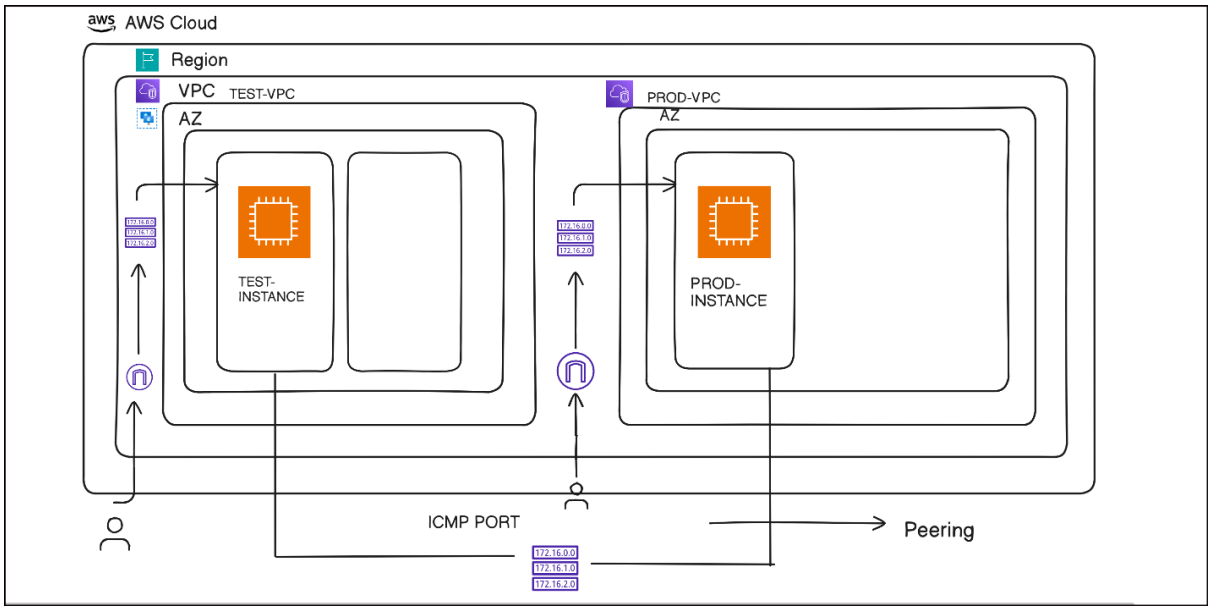
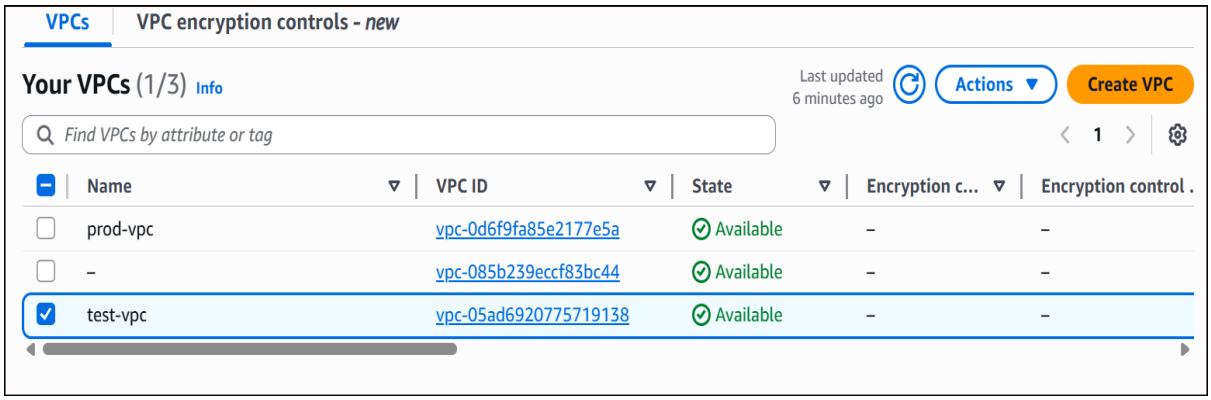
VPC Peering Project

Project Overflow:



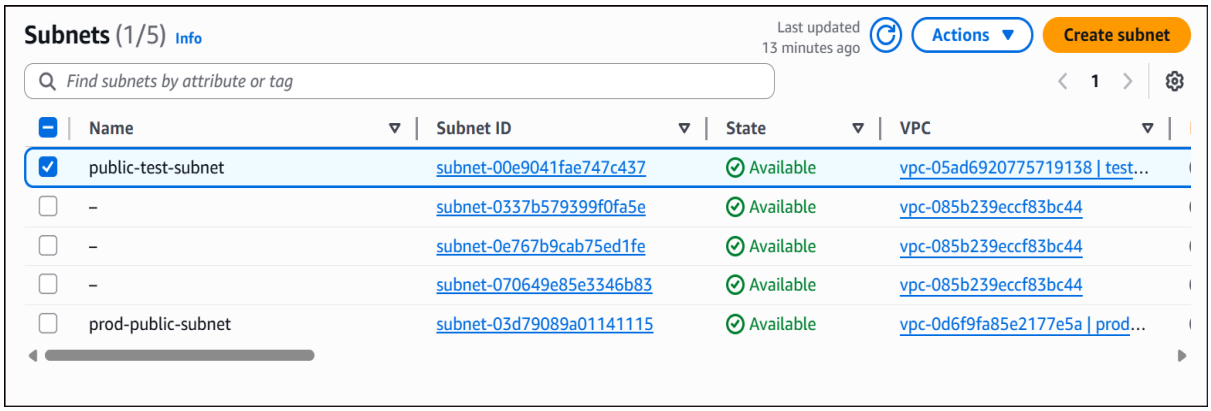
Steps to do VPC Peering in AWS:

1. Go to the VPC page.
2. Click on "Create VPC" and provide the following information in the required fields.
    a. VPC name - “test-vpc.”
    b. CIDR - “10.0.0.0/16”
    c. Click on Create VPC.

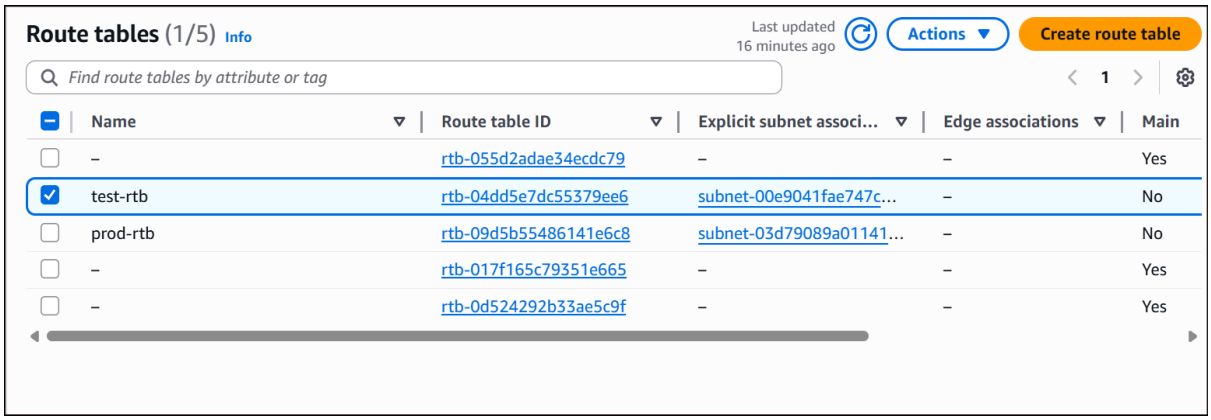


3. Go to the Subnets option.
4. Click on Create subnet and provide the following information in the required fields.
    a. VPC ID - “test-vpc.”
    b. Name of the subnet - "public-test-subnet."
    c. Availability zones - “us-east-2a”

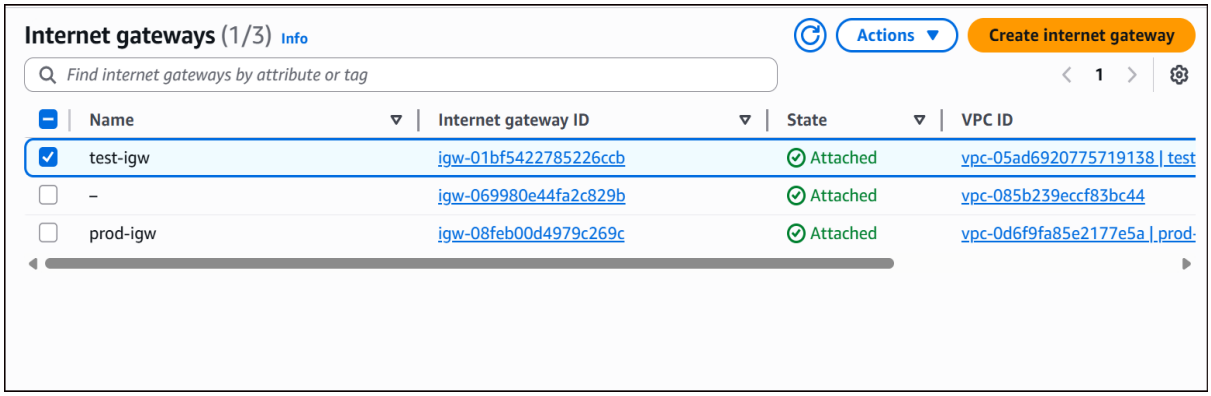
d. Divide the range of CIDR - “10.0.0.0/24”
e. Click on “Create Subnet”.



5. Go to the route table.
6. Click on Create route table and provide the following information in the required fields.
   a. Name of table - “test-rtb.”
   b. Select VPC - “test-vpc.”
   c. Click on “Create route table.”

