

## Lesson 05 Demo 08

### Configuring CloudFront Distribution with S3 Origin

**Objective:** To host static web content in an Amazon S3 bucket, protected and accelerated by Amazon CloudFront for efficient content delivery

**Tools required:** AWS account

**Prerequisites:** AWS Lab access with an AWS account created

Steps to be followed:

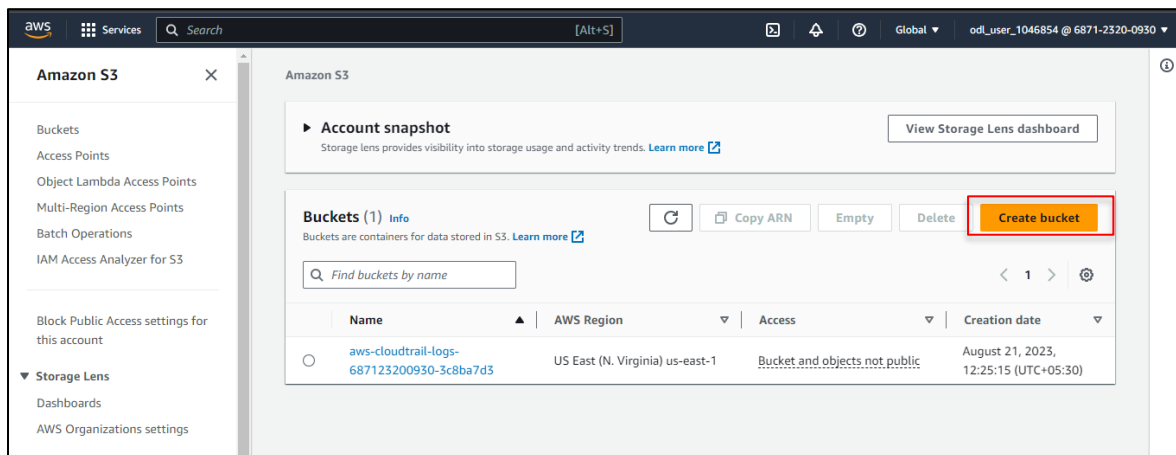
1. Create an S3 bucket
2. Upload a file
3. Configure Amazon CloudFront

#### Step 1: Create an S3 bucket

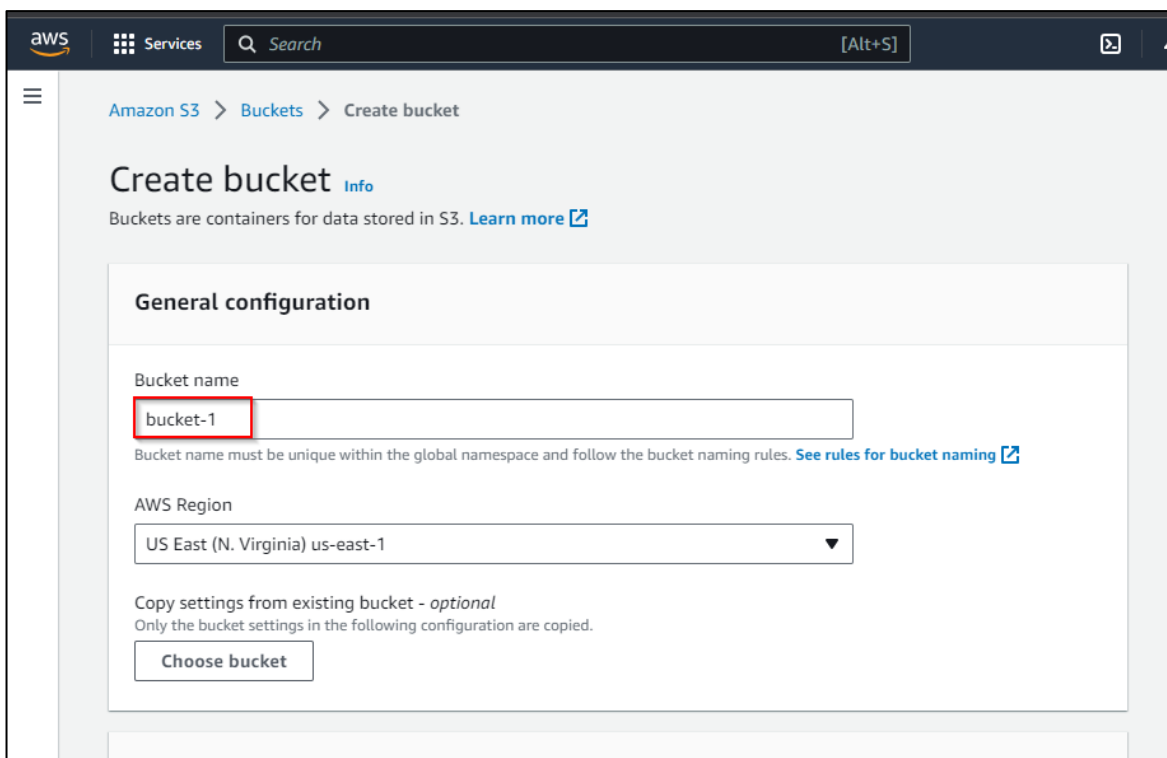
1.1 Navigate to the AWS Management Console, search for and select **S3**



