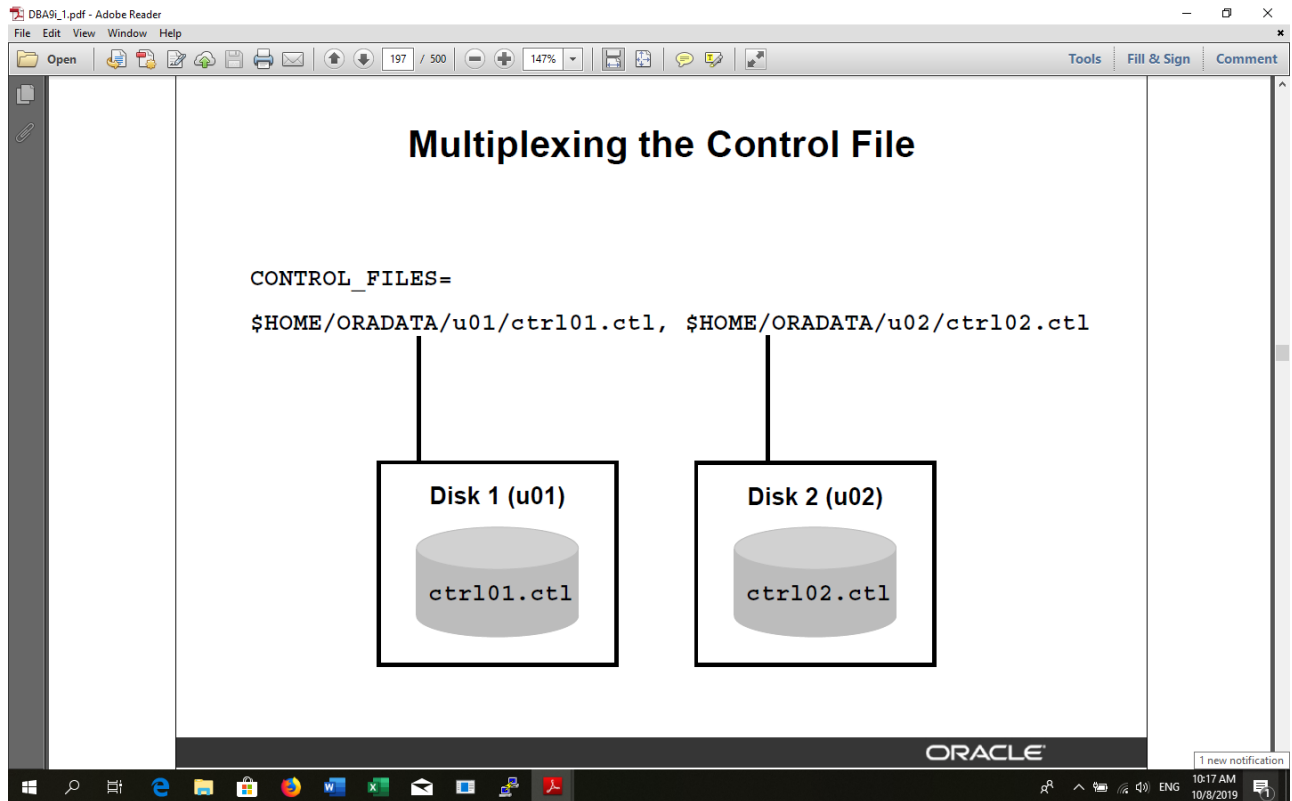
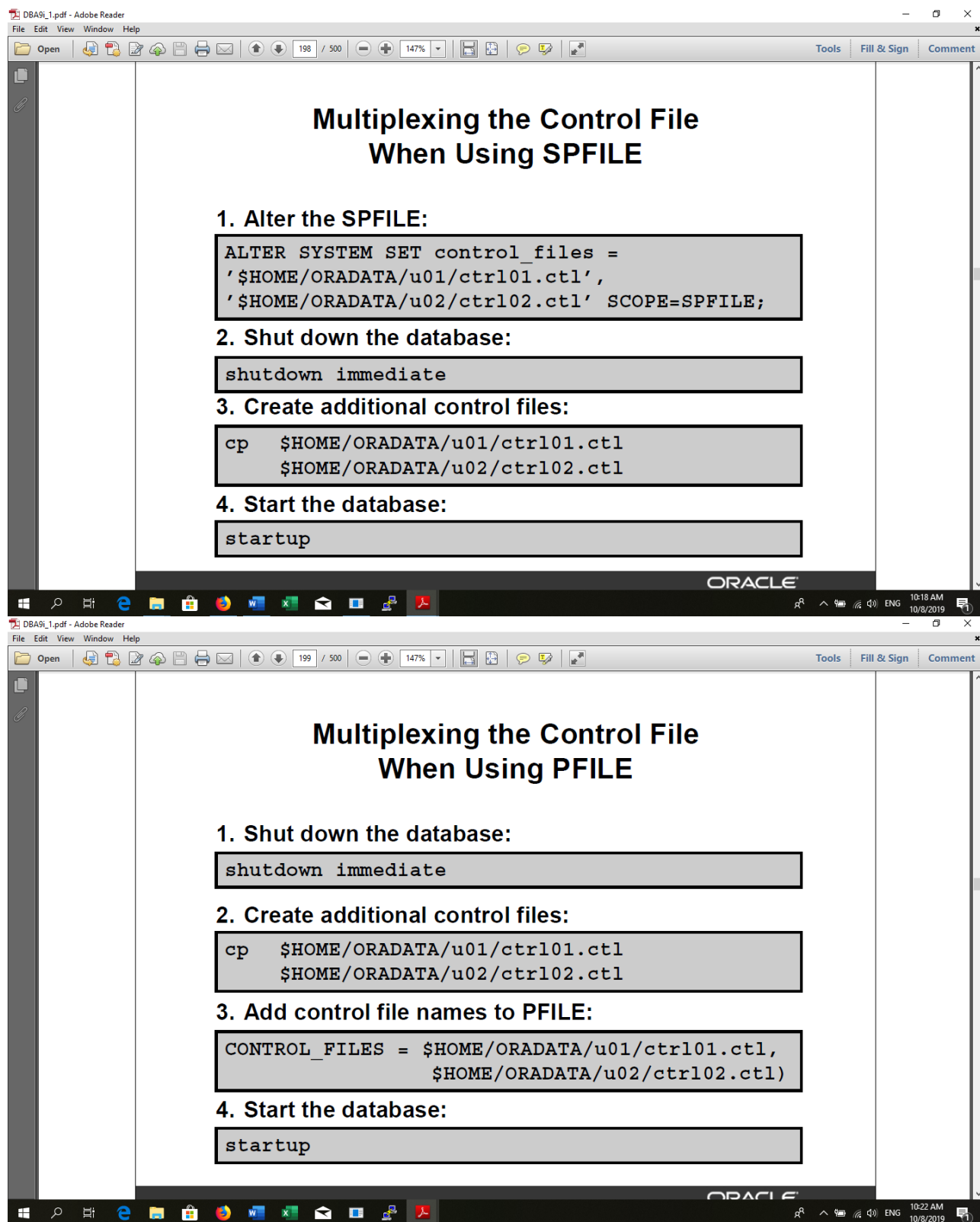


