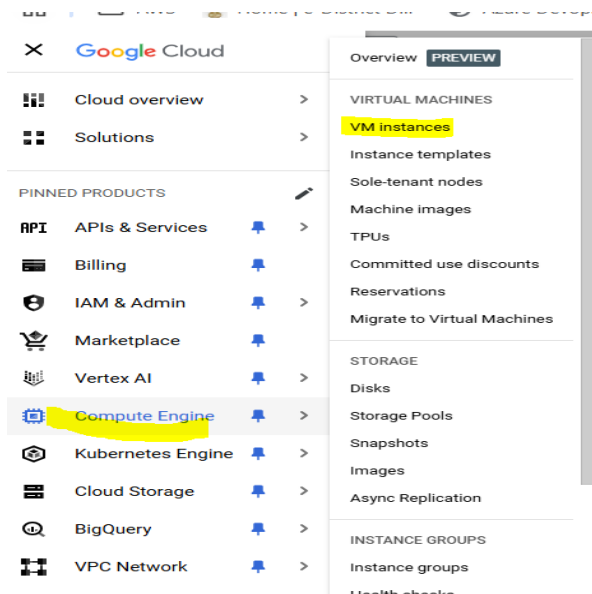


In this lab we will create a VM Instance using GCP console and we will also login to the VM

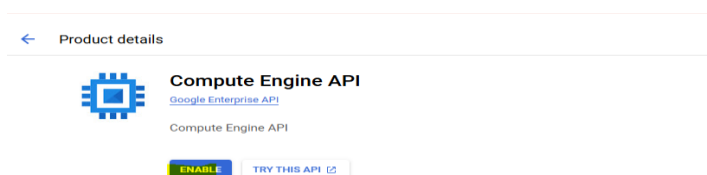
Once lab is completed, also explore stop, start and delete VM options.

Create VM

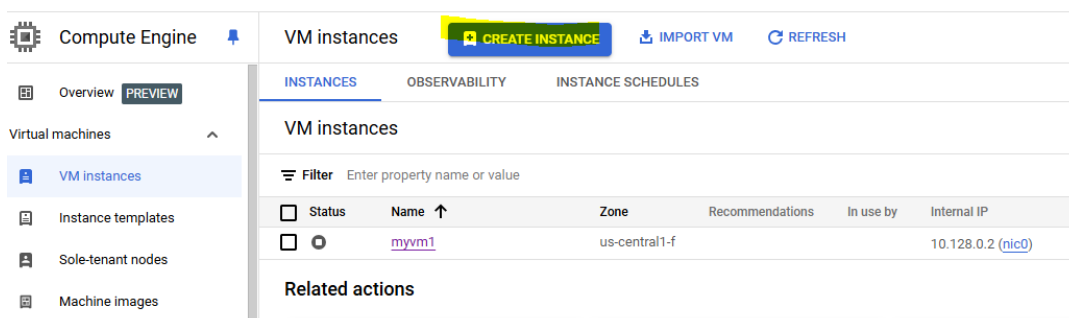
- 1) First select the project where you want to create VM
- 2) At hamburger menu go to Compute engine>VM Instances



- 3) For first time creation, we need to enable Compute engine API, so click Enable



- 4) Here we can see list of our existing instances, to create new click “Create Instance” button



- 5) Give instance a name, select region and zone
- 6) Select shape

Machine configuration

Name *
instance-20250110-032120

Region *
us-central1 (Iowa)

Zone *
Any

Region is permanent

Google will choose a zone on your behalf, maximizing VM obtainability. Zone is permanent.

General purpose

Compute optimized

Memory optimized

Storage optimized

GPUs

Machine types for common workloads, optimized for cost and flexibility

	Series ?	Description	vCPUs ?	Memory ?	Platform
<input type="radio"/>	C4	Consistently high performance	2 - 192	4 - 1,488 GB	Intel Emerald Rapids
<input type="radio"/>	C4A	Arm-based consistently high performance	1 - 72	2 - 576 GB	Google Axion
<input type="radio"/>	N4	Flexible & cost-optimized	2 - 80	4 - 640 GB	Intel Emerald Rapids
<input type="radio"/>	C3	Consistently high performance	4 - 192	8 - 1,536 GB	Intel Sapphire Rapids
<input type="radio"/>	C3D	Consistently high performance	4 - 360	8 - 2,880 GB	AMD Genoa
<input checked="" type="radio"/>	E2	Low cost, day-to-day computing	0.25 - 32	1 - 128 GB	Based on availability
<input type="radio"/>	N2	Balanced price & performance	2 - 128	2 - 864 GB	Intel Cascade Lake
<input type="radio"/>	N2D	Balanced price & performance	2 - 224	2 - 896 GB	AMD EPYC
<input type="radio"/>	T2A	Scale-out workloads	1 - 48	4 - 192 GB	Ampere Altra Arm
<input type="radio"/>	T2D	Scale-out workloads	1 - 60	4 - 240 GB	AMD EPYC Milan
<input type="radio"/>	N1	Balanced price & performance	0.25 - 96	0.6 - 624 GB	Intel Skylake

- 7) Keep the rest details to the default. Just make sure that you have enabled port 80 in the networking section.
- 8) Then just create your first virtual machine.

[← Create an instance](#)
[✦ Create VM from...](#)

- Machine configuration
e2-medium, us-central1
- OS and storage
Debian GNU/Linux 12 (bookworm)
- Data protection
Snapshot schedules
- Networking**
1 firewall rule, 1 network interface
- Observability
Install Ops Agent
- Security

Networking

Firewall ?

