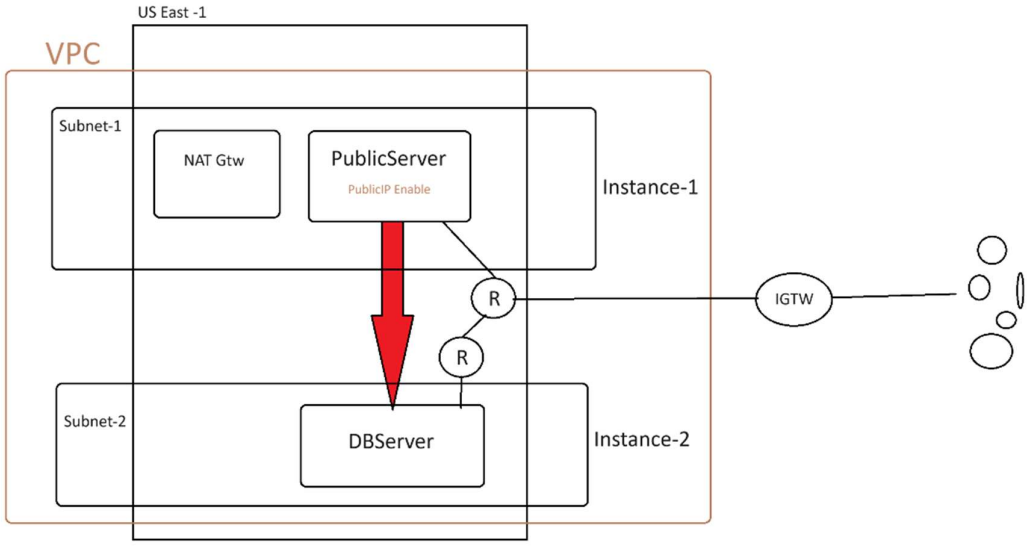
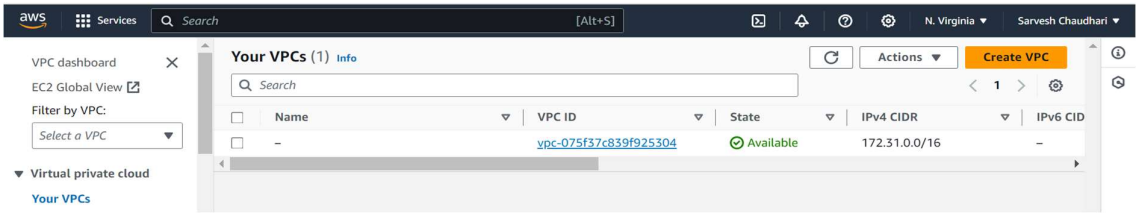
Objective:- Giving patch or update to Dbserver without giving direct access to Internet getway

