

```
[oracle@ol6-ag-rac1 ~]$ rman target sys
```

```
Recovery Manager: Release 11.2.0.3.0 - Production on Fri Jan 13 02:05:43 2017
```

```
Copyright (c) 1982, 2011, Oracle and/or its affiliates. All rights reserved.
```

```
target database Password:
```

```
connected to target database: DB11G (DBID=400243355)
```

```
RMAN> █
```

```
[oracle@ol6-ag-rac1 ~]$ sqlplus scott@DB11G
```

```
SQL*Plus: Release 11.2.0.3.0 Production on Fri Jan 13 02:13:41 2017
```

```
Copyright (c) 1982, 2011, Oracle. All rights reserved.
```

```
Enter password:
```

```
Connected to:
```

```
Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production  
With the Partitioning, OLAP, Data Mining and Real Application Testing options
```

```
SQL> █
```

```
RMAN> backup database plus archivelog;
```

```
Starting backup at 13-JAN-17
current log archived
using target database control file instead of recovery catalog
allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=56 device type=DISK
channel ORA_DISK_1: starting archived log backup set
channel ORA_DISK_1: specifying archived log(s) in backup set
input archived log thread=1 sequence=2 RECID=10 STAMP=933116481
input archived log thread=1 sequence=3 RECID=11 STAMP=933116926
input archived log thread=1 sequence=4 RECID=12 STAMP=933123599
input archived log thread=1 sequence=5 RECID=13 STAMP=933128098
channel ORA_DISK_1: starting piece 1 at 13-JAN-17
channel ORA_DISK_1: finished piece 1 at 13-JAN-17
piece handle=/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_anxxx_TA
G20170113T021459_d7jbjmhy_.bkp tag=TAG20170113T021459 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:00:15
Finished backup at 13-JAN-17
```

```
Starting backup at 13-JAN-17
using channel ORA_DISK_1
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00001 name=/u01/app/oracle/oradata/DB11G/datafiles/sy
stem01
input datafile file number=00003 name=/u01/app/oracle/oradata/DB11G/datafiles/un
do01
input datafile file number=00002 name=/u01/app/oracle/oradata/DB11G/datafiles/sy
saux01
input datafile file number=00004 name=/u01/app/oracle/oradata/DB11G/datafiles/in
dex01
input datafile file number=00005 name=/u01/app/oracle/oradata/DB11G/datafiles/us
ers01
channel ORA_DISK_1: starting piece 1 at 13-JAN-17
```

```
SQL> insert into emp (empno,ename) values (1111,'TOM');
```

```
1 row created.
```

```
SQL> commit;
```

```
Commit complete.
```

```
SQL> █
```

```
Starting backup at 13-JAN-17
using channel ORA_DISK_1
channel ORA_DISK_1: starting full datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00001 name=/u01/app/oracle/oradata/DB11G/datafiles/sy
stem01
input datafile file number=00003 name=/u01/app/oracle/oradata/DB11G/datafiles/un
do01
input datafile file number=00002 name=/u01/app/oracle/oradata/DB11G/datafiles/sy
soux01
input datafile file number=00004 name=/u01/app/oracle/oradata/DB11G/datafiles/in
dex01
input datafile file number=00005 name=/u01/app/oracle/oradata/DB11G/datafiles/us
ers01
channel ORA_DISK_1: starting piece 1 at 13-JAN-17
channel ORA_DISK_1: finished piece 1 at 13-JAN-17
piece handle=/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_nnndf_TAG20170113T021514_d7j bk3qc_.bkp tag=TAG2017011
3T021514 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:04:39
Finished backup at 13-JAN-17
```

```
Starting backup at 13-JAN-17
current log archived
using channel ORA_DISK_1
channel ORA_DISK_1: starting archived log backup set
channel ORA_DISK_1: specifying archived log(s) in backup set
input archived log thread=1 sequence=6 RECID=14 STAMP=933128394
channel ORA_DISK_1: starting piece 1 at 13-JAN-17
channel ORA_DISK_1: finished piece 1 at 13-JAN-17
piece handle=/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_an nnnn_TAG20170113T021954_d7j bsv4t_.bkp tag=TAG2017011
3T021954 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:00:01
Finished backup at 13-JAN-17
```

```
Starting Control File and SPFILE Autobackup at 13-JAN-17
piece handle=/u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_13/o1_mf_s_933128396_d7j bszlt_.bkp comment=NONE
Finished Control File and SPFILE Autobackup at 13-JAN-17
```

```

RMAN> list backupset;

