Frontend-VPC

Backend-VPC

Frontend-IGW

Public Subnet

Frontend

Frontend-RT

Public-Backend-RT

Backend-IGW

Public Subnet

Bastion Host

NAT

Private-Backend-RT

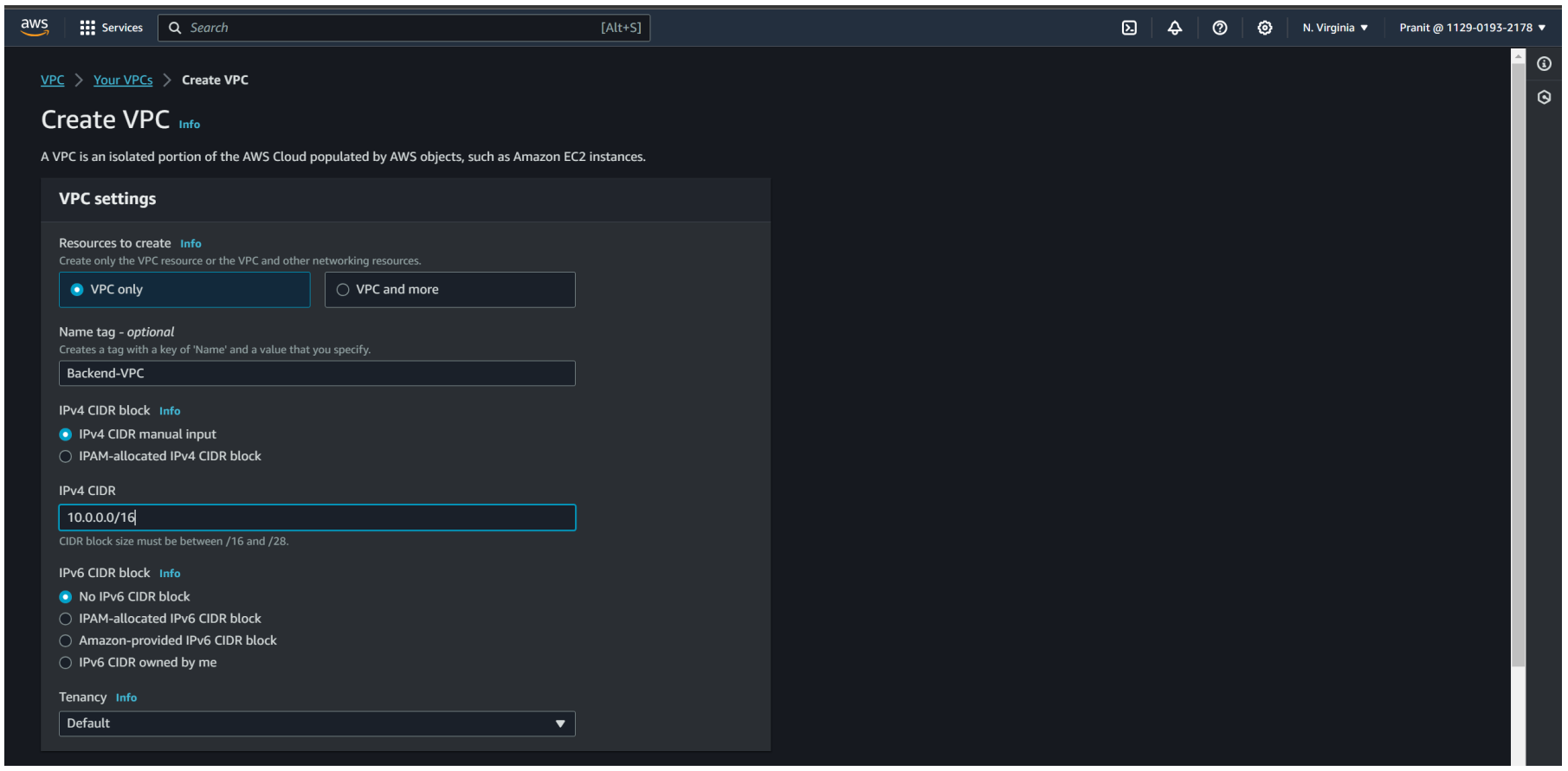
Backend Server

Private Subnet

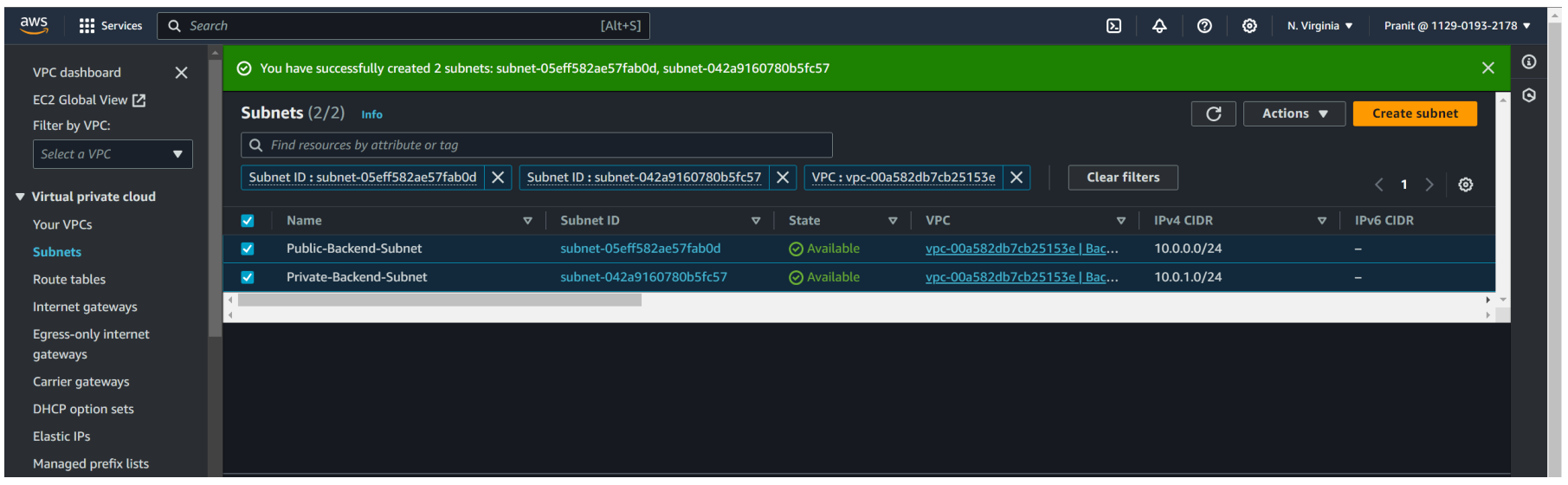
VPC Peering

Public Access

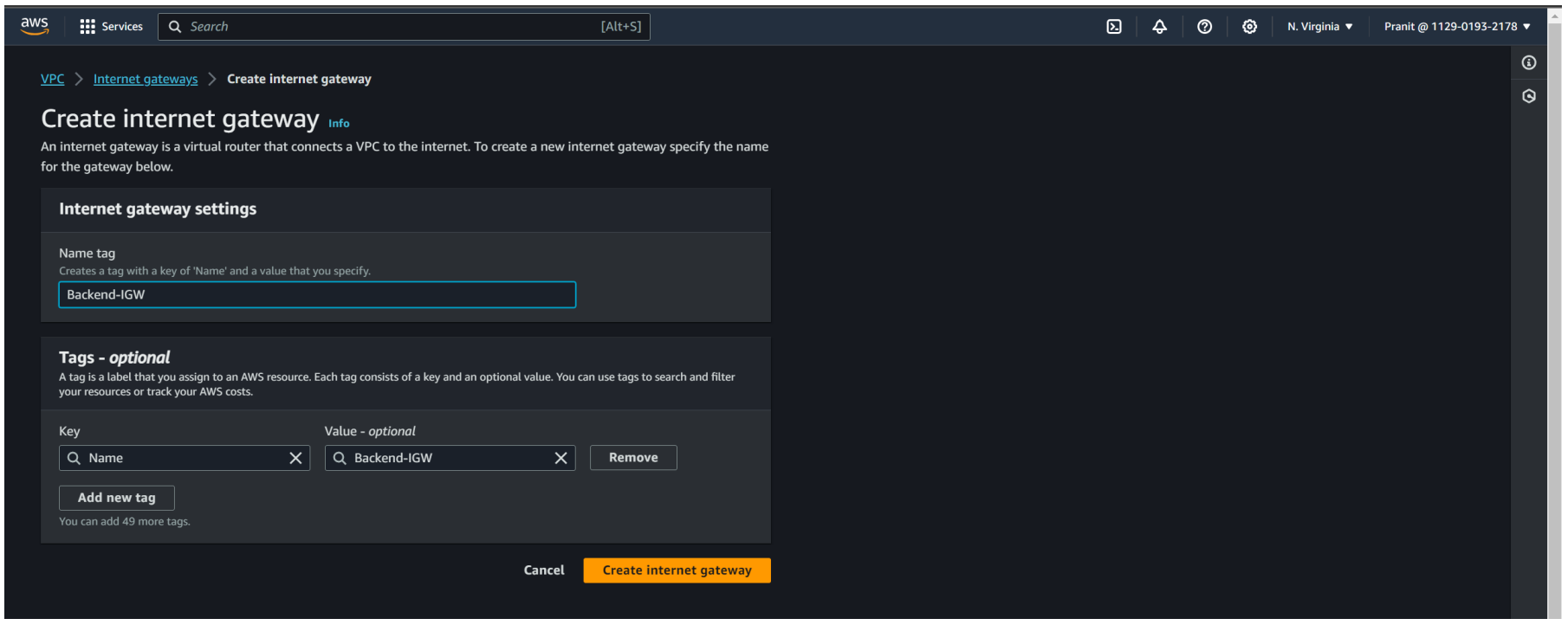
Created a Backend VPC



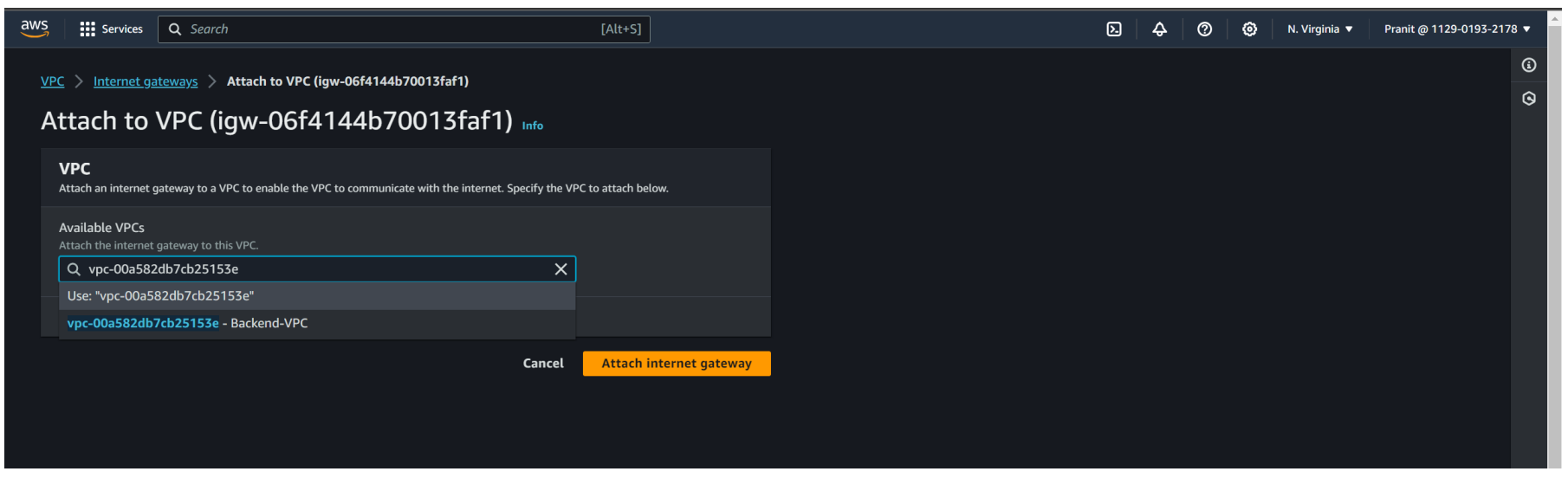
Created public-backend-subnet and private-backend-subnet



