



Lab 1. Setting up the Learning Environment

By the end of this lab exercise, you should be able to:

- Create a Google Cloud Platform (GCP) account
- Configure a VM on GCP
- Connect to a VM on GCP
- Install Docker on Linux VM
- Verify that git is installed

First, sign up for Docker Hub at <https://hub.docker.com/>.

Create a Google Cloud Platform Account

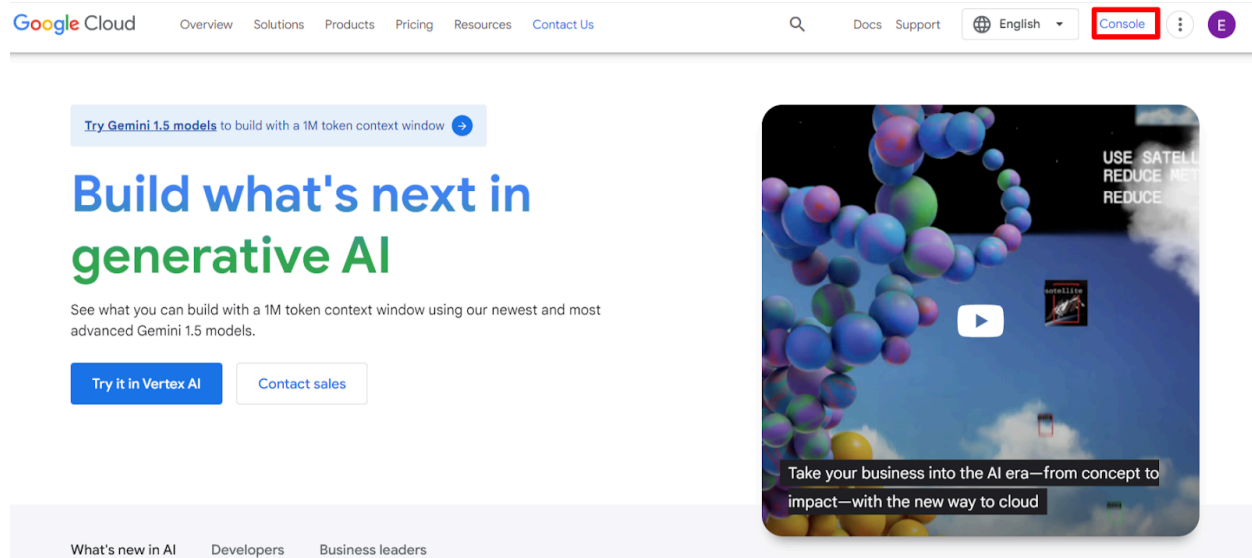
The only prerequisite for this task is a Google account. If you do not have one, go to google.com, select **Sign in** and follow the directions.

To get started, visit cloud.google.com and follow the simple steps to create a Google Cloud account. You can begin with a free account and sign up for free credits, which are valid for a limited time.

While creating an account, choose the account type **individual** and provide your address and payment details to complete the signup.

Once you create a Google Cloud Platform account, you will get Console access. You can revisit your account by going to cloud.google.com at any time.

Once logged in, you should see your Google Cloud Console, as pictured below:

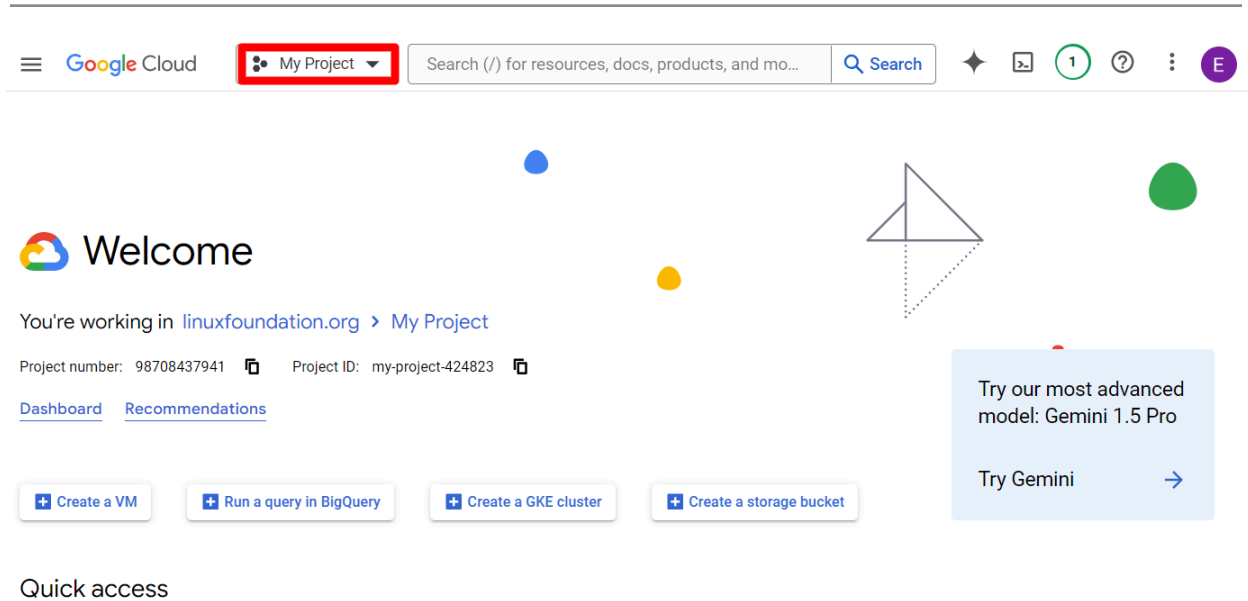


Alternatively, you can visit the console directly with this link: <https://console.cloud.google.com>.

