NAME: VOMMIDAPU CHINNI **BATCH NO:** 120

MAIL.ID: vommidapuchinni@gmail.com **DATE:** 25/02/24

TRAINER: Mr. Madhukar

ASSIGNMENT – 2

1. Create transit gateway in two different accounts?

Transit Gateway is a service that facilitates connectivity between two and more Virtual Private Clouds (vpc) in same or different regions or different accounts.

Create transit gateway in two different accounts we need to follow several steps in both different accounts :

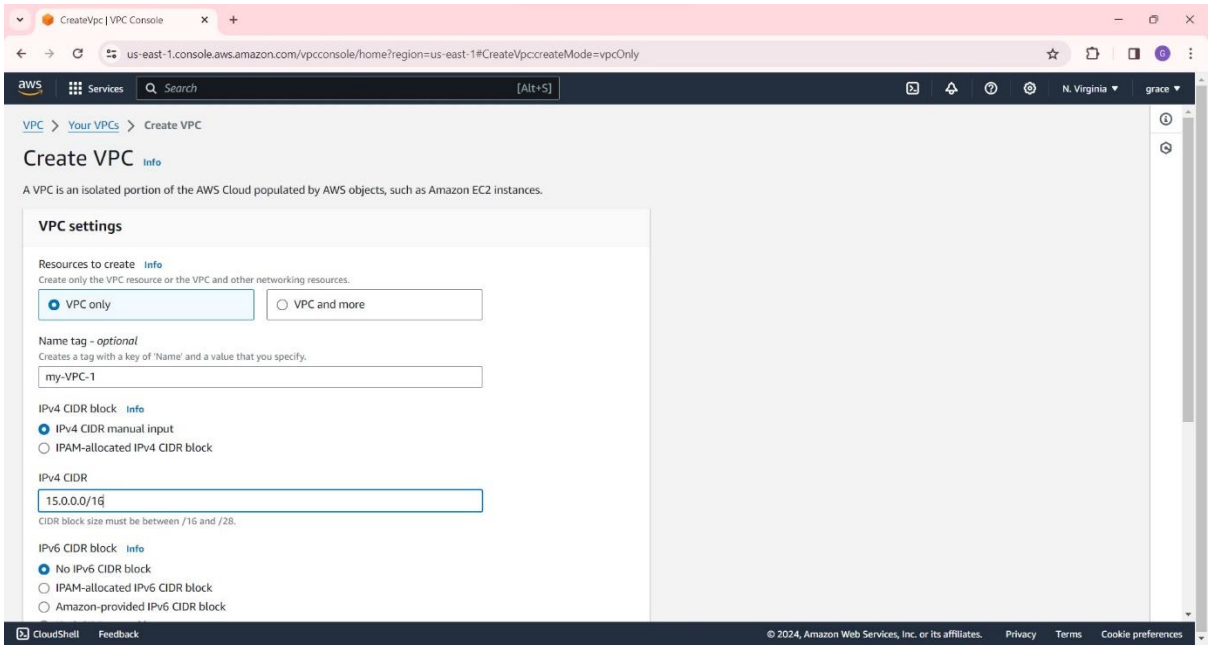
1. Create VPC.
2. Create subnet and internet gateway.
3. Create route tables and associate their subnets.
4. Create transit gateway and their attachments.
5. Create static route in transit gateway route table.
6. Launch EC2 instance.

Step 1: In first account in California region, second account in Virginia.

Step 2: Create VPC in California and Virginia.

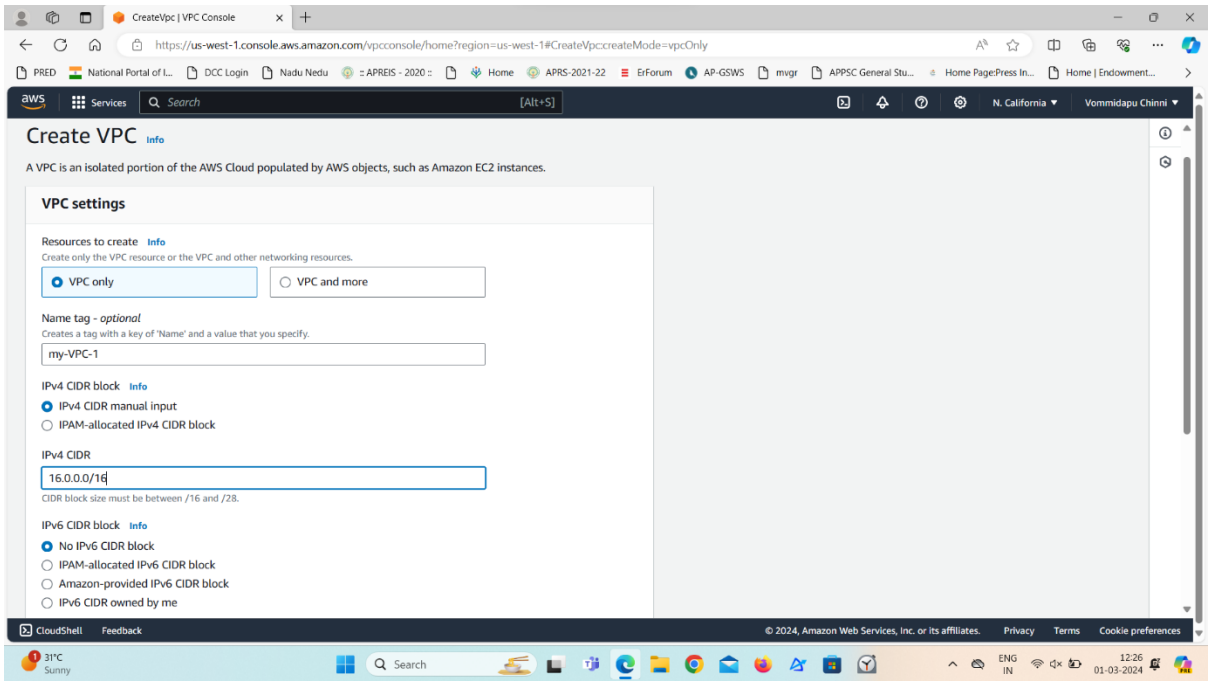
1. Search VPC, open VPC dash board.
2. Click on create VPC.
3. Give name and IPV4 CIDR as 15.0.0.0/16.
4. Create VPC.

❖ VPC in California:



❖ VPC in Virginia:

Give IPV4 CIDR as 16.0.0.0/16.

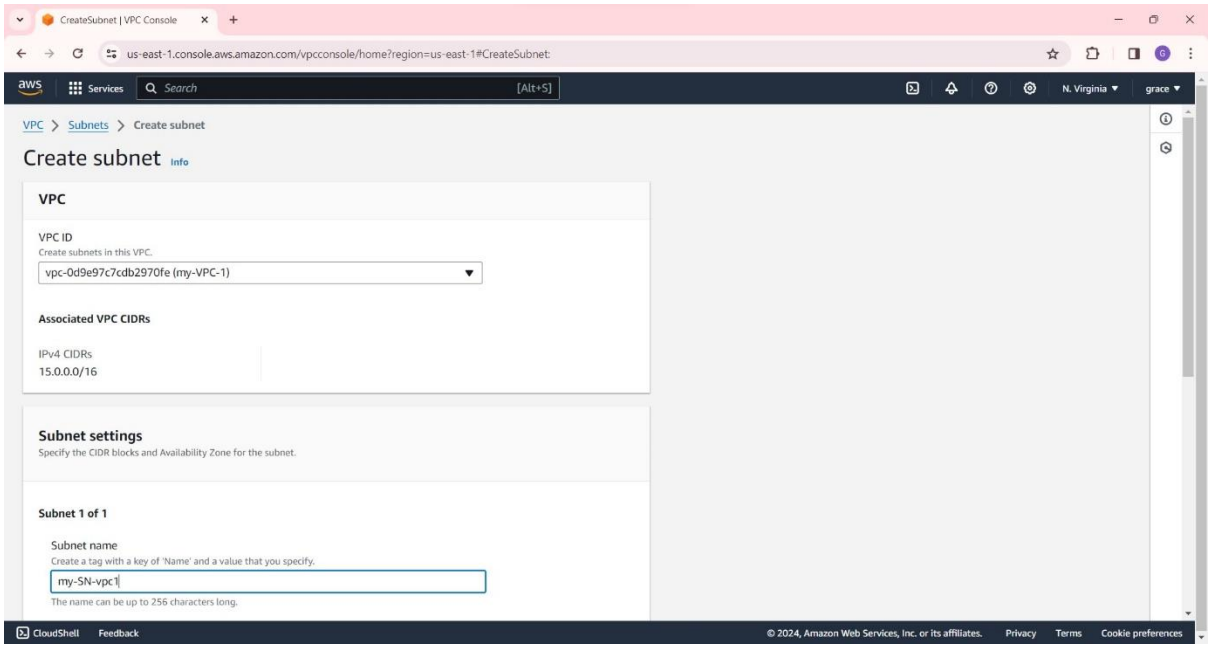


Step 3: Create subnet

In VPC dashboard click on subnet.

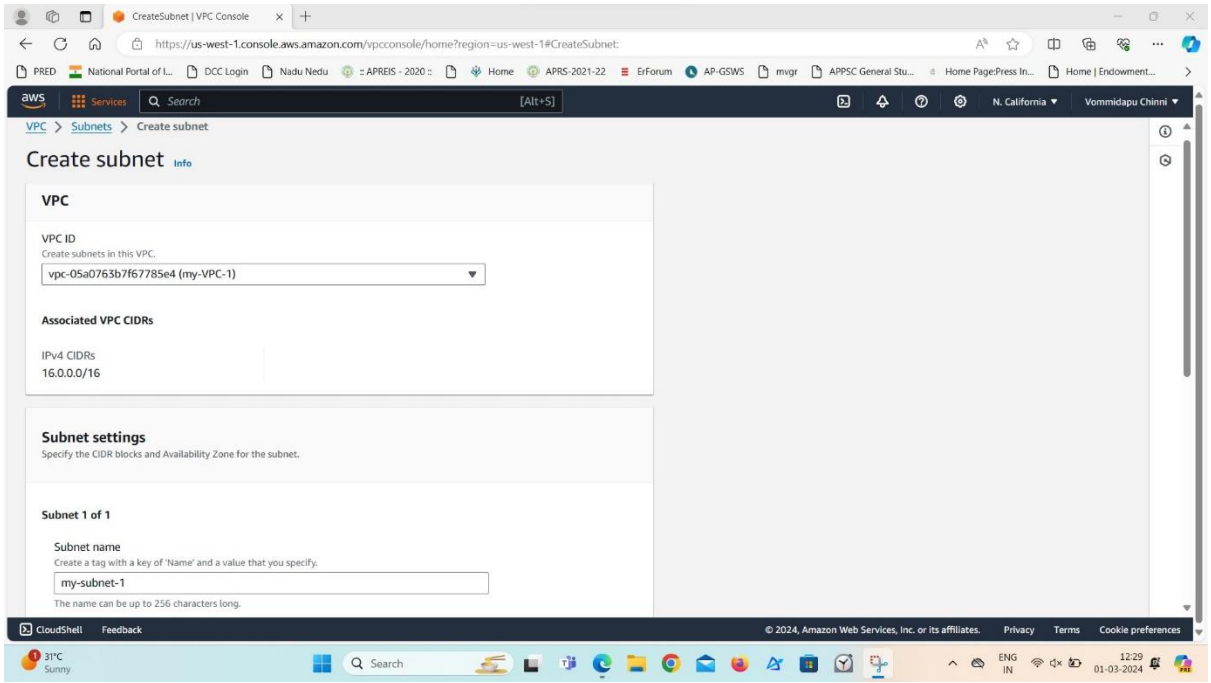
Select VPC ID and name the subnet and give IP as 15.0.0.0/24

- ❖ Subnet in California:



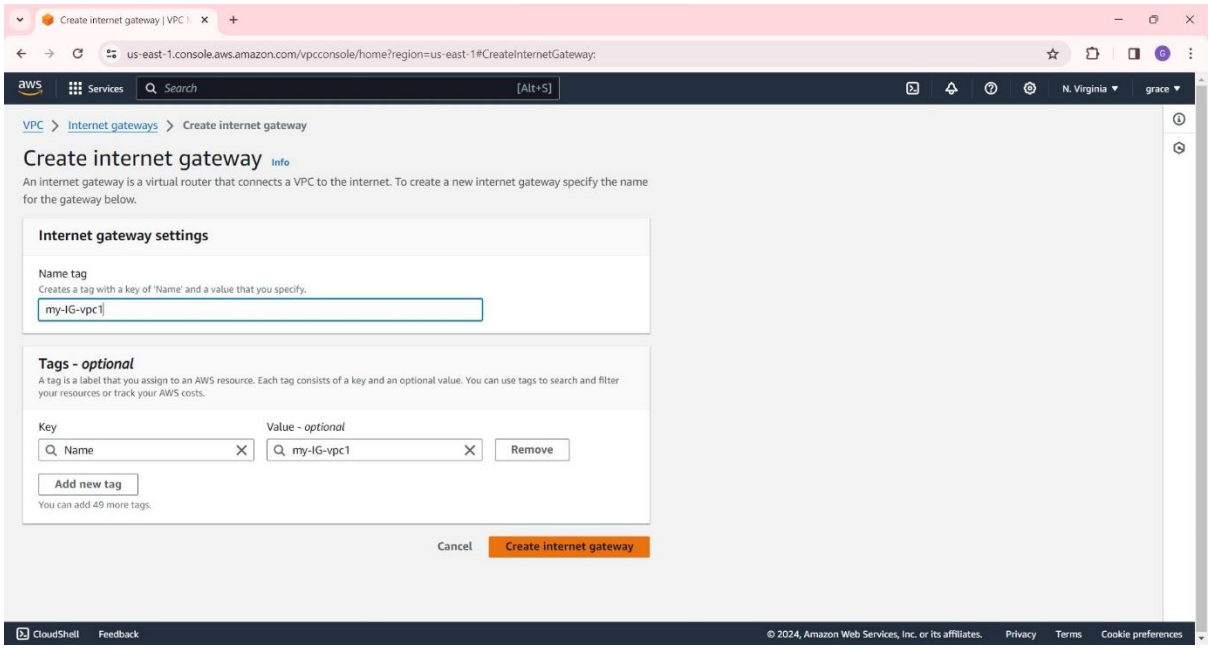
- ❖ Subnet in Virginia:

Subnet IP as 16.0.0.0/24.