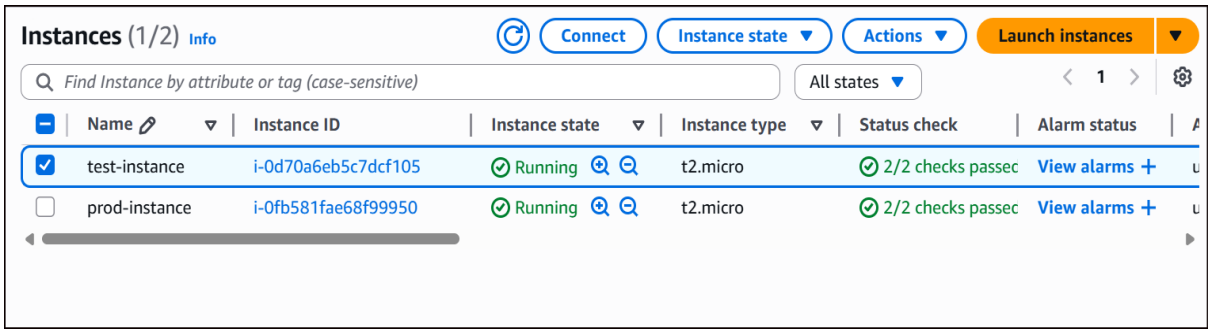


To allow the traffic from the outside world to create an internet gateway.
7. Go to the internet gateway.
8. Click on “create internet gateway”.
9. Give the name of the gateway and create it.
   a. Name - “test-igw”



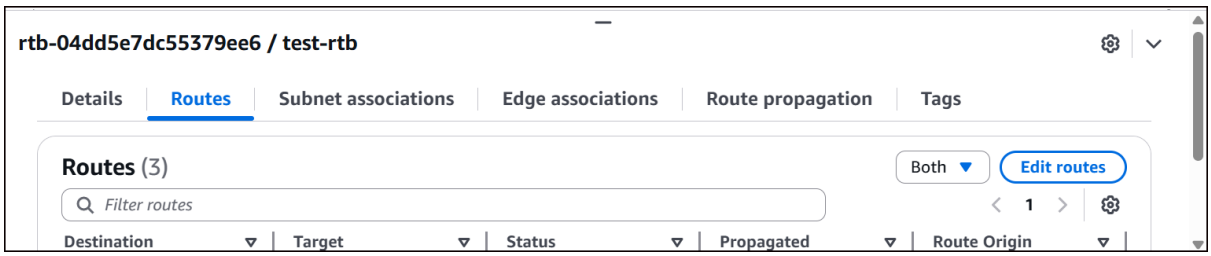
10. Attach your interway gateway to the created VPC - “test-vpc”.

11. Go to the EC2.
12. Click on “Launch instance” and provide the following information in the required fields.
    a. Name of instance - “test-instance.”
    b. Choose the AMI - “ubuntu.”
    c. Choose the instance-type - “t2.micro”.
    d. Give the key pair created or create a new pair - “aws-key.”
    e. In the networking section, go to edit and edit the VPC details.
    f. Choose VPC -”test-vpc.”
    g. Choose a subnet.
    h. Create a new security group that allows SSH and HTTP.
    i. Launch the instance.

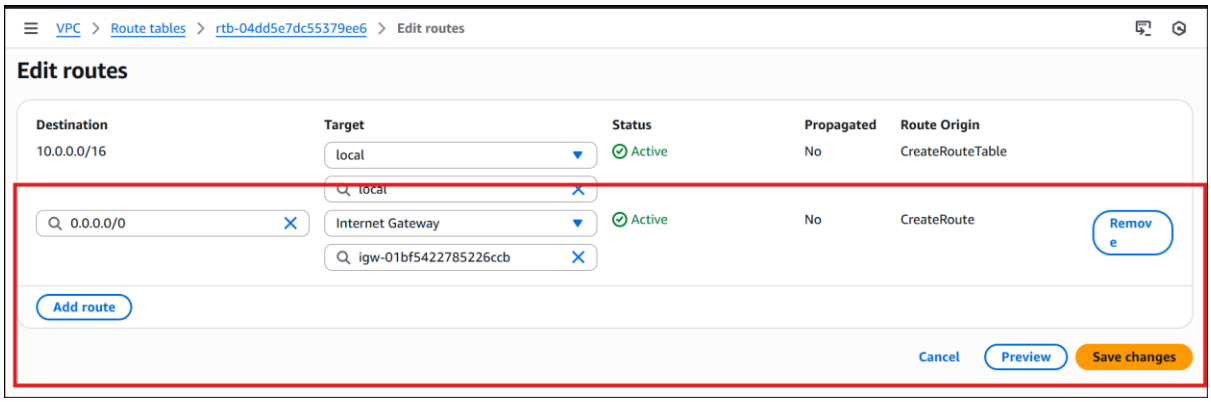


Now do the routing through the route tables so the requests reach the test-instance server.

