

Task 1: Run 2 Web Server Behind ALB

The screenshot shows the 'Create security group' page in the AWS EC2 console. In the 'Basic details' section, the security group name is set to 'MyAlbSG'. The 'Description' field contains 'MyAlbSG'. The 'VPC' dropdown is set to 'vpc-00ca485ce3bcba3'. Below this, the 'Inbound rules' section indicates 'This security group has no inbound rules.' A 'Add rule' button is visible.

The screenshot shows the 'Create security group' page with inbound rules configured. A new rule was added for 'Custom TCP' on port '80' from 'Anywhere' to '0.0.0.0/0'. A warning message at the bottom states: '⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.' In the 'Outbound rules' section, 'All traffic' is selected with 'All' protocols and 'Custom' ports.

Sun Mar 17 3:27PM

Launch AWS Academy Learn | CreateSecurityGroup | EC2 | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateSecurityGroup:

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AWS Services Search [Option+S]

Create security group [Info](#)

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

Basic details

Security group name [Info](#)
MyWebServerBehindLoadBalancers

Name cannot be edited after creation.

Description [Info](#)
MyWebServerBehindLoadBalancers

VPC Info
vpc-00ca485ce3bca3ba3

Inbound rules [Info](#)

This security group has no inbound rules.

Add rule

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Sun Mar 17 3:30PM

Launch AWS Academy Learn | CreateSecurityGroup | EC2 | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateSecurityGroup:

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AWS Services Search [Option+S]

vpc-00ca485ce3bca3ba3

Inbound rules [Info](#)

Type	Protocol	Port range	Source	Description - optional
Custom TCP	TCP	80	Custom	

Add rule

Outbound rules [Info](#)

Type	Protocol	Port range	Destination	Description - optional
Custom TCP	TCP	80	Custom	

Add rule

Tags - optional

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search Prefix lists

Prefix lists

launch-wizard-1 | sg-0370dc30fa1083410

MyAlbSG | sg-0553c1d2a61a3909b

default | sg-03f MyAlbSG | sg-0553c1d2a61a3909b

launch-wizard-3 | sg-07fccb6a594e4c288

No tags associated with the resource.

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Launch AWS Academy Learn Security Group | EC2 | us-east-1

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#SecurityGroup:groupId=sg-0327c67cc47aca0ff

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AWS Services Search [Option+S]

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

Network & Security CloudShell Feedback

EC2 > Security Groups > sg-0327c67cc47aca0ff - MyWebServerBehindLoadBalancers

sg-0327c67cc47aca0ff - MyWebServerBehindLoadBalancers Actions

Details

Security group name	sg-0327c67cc47aca0ff	Description	VPC ID
MyWebServerBehindLoadBalancers	MyWebServerBehindLoadBalancers	vpc-00ca485ce3bca3ba3	
Owner	339712977636	Inbound rules count	1 Permission entry
		Outbound rules count	1 Permission entry

Inbound rules Outbound rules Tags

Inbound rules (1)

Name	Security group rule...	IP version	Type	Protocol	Port range
-	sgr-00a02fca759790c82	IPv4	HTTP	TCP	80

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Sun Mar 17 3:34PM

Launch AWS Academy Learn Dashboard | EC2 | us-east-1 Console Home | Console Home

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Home:

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AWS Services Search [Option+S]

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

Network & Security CloudShell Feedback

Resources You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts	0
Elastic IPs	0	Instances	0	Key pairs	1
Load balancers	0	Placement groups	0	Security groups	6
Snapshots	0	Volumes	0		

Launch instance To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance Migrate a server

Note: Your instances will launch in the US East (N. Virginia) Region

Service health AWS Health Dashboard

Region US East (N. Virginia)

Status This service is operating normally.

Zones Zone name Zone ID

EC2 Free Tier Info Offers for all AWS Regions.

0 EC2 free tier offers in use

End of month forecast

User: arn:aws:sts::339712977636:assumed-role/voclabs/user3067672=sanjaya.koju is not authorized to perform: freetier:GetFreeTierUsage on resource: arn:freetier:us-east-1:339712977636:/GetFreeTierUsage because no identity-based policy allows the freetier:GetFreeTierUsage action

Exceeds free tier

User: arn:aws:sts::339712977636:assumed-role/voclabs/user3067672=sanjaya.koju is not authorized to perform: freetier:GetFreeTierUsage on resource: arn:freetier:us-east-1:339712977636:/GetFreeTierUsage because no identity-based policy allows the freetier:GetFreeTierUsage action

View Global EC2 resources

View all AWS Free Tier offers

Account attributes

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalanc...

Sun Mar 17 3:35 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | Console Home | Console Home

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalancers:sort=vpcId

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aws Services Search [Option+S]

EC2 > Load balancers

Introducing resource map for Application Load Balancers

Resource map is a visual representation of the relationships between load balancer resources and provides the ability to view, explore, and troubleshoot the architecture of your load balancer. Resource map can be viewed on the load balancers detail page. Share feedback to help us improve your experience.

Give feedback

Load balancers

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Filter load balancers

Name DNS name State VPC ID Availability Zones Type Data

No load balancers You don't have any load balancers in us-east-1

Create load balancer

0 load balancers selected

Select a load balancer above.

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Sun Mar 17 3:35 PM

Launch AWS Academy Learn | Compare and select load balancer | Console Home | Console Home

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#SelectCreateELBWizard:

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aws Services Search [Option+S]

Compare and select load balancer

Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic. Operating at the request level, Application Load Balancers provide advanced routing and visibility features targeted at application architectures, including microservices and containers.

Create

Create Application Load Balancer

Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, support for UDP, and static IP addresses for your applications. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.

Create

Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE. These appliances enable you to improve security, compliance, and policy controls.

