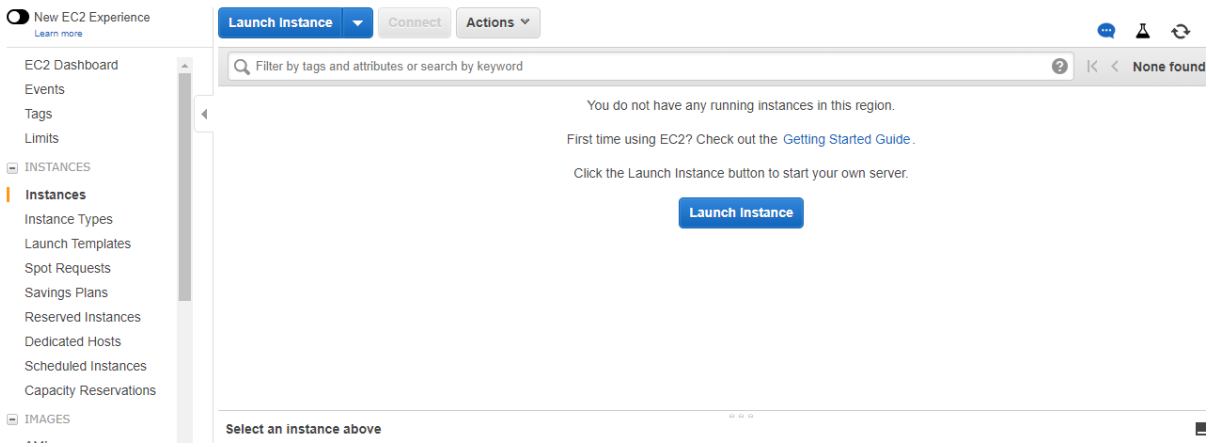
ABC Corporation wants to use Application Load Balancer using AutoScaling to host their website-1.

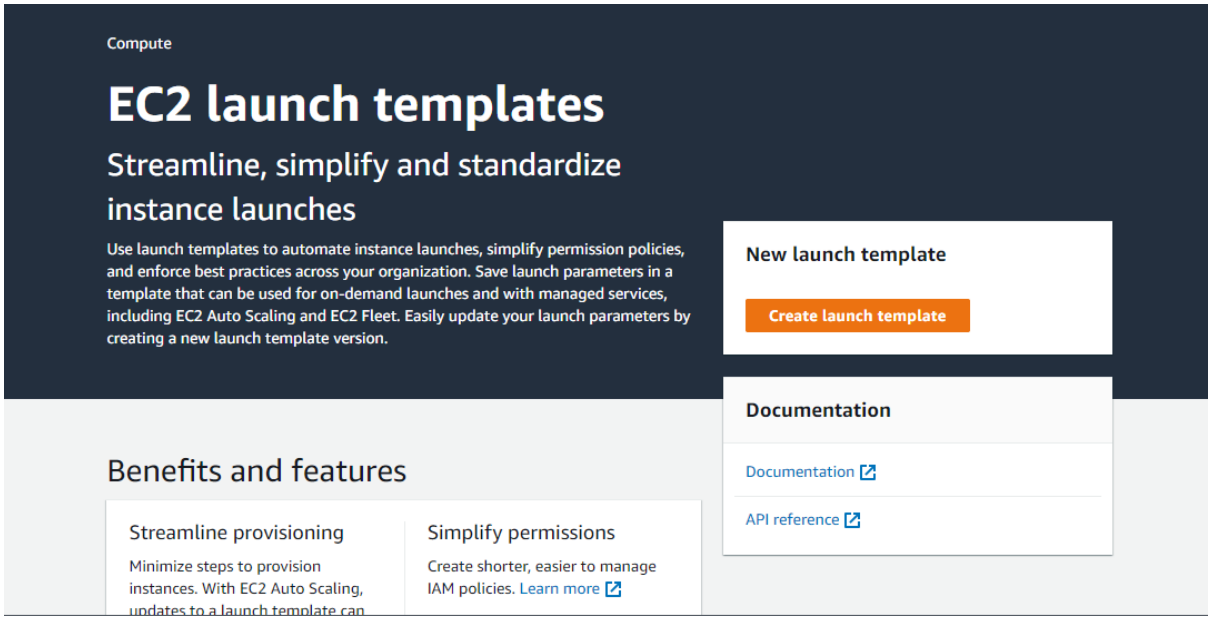
Since they knew already traffic to this website will be more at any point in time. They want to run 4 servers parallely with the same website and loadbalance during the time of request from the client.

