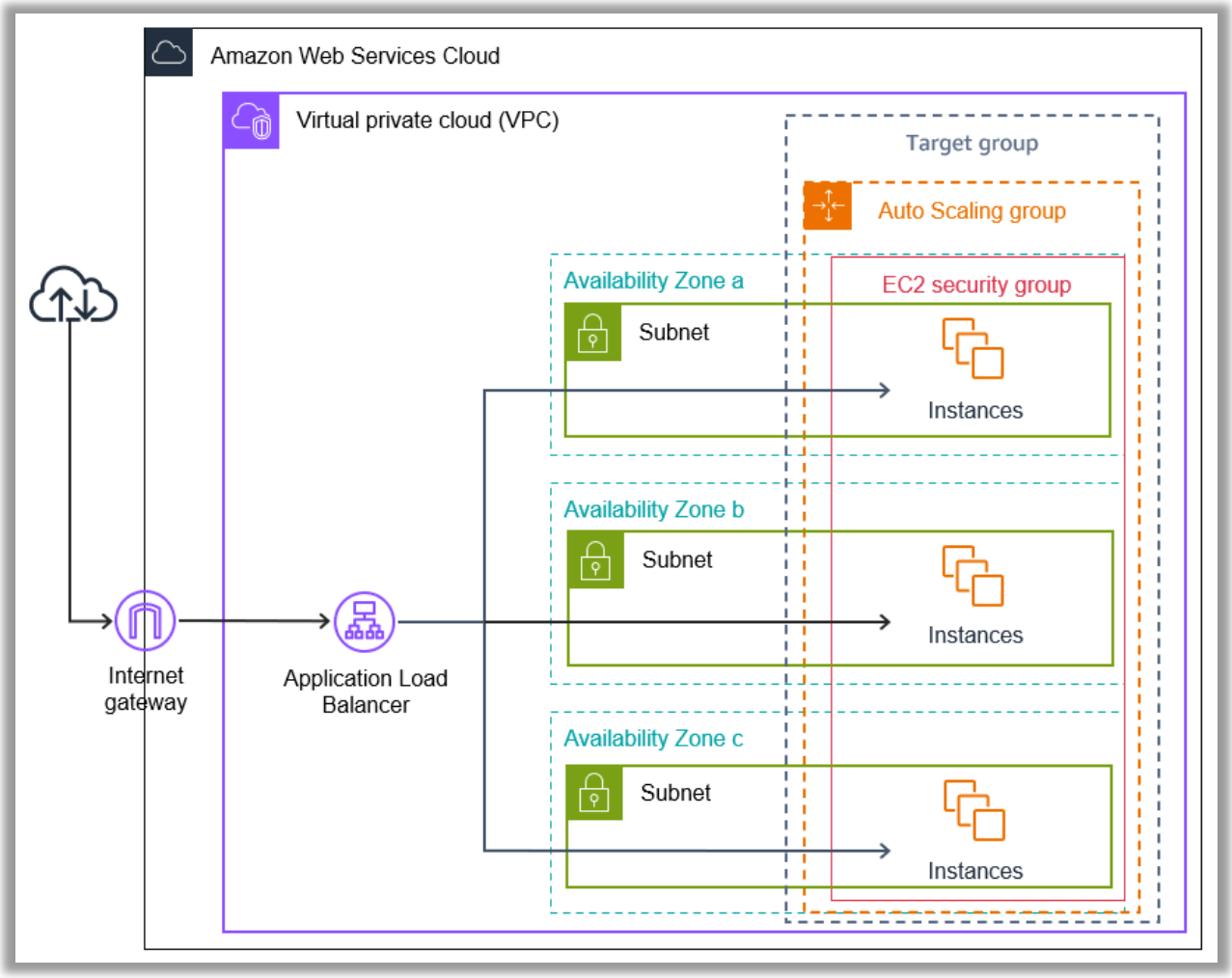
Auto Scaling Group

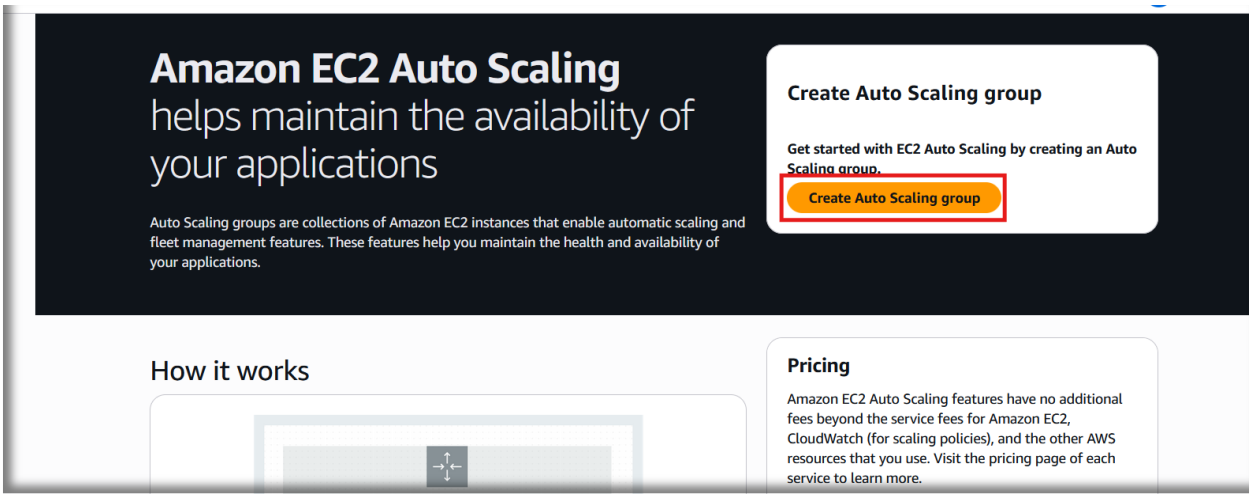
Your First Step Toward Cloud Automation



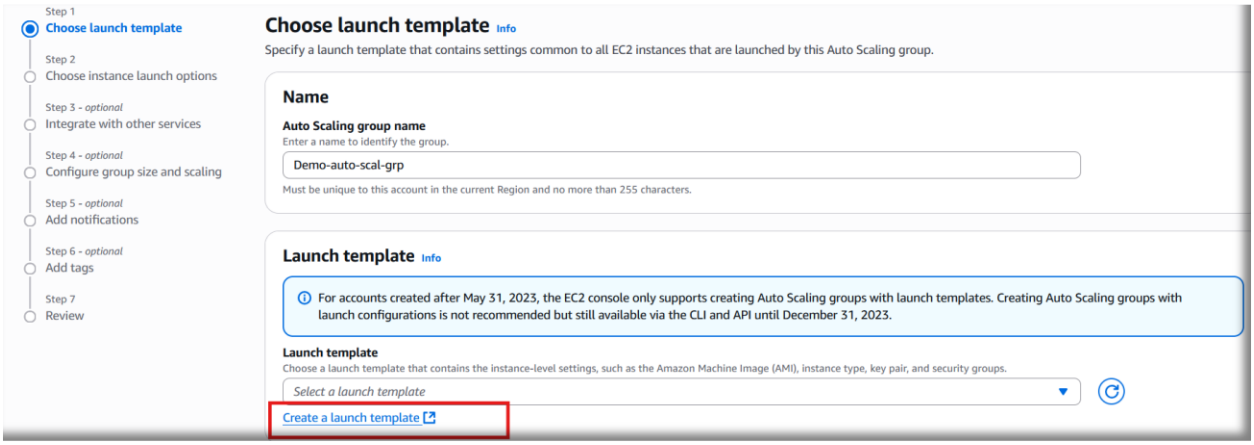
🚀 What is an Auto Scaling Group (ASG)?

An **Auto Scaling Group** that automatically manages the number of **EC2 instances** in your application — based on real-time **traffic and demand**.

