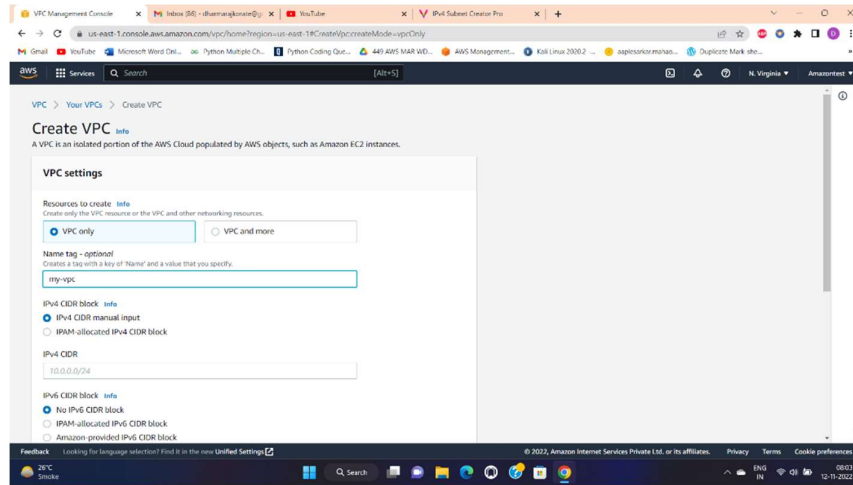


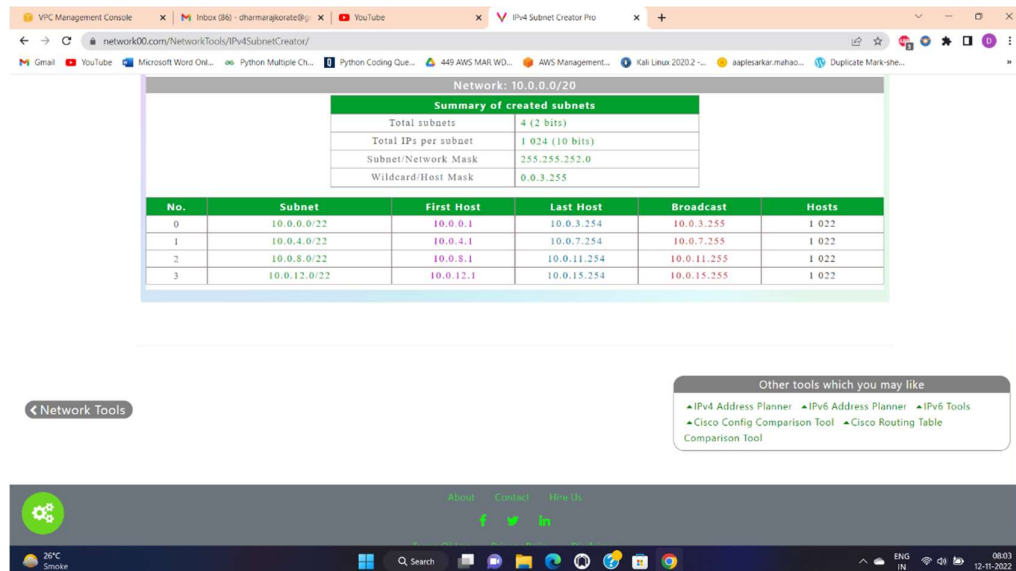
Creating the two windows server one server public and other one is private and use ping command to communicate each other.

