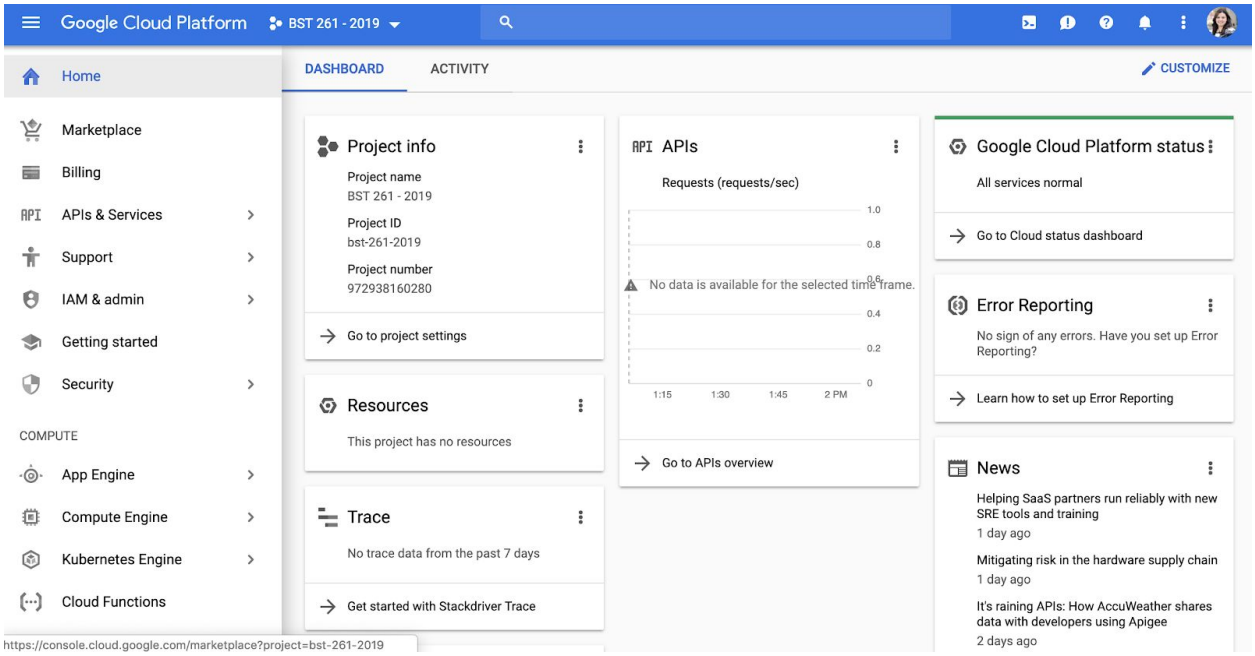
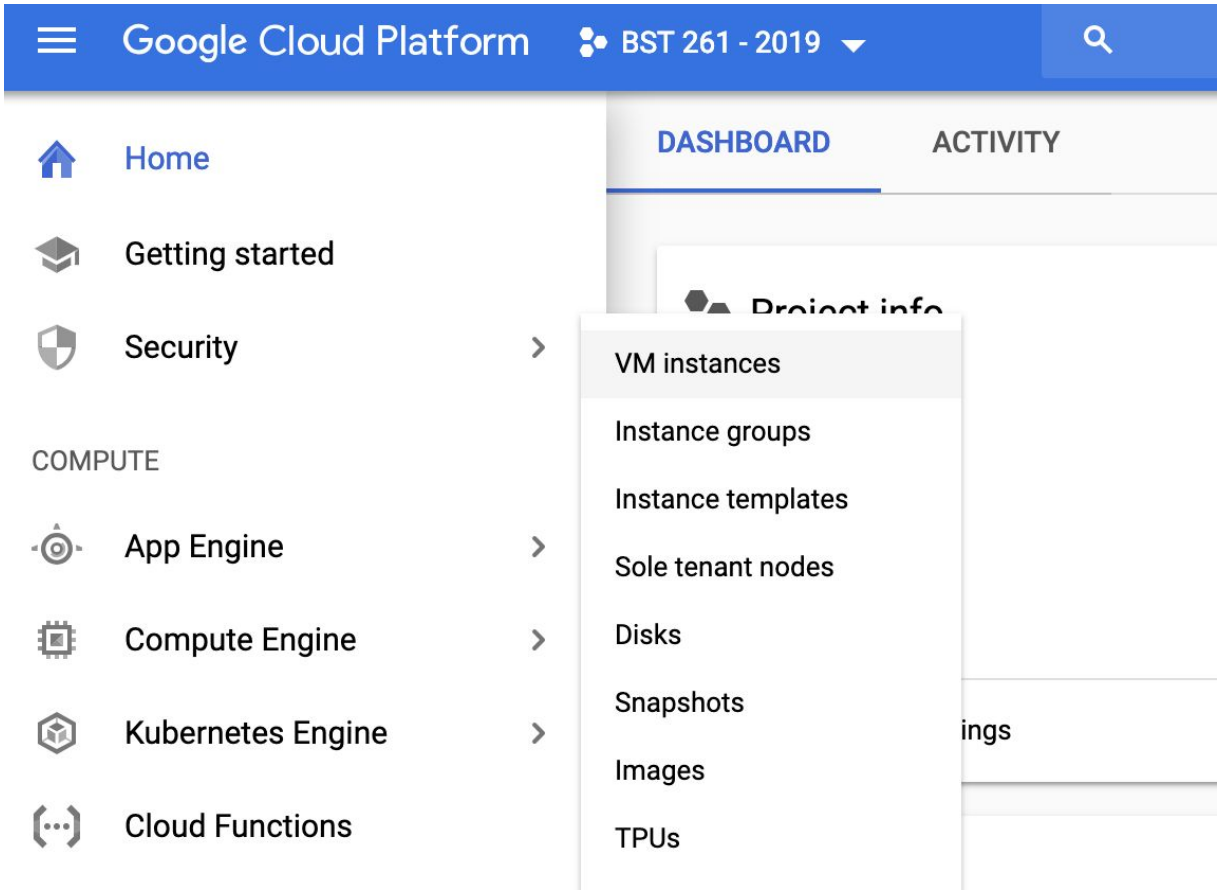
GCP VM Setup with CPU

