

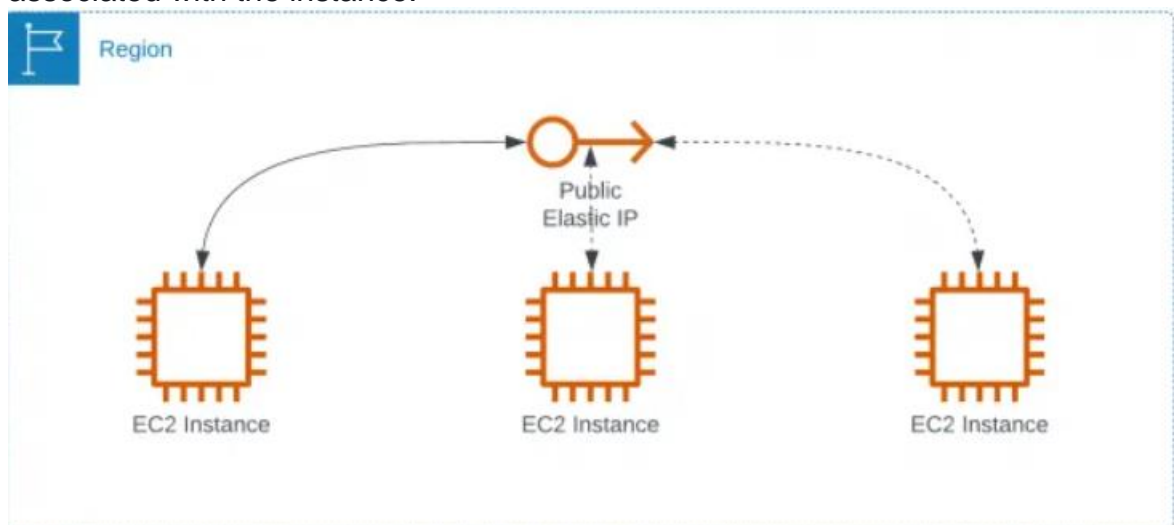
## AWS Documentation

No:-	Content
1.	Elastic IP

### Elastic IP:-

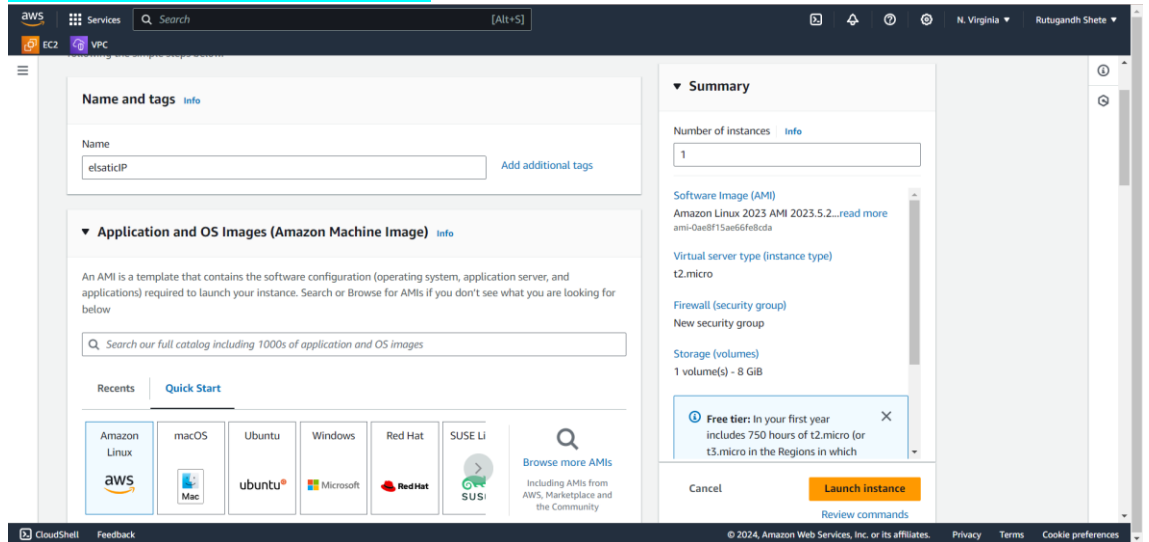
#### Introduction:

- An Elastic IP address is static; it does not change over time.
- An Elastic IP address is for use in a specific Region only, and cannot be moved to a different Region.
- An Elastic IP address comes from Amazon's pool of IPv4 addresses, or from a custom IPv4 address pool that you have brought to your AWS account. We do not support Elastic IP addresses for IPv6.
- To use an Elastic IP address, you first allocate one to your account, and then associate it with your instance or a network interface.
- When you associate an Elastic IP address with an instance, it is also associated with the instance's primary network interface. When you associate an Elastic IP address with a network interface that is attached to an instance, it is also associated with the instance.

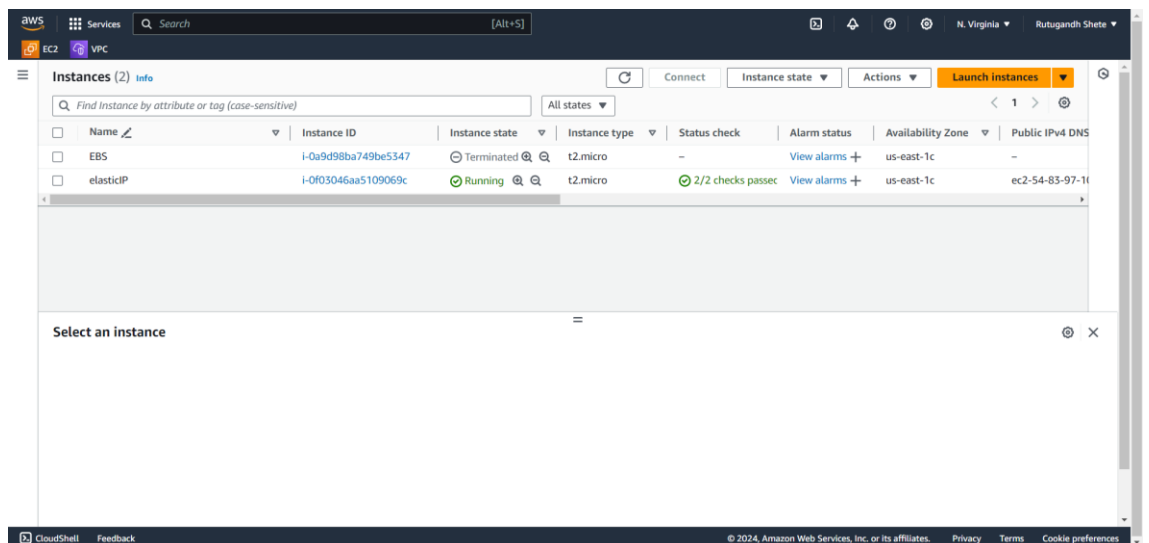


Steps:

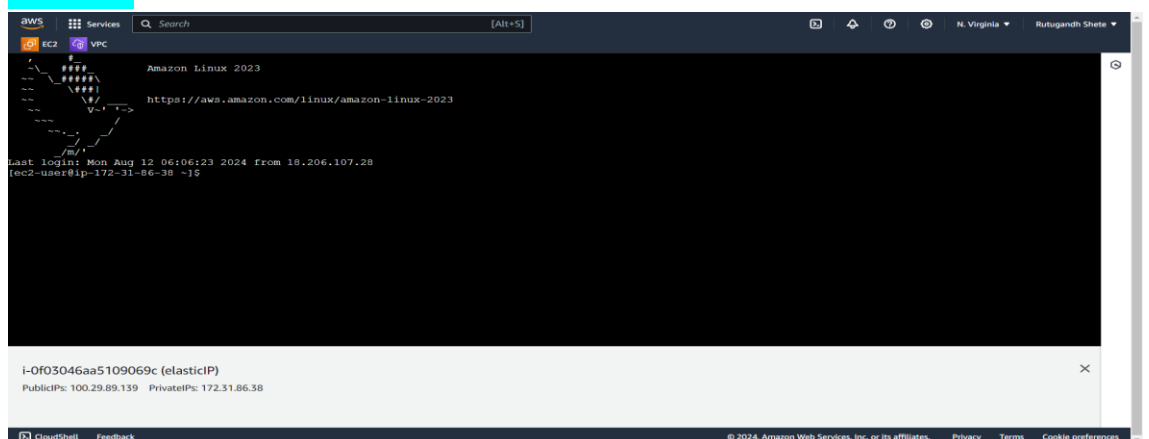
- Create EC2 as per normal procedure, while creating instance region should be taken into consideration.



