

UBUNTU Userdata script for the first instance

```
#!/bin/bash  
sudo apt update  
sudo apt install apache2 -y  
sudo systemctl enable apache2  
sudo mkdir /var/www/html/contacts/  
echo "<h1>This is contacts </h1>" >/var/www/html/contacts/index.html  
sudo systemctl start apache2
```

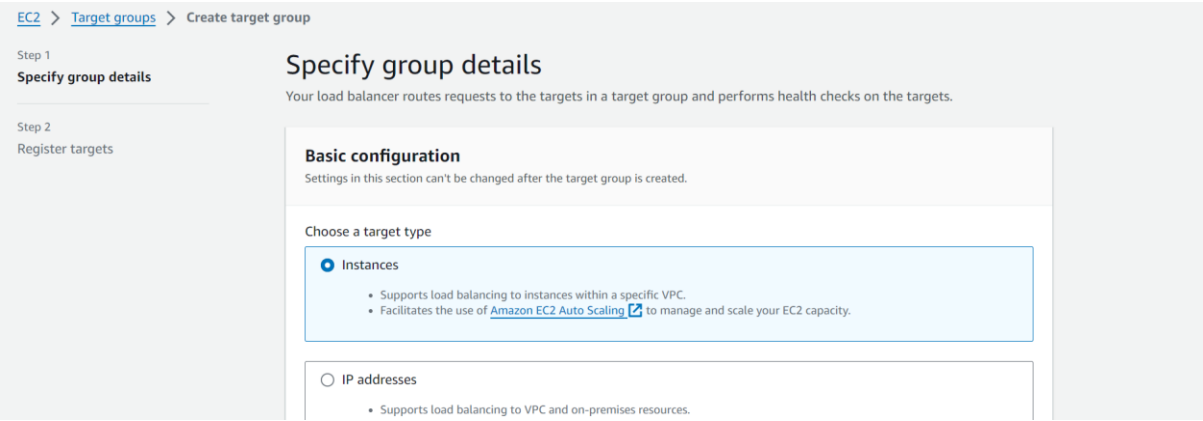
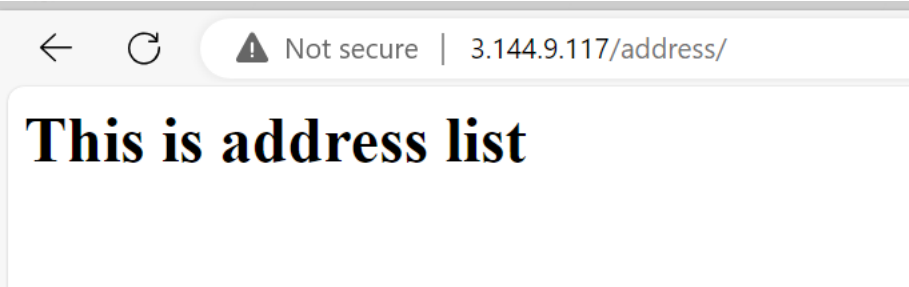
Enter the ip public address & :80/contacts-----→ 3.133.154.50:80/contacts



User data script for second instance

```
#!/bin/bash  
sudo apt update  
sudo apt install apache2 -y  
sudo systemctl enable apache2  
sudo mkdir /var/www/html/address/  
echo "<h1>This is address list</h1>" >/var/www/html/address/index.html  
sudo systemctl start apache2
```

3.144.9.117:80/address



Target group name

contact

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.

demo-nlb-vpc

vpc-03b065a48f328ac52

IPv4: 11.0.0.0/16



Protocol version

☒ HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

☐ HTTP2

Send requests to targets using HTTP/2. Supported when the request protocol is HTTP/2 or gRPC, but gRPC-specific features are not available.

☐ gRPC

Send requests to targets using gRPC. Supported when the request protocol is gRPC.

Health checks

The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol

HTTP ▼

Health check path

Use the default path of "/" to perform health checks on the root, or specify a custom path if preferred.

