1 – Verificación y activación de modo archive

Conexión a SQL y habilitar ARCHIVE

```
sqlplus connect sysdba/root as sysdba
shutdown immediate;

startup nomount;
alter database mount;
ALTER DATABASE ARCHIVELOG;
Alter Database Open;
Alter system archive log start;
ALTER SESSION SET log_archive_start = true ;
ALTER SESSION SET log_archive_dest=%Oracle_home%/database/%Oracle_sid%/Archive ;
ALTER SESSION SET log_archive_format=´´%XE%T%TS%S.ARC´´ ;
show parameter v$archived_log;
```

Habilitar archive en el init

```
db_recovery_file_dest='<ORACLE_BASE>/flash_recovery_area'
db_recovery_file_dest_size=2G
diagnostic_dest='<ORACLE_BASE>'
dispatchers='(PROTOCOL=TCP) (SERVICE=ORCLXDB)'
open_cursors=300
remote_login_passwordfile='EXCLUSIVE'
undo_tablespace='UNDOTBS1'
# You may want to ensure that control files are created on separate physical
# devices
control_files = (ora_control1, ora_control2)
compatible ='11.2.0'
log_archive_start=true
log_archive_dest=%Oracle_home%/database/%Oracle_sid%/Archive
log_archive_format=´´%sample%T%TS%S.ARC´´
```

Verificacion de Archive

```
SQL> shutdown immediate;
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL>
SQL> startup nomount;
ORACLE instance started.

Total System Global Area 1071333376 bytes
Fixed Size                  1388352 bytes
Variable Size             595591360 bytes
Database Buffers          469762048 bytes
Redo Buffers                4591616 bytes
SQL> alter database mount;

Database altered.

SQL> ALTER DATABASE ARCHIVELOG;

Database altered.

SQL> Alter Database Open;

Database altered.

SQL> Alter system archive log start;

System altered.
```

```
SQL> select log_mode from v$database;

LOG_MODE
------------
ARCHIVELOG

SQL>
```

2 – Creacion de tablespace con tablas

```
SQL> create tablespace nuevo datafile 'nuevo.dbf' size 2M autoextend on;

Tablespace created.
```

Creación de usuario y otorgamiento de permisos

```
SQL> create user rman identified by rman  default tablespace nuevo quota unlimited on nuevo;

User created.
```

```
SQL> grant connect to rman;

Grant succeeded.

SQL> grant recovery_catalog_owner to rman;

Grant succeeded.
```

3 - RMAN

Conexión a rman

```
C:\Users\Estudiante>rman catalog rman/rman

Recovery Manager: Release 11.2.0.2.0 - Production on Vie Oct 20 13:54:41 2017

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connected to recovery catalog database

RMAN> create catalog

recovery catalog created

RMAN>
```

Conexión a rman con user y database

```
C:\Users\Estudiante> rman target sys/root catalog rman/rman;

Recovery Manager: Release 11.2.0.2.0 - Production on Vie Oct 20 13:58:31 2017

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connected to target database: XE (DBID=2797012217)
connected to recovery catalog database

RMAN>
```

Registrar la base de datos

```
RMAN> register database;

database registered in recovery catalog
starting full resync of recovery catalog
full resync complete

RMAN>
```

Configuracion de autobackup y optimización

```
RMAN> configure controlfile autobackup on;

new RMAN configuration parameters:
CONFIGURE CONTROLFILE AUTOBACKUP ON;
new RMAN configuration parameters are successfully stored
starting full resync of recovery catalog
full resync complete

RMAN> configure backup optimization on;

new RMAN configuration parameters:
CONFIGURE BACKUP OPTIMIZATION ON;
new RMAN configuration parameters are successfully stored
starting full resync of recovery catalog
full resync complete

RMAN>
```

Upgrade catalog

```
RMAN> upgrade catalog;

recovery catalog owner is RMAN
enter UPGRADE CATALOG command again to confirm catalog upgrade

RMAN> upgrade catalog;
```

Creacion de script de backup

```
RMAN> create global script backup_db from file 'C:\Users\Estudiante\Desktop\respaldo.sql';

script commands will be loaded from file C:\Users\Estudiante\Desktop\respaldo.sql
created global script backup_db

RMAN>
```

Verificacion de script existente

```
RMAN> print script backup_db;

printing stored global script: backup_db
backup incremental level 0 database tag='L01';
backup incremental level 1 cumulative database tag='icumulative';
backup incremental level 1 database tag='idifferential';
backup as copy database spfile plus archivelog;
backup database spfile plus archivelog tag='FBD';
list backup of database summary;

RMAN>
```

4 – BACKUP SCRIPTS

PARCIAL INCREMENTAL

```
backup incremental level 0 tablespace users;
```

```
RMAN> create global script parcial from file 'C:\Users\Estudiante\Desktop\parcial.sql';

script commands will be loaded from file C:\Users\Estudiante\Desktop\parcial.sql
created global script parcial

RMAN>
```

PARCIAL COMPLETO

```
backup database spfile plus archivelog;
```

Scripts y ejecución de los mismos

```
create global script backup_db from file 'C:\Users\Estudiante\Desktop\respaldo.sql';
create global script completo from file 'C:\Users\Estudiante\Desktop\completo.sql';
create global script parcial from file 'C:\Users\Estudiante\Desktop\parcial.sql';

run{execute global script backup_db;}

list script names;
```

```
RMAN> run{execute global script parcial;}

executing global script: parcial

Starting backup at 20/10/17
allocated channel: ORA_DISK_1
channel ORA_DISK_1: SID=48 device type=DISK
channel ORA_DISK_1: starting incremental level 0 datafile backup set
channel ORA_DISK_1: specifying datafile(s) in backup set
input datafile file number=00004 name=C:\ORACLEXE\APP\ORACLE\ORADATA\XE\USERS.DBF
channel ORA_DISK_1: starting piece 1 at 20/10/17
channel ORA_DISK_1: finished piece 1 at 20/10/17
piece handle=C:\ORACLEXE\APP\ORACLE\FAST_RECOVERY_AREA\XE\BACKUPSET\2017_10_20\O1_MF_NNND0_TAG20171020T144554_DYNR43V2_.BKP tag=TAG20171020T144554 comment=NONE
channel ORA_DISK_1: backup set complete, elapsed time: 00:00:03
Finished backup at 20/10/17
```