

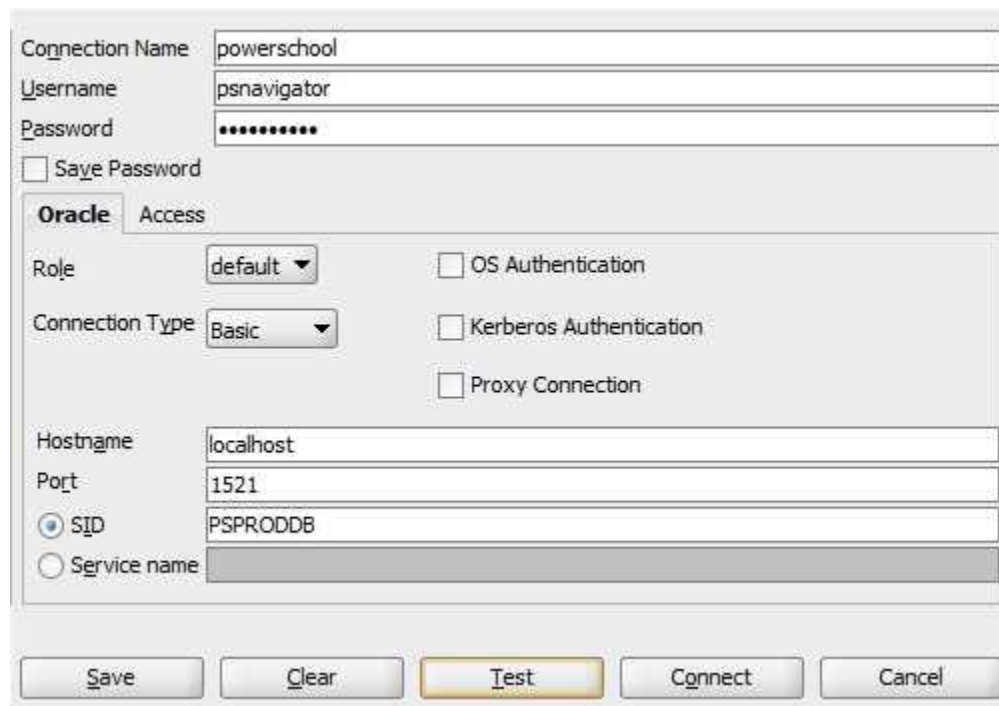
Using Oracle SQL Developer

Oracle SQL Developer is a [free download](#) from Oracle, which is the company that makes the database part of PowerSchool. The download site has installation information - the following covers how to set up the program to work with a PowerSchool database. The screen shots are based on a Windows machine and the commands mentioned may vary if you're using a Mac. Also, if you are hosted by Pearson, check with them to see if you are able to use this tool based on your setup.

The first thing you need to do is create a connection to your database. The first time you start the program it may prompt you to create a new connection, or you can click on the green plus sign above the word Connections like below to start the process:



You could actually create several connections within the program to different databases. Besides the Oracle database in PowerSchool, if you have another program that also has an Oracle database you could create a connection to it as well. Below is what the new connection window will look like after you have entered your data:



Connection Name: powerschool
Username: psnavigator
Password:

Save Password

Oracle Access

Role: default OS Authentication
Connection Type: Basic Kerberos Authentication
 Proxy Connection

Hostname: localhost
Port: 1521
 SID: PSPROddb
 Service name

Buttons: Save, Clear, Test, Connect, Cancel

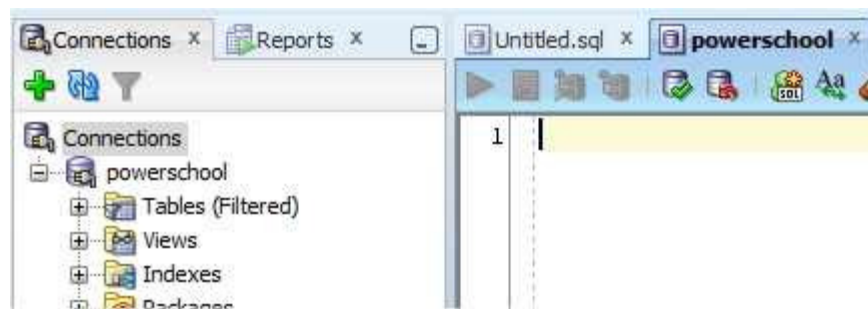
You will need to fill in the following information:



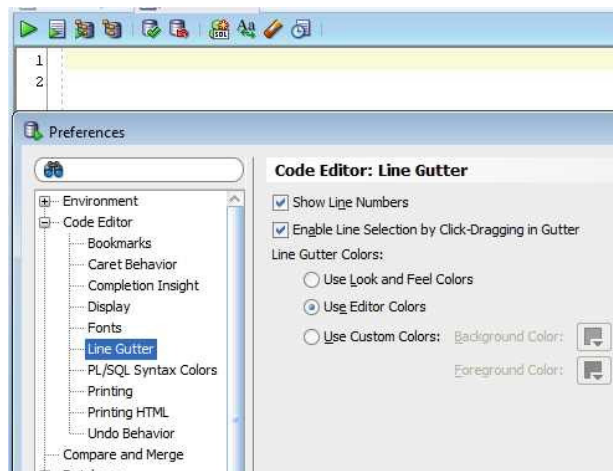
- Connection Name - this is just a label and can be anything you want it to be
- Username - enter psqlnavigator
- Password - the password for psqlnavigator, this will vary by district
- Save Password - optional to have checked, if you're on a shared computer then leave it unchecked
- Role and Connection Type - leave as default and Basic
- Hostname - this will be the IP or DNS name of the server that hosts the database
- Port - leave as 1521
- SID - usually PSPRODDDB but could be something else based on the initial setup of PowerSchool

Once you have the information entered, click on the Test button to see if it connects. If things are okay you'll see the word Success appear next to Status (Status does not appear on the screen shot above but is to the left of the Save button) and you can click on the Connect button. If it's not successful, then check your spelling of the username, password, hostname, and SID. Also be sure Port 1521 is not being blocked by a firewall.

Once you have a successful connection made and are connected, your Connection Name will appear under Connections in the left-hand pane and you can click on the + next to it to expand it's view:



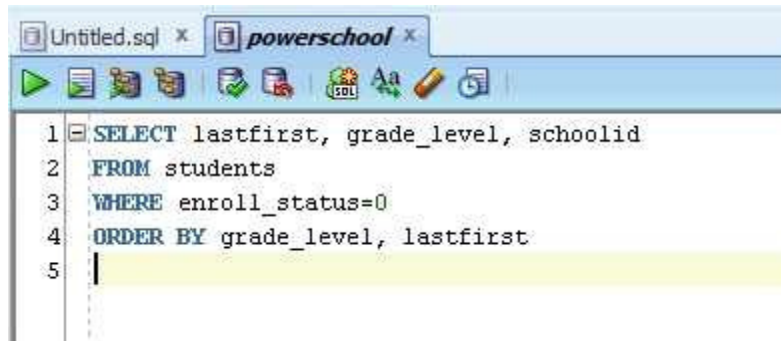
In the right-hand pane is where you'll be typing in SQL commands and viewing the output. Once you have your SQL Developer set up with a connection, you can type in sql commands and view the output. Before starting though, it's a good idea to turn on line numbering to help in troubleshooting as error messages will often mention the line with the error. To enable line numbering, click on Tools, Preferences, and expand the Code Editor line. You should see a screen like below:



To enable line numbering, click on the Line Gutter part and put a check in the box to the left of Show Line Numbers. Once line numbering is enabled, you'll see numbers to the left of your sql statement similar to the 1 and 2 in the screen shot above and the numbers in the screen shots below.

