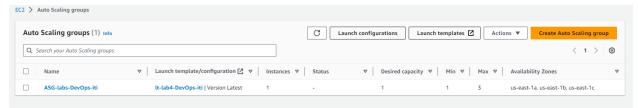
Seif Eldin Mohamed Aboelhassan Mohamed Hendawy Lab 4

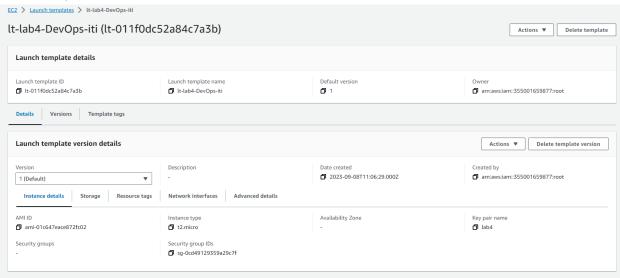
1- create load balancer



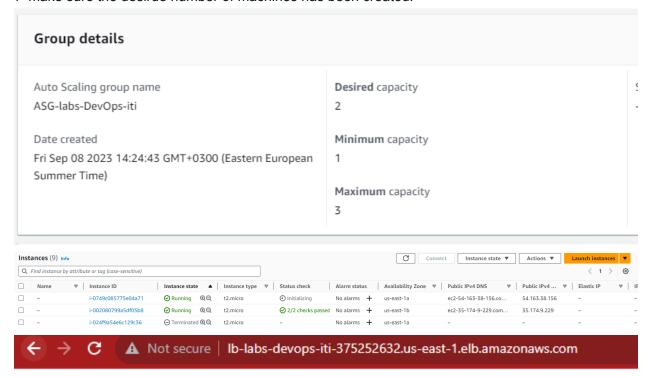
2- create ASG



3- create launch template to have script to install httpd and print hostname in index.html file (script I used in lec)



4- make sure the desirde number of machines has been created.



Hello World From ip-10-0-22-31.ec2.internal

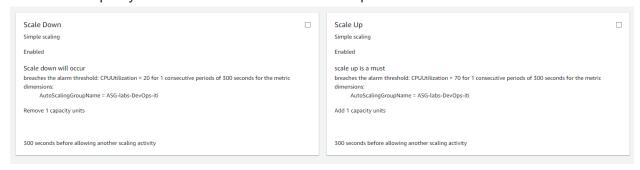


Hello World From ip-10-0-9-62.ec2.internal



Hello World From ip-10-0-44-3.ec2.internal

5-create scale policy to increase ec2 from 2 to 3 incase cpu is over 70%



6-increase the instances cpu to be 100% and see what happens

i-002080799a5df05b8

```
Example: stress --cpu 8 --io 4 --vm 2 --vm-bytes 128M --timeout 10s
Note: Numbers may be suffixed with s,m,h,d,y (time) or B,K,M,G (size).
[ec2-user@ip-10-0-22-31 ~]$ stress --cpu 8
stress: info: [26276] dispatching hogs: 8 cpu, 0 io, 0 vm, 0 hdd
Installed:
   stress-1.0.4-28.amzn2023.0.2.x86 64
Complete!
[ec2-user@ip-10-0-9-62 ~]$ stress --cpu 8
stress: info: [26221] dispatching hogs: 8 cpu, 0 io, 0 vm, 0 hdd
   ALARM: "scale up is a must" in US East (N. Virginia) Inbox x
   AWS Notifications <no-reply@sns.amaz
   You are receiving this email because your Amazon CloudWatch Alarm "scale up is a must" in the US East (N. Virginia) region has entered the ALARM state, because "Threshold Crossed: 1 out of the last 1 datapoints [99 81854308395103 (08/09/23
   greater than the threshold (70.0) (minimum 1 datapoint for OK -> ALARM transition)." at "Friday 08 September, 2023 12:42:24 UTC"
   View this alarm in the AWS Management Console:
   https://us-east-1.console.aws.amazon.com/cloudwatch/deeplink.is?region=us-east-1#alarmsV2:alarm/scale%20up%20is%20a%20must
   - Name:
- Description:
                 scale up is a must
                  OK -> ALARM
    - State Change:
   - Reason for State Change: Threshold Crossed: 1 out of the last 1 datapoints [99 81854308395103 (08/09/23 12:32:00)] was greater than the threshold (70.0) (minimum 1 datapoint for OK -> ALARM transition) - Timestamp: Friday 08 September, 2023 12:42:24 UTC
                   355001659877
    AWS Account:
   - Alarm Arn:
                 arn:aws:cloudwatch:us-east-1:355001659877:alarm:scale up is a must
   Threshold:
    - The alarm is in the ALARM state when the metric is GreaterThanThreshold 70.0 for at least 1 of the last 1 period(s) of 300 seconds
   Monitored Metric:
    - MetricNamespace:
- MetricName:
                        AWS/EC2
                      CPUUtilization
   - Dimensions
                      [AutoScalingGroupName = ASG-labs-DevOps-iti]
   - Statistic:
                    Average
   - Unit:
                    not specified
   - TreatMissingData:
   State Change Actions:
    - ALARM. [arm.aws.sns.us-east-1:355001659877.alent] [arm.aws.autoscalling us-east-1:355001659877.scallingPolicy:59281018-f4fa-411f-af5f-e24a47e8cd35.autoScallingGroupName/ASG-labs-DevOps-lit.policyName/Scale Up]
   - INSUFFICIENT_DATA:
                                     Instance ID
                                                                          Instance state
                                                                                                        Status check
           Name
                                     i-0749c085775e04a71
                                                                          Running
                                                                                            ΘQ
                                                                                                                                     2/2 checks passed
 t2.micro
 i-07ac0dcce1dde8962
                                                                          ΘQ

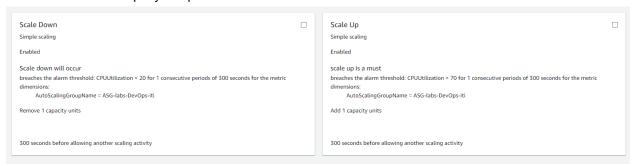
    Initializing

                                                                                                        t2.micro
```

ΘQ

t2.micro

7-create scale down plicy of cpu is under 20%



8-kill process that increase resouces and see what happens

