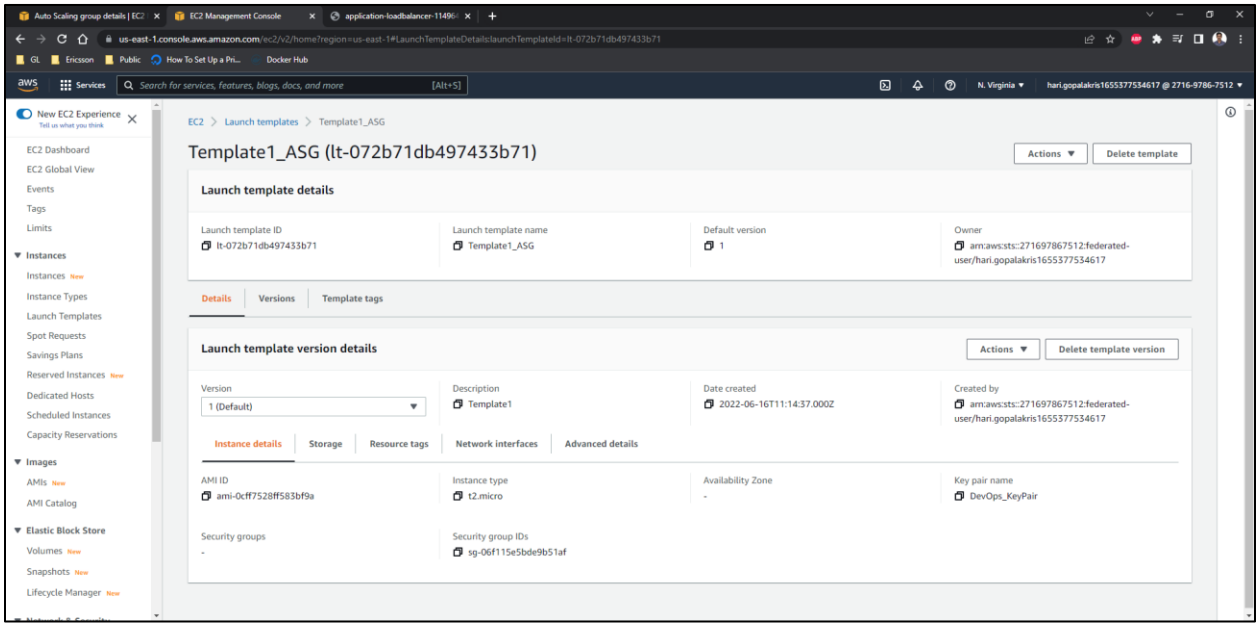
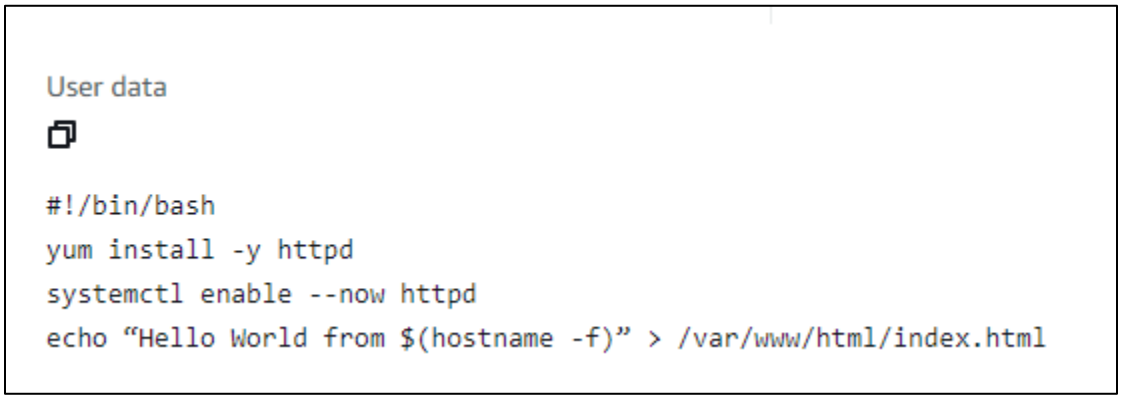
Assignment 4 :: Configure Autoscaling with 60% threshold CPU utilization metrics