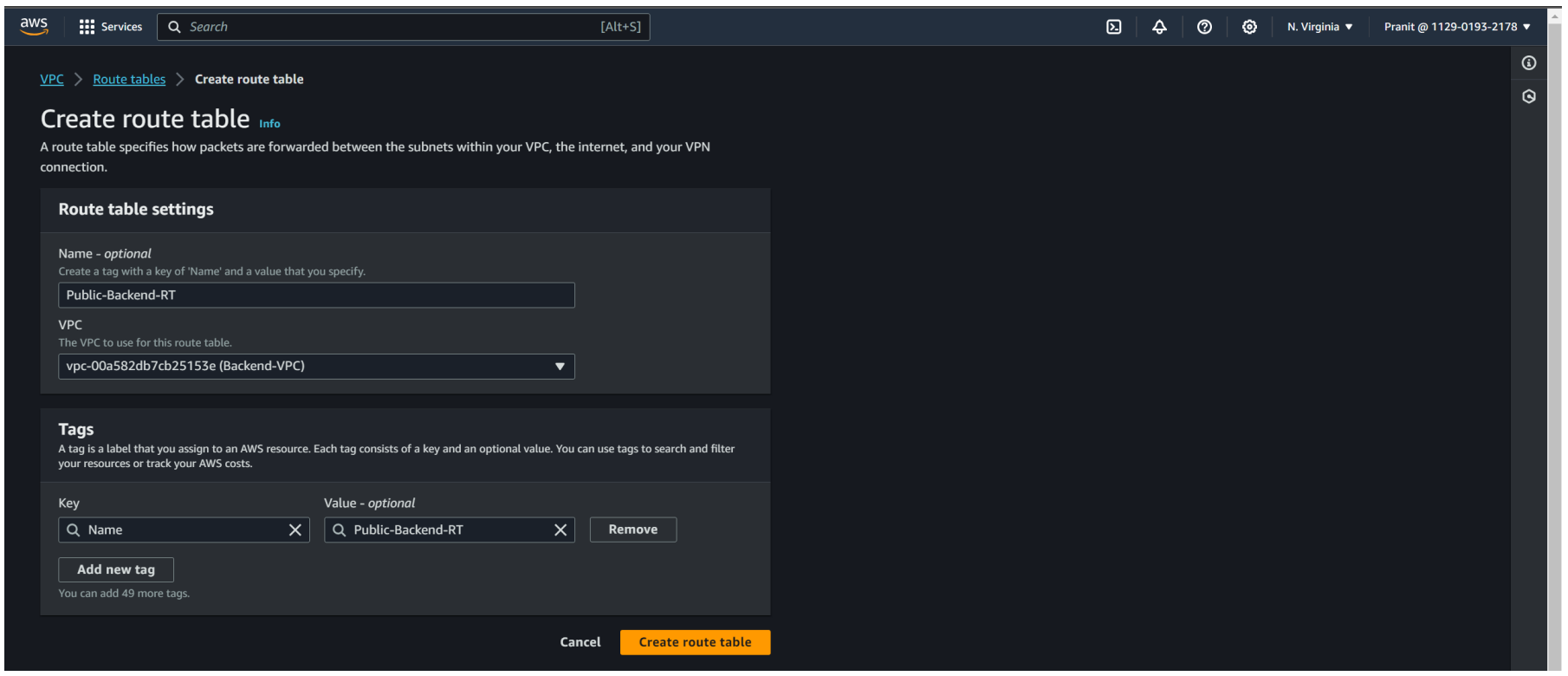
Created backend Internet gateway

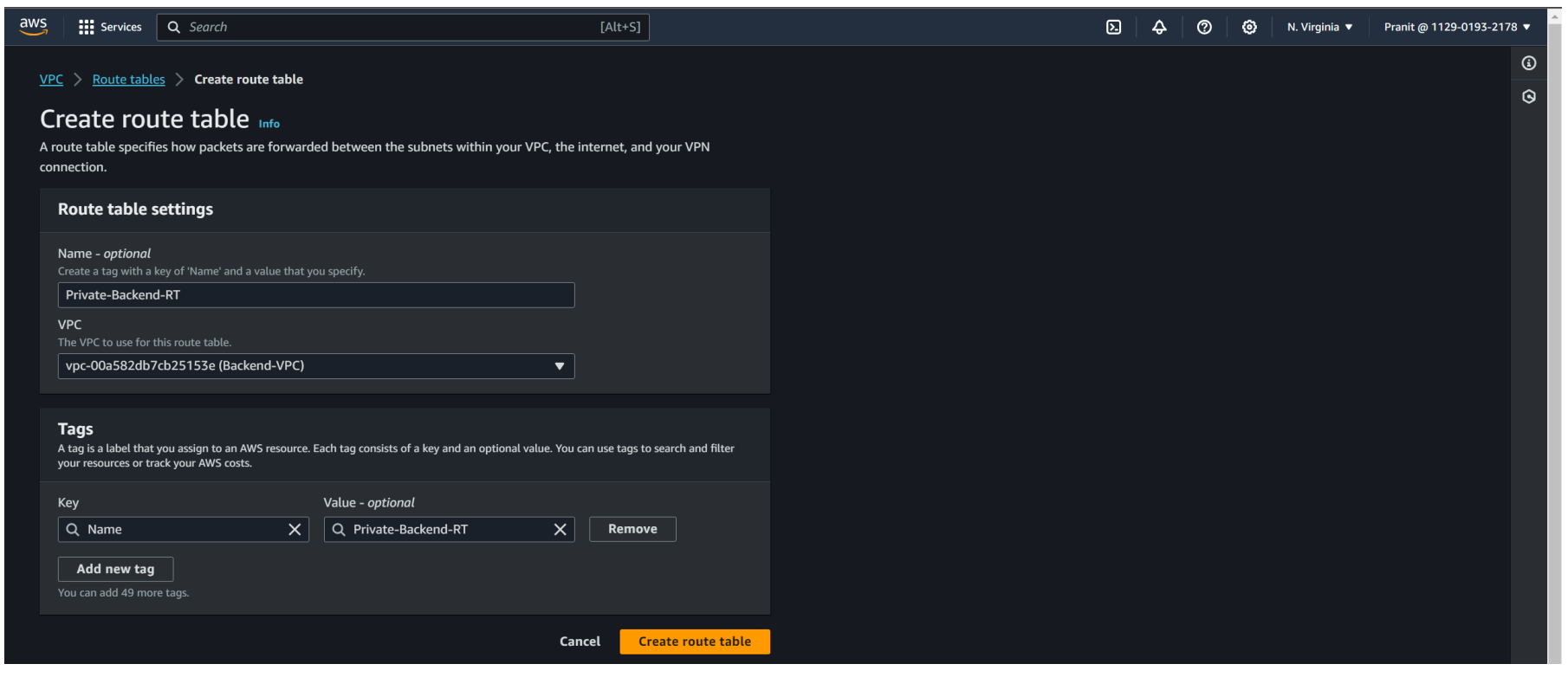


Attached backend internet gateway to backend VPC

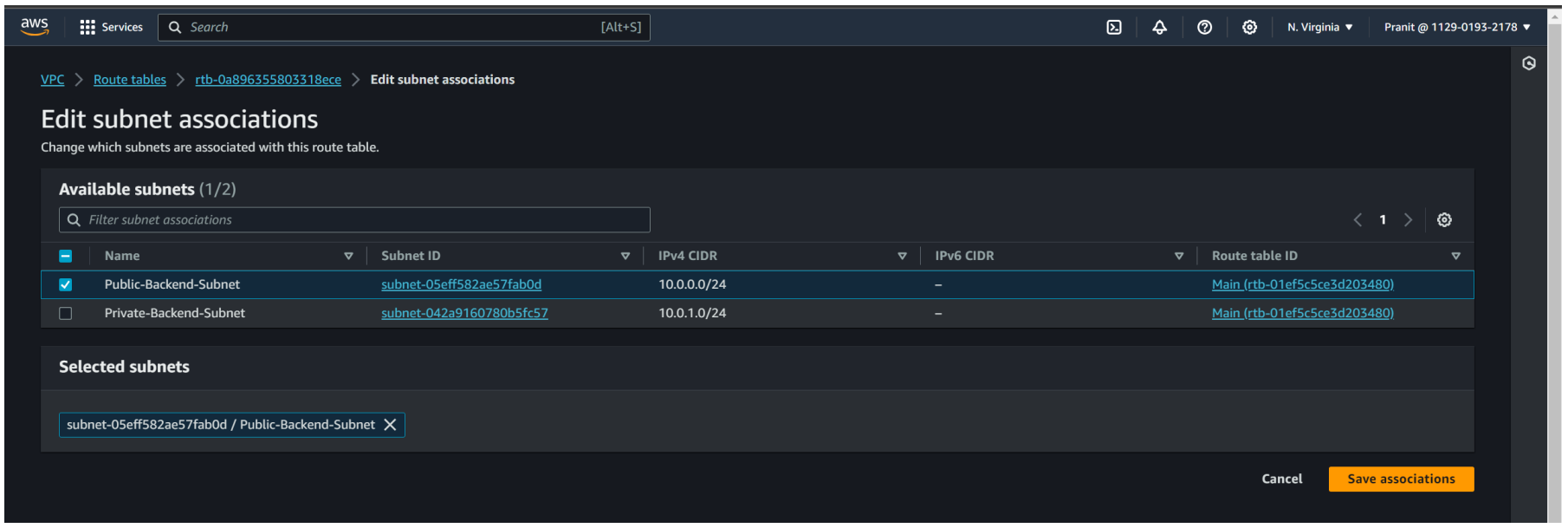


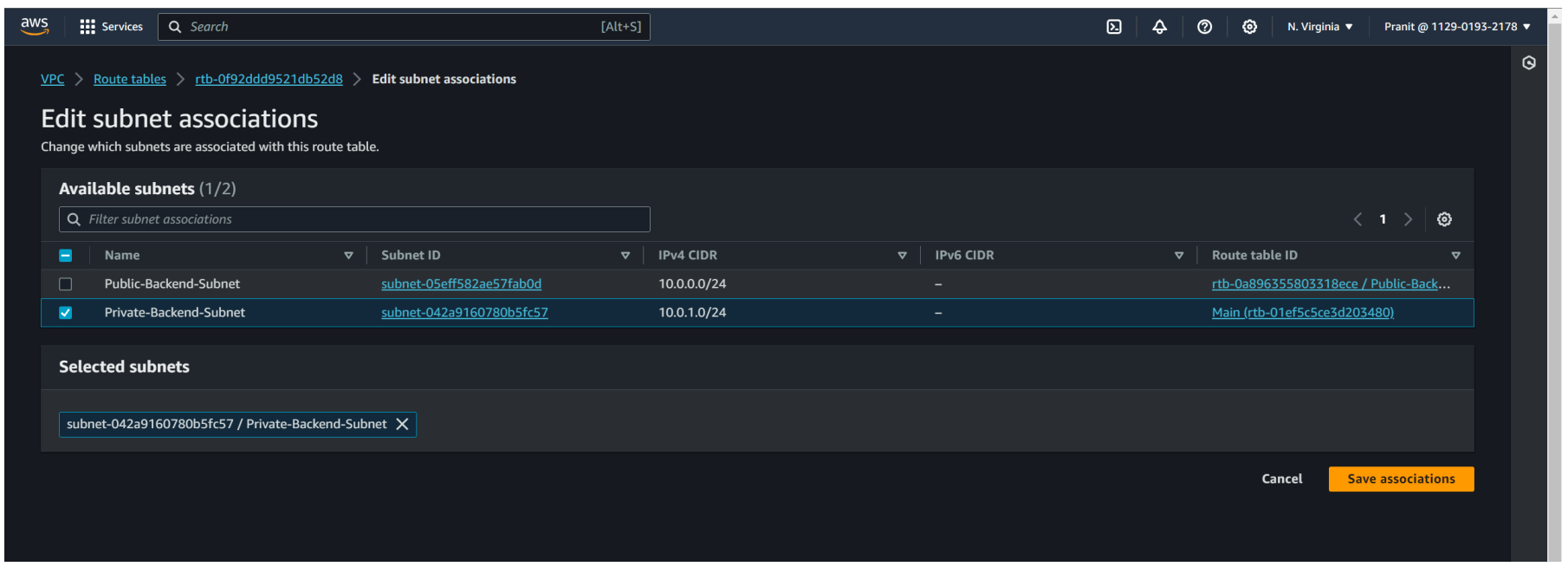
Created Public route table and Private route table