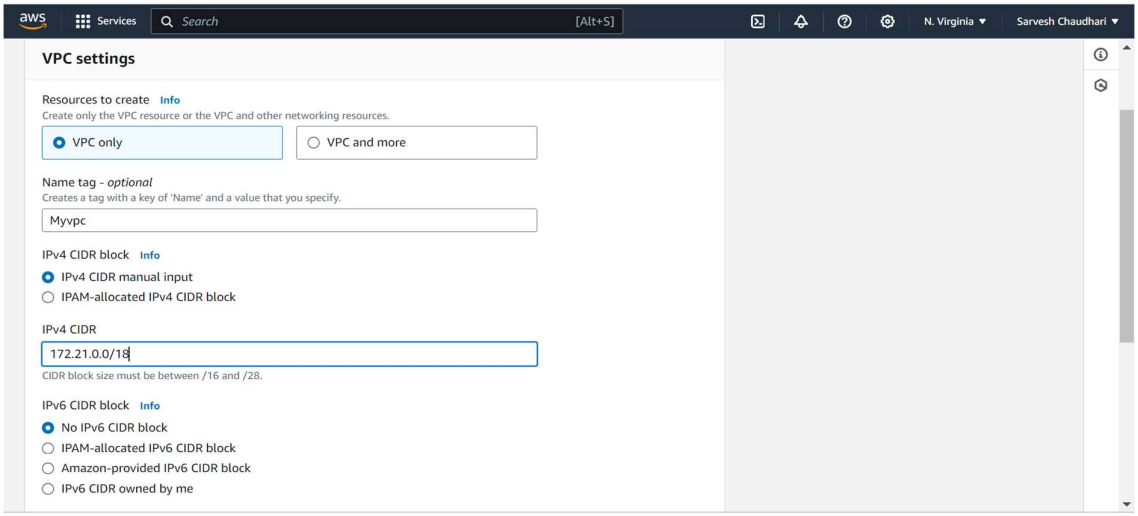
Architecture:-

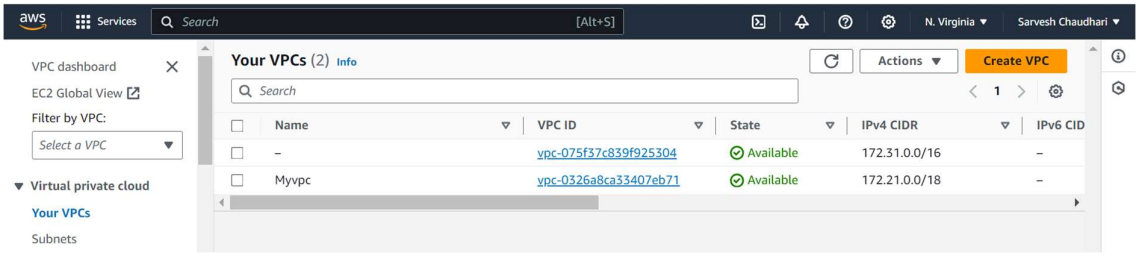


S1) Click on create VPC



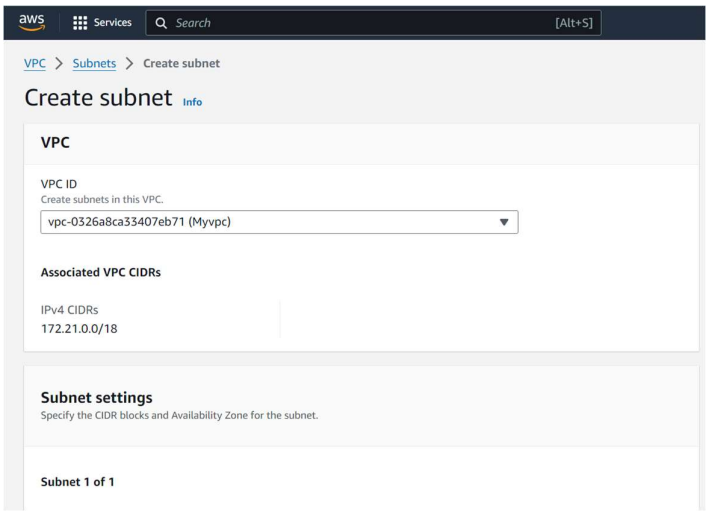
Now type name for VPC & IPv4 CIDR, then click on create VPC