## 1. Create VPC

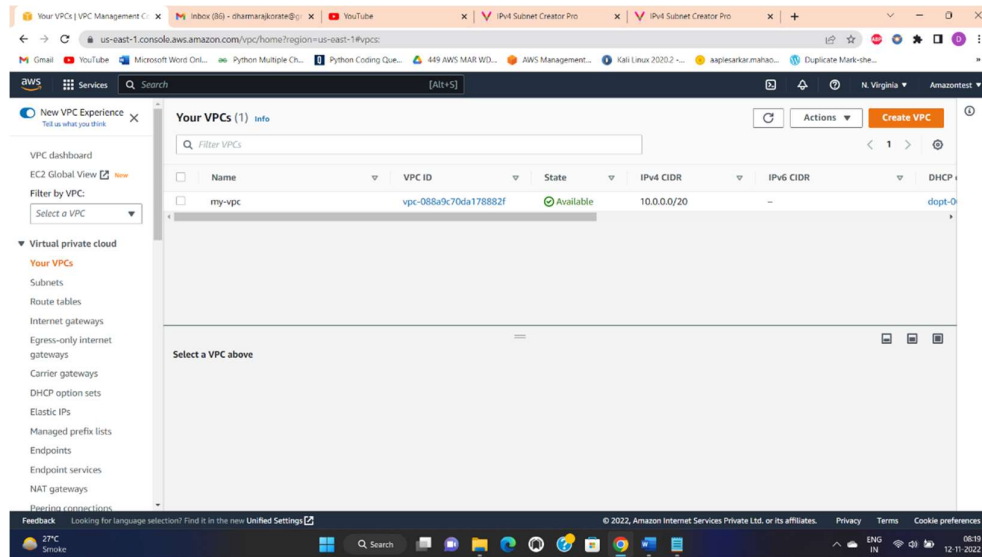


## 2. create subnets for VPC

1. Go to the network00.com
2. Scroll down and select IPV4 tool
3. Go to setting symbol on left side and choose ipv4 tool and click on the subnet creator
4. Then put network address 10.0.0.0 and choose subnet mask 255.255.240.0(20) [4096 host] then choose no of subnet 4
5. click on Create button

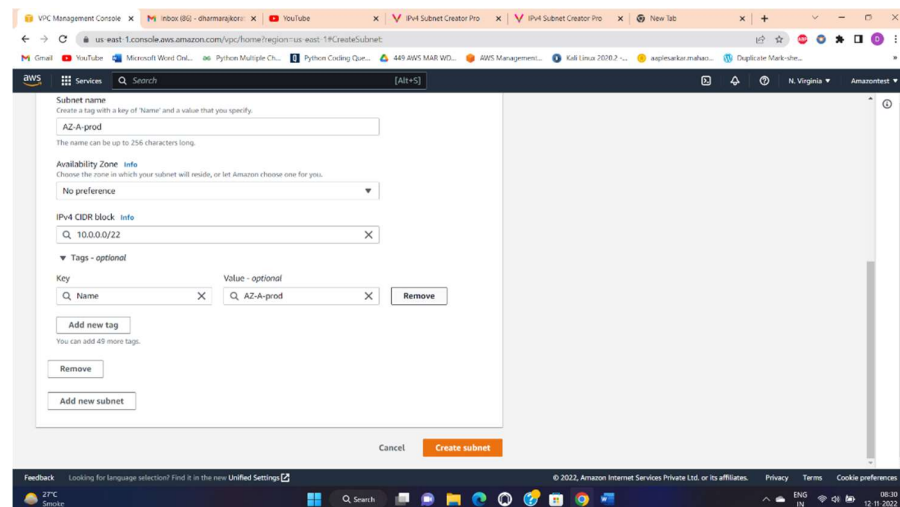


### 3. Add network Ipv4 in VPC 10.0.0/20 and create VPC



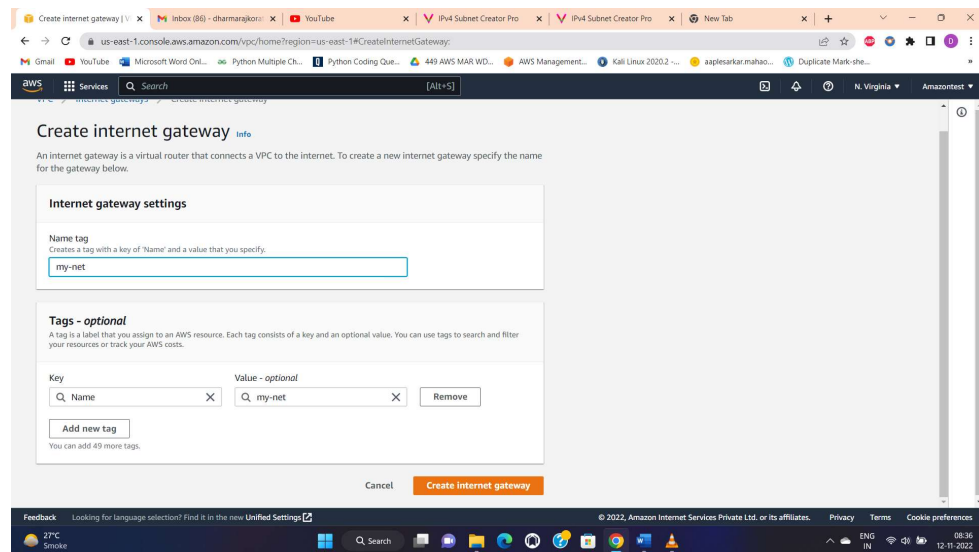
### 4. Create subnet 4 subnet 2 are public and 2 are private.