Creating a Project to Contain Your VM

According to [Google Cloud documentation](#), a "project in Google Cloud Platform (GCP) organizes all of your Google Cloud resources, including Cloud Storage data, Compute instances, monitoring and logging data, and App Engine instances. Projects also include associated permissions for these resources".

A project provides a namespace to isolate resources for that project. To set up a new project, select the project dropdown menu. If it is your first time, you will see **My First Project** in the box. Otherwise, you will see the last project that you were in. To create a new project, click inside the box as illustrated below.



The image shows the Google Cloud Welcome screen. At the top, there is a navigation bar with the Google Cloud logo, a dropdown menu for 'My Project', a search bar, and several icons. Below the navigation bar, the word 'Welcome' is displayed with the Google Cloud logo. Underneath, it says 'You're working in linuxfoundation.org > My Project'. It also shows the Project number (98708437941) and Project ID (my-project-424823). There are links for 'Dashboard' and 'Recommendations'. Below these are four buttons: 'Create a VM', 'Run a query in BigQuery', 'Create a GKE cluster', and 'Create a storage bucket'. On the right side, there is a blue box with the text 'Try our most advanced model: Gemini 1.5 Pro' and a 'Try Gemini' button with a right arrow. At the bottom, it says 'Quick access'.

Google Cloud

My Project

Search (/) for resources, docs, products, and mo... Search

Welcome

You're working in [linuxfoundation.org](#) > My Project

Project number: 98708437941 Project ID: my-project-424823

[Dashboard](#) [Recommendations](#)

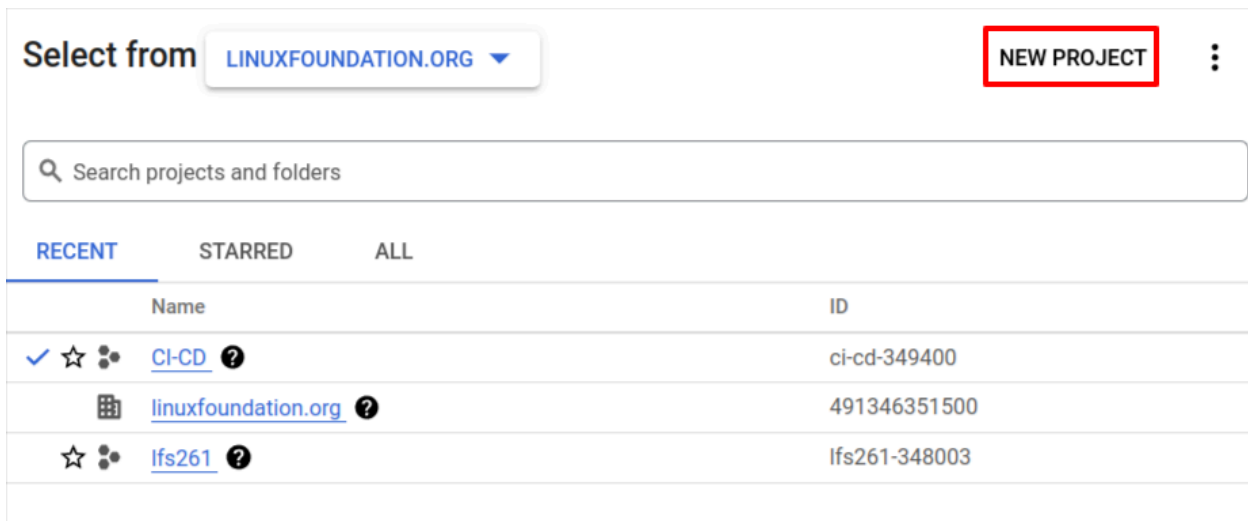
Create a VM Run a query in BigQuery Create a GKE cluster Create a storage bucket

Try our most advanced model: Gemini 1.5 Pro

Try Gemini →

Quick access

Select **NEW PROJECT**.



The image shows the 'Select from' screen in Google Cloud. At the top, there is a dropdown menu for 'LINUXFOUNDATION.ORG' and a 'NEW PROJECT' button. Below this is a search bar with the text 'Search projects and folders'. Under the search bar are three tabs: 'RECENT', 'STARRED', and 'ALL'. Below the tabs is a table with two columns: 'Name' and 'ID'. The table contains three rows of data.

Select from LINUXFOUNDATION.ORG

NEW PROJECT

Search projects and folders

RECENT STARRED ALL

Name	ID
✓ ☆ CI-CD ?	ci-cd-349400
📁 linuxfoundation.org ?	491346351500
☆ 📁 lfs261 ?	lfs261-348003

Name the project **CI-CD** and click **CREATE**.

New Project



You have 8 projects remaining in your quota. Request an increase or delete projects. [Learn more](#)

[MANAGE QUOTAS](#)

Project name *

CI-CD

Project ID *

psychic-nuance-349400



Project ID can have lowercase letters, digits, or hyphens. It must start with a lowercase letter and end with a letter or number.

Location *



No organization

[BROWSE](#)