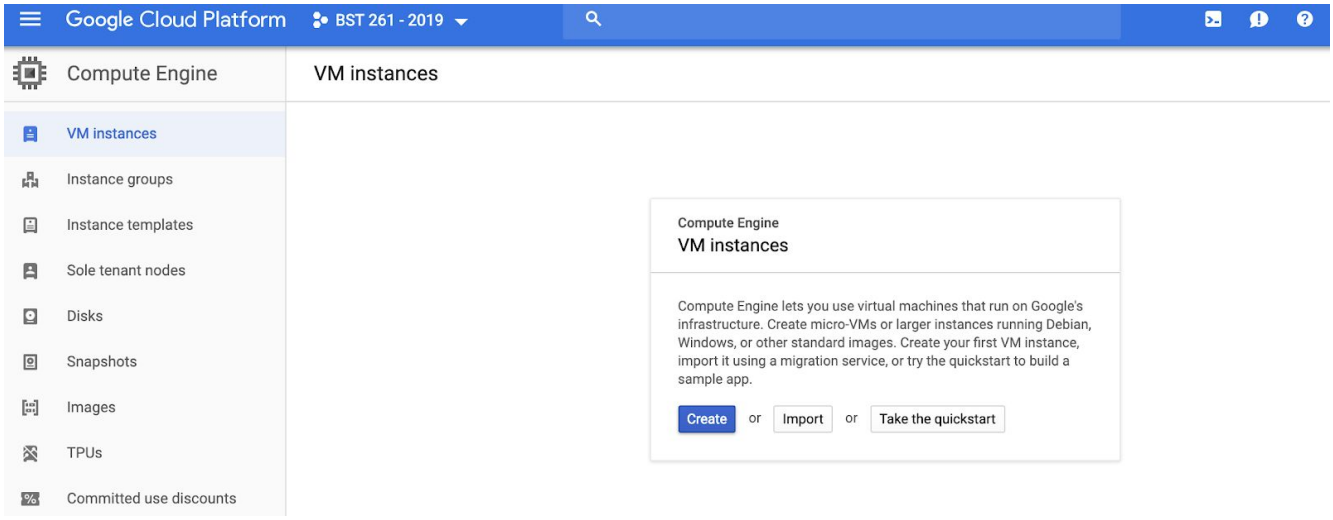
1. Go to console.cloud.google.com.



