

APPLICATION LOAD BALANCER

STEPS	
1	CREATE TARGET GROUP
2	CREATE LOAD BALANCER
3	CREATE & LAUNCH EC2 AMAZON LINUX
4	ADD NEW LISTENER RULE IN LOAD BALANCER-PATH BASED ROUTING
5	EDIT SECURITY GROUP-INBOUND RULES
6	COPY THE DNS AND CHECK IN THE BROWSER

Step 1 create a target group

The screenshot shows the AWS Management Console interface for creating a target group. The breadcrumb navigation at the top reads 'EC2 > Target groups > Create target group'. On the left sidebar, 'Step 1 Specify group details' is selected, with 'Step 2 Register targets' listed below it. The main content area is titled 'Specify group details' with a subtitle: 'Your load balancer routes requests to the targets in a target group and performs health checks on the targets.' Below this is a 'Basic configuration' section with a warning: 'Settings in this section can't be changed after the target group is created.' The 'Choose a target type' section contains three radio button options: 'Instances' (selected), 'IP addresses', and 'Lambda function'. Each option has a list of bullet points describing its capabilities. The 'Instances' option is highlighted with a blue border. The footer of the console shows 'CloudShell', 'Feedback', and a copyright notice for Amazon Web Services, Inc. or its affiliates.

EC2 > Target groups > Create target group

Step 1
Specify group details

Step 2
Register targets

Specify group details

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

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Target group name

appl-tg

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.

defaultvpc

vpc-07f48dec5a3f9030a

IPv4 VPC CIDR: 172.31.0.0/16

Protocol version

☒ HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or

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0 selected

Ports for the selected instances

Ports for routing traffic to the selected instances.

80

1-65535 (separate multiple ports with commas)

Include as pending below

Review targets

Targets (0)

Remove all pending

Filter targets

Show only pending

< 1 >

Instance ID ▾ Name ▾ Port ▾ State ▾ Security groups ▾ Zone ▾ Private IPv4 address Subnet ID ▾ Launch t

No instances added yet

Specify instances above, or leave the group empty if you prefer to add targets later.

0 pending

Cancel

Previous

Create target group

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Step 2

EC2 > Load balancers

Load balancers

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

Filter load balancers

< 1 >

Name ▾ DNS name ▾ State ▾ VPC ID ▾ Availability Zones ▾ Type ▾

No load balancers

You don't have any load balancers in ap-south-1

EC2 > Target groups

Target groups (1/1) Info

Filter target groups

<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target
<input checked="" type="checkbox"/>	appl-tg	arn:aws:elasticloadbalanci...	80	HTTP	Instance

Actions

Create target group

Delete

Register targets

Edit health check settings

Edit target group attributes

Manage tags

Associate with a new load balancer

Associate with an existing load balancer

Basic configuration

Load balancer name

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

demo-alb

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. Compatible with the IPv4 and Dualstack IP address types.

IP address type Info

Select the type of IP addresses that your subnets use. Public IPv4 addresses have an additional cost.

☒ IPv4

Includes only IPv4 addresses.

☐ Dualstack

Includes IPv4 and IPv6 addresses.

☐ Dualstack without public IPv4

Includes a public IPv6 address, and private IPv4 and IPv6 addresses. Compatible with **internet-facing** load balancers only.

Network mapping Info

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

Shell

Feedback

Network mapping Info

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

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](#).

defaultvpc

vpc-07f48dec5a3f9030a

IPv4 VPC CIDR: 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.

☒ ap-south-1a (aps1-az1)

Subnet

subnet-059fa228354025dfa

default1

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

default

sg-0b8f682f438e5936b

VPC: vpc-07f48dec5a3f9030a

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

Remove

Protocol

Port

Default action

Info

HTTP

:

80

Forward to

appl-tg

Target type: Instance, IPv4

HTTP

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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EC2 > Load balancers > demo-alb

demo-alb

Actions

▼ Details

Load balancer type

Application

Status

Active

VPC

vpc-07f48dec5a3f9030a

IP address type

IPv4

Scheme

Internet-facing

Hosted zone

ZP97RAFLXTNZK

Availability Zones

subnet-059fa228354025dfa ap-south-1a (aps1-a-z1)