Using SQL Developer

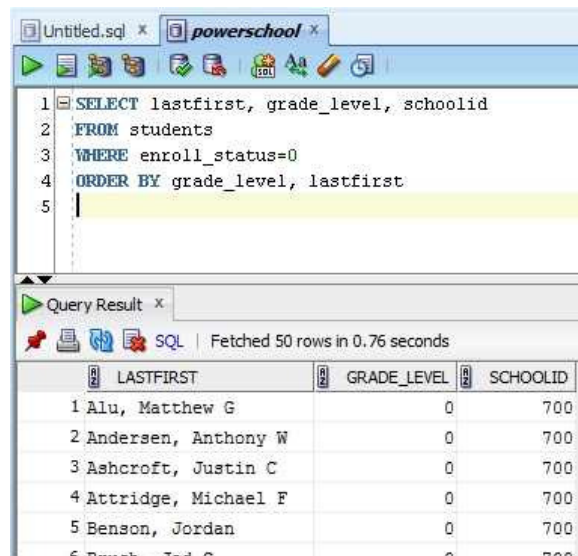
To use SQL Developer, type in your sql statement in the top half of the right pane. Below is a screen shot of a sample sql statement:



```
1 SELECT lastfirst, grade_level, schoolid
2 FROM students
3 WHERE enroll_status=0
4 ORDER BY grade_level, lastfirst
5
```

SQL Developer will color code sql commands in blue. You don't have to write each part of the statement on separate lines, but it's a good idea to do so to make it easier to read and to make troubleshooting easier. For example, an error message may say there's a problem with line 3 above and by having the parts on different lines you'll know where to troubleshoot. Also, you can break a line into more than one line by pressing enter after a part to make it easier to read or troubleshoot. For example, if your select clause has 15 fields, you can press enter after every 4 or so to make it easier to read rather than having to scroll to read them all.

Once your sql statement is done, you'll want to execute it to see the results. To execute, or run, the statement, click on the green arrow icon above the number 1. Your output will appear below the statement in another part of the pane provided there are no errors. If there's an error, an error message will appear instead:



```
1 SELECT lastfirst, grade_level, schoolid
2 FROM students
3 WHERE enroll_status=0
4 ORDER BY grade_level, lastfirst
5
```

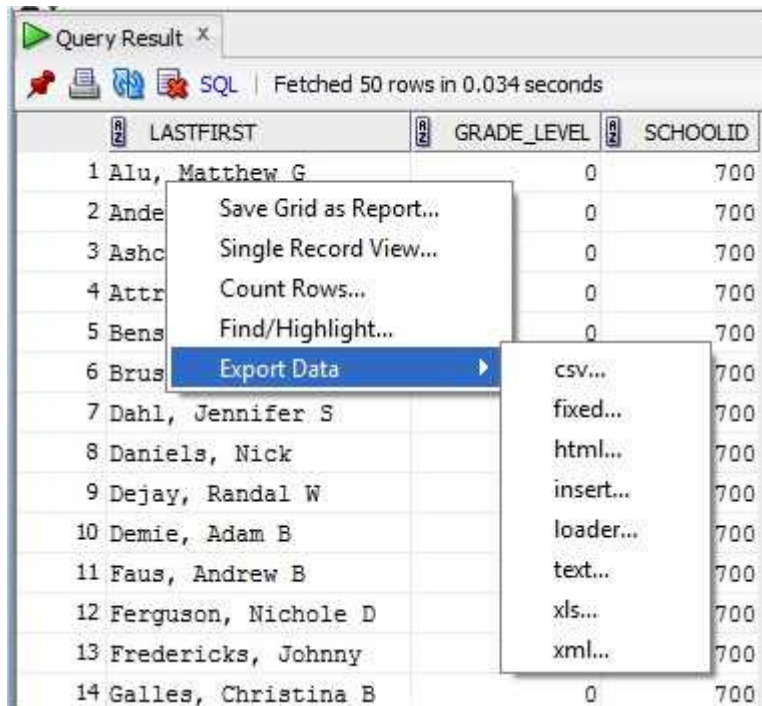
Query Result x
SQL | Fetched 50 rows in 0.76 seconds

