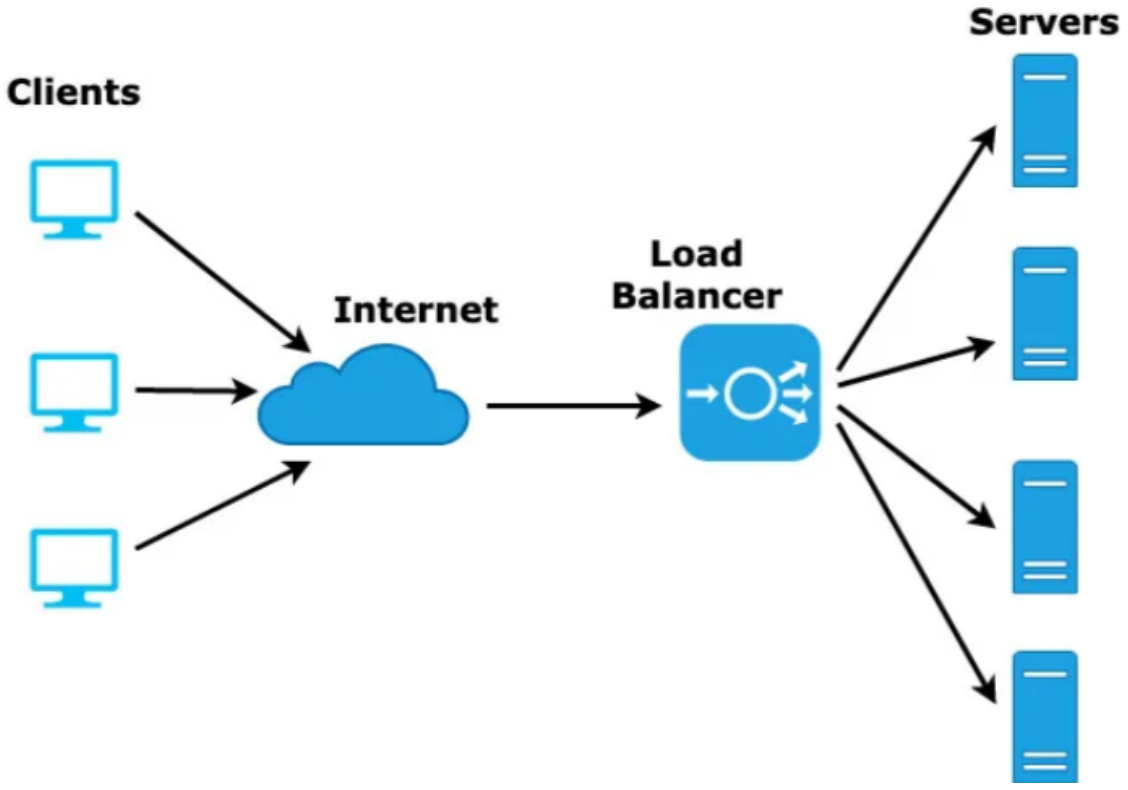
LOAD BALANCE
LAUCHINGING IN TWO MACHINE

Load balance is takes traffic from user /customer and distribute traffic of server / target machine(it follows the round robin method)

Load balance continuously monitors the health registered targets of the server and route traffic only healthy target.it will send pins requested to the server. every 5 second send ping request if server not respone ping request twice . load balance treated as unhealthy machine and stop traffic and distribute traffic to another machine. Once the server turns to a healthy state it resumes the traffic to healthy targets



Load balance can be classified into three types

Application Load balance
Network Load balance
Gateway Load balance

Application load balance :

Application load balance can be used in http and Https traffic routing
Its load balance works the application layer of the osI model.
The load balancer also support the dynamic host port mapping

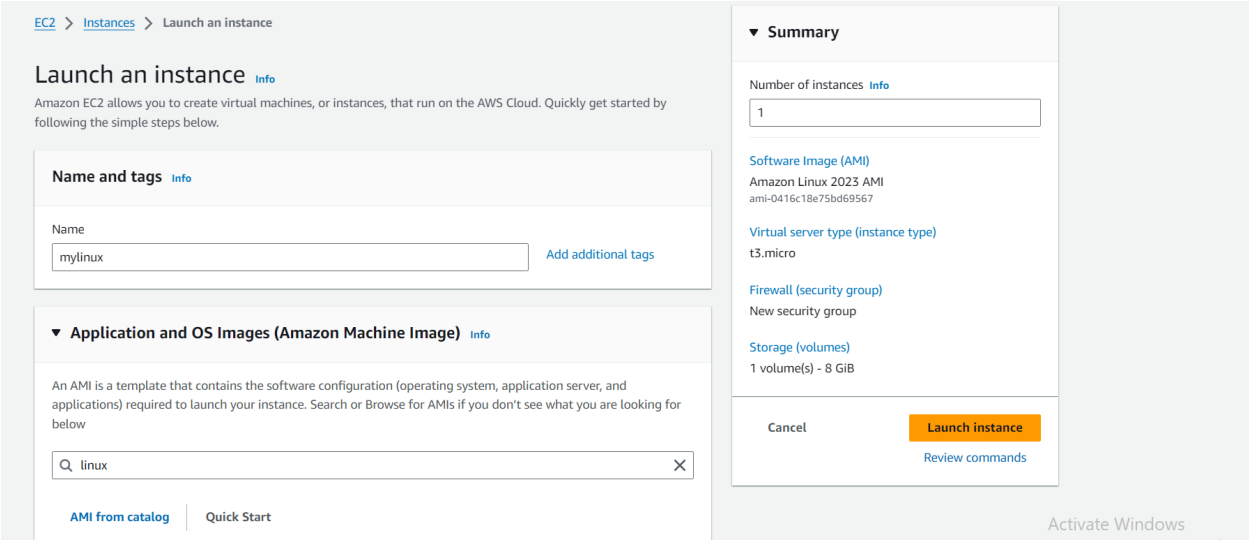
Launching in Application load balancer in aws conscole

