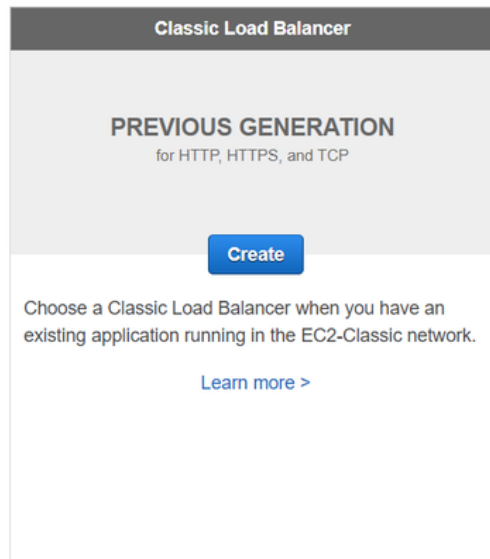


Load Balancer :- CLB, NLB, ALB

CLB:-

Launch two ec2-instance using our custom webserver image.

Now create a classic Load Balancer:-



1. Define Load Balancer

2. Assign Security Groups

3. Configure Security Settings

4. Configure Health Check

5. Add EC2 Instances

6. Add Tags

7. Review

Step 1: Define Load Balancer

Basic Configuration

This wizard will walk you through setting up a new load balancer. Begin by giving your new load balancer a unique name so that you can identify it from other load balancers you might create. You will also need to configure ports and protocols for your load balancer. Traffic from your clients can be routed from any load balancer port to any port on your EC2 instances. By default, we've configured your load balancer with a standard web server on port 80.

Load Balancer name:

Create LB Inside:

Create an internal load balancer: ☐ [\(what's this?\)](#)

Enable advanced VPC configuration: ☐

Listener Configuration:

Load Balancer Protocol	Load Balancer Port	Instance Protocol	Instance Port
HTTP	80	HTTP	80

[Add](#)

[Cancel](#) [Next: Assign Security Groups](#)

Step 2: Assign Security Groups

You have selected the option of having your Elastic Load Balancer inside of a VPC, which allows you to assign security groups to your load balancer. Please select the security groups to assign to this load balancer. This can be changed at any time.

Assign a security group: ☒ Create a new security group

☐ Select an existing security group

Security group name: quick-create-9

Description: quick-create-9 created on Monday, May 29, 2023 at 9:32:12 PM UTC+5

Type	Protocol	Port Range	Source
HTTP	TCP	80	Anywhere 0.0.0.0/0

Add Rule

[Cancel](#) [Previous](#) [Next: Configure Security Settings](#)

Step 4: Configure Health Check

Your load balancer will automatically perform health checks on your EC2 instances and only route traffic to instances that pass the health check. If an instance fails the health check, it is automatically removed from the load balancer. Customize the health check to meet your specific needs.

Ping Protocol	HTTP
Ping Port	80
Ping Path	/index.php

Advanced Details

Response Timeout	5	seconds
Interval	30	seconds
Unhealthy threshold	2	
Healthy threshold	10	

[Cancel](#) [Previous](#) [Next: Add EC2 Instances](#)

Step 5: Add EC2 Instances

The table below lists all your running EC2 Instances. Check the boxes in the Select column to add those instances to this load balancer.

VPC vpc-0b0ec2a980d3bb776 (172.31.0.0/16)

Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input type="checkbox"/>	i-0c5aa9f718e5cf81c chatApp-cloud23	stopped	default, launch-wizard-103	ap-south-1b	subnet-0bd12a9...	172.31.0.0/20
<input type="checkbox"/>	i-0e2a9254a1da10785 Homepage-cloud23	stopped	launch-wizard-102	ap-south-1b	subnet-0bd12a9...	172.31.0.0/20
<input checked="" type="checkbox"/>	i-0f16576864619853 webserver1-kishore	running	launch-wizard-105	ap-south-1b	subnet-0bd12a9...	172.31.0.0/20
<input checked="" type="checkbox"/>	i-04cd0406bae4b972d webserver-kishore	running	launch-wizard-104	ap-south-1b	subnet-0bd12a9...	172.31.0.0/20
<input type="checkbox"/>	i-029427654c292e038 linux-bilal	stopped	default, launch-wizard-85	ap-south-1a	subnet-03c8316...	172.31.32.0/20
<input type="checkbox"/>	i-0b07878f5a0f0181bb master	stopped	launch-wizard-81	ap-south-1a	subnet-03c8316...	172.31.32.0/20

