

1. Backend Infrastructure: ASG, ALB, Target Group, Launch Template, EC2

EC2 > Auto Scaling groups > backend-server-asg

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

Trust Stores

▼ Auto Scaling

Auto Scaling Groups

Settings

backend-server-asg

backend-server-asg Capacity overview

Edit

arn:aws:autoscaling:us-east-1:103619411293:autoScalingGroup:0c96a56d-4af5-4810-9b49-4ca7d8bac148:autoScalingGroupName/backend-server-asg

Desired capacity	Scaling limits (Min - Max)	Desired capacity type	Status
1	1 - 1	Units (number of instances)	-

Date created

Mon Apr 14 2025 19:52:11 GMT-0500 (Central Daylight Time)

Details

Integrations - new

Automatic scaling

Instance management

Instance refresh

Activity

Monitoring

Launch template

Edit

Launch template	AMI ID	Instance type	Owner
lt-05b1283e1792075bd backend-server-1t	ami-00a929b66ed6e0de6	t2.micro	arn:aws:iam::103619411293:root
Version	Security groups	Security group IDs	Create time
Default	-	sg-06853552bb7b3f2c8	Mon Apr 14 2025 19:50:36 GMT-0500 (Central Daylight Time)
Description	Storage (volumes)	Key pair name	Request Spot Instances
-	-	key	No

View details in the launch template console

EC2 > Load balancers > backend-alb

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

Trust Stores

▼ Auto Scaling

Auto Scaling Groups

Settings

Application Load Balancers now support public IPv4 IP Address Management (IPAM)

Edit IP pools

You can get started with this feature by configuring IP pools in the Network mapping section.

backend-alb

Actions

▼ Details

Load balancer type	Status	VPC	Load balancer IP address type
Application	Active	vpc-0d7818433017c2c0d	IPv4
Scheme	Hosted zone	Availability Zones	Date created
Internet-facing	Z35XDOTRQ7X7K	subnet-032a5248ece7d6acb us-east-1a (use1-az6)	April 14, 2025, 19:47 (UTC-05:00)
		subnet-056eda8ca2426bd92 us-east-1f (use1-az5)	
		subnet-067b942ce81fca362 us-east-1d (use1-az4)	
		subnet-02395ff77ba354b5af us-east-1e (use1-az3)	
		subnet-00ad408d69d49fa0 us-east-1b (use1-az1)	
		subnet-01585ad5016b19950 us-east-1c (use1-az2)	

Load balancer ARN

arn:aws:elasticloadbalancing:us-east-1:103619411293:loadbalancer/app/backend-alb/da3e8ae288bd8ee2

DNS name info

backend-alb-677981445.us-east-1.elb.amazonaws.com (A Record)

aws

Search

[Option+S]

United States (N. Virginia)

SaurabGhimire

EC2 > Target groups > backend-server-tg

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

Trust Stores

▼ Auto Scaling

Auto Scaling Groups

arn:aws:elasticloadbalancing:us-east-1:103619411293:targetgroup/backend-server-tg/b3da5201e899e8e8

Target type

Instance

Protocol : Port

HTTP: 80

Protocol version

HTTP1

VPC

vpc-0d7818433017c2c0d

IP address type

IPv4

Load balancer

None associated

1

Total targets

1

Healthy

0

Unhealthy

0

Unused

0

Initial

0

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.

Targets

Monitoring

Health checks

Attributes

Tags

Registered targets (1)

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 >

Instance ID

Name

Port

Zone

Health status

Health status details

Admini...

Overri

i-032a3006d801e0814

5005

us-east-1f (use...

Healthy

-

No override.

No ovr

aws

Search

[Option+S]

United States (N. Virginia)

SaurabGhimire

EC2 > Launch templates > backend-server-lt

EC2

Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

▼ Network & Security

Security Groups

backend-server-lt (lt-05b1283e1792075bd)

Actions

Delete template

Launch template details

Launch template ID

lt-05b1283e1792075bd

Launch template name

backend-server-lt

Default version

1

Owner

arn:aws:iam::103619411293:root

Details

Versions

Template tags

Launch template version details

Version

1 (Default)

