

Connecting to the Oracle School DB

How to connect to Oracle 11g through SSH?

1 - Download MobaXterm – free app - from <http://mobaxterm.mobatek.net> (There is portable version which does not need any installation)

2 - Run MobaXterm, or SSH through a UNIX terminal, or another app that can SSH

Hostname: moon.scs.ryerson.ca, username: your CompSci username, Port: 22

3 - Set the variable by typing this:

```
export LD_LIBRARY_PATH=/usr/lib/oracle/12.1/client64/lib
```

(you may not need to use this statement (export..) because it is added to all moon's path file)

4 - Connect to SQL 11G with this command ****Note this command is a single line with a space after sqlplus64****:

```
sqlplus64
```

```
"USERNAME@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(Host=oracle.scs.ryerson.ca)(Port=1521))(CONNECT_DATA=(SID=orcl)))"
```

Note: USERNAME is your Computer Science username.

5 - Then it prompts for oracle password. Password: MMDDXXXX which is your Birth-month, Birthday and last 4 digits of your student ID. Change your password after first login.

How to connect to Oracle 11g with sqldeveloper in Computer Science labs?

1 - Login to windows.

2 - Open computer and click on: "O:\Program Files\sqldeveloper-4.1.1.19\sqldeveloper"

3 - Click on Connection > new connection

Username: computer science username

Password: MMDDXXXX, which is your Birth-month, Birthday and last 4 digits of your ryerson ID.

Hostname: oracle.scs.ryerson.ca

Port: 1521

SID: orcl

4 - Click connect

How to connect to an Oracle database with sqldeveloper on your laptop

****To download from the Oracle website, you will need to create an Oracle account first. ****

1 – Download and install oracle sqldeveloper from

<https://www.oracle.com/database/technologies/appdev/sql-developer.html>

2 – Once installed, run sqldeveloper.exe from where you installed it

3 – Click on Connection > new connection

Then set the username, password, hostname, port and sid to the database you want to connect to.

4 - Click connect

Connecting to your own Oracle DB

There are **two** Oracle DB instances that can be installed on your laptop as follows:

1.1- To install Oracle on Linux which is similar to our school oracle server configuration:

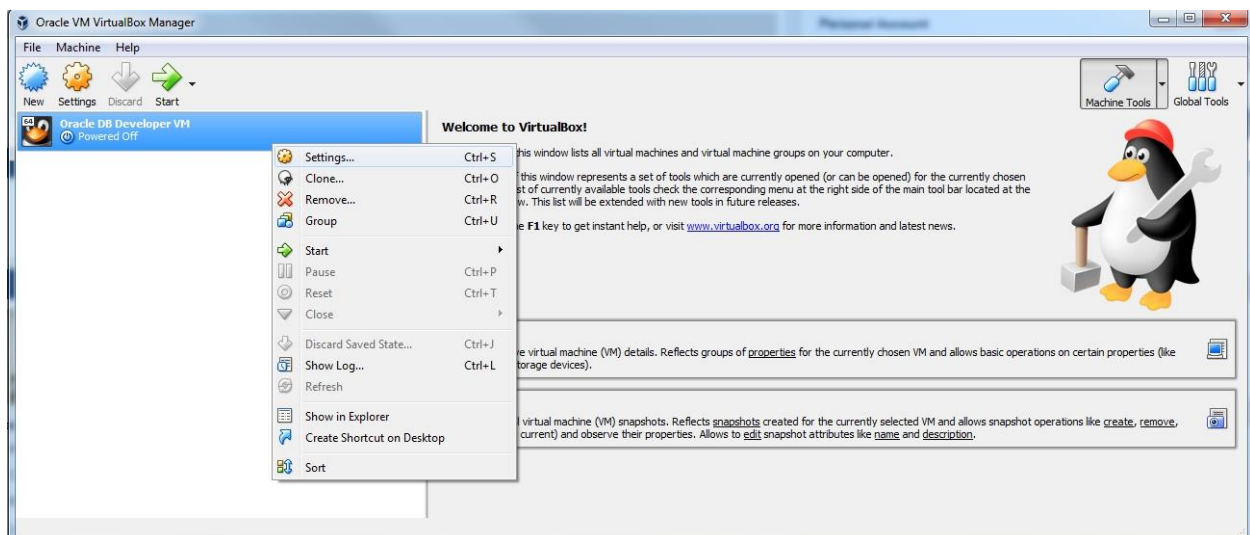
****To download from the Oracle website, you will need to create an Oracle account first.****

For Linux-based Oracle DB server you need Virtualbox on Windows and follow the steps according to the following link:

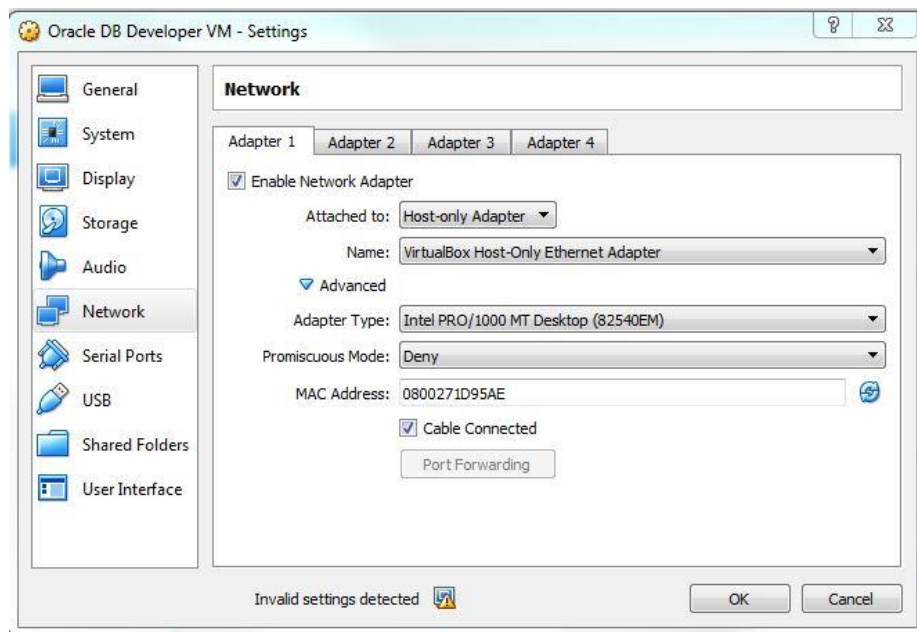
<http://www.oracle.com/technetwork/database/enterprise-edition/databaseappdev-vm-161299.html>

* Make sure you download Virtualbox as stated in step 1 before proceeding to step 2 in the link

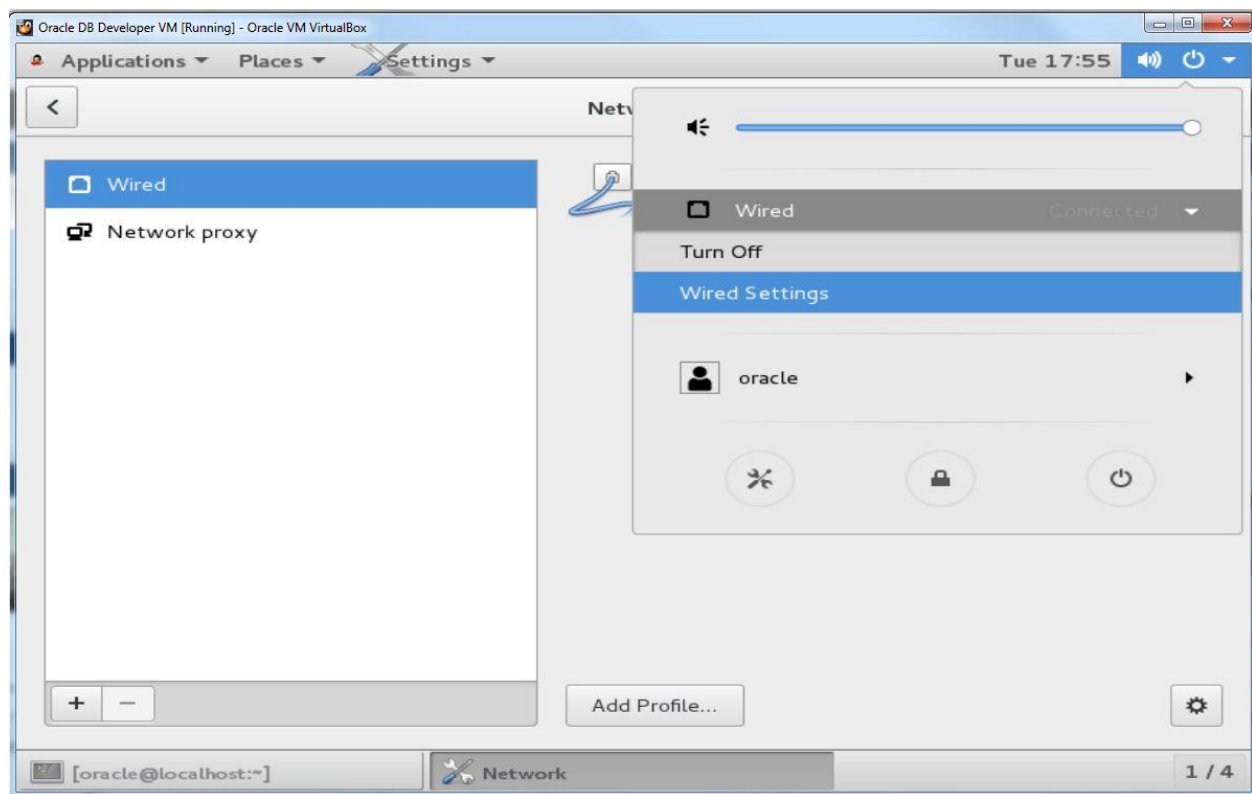
After Importing the Virtual Machine (VM), go to the settings of the VM by right-clicking on the VM image like the below image.



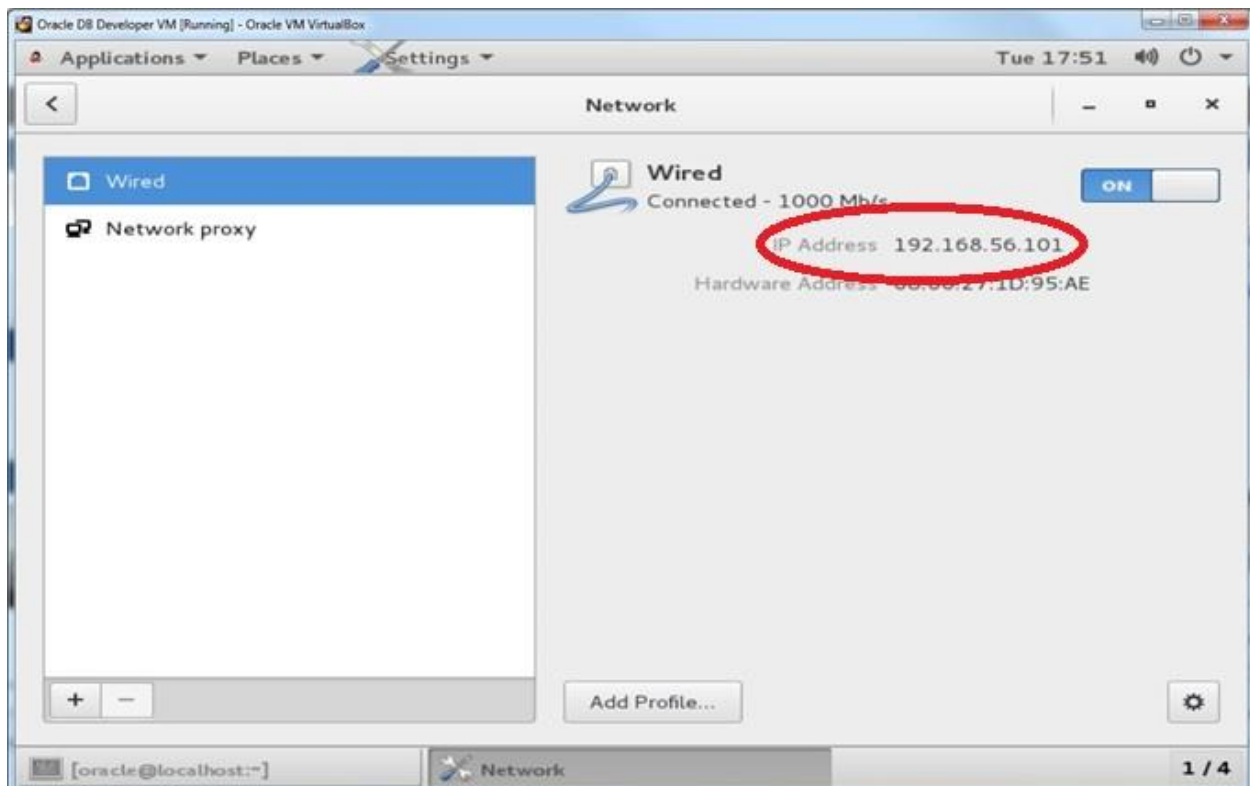
Change the network settings of VM like the screenshot below.



