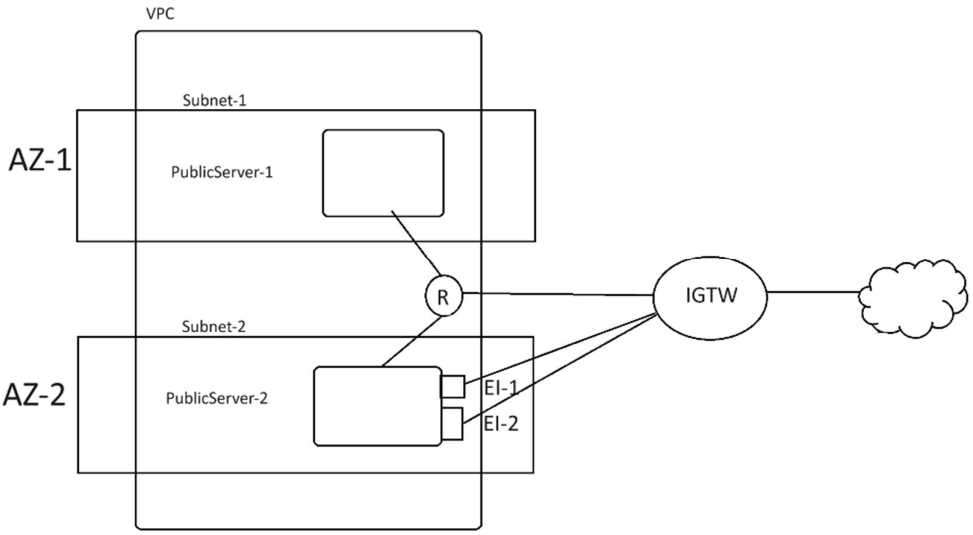
Objective:- Creating multiple ENI to access public server-2



- VPC :- 172.21.10.12

Class B 13-12 =1

Subnet mask:- 255.255.192.0

Block Size :- 256-192 = 64

IPs	SUBNET1	SUBNET2
Network	172.21.0.0 / 18	172.21.64.0 / 18
Brodcasting	172.21.63.255 / 18	172.21.127.255 / 18

- SUBNET :- 172.21.32.0 / 24

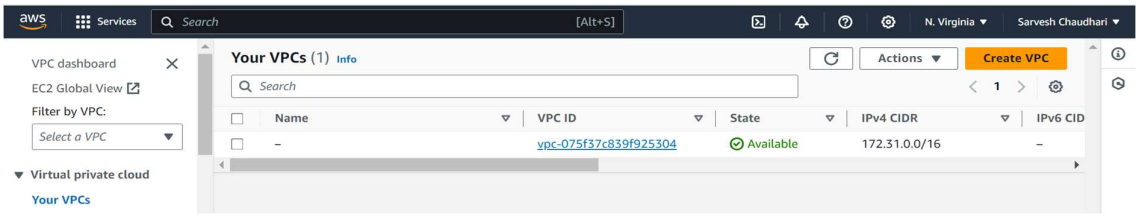
Class B 24-12 =12 Bits borrow from host

Subnet mask:- 255.255.192.0

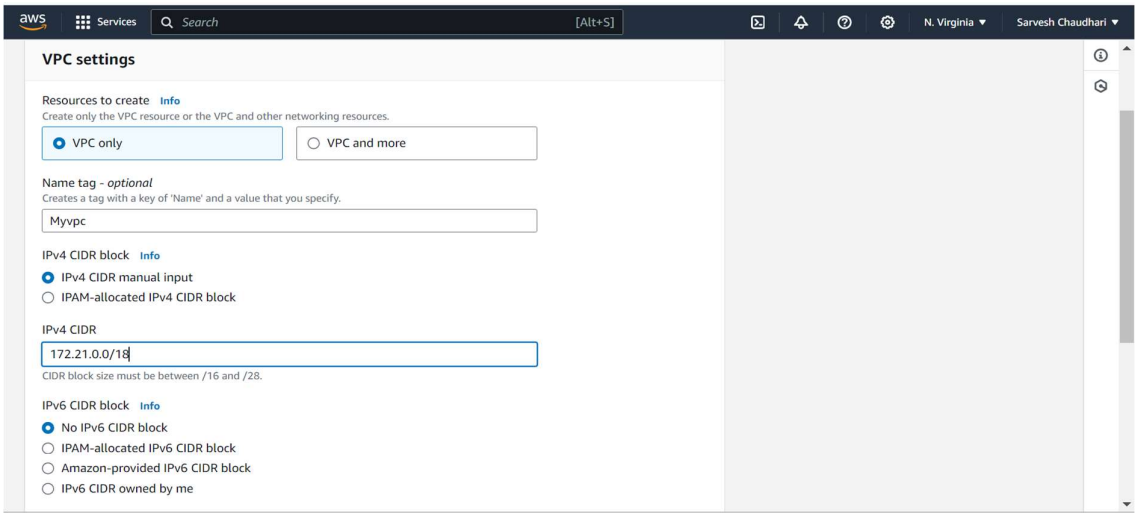
Block Size :- 256 - 255 = 1

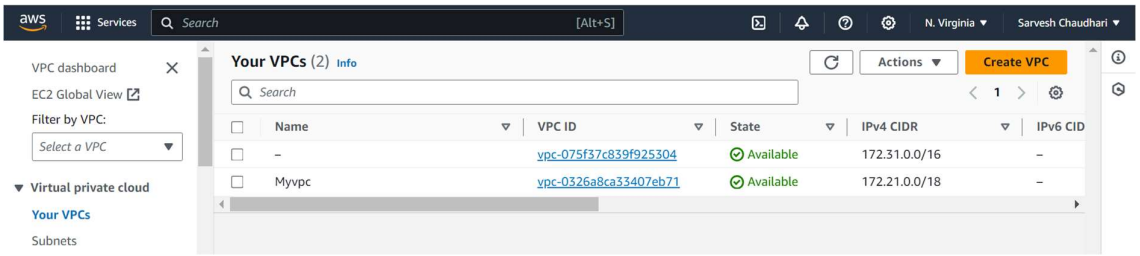
IPs	SUBNET1	SUBNET2
Network	172.21.32.0 / 24	172.21.33.0 / 24
Brodcasting	172.21.32.255 / 18	172.21.33.255 / 18