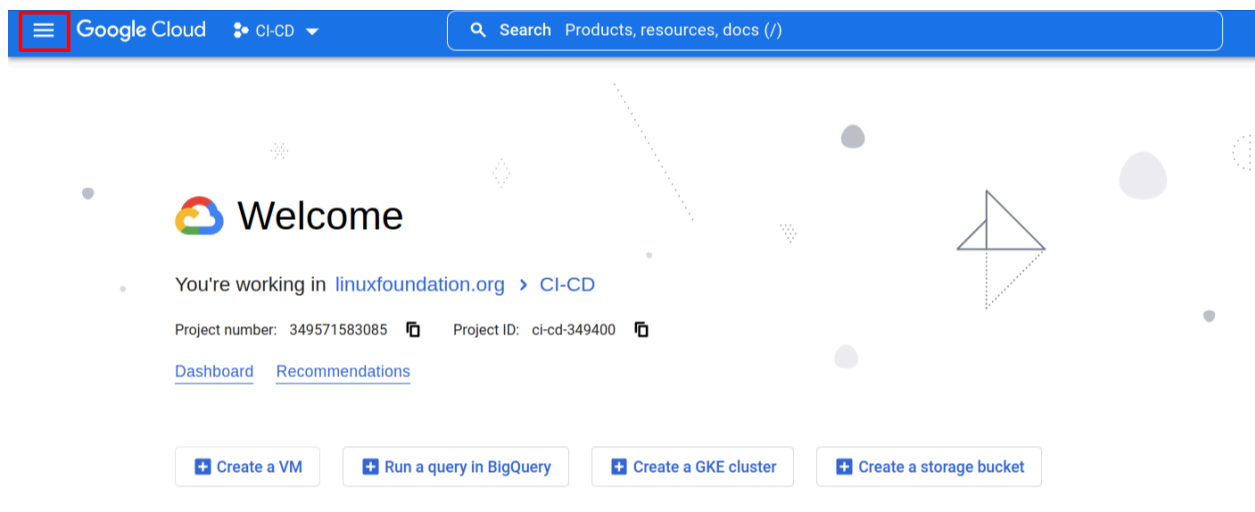
Parent organization or folder

CREATE

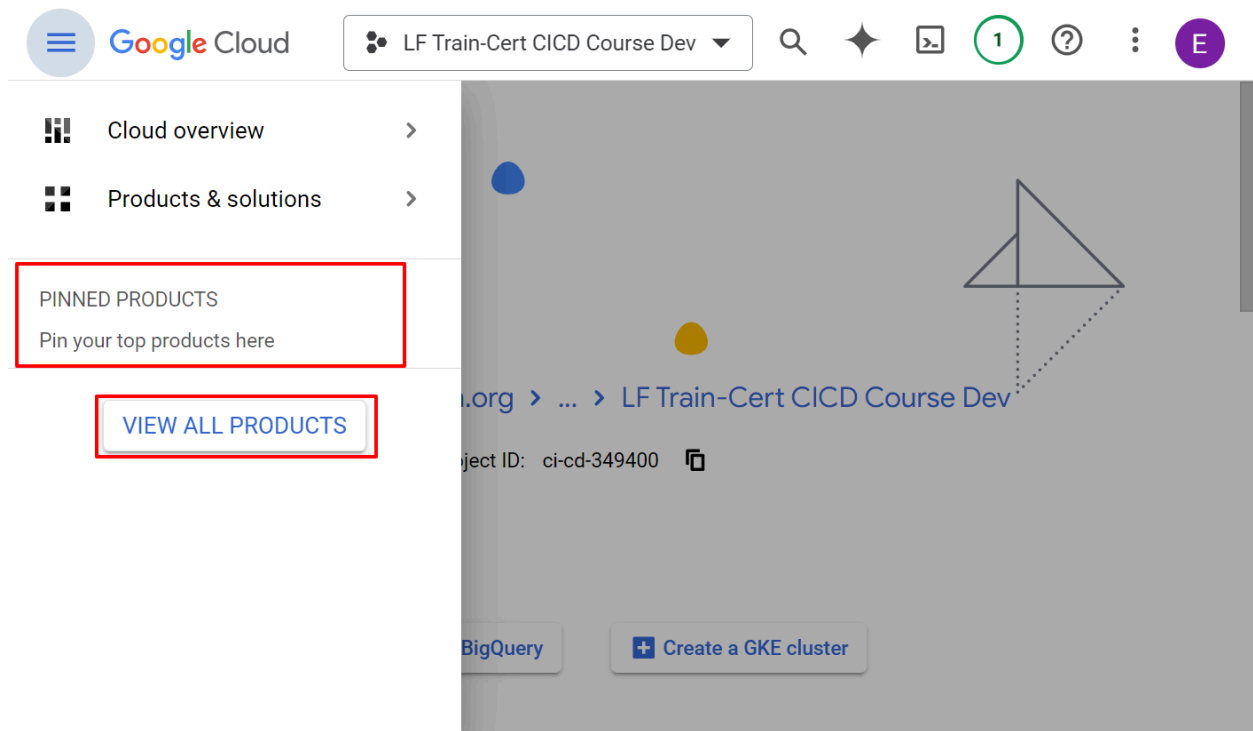
CANCEL

Navigating to VM Instances on Google Cloud

Open the menu in your Google Cloud account by clicking the menu in the top left:



The flyout menu has two sections. Look for **Compute Engine** in the **PINNED** or **VIEW ALL PRODUCTS** sections. If **Compute Engine** is not in the **PINNED** section, click **VIEW ALL PRODUCTS**:



Find **Compute Engine** and then click the **pin icon**.

Google Cloud | LF Train-Cert CICD Course Dev | Search (/) for resources, docs... | Search

Products & solutions

- All products
- Jump Start Solutions
- Solution deployments

Categories

- Management
- Compute**
- Storage
- Analytics
- Networking
- Distributed Cloud
- Serverless
- Databases
- Observability

APIs

- IAM & Admin
- Google Cloud Setup
- Admin for Gemini

Compute
Run scalable virtual machines and containers

Name	Description
Compute Engine	VMs, GPUs, TPUs, disks
Kubernetes Engine	Managed Kubernetes / containers
VMware Engine	VMware as a service
Anthos	Enterprise hybrid multi-cloud platform
Batch	Jobs as a service

Navigate to **Menu > Compute Engine > VM instances**:

Google Cloud | LF T | Search (/) for resources, docs... | Search

Cloud overview

Products & solutions

PINNED PRODUCTS

- IAM & Admin
- Billing
- APIs & Services
- Compute Engine**
- Kubernetes Engine
- VPC network