Step 1 :: Create a template to launch instances automatically




Note: I have added a bash script to create an instance with pre-installed http and print its fqdn. (Need to add in “Advance Details” Tab)

#!/bin/bash
yum install -y httpd
systemctl enable --now httpd
echo “Hello World from $(hostname -f)” > /var/www/html/index.html




Step 2 :: Select the VPC and Subnets required

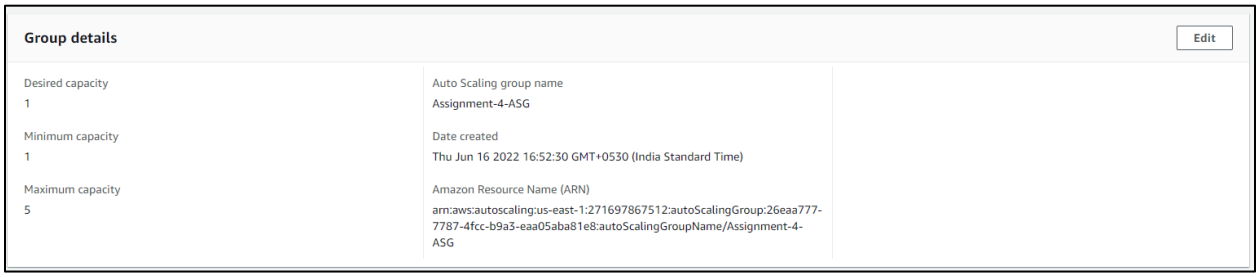
Step 3 :: Attach the existing Load Balancer or create a new Load Balancer and attach the same here. I have attached the existing one.