Create VPC and 2 Subnets

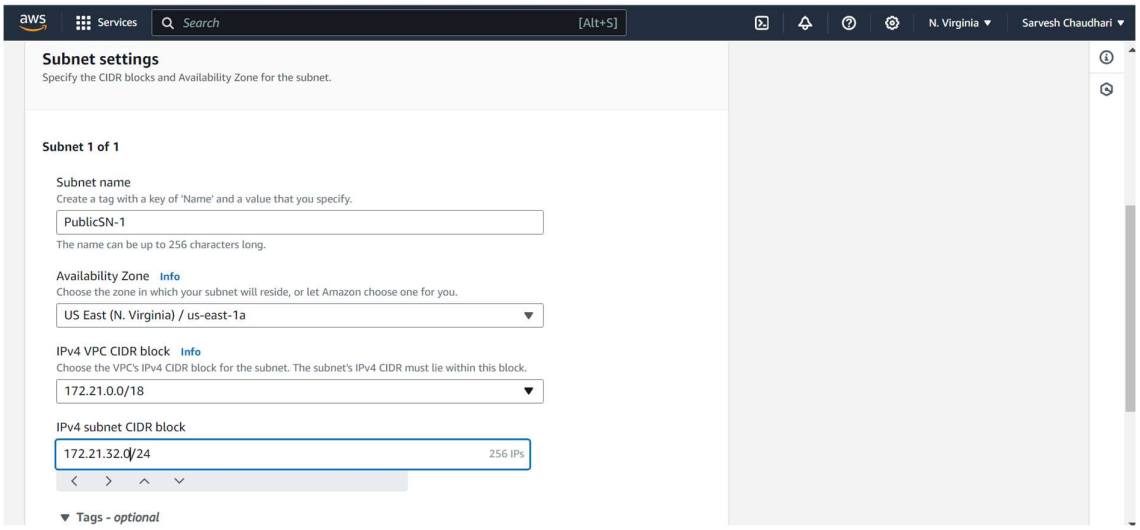


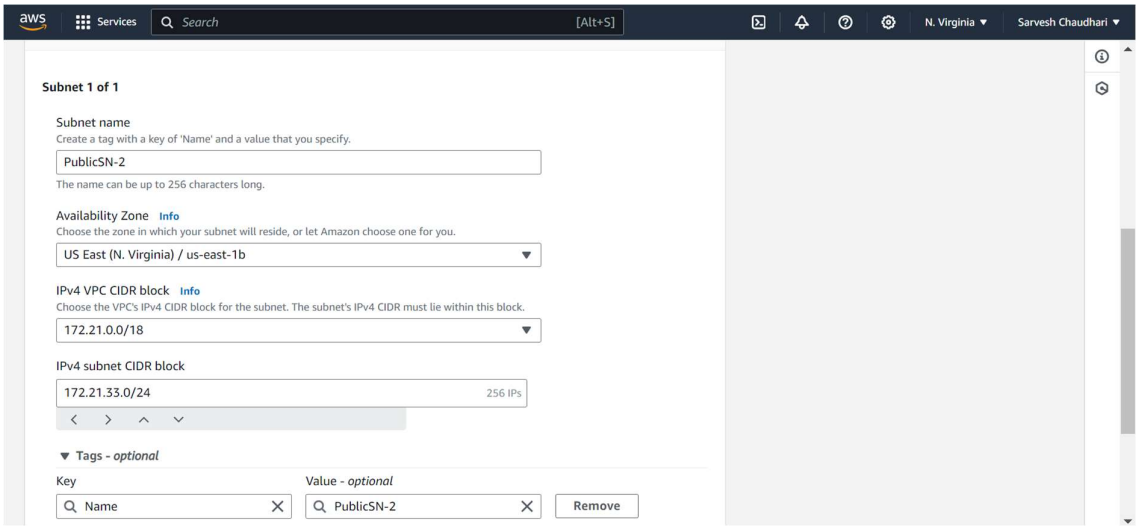
Now type name for VPC & IPv4 CIDR, then click on create VPC