Availability Zone Distribution

2 instances in ap-south-1b

<input checked="" type="checkbox"/> Enable Cross-Zone Load Balancing	
<input checked="" type="checkbox"/> Enable Connection Draining	300 seconds

[Cancel](#) [Previous](#) [Next: Add Tags](#)

Step 7: Review

Please review the load balancer details before continuing

▼ Define Load Balancer

Edit load balancer definition

Load Balancer name: myclb
Scheme: internet-facing
Port Configuration: 80 (HTTP) forwarding to 80 (HTTP)

▼ Configure Health Check

Edit health check

Ping Target: HTTP:80/index.php
Timeout: 5 seconds
Interval: 30 seconds
Unhealthy threshold: 2
Healthy threshold: 10

▼ Add EC2 Instances

Edit instances

Cross-zone load balancing: Enabled
Connection Draining: Enabled, 300 seconds
Instances: i-04cf0406bae4b972d (webserver-kishore), i-0f16576864619f653 (webserver1-kishore)

▼ VPC Information

Edit subnets

VPC: vpc-0b0ec2a980d3bb776
Subnets: subnet-0bd12a96e46688a38, subnet-05a1c05902ca37565, subnet-03c8316666c199488

Cancel

Previous

Create

Create Load Balancer

Actions ▼

Filter by tags and attributes or search by keyword

< < 1 to 1 of 1 > >

Name	DNS name	State	VPC ID	Availability Zones	Type	Created
myclb	myclb-562258415.ap-south-...		vpc-0b0ec2a980d3bb776	ap-south-1a, ap-south-...	classic	May 29, 2023

Load balancer: myclb

Description

Instances

Health check

Listeners

Monitoring

Tags

Migration

Basic Configuration

Name

myclb

* DNS name

myclb-562258415.ap-south-1.elb.amazonaws.com (A Record)

Type

Classic (Migrate Now)

Scheme

internet-facing

Availability Zones

subnet-03c8316666c199488 - ap-south-1a, subnet-05a1c05902ca37565 - ap-south-1c.

Creation time

May 29, 2023 at 9:33:33 PM UTC+5:30

Hosted zone

ZP97RAFLXTNZK

Status

0 of 2 instances in service

VPC

vpc-0b0ec2a980d3bb776

Create Load Balancer

Actions ▼

Filter by tags and attributes or search by keyword

< < 1 to 1 of 1 > >

Name	DNS name	State	VPC ID	Availability Zones	Type	Created
myclb	myclb-562258415.ap-south-...		vpc-0b0ec2a980d3bb776	ap-south-1a, ap-south-...	classic	May 29, 2023

Load balancer: myclb

Description

Instances

Health check

Listeners

Monitoring

Tags

Migration

Connection Draining: Enabled, 300 seconds (Edit)

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
i-0f16576864619f653	webserver1-kishore	ap-south-1b	InService ⓘ	Remove from Load Balancer
i-04cf0406bae4b972d	webserver-kishore	ap-south-1b	InService ⓘ	Remove from Load Balancer

