1. Oracle Data Pump: import, export data

Oracle Data Pump technology enables very high-speed movement of data and metadata from one database to another. Oracle Data Pump is available only on Oracle Database 10g release 1 (10.1) and later.

1. **Example 1:**

You have already connect to a user (ex: week6) of a pluggable database (week6pdb).

Now you connect to system of this pdb and create a user, a directory:

connect system/password@localhost/week6pdb

create user helen identified by userpass;

CREATE OR REPLACE DIRECTORY test\_dir AS 'C:\Oracle\dir';

**Generate the Export Dump File and Import data**

--Start **command line window** (cmd):

expdp system/password@localhost/week6pdb schemas=week6 directory=test\_dir dumpfile=week6.dmp

C:\Users\ASUS>expdp system/18012000 schemas=system directory=test\_dir dumpfile=week6.dmp

--Import data:

impdp system/password@localhost/week6pdb directory=test\_dir dumpfile=week6.dmp remap\_schema=week6:helen

**Select the data:**

--connect to helen

CONNECT helen/userpass@localhost/week6pdb

Select \* from TEST;

1. **Example 2:**

**PREPARE data**

--create a pluggable database

CREATE PLUGGABLE DATABASE THUCHANH ADMIN USER th IDENTIFIED BY userpass ROLES=(DBA)

FILE\_NAME\_CONVERT=('PDBSEED','THUCHANH')

DEFAULT TABLESPACE TH\_TBS DATAFILE **'C:\Oracle\oradata\ORCL\**THUCHANH\th1.dbf' SIZE 1M;

Before run the command, make sure this folder exist.

ALTER PLUGGABLE DATABASE THUCHANH OPEN;

--CONNECT TO the PDB: THUCHANH

CONNECT SYS/userpass@localhost/thuchanh AS SYSDBA

CREATE USER helen identified by userpass quota 5M on TH\_TBS;

CREATE USER john identified by userpass quota 7M on TH\_TBS;

GRANT CREATE SESSION, CREATE TABLE TO helen, john;

Before run the command, make sure this folder exist.

--create directory

CREATE OR REPLACE DIRECTORY test\_dir AS 'C:\Oracle\dir';

--connect to helen

CONNECT helen/userpass@localhost/thuchanh

CREATE TABLE EMPLOYEE (ID NUMBER, NAME VARCHAR2(50));

INSERT INTO EMPLOYEE VALUES (1, 'Micheal');

INSERT INTO EMPLOYEE VALUES (2, 'Joana');

COMMIT;

**Generate the Export Dump File**

--Start command line window:

expdp system/password@localhost/thuchanh schemas=helen directory=test\_dir dumpfile=helen.dmp

--import data

impdp system/password@localhost/thuchanh directory=test\_dir dumpfile=helen.dmp remap\_schema=helen:john

**Check the data**

--connect to john

CONNECT john/userpass@localhost/thuchanh

Select \* from employee;

**Drop the pluggable database**

ALTER PLUGGABLE DATABASE THUCHANH CLOSE;

drop pluggable database thuchanh including datafiles;

1. Database Backup and Recovery

RMAN enables you to back up one or more PDBs in a CDB using the BACKUP command.

**--1. Shutdown database**

rman target /

RMAN> shutdown immediate;

**--2. Startup database in mount mode**

RMAN> startup mount;

**--3. Execute backup database command.**

--The following example backs up the PDBs sales and hr:

BACKUP PLUGGABLE DATABASE sales, hr;

**--4. Check backup taken successfully.**

RMAN> list backup;

**--5. Start database open.**

RMAN> startup;

**To restore and recover the entire database:**

rman target /

SHUTDOWN IMMEDIATE;

STARTUP MOUNT;

ALTER PLUGGABLE DATABASE pdb1, pdb2 CLOSE;

RESTORE PLUGGABLE DATABASE pdb1, pdb2;

RECOVER PLUGGABLE DATABASE pdb1, pdb2;

ALTER PLUGGABLE DATABASE pdb1, pdb2 OPEN;