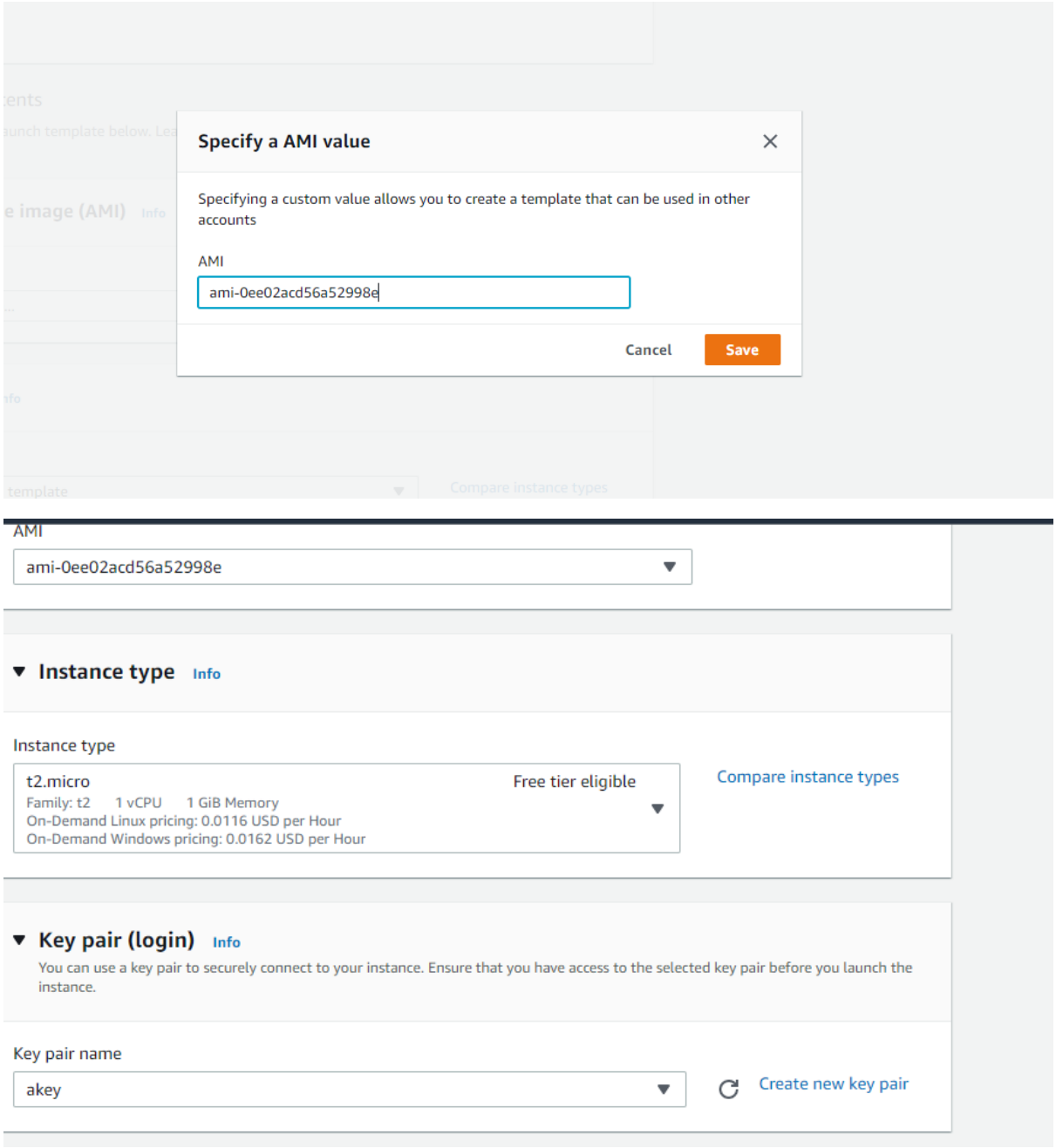
As a cloud architect , please configure the required infra for ABC corporates and ensure atleast four servers will be running all the time.

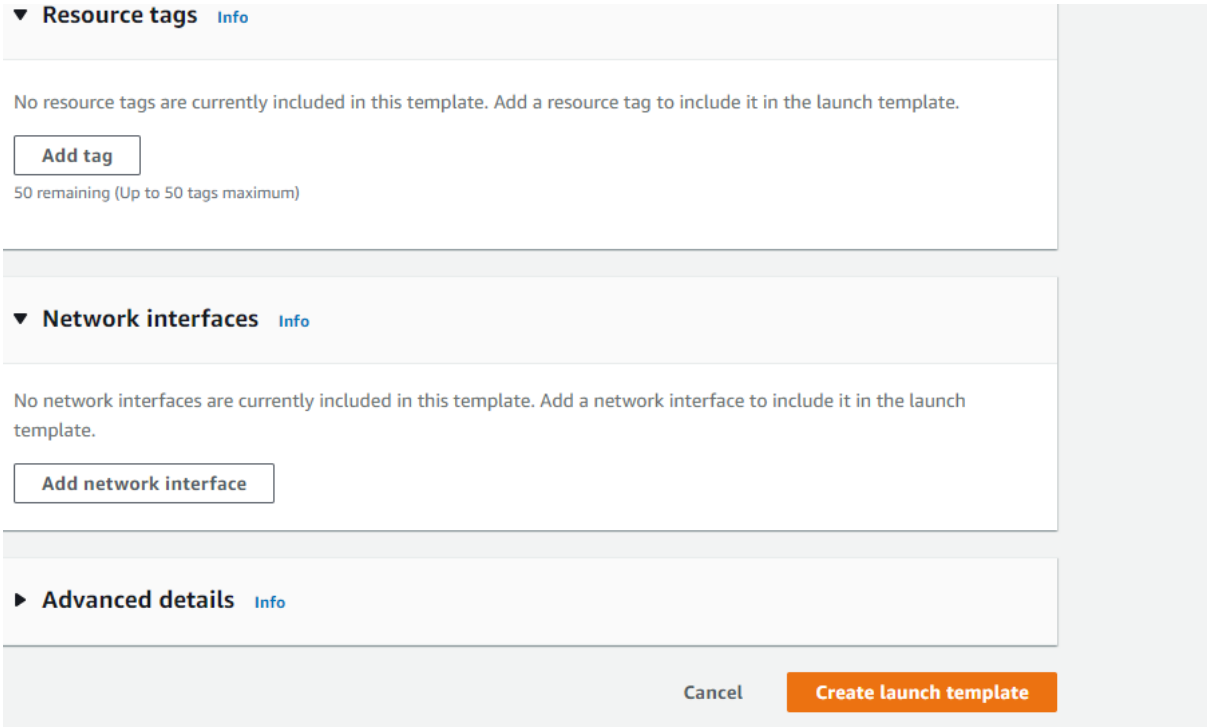
Step 1: Use the same VPC created in Network Load Balancer