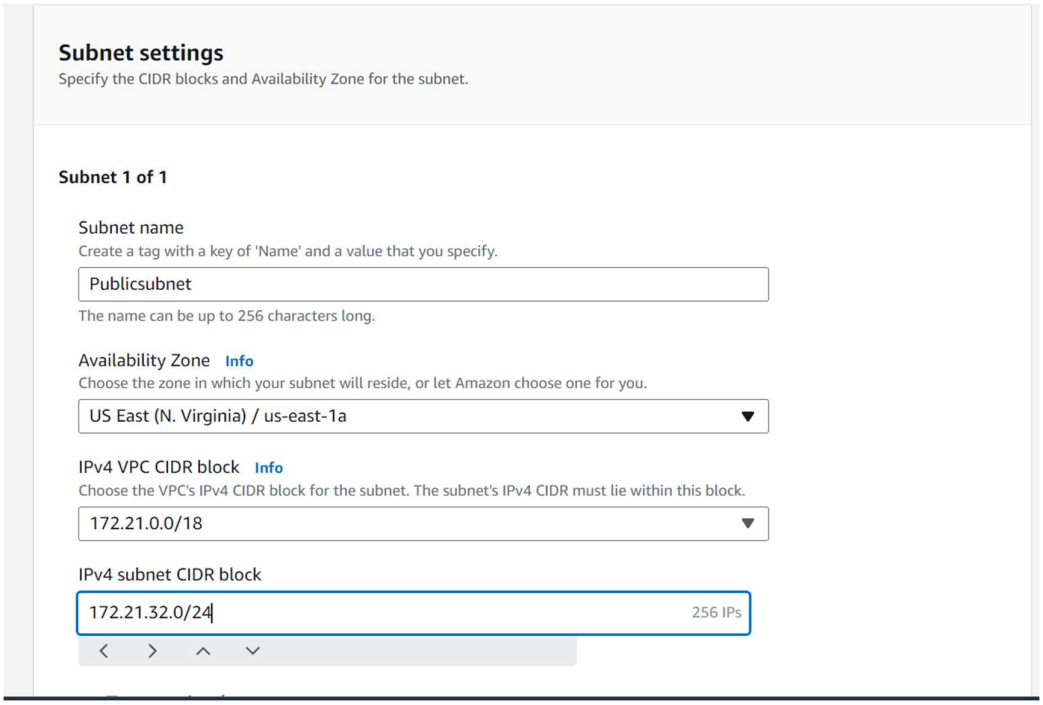


Now create subnet for Publicsubnet

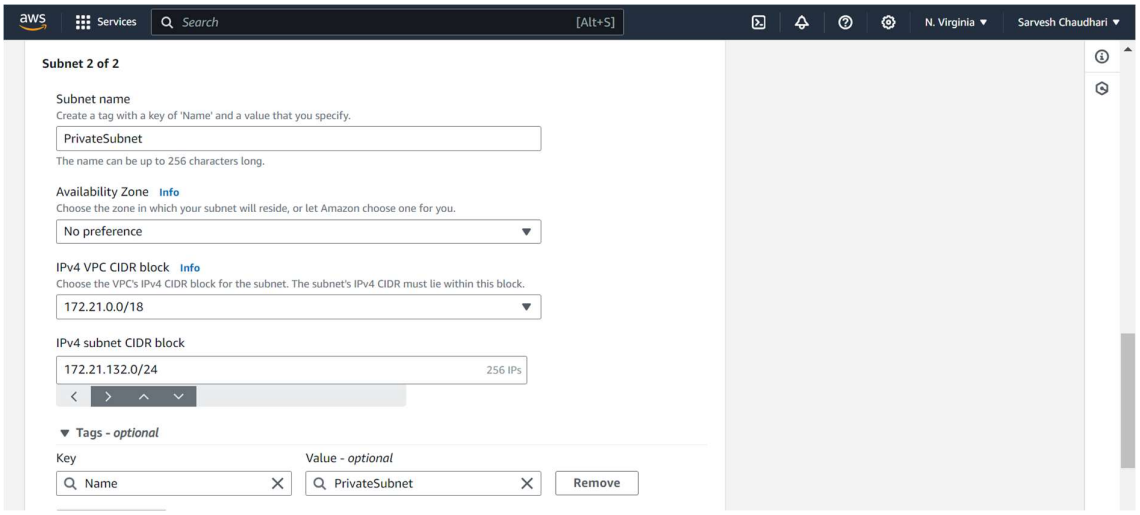
Select VPC



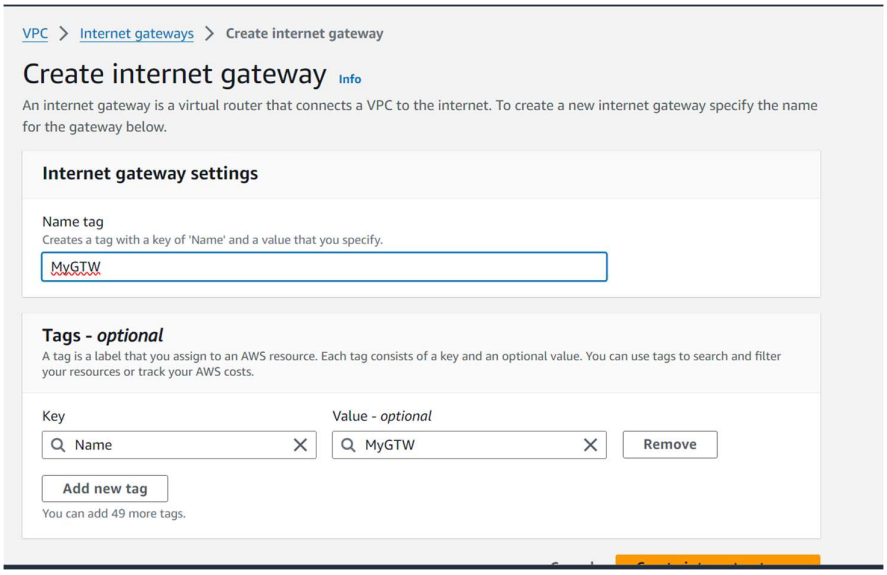
Now in subnet setting give name, Availability zone, then give IPv4 subnet CIDR block



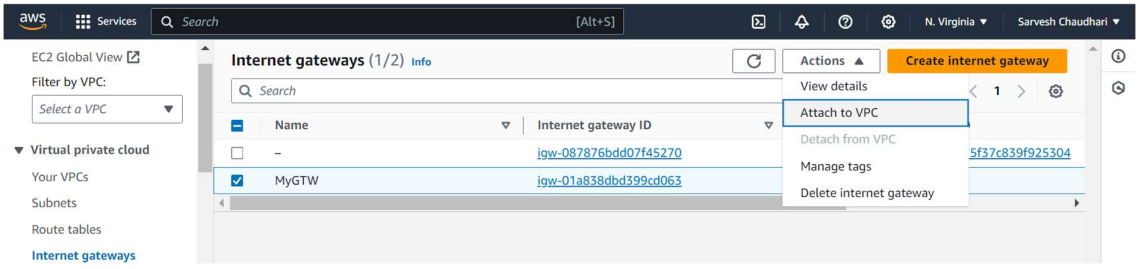
Then click on create. Now similarly create private subnet with subnet2 IP address.



