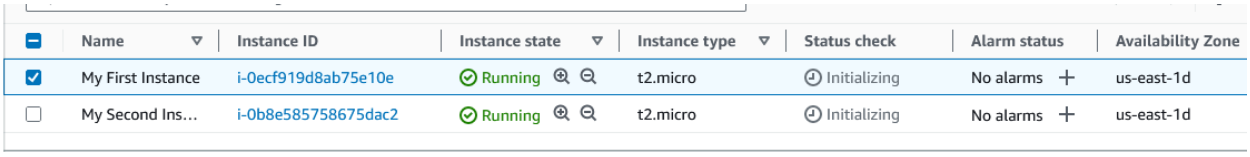
AWS Section 10 - ALB Hands on

Go to the EC2 instance and create 2 instances.

Add the following code to the user data script while creating the EC2 instances.

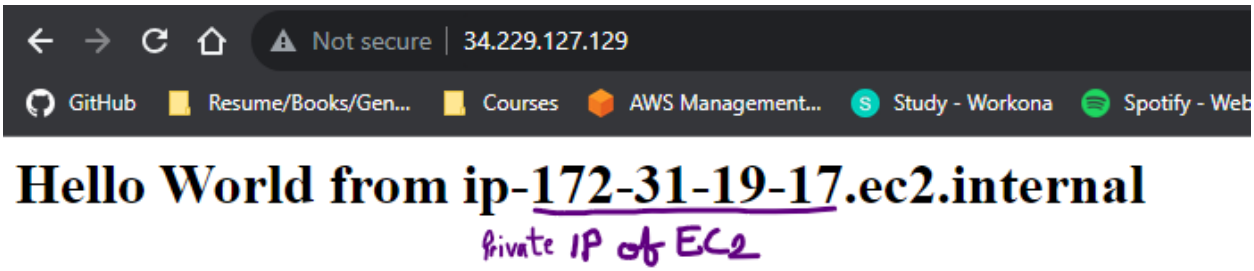
```
#!/bin/bash
# Use this for your user data (script from top to bottom)
# install httpd (Linux 2 version)
yum update -y
yum install -y httpd
systemctl start httpd
systemctl enable httpd
echo "<h1>Hello World from $(hostname -f)</h1>" > /var/www/html/index.html
```



Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
My First Instance	i-0ecf919d8ab75e10e	Running	t2.micro	Initializing	No alarms	us-east-1d
My Second Ins...	i-0b8e585758675dac2	Running	t2.micro	Initializing	No alarms	us-east-1d

Here i have created two instances with the above user data script.

Copy the public IP of both and open two different tabs in chrome and following message will be displayed.

