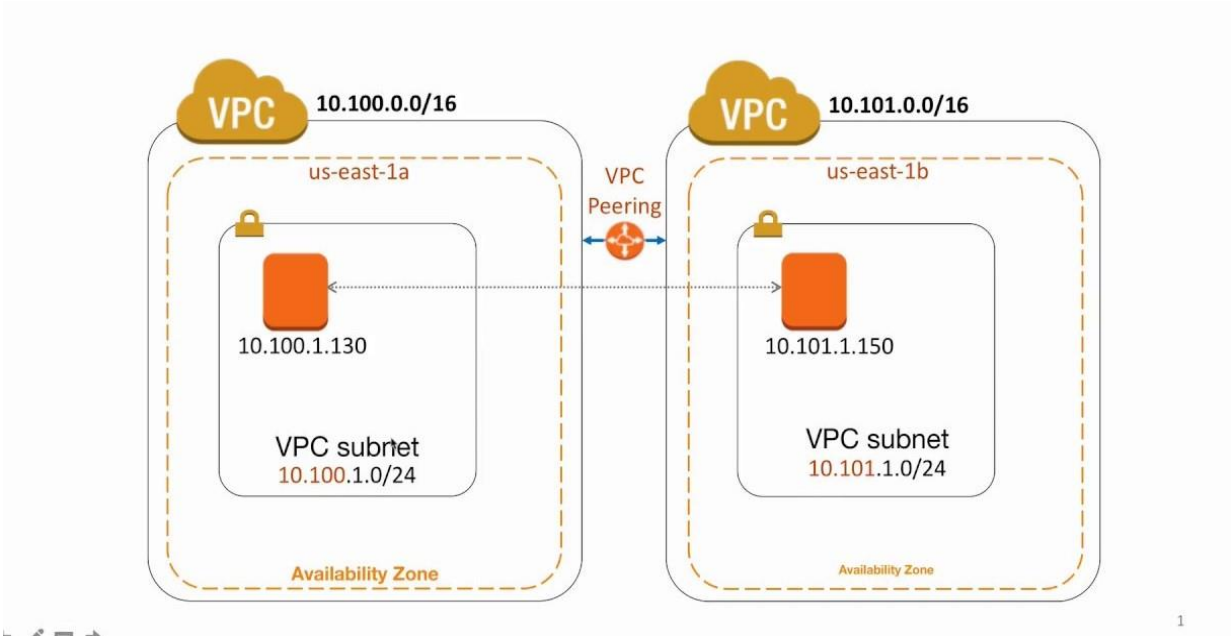
What is VPC Peering

1. Peering connection is a part in VPC
2. Peering connection means interconnection between two VPC's
3. It is called as two-way connection

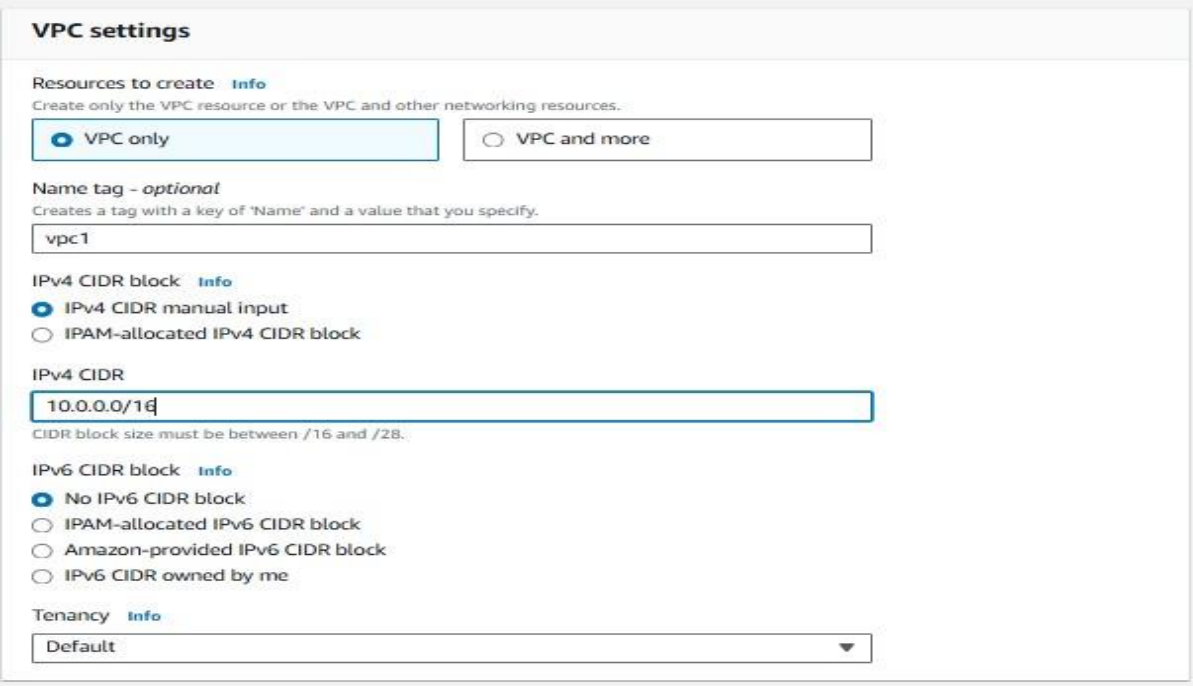
VPC Peering architecture



Steps to create peering connection

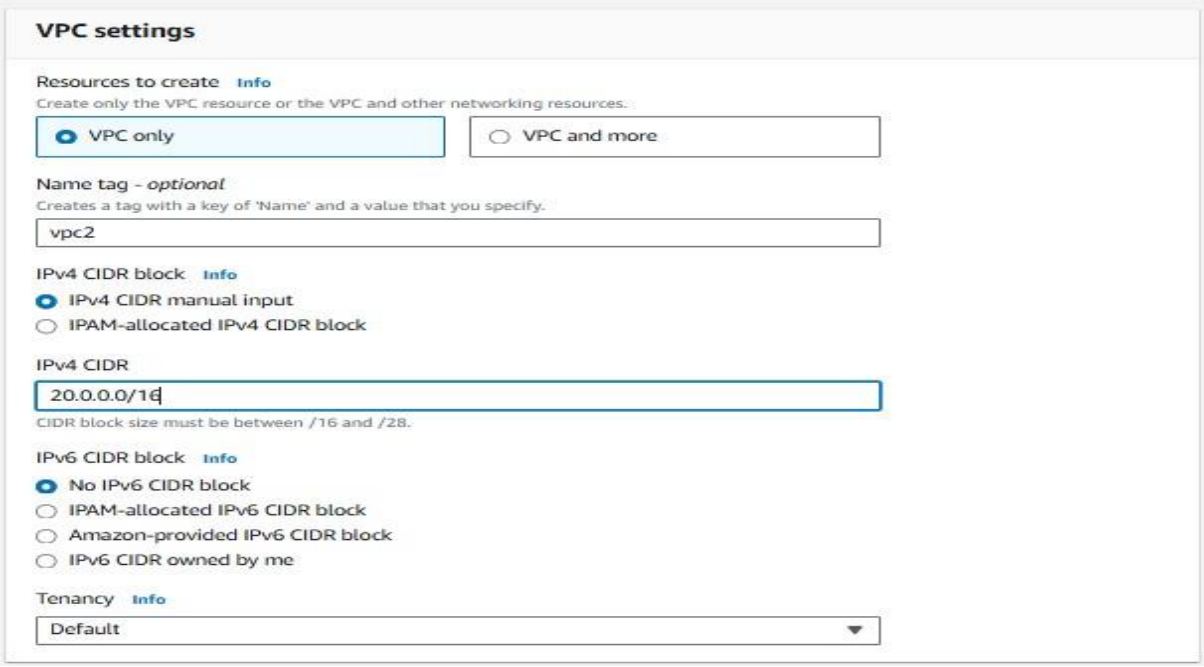
Step 1:

1. Go to VPC services
2. Create two VPC's with different CIDR block range
3. First create one VPC
4. Click on create VPC
    - Select VPC only
    - Give the name for VPC as VPC 1
    - Give the CIDR block range as (10.0.0.0/16)
    - Finally click on create VPC as shown in below figure



Step 2:

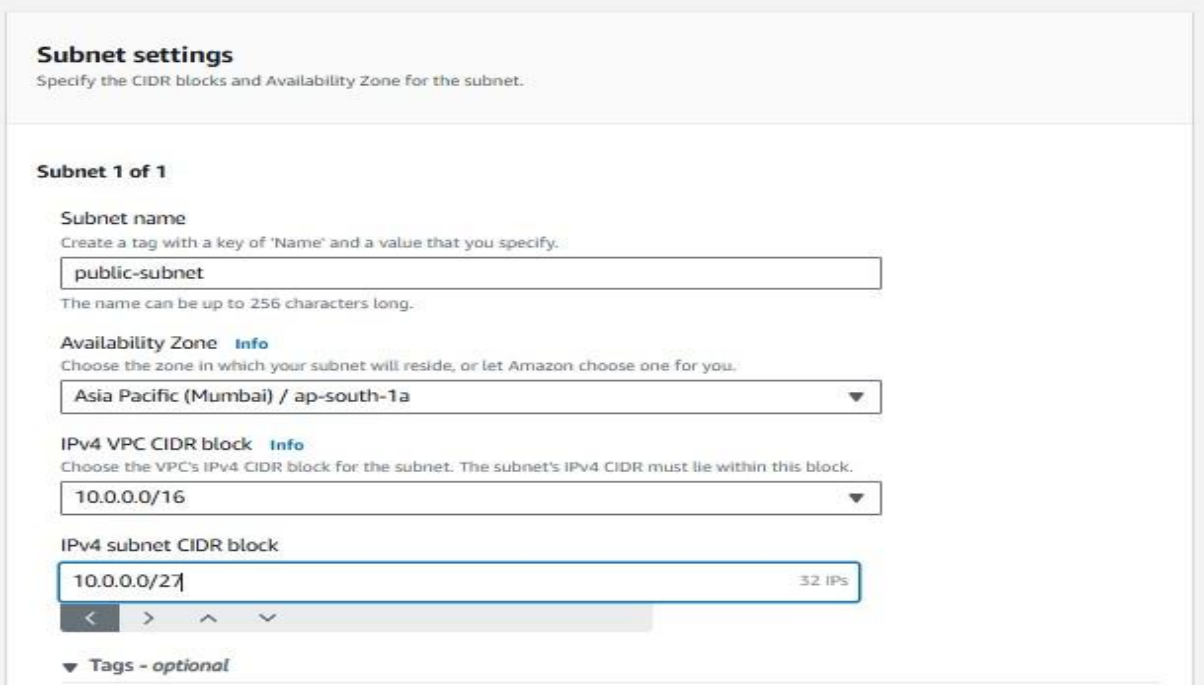
1. Create second VPC
2. Click on create VPC
    - Select VPC only
    - Give the name for second VPC as VPC 2
    - Give the CIDR block range as (20.0.0.0/16)
    - Finally click on create VPC as shown in below figure



Step 3:

1. Go to subnets
2. Create two subnets one is public subnet with created VPC 1 and another one is private subnet with created VPC 2
3. Click on create subnet
    - Select created VPC 1