Create

▶ Classic Load Balancer - previous generation

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Launch AWS Academy Learn... Create application load balan... Console Home | Console Home

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateALBWizard:

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AWS Services Search [Option+S]

EC2 > Load balancers > Create Application Load Balancer

Create Application Load Balancer Info

The Application Load Balancer distributes incoming HTTP and HTTPS traffic across multiple targets such as Amazon EC2 instances, microservices, and containers, based on request attributes. When the load balancer receives a connection request, it evaluates the listener rules in priority order to determine which rule to apply, and if applicable, it selects a target from the target group for the rule action.

▶ How Application Load Balancers work

Basic configuration

Load balancer name
Name must be unique within your AWS account and can't be changed after the load balancer is created.
 A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Scheme Info
Scheme can't be changed after the load balancer is created.
 Internet-facing
An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. [Learn more](#)
 Internal
An internal load balancer routes requests from clients to targets using private IP addresses.

IP address type Info
Select the type of IP addresses that your subnets use.
 IPv4
Recommended for internal load balancers.
 Dualstack

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Launch AWS Academy Learn... Create application load balan... Console Home | Console Home

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateALBWizard:

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VPC Info
Select the virtual private cloud (VPC) for your targets or you can [create a new VPC](#). Only VPCs with an internet gateway are enabled for selection. The selected VPC can't be changed after the load balancer is created. To confirm the VPC for your targets, view your [target groups](#).
 vpc-00ca485ce3bca3ba5
IPv4: 172.31.0.0/16

Mappings Info
Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

us-east-1a (use1-az1)
Subnet
 subnet-0e4a833bde9b47f78

IPv4 address
Assigned by AWS

us-east-1b (use1-az2)
Subnet
 subnet-0943597c0cfa5b34c
IPv4 address
Assigned by AWS

us-east-1c (use1-az4)

us-east-1d (use1-az6)

us-east-1e (use1-az3)

us-east-1f (use1-az5)

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Launch AWS Academy Learn | Create application load balan... | Console Home | Console Hom... | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateALBWizard:

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AWS Services Search [Option+S]

us-east-1f (use1-az5)

Security groups Info
A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can [create a new security group](#).

Security groups
Select up to 5 security groups

MyAlbSG sg-0553c1d2a61a3909b VPC: vpc-00ca485ce3bca3ba3

Listeners and routing Info
A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

▼ Listener HTTP:80

Protocol Port Default action Info
HTTP : 80 Forward to Select a target group 1-65535
Create target group

Listener tags - optional
Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

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Launch AWS Academy Learn | Create application load balan... | Console Home | Console Hom... | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateALBWizard:

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AWS Services Search [Option+S]

MyAlbSG sg-0553c1d2a61a3909b VPC: vpc-00ca485ce3bca3ba3

Listeners and routing Info
A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

▼ Listener HTTP:80

Protocol Port Default action Info
HTTP : 80 Forward to Select a target group 1-65535
Create target group

Listener tags - optional
Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

Add listener tag
You can add up to 50 more tags.

Add listener

► Load balancer tags - optional

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateTargetGroup;protocol=HTTP;vpc=vpc-00ca485ce3bca3ba3

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Launch AWS Academy Learn | Create application load balan | Step 1 Create target group | Console Home | Console Home

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AWS Services Search [Option+S]

EC2 Target groups Create target group

Step 1 Specify group details

Your load balancer routes requests to the targets in a target group and performs health checks on the targets.

Step 2 Register targets

Basic configuration

Settings in this section can't be changed after the target group is created.

Choose a target type

Instances

- Supports load balancing to instances within a specific VPC.
- Facilitates the use of [Amazon EC2 Auto Scaling](#) to manage and scale your EC2 capacity.

IP addresses

- Supports load balancing to VPC and on-premises resources.
- Facilitates routing to multiple IP addresses and network interfaces on the same instance.
- Offers flexibility with microservice based architectures, simplifying inter-application communication.
- Supports IPv6 targets, enabling end-to-end IPv6 communication, and IPv4-to-IPv6 NAT.

Lambda function

- Facilitates routing to a single Lambda function.
- Accessible to Application Load Balancers only.

Application Load Balancer

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Launch AWS Academy Learn | Create application load balan | Step 1 Create target group | Console Home | Console Home

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AWS Services Search [Option+S]

EC2 Target groups Create target group

Application Load Balancer

- Offers the flexibility for a Network Load Balancer to accept and route TCP requests within a specific VPC.
- Facilitates using static IP addresses and PrivateLink with an Application Load Balancer.

Target group name

myAlbTG

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Protocol : Port

Choose a protocol for your target group that corresponds to the Load Balancer type that will route traffic to it. Some protocols now include anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation.

HTTP 80 1-65535

IP address type

Only targets with the indicated IP address type can be registered to this target group.

IPv4

Each instance has a default network interface (eth0) that is assigned the primary private IPv4 address. The instance's primary private IPv4 address is the one that will be applied to the target.

IPv6

Each instance you register must have an assigned primary IPv6 address. This is configured on the instance's default network interface (eth0). [Learn more](#)

VPC

Select the VPC with the instances that you want to include in the target group. Only VPCs that support the IP address type selected above are available in this list.

vpc-00ca485ce3bca3ba3
IPv4: 172.31.0.1/16

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Launch AWS Academy Learn | Create application load balan... | Target group details | EC2 | us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateALBWizard: | Console Home | Console Home | +

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AWS Services Search [Option+S] N. Virginia voclabs/user3067672=sanjaya.koju @ 3397-1297-7636

MyAlbSG sg-0553c1d2a61a3909b VPC: vpc-00ca485ce3bca3ba3

Listeners and routing Info

A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

▼ Listener HTTP:80

Protocol Port Default action Info

HTTP : 80 Forward to myAlbTG Target type: Instance, IPv4

Remove Create target group

Listener tags - optional

Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

Add listener tag You can add up to 50 more tags.

Add listener

► Load balancer tags - optional

Sun Mar 17 3:47 PM

Launch AWS Academy Learn | Load balancer details | EC2 | Target group details | EC2 | us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalancer:loadBalancerArn=arn:aws:elasticloadbalancing:us-east-1:33971297... | Console Home | Console Home | +

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AWS Services Search [Option+S] N. Virginia voclabs/user3067672=sanjaya.koju @ 3397-1297-7636

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances Instances Instance Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

Network & Security

CloudShell Feedback

Successfully created load balancer: my-lab-alb

It might take a few minutes for your load balancer to fully set up and route traffic. Targets will also take a few minutes to complete the registration process and pass initial health checks.

