

AWS Auto Scaling & Elastic Load Balancer

2 Instance creation

aws

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N. Virginia

Naman

EC2 Dashboard

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Console-to-Code

Instances

Instance Types

Launch Templates

Instances (2)

Find Instance by attribute or tag (case-sensitive)

Running

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	22BPS1101-SERVER2	i-0ab65fc096256d5ba	Running	t2.micro	2/2 checks passed	View alarms	us-east-1a
<input type="checkbox"/>	22BPS1101-server1	i-04dcfee0b71e945f4	Running	t2.micro	2/2 checks passed	View alarms	us-east-1a

Load balancer

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

	Name	DNS name	State	VPC ID	Availability Zones	Type
<input checked="" type="checkbox"/>	22bps1101server	22bps1101server-588780...	Active	vpc-0f7c95415c5d55bf8	2 Availability Zones	Application

Load balancer: 22bps1101server

Details

Listeners and rules

Network mapping

Resource map - new

Security

Monitoring

Integrations

Attributes

Load balancer type

Application

Status

Active

VPC

vpc-0f7c95415c5d55bf8

Load balancer IP address type

IPv4

Scheme

Internet-facing

Hosted zone

Z35SXDOTRQ7X7K

Availability Zones

subnet-054ecacd65bc625cc us-east-1c (use1-az4)
subnet-00660e69604052e7e us-east-1a (use1-az1)

Date created

September 7, 2024, 14:12 (UTC+05:30)

Target Group (add the instances u want to share the load in)

EC2 > Target groups > balancemyinstance

balancemyinstance

Actions

Details

arn:aws:elasticloadbalancing:us-east-1:009160066859:targetgroup/balancemyinstance/cd5305bdb1248871

Target type
Instance

Protocol : Port
HTTP: 80

Protocol version
HTTP1

VPC
[vpc-0f7c95415c5d55bf8](#)

IP address type
IPv4

Load balancer
[22bps1101server](#)

2
Total targets

2
Healthy

0 Anomalous

0
Unhealthy

0
Unused

0
Initial

0
Draining

Distribution of targets by Availability Zone (AZ)

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

Targets

Monitoring

Health checks

Attributes

Tags

Registered targets (2)

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

	Instance ID	Name	Port	Zone	Health status	Health status details	Launch...	Anomaly detection result
<input type="checkbox"/>	i-0ab65fc096256d5ba	22BPS1101-SE...	80	us-east-1c	Healthy	-	Septembe...	Normal
<input type="checkbox"/>	i-04dcfee0b71e945f4	22BPS1101-se...	80	us-east-1c	Healthy	-	Septembe...	Normal

Instance 1

< > ↺

Not secure ec2-50-17-141-113.compute-1.amazonaws.com

DSA | WhatsApp | YouTube | V-Top | Teams | ChatGPT | Vit-Mail | Gmail | Spam mail | LinkedIn | Github

Hello World from 22BPS1101 and ip-172-31-21-2.ec2.internal

Instance 2

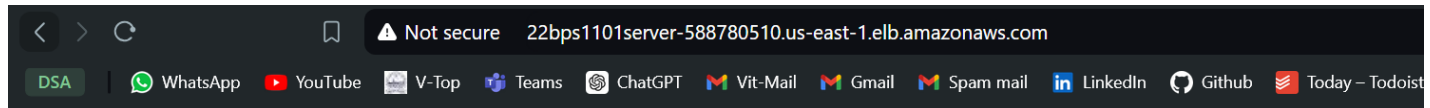
< > ↺

Not secure ec2-52-90-165-106.compute-1.amazonaws.com

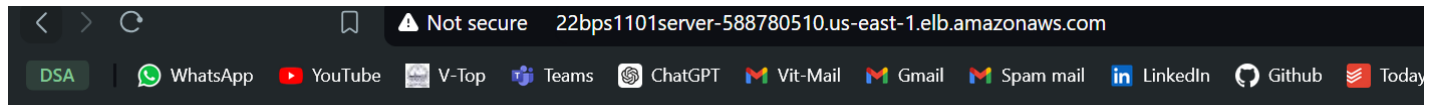
DSA | WhatsApp | YouTube | V-Top | Teams | ChatGPT | Vit-Mail | Gmail | Spam mail | LinkedIn | Github

Hello World from 22BPS1101 and ip-172-31-29-10.ec2.internal

With load balancer (Shows both alternatively on refreshing)



