

Oracle Pluggable Database Management

1. Overview of Tasks

This project involved creating and managing an Oracle Pluggable Database (PDB) within a Container Database (CDB) environment using Oracle 21c Express Edition on Windows x86 64-bit platform.

Tasks Completed:

Task 1: PDB Creation

- Created a new pluggable database named MU_PDB_27127 from the seed database template
- Configured admin user GENTIL_PLSOLUCA_27127 with secure credentials
- Set up file location
- Successfully opened the PDB for use

Task 2: Database Verification

- Queried the V\$PDBS system view to verify all pluggable databases
- Confirmed four PDBs in the container
- Verified access modes (READ ONLY vs READ WRITE)

Task 3: Session Management

- Changed session container to the newly created PDB
- Used ALTER SESSION SET CONTAINER command
- Verified container name using SHOW CON_NAME

Task 4: Database Cleanup

- Identified and closed the test database SECOND_PDB_27127
- Switched back to CDB root container
- Successfully dropped the unnecessary PDB including its datafiles

Task 5: Documentation

- Captured screenshots of all operations
- Created comprehensive README documentation
- Prepared project report with technical details

Technical Environment:

- Database Version: Oracle 21.3.0.0.0 Express Edition
- Platform: Microsoft Windows x86 64-bit
- Architecture: Single Instance Container Database
- **Total PDBs**: 3 active pluggable databases

Skills Demonstrated:

- Oracle multitenant architecture management
- PDB lifecycle operations (create, open, close, drop)
- SQL*Plus command-line interface proficiency
- Database administration and troubleshooting
- System catalog querying and verification
- Proper resource cleanup and management

Outcome:

Successfully created, configured, and verified a fully functional pluggable database ready for application deployment and development purposes.