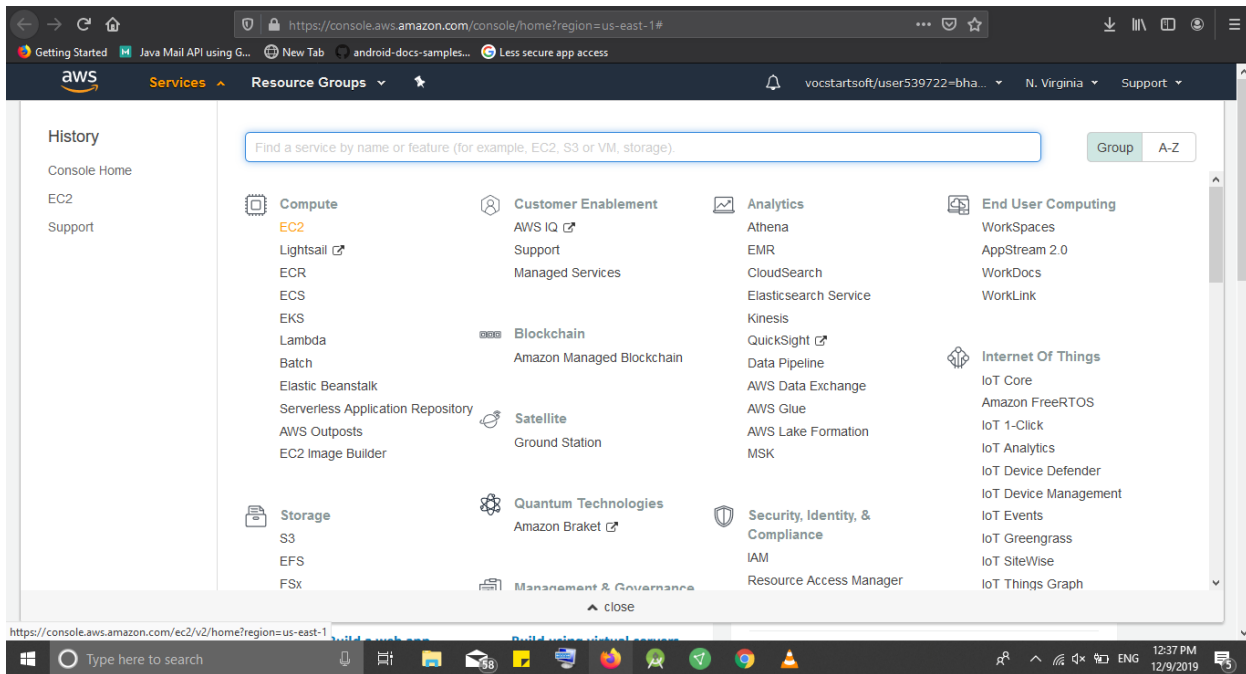


Practical 8 : Using Auto Scaling with AWS Lambda and Lifecycle Hooks

Step 1 - Use amazon EC2 service.



Step 2 : Create an auto scaling group.

EC2 Dashboard

Events

Tags

Reports

Limits

INSTANCES

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

IMAGES

AMIs

Bundle Tasks

ELASTIC BLOCK STORE

Volumes

Snapshots

Lifecycle Manager

Try the new design for Amazon EC2 Auto Scaling

This older console is being replaced with the new EC2 Auto Scaling console. No new features or improvements will be made in this older console. [Go to the new console.](#)

Welcome to Auto Scaling

You can use Auto Scaling to manage Amazon EC2 capacity automatically, maintain the right number of instances for your application, operate a healthy group of instances, and scale it according to your needs. [Learn more](#)

Create Auto Scaling group

Note: To create your Auto Scaling groups in a different region, select your region from the navigation bar.

Benefits of Auto Scaling

Automated Provisioning

Keep your Auto Scaling group healthy and balanced, whether you need one instance or 1,000. [Learn more](#)

Adjustable Capacity

Maintain a fixed group size or adjust dynamically based on Amazon CloudWatch metrics. [Learn more](#)

Launch Template Support

Provision instances easily using EC2 Launch Templates. [Learn more](#)

Additional Information

[Getting Started Guide](#)
[Documentation](#)
[All EC2 Resources](#)
[Forums](#)
[Pricing](#)
[Contact Us](#)

Create Auto Scaling Group

Cancel and Exit

Complete this wizard to create your Auto Scaling group. First, choose either a launch configuration or a launch template to specify the parameters that your Auto Scaling group uses to launch instances.