For launch the load balance you need the two instance and one load balance is requried and security group used to handle the inbound and outbound traffic and it act firewall

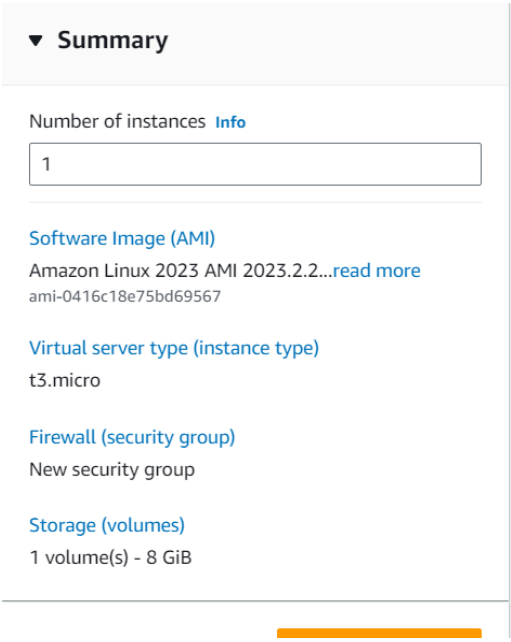
1. Lauch in ec2 instance(two machine and install the web server)
2. Lauch in load balance
3. Created the security group

Go the aws console serch ec2 instance

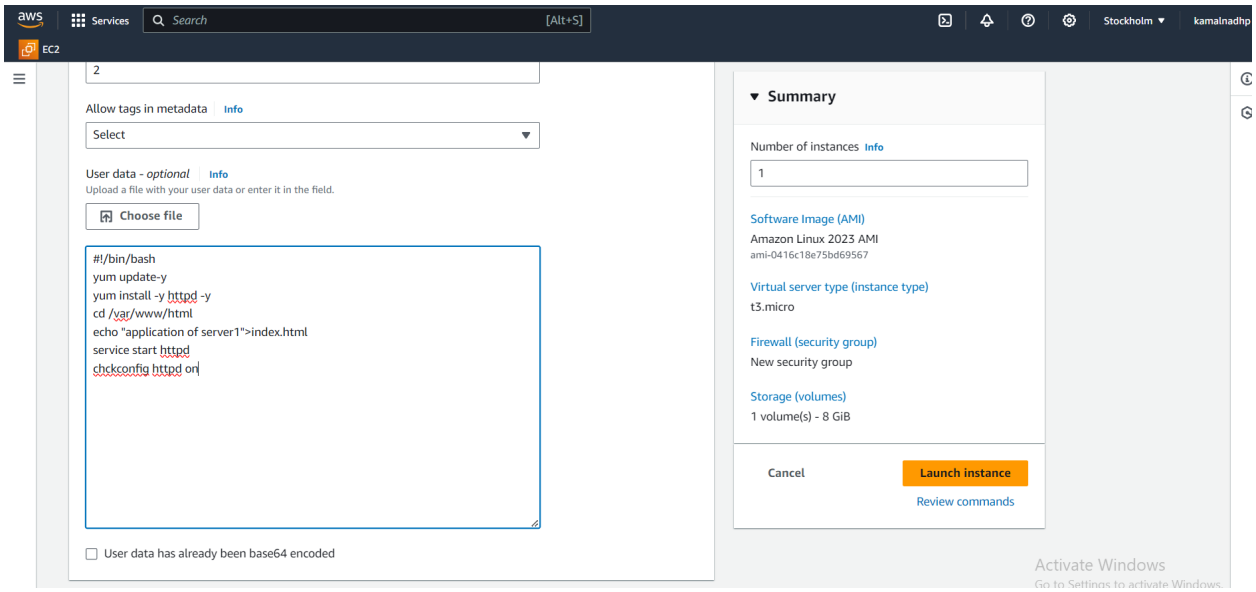
1. Choose the ami(image)



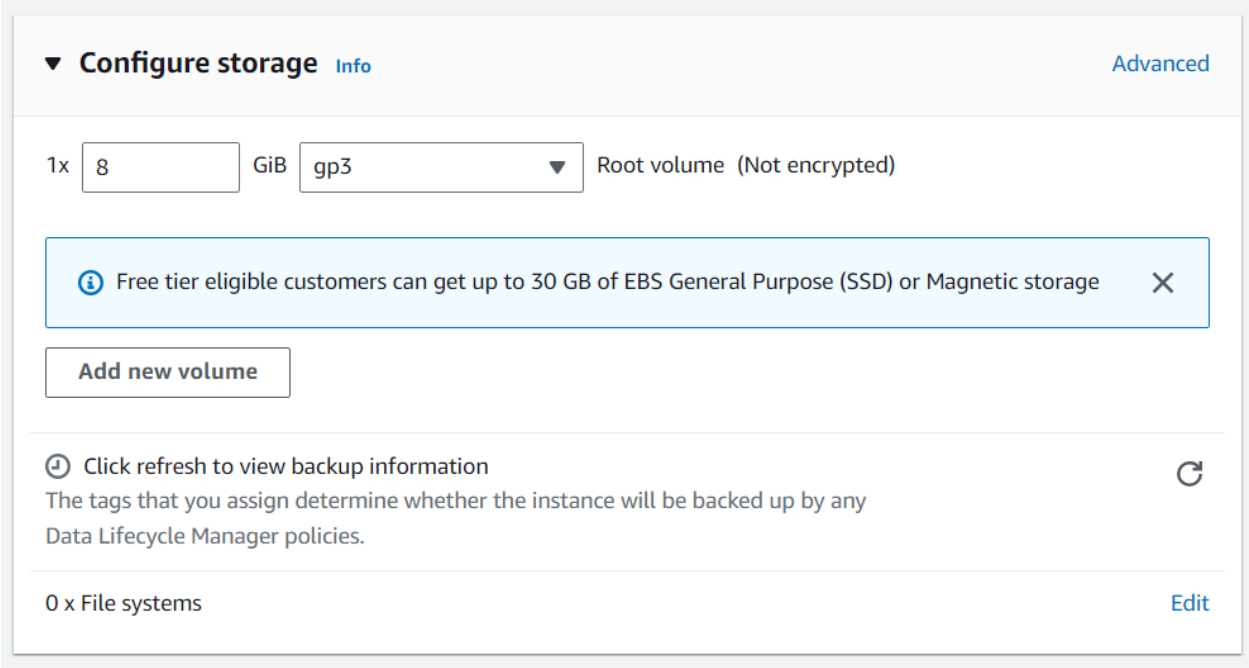
2.choose the instance type (os Ram)



