

Deploying a Website Using an Application Load Balancer (AWS)

1. Architecture Overview

This setup deploys a highly available website using:

- Amazon Web Services
- Amazon EC2 instances (web servers)
- Application Load Balancer (ALB)
- Target Group

Traffic Flow:

Client → ALB → Target Group → EC2 Instances

Prerequisites:

- AWS account
- VPC with:
 - At least 2 public subnets in different Availability Zones
- Security Groups configured
- Website files (HTML/CSS/JS or application stack)

1. Launch 2 EC2 Instances with different Av's zones and run your application on nginx

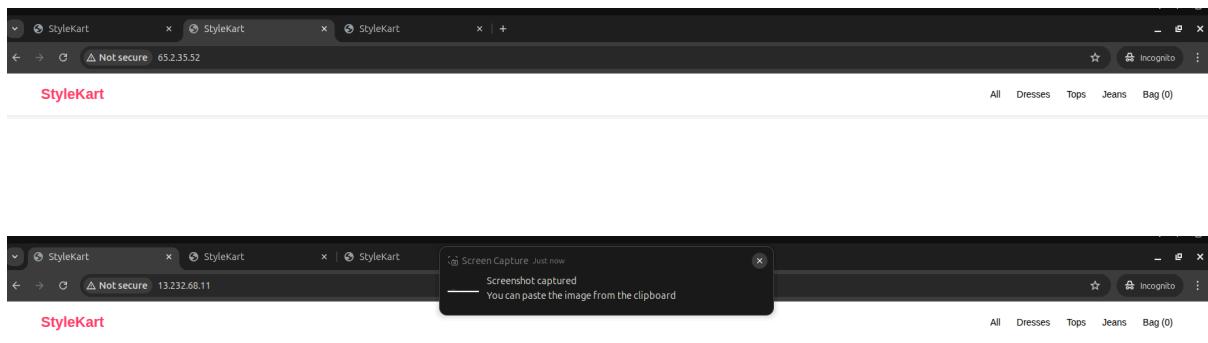
Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 IP
applb_server1	i-0e30e15f7c66d5e3c	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1a	ec2-13-232-68-11.ap-sout...	13.232.68.11
applb_server2	i-0542a7ab67712c931	Running	t2.micro	2/2 checks passed	View alarms +	ap-south-1b	ec2-65-2-35-52.ap-sout...	65.2.35.52

1.1 After the instance's is running select the instance and connect it and use the code to the run the website on nginx

```

ubuntu@ip-172-31-6-35:~/stylekart$ history
1 sudo apt update && sudo apt upgrade -y
2 sudo apt install git && git --version
3 git clone https://github.com/Gokula-krishnanR/stylekart.git
4 ls
5 cd stylekart/
6 sudo apt install nginx -y
7 ls
8 sudo mv index.html script.js styles.css /var/www/html
9 history
10 clear
11 history
ubuntu@ip-172-31-6-35:~/stylekart$ 

```



2. Create Target group:

- 1.Target type - Instances
2. Create a target name, eg., **sk-tg**
3. Click next → select register target
- 4.Click select → **Create target group**

Target	Status	Health Check Status	Zone
applb_server2	Healthy	Unused	ap-south-1a (a...)
applb_server1	Healthy	Unused	ap-south-1a (a...)

4. Create a application load balancer

1. Click on create load balancer → Click **create application load balancer**
2. Give a load balancer name → **sk-alb**
3. In networking mapping → **select all the availability zone's and subnet's**
4. In listeners and routing → In Target Group, select the target group you created before. Eg **sk-tg**
5. Then scroll down until you reach and click **Create load balancer**
6. Wait until the state is **Active**

Load balancers (1/1) [What's new?](#)

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

Name	State	Type	Scheme	IP address type	VPC ID	Availability Zones	Security groups	DNS name
SK-ALB	Active	application	Internet-facing	IPv4	vpc-08320a62a88e0e5fc	3 Availability Zones	2 Security groups	SK-AI

Load balancer: SK-ALB

Listeners and rules (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.

Protocol:Port	Default action	Rules	ARN	Security policy	Default SSL/TLS certificate	mTLS
HTTP:80	Forward to target group sk-tg (100%) Target group stickiness: Off	1 rule	ARN	Not applicable	Not applicable	Not applicable

6. Check the website is running :

Feb 19 00:29

Stylekart

Flat 40% Off

Categories

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