Step 4 :: Set the desired Group Size. I have set

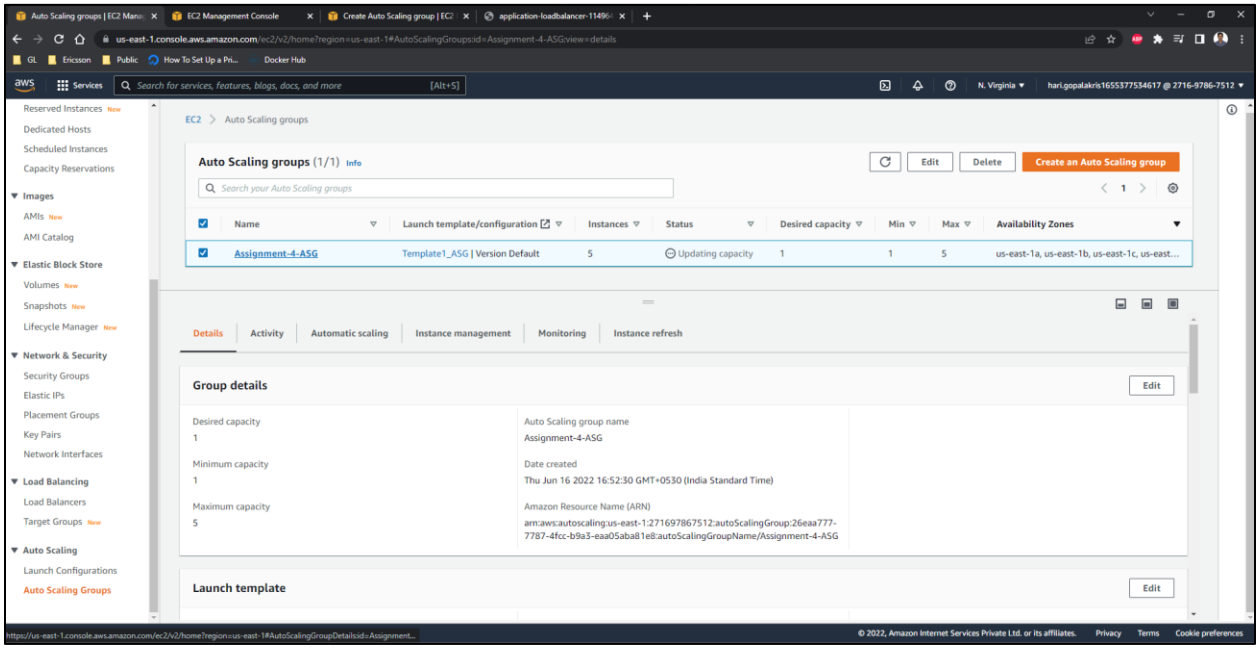
Desired Capacity – 1

Minimum Capacity – 1

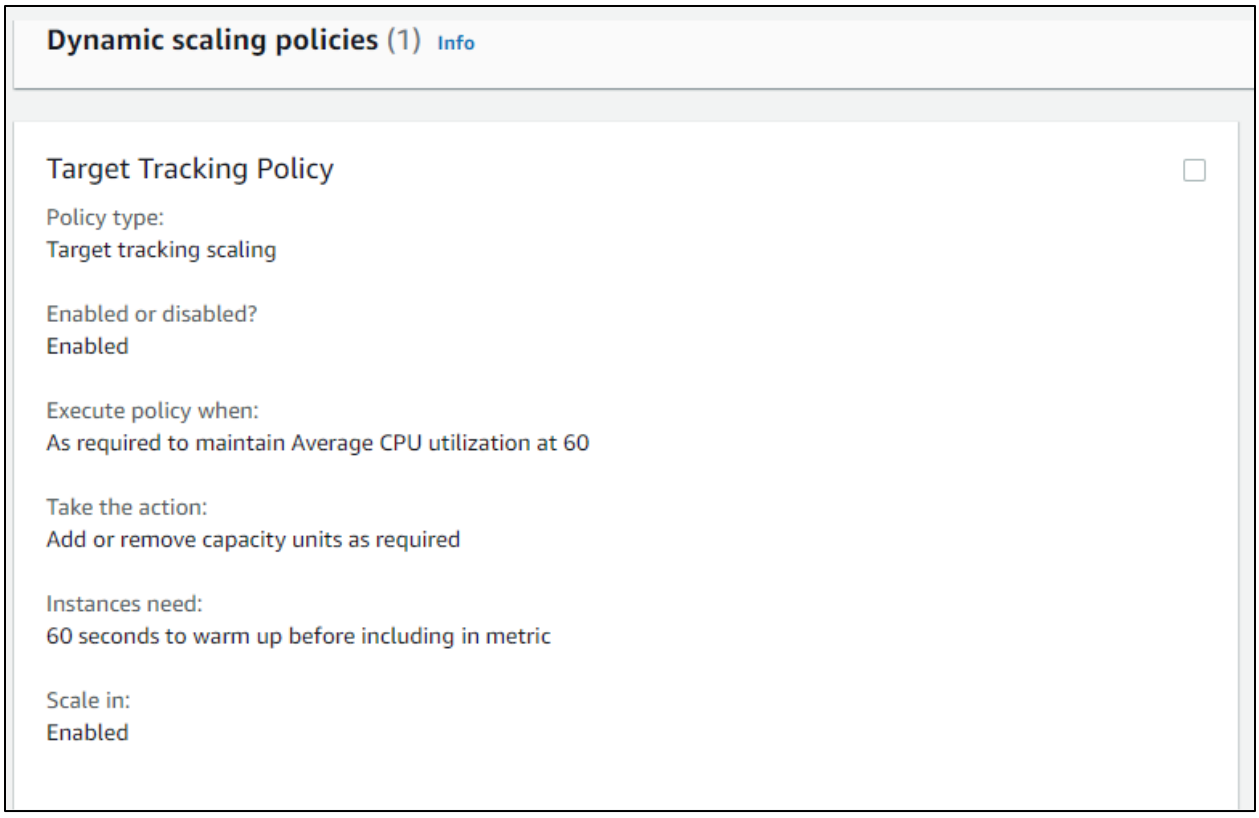
