

# Auto Scaling

## Create Auto scaling

### Create AMI (install IIS)

Amazon Machine Images (AMIs) (1/1) Info

Owned by me Search

	Name	AMI ID	AMI name	Status	Creation date	Platform
<input checked="" type="checkbox"/>	VIVEK-WEB-AMI	ami-021a1d72660a7e1f4	WEB-AMI	Available	2022/06/28 10:53 GMT+5:30	Windows

### Click to Launch configuration

Launch configurations (0) Info

Search launch configurations

	Name	AMI ID	Instance type	Spot price	Creation time
No launch configurations found in this region.					

Create launch configuration

### Insert name & select AMI & select instance

Create launch configuration Info

Launch configuration name

Name  
VIVEK-LC

Amazon machine image (AMI) Info

AMI  
WEB-AMI

Instance type Info

Instance type  
t2.micro (1 vCPUs, 1 GiB, EBS Only)

Choose instance type

### Configure SG

Security groups Info

Assign a security group

☒ Create a new security group

☐ Select an existing security group

Security group name  
AutoScaling-Security-Group-1

Description  
AutoScaling-Security-Group-1 (2022-06-28T05:46:33.102Z)

Rules

	Type	Protocol	Port range	Source type	Source
<input type="checkbox"/>	RDP	TCP	3389	Anywhere	0.0.0.0/0
<input type="checkbox"/>	All traffic	All	0 - 65535	Anywhere	0.0.0.0/0

+ Add new rule

# Auto Scaling

## Configure AMI Password assign (Admin@123)

### Key pair (login) [Info](#)

Key pair options

Proceed without a key pair

☒ I acknowledge that I will not be able to connect to this instance unless I already know the password built into this AMI.

Cancel

Create launch configuration

## Successfully created

☑ Successfully created launch configuration: VIVEK-LC

EC2 > Launch configurations

Launch configurations (1/1) [Info](#)



Actions ▾

Copy to launch template ▾

Create launch configuration

🔍 Search launch configurations

< 1 >



<input checked="" type="checkbox"/>	Name ▾	AMI ID ▾	Instance type ▾	Spot price ▾	Creation time ▾
<input checked="" type="checkbox"/>	VIVEK-LC	ami-021a1d7266...	t2.micro	-	Tue Jun 28 2022 11:21:06 GMT+0530 (In...

## Create Auto Scaling Group option

Launch configurations (1/1) [Info](#)



Actions ▲

Copy to launch template ▾

Create launch configuration

🔍 Search launch configurations

< 1 >



<input checked="" type="checkbox"/>	Name ▾	AMI ID ▾	Instance type ▾	Spot price ▾	Creation time ▾
<input checked="" type="checkbox"/>	VIVEK-LC	ami-021a1d7266...	t2.micro	-	Tue Jun 28 2022 11:21:06 GMT+0530 (In...

## Add name and select LC

Step 1

Choose launch template or configuration

Step 2

Choose instance launch options

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

### Choose launch template or configuration [Info](#)

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group. If you currently use launch configurations, you might consider migrating to launch templates.

#### Name

Auto Scaling group name

Enter a name to identify the group.

VIVEK-ASG

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

#### Launch configuration [Info](#)

[Switch to launch template](#)

Launch configuration

Choose a launch configuration that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

VIVEK-LC



[Create a launch configuration](#)

Launch configuration

VIVEK-LC

AMI ID

ami-021a1d72660a7e1f4

Date created

Tue Jun 28 2022 11:21:06 GMT+0530 (India Standard Time)

# Auto Scaling

## Select VPC and Select AZs (min 2 AZs select)

options.