Add tags and firewall rules to allow specific network traffic from the Internet

- ☒ Allow HTTP traffic
- ☐ Allow HTTPS traffic
- ☐ Allow Load Balancer Health Checks

Network tags ?

Hostname ?

Set a custom hostname for this instance or leave it default. Choice is permanent

IP forwarding ?

- ☐ Enable

Connect VM

Note:- In this section, we will only check connecting to vm directly via the browser. In the coming sessions and another lab, we will also connect to vm via putty tool using ssh key.

- 1) Make sure the Instance is at the running state

Filter

Enter property name or value

<input type="checkbox"/>	Status ↑	Name ↑	Zone	Re
<input type="checkbox"/>	✔	<u>myvm1</u>	us-central1-f	

- 2) Go to ssh option and click open in browser

myvm1

EDIT

RESET

CREATE MACHINE IMAGE

DETAILS

OBSERVABILITY

OS INFO

SCREENSHOT

SSH

CONNECT TO SERIAL CONSOLE

Connecting

Open in browser window

Open in browser window on custom port

Open in browser window using provided private SSH key

View gcloud command

Use another SSH client

Logs

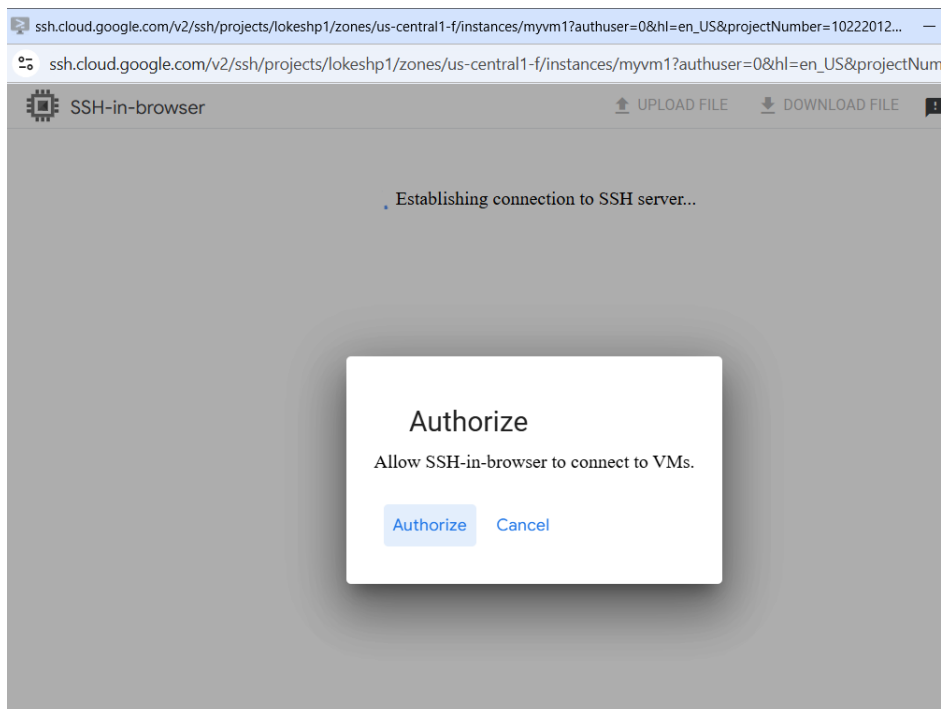
Logging

Serial port

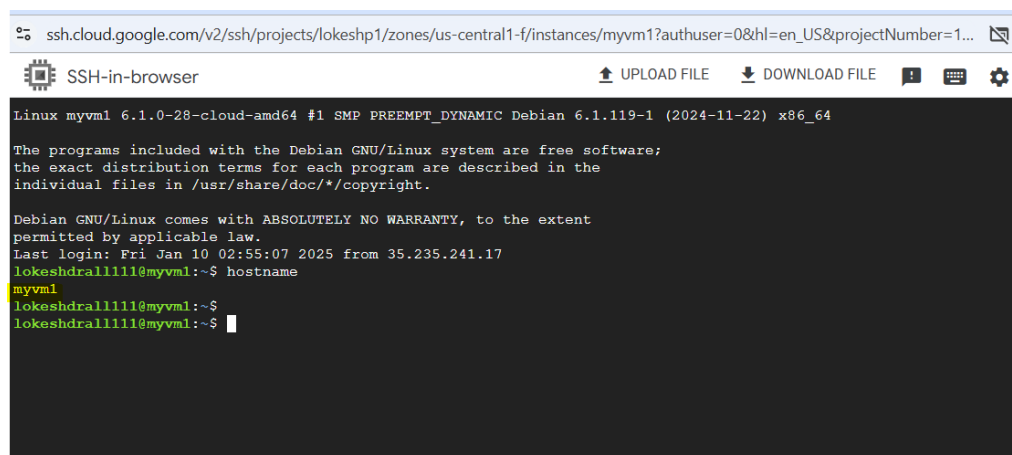
SHOW

Basic information

3) A new window will open, click the “Authorize” button if asked



4) Now you have logged in to the vm



5) Once you are in the SSH browser you need to run the below commands to install Nginx web server on your Virtual machine.

```
sudo apt-get update  
sudo apt-get install nginx
```

6) After that just copy the external IP address from your virtual machine and paste it in a new tab.

7) You will see the web server up and running.

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.

Once lab is completed, also explore stop, start and delete VM options.