

GCP Network Engineer Crash Course Lab 2

VPC Exercise 2 – VPC Peering

- *You can use VPC Network Peering to connect VPCs to other VPC networks located in different projects or organizations.*
- *VPC Network Peering enables you to peer VPC networks so that workloads in different VPC networks can communicate in private RFC 1918 space.*
- *Traffic stays within Google's network and doesn't traverse the public internet.*
- *VPC Network Peering works with Compute Engine, GKE, and App Engine flexible environment.*

VPC Network Peering is useful for:

- *SaaS (Software-as-a-Service) ecosystems in GCP. You can make services available privately across different VPC networks within and across organizations.*
- *Organizations with several network administrative domains can peer with each other.*

Let's create a New VPC Peering Network via the Cloud Console.

Log in to your Google Cloud Platform Account

- Determine the project you will be creating the VPC in (use the one in Lab 1 since we will peer that one to the newly created one).
- Go to VPC Network

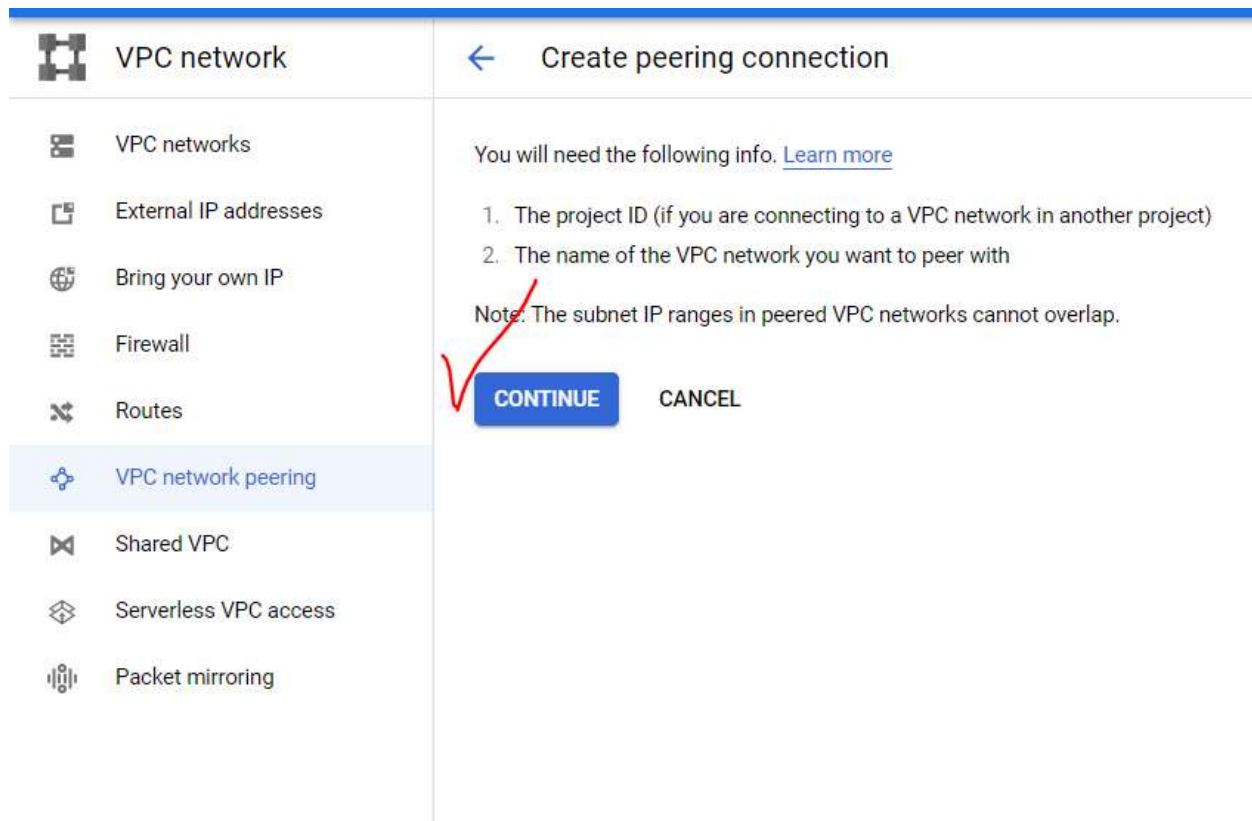
- ### Figure 1 – VPC Dashboard

- Select VPC network peering the left menu.