1. Choose VPC give Name AZ-A-Prod add subnet 10.0.0.0/22 create subnet
2. Choose VPC give Name AZ-A-Private and Subnet 10.0.4.0/22 create subnet
3. Choose VPC give Name AZ-B-Prod and Subnet 10.0.8.0/22 create subnet
4. Choose VPC give Name AZ-B-Private and Subnet 10.0.12.0/22 create subnet

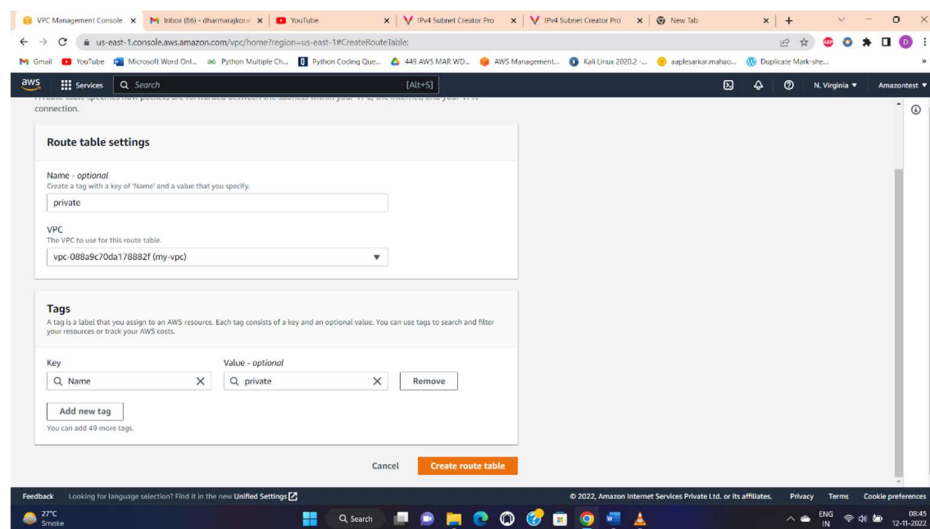


## 5. Create Internet Gateway and attached VPC

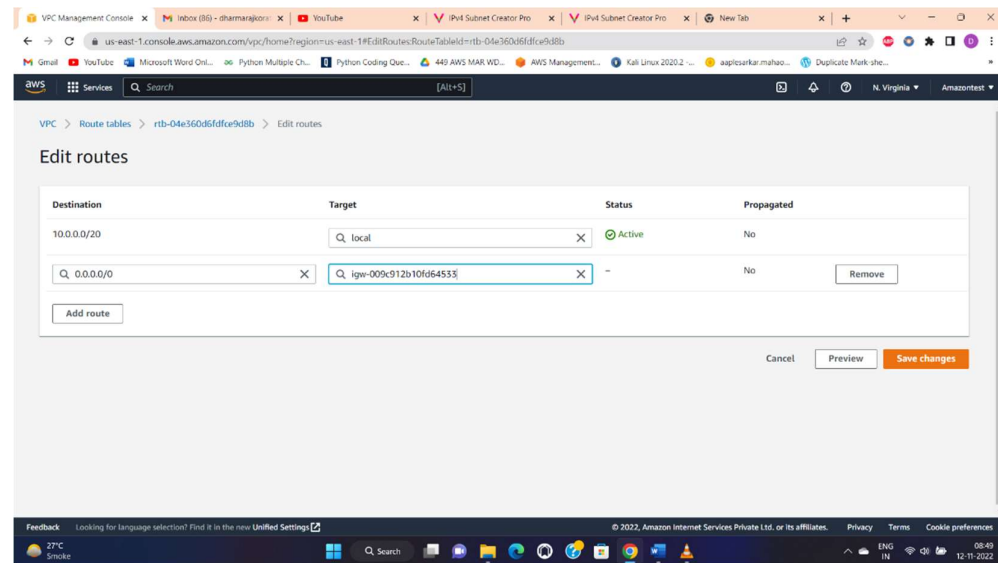
1. Selected internet gateway and click action and attached to VPC
2. Select VPC and clicked on the attached internet gateway.