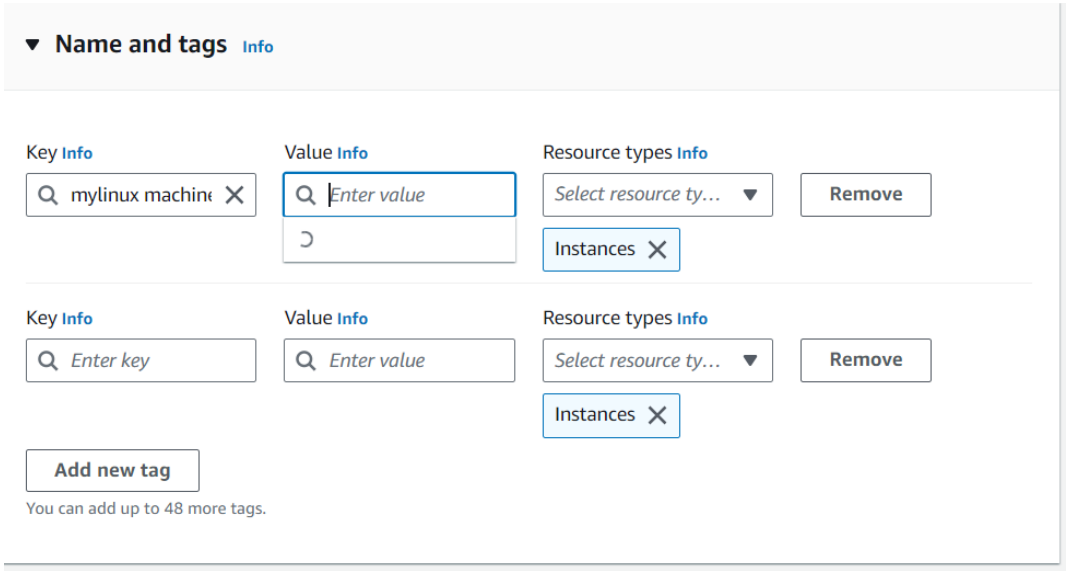
3.configure the instance type (go the user data install the web server given command below)



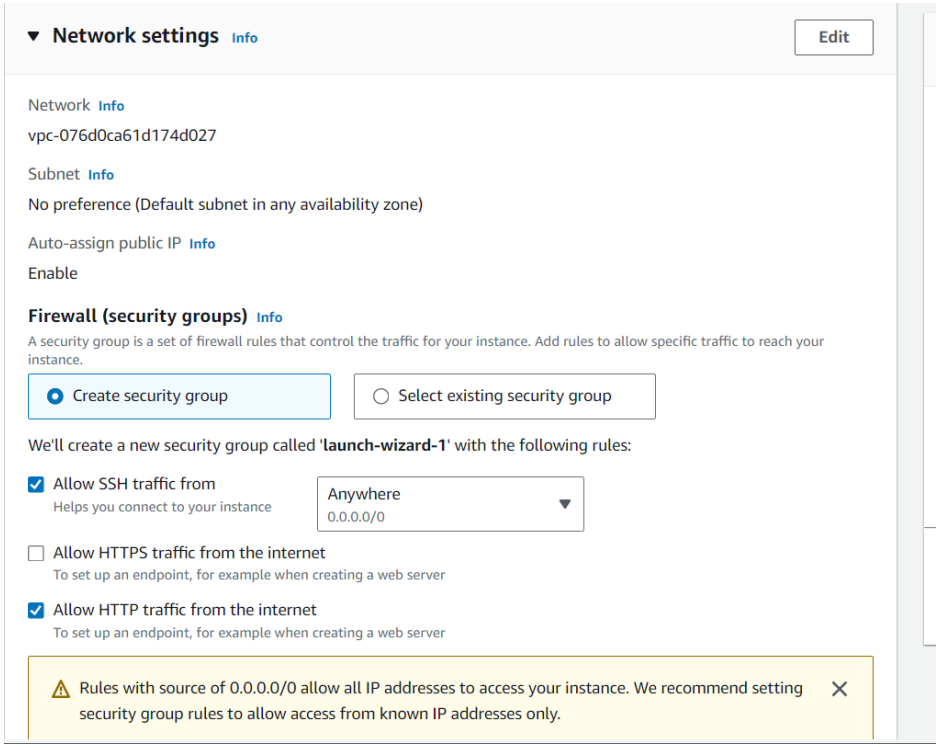
4.add the storage aws provided default as (8gb ram)



