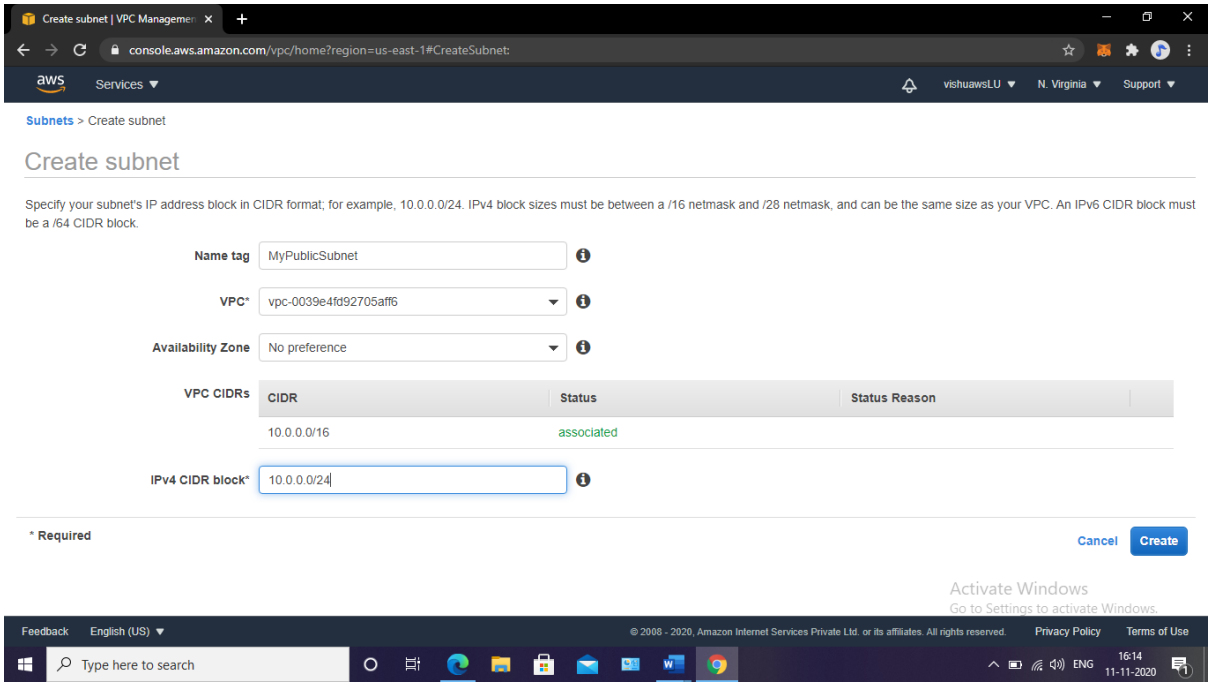
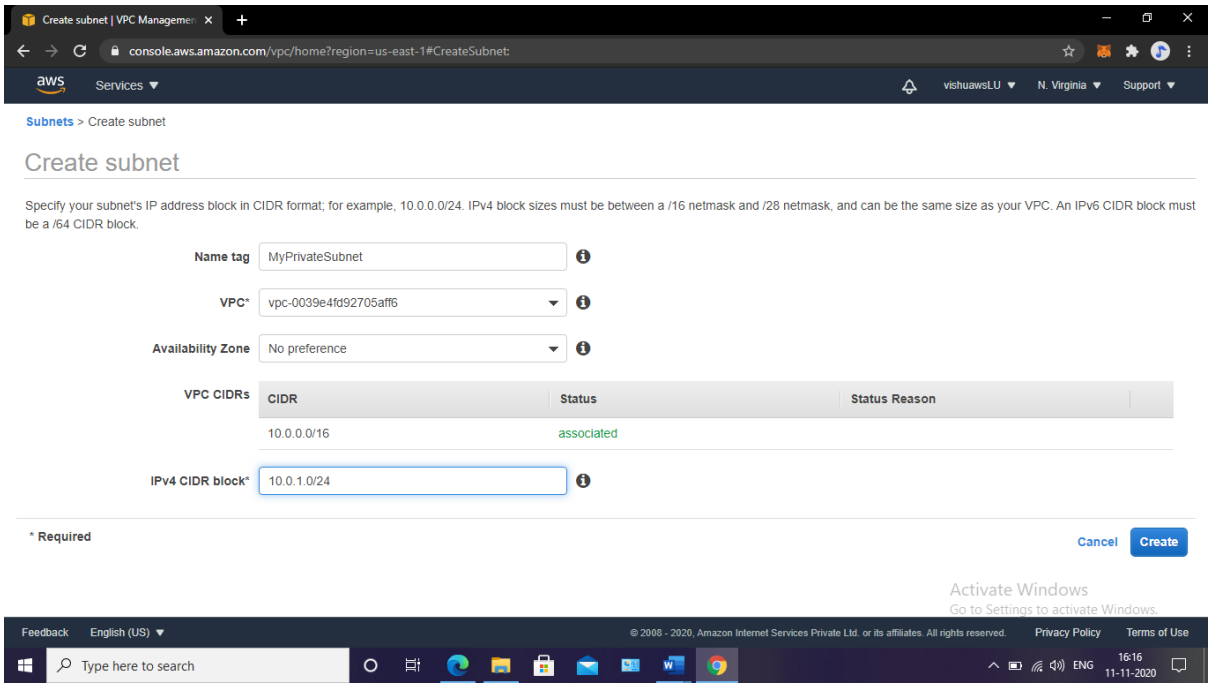
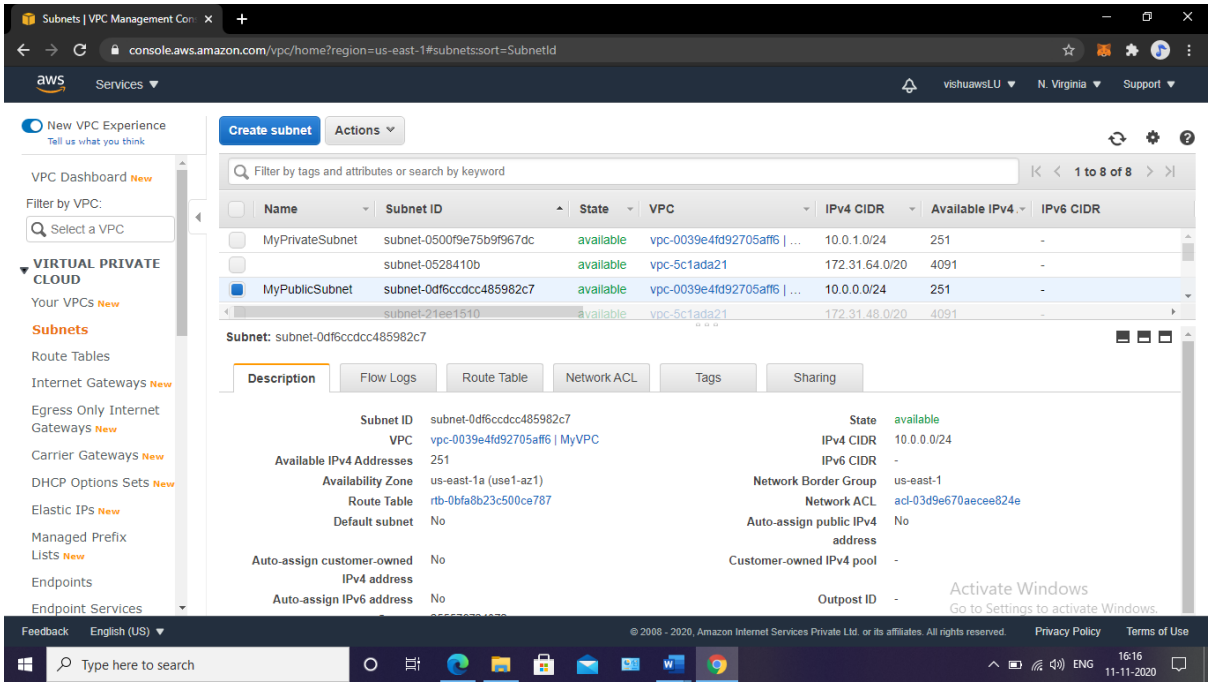
# LetsUpgrade AWS Advance Project-5