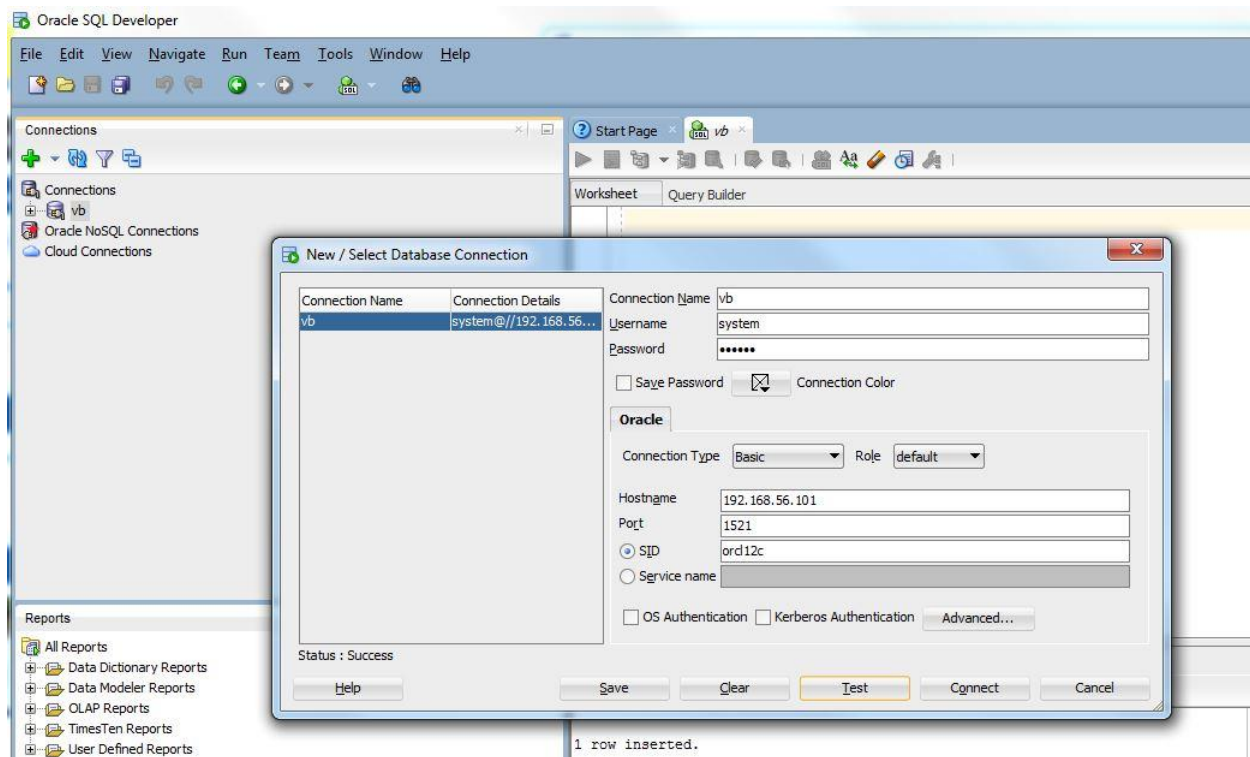
Power on VM after doing the previous steps and go to wired settings.



Find the IP provided to your VM



This IP can be used to be connected by sqldeveloper on your Host OS.



1.2- *For a light version Oracle DB Windows, the link and directions for Oracle XE for Windows from the Oracle website:*

****To download from the Oracle website, you will need to create an Oracle account first.****

Install Oracle XE from <http://www.oracle.com/technetwork/database/database-technologies/express-edition/downloads/index.html>

*Remember the account and password made for system user during installation
Run "Get Started" from Oracle Database 11g Express Edition. If you want to use sqldeveloper on your machine and get connected to Oracle XE as localhost you should be able to do it now.

If you want to use Application Express to create an application:

Click Application Express and Login as system user

Create a New Database User by filling in a username and password for the new user

Login Application Express with the newly created user

Look at Oracle Sample Applications

2- Installing JDBC:

****To download from the Oracle website, you will need to create an Oracle account first.****

To connect a java program to Oracle you need the JDBC driver which can be provided by a jar file. Getting access to the driver is explained below.

The path to that jar file has to be specified after the -cp option. The simplest way is just have the jar file in the same folder as the java file. Then run the command lines provided below to point to the jar file in the current directory.

```
javac -cp ojdbc7.jar; JdbcOracleConnectionTemplate.java
java -cp ojdbc7.jar; JdbcOracleConnectionTemplate
```

or

```
javac -cp ojdbc6.jar; JdbcOracleConnectionTemplate.java
java -cp ojdbc6.jar; JdbcOracleConnectionTemplate
```

For Oracle 11g, download ojdbc6.jar :

<http://www.oracle.com/technetwork/apps-tech/jdbc-112010-090769.html> [www.oracle.com]

For Oracle 12c, download ojdbc7.jar :

<http://www.oracle.com/technetwork/database/features/jdbc/jdbc-drivers-12c-download-1958347.html>

You can test the attached java template file to get connected to a local database.