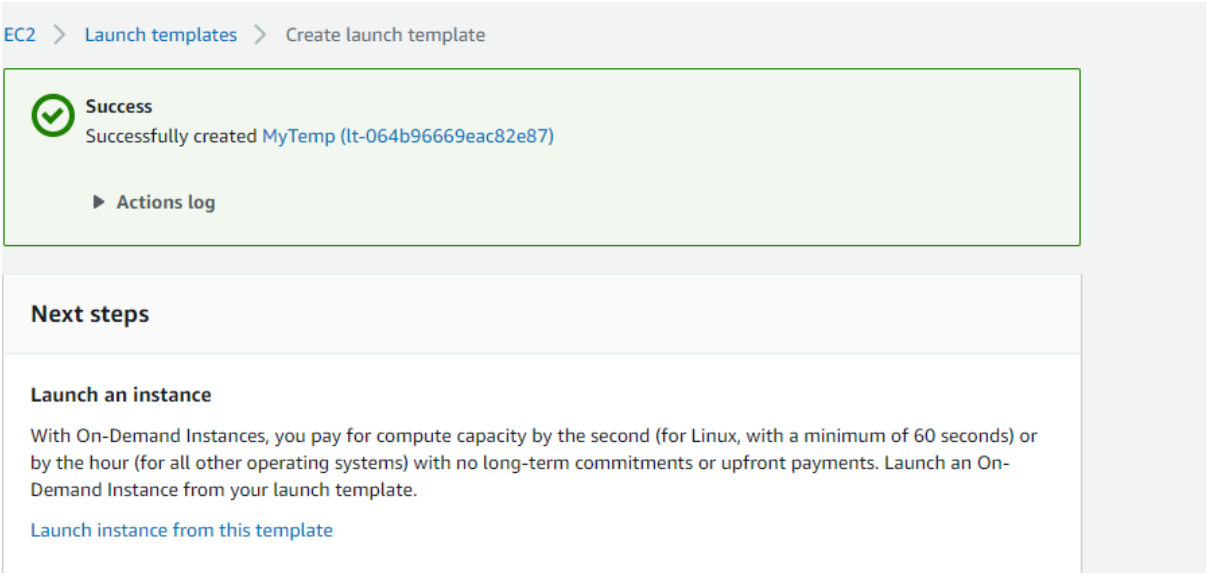
Step 2: Create Instance Template



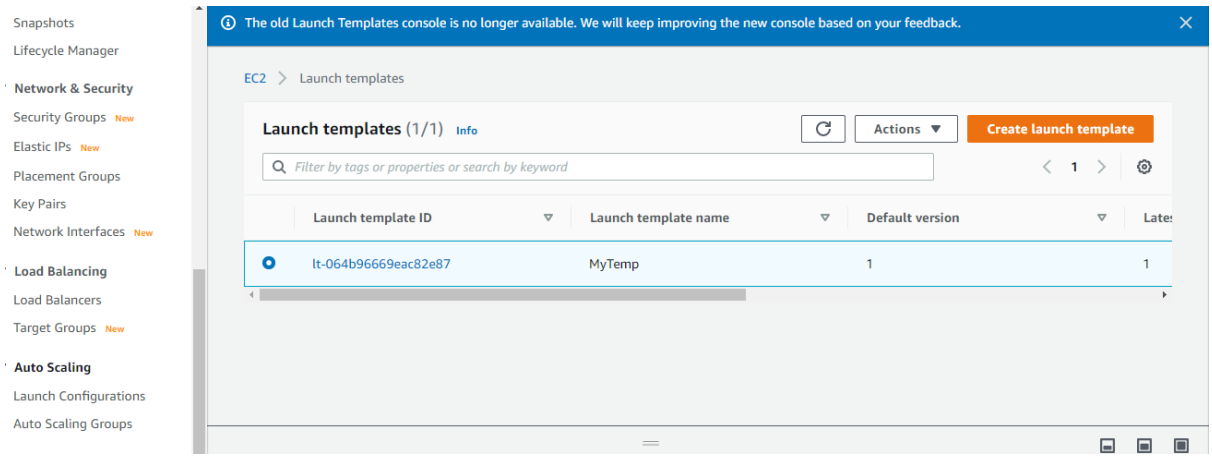


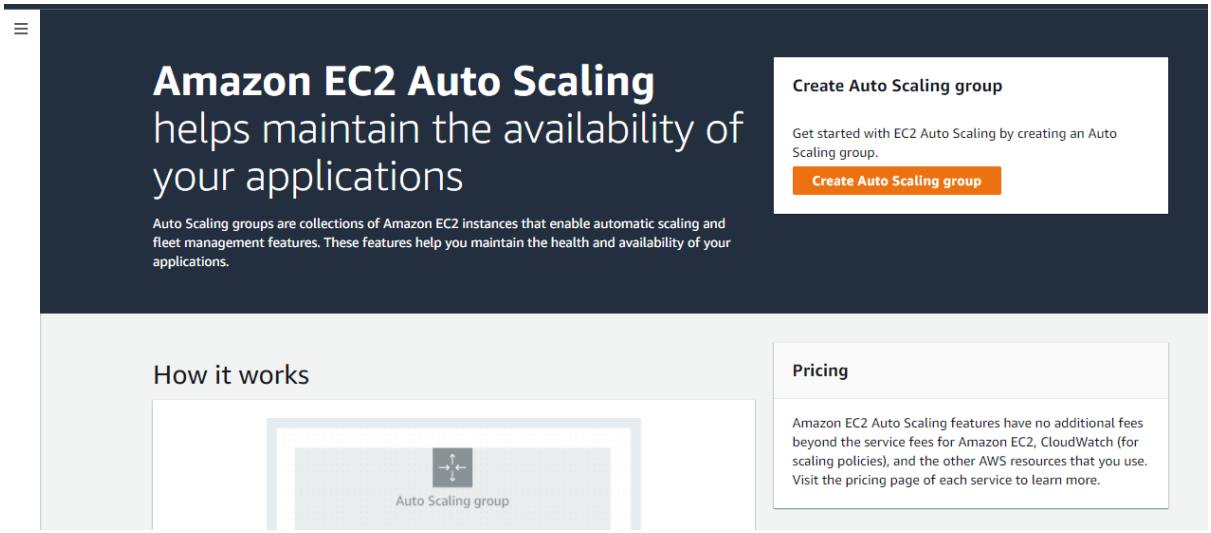

Specify a AMI value
Specifying a custom value allows you to create a template that can be used in other accounts
AMI
ami-0ee02acd56a52998e
Cancel
Save
AMI
ami-0ee02acd56a52998e
Instance type Info
Instance type
t2.micro
Free tier eligible
Family: t2 1 vCPU 1 GiB Memory
On-Demand Linux pricing: 0.0116 USD per Hour
On-Demand Windows pricing: 0.0162 USD per Hour
Compare instance types
Key pair (login) Info
You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.
Key pair name
akey
Create new key pair

