

Google Cloud Platform – Professional Cloud Architect (Lab commands & screenshots)

Compute

- **Commands:**

```
cd $HOME
mkdir git_repo
sudo su -
apt-get update
apt-get install nginx -y.    #install nginx
ps aux | grep nginx          #Verify nginx process

gcloud compute ssh <instance-name> #connecting from
cloud shell.
```

Screenshots:

1. VM Instance Config

Google Cloud Platform gcp-pca

Search products and resources

← Create an instance

To create a VM instance, select one of the options:

- New VM instance**
Create a single VM instance from scratch
- New VM instance from template
Create a single VM instance from an existing template
- New VM instance from machine image
Create a single VM instance from an existing machine image
- Marketplace
Deploy a ready-to-go solution onto a VM instance

Name *
gcp-pca01

Labels ⓘ
+ ADD LABELS

Region *
us-central1 (Iowa) ⓘ
Region is permanent

Zone *
us-central1-a ⓘ
Zone is permanent

Monthly estimate
\$25.46
That's about \$0.03 hourly
Pay for what you use: No upfront costs and per second billing

✓ DETAILS

Machine configuration

Machine family

GENERAL-PURPOSE COMPUTE-OPTIMIZED MEMORY-OPTIMIZED GPU

Machine types for common workloads, optimized for cost and flexibility

Series
E2

CPU platform selection based on availability

Machine type
e2-medium (2 vCPU, 4 GB memory)

vCPU
1 shared core

Memory
4 GB

✓ CPU PLATFORM AND GPU

Display device

Enable to use screen capturing and recording tools.

☐ Enable display device

Confidential VM service ⓘ

☐ Enable the Confidential Computing service on this VM instance.

Container ⓘ

Deploy a container image to this VM instance

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Confidential VM service

☐ Enable the Confidential Computing service on this VM instance.

Container

Deploy a container image to this VM instance

[DEPLOY CONTAINER](#)

Boot disk

Disk type	New balanced persistent disk
Disk size	10 GB
Image	Debian GNU/Linux 10 (buster)

[CHANGE](#)

Identity and API access

Service account
Compute Engine default service account

Access scopes

☒ Allow default access

☐ Allow full access to all Cloud APIs

☐ Set access for each API

Firewall

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

☐ Allow HTTP traffic

☐ Allow HTTPS traffic

[NETWORKING, DISKS, SECURITY, MANAGEMENT, SOLE-TENANCY](#)

Your free trial credit will be used for this VM instance. [GCP Free Tier](#)

[CREATE](#) [CANCEL](#) [EQUIVALENT COMMAND LINE](#)