Maximum Capacity – 5

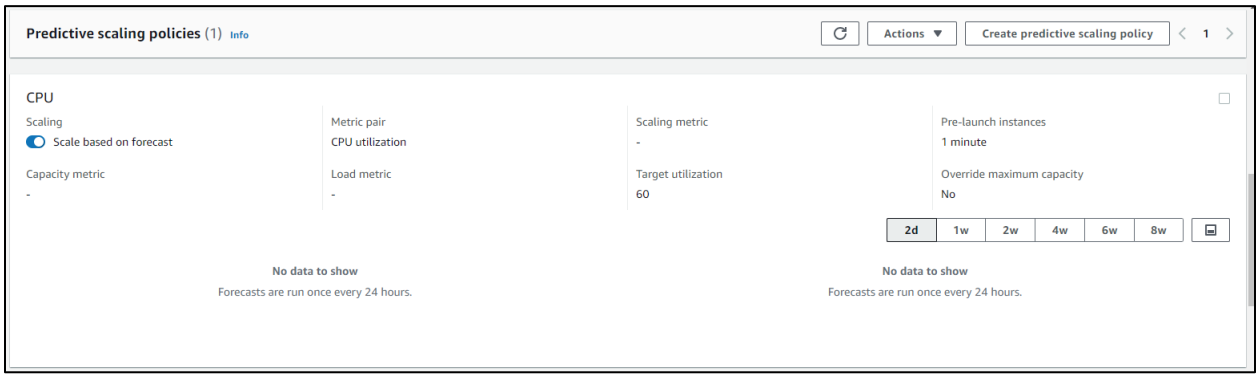



Step 5 :: Skip the remaining and submit. We will get the ASG as below