Step 2

**Choose instance launch options**

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

### 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

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

vpc-0c930c8f6492bbf6c (D-VPC)

172.31.0.0/16 Default

[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-2a | subnet-09270613a3c12521f X  
172.31.0.0/20 Default

us-east-2c | subnet-07663653eeb747912 X  
172.31.32.0/20 Default

[Create a subnet](#)

## If you assign direct LB so assign here but temporary I not assign

Step 1

[Choose launch template or configuration](#)

Step 2

[Choose instance launch options](#)

Step 3 (optional)

**Configure advanced options**

Step 4 (optional)

Configure group size and scaling policies

Step 5 (optional)

Add notifications

### 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.

## Select instance capacity

### Group size [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

3

# Auto Scaling

Assign tracking policy if my cpu 30 used than create 1 instance create automatic

## 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

Scaling policy name

vivek tracking

Metric type

Average CPU utilization

Target value

30

Instances need

10

seconds warm up before including in metric

☐ Disable scale in to create only a scale-out policy

## Successfully create

Auto Scaling groups (1/1)




Edit

Delete


Create an Auto Scaling group

Search your Auto Scaling groups

< 1 > ⚙

<input checked="" type="checkbox"/>	Name ▾	Launch template/configuration  ▾	Instances ▾	Status ▾	Desired capacity ▾	Min ▾	Max ▾	Avail
<input checked="" type="checkbox"/>	VIVEK-ASG	VIVEK-LC	2	-	2	2	3	us

## See activity

<input checked="" type="checkbox"/>	Name ▾	Launch template/configuration  ▾	Instances ▾	Status ▾	Desired capacity ▾	Min ▾	Max ▾	Avail
<input checked="" type="checkbox"/>	VIVEK-ASG	VIVEK-LC	2	-	2	2	3	us-ea

## Activity history (2)


Filter activity history

< 1 > ⚙

Status ▾	Description ▾	Cause ▾	Start time ▾	En
Successful	Launching a new EC2 instance: i-01ec2ccb55c7a558c	At 2022-06-28T06:02:07Z a user request created an AutoScalingGroup changing the desired capacity from 0 to 2. At 2022-06-28T06:02:08Z an instance was started in response to a difference between desired and actual capacity, increasing the capacity from 0 to 2.	2022 June 28, 11:32:10 AM +05:30	2028 AM
Successful	Launching a new EC2 instance: i-06d10d33b507436be	At 2022-06-28T06:02:07Z a user request created an AutoScalingGroup changing the desired capacity from 0 to 2. At 2022-06-28T06:02:08Z an instance was started in response to a difference between desired and actual capacity, increasing the capacity from 0 to 2.	2022 June 28, 11:32:10 AM +05:30	2028 AM

## Auto Scaling

See create 2 instances

<input checked="" type="checkbox"/>	Name ▾	Launch template/configuration 	Instances ▾	Status ▾	Desired capacity ▾	Min ▾	Max ▾	Avail.
<input checked="" type="checkbox"/>	VIVEK-ASG	VIVEK-LC	2	-	2	2	3	us-east-2a

Details

Activity

Automatic scaling

Instance management

Monitoring

Instance refresh

Instances (2)

☐

Instance ID ▲

Lifecycle ▾


Instance ty... ▾

Weighted capacity ▾

Launch template/configurati... ▾

Availability Zone ▾


☐

i-01ec2ccb55c7a558c 

InService


t2.micro

-

VIVEK-LC 

us-east-2a


☐

i-06d10d33b507436be 

InService

t2.micro

-

VIVEK-LC 

us-east-2c

Created instance


Successfully created ami-021a1d72660a7e1f4 from instance i-0dd737d9e6d52fb4b.

Instances (1/3) Info


☐

AUTO-A

i-01ec2ccb55c7a558c

Running 

t2.micro

2/2 checks passed 

No alarms +


us-east-2a

ec2-3-144


☒

AUTO-B

i-06d10d33b507436be

Running 

t2.micro

2/2 checks passed 


No alarms +

us-east-2c

ec2-3-144

Add LB in Auto scale

Edit LB

<input checked="" type="checkbox"/>	Name ▾	Launch template/configuration 	Instances ▾	Status ▾	Desired capacity ▾	Min ▾	Max ▾	Avail.
<input checked="" type="checkbox"/>	VIVEK-ASG	VIVEK-LC	2	-	2	2	3	us-east-2a

Network

Availability Zones  
us-east-2a, us-east-2c

Subnet ID  
subnet-09270613a3c12521f, subnet-07663653eeb747912

Load balancing

Load balancer target groups  
-

Classic Load Balancers  
-


Same network selects


### Network


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.