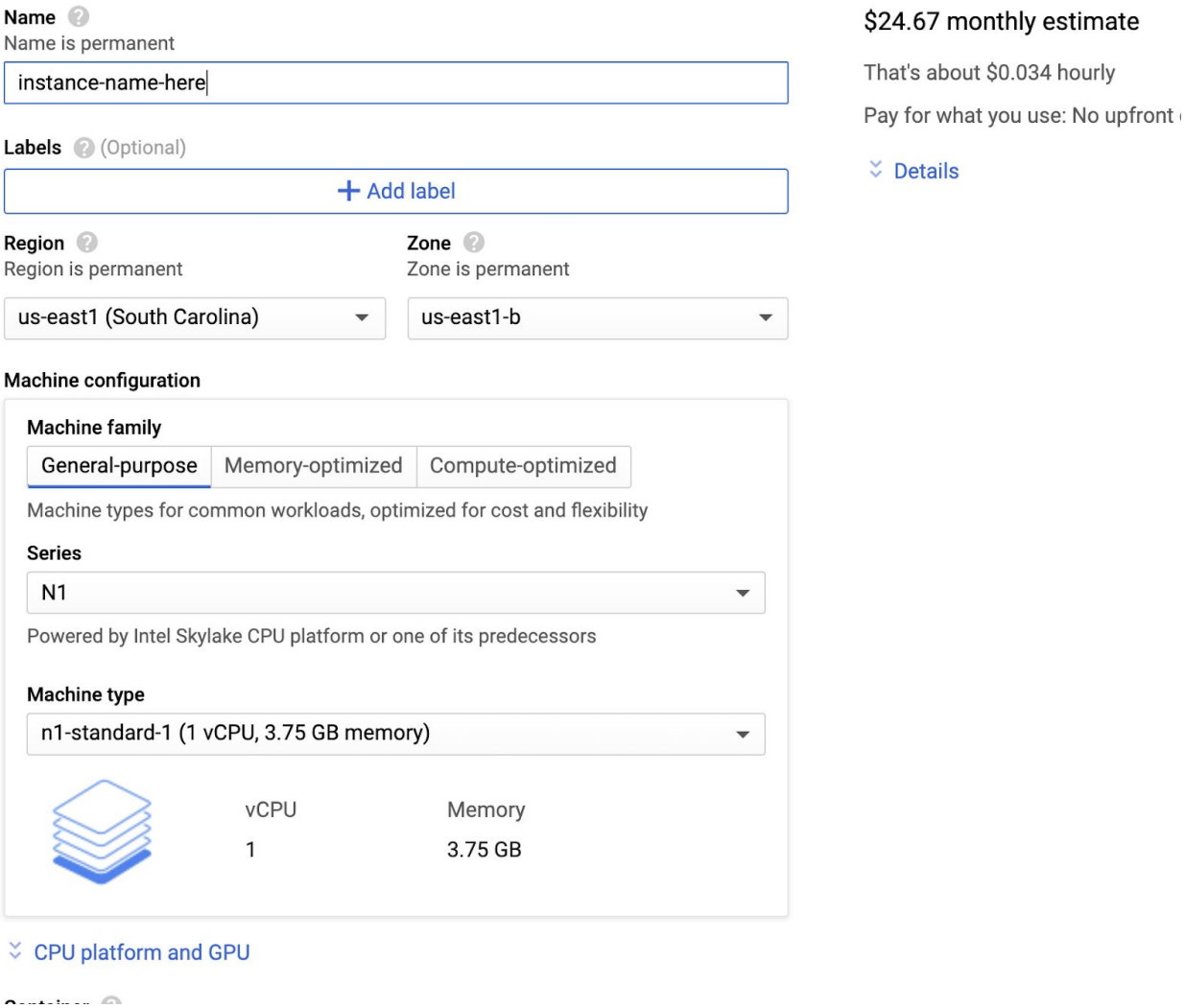
2. On the left side menu, mouse over Compute Engine, and select VM instances.