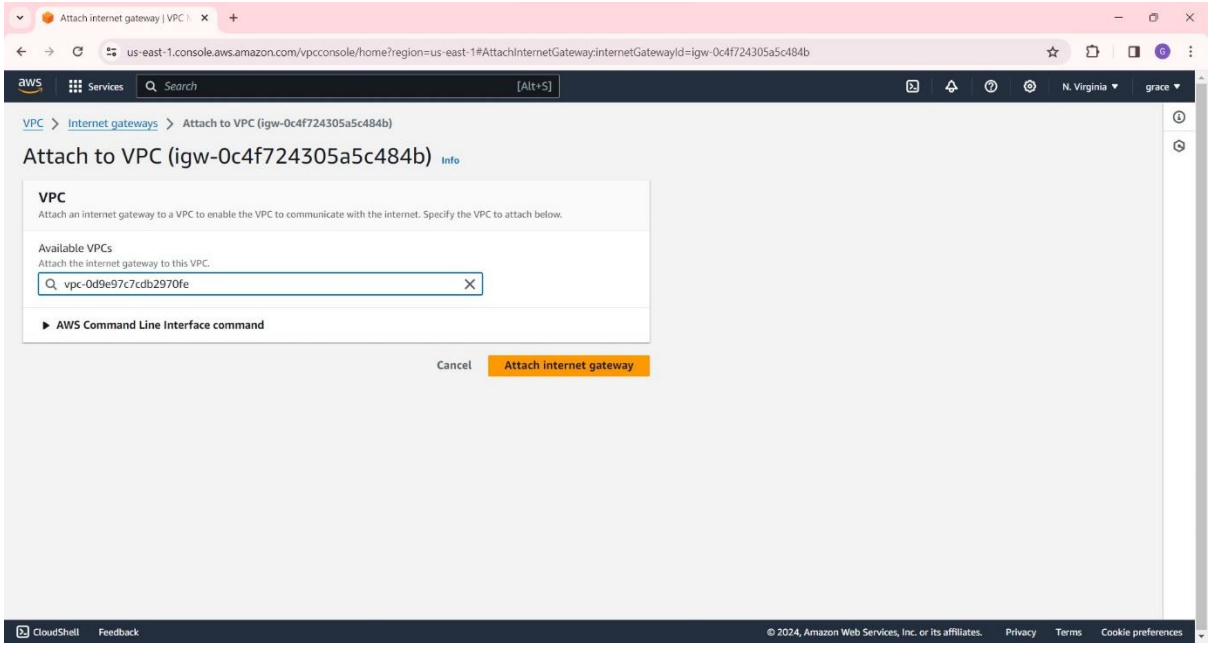


Step 4: Create Internet Gateway and attach to VPC's.

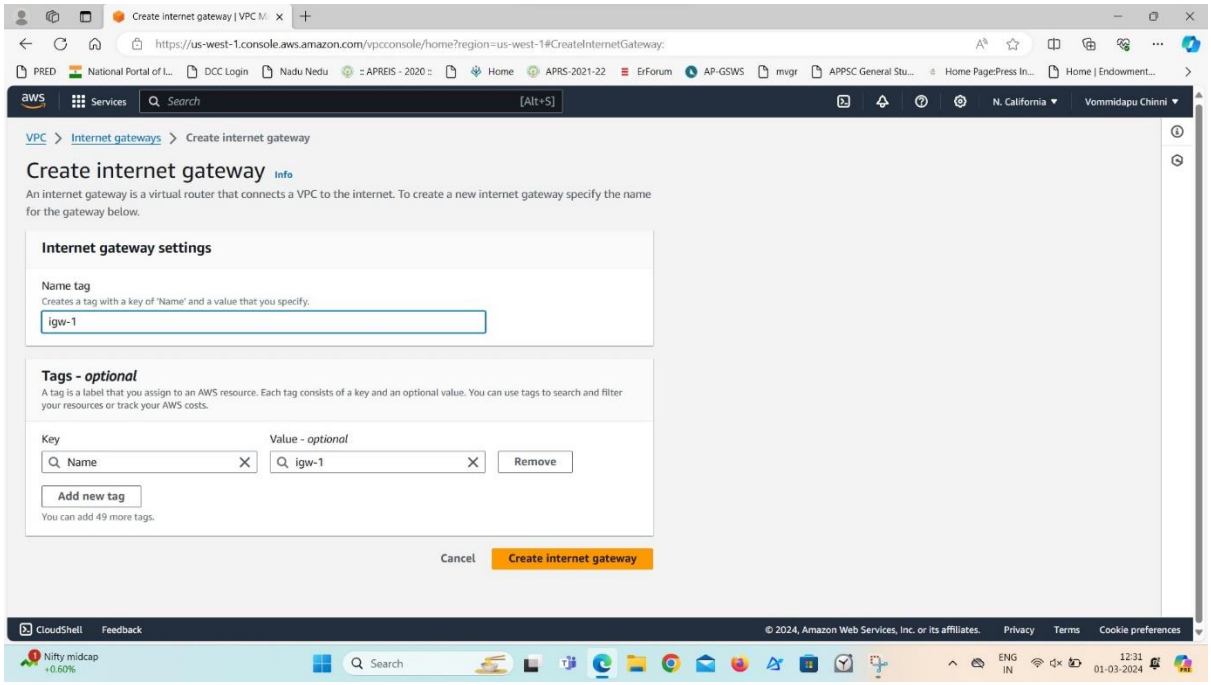
- ❖ Internet Gateway in California.



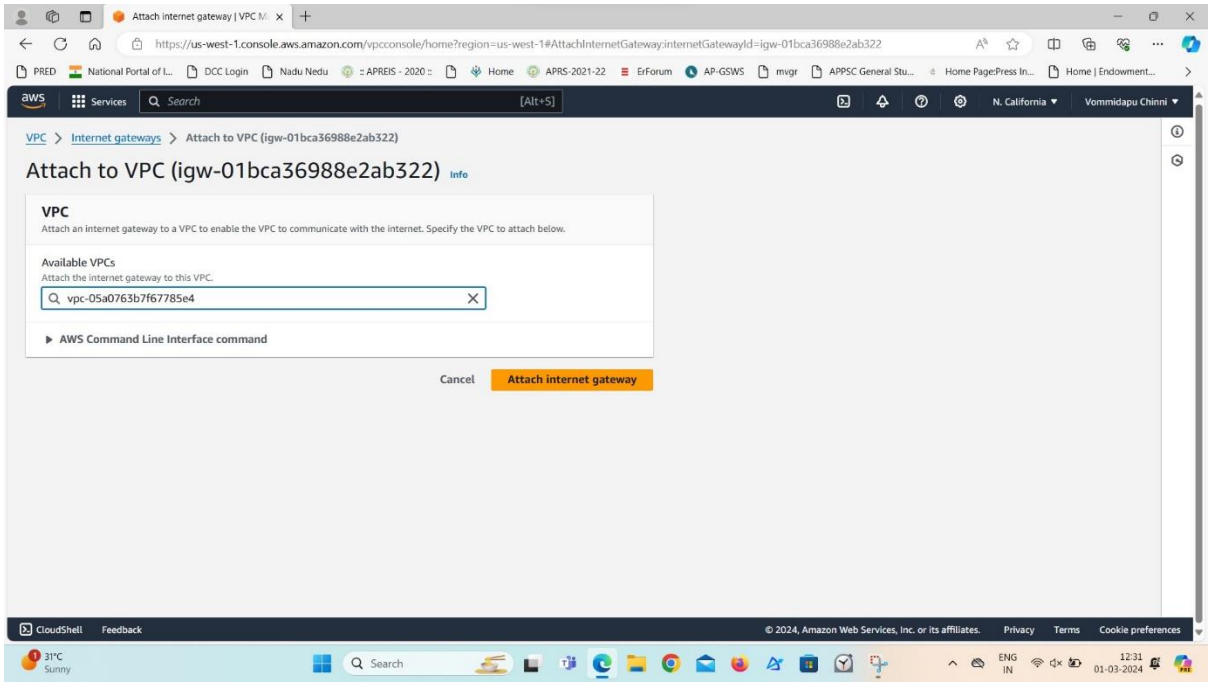
This internet gateway attach to the respected VPC.



❖ Internet Gateway in Virginia.

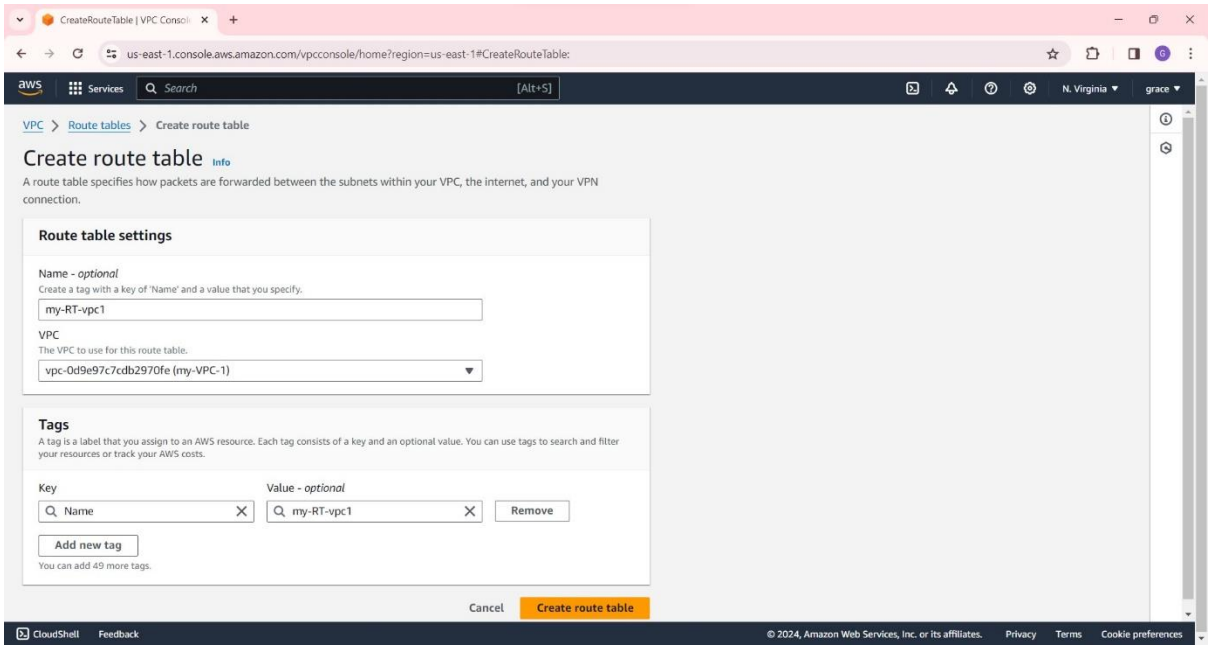


This internet gateway attached to the respected VPC.

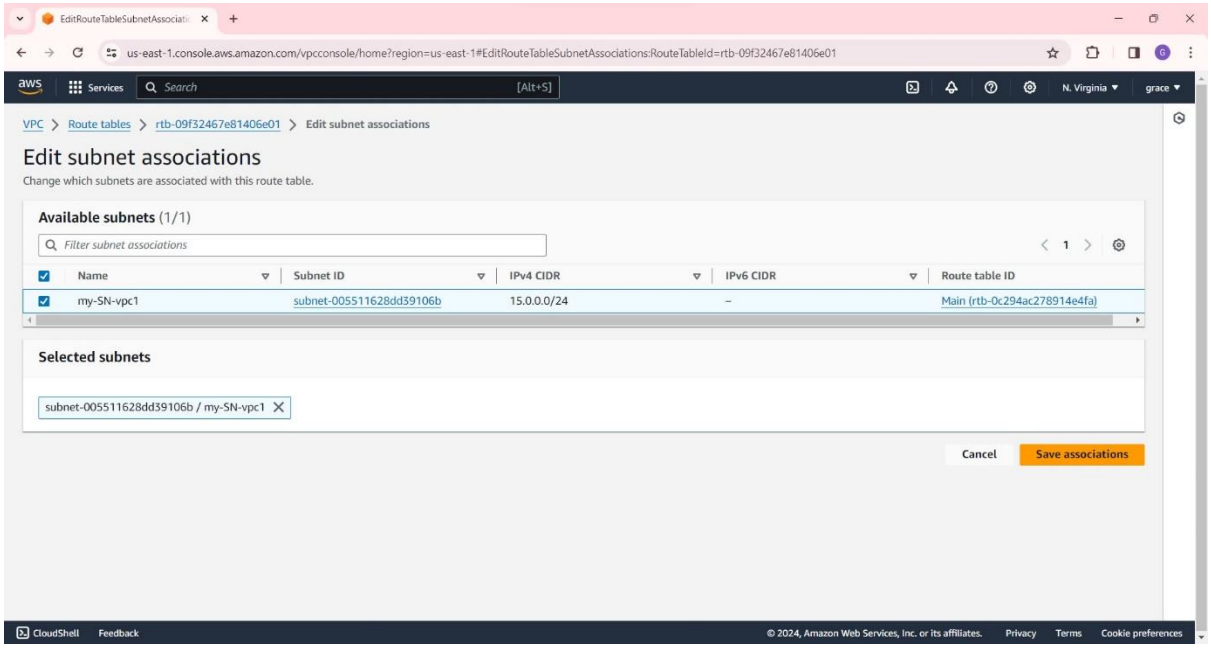


Step 5: Create route tables and give subnet association to respected routes.

- ❖ Route table in Virginia.

