|  |  |
| --- | --- |
| Tai-ve-logo-BV-moi | TẬP ĐOÀN BẢO VIỆT  BAN VẬN HÀNH VÀ QUẢN TRỊ HỆ THỐNG |

**HỢP ĐỒNG CUNG CẤP TRANG THIẾT BỊ, BẢN QUYỀN PHẦN MỀM PHỤC VỤ VIỆC TRIỂN KHAI MÔ HÌNH BVLIFE TẬP TRUNG CỦA BẢO VIỆT NHÂN THỌ**

**QUY TRÌNH BACKUP & RECOVER DATABASE 10GR2 RAC**

**BẢNG THEO DÕI THAY ĐỔI**

|  |  |  |  |
| --- | --- | --- | --- |
| **Phiên bản** | **Ngày cập nhật** | **Người cập nhật** | **Chú thích** |
| 1.0 | 22/02/2012 | Nguyễn Đức Tuyên | First Release. |
|  |  |  |  |
|  |  |  |  |

**MỤC LỤC**

[1 MỤC ĐÍCH VÀ PHẠM VI 4](#_Toc320800186)

[1.1 MỤC ĐÍCH 4](#_Toc320800187)

[1.2 PHẠM VI 4](#_Toc320800188)

[2 TÀI LIỆU THAM KHẢO và thuật ngữ sử dụng 4](#_Toc320800189)

[2.1 TÀI LIỆU THAM KHẢO 4](#_Toc320800190)

[2.2 THUẬT NGỮ SỬ DỤNG 4](#_Toc320800191)

[3 YÊU CẦU 4](#_Toc320800192)

[4 CHI TIẾT VẬN HÀNH HỆ THỐNG 4](#_Toc320800193)

[4.1 Backup 4](#_Toc320800194)

[4.1.1 Configure tnsnames.ora 4](#_Toc320800195)

[4.1.2 Configure backup 5](#_Toc320800196)

[4.1.3 Configure block change tracking 5](#_Toc320800197)

[4.1.4 Backup level 0 5](#_Toc320800198)

[4.1.5 Backup level 1 6](#_Toc320800199)

[4.2 Recover 6](#_Toc320800200)

[4.2.1 Block recover 6](#_Toc320800201)

[4.2.2 Recover datafile 7](#_Toc320800202)

[4.2.2.1 Recover normal datafile 7](#_Toc320800203)

[4.2.2.2 Recover system datafile 8](#_Toc320800204)

[4.2.3 Recover tablespace 9](#_Toc320800205)

[4.2.4 Recover full database 14](#_Toc320800206)

# 

# MỤC ĐÍCH VÀ PHẠM VI

## MỤC ĐÍCH

Tài liệu này nhằm giới thiệu các bước cơ bản được sử dụng trong quá trình backup và recover hệ thống. Tài liệu này có tính chất tham khảo, để người quản trị hình dung quá backup và recover. Tài liệu không nhằm giới thiệu các khái niệm, các thao tác chuyên sâu trên hệ thống. Các khái niệm và những tác vụ không được đề cập đến trong tài liệu có thể tham khảo tài liệu của hãng Oracle được đề cập đến trong tài liệu tham khảo.

## PHẠM VI

Tài liệu này giới hạn đề cập đến:

* Backup hệ thống với RMAN
* Các trường hợp recover hệ thống với RMAN
* Backup & restore với datapump

# TÀI LIỆU THAM KHẢO và thuật ngữ sử dụng

## TÀI LIỆU THAM KHẢO

Oracle® Database Backup and Recovery Basics 10g Release 2 (10.2)

<http://docs.oracle.com/cd/B19306_01/backup.102/b14192/toc.htm>

Oracle® Database Backup and Recovery Advanced User's Guide 10g Release 2 (10.2)

<http://docs.oracle.com/cd/B19306_01/backup.102/b14191/toc.htm>

Oracle® Database Backup and Recovery Reference 10g Release 2 (10.2)

<http://docs.oracle.com/cd/B19306_01/backup.102/b14194/toc.htm>

## THUẬT NGỮ SỬ DỤNG

Các thuật ngữ được sử dụng trong tài liệu: không có thuật ngữ đặc biệt.