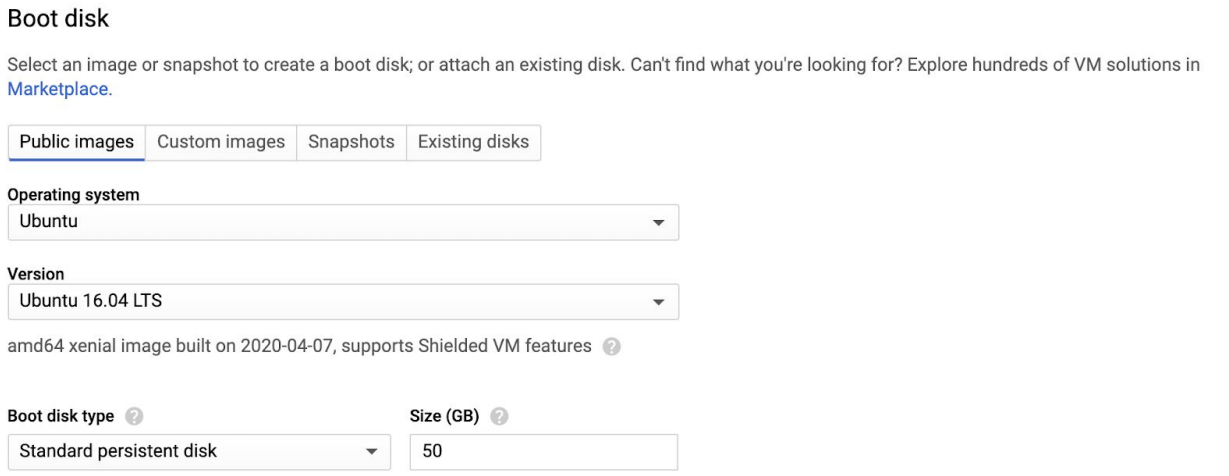
3. Select Create Instance.