Description

-

Date created

2025-04-15T00:50:36.000Z

Created by

arn:aws:iam::103619411293:root

Instance details

Storage

Resource tags

Network interfaces

Advanced details

AMI ID

ami-00a929b66ed6e0de6

Instance type

t2.micro

Availability Zone

-

Key pair name

key

Security groups

-

Security group IDs

sg-06853552bb7b3f2c8

aws [Search] [Option+S] United States (N. Virginia) SaurabGhimire

EC2 > Instances > i-032a3006d801e0814

EC2

- Dashboard
- EC2 Global View
- Events
- ▼ Instances
 - Instances
 - Instance Types
 - Launch Templates
 - Spot Requests
 - Savings Plans
 - Reserved Instances
 - Dedicated Hosts
 - Capacity Reservations
- ▼ Images
 - AMIs
 - AMI Catalog
- ▼ Elastic Block Store
 - Volumes
 - Snapshots
 - Lifecycle Manager
- ▼ Network & Security
 - Security Groups
 - Elastic IPs

Instance summary for i-032a3006d801e0814

Updated less than a minute ago

Instance ID i-032a3006d801e0814	Public IPv4 address 98.82.117.149 open address	Private IPv4 addresses 172.31.64.231
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-98-82-117-149.compute-1.amazonaws.com open address
Hostname type IP name: ip-172-31-64-231.ec2.internal	Private IP DNS name (IPv4 only) ip-172-31-64-231.ec2.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 98.82.117.149 [Public IP]	VPC ID vpc-0d7818433017c2c0d	Auto Scaling Group name backend-server-asg
IAM Role -	Subnet ID subnet-056eda8ca2426bd92	Managed false
IMDSv2 Required	Instance ARN arn:aws:ec2:us-east-1:103619411293:instance/i-032a3006d801e0814	
Operator -		

[Details](#) | [Status and alarms](#) | [Monitoring](#) | [Security](#) | [Networking](#) | [Storage](#) | [Tags](#)

▼ Instance details

AMI ID	Monitoring	Platform details
--------	------------	------------------

← → ↺ ⚠ Not Secure backend-alb-677981445.us-east-1.elb.amazonaws.com/students

DeepSeek - Into th... ChatGPT Redis Deep Dive f... Claude Inbox (6) - saurab... Practice Questions - Googl... An

Pretty-print

```
[
  {
    "name": "Alice",
    "email": "alice@miu.edu",
    "id": "S100"
  },
  {
    "name": "Bob",
    "email": "bob@miu.edu",
    "id": "S101"
  },
  {
    "name": "Carol",
    "email": "carol@miu.edu",
    "id": "S102"
  },
  {
    "name": "David",
    "email": "david@miu.edu",
    "id": "S103"
  },
  {
    "name": "Eve",
    "email": "eve@miu.edu",
    "id": "S104"
  },
  {
    "name": "Frank",
    "email": "frank@miu.edu",
    "id": "S105"
  },
  {
    "name": "Grace",
    "email": "grace@miu.edu",
    "id": "S106"
  }
]
```

2. Frontend Infrastructure: CloudFront, S3

The screenshot shows the AWS CloudFront console interface. The left sidebar contains navigation links for CloudFront, Distributions, Policies, Functions, Static IPs, VPC origins, What's new, Telemetry, Reports & analytics, Security, and Key management. The main content area is for distribution EII0KNLAIN98Z, with tabs for General, Security, Origins (selected), Behaviors, Error pages, Invalidation, Tags, and Logging. The 'Origins' tab displays a table with one origin: saurab.ghimire.cloudcomputing.workshop2.s3.us-east-1.amazonaws.com, with origin type S3. Below the table, there is a section for 'Origin groups' which is currently empty, with a 'Create origin group' button.

CloudFront > **Distributions** > EII0KNLAIN98Z

Origins

Origin name	Origin domain	Origin path	Origin type
saurab.ghimire.cloudcomputing.workshop2	saurab.ghimire.cloudcomputing.workshop2.s3.us-east-1.amazonaws.com		S3

Origin groups

No origin groups
You don't have any origin groups.

The screenshot shows the AWS CloudFront console interface for distribution EII0KNLAIN98Z, with the 'General' tab selected. The 'Details' section shows the distribution domain name, ARN, and last modified date. The 'Settings' section shows the description, price class, supported HTTP versions, alternate domain names, standard logging, cookie logging, and default root object. The 'Continuous deployment' section has a 'Create staging distribution' button.

