

This document is a guide to how you can:

- How to create a connection to your Oracle schema (within DIT)
- Some guidance on how to set up your home machine to use Oracle

Connecting to Oracle

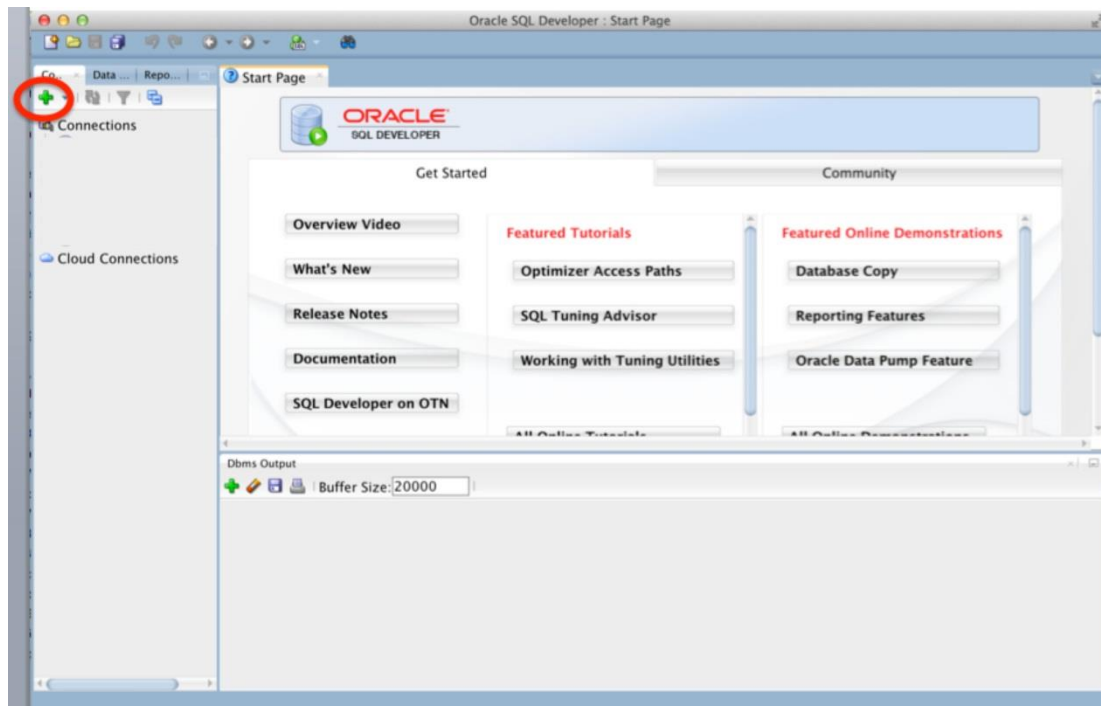
1. Open SQL Developer

SQL Developer is the main tool to access the database. SQL Developer is installed on the lab images. Look for the following icon on the desktop:



If you can't locate the icon, access search for programs via the Start button and search for SQLDeveloper.

When you have opened SQL Developer you will get presented with a screen like the following.



2. Connect to the Database

At this point you are not connected to the database.

To connect to your schema in the database you **must create a Connection**.

Click on the Green Plus icon above the connection pane (indicated by the red circle in image above).

When you click on this icon the **New/Select Connection window** will open. (Alternatively Choose File->New and click OK on the dialog that opens).

You must now create a connection to the database. You can have multiple connections to the database server. For each connection you must specify certain information:

- A connection name (this is the name you decide to call it)
- A username (usually the schema name – Oracle account)
- A password (authenticated by the database to allow entry)
- A host name (i.e. The name of the server)
- A port id (the port on which the server is listening for connections)
- A Service Name or SID, to identify the instance to which you are connecting.