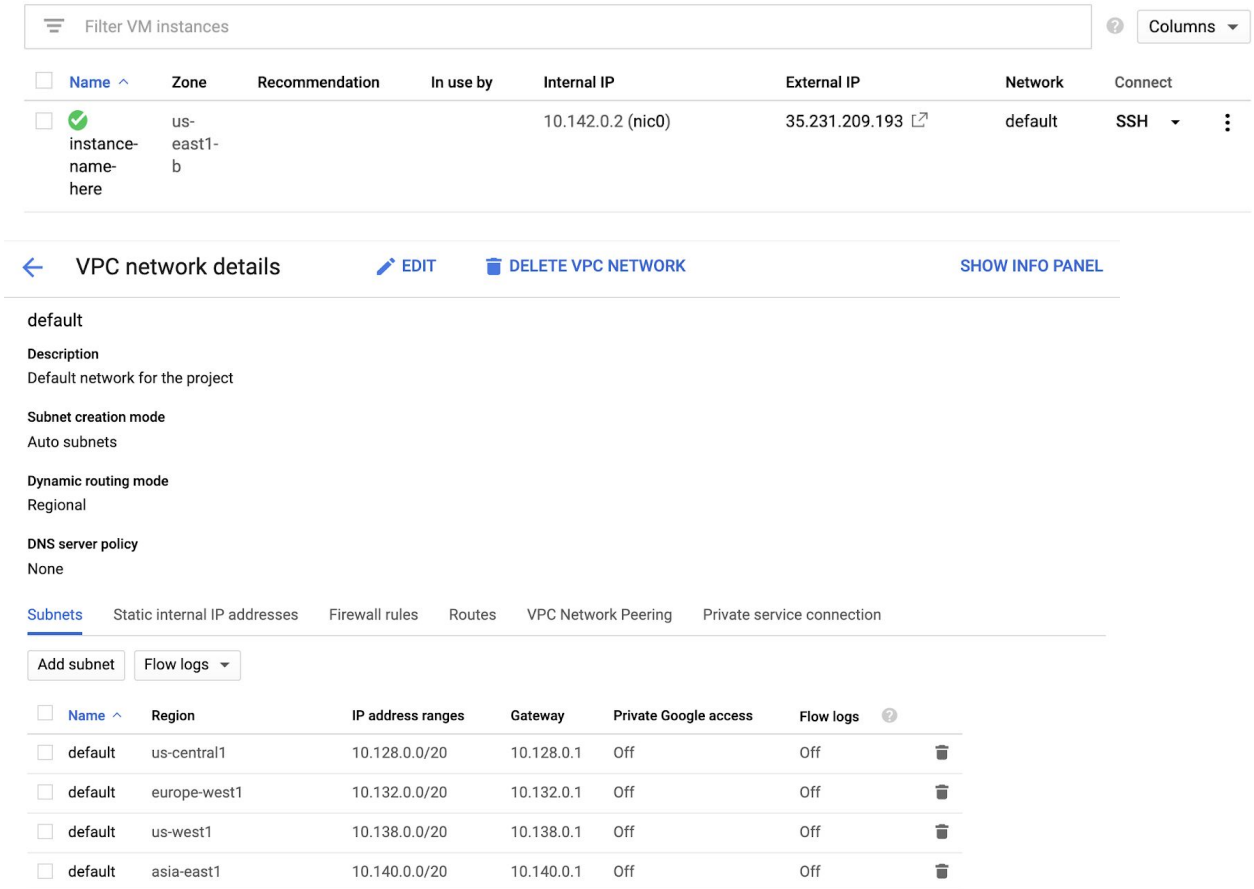
4. Complete the form according to the following configuration. Substitute an instance name of your choice. Notice the monthly estimate on the right - the more memory/resources you choose the more expensive it will be. Note that you won't be paying that much to run this instance - this would be the cost if you kept it running for a month straight. We'll be stopping the instance after a few minutes. There will be a reminder later on, but always remember to shut down your instance when you are finished so you aren't charged while not using it.



