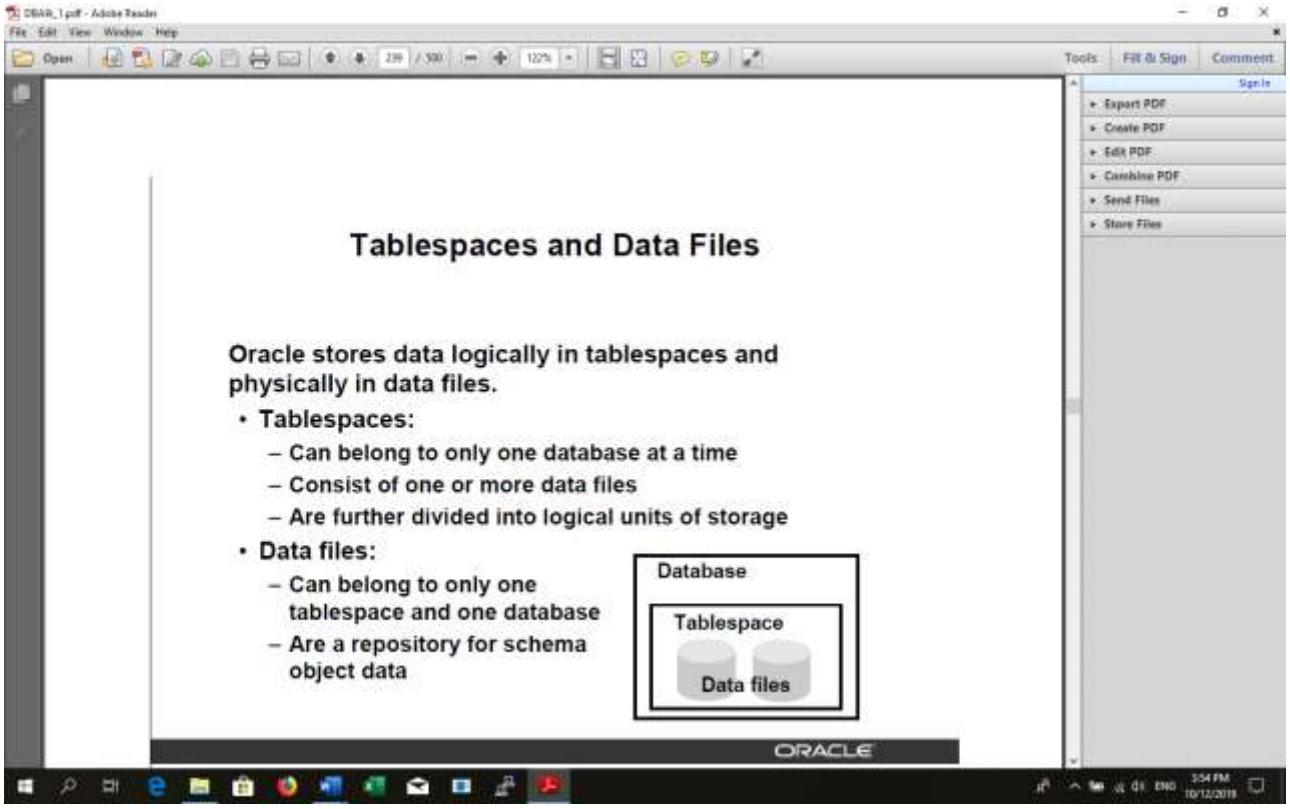
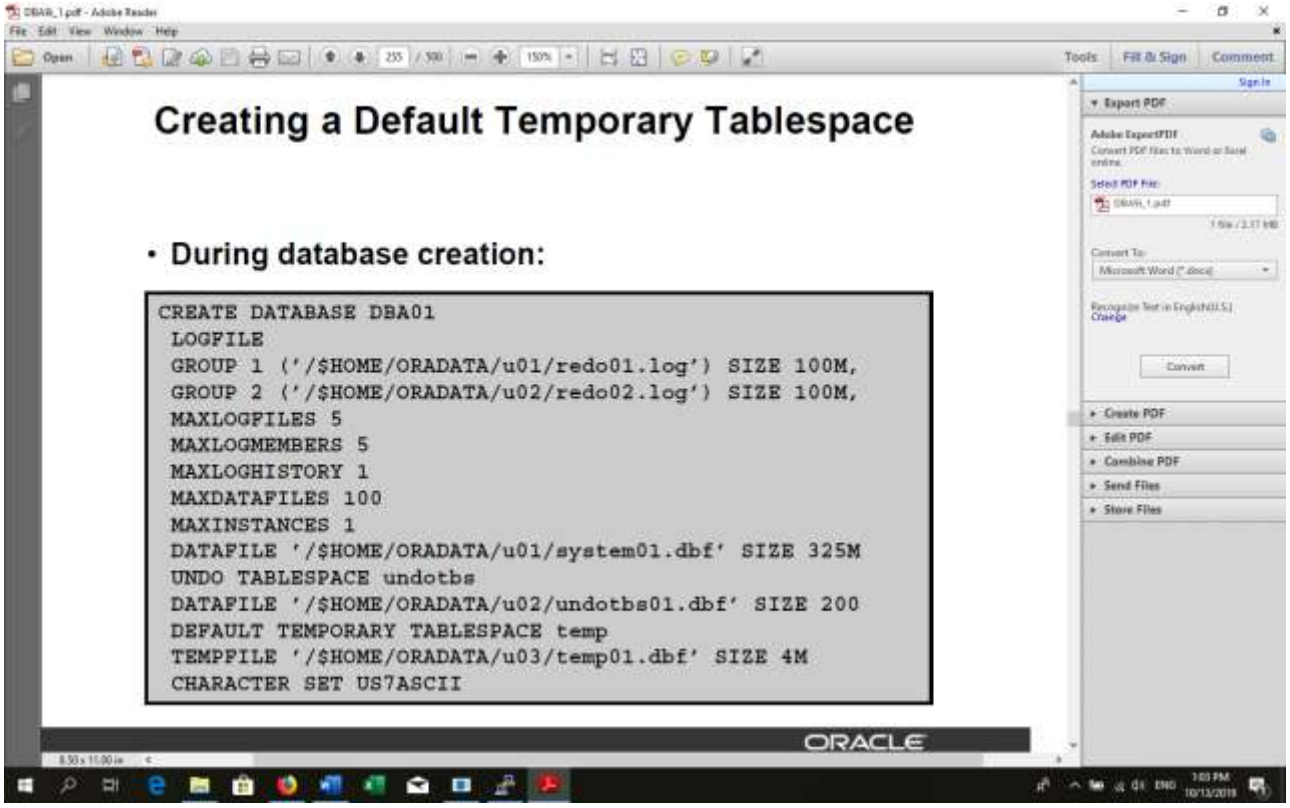
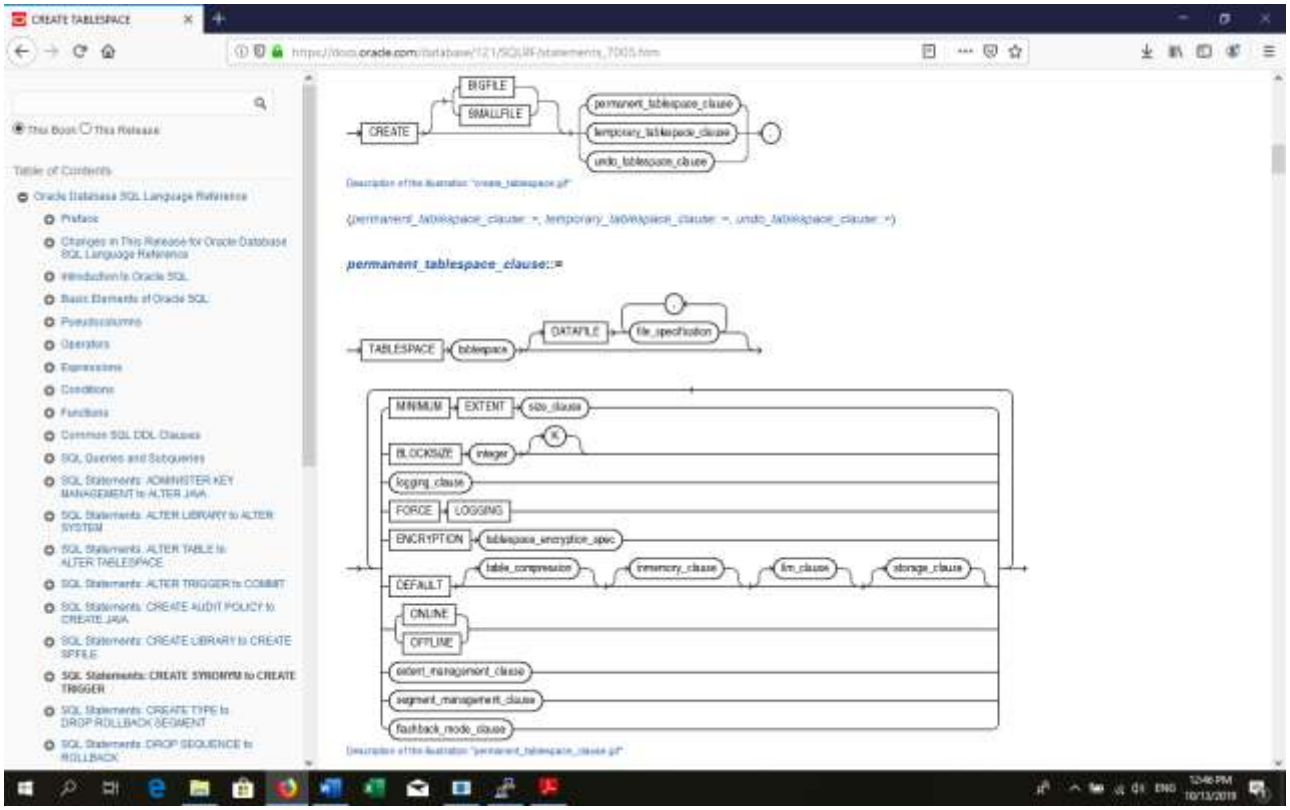
Tablespace-uri si fisiere de date






Obtaining Tablespace Information
Obtaining tablespace and data file information can be obtained by querying the following:
• Tablespace information:
– DBA_TABLESPACES
– V$TABLESPACE
• Data file information:
– DBA_DATA_FILES
– V$DATAFILE
• Temp file information:
– DBA_TEMP_FILES
– V$TEMPFILE
ORACLE


CREATE TABLESPACE
CREATE
BIGFILE
SMALLFILE
permanent_tablespace_clause
temporary_tablespace_clause
undo_tablespace_clause
permanent_tablespace_clause::=
TABLESPACE
tblespace
DATAFILE
file_specification
MINIMUM
EXTENT
size_clause
BLOCKSIZE
integer
K
logging_clause
FORCE
LOGGING
ENCRYPTION
tblespace_encryption_spec
table_compression
inmemory_clause
ilm_clause
storage_clause
DEFAULT
ONLINE
OFFLINE
extent_management_clause
segment_management_clause
flashback_mode_clause

1) Crearea unui tablespace permanent cu un fisier de date asignat de 1 Mb, cu sau fara extensie:

a) cu specificarea tipului si dimensiunea extensiei:

```
SQL> create tablespace abd_data1 datafile 'g:/temp/abd_data1.dbf' size 5M
        extent management local uniform size 128k;
Tablespace created.
```

b) fara specificarea extensiei (implicit AUTOALLOCATE):

```
SQL >create tablespace abd_data2
        datafile 'G:/temp/abd_data2.dbf' size 5M;
Tablespace created.
```

2) Extinderea spatiului alocat unui tablespace:

a) extinderea spatiului prin autoextensie:

```
SQL> alter database datafile 'g:/temp/abd_data1.dbf'
        autoextend on next 2M;
Database altered.
```

b) extinderea spatiului cu marime fixa:

```
SQL> alter database datafile 'g:/temp/abd_data1.dbf' resize 3M;
Database altered.
```

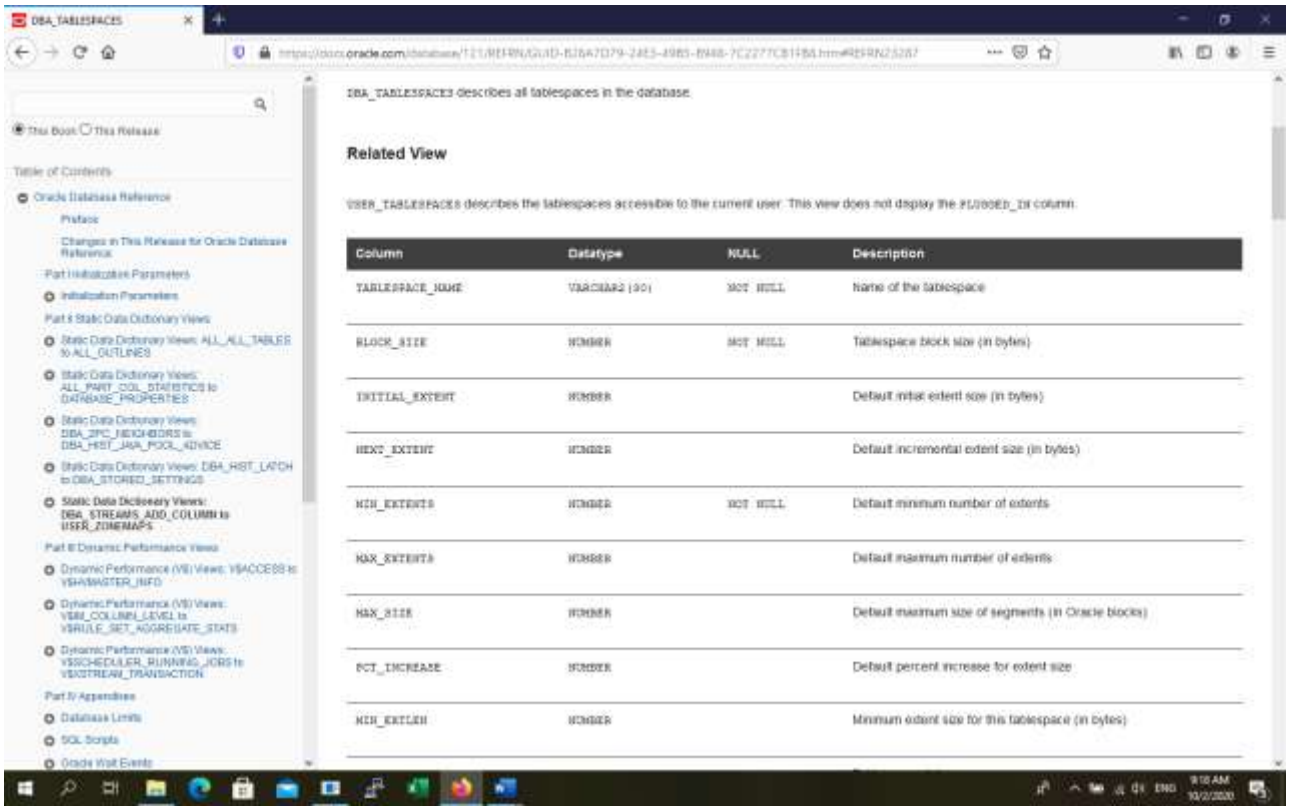
3) Adaugarea unui nou fisier de date la un tablespace:

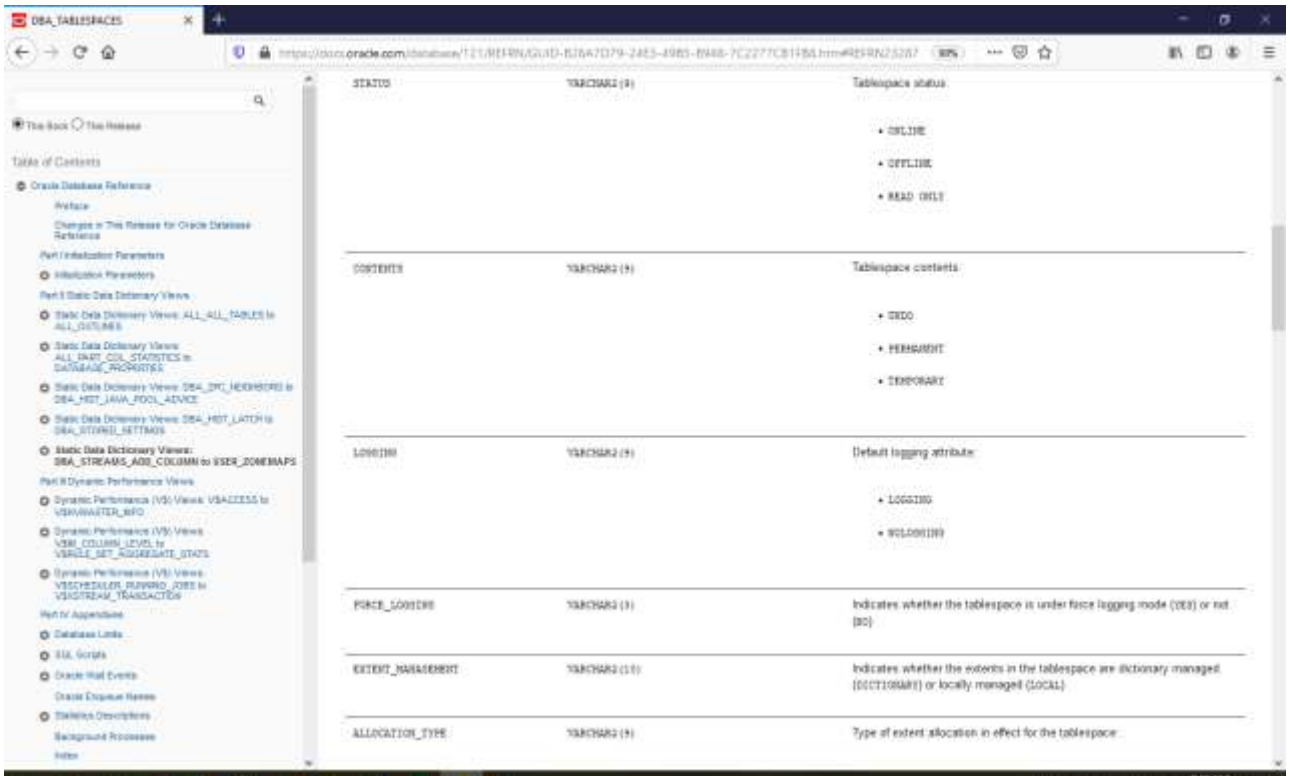
```
SQL> alter tablespace abd_data1
        add datafile 'g:/temp/abd_data11.dbf' size 3M;
Tablespace altered.
```

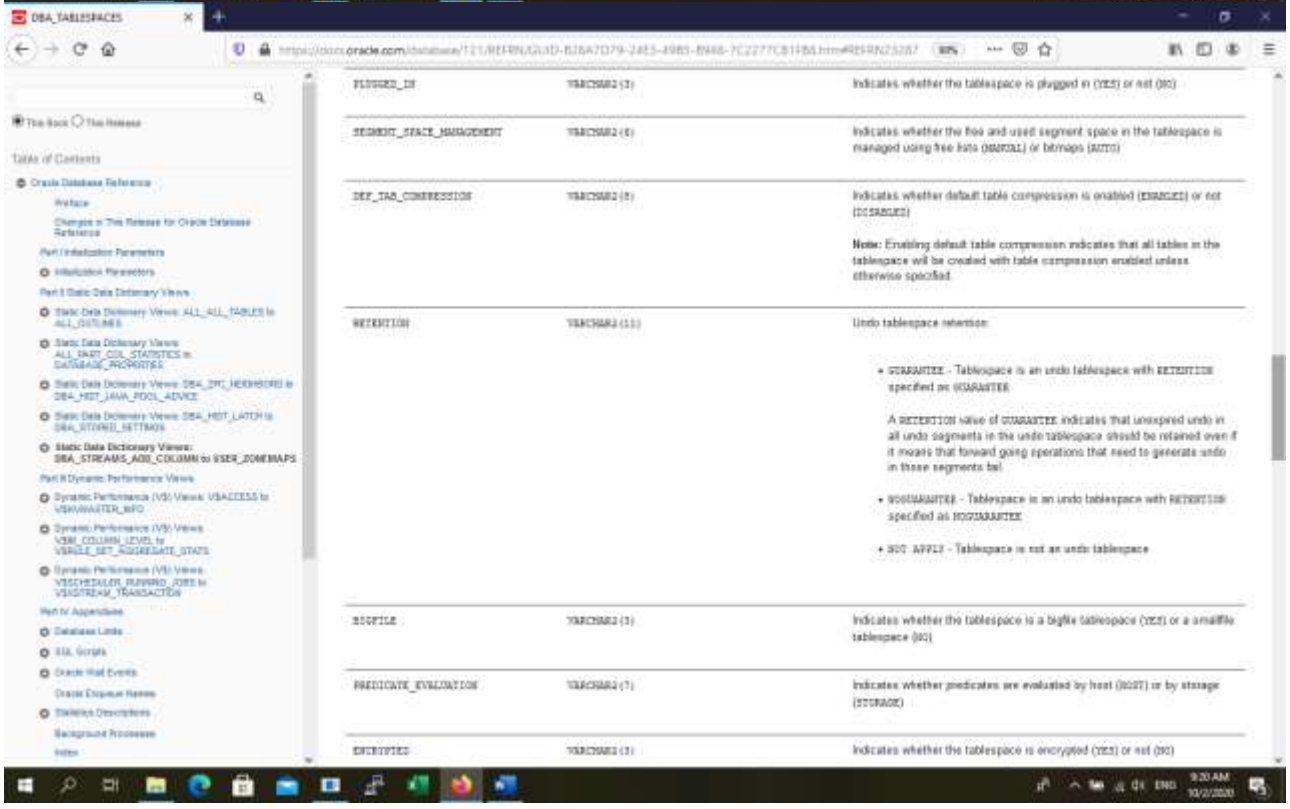
4) Informatii despre tablespace-uri create pe baza de date:

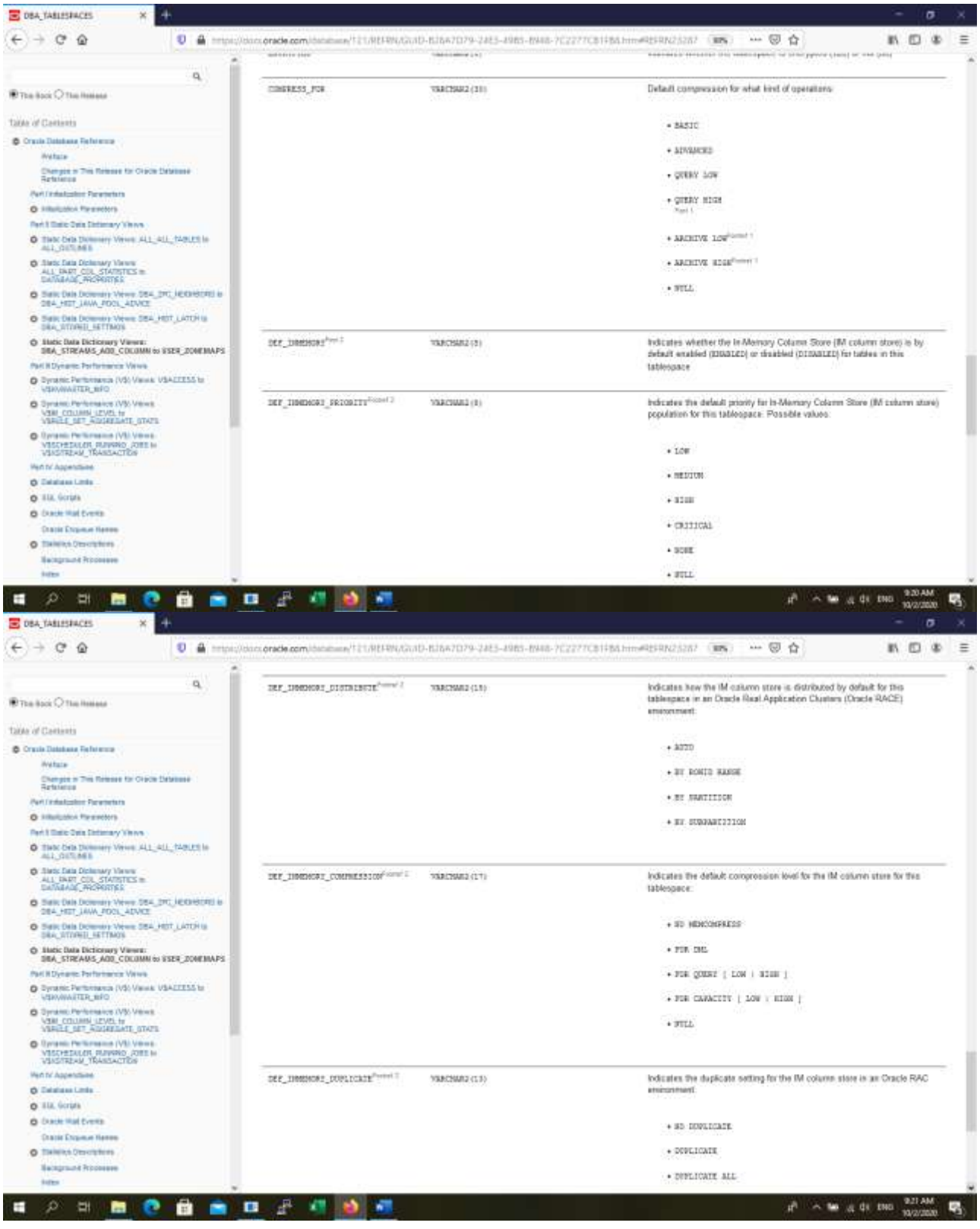
```
SQL> desc dba_tablespaces
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------
TABLESPACE_NAME                           NOT NULL VARCHAR2(30)
 BLOCK_SIZE                                NOT NULL NUMBER
 INITIAL_EXTENT                                     NUMBER
 NEXT_EXTENT                                        NUMBER
 MIN_EXTENTS                               NOT NULL NUMBER
 MAX_EXTENTS                                        NUMBER
 MAX_SIZE                                           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)
DEF_TAB_COMPRESSION	VARCHAR2(8)
RETENTION	VARCHAR2(11)
BIGFILE	VARCHAR2(3)
PREDICATE_EVALUATION	VARCHAR2(7)
ENCRYPTED	VARCHAR2(3)
COMPRESS_FOR	VARCHAR2(30)
DEF_INMEMORY	VARCHAR2(8)
DEF_INMEMORY_PRIORITY	VARCHAR2(8)
DEF_INMEMORY_DISTRIBUTE	VARCHAR2(15)
DEF_INMEMORY_COMPRESSION	VARCHAR2(17)
DEF_INMEMORY_DUPLICATE	VARCHAR2(13)




DBA_TABLESPACES
STATUS
VARCHAR2 (9)
Tablespace status
• ONLINE
• OFFLINE
• READ ONLY
CONTENTS
VARCHAR2 (9)
Tablespace contents
• UNDO
• PERMANENT
• TEMPORARY
LOGGING
VARCHAR2 (9)
Default logging attribute
• LOGGING
• NOLOGGING
FORCE_LOGGING
VARCHAR2 (3)
Indicates whether the tablespace is under force logging mode (YES) or not (NO)
EXTENT_MANAGEMENT
VARCHAR2 (10)
Indicates whether the extents in the tablespace are dictionary managed (DICTIONARY) or locally managed (LOCAL)
ALLOCATION_TYPE
VARCHAR2 (9)
Type of extent allocation in effect for the tablespace


DBA_TABLESPACES
PLUGGED_IN
VARCHAR2 (3)
Indicates whether the tablespace is plugged in (YES) or not (NO)
SEGMENT_SPACE_MANAGEMENT
VARCHAR2 (6)
Indicates whether the free and used segment space in the tablespace is managed using free lists (MANUAL) or bitmaps (AUTO)
DEF_TAB_COMPRESSION
VARCHAR2 (8)
Indicates whether default table compression is enabled (ENABLED) or not (DISABLED)
Note: Enabling default table compression indicates that all tables in the tablespace will be created with table compression enabled unless otherwise specified
RETENTION
VARCHAR2 (11)
Undo tablespace retention
• GUARANTEE - Tablespace is an undo tablespace with RETENTION specified as GUARANTEE
A RETENTION value of GUARANTEE indicates that unexpired undo in all undo segments in the undo tablespace should be retained even if it means that forward going operations that need to generate undo in those segments fail
• NOGUARANTEE - Tablespace is an undo tablespace with RETENTION specified as NOGUARANTEE
• NOT APPLY - Tablespace is not an undo tablespace
BIGFILE
VARCHAR2 (3)
Indicates whether the tablespace is a bigfile tablespace (YES) or a smallfile tablespace (NO)
PREDICATE_EVALUATION
VARCHAR2 (7)
Indicates whether predicates are evaluated by host (HOST) or by storage (STORAGE)
ENCRYPTED
VARCHAR2 (3)
Indicates whether the tablespace is encrypted (YES) or not (NO)



SQL> select tablespace_name, contents, block_size,status from dba_tablespaces;

TABLESPACE_NAME	CONTENTS	BLOCK_SIZE	STATUS
SYSTEM	PERMANENT	8192	ONLINE
SYSAUX	PERMANENT	8192	ONLINE
UNDOTBS1	UNDO	8192	ONLINE
TEMP	TEMPORARY	8192	ONLINE
USERS	PERMANENT	8192	ONLINE
BD_DATA	PERMANENT	8192	ONLINE
BD_TEMP	TEMPORARY	8192	ONLINE
ABD_DATA1	PERMANENT	8192	OFFLINE
ABD_DATA2	PERMANENT	8192	OFFLINE

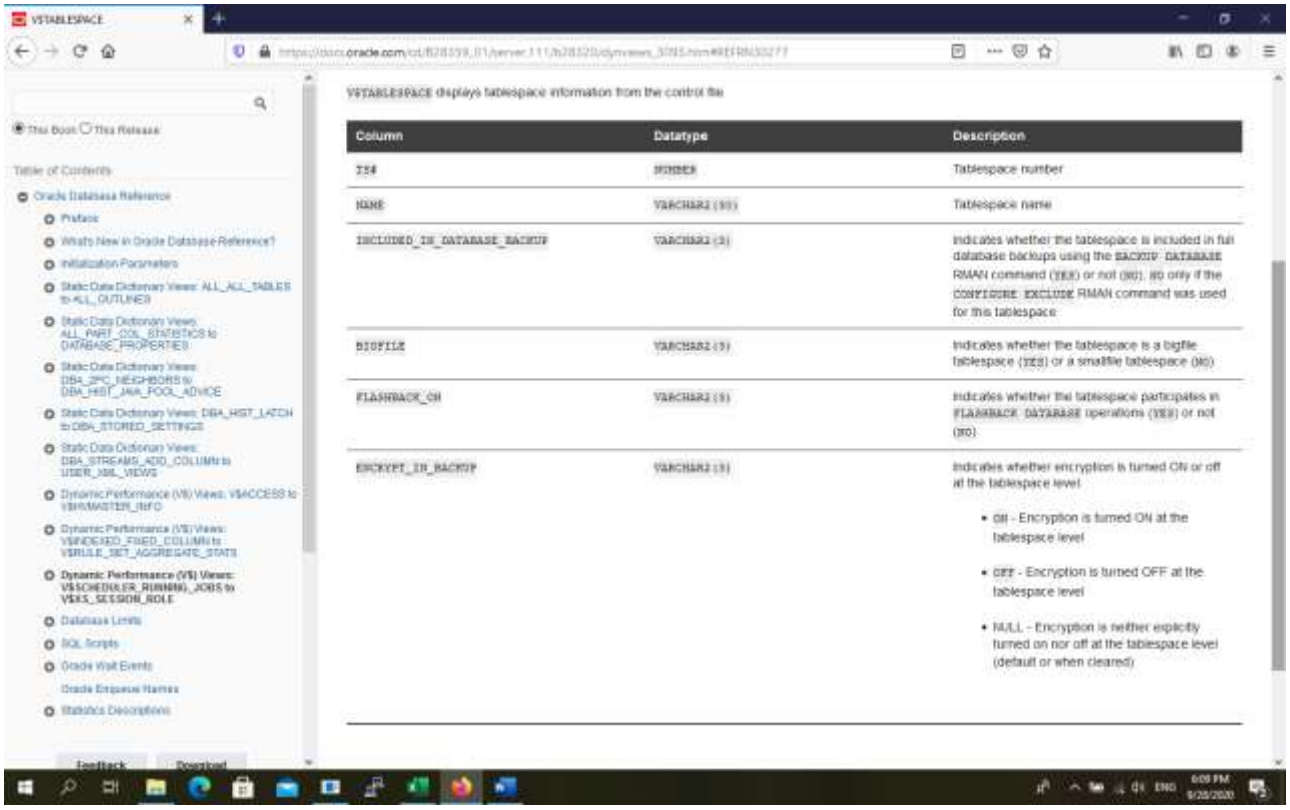
TABLESPACE_NAME	CONTENTS	BLOCK_SIZE	STATUS
SYSTEM	PERMANENT	8192	ONLINE
SYSAUX	PERMANENT	8192	ONLINE
UNDOTBS1	UNDO	8192	ONLINE
TEMP	TEMPORARY	8192	ONLINE
USERS	PERMANENT	8192	ONLINE
EXAMPLE	PERMANENT	8192	ONLINE
BI_IAS_OPSS	PERMANENT	8192	ONLINE
BI_IAS_TEMP	PERMANENT	8192	ONLINE
BI_IAS_UMS	PERMANENT	8192	ONLINE
BI_MDS	PERMANENT	8192	ONLINE
BI_IAU	PERMANENT	8192	ONLINE
BI_BIPLATFORM	PERMANENT	8192	ONLINE
BI_WLS	PERMANENT	8192	ONLINE
BI_STB	PERMANENT	8192	ONLINE
UBD_TEMP	TEMPORARY	8192	ONLINE
BD_UNDO	PERMANENT	8192	ONLINE
BD_DATA	PERMANENT	8192	ONLINE
BD_TEMP	TEMPORARY	8192	ONLINE
ABD_DATA1	PERMANENT	8192	OFFLINE
ABD_DATA2	PERMANENT	8192	OFFLINE

5) Informatii despre tablespace-uri create pe baza de date(preluate din view):

SQL> desc v$tablespace

Name	Null?	Type
TS#		NUMBER
NAME		VARCHAR2(30)
INCLUDED_IN_DATABASE_BACKUP		VARCHAR2(3)
BIGFILE		VARCHAR2(3)

FLASHBACK_ON	VARCHAR2(3)
ENCRYPT_IN_BACKUP	VARCHAR2(3)
CON_ID	NUMBER



V$TABLESPACE displays tablespace information from the control file

Column	Datatype	Description
TS#	NUMBER	Tablespace number
NAME	VARCHAR2 (30)	Tablespace name
INCLUDED_IN_DATABASE_BACKUP	VARCHAR2 (3)	Indicates whether the tablespace is included in full database backups using the BACKUP DATABASE RMAN command (YES) or not (NO). NO only if the CONFIGURE EXCLUDE RMAN command was used for this tablespace
BIGFILE	VARCHAR2 (3)	Indicates whether the tablespace is a bigfile tablespace (YES) or a smallfile tablespace (NO)
