

# **Institute of Technology Tralee**

Institiúid Teicneolaíochta Trá Lí

# **Database Concepts**

Lab 05 – Oracle SQL Developer

# In this lab you will learn about:

• Oracle SQL Developer

#### **Before You Start:**

During this lab, you will work the Oracle database **DVDSYS** which you created in your last session.

Quickly logon to SQL\*Plus and check that the tables defined in the DVDSYS schema exist in your tablespace. If not, execute the script *DVDSYS.sql* to crete them.

## What is Oracle SQL Developer?

Oracle SQL Developer is a **free** graphical tool for database development. With SQL Developer, you can:

- Browse database objects (tables, queries, views, etc)
- Run SQL statements and SQL scripts
- Edit and debug PL/SQL statements (advanced database programming)

Below is a summary of the capabilities of SQL Developer. We will use those highlighted in red.

- 1. Create Connections
- 2. Browse Objects
- 3. Create Objects
- 4. Modify Objects
- 5. Query and Update Data
- 6. Export Data and DDL and Import Data
- 7. Schema Copy and Compare
- 8. Process Commands
- 9. Edit PL/SQL
- 10. Run and Debug PL/SQL
- 11. Run and Create Reports
- 12. PL/SQL Unit Testing
- 13. Data Modeler Viewer
- 14. Migrate from Third Party Databases
- 15. Version Files
- 16. Review the Robust IDE

For more information on SQL Developer, visit:

http://www.oracle.com/technetwork/developer-tools/sql-developer/what-is-sqldev-093866.html

Oracle provide an on-line tutorial which can be found at:

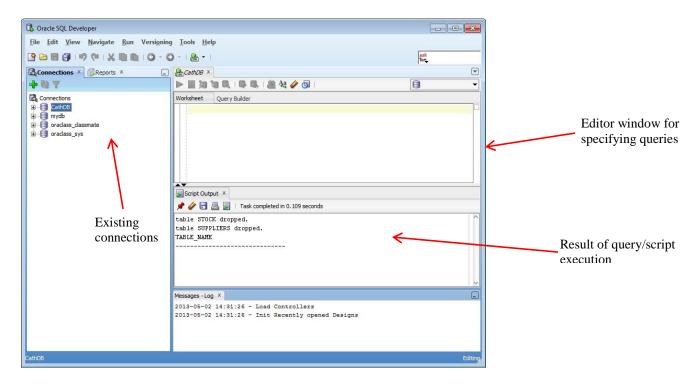
http://st-curriculum.oracle.com/tutorial/SQLDeveloper/index.htm

# Connecting to a Database

### Open Sqldeveloper.

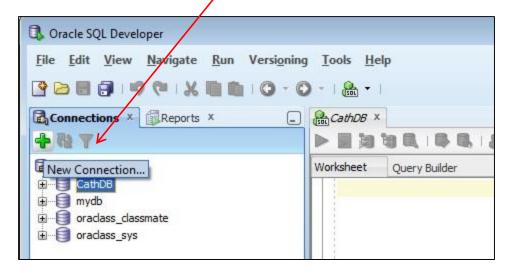


### The following screen is displayed:



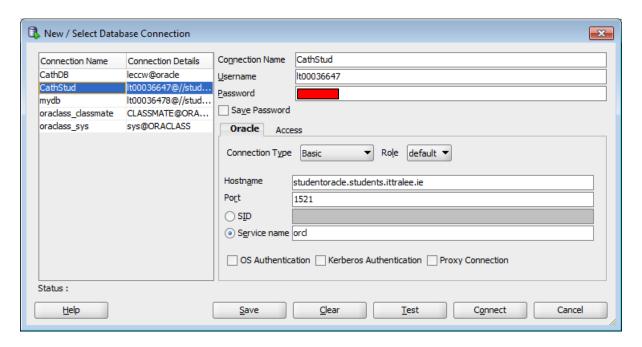
#### Create a new connection

Click on the 'add connection' icon.



Next, enter your username, password, Hostname and Service name as shown below:

The hostname is: studentoracle.students.ittralee.ie



Click 'Test' to see if the connection can be made.

If the test is successful, click 'Connect'.

### Open an existing connection

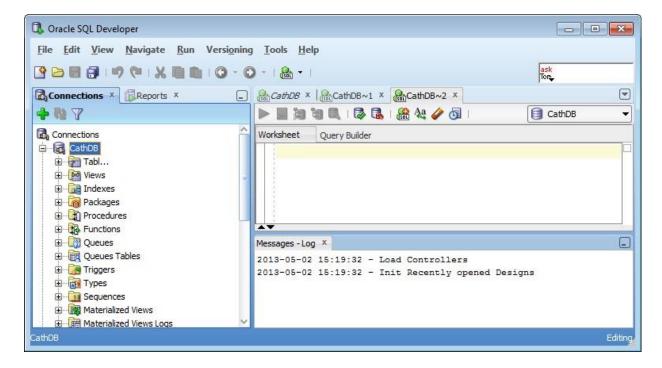
Double click on the connection you wish to open.

The following is displayed:



Enter the password you entered when you created the connection.

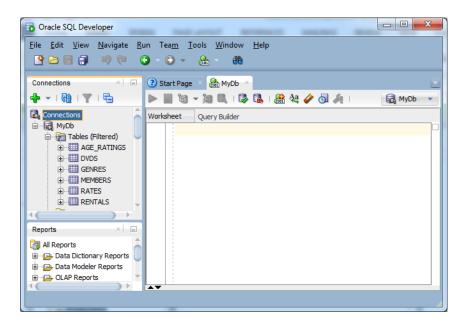
If successful, the following screen is presented:



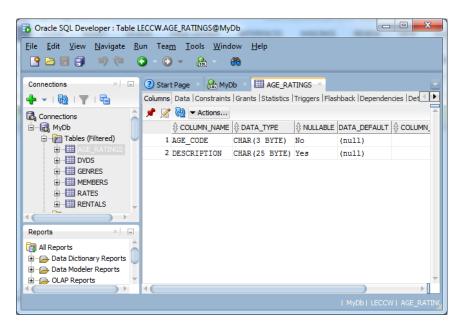
#### Browse Objects

#### Expand the *Tables* tab

You will see a list of tables which exist in your tablespace.



Expand the Age\_Ratings table and notice that the window on the right hand side (RHS) changes:



Select the *Columns*, *Data*, *Constraints* tabs and see the information presented.

#### The Worksheet

Execute queries or scripts and see the results and messages instantaneously. Enter some simple queries and execute to see the results.