Date created

June 25, 2024, 12:27 (UTC+05:30)

Load balancer ARN

arn:aws:elasticloadbalancing:ap-south-1:637423530978:loadbalancer/app/demo-alb/73b71bc079789e24

DNS name

demo-alb-1823611245.ap-south-1.elb.amazonaws.com (A Record)

Listeners and rules

Network mapping

Resource map - new

Security

Monitoring

Integrations

Attributes

Tags

Listeners and rules (1)

Info

Manage rules

Manage listener

Add listener

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Step 3 create a EC2

Name and tags

Info

Name

alb-ec2

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

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)

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...read more

ami-04f8d7ed2f1a54b14

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

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

Cancel

Launch instance

Review commands

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▼ Network settings Info

VPC - required Info

vpc-07f48dec5a3f9030a (defaultvpc) (default) ↻

Subnet Info

subnet-059fa228354025dfa default1 ↻ Create new subnet ↗

VPC: vpc-07f48dec5a3f9030a

Owner: 637423530978

Availability Zone: ap-south-1a

IP addresses available: 4090

CIDR: 172.31.0.0/20

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

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

default sg-0b8f682f438e5936b X

VPC: vpc-07f48dec5a3f9030a

Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...read more

ami-04f8d7ed2f1a54b14

Virtual server type (instance type)

t2.micro

Firewall (security group)

default

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

X

Cancel

Launch instance

Review commands

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Services Search (Alt+S)

▼ Summary

Allow tags in metadata Info

Select

User data - optional Info

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

Choose file

#bin/bash
yum install httpd -y
service httpd start
mkdir /var/www/html/dem
echo 'ch1>***PRIYANKA***<h1/>'> /var/www/html/dem/index.html

☐ User data has already been base64 encoded

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...read more

ami-04f8d7ed2f1a54b14

Virtual server type (instance type)

t2.micro

Firewall (security group)

default

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

X

Cancel

Launch instance

Review commands

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Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

All states

Connect Instance state Actions Launch instances

<input checked="" type="checkbox"/>	Name ↗	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public I
<input checked="" type="checkbox"/>	alb-ec2	i-09d0fc7237744f824	Running	t2.micro	2/2 checks pass	View alarms +	ap-south-1a	-

http://52.66.203.61/

PRIYANKA

Scheme Internet-facing	Hosted zone ZP97RAFLXTNZK	Availability Zones subnet-059fa228354025dfa ap-south-1a (aps1-az1) subnet-0b506d5402b693a4d ap-south-1b (aps1-aaz3)	Date created June 25, 2024, 12:27 (UTC+05:30)
Load balancer ARN arn:aws:elasticloadbalancing:ap-south-1:637423530978:loadbalancer/app/demo-alb/73b71bc079789e24		DNS name info demo-alb-1823611245.ap-south-1.elb.amazonaws.com (A Record)	

Listeners and rules | Network mapping | Resource map - new | Security | Monitoring | Integrations | Attributes | Tags

Listeners and rules (1 / 1) info

A listener checks for connection requests on its configured protocol and port. Traffic received by the listener is routed according to the default action and any additional rules.

Filter listeners

<input checked="" type="checkbox"/>	Protocol:Port	Default action	Rules	ARN	Security policy	Default SSL/TLS certificate
<input checked="" type="checkbox"/>	HTTP:80	Forward to target group <ul style="list-style-type: none"> appl-tg: 1 (100%) Target group stickiness: Off 	1 rule	ARN	Not applicable	Not applicable

Listener configuration

The listener will be identified by the protocol and port.

Protocol

Used for connections from clients to the load balancer.

HTTP

Port

The port on which the load balancer is listening for connections.

81

1-65535

Default actions

Info

The default action is used if no other rules apply. Choose the default action for traffic on this listener.

Forward to target groups

Redirect to URL

Return fixed response

Return fixed response

Info

Use fixed-response actions to drop client requests and return a custom HTTP response. When a fixed-response action is taken, the action and the URL of the redirect target are recorded in the access logs.

Response code

The type of message you want to send.