# YÊU CẦU

* Client để thực hiện việc remote để chuyển đồi có cài ssh/telnet client.
* Client để thực hiện remote có thể connect được tới primary và standby.
* Người thực hiện cần có password của user oracle để connect vào máy chủ bvldb01.

# CHI TIẾT VẬN HÀNH HỆ THỐNG

## Backup với RMAN

Việc backup database sẽ được chia làm 2 loại.

* Backup lv0 : thực hiện vào ngày cuối tuần
* Backup lv1 : thực hiện vào các ngày trong tuần

### Configure tnsnames.ora

Rman yêu cầu connect tới database bằng dedicate session. Thêm mục sau vào file tnsnames.ora để sử dụng cho RMAN

RMANBVL =

(DESCRIPTION =

(ADDRESS = (PROTOCOL = TCP)(HOST = bvldb01-vip)(PORT = 1521))

(CONNECT\_DATA =

(SERVER = DEDICATED)

(SERVICE\_NAME = bvldb.baoviet.com.vn)

(INSTANCE\_NAME = bvldb1)

)

)

### Configure backup

Login vào máy chủ bvldb01 bằng user oracle:

$ rman target sys/oracle@rmanbvl

RMAN> show all;

using target database control file instead of recovery catalog

RMAN configuration parameters are:

CONFIGURE RETENTION POLICY TO REDUNDANCY 1; # default

CONFIGURE BACKUP OPTIMIZATION OFF; # default

CONFIGURE DEFAULT DEVICE TYPE TO DISK; # default

CONFIGURE CONTROLFILE AUTOBACKUP OFF; # default

CONFIGURE CONTROLFILE AUTOBACKUP FORMAT FOR DEVICE TYPE DISK TO '%F'; # default

CONFIGURE DEVICE TYPE DISK PARALLELISM 1 BACKUP TYPE TO BACKUPSET; # default

CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default

CONFIGURE ARCHIVELOG BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default

CONFIGURE MAXSETSIZE TO UNLIMITED; # default

CONFIGURE ENCRYPTION FOR DATABASE OFF; # default

CONFIGURE ENCRYPTION ALGORITHM 'AES128'; # default

CONFIGURE ARCHIVELOG DELETION POLICY TO NONE; # default

CONFIGURE SNAPSHOT CONTROLFILE NAME TO '/u01/app/10.2/db/dbs/snapcf\_bvldb1.f'; # default

Chỉnh các tham số sau:

CONFIGURE DEVICE TYPE DISK PARALLELISM 16 BACKUP TYPE TO BACKUPSET;

CONFIGURE CHANNEL DEVICE TYPE DISK FORMAT '/backup/rman/bvldb/bvldb\_%U.bkp';

### Configure block change tracking

Login với user oracle vào bvldb01

$ sqlplus /nolog

SQL> ALTER DATABASE ENABLE BLOCK CHANGE TRACKING;

SQL> ALTER DATABASE ENABLE BLOCK CHANGE TRACKING USING FILE '/backup/rman/rman\_change\_track.f' REUSE;

### Backup level 0

Login vào máy chủ bvldb01 bằng user oracle

Tạo script backup level 0 như sau:

$ vi /backup/rman/script/lv0\_rman\_bk\_bvlife.sh

today=`date "+%Y%m%d"`

export ORACLE\_HOME=/u01/app/10.2/db

export ORACLE\_SID=bvldb1

logfile=/backup/rman/log/bvlife/lv0\_rmanbk\_$today.log

if [ ! -d /backup/rman/log/bvlife ]

then

mkdir -p /backup/rman/log/bvlife

fi

{

rman target / <<EOF

backup incremental level 0 database;

sql 'alter system archive log current';

backup archivelog all not backed up 1 times;

report obsolete;