FLASHBACK_ON	VARCHAR2 (3)	Indicates whether the tablespace participates in FLASHBACK DATABASE operations (YES) or not (NO)
ENCRYPT_IN_BACKUP	VARCHAR2 (3)	Indicates whether encryption is turned ON or off at the tablespace level • ON - Encryption is turned ON at the tablespace level • OFF - Encryption is turned OFF at the tablespace level • NULL - Encryption is neither explicitly turned on nor off at the tablespace level (default or when cleared)

SQL> select * from v$tablespace;

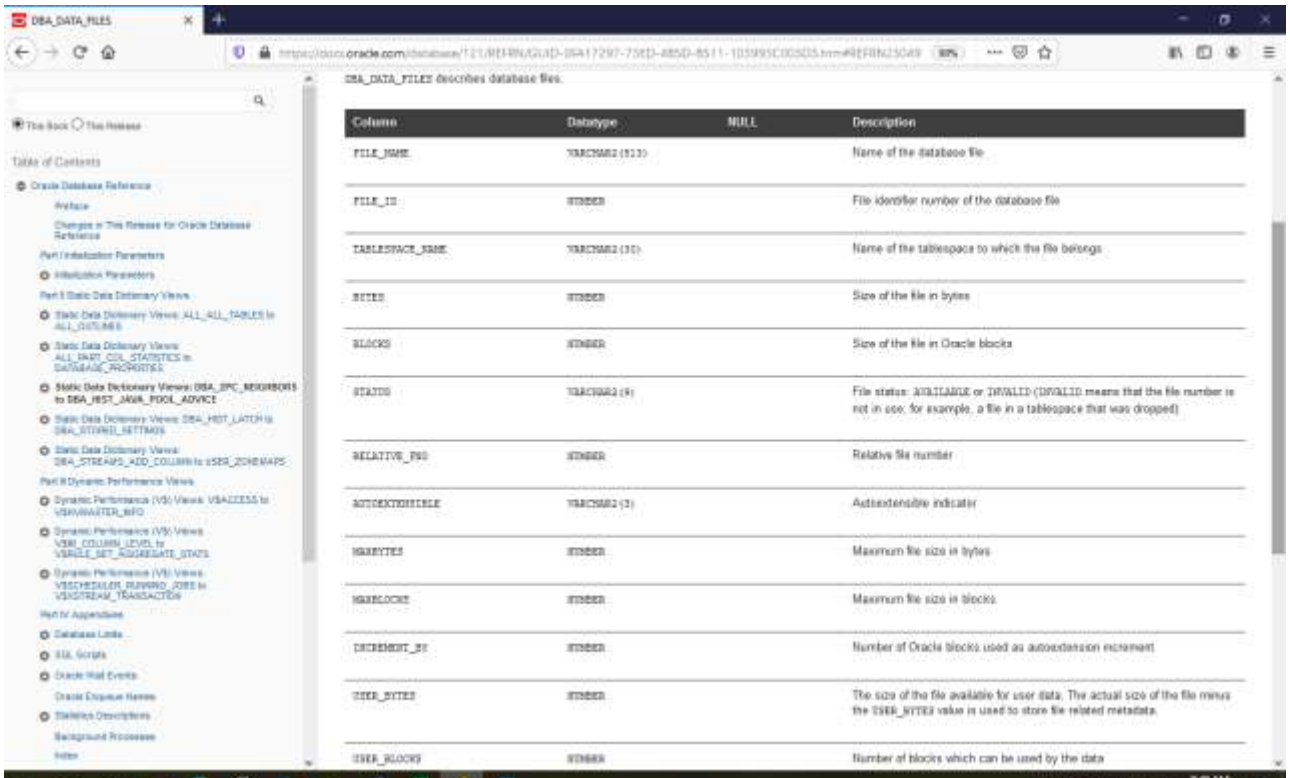
TS#	NAME	INC	BIG	FLA	ENC	CON_ID
1	SYSAUX	YES	NO	YES		0
0	SYSTEM	YES	NO	YES		0
2	UNDOTBS1	YES	NO	YES		0
4	USERS	YES	NO	YES		0
3	TEMP	NO	NO	YES		0
5	EXAMPLE	YES	NO	YES		0
6	BI_IAS_OPSS	YES	NO	YES		0
7	BI_IAS_TEMP	NO	NO	YES		0
8	BI_IAS_UMS	YES	NO	YES		0
9	BI_MDS	YES	NO	YES		0
10	BI_IAU	YES	NO	YES		0
11	BI_BIPLATFORM	YES	NO	YES		0
12	BI_WLS	YES	NO	YES		0
13	BI_STB	YES	NO	YES		0
20	BD_UNDO	YES	NO	YES		0
19	UBD_TEMP	NO	NO	YES		0

21	BD_DATA	YES	NO	YES	0
22	BD_TEMP	NO	NO	YES	0
23	ABD_DATA1	YES	NO	YES	1
24	ABD_DATA2	YES	NO	YES	1

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

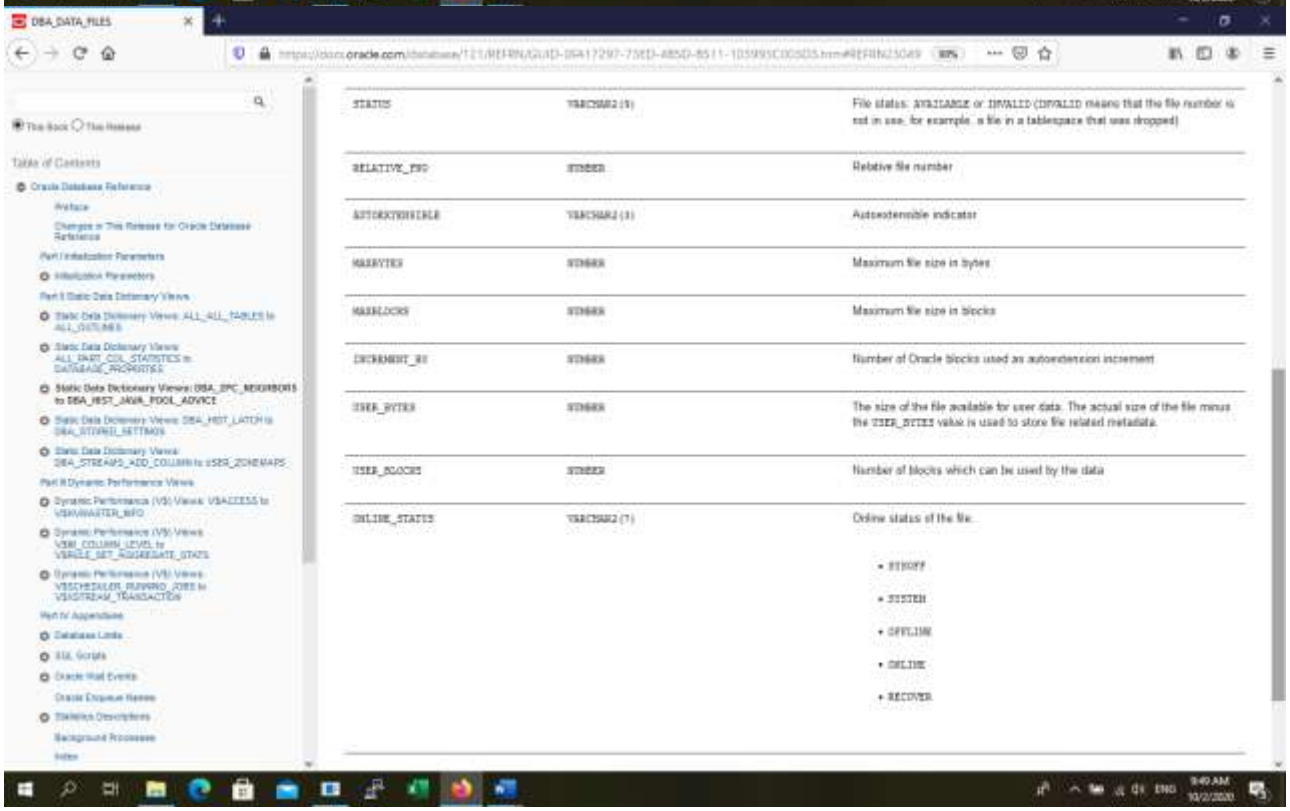
SQL> desc dba_data_files;

Name	Null?	Type
FILE_NAME		VARCHAR2(513)
FILE_ID		NUMBER
TABLESPACE_NAME		VARCHAR2(30)
BYTES		NUMBER
BLOCKS		NUMBER
STATUS		VARCHAR2(9)
RELATIVE_FNO		NUMBER
AUTOEXTENSIBLE		VARCHAR2(3)
MAXBYTES		NUMBER
MAXBLOCKS		NUMBER
INCREMENT_BY		NUMBER
USER_BYTES		NUMBER
USER_BLOCKS		NUMBER
ONLINE_STATUS		VARCHAR2(7)



DBA_DATA_FILES describes database files.

Column	Datatype	NULL	Description
FILE_NAME	VARCHAR2 (513)		Name of the database file
FILE_ID	NUMBER		File identifier number of the database file
TABLESPACE_NAME	VARCHAR2 (30)		Name of the tablespace to which the file belongs
BYTES	NUMBER		Size of the file in bytes
BLOCKS	NUMBER		Size of the file in Oracle blocks
STATUS	VARCHAR2 (9)		File status: AVAILABLE or INVALID (INVALID means that the file number is not in use, for example, a file in a tablespace that was dropped)
RELATIVE_FNO	NUMBER		Relative file number
AUTOEXTENSIBLE	VARCHAR2 (3)		Autoextensible indicator
MAXBYTES	NUMBER		Maximum file size in bytes
MAXBLOCKS	NUMBER		Maximum file size in blocks
INCREMENT_BY	NUMBER		Number of Oracle blocks used as autoextension increment
USER_BYTES	NUMBER		The size of the file available for user data. The actual size of the file minus the USER_BYTES value is used to store file related metadata.
USER_BLOCKS	NUMBER		Number of blocks which can be used by the data



STATUS	VARCHAR2 (9)		File status: AVAILABLE or INVALID (INVALID means that the file number is not in use, for example, a file in a tablespace that was dropped)
RELATIVE_FNO	NUMBER		Relative file number
AUTOEXTENSIBLE	VARCHAR2 (3)		Autoextensible indicator
MAXBYTES	NUMBER		Maximum file size in bytes
MAXBLOCKS	NUMBER		Maximum file size in blocks
INCREMENT_BY	NUMBER		Number of Oracle blocks used as autoextension increment
USER_BYTES	NUMBER		The size of the file available for user data. The actual size of the file minus the USER_BYTES value is used to store file related metadata.
USER_BLOCKS	NUMBER		Number of blocks which can be used by the data
ONLINE_STATUS	VARCHAR2 (7)		Online status of the file: • SYSOFF • SYSTEM • OFFLINE • ONLINE • RECOVER

SQL> select tablespace_name,file_name,status from dba_data_files;

TABLESPACE_NAME	FILE_NAME	STATUS
SYSTEM	C:\ORACLE_12C\ORADATA\BD\SYSTEM01.DBF	AVAILABLE
SYSAUX	C:\ORACLE_12C\ORADATA\BD\SYSAUX01.DBF	AVAILABLE
UNDOTBS1	C:\ORACLE_12C\ORADATA\BD\UNDOTBS01.DBF	AVAILABLE
USERS	C:\ORACLE_12C\ORADATA\BD\USERS01.DBF	AVAILABLE
EXAMPLE	C:\ORACLE_12C\ORADATA\BD\EXAMPLE01.DBF	AVAILABLE
BI_IAS_OPSS	C:\ORACLE_12C\ORADATA\BD\BI_IAS_OPSS.DBF	AVAILABLE
BI_IAS_UMS	C:\ORACLE_12C\ORADATA\BD\BI_UMS.DBF	AVAILABLE
BI_MDS	C:\ORACLE_12C\ORADATA\BD\BI_MDS.DBF	AVAILABLE
BI_IAU	C:\ORACLE_12C\ORADATA\BD\BI_IAU.DBF	AVAILABLE
BI_BIPLATFORM	C:\ORACLE_12C\ORADATA\BD\BI_BIPLATFORM.DBF	AVAILABLE
BI_WLS	C:\ORACLE_12C\ORADATA\BD\BI_WLSSERVICES.DBF	AVAILABLE
BI_STB	C:\ORACLE_12C\ORADATA\BD\BI_SVCTBL.DBF	AVAILABLE
UBD_UNDO	E:\TEMP\UNDO_DB01.DBF	AVAILABLE
UBD_DATA	C:\ORACLE_12C\ORADATA \UBD_DATA.DBF	AVAILABLE
ABD_DATA1	G:\TEMP\ABD_DATA1.DBF	AVAILABLE
ABD_DATA1	G:\TEMP\ABD_DATA11_COPY.DBF	AVAILABLE
ABD_DATA2	G:\TEMP\ABD_DATA2.DBF	AVAILABLE

7) Spatiu total alocat tablespace-urilor (aflate in starea online):

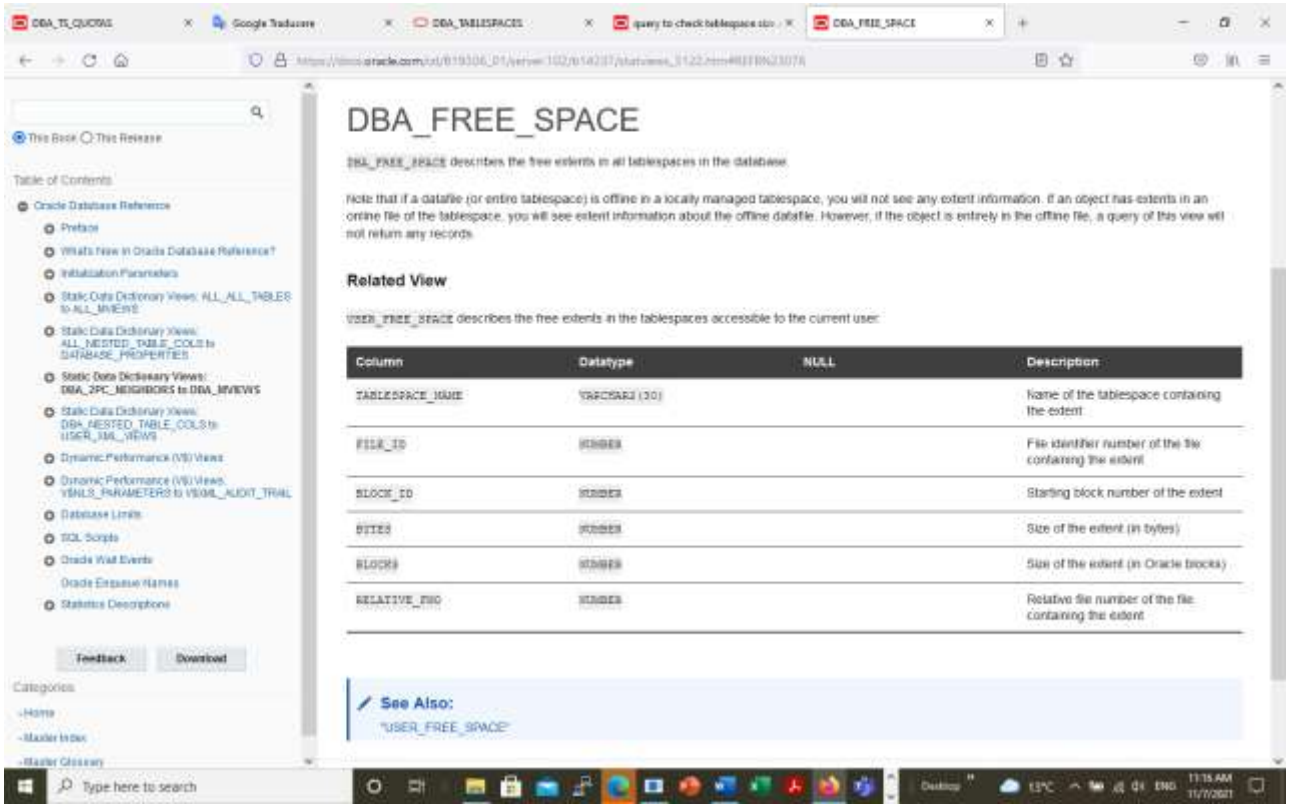
```
SQL> select tablespace_name, sum(bytes)/1024/1024  tab_size
        from dba_data_files
        group by tablespace_name;
```

TABLESPACE_NAME	TAB_SIZE
UBD_DATA	50
SYSAUX	870
UNDOTBS1	1285
USERS	5
SYSTEM	800
ABD_DATA1	5
ABD_DATA2	5

8) Spatiu liber disponibil in tablespace-uri:

```
SQL> desc  dba_free_space;
```

Name	Null?	Type
TABLESPACE_NAME		VARCHAR2(30)
FILE_ID		NUMBER
BLOCK_ID		NUMBER
BYTES		NUMBER
BLOCKS		NUMBER
RELATIVE_FNO		NUMBER



9) Calcul spatiu liber in tablespace-uri (aflate in starea online):

```
SQL> select tablespace_name, round(sum(bytes)/1024/1024 ,2)  tab_free_space
        from dba_free_space
        group by tablespace_name;
```

TABLESPACE_NAME	TAB_FREE_SPACE
SYSAUX	111.19
UNDOTBS1	1252.63
USERS	3.13
SYSTEM	4.31
UBD_DATA	23.19
ABD_DATA1	4
ABD_DATA2	4

10) Calcul spatiu alocat si spatiu utilizat pentru tablespace-uri:

```
SQL> select b.tablespace_name, b.tab_size, a.tab_free_space
        from  (select tablespace_name, round(sum(bytes)/1024/1024 ,2)  tab_free_space
                 from dba_free_space group by tablespace_name) a,
               (select tablespace_name, sum(bytes)/1024/1024  tab_size from dba_data_files
```

```
        group by tablespace_name) b
where a.tablespace_name = b.tablespace_name;
```

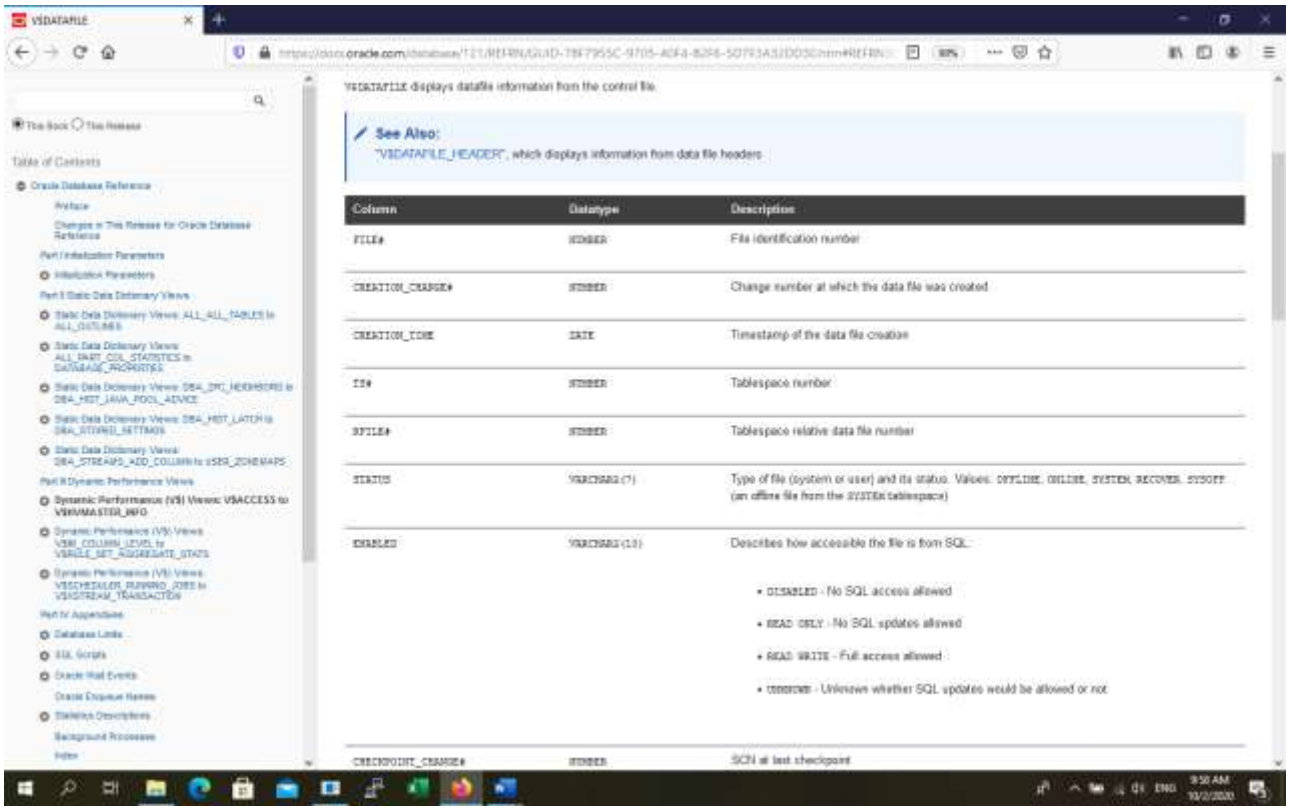
TABLESPACE_NAME	TAB_SIZE	TAB_FREE_SPACE
SYSAUX	870	110.19
UNDOTBS1	1285	1252.63
USERS	5	3.13
SYSTEM	800	4.31
UBD_DATA	50	23.19
ABD_DATA1	5	4
ABD_DATA2	5	4

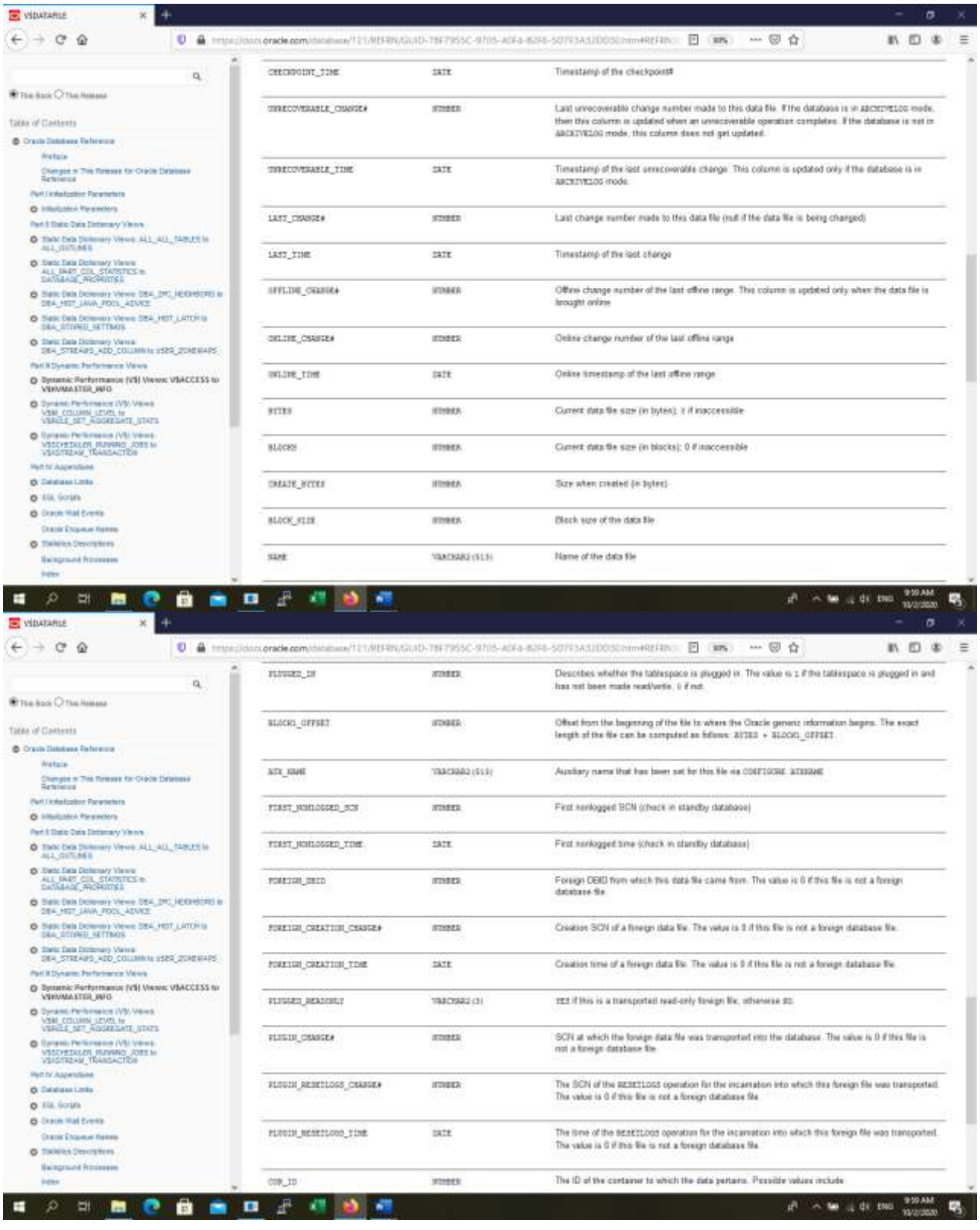
11) Informatii despre fisierele de date asignate bazei de date:

```
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)
FIRST_NONLOGGED_SCN		NUMBER
FIRST_NONLOGGED_TIME		DATE
FOREIGN_DBID		NUMBER
FOREIGN_CREATION_CHANGE#		NUMBER
FOREIGN_CREATION_TIME		DATE
PLUGGED_READONLY		VARCHAR2(3)
PLUGIN_CHANGE#		NUMBER
PLUGIN_RESETLOGS_CHANGE#		NUMBER

PLUGIN_RESETLOGS_TIME	DATE
CON_ID	NUMBER





CHECKPOINT_TIME	DATE	Timestamp of the checkpoint#
UNRECOVERABLE_CHANGE#	NUMBER	Last unrecoverable change number made to this data file. If the database is in ARCHIVELOG mode, then this column is updated when an unrecoverable operation completes. If the database is not in ARCHIVELOG mode, this column does not get updated.
UNRECOVERABLE_TIME	DATE	Timestamp of the last unrecoverable change. This column is updated only if the database is in ARCHIVELOG mode.
LAST_CHANGE#	NUMBER	Last change number made to this data file (null if the data file is being changed)
LAST_TIME	DATE	Timestamp of the last change
OFFLINE_CHANGE#	NUMBER	Offline change number of the last offline range. This column is updated only when the data file is brought online
ONLINE_CHANGE#	NUMBER	Online change number of the last offline range
ONLINE_TIME	DATE	Online timestamp of the last offline range
BYTES	NUMBER	Current data file size (in bytes); 1 if inaccessible
BLOCKS	NUMBER	Current data file size (in blocks); 0 if inaccessible
CREATE_BYTES	NUMBER	Size when created (in bytes)
BLOCK_SIZE	NUMBER	Block size of the data file
NAME	VARCHAR2 (513)	Name of the data file

PLUGGED_IN	NUMBER	Describes whether the tablespace is plugged in. The value is 1 if the tablespace is plugged in and has not been made read/write, 0 if not.
BLOCK1_OFFSET	NUMBER	Offset from the beginning of the file to where the Oracle generic information begins. The exact length of the file can be computed as follows: BYTES + BLOCK1_OFFSET.
AUX_NAME	VARCHAR2 (513)	Auxiliary name that has been set for this file via CONFIGURE AUXNAME
FIRST_NONLOGGED_SCN	NUMBER	First nonlogged SCN (check in standby database)
FIRST_NONLOGGED_TIME	DATE	First nonlogged time (check in standby database)
FOREIGN_DBID	NUMBER	Foreign DBID from which this data file came from. The value is 0 if this file is not a foreign database file
FOREIGN_CREATION_CHANGE#	NUMBER	Creation SCN of a foreign data file. The value is 0 if this file is not a foreign database file.
FOREIGN_CREATION_TIME	DATE	Creation time of a foreign data file. The value is 0 if this file is not a foreign database file.
PLUGGED_READONLY	VARCHAR2 (3)	YES if this is a transported read-only foreign file, otherwise NO.
PLUGIN_CHANGE#	NUMBER	SCN at which the foreign data file was transported into the database. The value is 0 if this file is not a foreign database file.
PLUGIN_RESETLOGS_CHANGE#	NUMBER	The SCN of the RESETLOGS operation for the incarnation into which this foreign file was transported. The value is 0 if this file is not a foreign database file.
PLUGIN_RESETLOGS_TIME	DATE	The time of the RESETLOGS operation for the incarnation into which this foreign file was transported. The value is 0 if this file is not a foreign database file.
CON_ID	NUMBER	The ID of the container to which the data pertains. Possible values include:

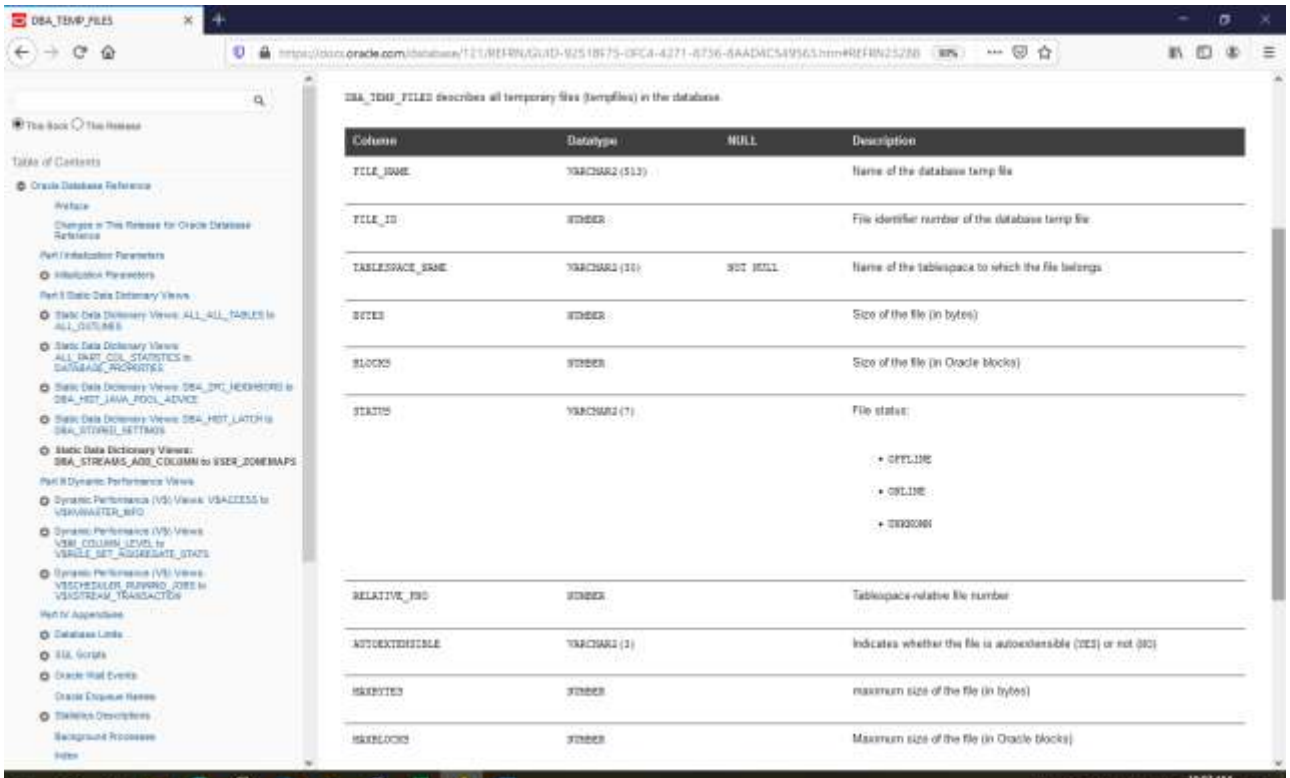
SQL> select file#, name, creation_time,status, enabled from v$datafile;

FILE#	NAME	CREATION_	STATUS	ENABLED
1	C:\ORACLE_12C\ORADATA\BD\SYSTEM01.DBF	11-SEP-14	SYSTEM	READ WRITE
3	C:\ORACLE_12C\ORADATA\BD\SYSAUX01.DBF	11-SEP-14	ONLINE	READ WRITE
5	C:\ORACLE_12C\ORADATA\BD\UNDOTBS01.DBF	11-SEP-14	ONLINE	READ WRITE
6	C:\ORACLE_12C\ORADATA\BD\USERS01.DBF	11-SEP-14	ONLINE	READ WRITE
7	C:\ORACLE_12C\ORADATA\BD\EXAMPLE01.DBF	08-MAY-19	ONLINE	READ WRITE
8	C:\ORACLE_12C\ORADATA\BD\BI_IAS_OPSS.DBF	02-AUG-19	ONLINE	READ WRITE
9	C:\ORACLE_12C\ORADATA\BD\BI_UMS.DBF	02-AUG-19	ONLINE	READ WRITE
10	C:\ORACLE_12C\ORADATA\BD\BI_MDS.DBF	02-AUG-19	ONLINE	READ WRITE
11	C:\ORACLE_12C\ORADATA\BD\BI_IAU.DBF	02-AUG-19	ONLINE	READ WRITE
12	C:\ORACLE_12C\ORADATA\BD\BI_BIPLATFORM.DBF	02-AUG-19	ONLINE	READ WRITE
13	C:\ORACLE_12C\ORADATA\BD\BI_WLSSERVICES.DBF	02-AUG-19	ONLINE	READ WRITE
14	C:\ORACLE_12C\ORADATA\BD\BI_SVCTBL.DBF	02-AUG-19	ONLINE	READ WRITE
15	E:\TEMP\ UNDO_DB01.DBF	29-OCT-19	ONLINE	READ WRITE
16	C:\ORACLE_12C\ORADATA\BD BD_DATA.DBF	02-OCT-21	ONLINE	READ WRITE
17	G:\TEMP\ABD_DATA1.DBF	1-NOV-24	ONLINE	READ WRITE
18	G:\TEMP\ABD_DATA12.DBF	1-NOV-24	ONLINE	READ WRITE

12) Informatii despre fisierele de date temporare create pe baza de date:

SQL> desc dba_temp_files

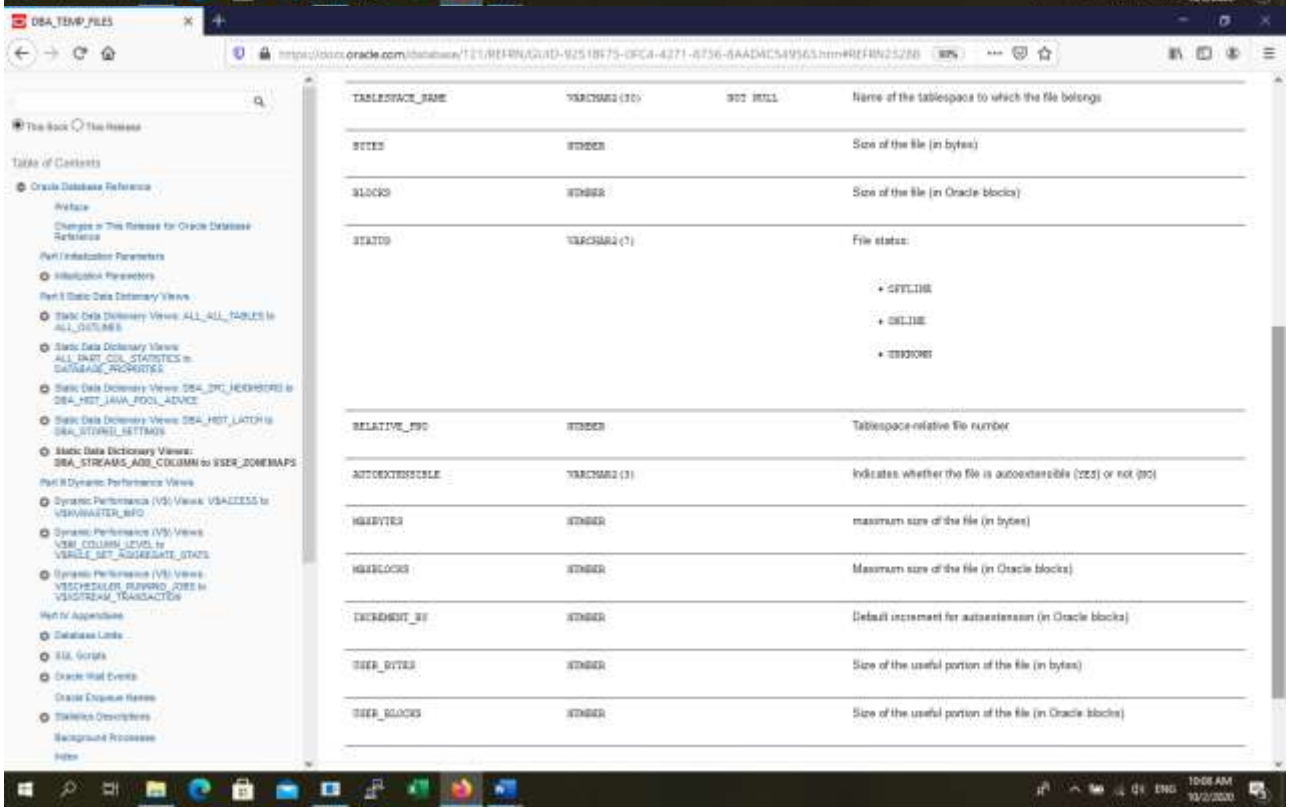
Name	Null?	Type
FILE_NAME		VARCHAR2(513)
FILE_ID		NUMBER
TABLESPACE_NAME		NOT NULL VARCHAR2(30)
BYTES		NUMBER
BLOCKS		NUMBER
STATUS		CHAR(9)
RELATIVE_FNO		NUMBER
AUTOEXTENSIBLE		VARCHAR2(3)
MAXBYTES		NUMBER
MAXBLOCKS		NUMBER
INCREMENT_BY		NUMBER
USER_BYTES		NUMBER
USER_BLOCKS		NUMBER



DBA_TEMP_FILES

DBA_TEMP_FILES describes all temporary files (tempfiles) in the database.

Column	Datatype	NULL	Description
FILE_NAME	VARCHAR2 (513)		Name of the database temp file
FILE_ID	NUMBER		File identifier number of the database temp file
TABLESPACE_NAME	VARCHAR2 (30)	NOT NULL	Name of the tablespace to which the file belongs
BYTES	NUMBER		Size of the file (in bytes)
BLOCKS	NUMBER		Size of the file (in Oracle blocks)
STATUS	VARCHAR2 (7)		File status: • OFFLINE • ONLINE • UNKNOWN
RELATIVE_FNO	NUMBER		Tablespace-relative file number
AUTOEXTENSIBLE	VARCHAR2 (3)		Indicates whether the file is autoextensible (YES) or not (NO)
MAXBYTES	NUMBER		maximum size of the file (in bytes)
MAXBLOCKS	NUMBER		Maximum size of the file (in Oracle blocks)



DBA_TEMP_FILES

Column	Datatype	NULL	Description
TABLESPACE_NAME	VARCHAR2 (30)	NOT NULL	Name of the tablespace to which the file belongs
BYTES	NUMBER		Size of the file (in bytes)
BLOCKS	NUMBER		Size of the file (in Oracle blocks)
STATUS	VARCHAR2 (7)		File status: • OFFLINE • ONLINE • UNKNOWN
RELATIVE_FNO	NUMBER		Tablespace-relative file number
AUTOEXTENSIBLE	VARCHAR2 (3)		Indicates whether the file is autoextensible (YES) or not (NO)
MAXBYTES	NUMBER		maximum size of the file (in bytes)
MAXBLOCKS	NUMBER		Maximum size of the file (in Oracle blocks)
INCREMENT_BY	NUMBER		Default increment for autoextension (in Oracle blocks)
USER_BYTES	NUMBER		Size of the useful portion of the file (in bytes)
USER_BLOCKS	NUMBER		Size of the useful portion of the file (in Oracle blocks)

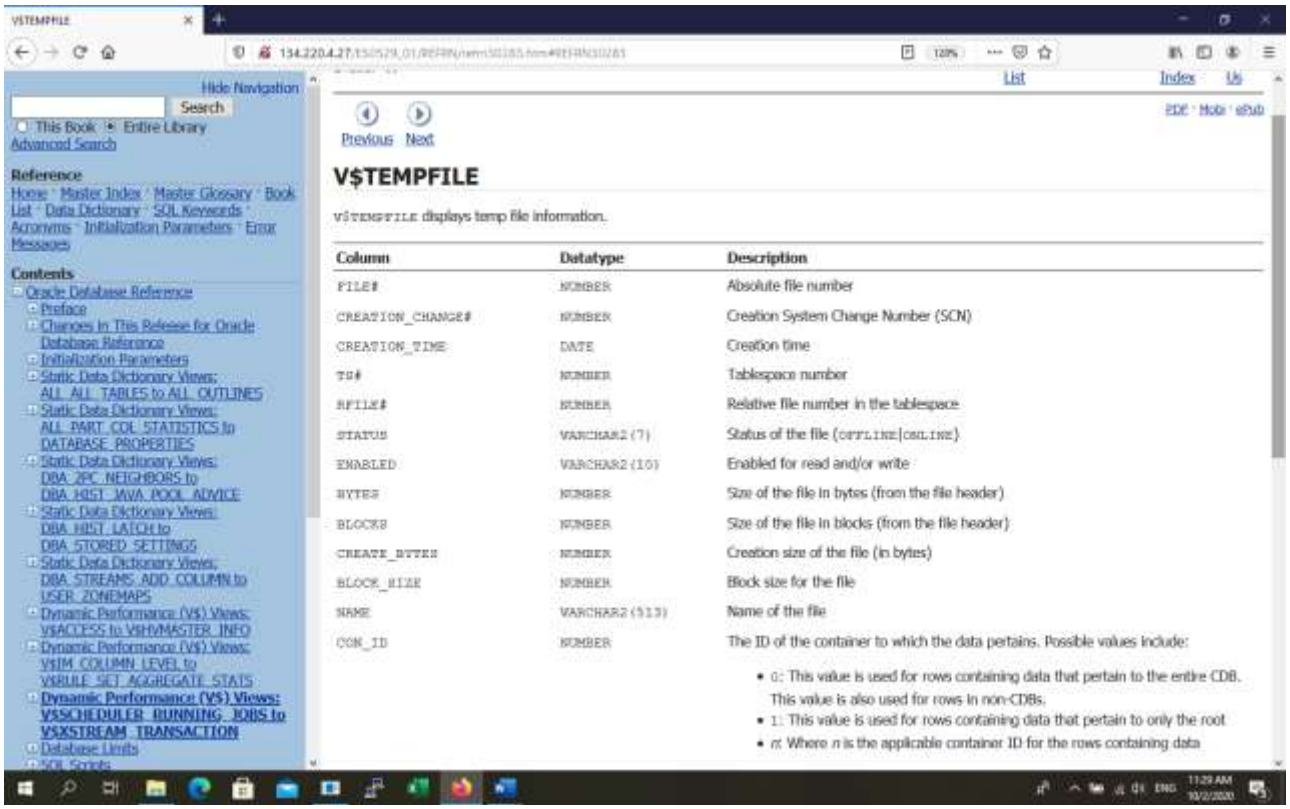
SQL> select file_name,tablespace_name, status from dba_temp_files;

FILE_NAME	TABLESPACE_NAME	STATUS
C:\ORACLE_12C\ORADATA\BD\TEMP01.DBF	TEMP	ONLINE
C:\ORACLE_12C\ORADATA\BD\BI_IASTEMP.DBF	BI_IAS_TEMP	ONLINE
C:\ORACLE_12C\ORADATA\BD\BD_TEMP.DBF	BD_TEMP	ONLINE

13) Informatii despre fisierele temporare create pe baza de date (preluate din view):

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)
CON_ID		NUMBER



V$TEMPFILE

V$TEMPFILE displays temp file information.

Column	Datatype	Description
FILE#	NUMBER	Absolute file number
CREATION_CHANGE#	NUMBER	Creation System Change Number (SCN)
CREATION_TIME	DATE	Creation time
TS#	NUMBER	Tablespace number
RFILE#	NUMBER	Relative file number in the tablespace
STATUS	VARCHAR2(7)	Status of the file (OFFLINE|ONLINE)
ENABLED	VARCHAR2(10)	Enabled for read and/or write
BYTES	NUMBER	Size of the file in bytes (from the file header)
BLOCKS	NUMBER	Size of the file in blocks (from the file header)
CREATE_BYTES	NUMBER	Creation size of the file (in bytes)
BLOCK_SIZE	NUMBER	Block size for the file
NAME	VARCHAR2(513)	Name of the file
CON_ID	NUMBER	The ID of the container to which the data pertains. Possible values include: • 0: This value is used for rows containing data that pertain to the entire CDB. This value is also used for rows in non-CDBs. • 1: This value is used for rows containing data that pertain to only the root • n: Where n is the applicable container ID for the rows containing data

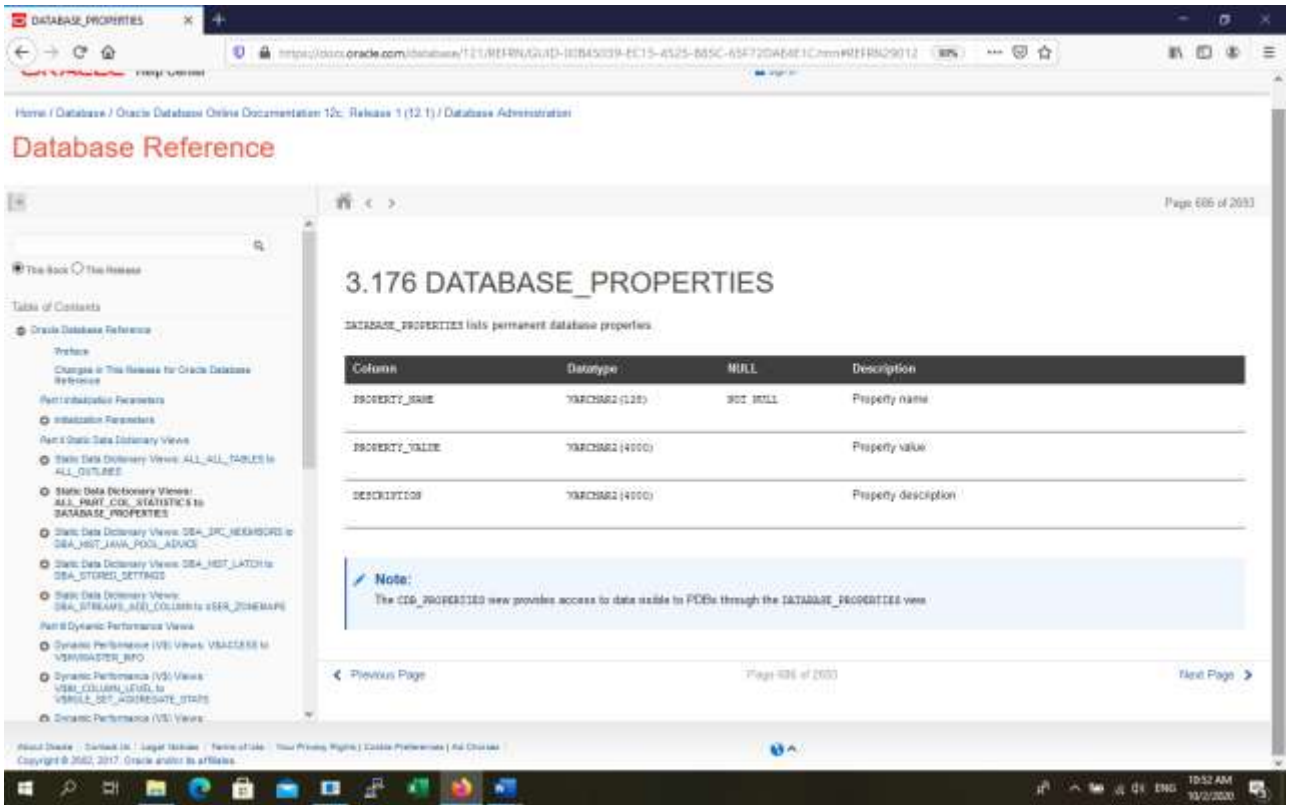
SQL> select file#, name, creation_time, status from v$tempfile;

FILE#	NAME	CREATION_	STATUS
1	C:\ORACLE_12C\ORADATA\BD\TEMP01.DBF	08-MAY-19	ONLINE
2	C:\ORACLE_12C\ORADATA\BD\BI_IASTEMP.DBF	02-AUG-19	ONLINE
3	C:\ORACLE_12C\ORADATA\BD\BD_TEMP.DBF	02-DEC-19	ONLINE

14) 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;

