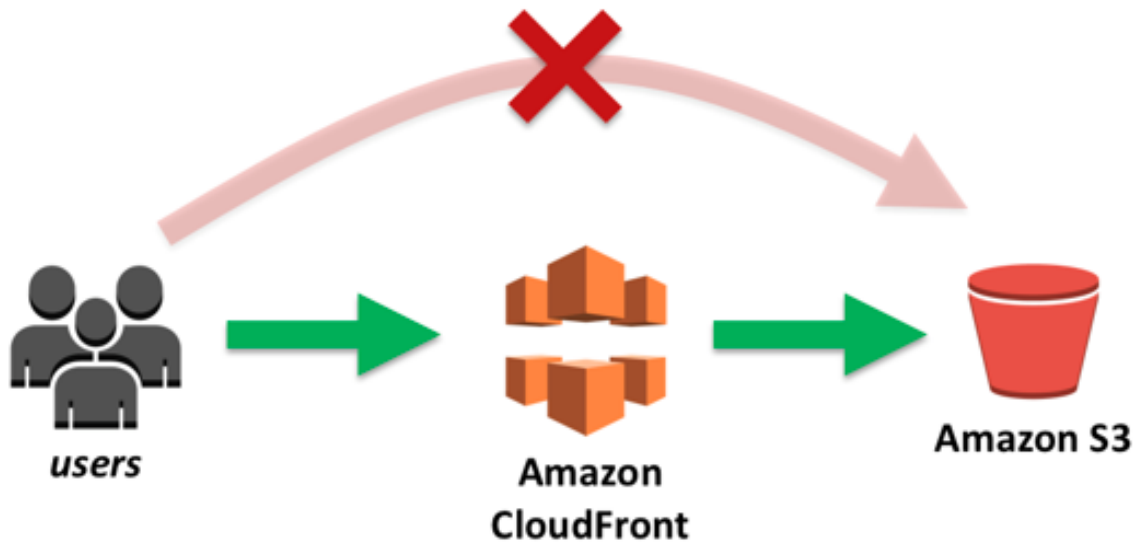


## CDN- Cloud-Front DEMO

### How CDN works in AWS.

Connect on LinkedIn. <https://www.linkedin.com/in/ritikktiwari/>



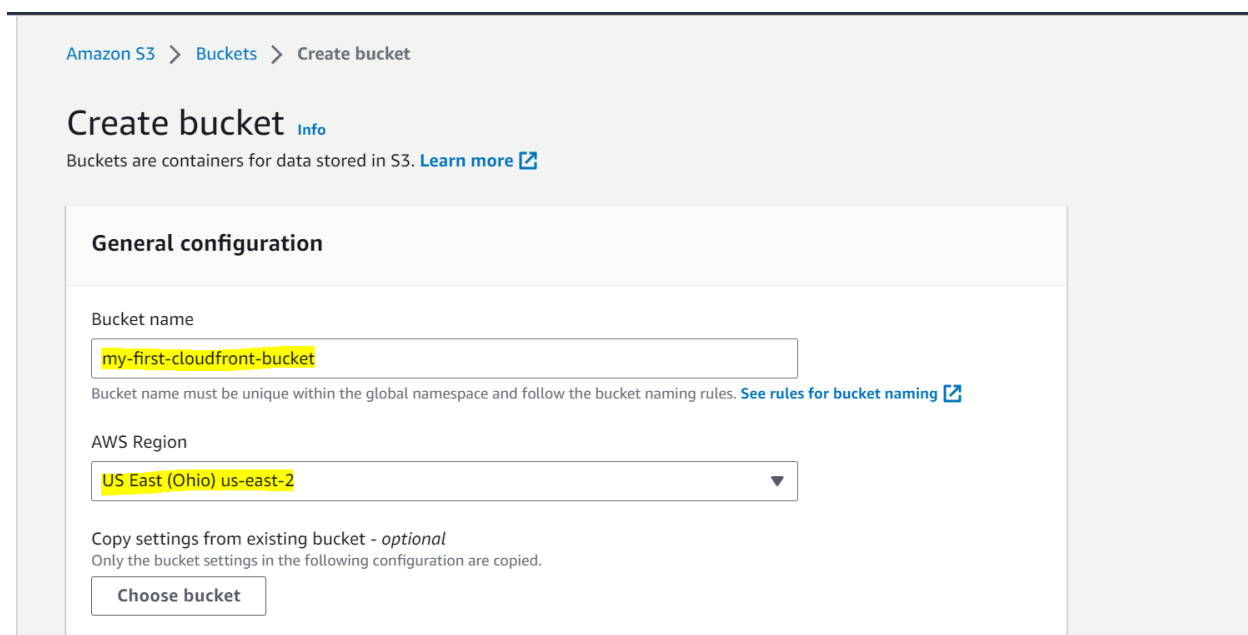
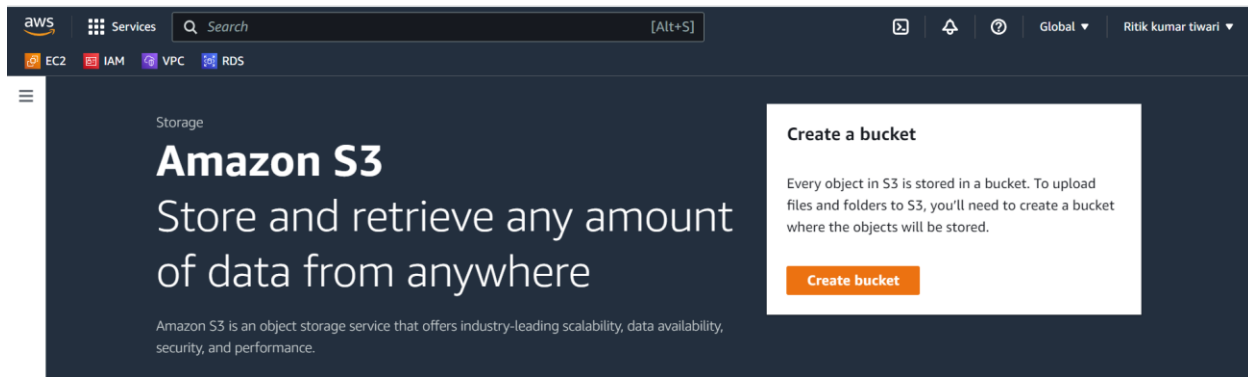
### **AWS Free Usage Tier**