#### 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-2a | subnet-09270613a3c12521f   
172.31.0.0/20 Default

us-east-2c | subnet-07663653eeb747912   
172.31.32.0/20 Default

Create a subnet 

# Auto Scaling

## CONFIGURATION

### Load balancing - optional

#### Load balancers

- ☐ Application, Network or Gateway Load Balancer target groups  
☐ Classic Load Balancers

#### Create and attach new load balancers

▼ New load balancer: VIVEK-LB

Remove

#### 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.

VIVEK-LB

#### Load balancer scheme

Scheme cannot be changed after the load balancer is created.

☐ Internal

☒ Internet-facing

## Select LB NETWORK AND AZs

#### 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-0c930c8f6492bbf6c [↗](#) D-VPC

#### 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-2a

subnet-09270613a3c12521f

☒ us-east-2c

subnet-07663653eeb747912

☐ us-east-2b

Select a subnet

#### 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

HTTP

#### Port

80

#### Default routing (forward to)

Create a target group

#### New target group name

An instance target group with default settings will be created.

VIVEK-LB

## Auto update instance

### Target groups (1/1) [Info](#)

Q Search or filter target groups



Actions ▼

Create target group

< 1 >



<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Load balancer
<input checked="" type="checkbox"/>	VIVEK-LB	arn:aws:elasticloadbalancin...	80	HTTP	Instance	VIVEK-LB

### Target group: VIVEK-LB



### Registered targets (2)

Q Filter resources by property or value



Deregister

Register targets

< 1 >



<input type="checkbox"/>	Instance ID	Name	Port	Zone	Health status	Health status details
<input type="checkbox"/>	i-06d10d33b507436be	vivek-ASG	80	us-east-2c	healthy	
<input type="checkbox"/>	i-01ec2ccb55c7a558c	AUTO-A	80	us-east-2a	healthy	

# Auto Scaling

See log

Auto Scaling groups (1/1)

Q Search your Auto Scaling groups

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Avail
<input checked="" type="checkbox"/>	VIVEK-ASG	VIVEK-LC	2	-	2	2	3	us-ea

Status	Description	Cause	Start time	En
Successful	Updating load balancers/target groups: Successful. Status Reason: Added: arn:aws:elasticloadbalancing:us-east-2:659202326636:target-group/VIVEK-LB/0171bc6287a42bf0		2022 June 28, 11:43:00 AM +05:30	2022 June 28, 11:43:00 AM +05:30

Check LB work or not copy DNS

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

<

1 to 1 of 1

<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID	Availability Zones	Type
<input checked="" type="checkbox"/>	VIVEK-LB	VIVEK-LB-1504445010.us-e...	Provisioning	vpc-0c930c8f6492bbf6c	us-east-2c, us-east-2a	application

Load balancer: VIVEK-LB

Description

Listeners

Monitoring

Integrated services

Tags

Basic Configuration

Name	VIVEK-LB
ARN	arn:aws:elasticloadbalancing:us-east-2:659202326636:loadbalancer/app/VIVEK-LB/7a831ec59b65ae24
DNS name	VIVEK-LB-1504445010.us-east-2.elb.amazonaws.com (A Record)
State	Provisioning

BROWSE DNS

Connect to instance   EC2 Mana	EC2 Management Console	EC2 Management Console	Target groups   EC2 Managemen	SERVER-A
Not secure   vivek-lb-1504445010.us-east-2.elb.amazonaws.com				
SERVER-A SERVER-A SERVER-A SERVER-A SERVER-A SERVER-A				