CloudFront > **Distributions** > EII0KNLAIN98Z

General

Details

Property	Value
Distribution domain name	d2eit843v46y9.cloudfront.net
ARN	arn:aws:cloudfront::103619411293:distribution/EII0KNLAIN98Z
Last modified	April 14, 2025 at 5:02:36 PM UTC

Settings

Property	Value
Description	-
Price class	Use all edge locations (best performance)
Supported HTTP versions	HTTP/2, HTTP/1.1, HTTP/1.0
Alternate domain names	-
Standard logging	Off
Cookie logging	Off
Default root object	index.html









Continuous deployment

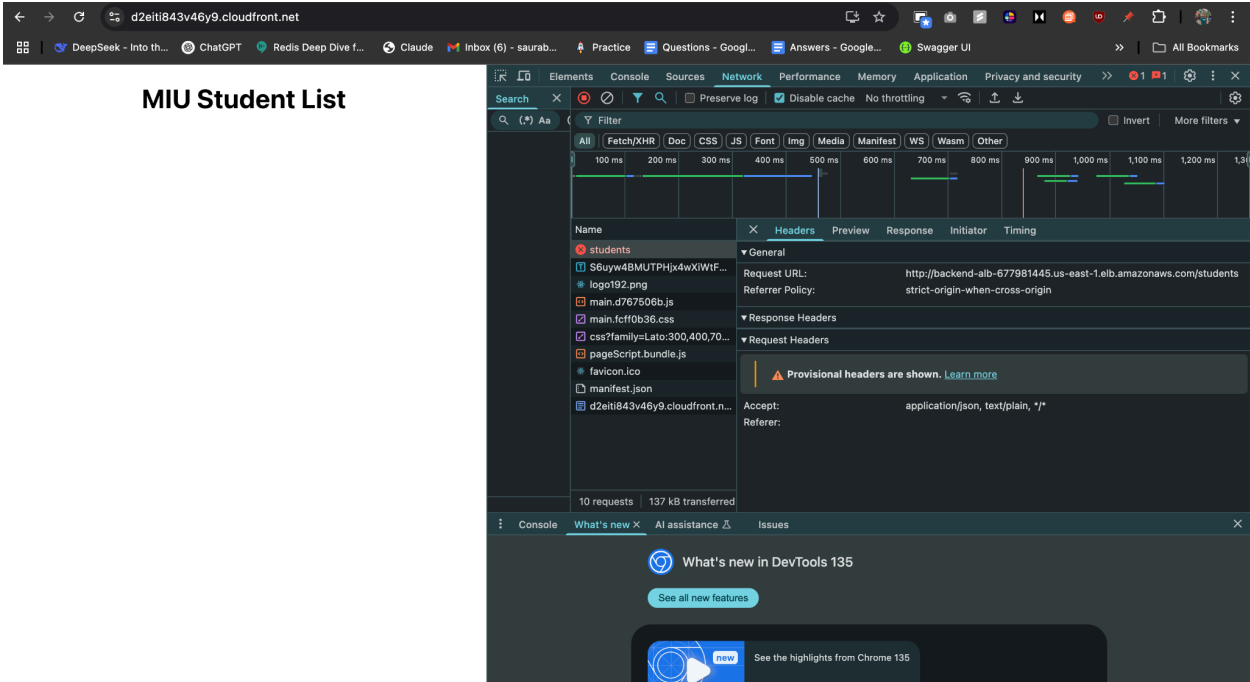
Create staging distribution

[Objects](#) | [Metadata](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

 Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Find objects by prefix

	Name	type	Last modified	Size	Storage class
<input type="checkbox"/>	 asset-manifest.json	json	April 14, 2025, 11:48:02 (UTC-05:00)	517.0 B	Standard
<input type="checkbox"/>	 favicon.ico	ico	April 14, 2025, 11:48:02 (UTC-05:00)	3.8 KB	Standard
<input type="checkbox"/>	 index.html	html	April 14, 2025, 11:48:02 (UTC-05:00)	649.0 B	Standard
<input type="checkbox"/>	 logo192.png	png	April 14, 2025, 11:48:02 (UTC-05:00)	5.2 KB	Standard
<input type="checkbox"/>	 logo512.png	png	April 14, 2025, 11:48:03 (UTC-05:00)	9.4 KB	Standard
<input type="checkbox"/>	 manifest.json	json	April 14, 2025, 11:48:03 (UTC-05:00)	492.0 B	Standard
<input type="checkbox"/>	 robots.txt	txt	April 14, 2025, 11:48:03 (UTC-05:00)	67.0 B	Standard
<input type="checkbox"/>	 static/	Folder			



MIU Student List

Alice - alice@miu.edu - S100
Bob - bob@miu.edu - S101
Carol - carol@miu.edu - S102
David - david@miu.edu - S103
Eve - eve@miu.edu - S104
Frank - frank@miu.edu - S105
Grace - grace@miu.edu - S106
Hank - hank@miu.edu - S107
Ivy - ivy@miu.edu - S108
Jack - jack@miu.edu - S109