Launch Configuration

You can continue to use your launch configurations if they support the Amazon EC2 features you need. [Learn more](#)

Create a new launch configuration

Launch Template New

Launch templates give you the option of launching one type of instance, or a combination of instance types and purchase options. Launch templates include the latest Amazon EC2 features and can be updated and versioned. [Learn more](#)

Create new launch template

Filter launch configurations...

Name

AMI ID

Instance Type

Spot Price

Security Groups

<input type="checkbox"/> Firstic	ami-0bdfa1adc3878cd23	t2.micro		sg-0de198a462bf8c8a
----------------------------------	-----------------------	----------	--	---------------------

< 1 to 1 of 1 Launch Configurations >

Step 3 : Name it as firstasg.

Utsav Gohel -91900104011

2

1. Configure Auto Scaling group details
2. Configure scaling policies
3. Configure Notifications
4. Configure Tags
5. Review

Create Auto Scaling Group

[Cancel and Exit](#)

Group name (i)

Launch Configuration (i)

Group size (i) Start with instances

Network (i) [Create new VPC](#)

Subnet (i)

[x](#)
 [x](#)
 [Create new subnet](#)

Each instance in this Auto Scaling group will be assigned a public IP address. (i)

▶ Advanced Details

1. Configure Auto Scaling group details
2. Configure scaling policies
3. Configure Notifications
4. Configure Tags
5. Review

Create Auto Scaling Group

Please review your Auto Scaling group details. You can go back to edit changes for each section. Click **Create Auto Scaling group** to complete the creation of an Auto Scaling group.

▼ Auto Scaling Group Details [Edit details](#)

Group name	Firstasg
Group size	0
Minimum Group Size	0
Maximum Group Size	0
Subnet(s)	subnet-e024d689,subnet-5446115
Health Check Grace Period	300
Detailed Monitoring	No
Instance Protection	None
Service-Linked Role	AWSServiceRoleForAutoScaling

▼ Scaling Policies [Edit scaling policies](#)

▼ Notifications [Edit notifications](#)

▼ Tags [Edit tags](#)

Step 4 : Create life cycle hooks.

Create Lifecycle Hook

Auto Scaling lifecycle hooks enable you to perform custom actions as Auto Scaling launches or terminates instances. For example, you could install or configure software on newly launched instances, or download log files from an instance before it terminates. Learn more about lifecycle hooks [here](#).

Lifecycle Hook Name	<input type="text" value="firsthook"/>
Auto Scaling Group	Firstasg
Lifecycle Transition ⓘ	<input type="text" value="Instance Launch"/>
Heartbeat Timeout ⓘ	<input type="text" value="3600"/> seconds
Default Result ⓘ	<input type="text" value="ABANDON"/>
Notification Metadata ⓘ	<div></div>

[Learn how to receive lifecycle hook notifications using Cloudwatch Events \(recommended\)](#)

Cancel Create

Step 5 : launch instances in asg.

Edit details - Firstasg

Launch Instances Using

☐ Launch Template
☒ Launch Configuration

Launch Configuration

Firstlc

Desired Capacity

1

Min

1

Max

1

Availability Zone(s)

eu-west-2b x eu-west-2c x

Subnet(s)