EC2 > Load balancers > my-lab-alb

my-lab-alb

Introducing resource map for Application Load Balancers

Resource map is a visual representation of the relationships between load balancer resources and provides the ability to view, explore, and troubleshoot the architecture of your load balancer. Resource map can be viewed on the load balancers detail page. Share feedback to help us improve your experience.

Give feedback

▼ Details

Load balancer type	Status	VPC	IP address type
Application	Provisioning	vpc-00ca485ce3bca3ba3	IPv4
Scheme	Hosted zone	Availability Zones	Date created
Internet-facing	Z35SXDOTRQ7X7K	subnet-0e4a833bde9b47f78 us-east-1a (use1-az1)	March 17, 2024, 15:47 (UTC-05:00)
Load balancer ARN		subret-0943597c0cfa5b34c us-east-1b (use1-az2)	
		DNS name	
b/59cbc094bc92a44c		Info	my-lab-alb-201185273.us-east-1.elb.amazonaws.com (A Record)

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Task 2: Create an NLB

The screenshot shows the AWS EC2 Dashboard in a web browser. The left sidebar contains navigation links for EC2 Global View, Events, Console-to-Code, Instances, Images, Elastic Block Store, and Network & Security. The main content area is divided into several sections:

- Resources:** Displays usage statistics for the US East (N. Virginia) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts	0
Elastic IPs	0	Instances	0	Key pairs	1
Load balancers	1	Placement groups	0	Security groups	6
Snapshots	0	Volumes	0		
- Launch instance:** A button labeled "Launch instance" is present.
- Service health:** Shows the AWS Health Dashboard with the status "This service is operating normally".
- Zones:** A table with columns "Zone name" and "Zone ID".
- Account attributes:** A section showing account information.
- Right sidebar:** Includes a "EC2 Free Tier" info card, a "0 EC2 free tier offers in use" section, and a "Exceeds free tier" section with a detailed error message about IAM policy.

The browser's address bar shows the URL: <https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalanc...>. The status bar at the bottom indicates the date and time: Sun Mar 17 3:51PM.

Sun Mar 17 3:51 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | Target group details | EC2 | us-east-1 | Console Home | Console Home

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aws Services Search [Option+S]

EC2 > Load balancers

Introducing resource map for Application Load Balancers

Resource map is a visual representation of the relationships between load balancer resources and provides the ability to view, explore, and troubleshoot the architecture of your load balancer. Resource map can be viewed on the load balancers detail page. Share feedback to help us improve your experience.

Load balancers (1)

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Name	DNS name	State	VPC ID	Availability Zones	Type	Data
my-lab-alb	my-lab-alb-201185273.us...	Active	vpc-00ca485ce3bca5ba3	2 Availability Zones	application	Ma

Filter load balancers

0 load balancers selected

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Launch AWS Academy Learn | Compare and select load balancer | Target group details | EC2 | us-east-1 | SelectCreateELBWizard: | Console Home | Console Home

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aws Services Search [Option+S]

Compare and select load balancer

Application Load Balancer

Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic. Operating at the request level, Application Load Balancers provide advanced routing and visibility features targeted at application architectures, including microservices and containers.

Create

Network Load Balancer

Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, support for UDP, and static IP addresses for your applications. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.

Create

Gateway Load Balancer

Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE. These appliances enable you to improve security, compliance, and policy controls.

Create

Create Network Load Balancer

▶ Classic Load Balancer - previous generation

Close

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Sun Mar 17 3:52 PM

Launch AWS Academy Learn... Create network load balancer Target group details | EC2 | us... Console Home | Console Home

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AWS Services Search [Option+S]

EC2 > Load balancers > Create Network Load Balancer

Create Network Load Balancer Info

The Network Load Balancer distributes incoming TCP and UDP traffic across multiple targets such as Amazon EC2 instances, microservices, and containers. When the load balancer receives a connection request, it selects a target based on the protocol and port that are specified in the listener configuration, and the routing rule specified as the default action.

▶ How Network Load Balancers work

Basic configuration

Load balancer name
Name must be unique within your AWS account and can't be changed after the load balancer is created.

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

Scheme
Scheme can't be changed after the load balancer is created.

Internet-facing
An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. [Learn more](#)

Internal
An internal load balancer routes requests from clients to targets using private IP addresses.

IP address type Info
Select the type of IP addresses that your subnets use.

IPv4
Recommended for internal load balancers.

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Launch AWS Academy Learn... Create network load balancer Target group details | EC2 | us... Console Home | Console Home

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AWS Services Search [Option+S]

EC2 > Network mapping Info

Network mapping Info

The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings.

VPC
Select the virtual private cloud (VPC) for your targets or you can [create a new VPC](#). Only VPCs with an internet gateway are enabled for selection. The selected VPC can't be changed after the load balancer is created. To confirm the VPC for your targets, view your [target groups](#).

- [vpc-00ca485ce3bca3ba](#)
IPv4: 172.31.0.0/16

Mappings
Select at least one Availability Zone and one subnet for each zone. We recommend selecting at least two Availability Zones. The load balancer will route traffic only to targets in the selected Availability Zones. Zones that are not supported by the load balancer or VPC can't be selected. Subnets can be added, but not removed, once a load balancer is created.

us-east-1a (use1-az1)
Subnet
IPv4 address

us-east-1b (use1-az2)
Subnet
IPv4 address

us-east-1c (use1-az4)

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Screenshot of the AWS Lambda console showing the creation of a new security group.

Security groups - Info
A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can [create a new security group](#).

