

Moving Online data file

This is another cool feature in 12c R1. Now you can move data files while file is online and accessible. It renames datafile on same location or it can move datafile to different location too. During this move process file will be accessible to users. At the end of process same command will update controlfile.

Command: alter database move datafile

Reuse: This option will overwrite if file exist on new location

Keep: will keep datafile on its original location too.

Benefits:

1. Move files from one storage to another storage (cost saving)
2. Files can be moved to ASM storage from non ASM

Limitations:

1. It will not work if your datafile in database is OMF. You can move any/all the non OMF files

Example:

Alter database move datafile 'file_loc1' to 'file_loc2'

```
SQL> select name,open_mode from v$database;
```

```
NAME    OPEN_MODE
```

```
-----  
ANUJCDB READ WRITE
```

```
SQL> select * from v$version;
```

```
BANNER    CON_ID
```

```
-----  
Oracle Database 12c Enterprise Edition Release 12.1.0.0.2 - 64bit Beta
```

```
0
```

```
PL/SQL Release 12.1.0.0.2 - Beta
```

```
0
```

```
CORE 12.1.0.0.2 Beta
```

```
0
```

```
TNS for 64-bit Windows: Version 12.1.0.0.2 - Beta
```

```
0
```

```
NLSRTL Version 12.1.0.0.2 - Beta
```

```
0
```

```
SQL> select file_name,status from dba_data_files;
FILE_NAME  STATUS
```

```
-----
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSTEM_8TR358YD_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSAUX_8TR33KJ1_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_UNDOTBS1_8TR37D09_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_USERS_8TR37BHP_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\ANUJ_DATA.DBF
AVAILABLE
```

```
SQL> alter database move datafile 'D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\ANUJ_
DATA.DBF' to 'D:\ORACLE\12R1\ANUJ_DATA.DBF';
Database altered.
```

```
SQL> select file_name,status from dba_data_files;
FILE_NAME  STATUS
```

```
-----
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSTEM_8TR358YD_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSAUX_8TR33KJ1_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_UNDOTBS1_8TR37D09_.DBF
AVAILABLE
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_USERS_8TR37BHP_.DBF
AVAILABLE
D:\ORACLE\12R1\ANUJ_DATA.DBF
AVAILABLE
```

```
SQL> alter database move datafile 'D:\ORACLE\12R1\ANUJ_DATA.DBF' to
'D:\ORACLE\
12R1\ORADATA\ANUJCDB\DATAFILE\ANUJ_DATA.DBF';
Database altered.
```

```
SQL> alter database move datafile 'D:\ORACLE\12R1\ANUJ_DATA.DBF' to
'D:\ORACLE\
12R1\ORADATA\ANUJCDB\DATAFILE\ANUJ_DATA.DBF';
```

If datafile does not exist you will get below error

```
alter database move datafile 'D:\ORACLE\12R1\ANUJ_DATA.DBF' to 'D:\ORACLE\12R1\
ORADATA\ANUJCDB\DATAFILE\ANUJ_DATA.DBF'
```

```
*
```

```
ERROR at line 1:
ORA-01516: nonexistent log file, data file, or temporary file "D:\ORACLE\12R1\AN
UJ_DATA.DBF"
```

```
SQL> select file_name,status from dba_data_files;  
FILE_NAME  STATUS
```

```
-----  
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSTEM_8TR358YD_.DBF  
AVAILABLE  
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_SYSAUX_8TR33KJ1_.DBF  
AVAILABLE  
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_UNDOTBS1_8TR37D09_.DBF  
AVAILABLE  
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\O1_MF_USERS_8TR37BHP_.DBF  
AVAILABLE  
D:\ORACLE\12R1\ORADATA\ANUJCDB\DATAFILE\ANUJ_DATA.DBF  
AVAILABLE
```

<http://www.oracle-12c.com/>