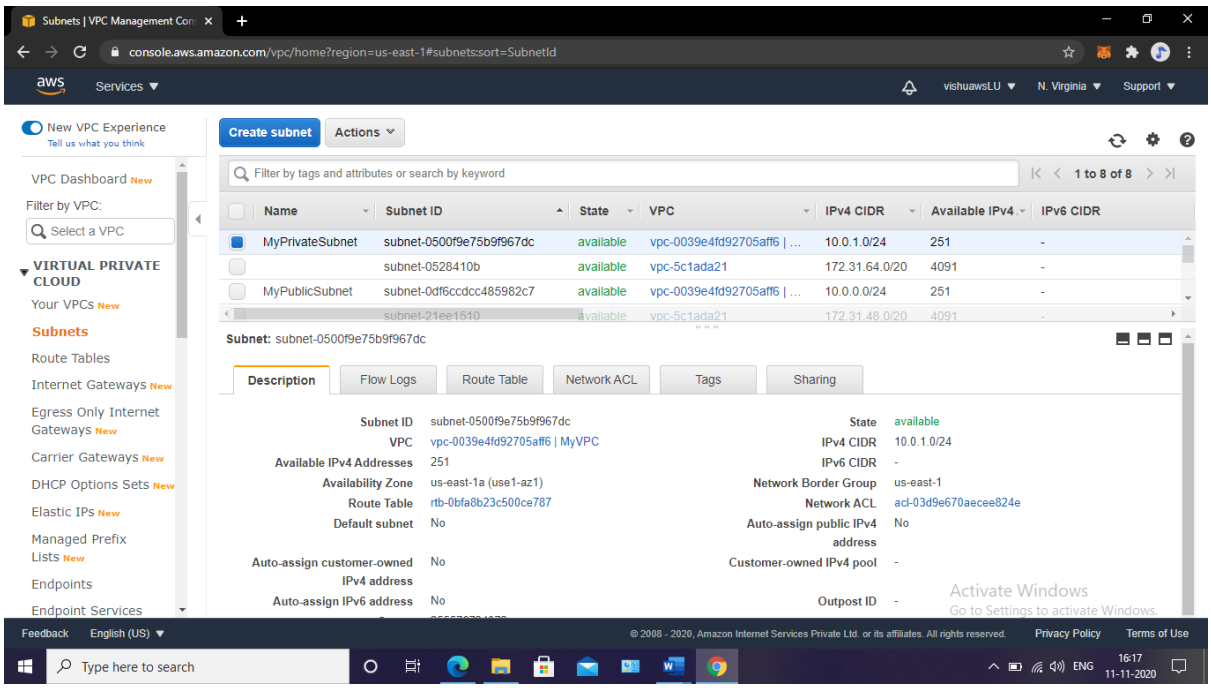
## Day-10 AWS ASSESSMENT PROJECT-1

## 1.Create a VPC with a private subnet and a public subnet

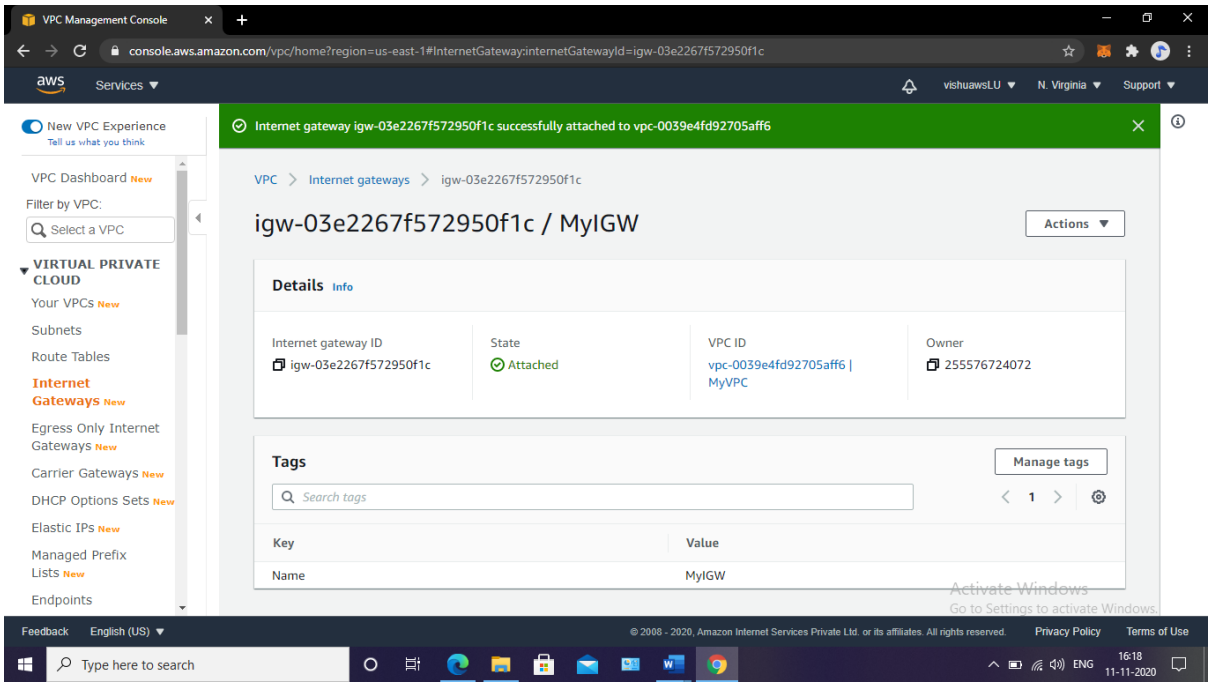


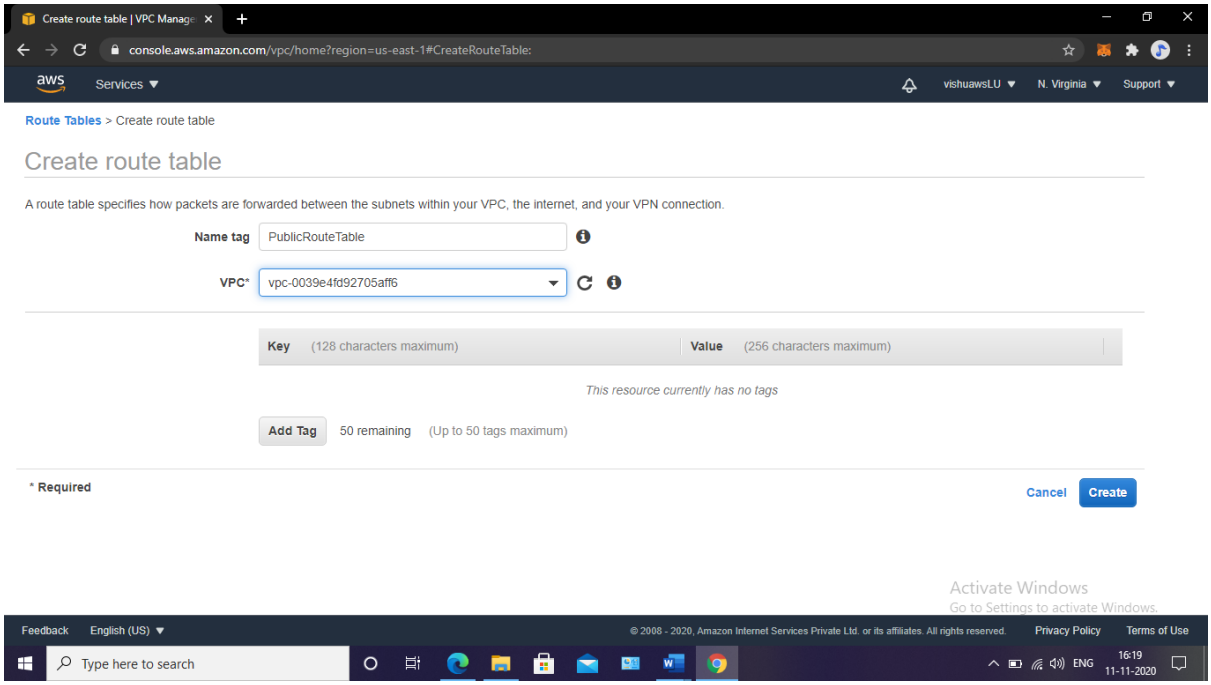

Subnets | VPC Management Con
console.aws.amazon.com/vpc/home?region=us-east-1#subnets:sort=SubnetId
aws
Services
vishuawsLU
N. Virginia
Support
New VPC Experience
Tell us what you think
VPC Dashboard New
Filter by VPC:
Select a VPC
VIRTUAL PRIVATE CLOUD
Your VPCs New
Subnets
Route Tables
Internet Gateways New
Egress Only Internet Gateways New
Carrier Gateways New
DHCP Options Sets New
Elastic IPs New
Managed Prefix Lists New
Endpoints
Endpoint Services
Create subnet
Actions
Filter by tags and attributes or search by keyword
1 to 8 of 8
Name
Subnet ID
State
VPC
IPv4 CIDR
Available IPv4
IPv6 CIDR
MyPrivateSubnet
subnet-0500f9e75b9f967dc
available
vpc-0039e4fd92705aff6 | ...
10.0.1.0/24
251
subnet-0528410b
available
vpc-5c1ada21
172.31.64.0/20
4091
MyPublicSubnet
subnet-0df6ccdcc485982c7
available
vpc-0039e4fd92705aff6 | ...
10.0.0.0/24
251
Subnet: subnet-0df6ccdcc485982c7
Description
Flow Logs
Route Table
Network ACL
Tags
Sharing
Subnet ID
subnet-0df6ccdcc485982c7
State
available
VPC
vpc-0039e4fd92705aff6 | MyVPC
IPv4 CIDR
10.0.0.0/24
Available IPv4 Addresses
251
IPv6 CIDR
-
Availability Zone
us-east-1a (use1-az1)
Network Border Group
us-east-1
Route Table
rtb-0bfa8b23c500ce787
Network ACL
acl-03d9e670aecee824e
Default subnet
No
Auto-assign public IPv4 address
No
Auto-assign customer-owned IPv4 address
No
Customer-owned IPv4 pool
-
Auto-assign IPv6 address
No
Outpost ID
-
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
16:16
11-11-2020

