

ASG Tasks - 01

- Create one VPC in North Virginia region.

Details Info			
VPC ID vpc-0535d400a67eee4e7	State Available	Block Public Access Off	DNS hostnames Disabled
DNS resolution Enabled	Tenancy default	DHCP option set dopt-054937f55b4bc2575	Main route table rtb-0f8e62999289eb8ae
Main network ACL acl-058f025e7cf6faaba	Default VPC No	IPv4 CIDR 192.168.0.0/16	IPv6 pool -
IPv6 CIDR (Network border group) -	Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID 526018540742
Encryption control ID -	Encryption control mode -		

- Create two subnets: one public subnet and one private subnet.

<input type="checkbox"/> asg-01	subnet-0f528593936e9d361	Available	vpc-0535d400a67eee4e7 ASG...	Off	192.168.0.0/26
<input type="checkbox"/> asg-02	subnet-0cd7db87245e9c9c7	Available	vpc-0535d400a67eee4e7 ASG...	Off	192.168.0.96/28

- Attach an IGW to the VPC.

Internet gateway igw-018fe7d0555545f12 successfully attached to vpc-0535d400a67eee4e7					
igw-018fe7d0555545f12 / ASG-gw					
Actions					
Details Info					
Internet gateway ID igw-018fe7d0555545f12	State Attached	VPC ID vpc-0535d400a67eee4e7 ASG-01	Owner 526018540742		

- Create one public route table (RT) and one private route table.


<input type="checkbox"/> asg-pub	rtb-018d66a7d870cf5f9	subnet-0f528593936e9d...	-	No	vpc-0535d400a67eee4e7 ASG...	526018540742
<input type="checkbox"/> asg-pri	rtb-0522d4627df9b5e67	subnet-0cd7db87245e9c...	-	No	vpc-0535d400a67eee4e7 ASG...	526018540742

- Deploy a NAT gateway in the public subnet and attach the NAT gateway to the private subnet.


rtb-0522d4627df9b5e67 / asg-pri

DetailsInfo


Route table ID

 rtb-0522d4627df9b5e67


VPC

 vpc-0535d400a67eee4e7 | ASG-01

Main

 No

Owner ID

 526018540742

Explicit subnet-

Routes


Subnet associations



Edge associations

Route propagation

Tags

Routes (2)

 Filter routes

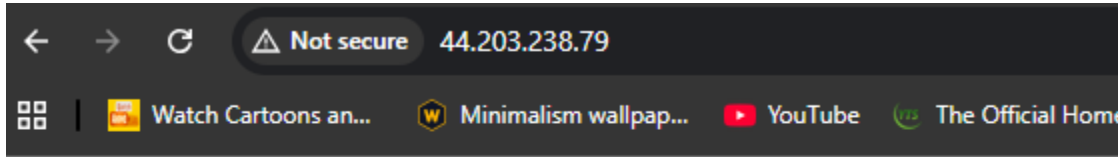
Destination	Target	Status
0.0.0.0/0	nat-157f1a77192259e38	 Active
192.168.0.0/16	local	 Active

- Create two instances, one in the public subnet and one in the private subnet.

<input type="checkbox"/> Private-ASG	i-07b92145b12858462	Running	t2.micro	Initializing	View alarms +	us-east-1a
<input type="checkbox"/> Public-ASG	i-01da19c813a6fedf2	Running	t2.micro	Initializing	View alarms +	us-east-1a

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- Deploy Apache server on both EC2 instances with a sample index.html file.



Apache is running!

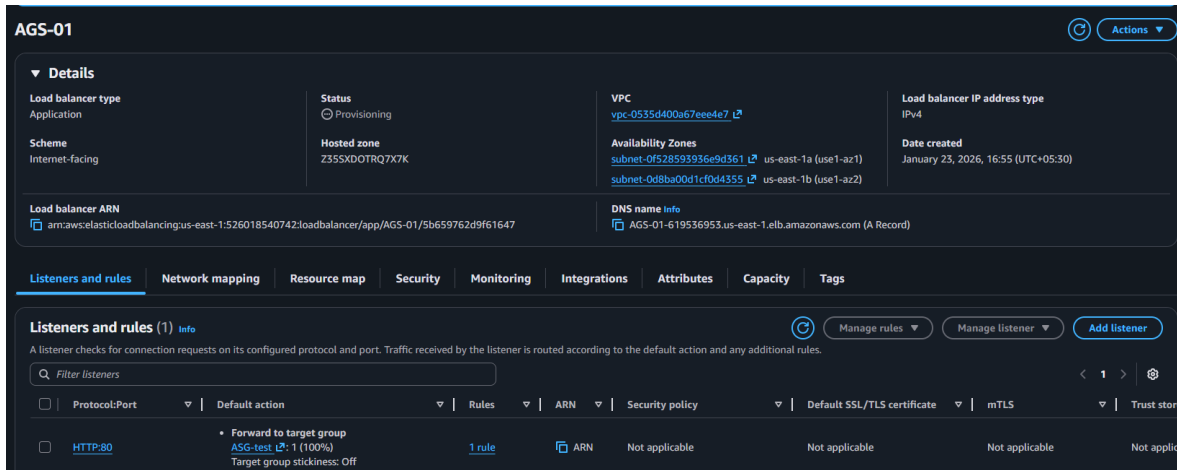
Instance: ip-192-168-0-19.ec2.internal

Public Instance

```
[ec2-user@ip-192-168-0-106 ~]$ curl http://192.168.0.106
<!DOCTYPE html>
<html>
<head>
  <title>Apache Test</title>
</head>
<body>
  <h1>Apache is running! even on private</h1>
  <p>Instance: ip-192-168-0-106.ec2.internal</p>
</body>
</html>
[ec2-user@ip-192-168-0-106 ~]$ |
```

Private Instance.

- Create one application load balancer and attach it to both EC2 instances.



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Details

arn:aws:elasticloadbalancing:us-east-1:526018540742:targetgroup/ASG-test/bafd7b2160d71236

Target type

Instance

Protocol : Port

HTTP: 80

Protocol version

HTTP1

VPC

vpc-0535d400a67eee4e7 [↗](#)

IP address type

IPv4

Load balancer

[None associated](#)

2

Total targets

0

Healthy

0

Unhealthy

0

Unused

2

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 (2) [Info](#)

[Anomaly mitigation: Not applicable](#) [Refresh](#) [Deregister](#) [Refresh](#)

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

<input type="checkbox"/>	Instance ID	Name	Port	Zone	Health status	Health status details	Administrative o...	Override details	Launch
<input type="checkbox"/>	i-01da19c813a6fedf2	Public-ASG	80	us-east-1a (us...	Initial	Target registration is i...	No override	No override is curre...	Januar
<input type="checkbox"/>	i-07b92145b12858462	Private-ASG	80	us-east-1a (us...	Initial	Target registration is i...	No override	No override is curre...	Januar

← → ↺

Not secure

ags-01-619536953.us-east-1.elb.amazonaws.com

Watch Cartoons an...

Minimalism wallpap...

YouTube

The Official Home o...

Gmail

Map

Apache is running! even on private

Instance: ip-192-168-0-106.ec2.internal

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- Store application load balancer logs in S3.