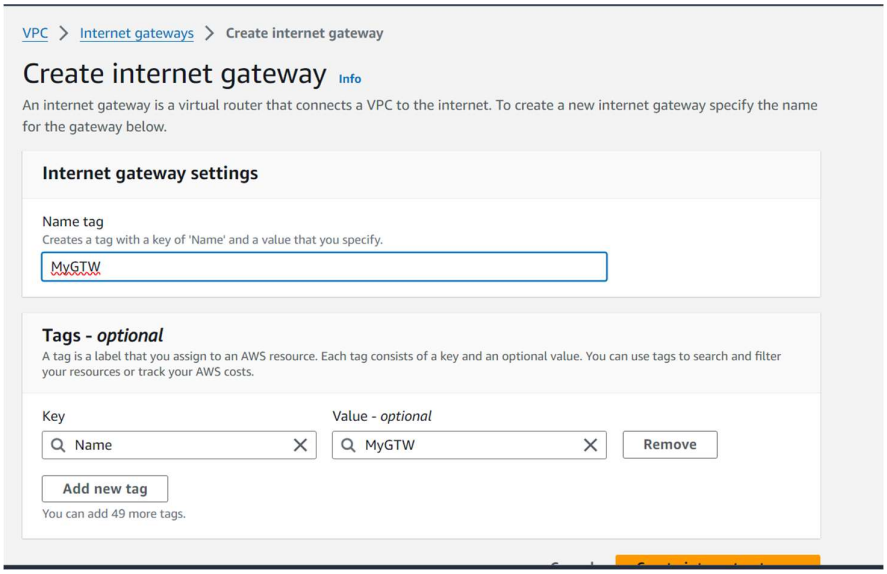


Now create subnet for Publicsubnet-1 Publicsubnet-2

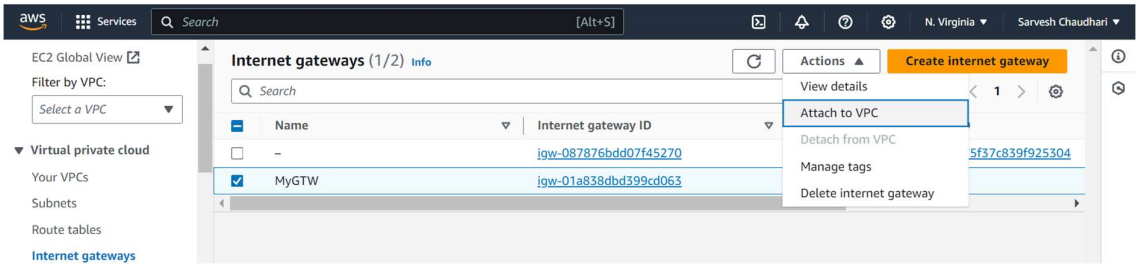




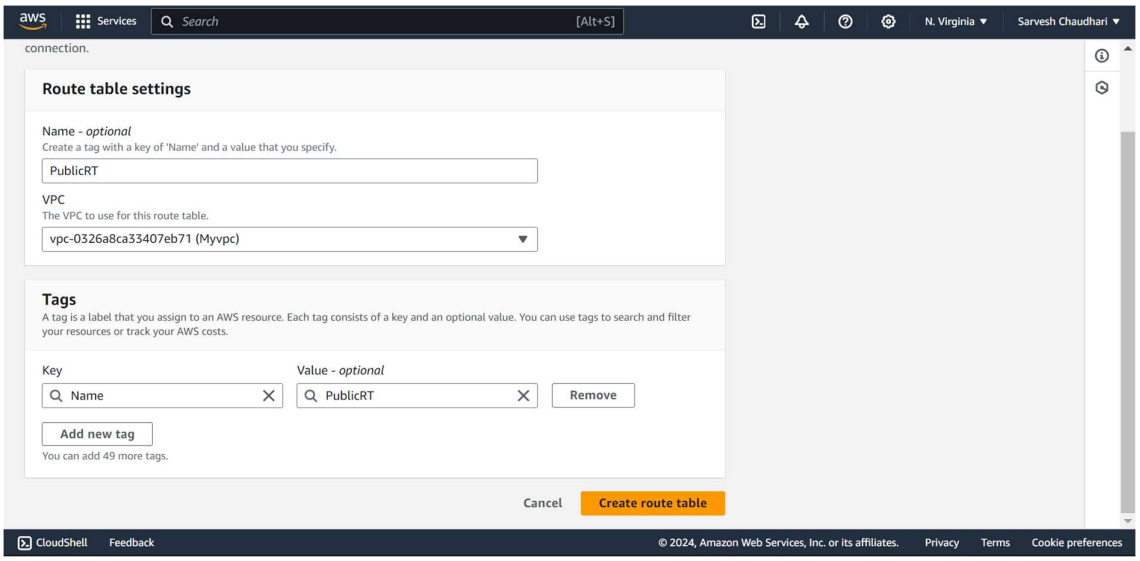
Now create Internet getway

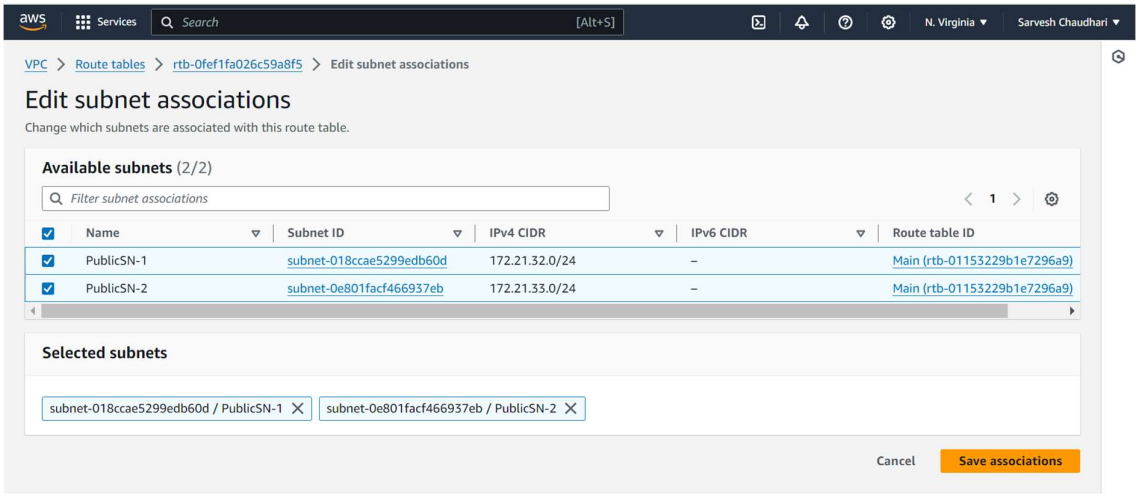


Now select Internet getway then using action Attach to VPC

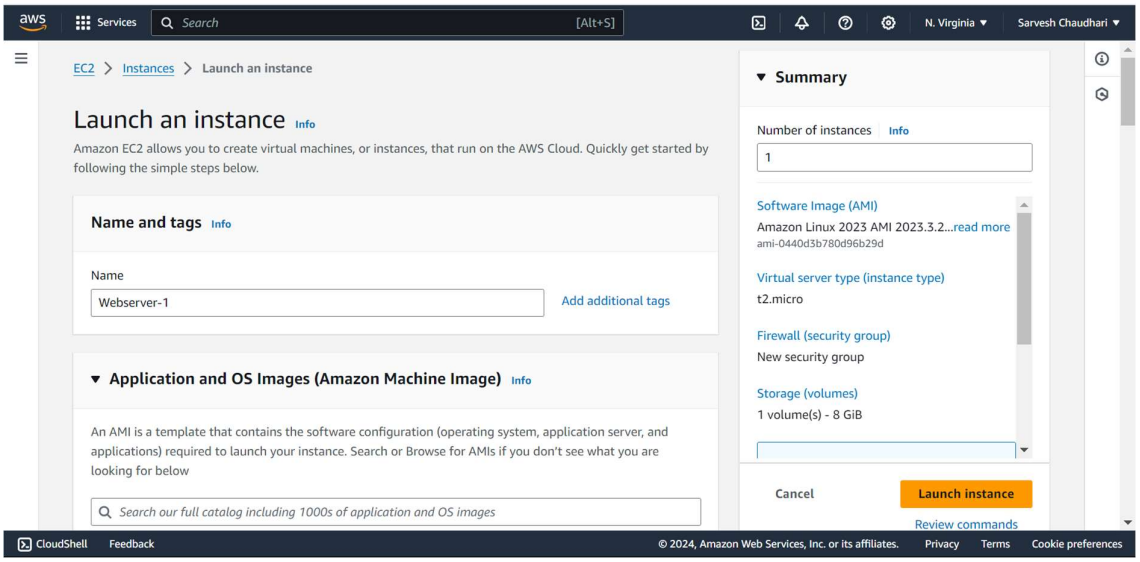


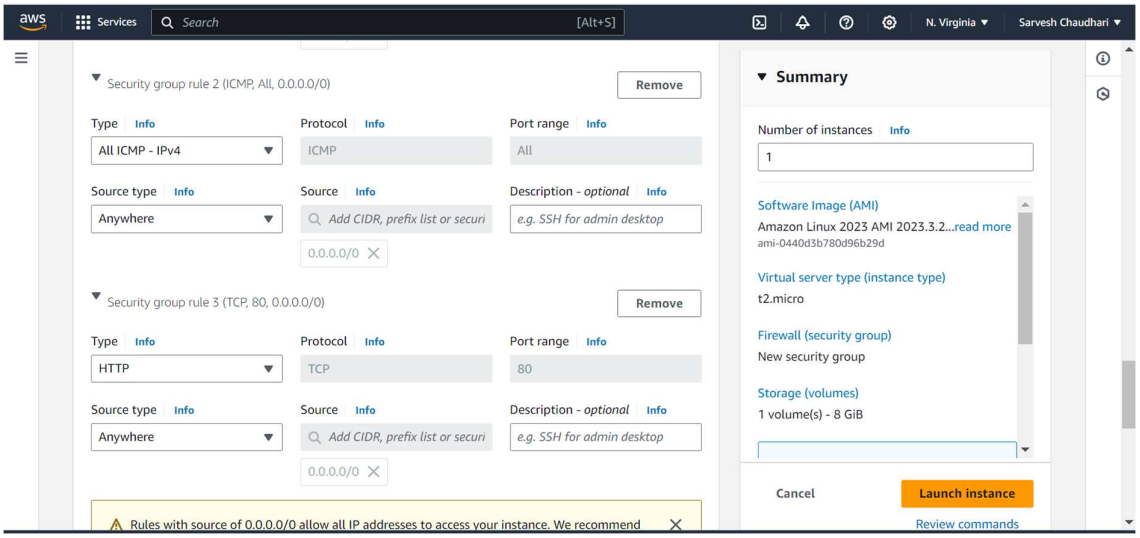