5.add the tags

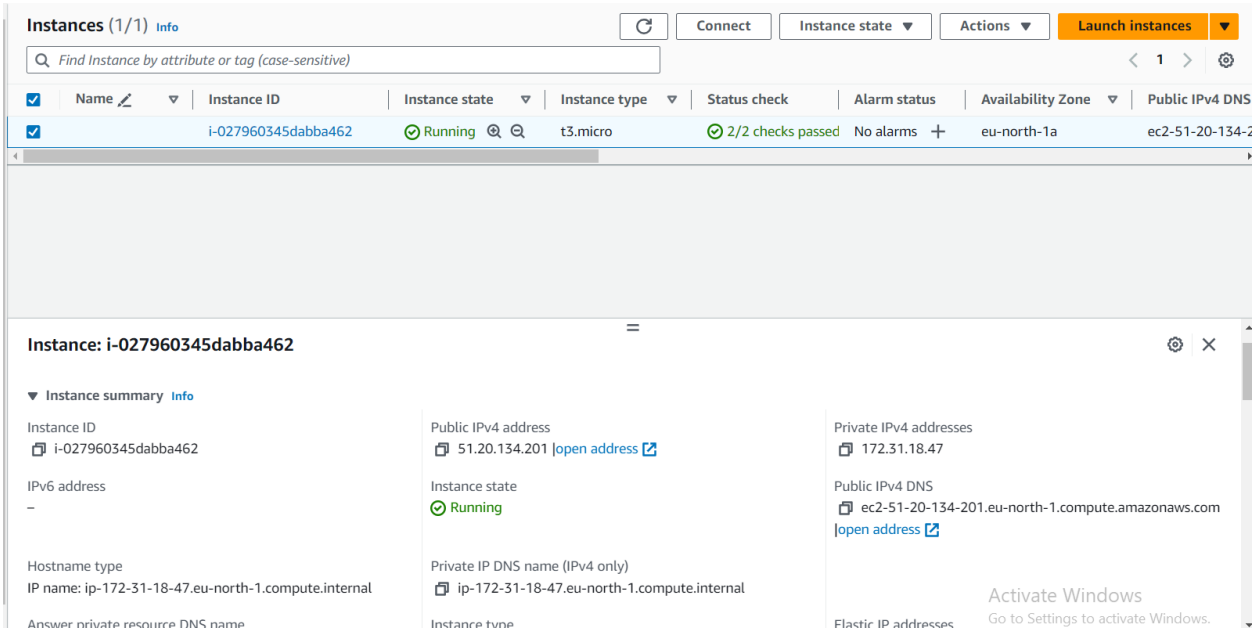


6.choose the security group and allow the http traffic



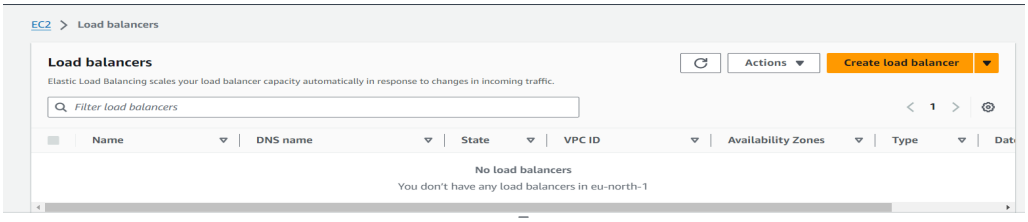
7.review the and launch instance

Go the ec2 detalis copy the public ip adress and paste in google browser because webserver working correctly or not

