

Getting Started with Compute Engine

Lab Objectives

- Create a Compute Engine virtual machine using the Google Cloud Platform (GCP) Console.
- Create a Compute Engine virtual machine using the gcloud command-line interface.
- Connect between the two instances.

In this lab, we created two vms: one with the GCP console and another one with the cloud shell. This is the command used to create a vm from the Cloud Shell:

gcloud compute instances create "my-vm-2" --machine-type "n1-standard-1" --image-project "debian-cloud" --image "debian-9-stretch-v20190213" --subnet "default"

The screenshot shows the Google Cloud Platform console interface. The left sidebar displays the 'Compute Engine' section with 'VM instances' selected. The main panel shows a table of VM instances:

Name	Zone	Recommendation	In use by	Internal IP	External IP	Connect
my-vm-1	us-central1-a			10.128.0.2 (nic0)	34.123.63.120	SSH
my-vm-2	us-central1-c			10.128.0.3 (nic0)	34.67.144.1	SSH

Below the table, the 'CLOUD SHELL' terminal window is open, showing the execution of the `gcloud compute instances create` command. The output indicates that the VM was created successfully, with a warning about a deprecated image resource. The terminal output is as follows:

```
9-stretch-20190213'. The referenced image resource cannot be found.
student_04_b07bb3b71aff@cloudshell:~ (qwiklabs-gcp-04-89f9d2ad6d1b)$ gcloud compute instances create "my-vm-2" --machine-type "n1-standard-1" --image-project "debian-cloud" --image "debian-9-stretch-v20190213" --subnet "default"
Created [https://www.googleapis.com/compute/v1/projects/qwiklabs-gcp-04-89f9d2ad6d1b/zones/us-central1-c/instances/my-vm-2].
WARNING: Some requests generated warnings:
- The resource 'projects/debian-cloud/global/images/debian-9-stretch-v20190213' is deprecated. A suggested replacement is 'projects/debian-cloud/global/images/debian-9-stretch-v20190312'.
NAME          ZONE          MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
my-vm-2       us-central1-c  n1-standard-1          10.128.0.3   34.67.144.1  RUNNING
student_04_b07bb3b71aff@cloudshell:~ (qwiklabs-gcp-04-89f9d2ad6d1b)$
```

[vms list]

The second vm was created in a different zone to the first vm. But both vms can communicate as they are in the same region. To confirm this, we connected us to the vm1 from vm2 via ssh and installed a nginx server on it. We edited the index.html with a custom message. we then made a request with curl from the two vms and the result is the following:

```
ssh.cloud.google.com/projects/qwiklabs-gcp-04-89f9d2ad6d1b/zones/us-central1-c/instances/my-vm-2?nonAdminProxySessionReas...
student-04-b07bb3b71aff@my-vm-2:~$ curl http://my-vm-1
<!DOCTYPE html>
<html>
<head>
<title>Welcome toyou big boss Anicet</title>
<style>
  body {
    width: 35em;
    margin: 0 auto;
    font-family: Tahoma, Verdana, Arial, sans-serif;
  }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
student-04-b07bb3b71aff@my-vm-2:~$
```

[Made a curl request from my-vm-2]