Fisiere de control si fisiere de log

A. Fisiere de control





Cateva exemple de view-uri dinamice care extrag informatii din fisierele de control:

- V\$BACKUP
- V\$DATAFILE
- V\$TEMPFILE
- V\$TABLESPACE
- V\$ARCHIVE
- V\$LOG
- V\$LOGFILE
- V\$LOGHIST
- V\$ARCHIVED_LOG
- V\$DATABASE

1) Informatii despre fisierele de control extrase din view-uri dinamice:

SQL> desc v\$controlfile

Name	Null?	Type
STATUS		VARCHAR2(7)
NAME		VARCHAR2(513)
IS_RECOVERY_DEST_FILE		VARCHAR2(3)
BLOCK_SIZE		NUMBER
FILE_SIZE_BKLS		NUMBER
CON_ID		NUMBER

V\$CONTROLFILE displays the names of the control files.

Column	Datatype	Description
STATUS	VARCHAR2 (7)	INVALID if the name cannot be determined (which should not occur); NULL if the name can be determined
NAME	VARCHAR2 (513)	Name of the control file
IS_RECOVERY_DEST_FILE	VARCHAR2 (3)	Indicates whether the file was created in the fast recovery area (YES) or not (NO)
BLOCK_SIZE	NUMBER	Control file block size
FILE_SIZE_BKLS	NUMBER	Control file size (in blocks)
CON_ID	NUMBER	The ID of the container to which the data pertains. Possible values include: <ul style="list-style-type: none"> 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

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SQL> select name,block_size, file_size_blks from v\$controlfile;

NAME	BLOCK_SIZE	FILE_SIZE_BKLS
C:\ORACLE_12C\ORADATA\BD\CONTROL01.CTL	16384	612
C:\ORACLE_12C\ORADATA\BD\CONTROL02.CTL	16384	612

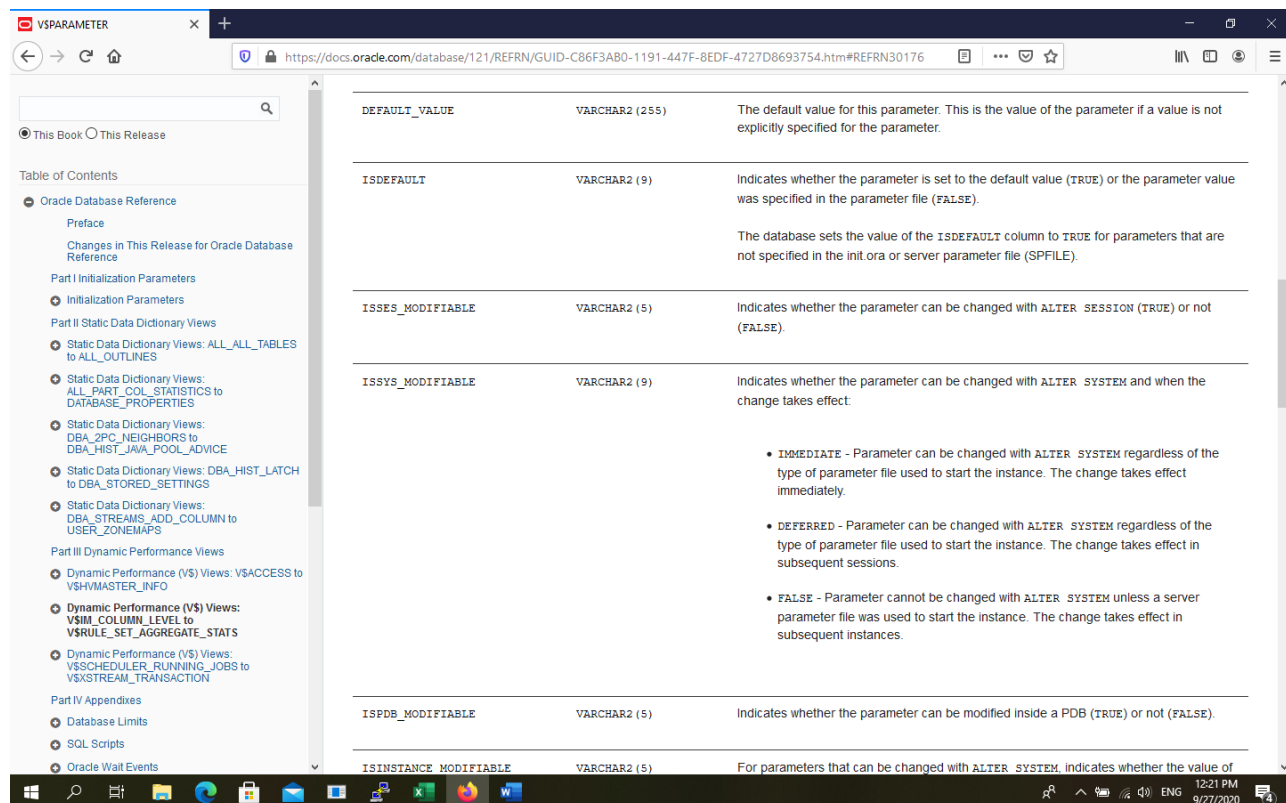
2) Informatii despre fisierele de control extrase din view-ul pentru parametri:

SQL> desc v\$parameter

Name	Null?	Type
NUM		NUMBER
NAME		VARCHAR2(64)
TYPE		NUMBER
VALUE		VARCHAR2(512)
ISDEFAULT		VARCHAR2(9)
ISSES_MODIFIABLE		VARCHAR2(5)
ISSYS_MODIFIABLE		VARCHAR2(9)
ISMODIFIED		VARCHAR2(10)
ISADJUSTED		VARCHAR2(5)
DESCRIPTION		VARCHAR2(64)
UPDATE_COMMENT		VARCHAR2(255)
HASH		NUMBER
CON_ID		NUMBER

The screenshot shows the Oracle Database documentation page for the `v$parameter` view. The page includes a search bar at the top, a Table of Contents on the left, and a main content area with a table describing the columns of the view.

Column	Datatype	Description
NUM	NUMBER	Parameter number
NAME	VARCHAR2 (64)	Name of the parameter
TYPE	NUMBER	Parameter type: <ul style="list-style-type: none"> 1 - Boolean 2 - String 3 - Integer 4 - Parameter file 5 - Reserved 6 - Big Integer
VALUE	VARCHAR2 (4000)	Parameter value for the session (if modified within the session); otherwise, the instance-wide parameter value
DISPLAY_VALUE	VARCHAR2 (4000)	Parameter value in a user-friendly format. For example, if the VALUE column shows the value 262144 for a big integer parameter, then the DISPLAY_VALUE column will show the value 256K.



