MANAGING TABLESPACES and DATA FILES
(Cap. 8)

1) Crearea unui tablespace permanent 'UBD' cu un fisier de date UBD1 cu dimensiunea de 1 M, cu sau fara extensie :

a) cu specificarea tipului si dimensiunea extensiei
```
SQL> CREATE TABLESPACE userdata DATAFILE 'E:/Student /userdata01.dbf' SIZE  1M
      EXTENT MANAGEMENT LOCAL UNIFORM SIZE 128K;
```

b) fara specificarea extensiei (implicit AUTOALLOCATE)
```
SQL >CREATE TABLESPACE ubd
      DATAFILE  'E:/Student/ubd1.dbf' SIZE 1M;
```

2) Extinderea spatiului alocat unui tablespace

a) extinderea spatiului cu autoextensie
```
SQL> ALTER DATABASE
      DATAFILE 'E:/Student/ubd1.dbf'
      AUTOEXTEND ON NEXT 2M;
```

c) extinderea spatiului cu marime fixa
```
SQL> ALTER DATABASE
      DATAFILE 'E:/Student/ubd1.dbf' RESIZE 2M;
```

3) Adaugarea unui nou fisier de date la un tablespace
```
SQL> ALTER TABLESPACE bd_data
      ADD DATAFILE 'E:/Student/ubd1.dbf'
      SIZE 1M;
```

4) Informatii despre tablespace-uri (la nivel de baza de date)

```
SQL> desc DBA_TABLESPACES
 Name                                    Null?      Type
 --------------------------------------- --------    --------------------
 TABLESPACE_NAME                 NOT NULL  VARCHAR2(30)
 BLOCK_SIZE                      NOT NULL  NUMBER
 INITIAL_EXTENT                            NUMBER
 NEXT_EXTENT                               NUMBER
 MIN_EXTENTS                     NOT NULL  NUMBER
 MAX_EXTENTS                               NUMBER
 PCT_INCREASE                              NUMBER
 MIN_EXTLEN                                NUMBER
 STATUS                                    VARCHAR2(9)
 CONTENTS                                  VARCHAR2(9)
 LOGGING                                   VARCHAR2(9)
 FORCE_LOGGING                             VARCHAR2(3)
 EXTENT_MANAGEMENT                         VARCHAR2(10)
 ALLOCATION_TYPE                           VARCHAR2(9)
 PLUGGED_IN                                VARCHAR2(3)
 SEGMENT_SPACE_MANAGEMENT                  VARCHAR2(6)
```

```
SQL> select tablespace_name,block_size,status from DBA_TABLESPACES;

TABLESPACE_NAME          BLOCK_SIZE  STATUS
-----------------------   ----------  ---------
SYSTEM                      8192      ONLINE
UNDOTBS1                    8192      ONLINE
TEMP                        8192      ONLINE
CWMLITE                     8192      ONLINE
DRSYS                       8192      ONLINE
EXAMPLE                     8192      ONLINE
INDX                        8192       ONLINE
ODM                         8192       ONLINE
TOOLS                       8192      ONLINE
USERS                       8192      ONLINE
XDB                         8192      ONLINE
BD_DATA                     8192       ONLINE
BD_TEMP                     8192      ONLINE
```

5) Starea unui tablespace (existent sau sters din baza de date)

```
SQL> desc V$TABLESPACE
 Name                                      Null?        Type
 ----------------------------------------  --------     -----------------
 TS#                                                    NUMBER
 NAME                                                   VARCHAR2(30)
 INCLUDED_IN_DATABASE_BACKUP                            VARCHAR2(3)
```

```
SQL> select * from V$TABLESPACE;

    TS# NAME                           INC
----------  ------------------------------  ---
      3 CWMLITE                        YES
      4 DRSYS                          YES
      5 EXAMPLE                        YES
      6 INDX                           YES
      7 ODM                            YES
      0 SYSTEM                         YES
      8 TOOLS                          YES
      1 UNDOTBS1                       YES
      9 USERS                          YES
     10 XDB                            YES
      2 TEMP                           YES
     12 BD_DATA                        YES
     13 BD_TEMP                        YES
```