## 6. Create both route table prod and private

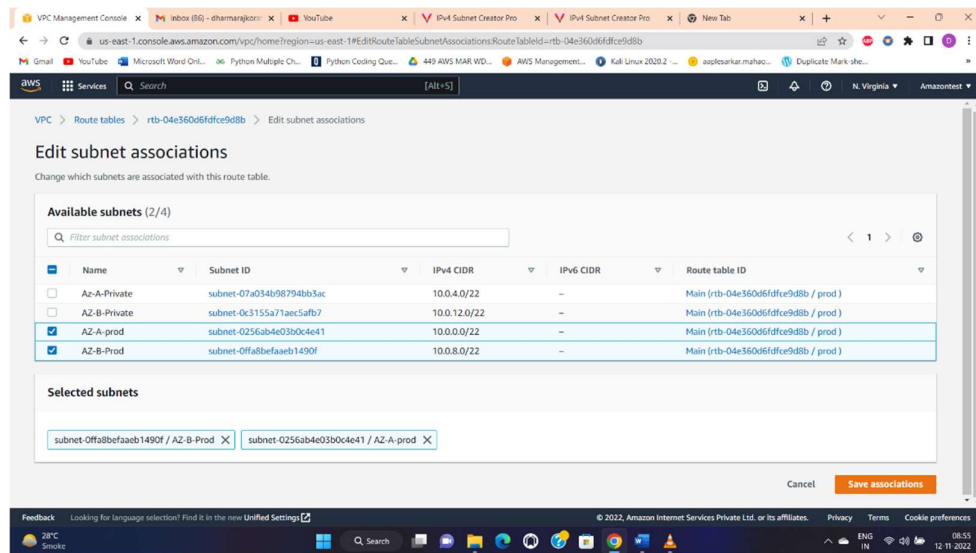


## 7. Edit route and give internet gate way

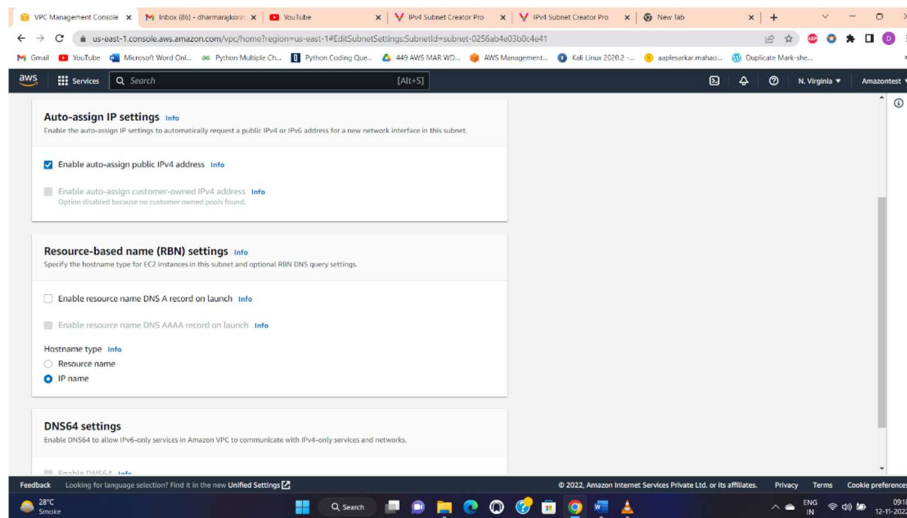


## 8. We have to add subnet for internet

1. Select prod route table and select subnet association
2. Then edit subnet association and select both prod subnets
3. Select private route table and select subnet association
4. Then edit subnet association and select private subnets