Security groups - recommended
Security groups support on Network Load Balancers can only be enabled at creation by including at least one security group. You can change security groups after creation. The security groups for your load balancer must allow it to communicate with registered targets on both the listener port and the health check port. For PrivateLink Network Load Balancers, security group rules are enforced on PrivateLink traffic; however, you can turn off inbound rule evaluation after creation within the load balancer's Security tab or using the API.

Select up to 5 security groups

MyAlbSG sg-0553c1d2a61a3909b VPC: vpc-00ca485ce3bca3ba3

Listeners and routing Info
A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

▼ Listener TCP:80

Protocol	Port	Default action	Info
TCP	: 80	Forward to	Select a target group

Create target group

Listener tags - optional

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Screenshot of the AWS EC2 Dashboard showing the Load balancers page.

Introducing resource map for Application Load Balancers
Resource map is a visual representation of the relationships between load balancer resources and provides the ability to view, explore, and troubleshoot the architecture of your load balancer. Resource map can be viewed on the load balancers detail page. Share feedback to help us improve your experience.

Load balancers (2)
Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Name	DNS name	State	VPC ID	Availability Zones	Type
my-lab-nlb	my-lab-nlb-1d217767fbef...	Provisioning...	vpc-00ca485ce3bca3ba3	2 Availability Zones	network
my-lab-alb	my-lab-alb-201185273.us...	Active	vpc-00ca485ce3bca3ba3	2 Availability Zones	application

0 load balancers selected

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Creating Servers

The screenshot shows the 'Launch an instance' wizard on the AWS EC2 console. The browser tab bar includes 'Launch AWS Academy Learn', 'Load balancers | EC2 | us-east-1', 'Target groups | EC2 | us-east-1', 'Target groups | EC2 | us-east-1', and 'Launch an instance | EC2 | us-east-1'. The address bar shows 'us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#launchInstances'. The main content area is titled 'Launch an instance' and contains several configuration sections:

- Name and tags**: A field labeled 'Name' contains 'My server 1 behind load balancer'. There is also a link 'Add additional tags'.
- Application and OS Images (Amazon Machine Image)**: A search bar 'Search our full catalog including 1000s of application and OS images' is present. Below it, a 'Quick Start' section lists various AMI icons: Amazon Linux, macOS, Ubuntu, Windows, Red Hat, and SUSE. A 'Browse more AMIs' link is available.
- Summary**: This section displays the configuration summary:
 - Number of instances: 1
 - Software Image (AMI): Amazon Linux 2023 AMI 2023.5.2... (with a 'read more' link)
 - Virtual server type (instance type): t2.micro
 - Firewall (security group): (empty)
 - Storage (volumes): 1 volume(s) - 8 GiB
- Free tier**: A callout box explains the free tier benefits: 'In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of bandwidth.'
- Buttons**: 'Cancel', 'Launch instance' (highlighted in orange), and 'Review commands'.

The bottom of the screen shows the Mac OS X dock with various application icons.

Sun Mar 17 4:14PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

VPC - required (default) **vpc-00ca485ce3bca3ba3** (172.31.0.0/16)

Subnet **subnet-0e4a833bde9b47f78** (VPC: vpc-00ca485ce3bca3ba3, Owner: 339712977636, Availability Zone: us-east-1a, IP addresses available: 4089, CIDR: 172.31.0.0/20)

Create new subnet

Auto-assign public IP **Enable**

Firewall (security groups) **Select existing security group**

Common security groups **Select security groups**

Advanced network configuration

Configure storage **Advanced**

VPC

The VPC that you want to launch your instance into.

Get more networking guidance

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Sun Mar 17 4:15PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

VPC - required (default) **vpc-00ca485ce3bca3ba3** (172.31.0.0/16)

Subnet **subnet-0e4a833bde9b47f78** (VPC: vpc-00ca485ce3bca3ba3, Owner: 339712977636, Availability Zone: us-east-1a, IP addresses available: 4089, CIDR: 172.31.0.0/20)

Create new subnet

Auto-assign public IP **Enable**

Firewall (security groups) **Select existing security group**

Common security groups **Select security groups**

MyWebServerBehindLoadBalancers sg-0327c67cc47aca0ff (VPC: vpc-00ca485ce3bca3ba3)

Compare security group rules

Advanced network configuration

Configure storage **Advanced**

VPC

The VPC that you want to launch your instance into.

Get more networking guidance

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Sun Mar 17 4:16PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

VPC

The VPC that you want to launch your instance into.

Get more networking guidance

Advanced details

Domain join directory

IAM instance profile

Hostname type

DNS Hostname

Instance auto-recovery

Shutdown behavior

Stop - Hibernate behavior

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This screenshot shows the 'Advanced details' section of the AWS EC2 'Launch Instances' wizard. It includes fields for selecting a domain join directory, IAM instance profile, hostname type (IP name), DNS settings (IPv4 and IPv6), instance auto-recovery, shutdown behavior (Stop), and hibernation behavior. A 'VPC' sidebar is visible on the right, prompting the user to select a VPC for their instance. The AWS navigation bar and search bar are at the top, and the Mac OS X dock is at the bottom.

Sun Mar 17 4:16PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

VPC

The VPC that you want to launch your instance into.

Get more networking guidance

2

Allow tags in metadata

User data - optional

Upload a file with your user data or enter it in the field.

Choose file

```
#!/bin/bash
yum install -y httpd
systemctl start httpd
systemctl enable httpd
echo "<h1>Hello YourName from $(hostname -f)</h1>" > /var/www/html/index.html
```

User data has already been base64 encoded

Summary

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This screenshot shows the 'User data' section of the AWS EC2 'Launch Instances' wizard. It allows users to upload a file or enter user data directly. A code editor window displays a shell script that installs Apache HTTPD and creates a dynamic index.html page. Below the code editor is a checkbox for base64 encoding. The 'Summary' section is partially visible at the bottom. The AWS navigation bar and search bar are at the top, and the Mac OS X dock is at the bottom.