Figure 2 – Create VPC Network

- **Select Create Connection**

Figure 3 – Create Peering Connection



- Enter Name
- Enter Your VPC Network (Network A)
- Select Project with the VPC in. (Same Project for this exercise)
- Select Create

Figure 4 – Create VPC Peering Connection

Create peering connection

i Your VPC network will be fully connected to the peered VPC network (full mesh topology). Routes to subnets in the peered VPC network will be automatically created.

Name *
vpcsharednetwork



Lowercase letters, numbers, hyphens allowed

Your VPC network *
networkengineerdemo



Peered VPC network

☒ In project encoded-hangout-331014


☐ In another project


VPC network name *
networkengineerdemob



Exchange custom routes

You can choose to import or export static and dynamic routes over the VPC peering connection


☐ Import custom routes 

☐ Export custom routes 

Exchange subnet routes with public IP

You can choose to import or export subnet routes with public IP over the VPC peering connection

☐ Import subnet routes with public IP 

☒ Export subnet routes with public IP 

CREATE

CANCEL

- Once Select Create is selected you see the network peering created. Will reflect "Inactive".



- The peer connection between networkengineerdemo >>>> networkengineerdemob has been created.

Figure 5 –VPC Peering Connection



VPC network peering [CREATE PEERING CONNECTION](#) [REFRESH](#) [DELETE](#)

Filter: Enter property name or value

<input type="checkbox"/>	Name 	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes	Exchange subnet routes with public IP
<input type="checkbox"/>	vposherednetwork	networkengineerdemo	networkengineerdemob	encoded-hangout-331014	 Inactive	None	Export subnet routes with public IP 

- We now need to create the peer connection for the other VPC which will be networkengineerdemob >>>> networkengineerdemo

Go back and create the other connection as earlier.

Figure 6 – Second VPC Peer Connection Creation



Your VPC network will be fully connected to the peered VPC network (full mesh topology). Routes to subnets in the peered VPC network will be automatically created.

Name *

vpcnetworkengineerb



Lowercase letters, numbers, hyphens allowed

Your VPC network *

networkengineerdemob



Peered VPC network



In project encoded-hangout-331014



In another project

VPC network name *

networkengineerdemo



Exchange custom routes ?

You can choose to import or export static and dynamic routes over the VPC peering connection



Import custom routes ?



Export custom routes ?

Exchange subnet routes with public IP ?

You can choose to import or export subnet routes with public IP over the VPC peering connection



Import subnet routes with public IP ?



Export subnet routes with public IP ?

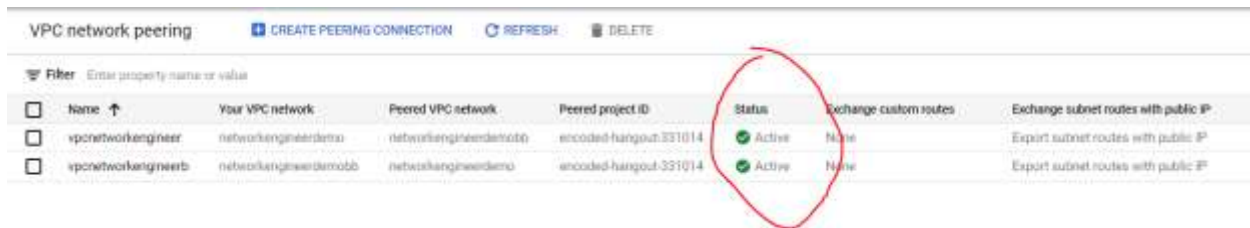
CREATE

CANCEL

- Select Create

Once you create the second peer connection your interface should reflect the following.

Figure 7 – VPC Network Peering Active



VPC network peering

[CREATE PEERING CONNECTION](#) [REFRESH](#) [DELETE](#)

Filter Enter property name or value

<input type="checkbox"/>	Name ↑	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes	Exchange subnet routes with public IP
<input type="checkbox"/>	vpcnetworkengineer	networkengineerdemo	networkengineerdemo	encoded-hangout-331014	Active	None	Export subnet routes with public IP
<input type="checkbox"/>	vpcnetworkengineer2	networkengineerdemo	networkengineerdemo	encoded-hangout-331014	Active	None	Export subnet routes with public IP

End