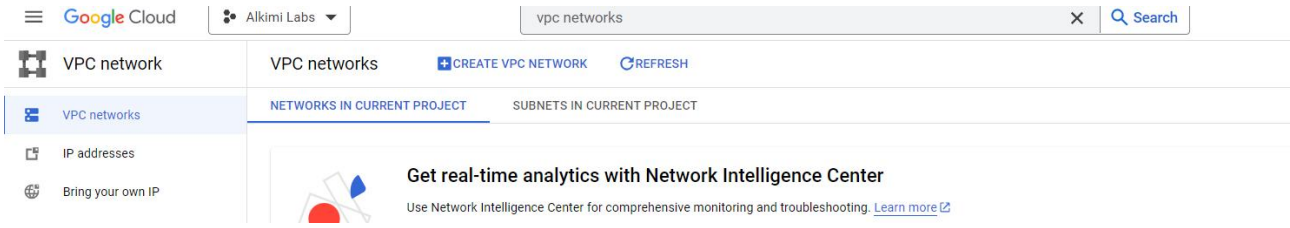
GCP Node Setup procedure

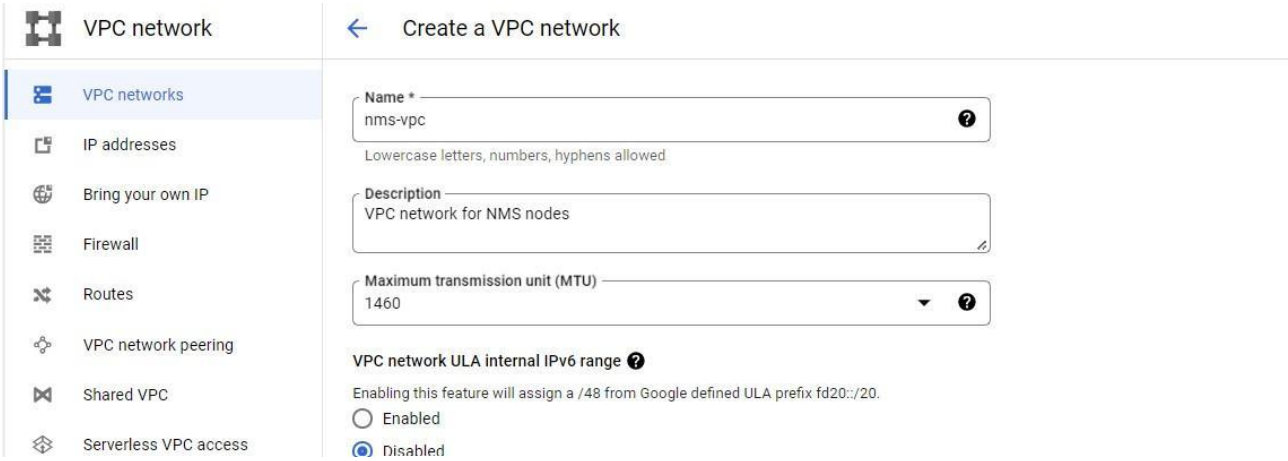
Log on to the GCP console with your credentials.

Setup VPC for the NMS.