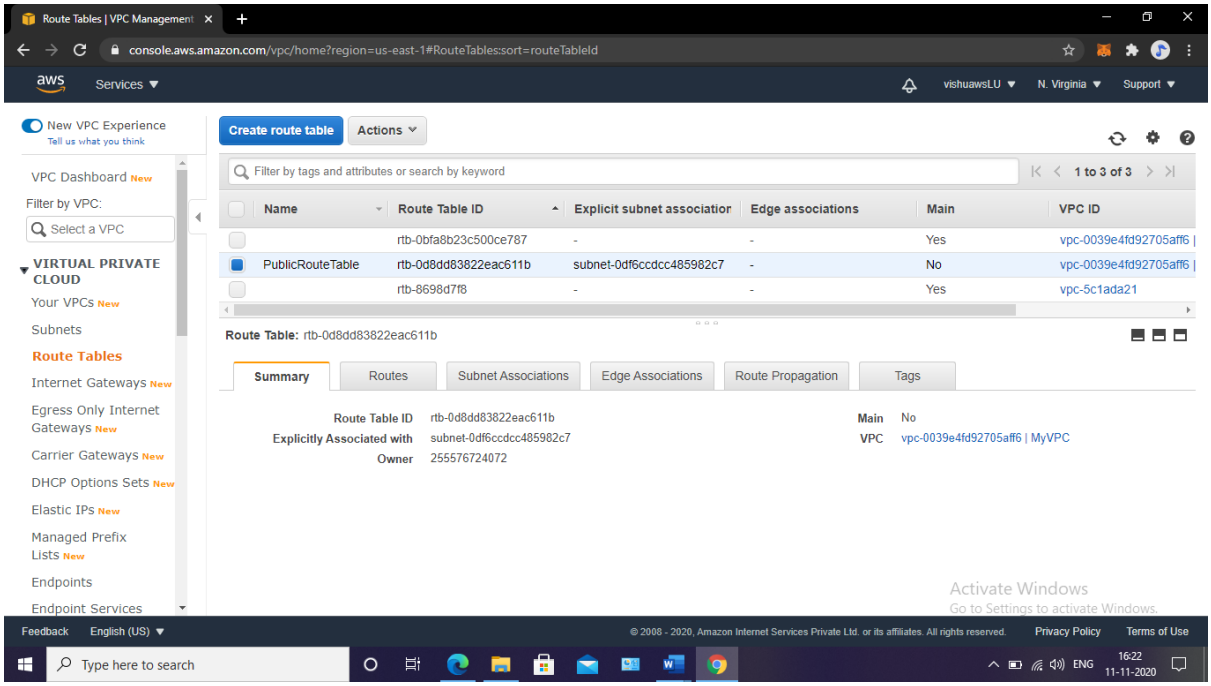

Subnets | VPC Management Con
console.aws.amazon.com/vpc/home?region=us-east-1#subnets:sort=SubnetId
aws
Services
vishuawsLU
N. Virginia
Support
New VPC Experience
Tell us what you think
VPC Dashboard New
Filter by VPC:
Select a VPC
VIRTUAL PRIVATE CLOUD
Your VPCs New
Subnets
Route Tables
Internet Gateways New
Egress Only Internet Gateways New
Carrier Gateways New
DHCP Options Sets New
Elastic IPs New
Managed Prefix Lists New
Endpoints
Endpoint Services
Create subnet
Actions
Filter by tags and attributes or search by keyword
1 to 8 of 8
Name
Subnet ID
State
VPC
IPv4 CIDR
Available IPv4
IPv6 CIDR
MyPrivateSubnet
subnet-0500f9e75b9f967dc
available
vpc-0039e4fd92705aff6 | ...
10.0.1.0/24
251
subnet-0528410b
available
vpc-5c1ada21
172.31.64.0/20
4091
MyPublicSubnet
subnet-0df6ccdcc485982c7
available
vpc-0039e4fd92705aff6 | ...
10.0.0.0/24
251
Subnet: subnet-0500f9e75b9f967dc
Description
Flow Logs
Route Table
Network ACL
Tags
Sharing
Subnet ID
subnet-0500f9e75b9f967dc
State
available
VPC
vpc-0039e4fd92705aff6 | MyVPC
IPv4 CIDR
10.0.1.0/24
Available IPv4 Addresses
251
IPv6 CIDR
-
Availability Zone
us-east-1a (use1-az1)
Network Border Group
us-east-1
Route Table
rtb-0bfa8b23c500ce787
Network ACL
acl-03d9e670aecee824e
Default subnet
No
Auto-assign public IPv4 address
No
Auto-assign customer-owned IPv4 address
No
Customer-owned IPv4 pool
-
Auto-assign IPv6 address
No
Outpost ID
-
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
16:17
11-11-2020