- After creation of ec2 instance.



- Connect instance to terminal.



- Install “httpd service” using command “yum install httpd”.

```

AWS Services Search [Alt+S] N. Virginia Rutugandh Shete
EC2 VPC
Installing : httpd-filessystem-2.4.62-1.amzn2023.noarch 7/12
Installing : httpd-core-2.4.62-1.amzn2023.x86_64 8/12
Installing : mod_http2-2.0.27-1.amzn2023.0.3.x86_64 9/12
Installing : mod_lua-2.4.62-1.amzn2023.x86_64 10/12
Installing : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 11/12
Installing : httpd-2.4.62-1.amzn2023.x86_64 12/12
Running scriptlet: httpd-2.4.62-1.amzn2023.x86_64 12/12
Verifying : apr-1.7.2-2.amzn2023.0.2.x86_64 1/12
Verifying : apr-util-1.6.3-1.amzn2023.0.1.x86_64 2/12
Verifying : apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64 3/12
Verifying : generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch 4/12
Verifying : httpd-2.4.62-1.amzn2023.x86_64 5/12
Verifying : httpd-core-2.4.62-1.amzn2023.x86_64 6/12
Verifying : httpd-filessystem-2.4.62-1.amzn2023.noarch 7/12
Verifying : httpd-tools-2.4.62-1.amzn2023.x86_64 8/12
Verifying : libbrotli-1.0.9-4.amzn2023.0.2.x86_64 9/12
Verifying : mailcap-2.1.49-3.amzn2023.0.3.noarch 10/12
Verifying : mod_http2-2.0.27-1.amzn2023.0.3.x86_64 11/12
Verifying : mod_lua-2.4.62-1.amzn2023.x86_64 12/12

Installed:
apr-1.7.2-2.amzn2023.0.2.x86_64 apr-util-1.6.3-1.amzn2023.0.1.x86_64 apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64
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mailcap-2.1.49-3.amzn2023.0.3.noarch mod_http2-2.0.27-1.amzn2023.0.3.x86_64 mod_lua-2.4.62-1.amzn2023.x86_64

Complete!
[root@ip-172-31-88-133 ~]#

```

- Enable httpd service using “systemctl enable httpd”. After enabling service start the service using “systemctl start httpd”.

```

AWS Services Search [Alt+S] N. Virginia Rutugandh Shete
EC2 VPC
Installing : mod_lua-2.4.62-1.amzn2023.x86_64 10/12
Installing : httpd-2.4.62-1.amzn2023.x86_64 11/12
Installing : httpd-core-2.4.62-1.amzn2023.x86_64 12/12
Running scriptlet: httpd-2.4.62-1.amzn2023.x86_64 12/12
Verifying : apr-1.7.2-2.amzn2023.0.2.x86_64 1/12
Verifying : apr-util-1.6.3-1.amzn2023.0.1.x86_64 2/12
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generic-logos-httpd-18.0.0-12.amzn2023.0.3.noarch httpd-2.4.62-1.amzn2023.x86_64 httpd-core-2.4.62-1.amzn2023.x86_64
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mailcap-2.1.49-3.amzn2023.0.3.noarch mod_http2-2.0.27-1.amzn2023.0.3.x86_64 mod_lua-2.4.62-1.amzn2023.x86_64

Complete!
[root@ip-172-31-88-133 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-88-133 ~]# systemctl start httpd
[root@ip-172-31-88-133 ~]#