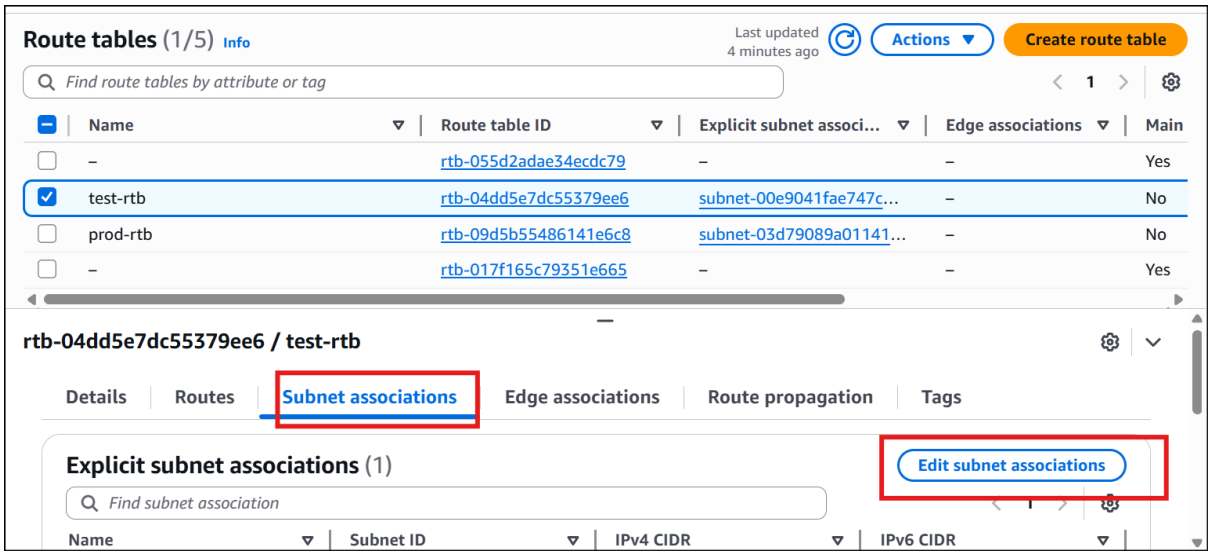
13. Go to the VPC and route table options.
14. Click on the “test-rtb” checkbox and below the Route option.

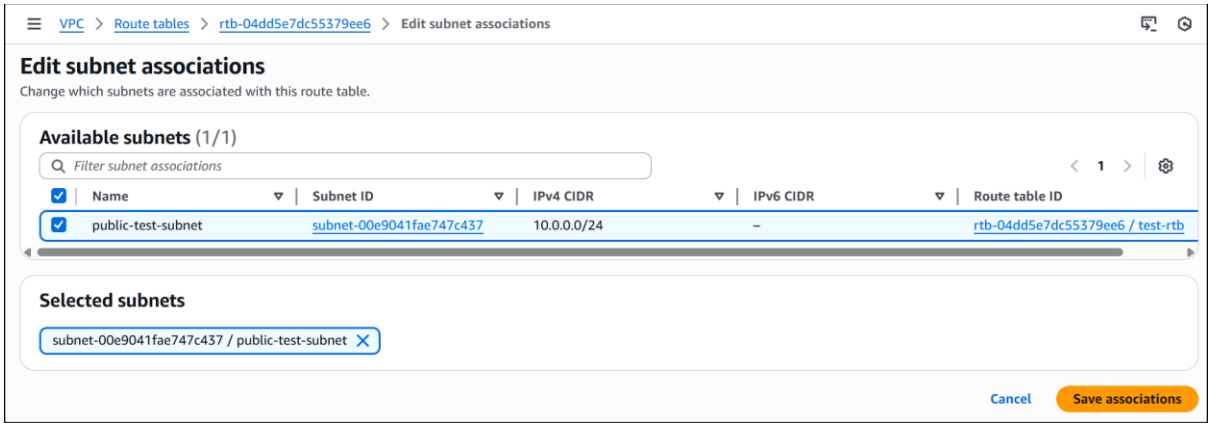


15. Edit routes and allow the routing of the internet gateway with this route table, and save the changes.



16. Go to the subnet associations and attach your “public-test-subnet” to the route table “test-rtb” by clicking on edit subnet associations.



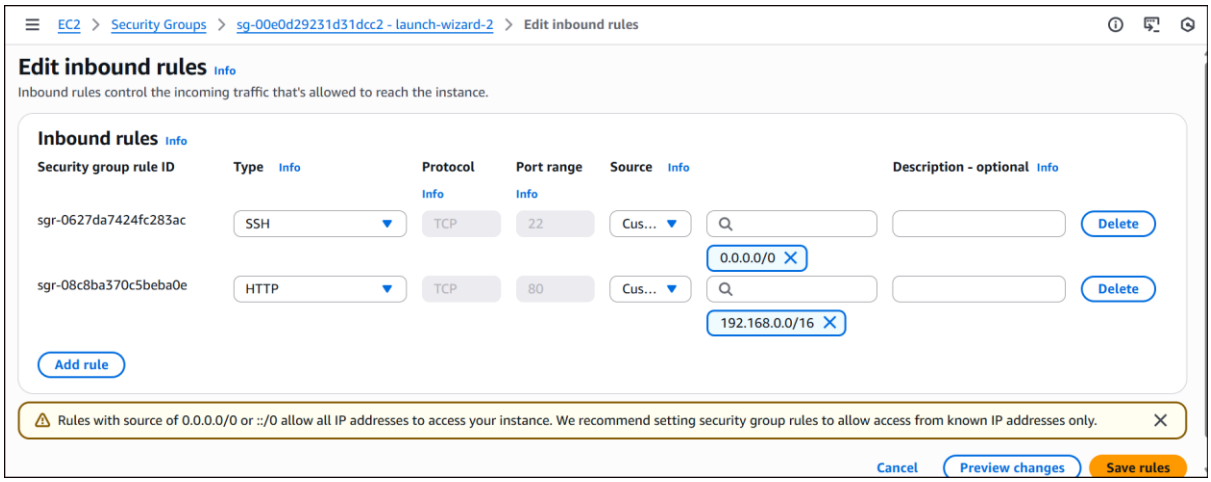


Now your “test-instance” is connected to the internet and ready to use.