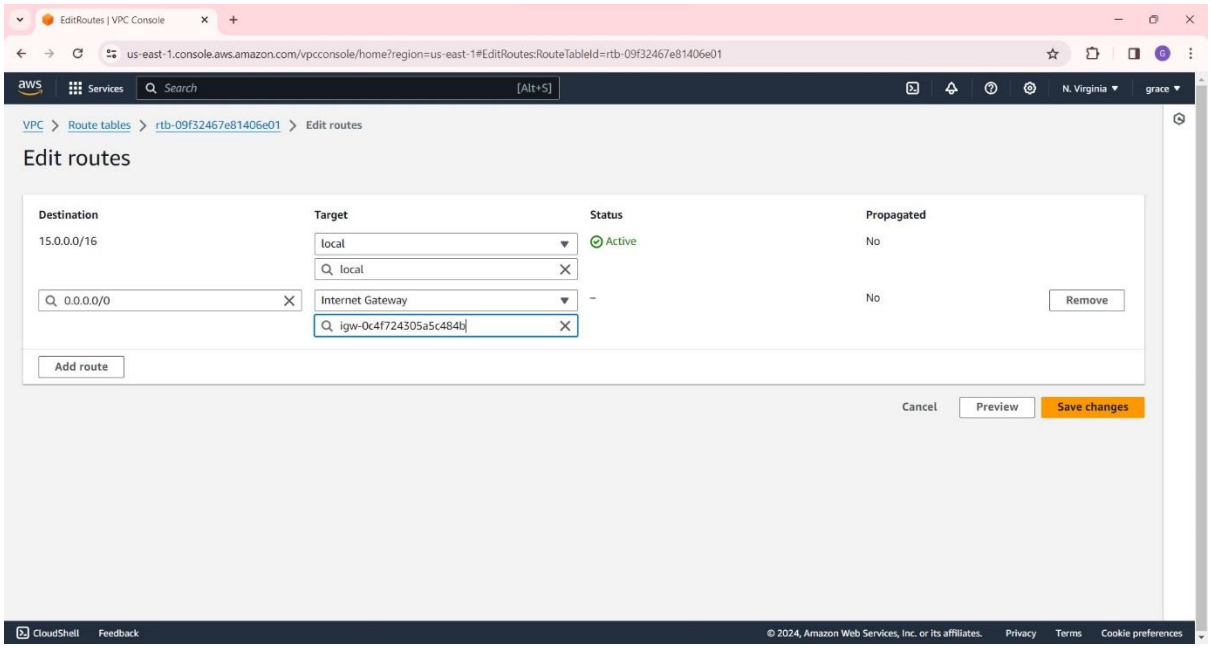


- ❖ Subnet association

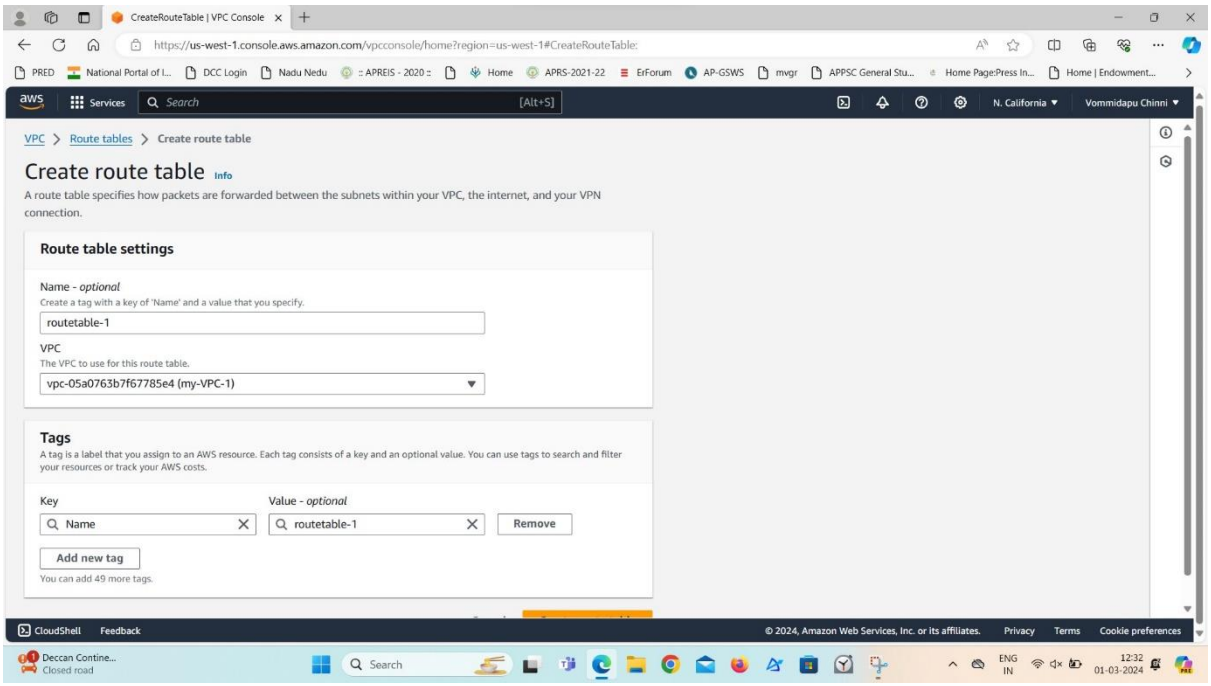


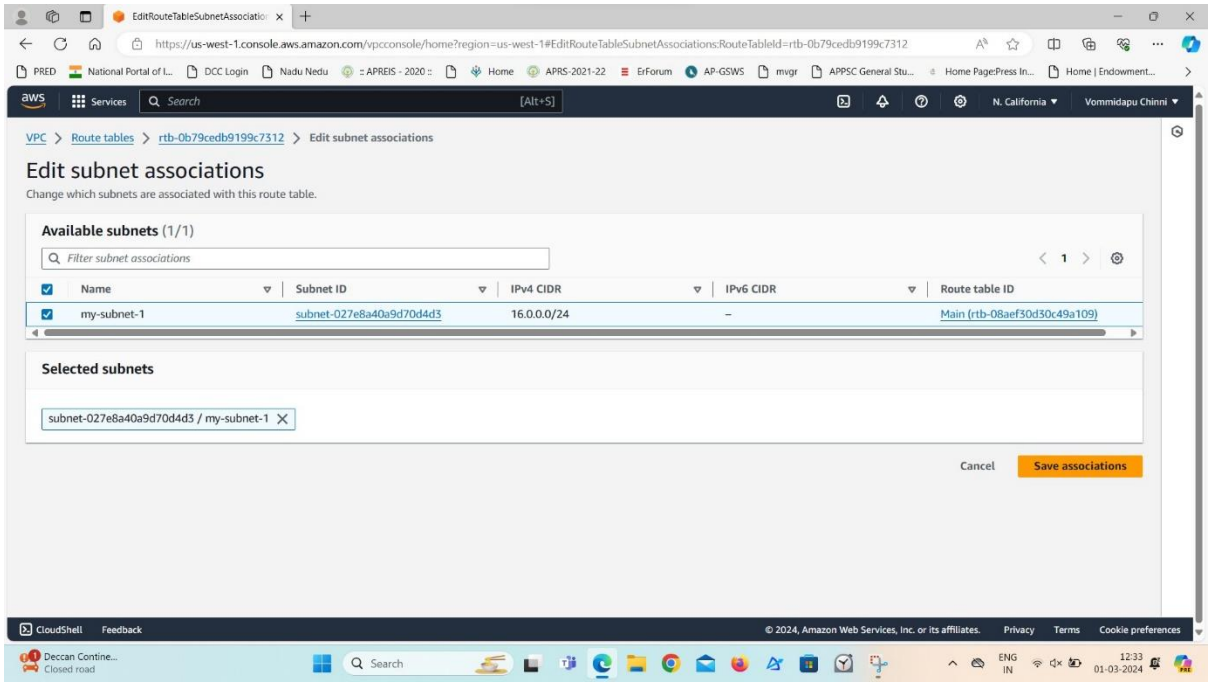
Add internet gate way to the route table.

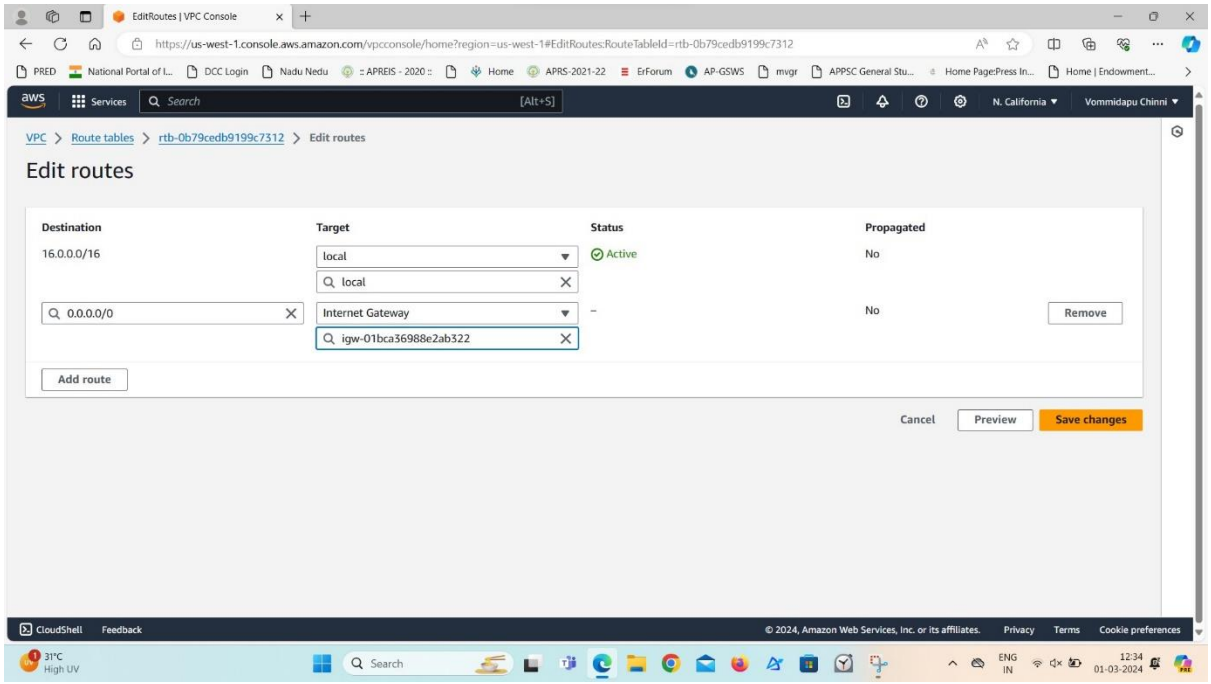
Actions → edit routes → add route → internet gateway → select the created igw → give all traffic (0.0.0.0/0) → save changes.



❖ Route table in California.

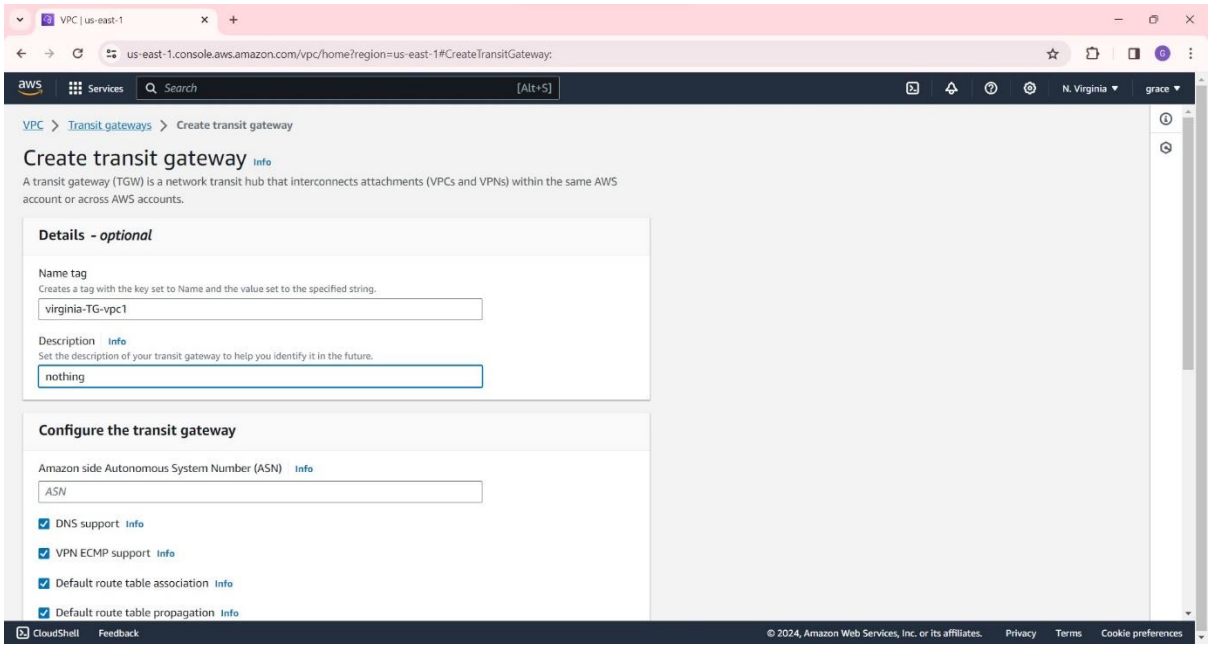




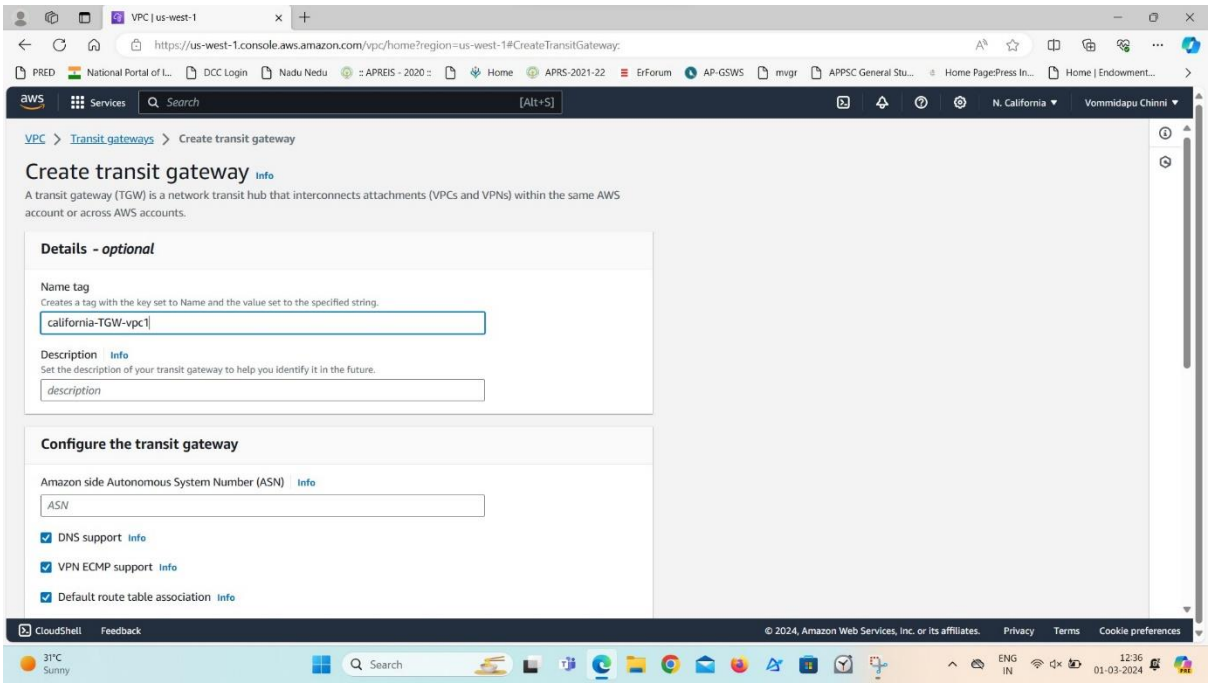


Step 6: Create transit gateway.