```

- Start and check service. “systemctl start httpd”& “systemctl status httpd”.

```

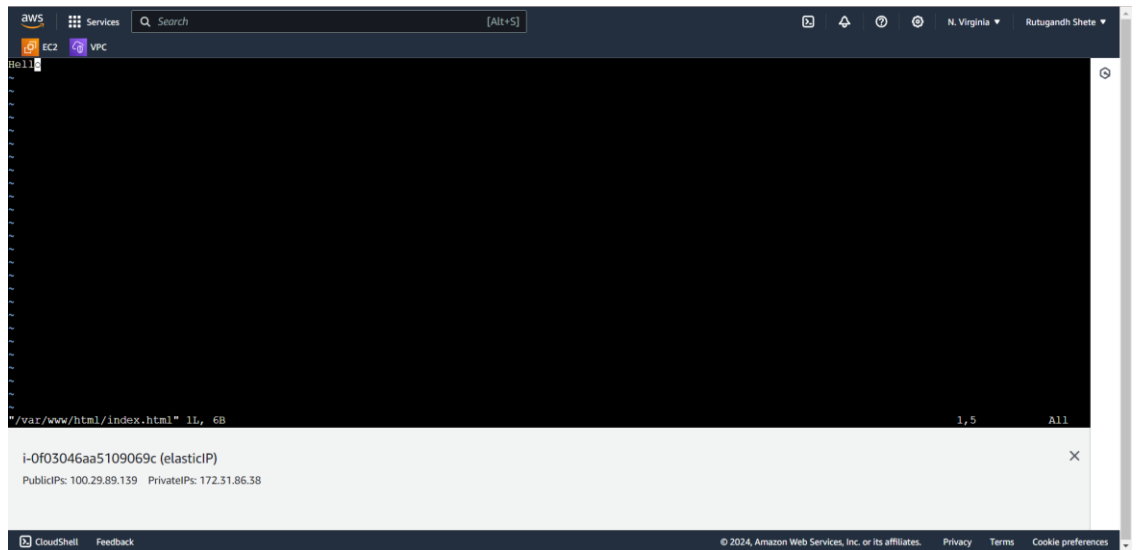
AWS Services Search [Alt+S] N. Virginia Rutugandh Shete
EC2 VPC
httpd-filessystem-2.4.62-1.amzn2023.noarch httpd-tools-2.4.62-1.amzn2023.x86_64 libbrotli-1.0.9-4.amzn2023.0.2.x86_64
mailcap-2.1.49-3.amzn2023.0.3.noarch mod_http2-2.0.27-1.amzn2023.0.3.x86_64 mod_lua-2.4.62-1.amzn2023.x86_64

Complete!
[root@ip-172-31-88-133 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-88-133 ~]# systemctl start httpd
[root@ip-172-31-88-133 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Active: active (running) since Mon 2024-08-12 11:36:34 UTC; 32s ago
     Docs: man:httpd.service(8)
   Main PID: 25942 (httpd)
   Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
    Tasks: 177 (limit: 1112)
  Memory: 13.0M
     CPU: 80ms
   CGroup: /system.slice/httpd.service
           └─25942 /usr/sbin/httpd -DFOREGROUND
           └─25943 /usr/sbin/httpd -DFOREGROUND
           └─25944 /usr/sbin/httpd -DFOREGROUND
           └─25945 /usr/sbin/httpd -DFOREGROUND
           └─25946 /usr/sbin/httpd -DFOREGROUND

Aug 12 11:36:34 ip-172-31-88-133.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Aug 12 11:36:34 ip-172-31-88-133.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Aug 12 11:36:34 ip-172-31-88-133.ec2.internal httpd[25942]: Server configured, listening on: port 80
[root@ip-172-31-88-133 ~]#