## 2.Create a IGW and associate with the public subnet

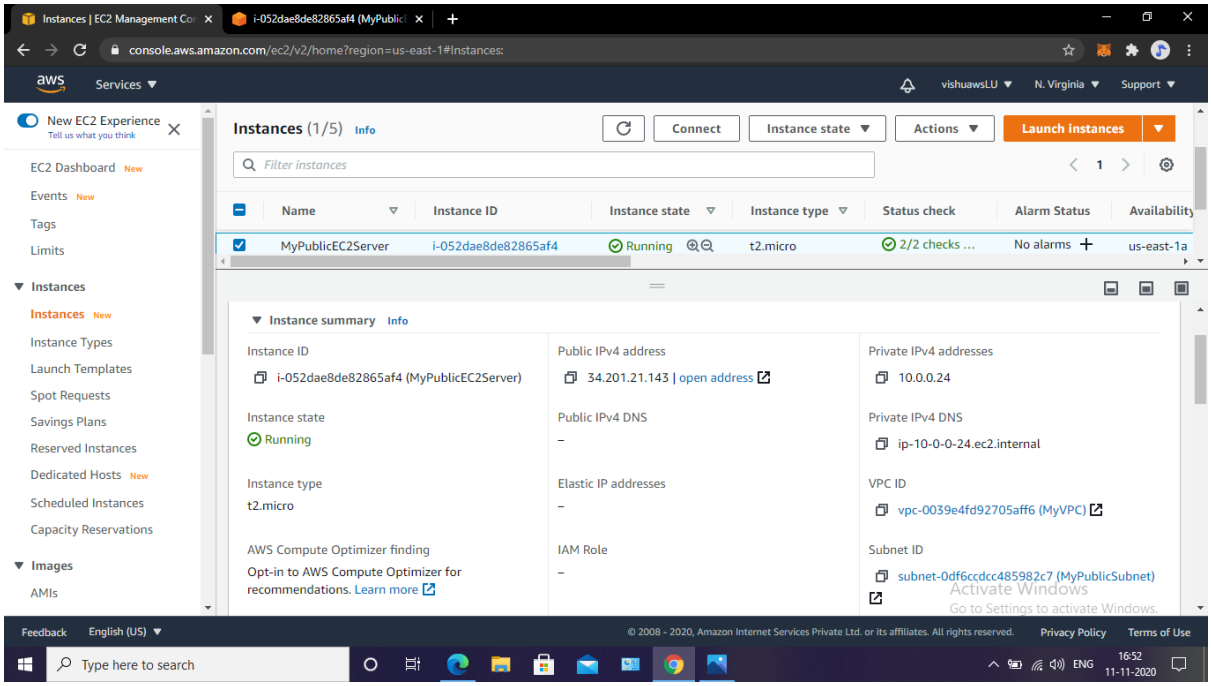


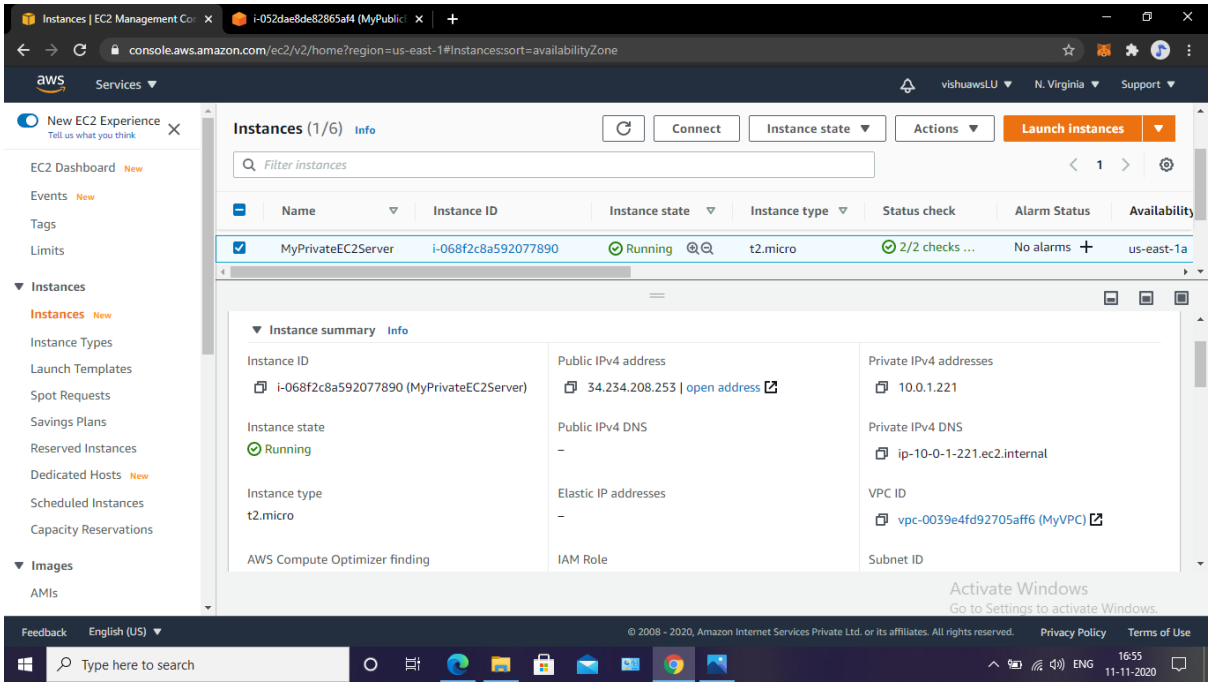

## 3.Create a route table with VPC



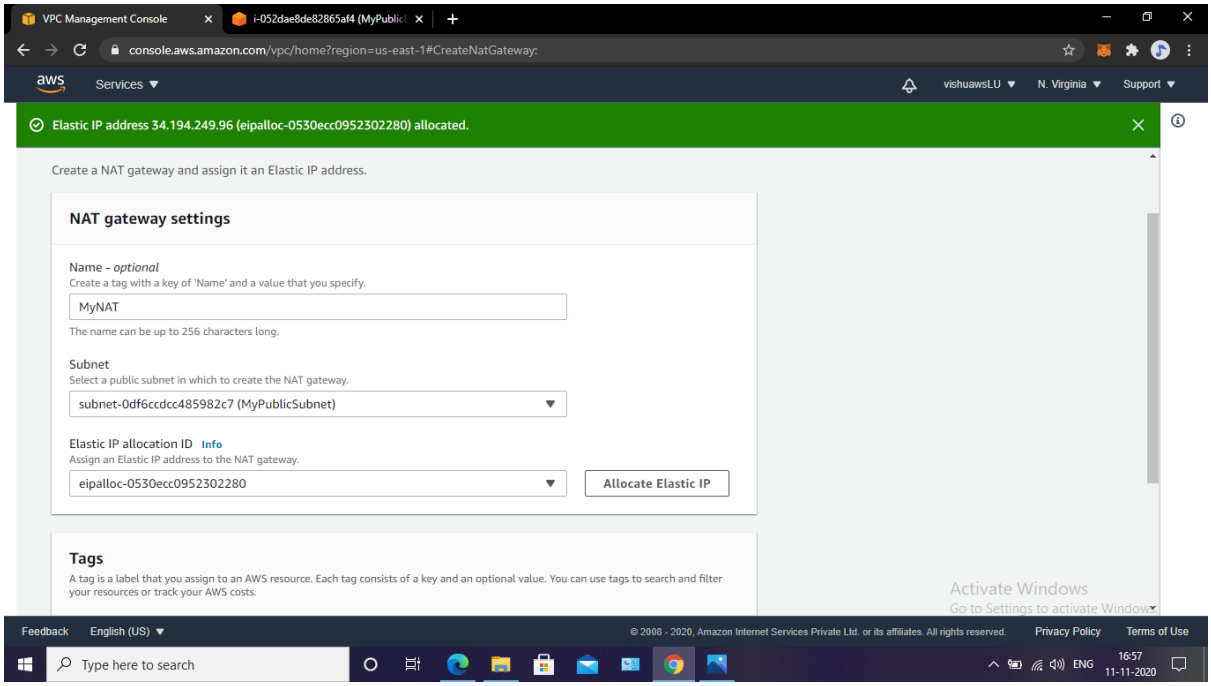


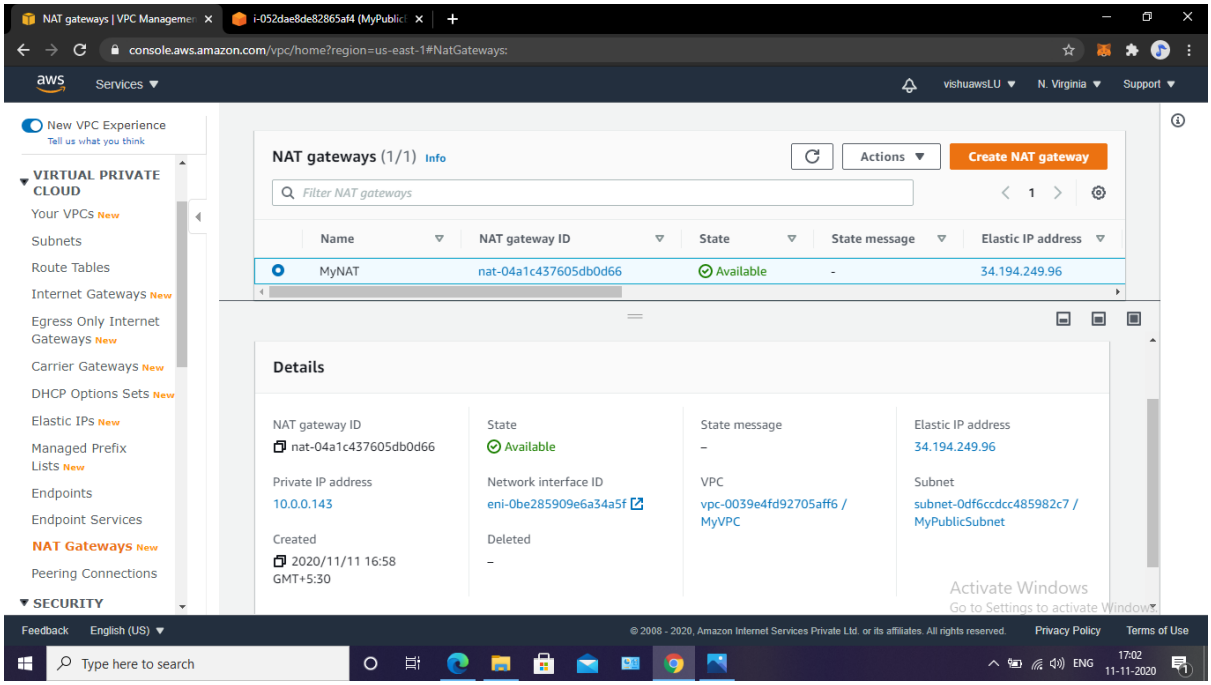

# 4.Creating two instances using Linux

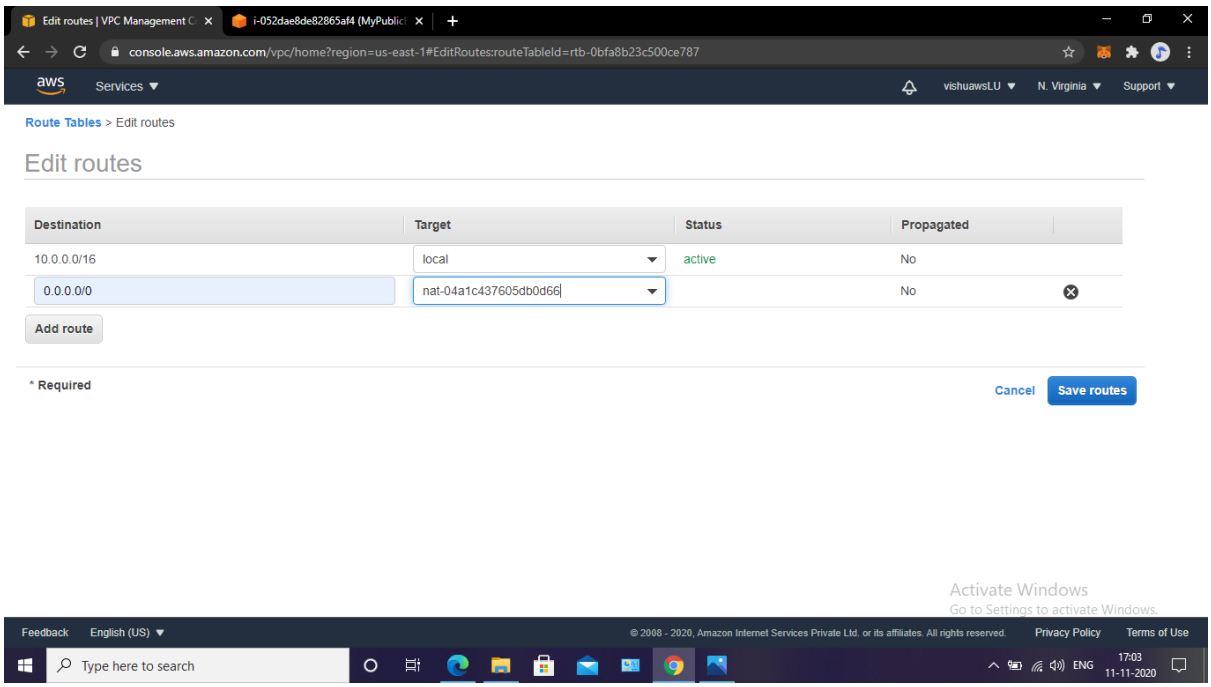




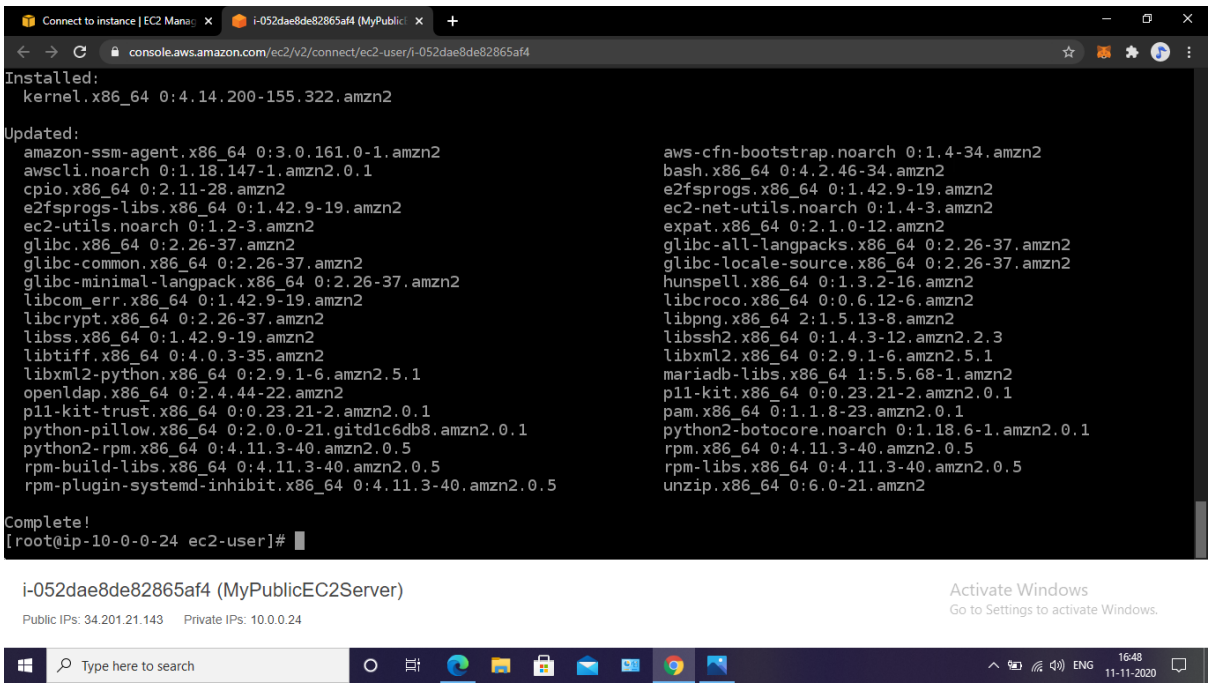

# 5.Create a NAT gateway and associate with public subnet

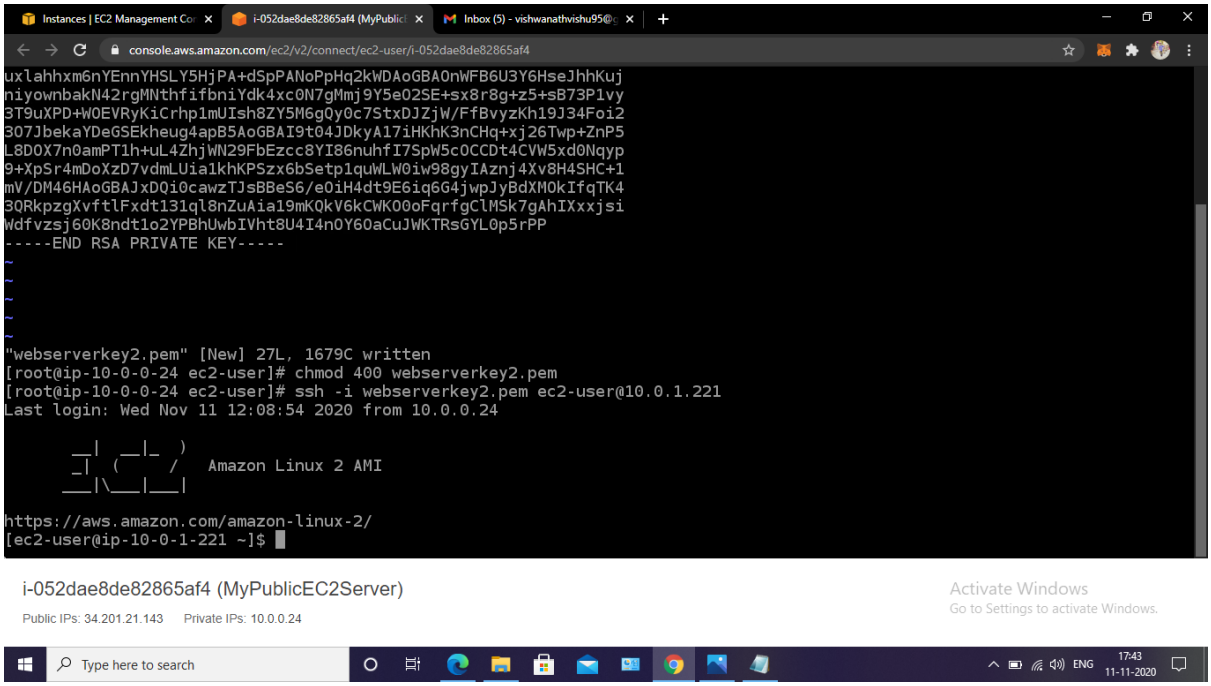



NAT gateways | VPC Management
i-052dae8de82865af4 (MyPublic
console.aws.amazon.com/vpc/home?region=us-east-1#NatGateways:
Services
vishuawsLU
N. Virginia
Support
New VPC Experience
Tell us what you think
VIRTUAL PRIVATE CLOUD
Your VPCs New
Subnets
Route Tables
Internet Gateways New
Egress Only Internet Gateways New
Carrier Gateways New
DHCP Options Sets New
Elastic IPs New
Managed Prefix Lists New
Endpoints
Endpoint Services
NAT Gateways New
Peering Connections
SECURITY
NAT gateways (1/1) Info
Actions