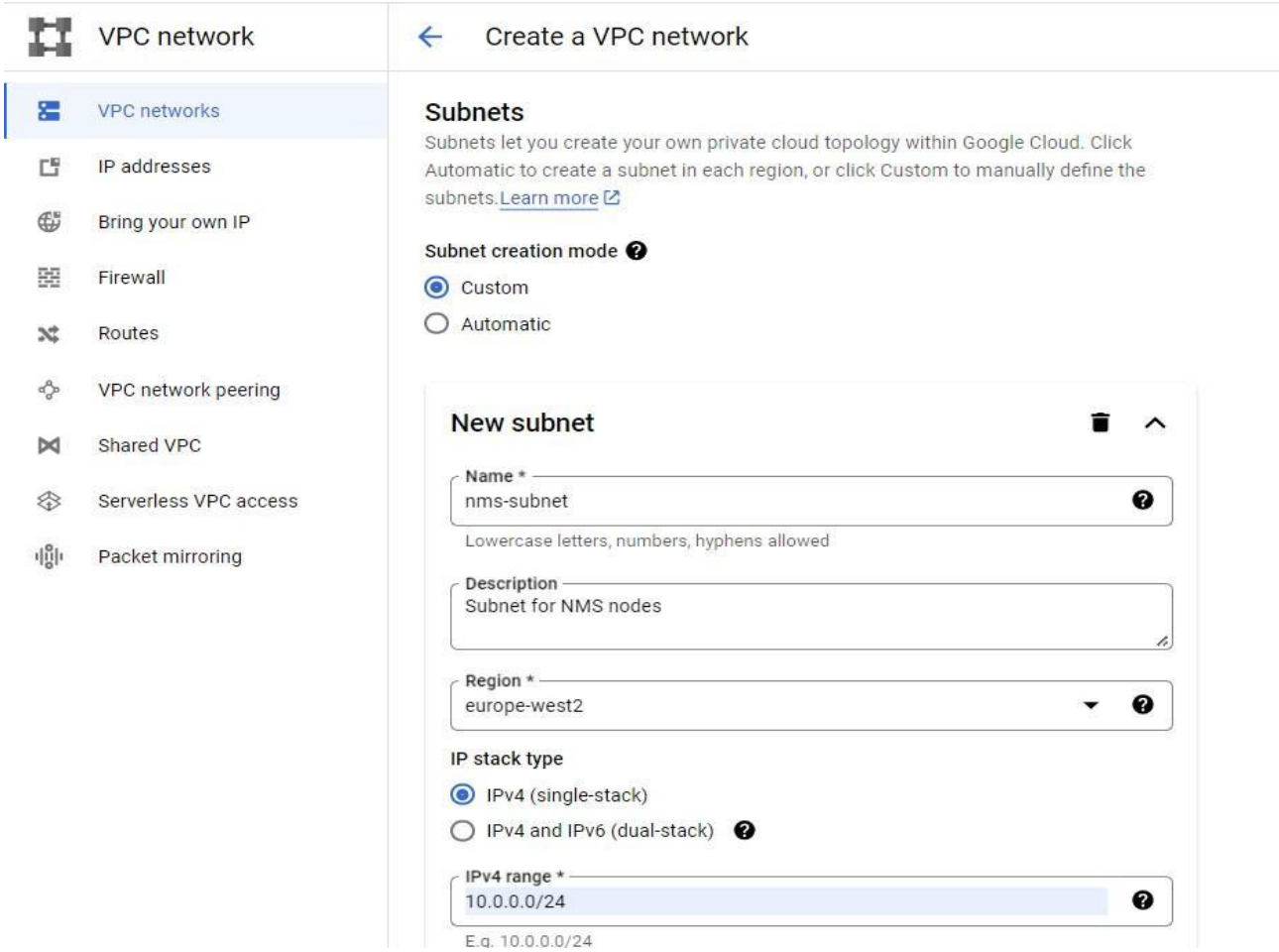
Enter “VPC networks” in the search button and click enter.