```

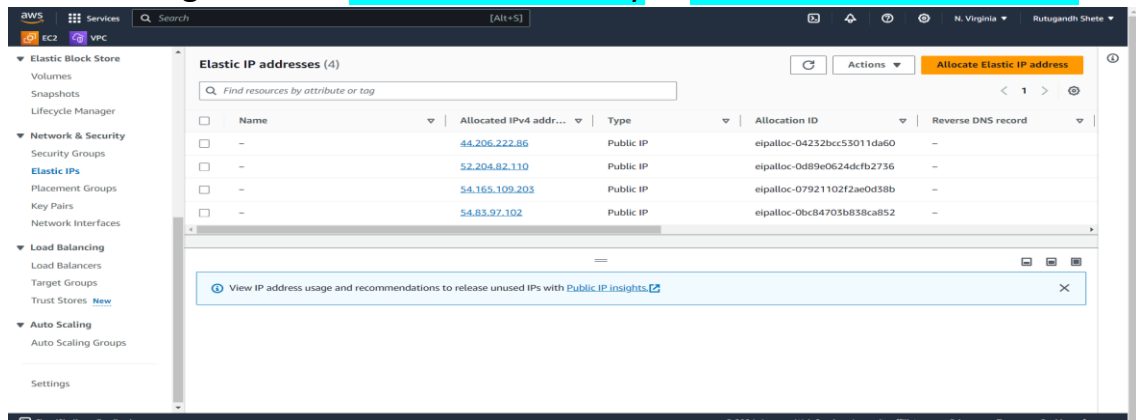
- Add index.html to location /var/www/html and vim /var/www/html/index.html.



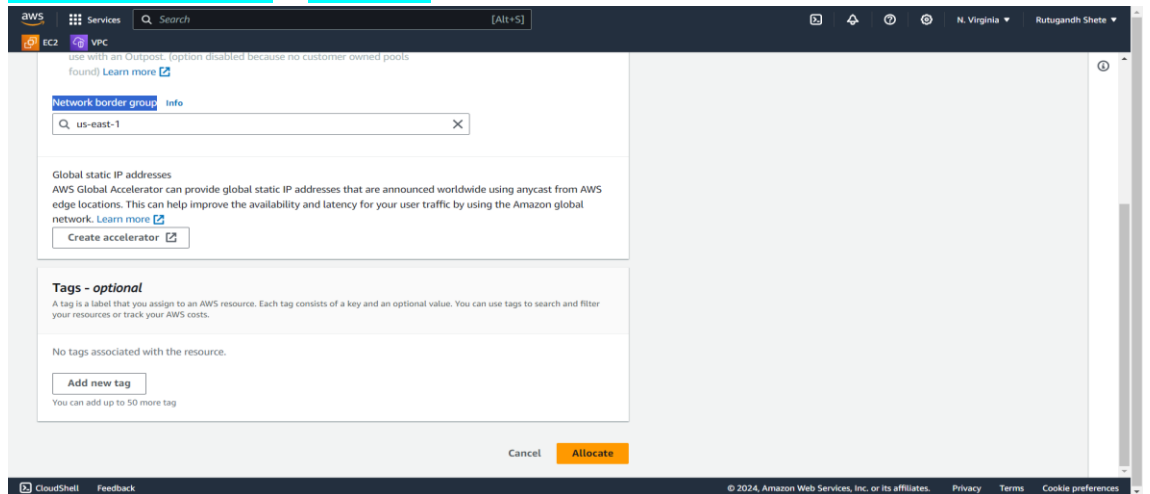
- Enter public IP of created instance to web browser.