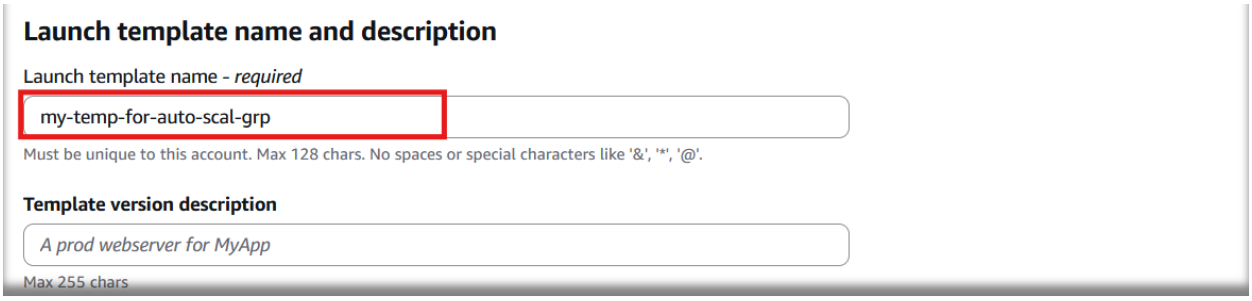
Step 1. Create Auto Scaling Group

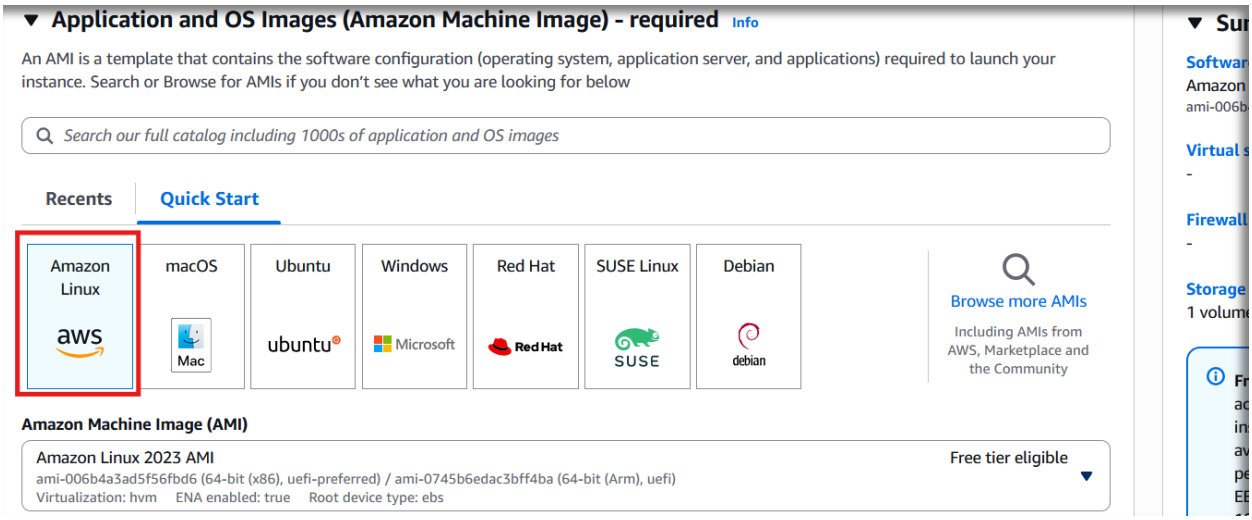


Step 2. Create a Launch Template

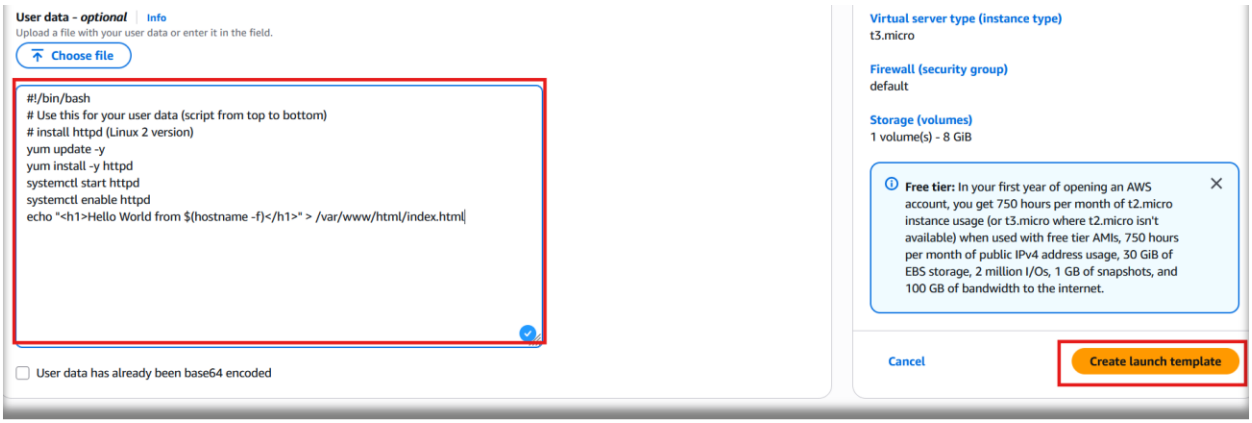


Step 3. Give unique name to your template and choose quick start AMI

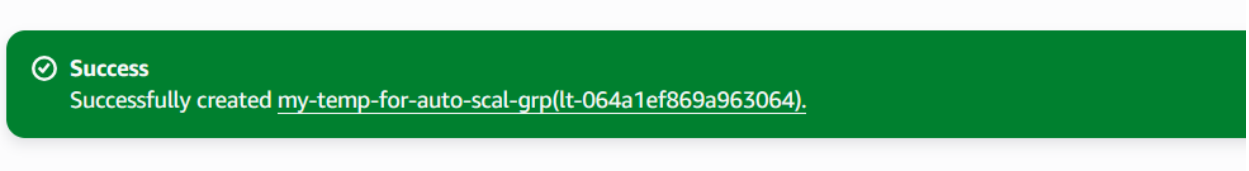




Step 4. Also fill **"User Data"** field which is used to provide a **script that will run automatically** when the instance is launched for the first time.

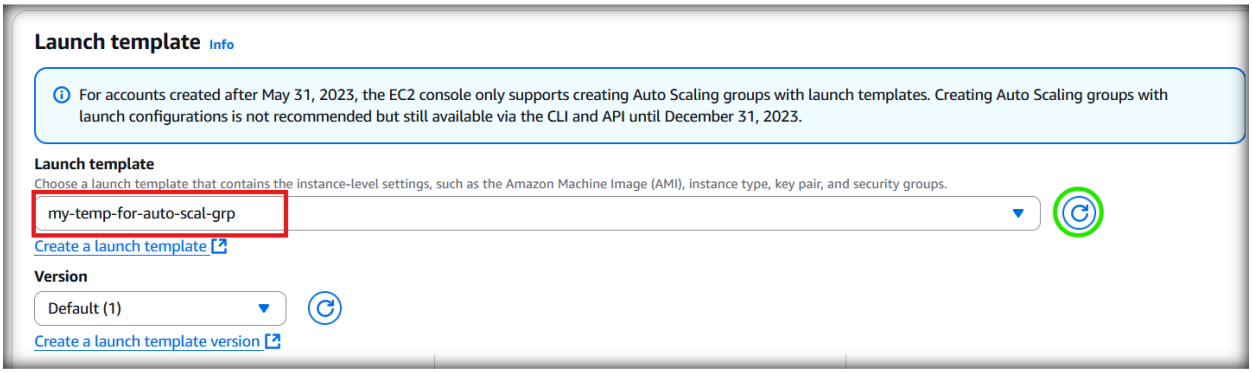


Template Launched Successfully.



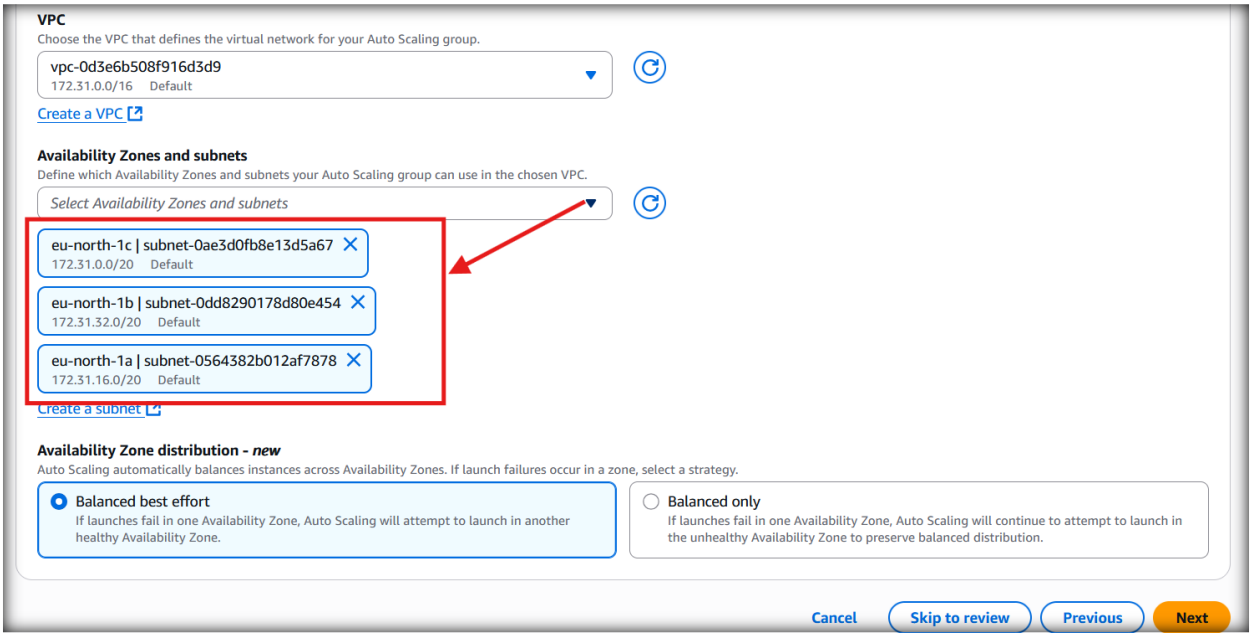
Step 5. For Auto scaling give your template name.