Sun Mar 17 4:18PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | Target groups | EC2 | us-east-1 | Target groups | EC2 | us-east-1 | Launch an instance | EC2 | us-east-1

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aws Services Search [Option+S]

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name: My Server 2 behind load balancer Add additional tags

Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE Linux Browse more AMIs Including AMIs from AWS, Marketplace and

Summary

Number of instances: Info 1

Software Image (AMI): Amazon Linux 2023 AMI 2023.3.2... read more ami-0d7a109bf30624c99

Virtual server type (instance type): t2.micro

Firewall (security group): MyWebServerBehindLoadBalancers

Storage (volumes): 1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of

Cancel **Launch instance** Review commands

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Sun Mar 17 4:19PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | Target groups | EC2 | us-east-1 | Target groups | EC2 | us-east-1 | Launch an instance | EC2 | us-east-1

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aws Services Search [Option+S]

Network settings Info

VPC - required Info

vpc-00ca485ce5bca3ba3 (default)

Subnet Info

subnet-0943597c0fa5b34c VPC: vpc-00ca485ce5bca3ba3 Owner: 339712977636 Availability Zone: us-east-1b IP addresses available: 4090 CIDR: 172.31.80.0/20 Create new subnet

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

Common security groups Info

Select security groups MyWebServerBehindLoadBalancers sg-0327c67cc47aca0ff X VPC: vpc-00ca485ce5bca3ba3

Compare security group rules

Advanced network configuration

Summary

Number of instances: Info 1

Software Image (AMI): Amazon Linux 2023 AMI 2023.3.2... read more ami-0d7a109bf30624c99

Virtual server type (instance type): t2.micro

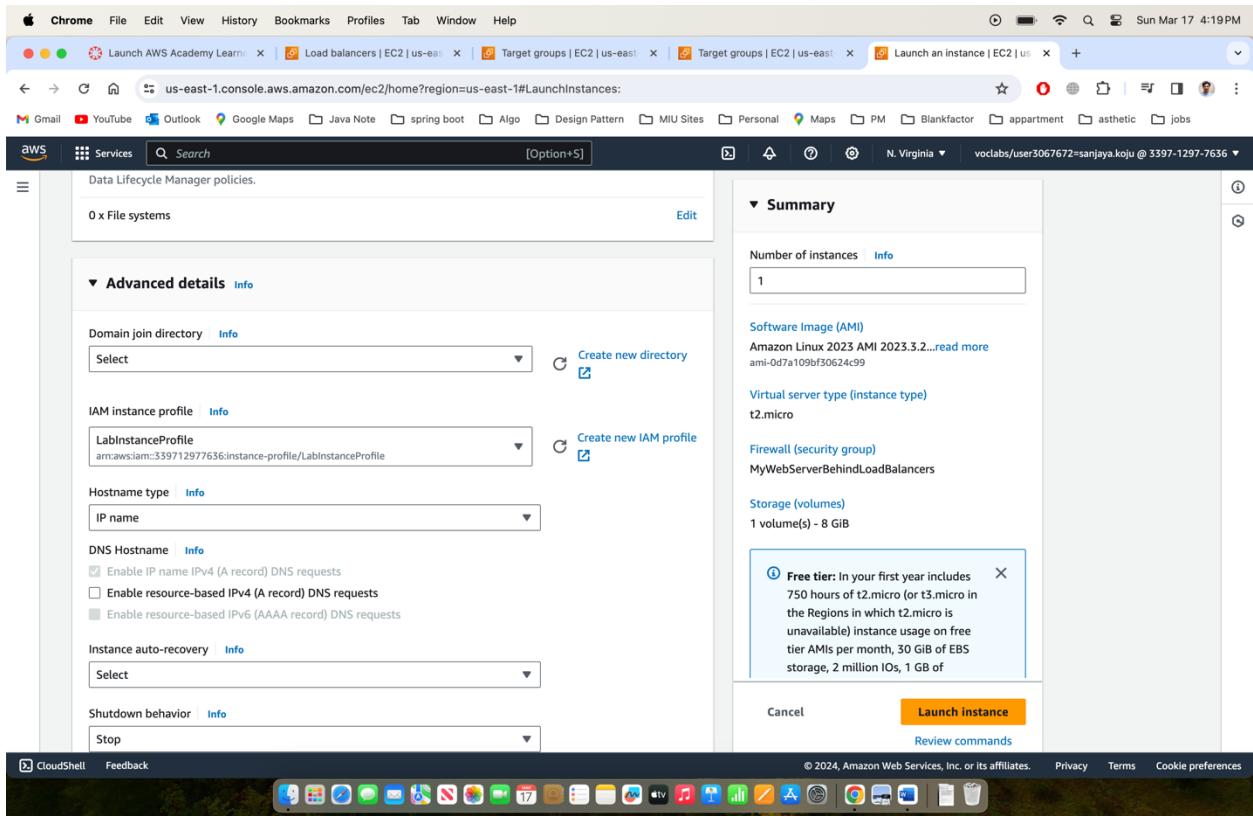
Firewall (security group): MyWebServerBehindLoadBalancers

Storage (volumes): 1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of

Cancel **Launch instance** Review commands

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Task 3 – Run the Web Server behind the ALB in ASG

Sun Mar 17 4:57 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Launch templates | EC2 | us-east-1 | SecurityGroup | EC2 | us-east-1 | +

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aws Services Search [Option+S]

EC2 Dashboard EC2 Global View Events Console-to-Code Preview

Instances Instances Instance Types **Launch Templates** Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

Network & Security

CloudShell Feedback

EC2 launch templates

Streamline, simplify and standardize instance launches

Use launch templates to automate instance launches, simplify permission policies, and enforce best practices across your organization. Save launch parameters in a template that can be used for on-demand launches and with managed services, including EC2 Auto Scaling and EC2 Fleet. Easily update your launch parameters by creating a new launch template version.

