

# AWS VPC Peering Connections

## Purpose:

Cost-effective, no single point of failure or bandwidth bottleneck, more secure (No DDoS, common exploits, without traffic going through public internet) inter-region VPC Peering connection.

## Assumption:

Having 2 VPCs within Sydney (Asia Pacific (Sydney) ap-southeast-2) and Singapore (Asia Pacific (Singapore) ap-southeast-1) respectively.

## Subnet configuration in Sydney region:

Test-1a subnet-08 99e0 available vpc-01a 462 | VPC-Test 10.0.1.0/24 250 - ap-southeast-2a apse2-az1

We have an EC2 instance running in this subnet with private IP 10.0.1.183

Instance: i-061d2d9fb1d051dd0 (Terraform-1) Elastic IP: 54.66.110.226

Description Status Checks Monitoring Tags

Instance ID i-061d2d9fb1d051dd0 Public DNS (IPv4) ec2-54-66-110-226.ap-southeast-2.compute.amazonaws.com

Instance state running IPv4 Public IP 54.66.110.226

Instance type t2.micro IPv6 IPs -

Finding Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#) Elastic IPs 54.66.110.226

Private DNS ip-10-0-1-183.ap-southeast-2.compute.internal Availability zone ap-southeast-2a

Private IPs 10.0.1.183 Security groups launch-wizard-31.vi

Secondary private IPs - Scheduled events No scheduled events

VPC ID vpc-01a462 (VPC-Test) AMI ID ubuntu/images/hvm-0bc49f9283d686bat

Subnet ID subnet-08c5t9e0 (Test-1a) Platform -

Network interfaces eth0 IAM role -

## Subnet configuration in Sydney region:

Peer-Subne... subnet-0a 4c3 available vpc-07 1f01 | ... 172.32.2.0/28 10 - ap-southeast-1b apse1-az1

We have an EC2 instance running in this subnet with private IP 172.32.2.12

Instance ID i-004e65e Public DNS (IPv4) -

Instance state running IPv4 Public IP 52.52.70.0

Instance type t2.micro IPv6 IPs -

Finding Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#) Elastic IPs 52.52.70.0

Private DNS ip-172-32-2-12.ap-southeast-1.compute.internal Availability zone ap-southeast-1b

Private IPs 172.32.2.12 Security groups launch-wizard-1.view ir

Secondary private IPs - Scheduled events No scheduled events

VPC ID vpc-07b1 (SG-Peer-VPC) AMI ID amzn-ami-hvm-2018.03.02de387a2c625404f

Subnet ID subnet-0a1ed3 (Peer-Subnet-2) Platform -

## Create VPC Peering Connection

Name	Peering Connecti	Status	Requester VPC	Accepter VPC	Requester CIDRs	Accepter CIDRs	Requester Owner	Accepter Owner
SYD-SG	pcc-01...	Active	vpc-01...	vpc-07...	10.0.0.0/16	172.32.0.0/16		

## Create Routing from the VPC in Sydney to the VPC in Singapore

April rtb-001be01e8330e0c21 3 subnets - Yes vpc-01e4621

Route Table: rtb-001be01e8330e0c21

Summary Routes Subnet Associations Edge Associations Route Propagation Tags

Edit routes

View All routes

Destination	Target	Status
10.0.0.0/16	local	active
0.0.0.0/0	lgw-02c1f6	active
172.32.2.0/28	pcx-01c1b4	active

## Create Routing from the VPC in Singapore to the VPC in Sydney

sg-peer-public rtb-08495945e370b63a9 - - Yes vpc-01ef6b1

Route Table: rtb-08495945e370b63a9

Summary Routes Subnet Associations Edge Associations Route Propagation Tags

Edit routes

View All routes

Destination	Target	Status
172.32.0.0/16	local	active
0.0.0.0/0	lgw-03f1b8c	active
10.0.1.0/24	pcx-017b4	active

## Security Inbound rule for the EC2 instance in the Sydney VPC

sg-032117 - launch-wizard-31

Details Inbound rules Outbound rules Tags

Inbound rules

Type	Protocol	Port range	Source
Custom TCP	TCP	8000	172.32.2.0/24
SSH	TCP	22	0.0.0.0/0

Only allow traffic from the 172.32.2.0/24 subnet in peering VPC in Singapore region

## Listen to port 8000 in Sydney EC2 instance

```
[root@ip-10-0-1-183:/home/ubuntu# nc -l -p 8000  
nice
```

Connection from Singapore EC2 instance to the Sydney EC2 instance through private network. (Must use private IP as destination IP here)

```
[root@ip-172-32-2-12 ec2-user]# nc -vv 10.0.1.183 8000
Connection to 10.0.1.183 8000 port [tcp/irdmi] succeeded!
nice
```