/contacts/index.html

Up to 1024 characters allowed.

► Advanced health check settings

[EC2](#) > Target groups

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

Filter target groups

< 1 > ⚙

<input checked="" type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Lo
<input checked="" type="checkbox"/>	contact	arn:aws:elasticloadbalanci...	80	HTTP	Instance	Info

Target group: contact

Details **Targets** Monitoring Health checks Attributes Tags

Registered targets (0) [Info](#)

[Anomaly mitigation: Not applicable](#) [Deregister](#) [Register targets](#)

Target groups route requests to individual registered targets using the protocol and port number specified. Health checks are performed on all registered targets according to the target group's health check settings. Anomaly detection is automatically applied to HTTP/HTTPS target groups with at least 3 healthy targets.

Filter targets

< 1 > ⚙

<input type="checkbox"/>	Instance ID	Name	Port	Zone	Health status	Health status details
--------------------------	-------------	------	------	------	---------------	-----------------------

No registered targets

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 in anomaly detection for the targets and you can set mitigation options once your target group is created. This choice cannot be changed after creation

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

Send requests to targets using gRPC. Supported when the request protocol is gRPC.

Health checks

The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol

HTTP ▼

Health check path

Use the default path of "/" to perform health checks on the root, or specify a custom path if preferred.

/address/index.html

Up to 1024 characters allowed.

► Advanced health check settings

Attributes

EC2 > Target groups

Target groups (2) Info



Actions ▼

Create target group

Filter target groups

< 1 > ⚙

<input type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Load balancer
<input type="checkbox"/>	address	arn:aws:elasticloadbalanci...	80	HTTP	Instance	No

EC2 > Target groups

Target groups (1/2) Info



Actions ▼

Create target group

Filter target groups

< 1 > ⚙

<input type="checkbox"/>	Name	ARN	Port	Protocol	Target type	Load balancer
<input checked="" type="checkbox"/>	address	arn:aws:elasticloadbalanci...	80	HTTP	Instance	No
<input type="checkbox"/>	contact	arn:aws:elasticloadbalanci...	80	HTTP	Instance	No

Target group: address



Details Targets Monitoring Health checks Attributes Tags

Target group: address

Target groups route requests to individual registered targets using the protocol and port number specified. Health checks are performed on all registered targets according to the target group's health check settings. Anomaly detection is automatically applied to HTTP/HTTPS target groups with at least 3 healthy targets.

Filter targets

< 1 > ⚙

Instance ID	Name	Port	Zone	Health status	Health status details
No registered targets					
You have not registered targets to this group yet					
<div>Register targets</div>					

EC2 > Target groups > address > Register targets

Register targets

Select instances, specify ports, and add the instances to the list of pending targets. Repeat to add additional combinations of instances and ports to the list of pending targets. Once you are satisfied with your selections, click Register pending targets.

Available instances (1/2)

Filter instances

< 1 > ⚙

Instance ID	Name	State	Security groups	Zone
<input checked="" type="checkbox"/> i-0d41ca166848e861d	instance2-subnet1-2a	Running	launch-wizard-5	us-east-2a
<input type="checkbox"/> i-0dbd075f279ebb31a	instance-subnnet1-2a	Running	launch-wizard-4	us-east-2a

1 selected

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

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

Review targets

Targets (1)

Filter targets

Show only pending

Remove all pending

< 1 > ⚙

Instance ID	Name	Port	State	Security groups	Zone	Private IPv4 address	Subnet ID
i-0d41ca166848e861d	instance2-subnet1-2a	80	Running	launch-wizard-5	us-east-2a	11.0.1.97	subnet-0aaae2fea92a78

