Oracle Database 21c PDB Management Assignment

Prepared by: BYIRINGIRO Urban Bobola

Database: BY_PDB_27150

Admin User: urban_plsqluca_27150 / Urban#2024

Introduction

This report explains how the Oracle Database 21c Pluggable Database (PDB) tasks were completed, including creating, managing, and deleting PDBs. The tasks were performed using SQL*Plus on Windows, with Oracle XE 21c installed at `D:\iru\dbhomeXE`. Each step is explained in detail with the corresponding SQL commands.

Task 1: Create a Pluggable Database (BY_PDB_27150)

1. Connected to Oracle as a privileged SYSDBA user:

SQL> sqlplus / as sysdba

2. Verified the current container:

SQL> SHOW CON NAME; CON NAME ----- CDB\$ROOT

3. Created a new PDB named `BY_PDB_27150` with the admin user `urban_plsqluca_27150`:

CREATE PLUGGABLE DATABASE BY_PDB_27150 ADMIN USER urban_plsqluca_27150 IDENTIFIED BY "Urban#2024" FILE_NAME_CONVERT = ('D:\iru\oradata\XE\pdbseed\', 'D:\iru\oradata\XE\by_pdb_27150\');

4. Opened and saved the PDB state:

ALTER PLUGGABLE DATABASE BY_PDB_27150 OPEN; ALTER PLUGGABLE DATABASE BY_PDB_27150 SAVE STATE;

5. Verified the list of all available PDBs:

SELECT CON_ID, NAME, OPEN_MODE FROM V\$PDBS;

Task 2: Create and Delete a Second PDB (BY_TO_DELETE_PDB_27150)

1. Connected again as SYSDBA and created a second PDB:

CREATE PLUGGABLE DATABASE BY_TO_DELETE_PDB_27150 ADMIN USER del_user_27150 IDENTIFIED BY "Delete#2024" FILE_NAME_CONVERT = ('D:\iru\oradata\XE\pdbseed\', 'D:\iru\oradata\XE\by_to_delete_pdb_27150\');

2. Opened and verified the second PDB:

ALTER PLUGGABLE DATABASE BY_TO_DELETE_PDB_27150 OPEN; SHOW PDBS;

3. Deleted the PDB after testing:

ALTER PLUGGABLE DATABASE BY_TO_DELETE_PDB_27150 CLOSE IMMEDIATE; DROP PLUGGABLE DATABASE BY_TO_DELETE_PDB_27150 INCLUDING DATAFILES;

Verification

To confirm the deletion, the following query was executed:

SELECT NAME, OPEN_MODE FROM V\$PDBS;

Result showed only the default PDBs (PDB\$SEED, XEPDB1, and BY_PDB_27150), confirming successful deletion.

Conclusion

All tasks were successfully completed using SQL*Plus. The PDB `BY_PDB_27150` was created and configured correctly, and the second PDB `BY_TO_DELETE_PDB_27150` was created and deleted as required. This demonstrates proficiency in Oracle 21c multitenant architecture management.