PROJECT 7

NEWAY.IT.SOLUTIONS

AFFORDABLE ORACLE DBA HANDS-ON TRAINING

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Make sure you take a backup after each question and each recovery.

Some of these questions are theory and others are practical. I need you to do a research on the once you do not understand. You need to know all of these questions to be successful as a DBA. Remember our focus is hands on. Make sure you give me all the steps in involved in answering the questions. **REMEMBER TO SPOOL YOUR RESULTS OR COPY AND PASTE THE RESULTS IN A FILE AND THEN EMAIL THE ANSWERS TO ME UPON COMPLETION.**

1.) Backup parameters

a.) Set your rman policy to hold 5 backups on disk at any point in time.

b.) Display the command to allow rman to retain backup for 3days

c.) Make sure that all database backup are optimized.

d.) Any time a backup runs, make sure your control file and spfile are automatically backed up.

e.) Configure your control file backup to go to this specific location c:\oracle\backup\backdatafile\ on Windows and

/home/oracle/backup/backcontrolfile on UNIX. Note that you have to create the folder if it does not exist.

f.) Increase your backup parallelism to 3

g.) Configure your backup to always compress the files whenever you run any backup.

h.) Set your backups to always go to this location: c:\oracle\backup\backdatafile\ on Windows or

/home/oracle/backup/backdatafile/ in unix. Note that you must create the folder if it does not exist. Remember to set 3 channels since you have parallelism

i.) Issue a command to display all the parameters you just set.

j.) Take a successful backup of your database to prove that all you did above worked.

2.) Database backup

a.) Issue a simple command to backup your database.

b.) Issue another simple command to backup your database and archive log files in the same command

c.) Issue a single command to back up your database, archive logs and delete your archive logs when they have been successfully backed up.

d.) Issue a command to backup up just the archive log file

e.) Issue a command to backup up just the control file

f.) Issue a command to backup the users and system tablespaces

g.) Issue a command to backup just the data files that belong to the users and system tablespaces.

h.) Issue a command to show all the backups on disk

i.) Issue a command to show all the expired backups

j.) Issue a command to show all the expired archive logs

k.) Issue a command to delete all expired backup

l.) Issue a command to delete all expired archive logs.

m.) Issue a command to show me all the backups RMAN has record of are on disks.

n.) Issue a command to show all obsolete archive log

o.) Issue a command to deleted all the obsolete backup

p.) Issue a command to back up your database using image copy.

q.) Issue a command to show all the obsolete backups.

r.) Issue a command to back up your control file to trace;

s.) Tell me 3 place you can find your DBID

t.) Issue a command to show me whether you have good backups

u.) Issue a single command to back up your database and compress the back up at the same time.

v.) Issue a command to show all your backup summary

w.) Issue a command to show all your control file backups

x.) Issue a command to show me all the data files that have not been backed up.

y.) Issue a command to back up the database with level 0 backup

z.) Issue a command to back up the database with level 1 incremental backup.

aa.) Issue a command to back up your database using cumulative incremental backup;

bb.) Issue a command to back up your database using differential incremental backup;

cc.) Issue a command to back up your database by manually allocating 2 channels. Let the backup go to /home/oracle/backup8. (Create the directory if it does not exist).

dd.) Your RMAN parameter is set to backup set by default. Issue a single script to an image copy backup of your database. Make sure you allocate 3 channels and set the backup location to /home/oracle/backup9.

(Create the directories if they do not exist.)

3.) Control File and SPFILE Recovery

A.) Add a control file to your database.

i.) Make sure you have backed up your control file and spfile using rman for this session

ii.) If your database has 2 control files add 1 more control file to your database.

iii.) Start up your database and issue a command to show me the 3 from v$ controlfile.

B.) Restore Control file using existing copies

i.) Simulate the loss of your control file by renaming one of your control files.

NOTE To rename a file in windows, the database must either be shutdown or the databaseservice turned off.

ii.) Startup your database and you should get an error.

iii.) Fix the control file error by using a copy of an existing good control file. At this time do not use control file backup to fix the error.

C.) Restore control file and using backup.

i.) Simulate the loss of your control file by rename your 3 control files.

ii.) Start your database and it should start but not mount.
iii.) Recover the control files from backups using rman.