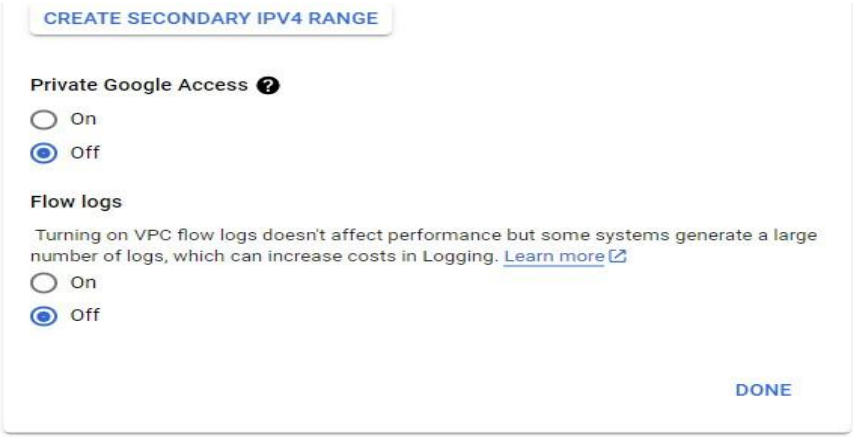


Click on Create VPC networks and enter details as given below



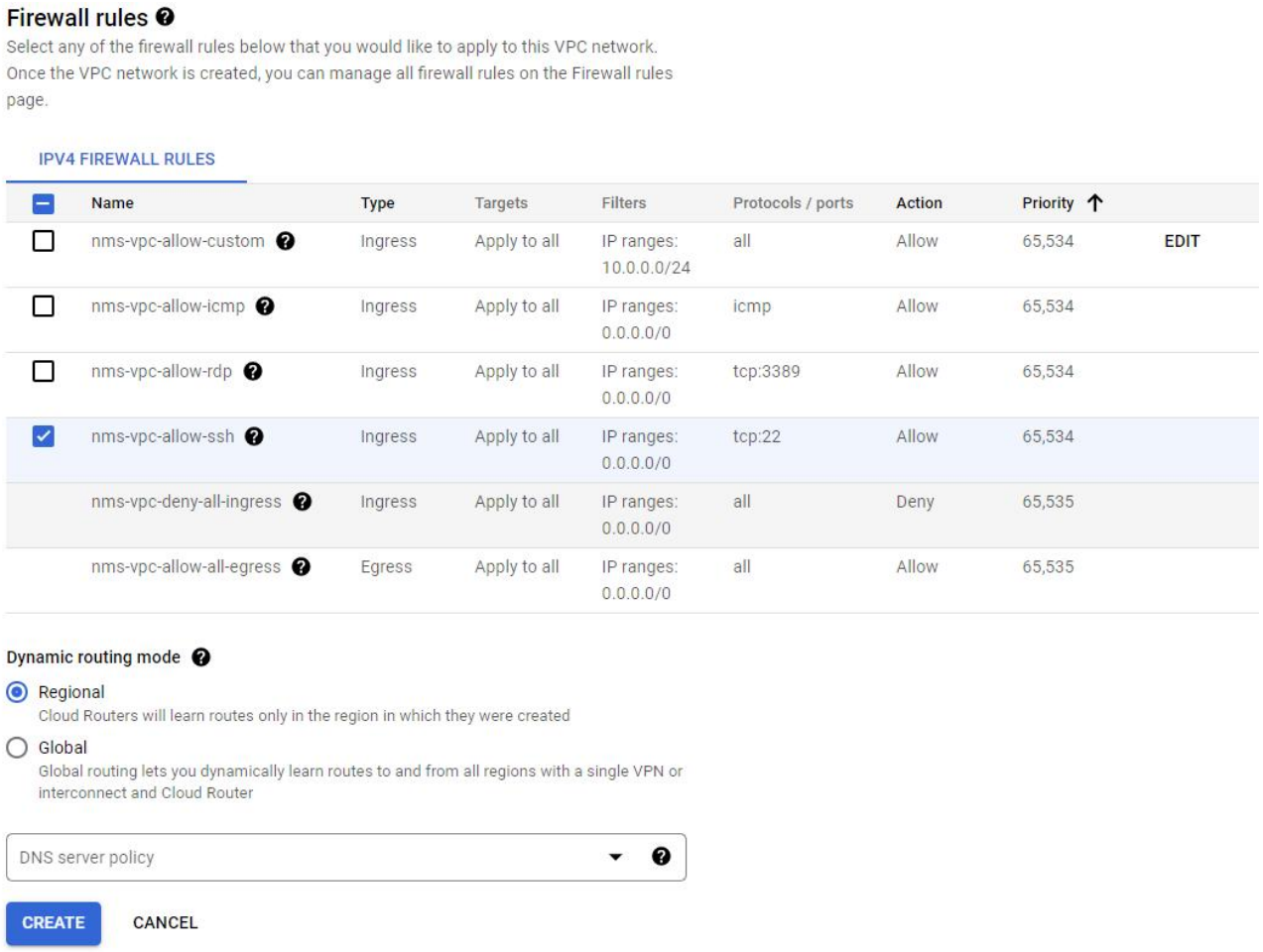
Enter subnet details as given below





Click on Done .

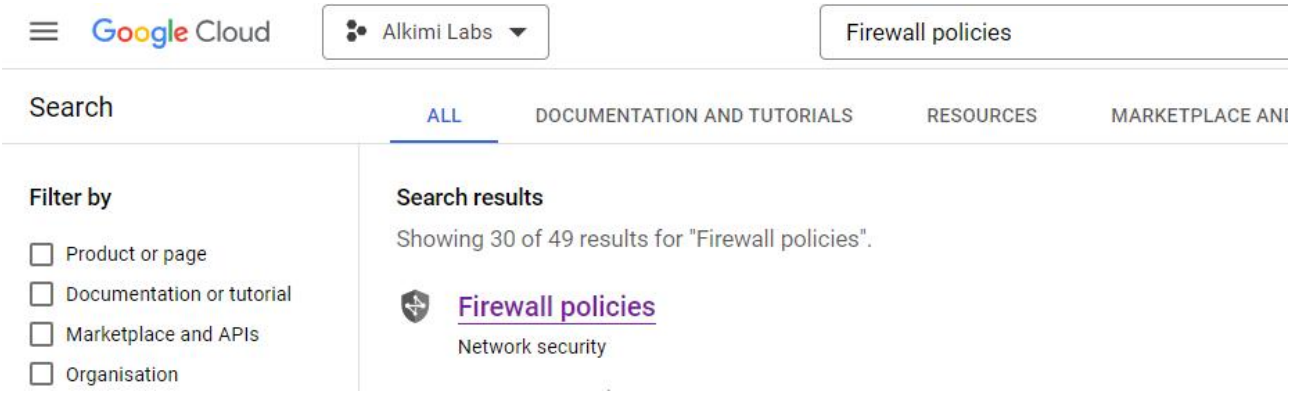
In the Firewall rules select nms-vpc-allow-ssh as shown below.



And then click on Create to create a VPC.