Now create Route Table for Public



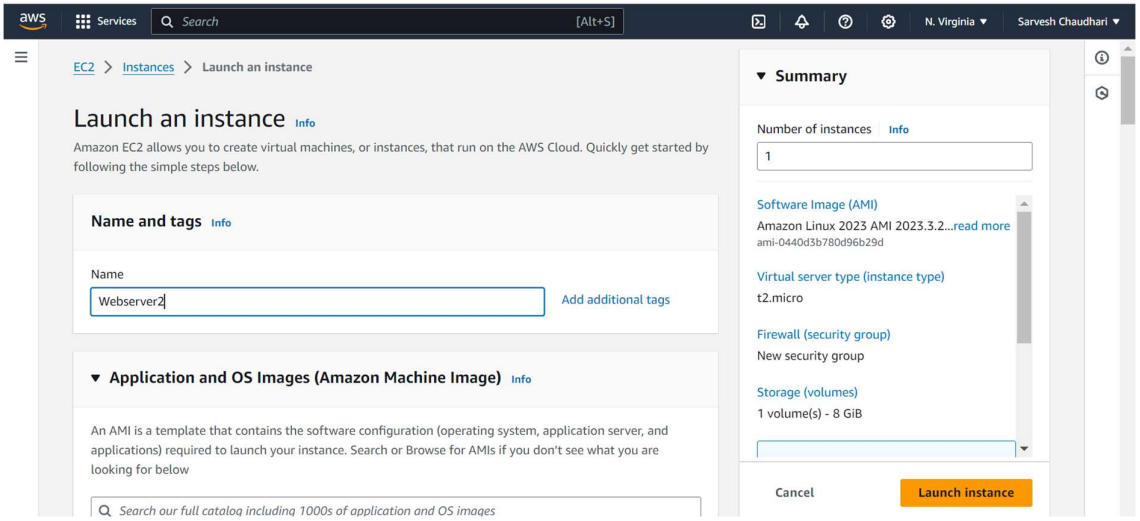


Now create instances from EC2 -Webserver1 and Webserver2



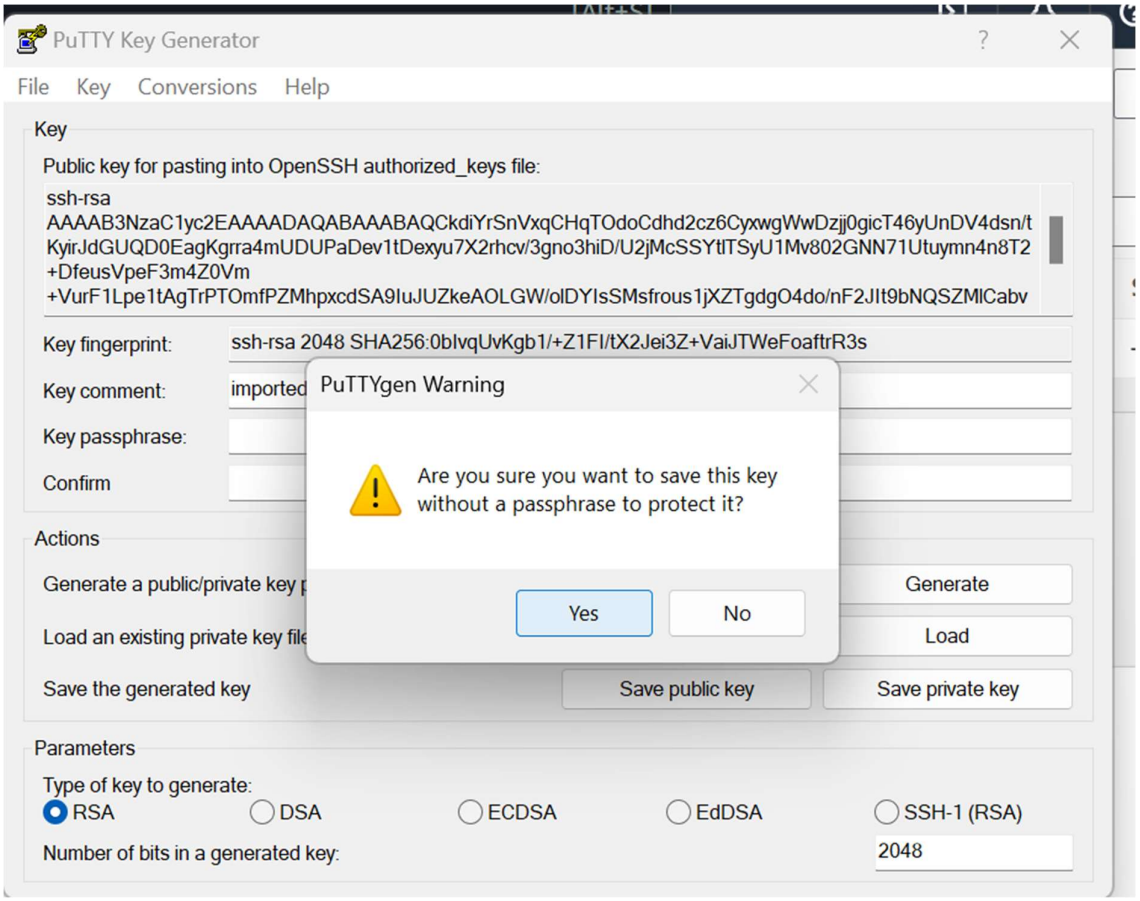


Similarly create instance2

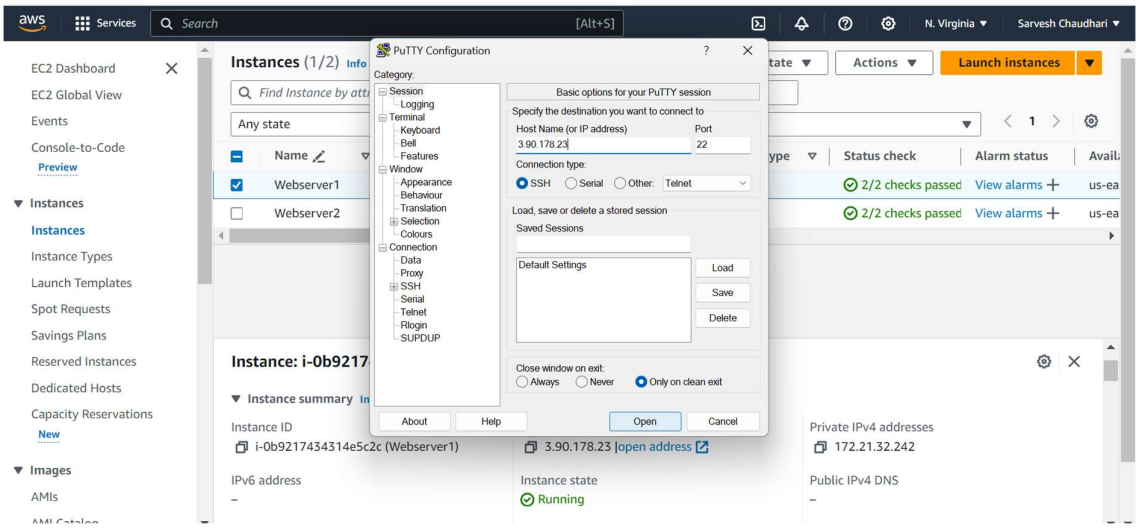


Now to get into instance1 we will use PuttyGen

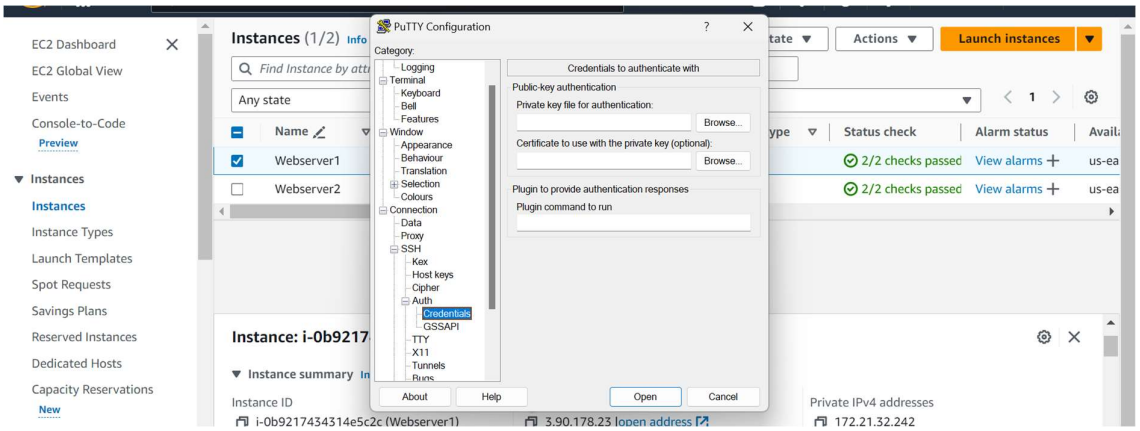
PuttyGen > Conversion > ImportKey > Save Private Key > Yes