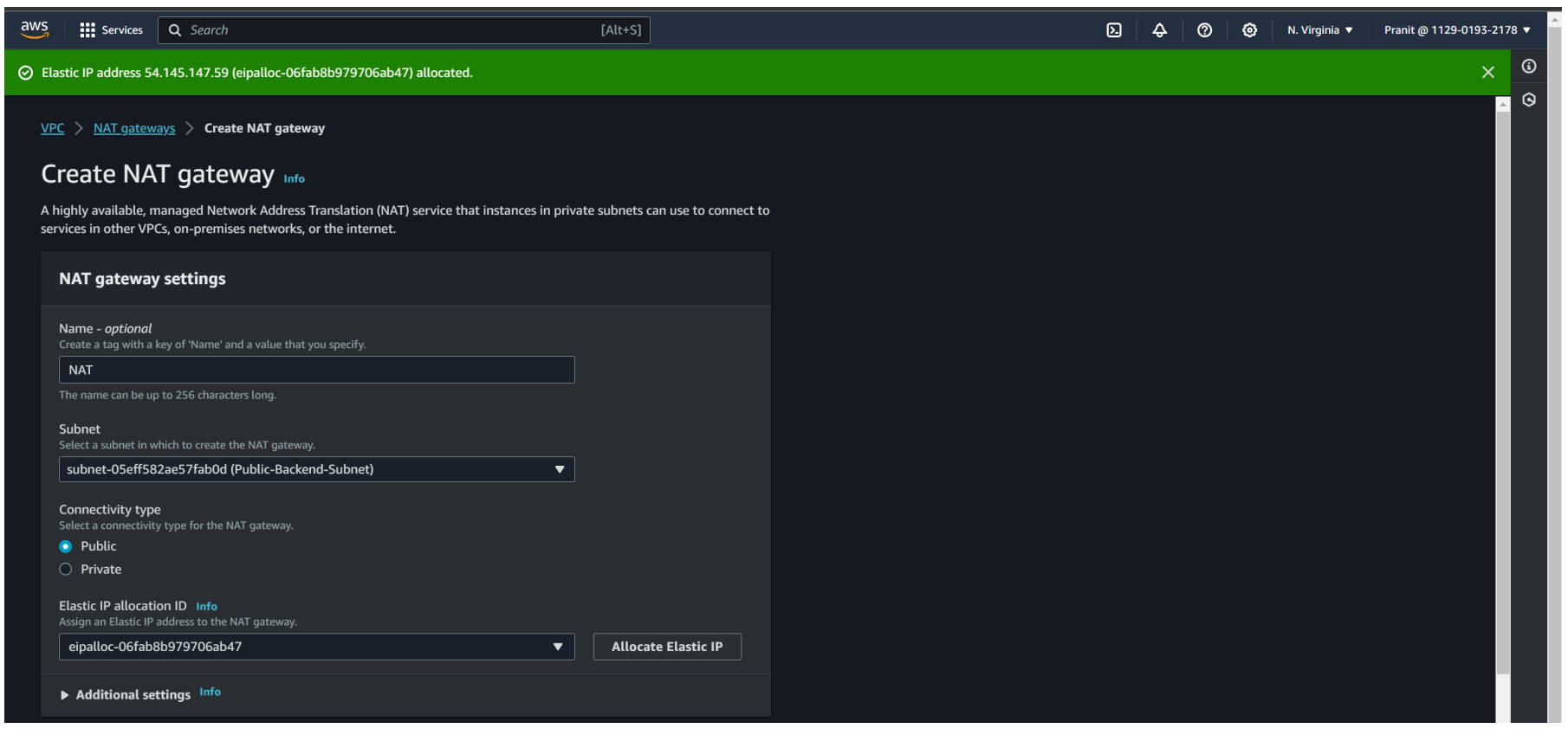


Public subnet is associated with public route table and Private subnet is associated with private route table

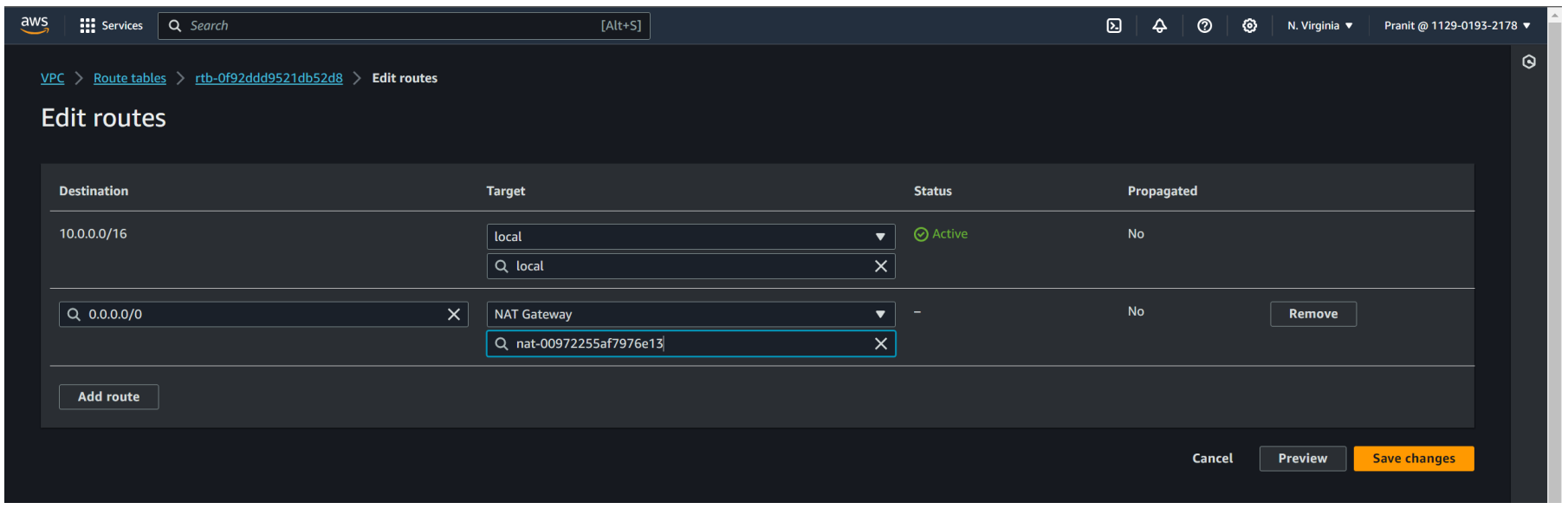




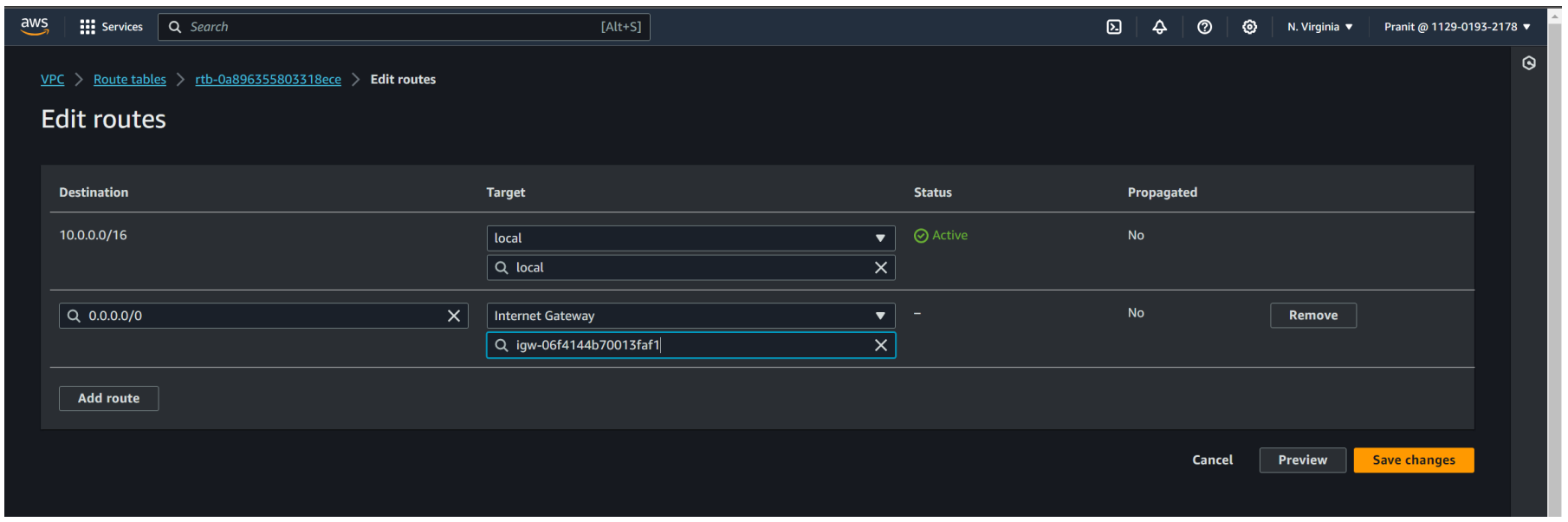
Created NAT to make the private subnet to access internet(NAT is created on public subnet)



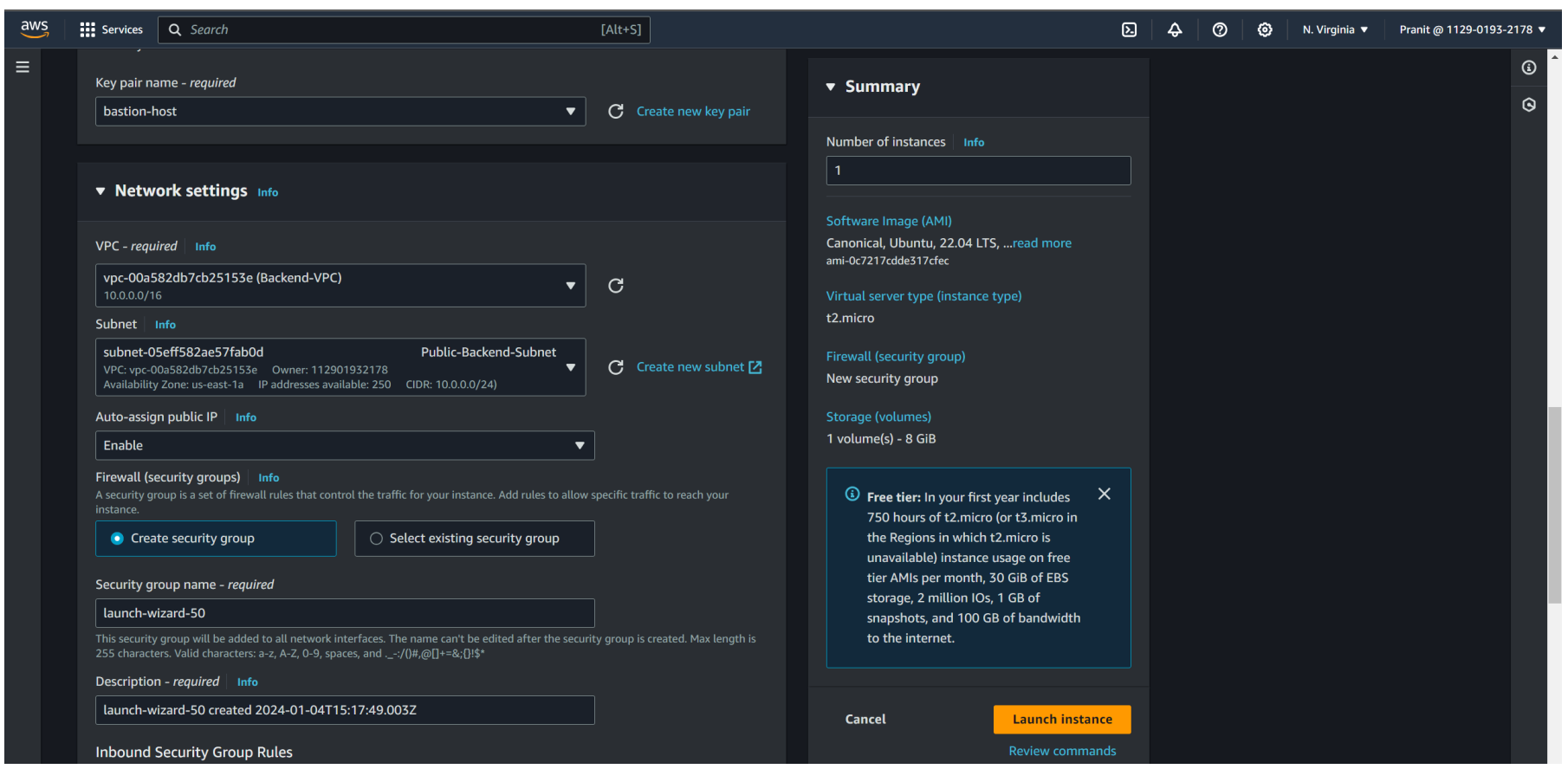
Route traffic on private route table to NAT