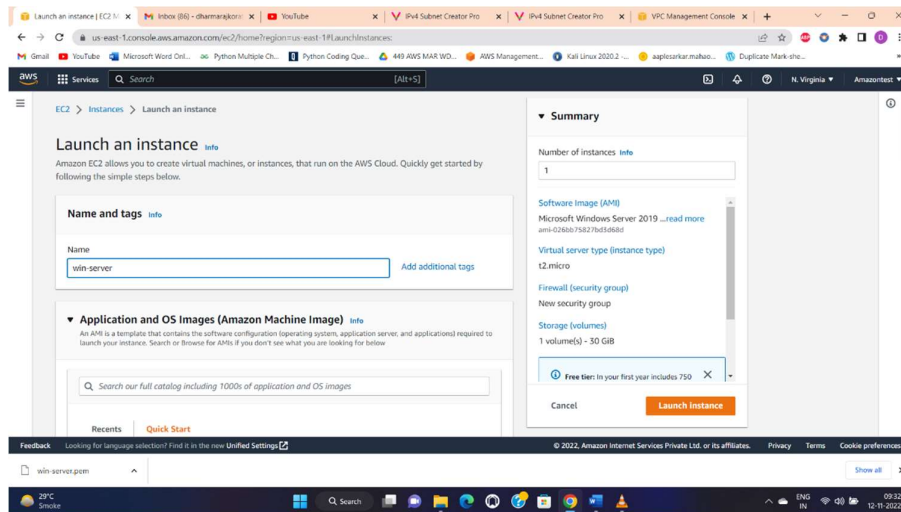


9. Enable auto assign public IPV4 address for both prod subnets
  1. Go to the subnet AZ-A-prod
  2. select prod subnets and choose action and select edit subnet setting
  3. Click on the check box enable auto assign public IPV4 address and
  4. Do the same process for the AZ-b-prod subnet

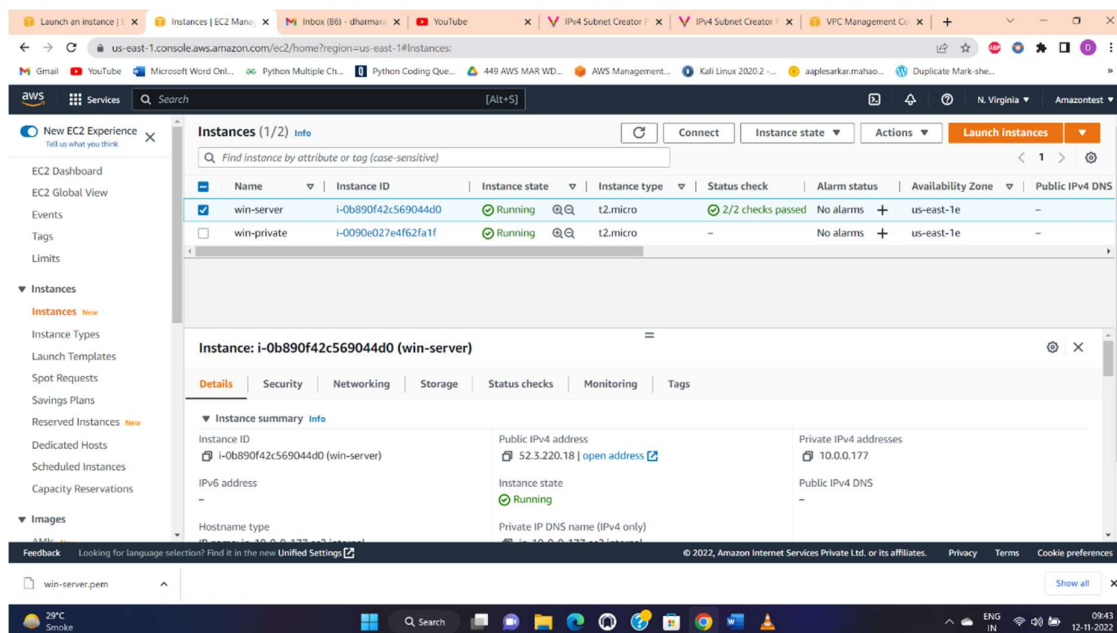


## 10. Create windows ec2 instance prod and private

- I. Launch Windows ec2 instance for public subnet
  1. Select ec2 instance and give name win-server
  2. Select windows window machine and t2 micro
  3. Then create key pair for windows and download .pem file
  4. In network setting choose VPC and Select subnet AZ-A-Prod
  5. Select create security group and allow access rdp port for anywhere
  6. Then allow http port select allow anywhere 0.0.0.0/0
  7. And Launch instance
- II. Launch Windows Private Instance for Private Subnet
  1. Select ec2 instance and give name win-server
  2. Select windows window machine and t2 micro
  3. Then create key pair for windows and download .pem file
  4. In network setting choose VPC and Select subnet AZ-B-Private
  5. Select create security group and allow access rdp port for anywhere
  6. Then allow http port select allow anywhere 0.0.0.0/0
  7. And Launch instance