## 1.2 Click on **Create bucket**



## 1.3 Provide a name for the bucket and enable **Bucket Versioning**



### Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Bucket Versioning

☐ Disable

☒ Enable

#### 1.4 Click on **Create bucket**

Encryption type [Info](#)

☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)

☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)

☐ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)

Secure your objects with two separate layers of encryption. For details on pricing, see [DSSE-KMS pricing](#) on the **Storage** tab of the [Amazon S3 pricing page](#).

Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#)

☐ Disable

☒ Enable

► **Advanced settings**

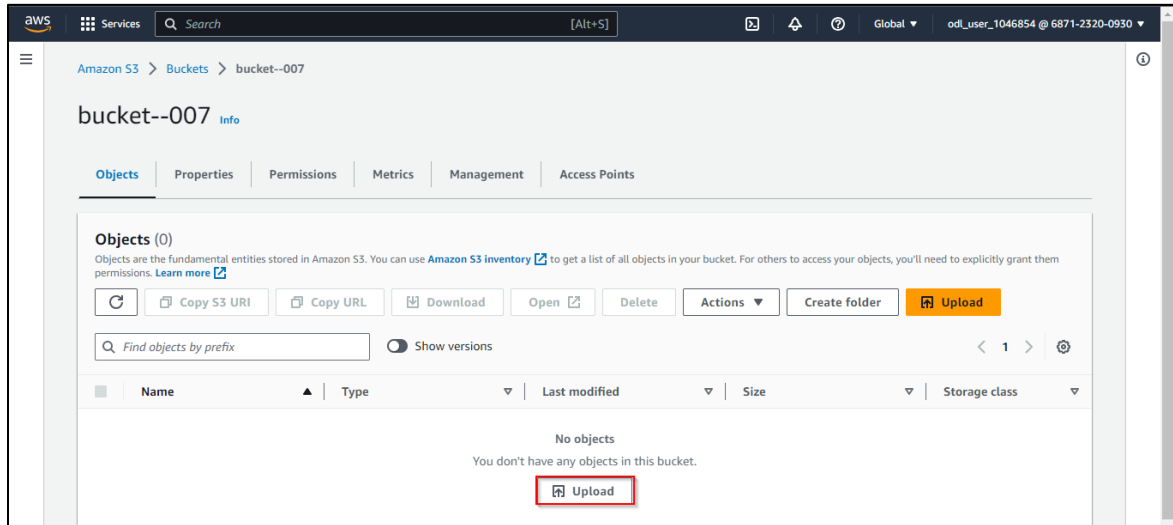
[i](#) After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel **Create bucket**