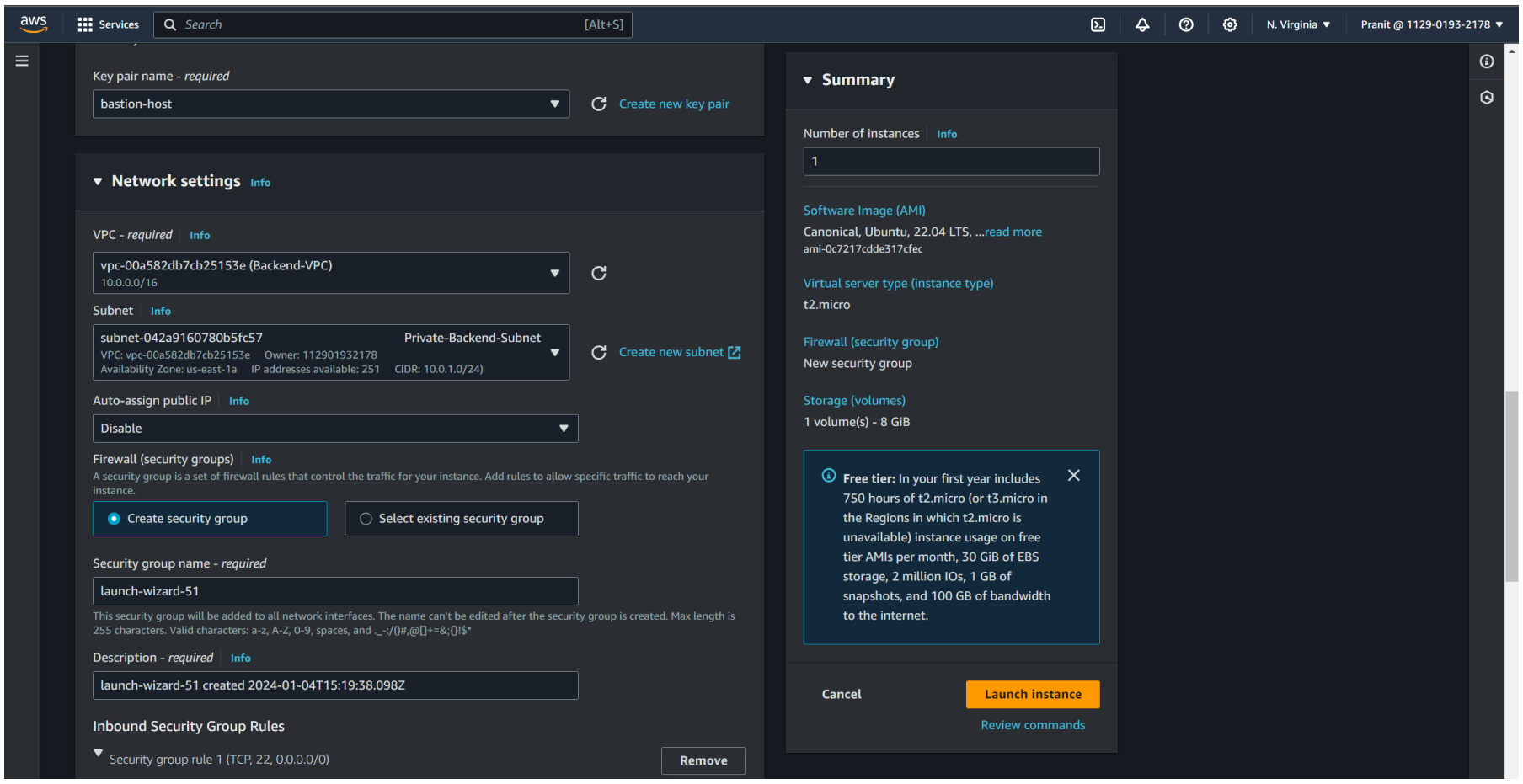
Route traffic on public route table to Internet Gateway



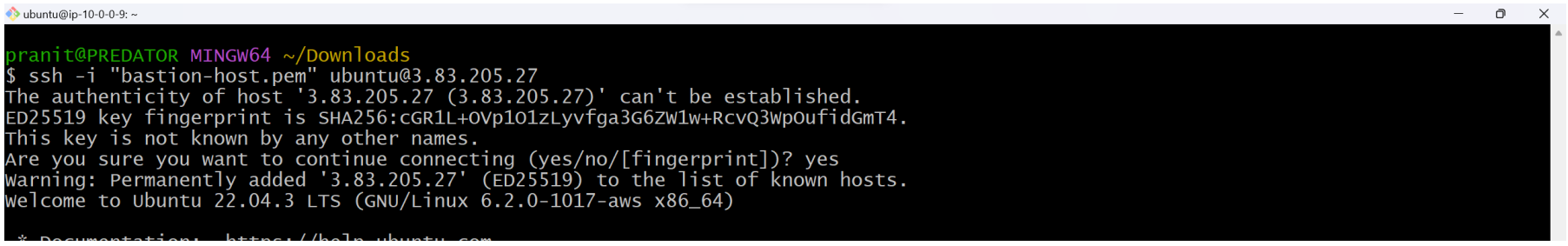
Created an EC2 instance(bastion host) on public backend subnet



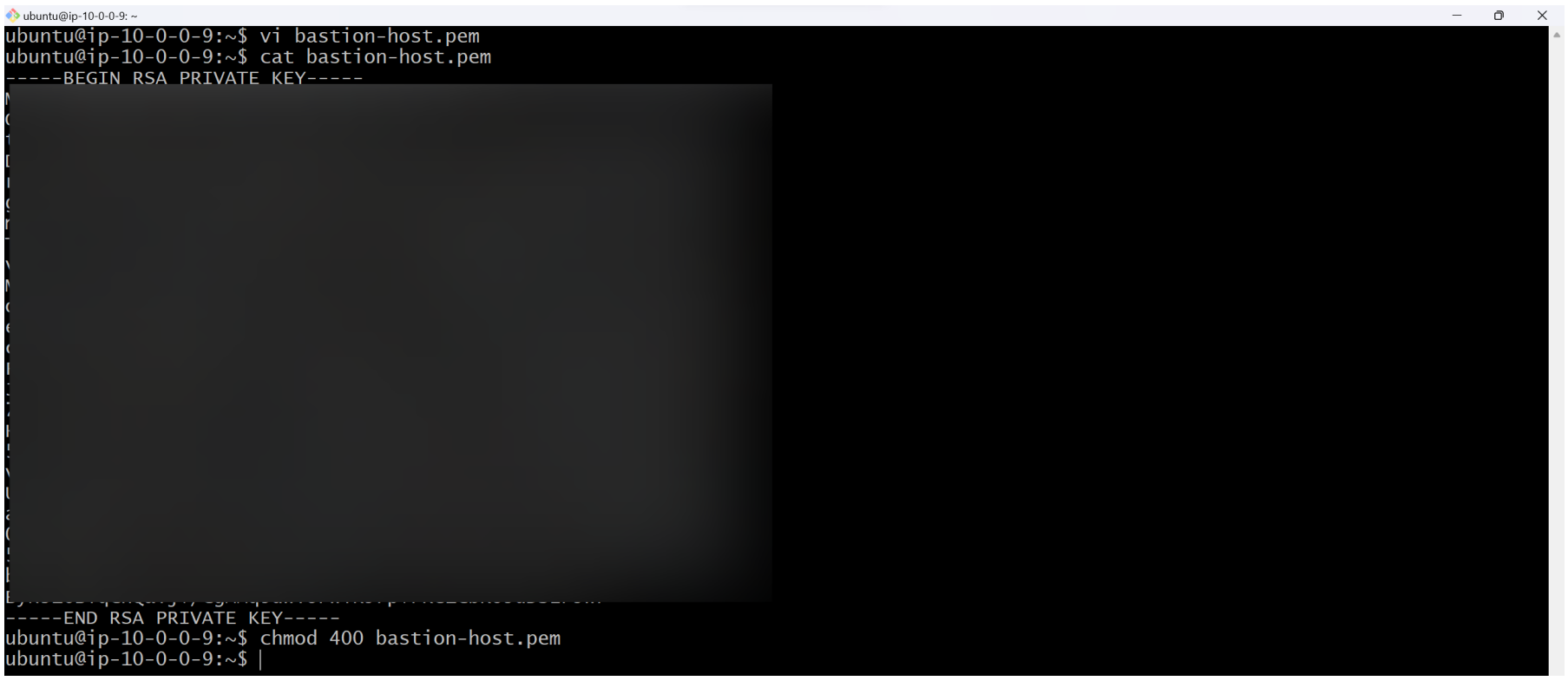
Created an EC2 instance(backend server) on private backend subnet



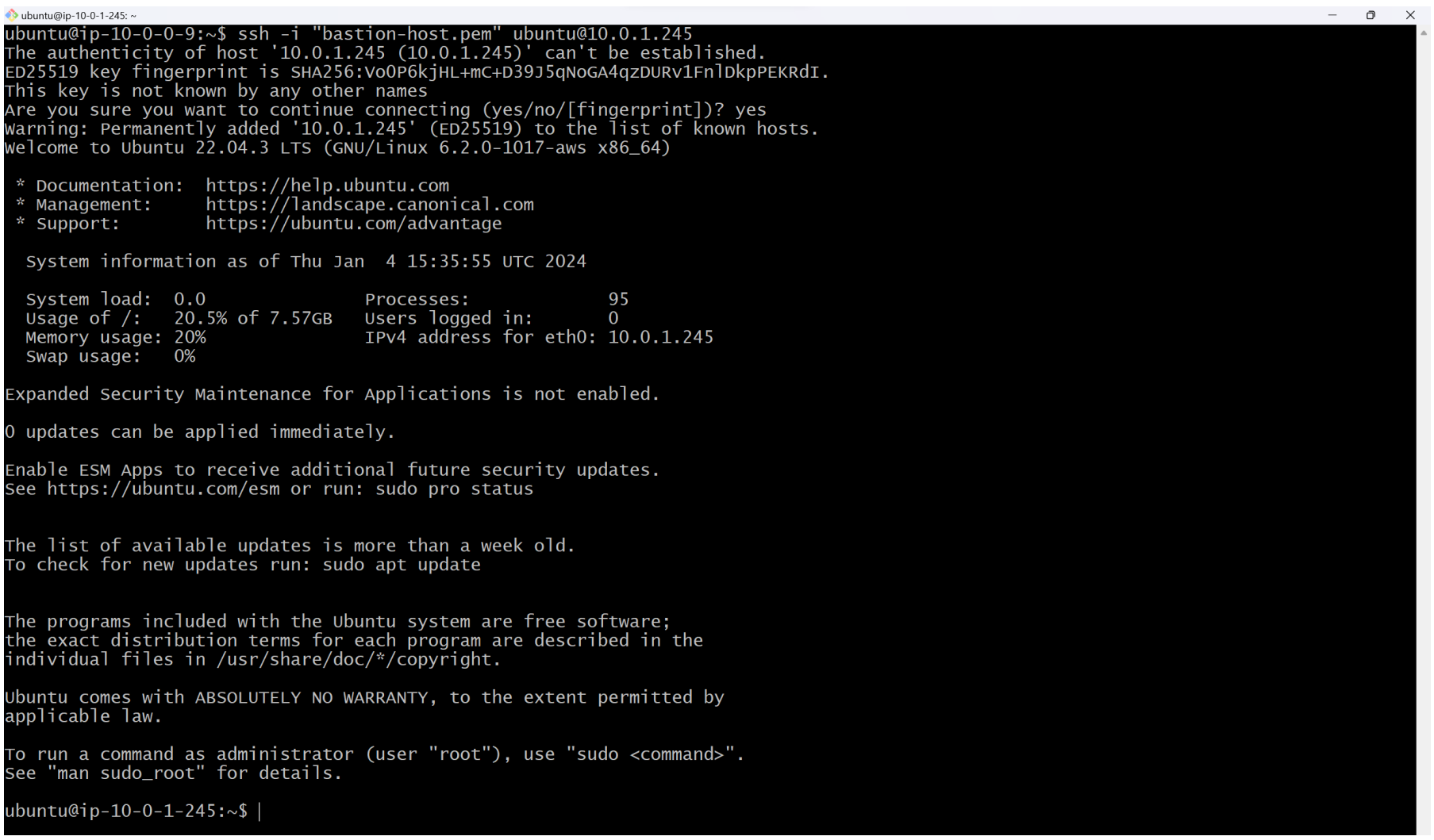
Login into bastion host



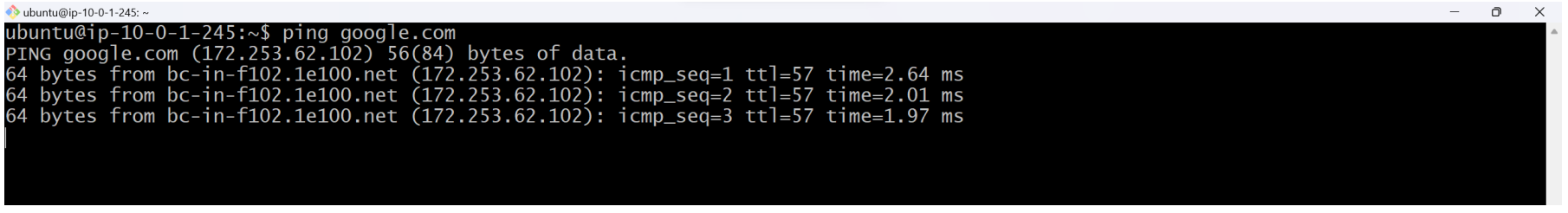
Copied the ssh key to bastion host that is used to login the backend server