- ❖ Transit gateway in Virginia.

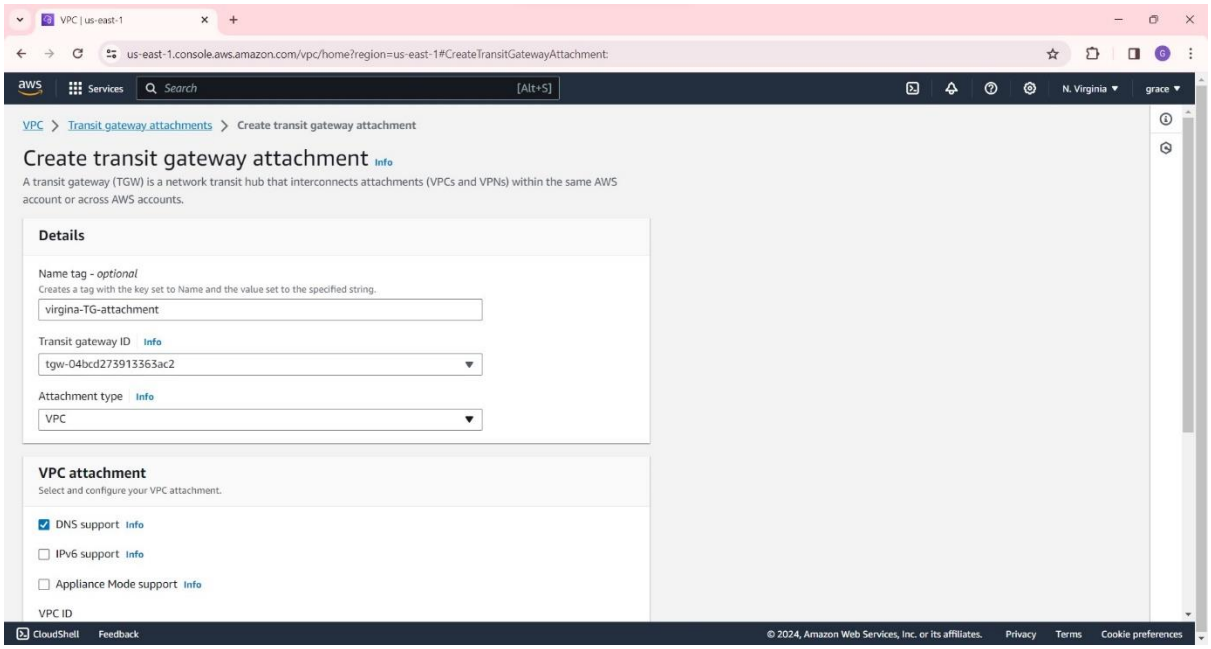


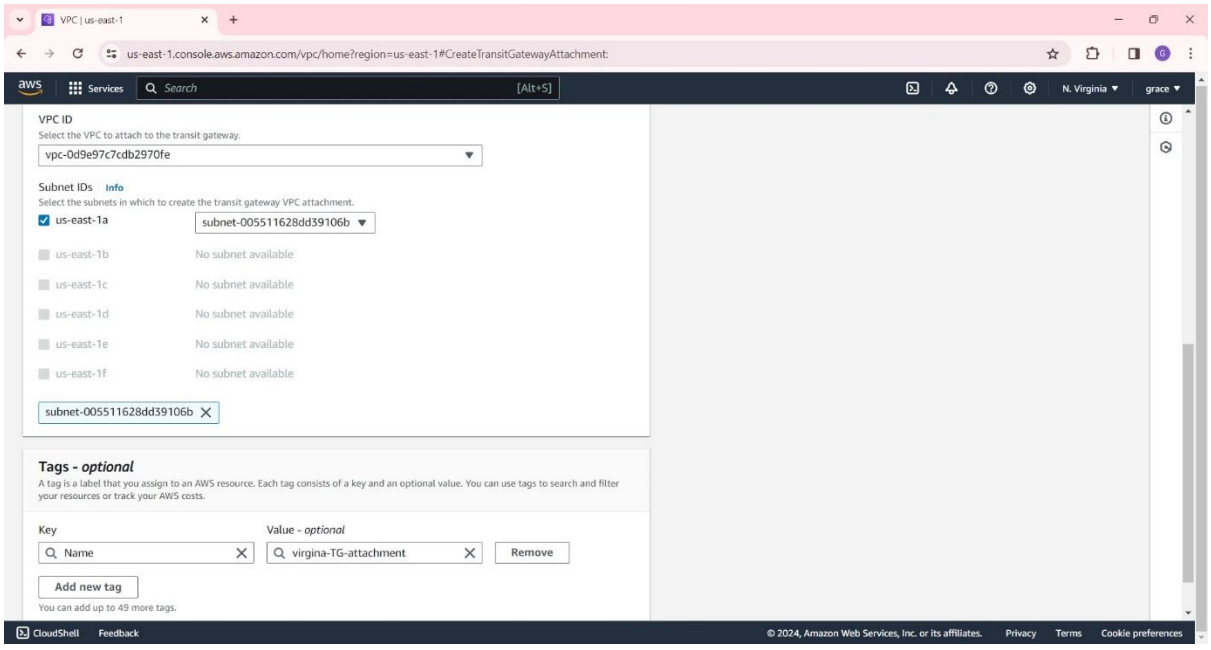
❖ Transit gateway in California.

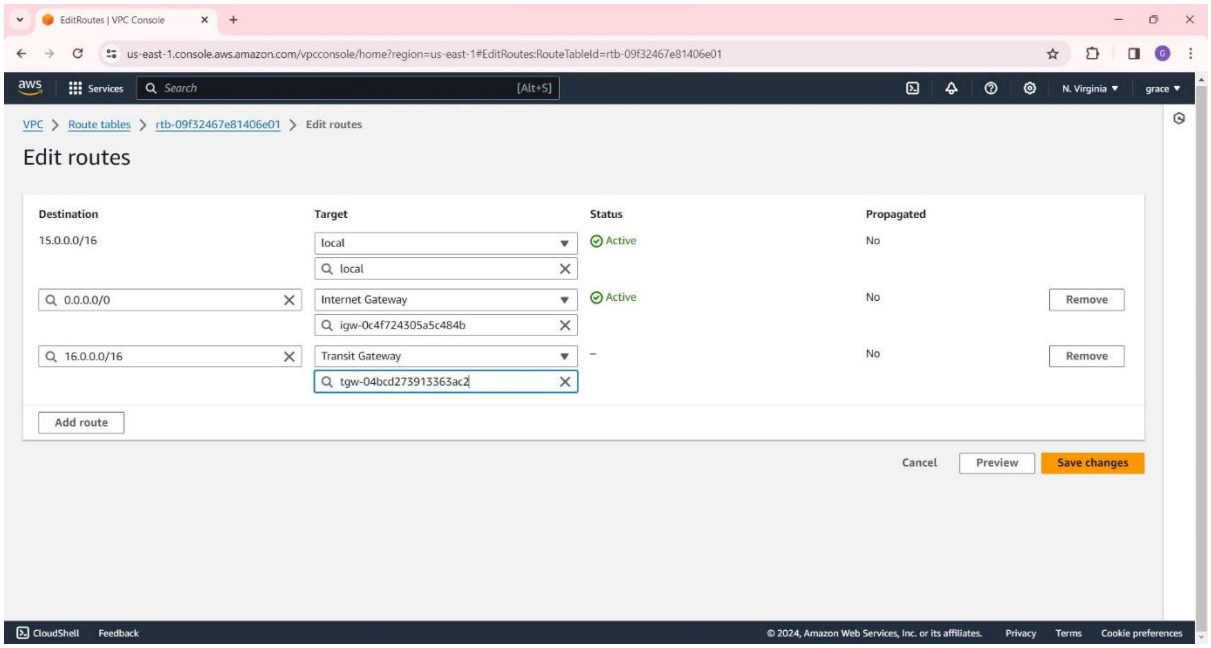


Step 7: Create transit gateway attachment.

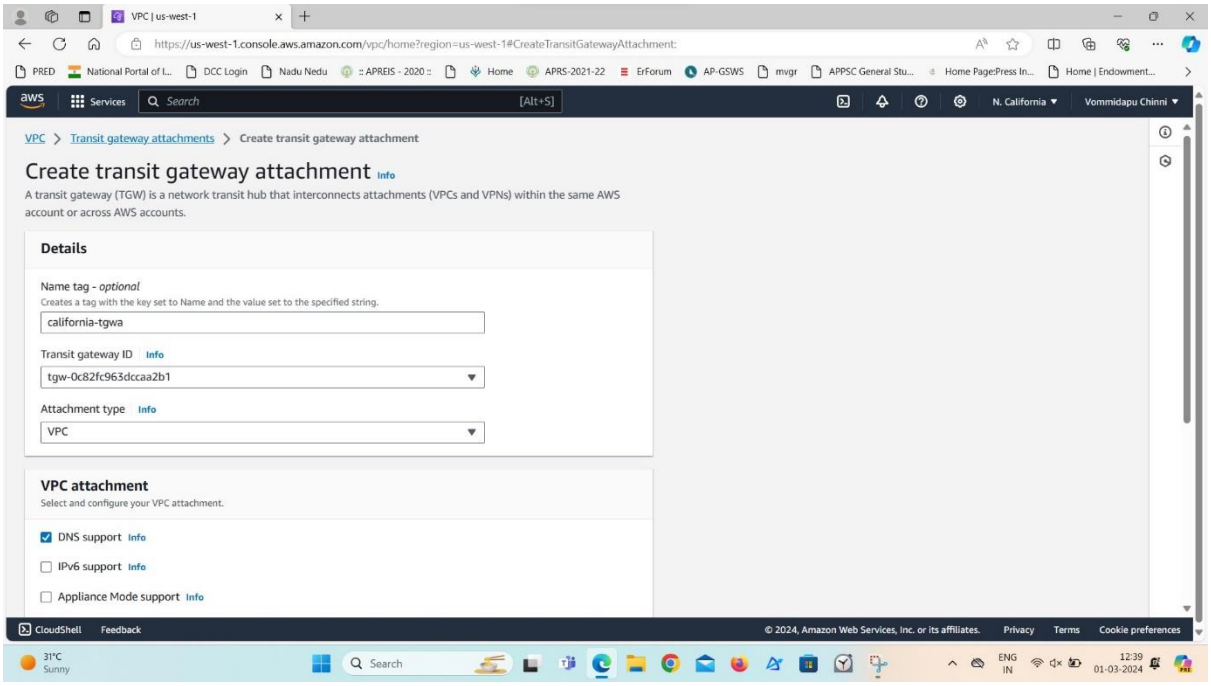
- ❖ Transit gateway attachment in Virginia.

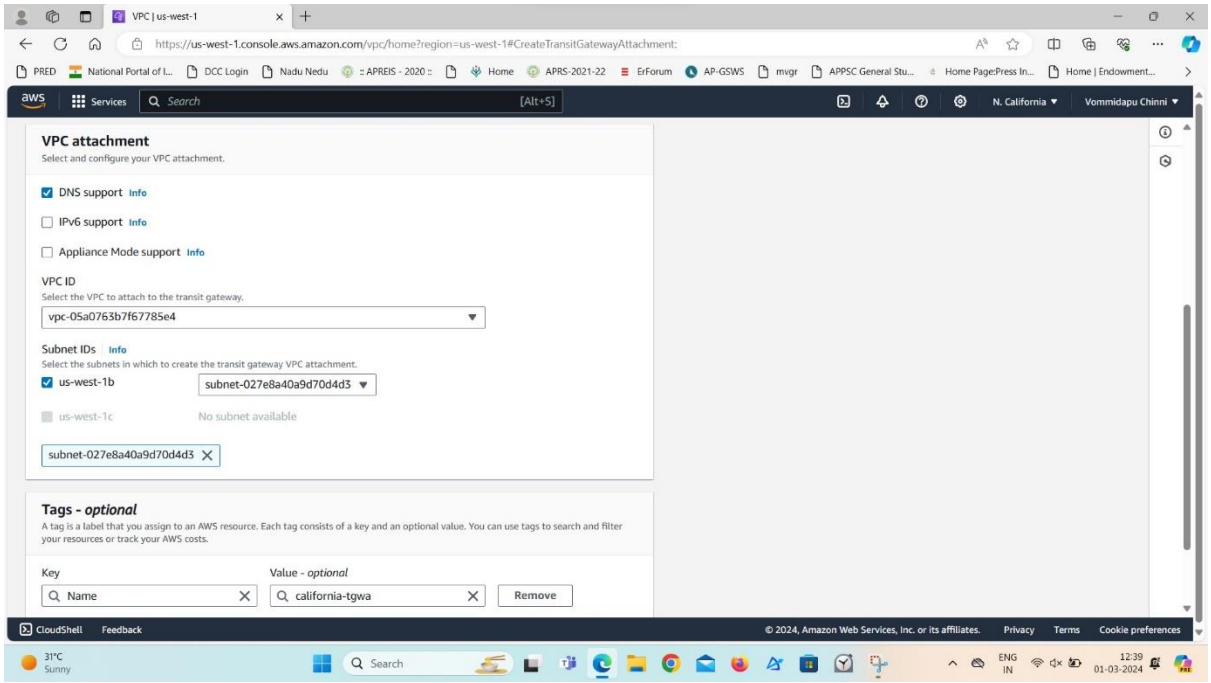


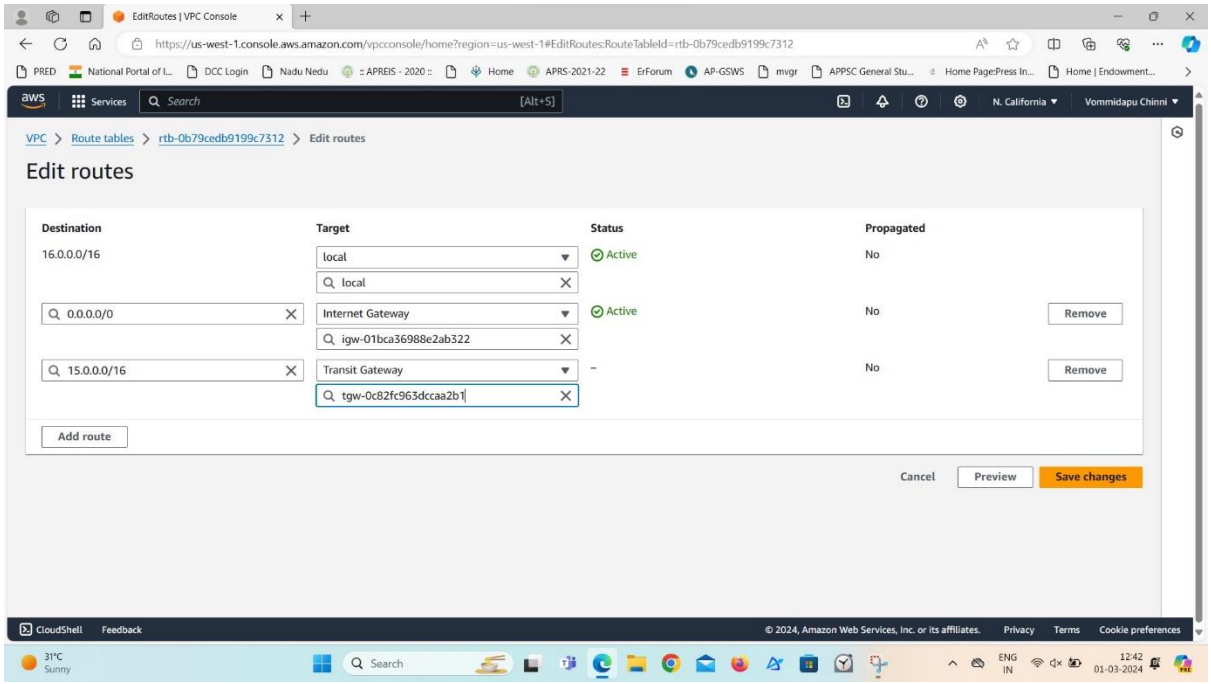




❖ Transit gateway attachment in California.