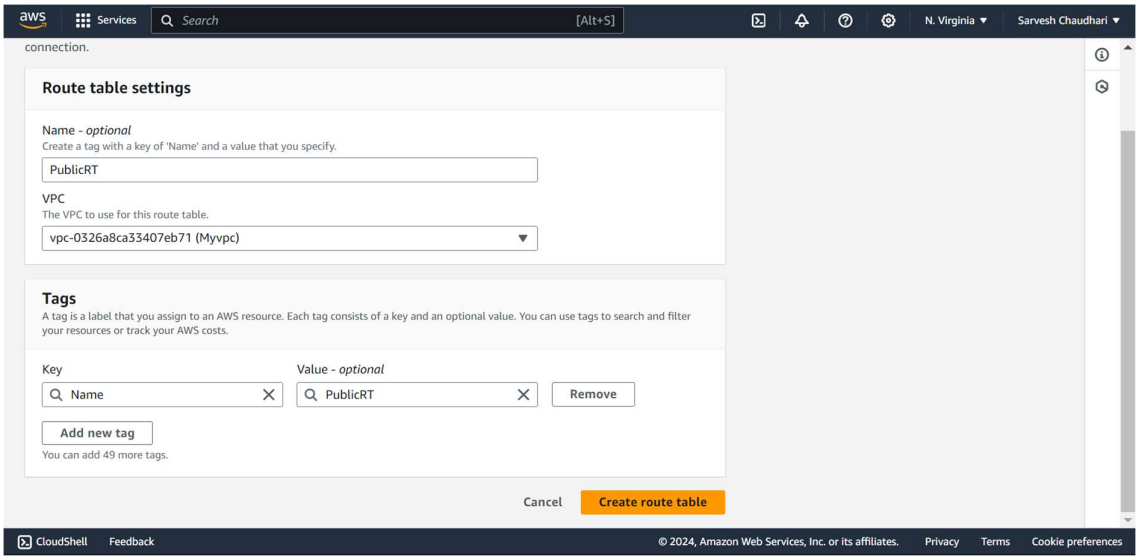
Now create Internet getway



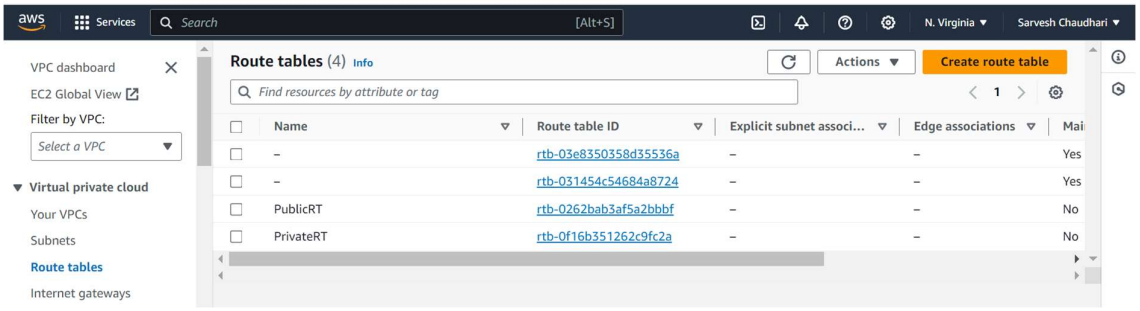
Now select Internet getway then using action Attach to VPC



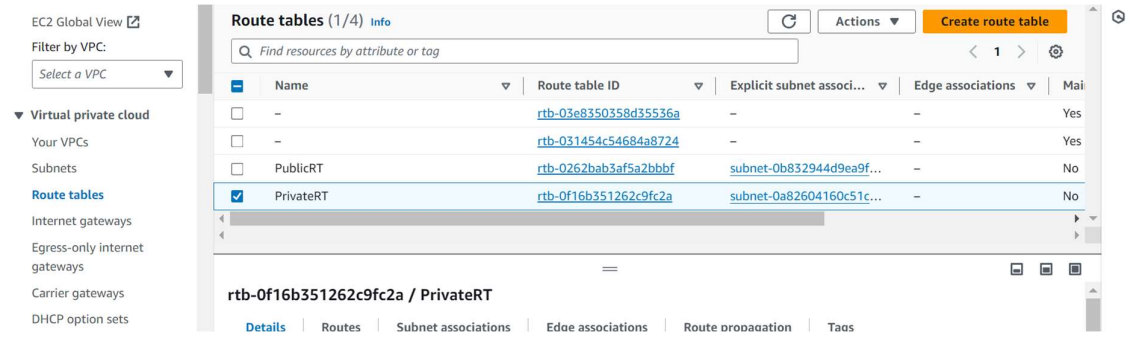
Now create Route Table for Public and private