Edit Availability Zones

```

Welcome to devops training !!!
h0: flags=4163 mtu 9001
    inet 172.31.13.62 netmask 255.255.240.0 broadcast 172.31.15.255
    inet6 fe80::8db:9eff:fe06:abc6 prefixlen 64 scopeid 0x20
    ether 0a:db:9e:06:ab:c6 txqueuelen 1000 (Ethernet)
    RX packets 1642 bytes 1754240 (1.6 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 704 bytes 79127 (77.2 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

v: flags=73 mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

NLB:-

Create a network Load Balancer

Select load balancer type

Elastic Load Balancing supports four types of load balancers: Application Load Balancers, Network Load Balancers, Gateway Load Balancers, and Classic Load Balancers. Choose the load balancer type that meets your needs. [Learn more about which load balancer is right for you](#)

<div><div>Application Load Balancer</div><div><div>HTTP HTTPS</div><div>Create</div></div><div><p>Choose an Application Load Balancer when you need a flexible feature set for your web 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.</p>Learn more ></div></div>	<div><div>Network Load Balancer</div><div><div>TCP TLS UDP</div><div>Create</div></div><div><p>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 application. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.</p>Learn more ></div></div>	<div><div>Gateway Load Balancer</div><div><div>IP</div><div>Create</div></div><div><p>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.</p>Learn more ></div></div>
<div>Classic Load Balancer</div>		

Cancel

Step 1: Configure Load Balancer

Basic Configuration

To configure your load balancer, provide a name, select a scheme, specify one or more listeners, and select a network. The default configuration is an Internet-facing load balancer in the selected network with a listener that receives TCP traffic on port 80.

Name ⓘ

mylib

Scheme ⓘ

☒ Internet-facing

☐ Internal

IP address type ⓘ

IPv4

Listeners

A listener is a process that checks for connection requests, using the protocol and port that you configured.

Load Balancer Protocol

Load Balancer Port

TCP

80

Add listener

Availability Zones

Step 1: Configure Load Balancer

A listener is a process that checks for connection requests, using the protocol and port that you configured.

Load Balancer Protocol

Load Balancer Port

TCP

80

Add listener

Availability Zones

Specify the Availability Zones to enable for your load balancer. The load balancer routes traffic to the targets in these Availability Zones only. You can specify only one subnet per Availability Zone. You may also add one Elastic IP per Availability Zone if you wish to have specific addresses for your load balancer.

Create and manage Elastic IPs in the VPC console

VPC ⓘ

vpc-0b0ec2a980d3bb776 (172.31.0.0/16) (default)

Availability Zones

☒ ap-south-1a

subnet-03c8316666c199488

IPv4 address ⓘ

Assigned by AWS

☒ ap-south-1b

subnet-0bd12a96e46688a38

IPv4 address ⓘ

Assigned by AWS

☐ ap-south-1c

subnet-05a1c05902ca37565

Step 3: Configure Routing

Your load balancer routes requests to the targets in this target group using the protocol and port that you specify here. It also performs health checks on the targets using these settings. The target group you specify in this step will apply to all of the listeners configured on this load balancer. You can edit or add listeners after the load balancer is created.

Target group

Target group ⓘ

New target group

Name ⓘ

mytarget

Target type

☒ Instance

☐ IP

Protocol ⓘ

TCP

Port ⓘ

80

Health checks

Protocol ⓘ

TCP

Advanced health check settings

Step 4: Register Targets

Registered targets

To deregister instances, select one or more registered instances and then click Remove.

Remove

<input type="checkbox"/>	Instance	Name	Port	State	Security groups	Zone
<input type="checkbox"/>	i-0f16576864619f553	webserver1-kishore	80	running	launch-wizard-105	ap-south-1b
<input type="checkbox"/>	i-04cf0406bae4b972d	webserver-kishore	80	running	launch-wizard-104	ap-south-1b

Instances