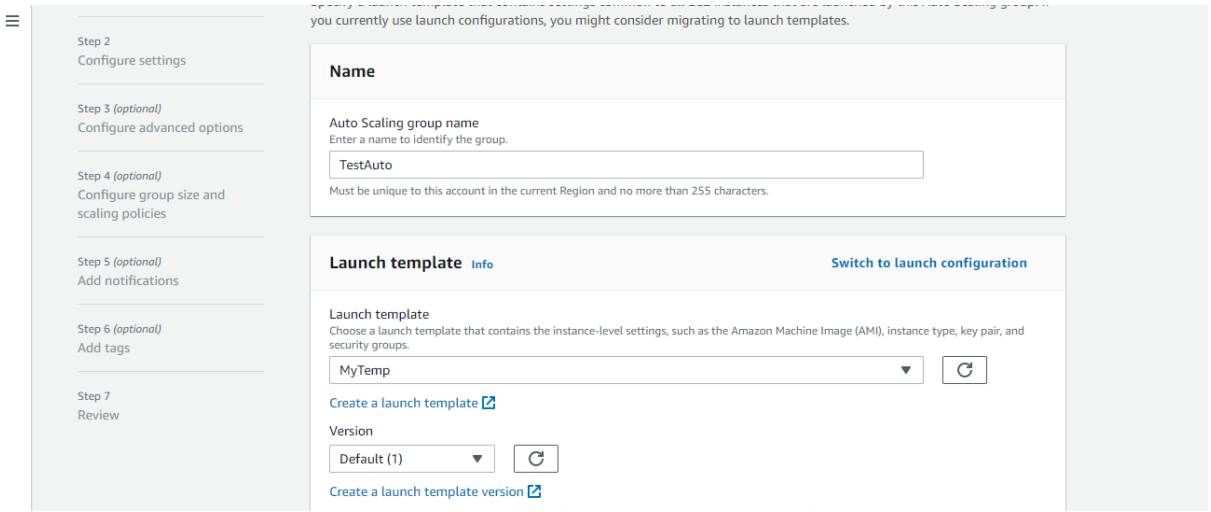


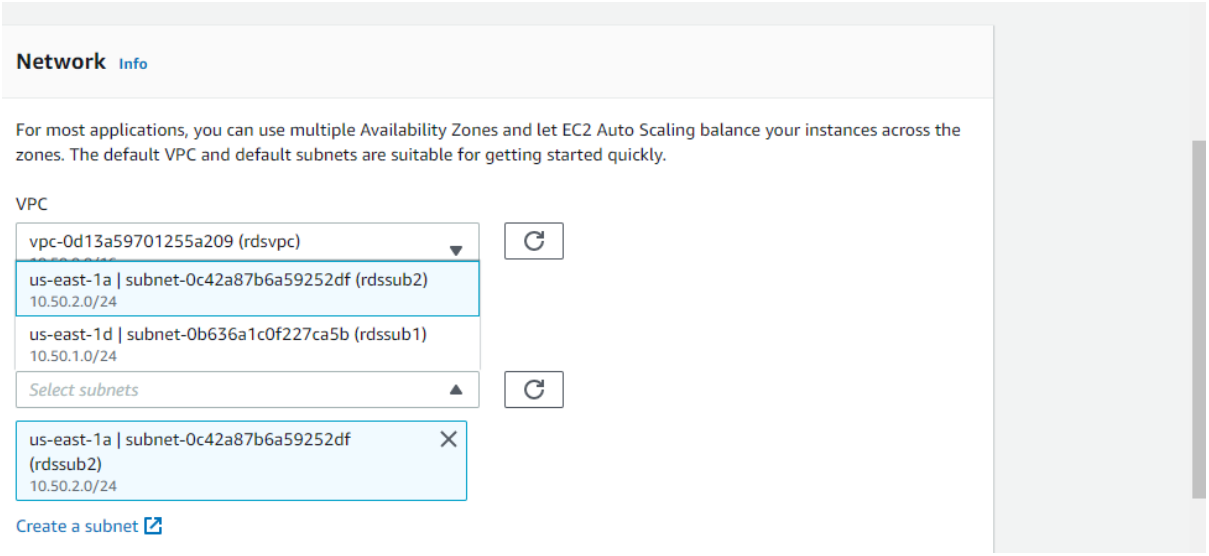


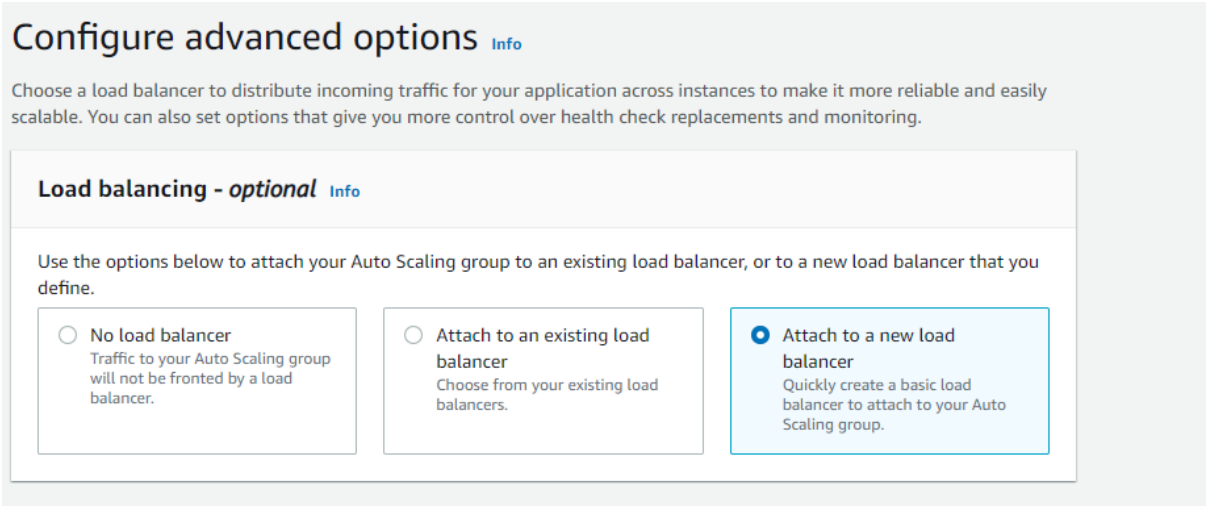
Step 3: Configure Autoscaling group with desired number of instances 4 min-4 and max-6

