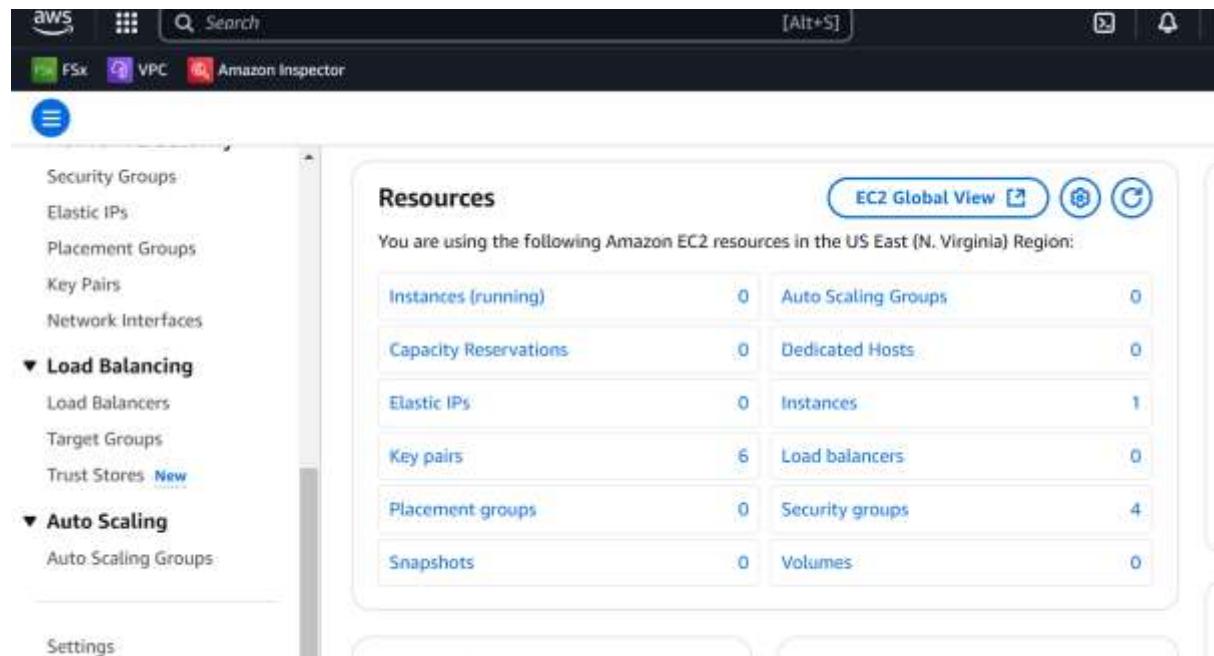


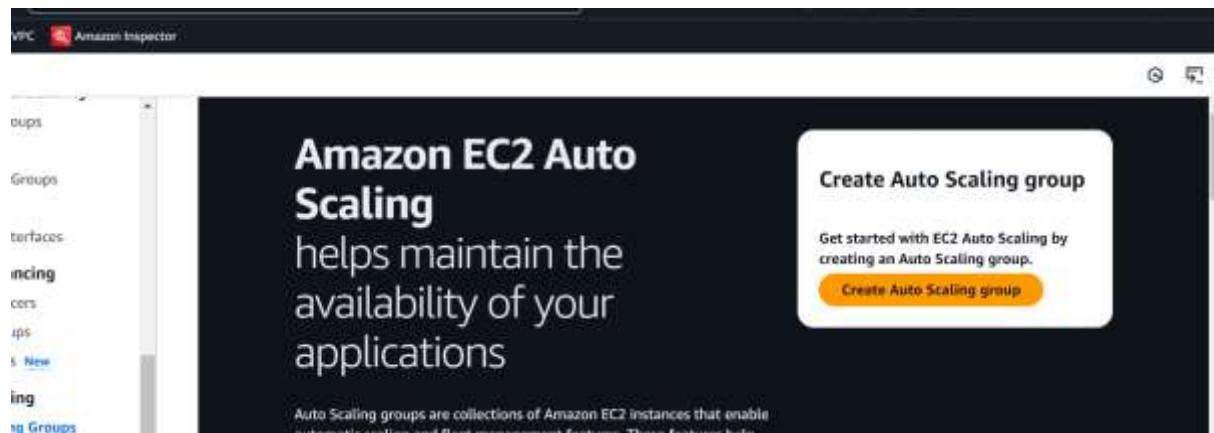
Lab :Autoscaling group

Steps to create Launch Configuration

Navigate to the following page to create a launch configuration.