17. Do the same process for creating “prod-vpc” as well.

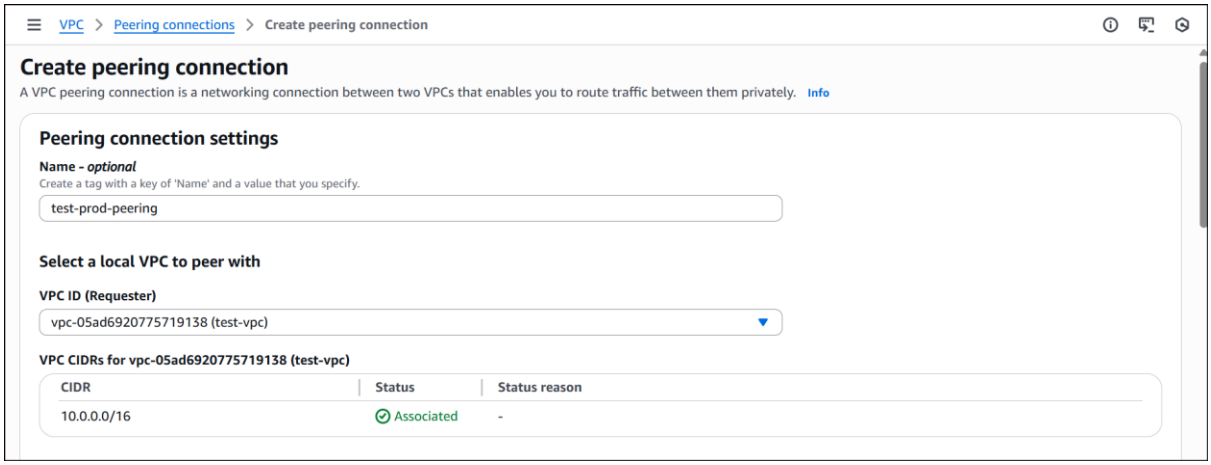
Points to remember:

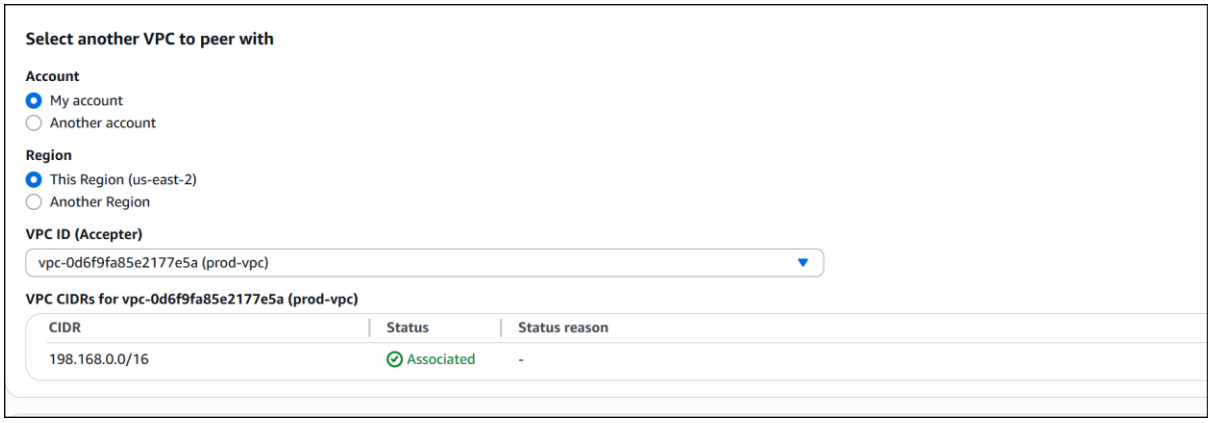
1. While creating “prod-instance” in the security group, give IP address ranges “198.168.0.0/16” in the HTTP request because we are creating prod-vpc, so it could be private, that’s why specific IP ranges.