VIEW ALL PRODUCTS

VIRTUAL MACHINES

- VM instances**
- Instance templates
- Sole-tenant nodes
- Machine images
- TPUs
- Committed use discounts
- Reservations
- Migrate to Virtual Machines

STORAGE

- Disks
- Storage Pools
- Snapshots
- Images
- Async Replication

INSTANCE GROUPS

- Instance groups

CREATE INSTANCE | **IMPORT VM** | **REFRESH** | **LEARN**

INSTANCE SCHEDULES

global DNS names by default. To reduce the risk of cross-regional outages, we recommend you use [more](#)

DISMISS

Zone	Recommendations	In use by	Internal IP	Connect
us-central1-a			10.128.0.1 (nic0)	SSH

Monitor VMs
View outlier VMs across metrics like CPU and network

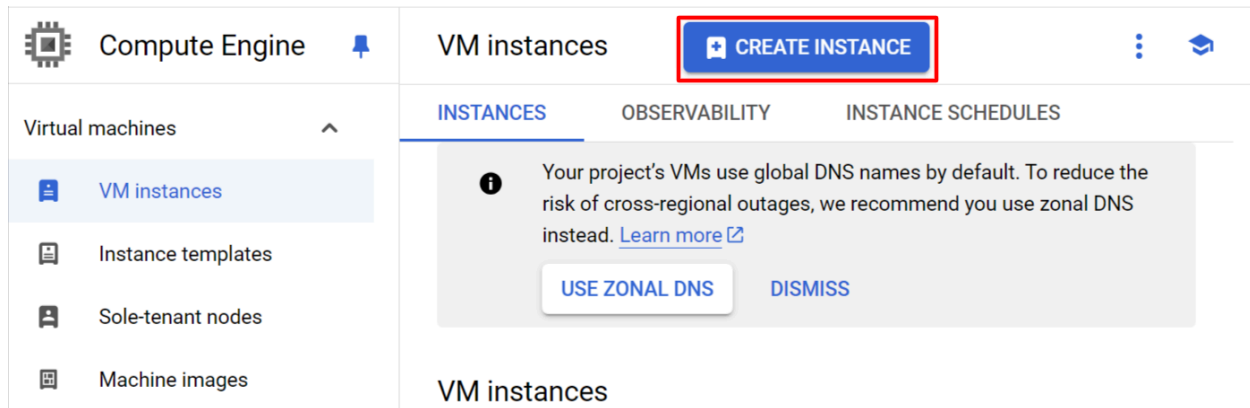
Explore VM logs
View, search, analyze, and download VM

Set up firewall rules
Control traffic to and from a VM instance

This will bring you to the VM instances page where you can create your VMs and see any VMs that have already been created.

Creating a VM Instance

To bring up the UI for creating a new VM instance, select **CREATE INSTANCE** at the top of the page:



You can give the instance a name that is meaningful to you. In this example, the VM instance is named **ci**.

Choose the **Region** that is closest to you. In this example, we have chosen **us-west1 (Oregon)**.

The form shows the configuration for a new VM instance. The 'Name' field is a text input containing 'ci', highlighted with a red box. Below it is a 'Labels' section with a '+ ADD LABELS' button. The 'Region' dropdown menu is highlighted with a red box and shows 'us-west1 (Oregon)'. Below the region dropdown is the text 'Region is permanent'. The 'Zone' dropdown menu shows 'us-west1-b' and has the text 'Zone is permanent' below it. Both dropdowns have a question mark icon for help.

Scroll to **Machine Configuration**. Select **E2** under the **General purpose** tab.

Machine configuration

☒ **General purpose**
☐ Compute optimized
 ☐ Memory optimized
 ☐ Storage optimized **NEW**

☐ GPUs

Machine types for common workloads, optimized for cost and flexibility

	Series ?	Description	vCPUs ?	Memory ?
<input type="radio"/>	C4	PREVIEW Consistently high performance	2 - 192	4 - 1,488 GB
<input type="radio"/>	N4	Flexible & cost-optimized	2 - 80	4 - 640 GB
<input type="radio"/>	C3	Consistently high performance	4 - 192	8 - 1,536 GB
<input type="radio"/>	C3D	Consistently high performance	4 - 360	8 - 2,880 GB
<input checked="" type="radio"/>	E2	Low cost, day-to-day computing	0.25 - 32	1 - 128 GB

Scroll to **Machine type**. For machine type, choose **e2-standard-2 (2 vCPU, 8 GB memory)**.

Google Cloud LFS Train-Cert CIDC Course Dev

Search (/) for resources, docs, products, and more

Create an instance Create VM from...

Machine configuration e2-standard-2, us-central1

- OS and storage Debian GNU/Linux 12 (bookworm)
- Data protection Snapshot schedules
- Networking 1 network interface
- Observability Install Ops Agent
- Security
- Advanced

Machine types for common workloads, optimized for cost and flexibility

Series ?	Description	vCPUs ?	Memory ?	CPU Platform
<input type="radio"/> C4	Consistently high performance	2 - 192	4 - 1,488 GB	Intel Emerald
<input type="radio"/> C4A	Arm-based consistently high performance	1 - 72	2 - 576 GB	Google Axion
<input type="radio"/> C4D	PREVIEW Consistently high performance	2 - 384	3 - 3,024 GB	AMD Turin
<input type="radio"/> N4	Flexible & cost-optimized	2 - 80	4 - 640 GB	Intel Emerald
<input type="radio"/> C3	Consistently high performance	4 - 192	8 - 1,536 GB	Intel Sapphire
<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	Intel Broadwell
<input type="radio"/> N2	Balanced price & performance	2 - 128	2 - 864 GB	Intel Cascade