Create NAT gateway
Filter NAT gateways
Name
NAT gateway ID
State
State message
Elastic IP address
MyNAT
nat-04a1c437605db0d66
Available
34.194.249.96
Details
NAT gateway ID
nat-04a1c437605db0d66
State
Available
State message
Elastic IP address
34.194.249.96
Private IP address
10.0.0.143
Network interface ID
eni-0be285909e6a34a5f
VPC
vpc-0039e4fd92705aff6 / MyVPC
Subnet
subnet-0df6ccdcc485982c7 / MyPublicSubnet
Created
2020/11/11 16:58 GMT+5:30
Deleted
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
17:02
11-11-2020

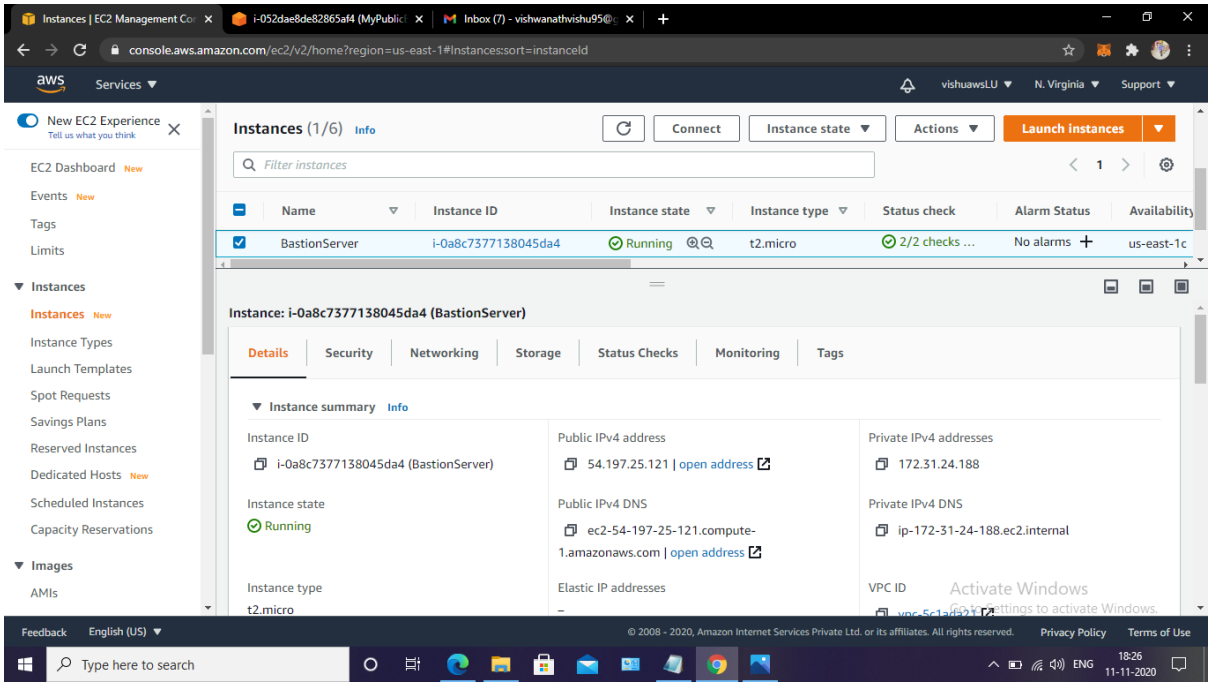

Edit routes | VPC Management
i-052dae8de82865af4 (MyPublic
console.aws.amazon.com/vpc/home?region=us-east-1#EditRoutes:routeTableId=rtb-0bfa8b23c500ce787
Services
vishuawsLU
N. Virginia
Support
Route Tables > Edit routes
Edit routes
Destination
Target
Status
Propagated
10.0.0.0/16
local
active
No
0.0.0.0/0
nat-04a1c437605db0d66
No
Add route
* Required
Cancel
Save routes
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
17:03
11-11-2020