- It stores your instance configuration (AMI, instance type, key, etc)
- You can reuse it easily in Auto Scaling Groups or future launches.

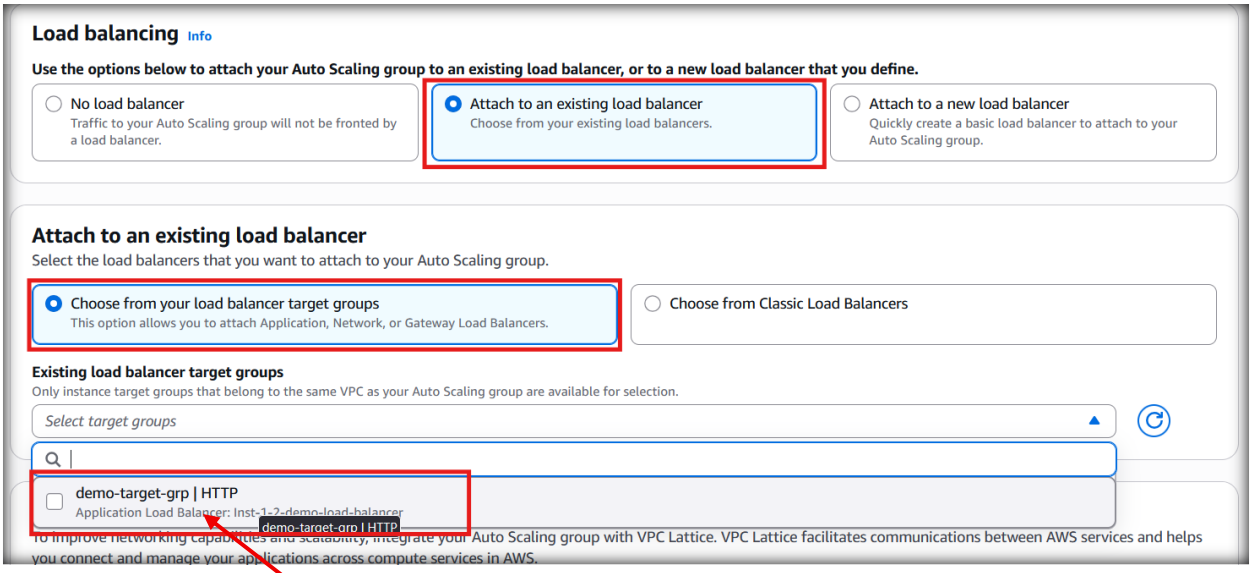


Step 6. Select all available zones.

- It decides where your EC2 instance runs.
- Choosing the right zone improves performance, redundancy, and high availability