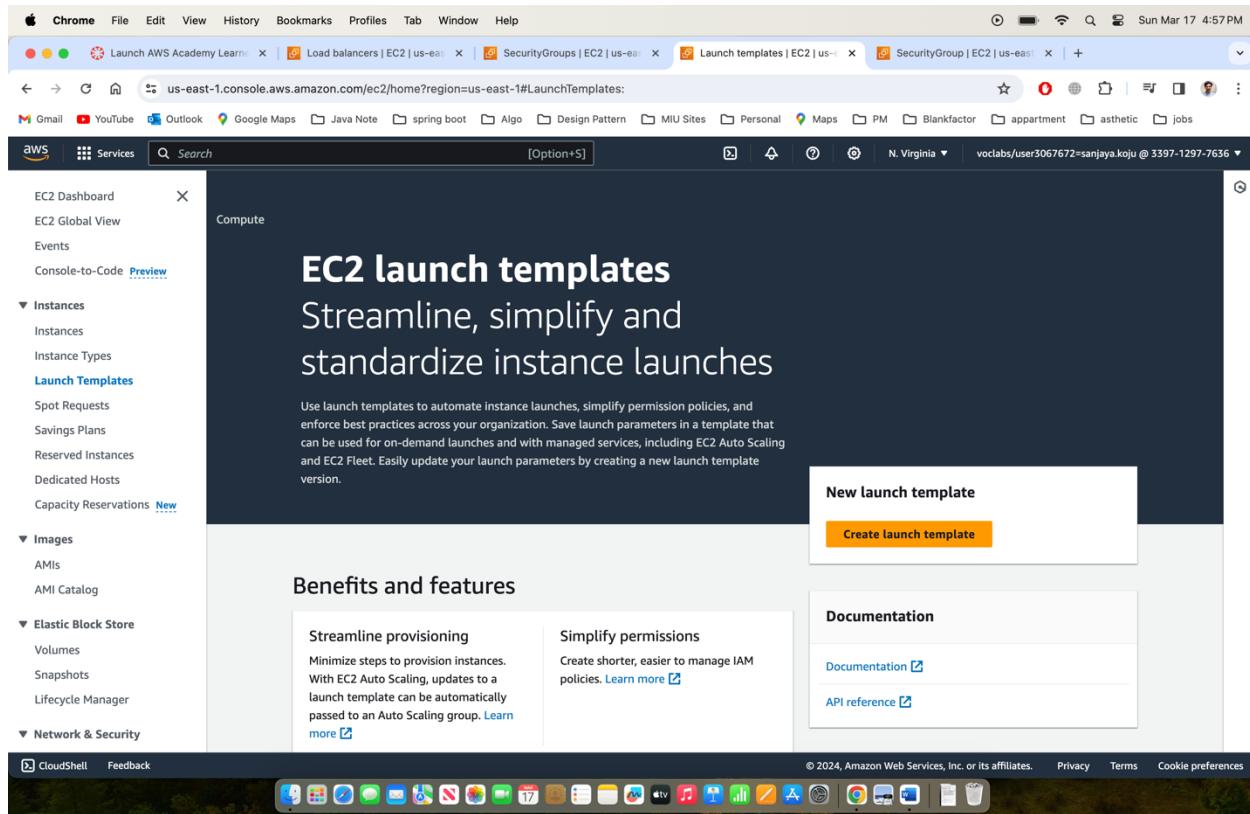
New launch template Create launch template

Benefits and features

Streamline provisioning Minimize steps to provision instances. With EC2 Auto Scaling, updates to a launch template can be automatically passed to an Auto Scaling group. Learn more	Simplify permissions Create shorter, easier to manage IAM policies. Learn more
---	--

Documentation Documentation API reference

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Sun Mar 17 4:58 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Create launch template | EC2 | us-east-1 | SecurityGroup | EC2 | us-east-1 | +

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aws Services Search [Option+S]

EC2 > Launch templates > Create launch template

Create launch template

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

Launch template name and description

Launch template name - required
 Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '*', '@'.

Template version description
 Max 255 chars

Auto Scaling guidance | Info
Select this if you intend to use this template with EC2 Auto Scaling
 Provide guidance to help me set up a template that I can use with EC2 Auto Scaling