delete noprompt obsolete;

delete noprompt backup of archivelog until time='trunc(sysdate - 7)';

exit

EOF

}>$logfile

$ chmod +x /backup/rman/script/lv0\_rman\_bk\_bvlife.sh

$ crontab -e

0 23 \* \* 7 /backup/rman/script/lv0\_rman\_bk\_bvlife.sh

### Backup level 1

$ vi /backup/rman/script/lv1\_rman\_bk\_bvlife.sh

today=`date "+%Y%m%d"`

export ORACLE\_HOME=/u01/app/10.2/db

export ORACLE\_SID=bvldb1

logfile=/backup/rman/log/bvlife/lv1\_rmanbk\_$today.log

if [ ! -d /backup/rman/log/bvlife ]

then

mkdir -p /backup/rman/log/bvlife

fi

{

rman target / <<EOF

backup incremental level 1 database;

sql 'alter system archive log current';

backup archivelog all not backed up 1 times;

report obsolete;

delete noprompt obsolete;

delete noprompt backup of archivelog until time='trunc(sysdate - 7)';

exit

EOF

}>$logfile

$ chmod +x /backup/rman/script/lv1\_rman\_bk\_bvlife.sh

$ crontab -e

0 23 \* \* 1-6 /backup/rman/script/lv1\_rman\_bk\_bvlife.sh

## Recover với RMAN

### Block recover

Khi datafile có block bị copprupt có thể recover datafile đó. Các bước thực hiện:

* Thực hiện block recover

Lỗi xuất hiện trong alertlog:

ORA-01578: ORACLE data block corrupted (file # 7, block # 3)

ORA-01110: data file 7: '/oracle/oradata/trgt/tools01.dbf'

ORA-01578: ORACLE data block corrupted (file # 2, block # 235)

ORA-01110: data file 2: '/oracle/oradata/trgt/undotbs01.dbf'

Thực hiện block recover:

Login với user oracle

$ rman target /

RMAN> BLOCKRECOVER

DATAFILE 7 BLOCK 3

DATAFILE 2 BLOCK 235;

### Recover datafile

#### Recover normal datafile

Khi datafile bị copprupt có thể recover datafile đó. Các bước thực hiện bao gồm:

* Offline datafile bị corrupt
* Restore & recover datafile
* Online datafile đã được recover

Error:

SQL> create table test (t\_id number) tablespace test;

create table test (t\_id number) tablespace test

\*

ERROR at line 1:

ORA-01658: unable to create INITIAL extent for segment in tablespace TEST

SQL> alter tablespace test offline;

alter tablespace test offline

\*

ERROR at line 1:

ORA-01122: database file 17 failed verification check

ORA-01110: data file 17: '/u02/bvldb/test.dbf'

ORA-01210: data file header is media corrupt

Offline datafile bị corrupt:

$ sqlplus /nolog

SQL> conn /as sysdba

SQL> alter database datafile 17 offline;

Database altered.

SQL> exit

Restore & recover datafile

$ rman target /

Recovery Manager: Release 10.2.0.5.0 - Production on Tue Mar 27 17:25:38 2012

Copyright (c) 1982, 2007, Oracle. All rights reserved.

connected to target database: BVLDB (DBID=1168308061)

RMAN> restore datafile 17;

Starting restore at 27-MAR-12

using channel ORA\_DISK\_1

creating datafile fno=17 name=/u02/bvldb/test.dbf

restore not done; all files readonly, offline, or already restored

Finished restore at 27-MAR-12

RMAN> recover datafile 17;

Starting recover at 27-MAR-12

using channel ORA\_DISK\_1

starting media recovery

media recovery complete, elapsed time: 00:00:01

Finished recover at 27-MAR-12

RMAN> exit

Recovery Manager complete.

$ sqlplus /nolog

SQL> conn / as sysdba

SQL> alter database datafile 17 online;

Database altered.

Test datafile

SQL> create table test (t\_id number) tablespace test;

Table created.

#### Recover system datafile

Các bước thực hiện

* Mount database
* Restore & recover system datafile
* Open database

Login với user oracle

$ sqlplus /nolog

SQL> conn / as sysdba

SQL> startup mount;

SQL> exit

$ rman target /

RMAN> restore datafile 1;

RMAN> recover datafile 1;

RMAN> exit

$sqlplus /nolog

SQL> conn /as sysdba

SQL> alter database open;

### Recover tablespace

Để khôi phục tablespace do lỗi của người dùng, cần thực hiện incompelete recovery. Các bước thực hiện bao gồm:

* Delete database
* Restore spfile
* Restore controlfile
* Restore & recover database về thời điểm trước khi có sự cố.

Lỗi do người dùng :

SQL> select tablespace\_name from dba\_tablespaces;

TABLESPACE\_NAME

------------------------------

SYSTEM

UNDOTBS1

SYSAUX

TEMP

USERS

EXAMPLE

CHUNGTU

KEHOACH

BBINDEX

BVINDX

BVLTK

GQQL

HETHONG

HOPDONG

QTNOPPHI

SANPHAM

TRUNGGIAN

TEST

SQL> !date

Tue Mar 27 18:04:21 TST 2012

SQL> drop tablespace test including contents;

Tablespace dropped.

Recover

Xóa database

Login với user oracle:

SQL> shutdown immediate;

Database closed.

Database dismounted.

ORACLE instance shut down.

Login với user grid :

$ export ORACLE\_SID=+ASM

$ asmcmd

ASMCMD> rm -fr bvldb

Thực hiện recover:

Login với user oracle thực hiện recover spfile

$ sqlplus /nolog

SQL> startup nomount

ORACLE instance started.

Total System Global Area 1610612736 bytes

Fixed Size 2068296 bytes

Variable Size 452985016 bytes

Database Buffers 1140850688 bytes

Redo Buffers 14708736 bytes

SQL> exit

$ rman target /

Recovery Manager: Release 10.2.0.5.0 - Production on Tue Mar 27 18:05:27 2012

Copyright (c) 1982, 2007, Oracle. All rights reserved.

connected to target database: bvldb (not mounted)

RMAN> restore spfile to '+SYSTEM/bvldb/spfilebvldb.ora' from '/u02/rman/bvldb\_19n6uk0g\_1\_1.bkp';

Starting restore at 27-MAR-12

using target database control file instead of recovery catalog

allocated channel: ORA\_DISK\_1

channel ORA\_DISK\_1: sid=155 devtype=DISK

channel ORA\_DISK\_1: autobackup found: /u02/rman/bvldb\_19n6uk0g\_1\_1.bkp

channel ORA\_DISK\_1: SPFILE restore from autobackup complete

Finished restore at 27-MAR-12

RMAN> exit

Recovery Manager complete.

Restore controlfile:

$ sqlplus /nolog

SQL> startup nomount force

ORACLE instance started.

Total System Global Area 1610612736 bytes

Fixed Size 2068296 bytes

Variable Size 452985016 bytes

Database Buffers 1140850688 bytes

Redo Buffers 14708736 bytes

SQL> exit

$ rman target /

Recovery Manager: Release 10.2.0.5.0 - Production on Tue Mar 27 18:06:52 2012

Copyright (c) 1982, 2007, Oracle. All rights reserved.

connected to target database: bvldb (not mounted)

RMAN> restore controlfile from '/u02/rman/bvldb\_19n6uk0g\_1\_1.bkp';

Starting restore at 27-MAR-12

using target database control file instead of recovery catalog

allocated channel: ORA\_DISK\_1

channel ORA\_DISK\_1: sid=155 devtype=DISK

channel ORA\_DISK\_1: restoring control file

channel ORA\_DISK\_1: restore complete, elapsed time: 00:00:07

output filename=+SYSTEM/bvldb/controlfile/control01.ctl

output filename=+SYSTEM/bvldb/controlfile/control02.ctl

Finished restore at 27-MAR-12

Restore & recover database :

RMAN> sql 'alter database mount';

sql statement: alter database mount

released channel: ORA\_DISK\_1

RMAN> run{

2> set until time "to\_date('20120327 180421','YYYYMMDD HH24MISS')";

3> restore database;

4> recover database;

5> }

executing command: SET until clause

Starting restore at 27-MAR-12

allocated channel: ORA\_DISK\_1

channel ORA\_DISK\_1: sid=155 devtype=DISK

channel ORA\_DISK\_1: starting datafile backupset restore

channel ORA\_DISK\_1: specifying datafile(s) to restore from backup set

restoring datafile 00001 to +SYSTEM/bvldb/datafile/system.284.779046569

restoring datafile 00002 to +SYSTEM/bvldb/datafile/undotbs1.299.779046569

restoring datafile 00003 to +SYSTEM/bvldb/datafile/sysaux.282.779046569

restoring datafile 00004 to +SYSTEM/bvldb/datafile/users.286.779046567

restoring datafile 00005 to +SYSTEM/bvldb/datafile/example.305.779046577

restoring datafile 00006 to +SYSTEM/bvldb/datafile/chungtu.283.779046569

restoring datafile 00007 to +SYSTEM/bvldb/datafile/kehoach.285.779046569

restoring datafile 00008 to +SYSTEM/bvldb/datafile/bbindex.300.779046575

restoring datafile 00009 to +SYSTEM/bvldb/datafile/bvindx.297.779046569

restoring datafile 00010 to +SYSTEM/bvldb/datafile/bvltk.306.779046577

restoring datafile 00011 to +SYSTEM/bvldb/datafile/gqql.301.779046575

restoring datafile 00012 to +SYSTEM/bvldb/datafile/hethong.302.779046575

restoring datafile 00013 to +SYSTEM/bvldb/datafile/hopdong.298.779046569

restoring datafile 00014 to +SYSTEM/bvldb/datafile/qtnopphi.307.779046577

restoring datafile 00015 to +SYSTEM/bvldb/datafile/sanpham.303.779046575

restoring datafile 00016 to +SYSTEM/bvldb/datafile/trunggian.304.779046577

restoring datafile 00017 to /u02/bvldb/test.dbf

channel ORA\_DISK\_1: reading from backup piece /u02/rman/bvldb\_18n6ujvn\_1\_1.bkp

channel ORA\_DISK\_1: restored backup piece 1

piece handle=/u02/rman/bvldb\_18n6ujvn\_1\_1.bkp tag=TAG20120327T175502

channel ORA\_DISK\_1: restore complete, elapsed time: 00:00:25

Finished restore at 27-MAR-12

Starting recover at 27-MAR-12

using channel ORA\_DISK\_1

starting media recovery

archive log filename=/u02/arch/1\_1\_779046646.dbf thread=1 sequence=1

archive log filename=/u02/arch/1\_2\_779046646.dbf thread=1 sequence=2

archive log filename=/u02/arch/1\_2\_779046646.dbf thread=1 sequence=3

RMAN-00571: ===========================================================

RMAN-00569: =============== ERROR MESSAGE STACK FOLLOWS ===============

RMAN-00571: ===========================================================

RMAN-03002: failure of recover command at 03/27/2012 18:11:42

RMAN-11003: failure during parse/execution of SQL statement: alter database recover logfile '/u02/arch/1\_2\_779046646.dbf'

ORA-00310: archived log contains sequence 2; sequence 3 required

ORA-00334: archived log: '/u02/arch/1\_2\_779046646.dbf'

RMAN> sql 'alter database open resetlogs';

sql statement: alter database open resetlogs

RMAN> exit

Recovery Manager complete.

Kiểm tra tablespace :

SQL> select tablespace\_name from dba\_tablespaces;

TABLESPACE\_NAME

------------------------------

SYSTEM

UNDOTBS1

SYSAUX

TEMP

USERS

EXAMPLE

CHUNGTU

KEHOACH

BBINDEX

BVINDX

BVLTK

GQQL

HETHONG

HOPDONG

QTNOPPHI

SANPHAM

TRUNGGIAN

TEST

18 rows selected.