1 pending

Cancel

Register pending targets

EC2VPC

Dedicated Hosts

Capacity Reservations

New

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

▼ Network & Security

Security Groups

Elastic IPs

Placement Groups

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

<1>

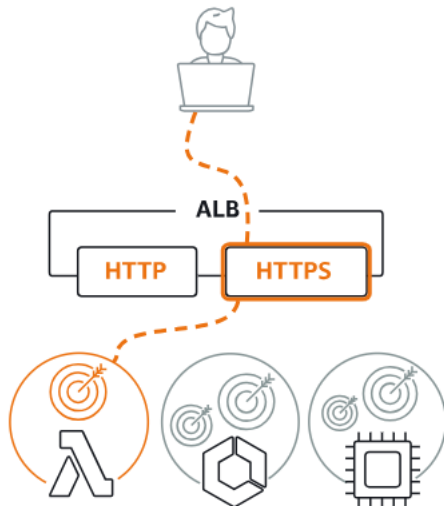
	Name	DNS name	State	VPC ID	Availability Zones
No load balancers					
You don't have any load balancers in us-east-2					

Actions

Create load balancer

Load balancer types

Application Load Balancer [Info](#)



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 target grp

[EC2](#) > Target groups

Target groups [Info](#)

Actions ▾

Create target group

Q Filter target groups

< 1 > ⚙

<input type="checkbox"/>	Name ▾	ARN ▾	Port ▾	Protocol ▾	Target type ▾	Load balancer
No target groups You don't have any target groups in us-east-2						
<div>Create target group</div>						

0 target groups selected

[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.

Target group name

contacts-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.

test-vpc

vpc-0113fbb8788f0ca5d
IPv4 VPC CIDR: 11.0.0.0/16

Protocol version

☒ HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2.

Health checks

The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol

HTTP ▼

Health check path

Use the default path of "/" to perform health checks on the root, or specify a custom path if preferred.

/

Up to 1024 characters allowed.

► Advanced health check settings

Attributes

❗ Certain default attributes will be applied to your target group. You can view and edit them after creating the target group.

► Tags - *optional*

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

Cancel

Next

Register targets

This is an optional step to create a target group. However, to ensure that your load balancer routes traffic to this target group you must register your targets.

Available instances (1/2)

🔍 Filter instances

< 1 > ⚙️

	Instance ID ▼	Name ▼	State ▼	Security groups
<input type="checkbox"/>	i-0e7662faf56985bb0	instance2	✔️ Running	launch-wizard-2
<input checked="" type="checkbox"/>	i-0e95c524f9d71c5b4	instance1	✔️ Running	launch-wizard-1

1 selected

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

Review targets

Targets (1)

Remove all pending

Show only pending

< 1 >

Instance ID	Name	Port	State	Security groups	Zone	Private IPv4 address
i-0e95c524f9d71c5b4	instance1	80	Running	launch-wizard-1	us-east-2a	11.0.1.234

1 pending

Cancel

Previous

Create target group

[EC2](#) > [Target groups](#) > contacts-tg

contacts-tg

Actions

Details

arn:aws:elasticloadbalancing:us-east-2:389363067735:targetgroup/contacts-tg/2d23dfc3e0c286eb

Target type	Protocol : Port	Protocol version	VPC
Instance	HTTP: 80	HTTP1	vpc-0113fbb8788f0ca5d
IP address type	Load balancer		
IPv4	None associated		

1	0	0	1	0	0
Total targets	Healthy	Unhealthy	Unused	Initial	Draining
	0 Anomalous				

Distribution of targets by Availability Zone (AZ)

Select values in this table to see corresponding filters applied to the Registered targets table below.

[EC2](#) > Target groups

Target groups (1) Info

Actions

Create target group

< 1 >

	Name	ARN	Port	Protocol	Target type	Load balancer
<input type="checkbox"/>	contacts-tg	arn:aws:elasticloadbalanci...	80	HTTP	Instance	None associated

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.

Target group name

address-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.

test-vpc

vpc-0113fbb8788f0ca5d

IPv4 VPC CIDR: 11.0.0/16

Protocol version

☒ HTTP1

Send requests to targets using HTTP/1.1. Supported when the request protocol is HTTP/1.1 or HTTP/2

Health checks

The associated load balancer periodically sends requests, per the settings below, to the registered targets to test their status.