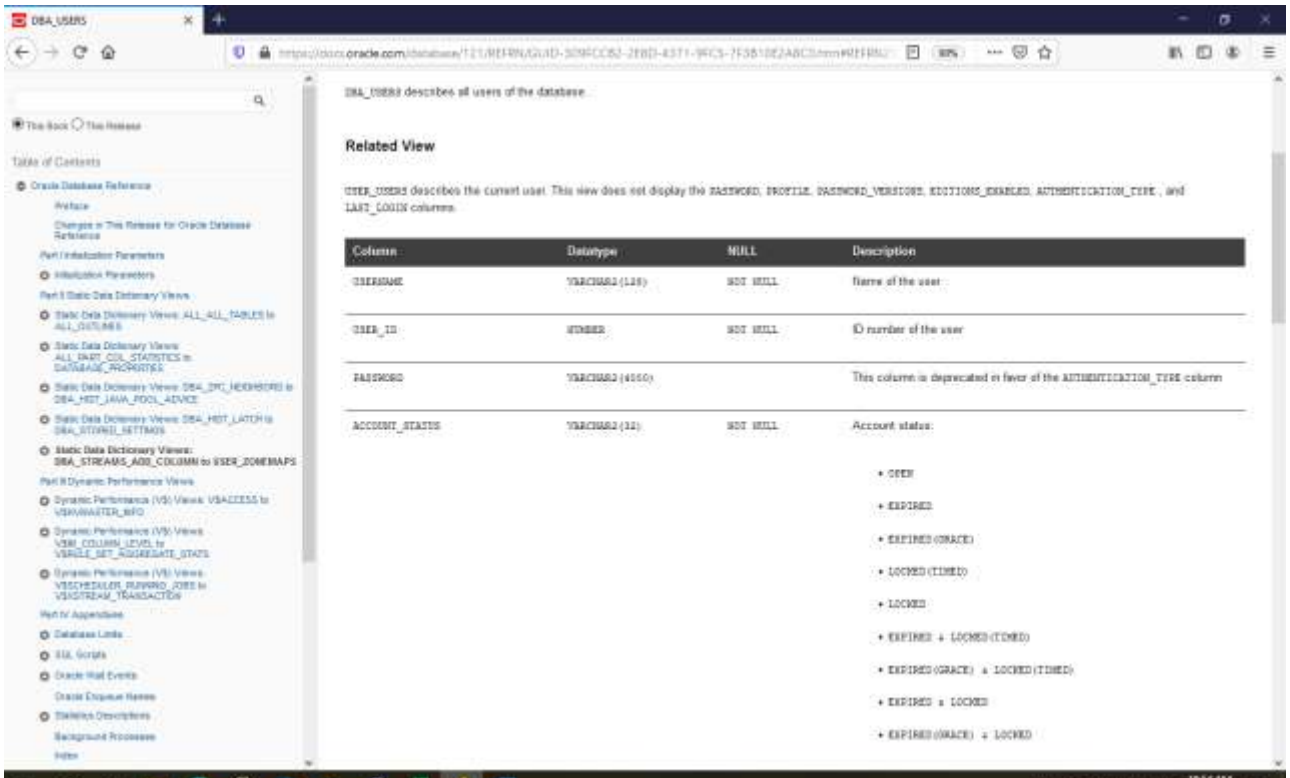
PROPERTY_NAME	PROPERTY_VALUE	DESCRIPTION
DICT.BASE	2	dictionary base tables version #
DEFAULT_TEMP_TABLESPACE	TEMP	Name of default temporary tablespace
DEFAULT_PERMANENT_TABLESPACE	USERS	Name of default permanent tablespace
DEFAULT_EDITION	ORA$BASE	Name of the database default edition
Flashback Timestamp TimeZone	GMT	Flashback timestamp created in GMT
TDE_MASTER_KEY_ID		
DEFAULT_TBS_TYPE	SMALLFILE	Default tablespace type
GLOBAL_DB_NAME	BD	Global database name
NLS_RDBMS_VERSION	12.1.0.2.0	RDBMS version for NLS parameters
NLS_NCHAR_CHARACTERSET	AL16UTF16	NCHAR Character set
NLS_NCHAR_CONV_EXCP	FALSE	NLS conversion exception
NLS_LENGTH_SEMANTICS	BYTE	NLS length semantics
NLS_COMP	BINARY	NLS comparison
NLS_DUAL_CURRENCY	$	Dual currency symbol
NLS_TIMESTAMP_TZ_FORMAT	DD-MON-RR HH.MI.SSXFF AM TZR	Timestamp with timezone format
NLS_TIME_TZ_FORMAT	HH.MI.SSXFF AM TZR	Time with timezone format
NLS_TIMESTAMP_FORMAT	DD-MON-RR HH.MI.SSXFF AM	Time stamp format
NLS_TIME_FORMAT	HH.MI.SSXFF AM	Time format
NLS_SORT	BINARY	Linguistic definition
NLS_DATE_LANGUAGE	AMERICAN	Date language
NLS_DATE_FORMAT	DD-MON-RR	Date format
NLS_CALENDAR	GREGORIAN	Calendar system
NLS_CHARACTERSET	WE8MSWIN1252	Character set
NLS_NUMERIC_CHARACTERS	.,	Numeric characters

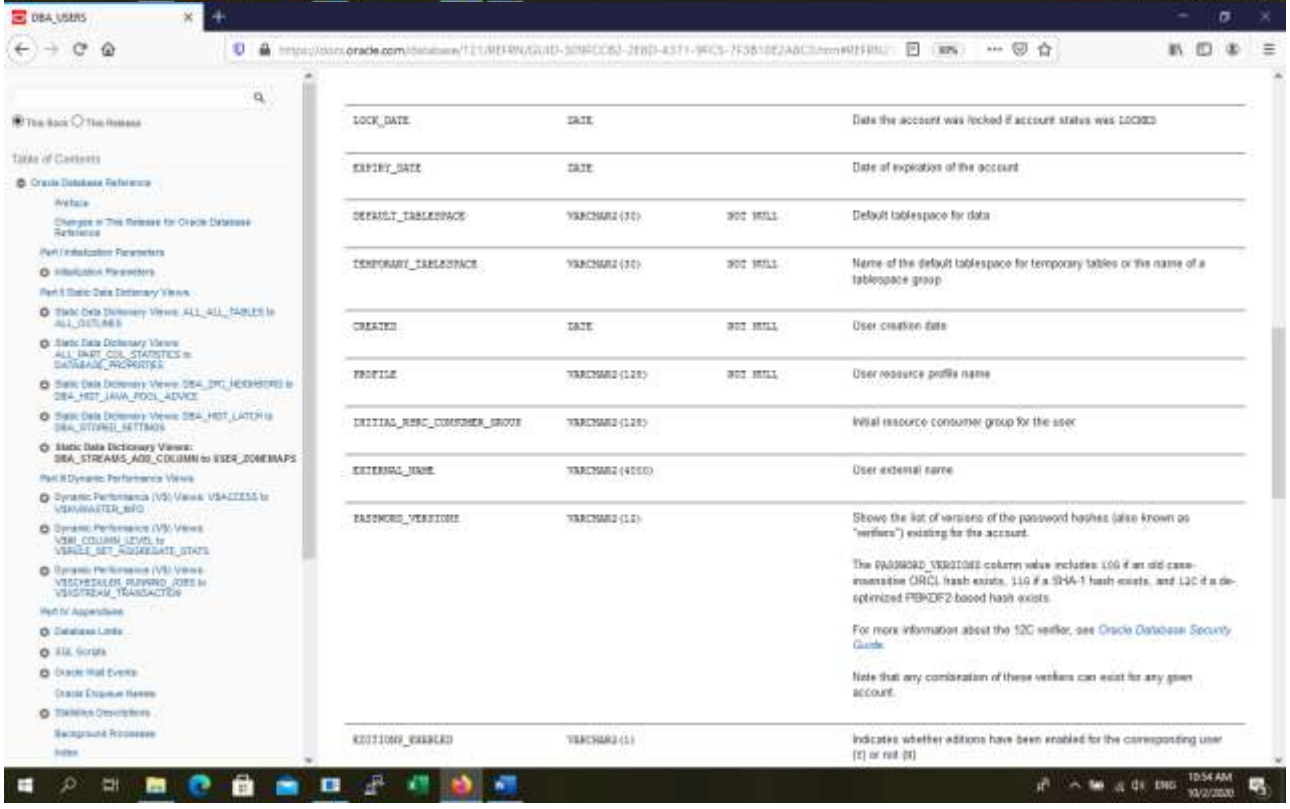
NLS_ISO_CURRENCY	AMERICA	ISO currency
NLS_CURRENCY	$	Local currency
NLS_TERRITORY	AMERICA	Territory
NLS_LANGUAGE	AMERICAN	Language
DST_SECONDARY_TT_VERSION	0	Version of secondary timezone data file
DST_PRIMARY_TT_VERSION	18	Version of primary timezone data file
DST_UPGRADE_STATE	NONE	State of Day Light Saving Time Upgrade
MAX_STRING_SIZE	STANDARD_MAX_STRING_SIZE	paramter used for dictionary metadata
EXPORT_VIEWS_VERSION	8	Export views revision #
WORKLOAD_CAPTURE_MODE		CAPTURE implies workload capture is in progress
WORKLOAD_REPLAY_MODE		PREPARE implies external replay clients can connect; REPLAY implies workload replay is in progress
NO_USERID_VERIFIER_SALT		79F6374D9E33A4DF86E3D6BEE0F376EF
OLS_OID_STATUS	0	OLS OID Status used for Label Security
DBTIMEZONE	00:00	DB time zone

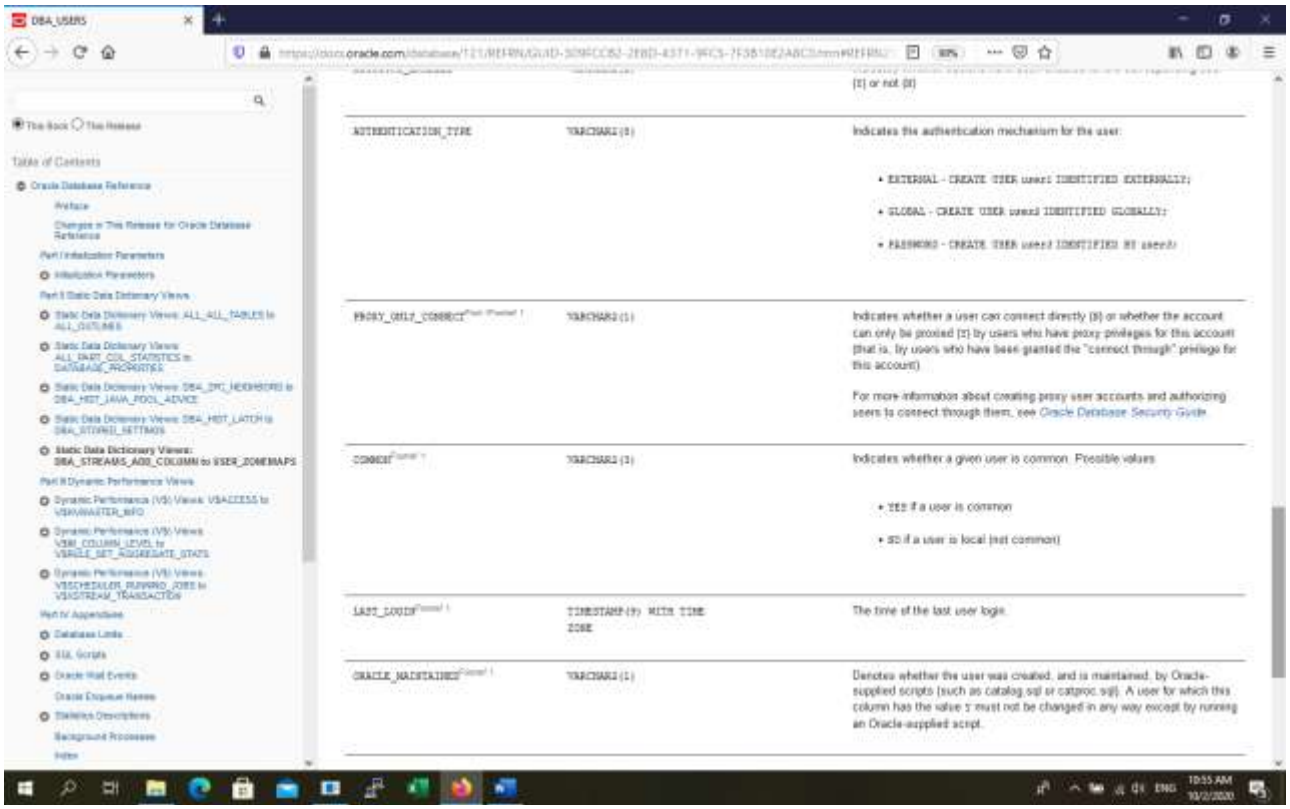
15) Informatii despre tablespace-urile alocate userilor creati pe baza de date:

SQL> desc dba_users

Name	Null?	Type
USERNAME	NOT NULL	VARCHAR2(128)
USER_ID	NOT NULL	NUMBER
PASSWORD		VARCHAR2(4000)
ACCOUNT_STATUS	NOT NULL	VARCHAR2(32)
LOCK_DATE		DATE
EXPIRY_DATE		DATE
DEFAULT_TABLESPACE	NOT NULL	VARCHAR2(30)
TEMPORARY_TABLESPACE	NOT NULL	VARCHAR2(30)
CREATED	NOT NULL	DATE
PROFILE	NOT NULL	VARCHAR2(128)
INITIAL_RSRC_CONSUMER_GROUP		VARCHAR2(128)
EXTERNAL_NAME		VARCHAR2(4000)
PASSWORD_VERSIONS		VARCHAR2(12)
EDITIONS_ENABLED		VARCHAR2(1)
AUTHENTICATION_TYPE		VARCHAR2(8)
PROXY_ONLY_CONNECT		VARCHAR2(1)
COMMON		VARCHAR2(3)
LAST_LOGIN		TIMESTAMP(9) WITH TIME ZONE
ORACLE_MAINTAINED		VARCHAR2(1)


DBA_USERS
DBA_USERS describes all users of the database.
Related View
USER_USERS describes the current user. This view does not display the PASSWORD, PROFILE, PASSWORD_VERSIONS, EDITIONS_ENABLED, AUTHENTICATION_TYPE , and LAST_LOGIN columns.
Column
Datatype
NULL
Description
USERNAME
VARCHAR2 (128)
NOT NULL
Name of the user
USER_ID
NUMBER
NOT NULL
ID number of the user
PASSWORD
VARCHAR2 (4000)
This column is deprecated in favor of the AUTHENTICATION_TYPE column
ACCOUNT_STATUS
VARCHAR2 (32)
NOT NULL
Account status:
• OPEN
• EXPIRED
• EXPIRED(GRACE)
• LOCKED(TIMED)
• LOCKED
• EXPIRED & LOCKED(TIMED)
• EXPIRED(GRACE) & LOCKED(TIMED)
• EXPIRED & LOCKED
• EXPIRED(GRACE) & LOCKED