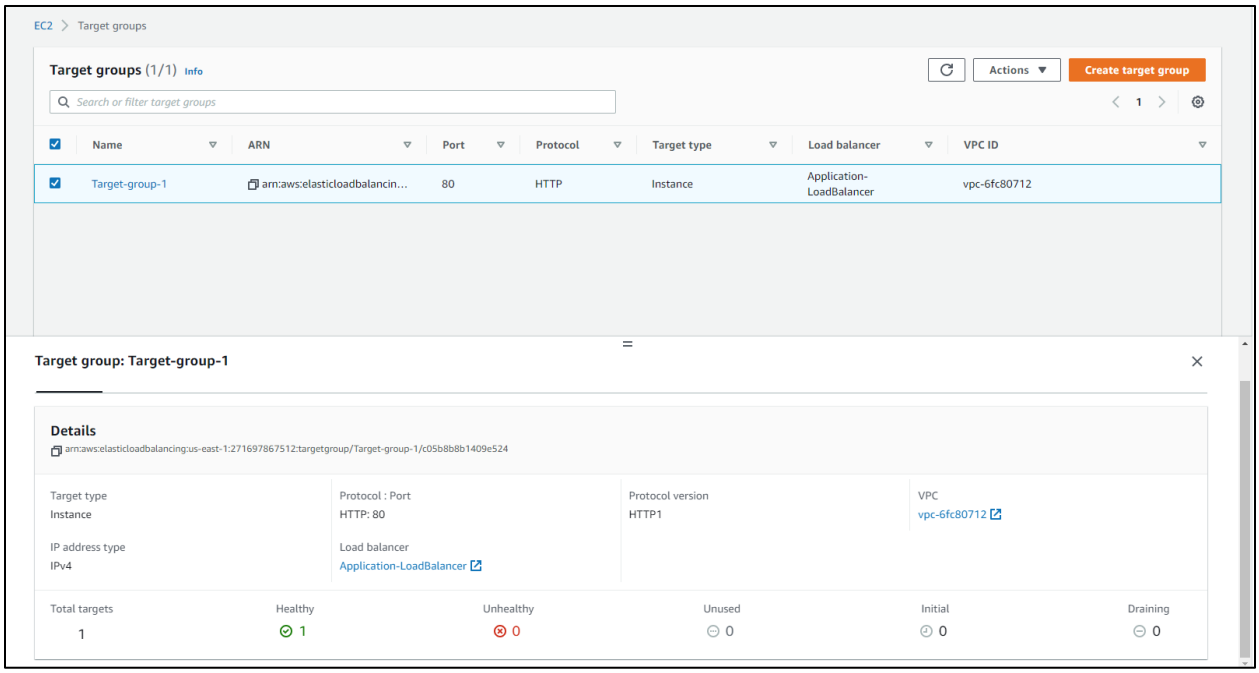


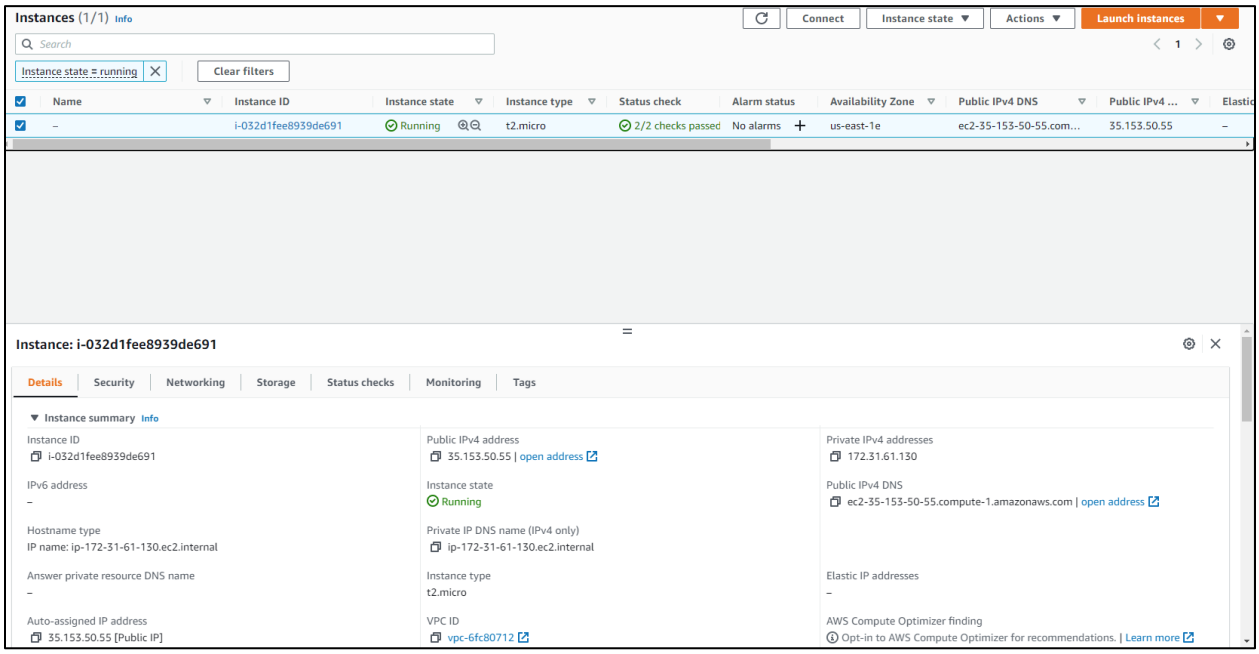
Step 6 :: Click on the Automatic Scaling tab and create policies as below



Result :