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "AWSALBLogDeliveryWrite",
      "Effect": "Allow",
      "Principal": {
        "AWS": "arn:aws:iam::127311923021:root"
      },
      "Action": "s3:PutObject",
      "Resource": "arn:aws:s3:::alb-logs-ags01/AWSLogs/526018540742/*",
      "Condition": {
        "StringEquals": {
          "s3:x-amz-acl": "bucket-owner-full-control"
        }
      }
    },
    {
      "Sid": "AWSALBLogDeliveryAclCheck",
      "Effect": "Allow",
      "Principal": {
        "AWS": "arn:aws:iam::127311923021:root"
      },
      "Action": "s3:GetBucketAcl",
      "Resource": "arn:aws:s3:::alb-logs-ags01"
    }
  ]
}
```

Protection

☐ Deletion protection

To prevent your load balancer from being deleted accidentally, turn on deletion protection. If you turn on deletion protection, you must turn it off before you can delete the load balancer.

Monitoring

☒ Access logs

Access logs deliver detailed logs of all requests made to your Elastic Load Balancer. Choose an existing S3 location. If you don't specify a prefix, the logs are stored in the root of the bucket. Additional charges apply. [Learn more](#)

S3 URI

Q s3://alb-logs-ags01

Format: s3://bucket/prefix

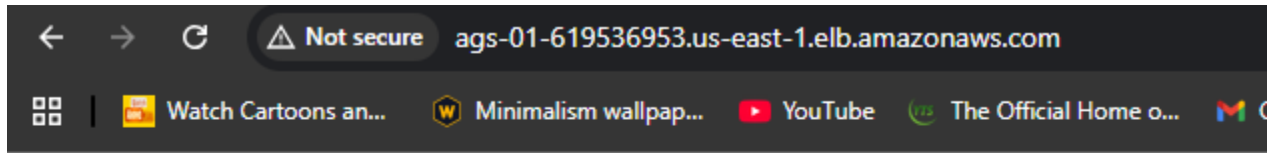
☐ Connection logs

Connection logs deliver detailed logs of all connections made to your Elastic Load Balancer. Choose an existing S3 location. If you don't specify a prefix, the logs are stored in the root of the bucket. Additional charges apply. [Learn more](#)

☐ Health check logs - *new*

Health check logs deliver detailed logs of health checks for all targets in your Elastic Load Balancer's target groups. Choose an existing S3 location. If you don't specify a prefix, the logs are stored in the root of the bucket. Additional charges apply. [Learn more](#)

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Apache is running! even on private

Instance: ip-192-168-0-106.ec2.internal

25/ Copy S3 URI

Objects | Properties

Objects (3) Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Show versions < 1 > Settings

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	526018540742_elasticloadbalancing_us-east-1_app.AGS-01.5b659762d9f61647_20260125T12352_98.86.29.61_5i0cp8kf.log.gz	gz	January 25, 2026, 18:05:07 (UTC+05:30)	1.3 KB	Standard
<input type="checkbox"/>	526018540742_elasticloadbalancing_us-east-1_app.AGS-01.5b659762d9f61647_20260125T12402_98.86.29.61_482lrzy0.log.gz	gz	January 25, 2026, 18:07:45 (UTC+05:30)	1.0 KB	Standard
<input type="checkbox"/>	526018540742_elasticloadbalancing_us-east-1_app.AGS-01.5b659762d9f61647_20260125T12402	gz	January 25, 2026, 18:06:49 (UTC+05:30)	397.0 B	Standard

ASG Tasks - 01

- Store the VPC flow logs in a CloudWatch log group.

VPCFlowLogsRole [Info](#)

Summary

Creation date
January 06, 2026, 16:17 (UTC+05:30)

Last activity
 2 days ago

ARN
 arn:aws:iam::526

Maximum session du
1 hour

Permissions

Trust relationships

Tags

Last Accessed

Revoke sessions

Trusted entities

Entities that can assume this role under specified conditions.