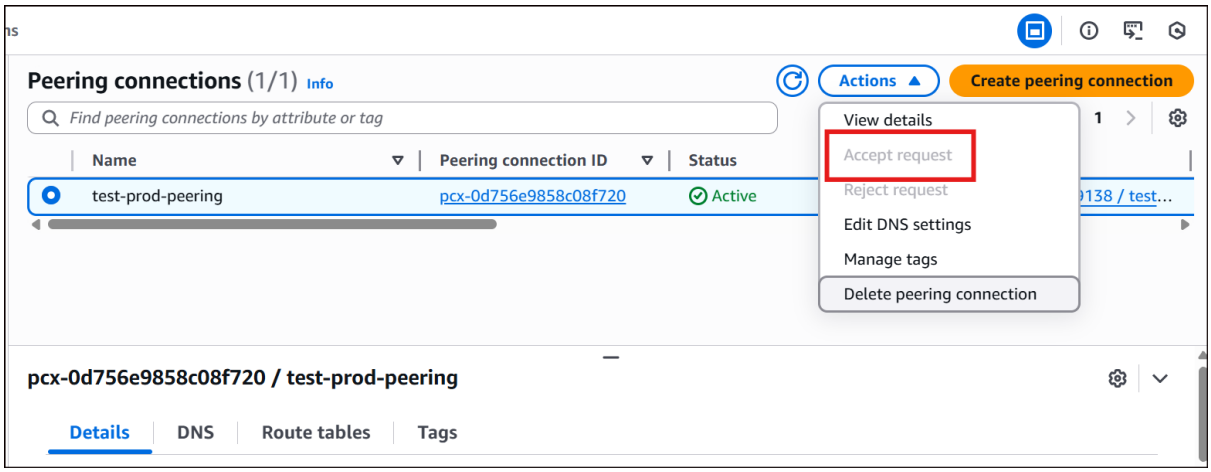
VPC Peering Method:

1. Go to the VPC and click on the “peering connections” option.
2. Give the following information in the settings and create peering between the two servers.
3. From “test-vpc” to “prod-vpc”.



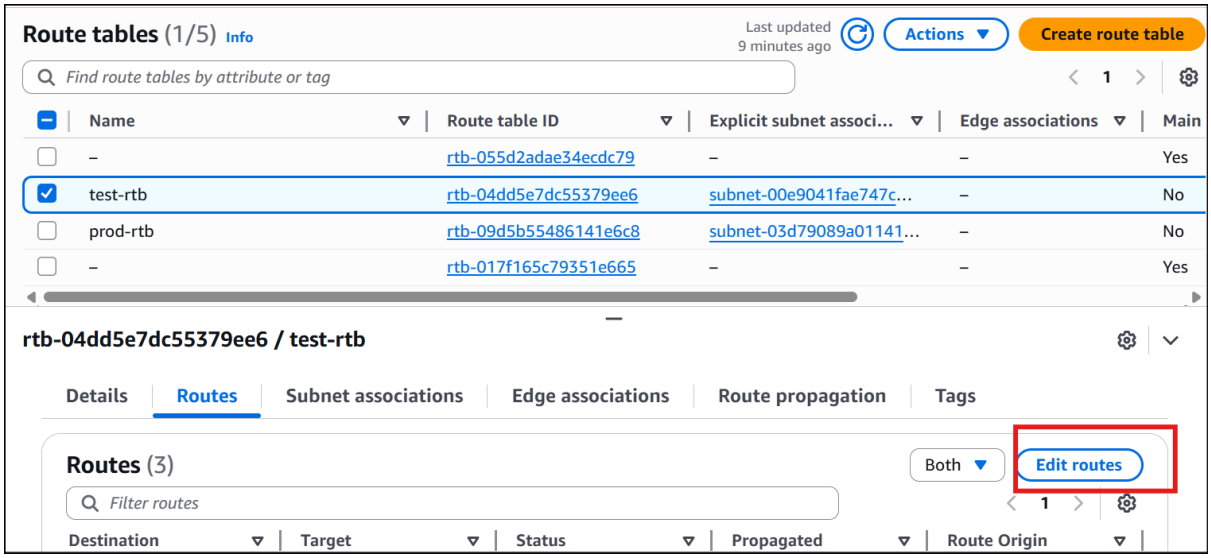


4. To allow peering between the two VPCs, we need to accept the request just like a friend request on social media, and then only the two VPCs can communicate with each other.



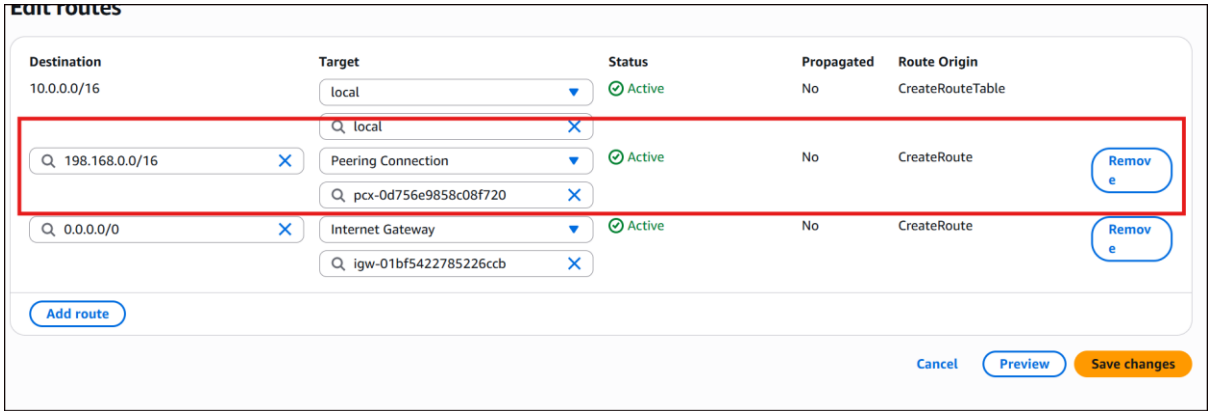
Then, only the status will be active for peering.