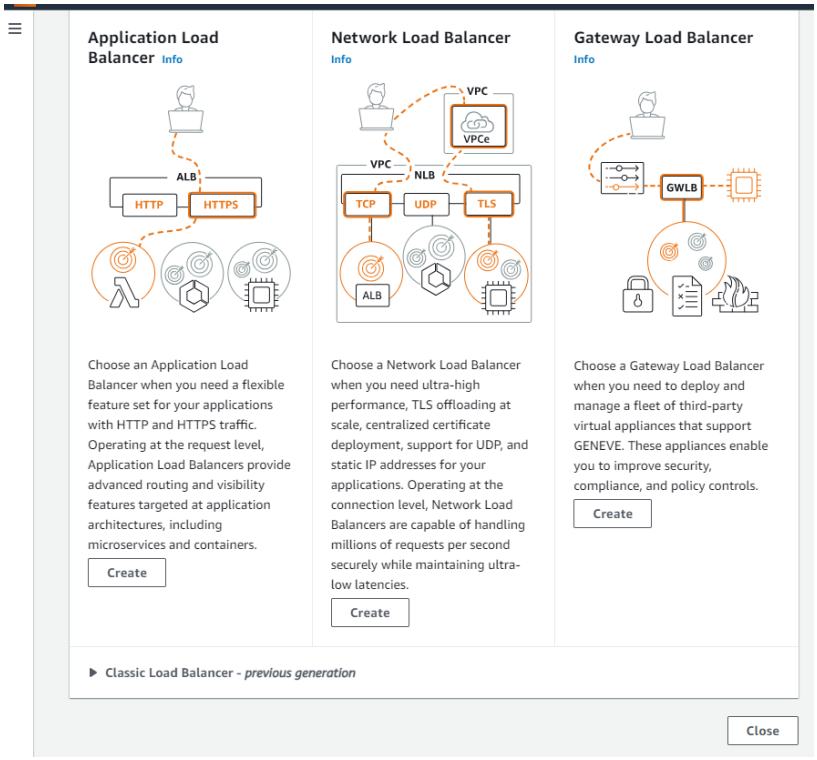


Launch the another instance as shown a below

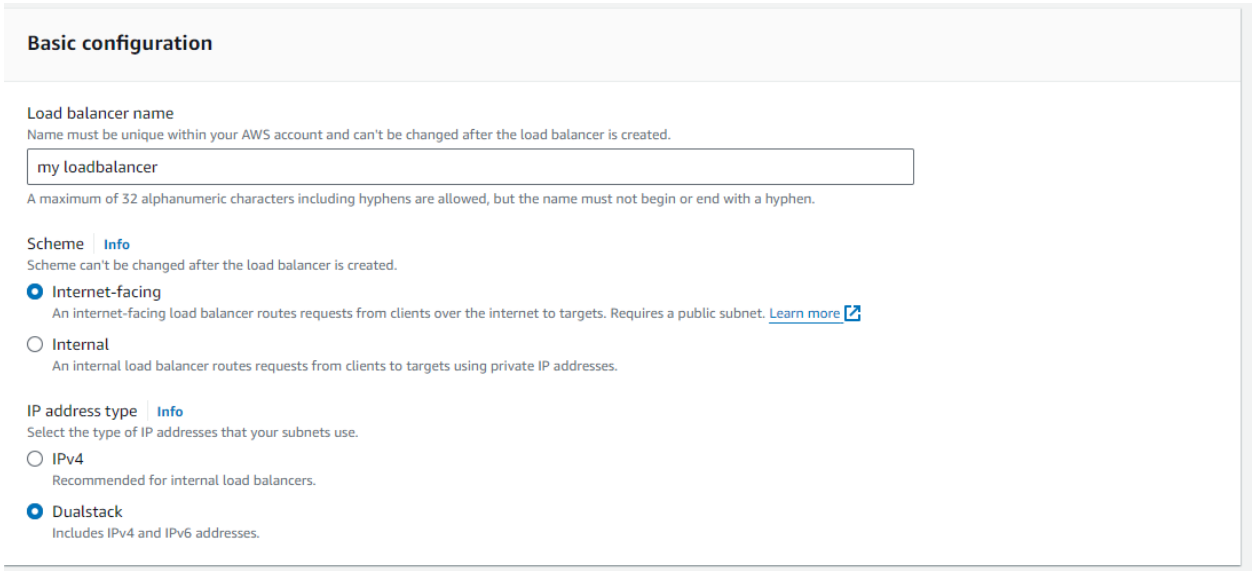
2. Choose the load balance as shown in below



Steps to create load balance as shown below



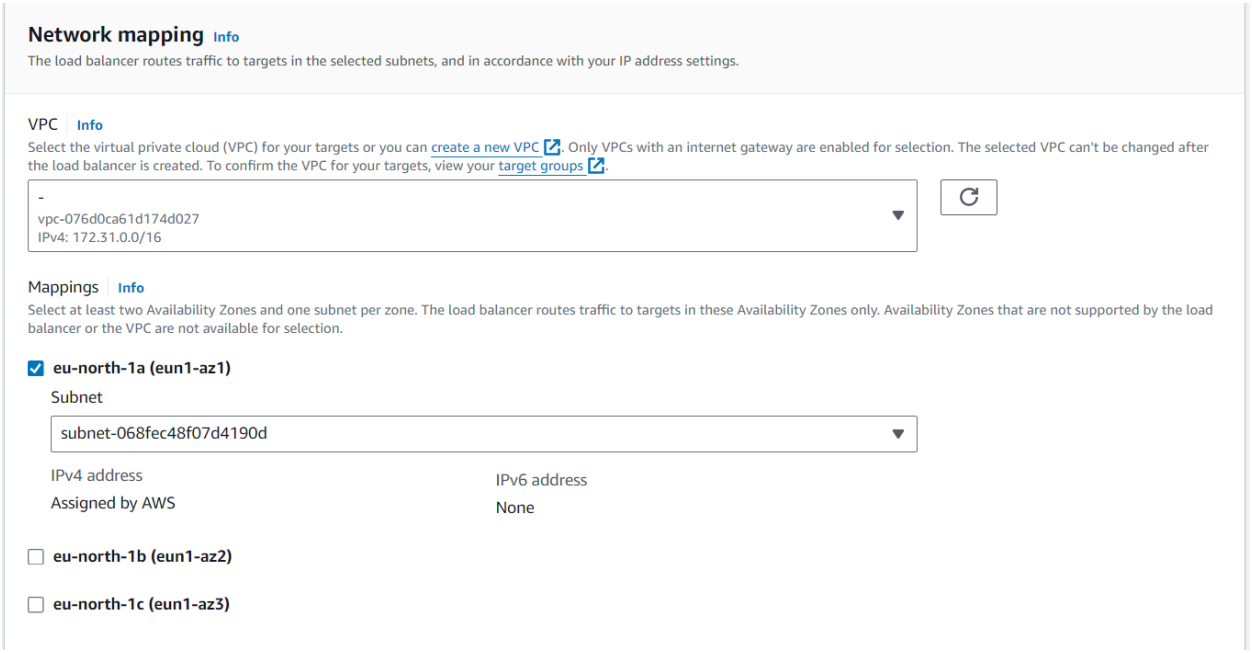
1.Created as Application load balance it allow the http and https traffic as shown as below



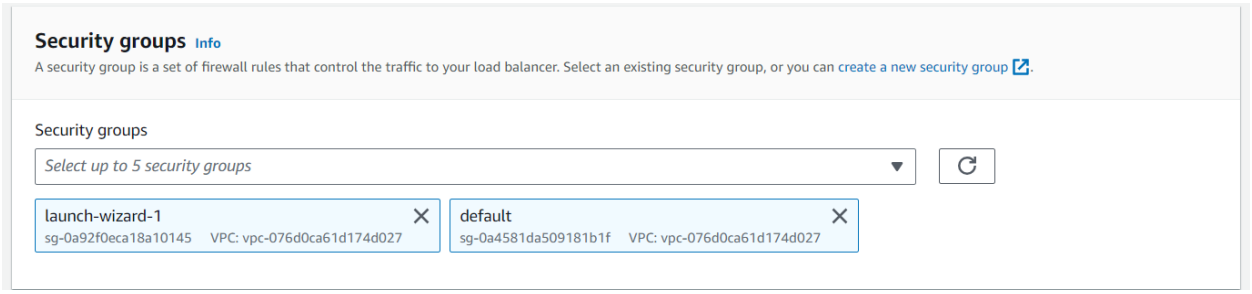
When are deals with public ip gothe internet -facing and internal ip means the public ip