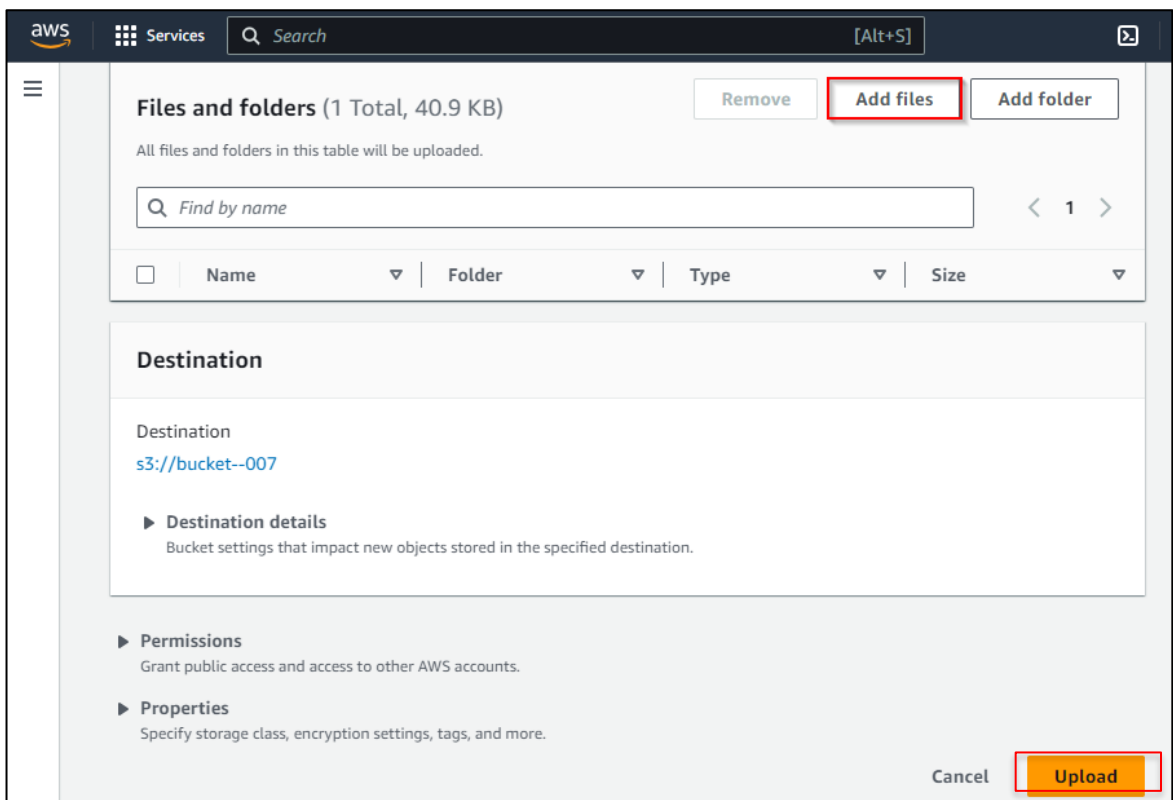
The S3 bucket is created successfully.