SUCCESSFULLY LB WORK

Connect to instance   EC2 Mana	EC2 Management Console	EC2 Management Console	Target groups   EC2 Managemen	SERVER-B
Not secure   vivek-lb-1504445010.us-east-2.elb.amazonaws.com				
SERVER-B SERVER-B SERVER-B SERVER-B SERVER-B SERVER-B				



# Auto Scaling

If load increases then automatic instance create

Auto Scaling groups (1/1) Refresh Edit Delete Create an Auto Scaling group

Search your Auto Scaling groups

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability
<input checked="" type="checkbox"/>	vivek-asg	vivek-lc	2	Updating capacity	3	2	3	us-east-1

Also add instance see

Success vivek-asg, 1 Scaling policy created successfully

EC2 > Auto Scaling groups

Auto Scaling groups (1/1) Refresh Edit Delete Create an Auto Scaling group

Search your Auto Scaling groups

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability
<input checked="" type="checkbox"/>	vivek-asg	vivek-lc	3	-	3	2	3	us-east-1

<input type="checkbox"/>	Instance ID	Lifecycle	Instance type	Weighted capacity	Launch template/configuration	Availability Zone
<input type="checkbox"/>	i-0638ce3fc3aafb39	InService	t2.micro	-	vivek-lc	us-east-2c
<input type="checkbox"/>	i-090c92b69d31a3e97	InService	t2.micro	-	vivek-lc	us-east-2a
<input type="checkbox"/>	i-0935af1f0212be90b	InService	t2.micro	-	vivek-lc	us-east-2c

See activity log

Auto Scaling groups (1/1) Refresh Edit Delete Create an Auto Scaling group

Search your Auto Scaling groups

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability
<input checked="" type="checkbox"/>	vivek-asg	vivek-lc	3	-	3	2	3	us-east-1

Status	Description	Cause	Start time	End time
Successful	Launching a new EC2 instance: i-0638ce3fc3aafb39	At 2022-06-28T06:46:09Z a monitor alarm TargetTracking-vivek-asg-AlarmHigh-5bce62d4-c123-40b2-86b4-4cb65ef3db7 in state ALARM triggered policy vivek-policy changing the desired capacity from 2 to 3. At 2022-06-28T06:46:17Z an instance was started in response to a difference between desired and actual capacity, increasing the capacity from 2 to 3.	2022 June 28, 12:16:19 PM +05:30	2022 June 28, 12:16:19 PM +05:30
Successful	Launching a new EC2 instance: i-090c92b69d31a3e97	At 2022-06-28T06:43:22Z a user request created an AutoScalingGroup changing the desired capacity from 0 to 2. At 2022-06-28T06:43:26Z an instance was started in response to a difference between desired and actual capacity, increasing the capacity from 0 to 2.	2022 June 28, 12:13:28 PM +05:30	2022 June 28, 12:13:28 PM +05:30
Successful	Launching a new EC2 instance: i-0935af1f0212be90b	At 2022-06-28T06:43:27Z a user request created an AutoScalingGroup changing the desired capacity from 0 to 3.	2022 June 28, 12:13:28 PM +05:30	2022 June 28, 12:13:28 PM +05:30

Also add LB

Create Load Balancer Actions

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones	Type	Created
VIVEK-LB	VIVEK-LB-887704073.us-east-1.elb.amazonaws.com	Available	vpc-0c930c8f6492bbf6c	us-east-2c, us-east-2a	classic	June 28, 12:13:28 PM +05:30

Load balancer: VIVEK-LB

Description Instances Health check Listeners Monitoring Tags Migration

Connection Draining: Enabled, 30 seconds (Edit)

Instance ID	Name	Availability Zone	Status	Actions
i-090c92b69d31a3e97	AUTO-A	us-east-2a	InService	Remove from Load Balancer
i-0935af1f0212be90b	AUTO-B	us-east-2c	InService	Remove from Load Balancer
i-0638ce3fc3aafb39	AUTO-C	us-east-2c	InService	Remove from Load Balancer



