

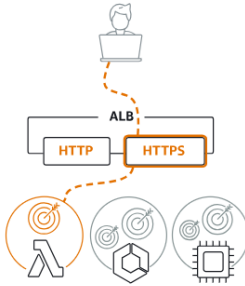
Prerequisite

- Target instances up and running with your server. (You should be able to send the HTTP requests/access the Tomcat page at individual instances)
- **Security Group** of your target instances accepting traffic on port 8080 (tomcat port) from any load balancer you created.
- **Security group** of your load balancer accepting traffic on port 80 (HTTP). (If you use HTTPS, then 443).
- If required, allows the security group of your target instances accepting traffic on port 80 (HTTP) as well.

Creating Load Balancer

From AWS , select create a Load balancer. Choose Application Load Balancer

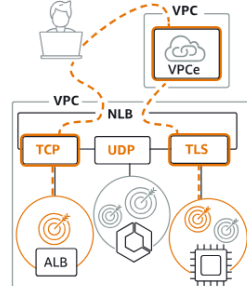
Application Load Balancer [Info](#)



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

Network Load Balancer [Info](#)



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.

Gateway Load Balancer [Info](#)



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

Basic Configuration as follows

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**

Includes IPv4 and IPv6 addresses.

For network mapping, choose the availability zones of your instances. You can have all instances within the same availability zone or different AZ.

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 available for selection. To confirm the VPC for your targets, view your [target groups](#).

-
vpc-0eaa3f2cefcac4538
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 if the VPC or the VPC are not available for selection.

- ☐ us-west-2a (usw2-az1)
- ☐ us-west-2b (usw2-az2)
- ☐ us-west-2c (usw2-az3)
- ☐ us-west-2d (usw2-az4)

Listeners and routing

For Load Balancer, it should listen on HTTP (Port 80)/ HTTPS.

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 [Select a target group](#) [Create target group](#)

1-65535

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

Create the target group for instances

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

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

Target group protocol : port need to be the same as your load balancer . Else you wont be able to select it from your load balancer

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

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.

IPv4: 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 HTTP/2.

Ports for the selected Instances: **8080** (same port for your Tomcat services)

Click include as pending below.

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 (0)

< 1

<input type="checkbox"/>	Instance ID	Name	State	Security groups	Zone
No instances					

0 selected

Ports for the selected instances

Ports for routing traffic to the selected instances.

1-65535 (separate multiple ports with commas)

Include as pending below