LAB – VPC Peering Connection (Virtual Private Cloud)

Use case

Client has requested that you design and implement 2 separate VPC networks in AWS to host an Application within an EC2 instance deployed into each VPC. You have been provided the below requirements to help with a smooth provisioning process.

DevVPC Requirements

Data Center Virginia

1. VPC Name: **Dev-VPC**
    - VPC
        - CIDR: **10.38.0.0/20**
2. Public subnet name: **DevPublicSubnet**
    - Public Subnet
        - CIDR: **10.38.0.0/24**
3. Private subnet name: **DevPrivateSubnet**
    - Private subnet
        - CIDR: **10.38.1.0/24**
4. Configure
    - Private Route Table
    - Public Route Table

ProdVPC Requirements

Data Center Ohio

1. VPC Name: **Prod-VPC**
    - VPC
        - CIDR: **10.39.0.0/20**
2. Public subnet name: **ProdPublicSubnet**
    - Public Subnet
        - CIDR: **10.39.0.0/24**
3. Private subnet name: **ProdPrivateSubnet**
    - Private subnet
        - CIDR: **10.39.1.0/24**
5. Configure
    - Private Route Table
    - Public Route Table
6. Create Security Groups

- Security group for Bastion Host
  - Bastion-sg
- Security group for DevApp in Dev VPC
  - DevApp-sg
- Security group for ProdApp in Prod VPC
  - ProdApp-sg

7. Deploy Bastion Host in Prod VPC
   - Use Windows OS AMI
8. Deploy ProdAppServer in Prod VPC
   - Use Amazon Linux OS AMI
9. Deploy DevAppServer in Dev VPC
   - Use Linus OS AMI

Phase 2

Steps

1. Create a VPC Peering Connection from Prod-VPC (Requester VPC)

2. Accept VPC Peering Connection in Dev-VPC (Accepter)

3. Configure VPC Route Table

- Prod-VPC (Requester) (ProdAppServer)

a) Navigate and locate Route table of the subnet in which

prodAppServer in deployed

b) Go to the ProdAppServer, Click on networking tab, Click on subnet,

click on route table tab, click on route table, and click on route, edit route,

Destination = Dev-VPC CIDR (10.38.0.0/16)

Target = Peering Connection

- Dev-VPC (Accepter) (DevAppServer)

a) Navigate and locate Route table of the subnet in which

DevAppServer in deployed

b) Go to the DevAppServer, Click on networking tab, Click on subnet,

click on route table tab, click on route table, and click on route, edit route,

Destination = prod-VPC CIDR (10.39.0.0/16)

Target = Peering Connection

4. Security Configure;

- DevAppServer-sg

a) Allow all traffic inbound from ProdAppServer Private IPV4 Address

10. Log into your Bastion
    - Ssh into ProdAppServer
    - Ping Private IP of DevAppServer
11. You should get a successful Ping

Question:

How do you determine what is a private and public network?

Answer:

a. By associating your private subnet with your private RT
    a. If a route table has internet gateway associated to it, then it is public.
b. By associating your public subnet with your public RT
    a. If a route table has NAT gateway associated to it, then it is private.