5. To allow communication, we need a route table between two VPCs so our message can go to the VPCs.
6. Go to the VPC and route table option.
7. Route the “test-rtb” with “prod-rtb” by adding their IP ranges.

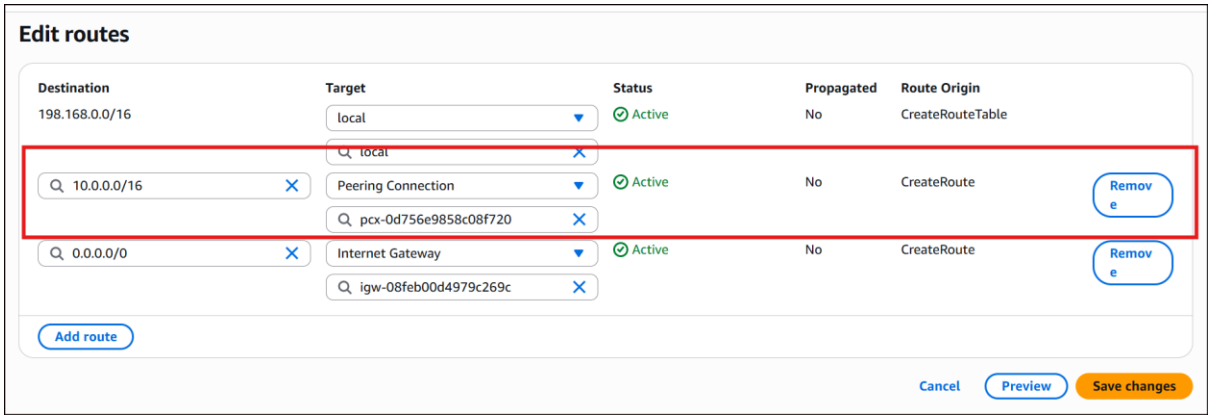


8. We are allowing routing from “test-instance” to “prod-instance” and vice versa in the form of IP addresses.

Prod IP Address



Test IP Address

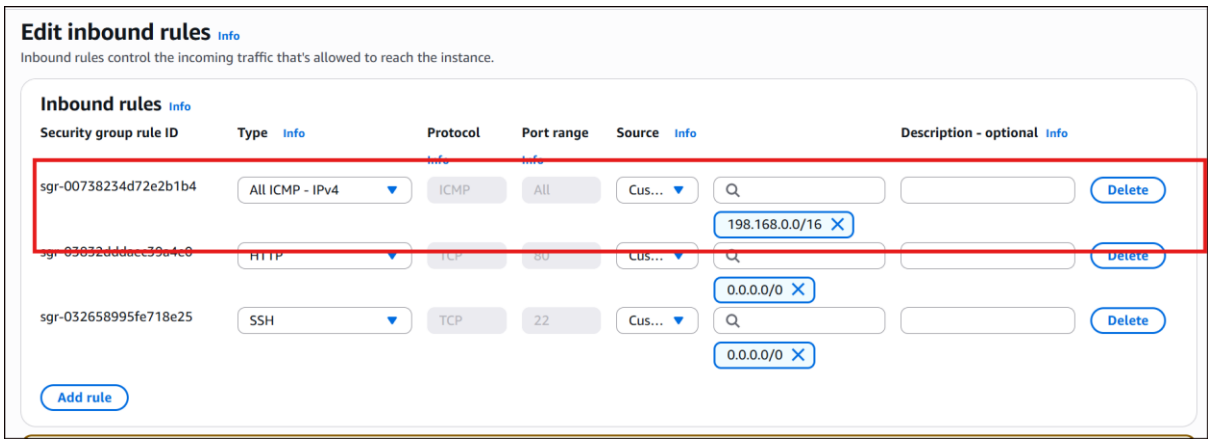


9. Open both instances - test and prod, and try to **“PING”** - to send the messages or packets to the other server to check whether the servers are getting the requests or not.

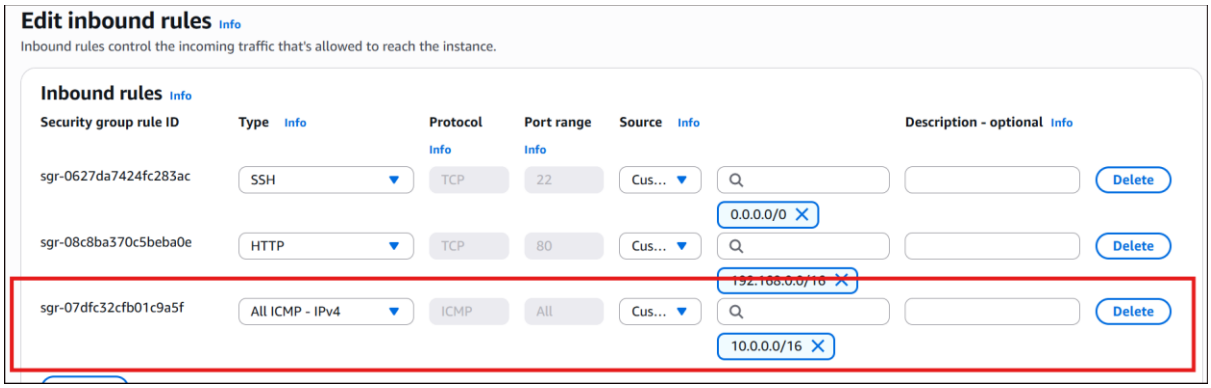
When you try to do a ping, it won't work because the "PING" command only works with the ICMP protocol.