► Template tags
► Source template

Summary

Software Image (AMI)
-

Virtual server type (instance type)
-

Firewall (security group)
-

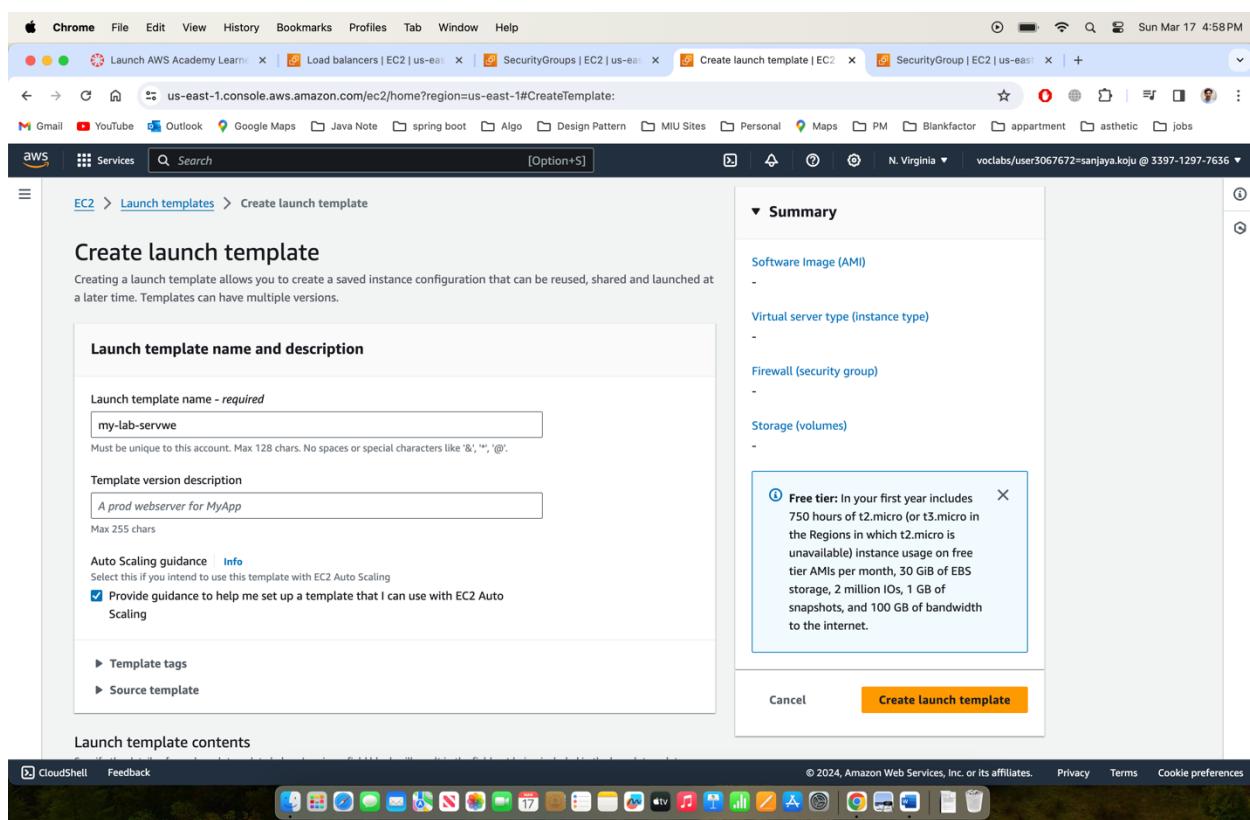
Storage (volumes)
-

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Create launch template

CloudShell Feedback

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Sun Mar 17 4:58PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Create launch template | EC2 | SecurityGroup | EC2 | us-east-1 | +

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aws Services Search [Option+S]

Application and OS Images (Amazon Machine Image) - required [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Recents Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE L

Browse more AMIs Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI [Free tier eligible](#)

ami-0d7a109bf30624c99 (64-bit (x86), uefi-preferred) / ami-08b46fd32a1a5be7f (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2023 AMI 2023.3.20240312.0 x86_64 HVM kernel-6.1

Architecture Boot mode AMI ID

64-bit (x86) uefi-preferred ami-0d7a109bf30624c99 [Verified provider](#)

Cancel [Create launch template](#)

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Sun Mar 17 4:59PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Create launch template | EC2 | SecurityGroup | EC2 | us-east-1 | +

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aws Services Search [Option+S]

Application and OS Images (Amazon Machine Image) - required [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Search our full catalog including 1000s of application and OS images

Recents Quick Start

Amazon Linux macOS Ubuntu Windows Red Hat SUSE L

Browse more AMIs Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI [Free tier eligible](#)

ami-0d7a109bf30624c99 (64-bit (x86), uefi-preferred) / ami-08b46fd32a1a5be7f (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Amazon Linux 2023 AMI 2023.3.20240312.0 x86_64 HVM kernel-6.1

Architecture Boot mode AMI ID

64-bit (x86) uefi-preferred ami-0d7a109bf30624c99 [Verified provider](#)

▼ Instance type [Info](#) | [Get advice](#) Advanced

Instance type

t2.micro [Free tier eligible](#)

Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows base pricing: 0.0162 USD per Hour
On-Demand SUSE base pricing: 0.0116 USD per Hour
On-Demand RHEL base pricing: 0.0716 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

All generations Compare instance types

Additional costs apply for AMIs with pre-installed software

Cancel [Create launch template](#)

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Sun Mar 17 5:00PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateTemplate:

Subnet: Don't include in launch template | Create new subnet

Firewall (security groups): Select existing security group (MyWebServerBehindLoadBalancers)

Security groups: MyWebServerBehindLoadBalancers sg-0327c67cc47aca0ff

Storage (volumes): 1 volume(s) - 8 GB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GiB of bandwidth to the internet.

Create launch template

Sun Mar 17 5:00PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateTemplate:

Success: Successfully created my-lab-server(lt-08875c66f002173ae).

Actions log

Next Steps

Launch an instance

With On-Demand Instances, you pay for compute capacity by the second (for Linux, with a minimum of 60 seconds) or by the hour (for all other operating systems) with no long-term commitments or upfront payments. Launch an On-Demand Instance from your launch template.

Launch instance from this template

Create an Auto Scaling group from your template

Amazon EC2 Auto Scaling helps you maintain application availability and allows you to scale your Amazon EC2 capacity up or down automatically according to conditions you define. You can use Auto Scaling to help ensure that you are running your desired number of Amazon EC2 instances during demand spikes to maintain performance and decrease capacity during lulls to reduce costs.

Create Auto Scaling group

Create Spot Fleet

A Spot Instance is an unused EC2 instance that is available for less than the On-Demand price. Because Spot Instances enable you to request unused EC2 instances at steep discounts, you can lower your Amazon EC2 costs significantly. The hourly price for a Spot Instance (of each instance type in each Availability Zone) is set by Amazon EC2, and adjusted gradually based on the long-term supply of and demand for Spot Instances. Spot instances are well-suited for data-analysis, batch jobs, background processing, and optional tasks.

Create Spot Fleet

View launch templates

Sun Mar 17 5:01 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Auto Scaling groups | EC2 | us-east-1 | SecurityGroup | EC2 | us-east-1 | +

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AWS Services Search [Option+S]

Capacity Reservations New

Images AMIs AMI Catalog

Elastic Block Store Volumes Snapshots Lifecycle Manager

Network & Security Security Groups Elastic IPs Placement Groups Key Pairs Network Interfaces

Load Balancing Load Balancers Target Groups Trust Stores New

Auto Scaling Auto Scaling Groups

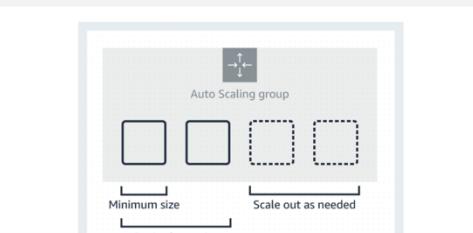
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Amazon EC2 Auto Scaling

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.

How it works



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.