To register additional instances, select one or more running instances, specify a port, and then click Add. The default port is the port specified for the target group. If the instance is already registered on the specified port, you must specify a different port.

Add to registered on port 80

Search Instances

<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input checked="" type="checkbox"/>	i-0f16576864619f553	webserver1-kishore	running	launch-wizard-105	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20
<input checked="" type="checkbox"/>	i-04cf0406bae4b972d	webserver-kishore	running	launch-wizard-104	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20

Cancel Previous Next: Review

Step 5: Review

Please review the load balancer details before continuing.

Load balancer

Edit

Name mynlb
Scheme internet-facing
Listeners Port:80 - Protocol:TCP
IP address type ipv4
VPC vpc-0b0ec2a980d3bb776
Subnets subnet-03c8316666c199488, subnet-0bd12a96e46688a38
Tags

Routing

Edit

Target group New target group
Target group name mynwtg
Port 80
Target type Instance
Protocol TCP
Health check protocol TCP
Health check port traffic port
Healthy threshold 3
Unhealthy threshold 3
Interval 30

Targets

Edit

Cancel Previous Create

Create Load Balancer

Actions



Filter by tags and attributes or search by keyword

1 to 1 of 1

<input checked="" type="checkbox"/>	Name	DNS name	State	VPC ID	Availability Zones	Type	Created
<input checked="" type="checkbox"/>	mynlb	mynlb-198d55a45ce92f16.elb.ap-south-1.amazonaws.com	Provisioning	vpc-0b0ec2a980d3bb776	ap-south-1b, ap-south-1a	network	May 29, 2020

Load balancer: mynlb

Description

Listeners

Monitoring

Integrated services

Tags

Basic Configuration

Name mynlb
ARN arn:aws:elasticloadbalancing:ap-south-1:394775085530:loadbalancer/net/mynlb/198d55a45ce92f16
DNS name mynlb-198d55a45ce92f16.elb.ap-south-1.amazonaws.com (A Record)
State Provisioning
Type network

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

<< 1 to 1 of 1 >>

Name	DNS name	State	VPC ID	Availability Zones	Type	Created
mynlb	mynlb-198d55a45ce92f16.el...	Provisioning	vpc-0b0ec2a980d3bb776	ap-south-1b, ap-south-1a	network	May 29, 2

Load balancer: mynlb

Description

Listeners

Monitoring

Integrated services

Tags

Listeners listen for connection requests using their protocol and port. You can add, remove, or update listeners and listener rules.

To view and edit listener attributes, select the listener and choose Edit.

Add listener

Edit

Delete

Listener ID	Security policy	SSL Certificate	ALPN policy	Default action
TCP : 80	N/A	N/A	N/A	Forward to mynwtg

Create target group

Actions

Filter by tags and attributes or search by keyword

<< 1 to 1 of 1 >>

Name	Port	Protocol	Target type	Load Balanc	VPC ID	Monitoring
mynwtg	80	TCP	instance	mynlb	vpc-0b0ec2a980d3bb776	

Target group: mynwtg

Description

Targets

Health checks

Monitoring

Tags

Basic Configuration

Name	mynwtg
ARN	arn:aws:elasticloadbalancing:ap-south-1:394775085530:targetgroup/mynwtg/f985a15ade21d2ad
Protocol	TCP
Port	80

Filter by tags and attributes or search by keyword

<< 1 to 1 of 1 >>

Name	Port	Protocol	Target type	Load Balanc	VPC ID	Monitoring
mynwtg	80	TCP	instance	mynlb	vpc-0b0ec2a980d3bb776	

Target group: mynwtg

Description

Targets

Health checks

Monitoring

Tags

The load balancer starts routing requests to a newly registered target as soon as the registration process completes and the target passes the initial health checks. If demand on your targets increases, you can register additional targets. If demand on your targets decreases, you can deregister targets.

Edit

Registered targets

Instance ID	Name	Port	Availability Zone	Status	Description
i-0f165768646198653	webserver1-kishore	80	ap-south-1b	healthy	This target is currently passing target group's health checks.
i-04cf0406bae4b972d	webserver-kishore	80	ap-south-1b	healthy	This target is currently passing target group's health checks.

Availability Zones

Availability Zone	Target count	Healthy?
-------------------	--------------	----------

