

In this lab, we will see connectivity between two different VPCs by using peering. We will check before and after connectivity between VMs in different VPCs

### **Make sure the ICMP port is open in both VPCs before starting**

Create one VM in the default VPC, and one VM in MyVPC

Log in to VM in my VPC and ping the private IP address of the Default VPC's VM


Before any peering, we are not able to communicate between VMs in two different VPCs by using their private IP

But if we use a public IP, then it works because it travels through the Internet, but we need to establish internal connectivity

```
lokeshdrall1111@vmpub1:~$  
lokeshdrall1111@vmpub1:~$ ping 10.128.0.3  
PING 10.128.0.3 (10.128.0.3) 56(84) bytes of data.  
^C  
--- 10.128.0.3 ping statistics ---  
6 packets transmitted, 0 received, 100% packet loss, time 5127ms  
  
lokeshdrall1111@vmpub1:~$ ping 34.123.193.165  
PING 34.123.193.165 (34.123.193.165) 56(84) bytes of data.  
64 bytes from 34.123.193.165: icmp_seq=1 ttl=61 time=4.75 ms  
64 bytes from 34.123.193.165: icmp_seq=2 ttl=61 time=1.49 ms  
64 bytes from 34.123.193.165: icmp_seq=3 ttl=61 time=1.38 ms  
64 bytes from 34.123.193.165: icmp_seq=4 ttl=61 time=1.48 ms  
^C  
--- 34.123.193.165 ping statistics ---  
4 packets transmitted, 4 received, 0% packet loss, time 3005ms  
rtt min/avg/max/mdev = 1.375/2.275/4.750/1.429 ms  
lokeshdrall1111@vmpub1:~$
```

Now let's do the peering

Go to the VPC dashboard and click VPC Network Peering

 VPC Network

VPC networks

IP addresses

Internal ranges

Bring your own IP

Firewall

Routes

VPC network peering

Shared VPC

Serverless VPC access

VPC networks

NETWORKS IN CURRENT PROJECT

SMTP port 25 disallowed

VPC networks

Filter Enter property name or

Name	Subnets
default	41
myvpc	2

Give the peering name, select both VPC, and keep the rest default

Create peering connection

Peering connection name \*

myvpctodefault

Lowercase letters, numbers, hyphens allowed

Your VPC network \*

myvpc

Peered VPC network

☒ In project lokeshp1

☐ In another project

VPC network name \*

default

☒ IPv4 (single-stack)

☐ IPv4 and IPv6 (dual-stack)

Exchange IPv4 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 privately used public IPv4 addresses

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

☐ Import subnet routes with privately used public IPv4 addresses

☒ Export subnet routes with privately used public IPv4 addresses

CREATE

CANCEL

Once created, it will show as an inactive state and a message. To make it active, we need to make a peering connection other direction as well

←

Peering connection details

EDIT

DELETE

i

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

⚠

**myvpctodefault**

Inactive. Waiting for the connection to be created by default.

To create an active connection, VPC network default needs to set up a connection to this VPC network (myvpc).

Your VPC network

Similarly, make a peering connection from the default to myvpc

As soon we create the second peering connection, both status will show as Active

Filter Enter property name or value						
<input type="checkbox"/>	Name ↑	Your VPC network	Peered VPC network	Peered project ID	Status	IP stack type
<input type="checkbox"/>	<a href="#">defaulttomyvpc</a>	default	myvpc	lokeshp1	<div><div></div>Active</div>	IPv4
<input type="checkbox"/>	<a href="#">myvpctodefault</a>	myvpc	default	lokeshp1	<div><div></div>Active</div>	IPv4

Now again, try to ping the private IP and this will work this time.

```
lokeshdrall1111@vmpub1:~$ ping 10.128.0.3
PING 10.128.0.3 (10.128.0.3) 56(84) bytes of data.
^C
--- 10.128.0.3 ping statistics ---
6 packets transmitted, 0 received, 100% packet loss, time 5127ms

lokeshdrall1111@vmpub1:~$ ping 34.123.193.165
PING 34.123.193.165 (34.123.193.165) 56(84) bytes of data.
64 bytes from 34.123.193.165: icmp_seq=1 ttl=61 time=4.75 ms
64 bytes from 34.123.193.165: icmp_seq=2 ttl=61 time=1.49 ms
64 bytes from 34.123.193.165: icmp_seq=3 ttl=61 time=1.38 ms
64 bytes from 34.123.193.165: icmp_seq=4 ttl=61 time=1.48 ms
^C
--- 34.123.193.165 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 1.375/2.275/4.750/1.429 ms
lokeshdrall1111@vmpub1:~$ ping 10.128.0.3
PING 10.128.0.3 (10.128.0.3) 56(84) bytes of data.
64 bytes from 10.128.0.3: icmp_seq=1 ttl=64 time=2.32 ms
64 bytes from 10.128.0.3: icmp_seq=2 ttl=64 time=1.08 ms
64 bytes from 10.128.0.3: icmp_seq=3 ttl=64 time=0.961 ms
64 bytes from 10.128.0.3: icmp_seq=4 ttl=64 time=0.892 ms
^C
--- 10.128.0.3 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 0.892/1.313/2.321/0.585 ms
lokeshdrall1111@vmpub1:~$
```