

Full RMAN Restore (Same Server)

This scenario assumes that all datafiles are missing or corrupt on the current server.
It assumes that the Recovery Catalog is still available.
The below is an example of restoring data from DUBELIVE.

Information taken from Oracle 11gR2 RMAN documentation

http://docs.oracle.com/cd/E11882_01/backup.112/e10642/rcmcomre.htm#i1009223

The stages of the restore are ...

1. Check Existing Backup Sets
2. Connect to Target Database and Recovery Catalog
3. Restore / Recover the Datafiles
4. Open Database

Check Existing Backup Sets

At least 1 days worth of backup data is kept on disk on the live servers.

You can check what files exist with the following command in RMAN

```
RMAN> LIST BACKUP OF DATABASE;
```

Connect To Target Database and Recovery Catalog

Connect to the target database and recovery catalog using rman.

```
rman target / catalog rman/<pwd> @//sheffield/rman11g
```

Now startup mount the instance, we are assuming in this scenario that the spfile, control files and online redo logs are all still available.

```
STARTUP FORCE MOUNT;
```

Use Data Recovery Advisor to Restore Datafile

The restore / recovery process is now very simple. Simply enter the commands below.

```
RMAN> RESTORE DATABASE;
```

```
RMAN> RECOVER DATABASE;
```

This process took approximately 35 minutes for a copy of the Unit-e live database on 4th June 2013.

Open Database

As we have done a full recovery there is no need to use the resetlogs parameter

```
RMAN> ALTER DATABASE OPEN;
```

Example Restore Scenario

RMAN> **LIST BACKUP OF DATABASE;**

List of Backup Sets
=====

BS Key	Type	LV	Size	Device Type	Elapsed Time	Completion Time
284	Full		6.27G	DISK	00:31:53	04-JUN-13
BP Key: 286 Status: AVAILABLE Compressed: YES Tag: TAG20130604T100355						
Piece Name:						
/backup/fast_recovery_area/DUBELIVE/backupset/2013_06_04/o1_mf_nnndf_TAG20130604T100355_8tvccx3b_.bkp						
List of Datafiles in backup set 284						
File	LV	Type	Ckp	SCN	Ckp Time	Name
1		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_system_8rt2zmgs_.dbf	
2		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_sysaux_8rt2zmkg_.dbf	
3		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_undotbs1_8rt2zmjo_.dbf	
4		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_users_8rt2zmlw_.dbf	
5		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_unite_ar_8rt2zmjy_.dbf	
6		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_unite_da_8rt2zm9o_.dbf	
7		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_unite_in_8tvk55mn_.dbf	
8		Full	9763878049371	04-JUN-13	/u02/oradata/DUBELIVE/datafile/o1_mf_unite_in_8rt2zmcy_.dbf	

RMAN> **STARTUP FORCE MOUNT;**

Oracle instance started
database mounted

Total System Global Area 2137886720 bytes

Fixed Size 2230072 bytes
Variable Size 1325402312 bytes
Database Buffers 805306368 bytes
Redo Buffers 4947968 bytes

RMAN> **RESTORE DATABASE;**

Starting restore at 04-JUN-13
allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=770 device type=DISK

channel ORA_DISK_1: starting datafile backup set restore
channel ORA_DISK_1: specifying datafile(s) to restore from backup set
channel ORA_DISK_1: restoring datafile 00001 to /u02/oradata/DUBELIVE/datafile/o1_mf_system_8rt2zmgs_.dbf
channel ORA_DISK_1: restoring datafile 00002 to /u02/oradata/DUBELIVE/datafile/o1_mf_sysaux_8rt2zmkg_.dbf
channel ORA_DISK_1: restoring datafile 00003 to /u02/oradata/DUBELIVE/datafile/o1_mf_undotbs1_8rt2zmjo_.dbf
channel ORA_DISK_1: restoring datafile 00004 to /u02/oradata/DUBELIVE/datafile/o1_mf_users_8rt2zmlw_.dbf
channel ORA_DISK_1: restoring datafile 00005 to /u02/oradata/DUBELIVE/datafile/o1_mf_unite_ar_8rt2zmjy_.dbf
channel ORA_DISK_1: restoring datafile 00006 to /u02/oradata/DUBELIVE/datafile/o1_mf_unite_da_8rt2zm9o_.dbf
channel ORA_DISK_1: restoring datafile 00007 to /u02/oradata/DUBELIVE/datafile/o1_mf_unite_in_8tvk55mn_.dbf
channel ORA_DISK_1: restoring datafile 00008 to /u02/oradata/DUBELIVE/datafile/o1_mf_unite_in_8rt2zmcy_.dbf
channel ORA_DISK_1: reading from backup piece
/backup/fast_recovery_area/DUBELIVE/backupset/2013_06_04/o1_mf_nnndf_TAG20130604T100355_8tvccx3b_.bkp
channel ORA_DISK_1: piece
handle=/backup/fast_recovery_area/DUBELIVE/backupset/2013_06_04/o1_mf_nnndf_TAG20130604T100355_8tvccx3b_.bkp
tag=TAG20130604T100355
channel ORA_DISK_1: restored backup piece 1
channel ORA_DISK_1: restore complete, elapsed time: 00:32:15
Finished restore at 04-JUN-13

RMAN> **RECOVER DATABASE;**

Starting recover at 04-JUN-13
using channel ORA_DISK_1

starting media recovery

archived log for thread 1 with sequence 5 is already on disk as file
/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_5_8tvf7qbg_.arc
archived log for thread 1 with sequence 6 is already on disk as file
/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_6_8tvjr64z_.arc
archived log for thread 1 with sequence 7 is already on disk as file
/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_7_8tvm118f_.arc
archived log for thread 1 with sequence 8 is already on disk as file
/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_8_8tvpcd98_.arc
archived log for thread 1 with sequence 9 is already on disk as file
/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_9_8tvsvwx9_.arc
archived log file name=/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_5_8tvf7qbg_.arc
thread=1 sequence=5

archived log file name=/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_6_8tvjr64z_.arc
thread=1 sequence=6
archived log file name=/backup/fast_recovery_area/DUBELIVE/archivelog/2013_06_04/o1_mf_1_7_8tvm118f_.arc
thread=1 sequence=7
media recovery complete, elapsed time: 00:00:05
Finished recover at 04-JUN-13

RMAN> **ALTER DATABASE OPEN;**

database opened

RMAN>