# 6.Connect the public instance and copy the private key and login to private IP

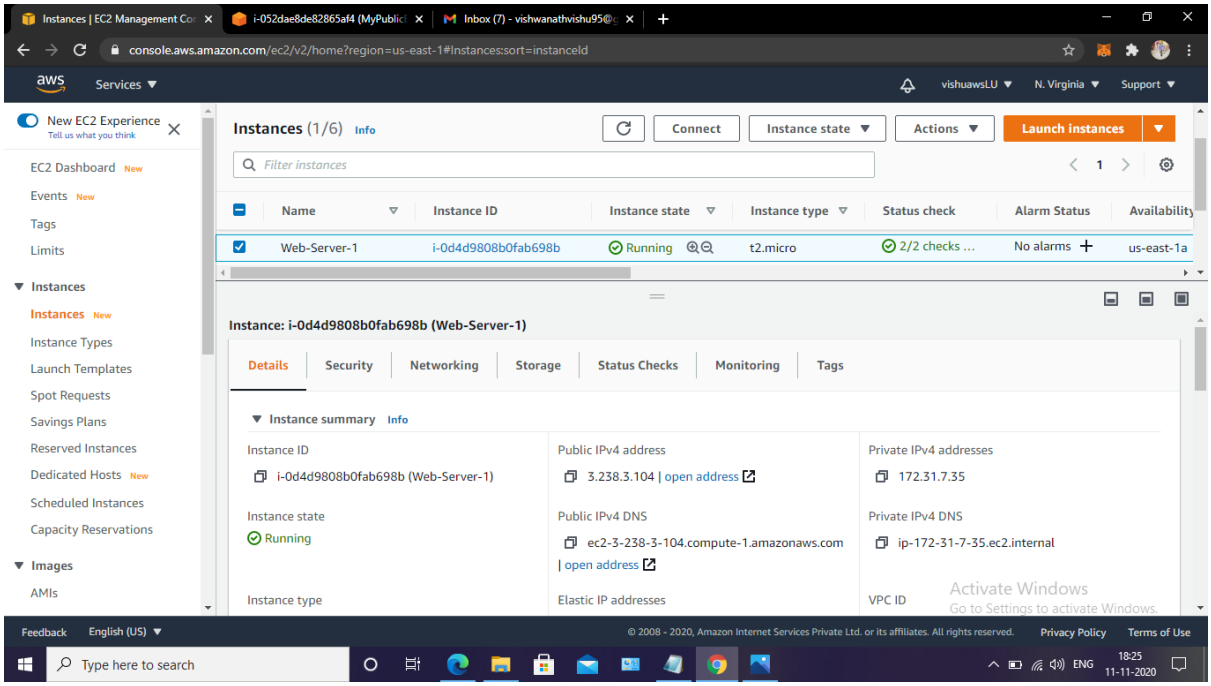


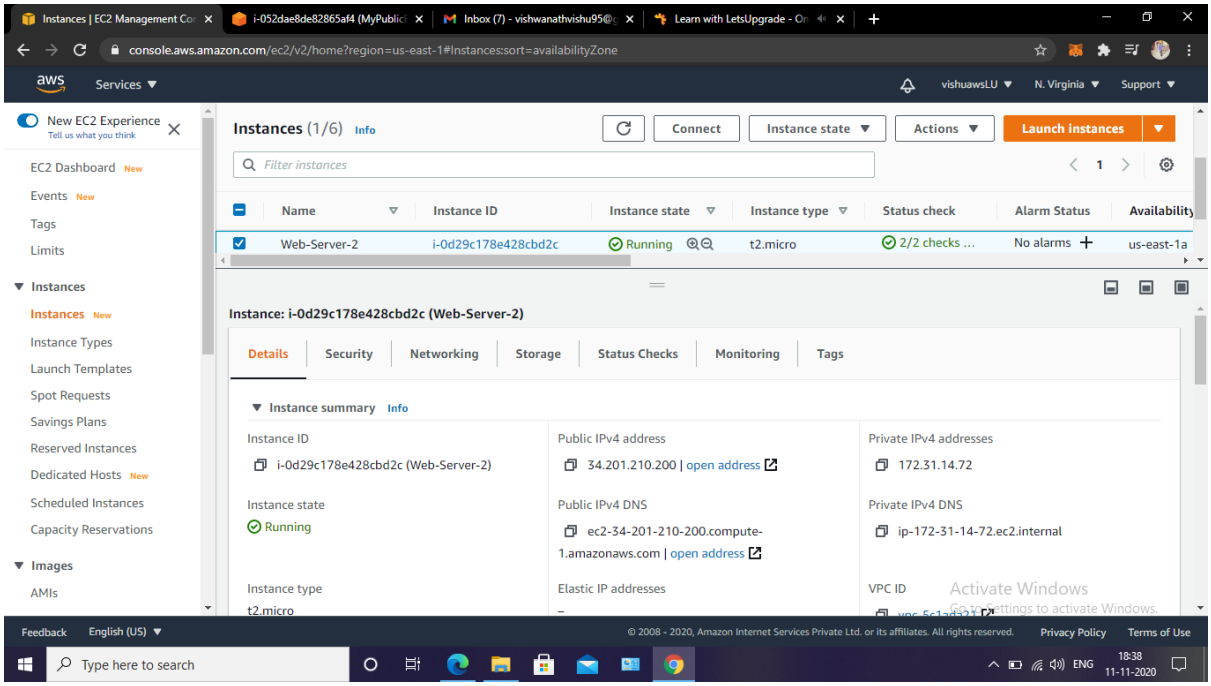



# 7.Now launch bastion server in the public subnet

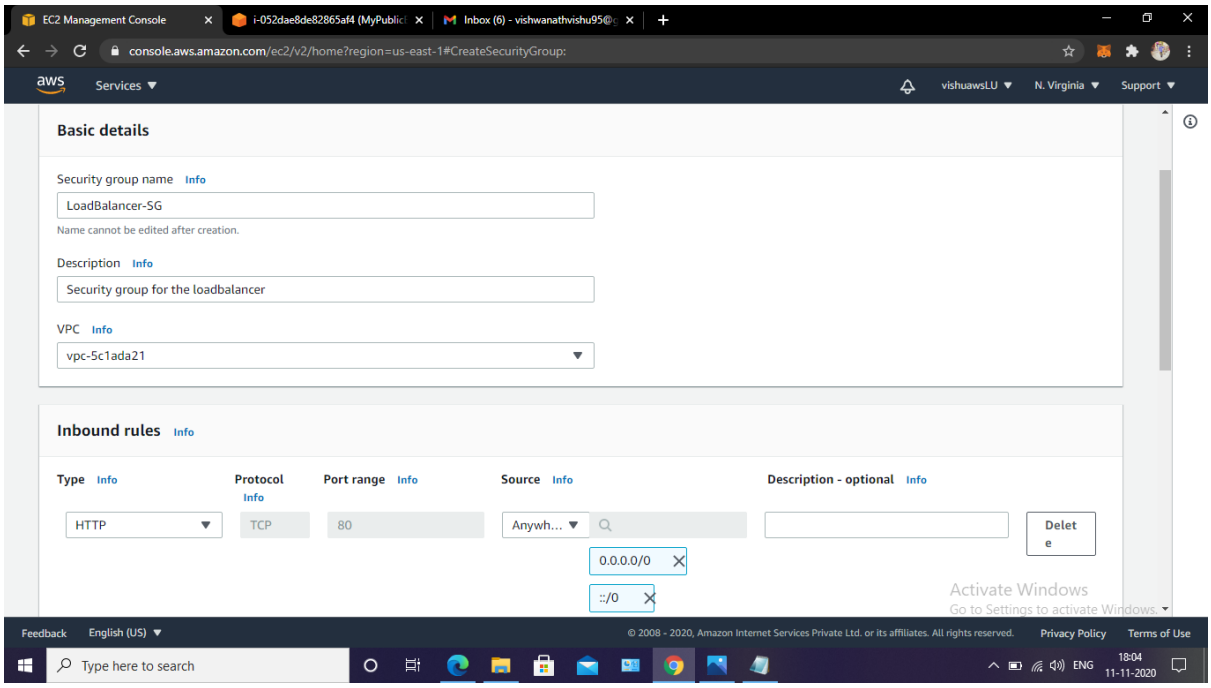


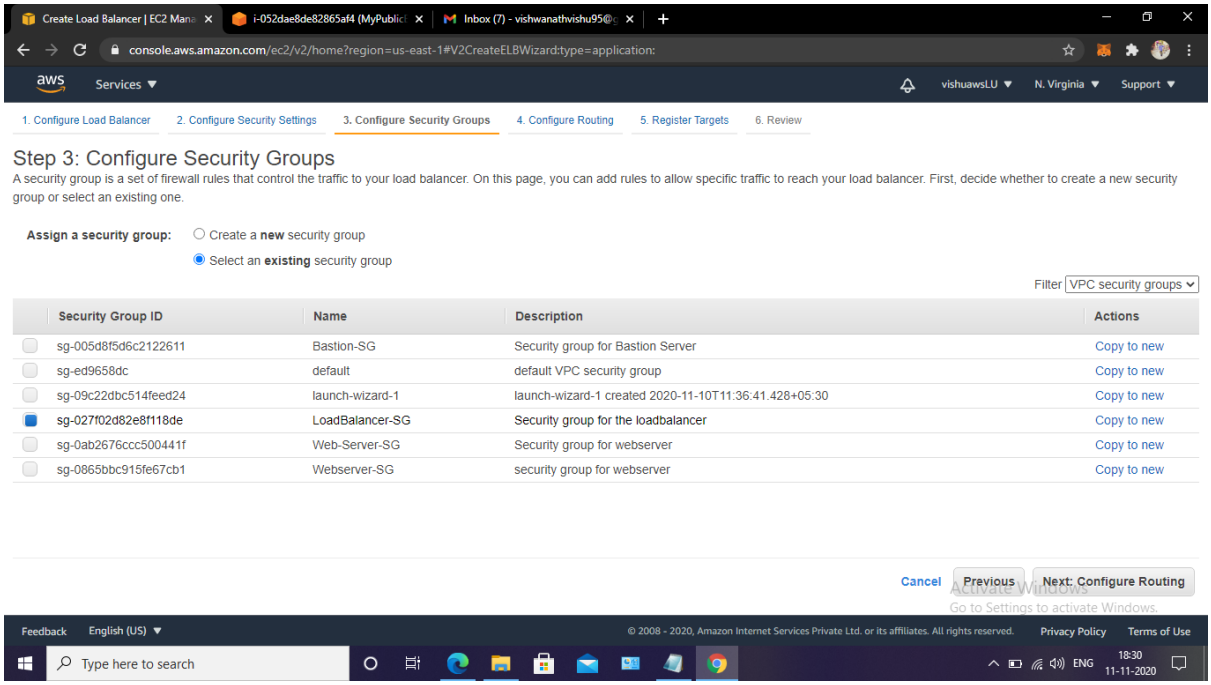

# 8.Launch two webservers in the private subnet

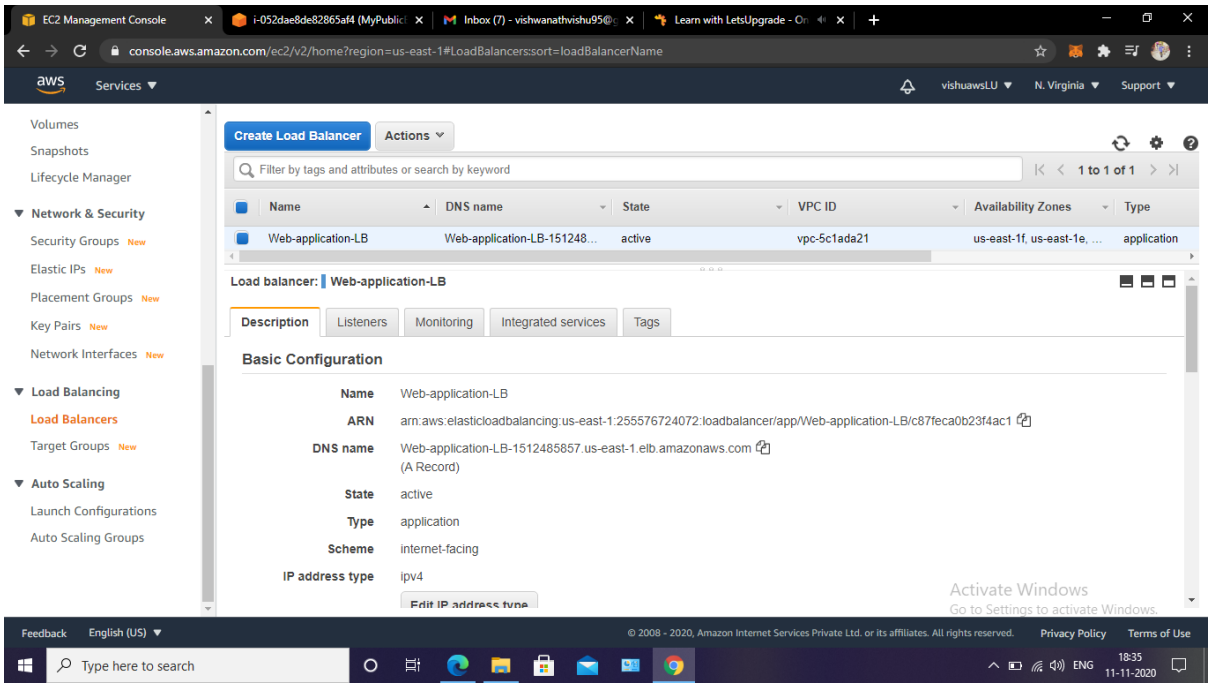




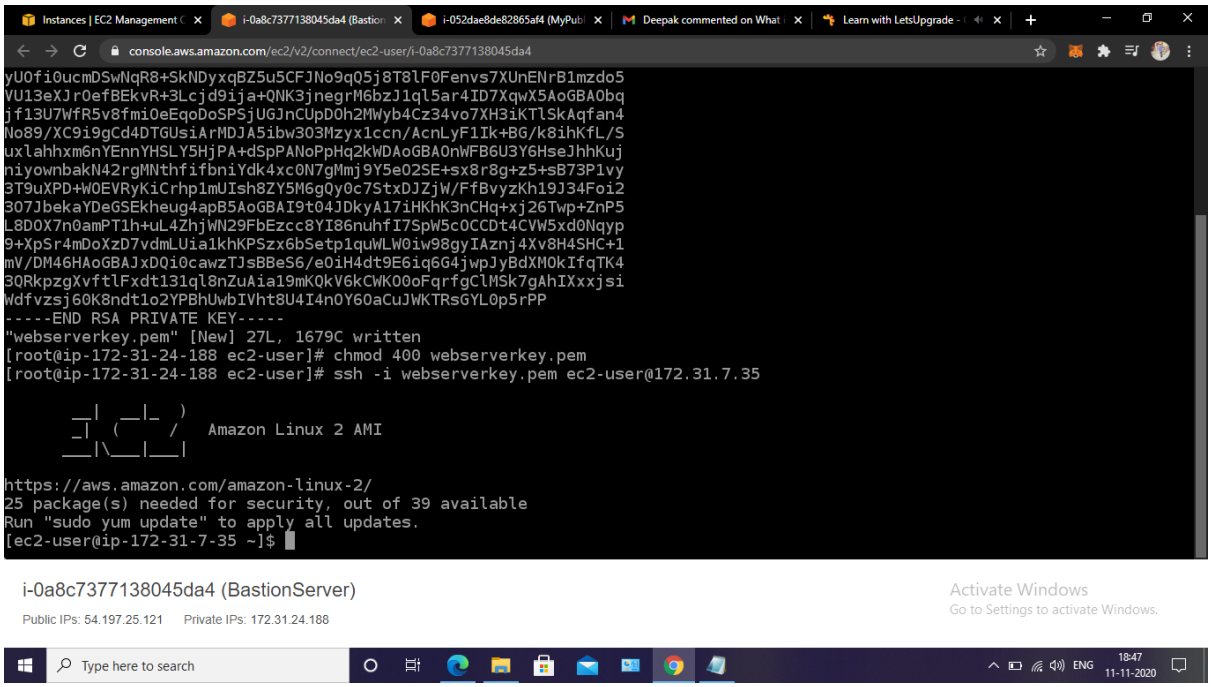

# 9.Create a load balancer in the public subnet range

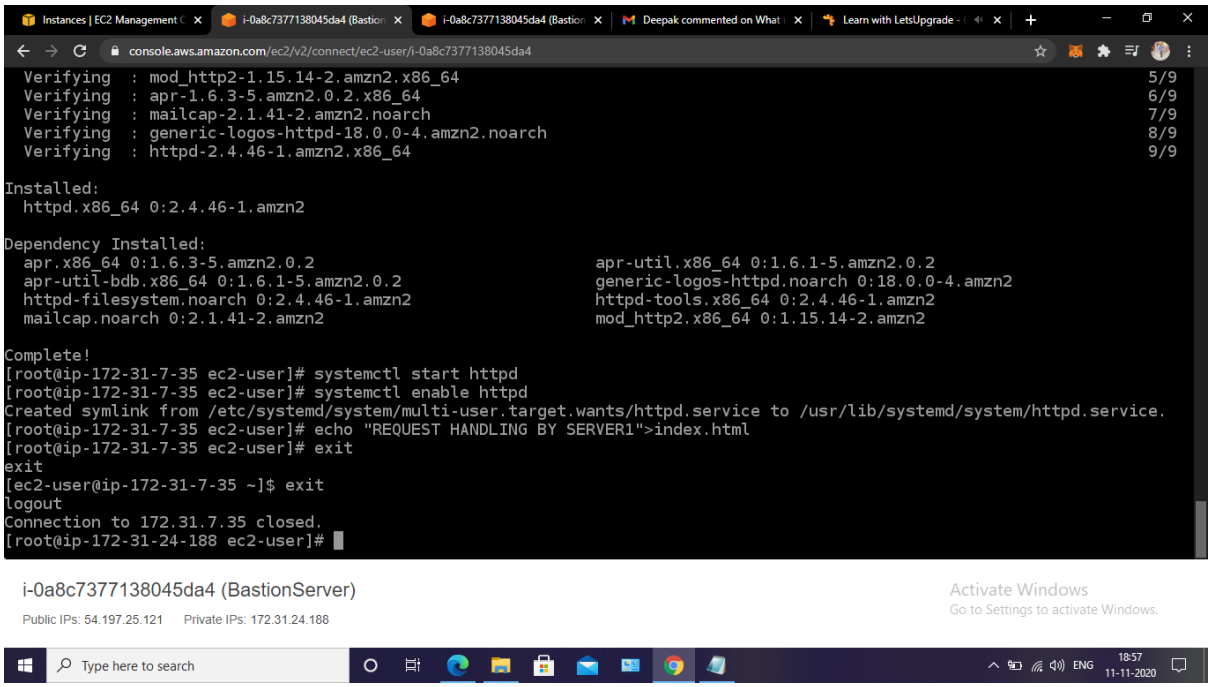


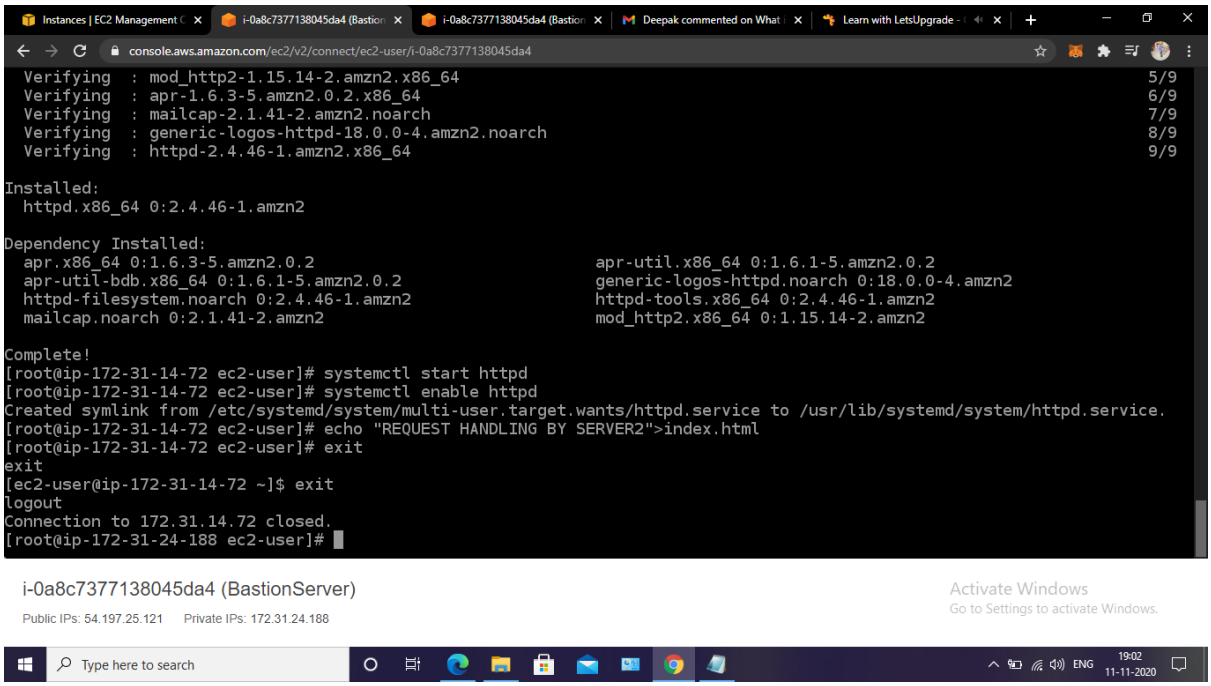

Create Load Balancer | EC2 Mana
i-052dae8de82865af4 (MyPublic
Inbox (7) - vishwanathvishu95@g
console.aws.amazon.com/ec2/v2/home?region=us-east-1#V2CreateELBWizard:type=application:
aws
Services
vishuawsLU
N. Virginia
Support
1. Configure Load Balancer
2. Configure Security Settings
3. Configure Security Groups
4. Configure Routing
5. Register Targets
6. Review
Step 3: Configure Security Groups
A security group is a set of firewall rules that control the traffic to your load balancer. On this page, you can add rules to allow specific traffic to reach your load balancer. First, decide whether to create a new security group or select an existing one.
Assign a security group:
Create a new security group
Select an existing security group
Filter VPC security groups
Security Group ID
Name
Description
Actions
sg-005d8f5d6c2122611 Bastion-SG Security group for Bastion Server Copy to new
sg-ed9658dc default default VPC security group Copy to new
