128875639
/bkp_test01/prd/new2/
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38824.14516.1128875639
/bkp_test01/prd/new2/
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38825.94200.1128876189
/bkp_test01/prd/new2/
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38826.15567.1128881273
/bkp_test01/prd/new2/
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38827.242053.1128883975
/bkp_test01/prd/new2/
cp +RECO1/TEST01_SD04/ARCHIVELOG/2023_02_15/thread_1_seq_38828.254974.1128898609
/bkp_test01/prd/new2/
```

Register the logfiles again in the DR database

```
alter database register logfile '/bkp_test01/prd_14022023/new2/<filename1>';  
alter database register logfile '/bkp_test01/prd_14022023/new2/<filename2>';  
alter database register logfile '/bkp_test01/prd_14022023/new2/<filename3>';  
alter database register logfile '/bkp_test01/prd_14022023/new2/<filename4>';
```

Rerun the database recovery command

```
RMAN>  
RMAN> ALTER DATABASE RECOVER MANAGED STANDBY DATABASE DISCONNECT FROM SESSION;"
```

Step 6

Manually sync any additional log files that should be required for the recovery (follow steps 4 & 5) (this database required some additional log files – see the GAP identifying which log files are required)

```
PRO0 (PID:160433): FAL: Failed to request gap sequence  
PRO0 (PID:160433): GAP - thread 2 sequence 21172-21175  
PRO0 (PID:160433): DBID 903867048 branch 1110820357  
PRO0 (PID:160433): FAL: All defined FAL servers have been attempted
```

Keep repeating the above process until no errors are reported

After syncing all the gaps, media recovery on DR is started and will continue until SCN number requested

```
2023-02-19T10:46:45.049229+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_2_seq_21181.81982.1128993801  
2023-02-19T10:46:45.373047+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_1_seq_38840.188964.1128993799  
2023-02-19T10:46:48.585785+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_1_seq_38841.103151.1129006869  
2023-02-19T10:46:48.921101+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_2_seq_21182.113652.1129006869  
2023-02-19T10:46:52.373504+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_1_seq_38842.160353.1129029809  
2023-02-19T10:46:52.779270+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_2_seq_21183.196317.1129066561  
2023-02-19T10:47:02.236044+02:00  
PRO0 (PID:115735): Media Recovery Log /bkp_clouds2z031/ test_14022023/new/thread_1_seq_38843.79393.1129045903  
2023-02-19T10:47:05.166239+02:00  
Successfully added datafile 769 to media recovery  
Datafile #769: '+DATA1/TEST01_SD01 /DATAFILE/undotbs2.9959.1129200423'  
2023-02-19T10:47:06.809155+02:00  
Successfully added datafile 770 to media recovery  
Datafile #770: '+DATA1/TEST01_SD01 /DATAFILE/undotbs1.9960.1129200425'  
2023-02-19T10:47:08.345819+02:00  
Successfully added datafile 771 to media recovery  
Datafile #771: '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9961.1129200427'  
2023-02-19T10:47:09.843776+02:00  
Successfully added datafile 772 to media recovery  
Datafile #772: '+DATA1/TEST01_SD01 /DATAFILE/undotbs1.9962.1129200429'  
2023-02-19T10:47:11.536544+02:00  
Successfully added datafile 773 to media recovery  
Datafile #773: '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9963.1129200431'  
2023-02-19T10:47:13.135632+02:00  
Successfully added datafile 774 to media recovery  
Datafile #774: '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9964.1129200431'  
Resize operation completed for file# 771, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9961.1129200427', old size 10485760K, new size 10588160K  
Resize operation completed for file# 773, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9963.1129200431', old size 10485760K, new size 10588160K  
Resize operation completed for file# 774, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9964.1129200431', old size 10485760K, new size 10588160K  
Resize operation completed for file# 771, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9961.1129200427', old size 10588160K, new size 10690560K  
2023-02-19T10:47:14.170675+02:00  
Resize operation completed for file# 773, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9963.1129200431', old size 10588160K, new size 10690560K  
Resize operation completed for file# 774, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9964.1129200431', old size 10588160K, new size 10690560K  
Resize operation completed for file# 771, fname '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9961.1129200427', old size 10690560K, new size 10792960K  
2023-02-19T10:47:16.015400+02:00  
Successfully added datafile 775 to media recovery  
Datafile #775: '+DATA1/TEST01_SD01 /DATAFILE/undotbs1.9965.1129200435'  
2023-02-19T10:47:17.285300+02:00  
Successfully added datafile 776 to media recovery  
Datafile #776: '+DATA1/TEST01_SD01 /DATAFILE/sysaux.9966.1129200437'
```

Step 7

The next logs required are as per output below, these were spooled after the SCN number from production database was captured. This is normal and will sync on the next recovery SCN number.

```
2023-02-19T11:27:54.838235+02:00  
PR00 (PID:115735): Media Recovery Waiting for T-1.S-38858
```

38858 not spooled in PROD yet → DR in sync with PROD

```
SQL> select name from v$archived_log where SEQUENCE# like '38858';  
  
no rows selected  
  
SQL>
```

The DR is now in sync and logs will apply as they are automatically shipped from the PROD database to the DR database.

Keywords

- Oracle, Database, DataGuard, Standby, HA, DR, Disaster Recovery, High Availability

Disclaimer: It is always recommended to log a support request with Oracle Support for any Oracle error you may encounter in your environment.