Filter Instance sizes

☒ Shared-core
 ☐ Standard
 ☐ High memory
 ☐ High CPU

☐ e2-standard-2
2 vCPU (1 core), 8 GB memory
 ☐ e2-standard-4
4 vCPU (2 core), 16 GB memory
 ☐ e2-standard-8
8 vCPU (4 core), 32 GB memory
 ☐ e2-standard-16
16 vCPU (8 core), 64 GB memory
 ☐ e2-standard-32
32 vCPU (16 core), 128 GB memory

vCPU platform Automatic

2 vCPU (1 core) 8 GB

Create Cancel Equivalent code

Monthly estimate

\$49.92
That's about \$0.07 hourly

Pay for what you use: no upfront costs and per second billing

Item	Monthly estimate
2 vCPU + 8 GB memory	\$48.92
10 GB balanced persistent disk	\$1.00
Logging	Cost varies
Monitoring	Cost varies
Snapshot schedule	Cost varies
Total	\$49.92

[Compute Engine pricing](#)
[Cloud Operations pricing](#)
[Less](#)

Click **OS** and **storage** on the right.

Google Cloud | LF Train-Cert CICD Course Dev | Search (/) for resources, docs, products, and more

Protect Compute Engine VMs with advanced backup scheduling, vaulted storage, and ransomware protection. [Read more](#) [Try Backup and DR](#) [Dismiss](#)

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

- Machine configuration
e2-medium, us-west1
- OS and storage**
Debian GNU/Linux 12 (bookworm)
- Data protection
Snapshot schedules
- Networking
1 network interface
- Observability
Install Ops Agent
- Security
- Advanced

Machine configuration

Name * ci

Region * us-west1 (Oregon) 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	CPU Platform
<input type="radio"/> C4	Consistently high performance	2 - 192	4 - 1,488 GB	Intel Emerald
<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
<input type="radio"/> C3	Consistently high performance	4 - 192	8 - 1,536 GB	Intel Sapphire
<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	Intel Broadwell
<input type="radio"/> N2	Balanced price & performance	2 - 128	2 - 864 GB	Intel Cascade
<input type="radio"/> N2D	Balanced price & performance	2 - 224	2 - 896 GB	AMD Milan
<input type="radio"/> T2A	Scale-out workloads	1 - 48	4 - 192 GB	Ampere Altra
<input type="radio"/> T2D	Scale-out workloads	1 - 60	4 - 240 GB	AMD Milan
<input type="radio"/> N1	Balanced price & performance	0.25 - 96	0.6 - 624 GB	Intel Haswell

Machine type

[Create](#) [Cancel](#) [Equivalent code](#)

Monthly estimate

\$25.46
That's about \$0.03 hourly

Pay for what you use: no upfront costs and per second billing

Item	Monthly estimate
2 vCPU + 4 GB memory	\$24.46
10 GB balanced persistent disk	\$1.00
Logging	Cost varies
Monitoring	Cost varies
Snapshot schedule	Cost varies
Total	\$25.46

[Compute Engine pricing](#)
[Cloud Operations pricing](#)
[Less](#)

Scroll to **Boot disk** and select **CHANGE**:

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

- Machine configuration
e2-medium, us-west1
- OS and storage**
Debian GNU/Linux 12 (bookworm)
- Data protection
Snapshot schedules
- Networking
1 network interface
- Observability
Install Ops Agent
- Security
- Advanced

Operating system and storage

Name ci

Type New balanced persistent disk

Size 10 GB

Snapshot schedule default-schedule-1

License type Free

Image Debian GNU/Linux 12 (bookworm)

[Change](#)

Additional disks

[+ Add new disk](#) [+ Attach existing disk](#) [+ Add local SSD](#)

Container

Deploy a container image to this VM instance

[Deploy container](#)

Monthly estimate

\$25.46
That's about \$0.03 hourly

Pay for what you use: no upfront costs and per second billing

Item	Monthly estimate
2 vCPU + 4 GB memory	\$24.46
10 GB balanced persistent disk	\$1.00
Logging	Cost varies
Monitoring	Cost varies
Snapshot schedule	Cost varies
Total	\$25.46

[Compute Engine pricing](#)
[Cloud Operations pricing](#)
[Less](#)

This will bring up a form that allows you to choose the operating system you want to run. As we decided to use Ubuntu 24.04 for lab exercises, choose **Operating system > Ubuntu**. Choose the **x86** version of **Ubuntu 24.04**. Enter **30** for the **Size**. Then, click **Select**.

Boot disk ✕

Select an image or snapshot to create a boot disk; or attach an existing disk. Can't find what you're looking for? Explore hundreds of VM solutions in [Marketplace](#) 🔗

Public images

Custom images

Snapshots

Archive Snapshots

Existing Disks

Operating system ▾

Ubuntu

Version * ▾

Ubuntu 24.04 LTS

x86/64, amd64 noble image built on 2025-06-24

Boot disk type * ▾

Balanced persistent disk

Compare disk types

Size (GB) ▾

30

Provision between 10 and 65536 GB

✓ Show advanced configuration

Select

Cancel

Scroll to the bottom of the VM creation form and click **CREATE**.

