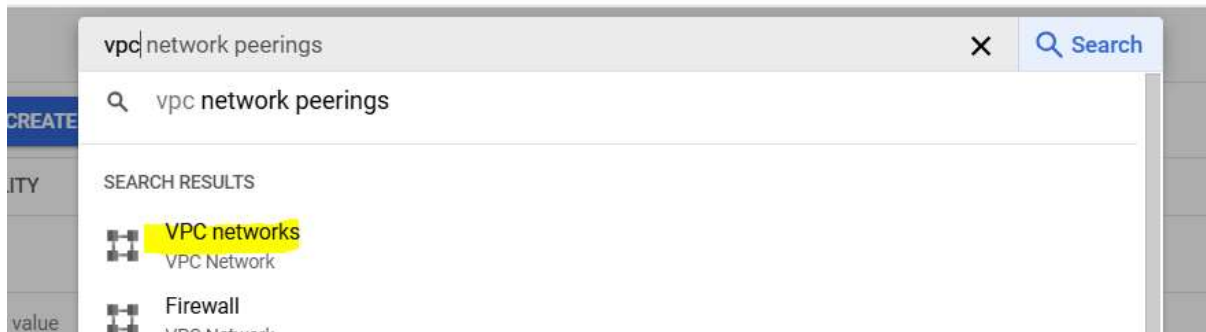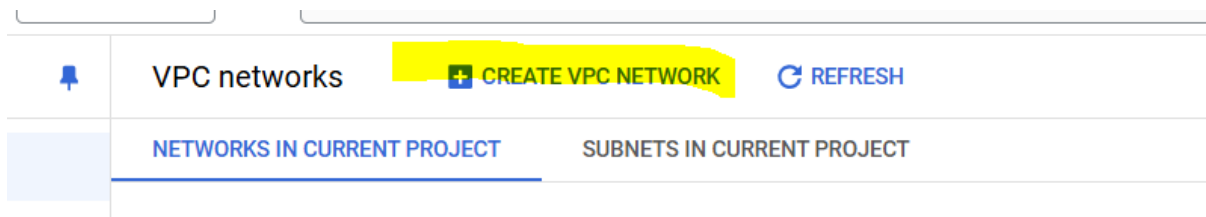In this lab we will create a New VPC and subnets under it. We will also discuss about default VPC

1. First, go to the GCP console and search for and click VPC

2. Here will see the default VPC already created. Open the default VPC and go through its content
3. The default VPC has one default Subnet in every region
4. To create a new VPC, click Create New VPC Network

5. Give VPC a name. Keep subnet creation mode as Custom

6. Fill Subnet details (for subnet calculation, you can use https://visualsubnetcalc.com/)

Name *

mypubsubnet

Lowercase letters, numbers, hyphens allowed

Description

Region *

us-central1

IP stack type ❓

- ⦿ IPv4 (single-stack)
- ◯ IPv4 and IPv6 (dual-stack)
- ◯ IPv6 (single-stack)

Primary IPv4 range

☐ Associate with an internal range
Use an internal range to specify the subnet's internal IP address range. The subnetwork can be associated with an entire internal range or only part of the range.

IPv4 range *

10.0.0.0/18

E.g. 10.0.0.0/24

7. For the public subnet, make "Private Google Access" as OFF, and vice-versa

Secondary IPv4 ranges ❓

ADD A SECONDARY IPV4 RANGE

Private Google Access ❓
- ◯ On
- ⦿ Off

Flow logs
- ◯ On
- ⦿ Off

Hybrid Subnets ❓
- ◯ On
- ⦿ Off

DONE

8. Keep all other settings default and click Create.

9. Once the Subnet is created, go to the VPC>Subnets and click Add subnet (Now we will create one private subnet)
10. Keep the region the same as the public subnet

Name *

myprvsub1 ❓

Lowercase letters, numbers, hyphens allowed

Description

VPC Network

myvpc

Region *

us-central1 ▾ ❓

Purpose

○ Regional Managed Proxy ❓
○ Cross-region Managed Proxy ❓
○ Private Service Connect ❓
○ Private NAT ❓
◉ None

11. Give IP range and make "Private Google Access" as ON and Click ADD

Use an internal range to specify the subnet's internal IP address range. The subnetwork can be associated with an entire internal range or only part of the range.

IPv4 range *

10.0.64.0/18 ❓

E.g. 10.0.0.0/24

Secondary IPv4 ranges ❓

ADD A SECONDARY IPV4 RANGE

Private Google Access ❓
◉ On
○ Off

Flow logs
○ On
◉ Off

Hybrid Subnets ❓
○ On
◉ Off

ADD   CANCEL

12. Once created, go to VPC and explore options, also explore subnet configurations