6) Informatii despre tablespace-uri si fiserele de date aferente (la nivelul bazei de date)

```
SQL> desc DBA_DATA_FILES;
 Name
 --------------------------------------------------
 FILE_NAME
 FILE_ID
```

```
TABLESPACE_NAME
BYTES
BLOCKS
STATUS
RELATIVE_FNO
AUTOEXTENSIBLE
MAXBYTES
MAXBLOCKS
INCREMENT_BY
USER_BYTES
USER_BLOCKS
```

SQL> select tablespace_name,file_name,status from DBA_DATA_FILES;

TABLESPACE_NAME	FILE_NAME	STATUS
USERS	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\USERS01.DBF	AVAILABLE
SYSAUX	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\SYSAUX01.DBF	AVAILABLE
UNDOTBS1	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\UNDOTBS01.DBF	AVAILABLE
SYSTEM	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\SYSTEM01.DBF	AVAILABLE
EXAMPLE	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\EXAMPLE01.DBF	AVAILABLE
UPB_DATA	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\UPB_DATA	AVAILABLE
CONSTANT_GROW_IN	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_GR	AVAILABLE
CONSTANT_GROW_T	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_GR_T	AVAILABLE

7) Informatii despre fisierele de date (la nivel de baza de date)

SQL> desc V$DATAFILE

Name	Null?	Type
FILE#		NUMBER
CREATION_CHANGE#		NUMBER
CREATION_TIME		DATE
TS#		NUMBER
RFILE#		NUMBER
STATUS		VARCHAR2(7)
ENABLED		VARCHAR2(10)
CHECKPOINT_CHANGE#		NUMBER
CHECKPOINT_TIME		DATE
UNRECOVERABLE_CHANGE#		NUMBER
UNRECOVERABLE_TIME		DATE
LAST_CHANGE#		NUMBER
LAST_TIME		DATE
OFFLINE_CHANGE#		NUMBER
ONLINE_CHANGE#		NUMBER
ONLINE_TIME		DATE
BYTES		NUMBER
BLOCKS		NUMBER
CREATE_BYTES		NUMBER
BLOCK_SIZE		NUMBER
NAME		VARCHAR2(513)
PLUGGED_IN		NUMBER
BLOCK1_OFFSET		NUMBER
AUX_NAME		VARCHAR2(513)

SQL> select file#,name,creation_time,status,enabled from V$DATAFILE;

FILE#	NAME	CREATION	STATUS	ENABLED
1	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\SYSTEM01.DBF	17-APR-07	SYSTEM	READ WRITE
2	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\UNDOTBS01.DBF	17-APR-07	ONLINE	READ WRITE
3	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\SYSAUX01.DBF	17-APR-07	ONLINE	READ WRITE
4	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\USERS01.DBF	17-APR-07	ONLINE	READ WRITE
5	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\EXAMPLE01.DBF	13-FEB-11	ONLINE	READ WRITE
6	F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\UPB_DATA	05-NOV-11	ONLINE	READ WRITE
7	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_GR_IDX	25-FEB-12	ONLINE	READ WRITE
8	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_GR_TAB	25-FEB-12	ONLINE	READ WRITE
9	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_DEP_IDX	25-FEB-12	ONLINE	READ WRITE
10	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_DEP_TAB	25-FEB-12	ONLINE	READ WRITE
11	F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_DIA_IDX	25-FEB-12	ONLINE	READ WRITE

8) Informatii despre fisierele de date temporare la nivel de baza de date

SQL> desc DBA_TEMP_FILES

Name	Null?	Type
FILE_NAME		VARCHAR2(513)
FILE_ID		NUMBER
TABLESPACE_NAME	NOT NULL	VARCHAR2(30)
BYTES		NUMBER
BLOCKS		NUMBER
STATUS		CHAR(9)
RELATIVE_FNO		NUMBER
AUTOEXTENSIBLE		VARCHAR2(3)
MAXBYTES		NUMBER
MAXBLOCKS		NUMBER
INCREMENT_BY		NUMBER
USER_BYTES		NUMBER
USER_BLOCKS		NUMBER