Login into backend server

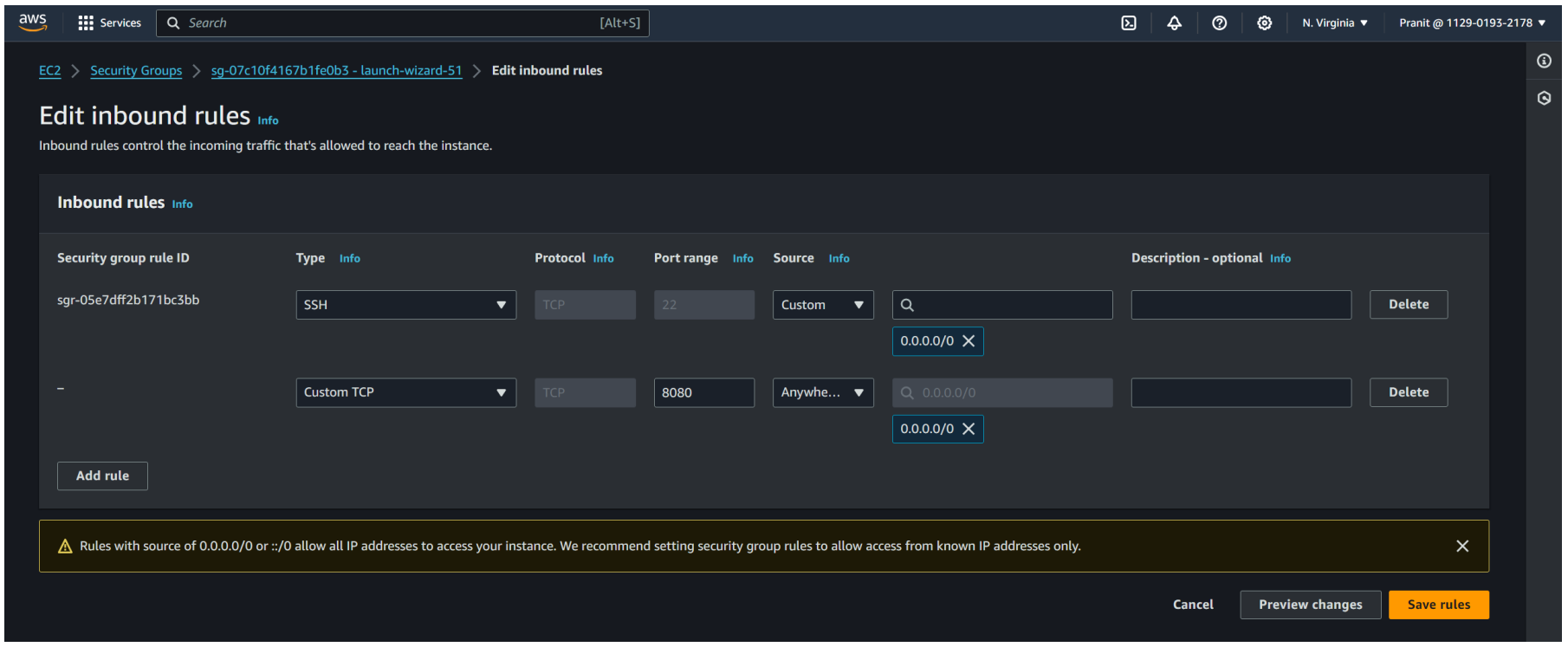


Checked whether the internet is accessible on backend server or not?

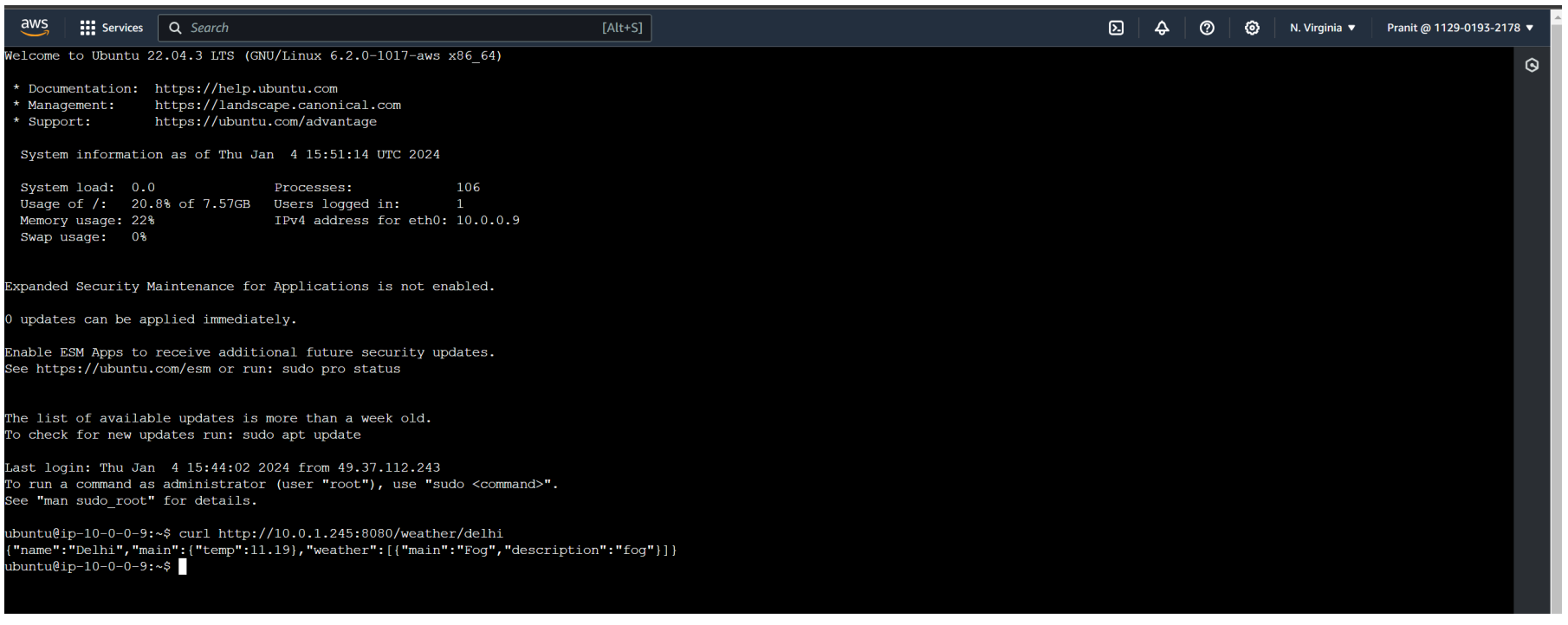


After cloned the git repository , run the backend server

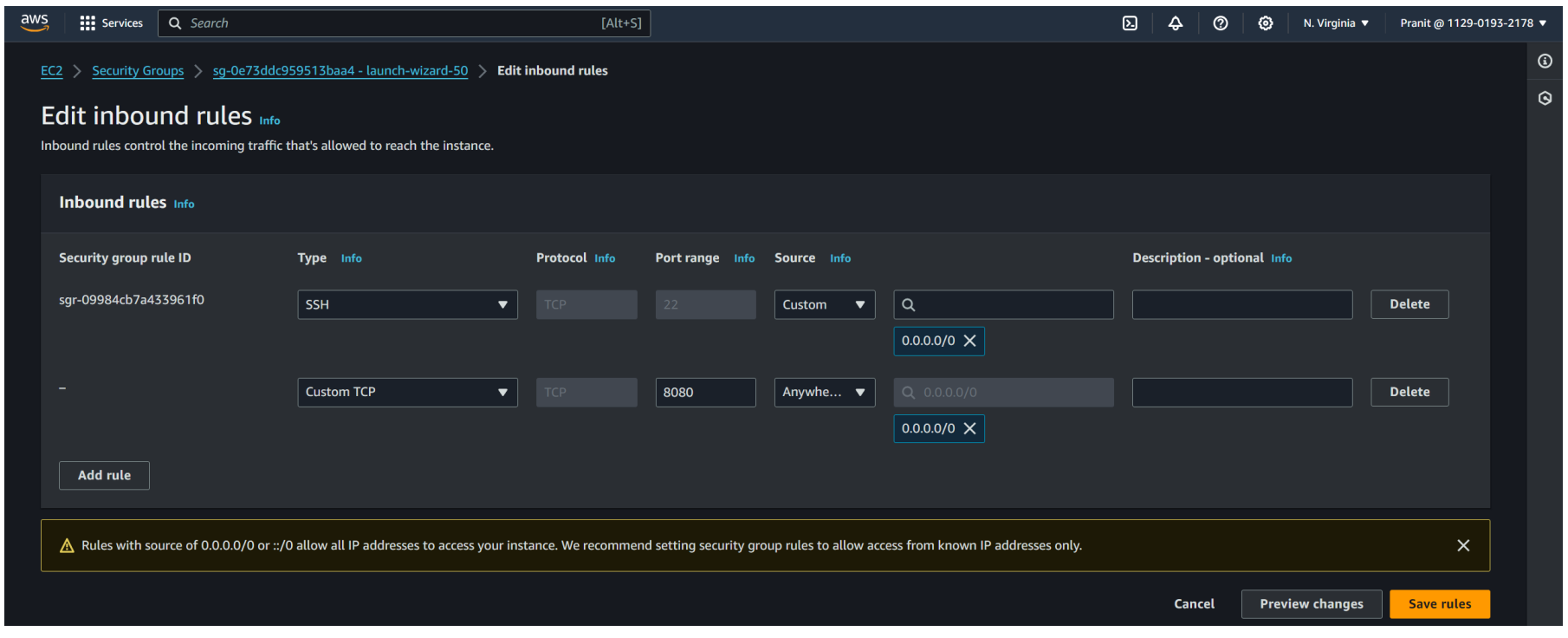
As the backend server runs on 8080 port , so added 8080 port to the security group used in the backend server



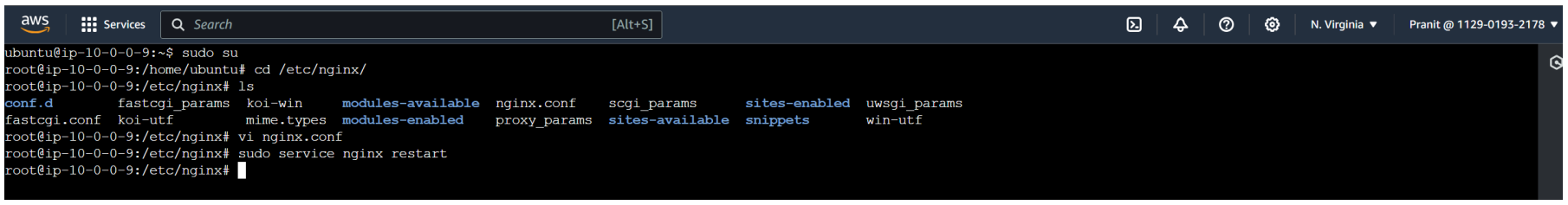
Get response on bastion host from the backend server



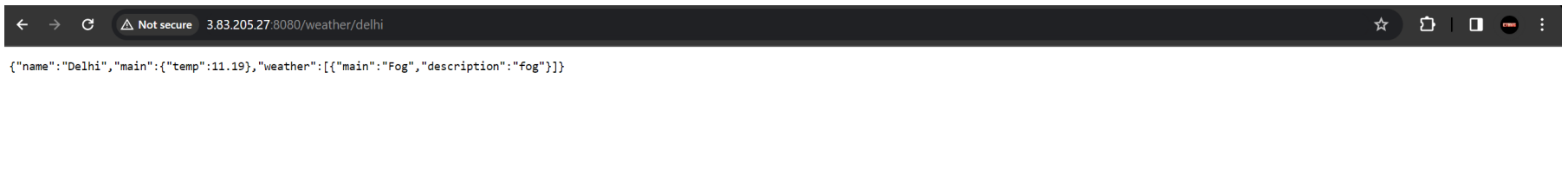
Port 8080 is added to security group of bastion host