503

2xx, 4xx, 5xx

Content type - optional

The format of your message.

text/plain

Response body - optional

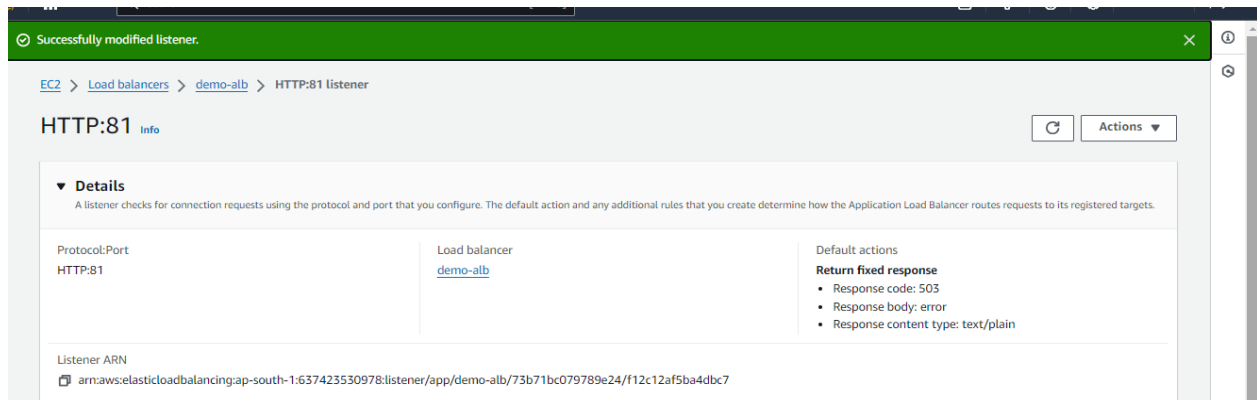
Enter your response message.