SQL> select name, type, value from v\$parameter where name='control_files';

NUM	NAME	TYPE
1213	control_files	2
	C:\ORACLE_12C\ORADATA\BD\CONTROL01.CTL,	
	C:\ORACLE_12C\ORADATA\BD\CONTROL02.CTL	

3) Informatii despre dimensiunea inregistrarii, numarul total de inregistrari alocate si cele utilizate referitoare la parametrii de control:

SQL> desc v\$controlfile_record_section

Name	Null?	Type
TYPE		VARCHAR2(20)
RECORD_SIZE		NUMBER
RECORDS_TOTAL		NUMBER
RECORDS_USED		NUMBER

FIRST_INDEX
LAST_INDEX
LAST_RECID
CON_ID

NUMBER
NUMBER
NUMBER
NUMBER

VSCONTROLFILE_RECORD_SECTION

https://docs.oracle.com/database/121/REFRN/GUID-4554C1D1-452F-4C47-9562-9A0C45F91D7F.htm#REFRN30044

VSCONTROLFILE_RECORD_SECTION displays information about the control file record sections.

Column	Datatype	Description
TYPE	VARCHAR2 (28)	Identifies the type of record section: <ul style="list-style-type: none">• DATABASE• CKPT PROGRESS• REDO THREAD• REDO LOG• DATAFILE• FILENAME• TABLESPACE• TEMPORARY FILENAME• RMAN CONFIGURATION• LOG HISTORY• OFFLINE RANGE• ARCHIVED LOG• BACKUP SET• BACKUP PIECE• BACKUP DATAFILE

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

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

```

SQL> select * from v$controlfile_record_section;

```

TYPE	RECORD_SIZE	RECORDS_TOTAL	RECORDS_USED	FIRST_INDEX	LAST_INDEX	LAST_RECID	CON_ID
DATABASE	316	1	1	0	0	0	0
CKPT PROGRESS	8180	11	0	0	0	0	0
REDO THREAD	256	8	1	0	0	0	0
REDO LOG	72	16	3	0	0	10	0
DATAFILE	520	100	18	0	0	81	0
FILENAME	524	2298	21	0	0	0	0
TABSPACE	68	100	18	0	0	26	0
TEMPORARY FILENAME	56	100	3	0	0	5	0
RMAN CONFIGURATION	1108	50	0	0	0	0	0
LOG HISTORY	56	292	292	229	228	520	0
OFFLINE RANGE	200	163	2	1	2	2	0
ARCHIVED LOG	584	28	0	0	0	0	0
BACKUP SET	96	170	0	0	0	0	0
BACKUP PIECE	780	209	0	0	0	0	0
BACKUP DATAFILE	200	245	0	0	0	0	0
BACKUP REDOLOG	76	215	0	0	0	0	0
DATAFILE COPY	736	200	0	0	0	0	0
BACKUP CORRUPTION	44	371	0	0	0	0	0
COPY CORRUPTION	40	409	0	0	0	0	0
DELETED OBJECT	20	818	2	1	2	2	0
PROXY COPY	928	246	0	0	0	0	0
BACKUP SPFILE	124	131	0	0	0	0	0
DATABASE INCARNATION	56	292	2	1	2	2	0
FLASHBACK LOG	84	2048	0	0	0	0	0
RECOVERY DESTINATION	180	1	0	0	0	0	0
INSTANCE SPACE RESERVATION	28	1055	1	0	0	0	0
REMOVABLE RECOVERY FILES	32	1000	0	0	0	0	0
RMAN STATUS	116	141	0	0	0	0	0
THREAD INSTANCE NAME MAPPING	80	8	8	0	0	0	0
MTTR	100	8	1	0	0	0	0
DATAFILE HISTORY	568	57	0	0	0	0	0
STANDBY DATABASE MATRIX	400	31	31	0	0	0	0
GUARANTEED RESTORE POINT	212	2048	0	0	0	0	0
RESTORE POINT	212	2083	0	0	0	0	0
DATABASE BLOCK CORRUPTION	80	8384	0	0	0	0	0
ACM OPERATION	104	64	9	0	0	0	0
FOREIGN ARCHIVED LOG	604	1002	0	0	0	0	0
PDB RECORD	684	10	0	0	0	0	0
AUXILIARY DATAFILE COPY	584	128	0	0	0	0	0
MULTI INSTANCE REDO APPLY	556	1	0	0	0	0	0
PDBINC RECORD	144	113	0	0	0	0	0

```

41 rows selected.
SQL>

```

4) Vizualizare fisiere de control:

```
SQL> SHOW PARAMETER CONTROL_FILES
```

NAME	TYPE	VALUE
control_files	string	C:\ORACLE_12C\ORADATA\BD\CONTROL01.CTL, C:\ORACLE_12C\ORADATA\BD\CONTROL02.CTL