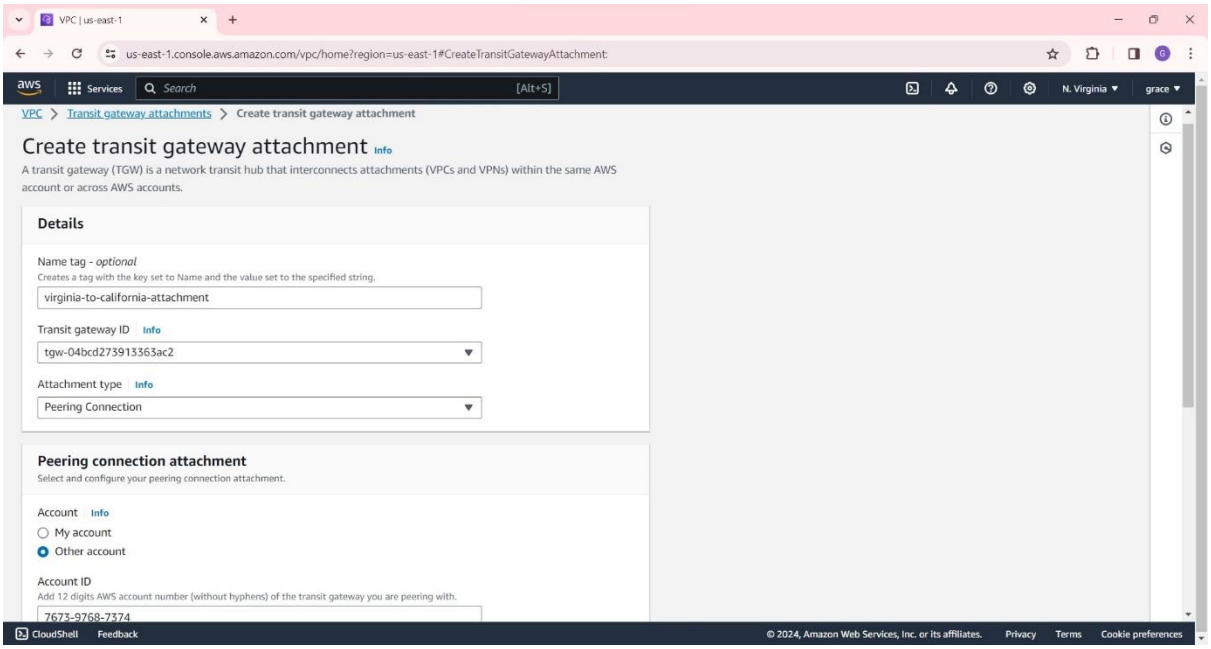


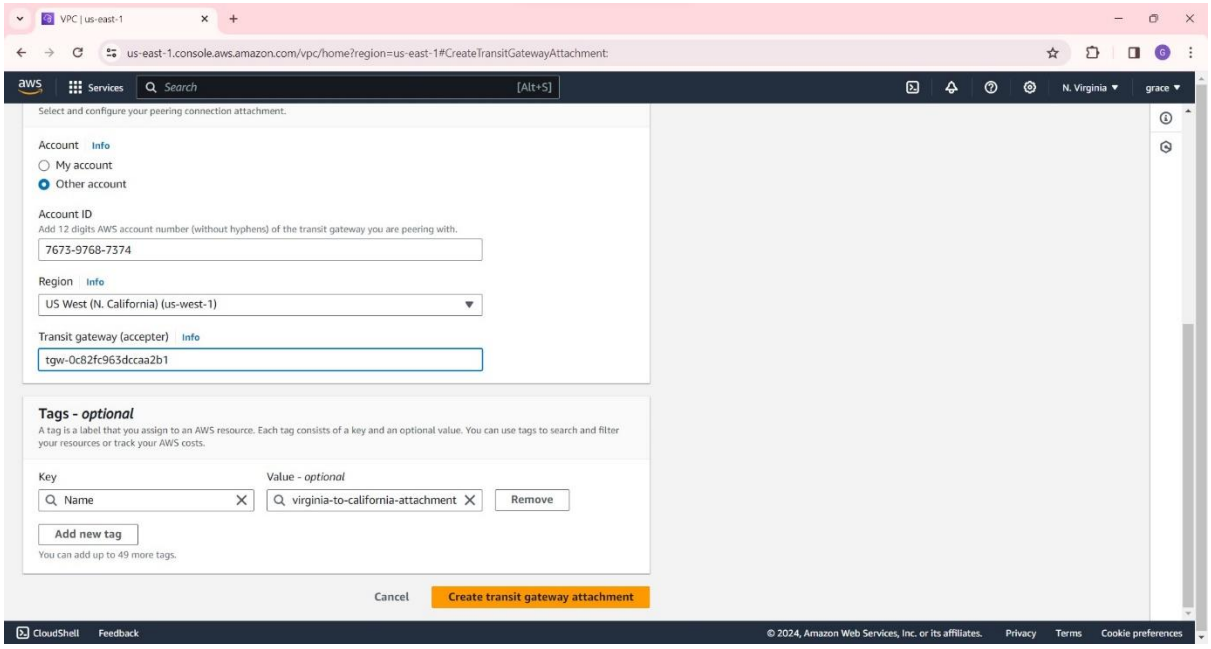

VPC | us-west-1
https://us-west-1.console.aws.amazon.com/vpc/home?region=us-west-1#CreateTransitGatewayAttachment:
VPC attachment
Select and configure your VPC attachment.
DNS support Info
IPv6 support Info
Appliance Mode support Info
VPC ID
Select the VPC to attach to the transit gateway.
vpc-05a0763b7f67785e4
Subnet IDs Info
Select the subnets in which to create the transit gateway VPC attachment.
us-west-1b
subnet-027e8a40a9d70d4d3
us-west-1c
No subnet available
subnet-027e8a40a9d70d4d3
Tags - optional
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
Key
Value - optional
Name
california-tgwa
Remove
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


EditRoutes | VPC Console
https://us-west-1.console.aws.amazon.com/vpcconsole/home?region=us-west-1#EditRoutes:RouteTableId=rtb-0b79cedb9199c7312
VPC > Route tables > rtb-0b79cedb9199c7312 > Edit routes
Edit routes
Destination
Target
Status
Propagated
16.0.0.0/16
local
local
Active
No
0.0.0.0/0
Internet Gateway
igw-01bca36988e2ab322
Active
No
Remove
15.0.0.0/16
Transit Gateway
tgw-0c82fc963dccaa2b1
–
No
Remove
Add route
Cancel
Preview
Save changes
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

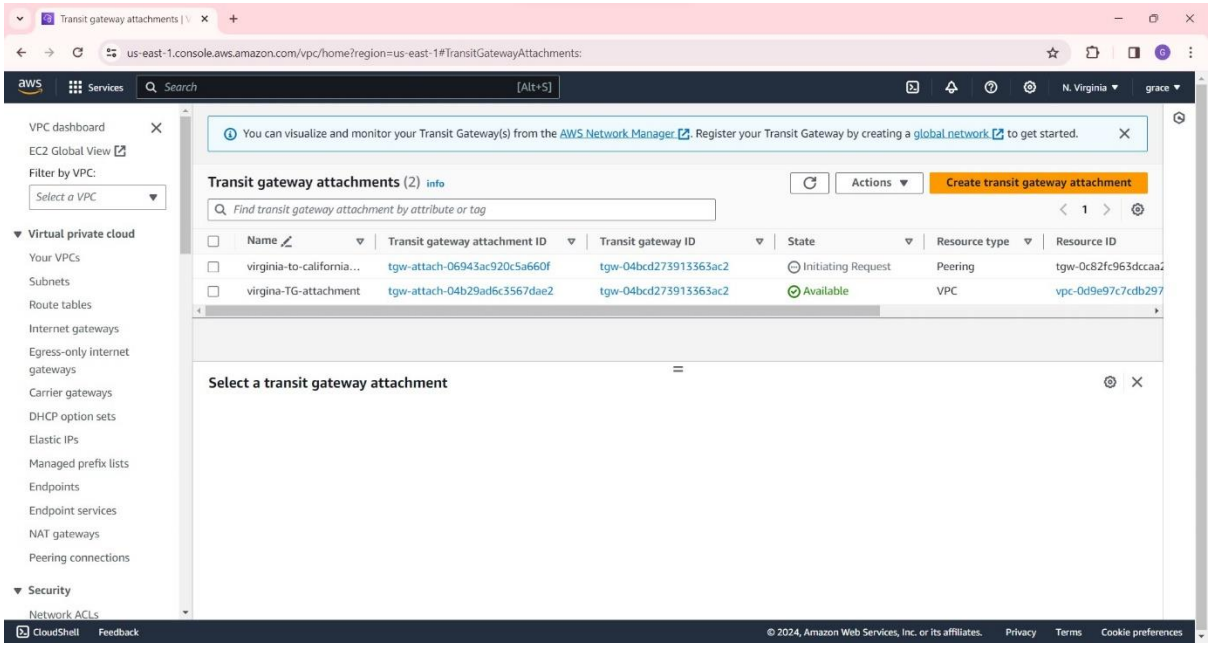
Step 8: Create transit gateway attachment for peering connection.

Creating transit gateway attachment for connecting two different accounts.

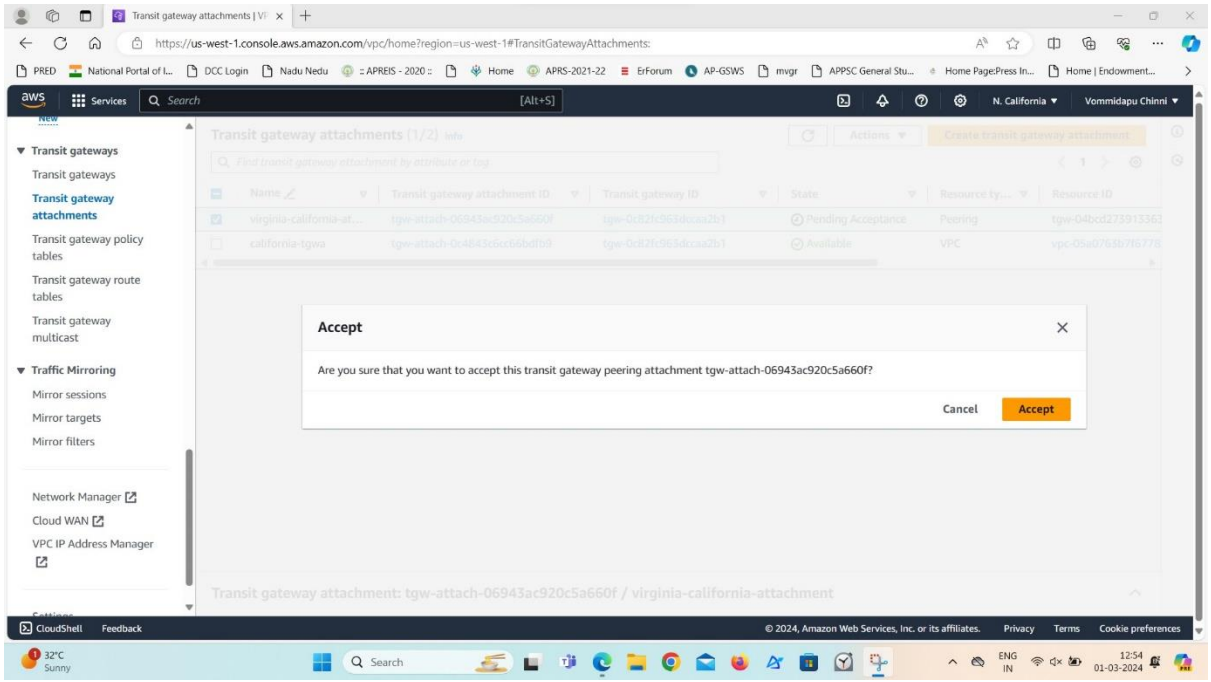


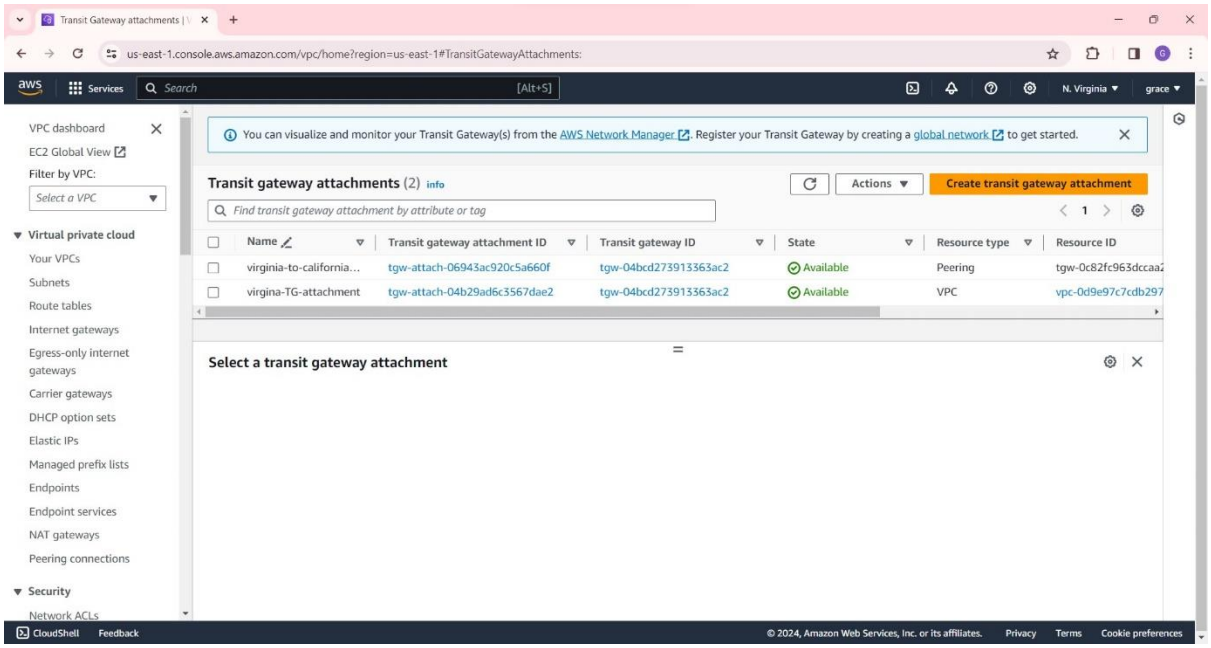


❖ Initiating request in account 1 in Virginia.