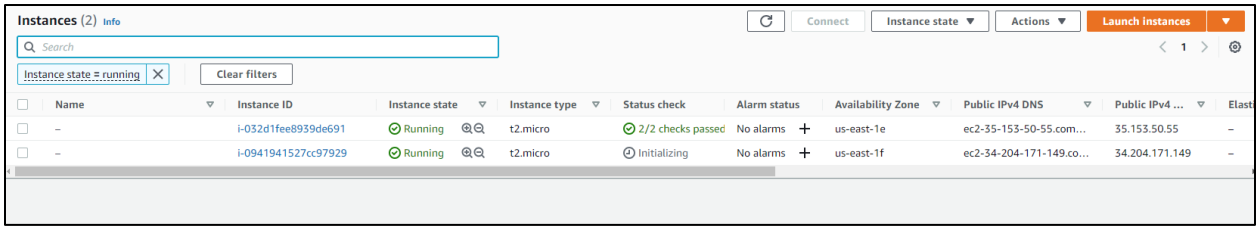


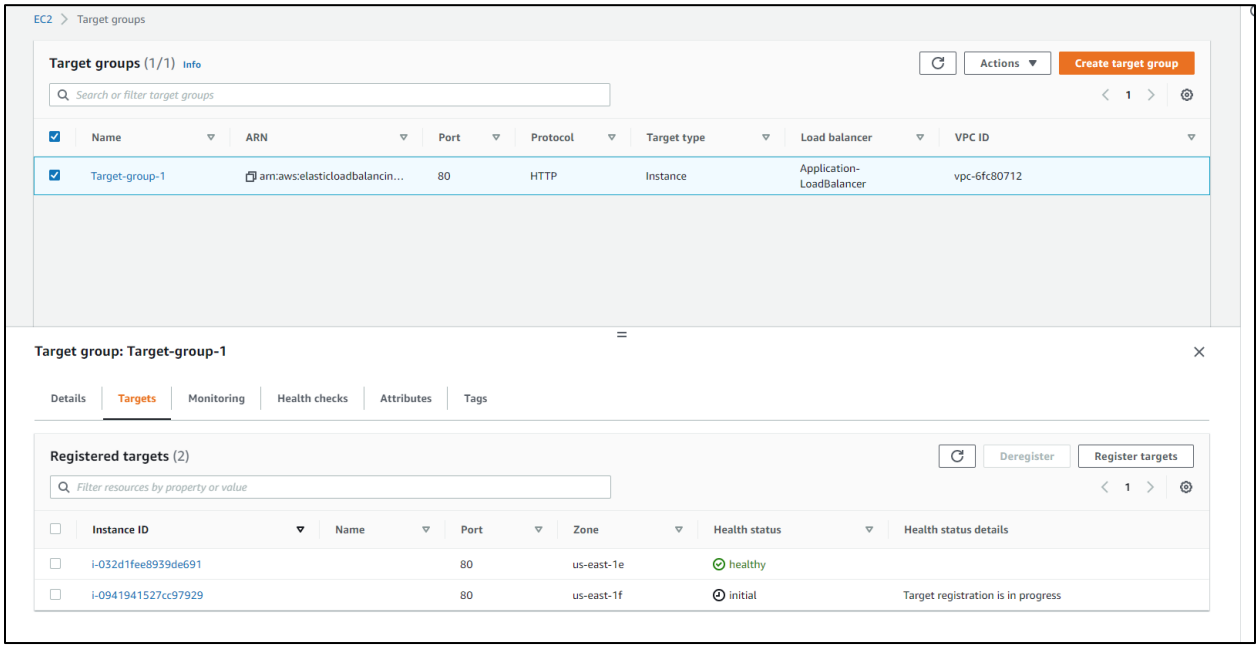



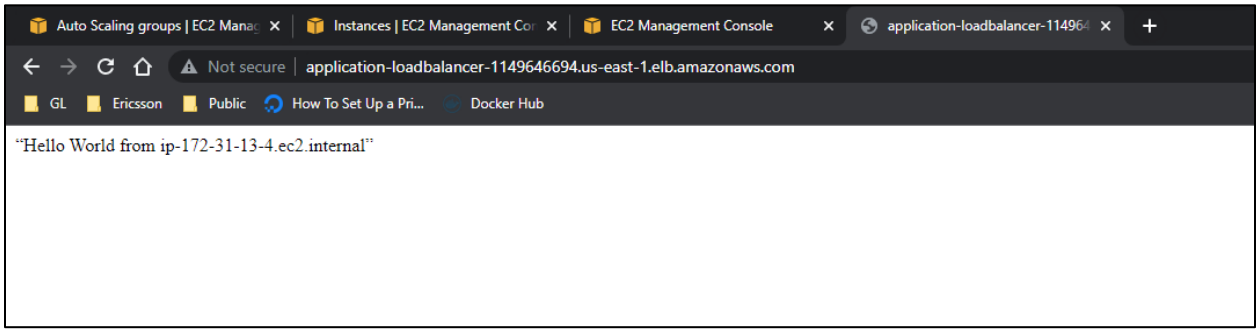

Increasing the CPU Utilization

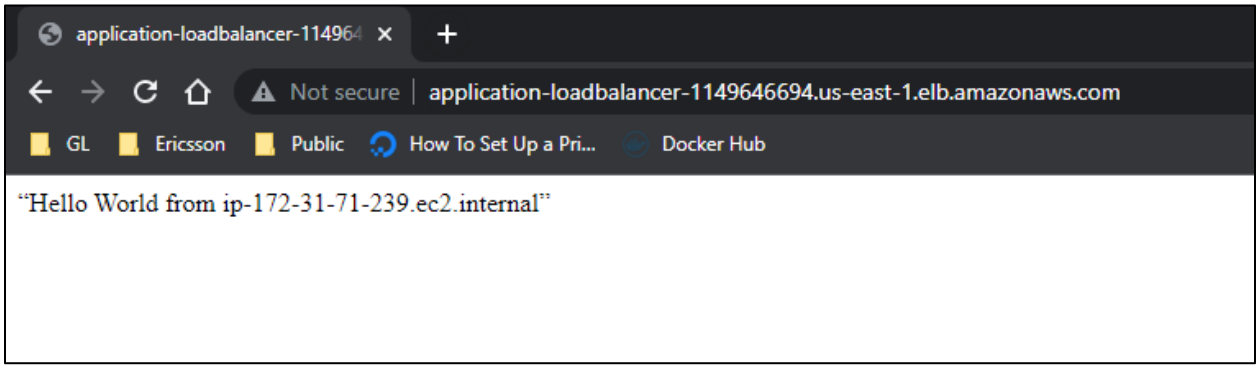
# yes > /dev/null & → Run in terminal to increase the CPU utilization

It automatically created a new instance and added to Target Group as well


Instances (2) Info
Search
Instance state = running
Clear filters
Connect
Instance state
Actions
Launch instances
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4 DNS
Public IPv4 ...
i-032d1fee8939de691
Running
t2.micro
2/2 checks passed
No alarms
us-east-1e
ec2-35-153-50-55.com...
35.153.50.55
i-0941941527cc97929
Running
t2.micro
Initializing
No alarms
us-east-1f
ec2-34-204-171-149.co...
34.204.171.149


EC2 > Target groups
Target groups (1/1) Info
Search or filter target groups
Actions
Create target group
Name
ARN
Port
Protocol
Target type
Load balancer
VPC ID
Target-group-1
arn:aws:elasticloadbalancin...
80
HTTP
Instance
Application-LoadBalancer
vpc-6fc80712
Target group: Target-group-1
Details
Targets
Monitoring
Health checks
Attributes
Tags
Registered targets (2)
Filter resources by property or value
Deregister
Register targets
Instance ID
Name
Port
Zone
Health status
Health status details
i-032d1fee8939de691
80
us-east-1e
healthy
i-0941941527cc97929
80
us-east-1f
initial
Target registration is in progress


Auto Scaling groups | EC2 Mana
Instances | EC2 Management Co
EC2 Management Console
application-loadbalancer-114964
Not secure
application-loadbalancer-1149646694.us-east-1.elb.amazonaws.com
GL
Ericsson
Public
How To Set Up a Pri...
Docker Hub
"Hello World from ip-172-31-13-4.ec2.internal"


application-loadbalancer-114964
Not secure
application-loadbalancer-1149646694.us-east-1.elb.amazonaws.com
GL
Ericsson
Public
How To Set Up a Pri...
Docker Hub
"Hello World from ip-172-31-71-239.ec2.internal"