

AWS Task-3

1. Create a S3 bucket, with no public access and upload files to the bucket & view the logs using cloudwatch for the uploaded files.

Create an S3 Bucket with No Public Access:

Amazon S3 console - Create bucket

Bucket name:

Copy settings from existing bucket - optional

Object Ownership

Object Ownership

Block Public Access settings for this bucket

Bucket Versioning

General purpose buckets | All AWS Regions | Directory buckets

General purpose buckets (1) Info

Buckets are containers for data stored in S3.

Find buckets by name

Name	AWS Region	Creation date
my-sourcebucket-2026	US East (N. Virginia) us-east-1	February 18, 2026, 08:36:29 (UTC+05:30)

Uploaded files to s3 bucket:

Amazon S3

Upload succeeded

Upload: status

Summary

Destination	Succeeded	Failed
s3://my-sourcebucket-2026	3 files, 1.6 MB (100.00%)	0 files, 0 B (0%)

Files and folders

Files and folders (3 total, 1.6 MB)

Name	Folder	Type	Size	Status	Error
Kubernetes Task-2.pdf	-	application/pdf	696.4 KB	Succeeded	-
Docker Task -3.pdf	-	application/pdf	326.6 KB	Succeeded	-
VCS Task.pdf	-	application/pdf	597.3 KB	Succeeded	-

Upload succeeded
For more information, see the Files and folders table.

my-sourcebucket-2026 info

Objects | Metadata | Properties | Permissions | Metrics | Management | Access Points

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

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	Docker Task-3.pdf	pdf	February 18, 2026, 08:40:28 (UTC+05:30)	326.6 KB	Standard
<input type="checkbox"/>	Kubernetes Task-2.pdf	pdf	February 18, 2026, 08:40:27 (UTC+05:30)	696.4 KB	Standard
<input type="checkbox"/>	VCS Task.pdf	pdf	February 18, 2026, 08:40:28 (UTC+05:30)	597.3 KB	Standard

Enabling CloudTrail Logging for S3:

Created cloud trail for s3 bucket and enabled cloudwatch logs and created new role

CloudTrail > Trails

You can now enrich CloudTrail events with additional information by adding resource tags and IAM global keys in CloudTrail Lake. [Learn more](#)

Trails

Name	Home region	Multi-region trail	ARN	Insights	Organization trail	S3 bucket	Log file prefix	CloudWatch Logs log group	Status
s3-cloud-trail	US East (N. Virginia)	Yes	arn:aws:cloudtrail:us-east-1:260448776023:trail/s3-cloud-trail	Disabled	No	my-sourcebucket-2026	S3Logs	arn:aws:logs:us-east-1:260448776023:log-group:aws-cloudtrail-log-260448776023-7a08e472*	Logging

[arn:aws:cloudtrail:us-east-1:260448776023:trail/s3-cloud-trail](#) > Edit

Edit arn:aws:cloudtrail:us-east-1:260448776023:trail/s3-cloud-trail info

CloudWatch Logs - optional
Configure CloudWatch Logs to monitor your trail logs and notify you when specific activity occurs. Standard CloudWatch and CloudWatch Logs charges apply. [Learn more](#)

CloudWatch Logs info

☒ Enabled

Log group info

☐ New

☒ Existing

Log group name

1-512 characters. Only letters, numbers, dashes, underscores, forward slashes, and periods are allowed.

IAM Role info

AWS CloudTrail assumes this role to send CloudTrail events to your CloudWatch Logs log group.

☐ New

☒ Existing

Role name

Policy document

[Trails](#) > [am-awscloudtrail:us-east-1:260448776023:trail/s3-cloud-trail](#)

s3-cloud-trail

Trail logging

Logging

Trail name

s3-cloud-trail

Multi-region trail

Yes

Apply trail to my organization

Not enabled

Trail log location

my-s3bucket

2024/03/09/TrailLogs/260448776023

Last log file delivered

February 18, 2026, 09:42:40 (UTC+05:30)

Log file SSE-KMS encryption

Not enabled

Log file validation

Enabled

Last file validation delivered

February 18, 2026, 09:37:04 (UTC+05:30)

SMS notification delivery

Disabled

Last SMS notification

-

CloudWatch Logs

Log group

aws-logs-2024/03/09/TrailLogs/260448776023-7a26b472

IAM Role

arn:aws:iam::260448776023:role/service-role/CS3Cloudwatch-2026

Tags

Key

Value

No tags

No tags associated with this trail

Aggregated events - New

No aggregated templates selected

Management events

Management events are not configured for this trail

Data events: S3 (1)

Bucket name

Prefix

Read

Write

All current and future S3 buckets

Enabled

Enabled

Insights events

Insights events are not configured for this trail

Network activity events

You're currently using basic event selectors to log data events. To log network activity events, you must switch to advanced event selectors.