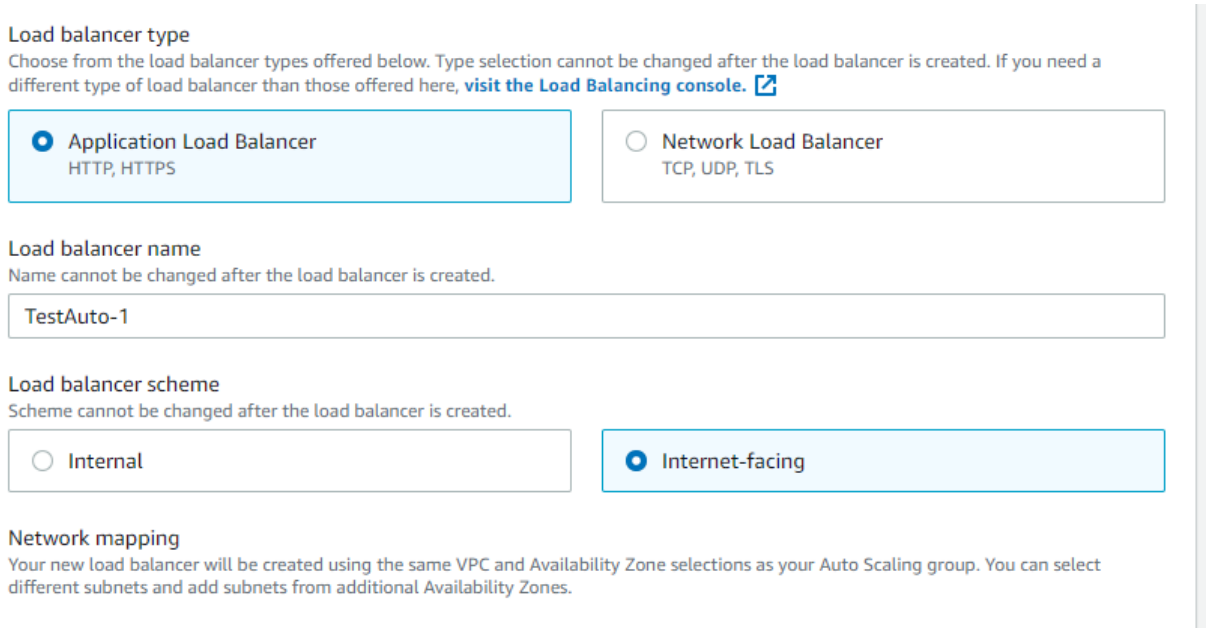

Snapshots
Lifecycle Manager
Network & Security
Security Groups New
Elastic IPs New
Placement Groups
Key Pairs
Network Interfaces New
Load Balancing
Load Balancers
Target Groups New
Auto Scaling
Launch Configurations
Auto Scaling Groups
The old Launch Templates console is no longer available. We will keep improving the new console based on your feedback.
EC2 > Launch templates
Launch templates (1/1) Info
Actions
Create launch template
Filter by tags or properties or search by keyword
Launch template ID
Launch template name
Default version
lt-064b96669eac82e87
MyTemp
1
1


Amazon EC2 Auto Scaling
helps maintain the availability of your applications
Auto Scaling groups are collections of Amazon EC2 instances that enable automatic scaling and fleet management features. These features help you maintain the health and availability of your applications.
Create Auto Scaling group
Get started with EC2 Auto Scaling by creating an Auto Scaling group.
Create Auto Scaling group
How it works
Auto Scaling group
Pricing
Amazon EC2 Auto Scaling features have no additional fees beyond the service fees for Amazon EC2, CloudWatch (for scaling policies), and the other AWS resources that you use. Visit the pricing page of each service to learn more.


you currently use launch configurations, you might consider migrating to launch templates.
Step 2
Configure settings
Step 3 (optional)
Configure advanced options
Step 4 (optional)
Configure group size and scaling policies
Step 5 (optional)
Add notifications
Step 6 (optional)
Add tags
Step 7
Review
Name
Auto Scaling group name
Enter a name to identify the group.
TestAuto
Must be unique to this account in the current Region and no more than 255 characters.
Launch template Info
Switch to launch configuration
Launch template
Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.
MyTemp
Create a launch template
Version
Default (1)
Create a launch template version


Network Info
For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances across the zones. The default VPC and default subnets are suitable for getting started quickly.
VPC
vpc-0d13a59701255a209 (rdsvpc)
us-east-1a | subnet-0c42a87b6a59252df (rdssub2)
10.50.2.0/24
us-east-1d | subnet-0b636a1c0f227ca5b (rdssub1)
10.50.1.0/24
Select subnets
us-east-1a | subnet-0c42a87b6a59252df (rdssub2)
10.50.2.0/24
Create a subnet


Configure advanced options Info
Choose a load balancer to distribute incoming traffic for your application across instances to make it more reliable and easily scalable. You can also set options that give you more control over health check replacements and monitoring.
Load balancing - optional Info
Use the options below to attach your Auto Scaling group to an existing load balancer, or to a new load balancer that you define.
No load balancer
Traffic to your Auto Scaling group will not be fronted by a load balancer.
Attach to an existing load balancer
Choose from your existing load balancers.
Attach to a new load balancer
Quickly create a basic load balancer to attach to your Auto Scaling group.