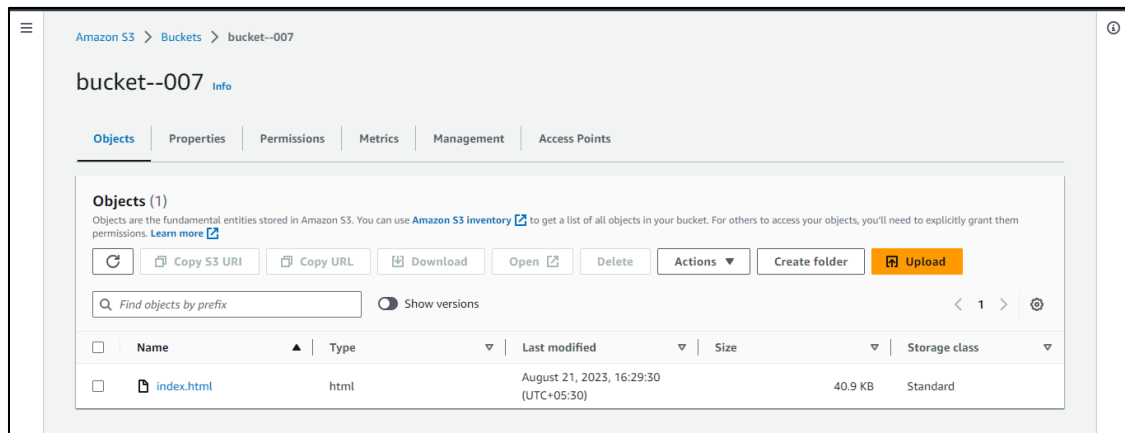
## Step 2: Upload a file

### 2.1 Select the created bucket and click on the **Upload** option



### 2.2 Click on **Add files**, select an HTML file, and then click the **Upload** button



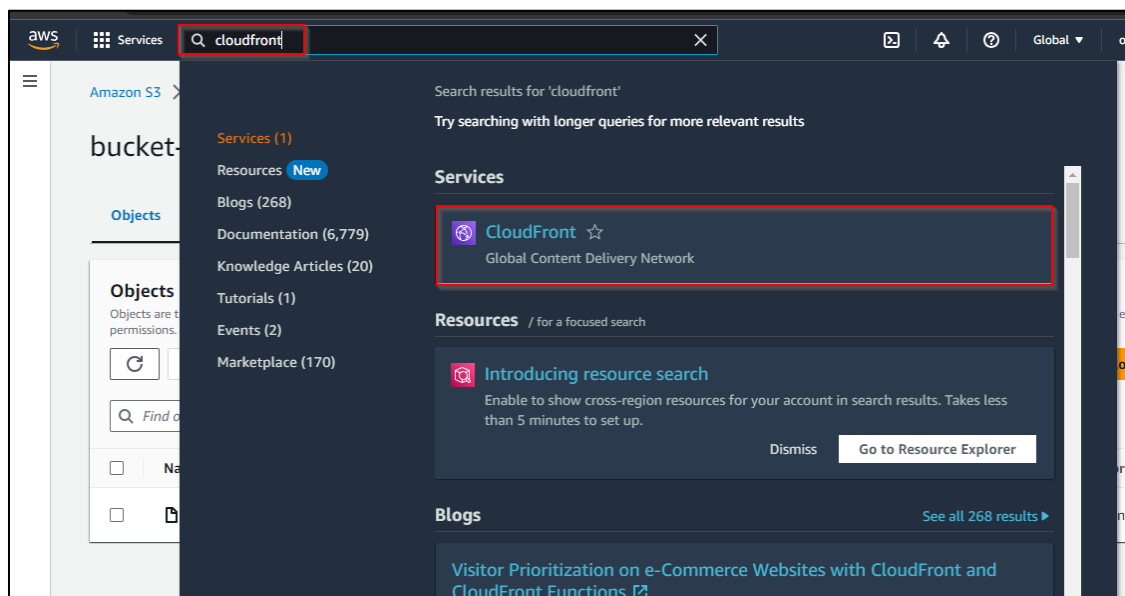


The uploaded file will now appear in the list of files within the bucket.

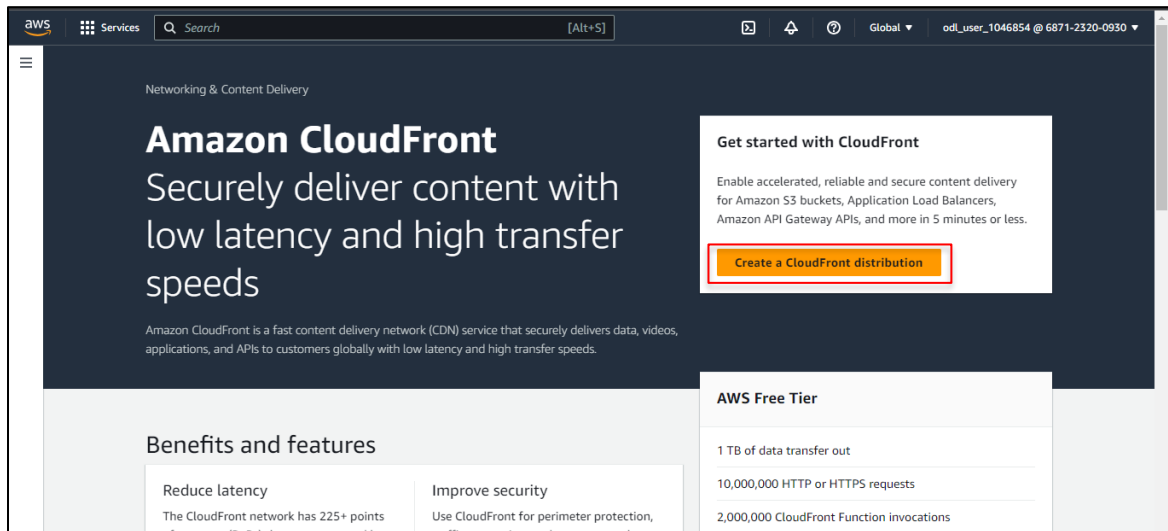
**Note:** HTML file should be already created in your local computer.