Google Cloud | LF Train-Cert CICD Course Dev | Search (/) for resources, docs, products, and more

Protect Compute Engine VMs with advanced backup scheduling, vaulted storage, and ransomware protection. [Read more](#) | [Try Backup and DR](#) | [Dismiss](#)

← Create an instance | Create VM from... | Equivalent code

- Machine configuration
e2-medium, us-west1
- OS and storage**
Ubuntu 24.04 LTS
- Data protection
Snapshot schedules
- Networking
1 network interface
- Observability
Install Ops Agent
- Security
- Advanced

Operating system and storage

Name	ci
Type	New balanced persistent disk
Size	20 GB
Snapshot schedule	default-schedule-1
License type	Free
Image	Ubuntu 24.04 LTS

[Change](#)

Additional disks

[+ Add new disk](#) [+ Attach existing disk](#) [+ Add local SSD](#)

Container

Deploy a container image to this VM instance

[Deploy container](#)

Monthly estimate

\$26.46
That's about \$0.04 hourly
Pay for what you use: no upfront costs and per second billing

Item	Monthly estimate
2 vCPU + 4 GB memory	\$24.46
20 GB balanced persistent disk	\$2.00
Logging	Cost varies
Monitoring	Cost varies
Snapshot schedule	Cost varies
Total	\$26.46

[Compute Engine pricing](#)
[Cloud Operations pricing](#)
[Less](#)

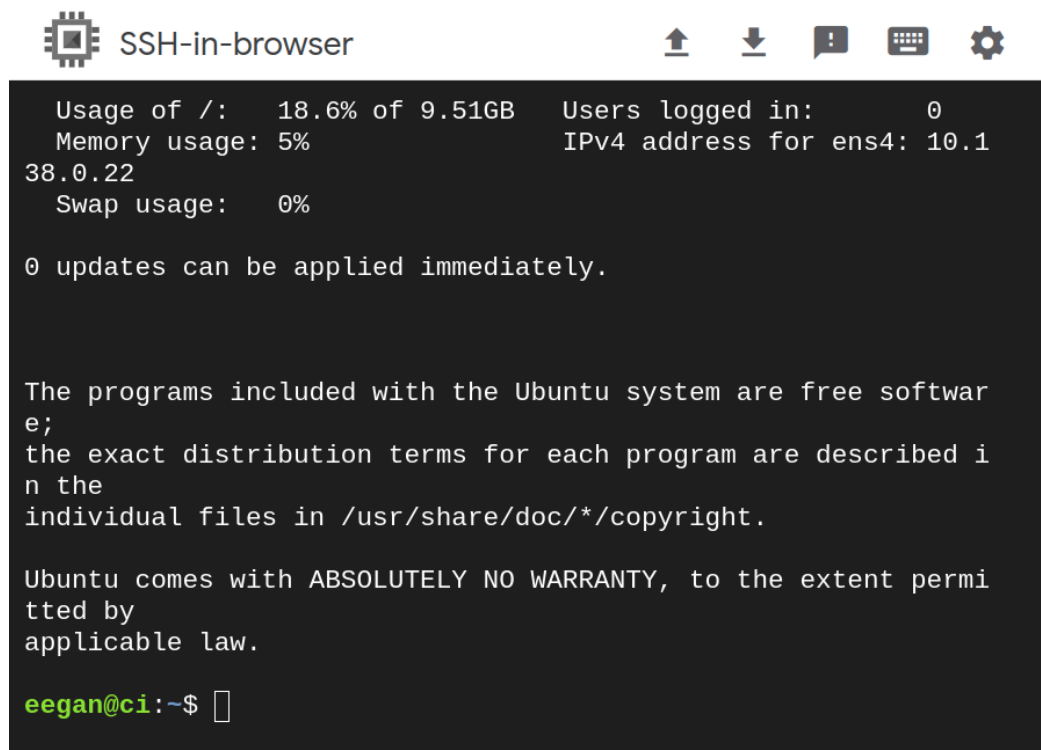
[Create](#) Cancel [Equivalent code](#)

Connecting to Your VM Instance

You will be taken back to the **VM instances** page where you will see your newly created VM. To connect to your VM, click **SSH**.

<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	ci-01	us-west1-b			10.138.0.2 (nic0)	35.197.102.152 (nic0)	SSH

A terminal window will pop up.



```
SSH-in-browser

Usage of /: 18.6% of 9.51GB   Users logged in: 0
Memory usage: 5%           IPv4 address for ens4: 10.1
38.0.22
Swap usage: 0%

0 updates can be applied immediately.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in
the individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted
by applicable law.

eegan@ci:~$
```

You are inside a Linux Ubuntu machine. This is a terminal that you can use to interact with your VM on GCP.

If you would like to connect to a Google Cloud VM instance from a terminal on your own computer, you will need to follow the directions here:

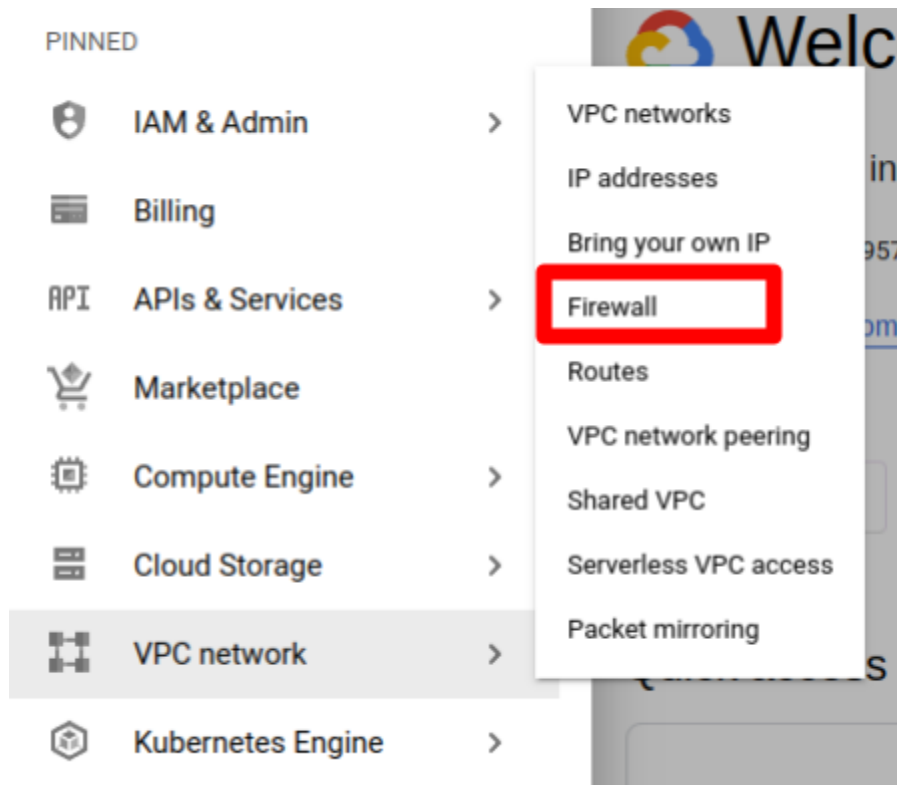
<https://cloud.google.com/compute/docs/instances/connecting-advanced#before-you-begin>