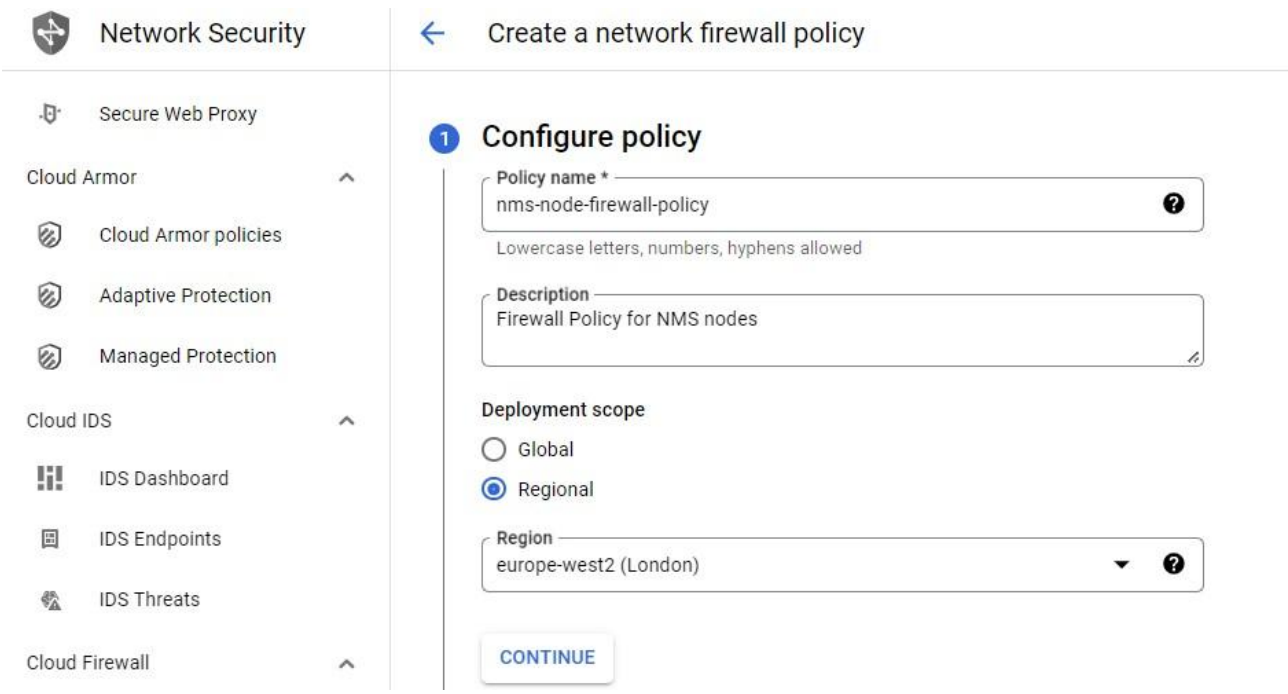
Once VPC is created, it is time to set up a Network Firewall Policy.

Search for “Firewall policies” as below and select Firewall Policies

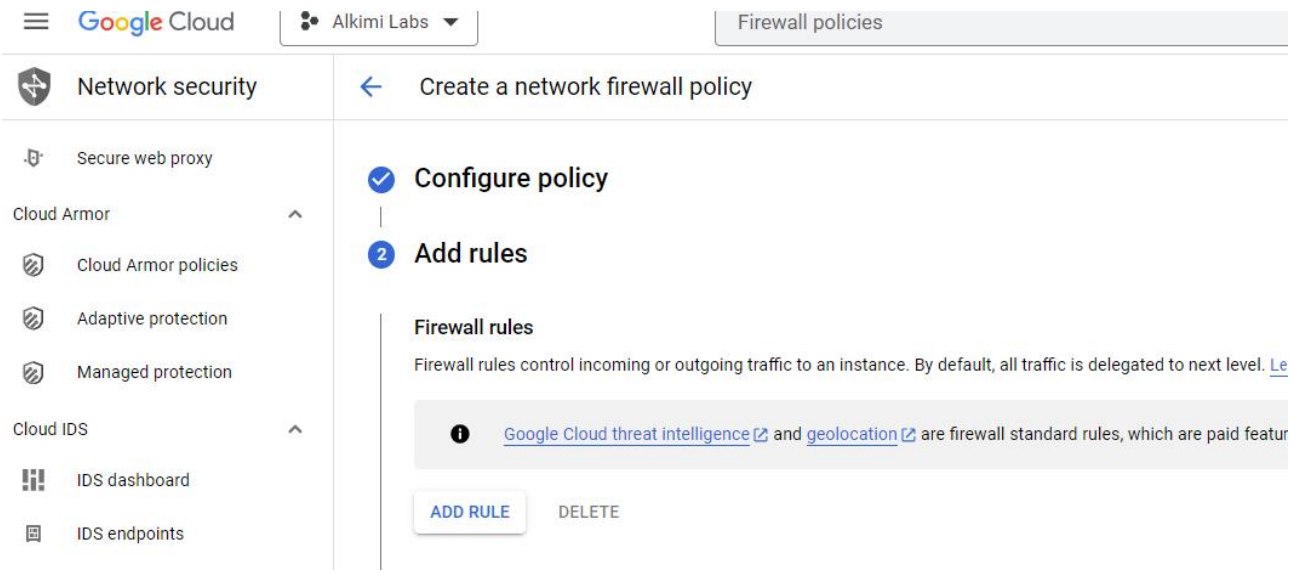


and click on Create Firewall Policy

Enter Firewall policy details as below



Click on Continue to Add Rule



Click on ADD RULE to add Firewall Rule

Enter firewall rule details as below

Create a firewall rule

Priority *
1000
Priority can be 0 – 2147483643.