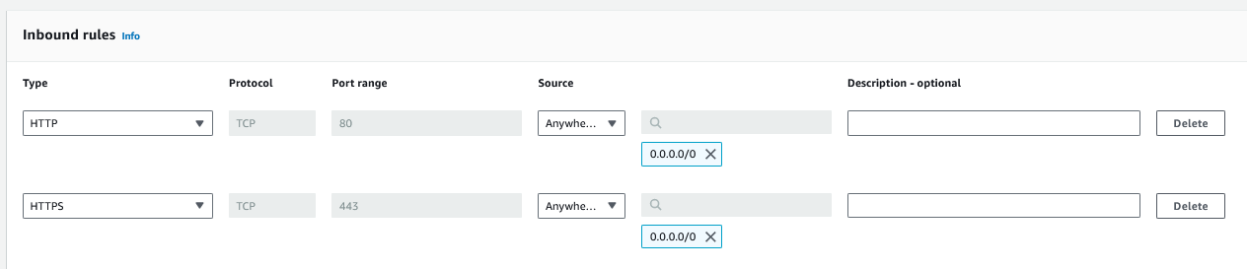


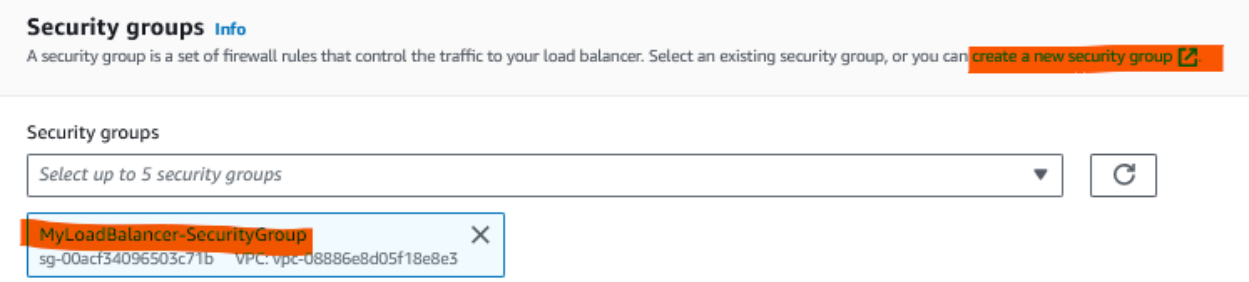
Private Ip of both the EC2 instance will be shows in the browser when the ip address will be displayed.

Go to the load balancer and create load balancer, Security group for load balancer, Target group.

as following

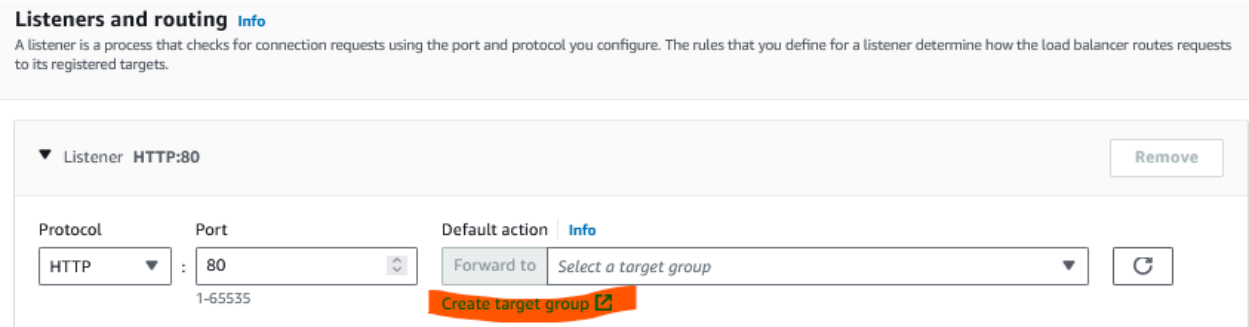
- GO to load balancer and choose application load balancer after clicking on create load balancer.
- Under basic configuration give the name to ALB.
- Under network settings keep the load balancer as internet facing and then select all the mappings under the subnet section.
- Create the security group by clicking on security group link. Create the SG with below inbound and out bound rules for the load balancer. Give the name to this security group.
  And then again when you come back to the load balancer tab go join this newly created security group to the Load balancer.