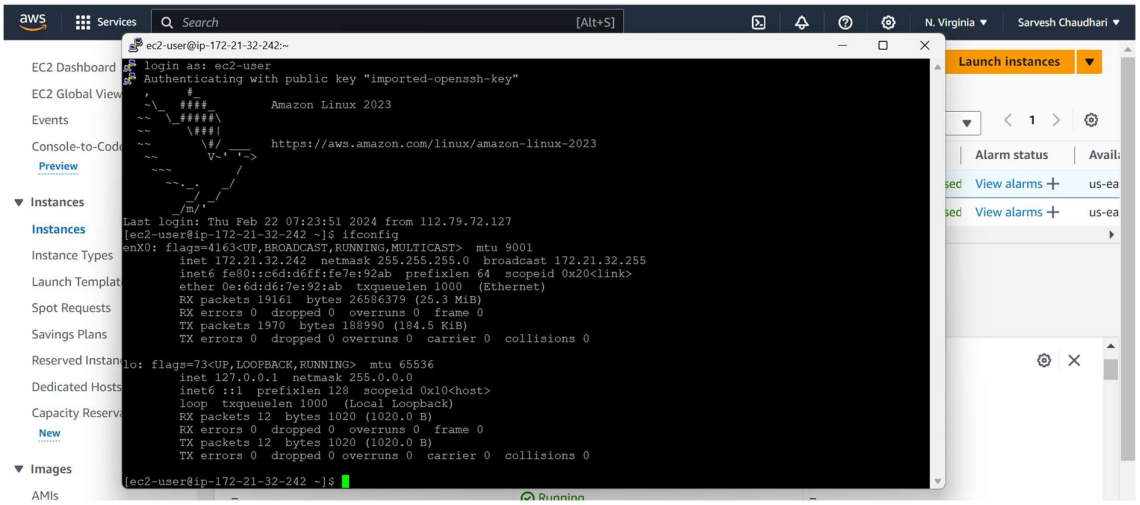
Putty > In host name give IP address of PublicIP



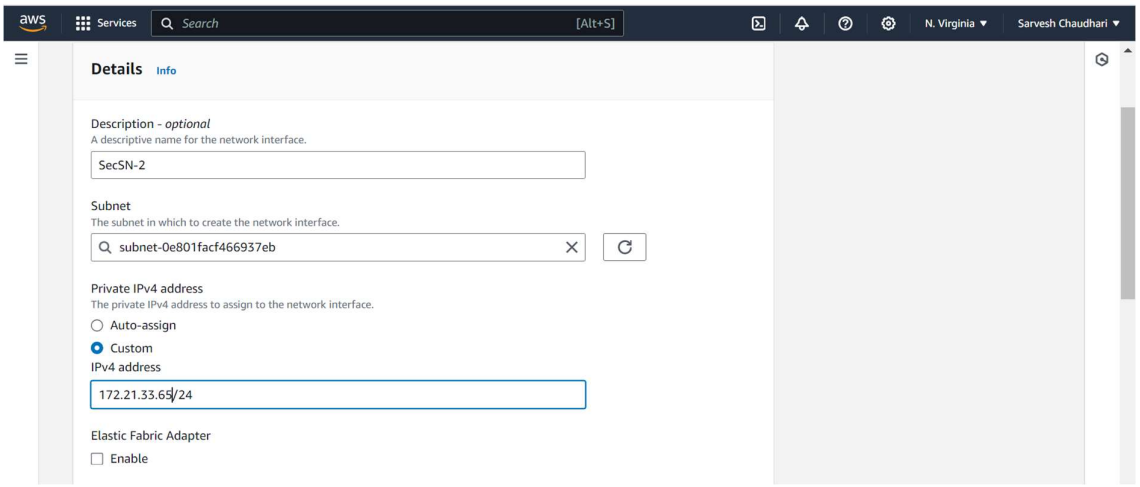
Now SSH > Author > Credentials > Now Upload key file converted.