Load balancer type
Choose from the load balancer types offered below. Type selection cannot be changed after the load balancer is created. If you need a different type of load balancer than those offered here, visit the Load Balancing console.
Application Load Balancer
HTTP, HTTPS
Network Load Balancer
TCP, UDP, TLS
Load balancer name
Name cannot be changed after the load balancer is created.
TestAuto-1
Load balancer scheme
Scheme cannot be changed after the load balancer is created.
Internal
Internet-facing
Network mapping
Your new load balancer will be created using the same VPC and Availability Zone selections as your Auto Scaling group. You can select different subnets and add subnets from additional Availability Zones.

VPC

vpc-0d13a59701255a209 rdsvpc

Availability Zones and subnets

You must select a single subnet for each Availability Zone enabled. Only public subnets are available for selection to support DNS resolution.

us-east-1a subnet-0c42a87b6a59252df

us-east-1d subnet-0b636a1c0f227ca5b

Listeners and routing

If you require secure listeners, or multiple listeners, you can configure them from the **Load Balancing console** after your load balancer is created.

Protocol	Port	Default routing (forward to)
HTTP	80	Create a target group

New target group name

An instance target group with default settings will be created.

TestAuto-1

Tags - *optional*

Group size - *optional* Info

Specify the size of the Auto Scaling group by changing the desired capacity. You can also specify minimum and maximum capacity limits. Your desired capacity must be within the limit range.