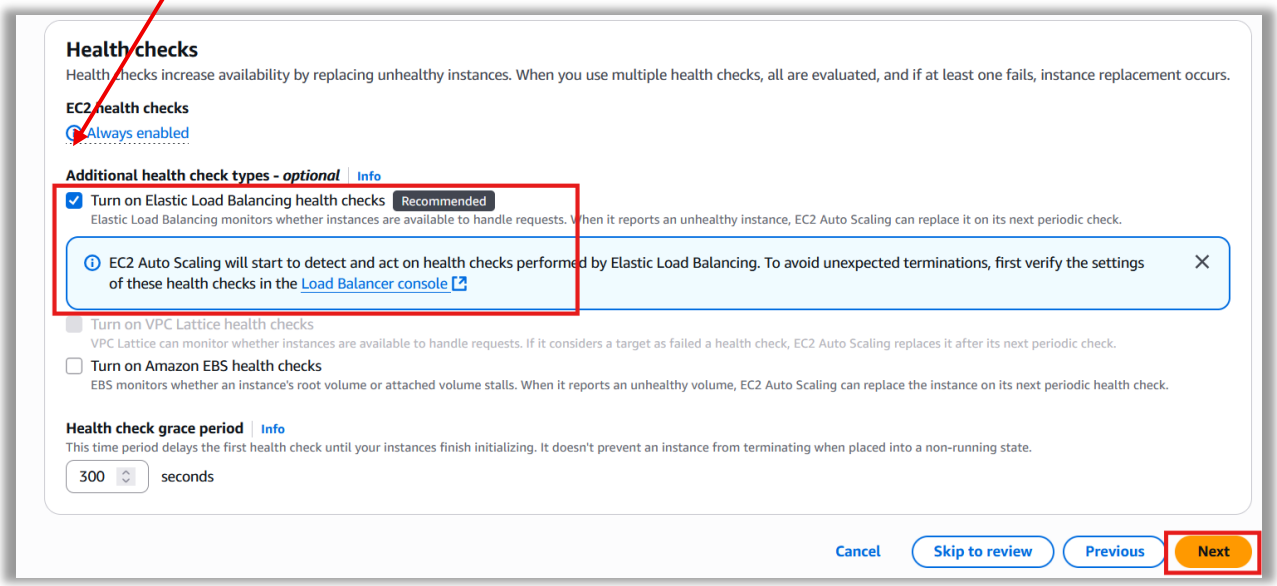


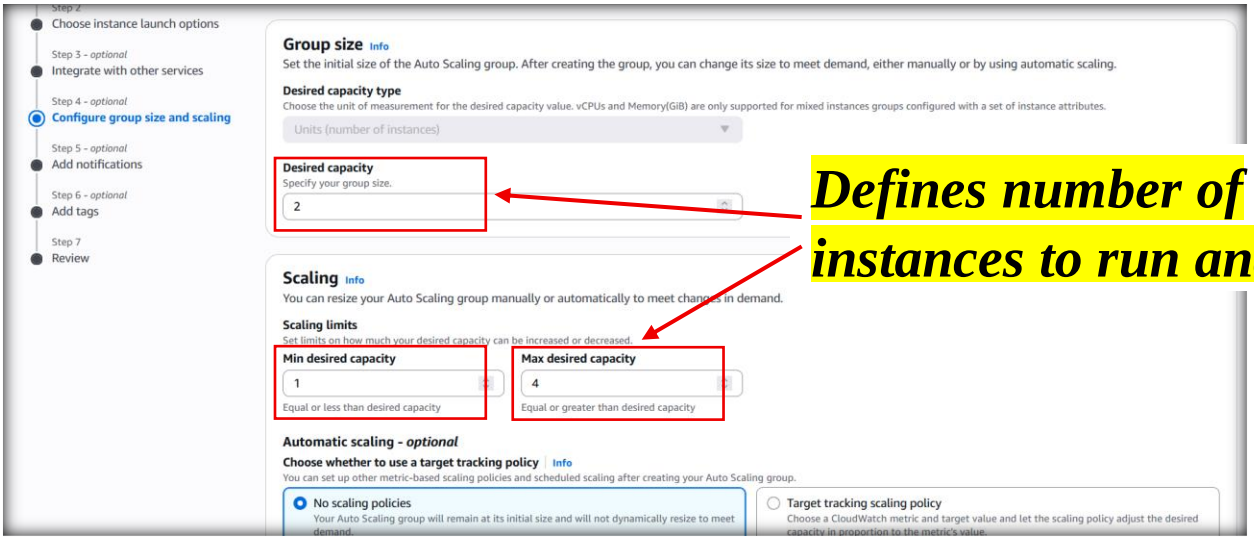
Follow the given steps and do Next.



Here you can attach existing load balancer

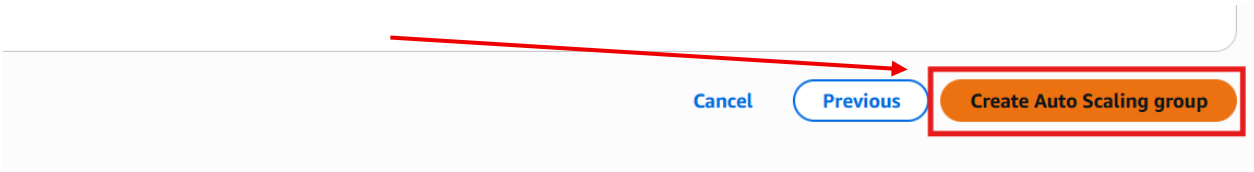
Turn on Elastic Load Balancing Health Check