5) Informatii despre fisierele temporare:

```
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
BLOCKS
CREATE_BYTES
BLOCK_SIZE
NAME
CON_ID

NUMBER
NUMBER
NUMBER
NUMBER
VARCHAR2(513)
NUMBER

V\$TEMPFILE

https://docs.oracle.com/database/121/REFRN/GUID-7C8B580F-CA07-45EF-A47F-C5F677380282.htm#REFRN30283

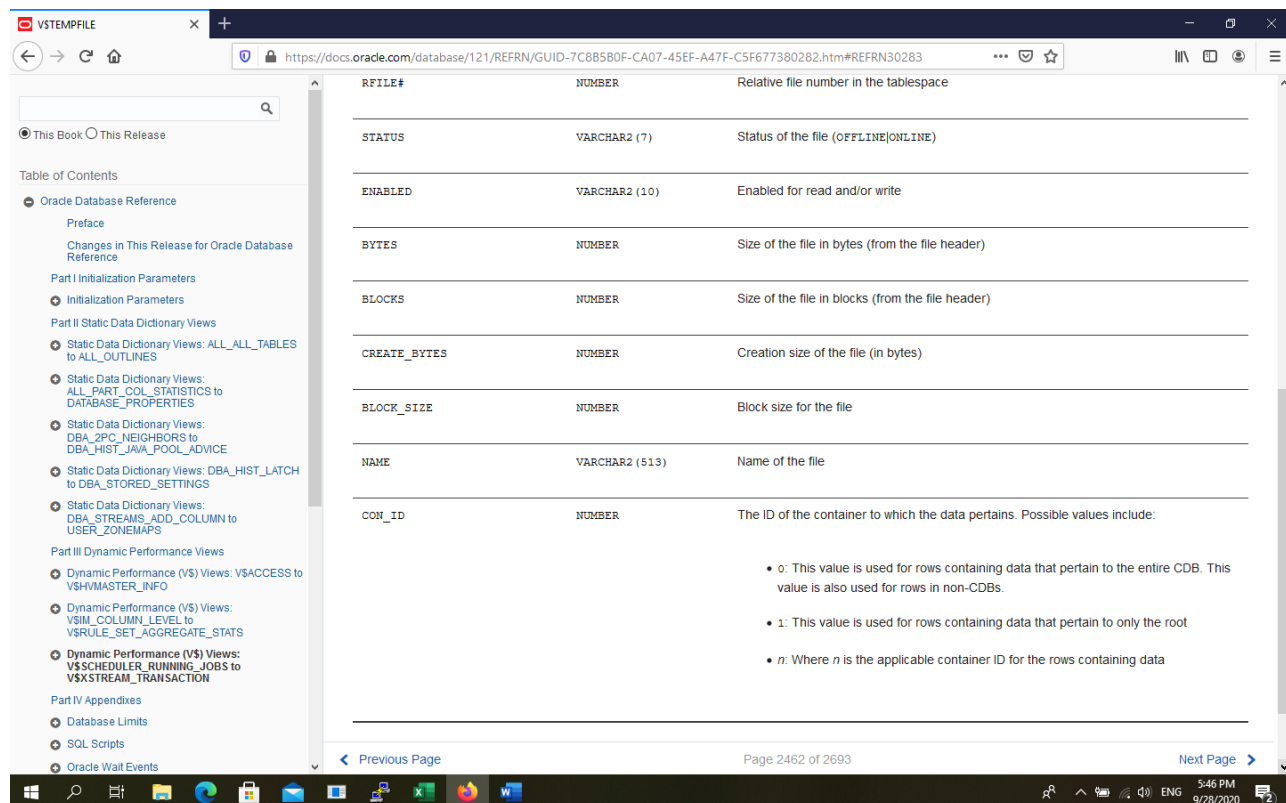
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V\$TEMPFILE displays temp file information.

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

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SQL> select * from v\$tempfile;

FILE#	CREATION_CHANGE#	CREATION_	TS#	RFILE#	STATUS	ENABLED	BYTES	BLOCKS	CREATE_BYTES	BLOCK_SIZE	NAME	CON_ID
1	2233806	08-MAY-19	3	1	ONLINE	READ WRITE	62914560	7680	62914560	8192	C:\ORACLE_12C\ORADATA\BD\TEMP01.DBF	0
2	4039792	02-AUG-19	7	1	ONLINE	READ WRITE	104857600	12800	104857600	8192	C:\ORACLE_12C\ORADATA\BD\BI_IASTEMP.DBF	0
3	5753558	02-DEC-19	22	1	ONLINE	READ WRITE	10485760	1280	10485760	8192	C:\ORACLE_12C\ORADATA\BD\BD_TEMP.DBF	0

6) Informatii despre tablespace-uri:

SQL> desc v\$tablespace

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

BIGFILE
FLASHBACK_ON
ENCRYPT_IN_BACKUP
CON_ID

VARCHAR2(3)
VARCHAR2(3)
VARCHAR2(3)
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: <ul style="list-style-type: none"> 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 ts#, name, included_in_database_backup from v\$tablespace;

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

19 UBD_TEMP	NO
21 BD_DATA	YES
22 BD_TEMP	NO

7) Informatii despre baza de date si fisierele de control:

SQL> desc v\$database

Name	Null?	Type
DBID		NUMBER
NAME		VARCHAR2(9)
CREATED		DATE
RESETLOGS_CHANGE#		NUMBER
RESETLOGS_TIME		DATE
PRIOR_RESETLOGS_CHANGE#		NUMBER
PRIOR_RESETLOGS_TIME		DATE
LOG_MODE		VARCHAR2(12)
CHECKPOINT_CHANGE#		NUMBER
ARCHIVE_CHANGE#		NUMBER
CONTROLFILE_TYPE		VARCHAR2(7)
CONTROLFILE_CREATED		DATE
CONTROLFILE_SEQUENCE#		NUMBER
CONTROLFILE_CHANGE#		NUMBER
CONTROLFILE_TIME		DATE
OPEN_RESETLOGS		VARCHAR2(11)
VERSION_TIME		DATE
OPEN_MODE		VARCHAR2(20)
PROTECTION_MODE		VARCHAR2(20)
PROTECTION_LEVEL		VARCHAR2(20)
REMOTE_ARCHIVE		VARCHAR2(8)
ACTIVATION#		NUMBER
SWITCHOVER#		NUMBER
DATABASE_ROLE		VARCHAR2(16)
ARCHIVELOG_CHANGE#		NUMBER
ARCHIVELOG_COMPRESSION		VARCHAR2(8)
SWITCHOVER_STATUS		VARCHAR2(20)
DATAGUARD_BROKER		VARCHAR2(8)
GUARD_STATUS		VARCHAR2(7)
SUPPLEMENTAL_LOG_DATA_MIN		VARCHAR2(8)
SUPPLEMENTAL_LOG_DATA_PK		VARCHAR2(3)
SUPPLEMENTAL_LOG_DATA_UI		VARCHAR2(3)
FORCE_LOGGING		VARCHAR2(39)
PLATFORM_ID		NUMBER
PLATFORM_NAME		VARCHAR2(101)

RECOVERY_TARGET_INCARNATION#	NUMBER
LAST_OPEN_INCARNATION#	NUMBER
CURRENT_SCN	NUMBER
FLASHBACK_ON	VARCHAR2(18)
SUPPLEMENTAL_LOG_DATA_FK	VARCHAR2(3)
SUPPLEMENTAL_LOG_DATA_ALL	VARCHAR2(3)
DB_UNIQUE_NAME	VARCHAR2(30)
STANDBY_BECAME_PRIMARY_SCN	NUMBER
FS_FAILOVER_STATUS	VARCHAR2(22)
FS_FAILOVER_CURRENT_TARGET	VARCHAR2(30)
FS_FAILOVER_THRESHOLD	NUMBER
FS_FAILOVER_OBSERVER_PRESENT	VARCHAR2(7)
FS_FAILOVER_OBSERVER_HOST	VARCHAR2(512)
CONTROLFILE_CONVERTED	VARCHAR2(3)
PRIMARY_DB_UNIQUE_NAME	VARCHAR2(30)
SUPPLEMENTAL_LOG_DATA_PL	VARCHAR2(3)
MIN_REQUIRED_CAPTURE_CHANGE#	NUMBER
CDB	VARCHAR2(3)
CON_ID	NUMBER
PENDING_ROLE_CHANGE_TASKS	VARCHAR2(512)
CON_DBID	NUMBER
FORCE_FULL_DB_CACHING	VARCHAR2(3)

VSDATABASE displays information about the database from the control file.

Column	Datatype	Description
DBID	NUMBER	Database identifier calculated when the database is created and stored in all file headers
NAME	VARCHAR2 (9)	Name of the database
CREATED	DATE	Creation date of the database. If the control file was re-created using the CREATE CONTROLFILE statement, then this column displays the date that the control file was re-created.
RESETLOGS_CHANGE#	NUMBER	System change number (SCN) at open resetlogs
RESETLOGS_TIME	DATE	Timestamp of open resetlogs
PRIOR_RESETLOGS_CHANGE#	NUMBER	SCN at prior resetlogs
PRIOR_RESETLOGS_TIME	DATE	Timestamp of prior resetlogs
LOG_MODE	VARCHAR2 (12)	Archive log mode: <ul style="list-style-type: none"> • NOARCHIVELOG • ARCHIVELOG • MANUAL

V\$DATABASE

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CHECKPOINT_CHANGE#	NUMBER	Last SCN checkpointed
ARCHIVE_CHANGE#	NUMBER	Database force archiving SCN. Any redo log with a start SCN below this will be forced to archive out.
CONTROLFILE_TYPE	VARCHAR2(7)	Type of control file: <ul style="list-style-type: none"> STANDBY - Indicates that the database is in standby mode CLONE - Indicates a clone database BACKUP CREATED - Indicates the database is being recovered using a backup or created control file CURRENT - database is available for general use
CONTROLFILE_CREATED	DATE	Creation date of the control file
CONTROLFILE_SEQUENCE#	NUMBER	Control file sequence number incremented by control file transactions
CONTROLFILE_CHANGE#	NUMBER	Last SCN in backup control file; null if the control file is not a backup
CONTROLFILE_TIME	DATE	Last timestamp in backup control file; null if the control file is not a backup
OPEN_RESETLOGS	VARCHAR2(11)	(NOT ALLOWED ALLOWED REQUIRED) Indicates whether the next database open allows or requires the resetlogs option
VERSION TIME	DATE	Version time

OPEN_MODE

OPEN_MODE	VARCHAR2(20)	Open mode information:
		<ul style="list-style-type: none"> MOUNTED READ WRITE READ ONLY READ ONLY WITH APPLY - A physical standby database is open in real-time query mode

PROTECTION_MODE

PROTECTION_MODE	VARCHAR2(20)	Protection mode currently in effect for the database:
		<ul style="list-style-type: none"> MAXIMUM PROTECTION - Database is running in maximized protection mode MAXIMUM AVAILABILITY - Database is running in maximized availability mode RESYNCHRONIZATION - Database is running in resynchronization mode MAXIMUM PERFORMANCE - Database is running in maximized performance mode UNPROTECTED - Database is unprotected (this normally occurs when the primary database is mounted and not open)

PROTECTION_LEVEL

PROTECTION_LEVEL	VARCHAR2(20)	Aggregated protection mode currently in effect for the database:
		<ul style="list-style-type: none"> MAXIMUM PROTECTION - Database is running in maximized protection mode MAXIMUM AVAILABILITY - Database is running in maximized availability mode