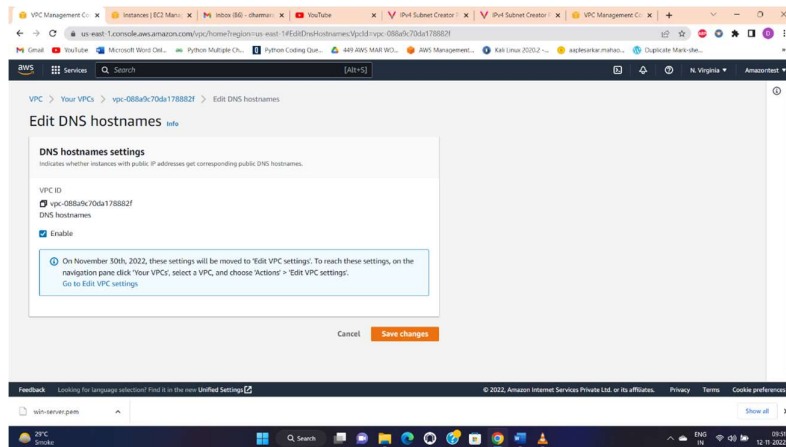


11. Successfully launch both instances but if not see public IPV4 DNS.



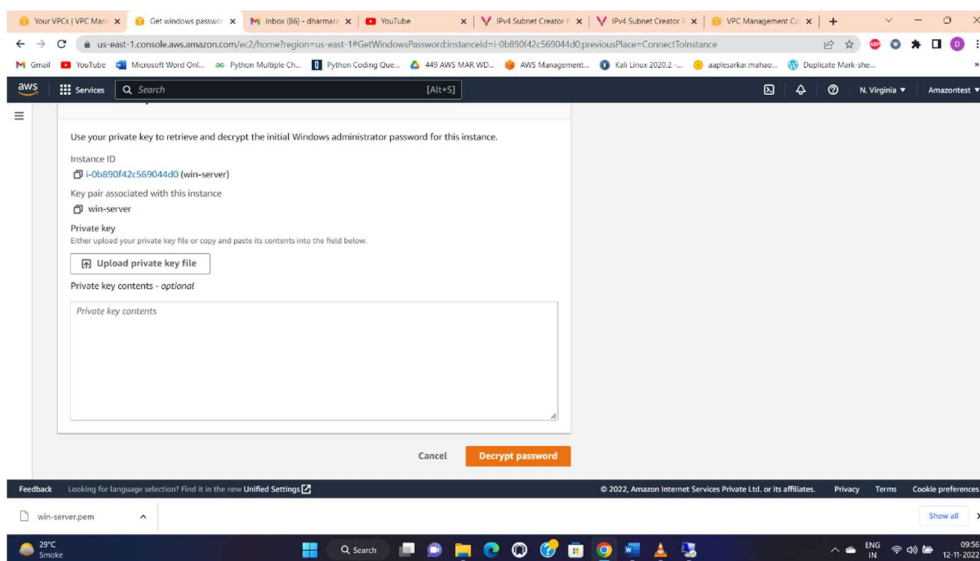
## 12. Then we have to enable DNS hostnames

1. Go to the VPC
2. Select VPC and go option action and choose edit DNS Hostname
3. Allow the DNS hostname and save the changes then Public DNS will be showing the ec2



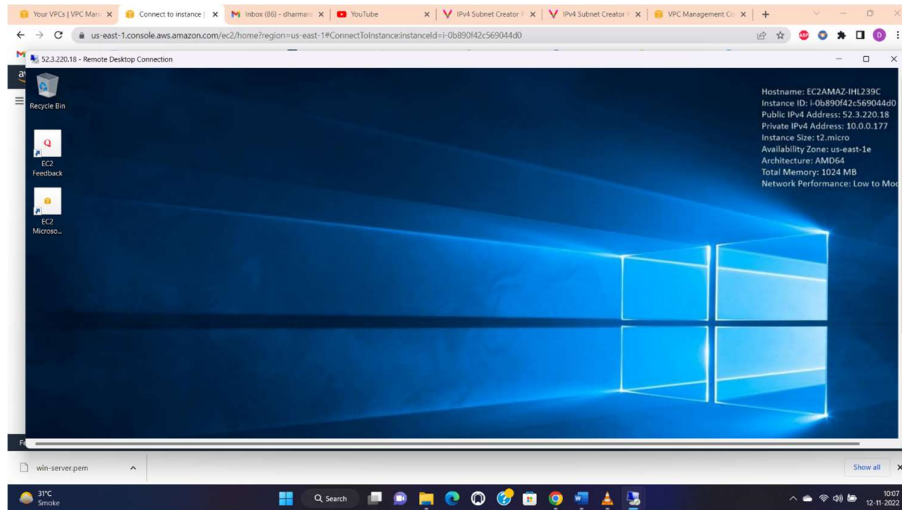
## 13. Then launch the RDP with public IPV4