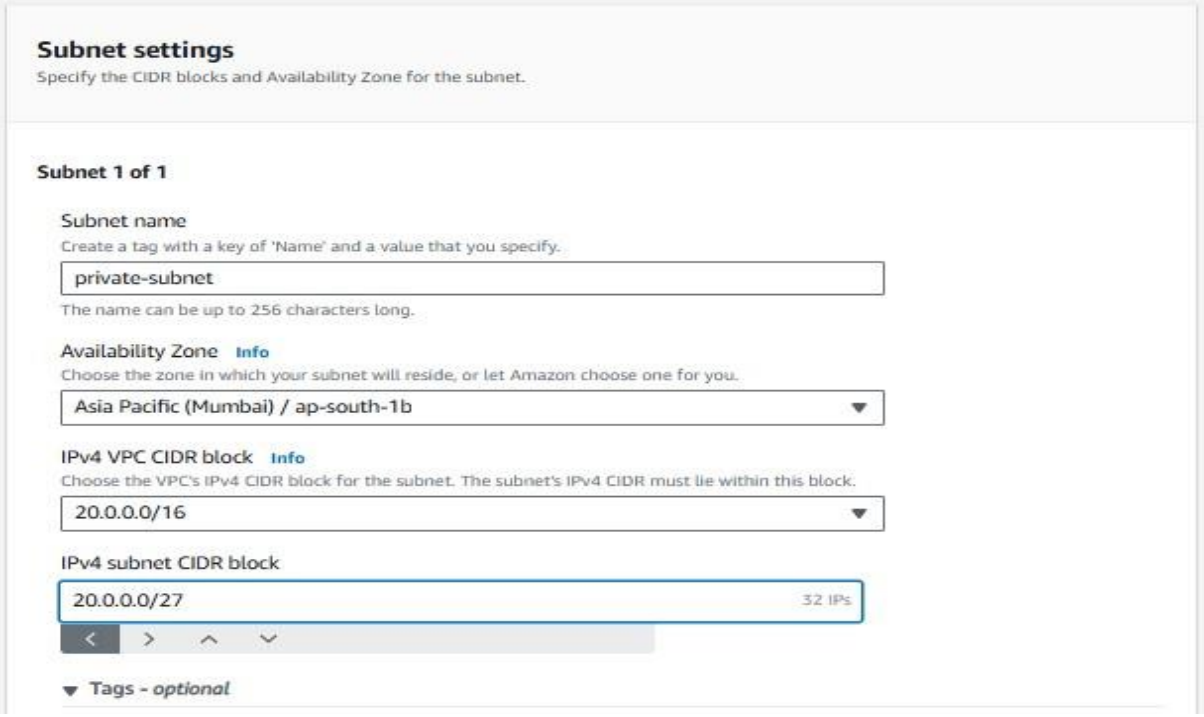
- Edit subnet settings
- Give the name for subnet as public subnet
- Select the availability zone
- Select subnet CIDR block range as (10.0.0.0/27)
- Finally create the subnet as shown in below figure



Step 4:

1. Create second subnet
2. Click on create subnet
    - Select created VPC 2

3. Edit subnet settings
    - Give the name for subnet as private subnet
    - Select the availability zone
    - Select subnet CIDR block range as (20.0.0.0/27)
    - Finally create the subnet as shown in below figure



Step 5:

1. Go to route tables
2. Their already two route tables are created for created two VPC's
3. Give the names for two route tables as one is public route and another one is private route to avoid the confusions
4. Select the public-route and click on subnet associations and click on edit subnet associations and select public-subnet and click on save associations
5. Select the private-route and click on subnet associations and click on edit subnet associations and select private-subnet and click on save associations