Choose the both ipv4 and ipv6 go the dual stack as mentioned as below figure

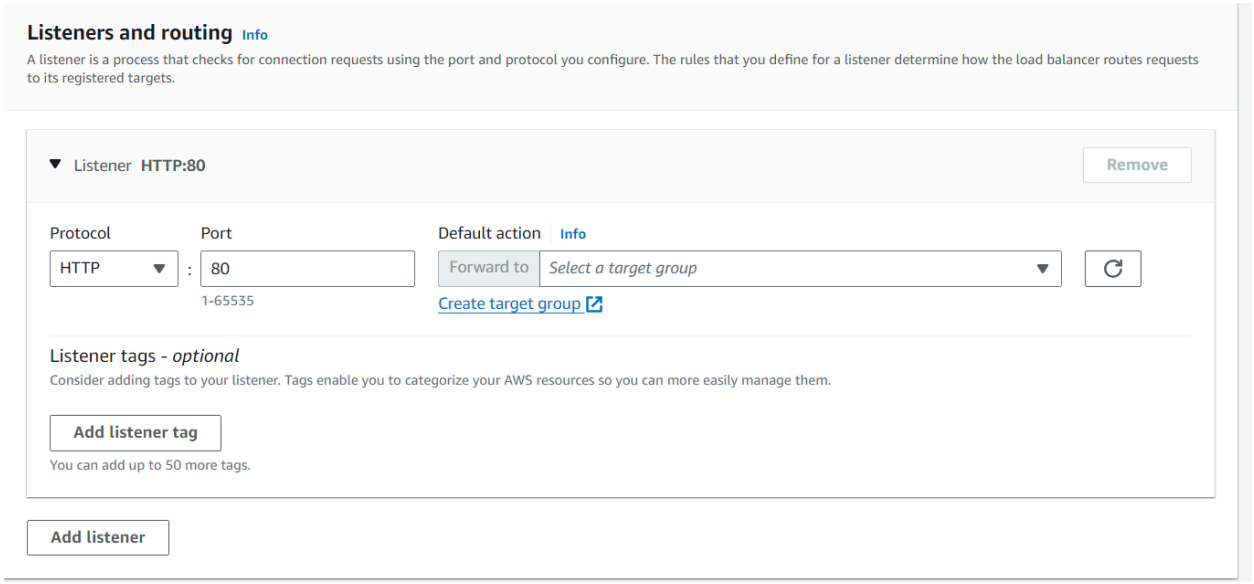
2.choose the network mapping as shown in figure and check and ec2 - instance avaliablity zone mentioned checkbox as below two mapping one default and another one you need mentioned .



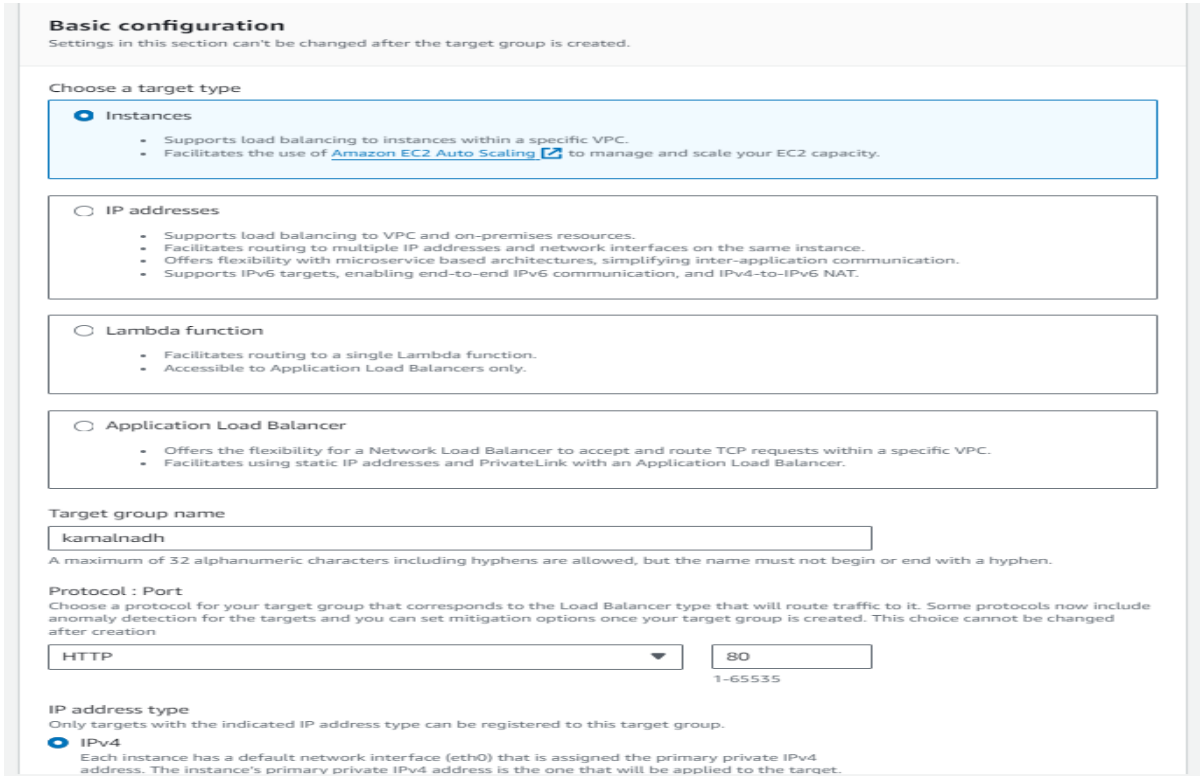
3.choose the security group and menthioned ec2 instance security group one default and another one is ec2 security group