View uploaded logs in cloudwatch:

CloudWatch > Log management

CloudWatch

Log groups

Data sources - new

Summary

Get-set-go with unified data store

Log groups (2)

By default, we only load up to 10,000 log groups.

☒ Exact match

<input type="checkbox"/>	Log group	Log class	Anomaly d...	Detection protection	Data protection	Sensitive data count	Retention	Metric filters	Contributor Insights	Subscri...
<input type="checkbox"/>	/aws/cloudtrail/33-upload-logs	Standard	Configure	<input type="radio"/> Off	-	-	Never expire	-	-	-
<input type="checkbox"/>	aws-cloudtrail-logs-260448776023-7a08e472	Standard	Configure	<input type="radio"/> On	-	-	Never expire	-	-	-

Log Management

New

Log Anomalies

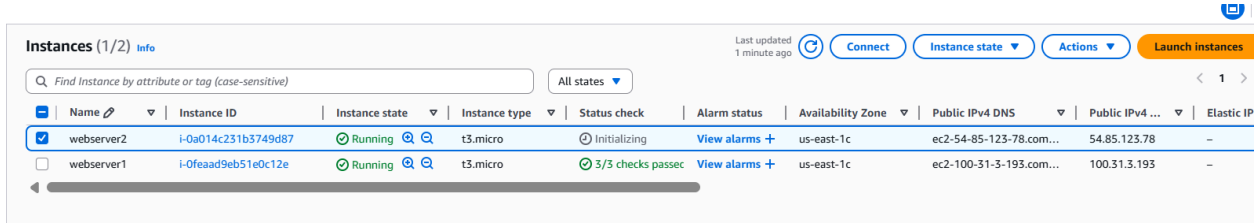
Live Tail

Logs Insights

[illegible]

- Launch two ec2-instances and connect it to a application load balancer, where the output traffic from the server must be an load balancer IP address

Launch two ec2-instances:



The screenshot shows the AWS Management Console 'Instances' page. Two instances are listed: 'webserver2' (ID: i-0a014c231b3749d87) and 'webserver1' (ID: i-0fead9eb51e0c12e). Both are 'Running' and of type 't3.micro'. The status check for 'webserver1' shows '3/3 checks passed', while 'webserver2' is 'Initializing'. The table includes columns for Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, Public IPv4 DNS, Public IPv4 address, and Elastic IP.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
webserver2	i-0a014c231b3749d87	Running	t3.micro	Initializing	View alarms +	us-east-1c	ec2-54-85-123-78.com...	54.85.123.78	-
webserver1	i-0fead9eb51e0c12e	Running	t3.micro	3/3 checks passed	View alarms +	us-east-1c	ec2-100-31-3-193.com...	100.31.3.193	-

first Ec2 instance(webserver1):

Installing Apache server and started/enabled and created index.html file

```
[ec2-user@ip-172-31-26-86 ~]$ sudo yum install -y httpd # Amazon Linux
sudo systemctl start httpd
sudo systemctl enable httpd
Last metadata expiration check: 0:01:33 ago on Wed Feb 18 06:52:00 2026.
Dependencies resolved.
```

```
[ec2-user@ip-172-31-26-86 ~]$ echo "Hello from Instance 1" | sudo tee /var/www/html/index.html
Hello from Instance 1
[ec2-user@ip-172-31-26-86 ~]$ ls
[ec2-user@ip-172-31-26-86 ~]$ ls -ltr
total 0
[ec2-user@ip-172-31-26-86 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-26-86 html]$ ls
index.html
```

2nd Ec2 instance(webserver2):

Installing Apache server and started/enabled and creating index.html file

```
[ec2-user@ip-172-31-24-56 ~]$ sudo yum install -y httpd # Amazon Linux
sudo systemctl start httpd
sudo systemctl enable httpd
Amazon Linux 2023 Kernel Livepatch repository 201 kB/s
Dependencies resolved.
=====
Package                                Architecture Version                                Repository
=====
Installing:
[ec2-user@ip-172-31-24-56 ~]$ echo "Hello from Instance 2" | sudo tee /var/www/html/index.html
Hello from Instance 2
[ec2-user@ip-172-31-24-56 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-24-56 html]$ ls
index.html
[ec2-user@ip-172-31-24-56 html]$
```

Attach the one security group to both the instances:

Security Groups > sg-0b2345e6ce58201ec - launch-wizard-14

sg-0b2345e6ce58201ec - launch-wizard-14 Actions

Details

Security group name launch-wizard-14	Security group ID sg-0b2345e6ce58201ec	Description launch-wizard-14 created 2026-02-18T07:00:39.523Z	VPC ID vpc-0d0636079a7bfa7fd
Owner 260448776023	Inbound rules count 1 Permission entry	Outbound rules count 1 Permission entry	

Inbound rules | Outbound rules | Sharing | VPC associations | **Related resources - new** | Tags

Related resources Feedback

4 resources related to the sg-0b2345e6ce58201ec found across 69 AWS resources.