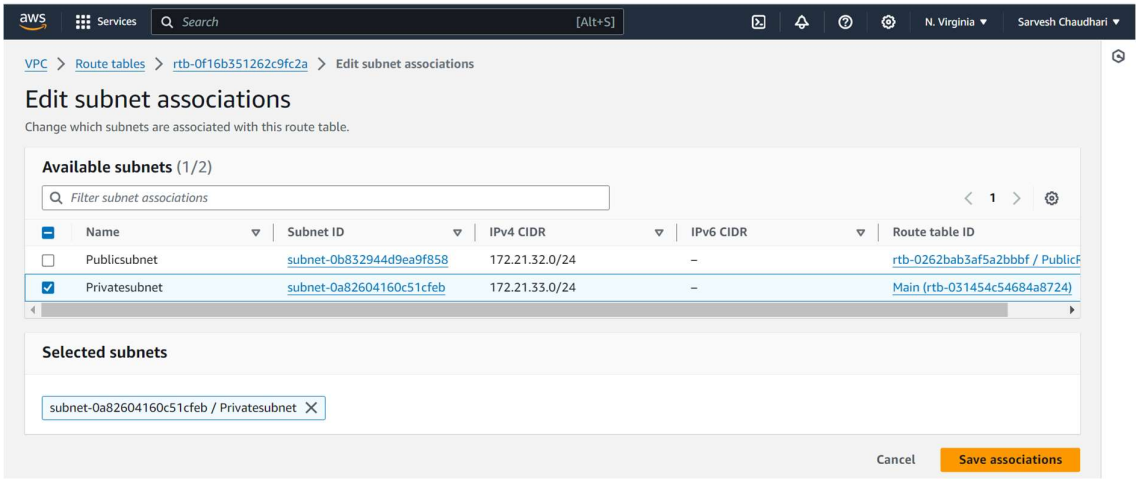
Both Route tables created



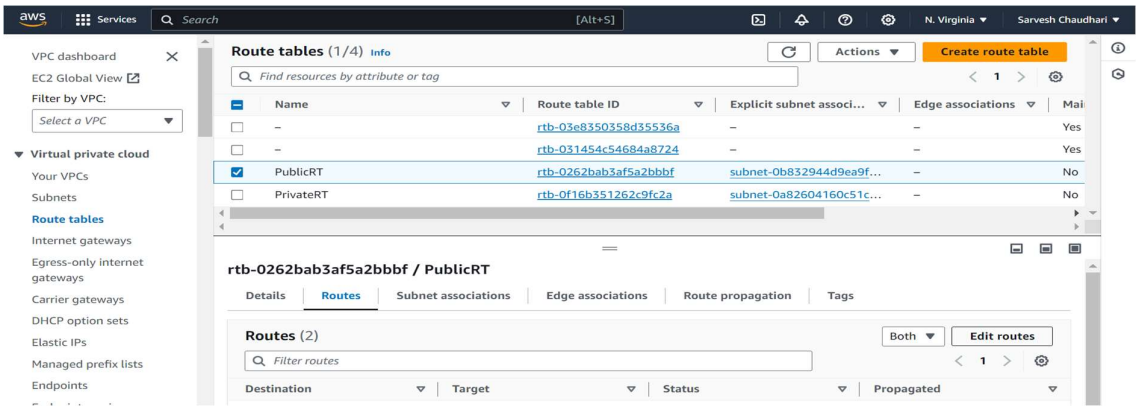
Now select PublicRT then go to Subnet Association > Edit Subnet association



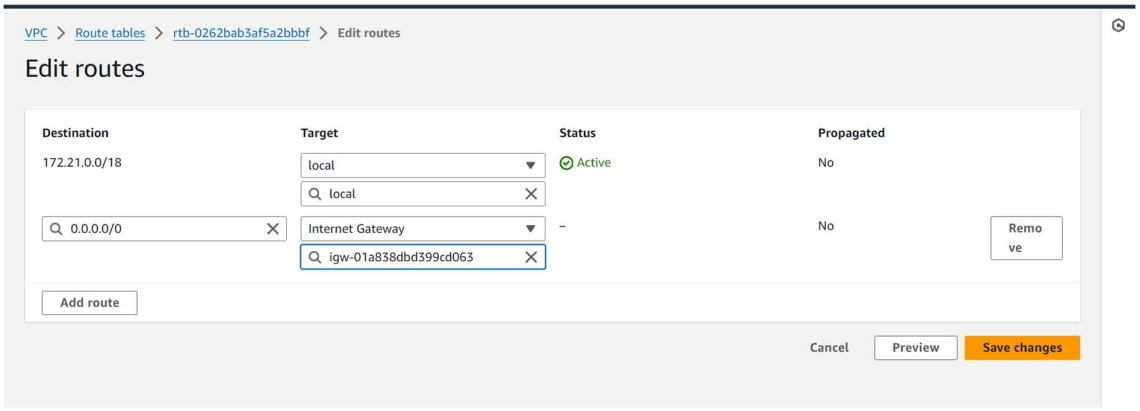
Now Select publicsubnet and privatesubnet for there respective RT