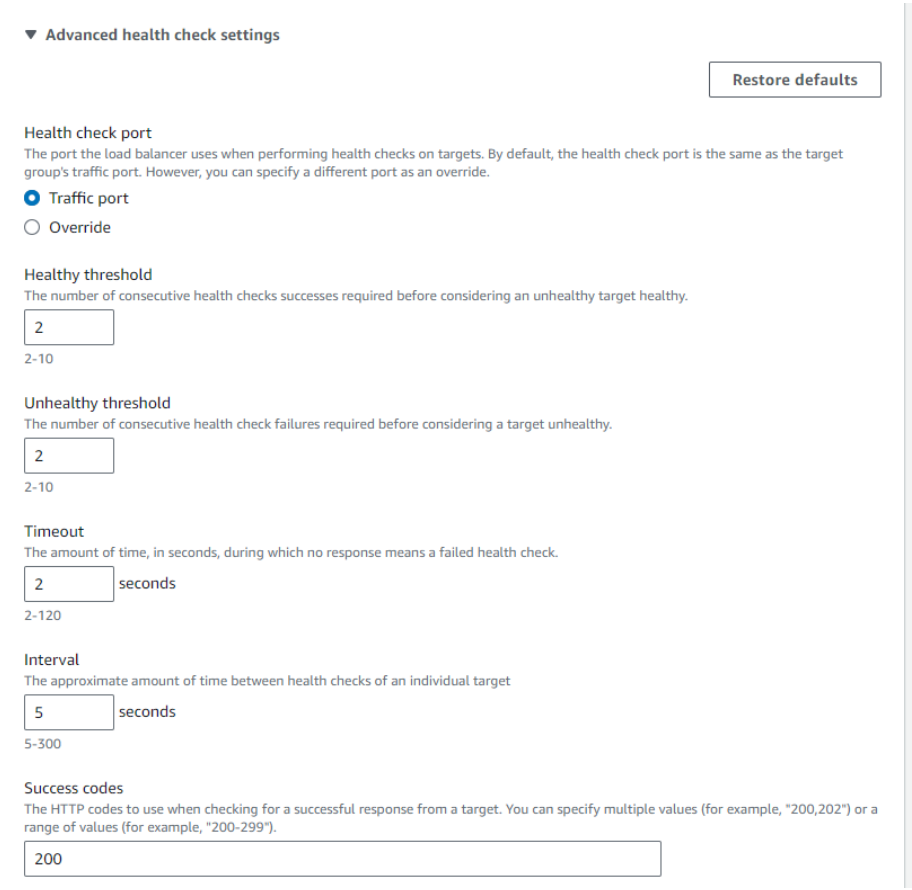
4.Application load balance allow only http and https as below



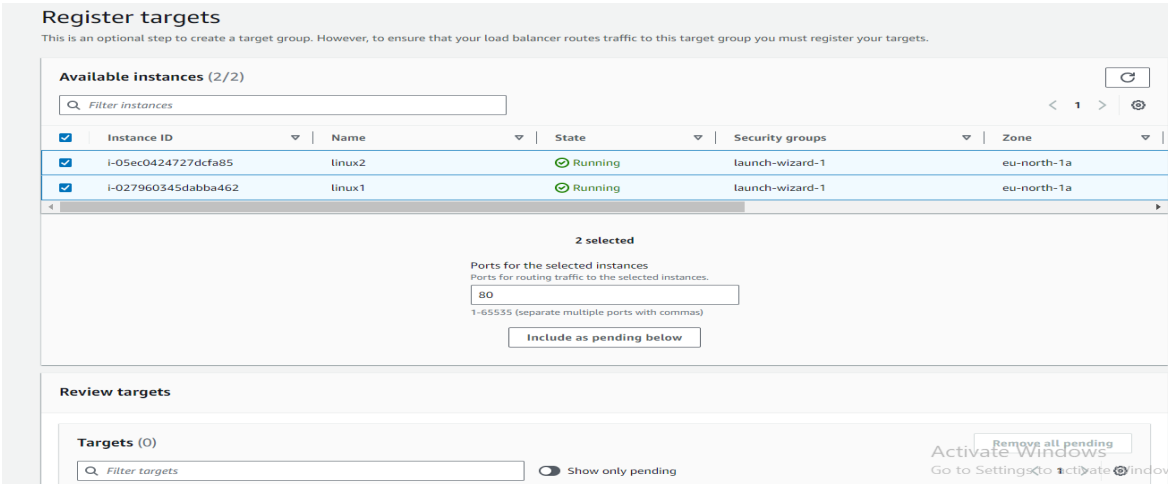
5.created target group as below and given the target group name