Description
NMS Firewall rules

Direction of traffic
- (●) Ingress
- ( ) Egress

Action on match
- (●) Allow
- ( ) Deny
- ( ) Go to next

Logs

Turning on firewall logs can generate a large number of logs, which can increase costs in Logging. Learn more
- ( ) On
- (●) Off

Target

Target type
All instances in the network

Source

IP type
IPv4

IP ranges
0.0.0.0/0

Tags
SELECT SCOPE

Select "Specified protocols and ports" as shown below

Then Enter port details as below for Guardian Nodes (For Master Node check next Step)

Destination

IP type
None

Protocols and ports

- ○ Allow all
- ◉ Specified protocols and ports

☑ TCP

Ports
8000-8001,9000,9065-9066

E.g. 20, 50–60

☐ UDP

Ports

E.g. all

☐ Other

Protocols

Separate multiple protocols by commas, e.g. ah, sctp

CREATE CANCEL

OR enter port details as below for Master node

Destination

IP type
None

Protocols and ports

- ○ Allow all
- ◉ Specified protocols and ports

☑ TCP

Ports
8000-8001,9000,19001-19004

E.g. 20, 50–60

☐ UDP

Ports

E.g. all

☐ Other

Protocols

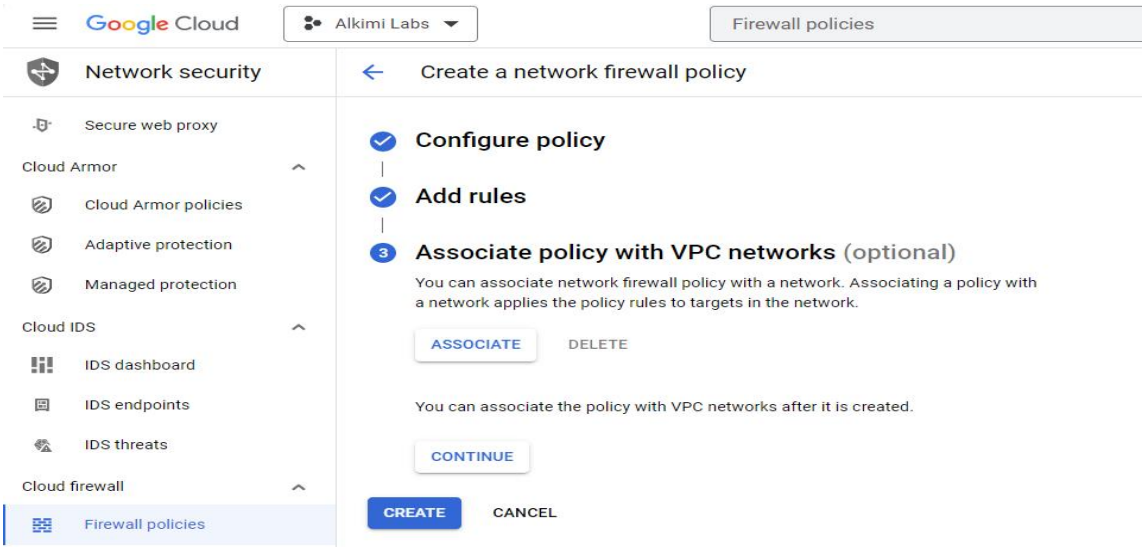
Separate multiple protocols by commas, e.g. ah, sctp

CREATE CANCEL

and Click on Create.