```
SQL> select controlfile_type, controlfile_sequence#, controlfile_change#, controlfile_time
from v$database;
```

CONTROL	CONTROLFILE_SEQUENCE#	CONTROLFILE_CHANGE#	CONTROLFI
CURRENT	46189	10358371	28-SEP-20

SQL> select * from v\$database;

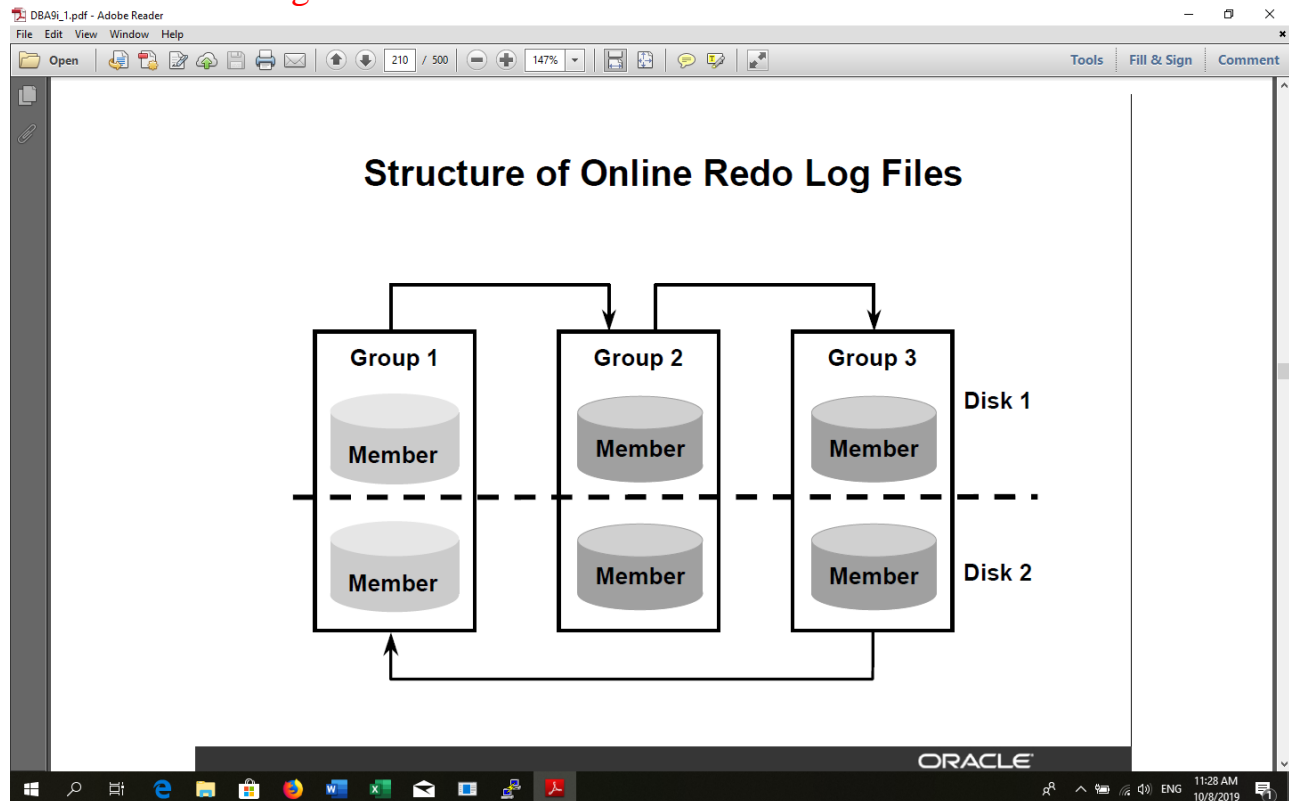
```

SQL>
SQL>
SQL> select * from v$database;

```

DBID	NAME	CONTROLFILE_SEQUENCE#	CONTROLFILE_CHANGE#	CONTROLFI	OPEN_RESETL	VERSION_T	OPEN_MODE	PROTECTION_MODE	PROTECTION_LEVEL	REMOTE_A	ACTIVATION#	SWITCHOVER#	DATABAS
1981261066	BD	46188	10358285	28-SEP-20	NOT ALLOWED	08-MAY-19	READ WRITE	MAXIMUM PERFORMANCE	UNPROTECTED	ENABLED	1981264138	1981264138	PRIMARY

B. Fisiere de log



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Forcing Log Switches and Checkpoints

- Forcing a log switch:

```
ALTER SYSTEM SWITCH LOGFILE;
```
- Checkpoints can be forced by:
 - Setting FAST_START_MTTR_TARGET parameter

```
FAST_START_MTTR_TARGET = 600
```
 - ALTER SYSTEM CHECKPOINT command

```
ALTER SYSTEM CHECKPOINT;
```

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Adding Online Redo Log File Groups