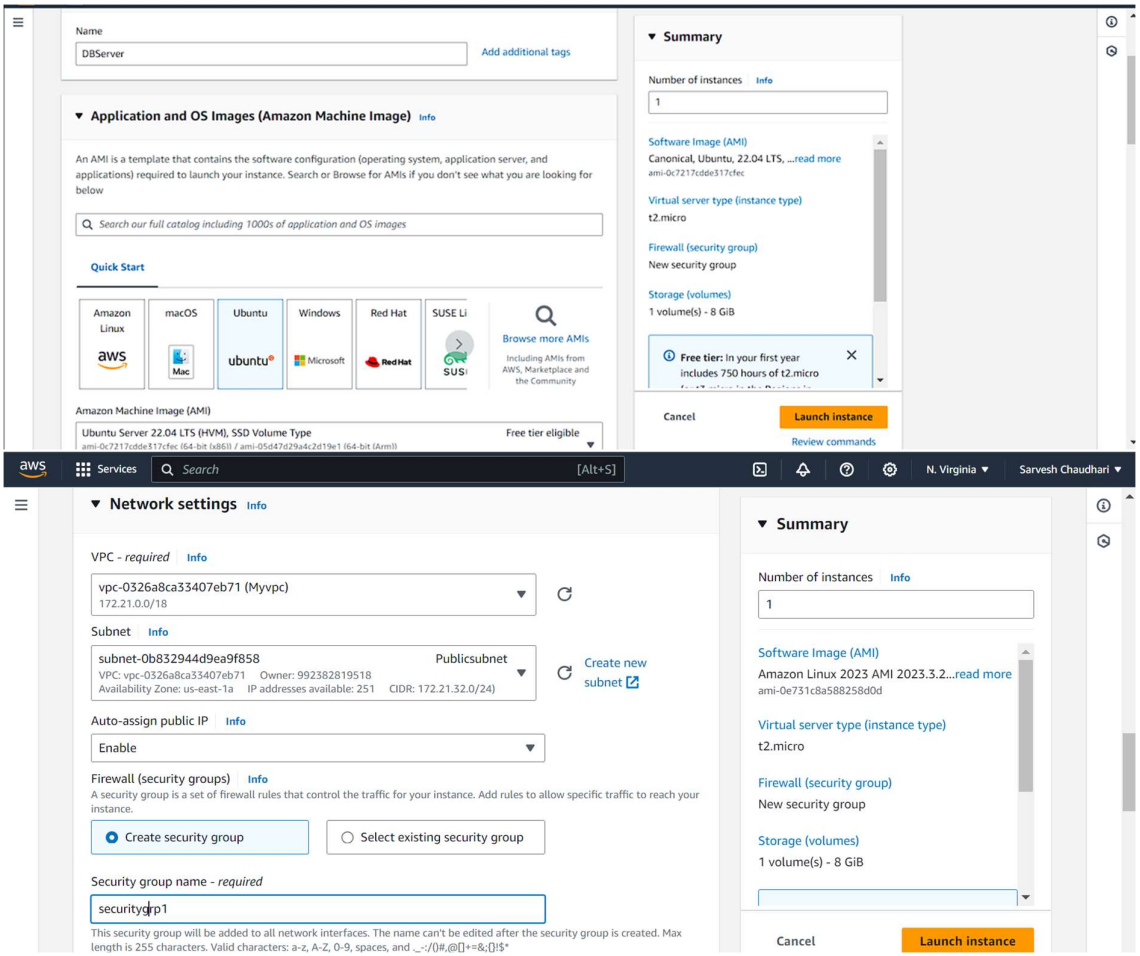
Now edit route.



Now go to PublicRT then go to Routes > edit route > add route > Select created Getway then save changes



Now create instances Public and Private



Now connect Public instance from direct connect

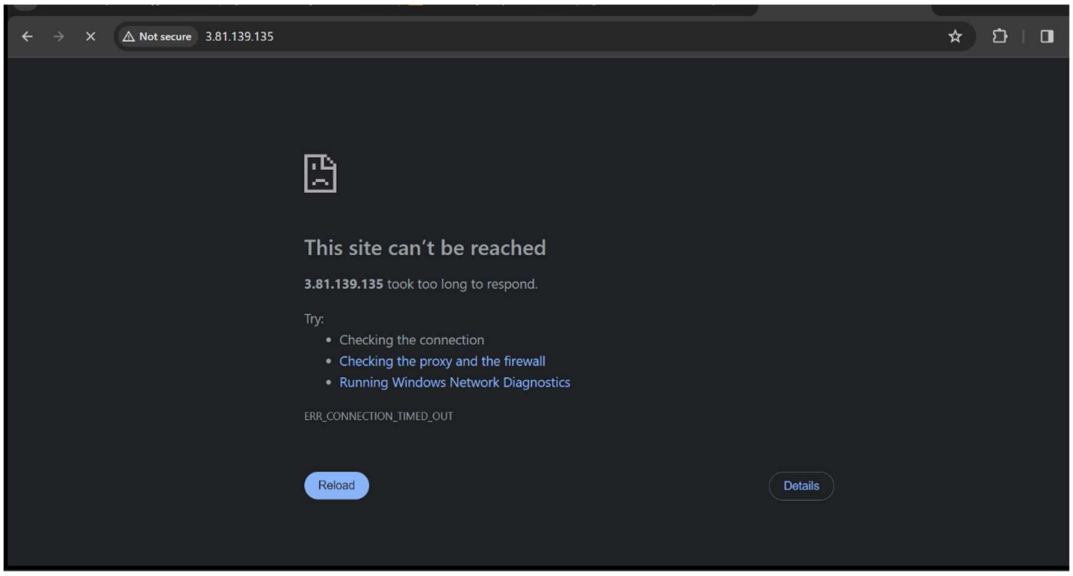
```
ubuntu@ip-172-89-0-79:~$ sudo su
root@ip-172-89-0-79:/home/ubuntu# apt update && upgrade
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
```