10. Add an ICMP request to the security group.

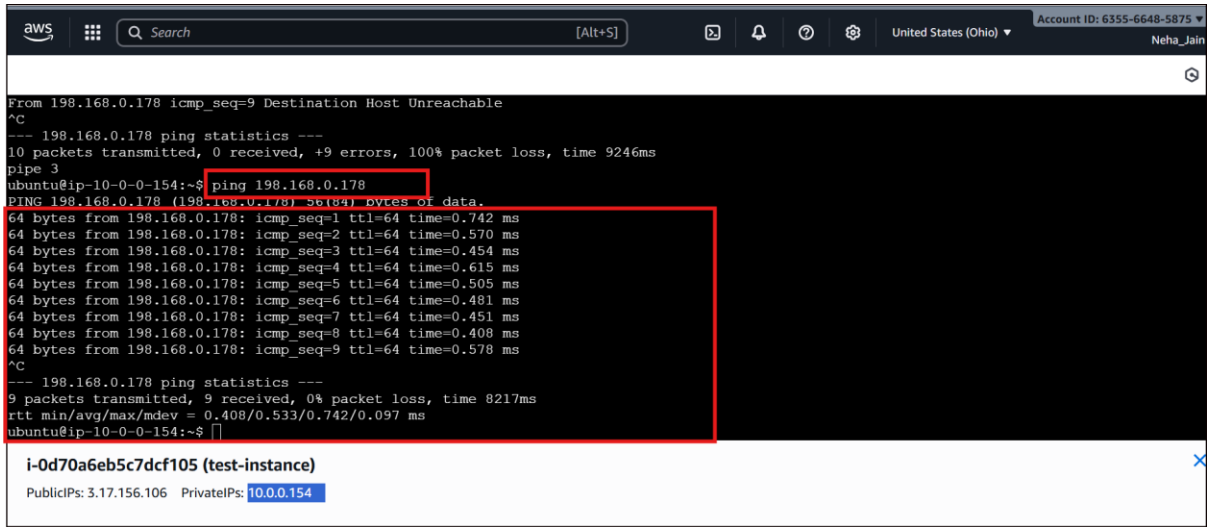
In "test-instance", add the IP address of prod-instance, ie, 192.168.0.0/16.



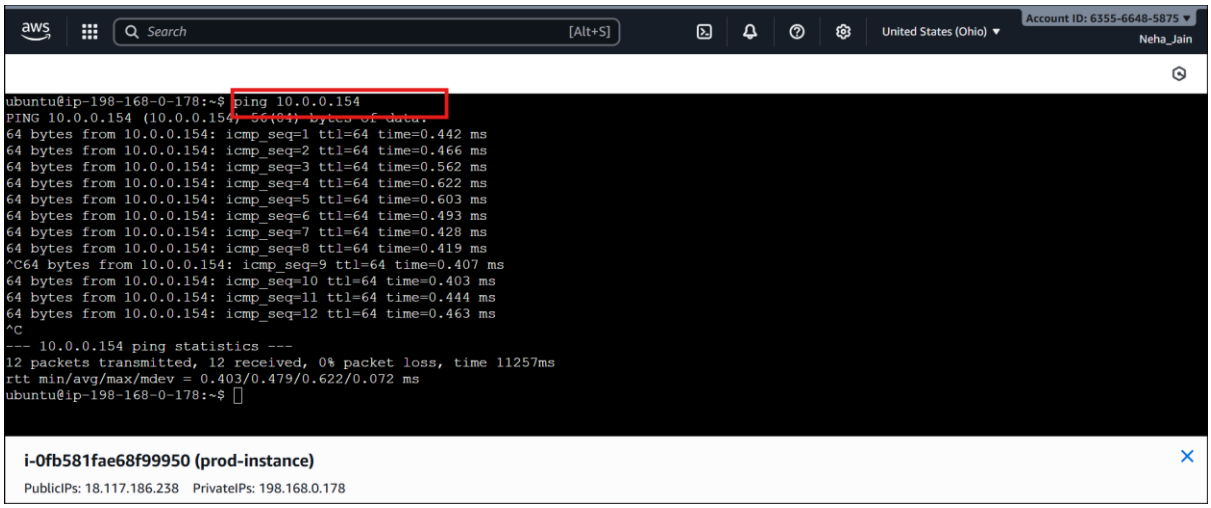
In "prod-instance", add the IP Address of test-instance, ie, 10.0.0.0/16.



11. Now you can do "PING" in the "test instance" to check, and now it will communicate with "prod-instance".



12. Now you can do “PING” in the “prod-instance” to check, and now it will communicate with “test-instance”.



Enjoy :)