Getting started

What is Amazon EC2 Auto Scaling?

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Sun Mar 17 5:01 PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | Create Auto Scaling group | E | SecurityGroups | EC2 | us-east-1 | +

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AWS Services Search [Option+S]

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

Choose launch template Info

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group.

Name

Auto Scaling group name
Enter a name to identify the group.

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.

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.

Default (1)

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Sun Mar 17 5:01 PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

Step 7 Review

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.

my-lab-servwe

Create a launch template [\[More\]](#)

Version
Default (1) [\[More\]](#)

Create a launch template version

Description	Launch template my-lab-servwe [More] lt-08875c66f002173ae	Instance type t2.micro
AMI ID	ami-0d7a109bf30624c99	Security groups -
Key pair name	sg-0327c67cc47aca0ff [More]	Security group IDs -

Additional details

Storage (volumes)	Date created Sun Mar 17 2024 17:00:26 GMT-0500 (Central Daylight Time)
-------------------	---

Cancel [Next](#)

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Sun Mar 17 5:04 PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

Step 4 - optional
[Configure group size and scaling](#)

Step 5 - optional
[Add notifications](#)

Step 6 - optional
[Add tags](#)

Step 7
[Review](#)

Launch template
my-lab-servwe [\[More\]](#)
lt-08875c66f002173ae

Version
Default

Description

Instance type
t2.micro

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-00ca485ce3bca3ba3
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 [\[More\]](#)

us-east-1a | subnet-0e4a833bde9b47f78 [X](#)
172.31.0.0/20 Default

us-east-1b | subnet-0943597c0cfa5b34c [X](#)
172.31.80.0/20 Default

[Create a subnet](#)

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Sun Mar 17 5:04PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Create Auto Scaling group | E | SecurityGroup | EC2 | us-east-1 | +

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aws Services Search [Option+S] N. Virginia vclabs/user3067672=sanjaya.koju @ 3397-1297-7636

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

Configure advanced options - optional Info

Integrate your Auto Scaling group with other services to distribute network traffic across multiple servers using a load balancer or to establish service-to-service communications using VPC Lattice. You can also set options that give you more control over 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.

Attach to an existing load balancer

Select the load balancers that you want to attach to your Auto Scaling group.

Choose from your load balancer target groups This option allows you to attach Application, Network, or Gateway Load Balancers.

Choose from Classic Load Balancers

Existing load balancer target groups

Only instance target groups that belong to the same VPC as your Auto Scaling group are available for selection.

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Sun Mar 17 5:04PM

Launch AWS Academy Learn | Load balancers | EC2 | us-east-1 | SecurityGroups | EC2 | us-east-1 | Create Auto Scaling group | E | SecurityGroup | EC2 | us-east-1 | +

Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal Maps PM Blankfactor appartement asthetic jobs

aws Services Search [Option+S] N. Virginia vclabs/user3067672=sanjaya.koju @ 3397-1297-7636

EC2 > Auto Scaling groups > Create Auto Scaling group

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

Configure advanced options - optional Info

Integrate your Auto Scaling group with other services to distribute network traffic across multiple servers using a load balancer or to establish service-to-service communications using VPC Lattice. You can also set options that give you more control over health check replacements and monitoring.

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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.

Attach to an existing load balancer

Select the load balancers that you want to attach to your Auto Scaling group.

Choose from your load balancer target groups This option allows you to attach Application, Network, or Gateway Load Balancers.

Choose from Classic Load Balancers

Existing load balancer target groups

Only instance target groups that belong to the same VPC as your Auto Scaling group are available for selection.

Select target groups

myAlbTG | HTTP Application Load Balancer: my-lab-alb

VPC Lattice integration options Info

To improve networking capabilities and scalability, integrate your Auto Scaling group with VPC Lattice. VPC Lattice facilitates

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Sun Mar 17 5:06PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

Create new VPC Lattice service

Health checks

Health checks increase availability by replacing unhealthy instances. When you use multiple health checks, all are evaluated, and if at least one fails, instance replacement occurs.

EC2 health checks

Always enabled

Additional health check types - optional Info

Turn on Elastic Load Balancing health checks Recommended

Elastic Load Balancing monitors whether instances are available to handle requests. When it reports an unhealthy instance, EC2 Auto Scaling can replace it on its next periodic check.

EC2 Auto Scaling will start to detect and act on health checks performed by Elastic Load Balancing. To avoid unexpected terminations, first verify the settings of these health checks in the Load Balancer console

Turn on VPC Lattice health checks

VPC Lattice can monitor whether instances are available to handle requests. If it considers a target as failed a health check, EC2 Auto Scaling replaces it after its next periodic check.

Health check grace period Info

This time period delays the first health check until your instances finish initializing. It doesn't prevent an instance from terminating when placed into a non-running state.

300 seconds

Additional settings

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Sun Mar 17 5:08PM

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

Step 1 Choose launch template

Step 2 Choose instance launch options

Step 3 - optional Configure advanced options

Step 4 - optional Configure group size and scaling

Step 5 - optional Add notifications

Step 6 - optional Add tags

Step 7 Review

Configure group size and scaling - optional Info

Define your group's desired capacity and scaling limits. You can optionally add automatic scaling to adjust the size of your group.

Group size Info

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

3

Scaling Info

You can resize your Auto Scaling group manually or automatically to meet changes in demand.

Scaling limits

Set limits on how much your desired capacity can be increased or decreased.

Min desired capacity	Max desired capacity
1	3

Equal or less than desired capacity Equal or greater than desired capacity

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us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateAutoScalingGroup:

AWS Services Search [Option+S] N. Virginia vocabs/user3067672=sanjaya.koju @ 3397-1297-7636

Automatic scaling - optional

Choose whether to use a target tracking policy [Info](#)

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

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.

Target value

Instance warmup [Info](#)

Disable scale in to create only a scale-out policy

Instance maintenance policy - new [Info](#)

Control your Auto Scaling group's availability during instance replacement events. This includes health checks, instance refreshes, maximum

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