```

```

List of Backup Sets
=====

```

```

BS Key  Type LV Size          Device Type Elapsed Time Completion Time
-----
1       Full  1.02G          DISK            00:03:47      11-JAN-17
      BP Key: 1   Status: AVAILABLE Compressed: NO  Tag: BACKUP_DB11G_00000_011117100010
      Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_11/o1_mf_nnndf_BACKUP_DB11G_00000_0_d7f78fxn_.bkp

```

```

List of Datafiles in backup set 1

```

```

File LV Type Ckp SCN      Ckp Time  Name
-----
1       Full 807694    11-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/system01
2       Full 807694    11-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/sysaux01
3       Full 807694    11-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/undo01
4       Full 807694    11-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/index01
5       Full 807694    11-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/users01

```

```

BS Key  Type LV Size          Device Type Elapsed Time Completion Time
-----
2       Full  9.36M          DISK            00:00:03      11-JAN-17
      BP Key: 2   Status: AVAILABLE Compressed: NO  Tag: TAG20170111T220457
      Piece Name: /u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_11/o1_mf_s_933026446_d7f7hv5t_.bkp
SPFILE Included: Modification time: 11-JAN-17
SPFILE db_unique_name: DB11G
Control File Included: Ckp SCN: 807694          Ckp time: 11-JAN-17

```

```
BS Key   Size      Device Type Elapsed Time Completion Time
-----
```

```
5        94.76M    DISK          00:00:12    13-JAN-17
BP Key: 5   Status: AVAILABLE Compressed: NO   Tag: TAG20170113T021459
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/ol_mf_annnn_TAG20170113T021459_d7bjbmhy_.bkp
```

List of Archived Logs in backup set 5

Thrd	Seq	Low SCN	Low Time	Next SCN	Next Time
1	2	814075	12-JAN-17	827766	12-JAN-17
1	3	827766	12-JAN-17	828515	12-JAN-17
1	4	828515	12-JAN-17	844686	13-JAN-17
1	5	844686	13-JAN-17	848982	13-JAN-17

```
BS Key   Type LV Size      Device Type Elapsed Time Completion Time
-----
```

```
6        Full    1.02G    DISK          00:04:34    13-JAN-17
BP Key: 6   Status: AVAILABLE Compressed: NO   Tag: TAG20170113T021514
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/ol_mf_nnndf_TAG20170113T021514_d7jkb3qc_.bkp
```

List of Datafiles in backup set 6

File	LV	Type	Ckp SCN	Ckp Time	Name
1		Full	849004	13-JAN-17	/u01/app/oracle/oradata/DB11G/datafiles/system01
2		Full	849004	13-JAN-17	/u01/app/oracle/oradata/DB11G/datafiles/sysaux01
3		Full	849004	13-JAN-17	/u01/app/oracle/oradata/DB11G/datafiles/undo01
4		Full	849004	13-JAN-17	/u01/app/oracle/oradata/DB11G/datafiles/index01
5		Full	849004	13-JAN-17	/u01/app/oracle/oradata/DB11G/datafiles/users01

```
BS Key Size Device Type Elapsed Time Completion Time
```

```
-----  
7 100.00K DISK 00:00:00 13-JAN-17  
BP Key: 7 Status: AVAILABLE Compressed: NO Tag: TAG20170113T021954  
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_annnn_TAG20170113T021954_d7jbsv4t_.bkp
```

List of Archived Logs in backup set 7

```
Thrd Seq Low SCN Low Time Next SCN Next Time  
-----  
1 6 848982 13-JAN-17 849188 13-JAN-17
```

```
BS Key Type LV Size Device Type Elapsed Time Completion Time
```

```
-----  
8 Full 9.36M DISK 00:00:04 13-JAN-17  
BP Key: 8 Status: AVAILABLE Compressed: NO Tag: TAG20170113T021956  
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_13/o1_mf_s_933128396_d7jbszlt_.bkp
```

SPFILE Included: Modification time: 12-JAN-17

SPFILE db_unique_name: DB11G

Control File Included: Ckp SCN: 849198 Ckp time: 13-JAN-17

RMAN> █


```
RMAN> report obsolete;
```

```
RMAN retention policy will be applied to the command
```

```
RMAN retention policy is set to redundancy 1
```

```
Report of obsolete backups and copies
```

Type	Key	Completion Time	Filename/Handle
Backup Set	1	11-JAN-17	
Backup Piece	1	11-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_11/o1_mf_nnndf_BACKUP_DB11G_00000_0_d7f78fxn_.bkp
Archive Log	10	12-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_2_d7hz59kx_.arc
Backup Set	2	11-JAN-17	
Backup Piece	2	11-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_11/o1_mf_s_933026446_d7f7hv5t_.bkp
Archive Log	11	12-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_3_d7hzmgtz_.arc
Archive Log	12	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_4_d7j63toh_.arc
Archive Log	13	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_5_d7jbjk6b_.arc
Backup Set	5	13-JAN-17	
Backup Piece	5	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_anndn_TAG20170113T021459_d7jbjmhy_.bkp

```
RMAN> █
```

```
RMAN> delete obsolete;
```

```
RMAN retention policy will be applied to the command
```

```
RMAN retention policy is set to redundancy 1
```

```
using channel ORA_DISK_1
```

```
Deleting the following obsolete backups and copies:
```