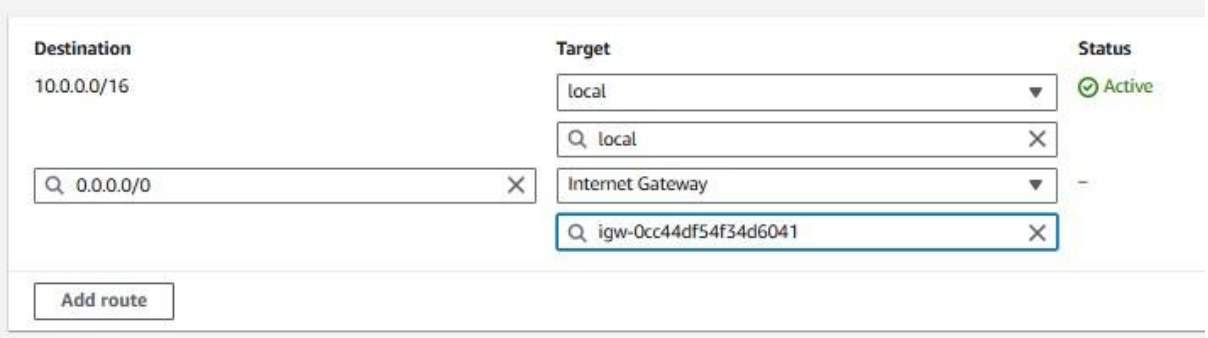
Step 6:

1. Select internet gateway
2. Click on create internet gateway
3. Give the name for internet gateway
4. Finally click on create internet gateway
5. Click on attach to a VPC
6. Select the created VPC 1
7. Finally click on attach internet gateway

Step 7:

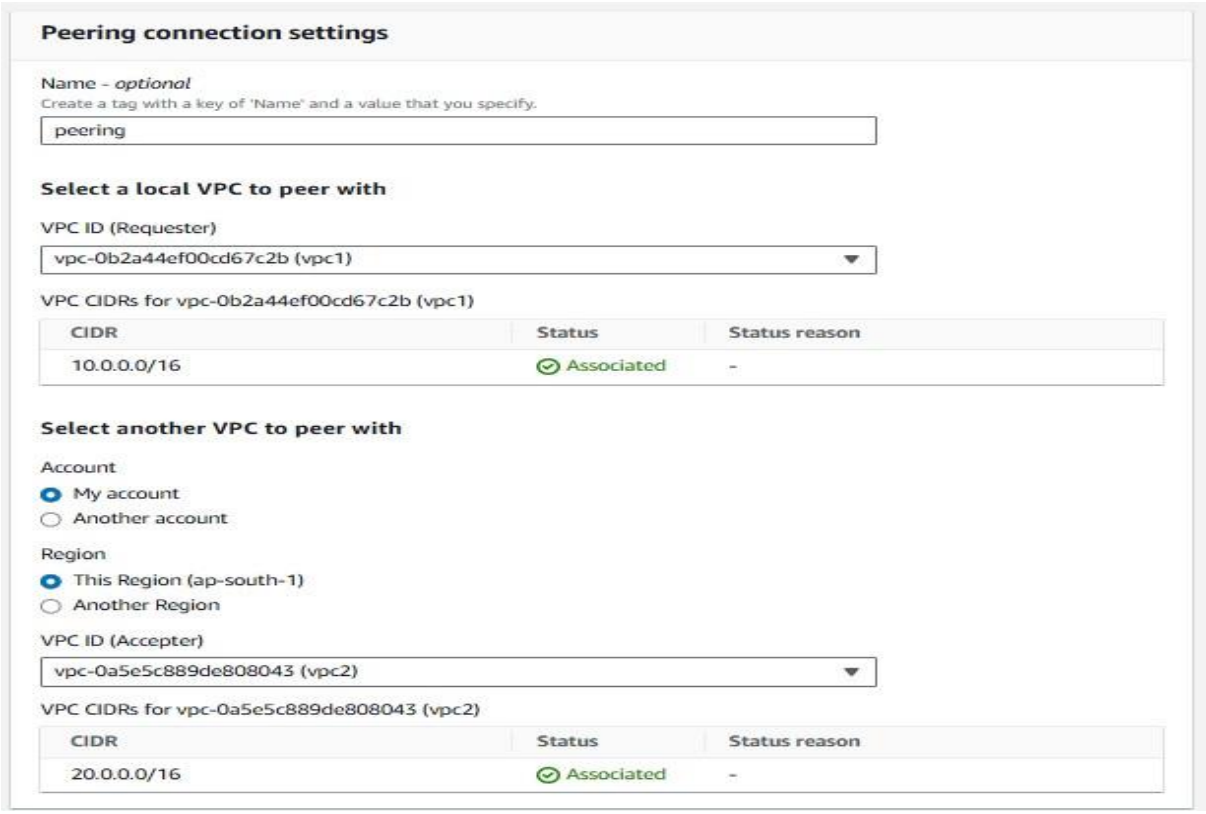
1. Go to route tables
2. Select the public-route
    - Click on routes
    - Click on edit routes
    - Click on add routes