D.) Restore Spfile from backup.

i.) Simulate the loss of your spfile by renaming the file.
Note. You must rename all of your parameter files such as spfileorcl.ora, initorcl.ora and spfile.ora if your database is orcl and if they exist.

ii.) Restart your database and you should get an error. iii.) Recover your spfile from backup by using rman.

E.) Recreate your Control file.

i.) Backup your control file to trace

ii.) Delete all your control files from the OS.

iii.) Recreate your control file by using the script generated by backing up your control file to trace

5.) Full Recovery Data files

A.) Recovery from the loss of datafile

i.) Make sure you have backed up your database using rman before attempting this section.

ii.) Simulate the loss of your data file by rename all your data file. NOTE To rename a file in windows, the database must either be shutdown or the database service turned off.

iii.) Restart your database. It should start mount and not open. iv.) Recover all the database files from backup by using rman.

B.)Recovery from the loss of your spfile, controlfile and datafile

i.) Take a full backup of your database to include controlfile and spfile.

ii.) Delete all your datafiles, controlfiles and spfile

iii.) Using rman recover all the files.

iv.) Open your database to make sure that the recovery was successful

6.) Incomplete recovery

A.) Loss of Redo Log Files

i.) Simulate the loss of your redo log files by renaming or deleting all of them.

ii.) Restart your database and you get an error

iii.) Recover all your redo logs files back by perform an incomplete recovery

B.) Loss of important data

i.) Create a tablespace called testdel

ii.) Create another tablespace called testdel2

iii.) Take a full backup after the tablespaces creation.

iv.) Wait for 15 minutes after the backup then drop the 2 tablespaces. Make sure you note the time before dropping the 2 tablespaces.

v.) Perform an incomplete recovery using until time to recover the 2 tablespaces.

7.) **Flashback**

a.) Flashback database

i.) Configure your database to use flashback database.

ii.) Make sure the flashback retention is set to 3 days.

iii.) Remember to set up your flash recovery area and allocate the right space.

iv.) Create 2 tables called flashtest and flashtest2 on scott schema. Let scott.emp be the source of you table data. Wait for at least 20minutes before you do the next step

v.) drop the 2 tables

vi.) Use flashback database to recover them. Do not use rman incomplete recovery or flashback drop.

vii.) Issue a query to confirm the recovery of the tables

b.) Flashback drop

i.) Drop all the 7 tables that belong to user hr.

ii.) Recover all of them using flashback drop from the recyclebin

iii.) Create another table called scott.test. Make scott.emp the source of the data.

iv.) Drop the new table you just created scott.test.

v.) Recover it from the recyclebin and rename it to test7.

c.) Flashback table

i.) Enable row movement for all Scott tables.

ii.) Set your undo retention to 2 days

iii.) Issue a select * from scott.emp to check the table records and count.

iv.) Delete the 4 salesman from scott.emp table. Make sure you issue a commit.

v.) Use flashback table to recover them.

vi.) Issue select * from scott.emp to verify that the salesman are back to the scott.emp table.

8.) Datapump Export and Import

A.) Schema Export and Import 1

i.) Create a user call exp_user with password pump. Grant the user the necessary privilege to connect to the database and to take full database export. Do not grant the user dba or sysdba priviledge.

ii.) Create a datapump directory called exp_dir and grant exp_user privilege on that directory.

iii.) Connect as user exp_user and take a full export of your database using datapump.

Call the dumpfile full.dmp iv.) Drop the Hr and Scott users in your database.

v.) From your export dumpfile import back the 2 users and their objects.

vi.) Issue a select statement on hr.employees and scott.emp to make sure the 2 tables were recovered

B.)Schema Export and Import 2

i.) Create a tablespace called Johntbs

ii.) Create a user called John and make Johntbs the default tablespace

iii.) Grant John the necessary privilege to take a schema export without granting him

DBA or SYSDBA privileges

iv.) Create a directory called John_dir

v.) As user john take a hr schema export. Make sure you user John_dir directory and call the dump file johndata.dmp.

vi.) Import all of hr data in the johndata.dmp into John' schema.

vii.) Crosscheck to make sure that all HR schema data is identical to john's schemas data.

viii.) Crosscheck to make sure that all John's schema data are all in Johntbs tablespaces.