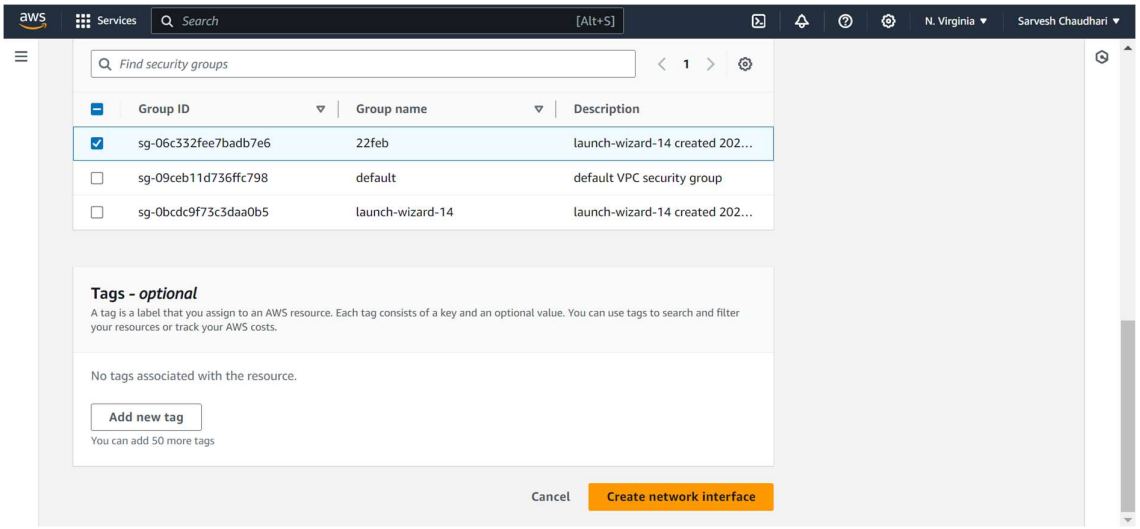


Now to login give ec2-user then give command ifconfig

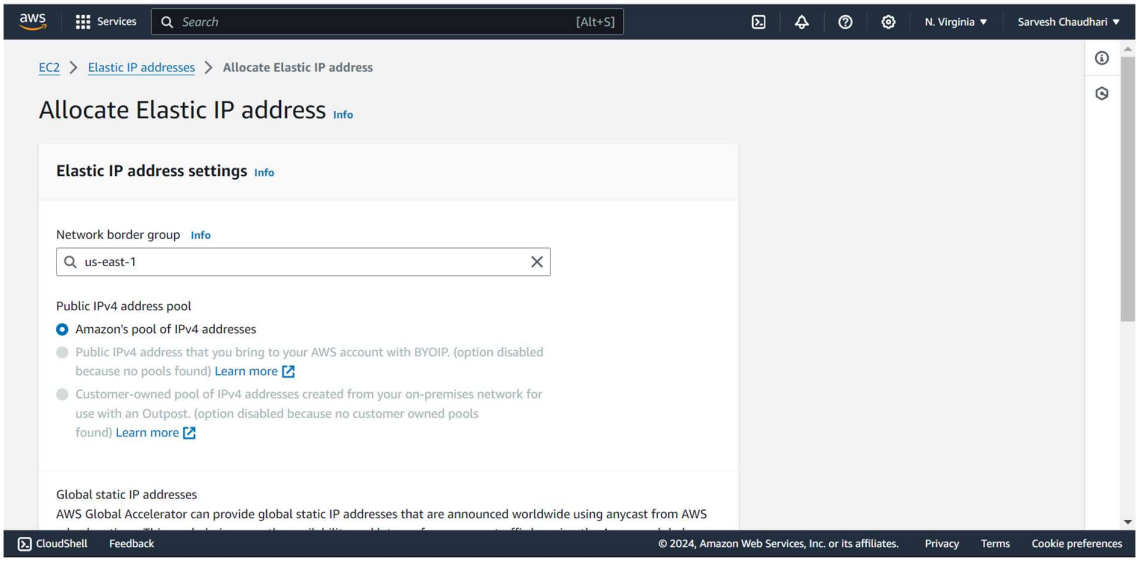


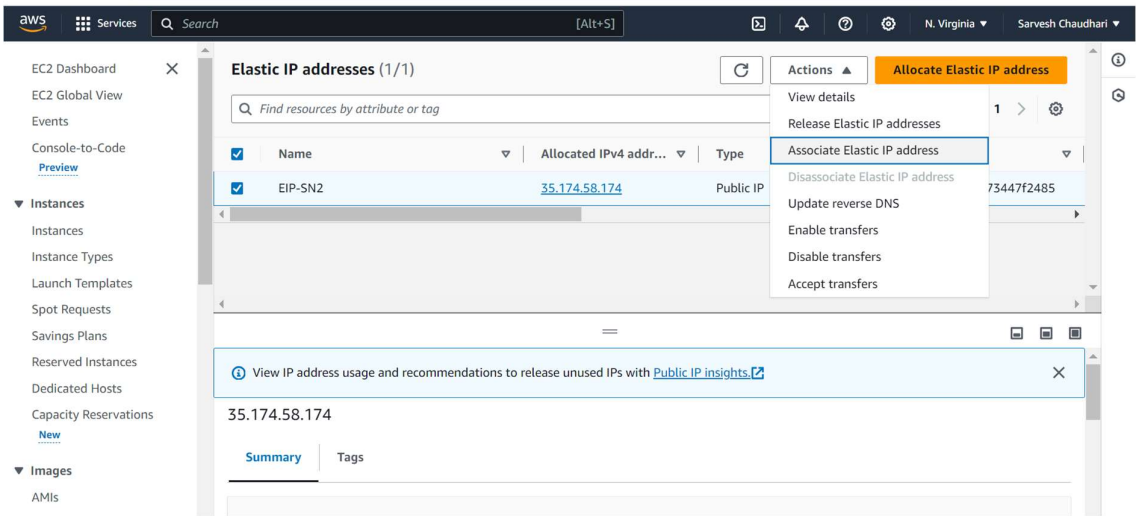
Create network Interface Secondary EIN for Subnet2

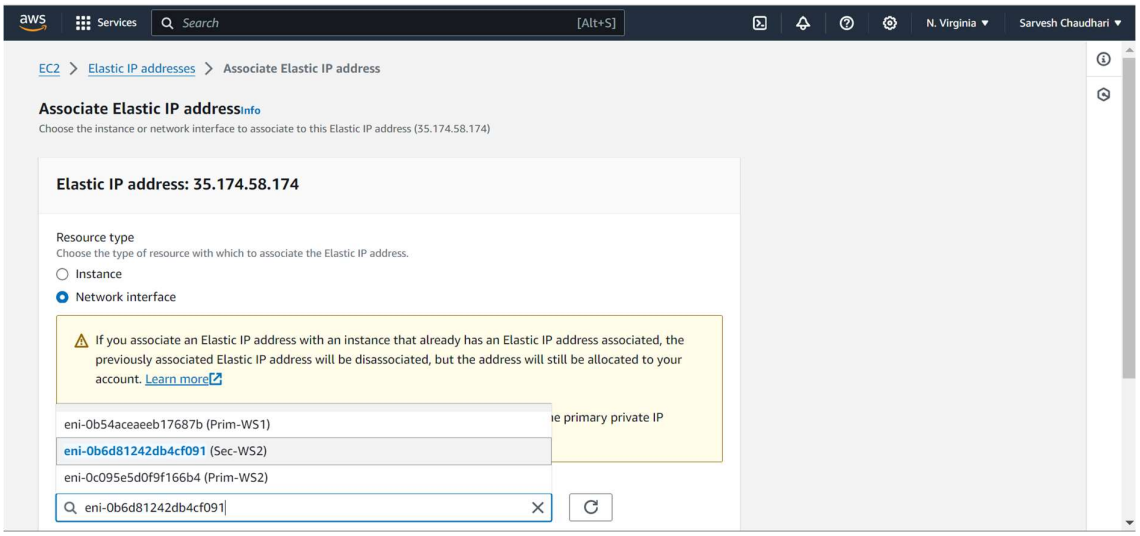


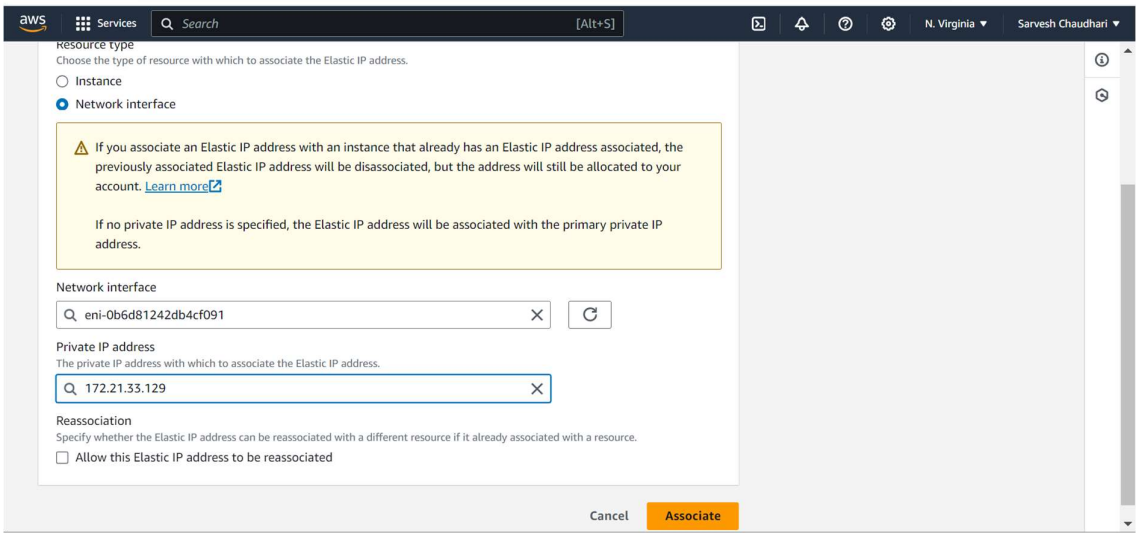


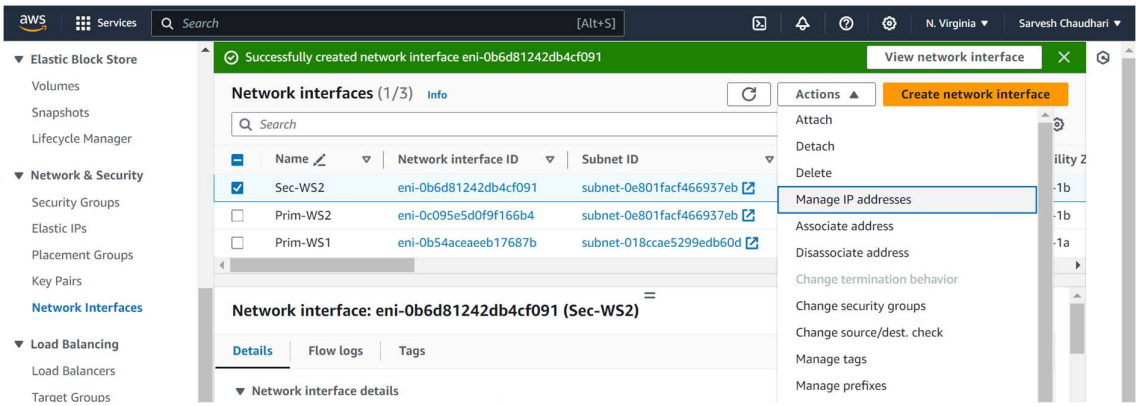
Now go to elastic ip and allocate Elastic IP address