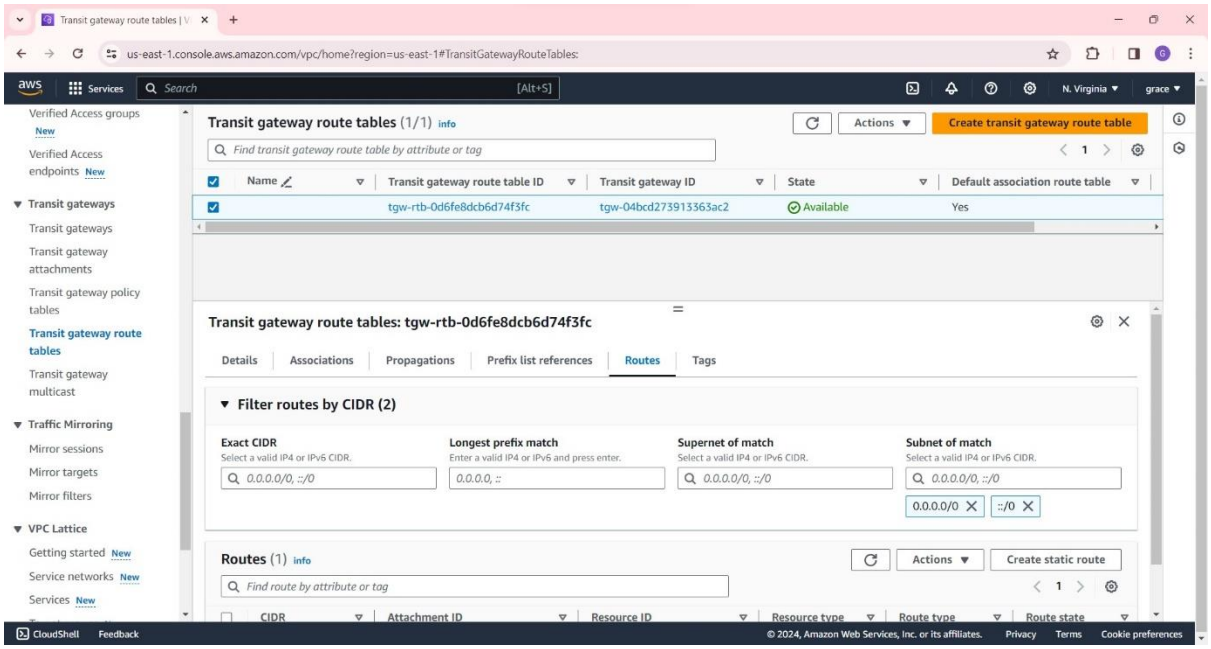
Accepting request in account 2 calofornia.

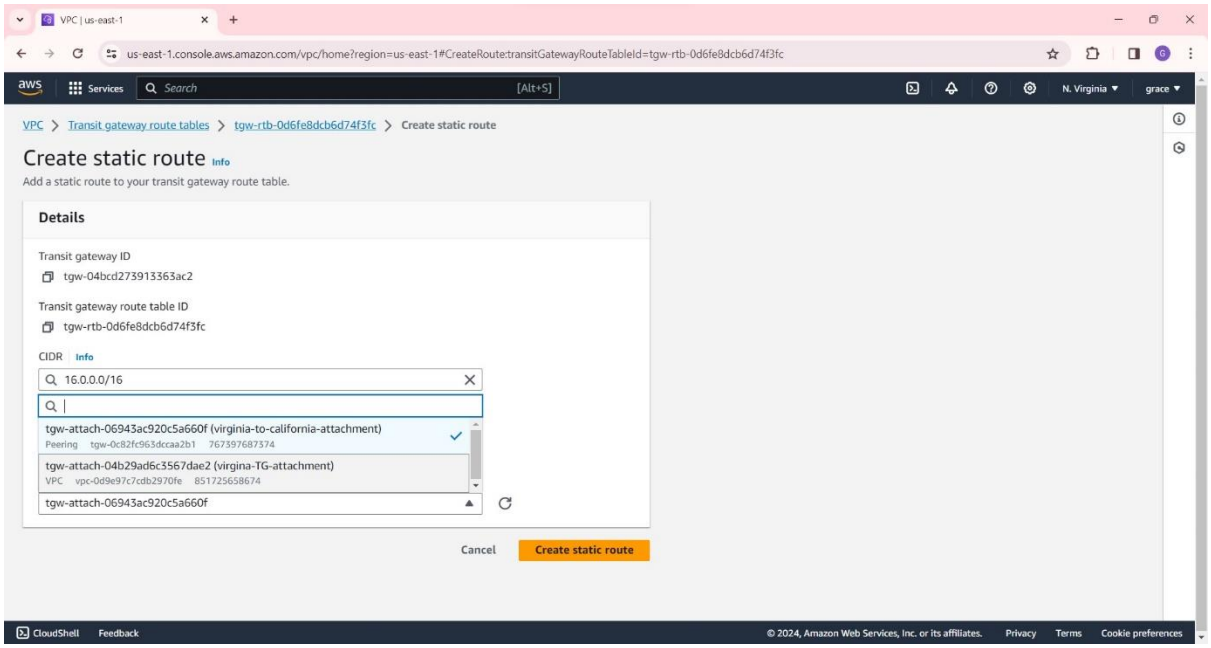




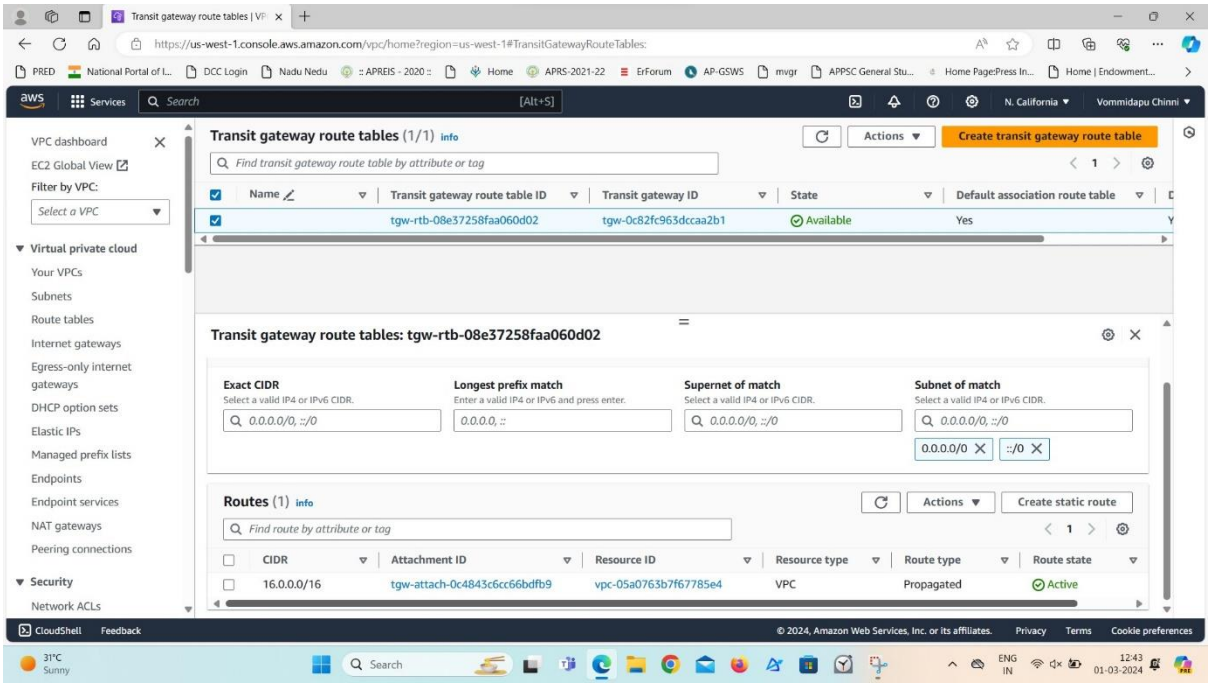
Step 9: Create static route table in transit gateway route table.

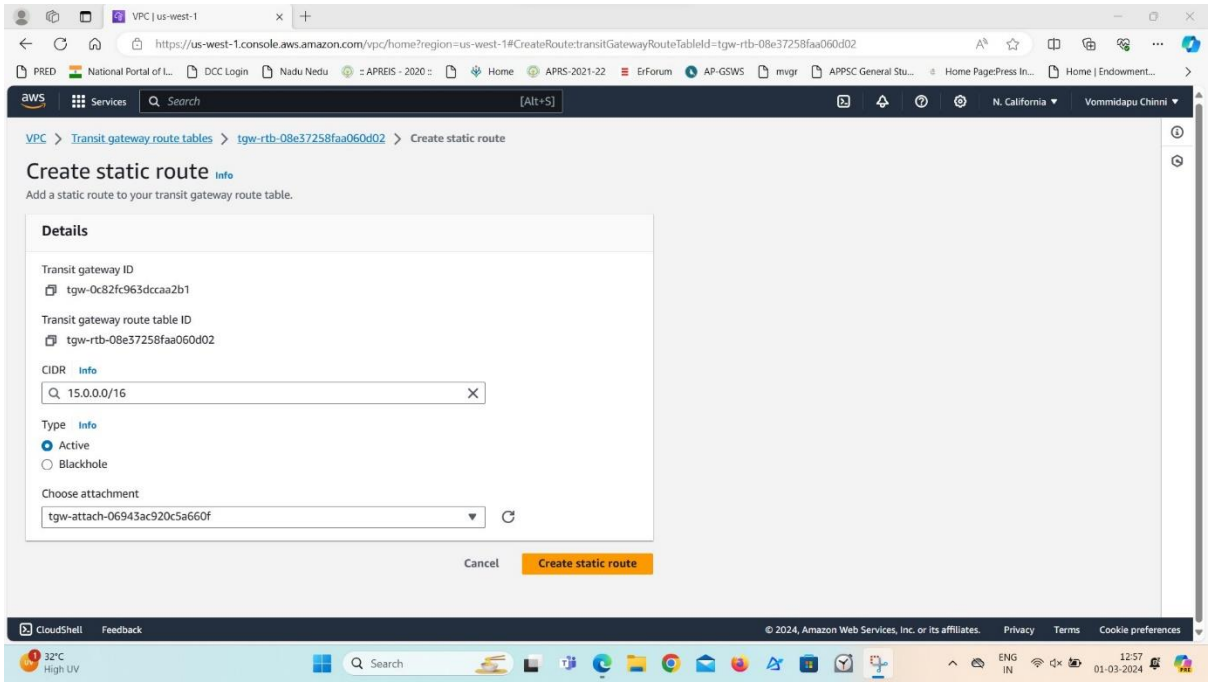
- ❖ Static route table in Virginia.





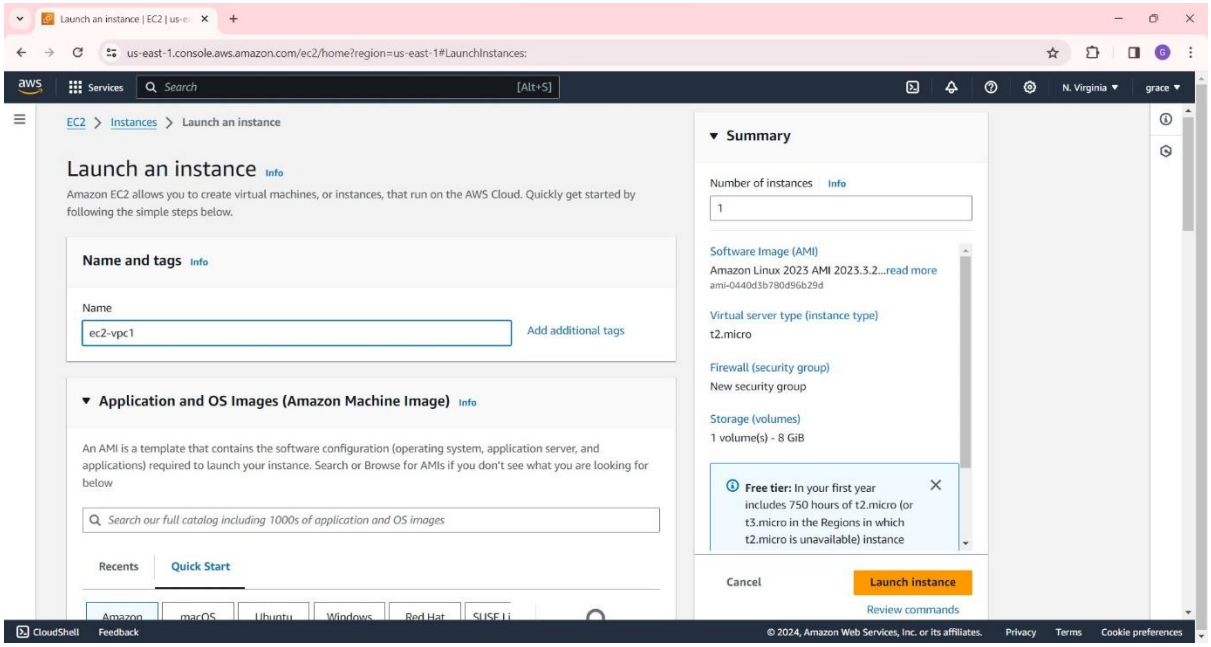
❖ Static route table in California.