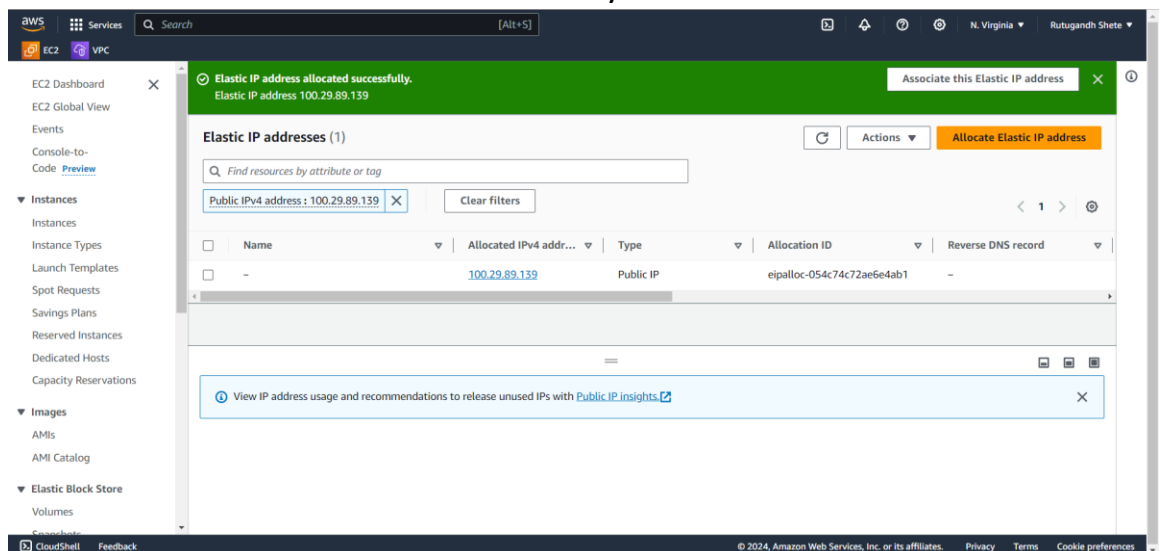
- Ip address changes whenever we stops Instance and new IP is created everytime whenever instance is started.
- For initiating elastic IP **Network & Security** → **Allocate Elastic IP address**.



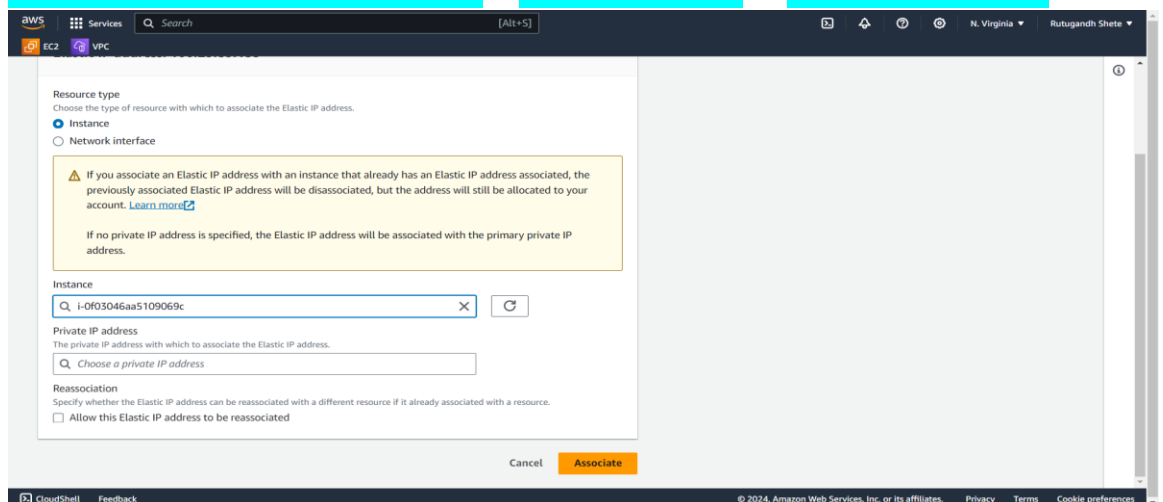
- Click on **Allocate Elastic IP address** → select Network border group (choose zone accordingly) → **Allocate**



- Elastic IP address is created successfully.



- Associate this Elastic IP address to Instance that we have created **Associate this elastic IP address** → select instance → click on **associate**.



- After successfully associated it to instance.