```
1 {  
2   "Version": "2012-10-17",  
3   "Statement": [  
4     {  
5       "Effect": "Allow",  
6       "Principal": {  
7         "Service": "vpc-flow-logs.amazonaws.com"  
8       },  
9       "Action": "sts:AssumeRole"  
10    }  
11  ]  
12 }
```

Permissions policies (1) [Info](#)

You can attach up to 10 managed policies.

☐

Policy name [↗](#)

☐

[CloudWatchLogsFullAccess](#)

Filter by Type

All types

▲

Type

AWS managed

▶

Permissions boundary (not set)

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fl-0b6ad0ab7431505c2

Details

Flow Log ID fl-0b6ad0ab7431505c2	Destination Type cloud-watch-logs	Traffic Type All	File Format -
Name -	Destination Name vpc-flow-logs	Max Aggregation Interval 10 minutes	Hive Configuration -
State Active	IAM Role arn:aws:iam::526018540742:role/VPCFlowLogsRole	Log Format Default	Partition -
Creation Time Sunday, January 25, 2026 at 18:16:08 GMT+5:30	Cross Account IAM Role -		

Tags | **Integrations**

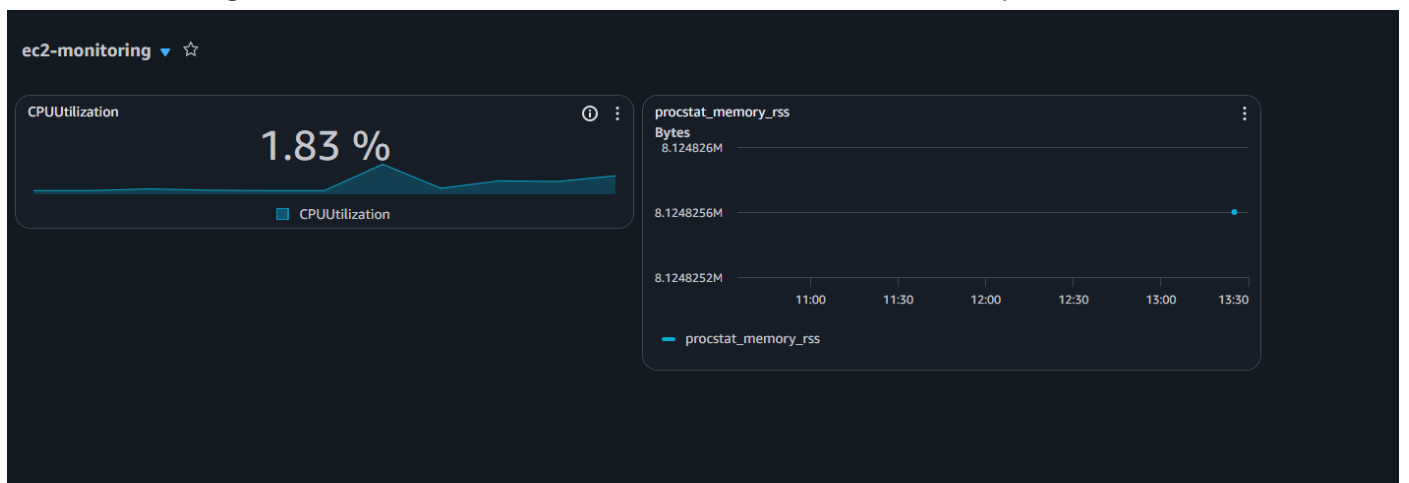
Log events

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Filter events - press enter to search

Timestamp	Message
	No older events at this moment. Retry
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 192.168.0.19 192.168.0.38 80 43580 6 5 704 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 95.168.178.138 192.168.0.38 59134 23 6 2 80 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 192.168.0.38 95.168.178.138 23 59134 6 2 80 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 192.168.0.38 141.225.220.91 0 0 1 1 32 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 193.163.125.99 192.168.0.38 56954 10027 6 1 44 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 192.168.0.38 95.168.178.138 2222 43647 6 2 80 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 67.145.202.60 192.168.0.38 43097 23 6 1 60 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 141.225.220.91 192.168.0.38 0 0 1 1 32 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 192.168.0.106 192.168.0.38 80 64256 6 5 721 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 47.251.63.50 192.168.0.38 27195 3478 17 1 56 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 194.180.49.101 192.168.0.38 44904 495 6 1 40 1769345235 1769345262 ACCEPT OK
2026-01-25T12:47:15.000Z	2 526018540742 eni-0328f0346c983e06a 95.168.178.138 192.168.0.38 43647 2222 6 2 80 1769345235 1769345262 ACCEPT OK

- Create monitoring dashboards to monitor CPU utilization and to monitor the Apache service.



ASG Tasks - 01

- If CPU utilization is more than 70%, then it should trigger auto scaling and launch new instance.

☰

EC2 > Launch templates > Create launch template

✓ Success

Successfully created Testing-Template(lt-0ca17c3617b859828).

▶ Actions log

Next Steps

Create dynamic scaling policy

Policy type

Target tracking scaling

Scaling policy name

Target Tracking Policy

Metric type

Info

Monitored metric that determines if resource utilization is too low or high. If using EC2 metrics, consider enabling detailed monitoring for better scaling performance.

Average CPU utilization

Target value

70

Instance warmup

Info

300

seconds

☒ Disable scale in to create only a scale-out policy

Auto Scaling groups (1/1)

Info

Last updated 4 minutes ago

Launch configurations

Search your Auto Scaling groups

<input checked="" type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability
<input checked="" type="checkbox"/>	Test-Scaling	Testing-Template Version Default	1	-	1	1	3	use1-az1 (us-east-1a)

Auto Scaling group: Test-Scaling

Details

Integrations

Automatic scaling

Instance management

Instance refresh

Activity

Monitoring

Tags - moved

Test-Scaling Capacity overview

arn:aws:autoscaling:us-east-1:526018540742:autoScalingGroup:fb4f45c5-4222-4836-b255-d125f55c2d05:autoScalingGroupName/Test-Scaling

Desired capacity

1

Scaling limits

1 - 3

Desired capacity type

Units (number of instances)

Date created

Mon Jan 26 2026 12:46:55 GMT+0530 (India Standard Time)

Launch template