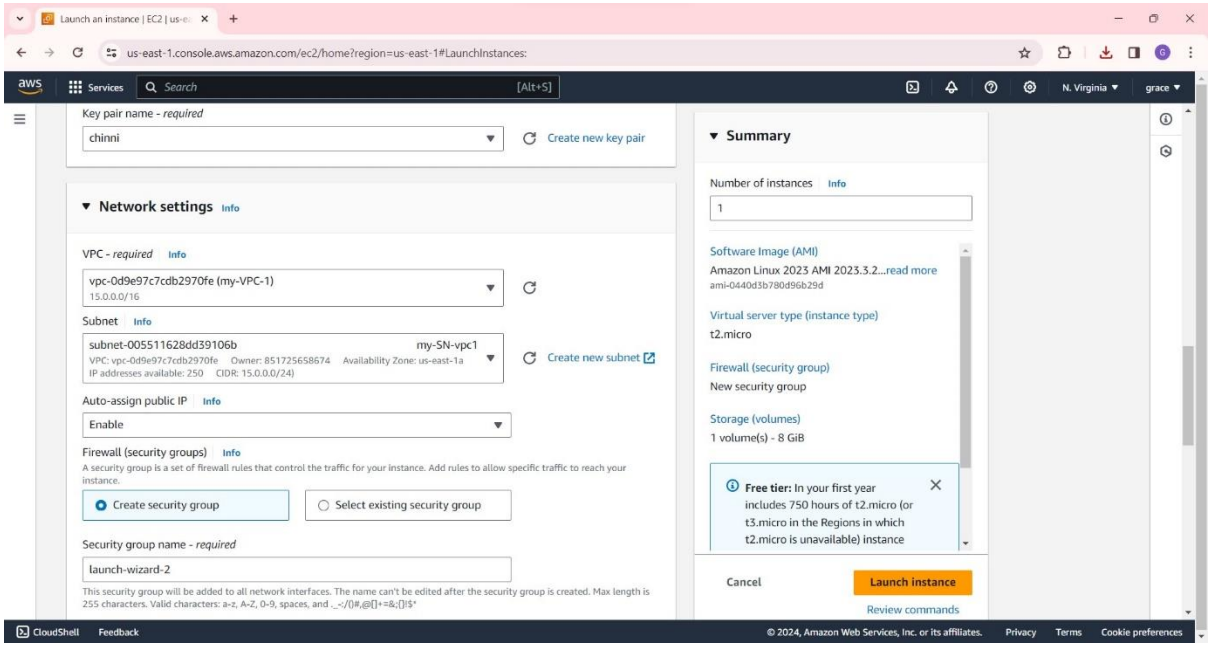


Step 10: Launch instance.

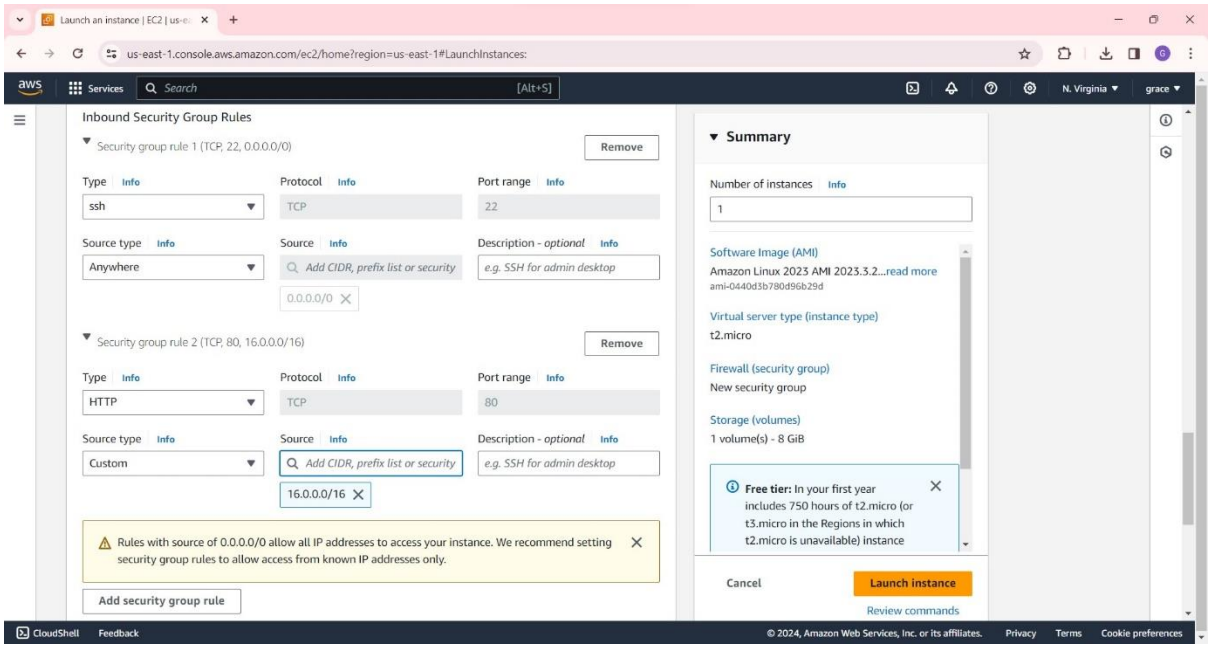
- ❖ Launching an instance in Virginia.



Select respected VPC and subnet.

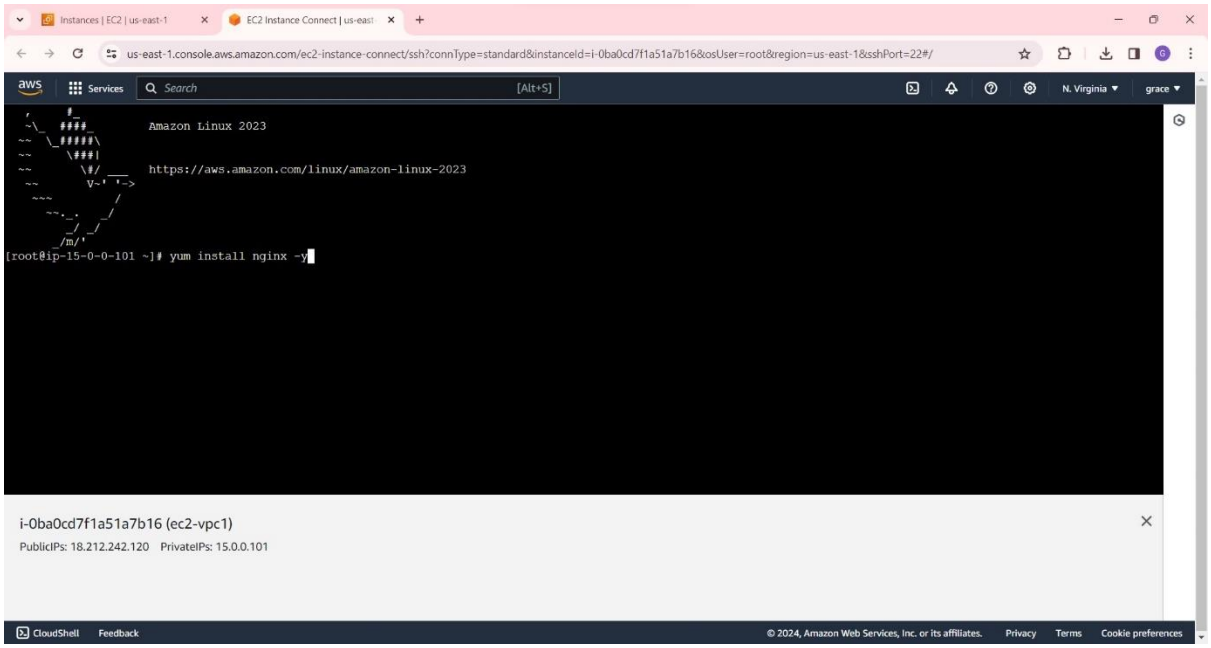


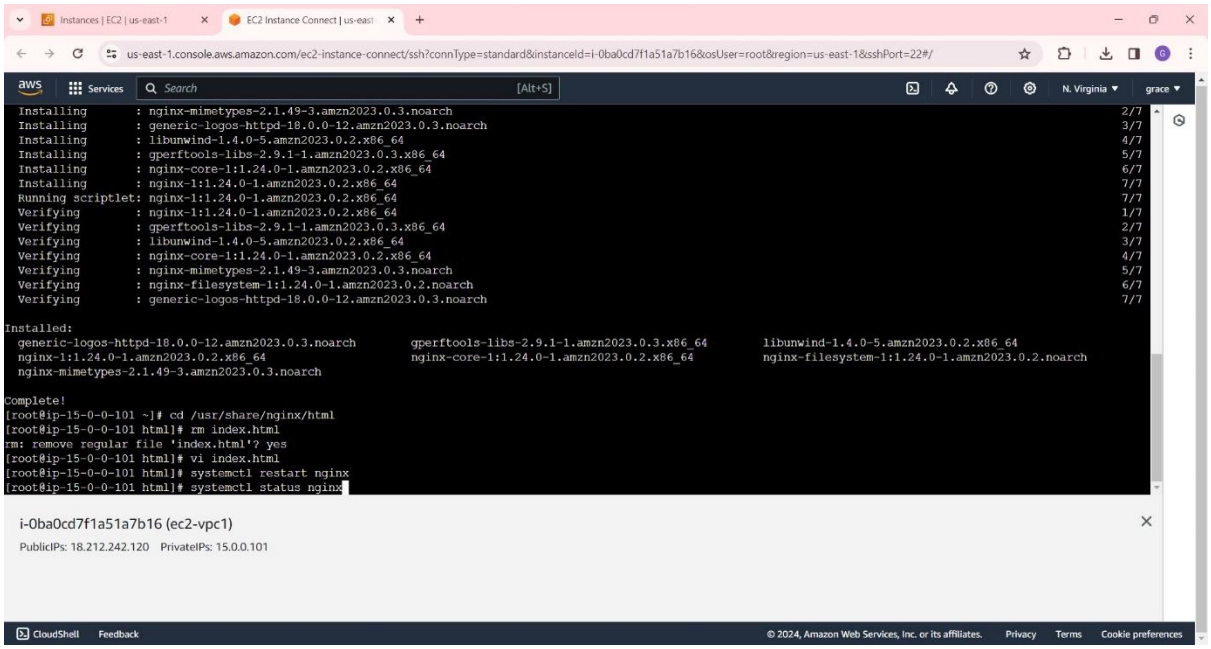
Give inbound security group rules.

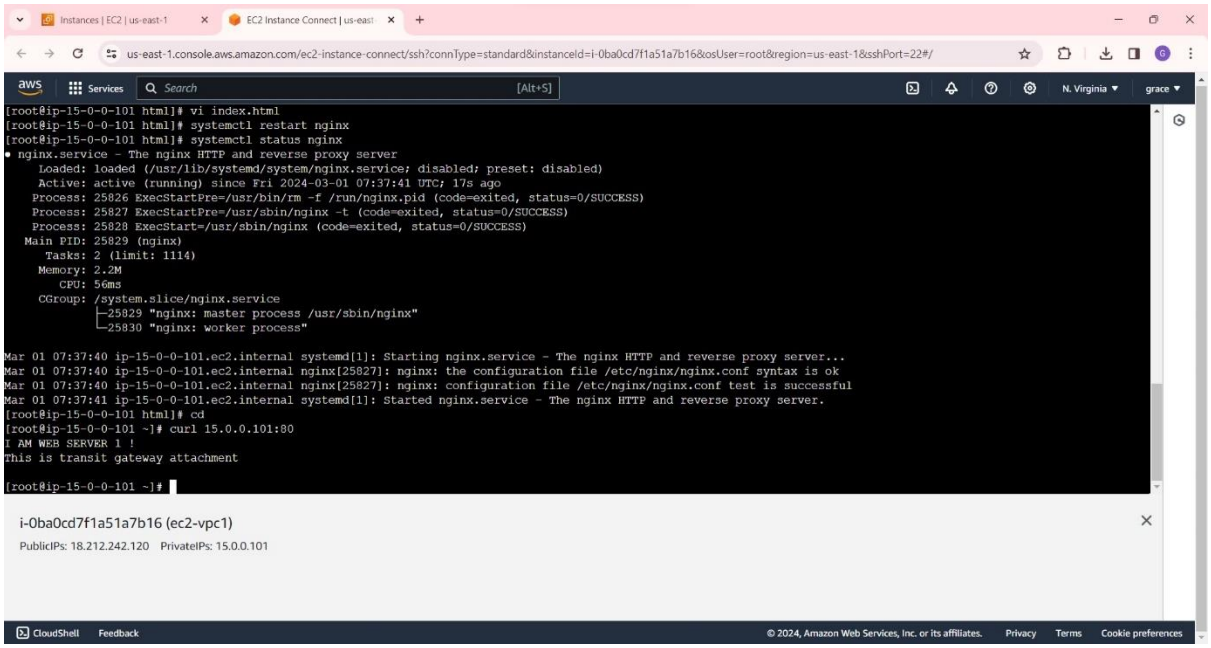


Launch instance.

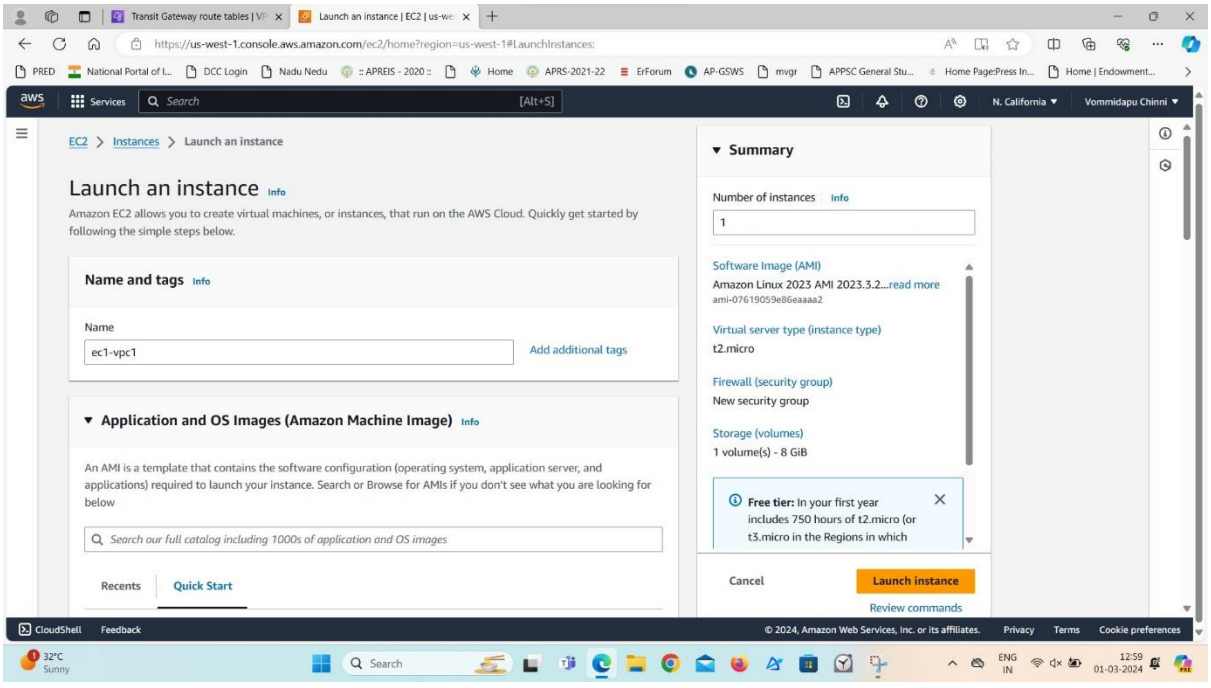
Connect to the server.