Create Autoscaling group



Provide a name

Launch options

My services

Size and scaling

Name

Auto Scaling group name

Enter a name to identify the group.

asg

Must be unique to this account in the current Region and no more than 255 characters.

Launch template Info

ⓘ For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

Click on create a launchtemplate

Launch template Info

ⓘ For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

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.

Select a launch template



Create a launch template

Cancel

Next

Create launch template

Creating a launch template allows you to create a saved instance configuration that can be reused, shared and launched later time. Templates can have multiple versions.

Launch template name and description

Launch template name - required

mytemplate

Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '#', '@'.

Template version description

A prod webserver for MyApp

Max 255 chars

Click on Quick start and select aws linux

The screenshot shows the AWS Quick Start interface. At the top, there's a search bar with placeholder text "Search our full catalog including 1000s of application and OS images". Below it, a navigation bar has "Recent" and "Quick Start" tabs, with "Quick Start" being active. A grid of six cards represents different operating systems: Amazon Linux (with AWS logo), macOS (with Mac logo), Ubuntu (with Ubuntu logo), Windows (with Microsoft logo), Red Hat (with Red Hat logo), and SUSE Linux (with SUSE logo). To the right of the grid is a search icon and a link "Browse more AMIs" with the note "Including AMIs from AWS, Marketplace and the Community". Below the grid, a section titled "Amazon Machine Image (AMI)" lists "Amazon Linux 2023 AMI" with the identifier "ami-0c614dee691cbbf37 (64-bit (x86), uefi-preferred) / ami-0b29c89c15cfb8a6d (64-bit (Arm), uefi)". A "Free tier eligible" badge is shown next to the AMI listing.

Select instance type

The screenshot shows the "Instance type" selection screen. It features a dropdown menu currently set to "t2.nano". The dropdown details the instance family (t2), vCPU count (1), memory (0.5 GiB), current generation (true), and On-Demand Linux base pricing (0.0058 USD per Hour). Other options listed include SUSE, Windows, and Ubuntu Pro. To the right of the dropdown are buttons for "All generations" and "Compare instance types". Below the dropdown, a note states "Additional costs apply for AMIs with pre-installed software". At the top right, there's an "Advanced" button.

Rest parameters, such as keypair, network you can keep it default and create Launch template

The screenshot shows the "Create launch template" wizard. The first step, "Security group", includes options to "Select existing security group" (selected) or "Create security group", and a dropdown for "Select security groups". The second step, "Storage (volumes)", shows "EBS Volumes" with a note about Volume 1 (8 GiB, gp3, 3000 IOPS). The third step, "Summary", displays the selected "Software Image (AMI)" (Amazon Linux 2023 AMI 2023.5.2...), "Virtual server type (instance type)" (t2.nano), and "Firewall (security group)". At the bottom are "Cancel" and "Create launch template" buttons.

Select your launch template

For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

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.

mytemplate



[Create a launch template](#)

Version

Default (1)



[Create a launch template version](#)

Description

-

Launch template

mytemplate

Instance type

t2.nano

Select vpc and network

For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances; default VPC and default subnets are suitable for getting started quickly.

VPC

Choose the VPC that defines the virtual network for your Auto Scaling group.

vpc-02d25356c06c8e854

172.30.0.0/16



[Create a VPC](#)

Availability Zones and subnets

Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.

Select Availability Zones and subnets



us-east-1a | subnet-0ed92042d81040bde X

172.30.0.0/24

us-east-1b | subnet-0baf3b76a8f33074f X

172.30.1.0/24

us-east-1c | subnet-0f211779e4a0c55ea X

172.30.2.0/24

No LB

ups > Create Auto Scaling group

date
which options
r services
and scaling

Integrate with other services - optional [Info](#)

Use a load balancer to distribute network traffic across multiple servers. Enable service-to-service communications with VPC Lattice. Shift resources away from impaired Availability Zones with zonal shift. You can also customize health check replacements and monitoring.