subnet-e024d689(172.31.32.0/20) | Default in eu-west-2c x

subnet-5f4f6115(172.31.16.0/20) | Default in eu-west-2b x

Classic Load Balancers

Target Groups

Health Check Type

EC2

Health Check Grace Period

300

Instance Protection

Termination Policies

Default x

Suspended Processes

Placement Groups

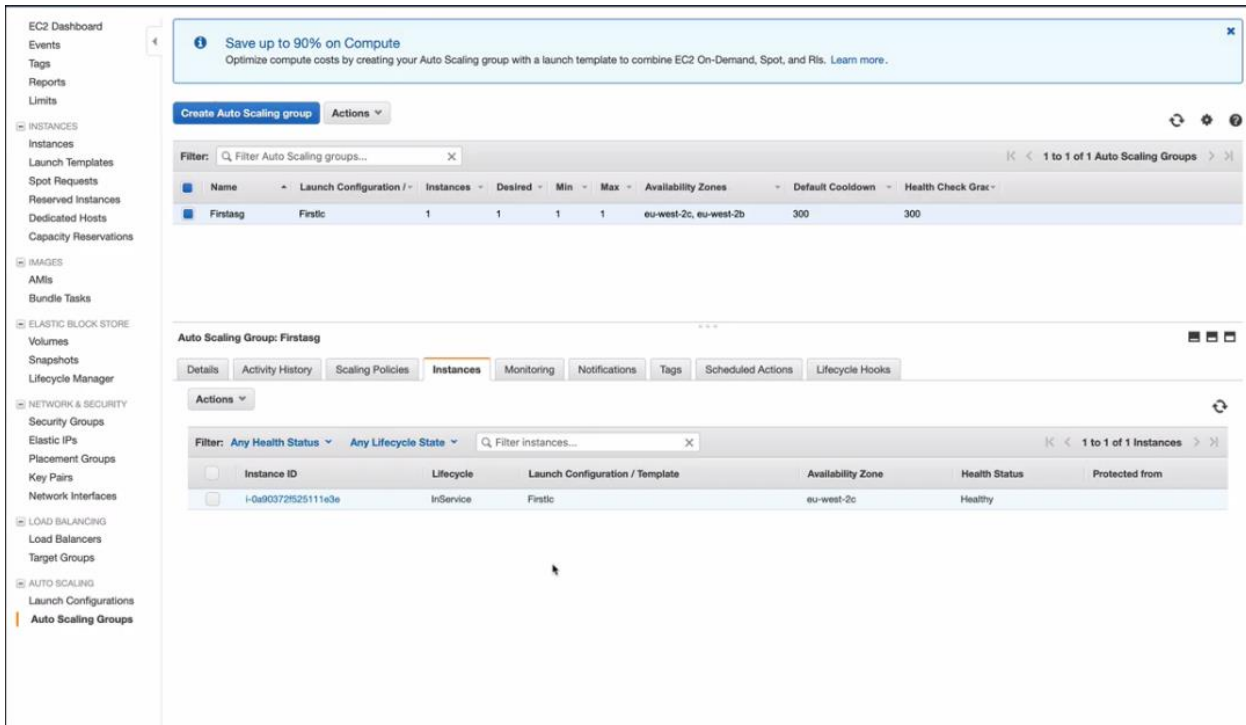
Default Cooldown

300

Step 6 : Goes to AWS CLI and list lifecycle hook.

```
saws> aws autoscaling describe-lifecycle-hooks --auto-scaling-group-name firstasg --lifecycle-hook-names firsthook --region eu-west-2
{
  "LifecycleHooks": [
    {
      "GlobalTimeout": 172800,
      "HeartbeatTimeout": 3600,
      "AutoScalingGroupName": "firstasg",
      "LifecycleHookName": "firsthook",
      "DefaultResult": "ABANDON",
      "LifecycleTransition": "autoscaling:EC2_INSTANCE_LAUNCHING"
    }
  ]
}
```

Step 7 : Now instance has completed their lifecycle.



The screenshot displays the AWS Management Console interface for the 'Auto Scaling Group: Firstasg'. The left sidebar shows the navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, and AUTO SCALING. The main content area shows the 'Auto Scaling Group: Firstasg' details, including a table of instances. The 'Instances' tab is active, showing one instance with ID 'I-0a90372525111e3e' in the 'InService' lifecycle state and 'Healthy' status.

Name	Launch Configuration	Instances	Desired	Min	Max	Availability Zones	Default Cooldown	Health Check Grace
Firstasg	Firstlc	1	1	1	1	eu-west-2c, eu-west-2b	300	300

Instance ID	Lifecycle	Launch Configuration / Template	Availability Zone	Health Status	Protected from
I-0a90372525111e3e	InService	Firstlc	eu-west-2c	Healthy	