- Select the internet gateway and click on save changes as shown in below figure



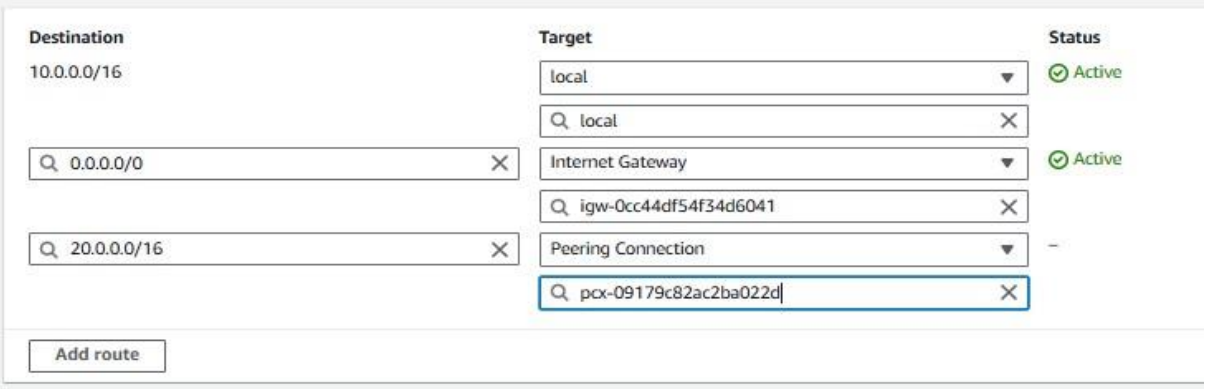
Step 8:

1. Select peering connections
2. Click on create peering connection
    - Give the name for peering
    - Select the VPC requester as VPC 1 and accepter is VPC 2 as shown in below figure

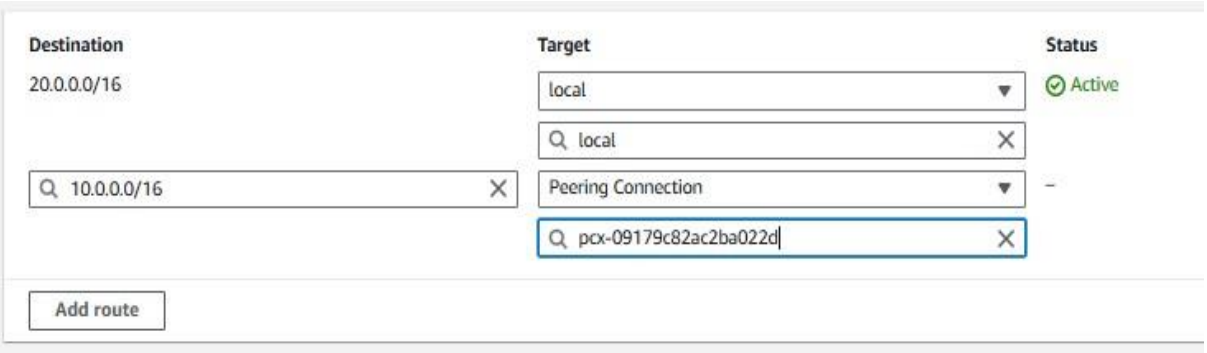


Step 9:

1. Go to route tables
2. Select the public-route
    - Click on routes
    - Click on edit routes
    - Click on add routes
    - Give created VPC 2 IP address and select peering connection and select created peering connection ID and click on save changes as shown in below figure

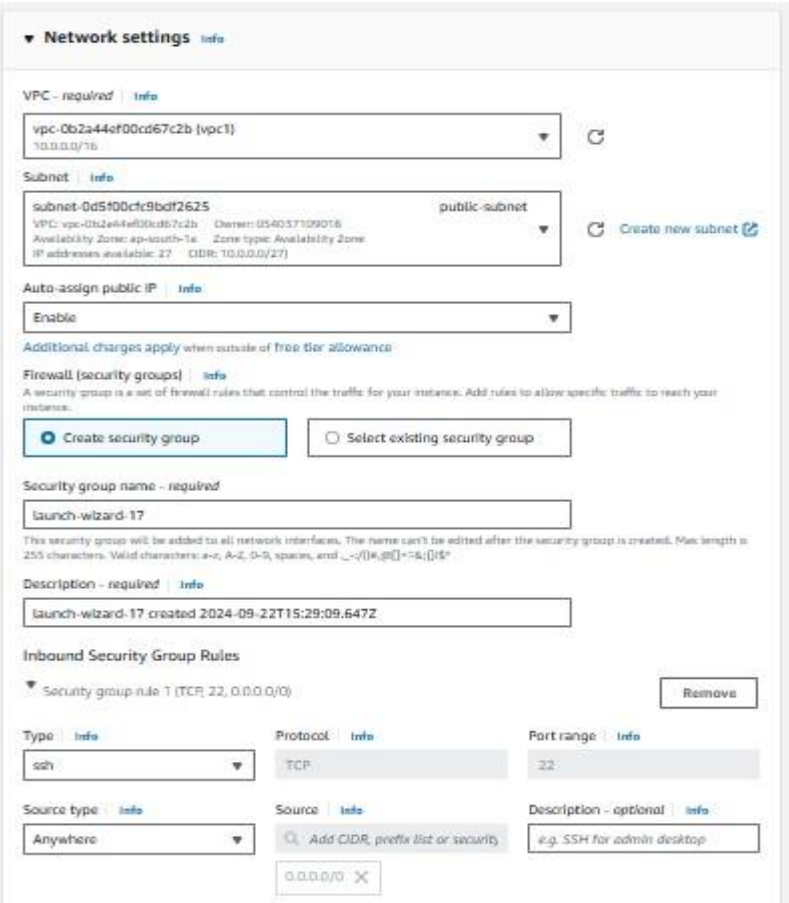


3. Select the private-route
    - Click on routes
    - Click on edit routes
    - Click on add routes
    - Give created VPC 1 IP address and select peering connection and select created peering connection ID and click on save changes as shown in below figure