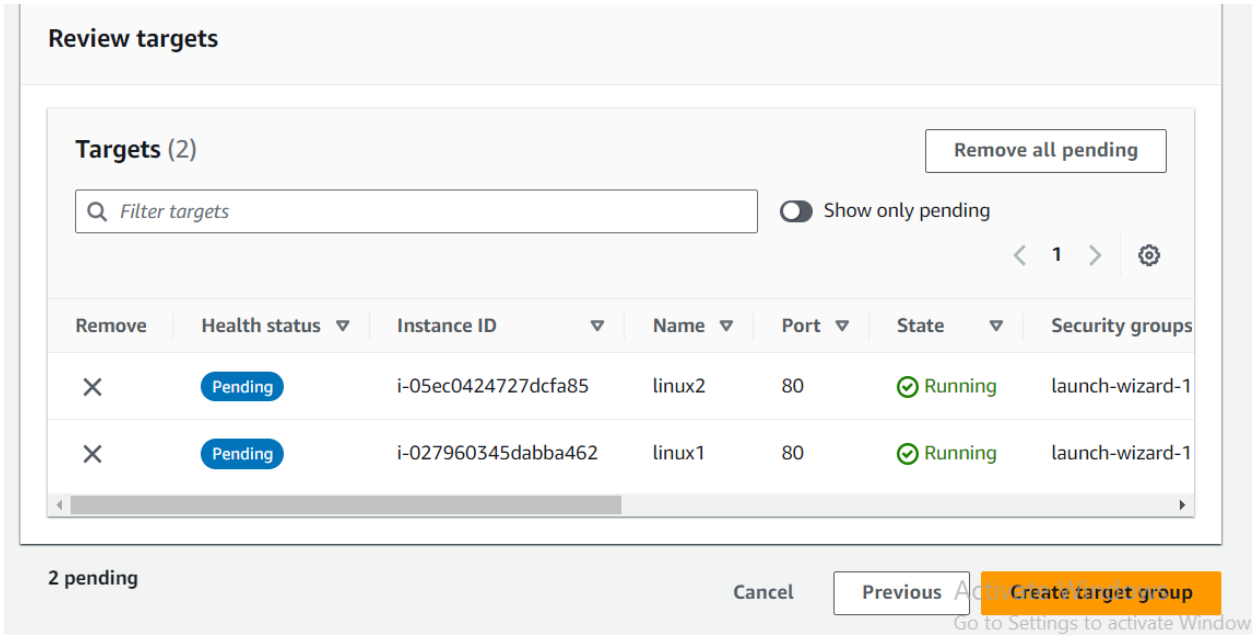


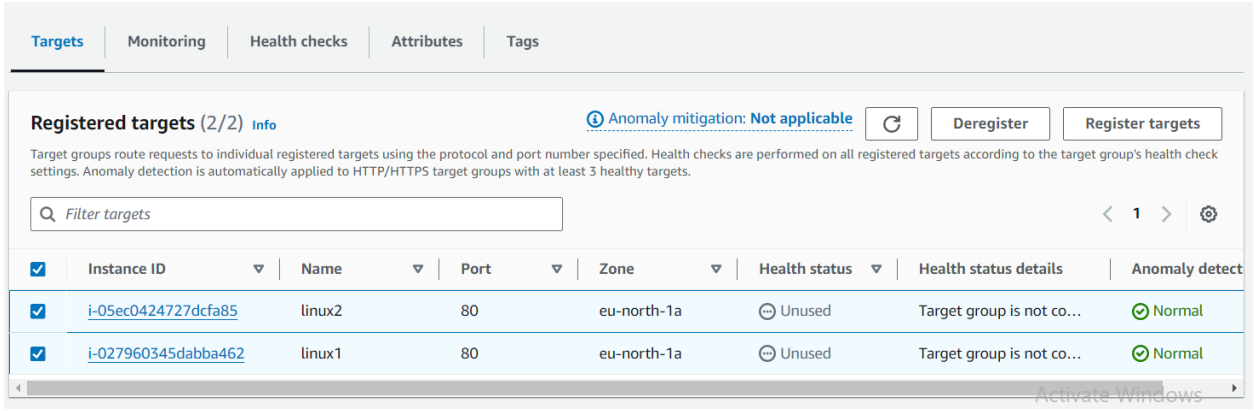
6.change the health check and unhealthy check as below as save and go the next



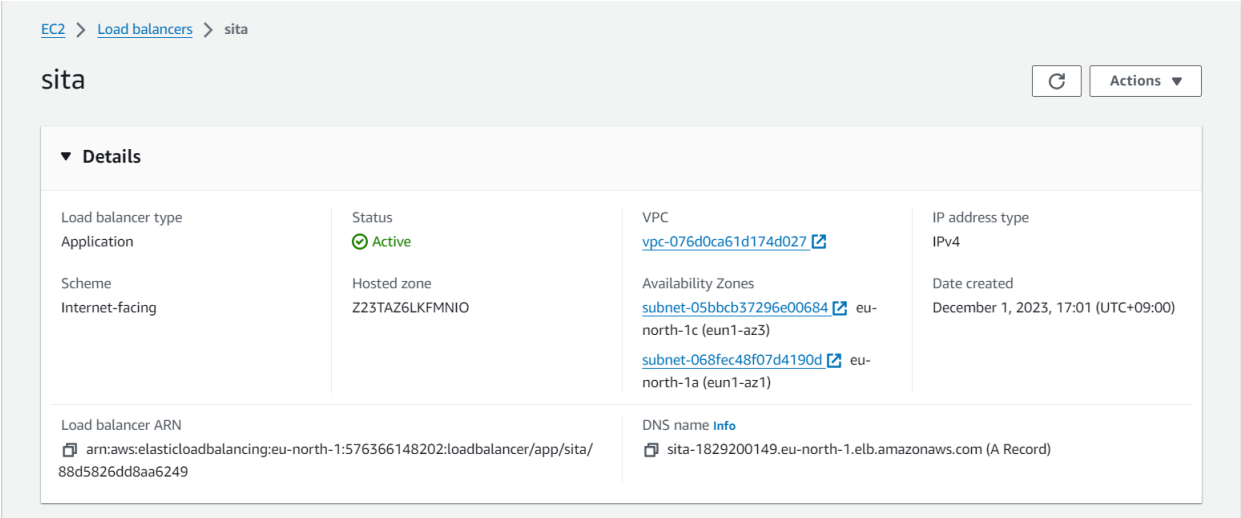
7.register two instance in target group as click on pending status




Review targets
Targets (2)
Remove all pending
Filter targets
Show only pending
1
Remove
Health status
Instance ID
Name
Port
State
Security groups
Pending
i-05ec0424727dcfa85
linux2
80
Running
launch-wizard-1
Pending
i-027960345dabba462
linux1
80
Running
launch-wizard-1
2 pending
Cancel
Previous
Create target group
Go to Settings to activate Window


Targets
Monitoring
Health checks
Attributes
Tags
Registered targets (2/2) Info
Anomaly mitigation: Not applicable
Deregister
Register targets
Target groups route requests to individual registered targets using the protocol and port number specified. Health checks are performed on all registered targets according to the target group's health check settings. Anomaly detection is automatically applied to HTTP/HTTPS target groups with at least 3 healthy targets.
Filter targets
1
Instance ID
Name
Port
Zone
Health status
Health status details
Anomaly detect
i-05ec0424727dcfa85
linux2
80
eu-north-1a
Unused
Target group is not co…
Normal
i-027960345dabba462
linux1
80
eu-north-1a
Unused
Target group is not co…
Normal
Activate Windows

Go the load balance is the copy as DNS and paste



The paste dns and google chrome if traffic move on one server to another server as shown as figure

Then you refresher as server then move traffic to another webserver as shown in figure