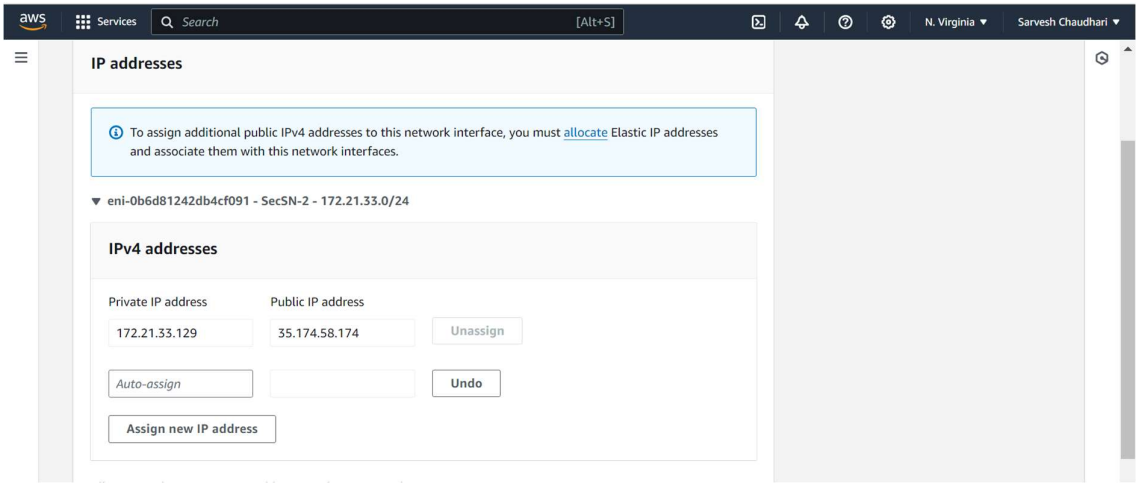


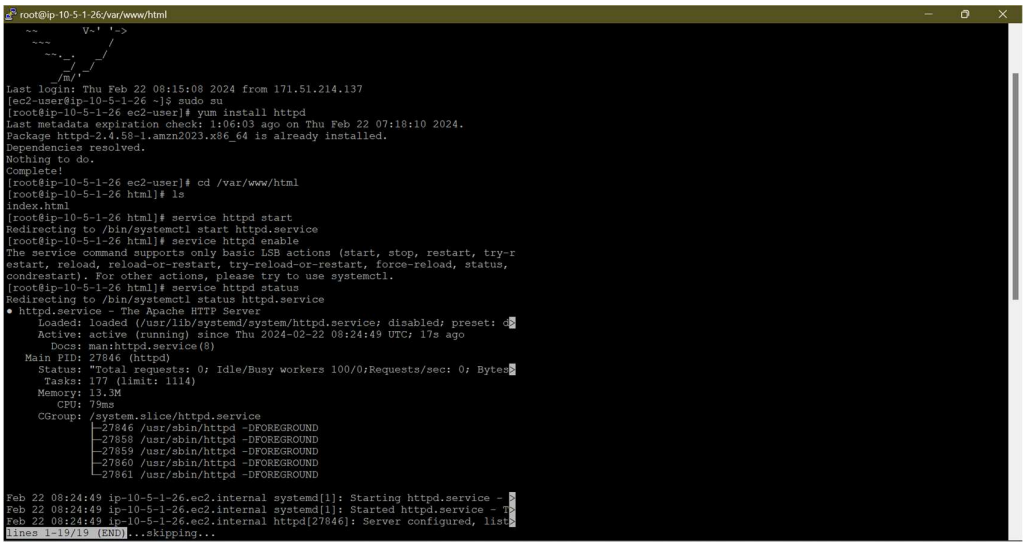


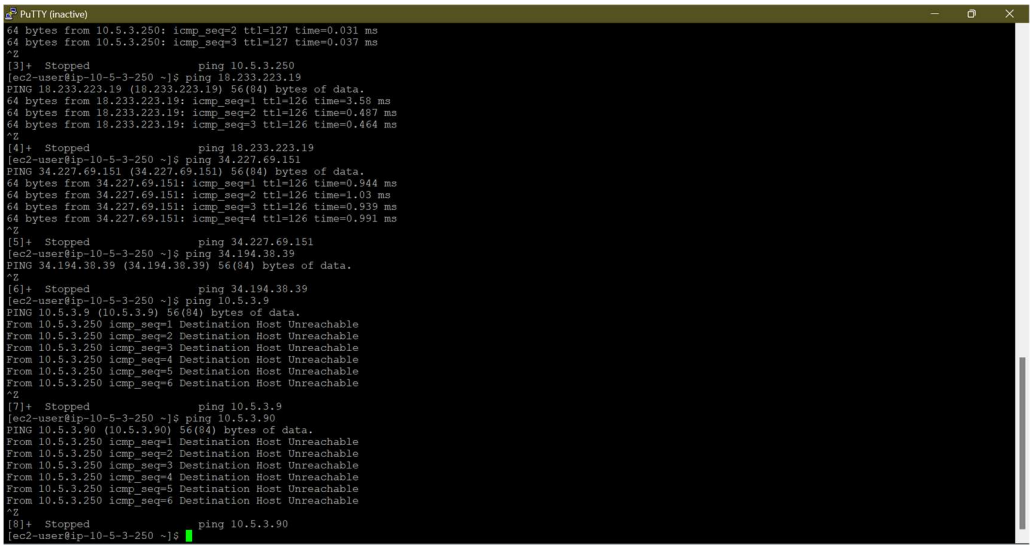

aws
Services
Search
[Alt+S]
N. Virginia
Sarvesh Chaudhari
EC2 > Elastic IP addresses > Associate Elastic IP address
Associate Elastic IP address Info
Choose the instance or network interface to associate to this Elastic IP address (35.174.58.174)
Elastic IP address: 35.174.58.174
Resource type
Choose the type of resource with which to associate the Elastic IP address.
Instance
Network interface
If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more
eni-0b54aceaeeb17687b (Prim-WS1)
eni-0b6d81242db4cf091 (Sec-WS2)
eni-0c095e5d0f9f166b4 (Prim-WS2)
eni-0b6d81242db4cf091

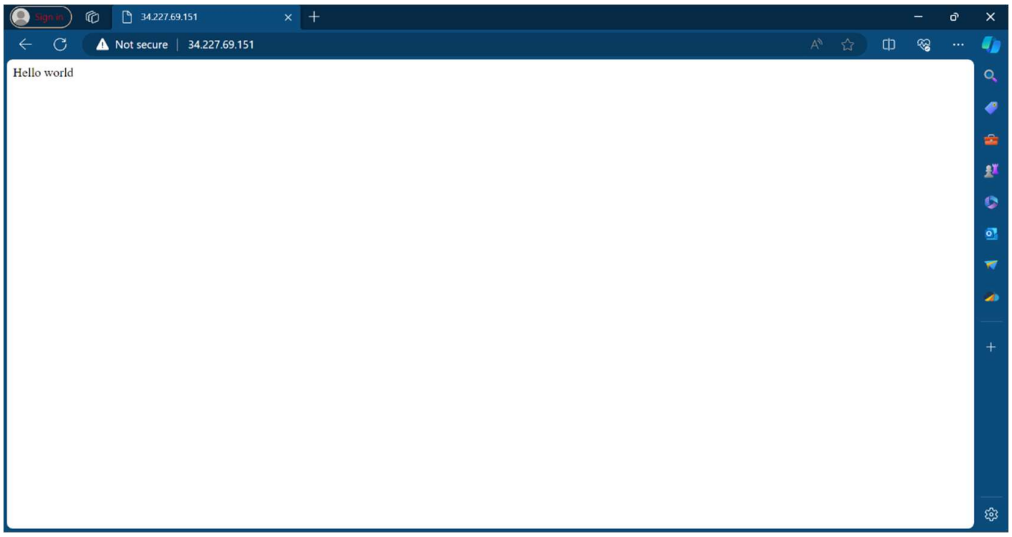

aws
Services
Search
[Alt+S]
N. Virginia
Sarvesh Chaudhari
Resource type
Choose the type of resource with which to associate the Elastic IP address.
Instance
Network interface
If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. Learn more
If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.
Network interface
eni-0b6d81242db4cf091
Private IP address
The private IP address with which to associate the Elastic IP address.
172.21.33.129
Reassociation
Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.
Allow this Elastic IP address to be reassociated
Cancel
Associate