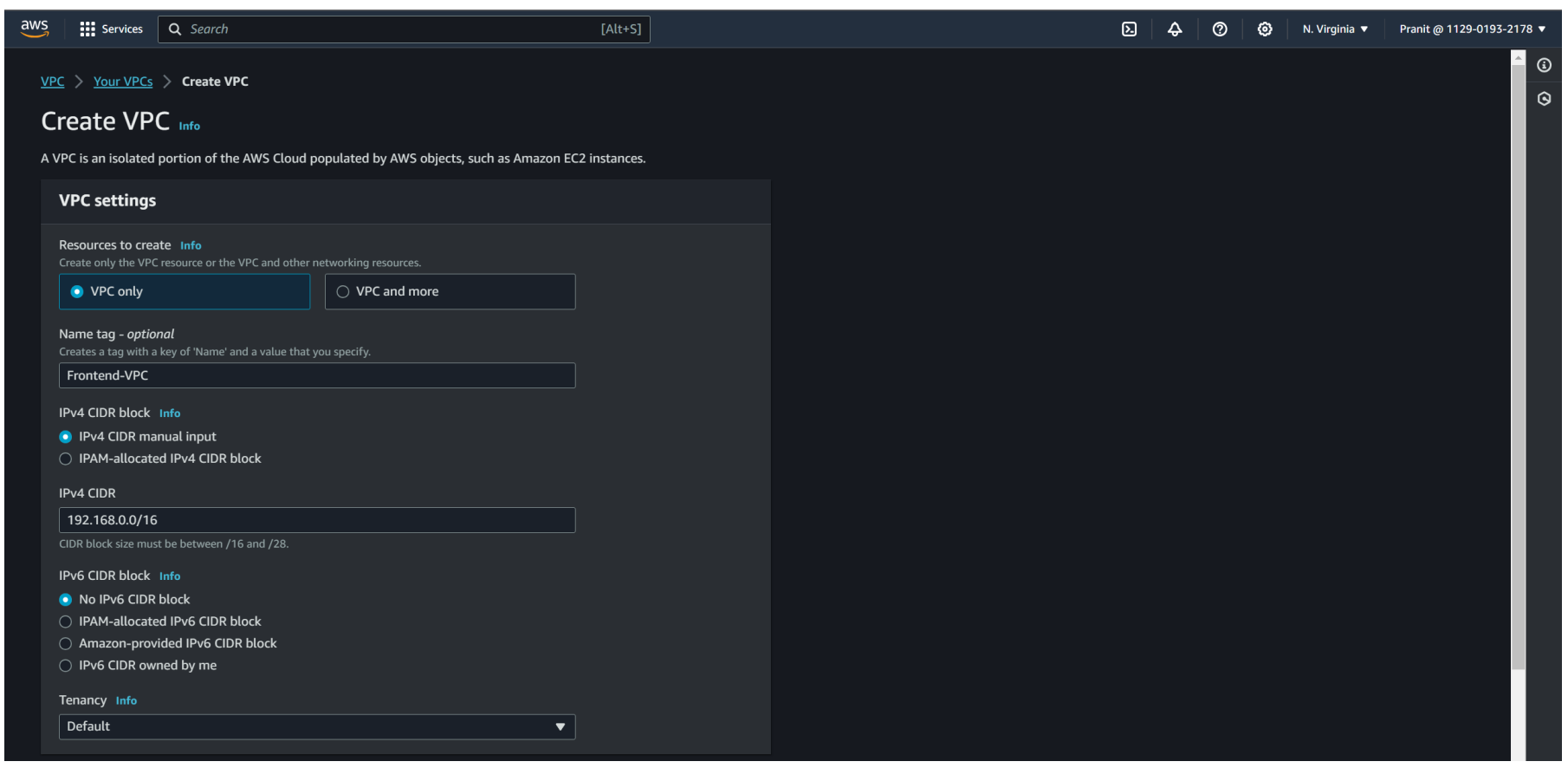
Configured a nginx proxy server



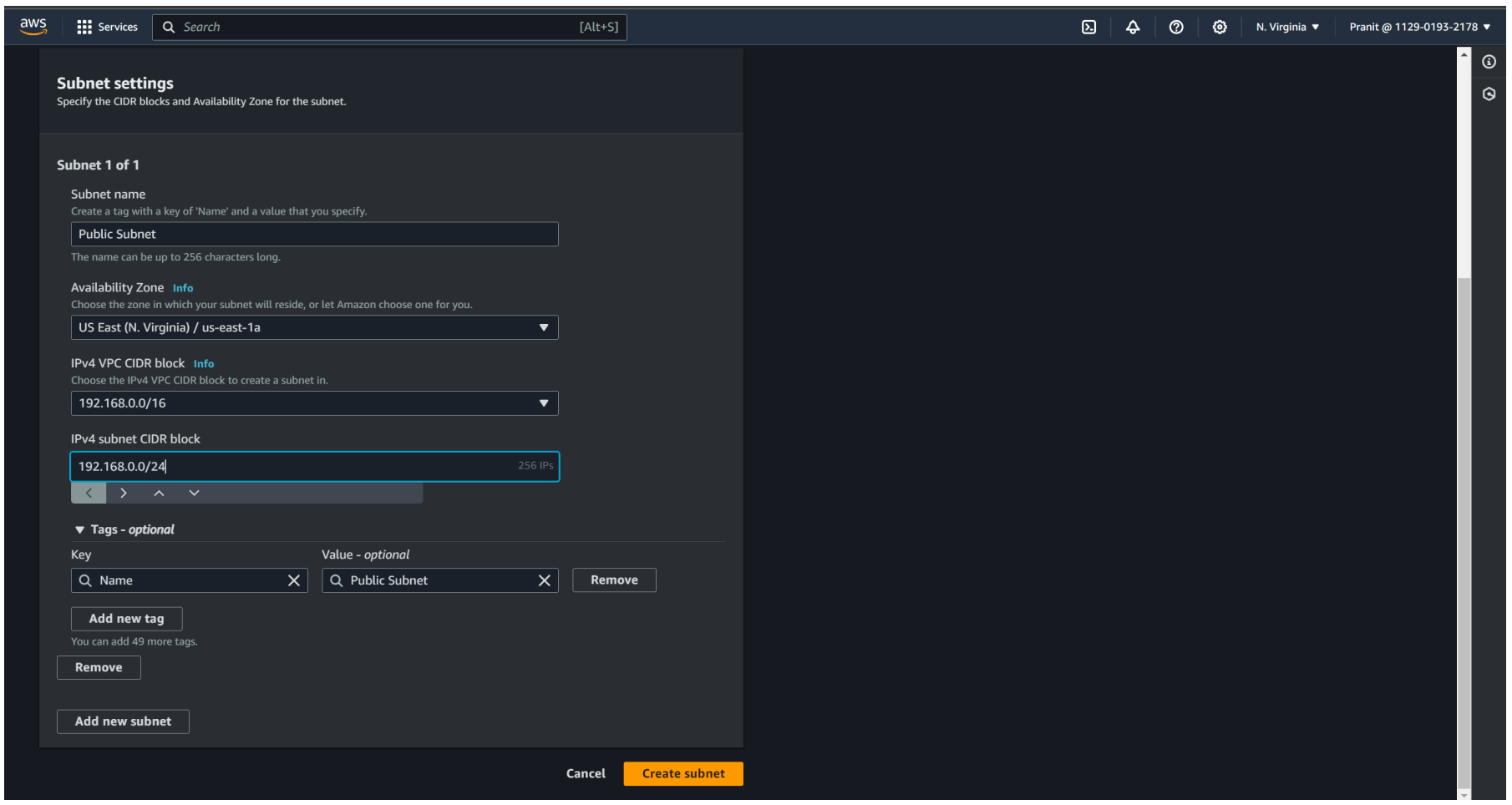
Accessed the api on backend server through the public IP of bastion host