Now install Apache

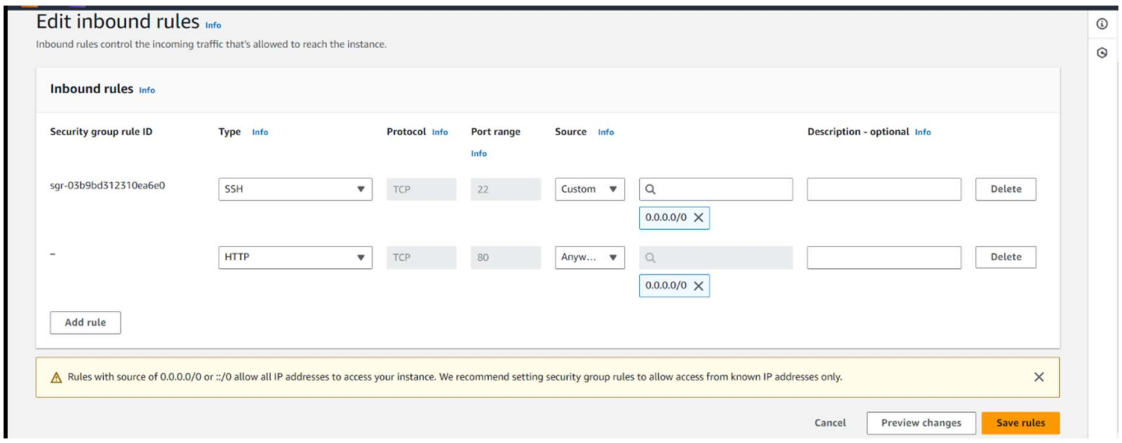
```
root@ip-172-89-0-79:/home/ubuntu# apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

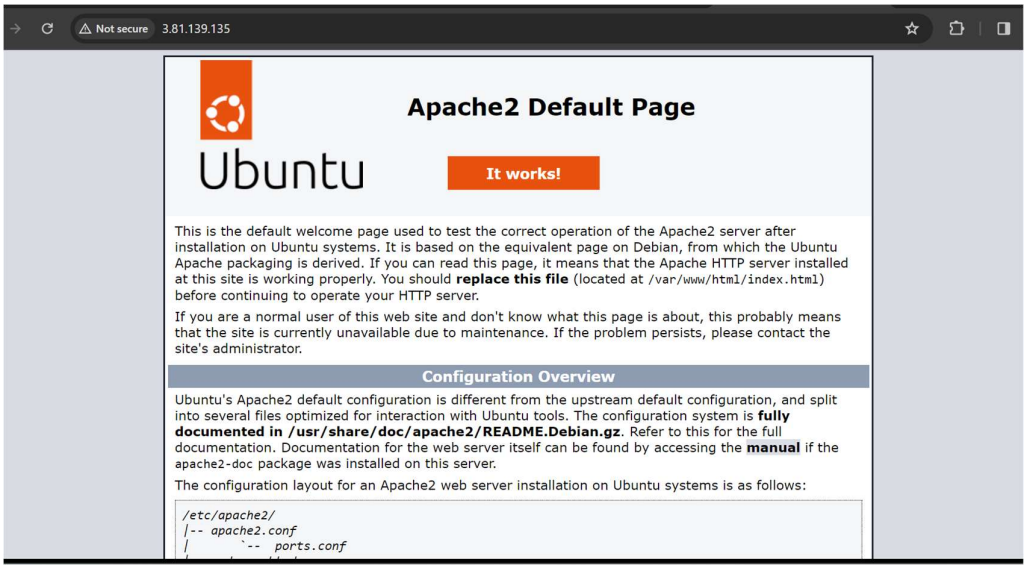
Ow ping PublicServer

