

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:

The screenshot shows the 'Create bucket' wizard in the AWS S3 console. The bucket name is set to 'my-sourcebucket-2026'. Under 'Object Ownership', 'ACLS disabled (recommended)' is selected. In the 'Block Public Access settings for this bucket' section, 'Block all public access' is checked. The 'Bucket Versioning' section is also visible. At the bottom, the 'General purpose buckets' tab is active, showing one bucket named 'my-sourcebucket-2026' created on February 18, 2026, at 08:36:29 UTC+05:30.

Uploaded files to s3 bucket:

The screenshot shows the 'Upload succeeded' confirmation page after a file upload. It displays a summary table with 3 files (1.6 MB) and a detailed 'Files and folders' table listing three PDF files: 'Kubernetes Task-2.pdf', 'Docker Task-3.pdf', and 'VCS Task.pdf', all with successful upload status.

Buckets > my-sourcebucket-2026

Upload succeeded
For more information, see the [Files and folders table](#).

my-sourcebucket-2026 [Info](#)

[Objects](#) (3) [Metadata](#) [Properties](#) [Permissions](#) [Metrics](#) [Management](#) [Access Points](#)

Objects (3)
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](#)

<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	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
aws-cloudtrail-logs-260448776023-7a08e472
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
S3cloudwatch-2026

Policy document

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

Trails > arn:aws:cloudtrail:us-east-1:260448776023:trail/s3-cloud-trail

s3-cloud-trail

[Delete](#) [Stop logging](#)

[Edit](#)

General details

Trail logging	Logging
Trail name	s3-cloud-trail
Multi-region trail	Yes
Apply trail to my organization	Not enabled

CloudWatch Logs

[Log group](#)
arn:aws:cloudtrail-log:260448776023:log/S3Cloudwatch-2024

[IAM Role](#)
arn:aws:iam::260448776023:role/service-role/s3Cloudwatch-2024

[Edit](#) [Manage tags](#)

Tags

Key	Value
-----	-------

No tags
No tag associated with this trail

[Edit](#)

Aggregated events - New

No aggregated templates selected

[Edit](#)

Management events

Management events are not configured for this trail

[Edit](#)

Data events : S3 (1)

Bucket name	Prefix	Read	Write
All current and future S3 buckets		Enabled	Enabled

[Edit](#)

Insights events

Insights events are not configured for this trail

[Edit](#)

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:

The screenshot displays the AWS CloudWatch Log Management interface. At the top, there are tabs for 'Log groups' (selected), 'Data sources - new', and 'Summary'. The left sidebar shows navigation paths: 'CloudWatch' > 'Log management' > 'aws-cloudtrail-logs-260448776023-7a08e472' > '260448776023_CloudTrail_us-east-1'. Under 'Log groups', the 'Log groups (2)' section lists two entries: '/aws/cloudtrail/s3-upload-log' and 'aws-cloudtrail-log-260448776023-7a08e472'. The 'Log events' section shows log entries from 2020-02-18T04:23:48.455Z to 2020-02-18T04:23:48.853Z. The 'CloudWatch Metrics' section shows metrics for 'Log Events' and 'Log Metrics'.

- 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:

Instances (1/2) Info									
<input type="text"/> Find Instance by attribute or tag (case-sensitive)		Instance state		Instance type		Status check		Actions	
	Name	Instance ID						Last updated	Launch instances
<input checked="" type="checkbox"/>	webserver2	i-0a014c231b5749d87	Running  	t3.micro	Initializing 	View alarms +	us-east-1c	ec2-54-85-123-78.com...	54.85.123.78 -
<input type="checkbox"/>	webserver1	i-0feaad9eb51e0c12e	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

```
./m/
[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
Dependencies resolved.                                              201 kB/s
=====
 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

Details

Security group name: Launch-wizard-14
Owner: 260448776023
Security group ID: sg-0b2345e6ce58201ec
Inbound rules count: 1 Permission entry
Outbound rules count: 1 Permission entry
Description: Launch-wizard-14 created 2026-02-18T07:00:39Z
VPC ID: vpc-0d0636079a7bfa7fd

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

Related resources

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

Resources | Resources investigated

Resources (4)

Resource identifier	Service	Resource type
eni-0c002ab5faea972	EC2	NetworkInterfaces
eni-0f6fc9c904ecf41c	EC2	NetworkInterfaces
i-0a014c231b3749db7	EC2	Instances
i-0feaad9eb51e0c12e	EC2	Instances

Created target group(MyTG) by registering two instances:

MyTG

Details

arn:aws:elasticloadbalancing:us-east-1:260448776023:targetgroup/MyTG/6ed7d9e18387495b

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 Initial
	0 Anomalous		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

Targets 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	Administrative	Overrides	Launch time	Anomaly detection
<input type="checkbox"/> i-0a014c231b3749db7	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

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

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):

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 Z355XD0T1RQ7X7K	Availability Zones	Date created February 18, 2026, 12:53 (UTC+05:30)
Load balancer ARN arnaws:elasticloadbalancing:us-east-1:260448776023:loadbalancer/app/MyALB/92f96906d502dd7a		DNS name info 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) 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	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:

[EC2](#) > [Security Groups](#) > [sg-0b2345e6ce58201ec - launch-wizard-14](#) > Edit inbound rules

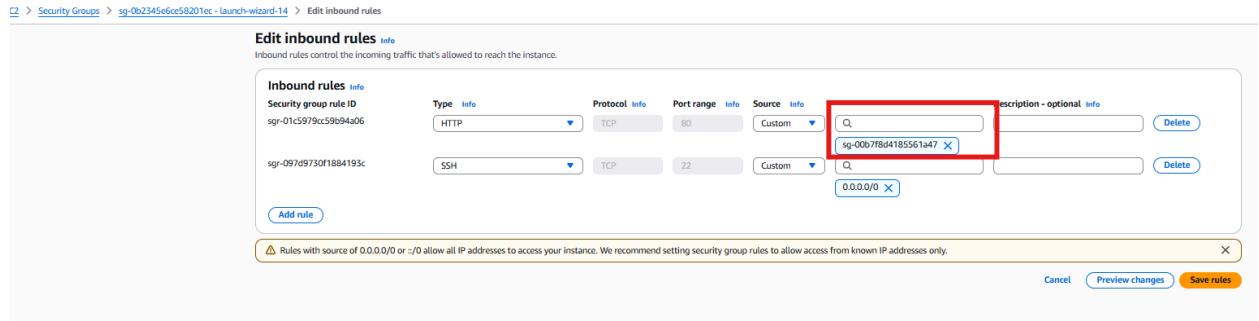
Edit inbound rules [Info](#)
Inbound rules control the incoming traffic that's allowed to reach the instance.

Inbound rules Info	Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info	Delete
sgr-01c5979cc59b94a06	HTTP	TCP	80	Custom	<input type="text" value="sg-00b7fb04185561a47"/> X	Delete
sgr-097d9730f1884195c	SSH	TCP	22	Custom	<input type="text" value="0.0.0.0/0"/> X	Delete

[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:

