BACKUP’s

1. logical backup

2. physical backup

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1. logical backup:

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• Schema

• table

• tqblespace

#Tools used for these backup’s:

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Traditional Exp

or

datapump / expdp

datapump was interdicted from (10g)

#Refreshes:

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• Imp for exp

• Impdp for expdp

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2. physical backup:

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• C R D files backup

# Tools used for these backup’s:

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1. Conventional backup’s :

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• Cold / consistent offline backup

• hot / inconsistent online backup

( In hot backup db must enable with archive log mode.)

2. Rman backup’s :

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• Cold / consistant offline backup

• hot / inconsistant online backup

( in hot backup db must enable with archive log mode )

• Incremental backup’s

In incremental 2 types

1. differential backup

2. Cumulative backup

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# To know any backups are running r not :

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• select \* from dba\_datapump\_jobs;

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# LOGICAL BACKUP,s: (exp help=y )

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Traditional export: imp

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• it is a client side tool .

• There is no data security.

• It is a single stream of execution ( there is no parallism ) .

# consistent backup in traditional export:

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• consistent=y

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1. Table backup :export

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• exp username/password file=(give backup ing file name).dmp log=( give backuping file name).log table=username.tablename

• exp system/manager file=table\_t1.dmp log=table\_t1.log tables=u1.t1

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2. schema backup :export

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• exp username/password file=(schema name).dmp log=(schema name).log OWNER=(schema name)

• exp system/system file=u2.dmp log=u2.log OWNER=u2

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3. Tablespace backup:export

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• exp username/password file=tablespace\_tablespace name.dmp log=tablespace\_tablespacename.log TABLESPACES=tablespace name

• exp system/system file=tablespace\_palikila.dmp log=tablespace\_palikila.log TABLESPACES=PALIKILA

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4. full database backup:exp

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• nohup:to run backup in background.

• nohup exp system/system file=full.dmp log=full.log full=y &

To see backup

• jobs

• tail -f nohup.out

• ctrl + c

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# Datapump or expdp : ( expdp help=y )

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1. it is a server side tool ( directory )

2. There is a data protection.

3. We can use parallel.

4. There is a control over the job. (attach )

5. to take this backup we should create directory in os level and sql level.

# To resume the backup :

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• expdp system/system attach=job name

• it connect to Export prompt

1. stop\_job

2. Start\_job

• continue\_client ( the log file will display)

3. kill \_job

• if we kill the job we cannot resume it again.

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# Kill from os level : should not use this process

• Ps -ef|grep expdp

• Kill -9 id number

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# create a directory in os level and sql level.

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Os : /prod/hyd/backup(any location )

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Sql :

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create directory expdp\_mouli as ‘/prod/hyd/backup’;

• grant permission to system user on this directory

Grant read,write on directory expdp\_mouli to system;

# To check directory in sql :

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• Select \* from dba\_directories;

# nohup : to run backups in background.

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#To check jobs in datapump:from duplicate db

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• select \* from dba\_datapump\_jobs;

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1. table backup :expdp

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• nohup expdp system/system dumpfile=table\_t1.dmp logfile=table\_t1.log directory=expdp\_mouli tables=u1.t1 &

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2. schema backup :expdp

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• nohup expdp system/system dumpfile=schema\_u1\_%U.dmp logfile=schema\_u1.log schemas=u1 directory= expdp\_mouli parallel=2 &

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3. Full db backup:expdp

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1. if we start this backup at 7 am and it’s going. To end at 9 .

2. In between 7 to 9 any data updated .it will take that data also into backup.

• nohup expdp system/system directory=expdp\_mouli dumpfile=full\_db\_%U.dmp logfile=full\_db.log full=y size=50m parallel=2 &

• Based on the file size option it will create number of dumpfiles.

# consistent backup :

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• in full db backup.if we want only that time available data and .if any data update happen .if we don’t want that data we should take this backup.

Commands:

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• FLASHBACK\_SCN=

Select CURRENT\_SCN from v$database;

• FLASHBACK\_TIME= systimestamp

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# Physical backups:

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• C R D files backup

# Tools used for these backup’s:

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1. Conventional backup’s :

~~~~~~~~~~~~~~~~~

• Cold / consistent offline backup

• hot / inconsistent online backup

( In hot backup db must enable with archive log mode.)

2. Rman backup’s :

~~~~~~~~~~~~

• Cold / consistant offline backup

• hot / inconsistant online backup

( in hot backup db must enable with archive log mode )

• Incremental backup’s :

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In incremental 2 types :

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1. level ‘0’

2. level ‘1’

Again: Level ‘1’ divided into 2 types:

1 . differential backup

2 . Cumulative backup

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# conventional cold backup :

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1. check C R D files (open)

2. Shut down the database

3. Create backup directory ( os level )

4. Copy C R D files to created backup directory

sql> !cp datafiles /datafiles/datafiles/ directory path.(/prod/hyd/)

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# conventional Hot backup :

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1. db must be enable with archivelog mode

2. Check the max count of archives.

• select max (sequence#) from v$archived\_log;

3. Put the database in begin backup mode.( Check the backup mode status )(activate)

4. Take backup of only datafiles (! Cp /datafile/directory path)

5. End the begin backup mode

6. Check the max count of archives

7. Copy archives between step 2 and step 7 to backup location

# to know archives count during this :

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• select name from v$archived\_log;

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# RMAN Backups:

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• Rman takes only used blocks backup.

• by default rman backups information is stored in controlfile for 7 day.

• to store Rman backups information permanently we have to create recovery catalog.

Connect to Rman : Rman target /

When in sql : ! Rman target /

# TO specify Rman backup location:

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• Create wanted backup location in OS LEVEL.

Mkdir -p /prod/hyd/backup

• connect to RMAN

• show all ;

RMAN>configure channel device type disk format ‘/prod/hyd/backup/%d\_%s.rman’;

• %d= database name

• %s= sequence name

• %c= multiple backup copies

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# To check backups in Rman:

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• list backup;

# To check deleted backups in rman:

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• crosscheck backup;

# To delete expired backup in Rman:

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• delete expired backup; yes/ no

OR

• delete noprompt expired backup;

# To delete normal backup in Rman:

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• delete backup ; yes/no

OR

• delete noprompt backup;

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# Rman cold backup:

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1. shut down the database.

2. Put the db in mount state.

3. Connect to Rman.

RMAN > backup database;(tag=coldbkp)

RMAN > backup current controlfile;(tag)

• tag is for identification.

4. open the database (startup)

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# Rman hot backup:

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1. db must be enabled with archive log mode.

2. When db is in online mode we can take Rman hot backup.

3. Connect to RMAN

RMAN>backup database;(tag= hotbkp)

RMAN>backup archivelog all;(tag=archivebkp)

RMAN>backup current controlfile;(tag=ctlbkp)

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# RMAN incremental level ‘0’ backup:

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• it’s a full db backup.

RMAN> backup incremental level 0 database;

• before taking level ‘1’ backup we have to take level ‘0’ backup .

• Data updating during level 0 will backed up in level 1 backup.

# RMAN incremental level ‘1’ /differential BKP:

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RMAN> backup incremental level 1 database;

• it takes both level 0,1 backup’s

• And takes less disk space and more recovery time.

• only update blocks data backup in this.

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# RMAN incremental level ‘1’ cumulative BKP:

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RMAN> backup incremental level 1 cumulative database;

• it takes only level 0 backup .

• And more disk space and takes less recovery time.

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# TO Take image copy backup:fullfile size BKP:

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( as copy )

• backup as copy datafile 1;

• backup as copy database;

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BACKUPS:

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• backup archivelog all;

• backup database;

• backup datafile 1;

• backup datafile 2;

• Backup current controlfile;

# for standby controlfile backup:

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• backup current controlfile for standby;