error

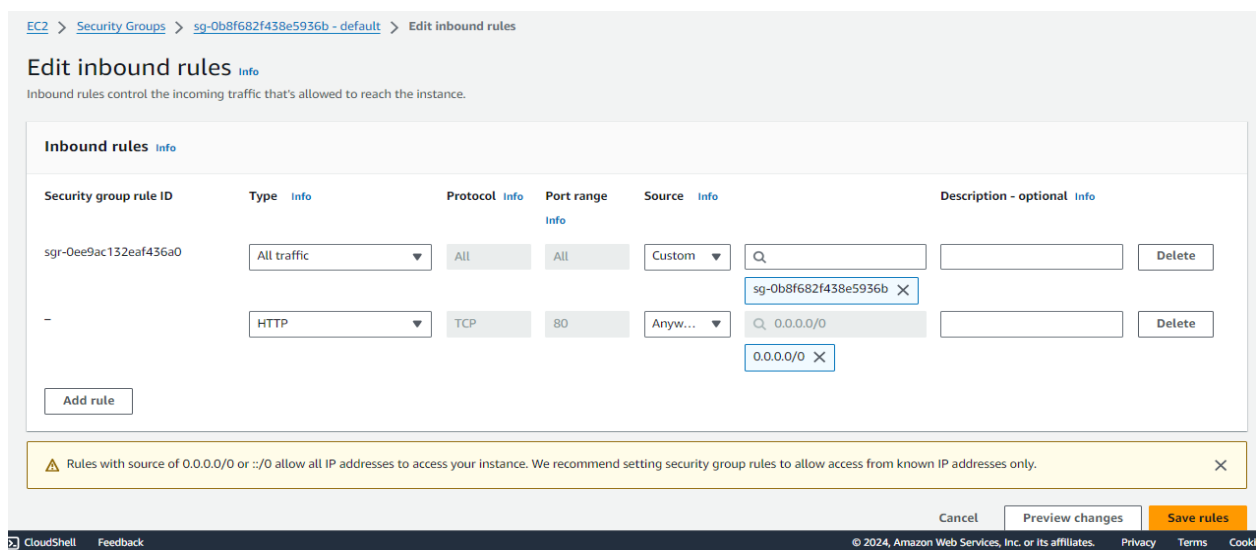
1024 character maximum

dShell

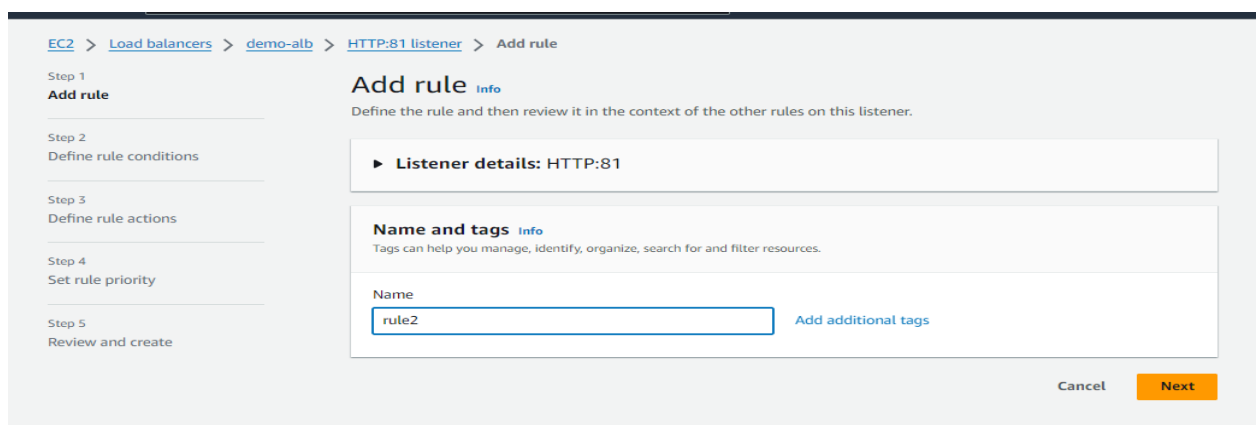
Feedback



Step 5 Edit security group



Step 6 Add new listener rules in the created load balancer



Add condition

Rule limits

Rule condition types

Route traffic based on the condition type of each request. Each rule can include one of each of the following conditions: host-header, path, http-request-method and source-ip. Each rule can include one or more of each of the following conditions: http-header and query-string.

Path

Path

Define the path. For example: /item/?. Case sensitive.

is

/demo*

Maximum 128 characters. Allowed characters are `[a-z]`, `[A-Z]`, `[0-9]`; the following special characters: `[-.$/%~*!@:~+]`; (using `&`); and wildcards (`[*]` and `[?]`).

Add new value

You can add up to 4 more condition values for this rule.

Cancel

Confirm

EC2 > Load balancers > demo-alb > HTTP:81 listener > Add rule

Step 1

Add rule

Step 2

Define rule conditions

Step 3

Define rule actions

Step 4

Set rule priority

Step 5

Review and create

Define rule conditions

Requests reaching this rule must match all specified conditions for the rule to apply. At least 1 condition is required.

► Listener details: HTTP:81

Conditions (1)

Rule limits

Edit

Delete

Add condition

Path (1)

Info

If

Path

is

/demo*

AND

Cancel

Previous

Next

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EC2 > Load balancers > demo-alb > HTTP:81 listener > Add rule

Step 1

Add rule

Step 2

Define rule conditions

Step 3

Define rule actions

Step 4

Set rule priority

Step 5

Review and create

Define rule actions

These actions will be applied to requests matching the rule conditions.

► Listener details: HTTP:81

Actions

Action types

Routing actions

Forward to target groups

Redirect to URL

Return fixed response

Forward to target group

Info

Choose a target group and specify routing weight or [Create target group](#).

Target group

appl-tg

Target type: Instance, IPv4

HTTP

Weight

Percent

1

100%

0-999

Add target group

You can add up to 4 more target groups.

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Define rule conditions

Step 3

Define rule actions

Step 4

Set rule priority

Step 5

Review and create

► Listener details: HTTP:81

Rule: rule2

Priority

Rule priority controls the evaluation order of a rule within the listener's set of rules. You can leave gaps in priority numbers.

1

1 - 50000

Listener rules (2) Info

Rule limits

Traffic received by the listener is routed according to the default action and any additional rules. Rules are evaluated in priority order from the lowest value to the highest value.