### Recover full database

Để thực hiện recover toàn bộ database thực hiện các bước sau:

* Restore spfile
* Restore controlfile
* Restore & recover database
* Add database vào cluster

Login vào máy chủ với user oracle

Restore spfile:

$ sqlplus /nolog

SQL> startup nomount

SQL> exit

$ rman target /

RMAN> restore spfile to '+SYSTEM/bvldb/spfilebvldb.ora' from '/u02/rman/bvldb\_13n6uf8h\_1\_1.bkp';

Restore controlfile:

RMAN> restore controlfile from '/u02/rman/bvldb\_13n6uf8h\_1\_1.bkp';

Starting restore at 27-MAR-12

using channel ORA\_DISK\_1

channel ORA\_DISK\_1: restoring control file

channel ORA\_DISK\_1: restore complete, elapsed time: 00:00:07

output filename=+SYSTEM/bvldb/controlfile/control01.ctl

output filename=+SYSTEM/bvldb/controlfile/control02.ctl

Finished restore at 27-MAR-12

RMAN> sql 'alter database mount';

sql statement: alter database mount

released channel: ORA\_DISK\_1

Restore database

RMAN> restore database;

Starting restore at 27-MAR-12

allocated channel: ORA\_DISK\_1

channel ORA\_DISK\_1: sid=156 devtype=DISK

channel ORA\_DISK\_1: starting datafile backupset restore

channel ORA\_DISK\_1: specifying datafile(s) to restore from backup set

restoring datafile 00001 to +SYSTEM/bvldb/datafile/system.285.777218485

restoring datafile 00002 to +SYSTEM/bvldb/datafile/undotbs1.283.777218485

restoring datafile 00003 to +SYSTEM/bvldb/datafile/sysaux.284.777218485

restoring datafile 00004 to +SYSTEM/bvldb/datafile/users.286.777218485

restoring datafile 00005 to +SYSTEM/bvldb/datafile/example.282.777218485

restoring datafile 00006 to +SYSTEM/bvldb/datafile/chungtu.297.778619787

restoring datafile 00007 to +SYSTEM/bvldb/datafile/kehoach.298.778619787

restoring datafile 00008 to +SYSTEM/bvldb/datafile/bbindex.299.778619787

restoring datafile 00009 to +SYSTEM/bvldb/datafile/bvindx.300.778619787

restoring datafile 00010 to +SYSTEM/bvldb/datafile/bvltk.301.778619787

restoring datafile 00011 to +SYSTEM/bvldb/datafile/gqql.302.778619787

restoring datafile 00012 to +SYSTEM/bvldb/datafile/hethong.303.778619787

restoring datafile 00013 to +SYSTEM/bvldb/datafile/hopdong.304.778619787

restoring datafile 00014 to +SYSTEM/bvldb/datafile/qtnopphi.305.778619787

restoring datafile 00015 to +SYSTEM/bvldb/datafile/sanpham.306.778619787

restoring datafile 00016 to +SYSTEM/bvldb/datafile/trunggian.307.778619789

channel ORA\_DISK\_1: reading from backup piece /u02/rman/bvldb\_10n6uf29\_1\_1.bkp

channel ORA\_DISK\_1: restored backup piece 1

piece handle=/u02/rman/bvldb\_10n6uf29\_1\_1.bkp tag=TAG20120327T163105

channel ORA\_DISK\_1: restore complete, elapsed time: 00:00:35

Finished restore at 27-MAR-12

Recover database

RMAN> recover database;