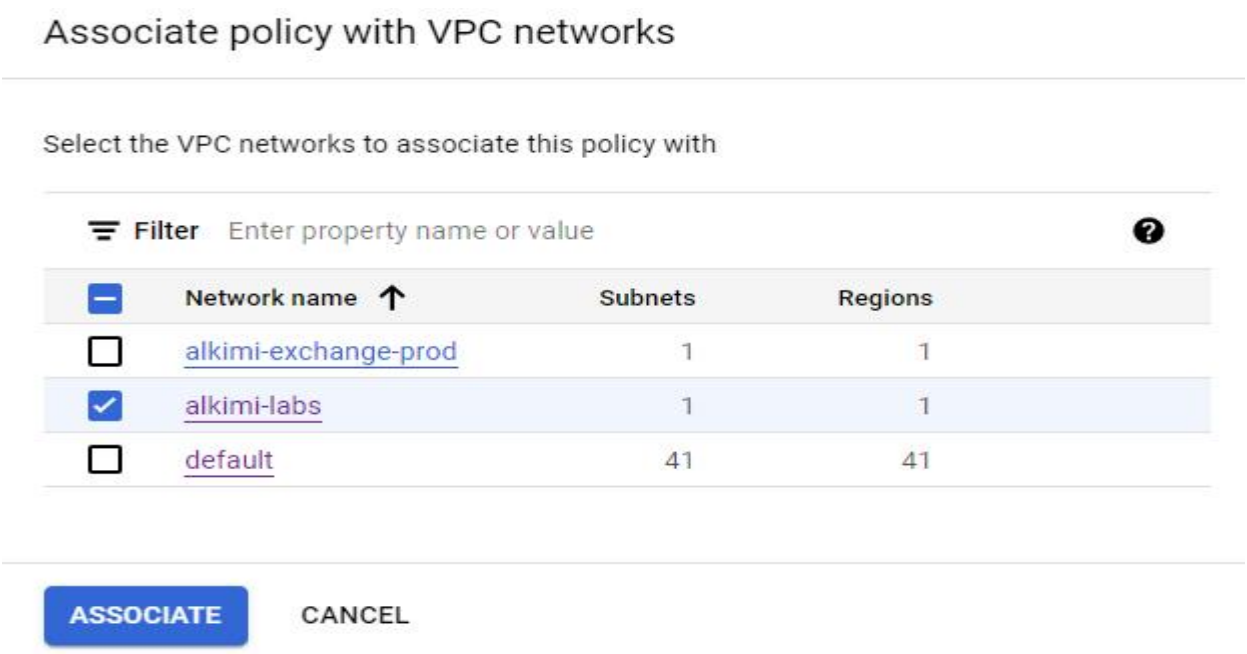
Click on Continue

Associate this with the VPC created already



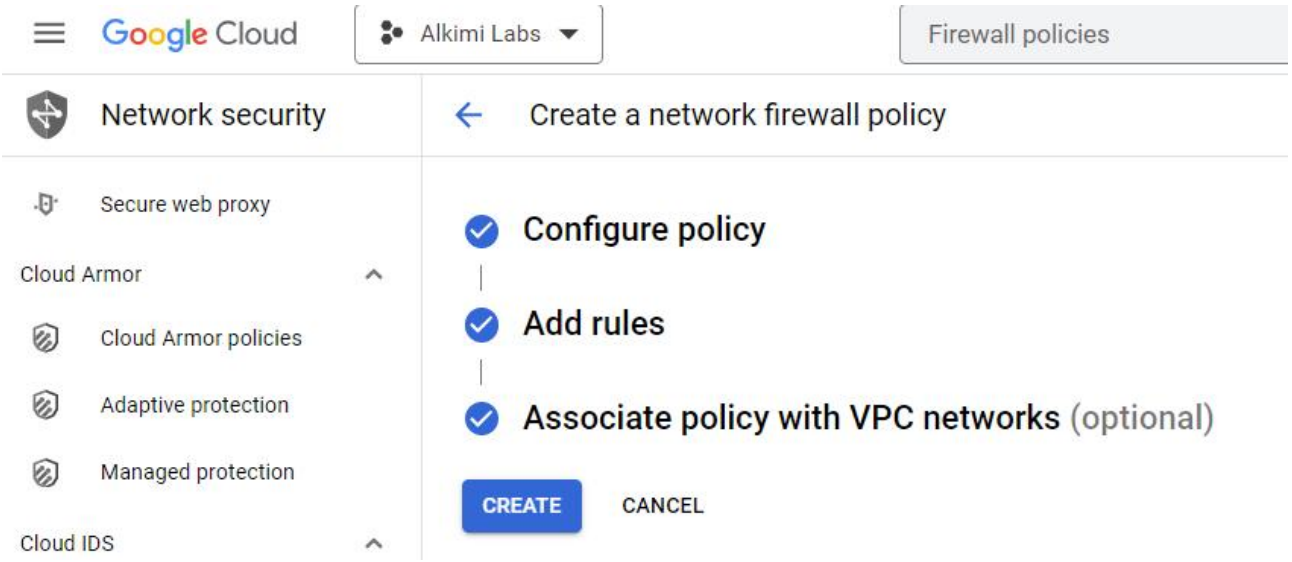
Click on Associate.

Select the VPC network name created in earlier steps.