C.) Table Export and Import

i.) Create another user exp2_user with password pump2. Grant the necessary privilege to the user to do a table export without granting dba or sysdba privileges.

ii.) Create another datapump directory called exp2_dir and grant the exp2_user privilege on that directory.

iii.) Connect as user exp2_user and take another export of just the employees and departments tables that belong to the hr schema. Call the dumpfile schemas.dmp and use the exp2_dir directory.

iv.) Drop the employees and department tables that belong to hr user.

v.) Recover the 2 tables by importing them from the export.

D.) Full Database Export and Import

i.) In the orcl database create 5 tablespaces called (testtbs1-5).

ii.) Create a user called Thomas with password tom

iii.) Create 5 tables called (testtab1-5) with table testtab1 in tablespace testtbs1 and testtab2 in testtbs2 e.t.c. The tables should be owned by the Thomas. Let the structure and data of the tables be taking from the scott.emp table.

iv.) Issue a select * from each of the 5 tables and make sure the data and structure are similar to the scott.emp table.

v.) Also issue a select table_name, tablespace_name from dba_tables where owner ='THOMAS'; Check and make sure all the tables are in the right tablespaces.

vi.) Connect as exp_user and take a full database export call the dumpfile fulldb.dmp

vii.) Delete your orcl database from dbca

viii.) Create a new database called orcl9 and DO NOT choose the sample schema option.

ix.) Perform a full database import using the fulldb.dmp export file. Note that the export will fail if the tablesapce datafile path is wrong. So fix that or create the tablespace manually. Check the export logfile to see the tablespace name.

x.) Connect to the orcl9 database and issues a select table_name, tablespace_name from dba_tables where owner='Thomas' to show all the 5 tables you created in the last database before you drop it. Make sure all the tables are owned by user Thomas and are in the right tablespaces as it was in the previous database.

9.) Password File

a.) No one knows the password of the Sys and System users. Recreate the password file and set the sys new password to newsyspwd.

b.)Then issue this command to connect to the database with the new sys password.
SQL> connect sys/newsyspwd@orcl as sysdba.

10.) SQL*LOADER

A.) Create a table called emp5 under scott's schema. Make sure the data and structure is gotten from scott.emp table. Note the number of rows and colum in the emp5 table.

B.)Data file

Create a file on your OS and put the data below in it. Just copy and paste it.

Name the file expdat.dat

360,Janes,ST_CLERK,121,17-MAY-2001,3000,0,20,

361,Markr,SA_REP,145,17-MAY-2001,8000,.1,30,

362,Brender,AD_ASST,200,17-MAY-2001,5500,0,10,

363,Alex,AC_MGR,145,17-MAY-2001,9000,.15,20,

401,Cromwell,HR_REP,203,17-MAY-2001,7000,0,30,

402,Applegate,IT_PROG,103,17-MAY-2001,9000,.2,20,

403,Cousins,AD_VP,100,17-MAY-2001,27000,.3,30,

404,John,AC_ACCOUNT,205,17-MAY-2001,5000,0,10,

405,Johns,AC_ACCOUNT,255,17-feb-2001,5500,0,10,

C.) Control file

Create another file on your OS and put the following in it. Just copy and paste it. Call the filename control.ctl Note that the infile, badfile, discardfile should have the path to your file on your OS.

LOAD DATA

INFILE '/home/oracle/expdat.dat'

BADFILE '/home/oracle/expdat.bad'

DISCARDFILE '/home/oracle/expdat.dsc'

APPEND

INTO TABLE scott.emp5

Fields terminated by ","

(empno,ename,job,mgr,hiredate,sal,comm,deptno)

C.) Create a table called emp5. Get the structure of the table from emp table of the scott schema.

D.) Issue a select * from scott.emp5 and note the row count.

E.) With the copy of the sql loader data file and controlfile you created above, load the 9 records into the emp5 tables.

F.) Check the emp5 table to make sure that the 9 rows were added to the table.

G.) It they do not exist or if some row are missing, check the sql loader logfile for the reasons and fix it.

ALL PROJECTS ANSWERS SHOULD BE SENT TO:

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