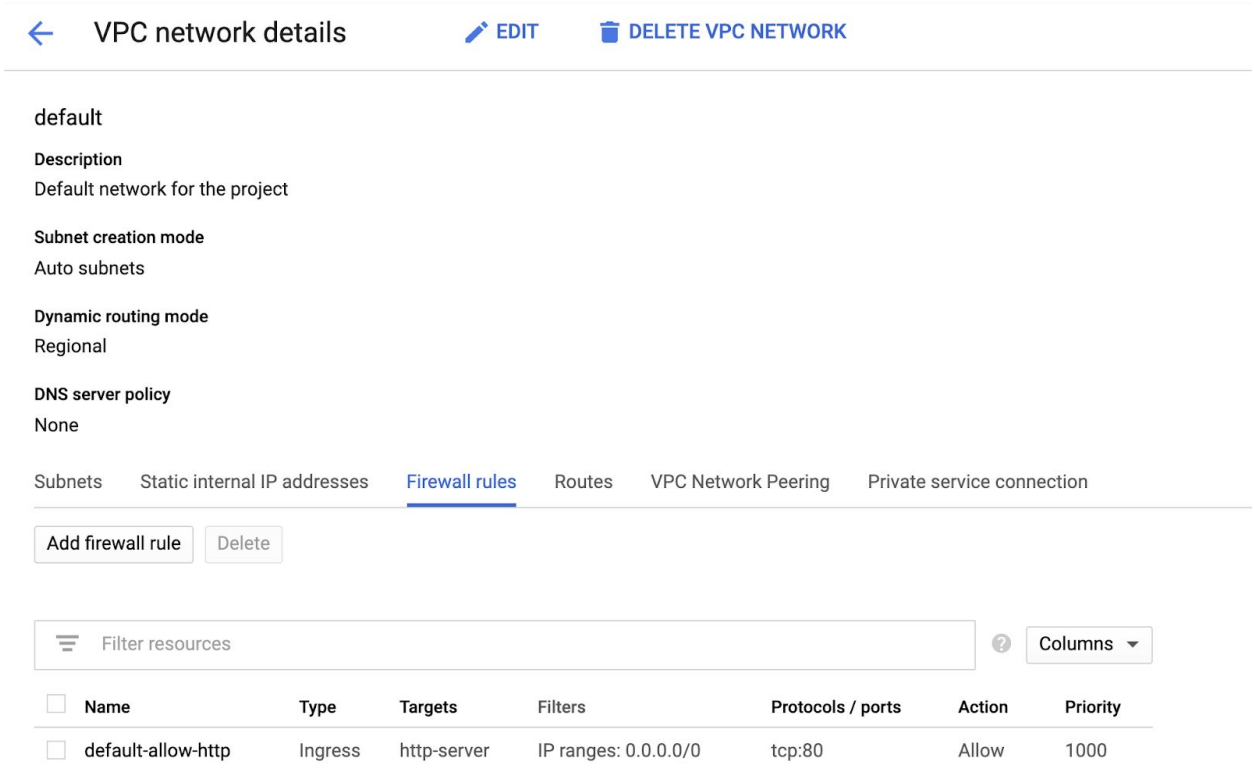
5. Boot Disk: click on the Change button. Select Ubuntu 16.04 LTS and type in 50 GB at the bottom.



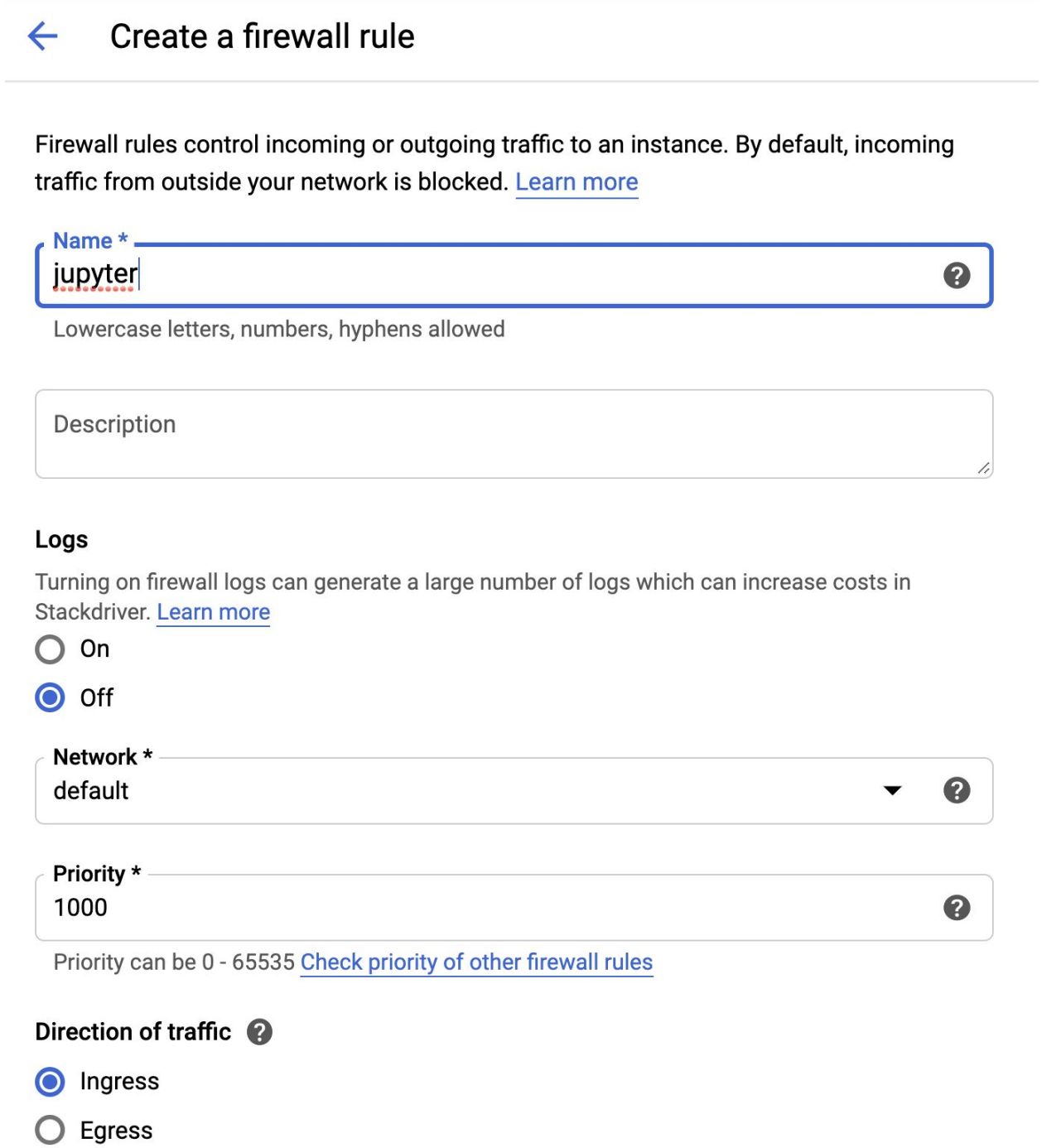
6. You will return to the VM instance list, and an icon will be on the left of the instance name that you created. Wait for a green checkmark to appear. Under the Network column, click on default.