Load balancing [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.

VPC Lattice integration options [Info](#)

To improve networking capabilities and scalability, integrate your Auto Scaling group with VPC Lattice. VPC Lattice facilitates communications between AWS services and helps you connect and manage your applications across compute services in AWS.

Capacity

Set the initial size of the Auto Scaling group. After creating the group, you can change its size to meet demand, either manually or using automatic scaling.

Desired capacity type

Choose the unit of measurement for the desired capacity value. vCPUs and Memory(GiB) are only supported for mixed instances groups configured with a set of instance attributes.

Units (number of instances)

Desired capacity

Specify your group size.

1

You can set up other metric-based scaling policies and scheduled scaling after creating your Auto Scaling group.

No scaling policies
Your Auto Scaling group will remain at its initial size and will not dynamically resize to meet demand.

Target tracking scaling policy
Choose a CloudWatch metric and target value and let the scaling policy adjust the desired capacity in proportion to the metric's value.

Scaling policy name

Target Tracking Policy

Metric type [Info](#)

Monitored metric that determines if resource utilization is too low or high. If using EC2 metrics, consider enabling detailed monitoring for better scaling performance.

Average CPU utilization

Target value

50

Instance warmup [Info](#)

300 seconds

Policy

maximum instance lifetime features and events that happen automatically to keep your group balanced, called rebalancing events.

Choose a replacement behavior depending on your availability requirements

- Mixed behavior**
 - No policy**
For rebalancing events, new instances will launch before terminating others. For all other events, instances terminate and launch at the same time.
- Prioritize availability**
 - Launch before terminating**
Launch new instances and wait for them to be ready before terminating others. This allows you to go above your desired capacity by a given percentage and may temporarily increase costs.
- Control costs**
 - Terminate and launch**
Terminate and launch instances at the same time. This allows you to go below your desired capacity by a given percentage and may temporarily reduce availability.
- Flexible**
 - Custom behavior**
Set custom values for the minimum and maximum amount of available capacity. This gives you greater flexibility in setting how far below and over your desired capacity EC2 Auto Scaling goes when replacing instances.

Notification

Step 1
● Choose launch template

Step 2
● Choose instance launch options

Step 3 - optional
● Integrate with other services

Step 4 - optional
● Configure group size and scaling

Step 5 - optional
● Add notifications

Step 6 - optional
● Add tags

Step 7
● Review

Add notifications - optional info

Send notifications to SNS topics whenever Amazon EC2 Auto Scaling launches or terminates the EC2 instances in your Auto Scaling group.

▼ Notification 1

SNS Topic
Choose an SNS topic to use to send notifications.

Create a topic

Event types
Notify subscribers whenever instances:
 Launch
 Terminate
 Fail to launch

Remove

Tags

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1
● Choose launch template

Step 2
● Choose instance launch options

Step 3 - optional
● Integrate with other services

Step 4 - optional
● Configure group size and scaling

Step 5 - optional
● Add notifications

Step 6 - optional
● Add tags

Step 7
● Review

Add tags - optional info

Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.

You can optionally choose to add tags to instances (and their attached EBS volumes) by specifying tags in your launch template. We recommend caution, however, because the tag values for instances from your launch template will be overridden if there are any duplicate keys specified for the Auto Scaling group.

Tags (0)

Add tag

50 remaining

Cancel **Previous** **Next**

Click on Create autoscaling group

- Choose launch template
- Step 2
- Choose instance launch options
- Step 3 - optional
- Integrate with other services
- Step 4 - optional
- Configure group size and scaling
- Step 5 - optional
- Add notifications
- Step 6 - optional
- Add tags**
- Step 7
- Review

Add tags - optional Info

Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.

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Tags (0)

[Add tag](#)

50 remaining

[Cancel](#)

[Previous](#)

[Next](#)