LASTFIRST	GRADE_LEVEL	SCHOOLID
1 Alu, Matthew G	0	700
2 Andersen, Anthony W	0	700
3 Ashcroft, Justin C	0	700
4 Attridge, Michael F	0	700
5 Benson, Jordan	0	700
6 Brush, Ted G	0	700



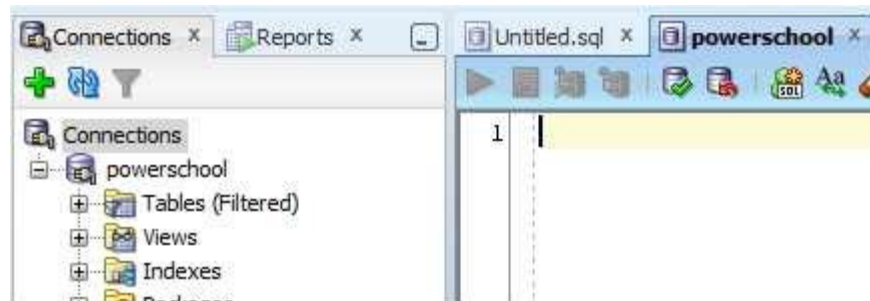
You can put your cursor on the line that separates the statement and the output and use your mouse to drag the line up to see more of the output. You can change things in the sql statement and click on the execute icon again (the green arrow) to reproduce the output.

Once you have the output, you can click on the printer icon on the output pane to print it or you can right click anywhere in the results and choose Export Data and a file type and save the output to a file. You can also use the Count Rows option on that menu to see how many records in total were produced.

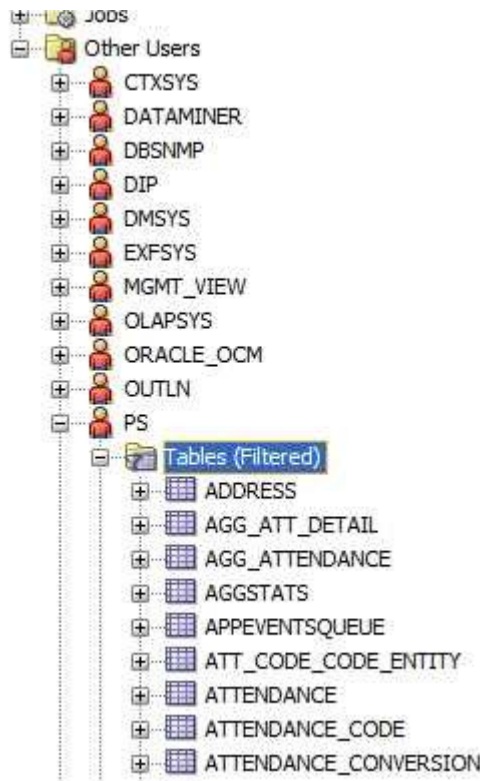


Viewing PS Tables

One of the advantages to using SQL Developer is the ability to see information in tables that do not appear in DDE, such as Incident Management tables. Not only can you view the information, but you could export it as well. To view the tables, click on the plus next to the connection name. A list of items will appear like below:



If you click on the plus next to Tables at the top of the list you won't see anything. What you need to do instead is click on the plus for the item called Other Users. Then click on the plus next to the PS item under it, and then click on the plus next to the Tables item under it:



You can then click on one of the tables and your right pane will look similar to the screen shot below of the Attendance table. The Columns part will show you the different fields for the table and going to the Data tab will display the records in the table. When you're viewing the Data part you can right click on the output and export the data or count the number of rows.

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
DCID	NUMBER(10,0)	No	(null)	1	(null)
ID	NUMBER(10,0)	Yes	(null)	2	(null)
ATTENDANCE_CODEID	NUMBER(10,0)	Yes	(null)	3	(null)
CALENDAR_DAYID	NUMBER(10,0)	Yes	(null)	4	(null)
SCHOOLID	NUMBER(10,0)	Yes	(null)	5	(null)