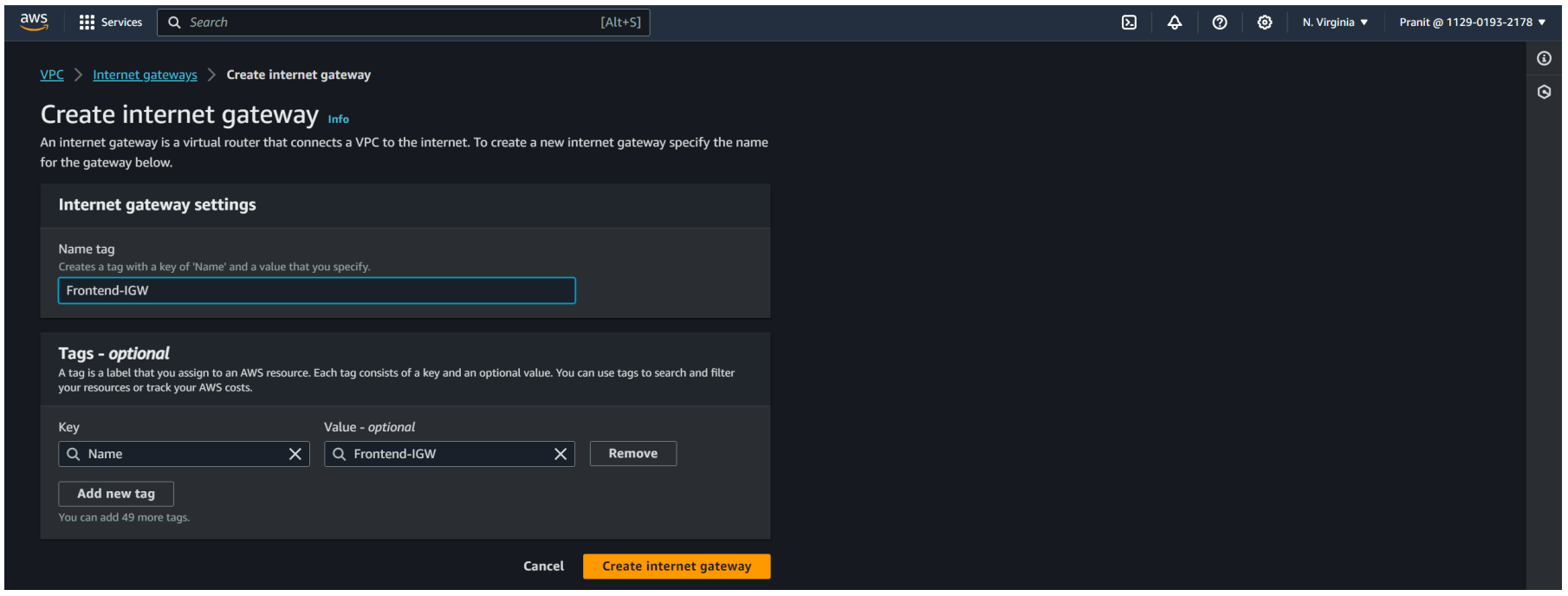
Created a Frontend VPC



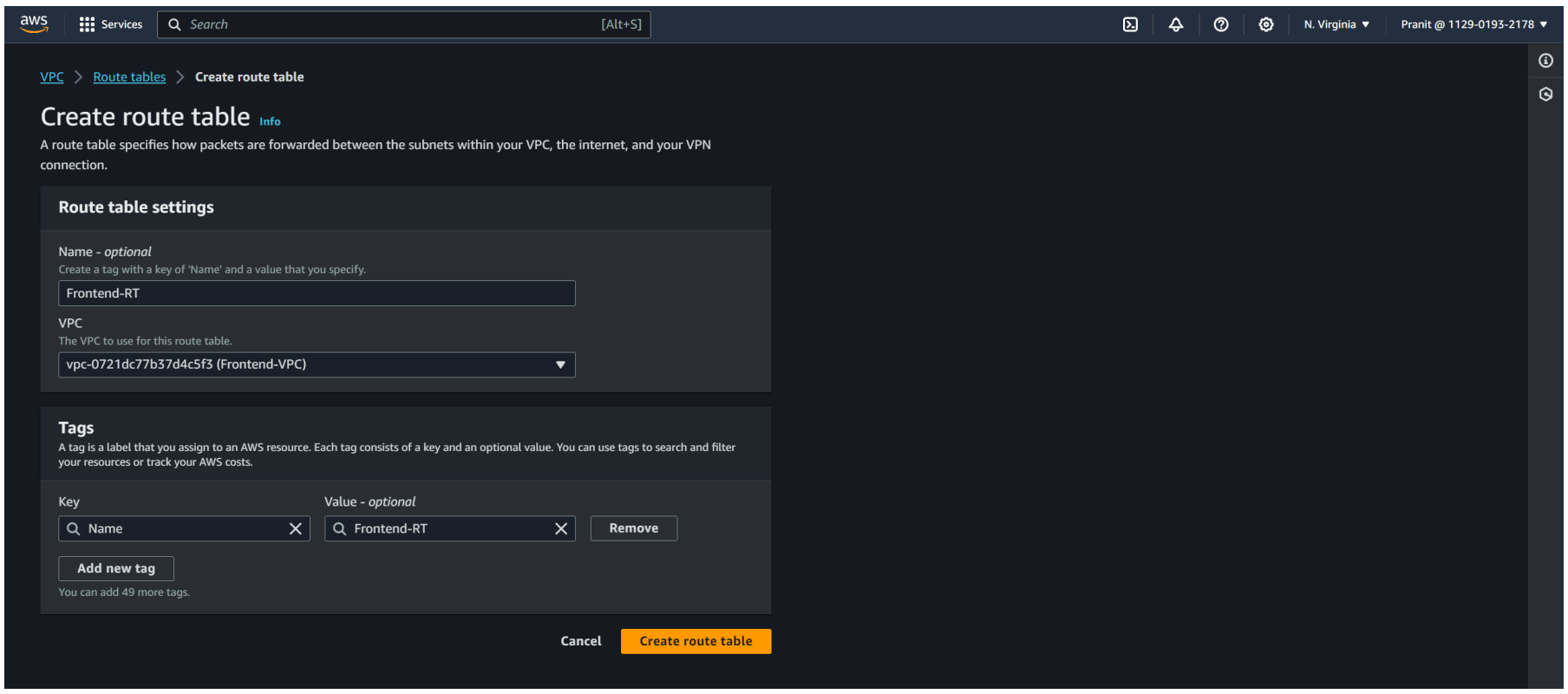
Created a public subnet on frontend VPC



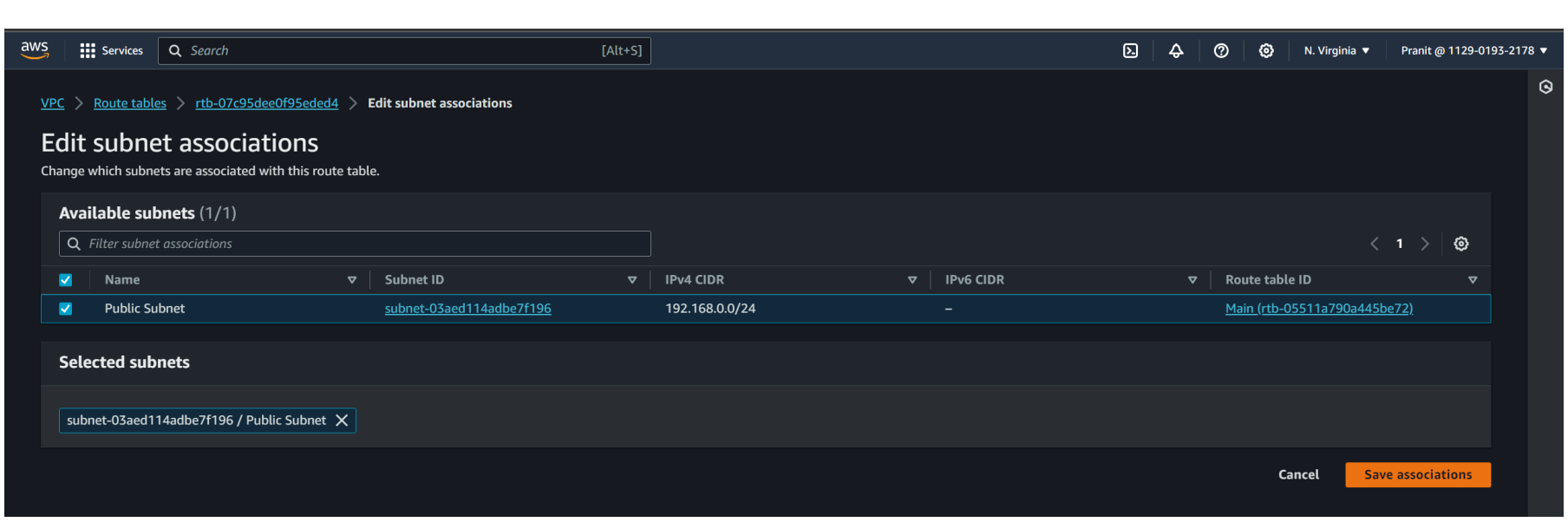
Created a Internet Gateway



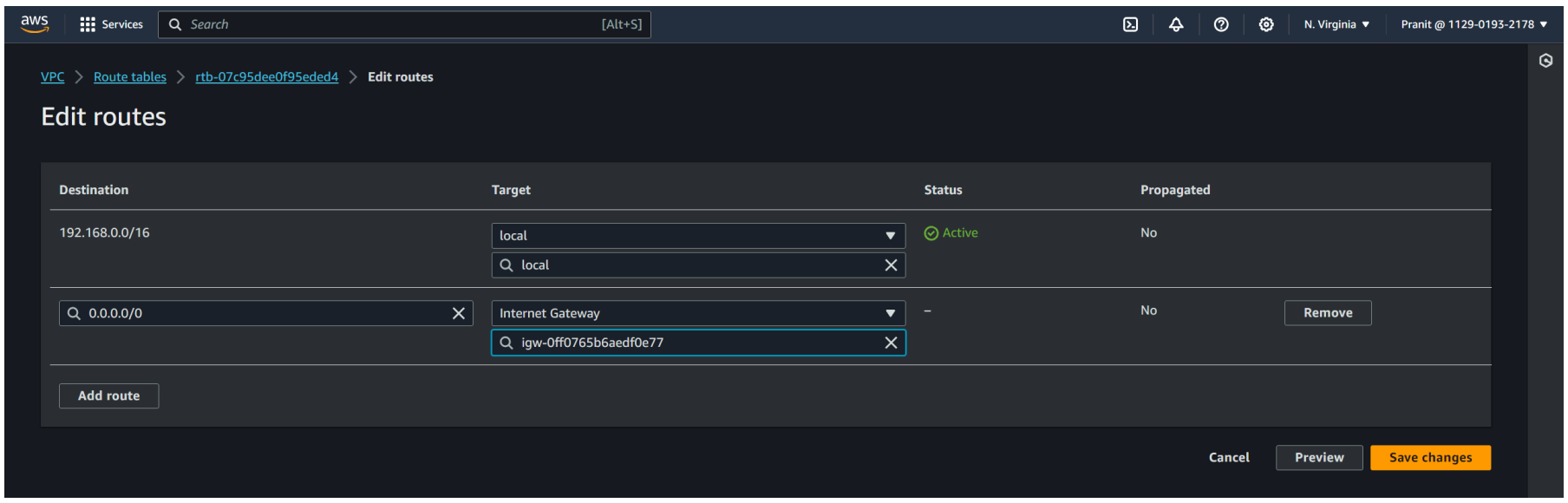
Created a Route table



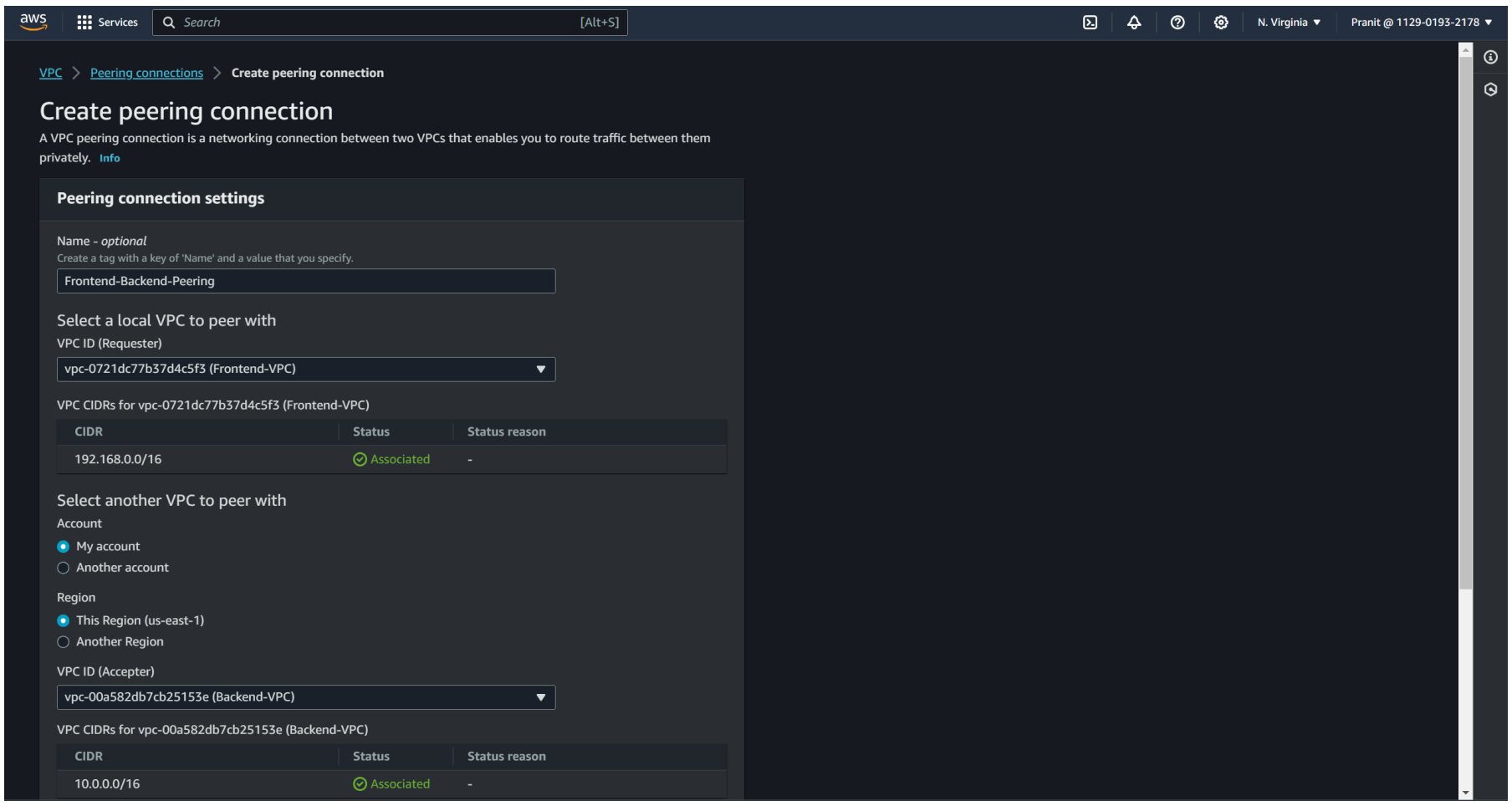
Associate the public subnet with public route table(frontend-vpc)



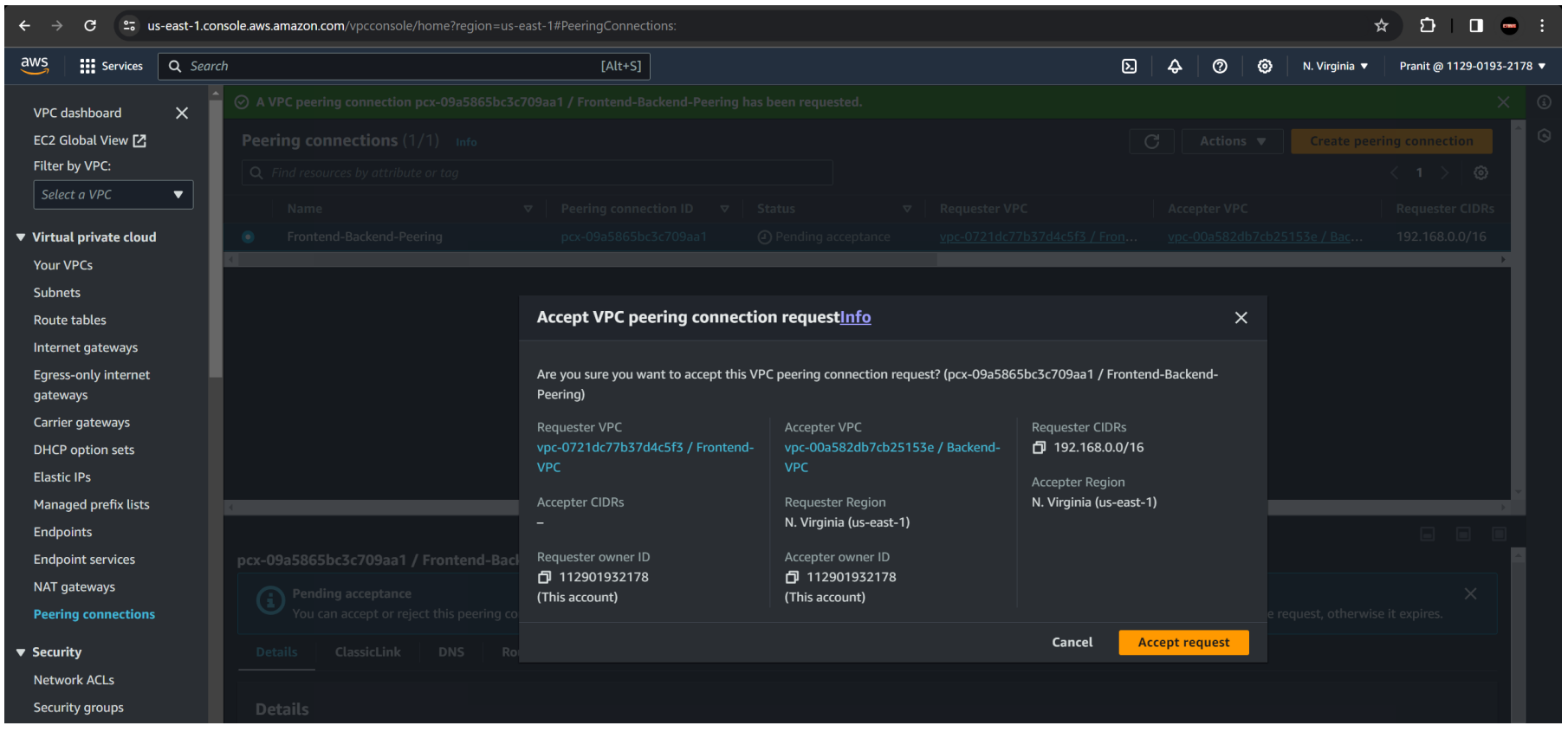
Added a route in route table to the target Internet Gateway