```
welcome to devops training !!!
eth0: flags=4163  mtu 9001
    inet 172.31.10.12  netmask 255.255.240.0  broadcast 172.31.15.255
    inet6 fe80::87b:f4ff:feff:d814  prefixlen 64  scopeid 0x20
    ether 0a:7b:f4:ff:d8:14  txqueuelen 1000  (Ethernet)
    RX packets 1782  bytes 1764589 (1.6 MiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 833  bytes 94635 (92.4 KiB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10
    loop txqueuelen 1000  (Local Loopback)
    RX packets 24  bytes 2296 (2.2 KiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 24  bytes 2296 (2.2 KiB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

ALB:-

First Configure one ec2-instance as chatAPP , second as SearchApp and third as Homepage.

Instances (3) Info

Instance state = running

Clear filters

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	chatApp-cloud23	i-Oc5aa6f718e5cf81c	Running	t2.micro	Initializing	No alarms +	ap-south-1b
<input type="checkbox"/>	Homepage-cloud23	i-Oe2a9254a1da10785	Running	t2.micro	Initializing	No alarms +	ap-south-1b
<input type="checkbox"/>	SEARCHAPP-CLOUD23	i-08682ef49ae25cc5c	Running	t2.micro	Initializing	No alarms +	ap-south-1b

Create a ApplicationLoad Balancer:-

Select load balancer type

Elastic Load Balancing supports four types of load balancers: Application Load Balancers, Network Load Balancers, Gateway Load Balancers, and Classic Load Balancers. Choose the load balancer type that meets your needs. [Learn more about which load balancer is right for you](#)

Application Load Balancer

HTTP
HTTPS

Create

Choose an Application Load Balancer when you need a flexible feature set for your web 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.

[Learn more >](#)

Network Load Balancer

TCP
TLS
UDP

Create

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 application. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.

[Learn more >](#)

Gateway Load Balancer

IP

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.

[Learn more >](#)

Classic Load Balancer

[Cancel](#)

1. Configure Load Balancer 2. Configure Security Settings 3. Configure Security Groups 4. Configure Routing 5. Register Targets 6. Review

Step 1: Configure Load Balancer

Configure your load balancer, provide a name, select a scheme, specify one or more listeners, and select a network. The default configuration is an internet-facing load balancer in the selected network with a listener that receives HTTP traffic on port 80.

Name ⓘ

myALB

Scheme ⓘ

☒ Internet-facing
☐ Internal

IP address type ⓘ

IPv4

Listeners

A listener is a process that checks for connection requests, using the protocol and port that you configured.

Load Balancer Protocol	Load Balancer Port
HTTP	80

Add listener

Availability Zones

Specify the Availability Zones to enable for your load balancer. The load balancer routes traffic to the targets in these Availability Zones only. You can specify only one subnet per Availability Zone. You must specify subnets from at least two Availability Zones to increase the availability of your load balancer.

[Cancel](#) [Next: Configure Security Settings](#)

Load Balancer Protocol	Load Balancer Port
HTTP	80

Add listener

Availability Zones

Specify the Availability Zones to enable for your load balancer. The load balancer routes traffic to the targets in these Availability Zones only. You can specify only one subnet per Availability Zone. You must specify subnets from at least two Availability Zones to increase the availability of your load balancer.

VPC ⓘ

vpc-0b0ec2a980d3bb776 (172.31.0.0/16) (default)

Availability Zones

☒ ap-south-1a

subnet-03c8316666c199488

IPv4 address ⓘ

Assigned by AWS

☒ ap-south-1b

subnet-0bd12a96e46688a38

IPv4 address ⓘ

Assigned by AWS

☐ ap-south-1c

subnet-05a1c05902ca37565

[Cancel](#) [Next: Configure Security Settings](#)

Step 3: Configure Security Groups

A security group is a set of firewall rules that control the traffic to your load balancer. On this page, you can add rules to allow specific traffic to reach your load balancer. First, decide whether to create a new security group or select an existing one.

Assign a security group ☒ Create a new security group
☐ Select an existing security group

Security group name
Description

Type	Protocol	Port Range	Source
HTTP	TCP	80	Anywhere 0.0.0.0/0, ::/0

Add Rule

Cancel Previous Next: Configure Routing

Step 4: Configure Routing

Configure this load balancer. You can edit or add listeners after the load balancer is created.

Configure listener

Target group

Name

Target type ☒ Instance
☐ IP
☐ Lambda function

Protocol

Port

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.