The screenshot shows the 'New / Select Database Connection' dialog box. It has a list on the left for 'Connection Name' and 'Connection Description'. The main form includes fields for 'Connection Name', 'Username', and 'Password'. There is a 'Save Password' checkbox and a 'Connection Color' button. Under the 'Oracle' section, 'Connection Type' is set to 'Basic' and 'Role' is 'default'. The 'Hostname' field contains 'redwood.ict.ad.dit.ie' and the 'Port' is '1521'. The 'Service name' radio button is selected, with the value 'pdb12c.ict.ad.dit.ie' entered. There are also checkboxes for 'OS Authentication', 'Kerberos Authentication', and 'Proxy Connection'. At the bottom, there is a 'Status' label and buttons for 'Help', 'Save', 'Clear', 'Test', 'Connect', and 'Cancel'.

- **Connection Name** : you can enter anything you want here as it is just a label that will be displayed in your list of connections.
- **Username** : enter your **Oracle username** here
- **Password** : enter your **Oracle password** here. This is case sensitive.
- **Save Password check box** : If you check this to save your password it will save your password but as the lab machines are cleared down when you leave your will have to create your connection again each time you log into a machine.
- **Hostname** : enter **redwood.ict.ad.dit.ie**
 - As we sometimes have DNS issues the IP address of the server can be entered 147.252.234.49 instead if you have difficulties connecting
- **Port** : enter 1521
- **SID** : this should be disabled, if it is not it can be disabled clearing the value (if any) in the box and by clicking on the Service Name button.
- **Service Name** : this should be enabled and set to **pdb12c.ict.ad.dit.ie**

When you have entered all of the above information you can click on the Test button. You should get a message displayed (above the Help button) saying Success.

If you do not get this message or an error message displayed then you may have entered some of the details incorrectly or you may not be connected to the

network.

Some common errors and their solutions:

Status : Failure -Test failed: ORA-01017: invalid username/password; logon denied

- Reenter your username and password – pay attention to the case

Status : Failure -Test failed: Listener refused the connection with the following error:ORA-12514, TNS:listener does not c.

- You have entered an incorrect name in the Service Name box

Status : Failure -Test failed: IO Error: Unknown host specified

- Either you have entered an incorrect name in the Hostname box (in particular check if you have a space just after the name of the server) or you do not have a connection to the DIT network

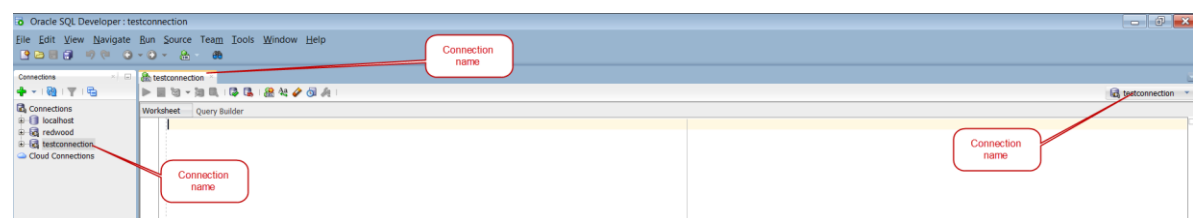
3. Open Your Connection

After you have entered all the connection details correctly and verified them by using the Test button, you can click on the **Connect** button to connect to the database.

Once you have successfully created the connection, it will appear in the list on the left-hand side of the screen.

Either **double-click your connection** in the connection list or **click on the + sign beside it**.

You will see an expanded list of the objects included in your connection and the name of the schema to which you are connected will be shown in a number of locations:



4. SQL Worksheet

The right hand window has two tabs which will allow you to enter SQL commands and execute them against a schema – Worksheet and Query Builder.

At this time you will be working with the Worksheet so make sure you type any commands into this window.

5. Join Oracle

Note: you may already have an Oracle account if you previously downloaded software so you will be able to use that to access livesql

Go to <https://livesql.oracle.com/apex/livesql/file/index.html>

Create a free account – this will allow you access to online Oracle and will allow you access to the oracle downloads and tutorials