## Step 3: Configure Amazon CloudFront

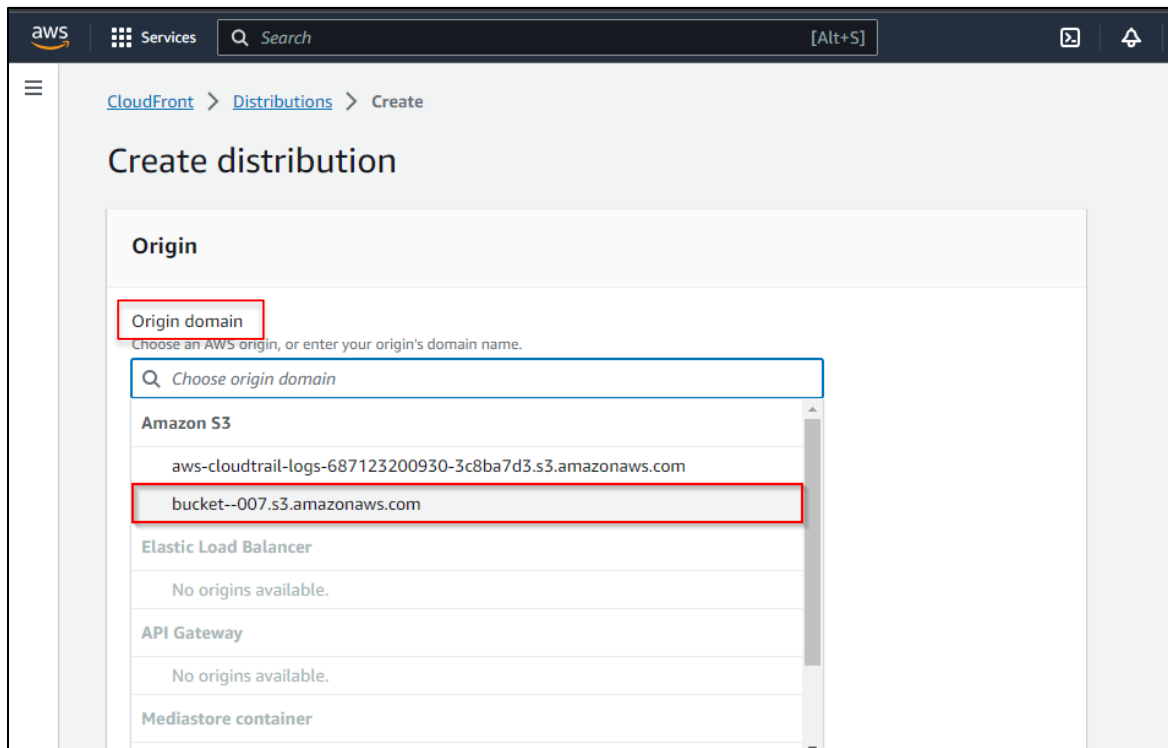
### 3.1 Search for **CloudFront** in the search bar



### 3.2 Click on **Create a CloudFront distribution**



### 3.3 Select the bucket created earlier in the **Origin Domain** field



3.4 Click on **Legacy access identities**, then click on **Yes, update the bucket policy**, and proceed to **Create a new OAI** (Origin Access Identity)

Origin path - optional [Info](#)  
Enter a URL path to append to the origin domain name for origin requests.

Name  
Enter a name for this origin.

Origin access [Info](#)

☐ Public  
Bucket must allow public access.

☐ Origin access control settings (recommended)  
Bucket can restrict access to only CloudFront.

☒ **Legacy access identities**  
Use a CloudFront origin access identity (OAI) to access the S3 bucket.

Origin access identity  
Select an existing origin access identity (recommended) or create a new identity.

[Create new OAI](#)

Bucket policy  
Update the S3 bucket policy to allow read access to the OAI.

☐ No, I will update the bucket policy

☒ **Yes, update the bucket policy**

3.5 Click on **Create**

**Create new OAI** ×

Name  
Enter a name for the new origin access identity. [Learn about using an origin access identity](#)

[Cancel](#) [Create](#)

### 3.6 Enter **index.html** in the **Default root object** field

The screenshot shows the AWS IAM console interface for requesting a certificate. The 'Default root object' field is highlighted with a red box and contains the text 'index.html'. The 'Supported HTTP versions' section shows 'HTTP/2' selected. The 'Standard logging' section shows 'Off' selected. The 'IPv6' section shows 'On' selected.

aws Services Search [Alt+S]

Choose certificate

Request certificate

Supported HTTP versions  
Add support for additional HTTP versions. HTTP/1.0 and HTTP/1.1 are supported by default.

☒ HTTP/2  
☐ HTTP/3

Default root object - optional  
The object (file name) to return when a viewer requests the root URL (/) instead of a specific object.

index.html

Standard logging  
Get logs of viewer requests delivered to an Amazon S3 bucket.

☒ Off  
☐ On

IPv6  
☐ Off  
☒ On

Description - optional



### 3.4 Click on **Create distribution**

**Default root object - optional**  
The object (file name) to return when a viewer requests the root URL (/) instead of a specific object.

index.html

**Standard logging**  
Get logs of viewer requests delivered to an Amazon S3 bucket.

☒ Off  
☐ On

**IPv6**

☐ Off  
☒ On

**Description - optional**

Cancel **Create distribution**

**NOTE:** Copy the domain name to the web browser to test.

By following these steps, you will have successfully created an Amazon CloudFront distribution with an S3 origin, enabling efficient content delivery from the S3 bucket.