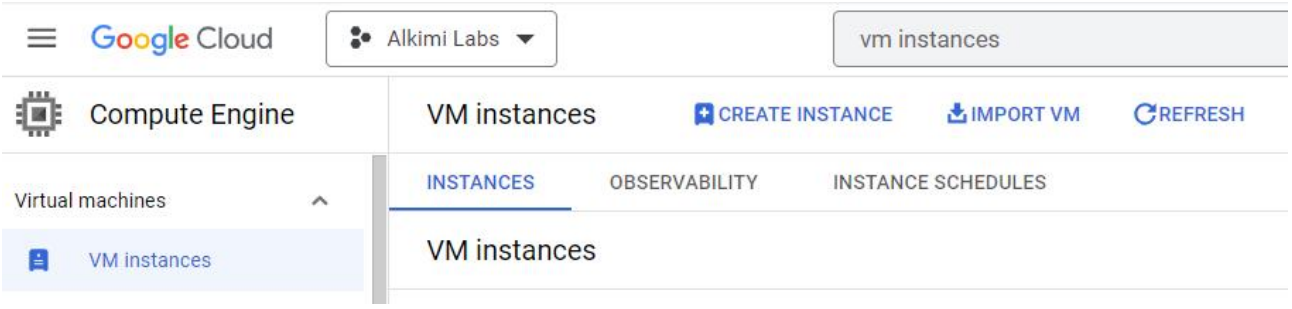


After Selecting network Click on Continue

And finally click on Create



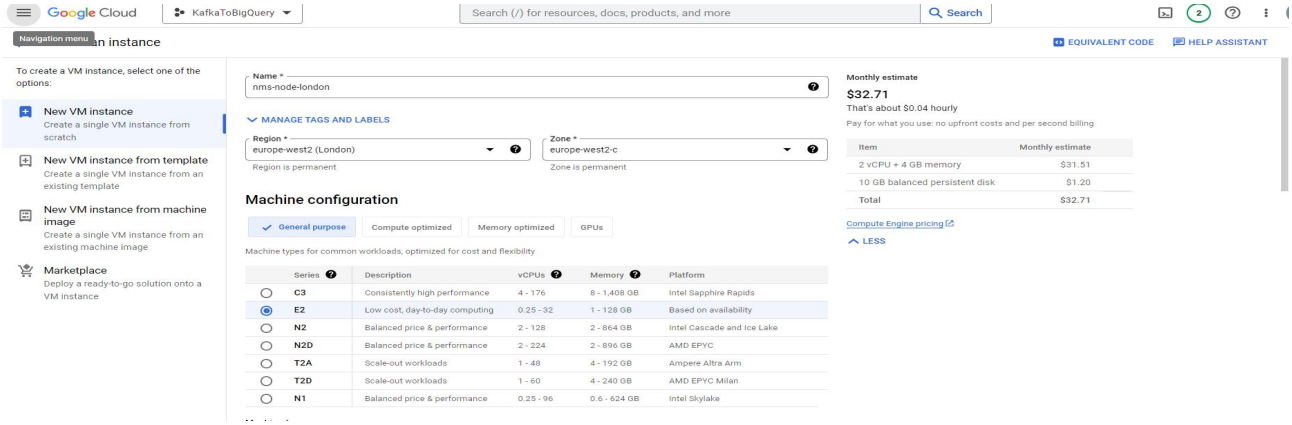
Now a VM instance has to be created. Search for “VM instances“



Now click on Create Instance as shown below

Create Instance shows below screen. Enter the name of the VM instance in the Name field.

Select europe-wes2 (London) region from Region field.



Now in Machine Type please select Custom option and enter suggested number of CPUs and Memory combinations as below

Machine type

Choose a machine type with preset amounts of vCPUs and memory that suit most workloads.
Or, you can create a custom machine for your workload's particular needs. Learn more

PRESET | CUSTOM

Creating a custom machine incurs additional costs

Cores

2 — 32 — 8 vCPU (4 core)

☐ Shared core

Memory

4 — 64 — 16 GB

ADVANCED CONFIGURATIONS

Availability policies

VM provisioning model
Standard

Choose 'Spot' to get a discounted, pre-emptible VM. Otherwise, stick to 'Standard'. Learn more

VM PROVISIONING MODEL ADVANCED SETTINGS

Deploy a container image to this VM instance

DEPLOY CONTAINER

Boot disk

Name	nms-node
Type	New balanced persistent disk
Size	10 GB
Licence type	Free
Image	Debian GNU/Linux 11 (bullseye)

CHANGE

Identity and API access

Service accounts

Service account

Compute Engine default service account

Requires the Service Account User role (roles/iam.serviceAccountUser) to be set for users who want to access VMs with this service account. Learn more

Access scopes

- (●) Allow default access
- ( ) Allow full access to all Cloud APIs
- ( ) Set access for each API

Now click on Change in Boot disk

Enter Operating System - Ubuntu, Version - Ubuntu 20.04 LTS(x86/64) and disk size (320GB) as given below.

Ubuntu 20.04 LTS

x86/64, amd64 focal image built on 2023-10-25

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 20.04 LTS
x86/64, amd64 focal image built on 2023-10-25