Health check protocol

HTTP

Health check path

Use the default path of "/" to perform health checks on the root, or specify a custom path if preferred.

/

Up to 1024 characters allowed.

► Advanced health check settings

Attributes

❗ Certain default attributes will be applied to your target group. You can view and edit them after creating the target group.

► Tags - *optional*

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

Cancel

Next

Register targets

This is an optional step to create a target group. However, to ensure that your load balancer routes traffic to this target group you must register your targets.

Available instances (1/2)

🔍 Filter instances

< 1 > ⚙️

<input type="checkbox"/>	Instance ID	Name	State	Security groups
<input checked="" type="checkbox"/>	i-0e7662faf56985bb0	instance2	🟢 Running	launch-wizard-2
<input type="checkbox"/>	i-0e95c524f9d71c5b4	instance1	🟢 Running	launch-wizard-1

Review targets

Targets (1)

Remove all pending

Show only pending

< 1 >

⚙️

Instance ID	Name	Port	State	Security groups	Zone	Private IPv4 address
i-0e7662faf56985bb0	instance2	80	Running	launch-wizard-2	us-east-2b	11.0.2.254

1 pending

Cancel

Previous

Create target group

EC2 > Target groups > address-tg

address-tg

Actions

Details

arn:aws:elasticloadbalancing:us-east-2:389363067735:targetgroup/address-tg/4f388e8700ddd4dc

Target type	Protocol : Port	Protocol version	VPC
Instance	HTTP: 80	HTTP1	vpc-0113fbb8788f0ca5d
IP address type	Load balancer		
IPv4	None associated		

1

0

0

1

0

0

Total targets

Healthy

Unhealthy

Unused

Initial

Draining

0 Anomalous

EC2 > Target groups

Target groups (2) Info

Filter target groups

Refresh

Actions

Create target group

< 1 >

⚙️

	Name	ARN	Port	Protocol	Target type	Load balancer
<input type="checkbox"/>	address-tg	arn:aws:elasticloadbalancing:us-east-2:389363067735:targetgroup/address-tg/4f388e8700ddd4dc	80	HTTP	Instance	None associated
<input type="checkbox"/>	contacts-tg	arn:aws:elasticloadbalancing:us-east-2:389363067735:targetgroup/contacts-tg/4f388e8700ddd4dc	80	HTTP	Instance	None associated

Therefore two target grp are created

Now crete Load balancer

aws

Services

Search

EC2

VPC

Dedicated Hosts

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



Introducing resource map for Network 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



Actions ▼

Create load balancer



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

Filter load balancers

< 1 >



Name ▼



DNS name ▼



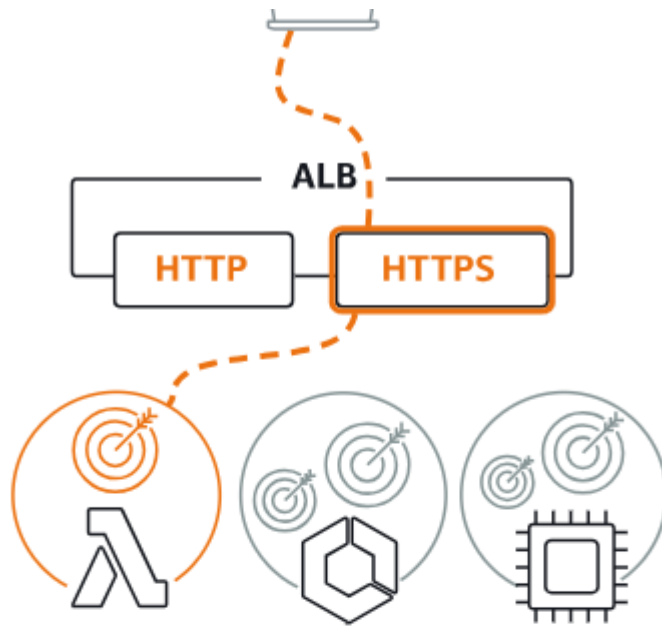
State ▼



VPC ID ▼



Availability Zones ▼



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 [Info](#)

The Application Load Balancer distributes incoming HTTP and HTTPS traffic across multiple targets such as Amazon EC2 instances, on request attributes. When the load balancer receives a connection request, it evaluates the listener rules in priority order to determine which rule is 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

Includes only IPv4 addresses.