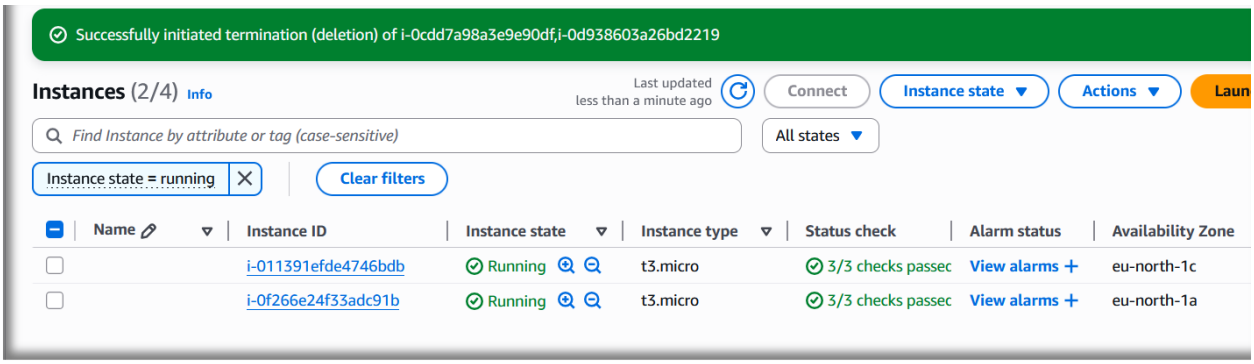




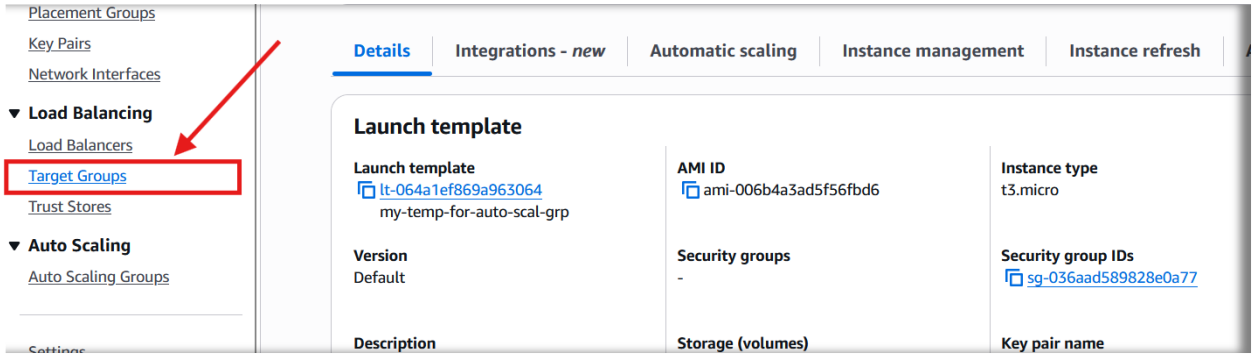
Defines number of instances to run and

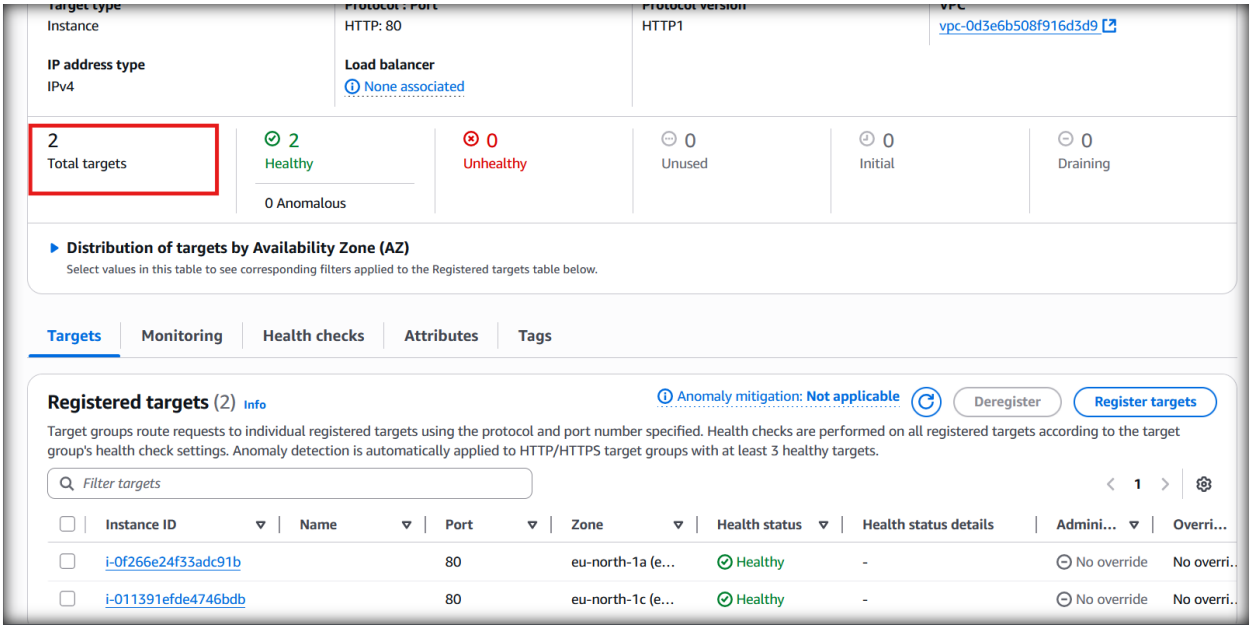
Click on Create Auto Scaling group



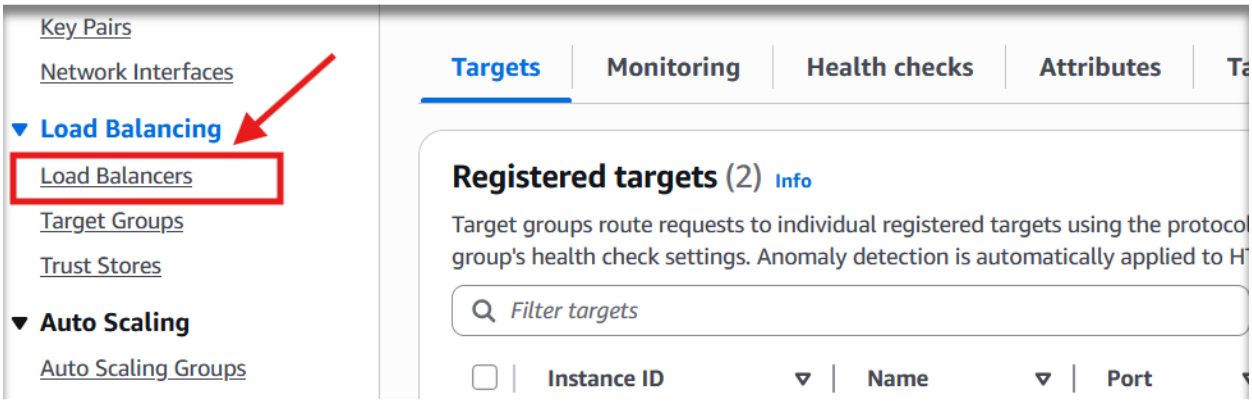


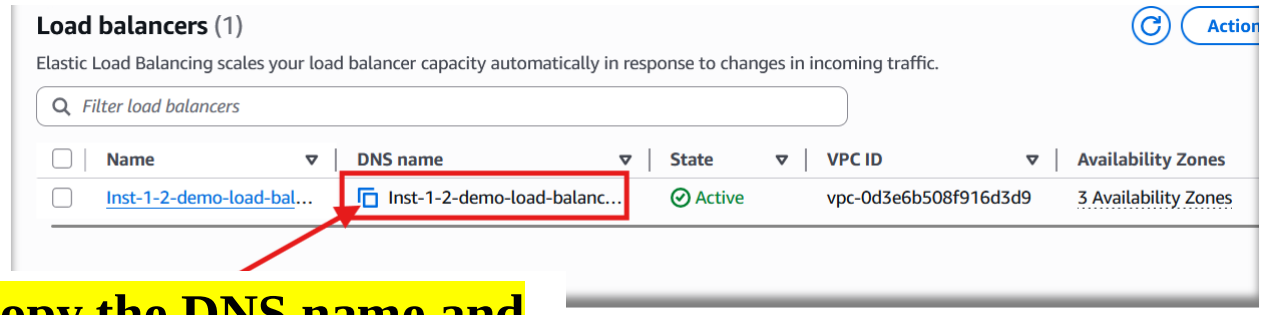
Navigate to Target Groups…