sg-09c22dbc514feed24 launch-wizard-1 launch-wizard-1 created 2020-11-10T11:36:41.428+05:30 Copy to new
sg-027f02d82e8f118de LoadBalancer-SG Security group for the loadbalancer Copy to new
sg-0ab2676ccc500441f Web-Server-SG Security group for webserver Copy to new
sg-0865bbc915fe67cb1 Webserver-SG security group for webserver Copy to new
Cancel
Previous
Next: Configure Routing
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
18:30
11-11-2020


EC2 Management Console
i-052dae8de82865af4 (MyPublic
Inbox (7) - vishwanathvishu95@g
Learn with LetsUpgrade - On
console.aws.amazon.com/ec2/v2/home?region=us-east-1#LoadBalancers:sort=loadBalancerName
aws
Services
vishuawsLU
N. Virginia
Support
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups New
Elastic IPs New
Placement Groups New
Key Pairs New
Network Interfaces New
Load Balancing
Load Balancers
Target Groups New
Auto Scaling
Launch Configurations
Auto Scaling Groups
Create Load Balancer
Actions
Filter by tags and attributes or search by keyword
1 to 1 of 1
Name
DNS name
State
VPC ID
Availability Zones
Type
Web-application-LB
Web-application-LB-151248...
active
vpc-5c1ada21
us-east-1f, us-east-1e, ...
application
Load balancer: Web-application-LB
Description
Listeners
Monitoring
Integrated services
Tags
Basic Configuration
Name Web-application-LB
ARN arn:aws:elasticloadbalancing:us-east-1:255576724072:loadbalancer/app/Web-application-LB/c87feca0b23f4ac1
DNS name Web-application-LB-1512485857.us-east-1.elb.amazonaws.com (A Record)
State active
Type application
Scheme internet-facing
IP address type ipv4
Edit IP address type
Activate Windows