DBA_USERS
LOCK_DATE
DATE
Date the account was locked if account status was LOCKED
EXPIRY_DATE
DATE
Date of expiration of the account
DEFAULT_TABLESPACE
VARCHAR2 (30)
NOT NULL
Default tablespace for data
TEMPORARY_TABLESPACE
VARCHAR2 (30)
NOT NULL
Name of the default tablespace for temporary tables or the name of a tablespace group
CREATED
DATE
NOT NULL
User creation date
PROFILE
VARCHAR2 (128)
NOT NULL
User resource profile name
INITIAL_RSRC_CONSUMER_GROUP
VARCHAR2 (128)
Initial resource consumer group for the user
EXTERNAL_NAME
VARCHAR2 (4000)
User external name
PASSWORD_VERSIONS
VARCHAR2 (12)
Shows the list of versions of the password hashes (also known as "verifiers") existing for the account.
The PASSWORD_VERSIONS column value includes 10G if an old case-insensitive ORCL hash exists, 11G if a SHA-1 hash exists, and 12C if a de-optimized PBKDF2 based hash exists.
For more information about the 12C verifier, see Oracle Database Security Guide.
Note that any combination of these verifiers can exist for any given account.
EDITIONS_ENABLED
VARCHAR2 (1)
Indicates whether editions have been enabled for the corresponding user (E) or not (N)



SQL> select username, default_tablespace, temporary_tablespace from dba_users;

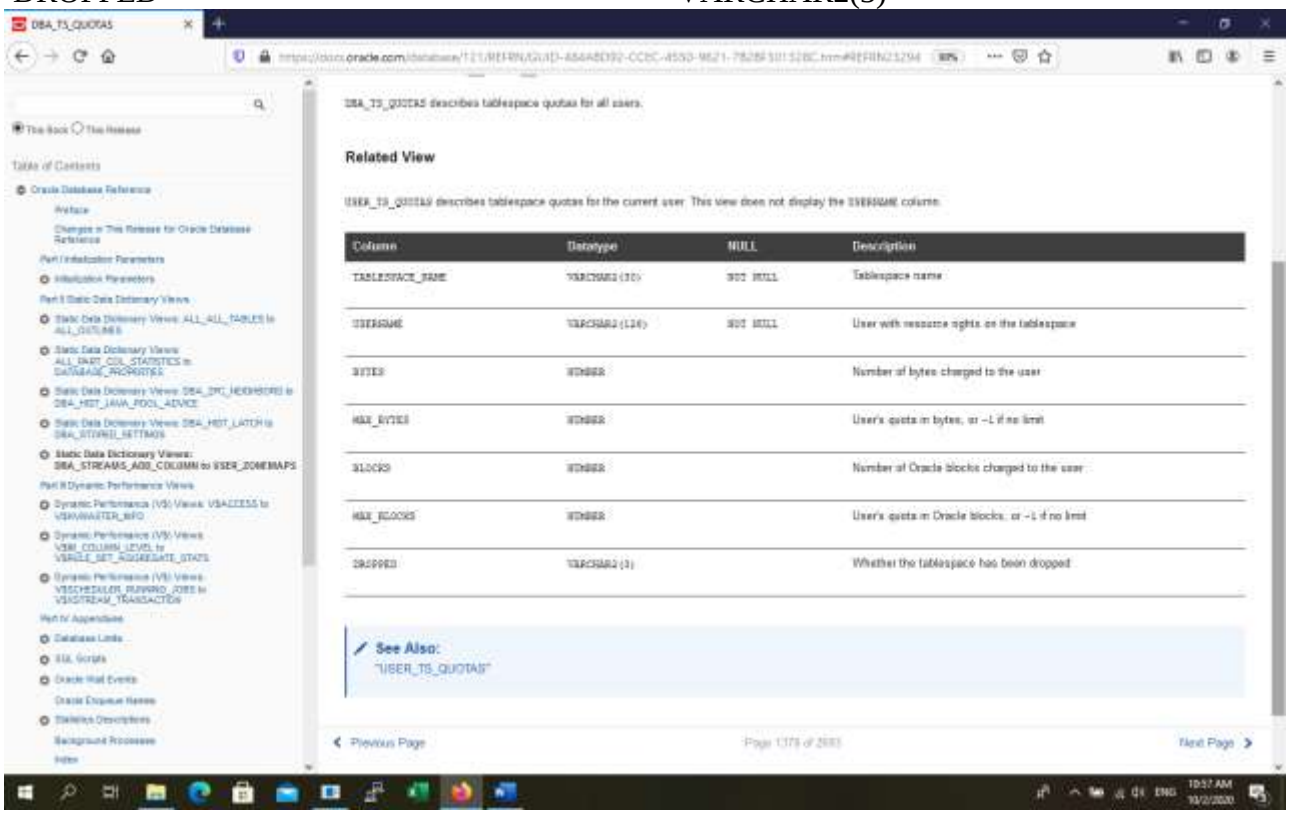
USERNAME	DEFAULT_TABLESPACE	TEMPORARY_TABLESPACE
SCOTT	USERS	TEMP
BI	USERS	TEMP
SH	USERS	TEMP
OE	USERS	TEMP
HR	USERS	TEMP
TEST	BD_DATA	BD_TEMP
ABD1	BD_DATA	BD_TEMP
ABD2	BD_DATA	BD_TEMP

16) Informatii despre spatiul alocat si spatiul utilizat de catre useri in tablespace-uri:

SQL> desc dba_ts_quotas

Name	Null?	Type
TABLESPACE_NAME	NOT NULL	VARCHAR2(30)
USERNAME	NOT NULL	VARCHAR2(30)
BYTES		NUMBER
MAX_BYTES		NUMBER
BLOCKS		NUMBER
MAX_BLOCKS		NUMBER

DROPPED VARCHAR2(3)



SQL> select tablespace_name, username, max_bytes, bytes from dba_ts_quotas;

TABLESPACE_NAME	USERNAME	MAX_BYTES	BYTES
BI_WLS	BI_WLS_RUNTIME	-1	131072
BI_WLS	BI_WLS	-1	131072
SYSAUX	AUDSYS	-1	1572864
BI_IAS_OPSS	BI_OPSS	-1	58720256
SYSAUX	GSMADMIN_INTERNAL	104857600	1441792
EXAMPLE	OE	-1	10420224
BI_MDS	BI_MDS	-1	17498112
SYSAUX	FLOWS_FILES	-1	0
SYSAUX	APPQOSSYS	-1	0
BI_STB	BI_STB	-1	917504
BI_IAS_UMS	BI_UMS	-1	7471104
SYSAUX	OLAPSYS	-1	0
BD_DATA	TEST2	10485760	0
BD_DATA	ABD1	5242880	2752512
BD_DATA	ABD2	5242880	5152516

17) Informatii despre userul curent:

SQL> desc user_users

Name	Null?	Type
USERNAME	NOT NULL	VARCHAR2(128)
USER_ID	NOT NULL	NUMBER
ACCOUNT_STATUS	NOT NULL	VARCHAR2(32)
LOCK_DATE		DATE
EXPIRY_DATE		DATE
DEFAULT_TABLESPACE	NOT NULL	VARCHAR2(30)
TEMPORARY_TABLESPACE	NOT NULL	VARCHAR2(30)
CREATED	NOT NULL	DATE
INITIAL_RSRC_CONSUMER_GROUP		VARCHAR2(128)
EXTERNAL_NAME		VARCHAR2(4000)
PROXY_ONLY_CONNECT		VARCHAR2(1)
COMMON		VARCHAR2(3)
ORACLE_MAINTAINED		VARCHAR2

SQL> select user_id, username, created, lock_date from user_users;

USER_ID	USERNAME	CREATED	LOCK_DATE
110	SCOTT	08-MAY-19	
114	ABD1	02-OCT- 21	
115	ABD2	02-OCT- 21	

18) Crearea unui tablespace temporar:

SQL> create temporary tablespace abd_temp1 tempfile ’g:\temp\abd_temp1.dbf’ size 5M extent management local uniform size 2M;
Tablespace created.

19) Setare tablespace temporar ca default:

SQL> alter database default temporary tablespace temp;
Database altered.

20) Verificare in dictionar ce tablespace temporar este setat ca default:

SQL> select * from database_properties where property_name =
’DEFAULT_TEMP_TABLESPACE’ ;

PROPERTY_NAME	PROPERTY_VALUE	DESCRIPTION
DEFAULT_TEMP_TABLESPACE	TEMP	Name of default temporary tablespace

21) Schimbare stare tablespace permanent (online) ca READ ONLY :

SQL> alter tablespace abd_data2 read only;

Tablespace altered.

Verificare:
SQL> select tablespace_name,block_size,status from dba_tablespaces where tablespace_name ='ABD_DATA2';

TABLESPACE_NAME	BLOCK_SIZE	STATUS
ABD_DATA2	8192	READ ONLY

22) Schimbare stare tablespace permanent ca READ WRITE:

SQL> alter tablespace abd_data2 read write;
Tablespace altered.

Verificare:
SQL> select tablespace_name,block_size,status from dba_tablespaces where tablespace_name ='ABD_DATA2';

TABLESPACE_NAME	BLOCK_SIZE	STATUS
ABD_DATA2	8192	READ WRITE

23) Verificare in dictionar starea unui tablespace:

SQL> select tablespace_name, status from dba_tablespaces where tablespace_name = 'BD_DATA';

TABLESPACE_NAME	STATUS
BD_DATA	ONLINE

24) Schimbare stare tablespace permanent ca OFFLINE/ONLINE:

SQL> alter tablespace abd_data2 offline;
Tablespace altered.

Verificare:

SQL> select tablespace_name, status from dba_tablespaces where tablespace_name='ABD_DATA2';

TABLESPACE_NAME	STATUS
ABD_DATA2	OFFLINE

Obs. In starea offline se trece numai din starea online(nu din read only).

SQL> alter tablespace abd_data2 online;
Tablespace altered.

25) Redenumirea/mutarea unui fisier de date asignat tablespace-lui (tablespace offline, fisier destinatie existent):

SQL> alter tablespace abd_data1 offline;
SQL> alter tablespace abd_data1 rename datafile 'g:/temp/abd_data11.dbf' to 'g:/temp/abd_data11_copy.dbf';
Tablespace altered.

Obs: Fisierul abd_data11_copy.dbf este o copie a lui abd_data11.dbf facuta in prealabil in SO.

Verificare in dictionar:

SQL> select tablespace_name, status, online_status, file_name from dba_data_files;

```
TABLESPACE_NAME              STATUS    ONLINE_
---------------------------- --------- -------
FILE_NAME
--------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------
SYSTEM                       AVAILABLE SYSTEM
C:\ORACLE_21C\ORADATA\ORA21C\SYSTEM01.DBF

SYSAUX                       AVAILABLE ONLINE
C:\ORACLE_21C\ORADATA\ORA21C\SYSAUX01.DBF

UNDOTBS1                     AVAILABLE ONLINE
C:\ORACLE_21C\ORADATA\ORA21C\UNDOTBS01.DBF

USERS                        AVAILABLE ONLINE
C:\ORACLE_21C\ORADATA\ORA21C\USERS01.DBF

BD_DATA                      AVAILABLE ONLINE
C:\ORACLE_21C\ORADATA\ORA21C\BD_DATA.DBF

ABD_DATA1                    AVAILABLE OFFLINE
G:\TEMP\ABD_DATA1.DBF

ABD_DATA1                    AVAILABLE OFFLINE
G:\TEMP\ABD_DATA11_COPY.DBF

ABD_DATA2                    AVAILABLE OFFLINE
G:\TEMP\ABD_DATA2.DBF
```

Obs. Dupa restartarea bazei de date fisierul initial nu mai este asignat si poate fi sters din SO. Daca se sterge inainte de restartarea bazei de date este posibil ca baza de date sa nu porneasca !

26) Mutare/redenumire fisier de date asignat unui database:

SQL> alter database rename file ’g:\temp\abd_data11_copy.dbf’ to ’g:\temp\abd_data11.dbf’;

Obs:
- Baza de date trebuie sa fie in starea MOUNT/OPEN;
- Fisierul destinatie trebuie sa existe fizic;
- Dupa redenumire fisierul initial poate fi sters din SO, fara restartarea bazei de date.

27) Crearea unui tablespace de tip undo:

SQL> create undo tablespace ubd_undo1 datafile ’e:\temp\ubd_undo1.dbf’ size 10M;
Tablespace created.

28) Stergerea unui fisier de date asignat la un tablespace (online):

SQL> alter tablespace abd_data1 drop datafile ’g:/temp/abd_data11.dbf’;

Obs: Daca se incearca sa se stearga fisierul abd_data11_copy.dbf (care a fost redenumit in abd_data11.dbf') se va genera o eroare deoarece nu mai este asignat la tablespace.

SQL> alter tablespace abd_data1 drop datafile ’g:/temp/abd_data11_copy.dbf’;

alter tablespace abd_data1 drop datafile 'g:/temp/abd_data11_copy.dbf'
*
ERROR at line 1:
ORA-01565: error in identifying file 'g:/temp/abd_data11_copy.dbf'

Obs: Trebuie ca fisierul sters sa nu fie singurul assignat la tablespace(sau primul), altfel se genereaza eroare:

SQL> alter tablespace abd_data2 drop datafile ’g:/temp/abd_data2.dbf’;

ERROR at line 1:
ORA-03261: the tablespace UBD_DATA2 has only one file

29) Stergerea din dictionar a unui fisier temporar asignat unui tablespace(trebuie sa nu fie singurul asignat):

```
SQL> alter tablespace abd_temp1 drop tempfile ’g:\temp\abd_temp1.dbf’;
```

30) Stergerea din dictionar a unui fisier temporar asignat unui database:

```
SQL> alter database tempfile ’g:\temp\abd_temp1.dbf’ drop including datafiles;
Database altered.
```

31) Stergerea din dictionar a unui tablespace permanent(inclusiv fisierele de date asignate):

```
SQL> drop tablespace abd_data1 including contents and datafiles;
Tablespace dropped.
```

32) Stergerea din dictionar a unui tablespace temporar(inclusiv fisierele temporare asignate):

```
SQL> drop tablespace abd_temp1 including contents;
Tablespace dropped.
```

Verificare:

```
SQL> select tablespace_name from dba_tablespaces;
SQL> select tablespace_name,file_name,status from dba_data_files;
SQL> select tablespace_name,file_name,status from dba_temp_files;
```