```
root@ip-172-89-0-79:/home/ubuntu# ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=117 time=1.49 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=117 time=1.46 ms
```



Our edit inbound rules to allow traffic.





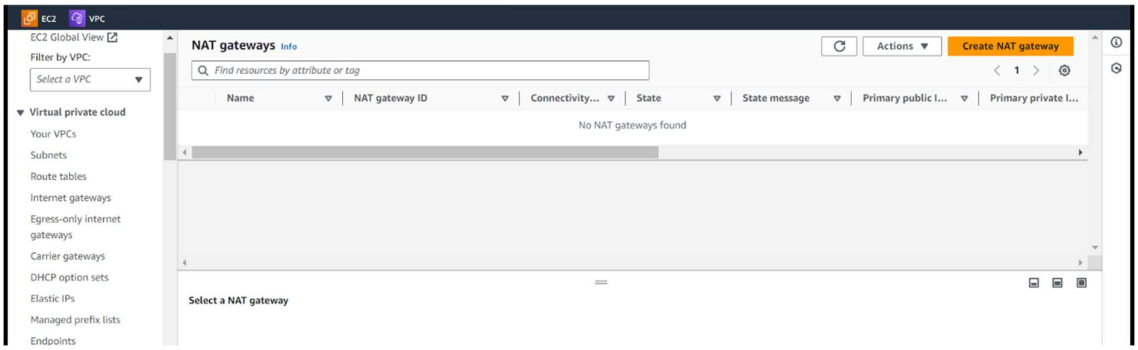
Create key and then enter into private server

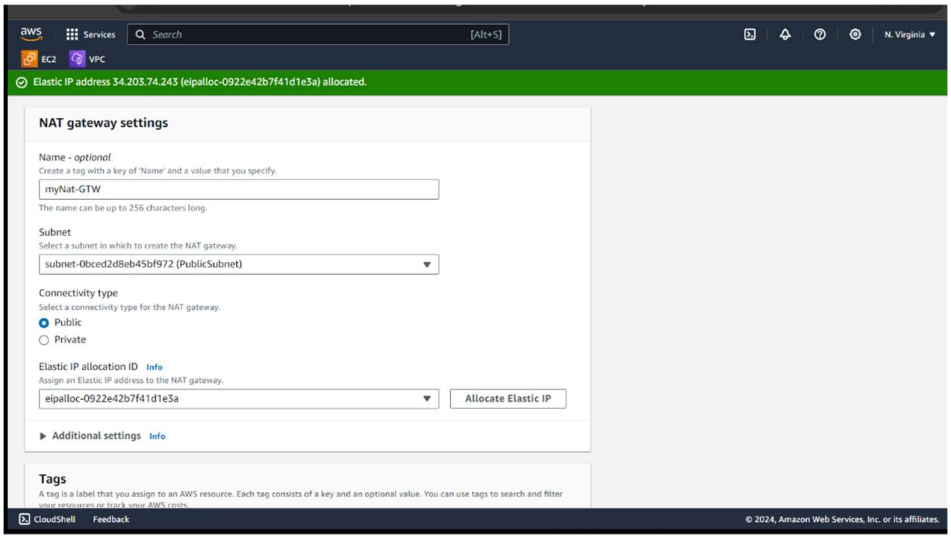
```
root@ip-172-89-0-79:/home/ubuntu# vi dkkey.pem
root@ip-172-89-0-79:/home/ubuntu# chmod 400 dkkey.pem
root@ip-172-89-0-79:/home/ubuntu# ssh -i dkkey.pem ubuntu@172.89.5.135
```

Ping in machine 2

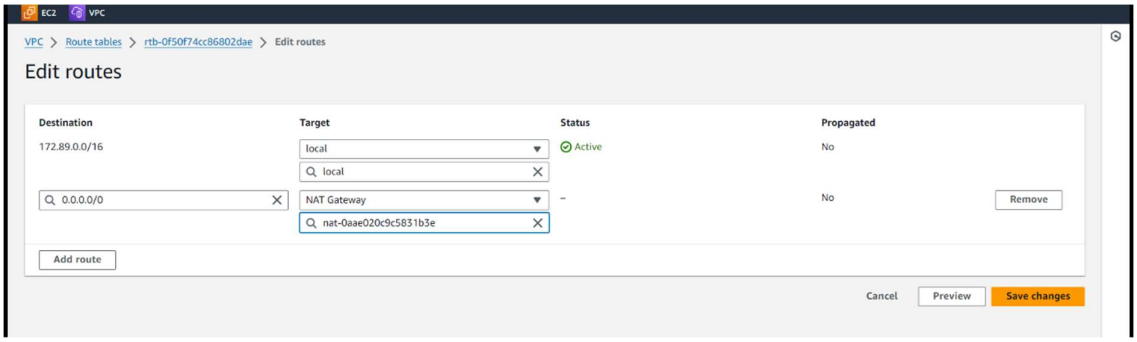
```
ubuntu@ip-172-89-5-135:~$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
```

Now create NAT-GTW





Go to private's Route table there add NAT Gateway



Now try to ping the connection