Boot disk type *
Balanced persistent disk

COMPARE DISK TYPES

Size (GB) *
320
Provision between 10 and 65536 GB

SHOW ADVANCED CONFIGURATION

SELECT CANCEL

Please make sure Version is selected as below

Ubuntu 20.04 LTS
x86/64, amd64 focal image built on 2023-09-18

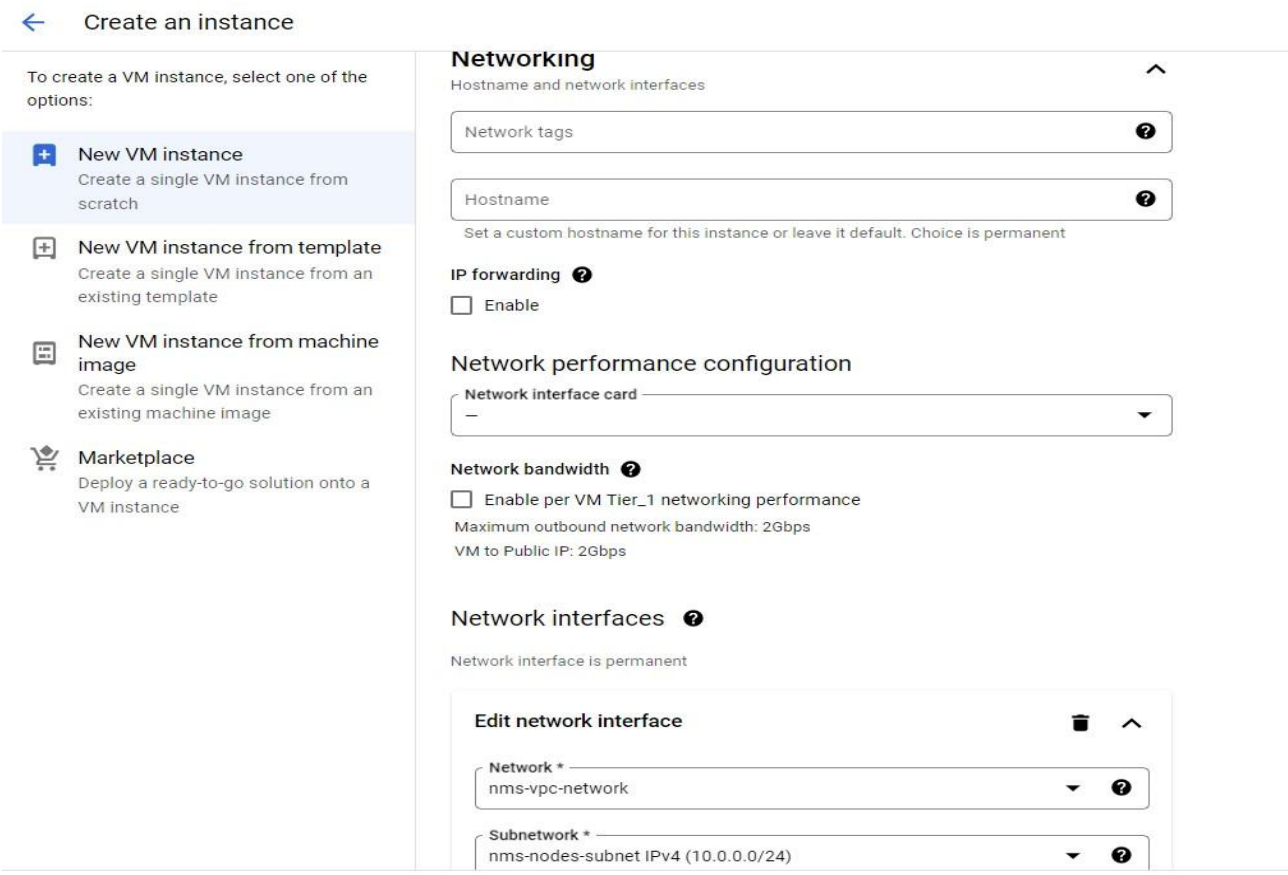
And click on SELECT

Now select/expand Advanced Options

Install Ops Agent for monitoring and logging

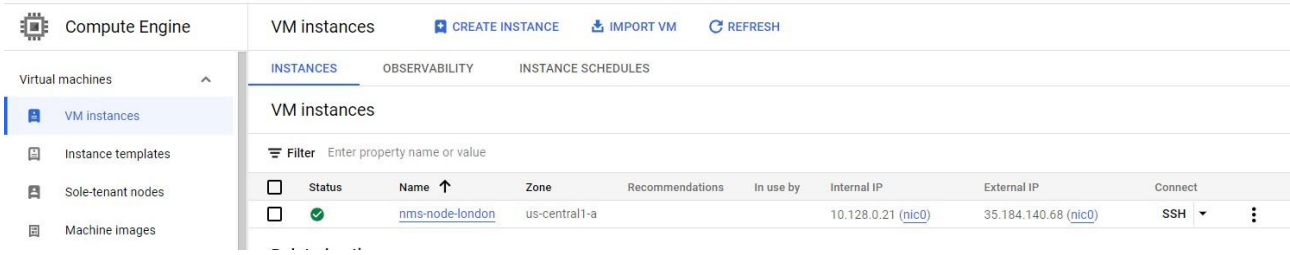
Advanced options
Networking, disks, security, management, sole-tenancy

Now select/expand Networking and select the VPC created earlier in “Network Interfaces” as given below.



Now click on Done

Click on Create now to create the instance. Once VM is created it is shown as below



Note down the External IP (highlighted in the image above).

Node Registration Procedure (GCP).

Now the VM instance is created, it is time to connect and install NMS software.

To connect the VM instance click on SSH on the VM Instance dashboard as given below