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 deleted until the load balancer is created. To confirm the VPC for your targets, view your [target groups](#).

test-vpc

vpc-0113fbb8788f0ca5d

IPv4 VPC CIDR: 11.0.0.0/16



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-2a (use2-az1)

Subnet

subnet-0fba650c88db1e30a

subnet1 ▼

IPv4 address

Assigned by AWS

☒ us-east-2b (use2-az2)

Subnet


subnet-094199c55bf9d16b7

subnet2 ▼

IPv4 address

Assigned by AWS

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](#) .

Create new sg

[EC2](#) > [Security Groups](#) > Create security group

Create security group [Info](#)

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a

Basic details

Security group name [Info](#)



Name cannot be edited after creation.

Description [Info](#)

VPC [Info](#)



Inbound rules [Info](#)

Type Info	Protocol Info	Port range Info	Source Info	Description - optional
SSH	TCP	22	Any... <input type="text" value="0.0.0.0/0"/>	<input type="text"/>
			<input type="text" value="0.0.0.0/0"/> 	
HTTP	TCP	80	Any... <input type="text" value="0.0.0.0/0"/>	<input type="text"/>
			<input type="text" value="0.0.0.0/0"/> 	
<input type="button" value="Add rule"/>				

Outbound rules [Info](#)

Type Info	Protocol Info	Port range Info	Destination Info	Description - optional
All traffic ▼	All	All	Cust... ▼ 0.0.0.0/0 ✕	<input type="text"/> <input type="button" value="Delete"/>
<input type="button" value="Add rule"/>				

⚠ 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. ✕

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 and filter your resources or track your AWS costs.

No tags associated with the resource.

You can add up to 50 more tags

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 ▼



my-sg1

sg-0a45908b614d8aa87 VPC: vpc-0113fbb8788f0ca5d ✕

default

sg-09e3da4d78c16e87f VPC: vpc-0113fbb8788f0ca5d ✕

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

HTTP ▼

Port

80

1-65535

Default action [Info](#)

Forward to

contacts-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.

You can add up to 50 more tags.

► Load balancer tags - optional

Consider adding tags to your load balancer. Tags enable you to categorize your AWS resources so you can more easily manage them. The 'Key' is required, but 'Value' is optional. For example, you can have Key = production-webserver, or Key = webserver, and Value = production.

my-alb

▼ Details


Load balancer type

Application

Scheme

Internet-facing

Load balancer ARN

 arn:aws:elasticloadbalancing:us
r/app/my-alb/50018809b9b69d69



Listeners and rules

Net

Listeners and rules (1) [Info](#)

A listener checks for connection requests

Listeners and rules (1) Info

Manage rules Manage listener Add listener

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

Protocol:Port

Default action

Rules

ARN

Security policy

HTTP:80

Forward to target group

contacts-tg: 1 (100%)

Group-level stickiness: Off

1 rule

ARN

Not applicable

EC2 > Load balancers > my-alb > HTTP:80 listener

HTTP:80 Info

Actions

Details

A listener checks for connection requests using the protocol and port that you configure. The default action and any additional rules that you create determine how the Application Load Balancer routes requests to its registered targets.