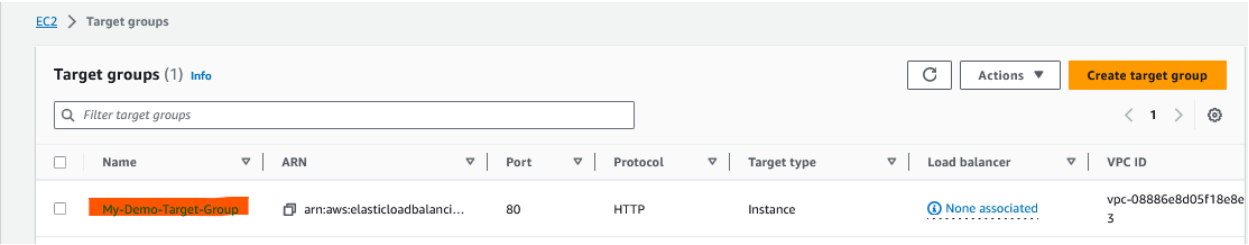


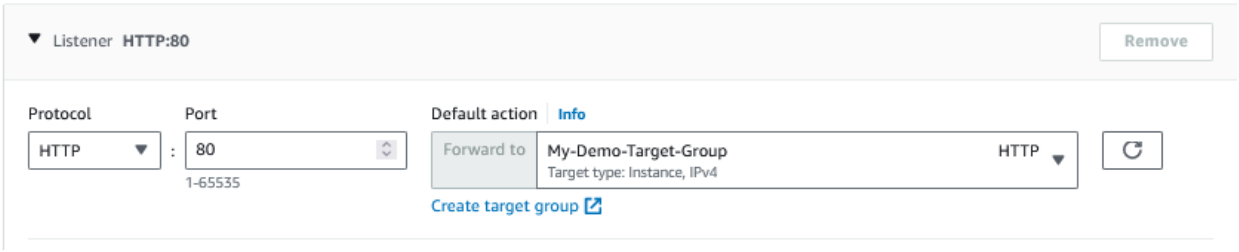
Click on that link above to direct to the security group. Remove the default sg and add the newly created sg to the load balancer.

Now we will create the target group and add servers to it by clicking on the link of create target group under the “listeners and routing section”



Under the Basic configuration page choose Instances and then give the target group name. Then proceed with the default selection to the next page. Add the 2 EC2 instances which we created.

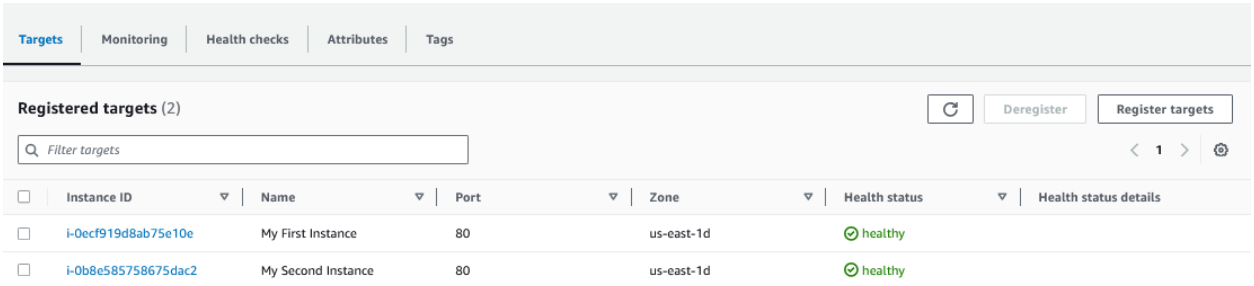




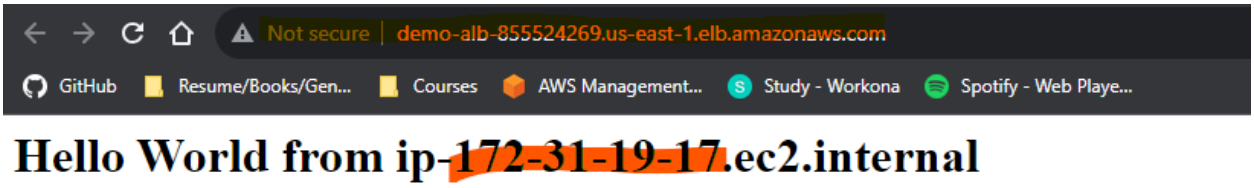
added new created target group.

Going forward keep all the rest settings as it is and then create the load balancer.

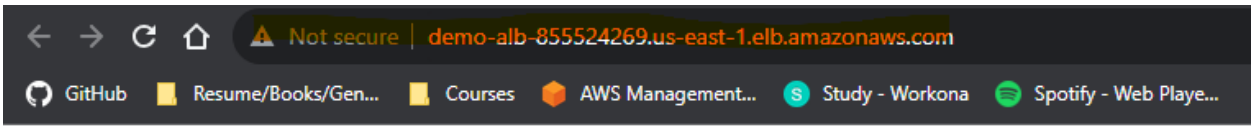
Go to the target group and you can see that the EC2 instances are healthy.



Now on the load balancer page we can see that there is a DNS which is common for the users. If we use that and open it in new tab of google chrome then we can actually access both the servers and we dont need to use two different tabs. Just refresh the link in the browser and the traffic will get routed to both the instances depending on the traffic.



Here the link is of the DNS name and the address is private IP of one EC2 instance. If we refresh the page then we will direct to the EC2 instance and private ip will get displayed.



Hello World from ip-172-31-19-133.ec2.internal

This is hands on of ALB completed.