aws
Services
Search
[Alt+S]
N. Virginia
Sarvesh Chaudhari
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Network & Security
Security Groups
Elastic IPs
Placement Groups
Key Pairs
Network Interfaces
Load Balancing
Load Balancers
Target Groups
Successfully created network interface eni-0b6d81242db4cf091
View network interface
Network interfaces (1/3) Info
Actions
Create network interface
Search
Name
Network interface ID
Subnet ID
Sec-WS2
eni-0b6d81242db4cf091
subnet-0e801facf466937eb
Prim-WS2
eni-0c095e5d0f9f166b4
subnet-0e801facf466937eb
Prim-WS1
eni-0b54aceaeeb17687b
subnet-018ccae5299edb60d
Attach
Detach
Delete
Manage IP addresses
Associate address
Disassociate address
Change termination behavior
Change security groups
Change source/dest. check
Manage tags
Manage prefixes
Network interface: eni-0b6d81242db4cf091 (Sec-WS2)
Details
Flow logs
Tags
Network interface details


aws
Services
Search
[Alt+S]
N. Virginia
Sarvesh Chaudhari
IP addresses
To assign additional public IPv4 addresses to this network interface, you must allocate Elastic IP addresses and associate them with this network interfaces.
eni-0b6d81242db4cf091 - SecSN-2 - 172.21.33.0/24
IPv4 addresses
Private IP address
Public IP address
172.21.33.129
35.174.58.174
Unassign
Auto-assign
Undo
Assign new IP address


root@ip-10-5-1-26:/var/www/html
Last login: Thu Feb 22 08:15:08 2024 from 171.51.214.137
[ec2-user@ip-10-5-1-26 ~]$ sudo su
[root@ip-10-5-1-26 ec2-user]# yum install httpd
Last metadata expiration check: 1:06:03 ago on Thu Feb 22 07:18:10 2024.
Package httpd-2.4.58-1.amzn2023.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-10-5-1-26 ec2-user]# cd /var/www/html
[root@ip-10-5-1-26 html]# ls
index.html
[root@ip-10-5-1-26 html]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@ip-10-5-1-26 html]# service httpd enable
The service command supports only basic LSB actions (start, stop, restart, try-r
estart, reload, reload-or-restart, try-reload-or-restart, force-reload, status,
condrestart). For other actions, please try to use systemctl.
[root@ip-10-5-1-26 html]# service httpd status
Redirecting to /bin/systemctl status httpd.service
● httpd.service - The Apache HTTP Server
Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: d
Active: active (running) since Thu 2024-02-22 08:24:49 UTC; 17s ago
Docs: man:httpd.service(8)
Main PID: 27846 (httpd)
Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes
Tasks: 177 (limit: 1114)
Memory: 13.3M
CPU: 79ms
CGroup: /system.slice/httpd.service
├─27846 /usr/sbin/httpd -DFOREGROUND
├─27858 /usr/sbin/httpd -DFOREGROUND
├─27859 /usr/sbin/httpd -DFOREGROUND
├─27860 /usr/sbin/httpd -DFOREGROUND
└─27861 /usr/sbin/httpd -DFOREGROUND
Feb 22 08:24:49 ip-10-5-1-26.ec2.internal systemd[1]: Starting httpd.service -
Feb 22 08:24:49 ip-10-5-1-26.ec2.internal systemd[1]: Started httpd.service - T
Feb 22 08:24:49 ip-10-5-1-26.ec2.internal httpd[27846]: Server configured, list
lines 1-19/19 (END)...skipping...


PuTTY (inactive)
64 bytes from 10.5.3.250: icmp_seq=2 ttl=127 time=0.031 ms
64 bytes from 10.5.3.250: icmp_seq=3 ttl=127 time=0.037 ms
^Z
[3]+ Stopped ping 10.5.3.250
[ec2-user@ip-10-5-3-250 ~]$ ping 18.233.223.19
PING 18.233.223.19 (18.233.223.19) 56(84) bytes of data.
64 bytes from 18.233.223.19: icmp_seq=1 ttl=126 time=3.58 ms
64 bytes from 18.233.223.19: icmp_seq=2 ttl=126 time=0.487 ms
64 bytes from 18.233.223.19: icmp_seq=3 ttl=126 time=0.464 ms
^Z
[4]+ Stopped ping 18.233.223.19
[ec2-user@ip-10-5-3-250 ~]$ ping 34.227.69.151
PING 34.227.69.151 (34.227.69.151) 56(84) bytes of data.
64 bytes from 34.227.69.151: icmp_seq=1 ttl=126 time=0.944 ms
64 bytes from 34.227.69.151: icmp_seq=2 ttl=126 time=1.03 ms
64 bytes from 34.227.69.151: icmp_seq=3 ttl=126 time=0.939 ms
64 bytes from 34.227.69.151: icmp_seq=4 ttl=126 time=0.991 ms
^Z
[5]+ Stopped ping 34.227.69.151
[ec2-user@ip-10-5-3-250 ~]$ ping 34.194.38.39
PING 34.194.38.39 (34.194.38.39) 56(84) bytes of data.
^Z
[6]+ Stopped ping 34.194.38.39
[ec2-user@ip-10-5-3-250 ~]$ ping 10.5.3.9
PING 10.5.3.9 (10.5.3.9) 56(84) bytes of data.
From 10.5.3.250 icmp_seq=1 Destination Host Unreachable
From 10.5.3.250 icmp_seq=2 Destination Host Unreachable
From 10.5.3.250 icmp_seq=3 Destination Host Unreachable
From 10.5.3.250 icmp_seq=4 Destination Host Unreachable
From 10.5.3.250 icmp_seq=5 Destination Host Unreachable
From 10.5.3.250 icmp_seq=6 Destination Host Unreachable
^Z
[7]+ Stopped ping 10.5.3.9
[ec2-user@ip-10-5-3-250 ~]$ ping 10.5.3.90
PING 10.5.3.90 (10.5.3.90) 56(84) bytes of data.
From 10.5.3.250 icmp_seq=1 Destination Host Unreachable
From 10.5.3.250 icmp_seq=2 Destination Host Unreachable
From 10.5.3.250 icmp_seq=3 Destination Host Unreachable
From 10.5.3.250 icmp_seq=4 Destination Host Unreachable
From 10.5.3.250 icmp_seq=5 Destination Host Unreachable
From 10.5.3.250 icmp_seq=6 Destination Host Unreachable
^Z
[8]+ Stopped ping 10.5.3.90
[ec2-user@ip-10-5-3-250 ~]$


34.227.69.151
Not secure | 34.227.69.151
Hello world