Go to Settings to activate Windows.
Feedback
English (US)
© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.
Privacy Policy
Terms of Use
Type here to search
ENG
18:35
11-11-2020

# 10.Connect the Bastion server with the web server 1 & 2 private IP addresses




Instances | EC2 Management
i-0a8c7377138045da4 (Bastion
i-0a8c7377138045da4 (Bastion
Deepak commented on What
Learn with LetsUpgrade -
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0a8c7377138045da4
Verifying : mod_http2-1.15.14-2.amzn2.x86_64 5/9
Verifying : apr-1.6.3-5.amzn2.0.2.x86_64 6/9
Verifying : mailcap-2.1.41-2.amzn2.noarch 7/9
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 8/9
Verifying : httpd-2.4.46-1.amzn2.x86_64 9/9
Installed:
httpd.x86_64 0:2.4.46-1.amzn2
Dependency Installed:
apr.x86_64 0:1.6.3-5.amzn2.0.2
apr-util.x86_64 0:1.6.1-5.amzn2.0.2
apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2
httpd-filesystem.noarch 0:2.4.46-1.amzn2
httpd-tools.x86_64 0:2.4.46-1.amzn2
mailcap.noarch 0:2.1.41-2.amzn2
mod_http2.x86_64 0:1.15.14-2.amzn2
Complete!
[root@ip-172-31-14-72 ec2-user]# systemctl start httpd
[root@ip-172-31-14-72 ec2-user]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-14-72 ec2-user]# echo "REQUEST HANDLING BY SERVER2">index.html
[root@ip-172-31-14-72 ec2-user]# exit
exit
[ec2-user@ip-172-31-14-72 ~]$ exit
logout
Connection to 172.31.14.72 closed.
[root@ip-172-31-24-188 ec2-user]#
i-0a8c7377138045da4 (BastionServer)
Public IPs: 54.197.25.121 Private IPs: 172.31.24.188
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
19:02
11-11-2020