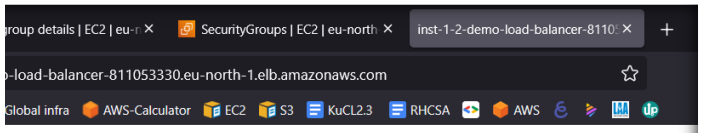


When I go to load balancer then copy the DNS name and paste on new tab

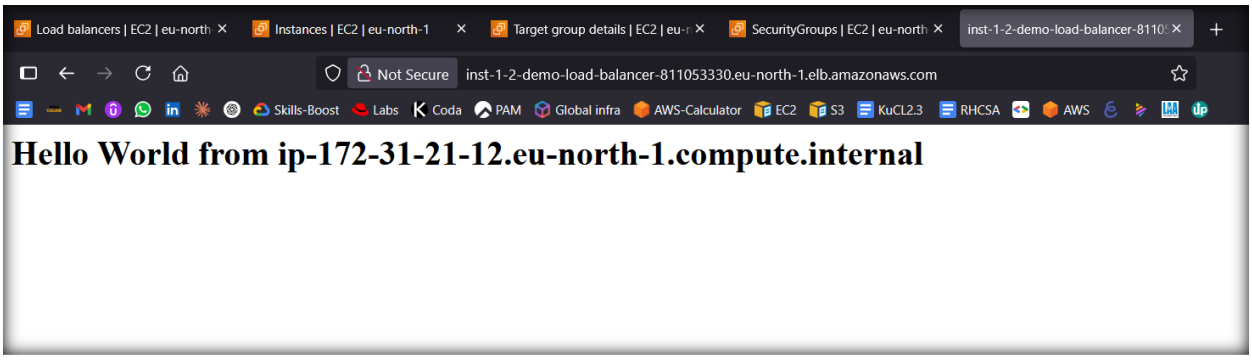




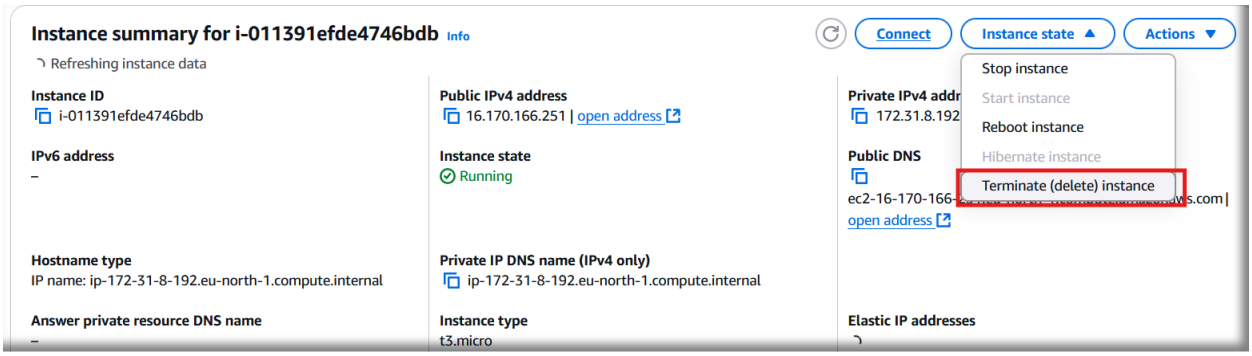
Copy the DNS name and paste in new tab



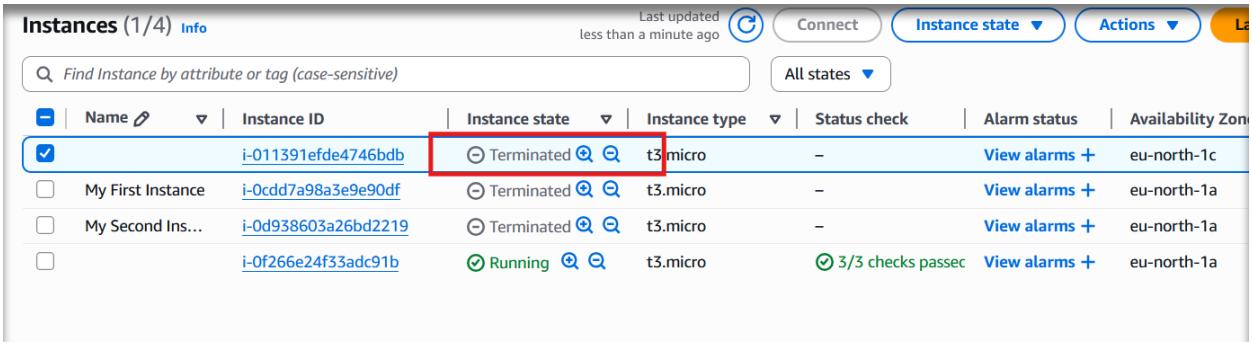
Hello World from ip-172-31-8-192.eu-north-1.compute.internal