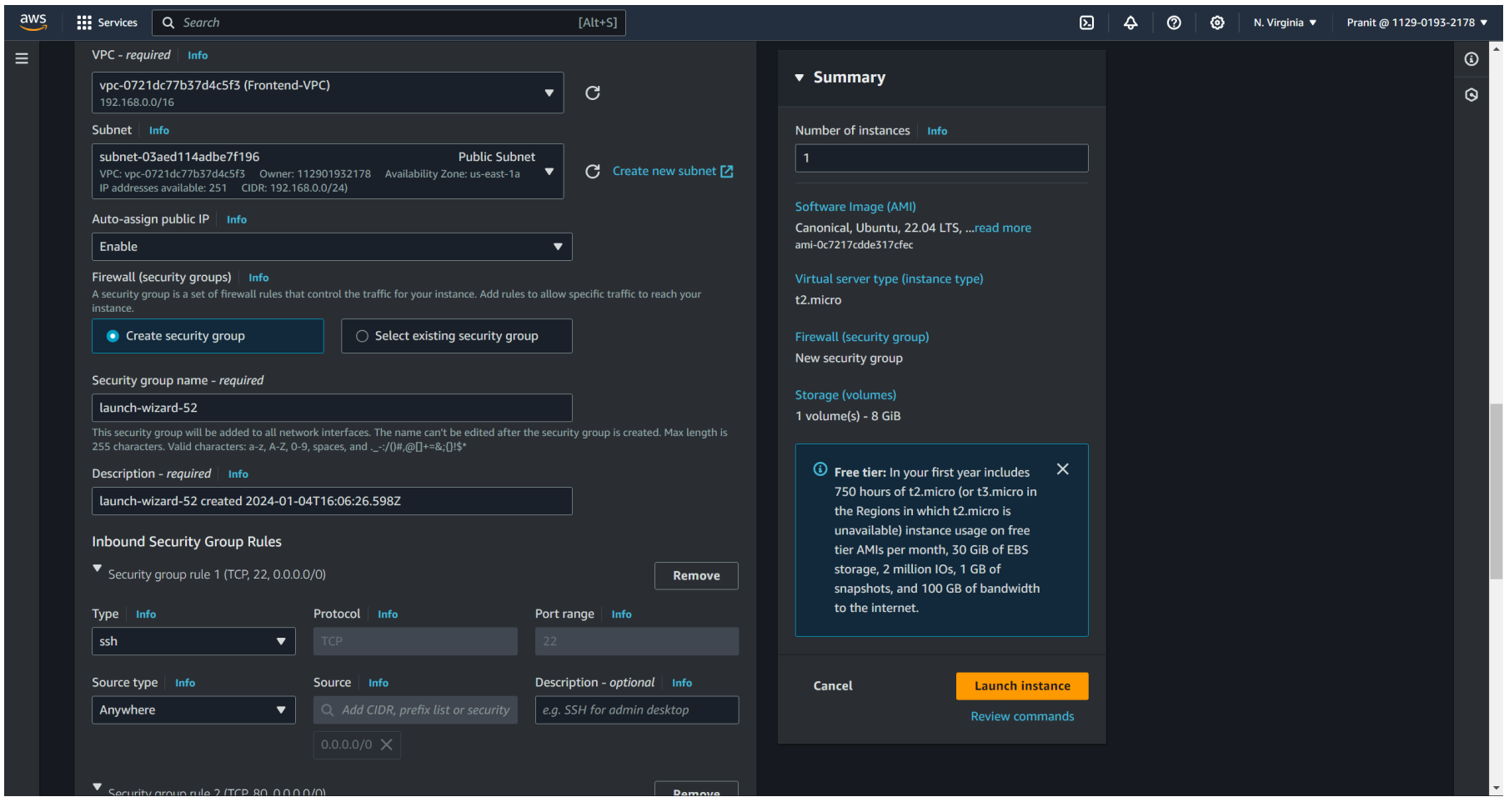
Create a VPC peering(to make connection between frontend and backend)



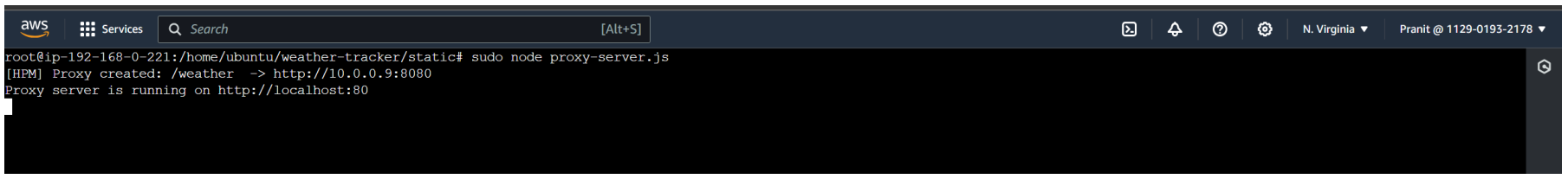
Accept the request



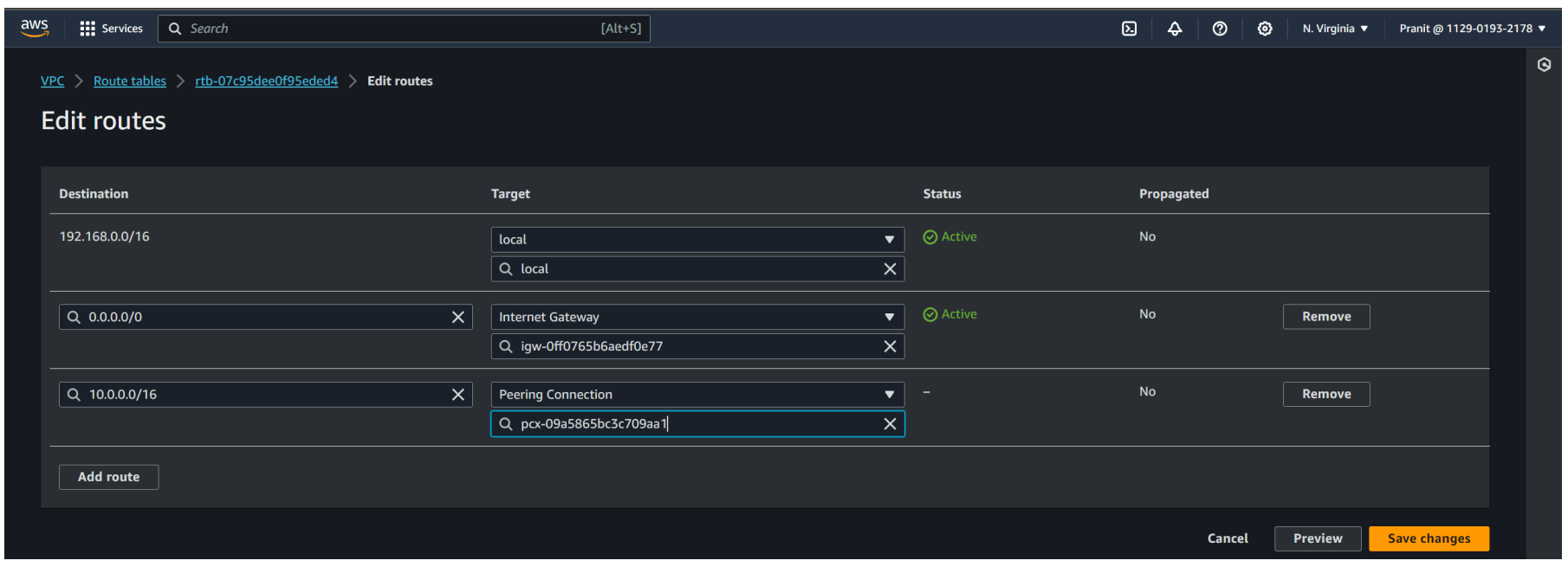
Launched an EC2 instance using Frontend VPC



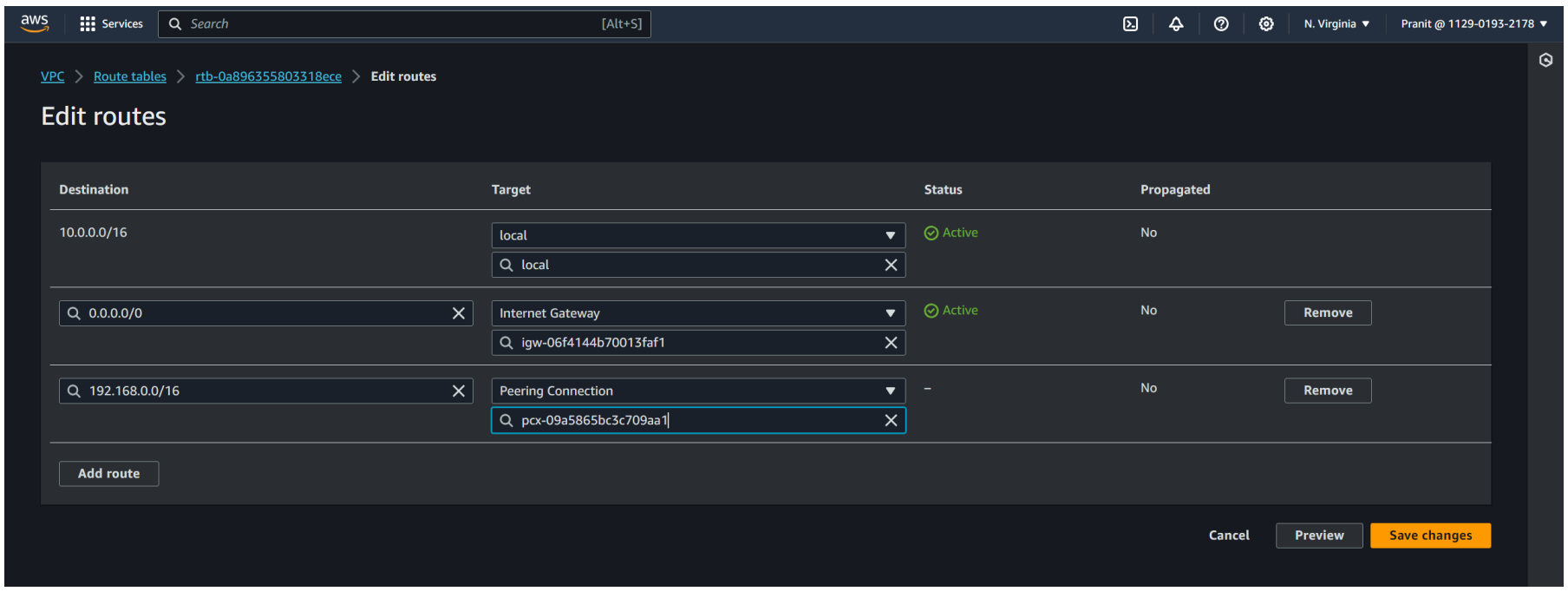
Created a proxy on frontend(EC2 instance)



In the frontend route table added a route , where destination is the bastion host and target is peering connection



In the backend route table added a route , where destination is the frontend and target is peering connection



Finally accessed the website through Frontend EC2 instance’s public IP and it is also successfully getting the responses from the backend server