Configure health checks

Protocol

Path

Cancel Previous Next: Register Targets

Step 5: Register Targets

Register targets with your target group. If you register a target in an enabled Availability Zone, the load balancer starts routing requests to the targets as soon as the registration process completes and the target passes the initial health checks.

Registered targets

To deregister instances, select one or more registered instances and then click Remove.

Remove	Instance	Name	Port	State	Security groups	Zone
<input type="checkbox"/>	i-0e2a9254a1da10785	Homepage-cloud23	80	running	launch-wizard-102	ap-south-1b

Instances

To register additional instances, select one or more running instances, specify a port, and then click Add. The default port is the port specified for the target group. If the instance is already registered on the specified port, you must specify a different port.

Add to registered

on port

80

Q

Search Instances

X

<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input type="checkbox"/>	i-0c5aa6f718e5cf81c	chatApp-cloud23		default, launch-wizard-103	ap-south-1b	subnet-0bd12a96e49688a38	172.31.0.0/20
<input checked="" type="checkbox"/>	i-0e2a9254a1da10785	Homepage-cloud23		launch-wizard-102	ap-south-1b	subnet-0bd12a96e49688a38	172.31.0.0/20
<input type="checkbox"/>	i-08682ef49ae25cc5c	SEARCHAPP-CLOUD23		launch-wizard-109	ap-south-1b	subnet-0bd12a96e49688a38	172.31.0.0/20

1. Configure Load Balancer
2. Configure Security Settings
3. Configure Security Groups
4. Configure Routing
5. Register Targets
6. Review

Step 6: Review

Load balancer
Edit

Name myALB
Scheme internet-facing
Listeners Port 80 - Protocol HTTP
IP address type ipv4
VPC vpc-0b0ec2a980d3bb776
Subnets subnet-03c8316666c199488, subnet-0bd12a96e46688a38
Tags

Security groups
load-balancer-wizard-3
Edit

Routing
Edit

Target group New target group
Target group name homepagetg
Port 80
Target type instance
Protocol HTTP
Protocol version HTTP1
Health check protocol HTTP
Path /index.php
Health check port traffic port
Healthy threshold 5
Unhealthy threshold 2
Timeout 5
Interval 30
Success codes 200

Cancel Previous Create

Filter by tags and attributes or search by keyword
1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At
myALB	myALB-698278970.ap-south...	Provisioning	vpc-0b0ec2a980d3bb776	ap-south-1a, ap-south-1b	application	May 29, 2023 at 9:46:48 PM ...

Load balancer: myALB

Description
Listeners
Monitoring
Integrated services
Tags

Basic Configuration

Name myALB
ARN arn:aws:elasticloadbalancing:ap-south-1:394775085530:loadbalancer/app/myALB/0865675d7f270694
DNS name myALB-698278970.ap-south-1.elb.amazonaws.com (A Record)
State Provisioning
Type application
Scheme internet-facing
IP address type ipv4
Edit IP address type

Create Two more target groups:

1. Chattg:-

Reserved Instances

Dedicated Hosts

Capacity Reservations

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

Auto Scaling

Launch Configurations

Auto Scaling Groups

Create target group

Actions

Cancel

Create

Target group name

Target type

Protocol

Port

VPC

Health check settings

Protocol

Path

Advanced health check settings

chatg

Instance

HTTP

80

vpc-0b0ec2a980d3bb776 (172.31.0.0/16) (M)

HTTP

/index.php

Cancel

Create

ap-south-1b

1

No (Availability Zone contains no healthy targets)

Register and deregister targets

Registered targets

To deregister instances, select one or more registered instances and then click Remove.

Remove

<input type="checkbox"/>	Instance	Name	Port	State	Security groups	Zone
<input type="checkbox"/>	i-0c5aa9f718e5cf81c	chatApp-cloud23	80	running	default, launch-wizard-103	ap-south-1b

Instances

To register additional instances, select one or more running instances, specify a port, and then click Add. The default port is the port specified for the target group. If the instance is already registered on the specified port, you must specify a different port.