1. Select windows-server and click on the connect and choose RDP client
2. Scroll down and click on the get password
3. Then you have to upload .PEM and click on the decrypt password
4. We get username and password for the RDP log in

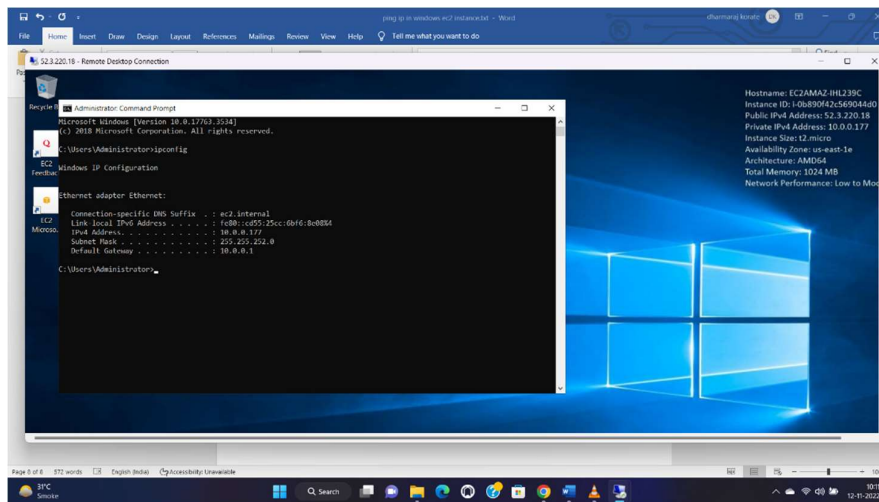


#### 14. Then Log in Into the Windows-server

1. First copy the public IPV4 from Instance
2. Go to RDP and paste it
3. Then copy the username and password from instance and log to the windows



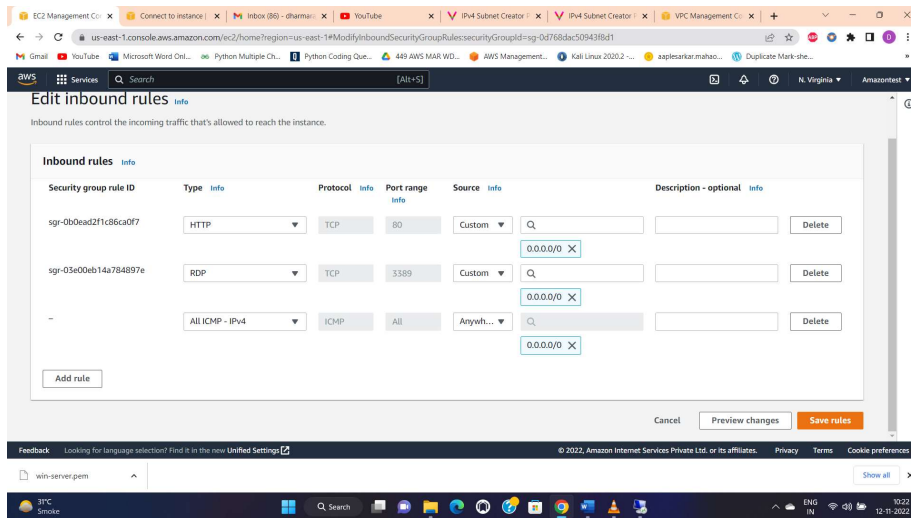
#### 15. After log in in windows-server using CMD perform the ipconfig command and check the ip are same shown in CMD and Instance private IP