7. Select the Firewall Rules tab, and then click the Add firewall rule button.



8. Complete the form with the following configuration. When finished, click Create at the bottom of the page.



Create a firewall rule

- (•) Allow
- ( ) Deny

Targets
All instances in the network

Source filter
IP ranges

Source IP ranges *
0.0.0.0/0 for example, 0.0.0.0/0, 192.168.2.0/24

Second source filter
None

Protocols and ports

- ( ) Allow all
- (•) Specified protocols and ports

- [x] tcp : 8888
- [x] udp : 8888
- [ ] Other protocols

Source IP ranges *

0.0.0.0/0 for example, 0.0.0.0/0, 192.168.2.0/24

Second source filter

None

Protocols and ports

- [ ] Allow all
- [x] Specified protocols and ports

- [x] tcp : 8888
- [x] udp : 8888
- [ ] Other protocols

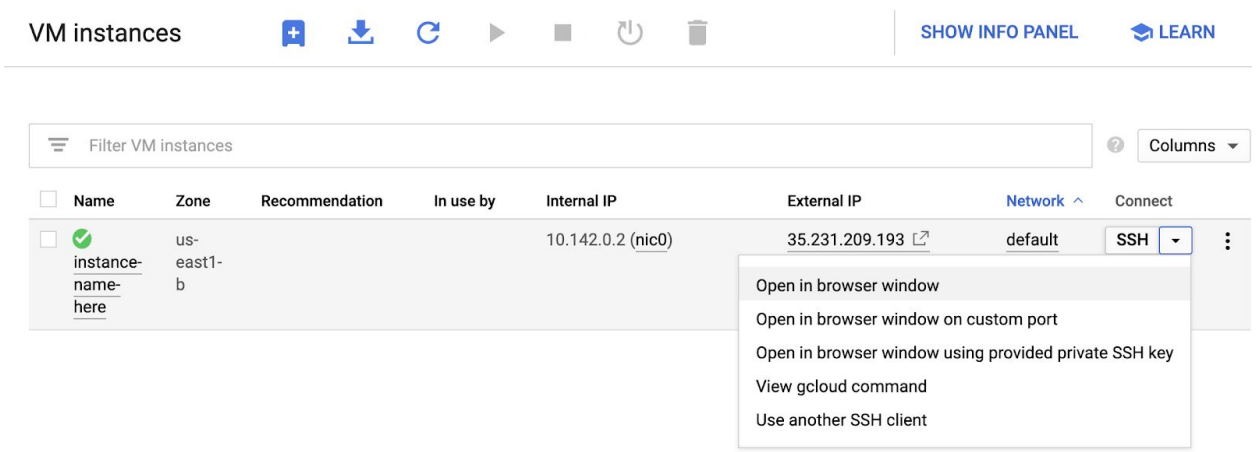
protocols, comma separated, e.g. ah, sctp

DISABLE RULE

CREATE CANCEL

Equivalent REST or command line

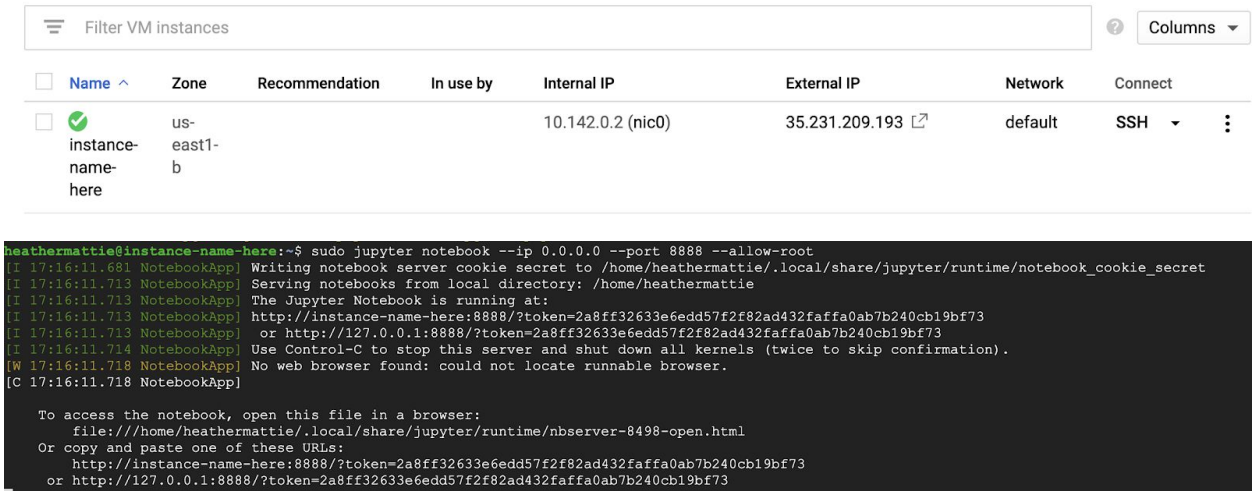
9. Return to your VM instances, either by selecting the blue arrow next to VPC network details twice, or by going to console.cloud.google.com/compute/instances. Select the arrow next to SSH in the row of your instance, and select Open in browser window.



11. Enter the following commands **one at a time**. Press Y and enter when prompted. (This will happen a few times)

sudo apt-get update
sudo apt-get install python-pip
sudo pip install tensorflow
sudo apt-get install ipython
sudo apt-get install python3-pip
pip3 install --upgrade setuptools
pip3 install keras
sudo pip3 install jupyter
sudo jupyter notebook --ip 0.0.0.0 --port 8888 --allow-root

12. Construct the url for your notebook by combining the following two pieces: the external IP of your instance, and the sequence following 0.0.0.0 that results from the console.



The url here would be http://35.231.209.193:8888/?token=(letters and numbers). Yours should be similar. Enter the url in your browser. Now you can upload data and/or a Jupyter notebook and work.

13. To close the notebook, select the New dropdown menu, and select Terminal. Enter the command: jupyter notebook stop

14. To shut off your instance, return to the VM instances page, select the three dots in the row of your instance, and select Stop. **This is important to avoid being charged for an instance that you are not using.**