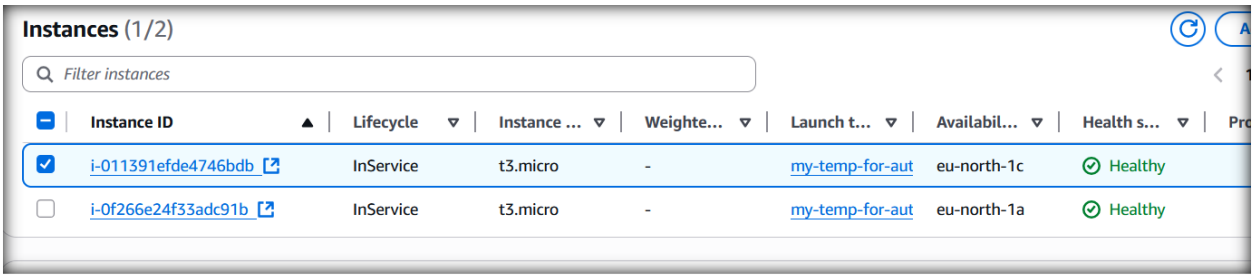
I get hello world from my both instances; this is cool because these instances are created by Auto Scaling group.

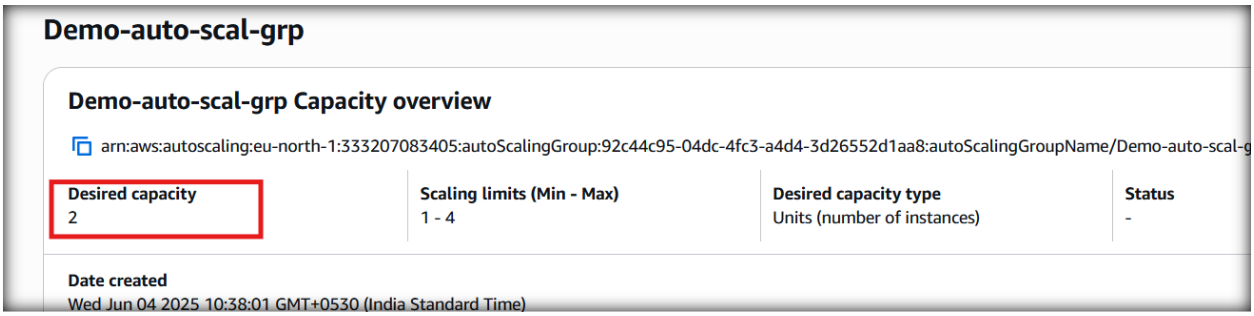


Let's terminate one instance and see what happens to it.



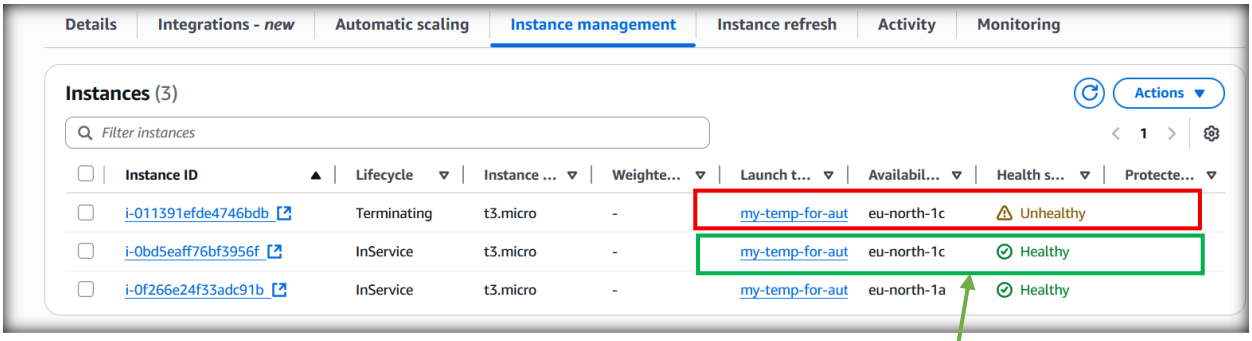
After terminating one instance, still both are healthy.



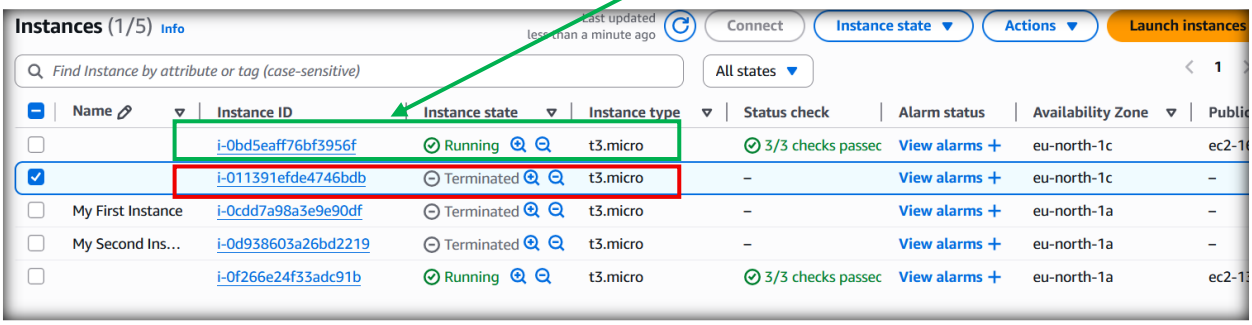


If you terminate 1 instance out of 2 in an Auto Scaling Group, it will automatically launch a new one to maintain the desired capacity and ensure high availability.

Here is output:



That instance gone Unhealthy and new instance created automatically.



✅ Conclusion

- Auto Scaling Groups help build scalable and reliable cloud apps.
- They adjust EC2 instances automatically based on traffic.
- Great for learning cloud automation and DevOps basics.
- A strong step toward becoming a Cloud/DevOps Engineer.

Keep experimenting. The cloud is your playground. ☁🚀