Resources | Resources investigated

Resources (4)

Filter resources

Resource identifier	Service	Resource type
eni-0c0c0a2ab5faea72	EC2	NetworkInterfaces
eni-0f6fc9c804ecf41c	EC2	NetworkInterfaces
i-0a014c231b5749d87	EC2	Instances
i-0feaad9eb51e0c12e	EC2	Instances

Created target group(MyTG) by registering two instances:

2 targets registered successfully to MyTG. ×

MyTG Actions

Details

arn:aws:elasticloadbalancing:us-east-1:260448776023:targetgroup/MyTG/6ed7d8e18387495b

Target type Instance	Protocol : Port HTTP: 80	Protocol version HTTP1	VPC vpc-0d0636079a7bfa7fd
IP address type IPv4	Load balancer MyALB		

2 Total targets 2 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 (2) Info 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

<input type="checkbox"/>	Instance ID	Name	Port	Zone	Health status	Health status details	Admini...	Overrid...	Launch ...	Anomaly detectio...
<input type="checkbox"/>	i-0a014c231b5749d87	webserver2	80	us-east-1c (use...	Healthy	-	No override...	No overrid...	February 1...	Normal
<input type="checkbox"/>	i-0feaad9eb51e0c12e	webserver1	80	us-east-1c (use...	Healthy	-	No override...	No overrid...	February 1...	Normal

Added **/index.html** in the path:

2 targets registered successfully to MyTG.

MyTG

Details

arn:aws:elasticloadbalancing:us-east-1:260448776023:targetgroup/MyTG/6ed7d8e18387495b

Target type Instance	Protocol : Port HTTP: 80	Protocol version HTTP1	VPC vpc-0d0636079a7bfa7fd
IP address type IPv4	Load balancer MyALB		

2 Total targets	2 Healthy 0 Anomalous	0 Unhealthy	0 Unused	0 Initial	0 Draining
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► 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

Health check settings

Protocol HTTP	Path /index.html	Port Traffic port	Healthy threshold 2 consecutive health check successes
Unhealthy threshold 2 consecutive health check failures	Timeout 5 seconds	Interval 30 seconds	Success codes 200

Edit

Created Application Load Balancer(MyALB) and attached the above created target group(MyTG):

MyALB

It might take a few minutes for your load balancer to fully set up and route traffic. Targets will also take a few minutes to complete the registration process and pass initial health checks.

Introducing ALB target optimizer
Target optimizer lets you enforce a maximum number of requests per target using an ALB-provided agent, improving success rates, latency, and efficiency. [Learn more](#)

MyALB

Details

Load balancer type Application	Status Provisioning	VPC vpc-0d0636079a7bfa7fd	Load balancer IP address type IPv4
Scheme Internet-facing	Hosted zone Z35SXDOTRQ7X7K	Availability Zones subnet-0aae272bf8fcbfa9b us-east-1e (use1-az3) subnet-0bfcaec7b8c705d39 us-east-1d (use1-az5) subnet-0c573244875057778 us-east-1c (use1-az4) subnet-07df075f851580a0c us-east-1a (use1-az1) subnet-012a79f865f6ef34a us-east-1f (use1-az5) subnet-007cc4c319a7f99e us-east-1b (use1-az2)	Date created February 18, 2026, 12:53 (UTC+05:30)

Load balancer ARN
[arn:aws:elasticloadbalancing:us-east-1:260448776023:loadbalancer/app/MyALB/92f96906d502d47a](#)

DNS name
[MyALB-1110972129.us-east-1.elb.amazonaws.com](#) (A Record)

Listeners and rules | Network mapping | Resource map | Security | Monitoring | Integrations | Attributes | Capacity | Tags

Listeners and rules (1)

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.

Filter listeners

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

Added ALB security group to Ec2 security group:

C2 > Security Groups > sg-0b23456ce58201ec - launch-wizard-14 > Edit inbound rules

Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

Security group rule ID	Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>	
sg-01c5979cc59b94a06	HTTP	TCP	80	Custom	Q	<div>sg-00b7f8d4185561a47 X</div> <div>0.0.0.0/0 X</div> <div>Delete</div>
sg-097d9730f1884193c	SSH	TCP	22	Custom	Q	<div>Delete</div>

[Add rule](#)

Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

[Cancel](#) [Preview changes](#) [Save rules](#)

Verifying the Output traffic from browser by using ALB DNS:

