

Follow below steps to run Django localhost on Virtual Machine (VM) and access it publicly:

Step 1: Place/Update your project on your VM

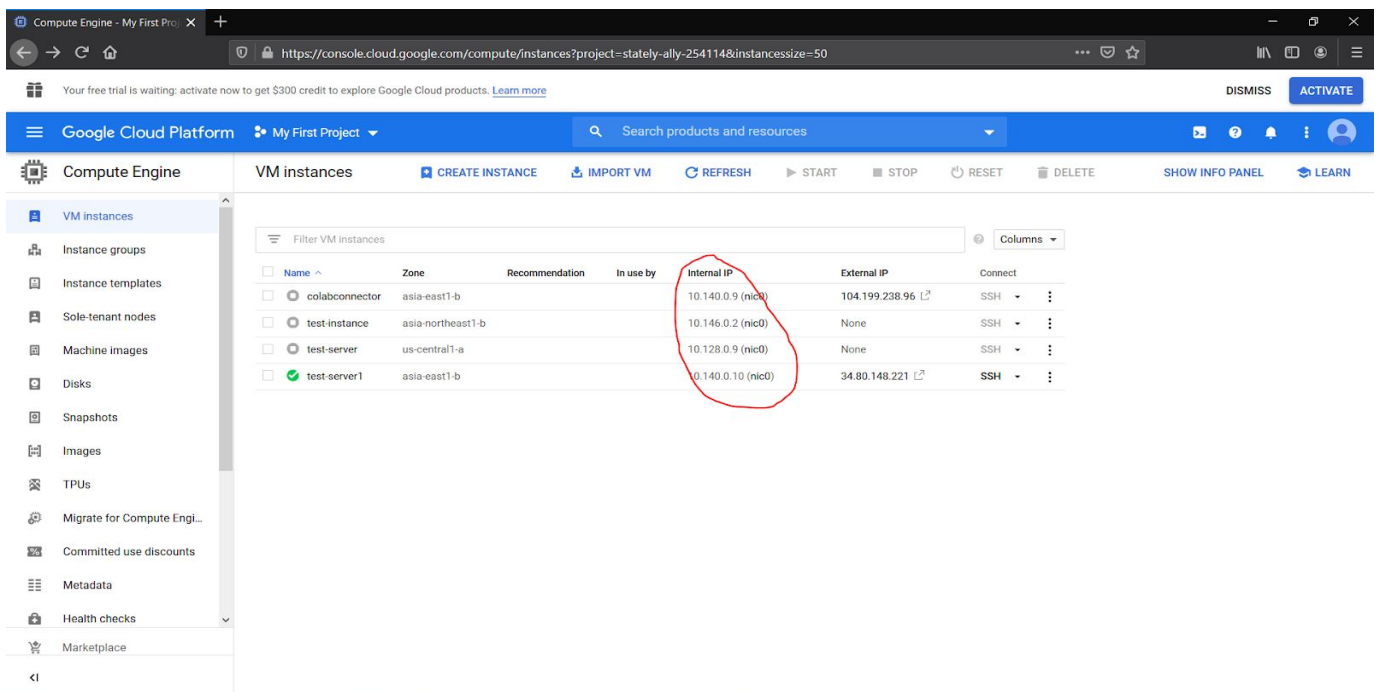
(a) One way to do this is to first push your project from your local machine to github and then pull it on VM through terminal by running “**git clone <project_url>**” or if the project is already there, run “**git pull**” command to update the project with the latest version.

Step 2: Create virtual environment on your VM

(a) This step is exactly the same as doing on your local machine. Create a virtual env using “**python -m virtualenv <venv_name>**”
(b) Activate the virtual environment using “**source <venv_name>/bin/activate**” command
(c) Enter in the project directory and install all dependencies of your virtual environment. You can use “**pip install -r requirements.txt**” command to do this. Note that you might not be able to install packages like “mysqlclient” if mysql is not installed on the VM. In this case you might have to work with the default sqlite database of Django.

Step 3: Run the project using internal ip

(a) Run “**python manage.py runserver <internal_ip>:<port_number>**” where internal_ip is the internal ip of your local machine and port_number is port number. You can find the internal ip on the page where all the VMs are listed on google console page. (See below picture).



Name	Zone	Recommendation	In use by	Internal IP	External IP	Connect
colabconnector	asia-east1-b			10.140.0.9 (nic0)	104.199.238.96	SSH
test-instance	asia-northeast1-b			10.146.0.2 (nic0)	None	SSH
test-server	us-central1-a			10.128.0.9 (nic0)	None	SSH
test server1	asia-east1-b			10.140.0.10 (nic0)	34.80.148.221	SSH

(b) Alternatively, you can run “**gcloud compute instances describe INSTANCE_NAME [--zone=ZONE]**” command and look for the value of the “networkIP” key in the output. This “networkIP” is your internal ip.

(c) Now you are all set and should be able to access the website on the Internet using the url “**http://<external_ip>:<port_number>**” where external_ip is public ip. You can look for external ip on the right side of internal ip in the above image. OR Alternatively, run the command described in the above sub-step and look for the value of “natIP” key in the output. This “natIP” is your external ip.