Desired capacity

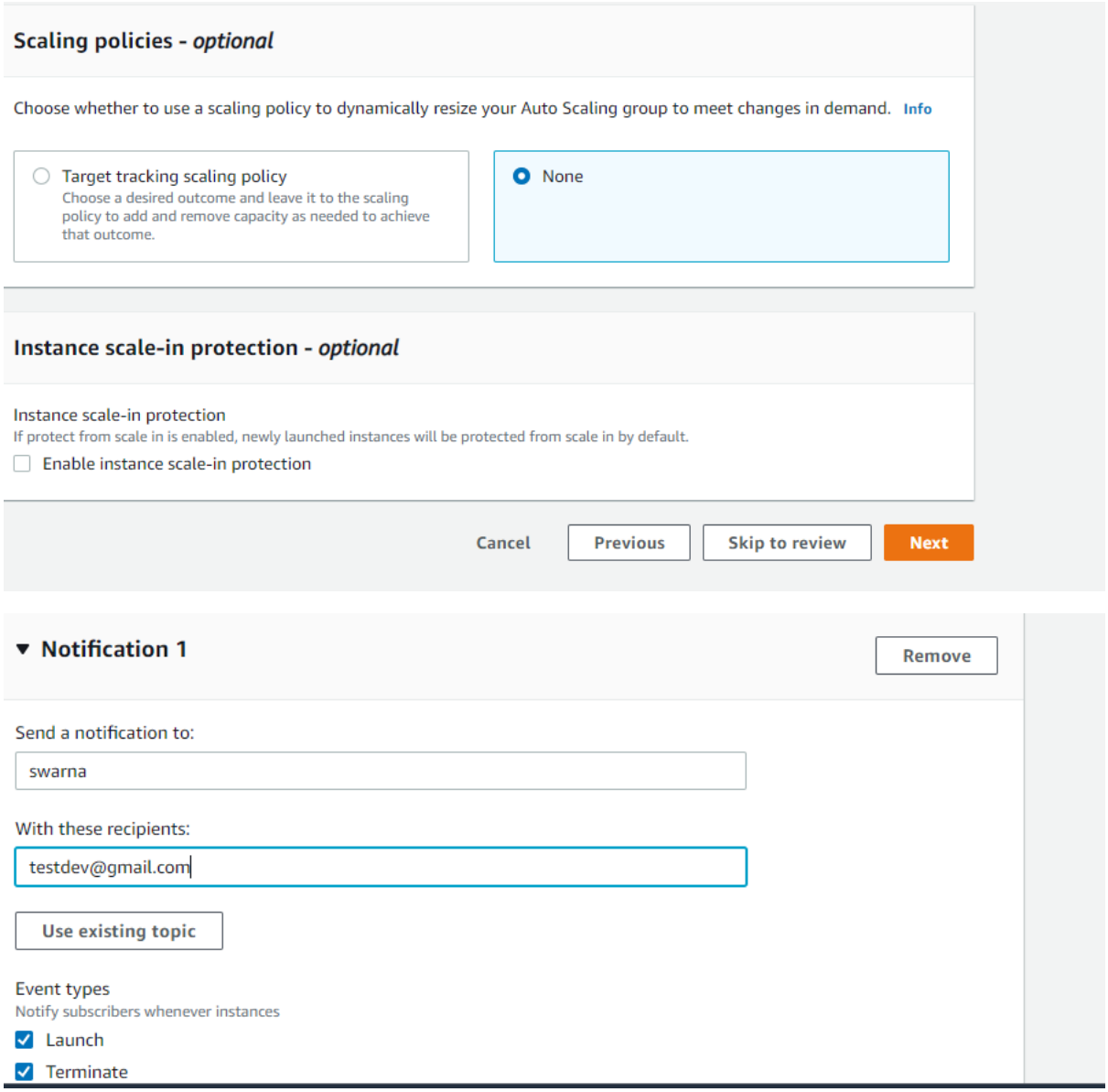
2

Minimum capacity

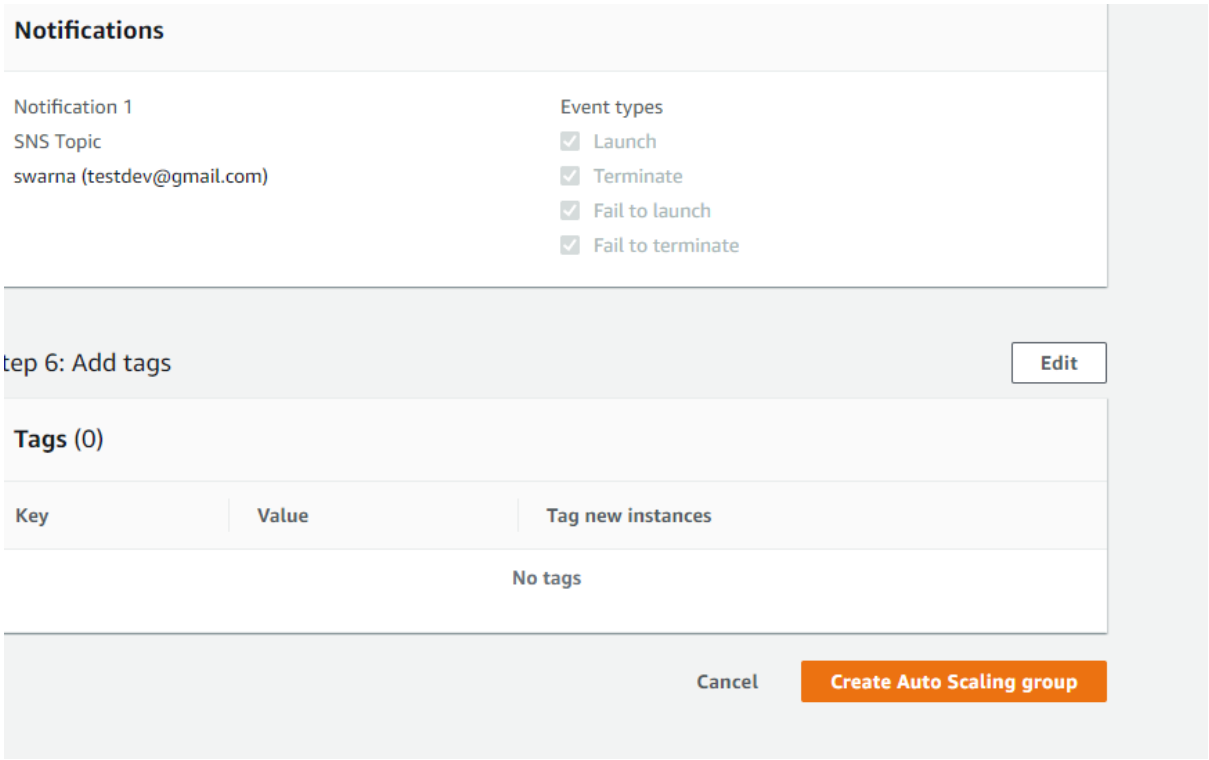
2

Maximum capacity

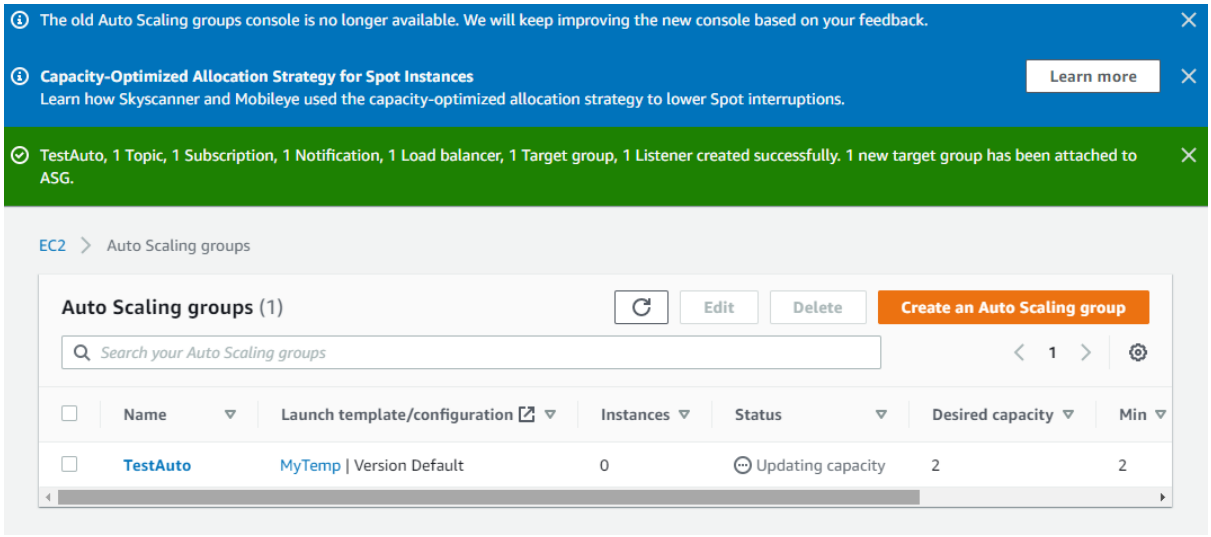
4


Scaling policies - optional
Choose whether to use a scaling policy to dynamically resize your Auto Scaling group to meet changes in demand. Info
Target tracking scaling policy
Choose a desired outcome and leave it to the scaling policy to add and remove capacity as needed to achieve that outcome.
None
Instance scale-in protection - optional
Instance scale-in protection
If protect from scale in is enabled, newly launched instances will be protected from scale in by default.
Enable instance scale-in protection
Cancel
Previous
Skip to review
Next
Notification 1
Remove
Send a notification to:
swarna
With these recipients:
testdev@gmail.com
Use existing topic
Event types
Notify subscribers whenever instances
Launch
Terminate