As part of the AWS Free Usage Tier, you can get started with Amazon CloudFront for free. Upon sign-up, new AWS customers receive 50 GB Data Transfer Out and 2,000,000 HTTP and HTTPS Requests, and 2,000,000 CloudFront Function invocations each month for one year.

### **For On Demand:**

- Data transfer out. (Internet/Origin)
- HTTPS/HTTP Requests
- Invalidation requests
- Dedicated IP Custom SSL certifications Associated with a CloudFront Distribution

Make **S3 bucket** and upload any object like: images, text file, json file, index.html file anything for accessing through CDN -CloudFront



## Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

### ☒ Block *all* public access

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

#### ☐ Block public access to buckets and objects granted through *new* access control lists (ACLs)

S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

#### ☐ Block public access to buckets and objects granted through *any* access control lists (ACLs)

S3 will ignore all ACLs that grant public access to buckets and objects.

#### ☐ Block public access to buckets and objects granted through *new* public bucket or access point policies

S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

#### ☐ Block public and cross-account access to buckets and objects through *any* public bucket or access point policies

S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

✓ Successfully created bucket "my-bucket-cf"

To upload files and folders, or to configure additional bucket settings choose [View details](#).

[View details](#)



Amazon S3 > Buckets

### Account snapshot

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

[View Storage Lens dashboard](#)

### Buckets (1) Info

Buckets are containers for data stored in S3. [Learn more](#)



Copy content

Empty

Delete

Create bucket

< 1 >

	Name	AWS Region	Access	Creation date
<input type="radio"/>	my-bucket-cf	US East (Ohio) us-east-2	<a href="#">Objects can be public</a>	August 6, 2023, 11:24:50 (UTC+05:30)

Now your bucket has been created, we need to upload a image in this bucket.

Amazon S3 > Buckets > my-bucket-cf

## my-bucket-cf [Info](#)

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

**Objects (0)**  
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](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

< 1 > [Settings](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
No objects You don't have any objects in this bucket.					

Amazon S3 > Buckets > my-bucket-cf > Upload

## Upload [Info](#)

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

**Files and folders (0)** [Remove](#) [Add files](#) [Add folder](#)

All files and folders in this table will be uploaded.

< 1 >

<input type="checkbox"/>	Name	Folder	Type	Size
No files or folders You have not chosen any files or folders to upload.				

Upload a picture for accessing through CloudFront.

**Files and folders** (1 Total, 63.8 KB)

RemoveAdd filesAdd folder

All files and folders in this table will be uploaded.

< 1 >

<input checked="" type="checkbox"/>	Name	Folder	Type	Size
<input checked="" type="checkbox"/>	ritik-first-page.jpg	-	image/jpeg	63.8 KB

**Destination**

Destination

s3://my-bucket-cf

► Destination details

Bucket settings that impact new objects stored in the specified destination.

► Permissions

Grant public access and access to other AWS accounts.

► Properties

Specify storage class, encryption settings, tags, and more.

CancelUpload

Upload succeeded

View details below.

Upload: status

Close

The information below will no longer be available after you navigate away from this page.