# Auto Scaling

## INSTANCE CREATE SUCCESSFULLY

Instances (3) Info

Search

Instance state = running X Clear filters

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input type="checkbox"/>	AUTO-A	i-090c92b69d31a3e97	Running	t2.micro	2/2 checks passed	No alarms	us-east-2a	ec2-3-142
<input type="checkbox"/>	AUTO-B	i-0935af1f0212be90b	Running	t2.micro	2/2 checks passed	No alarms	us-east-2c	ec2-52-14
<input type="checkbox"/>	-	i-0638ce3fc3aafb39	Running	t2.micro	2/2 checks passed	No alarms	us-east-2c	ec2-3-137

## THEN LOAD decrees automatic instance removes

Auto Scaling groups (1/1)

Search your Auto Scaling groups

Filter activity history

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Avail
<input checked="" type="checkbox"/>	vivek-asg	vivek-lc	2	-	2	2	3	us-ea

Status	Description	Cause	Start time
Successful	Terminating EC2 instance: i-04c53d3f99627cc7c	At 2022-06-28T07:47:08Z a monitor alarm TargetTracking-vivek-asg-AlarmLow-f2e51c8b-9bea-4886-b117-ee431559add9 in state ALARM triggered policy vivek-policy changing the desired capacity from 3 to 2. At 2022-06-28T07:47:22Z an instance was taken out of service in response to a difference between desired and actual capacity, shrinking the capacity from 3 to 2. At 2022-06-28T07:47:22Z instance i-04c53d3f99627cc7c was selected for termination.	2022 June 28, 01:17:22 PM +05:30

## Also remove in LB

Create Load Balancer Actions

Filter by tags and attributes or search by keyword

<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID	Availability Zones	Type
<input checked="" type="checkbox"/>	VIVEK-LB	VIVEK-LB-887704073 us-ea...		vpc-0c930c8f6492bbf6c	us-east-2c, us-east-2a	classic

Load balancer: VIVEK-LB

Description Instances Health check Listeners Monitoring Tags Migration

Connection Draining: Enabled, 30 seconds (Edit)

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
i-0d87425361289cbf0		us-east-2a	InService	Remove from Load Balancer
i-0d9eb86307c1af24		us-east-2c	InService	Remove from Load Balancer

## IF delete ASG all instance terminates automatic

Auto Scaling groups (1/1)

Search your Auto Scaling groups

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Avail
<input checked="" type="checkbox"/>	vivek-asg	vivek-lc	2	-	2	2	3	us-ea

# Auto Scaling

## See all instance and groups 0

Auto Scaling groups (1)								
<div><div>Q Search your Auto Scaling groups</div><div>&lt; 1 &gt;</div><div></div></div>								
	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availab
	vivek-asg	vivek-lc	2	Deleting	0	0	0	us-east-

## In LB all instance removes

Create Load Balancer Actions								
<div><div>Q Filter by tags and attributes or search by keyword</div><div>&lt; 1 to 1 of 1 &gt;</div><div></div></div>								
	Name	DNS name	State	VPC ID	Availability Zones	Type		Cr
	VIVEK-LB	VIVEK-LB-887704073 us-ea...		vpc-0c930c8f6492bbf6c	us-east-2c, us-east-2a	classic		Jur

Load balancer: VIVEK-LB

Description Instances Health check Listeners Monitoring Tags Migration

Connection Draining: Enabled, 30 seconds (Edit)

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
There are no instances registered to this load balancer				

## All instance terminates

Instances (5) Info								
<div><div>Q Search</div><div>&lt; 1 &gt;</div><div></div></div>								
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
	-	i-0d87425361289cbf0	Terminated	t2.micro	-	No alarms +	us-east-2a	-
	AUTO-A	i-090c92b69d31a3e97	Terminated	t2.micro	-	No alarms +	us-east-2a	-
	AUTO-B	i-0935af1f0212be90b	Terminated	t2.micro	-	No alarms +	us-east-2c	-