# How to connect SQL developer to oracle server located in your local Virtualbox VM.

If like me you installed an Oracle server on your local machine in a virtualbox you might want to install sqldeveloper on your machine and connect it to the database which is installed in a virtualbox.

Below I will show how to establish connections from local machine to the vm and to the oracle db in three ways:

1. ssh from local machine to VM’s linux
2. leveraging ssh connection to connect to sql\*plus database TUI
3. connecting to the database from local machine’s sqldeveloper
4. SSH from local machine to VM’s linux.

There is a ton of better walkthroughs on how to do that, however in order for this walkthrough to be comprehensive I decided to attach some screenshots on how to do that, so this is how you do this:

1.1 getting into VM’s os:   
A screenshot of a social media post

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10.0.2.15 is an address of a VM in Virtualbox Nat network, to check it you may have to go to the VM -> open a terminal and type a command ifconfig, the eth0 entry should show you correct ip, if it doesn’t work try to google it ☹   
127.0.0.1 is a so called loopback ip address

2200 is a port on your local machine that we will call to, which is being redirected into 10.0.2.15:22 port which is an ssh port of your VM.

Now you should be able to ssh to oracle, from your local os like this:

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1. getting into SQL\*plus console

Once we can ssh into os where oracle db is installed it is super easy to get to the database itself, you can interact with it via invoking sql\*plus console like that:   
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1. Getting from local machine’s sqldeveloper to the db.   
   To do that in a setup like this, do this:
   1. In sqldeveloper click view -> ssh a panel sould appear in left bottom corner of sqldeveloper window
   2. Rightlick ssh host and click new ssh host and configure it like that:  
      A screenshot of a cell phone

      Description automatically generated
   3. Click ok, rightlick foo ssh host in the left bottom panel of sql developer and click new local port forwarding, configure it like that, your ip may be different though   
      A screenshot of a cell phone

      Description automatically generated

* 1. Now, wo to oracle connections in top left panel of sql developer, configure it like that for example:  
     A screenshot of a cell phone

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Make sure to clicked save button if Test button shows there is an error, you should be fine now:  
A screenshot of a social media post

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