Protocol:Port

Load balancer

Default actions

HTTP:80

my-alb

Forward to target group

contacts-tg: 1 (100%)

Group-level stickiness: Off

Listener ARN

arn:aws:elasticloadbalancing:us-east-2:389363067735:listener/app/my-alb/50018809b9b69d69/d05c8e8c40ae77ce

Rules

Tags

Listener rules (1) 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

Name tag

Priority

Conditions (If)

Actions (Then)

Default

Last

If no other rule applies

Forward to target group

contacts-tg: 1 (100%)

EC2 > Load balancers > my-alb > HTTP:80 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

Add rule Info

Define the rule and then review it in the context of the other rules on this listener.

Listener details: HTTP:80

Name and tags Info

Tags can help you manage, identify, organize, search for and filter resources.

Name

contact

Add additional tags

Cancel

Next

my-alb / HTTP:80 listener / Add rule

Define rule conditions

Info

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

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

/contact

🗑

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 > my-alb > HTTP:80 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

Info

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

▶ Listener details: HTTP:80

Conditions (1)

Rule limits

Edit

Delete

Add condition

Path (1)

Info

□

If

Path

is

/contact

AND

Cancel

Previous

Next

► Listener details: HTTP:80

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

contacts-tg

Target type: Instance, IPv4

HTTP ▼



Weight

1

0-999

Percent

100%

Add target group

You can add up to 4 more target groups.

Group-level stickiness [Info](#)

If a target group is sticky, requests routed to it remain in that target group for the duration of the session. Individual target stickiness is a configuration of the target group.

☐ Turn on group-level stickiness

Cancel

Previous

Next

Set rule priority [Info](#)

Each rule has a priority. Rules are evaluated in priority order from the lowest value to the highest value. The default rule is evaluated last. You can change the priority of a non-default rule at any time. You can't change the priority of the default rule.

► Listener details: HTTP:80

Rule: contact

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
contact	1	Path Pattern is /contact	Forward to target group <ul style="list-style-type: none">contacts-tg: 1 (100%)Group-level stickiness: Off	Pending
Default	Last	If no other rule applies	Forward to target group <ul style="list-style-type: none">contacts-tg: 1 (100%)	ARN

Review and create

► Listener details: HTTP:80

Rule details: contact

Edit ▼

Priority	Conditions (If)	Actions (Then)
1	If request matches all: Path Pattern is /contact	Forward to target group <ul style="list-style-type: none">• contacts-tg : 1 (100%)• Group-level stickiness: Off

Rule ARN
Pending

Rule tags (1)

Edit

Tags can help you manage, identify, organize, search for and filter resources.

Key	Value
Name	contact

Cancel

Previous

Create

▼ Details

A listener checks for connection requests using the protocol and port that you configure. The default action and any additional rules that you create determine how the Application Load Balancer routes requests to its registered targets.

Protocol:Port HTTP:80	Load balancer my-alb	Default actions Forward to target group <ul style="list-style-type: none">• contacts-tg : 1 (100%)• Group-level stickiness: Off
--------------------------	---	--

Listener ARN
 `arn:aws:elasticloadbalancing:us-east-2:389363067735:listener/app/my-alb/50018809b9b69d69/d05c8e8c40ae77ce`

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)
<input type="checkbox"/>	contact	1	Path Pattern is /contact	Forward to target group <ul style="list-style-type: none">• contacts-tg : 1 (100%)• Group-level stickiness: Off
<input type="checkbox"/>	Default	Last (default)	If no other rule applies	Forward to target group <ul style="list-style-type: none">• contacts-tg : 1 (100%)• Group-level stickiness: Off

Click on add rule:

Do the same process for address as well

Set rule priority Info

Each rule has a priority. Rules are evaluated in priority order from the lowest value to the highest value. The default rule is evaluated last. You can change the priority of a non-default rule at any time. You can't change the priority of the default rule.