SQL> select file_name,tablespace_name, status from DBA_TEMP_FILES;

FILE_NAME	TABLESPACE_NAME	STATUS
F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\TEMP01.DBF	TEMP	AVAILABLE
F:\ORA10G_DB\PRODUCT\10.2.0\ORADATA\UPB\UPB_TEMP	UPB_TEMP	AVAILABLE
F:\ORA10G_DB\PRODUCT\10.2.0\DB_1\DATABASE\UPB_REPOS_TEMP	REPOS_TEMP	AVAILABLE

9) Informatii despre fisierele temporare la nivel de user

SQL> desc V$TEMPFILE

Name	Null?	Type
FILE#		NUMBER
CREATION_CHANGE#		NUMBER
CREATION_TIME		DATE
TS#		NUMBER
RFILE#		NUMBER
STATUS		VARCHAR2(7)
ENABLED		VARCHAR2(10)

```
BYTES                                            NUMBER
BLOCKS                                           NUMBER
CREATE_BYTES                                     NUMBER
BLOCK_SIZE                                       NUMBER
NAME                                             VARCHAR2(513)
```

SQL> select file#,name, creation_time, status from V$TEMPFILE;

```
FILE#        NAME                        CREATION_      STATUS
-----    -----------------------------   ---------      -------
    1    F:\ORA10G_DB\PRODUCT\10.2.0\OR  13-FEB-11      ONLINE
         ADATA\UPB\TEMP01.DBF

    2    F:\ORA10G_DB\PRODUCT\10.2.0\OR  05-NOV-11      ONLINE
         ADATA\UPB\BD_TEMP

    3    F:\ORA10G_DB\PRODUCT\10.2.0\DB  25-FEB-12      ONLINE
         _1\DATABASE\BD_REPOS_TEMP
```

10) Informatii despre parametrii bazei de date

SQL> desc DATABASE_PROPERTIES;
```
Name                                       Null?        Type
------------------------------------------------------ -------- ------
PROPERTY_NAME                              NOT NULL     VARCHAR2(30)
PROPERTY_VALUE                                          VARCHAR2(4000)
DESCRIPTION                                            VARCHAR2(4000)
```

SQL> select * from DATABASE_PROPERTIES;
```
PROPERTY_NAME                PROPERTY_VALUE                      DESCRIPTION
----------------------------  --------------------------------------  ---------------------------
DICT.BASE                    2                                   dictionary base tables version #
DEFAULT_TEMP_TABLESPACE      TEMP                                Name of default temporary tablespace
DEFAULT_PERMANENT_TABLESPACE USERS                               Name of default permanent tablespace
DEFAULT_TBS_TYPE              SMALLFILE                          Default tablespace type
NLS_LANGUAGE                 AMERICAN                            Language
NLS_TERRITORY                AMERICA                             Territory
NLS_CURRENCY                        $                            Local currency
NLS_ISO_CURRENCY             AMERICA                             ISO currency
NLS_CHARACTERSET             WE8MSWIN1252                        Character set
NLS_CALENDAR                 GREGORIAN                           Calendar system
NLS_DATE_FORMAT              DD-MON-RR                           Date format
NLS_NCHAR_CHARACTERSET       AL16UTF16                          NCHAR Character set
NLS_RDBMS_VERSION            10.2.0.3.0                          RDBMS version for NLS parameters
GLOBAL_DB_NAME         UPB.REGRESS.RDBMS.DEV.US.ORACLE.COM       Global database name
```

11) Stergerea din dictionar a unui tablespace
SQL> DROP TABLESPACE userdata
        INCLUDING CONTENTS AND DATAFILES;