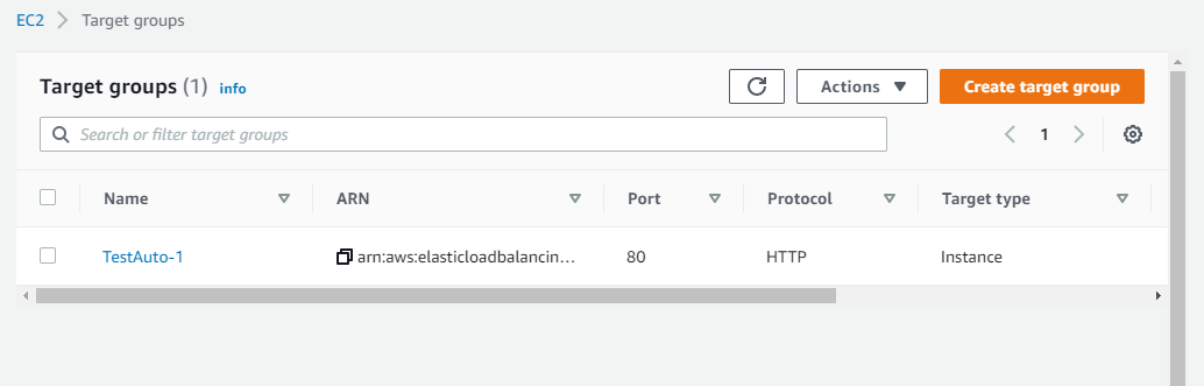
Review

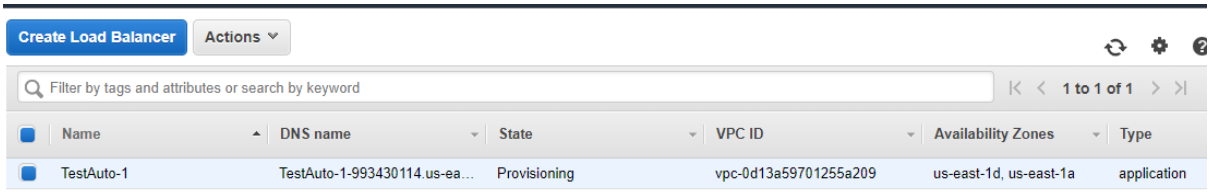


AutoScaling Group creates successfully.

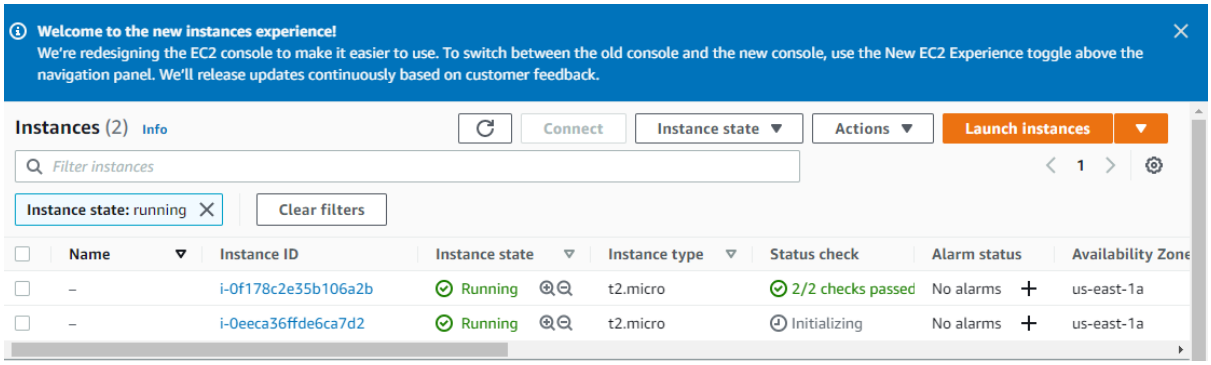


Please check Target Group and LoadBalancer and EC2 instances as you specified in desired capacity would have got created.

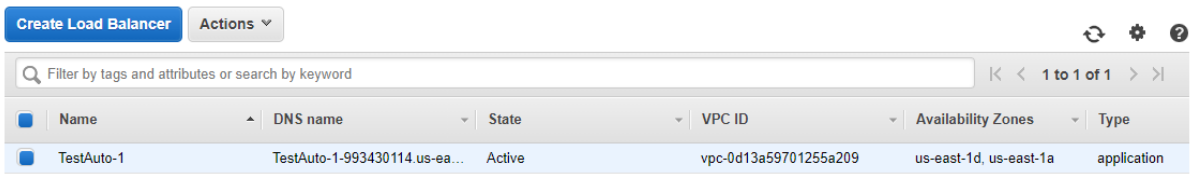




You could see desired number of instances running.

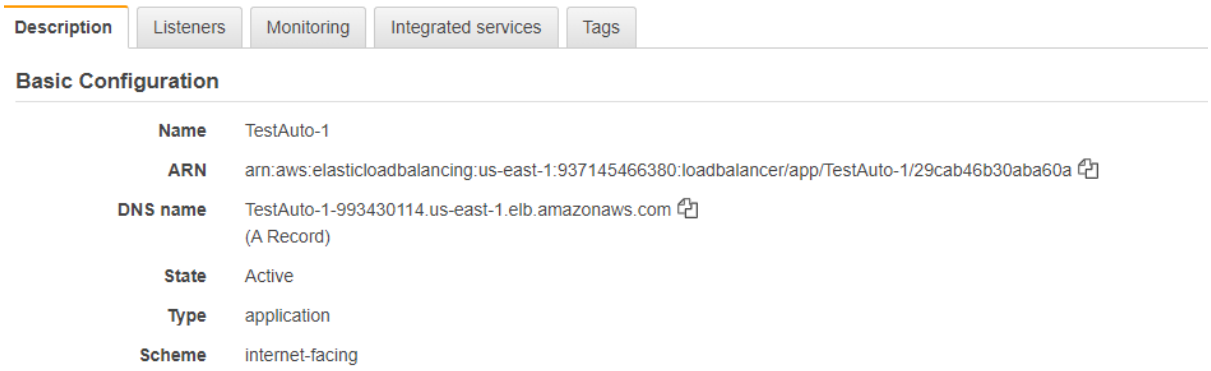


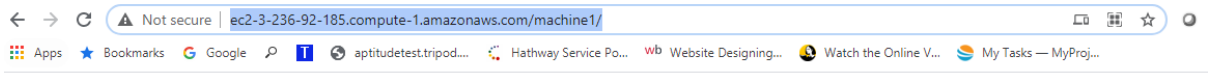
LoadBalancer turns active



Copy the DNS name of loadbalancer and paste in the browser window.

Wait for few minutes . You could see the load balancing happening between 2 autoscaled machine.





Hello from ip-10-50-1-190 vm.

I am from Machine-1

This is my first my first website

CleapUP

Delete AutoScaling Group

Delete LoadBalancers

Delete TargetGroup