Add to registered

on port

80

Q

Search Instances

X

<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input checked="" type="checkbox"/>	i-0c5aa9f718e5cf81c	chatApp-cloud23	running	default, launch-wizar...	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20
<input type="checkbox"/>	i-0e2a9254a1da10785	Homepage-cloud23	running	launch-wizard-102	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20
<input type="checkbox"/>	i-08682ef49ae25cc5c	SEARCHAPP-CLOU...	running	launch-wizard-109	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20

Cancel Save

Filter by tags and attributes or search by keyword
< 1 to 2 of 2 >

<input type="checkbox"/>	Name	Port	Protocol	Target type	Load Balancer	VPC ID	Monitoring
<input checked="" type="checkbox"/>	chattg	80	HTTP	instance		vpc-0b0ec2a980d3bb776	
<input type="checkbox"/>	homepagetg	80	HTTP	instance	myALB	vpc-0b0ec2a980d3bb776	<input checked="" type="checkbox"/>

Target group: chattg

Description
Targets
Health checks
Monitoring
Tags

The load balancer starts routing requests to a newly registered target as soon as the registration process completes and the target passes the initial health checks. If demand on your targets increases, you can register additional targets. If demand on your targets decreases, you can deregister targets.

Edit

Registered targets

Instance ID	Name	Port	Availability Zone	Status	Description
i-0c5aa6f718e5cf81c	chatApp-cloud23	80	ap-south-1b	unused	Target group is not configured to receive traffic from the load balancer

Availability Zones

Availability Zone	Target count	Healthy?
ap-south-1b	1	No (Availability Zone contains no healthy targets)

2. Searchtg:-

Create target group

Your load balancer routes requests to the targets in a target group using the target group settings that you specify, and performs health checks on the targets using the health check settings that you specify.

Target group name

Target type

☒ Instance
☐ IP
☐ Lambda function

Protocol

Port

VPC

Health check settings

Protocol

Path

Advanced health check settings

Cancel

Create

Register and deregister targets

Registered targets

To deregister instances, select one or more registered instances and then click Remove.

Remove

<input type="checkbox"/>	Instance	Name	Port	State	Security groups	Zone
<input type="checkbox"/>	i-06682ef49ae25cc5c	SEARCHAPP-CLOUD23	80	running	launch-wizard-109	ap-south-1b

Instances

To register additional instances, select one or more running instances, specify a port, and then click Add. The default port is the port specified for the target group. If the instance is already registered on the specified port, you must specify a different port.

Add to registered on port 80

Search Instances

<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input type="checkbox"/>	i-0c5aa9f718e5cf81c	chatApp-cloud23	running	default, launch-wizar...	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20
<input type="checkbox"/>	i-0e2a9254a1da10785	Homepage-cloud23	running	launch-wizard-102	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20
<input checked="" type="checkbox"/>	i-06682ef49ae25cc5c	SEARCHAPP-CLOU...	running	launch-wizard-109	ap-south-1b	subnet-0bd12a96e46688a38	172.31.0.0/20

Cancel Save

Create target group Actions

Filter by tags and attributes or search by keyword

1 to 3 of 3

<input type="checkbox"/>	Name	Port	Protocol	Target type	Load Balanc	VPC ID	Monitoring
<input type="checkbox"/>	chattg	80	HTTP	instance		vpc-0b0ec2a980d3bb776	
<input type="checkbox"/>	homepagetg	80	HTTP	instance	myALb	vpc-0b0ec2a980d3bb776	
<input checked="" type="checkbox"/>	searchtg	80	HTTP	instance		vpc-0b0ec2a980d3bb776	

Target group: searchtg

Description

Targets

Health checks

Monitoring

Tags

The load balancer starts routing requests to a newly registered target as soon as the registration process completes and the target passes the initial health checks. If demand on your targets increases, you can register additional targets. If demand on your targets decreases, you can deregister targets.