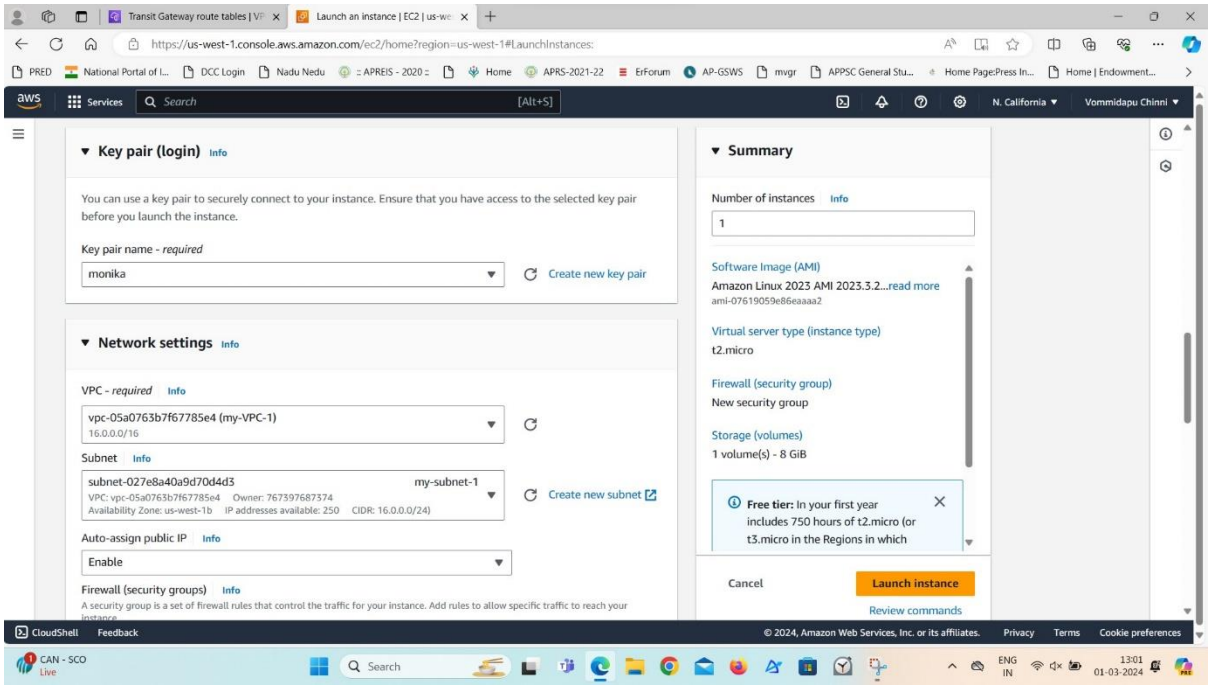

Instances | EC2 | us-east-1
EC2 Instance Connect | us-east
us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0ba0cd7f1a51a7b16&osUser=root&region=us-east-1&sshPort=22#/
Services
Search
[Alt+S]
N. Virginia
grace
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
[root@ip-15-0-0-101 ~]# yum install nginx -y
i-0ba0cd7f1a51a7b16 (ec2-vpc1)
PublicIPs: 18.212.242.120 PrivateIPs: 15.0.0.101
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

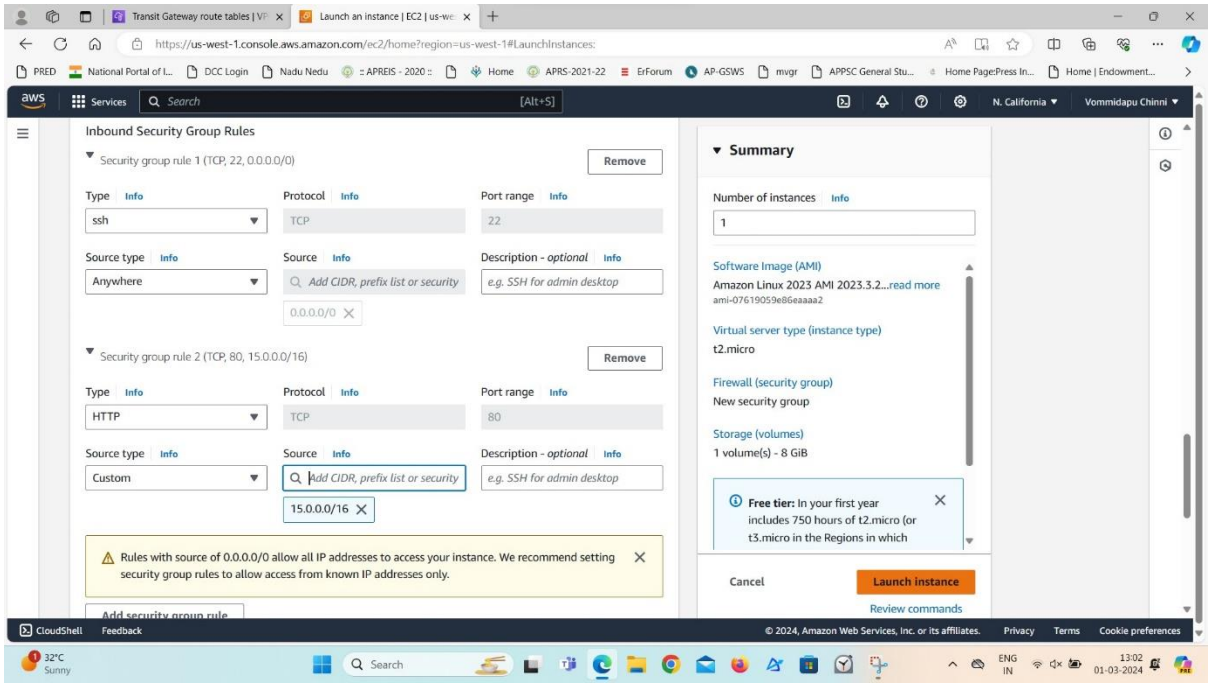

Instances | EC2 | us-east-1
EC2 Instance Connect | us-east
us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0ba0cd7f1a51a7b16&osUser=root&region=us-east-1&sshPort=22#/
Services
Search
[Alt+S]
N. Virginia
grace
Installing : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 2/7
Installing : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 3/7
Installing : libunwind-1.4.0-5.amzn2023.0.2.x86_64 4/7
Installing : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 5/7
Installing : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 6/7
Installing : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Running scriptlet: nginx-1:1.24.0-1.amzn2023.0.2.x86_64 7/7
Verifying : nginx-1:1.24.0-1.amzn2023.0.2.x86_64 1/7
Verifying : gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64 2/7
Verifying : libunwind-1.4.0-5.amzn2023.0.2.x86_64 3/7
Verifying : nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64 4/7
Verifying : nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch 5/7
Verifying : nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch 6/7
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 7/7
Installed:
generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch
gperftools-libs-2.9.1-1.amzn2023.0.3.x86_64
libunwind-1.4.0-5.amzn2023.0.2.x86_64
nginx-1:1.24.0-1.amzn2023.0.2.x86_64
nginx-core-1:1.24.0-1.amzn2023.0.2.x86_64
nginx-filesystem-1:1.24.0-1.amzn2023.0.2.noarch
nginx-mimetypes-2.1.49-3.amzn2023.0.3.noarch
Complete!
[root@ip-15-0-0-101 ~]# cd /usr/share/nginx/html
[root@ip-15-0-0-101 html]# rm index.html
rm: remove regular file 'index.html'? yes
[root@ip-15-0-0-101 html]# vi index.html
[root@ip-15-0-0-101 html]# systemctl restart nginx
[root@ip-15-0-0-101 html]# systemctl status nginx
i-0ba0cd7f1a51a7b16 (ec2-vpc1)
PublicIPs: 18.212.242.120 PrivateIPs: 15.0.0.101
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences



❖ Launching an instance in California.




Transit Gateway route tables | VP
Launch an instance | EC2 | us-we
https://us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#LaunchInstances:
Services
Search
[Alt+S]
N. California
Vommidapu Chinni
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name - required
monika
Create new key pair
Network settings Info
VPC - required Info
vpc-05a0763b7f67785e4 (my-VPC-1)
16.0.0.0/16
Subnet Info
subnet-027e8a40a9d70d4d3 my-subnet-1
VPC: vpc-05a0763b7f67785e4 Owner: 767397687374
Availability Zone: us-west-1b IP addresses available: 250 CIDR: 16.0.0.0/24)
Create new subnet
Auto-assign public IP Info
Enable
Firewall (security groups) Info
A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.3.2...read more
ami-07619059e86eaaaa2
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which
Cancel
Launch instance
Review commands
CloudShell
Feedback
© 2024, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences
CAN - SCO
Live
Search
ENG
IN
13:01
01-03-2024


Transit Gateway route tables | VP
Launch an instance | EC2 | us-we
https://us-west-1.console.aws.amazon.com/ec2/home?region=us-west-1#LaunchInstances:
Services
Search
[Alt+S]
N. California
Vommidapu Chinni
Inbound Security Group Rules
Security group rule 1 (TCP, 22, 0.0.0.0/0)
Remove
Type Info
ssh
Protocol Info
TCP
Port range Info
22
Source type Info
Anywhere
Source Info
Add CIDR, prefix list or security
0.0.0.0/0
Description - optional Info
e.g. SSH for admin desktop
Security group rule 2 (TCP, 80, 15.0.0.0/16)
Remove
Type Info
HTTP
Protocol Info
TCP
Port range Info
80
Source type Info
Custom
Source Info
Add CIDR, prefix list or security
15.0.0.0/16
Description - optional Info
e.g. SSH for admin desktop
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.
Add security group rule
Summary
Number of instances Info
1
Software Image (AMI)
Amazon Linux 2023 AMI 2023.3.2...read more
ami-07619059e86eaaaa2
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which
Cancel
Launch instance
Review commands
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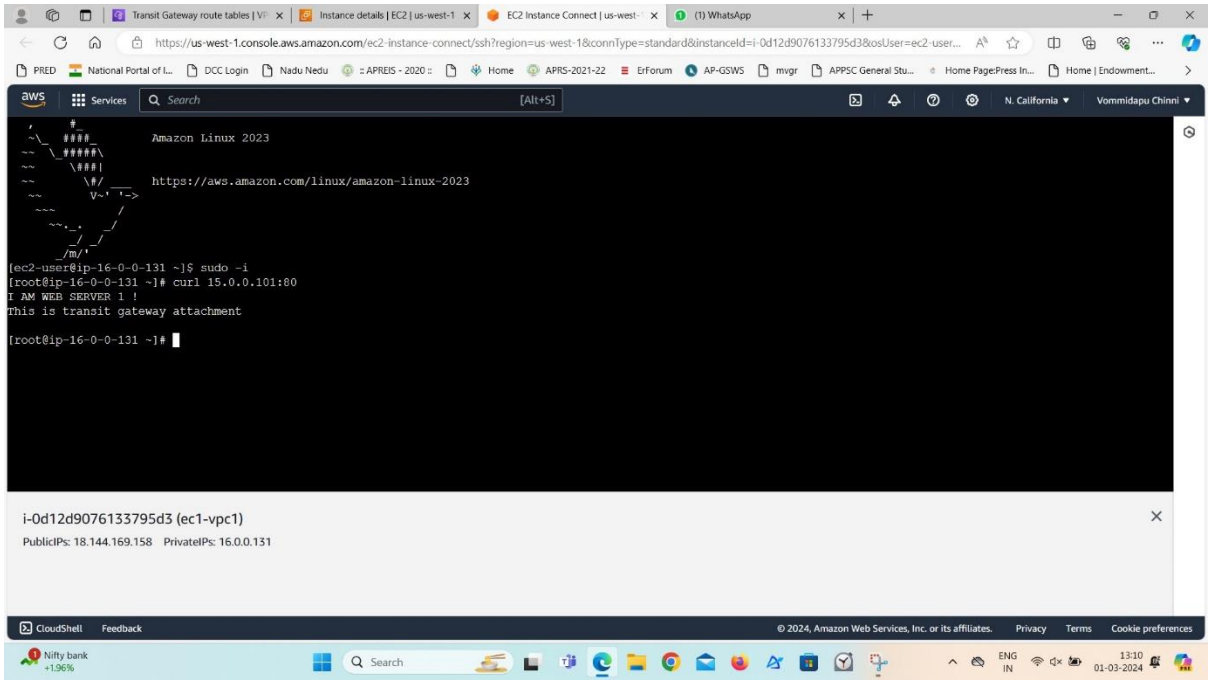
Transit Gateway route tables | VP
Instance details | EC2 | us-west-1
EC2 Instance Connect | us-west-1
(1) WhatsApp
https://us-west-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-west-1&connType=standard&instanceId=i-0d12d9076133795d3&osUser=ec2-user...
PRED
National Portal of I...
DCC Login
Nadu Nedu
:: APREIS - 2020 ::
Home
APRS-2021-22
ErForum
AP-GSWS
mvgr
APPSC General Stu...
Home Page:Press In...
Home | Endowment...
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Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
[ec2-user@ip-16-0-0-131 ~]$ sudo -i
[root@ip-16-0-0-131 ~]# curl 15.0.0.101:80
I AM WEB SERVER 1 !
This is transit gateway attachment
[root@ip-16-0-0-131 ~]#
i-0d12d9076133795d3 (ec1-vpc1)
PublicIPs: 18.144.169.158 PrivateIPs: 16.0.0.131
CloudShell
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