► **Listener details:** HTTP:80

Rule: address

Priority

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

2

▲▼

1 - 50000

Listener rules (3) 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
contact	1	Path Pattern is /contact	Forward to target group <ul style="list-style-type: none">contacts-tg : 1 (100%)Group-level stickiness: Off	ARN
address	2	Path Pattern is /address	Forward to target group <ul style="list-style-type: none">address-tg : 1 (100%)	Pending

Review and create

► **Listener details:** HTTP:80

Rule details: address

Edit ▼

Priority

2

Conditions (If)

If request matches all:

Path Pattern is /address

Actions (Then)

Forward to target group

- [address-tg](#) 1 (100%)
- Group-level stickiness: Off

Rule ARN

Pending

Rule tags (1)

Edit

Tags can help you manage, identify, organize, search for and filter resources.

Key

Value

Name

address

Cancel

Previous

Create

Therefore:

Rules

Tags

Listener rules (3) 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)
<input type="checkbox"/>	contact	1	Path Pattern is /contact	Forward to target group <ul style="list-style-type: none">• contacts-tg 1 (100%)• Group-level stickiness: Off
<input type="checkbox"/>	address	2	Path Pattern is /address	Forward to target group <ul style="list-style-type: none">• address-tg 1 (100%)• Group-level stickiness: Off
<input type="checkbox"/>	Default	Last (default)	If no other rule applies	Forward to target group <ul style="list-style-type: none">• contacts-tg 1 (100%)• Group-level stickiness: Off

Output:

Copy paste DNS from the loadbalancer created;

my-alb



Actions ▾

▼ Details

Load balancer type

Application

Scheme

Internet-facing

Status

✓ Active

Hosted zone

Z3AADJGX6KTTL2

VPC

[vpc-0113fbb8788f0ca5d](#)

Availability Zones

[subnet-094199c55bf9d16b7](#) us-

east-2b (use2-az2)

[subnet-0fba650c88db1e30a](#)

us-east-2a (use2-az1)

IP address type

IPv4

Date created

May 4, 2024, 13:58 (UTC+05:30)

Load balancer ARN

`arn:aws:elasticloadbalancing:us-east-2:389363067735:loadbalancer/app/my-alb/50018809b9b69d69`

✓ DNS name copied

`my-alb-1530199822.us-east-2.elb.amazonaws.com (A Record)`

Load balancer details | EC2 | us-e | Apache2 Ubuntu Default Page: It | 404 Not Found

Not secure | my-alb-1530199822.us-east-2.elb.amazonaws.com



Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

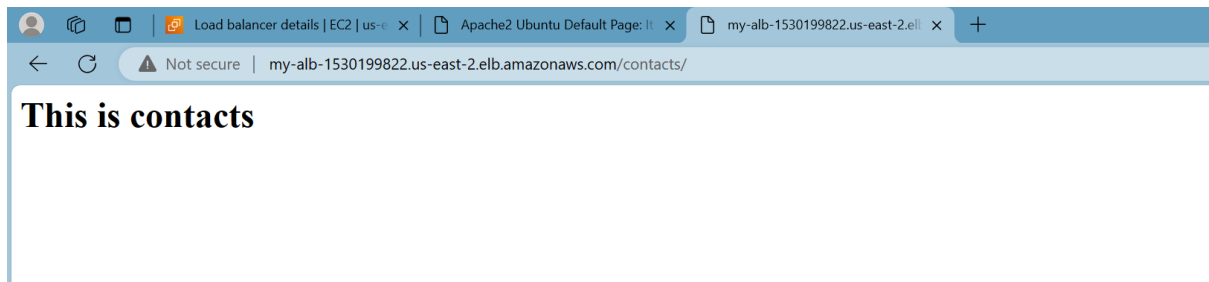
The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/  
|-- apache2.conf  
|   |-- ports.conf  
|-- mods-enabled  
|   |-- *.load  
|   |-- *.conf  
|-- conf-enabled  
|   |-- *.conf  
|-- sites-enabled  
|   |-- *.conf  
|
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain

Load balancer details | EC2 | us-e | Apache2 Ubuntu Default Page: It | New tab

my-alb-1530199822.us-east-2.elb.amazonaws.com/contacts



Same way: my-alb-1530199822.us-east-2.elb.amazonaws.com/address ---should display address page