Opening the Firewall for Our Google Cloud VM

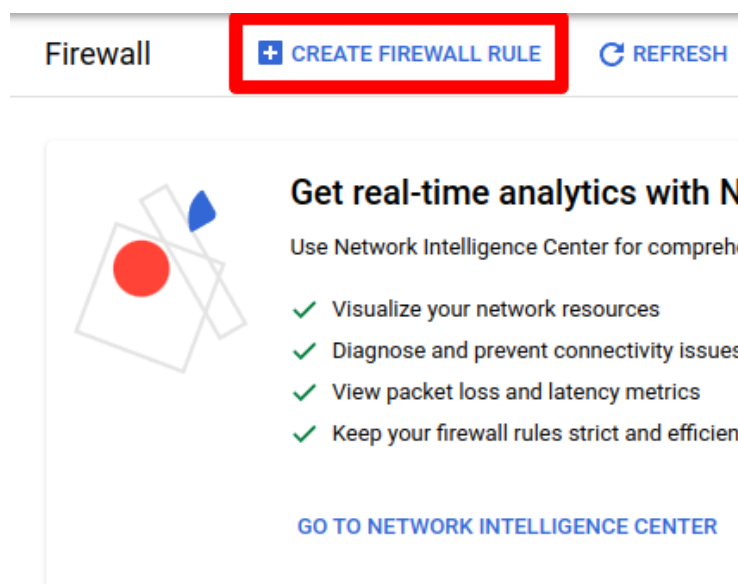
When learning new concepts, it is helpful to configure our learning environments in a way that allows us to focus on the topic at hand. In our case, we don't want to worry about whether the issues we are running into are network-related or due to the tools we are learning. This is not a networking course. As such, we will open our firewall completely to rule out any firewall issues. This is only for learning purposes. **This is *NOT* something you would do in production, as it is *NOT* secure.** However, it will help you troubleshoot a CI/CD pipeline.

Creating a Firewall Rule

Under the **VPC network** go to **Firewall**.



In networking, it is common to create **rules** that are then **applied** to specific computers or VMs. We will create a **Firewall rule** and then apply it to our VM instance.



Refer to the following screenshot:

Firewall rules control incoming or outgoing traffic to an instance. By default, incoming traffic from outside your network is blocked. [Learn more](#)

Name *
open ?
Lowercase letters, numbers, hyphens allowed

Description
Only use this firewall rule for learning. Do not use this firewall rule for production environments. /

Logs
Turning on firewall logs can generate a large number of logs which can increase costs in Cloud Logging. [Learn more](#)
☐ On
☒ Off

Network *
default ?

Priority *
1000 [CHECK PRIORITY OF OTHER FIREWALL RULES](#) ?
Priority can be 0 - 65535

Direction of traffic ?
☒ Ingress
☐ Egress

Action on match ?
☒ Allow
☐ Deny

Targets
Specified target tags ?

Target tags *
open ×

Source filter
IPv4 ranges ?

Source IPv4 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

[DISABLE RULE](#)

CREATE CANCEL

Name the firewall rule **open** and give it a description. In our case, we have reminded ourselves NOT to use this rule in production.

Then, under **Target tag**, enter **open**. This is how you will add this rule to your VM instance. You need to remember this or look it up to add it to your VM. To make it easy, give this firewall rule the same tag as the name of the firewall rule.

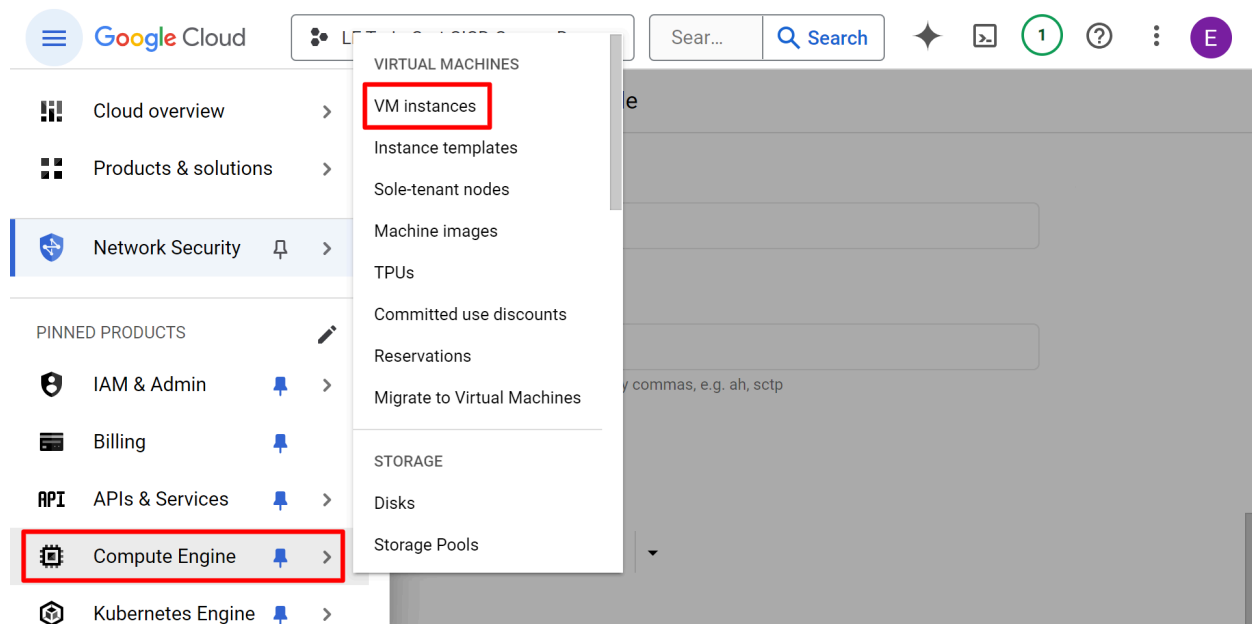
Under **Source IPv4 Ranges** we will enter `0.0.0.0/0.0.0.0.0/0` is networking for *all IP addresses*. This means that your VM can be connected to from *any computer*. As noted, this is highly insecure, but it is good for learning.