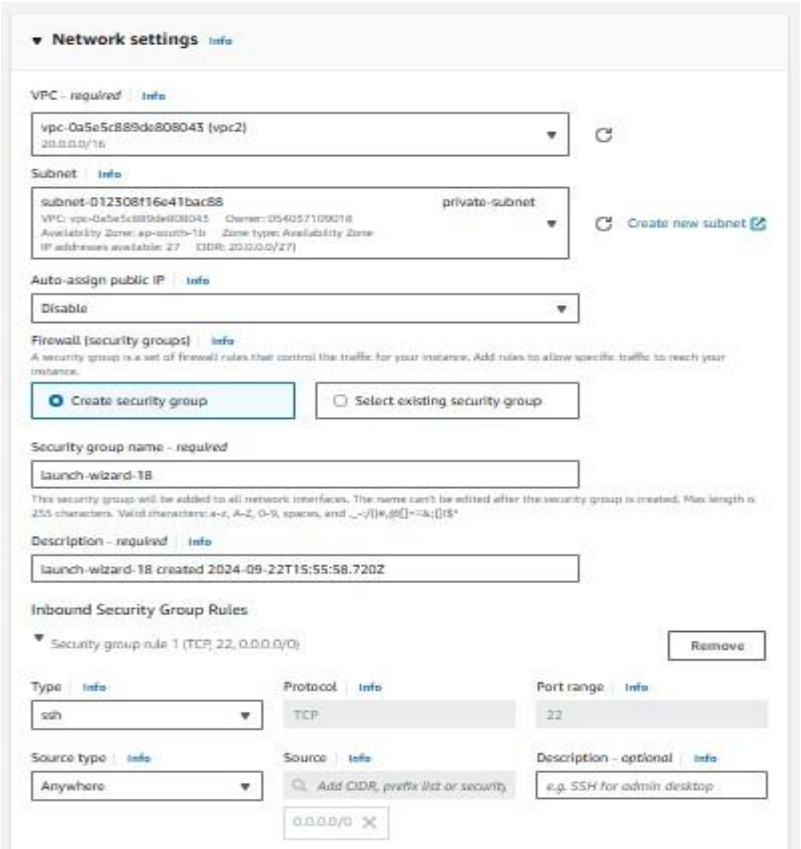
Step 10:

1. Go to EC2 services
2. Create two instances
3. One instance with VPC 1 and another instance with VPC 2
4. Click on launch instance
    - Give the name for instance
    - Select the AMI as amazon Linux
    - Select the key pair
    - Edit the network settings
    - Select the VPC as VPC 1
    - Select the subnet as public subnet
    - Enable the auto-assign public IP as shown in below figure



- Finally click on launch instance

5. Create another instance
    - Give the name for instance
    - Select the AMI as amazon Linux
    - Select the key pair
    - Edit the network settings
    - Select the VPC as VPC 2
    - Select the subnet as private subnet
    - Disable the auto-assign public IP as shown in below figure

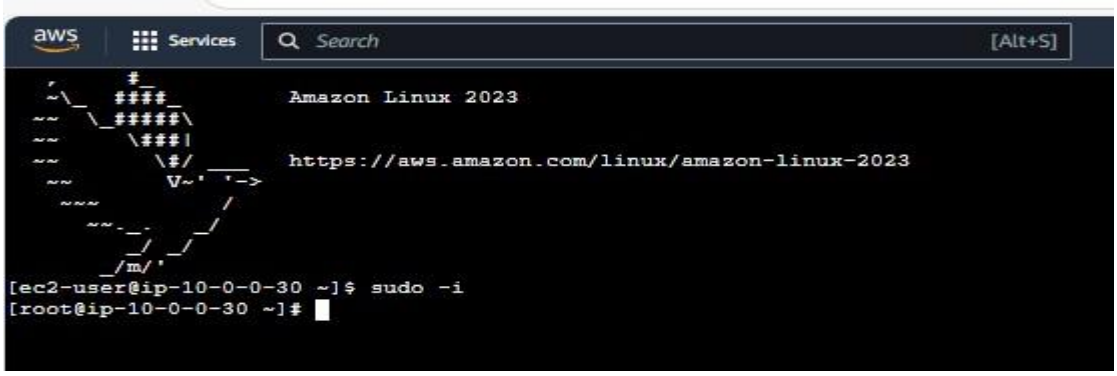


- Finally click on launch instance

Step 11:

1. Select public-instance or instance 1
2. Click on connect option

3. Click on EC2 instance connect and click on connect option then EC2 instance is connected to the server and type sudo -I to switch root user as shown in below figure



4. Select private instance or instance 2
   - Click on connect option
   - Select ssh client
   - Copy the key pair and go to server and type vi space then paste the copied key pair
   - Then vi editor is opened and copy the key pair content and paste in vi editor then save and quit
   - Go to ssh client and copy the chmod 400 "raj.pem" and paste in server
   - Copy the example URL and paste in server then server is switched from instance 1 to instance 2 server as shown in below figure