```
ALTER DATABASE ADD LOGFILE GROUP 3  
( '$HOME/ORADATA/u01/log3a.rdo',  
  '$HOME/ORADATA/u02/log3b.rdo' )  
SIZE 1M;
```

log1a.rdo
log1b.rdo
Group 1

log2a.rdo
log2b.rdo
Group 2

log3a.rdo
log3b.rdo
Group 3

ORACLE

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Adding Online Redo Log File Members

```
ALTER DATABASE ADD LOGFILE MEMBER  
'$HOME/ORADATA/u04/log1c.rdo' TO GROUP 1,  
'$HOME/ORADATA/u04/log2c.rdo' TO GROUP 2,  
'$HOME/ORADATA/u04/log3c.rdo' TO GROUP 3;
```

log1a.rdo log1b.rdo log1c.rdo Group 1

log2a.rdo log2b.rdo log2c.rdo Group 2

log3a.rdo log3b.rdo log3c.rdo Group 3

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Dropping Online Redo Log File Groups

```
ALTER DATABASE DROP LOGFILE GROUP 3;
```

log1a.rdo log1b.rdo log1c.rdo Group 1

log2a.rdo log2b.rdo log2c.rdo Group 2

log3a.rdo log3b.rdo log3c.rdo Group 3

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Dropping Online Redo Log File Members

```
ALTER DATABASE DROP LOGFILE MEMBER  
'$HOME/ORADATA/u04/log3c.rdo';
```

log1a.rdo log1b.rdo log1c.rdo Group 1

log1a.rdo log1b.rdo log2c.rdo Group 2

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Relocating or Renaming Online Redo Log Files

Relocate or rename online redo log files in one of the two following ways:

- ALTER DATABASE RENAME FILE command
 - Shut down the database.
 - Copy the online redo log files to the new location.
 - Place the database in MOUNT mode.
 - Execute the command.
 - Open database for normal operation.