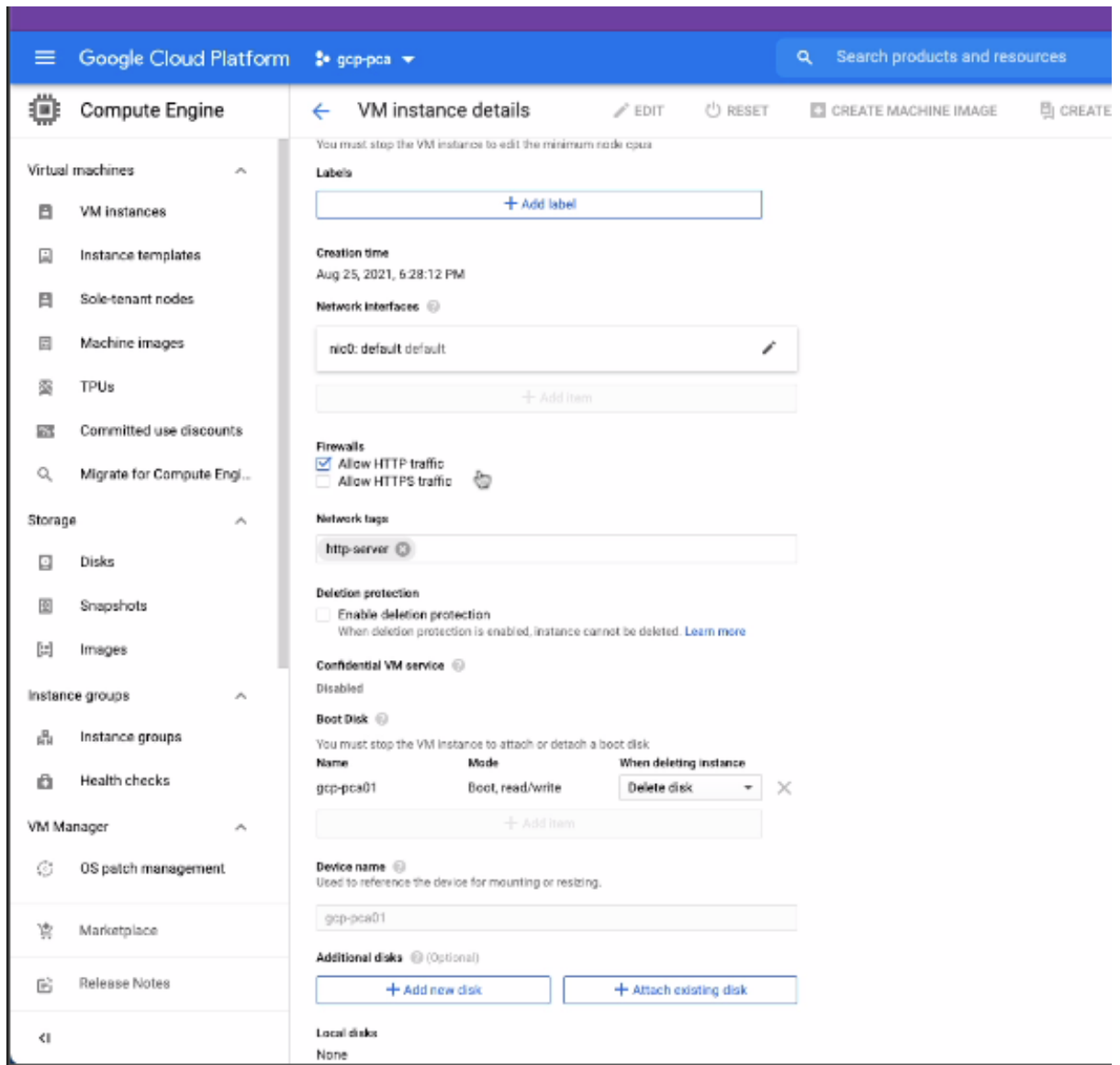
Monthly estimate
\$25.46
That's about \$0.03 hourly
Pay for what you use: No upfront costs and per second billing
[DETAILS](#)

2. SSH Access:

```
gyanilakhan@gcp-pca01:/$ pwd
/
gyanilakhan@gcp-pca01:/$ cd $HOME
gyanilakhan@gcp-pca01:~$ mkdir git_repo
gyanilakhan@gcp-pca01:~$ apt-get update
Reading package lists... Done
E: Could not open lock file /var/lib/apt/lists/lock - open (13: Permission denied)
E: Unable to lock directory /var/lib/apt/lists/
W: Problem unlinking the file /var/cache/apt/pkgcache.bin - RemoveCaches (13: Permission denied)
W: Problem unlinking the file /var/cache/apt/srcpkgcache.bin - RemoveCaches (13: Permission denied)
gyanilakhan@gcp-pca01:~$ sudo su -
root@gcp-pca01:~# apt-get update

root@gcp-pca01:~# ps aux|grep nginx
root      1941  0.0  0.0  65660  1708 ?        Ss   03:50   0:00 nginx: master process /
usr/sbin/nginx -g daemon on; master_process on;
www-data  1942  0.0  0.0  65976  3544 ?        S    03:50   0:00 nginx: worker process
www-data  1943  0.0  0.0  65976  3544 ?        S    03:50   0:00 nginx: worker process
root      1987  0.0  0.0   4836   876 pts/0    R+   03:51   0:00 grep nginx
```

3. Turn on Http



4. Access Nginx Server