Filter rules

Name tag	Priority	Conditions (If)	Actions (Then)	ARN
rule2	1	Path Pattern is /demo*	<div>Forward to target group</div> <ul style="list-style-type: none"> appl-tg: 1 (100%) Target group stickiness: Off 	Pending
Forward to target group				

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Rules Tags

Listener rules (2) Info

Rule limits

Actions

Add rule

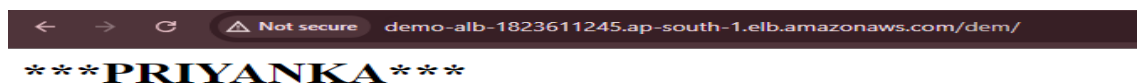
Traffic received by the listener is routed according to the default action and any additional rules. Rules are evaluated in priority order from the lowest value to the highest value.

Filter rules

<input type="checkbox"/>	Name tag	Priority	Conditions (If)	Actions (Then)	ARN
<input type="checkbox"/>	rule2	1	Path Pattern is /dem*	<div>Forward to target group</div> <ul style="list-style-type: none"> appl-tg: 1 (100%) Target group stickiness: Off 	ARN
<input type="checkbox"/>	Default	Last (default)	If no other rule applies	<div>Return fixed response</div> <ul style="list-style-type: none"> Response code: 503 Response body: error Response content type: text/plain 	ARN

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http://demo-alb-1823611245.ap-south-1.elb.amazonaws.com/dem/



Step 6 terminate everything

Instances (1/1) Info

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public
<input checked="" type="checkbox"/>	alb-ec2	i-09d0fc7237744f824	Terminated	t2.micro	2/2 checks passed	View alarms	ap-south-1a	-

EC2 > Load balancers

Load balancers (1/1)

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

Filter load balancers

<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID
<input checked="" type="checkbox"/>	demo-alb	demo-alb-1823611245.ap...	Active	vpc-07f48dec5a3f9030a

Load balancer:

Actions

- Edit IP address type
- Edit subnets
- Manage instances
- Edit health check settings
- Manage listeners
- Edit security groups
- Edit load balancer attributes
- Manage tags
- Delete load balancer

Delete load balancer

Delete load balancer **demo-alb** permanently? This action can't be undone.

Warning: Proceeding with this action deletes the load balancer and its listeners. Target groups associated to this load balancer will become available for association to another load balancer and their registered targets remain unaffected.

To avoid accidental deletion we ask you to provide additional written consent.

Type **confirm** to agree.

Cancel Delete

EC2 > Target groups

Target groups (1/1) Info

Filter target groups

<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target
<input checked="" type="checkbox"/>	appl-tg	arn:aws:elasticloadbalanci...	80	HTTP	Instance

Actions

- Delete
- Register targets
- Edit health check settings
- Edit target group attributes
- Manage tags
- Associate with a new load balancer
- Associate with an existing load balancer

Delete target group?

You can't undo this action.

Deleting a target group deletes the group; the individual resources registered to the target group don't get deleted as a result of this action.

Are you sure you want to delete this target group?

- appl-tg

Cancel Yes, delete

Network Load Balancer

STEPS	
1	CREATE & LAUNCH EC2 AMAZON LINUX
2	CREATE TARGET GROUP
3	CREATE LOAD BALANCER
4	ADD NEW LISTENER RULE IN LOAD BALANCER
5	EDIT SECURITY GROUP-INBOUND RULES
6	COPY THE DNS AND CHECK IN THE BROWSER

Step 1 create a target group

Specify group details

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

Target group name

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

TCP

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.

defaultvpc

vpc-07f48dec5a3f9030a

IPv4 VPC CIDR: 172.31.0.0/16

Health checks

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You can add IP addresses from the VPC selected for your target group or from outside the VPC. Note that you can assemble a mix of targets from multiple network sources by returning to this step and choosing another network.

Network

defaultvpc

vpc-07f48dec5a3f9030a
IPv4 VPC CIDR: 172.31.0.0/16

Step 2: Specify IPs and define ports
You can manually enter IP addresses from the selected network.

Enter an IPv4 address from a VPC subnet.

172.31.0.

Remove

Add IPv4 address

You can add up to 4 more IP addresses.

Ports
Ports for routing to this target.

80

1-65535 (separate multiple ports with commas)

Include as pending below

1 selection is now pending below. Include more or register targets when ready.

Successfully created the target group: nlb.

