Configure Jupyter notebook with Anaconda on Azure virtual machine

1. In order to make jupyter notebook run properly, which uses a certain portal address, we need to configure the network rules for the virtual machine to allow itself opening the portal.
   1. Select virtual machine, and click “Networking” on the left pane
      1. A screenshot of a computer

         Description automatically generated with medium confidence



* 1. Click “add inbound port rule” to configure the new portal for jupyter notebook.
     1. Graphical user interface, text

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  2. Enter the rules for new portal and give it a name mark it. In my case, it’s “jupyter\_portal”(Note: 8888 is jupyter’s default portal, but if this is occupied, then 8889 works, or 8890, so and so forth. Do not enter 9999 as jupyter is not listening on it).
     1. Text

        Description automatically generated



* 1. Open the new command prompt and connect to the virtual machine
  2. Go to anaconda homepage and copy the download link for LINUX version (<https://repo.anaconda.com/archive/Anaconda3-2021.11-Linux-x86_64.sh>):
     1. A screenshot of a computer screen

        Description automatically generated with medium confidence
  3. Enter “wget link” to download it to your virtual machine:
     1. Text

        Description automatically generated



* 1. Enter “bash installation\_file\_name” to continue to install the anaconda distribution, keep press enter until it asks you to enter “yes” or “no”, enter yes and continue press enter it starts installing:
     1. Text

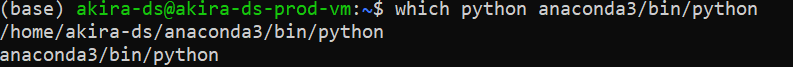
        Description automatically generated



* 1. Enter “source <path to conda>/bin/activate” to activate anaconda as default environment:
     1. 
     2. And then run “conda init” to initialize it: Text

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* + 1. To verify it, run “which python anaconda3/bin/python”, and it will give you something like below: , and until this point, the environment has been set up correctly.



* 1. Next, enter the command to generate jupyter notebook config file for the virtual machine: “jupyter notebook --generate-config”:
     1. Text

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  2. Cd into the folder (“cd ~/.jupyter/”) that has the python script configuration file and start edit it (“vi jupyter\_notebook\_config.py”):
     1. 
  3. Grab these lines to the start of the file and save the file (Note: Be sure to match the port number with the one you entered for the networking inbound rule):

*c = get\_config()*

*c.NotebookApp.open\_browser = False*

*c.NotebookApp.port = 8888*

*c.NotebookApp.ip = '\*'*

Text

Description automatically generated

* 1. Enter this command line: ”ssh -L 8080:localhost:8888 your\_user\_name@ip\_address” and enter your password for the virtual machine to enter the compatible mode for jupyter notebook:
     1. Text

        Description automatically generated



* 1. Create a new folder on your machine (optional) and enter “jupyter notebook” to open the jupyter notebook
     1. Graphical user interface, text

        Description automatically generated
  2. Scroll down to the very bottom of command prompt, get the link and paste it to your browser’s search bar, and be sure to replace the default ip address (red part) with your virtual machine’s public ip address(It can be found on overview page of the virtual machine).
     1. 



* 1. Jupyter notebook is now running properly:
     1. A screenshot of a computer screen

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