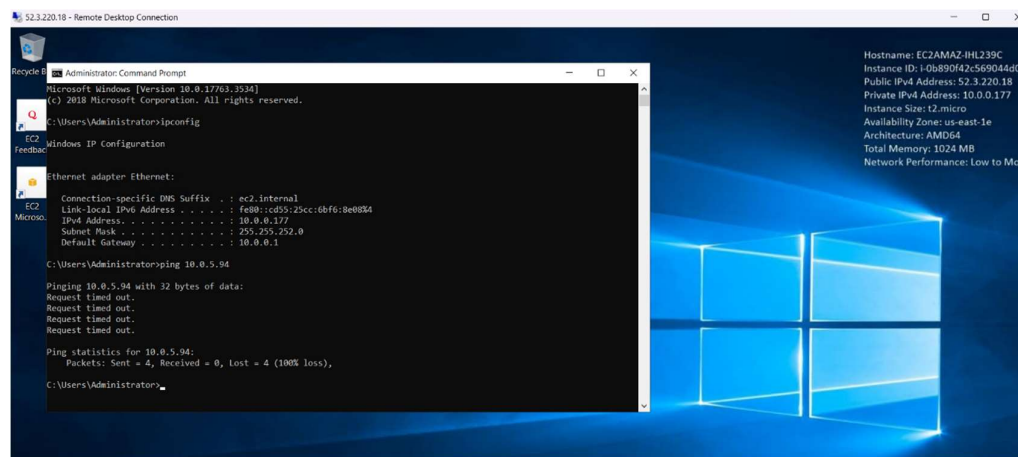


16. We have to check both private and public instance communicate with each other using ping command

1. Select the private instance and go to the security
  2. Then choose security group and edit inbound rules
  3. Add the ALL ICMP – IPv4 anywhere 0.0.0.0/0 and save rules.
- III. Same process for the public windows-server
1. Select the public instance and go to the security
  2. Then choose security group and edit inbound rules
  3. Add the ALL ICMP – IPv4 anywhere 0.0.0.0/0 and save rules

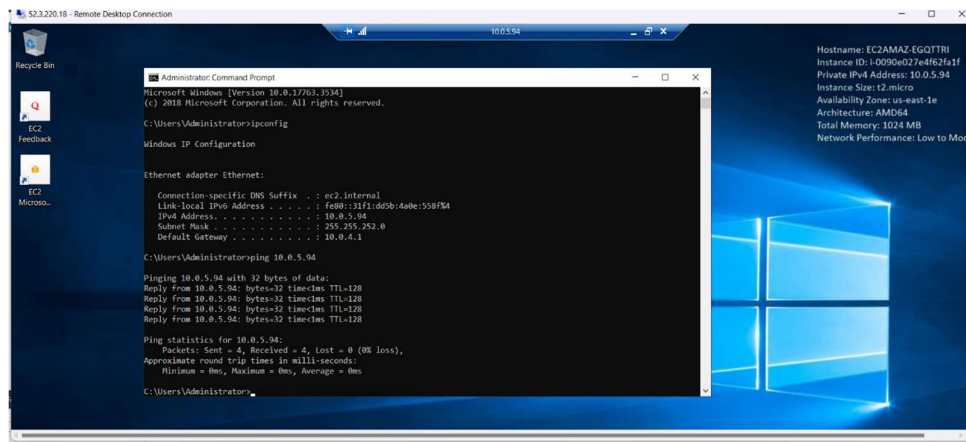


17. Select the private windows and copy the private IPv4 and ping IP in the Windows public instance and we got error request time out



18. We get because of our firewall is on we have to turn off the firewall and get the output.

1. Go to the Control Panel and turn of the firewall
2. After that we got same request time out error
3. In CMD type MSTSC and log in to other windows using private IPv4
4. Get the password and log on instance
5. After log in first you have to turn off the firewall and run the ping command
6. After run command we get output the both instances are communicating the each other



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17763.3526]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix  . : ec2.internal
    Link-local IPv6 Address . . . . . : fe80::31f1d6b8:4a8e:558f54
    IPv4 Address. . . . . : 10.0.5.94
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : 10.0.4.1

C:\Users\Administrator>ping 10.0.5.94

Pinging 10.0.5.94 with 32 bytes of data:
Reply from 10.0.5.94: bytes=32 time=1ms TTL=128
Reply from 10.0.5.94: bytes=32 time=1ms TTL=128
Reply from 10.0.5.94: bytes=32 time=1ms TTL=128
Reply from 10.0.5.94: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.5.94:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milliseconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\Administrator>
```

Hostname: EC2AMAZ-EGOTTRI  
Instance ID: i-0090e027e4621a1f  
Private IPv4 Address: 10.0.5.94  
Instance Size: t2.micro  
Availability Zone: us-east-1e  
Architecture: AMD64  
Total Memory: 1024 MB  
Network Performance: Low to Mod