EC2 > Target groups > nlb

nlb

Actions

Details

arn:aws:elasticloadbalancing:ap-south-1:637423530978:targetgroup/nlb/71429792d402d6b7

Target type	Protocol : Port	VPC	IP address type
IP	TCP: 80	vpc-07f48dec5a3f9030a	IPv4
Load balancer	None associated		

Total targets	Healthy	Unhealthy	Unused	Initial	Draining
0	0	0	0	0	0

Step 2 create a network load balancer

> Load balancers

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	Availa
No load balancers				
You don't have any load balancers in ap-south-1				

Actions

Create load balancer

Compare load balancer types

Create Application Load Balancer

Create Network Load Balancer

Create Gateway Load Balancer

Create Classic Load Balancer

EC2 > Load balancers > Create Network Load Balancer

Create Network Load Balancer

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.

nlb-sp

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.

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](#).

defaultvpc

vpc-07f48dec5a3f9030a

IPv4 VPC CIDR: 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.

☒ ap-south-1a (aps1-az1)

Subnet

subnet-059fa228354025dfa

default1

IPv4 address

☒ Assigned by AWS

☐ Use an Elastic IP address

☐ ap-south-1b (aps1-az3)

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

default

sg-0b8f682f438e5936b

VPC: vpc-07f48dec5a3f9030a

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

Remove

Protocol

TCP

Port

80

1-65535

Default action

info

Forward to

nlb

TCP

Target type: Instance, IPv4

Create target group

Listener tags - optional

Successfully created load balancer

EC2

>

Load balancers

>

nlb-sp

nlb-sp

Actions

▼ Details

Load balancer type

Network

Status

Provisioning

VPC

vpc-07f48dec5a3f9030a

IP address type

IPv4

Scheme

Internet-facing

Hosted zone

ZVDDRBQ08TROA

Availability Zones

subnet-059fa228354025dfa ap-south-1a (aps1-az1)

Date created

June 29, 2024, 19:43 (UTC+05:30)

Load balancer ARN

arn:aws:elasticloadbalancing:ap-south-1:637423530978:loadbalancer/net/nlb-sp/0c82138f4244e6e9

DNS name

info

nlb-sp-0c82138f4244e6e9.elb.ap-south-1.amazonaws.com (A Record)

Step 3 create an EC2 instance

Name and tags Info

Name

nlb-ec2

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

Q

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

Recents

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE L

SUS

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-04f8d7ed2f1a54b14

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

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

Cancel

Launch instance

[Review commands](#)

Network settings Info

VPC - required Info

vpc-07f48dec5a3f9030a (defaultvpc)

(default)

172.31.0.0/16

Subnet Info

subnet-059fa228354025dfa

default1

VPC: vpc-07f48dec5a3f9030a Owner: 637423530978 Availability Zone: ap-south-1a IP addresses available: 4090 CIDR: 172.31.0.0/20

Create new subnet

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

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

default sg-0b8f682f438e5936b X
VPC: vpc-07f48dec5a3f9030a

Compare security group rules

Advanced network configuration

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)
ami-04f8d7ed2f1a54b14

Virtual server type (instance type)

t2.micro

Firewall (security group)

default

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

Cancel

Launch instance

[Review commands](#)

User data - optional Info

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

Choose file

#!/bin/bash
yum install httpd -y
service httpd start

Instances (1/1) info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability zone
nlb-ec2	i-0b758e4858eb92e5a	Running	t2.micro	Initializing	View alarms	ap-south-1

i-0b758e4858eb92e5a (nlb-ec2)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance summary info

Instance ID i-0b758e4858eb92e5a (nlb-ec2)	Public IPv4 address 13.233.216.66 open address	Private IPv4 addresses 172.31.15.83
IPv6 address --	Instance state Running	Public IPv4 DNS ec2-13-233-216-66.ap-south-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-15-83.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-15-83.ap-south-1.compute.internal	

Amazon EC2 instance DNS name | Instance type | Elastic IP address

← → ↻ Not secure 13.233.216.66

It works!

<http://nlb-c5c436a631230b65.elb.ap-south-1.amazonaws.com/>

Load balancer details | EC2 | ap-south-1 | nlb-c5c436a631230b65.elb.ap-south-1.amazonaws.com

← → ↻ Not secure nlb-c5c436a631230b65.elb.ap-south-1.amazonaws.com

It works!

After completing the task delete the used services