Table of Contents

[1 - Summary 2](#_Toc28685117)

[2 - duplicate\_db.sh 2](#_Toc28685118)

[2 - Context 3](#_Toc28685119)

[3 - Case description 3](#_Toc28685120)

[4 – Active duplication 4](#_Toc28685121)

# 1 - Summary

A database can be duplicated while being open, this is Active Duplication. This is done using the

duplicate\_db.sh script located in /u01/app/oracle/admin/scripts/misc. This script can be use RMAN “active duplication” or RMAN backups to create a database.

# 2 - duplicate\_db.sh

./duplicate\_db.sh -h

script usage: duplicate\_db.sh [-h] [-m duplicate\_mode (B/A)] -s source\_db -d dest\_db[-b backup\_location ] [-p post\_duplication (Y/N)] -x source\_pass -y dest\_pass

Exemple : duplicate\_db.sh -s BELDEV -d BELQUA -m B -u 'SYSDATE-2' -b /DD2500/backup/BELDEV -p Y -x syspwd1 -y syspwd2

Backup based duplication, restore database at present time -2 days, No post duplication processing

Exemple : duplicate\_db.sh -s BELDEV -d BELQUA -b /DD2500/backup/BELDEV -m B -p N -x syspwd1 -y syspwd2

Backup based duplication, No post duplication processing

Exemple : duplicate\_db.sh -s BELDEV -d BELQUA -m A -x syspwd1 -y syspwd2

Active duplication, No post duplication processing

Exemple : duplicate\_db.sh -s BELDEV -d BELQUA -r RMANCAT -p Y -x syspwd1 -y syspwd2

Active duplication, post duplication processing, duplicated db registered in RMAN catalog

Notes for options

-m : Active duplication is the default duplication mode

-p : No post duplication activity by default

-x -y : SYS passwords for source and destination are mandatory

# 2 - Context

This technique is useful to duplicate a database “on the fly”. A restriction when compared to ackup based duplication is not being able to specify “UNTIL” when the database has to be duplicated.

# 3 - Case description

Database ADDEVL is duplicated from database NNZDEVL, NNZDEVL being open. After duplication ADDEVL is registered with crs.

# 4 – Active duplication

Duplicate\_db.sh script in /u01/app/oracle/admin/scripts/misc is used to duplicate NNZDEVL

|  |
| --- |
| **./duplicate\_db.sh -s NNZDEVL -d ADDEVL -x \*\*\*\* -y Welcome\_2020 -p Y**  ORACLE\_HOME is /u01/app/oracle/product/18.0.0.0  DUPLICATE\_MODE is A  SOURCE\_SID is NNZDEVL  SOURCE\_SID\_PWD is Qmx0225\_nnzdevl  DEST\_SID is ADDEVL  DEST\_SID\_PWD is Welcome\_2020  RMAN\_SID is  BACKUP\_LOCATION is  POST\_DUPLICATION is Y  Has any previous database ADDEVL been cleaned up (Y/N)?Y  SOURCE\_SID\_PWD is Qmx0225\_nnzdevl  DEST\_SID\_PWD is Welcome\_2020  Password & pfiles cleanup  Auxiliary instance ADDEVL /tmp/init\_ADDEVL\_4\_dup\_13476.ora  db\_name=ADDEVL  db\_unique\_name=ADDEVL  compatible=18.7.0  control\_files='+DATA/ADDEVL/CONTROLFILE/control01.ctl','+FRA/ADDEVL/CONTROLFILE/control02.ctl'  remote\_login\_passwordfile='EXCLUSIVE'  db\_create\_file\_dest='+DATA'  db\_recovery\_file\_dest='+FRA'  db\_recovery\_file\_dest\_size='20G'  RMAN command file /tmp/duplicate\_NNZDEVL\_2\_ADDEVL\_13476.rman  connect target sys/\*\*\*\*@NNZDEVL  connect auxiliary sys/\*\*\*\*  run{  allocate channel prm1 type disk;  allocate channel prm2 type disk;  allocate auxiliary channel aux1 type disk;  allocate auxiliary channel aux2 type disk;  allocate auxiliary channel aux3 type disk;  allocate auxiliary channel aux4 type disk;  **DUPLICATE TARGET DATABASE TO 'ADDEVL'**  **FROM ACTIVE DATABASE**  **SPFILE**  **PARAMETER\_VALUE\_CONVERT**  **'NNZDEVL','ADDEVL','nnzdevl','addevl'**  **SET DB\_UNIQUE\_NAME='ADDEVL'**  **USING COMPRESSED BACKUPSET SECTION SIZE 2G**  **NOFILENAMECHECK;**  }  mkdir: created directory ‘/u01/app/oracle/admin/ADDEVL’  mkdir: created directory ‘/u01/app/oracle/admin/ADDEVL/adump’  mkdir: created directory ‘/u01/app/oracle/diag/rdbms/addevl’  mkdir: created directory ‘/u01/app/oracle/diag/rdbms/addevl/ADDEVL’  mkdir: created directory ‘/u01/app/oracle/diag/rdbms/addevl/ADDEVL/trace’  mkdir: created directory ‘/u01/app/oracle/diag/rdbms/addevl/ADDEVL/cdump’  Oracle password file /u01/app/oracle/product/18.0.0.0/dbs/orapwADDEVL created  Startup auxiliary instance ADDEVL  ORACLE instance started.  Total System Global Area 306182176 bytes  Fixed Size 8656928 bytes  Variable Size 239075328 bytes  Database Buffers 50331648 bytes  Redo Buffers 8118272 bytes  About to duplicate ....  RMAN> 2> 3> 4> 5> 6> 7> 8> 9> 10> 11> 12> 13> 14> 15> 16> 17> 18> 19>  Succesfull duplication for ADDEVL  Elapsed Time: 00:13:58.496086883  Post duplication tasks start here  Put ADDEVL spfile on ASM  About to create temp pfile /tmp/initADDEVL\_13476.ora  File created.  About to create ASM pfile +DATA/ADDEVL/spfileADDEVL  File created.  ‘/u01/app/oracle/product/18.0.0.0/dbs/spfileADDEVL.ora’ -> ‘/u01/app/oracle/product/18.0.0.0/dbs/spfileADDEVL.ora\_13476’  ORACLE instance shut down.  ORACLE instance started.  Total System Global Area 1610612016 bytes  Fixed Size 8658224 bytes  Variable Size 603979776 bytes  Database Buffers 989855744 bytes  Redo Buffers 8118272 bytes  Database mounted.  Database opened.  User altered.  User altered.  User altered.  Database closed.  Database dismounted.  ORACLE instance shut down.  Database unique name: ADDEVL  Database name: ADDEVL  Oracle home: /u01/app/oracle/product/18.0.0.0  Oracle user: oracle  Spfile: +DATA/ADDEVL/spfileADDEVL  Password file:  Domain:  Start options: open  Stop options: immediate  Database role: PRIMARY  Management policy: AUTOMATIC  Disk Groups:  Services:  OSDBA group:  OSOPER group:  Database instance: ADDEVL |