Type	Key	Completion Time	Filename/Handle
Backup Set	1	11-JAN-17	
Backup Piece	1	11-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_11/o1_mf_nnndf_BACKUP_DB11G_00000_0_d7f78fxn_.bkp
Archive Log	10	12-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_2_d7hz59kx_.arc
Backup Set	2	11-JAN-17	
Backup Piece	2	11-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_11/o1_mf_s_933026446_d7f7hv5t_.bkp
Archive Log	11	12-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_3_d7hzmgtz_.arc
Archive Log	12	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_4_d7j63toh_.arc
Archive Log	13	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_5_d7jbjk6b_.arc
Backup Set	5	13-JAN-17	
Backup Piece	5	13-JAN-17	/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_annnn_TAG20170113T021459_d7jbjmhy_.bkp

```
Do you really want to delete the above objects (enter YES or NO)? YES
```

Do you really want to delete the above objects (enter YES or NO)? YES

deleted backup piece

backup piece handle=/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_11/o1_mf_nnndf_BACKUP_DB11G_00000_0_d7f78fxn_.bkp RECID=1 STAMP=933026461

deleted archived log

archived log file name=/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_2_d7hz59kx_.arc RECID=10 STAMP=933116481

deleted backup piece

backup piece handle=/u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_11/o1_mf_s_933026446_d7f7hv5t_.bkp RECID=2 STAMP=933026699

deleted archived log

archived log file name=/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_12/o1_mf_1_3_d7hzmgtz_.arc RECID=11 STAMP=933116926

deleted archived log

archived log file name=/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_4_d7j63toh_.arc RECID=12 STAMP=933123599

deleted archived log

archived log file name=/u01/app/oracle/fra/DB11G/DB11G/archivelog/2017_01_13/o1_mf_1_5_d7jbjk6b_.arc RECID=13 STAMP=933128098

deleted backup piece

backup piece handle=/u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_anndn_TAG20170113T021459_d7jbjmhy_.bkp RECID=5 STAMP=933128099

Deleted 7 objects

RMAN> █

```
RMAN> list backupset;
```

List of Backup Sets

```
=====
BS Key   Type LV Size          Device Type Elapsed Time Completion Time
-----
6        Full  1.02G          DISK          00:04:34    13-JAN-17
BP Key: 6   Status: AVAILABLE Compressed: NO Tag: TAG20170113T021514
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_nnndf_TAG20170113T021514_d7jbk3qc_.bkp
```

List of Datafiles in backup set 6

```
File LV Type Ckp SCN    Ckp Time  Name
-----
1      Full 849004    13-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/system01
2      Full 849004    13-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/sysaux01
3      Full 849004    13-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/undo01
4      Full 849004    13-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/index01
5      Full 849004    13-JAN-17 /u01/app/oracle/oradata/DB11G/datafiles/users01
```

```
BS Key   Size          Device Type Elapsed Time Completion Time
-----
7        100.00K       DISK          00:00:00    13-JAN-17
BP Key: 7   Status: AVAILABLE Compressed: NO Tag: TAG20170113T021954
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/backupset/2017_01_13/o1_mf_anndf_TAG20170113T021954_d7jbsv4t_.bkp
```

List of Archived Logs in backup set 7

```
Thrd Seq    Low SCN    Low Time  Next SCN  Next Time
-----
1     6         848982    13-JAN-17 849188    13-JAN-17
```

```
BS Key   Type LV Size          Device Type Elapsed Time Completion Time
-----
8        Full  9.36M          DISK          00:00:04    13-JAN-17
BP Key: 8   Status: AVAILABLE Compressed: NO Tag: TAG20170113T021956
Piece Name: /u01/app/oracle/fra/DB11G/DB11G/autobackup/2017_01_13/o1_mf_s_933128396_d7jbszlt_.bkp
SPFILE Included: Modification time: 12-JAN-17
SPFILE db_unique_name: DB11G
Control File Included: Ckp SCN: 849198      Ckp time: 13-JAN-17
```

```
SQL> insert into emp (empno,ename) values (2222,'DON');
```

```
1 row created.
```

```
SQL> commit;
```

```
Commit complete.
```

```
SQL> exit;
```

```
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64  
bit Production
```

```
With the Partitioning, OLAP, Data Mining and Real Application Testing options
```

```
[oracle@ol6-ag-rac1 ~]$ █
```