```
ALTER DATABASE RENAME FILE  
'$HOME/ORADATA/u01/log2a.rdo'  
TO '$HOME/ORADATA/u02/log1c.rdo';
```

- Add new members and drop old members.

ORACLE

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8) Informatii despre fisierele de log si starea lor:

SQL> desc v\$logfile

Name	Null?	Type
GROUP#		NUMBER
STATUS		VARCHAR2(7)
TYPE		VARCHAR2(7)
MEMBER		VARCHAR2(513)
IS_RECOVERY_DEST_FILE		VARCHAR2(3)
CON_ID		NUMBER

VSLOGFILE contains information about redo log files.

Column	Datatype	Description
GROUP#	NUMBER	Redo log group identifier number
STATUS	VARCHAR2 (7)	Status of the log member: <ul style="list-style-type: none"> INVALID - File is inaccessible STALE - File's contents are incomplete DELETED - File is no longer used null - File is in use
TYPE	VARCHAR2 (7)	Type of the logfile: <ul style="list-style-type: none"> ONLINE STANDBY
MEMBER	VARCHAR2 (513)	Redo log member name
IS_RECOVERY_DEST_FILE	VARCHAR2 (3)	Indicates whether the file was created in the fast recovery area (YES) or not (NO)
CON_ID	NUMBER	The ID of the container to which the data pertains. Possible values include:

SQL> select * from v\$logfile;

GROUP#	STATUS	TYPE	MEMBER	IS_	CO
3		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO03.LOG	NO	0
2		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO02.LOG	NO	0
1		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO01.LOG	NO	0

- 9) Informatii legate de modul de lucru al bazei de date (cu arhivare sau fara arhivare a fisierelor de log, data cand au fost resetate fisierele de log, etc.):

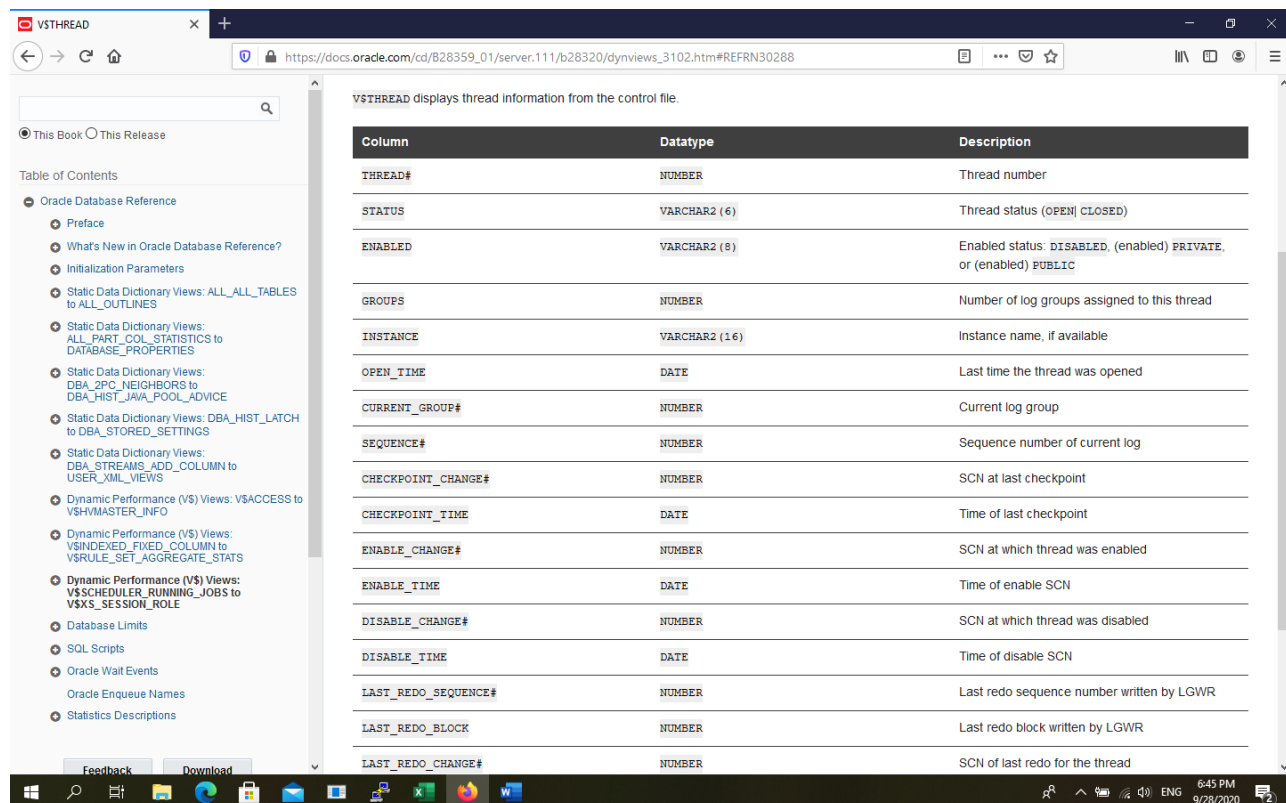
SQL> select name, log_mode, resetlogs_time from v\$database;

NAME	LOG_MODE	RESETLOGS
-----	-----	-----
BD	NOARCHIVELOG	08-MAY-19

- 10) Informatii legate de starea instantei, a grupului curent din fisierele de log si a secventei curente:

SQL> desc v\$thread

Name	Null?	Type
-----	-----	----
THREAD#		NUMBER
STATUS		VARCHAR2(6)
ENABLED		VARCHAR2(8)
GROUPS		NUMBER
INSTANCE		VARCHAR2(16)
OPEN_TIME		DATE
CURRENT_GROUP#		NUMBER
SEQUENCE#		NUMBER
CHECKPOINT_CHANGE#		NUMBER
CHECKPOINT_TIME		DATE
ENABLE_CHANGE#		NUMBER
ENABLE_TIME		DATE
DISABLE_CHANGE#		NUMBER
DISABLE_TIME		DATE
LAST_REDO_SEQUENCE#		NUMBER
LAST_REDO_BLOCK		NUMBER
LAST_REDO_CHANGE#		NUMBER
LAST_REDO_TIME		DATE
CON_ID		NUMBER



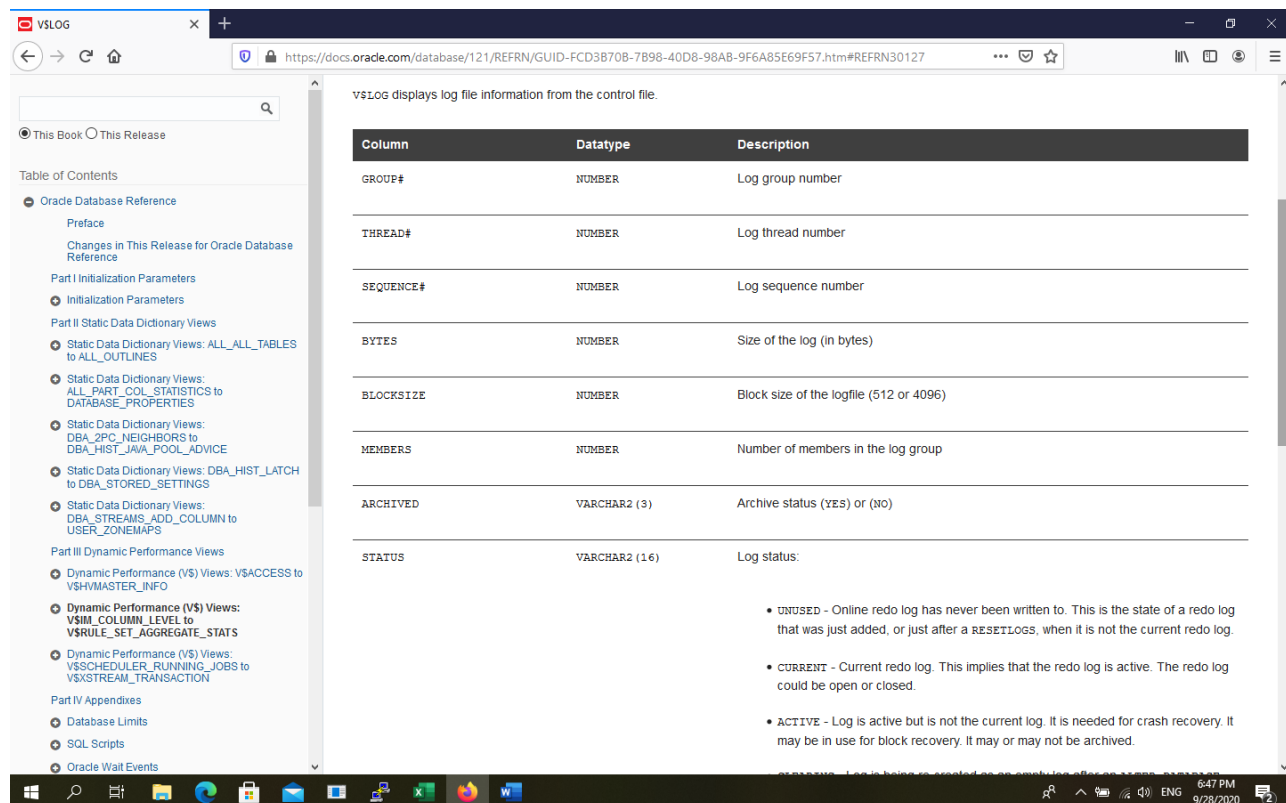
SQL> select groups, current_group#, sequence#, instance, status from v\$thread;

GROUPS	CURRENT_GROUP#	SEQUENCE#	INSTANCE	STATUS
3	1	872	bd	OPEN

11) Informatii despre gupuri si membri in cadrul grupurilor:

SQL> desc v\$log

Name	Null?	Type
GROUP#		NUMBER
THREAD#		NUMBER
SEQUENCE#		NUMBER
BYTES		NUMBER
MEMBERS		NUMBER
ARCHIVED		VARCHAR2(3)
STATUS		VARCHAR2(16)
FIRST_CHANGE#		NUMBER
FIRST_TIME		DATE
NEXT_CHANGE#		NUMBER
NEXT_TIME		DATE
CON_ID		NUMBER



SQL> select group#, members, bytes, archived, status from v\$log;

GROUP#	MEMBERS	BYTES	ARC	STATUS
-----	-----	-----	---	-----
1	1	52428800	NO	CURRENT
2	1	52428800	NO	INACTIVE
3	1	52428800	NO	INACTIVE

12) Adaugarea unui membru la un grup (se creeaza automat in SO un nou fisier de log):

SQL> alter database add logfile member 'E:\TEMP\log2.rdo' to group 1;
Database altered.

13) Resetarea unui grup dintr-un fisier de log(care nu este grup curent):

SQL> alter database clear logfile group 2 ;
Database altered.

14) Relocarea unui fisier de log cu baza de date online (trebuie ca fisierul sa nu fie in grupul curent si sa existe o copie in noua locatie):

SQL> alter database rename file 'E:\TEMP\log2.rdo' to 'E:\TEMP\log22.rdo';
Database altered.

Observatii:

✓ Daca fisierul face parte din grupul curent, se genereaza eroarea:

ERROR at line 1:

ORA-01511: error in renaming log/data files

ORA-01621: cannot rename member of current log if database is open

ORA-00312: online log 1 thread 1:

'C:\ORACLE_12C\ORADATA\BD\REDO01.LOG'

ORA-00312: online log 1 thread 1: 'E:\TEMP\LOG2.RDO'

In acest caz se face un switch pe urmatorul grup, apoi se relocheaza fisierul respectiv:

SQL> ALTER SYSTEM SWITCH LOGFILE;

✓ Daca fisierul nu a fost copiat deja in noua locatie se genereaza eroarea:

ERROR at line 1:

ORA-01511: error in renaming log/data files

ORA-01512: error renaming log file E:\TEMP\LOG2.RDO - new file

F:\temp1\log2.rdo not found

ORA-27041: unable to open file

OSD-04002: unable to open file

O/S-Error: (OS 2) The system cannot find the file specified.

15) Stergerea unui membru dintr-un grup :

➤ Se verifica starea fiserului care va fi sters :

SQL> select * from v\$logfile;

GROUP#	STATUS	TYPE	MEMBER	IS_
-----	-----	-----	-----	---
3		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO03.LOG	NO
2		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO02.LOG	NO
1		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO01.LOG	NO
1	INVALID	ONLINE	E:\TEMP1\LOG2.RDO	NO

➤ Se sterge fisierul de log (trebuie sa nu fie in grupul curent) :

SQL> alter database drop logfile member 'E:\TEMP1\LOG2.RDO';

Observatii:

✓ Daca fisierul face parte dintr-un grup urmatoare nu se poate sterge si se genereaza eroarea:

ERROR at line 1:

ORA-00362: member is required to form a valid logfile in group 3

ORA-01517: log member: 'E:\temp\log2.rdo'

✓ Daca fisierul face parte din grupul curent, se genereaza eroarea:

ERROR at line 1:

ORA-01609: log 1 is the current log for thread 1 - cannot drop members

In acest caz se face un switch pe urmatorul grup, apoi se sterge membrul respectiv:
SQL> alter system switch logfile;
System altered.

SQL> alter database drop logfile member 'E:\TEMP\LOG2.RDO';
Database altered.

SQL> select * from v\$logfile;

GROUP#	STATUS	TYPE	MEMBER	IS_
-----	-----	-----	-----	---
3		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO03.LOG	NO
2		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO02.LOG	NO
1		ONLINE	C:\ORACLE_12C\ORADATA\BD\REDO01.LOG	NO

16) Informatii legate de modul de lucru al instantei (modul arhiva sau nonarhiva):

SQL> desc v\$instance

Name	Null?	Type
-----	-----	-----
INSTANCE_NUMBER		NUMBER
INSTANCE_NAME		VARCHAR2(16)
HOST_NAME		VARCHAR2(64)
VERSION		VARCHAR2(17)
STARTUP_TIME		DATE
STATUS		VARCHAR2(12)
PARALLEL		VARCHAR2(3)
THREAD#		NUMBER
ARCHIVER		VARCHAR2(7)
LOG_SWITCH_WAIT		VARCHAR2(15)
LOGINS		VARCHAR2(10)
SHUTDOWN_PENDING		VARCHAR2(3)
DATABASE_STATUS		VARCHAR2(17)
INSTANCE_ROLE		VARCHAR2(18)
ACTIVE_STATE		VARCHAR2(9)
BLOCKED		VARCHAR2(3)
CON_ID		NUMBER
INSTANCE_MODE		VARCHAR2(11)
EDITION		VARCHAR2(7)
FAMILY		VARCHAR2(80)

VSINSTANCE displays the state of the current instance.

Column	Datatype	Description
INSTANCE_NUMBER	NUMBER	Instance number used for instance registration (corresponds to the INSTANCE_NUMBER initialization parameter) See Also: "INSTANCE_NUMBER"
INSTANCE_NAME	VARCHAR2 (16)	Name of the instance
HOST_NAME	VARCHAR2 (64)	Name of the host machine
VERSION	VARCHAR2 (17)	Database version
STARTUP_TIME	DATE	Time when the instance was started
STATUS	VARCHAR2 (12)	Status of the instance: <ul style="list-style-type: none">• STARTED - After STARTUP NOMOUNT• MOUNTED - After STARTUP MOUNT OF ALTER DATABASE CLOSE• OPEN - After STARTUP OF ALTER DATABASE OPEN• OPEN MIGRATE - After ALTER DATABASE OPEN (UPGRADE DOWNGRADE)
PARALLEL	VARCHAR2 (3)	Indicates whether the instance is mounted in cluster database mode (YES) or not (no)

THREAD#	NUMBER	Redo thread opened by the instance
ARCHIVER	VARCHAR2 (7)	Automatic archiving status: <ul style="list-style-type: none">• STOPPED• STARTED• FAILED - Archiver failed to archive a log last time but will try again within 5 minutes
LOG_SWITCH_WAIT	VARCHAR2 (15)	Event that log switching is waiting for: <ul style="list-style-type: none">• ARCHIVE LOG• CLEAR LOG• CHECKPOINT• NULL - ALTER SYSTEM SWITCH LOGFILE is hung but there is room in the current online redo log
LOGINS	VARCHAR2 (10)	Indicates whether the instance is in unrestricted mode, allowing logins by all users (ALLOWED, or in restricted mode, allowing logins by database administrators only (RESTRICTED))
SHUTDOWN_PENDING	VARCHAR2 (3)	Indicates whether a shutdown is pending (YES) or not (no)

SQL> select instance_name, status, archiver from v\$instance;

INSTANCE_NAME	STATUS	ARCHIVE
bd	OPEN	STOPPED

17) Informatii despre istoricul fisierelor de log:

SQL> desc v\$loghist

Name	Null?	Type
THREAD#		NUMBER
SEQUENCE#		NUMBER
FIRST_CHANGE#		NUMBER
FIRST_TIME		DATE
SWITCH_CHANGE#		NUMBER
CON_ID		NUMBER

The screenshot shows a web browser window displaying the Oracle Database Reference page for the `V$loghist` view. The page title is "V\$LOGHIST". The browser address bar shows the URL: <https://docs.oracle.com/database/121/REFRN/GUID-B4B3C331-6D65-49B5-8D3C-9438B51C7CD8.htm#REFRN30130>. The page content includes a "Table of Contents" on the left, a "See Also" section with a link to "V\$LOG_HISTORY", and a table with columns: Column, Datatype, and Description. The table lists the following columns and their descriptions:

Column	Datatype	Description
THREAD#	NUMBER	Log thread number
SEQUENCE#	NUMBER	Log sequence number
FIRST_CHANGE#	NUMBER	Lowest SCN in the log
FIRST_TIME	DATE	Time of first SCN in the log
SWITCH_CHANGE#	NUMBER	SCN at which the log switch occurred; one more than highest SCN in the log
CON_ID	NUMBER	The ID of the container to which the data pertains. Possible values include: <ul style="list-style-type: none">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 rootn: Where n is the applicable container ID for the rows containing data

SQL> select * from v\$loghist;

THREAD#	SEQUENCE#	FIRST_CHANGE#	FIRST_TIM	SWITCH_CHANGE#	CON_ID
-----	-----	-----	-----	-----	-----
1	1	2233668	08-MAY-19	2251966	0
1	2	2251966	08-MAY-19	2257658	0
1	3	2257658	08-MAY-19	2257826	0
1	4	2257826	08-MAY-19	2260506	0
1	5	2260506	08-MAY-19	2370497	0
1	6	2370497	10-MAY-19	2385355	0
1	7	2385355	11-MAY-19	2393508	0
1	8	2393508	11-MAY-19	2401645	0
1	9	2401645	11-MAY-19	2417525	0
1	10	2417525	11-MAY-19	2426821	0
1	11	2426821	12-MAY-19	2441691	0