Starting recover at 27-MAR-12

using channel ORA\_DISK\_1

channel ORA\_DISK\_1: starting incremental datafile backupset restore

channel ORA\_DISK\_1: specifying datafile(s) to restore from backup set

destination for restore of datafile 00001: +SYSTEM/bvldb/datafile/system.307.779042793

destination for restore of datafile 00002: +SYSTEM/bvldb/datafile/undotbs1.302.779042793

destination for restore of datafile 00003: +SYSTEM/bvldb/datafile/sysaux.305.779042793

destination for restore of datafile 00004: +SYSTEM/bvldb/datafile/users.280.779042793

destination for restore of datafile 00005: +SYSTEM/bvldb/datafile/example.282.779042803

destination for restore of datafile 00006: +SYSTEM/bvldb/datafile/chungtu.306.779042793

destination for restore of datafile 00007: +SYSTEM/bvldb/datafile/kehoach.281.779042793

destination for restore of datafile 00008: +SYSTEM/bvldb/datafile/bbindex.301.779042801

destination for restore of datafile 00009: +SYSTEM/bvldb/datafile/bvindx.304.779042793

destination for restore of datafile 00010: +SYSTEM/bvldb/datafile/bvltk.283.779042803

destination for restore of datafile 00011: +SYSTEM/bvldb/datafile/gqql.300.779042801

destination for restore of datafile 00012: +SYSTEM/bvldb/datafile/hethong.299.779042801

destination for restore of datafile 00013: +SYSTEM/bvldb/datafile/hopdong.303.779042793

destination for restore of datafile 00014: +SYSTEM/bvldb/datafile/qtnopphi.284.779042803

destination for restore of datafile 00015: +SYSTEM/bvldb/datafile/sanpham.298.779042801

destination for restore of datafile 00016: +SYSTEM/bvldb/datafile/trunggian.297.779042803

channel ORA\_DISK\_1: reading from backup piece /u02/rman/bvldb\_12n6uf74\_1\_1.bkp

channel ORA\_DISK\_1: restored backup piece 1

piece handle=/u02/rman/bvldb\_12n6uf74\_1\_1.bkp tag=TAG20120327T163340

channel ORA\_DISK\_1: restore complete, elapsed time: 00:00:01

starting media recovery

archive log filename=/u02/arch/1\_86\_777218900.dbf thread=1 sequence=86

archive log filename=/u02/arch/1\_87\_777218900.dbf thread=1 sequence=87

archive log filename=/u02/arch/1\_87\_777218900.dbf thread=1 sequence=88

RMAN-00571: ===========================================================

RMAN-00569: =============== ERROR MESSAGE STACK FOLLOWS ===============

RMAN-00571: ===========================================================

RMAN-03002: failure of recover command at 03/27/2012 16:47:20

RMAN-11003: failure during parse/execution of SQL statement: alter database recover logfile '/u02/arch/1\_87\_777218900.dbf'

ORA-00310: archived log contains sequence 87; sequence 88 required

ORA-00334: archived log: '/u02/arch/1\_87\_777218900.dbf'

RMAN> sql 'alter database open resetlogs';

sql statement: alter database open resetlogs

Add database vào cluster

Login với user oracle

$ srvctl add database -d bvldb -o $ORACLE\_HOME -y AUTOMATIC

$ srvctl add instance -d bvldb -i bvldb1 -n bvldb01

$ srvctl add instance -d bvldb -i bvldb2 -n bvldb02

## Backup & restore với datapump

### Chuẩn bị

Để thực hiện backup và restore với datapump cần tạo directory để lưu bản backup.

Login với user oracle vào bvldb01:

$ export ORACLE\_SID=bvldb1

$ sqlplus /nolog

SQL> conn /as sysdba

SQL> create directory backup\_pump as '/backup/pump';

SQL> grant read,write on backup\_pump to bv\_impexp;

### Backup

Để backup thực hiên export

Login với user oracle vào bvldb01:

$ expdp bv\_impexp/backup directory=backup\_pump dumpfile=bvxx.dmp logfile=exp\_bvxx.log schemas=bvxx

### Restore

Để recover thực hiện import.

Login với user oracle vào bvldb01:

$ impdp bv\_impexp/backup directory=backup\_pump dumpfile=bvxx.dmp logfile=imp\_bvxx.log schemas=bvxx