Hello World from 22BPS1101 and ip-172-31-29-10.ec2.internal



Hello World from 22BPS1101 and ip-172-31-21-2.ec2.internal

Initialize the printed words with apache server (Similar for both server)

```
[ec2-user@ip-172-31-29-10 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-31-29-10 ~]$ sudo systemcti enable httpd
sudo: systemcti: command not found
[ec2-user@ip-172-31-29-10 ~]$ sudo systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-31-29-10 ~]$ echo *<h1 >Hello World from $(hostname -f)</h1>*> /var/www/html/index.html
-bash: h1: No such file or directory
[ec2-user@ip-172-31-29-10 ~]$ echo *<h1 >Hello World from $(hostname -f)</h1>*>
-bash: syntax error near unexpected token `newline'
[ec2-user@ip-172-31-29-10 ~]$ echo *<h1 >Hello World from $(hostname -f)</h1>*
-bash: h1: No such file or directory
[ec2-user@ip-172-31-29-10 ~]$ echo "Hello world"
Hello world
[ec2-user@ip-172-31-29-10 ~]$ echo *<h1 >Hello World from $(hostname -f)</h1>*> /var/www/html/index.html
-bash: h1: No such file or directory
[ec2-user@ip-172-31-29-10 ~]$ echo "<h1>Hello World from $(hostname -f)</h1>" | sudo tee /var/www/html/index.html
<h1>Hello World from ip-172-31-29-10.ec2.internal</h1>
[ec2-user@ip-172-31-29-10 ~]$ ^C
[ec2-user@ip-172-31-29-10 ~]$ echo "<h1>Hello World from 22BPS1101 and$(hostname -f)</h1>" | sudo tee /var/www/html/index.html
<h1>Hello World from 22BPS1101 andip-172-31-29-10.ec2.internal</h1>
[ec2-user@ip-172-31-29-10 ~]$ echo "<h1>Hello World from 22BPS1101 and $(hostname -f)</h1>" | sudo tee /var/www/html/index.html
<h1>Hello World from 22BPS1101 and ip-172-31-29-10.ec2.internal</h1>
```

Create the 2 instance

Initialize apache server with –

```
sudo yum install httpd
```

```
sudo systemctl start httpd
```

```
sudo systemctl enable httpd
```

```
sudo systemcti enable httpd
```

```
echo "<h1>Hello World from $(hostname -f)</h1>" | sudo tee /var/www/html/index.html
```

Make load balancer and add both of those two instance in that within same region

Run the dns link and u see the load getting alternatively to both instance

AUTO SCALING

The 3rd instance without name is the automatically created instance from the template

Instances (3) [Info](#)

Last updated less than a minute ago

[Refresh](#)

[Connect](#)

[Instance state](#) ▼

[Actions](#) ▼

[Launch instances](#) ▼

[Running](#) ▼

[<](#) [1](#) [>](#) [Settings](#)

<input type="checkbox"/>	Name ✎	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	Availability Zone ▼
<input type="checkbox"/>	22BPS1101-SERVER2	i-0ab65fc096256d5ba	Running 🔍 🔍	t2.micro	2/2 checks passed	View alarms +	us-east-1c
<input type="checkbox"/>	22BPS1101-server1	i-04dcfee0b71e945f4	Running 🔍 🔍	t2.micro	2/2 checks passed	View alarms +	us-east-1c
<input type="checkbox"/>		i-0911cbdcdcee3bdc4	Running 🔍 🔍	t2.micro	Initializing	View alarms +	us-east-1c

[EC2](#) > [Auto Scaling groups](#) > 22bps1101autoscale

22bps1101autoscale

Details

Activity

Automatic scaling

Instance management

Monitoring

Instance refresh

Activity notifications (0)

[Refresh](#)

[Actions](#) ▼

[Create notification](#)

☐

Send to

[▼](#)

☐

On instance action

[▼](#)

No notifications are currently specified

[Create notification](#)

Activity history (1)

[Refresh](#)

[<](#) [1](#) [>](#) [Settings](#)

Status ▼	Description ▼	Cause ▼	Start time ▼
Successful	Launching a new EC2 instance: i-0911cbdcdcee3bdc4	At 2024-09-07T09:04:49Z a user request created an AutoScalingGroup changing the desired capacity from 0 to 1. At 2024-09-07T09:04:52Z an instance was started in response to a difference between desired and actual capacity, increasing the capacity from 0 to 1.	2024 September 07, 02:34:54 PM +05:30