

# Duplicating a Database with RMAN

- 1. Create the TNS entries for the two databases (orcl and db) and copy the tnsnames.ora on 2 machines (server1 and server2).**

```
orcl = target database      --> server1
db  = auxiliary database   --> server2
```

The two databases should be archivelog mode

```
ORCL =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = server1)(PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = orcl)))
```

```
DB =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = server2)(PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = db)))
```

- 2. Create Listener entries for databases.**

```
#Environnement windows
set ORACLE_SID=DB1
set LOCAL=DB1
C:\oracle\ora11\bin\oradim.exe -new -sid DB1 -startmode manual -intpwd oracle -spfile
```

```
#Listener.ora Server1.

SID_LIST_LISTENER =
  (SID_LIST =
    (SID_DESC =
      (GLOBAL_DBNAME = orcl)
      (ORACLE_HOME = /u01/app/oracle/product/11.2.0/db_1)
      (SID_NAME = orcl)))

LISTENER =
  (DESCRIPTION =
    (ADDRESS = (PROTOCOL = TCP)(HOST = server1)(PORT = 1521)))

ADR_BASE_LISTENER = /u01/app/oracle
```

```
#Listener.ora Server2.
```

```
SID_LIST_LISTENER =  
(SID_LIST =  
  (SID_DESC =  
    (GLOBAL_DBNAME = db)  
    (ORACLE_HOME = /u01/app/oracle/product/11.2.0/db_1)  
    (SID_NAME = db)))  
  
LISTENER =  
(DESCRIPTION =  
  (ADDRESS = (PROTOCOL = TCP)(HOST = server2)(PORT = 1521))  
)
```

```
ADR_BASE_LISTENER = /u01/app/oracle
```

### **3. Create directories on server2, if necessary.**

```
[server2]$ mkdir -p /u01/app/oracle/flash_recovery_area/db/archivelog  
[server2]$ mkdir -p /u01/app/oracle/flash_recovery_area/db/onlinelog  
[server2]$ mkdir -p /u01/app/oracle/flash_recovery_area/db/flashback  
[server2]$ mkdir -p /u01/app/oracle/admin/db/dpdump  
[server2]$ mkdir -p /u01/app/oracle/admin/db/adump  
[server2]$ mkdir -p /u01/app/oracle/admin/db/scripts  
[server2]$ mkdir -p /u01/app/oracle/admin/db/pfile  
[server2]$ mkdir -p /u01/app/oracle/cfgtoollogs/dbca/db  
[server2]$ mkdir -p /u01/app/oracle/cfgtoollogs/emca  
[server2]$ mkdir -p /u01/app/oracle/cfgtoollogs/netca  
[server2]$ mkdir -p /u01/app/oracle/oradata/db  
[server2]$ mkdir -p /u01/app/oracle/admin/db/adump
```

### **4. Ping the servers IPs and TNS entries**

```
[server1]$ Ping server1  
[server1]$ Ping server2  
[server1]$ Tns ping orcl  
[server1]$ Tns ping db
```

### **5. Create password files in ORACLE\_HOME/dbs**

```
[server1]$ orapwd file=orapwdb password=oracle  
[server1]$ scp orapwdb oracle@server2:/u01/app/oracle/product/11.2.0/db_1/dbs
```

### **6. Create a parameter file with only one parameter on server2**

```
[server2]$ Vi /backup/pfile.ora  
  
Db_name=db
```

### **7. Start the instance on server2**

```
[server2]$ SQL> Startup nomount pfile='/backup/pfile.ora'  
[server2]$ SQL> show parameter db_name;  
[server2]$ SQL> show parameter control_files;
```

### **8. Login to the source and the target**

```
[server1]$ man target=sys/oracle@orcl auxiliary=sys/oracle@db
```

### **9. Do the duplication with Rman**

```
RMAN>  
  
run {  
  allocate channel prmy1 type disk;  
  allocate auxiliary channel stby1 type disk;  
  DUPLICATE TARGET DATABASE TO db from active database  
  spfile  
  set db_file_name_convert '/orcl/', '/db/'  
  set log_file_name_convert '/orcl/', '/db/'  
  set control_files='/u01/app/oracle/oradata/db/control01.ctl',  
  '/u01/app/oracle/oradata/db/control02.ctl'  
  NOFILENAMECHECK;  
}
```