Under **Protocols and ports** select **Allow all** and then click **CREATE**.

Adding the Firewall Rule to Our VM

Now we have a firewall rule that will allow *all* traffic through. A rule is of no use unless it is applied to something. In this case, we want to apply it to our VM.

First go to **Compute Engine > VM instances**.



Click on your VM's name.

Filter Enter property name or value

<input type="checkbox"/>	Status	Name ↑	Zone
<input type="checkbox"/>	✓	ci-01	us-west1-b

Click **EDIT** at the top of the screen.

← ci-01 **EDIT** RESET

DETAILS OBSERVABILITY OS INFO

SSH

Connecting to serial ports is disabled ?

Scroll down to **Networking** if it isn't visible.

Networking

Network performance configuration

Network interface card is permanent

Network interface card

—



Network bandwidth

You must stop the VM instance to edit Network bandwidth.

☐ Increase total egress bandwidth

Maximum outbound network bandwidth: 2Gbps

Network interfaces ?

Network interface is permanent

default default (10.138.0.0/20)



ADD NETWORK INTERFACE

Firewalls

☐ Allow HTTP traffic

☐ Allow HTTPS traffic

Network tags

Network tags

open




SAVE


CANCEL

Enter **open** in the **Network tags** box. Remember, this is what we tagged our firewall rule earlier.

Verify the Rule Was Applied


To verify that the instance is associated with the **open** firewall rule, return to **Google Cloud > VPC Network > Firewall**. Click on the **open** firewall rule.


 **Filter** Enter property name or value


<input type="checkbox"/>	Name	Type	Targets	Filters	Protocols / ports	Action	Priority	Network 	Logs
<input type="checkbox"/>	default-allow-http	Ingress	http-server	IP ranges: 0.0.0.0/0	all	Allow	1000	default	Off
<input type="checkbox"/>	default-allow-https	Ingress	https-server	IP ranges: 0.0.0.0/0	tcp:443	Allow	1000	default	Off
<input type="checkbox"/>	open	Ingress	open	IP ranges: 0.0.0.0/0	all	Allow	1000	default	Off
<input type="checkbox"/>	open-all	Ingress	open-all-tag	IP ranges: 0.0.0.0/0	all	Allow	1000	default	Off

Then scroll down to **Applicable to Instances**.

Applicable to instances

 The following table shows only the VM instances that you have permission to view.

 **Filter** Filter by instance name, project or subnetwork

Name 	Subnetwork	Internal IP ranges	External IP ranges
ci	default	10.138.0.22	34.168.137.243

You should see your VM listed.

Installing and Verifying Docker on Your Linux VM

The following directions have been pulled directly from Docker's documentation. Run each command in the order in which they appear. The first command ensures that any existing Docker versions are removed, preventing conflicts with the new version we will install. If Docker is not installed, the output will inform you that Docker was not found. Either outcome is fine.

```
$ sudo apt-get remove docker docker-engine docker.io containerd runc
```

Now that you have removed or ensured that no Docker is present on the machine, we can proceed with the install.

```
$ sudo apt-get update

$ sudo apt-get install \
    ca-certificates \
    curl \
    gnupg \
    lsb-release

$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor
-o /etc/apt/keyrings/docker.gpg

$ echo \

    "deb [arch=$(dpkg --print-architecture)
signed-by=/etc/apt/keyrings/docker.gpg]
https://download.docker.com/linux/ubuntu \

    $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list \
> /dev/null

$ sudo apt-get update

$ sudo apt-get install docker-ce docker-ce-cli containerd.io
docker-buildx-plugin docker-compose-plugin
```

Type **Y** when prompted.

The directions are found here: <https://docs.docker.com/engine/install/ubuntu/>.

After installation, validate Docker by running the following commands:

```
$ sudo docker version

Client:           Docker Engine - Community
Version:          28.0.4
.....
Server: Docker Engine - Community
Engine:
Version:          28.0.4
.....
```

Do a smoke test with:

```
$ sudo docker run hello-world

.....

Hello from Docker!
```

This message shows that your installation appears to be working correctly.

....

This validates that Docker has successfully been installed.

Add your user to the `docker` group. This will make it more convenient to run commands, as you won't need to type `sudo` every time you run Docker.

WARNING: In a production environment, this has significant security implications that must be carefully weighed.

There is no one-size-fits-all answer as to whether you should add users to the `docker` group.

```
$ sudo usermod -aG docker $USER
```

```
$ newgrp docker
```

You should now be able to run `docker` commands without typing `sudo` first.

Verifying and Installing Git

Git comes pre-installed on most Linux distributions. To verify, run:

```
$ git version
```

If it is not installed, reference the official download and installation guides below to set up Git:

- [Git - Downloads](#)
- [Installing Git](#)

Summary

You are now set up to get started with the hands-on lab exercises in the rest of the course.