Edit

Registered targets

Instance ID	Name	Port	Availability Zone	Status	Description
i-06682ef49ae25cc5c	SEARCHAPP-CLOUD23	80	ap-south-1b	unused	Target group is not configured to receive traffic from the load balancer

Availability Zones

Availability Zone	Target count	Healthy?
ap-south-1b	1	No (Availability Zone contains no healthy targets)

Now add rule in loadbalancer to enable path based routing:-

Create Load Balancer

Actions

Filter by tags and attributes or search by keyword

< < 1 to 1 of 1 > >

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At
myALb	myALb-698278970-ap-south...	Active	vpc-0b0ec2a980d3bb776	ap-south-1a, ap-south-1b	application	May 29, 2023 at 9:46:48 PM ...

Load balancer: myALb

Description

Listeners

Monitoring

Integrated services

Tags

Listeners listen for connection requests using their protocol and port. You can add, remove, or update listeners and listener rules.

To view and edit listener attributes, select the listener and choose Edit.

Add listener

Edit

Delete

Listener ID	Security policy	SSL Certificate	Rules
<input type="checkbox"/> HTTP : 80 arn...53b38ba832730896	N/A	N/A	Default: forwarding to homepagetg View/edit rules

< Rules

+

||

-

myALb | HTTP:80

To edit, select a mode above.

myALb | HTTP:80 (1 rules)

Rule limits for condition values, wildcards, and total rules.

last	HTTP 80: default action	IF	THEN
	<i>This rule cannot be moved or deleted</i>	<input checked="" type="checkbox"/> Requests otherwise not routed	Forward to homepagetg : 1 (100%) Group-level stickiness: Off

< Rules

+

||

-

myALb | HTTP:80

Click a location for your new rule. Each rule must include one action of type forward, redirect, fixed response.

New rule was created successfully.

x

myALb | HTTP:80 (3 rules)

Rule limits for condition values, wildcards, and total rules.

Insert Rule

1	arn...8bcca	IF <input checked="" type="checkbox"/> Path is /search/*	THEN Forward to searchtg : 1 (100%) Group-level stickiness: Off
<div>Insert Rule</div>			
2	arn...ce458	IF <input checked="" type="checkbox"/> Path is /chat/*	THEN Forward to chattg : 1 (100%) Group-level stickiness: Off
<div>Insert Rule</div>			
last	HTTP 80: default action <i>This rule cannot be moved or deleted</i>	IF <input checked="" type="checkbox"/> Requests otherwise not routed	THEN Forward to homepagetg : 1 (100%) Group-level stickiness: Off

Not secure | http://myalb-698278970.ap-south-1.elb.amazonaws.com

```
come to devops training !!!
eth0: flags=4163 mtu 9001
    inet 172.31.13.219 netmask 255.255.240.0 broadcast 172.31.15.255
    inet6 fe80::82f:dfff:fe5b:35c4 prefixlen 64 scopeid 0x20
    ether 0a:2f:df:5b:35:c4 txqueuelen 1000 (Ethernet)
    RX packets 1736 bytes 1780331 (1.6 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 838 bytes 111068 (108.4 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73 mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Not secure | http://myalb-698278970.ap-south-1.elb.amazonaws.com/chat/

```
welcome to CHAT APP !!!
eth0: flags=4163 mtu 9001
    inet 172.31.15.45 netmask 255.255.240.0 broadcast 172.31.15.255
    inet6 fe80::813:ff:fe03:18f2 prefixlen 64 scopeid 0x20
    ether 0a:13:00:03:18:f2 txqueuelen 1000 (Ethernet)
    RX packets 1713 bytes 1758135 (1.6 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 756 bytes 88097 (86.0 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73 mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```



```
⏪ ⏩ ⌂ 🔒 Not secure | http://myalb-698278970.ap-south-1.elb.amazonaws.com/search/
welcome to SEARCH APP!!!
eth0: flags=4163  mtu 9001
    inet 172.31.11.127 netmask 255.255.240.0 broadcast 172.31.15.255
    inet6 fe80::852:84ff:fe0d:514a prefixlen 64 scopeid 0x20
    ether 0a:52:84:0d:51:4a txqueuelen 1000 (Ethernet)
    RX packets 769 bytes 1723110 (1.6 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 739 bytes 86687 (84.6 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73  mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10
    loop txqueuelen 1000 (Local Loopback)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Done.....