Summary

Destination

s3://my-bucket-cf

Succeeded

✔ 1 file, 63.8 KB (100.00%)

Failed

⌛ 0 files, 0 B (0%)

Files and folders

Configuration

Files and folders						
Configuration						
Files and folders (1 Total, 63.8 KB)						
Find by name						
Name	Folder	Type	Size	Status	Error	
ritik-first-page.jpg	-	image/jpeg	63.8 KB	Succeeded	-	

Permissions		
Access control list (ACL)		
Grant basic read/write permissions to other AWS accounts. <a href="#">Learn more</a>		
<div>  The console displays combined access grants for duplicate grantees. To see the full list of ACLs, use the Amazon S3 REST API, AWS CLI, or AWS SDKs. </div>		
Grantee	Objects	Object ACL
Object owner (your AWS account) Canonical ID: ce19f0c15a3645e132b54b81641e8f1c3dfb0cf8f66737fdd53293e6142d468	Read	Read, Write
Everyone (public access) Group: http://acs.amazonaws.com/groups/global/AllUsers	-	-

Now search CloudFront and go inside.

cloud front

×

Search results for 'cloud front'

Try searching with longer queries for more relevant results

Services (57)

Features (54)

Resources New

Blogs (7,409)

Documentation (56,080)

Knowledge Articles (28)

Services


See all 57 results ▶


CloudFront

Global Content Delivery Network

Click on create distribution.

CloudFront > Distributions

Distributions (0) [Info](#)  [Enable](#) [Disable](#) [Delete](#) [Create distribution](#)

< 1 > 

ID	Descrip...	Type	Domai...	Alterna...	Origins	Status	Last modified
<p><b>No distributions</b> You don't have any distributions.</p> <p><a href="#">Create distribution</a></p>							

Choose your bucket which you have made.

## Origin

Origin domain

Choose an AWS origin, or enter your origin's domain name.

**Amazon S3**

my-bucket-cf.s3.amazonaws.com

## Origin

### Origin domain

Choose an AWS origin, or enter your origin's domain name.

### 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.

## Web Application Firewall (WAF)

- ☐ **Enable security protections**  
Keep your application secure from the most common web threats and security vulnerabilities using AWS WAF. Blocked requests are stopped before they reach your web servers.

- ☒ **Do not enable security protections**  
Select this option if your application does not need security protections from AWS WAF.



## Settings

### Price class [Info](#)


Choose the price class associated with the maximum price that you want to pay.

- ☒ Use all edge locations (best performance)
- ☐ Use only North America and Europe
- ☐ Use North America, Europe, Asia, Middle East, and Africa

### Alternate domain name (CNAME) - optional

Add the custom domain names that you use in URLs for the files served by this distribution.

Add item

 To add a list of alternative domain names, use the [bulk editor](#).

### Custom SSL certificate - optional

Associate a certificate from AWS Certificate Manager. The certificate must be in the US East (N. Virginia) Region (us-east-1).

Choose certificate



[Request certificate](#) 

Supported HTTP versions

### Standard logging

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

- ☒ Off
- ☐ On

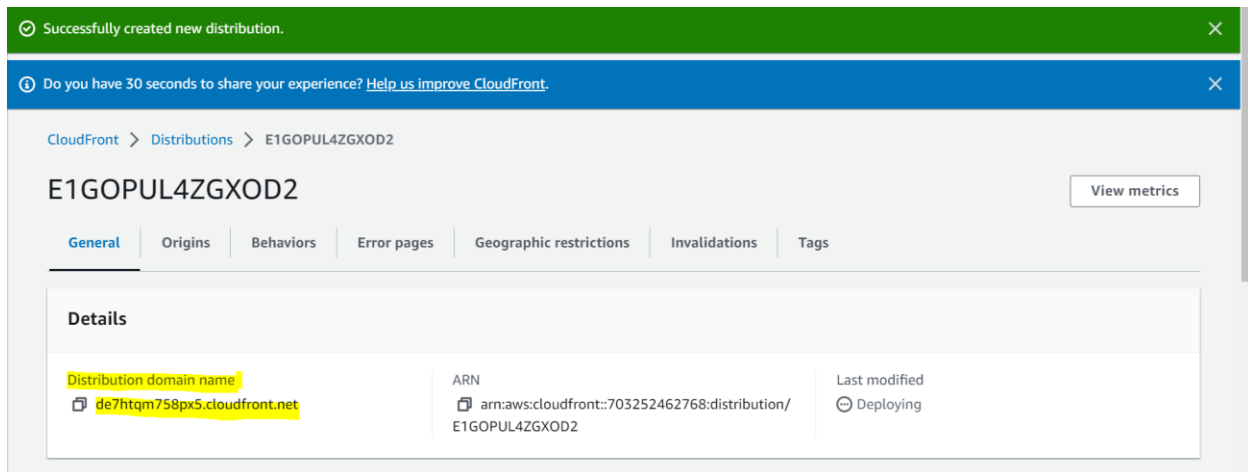
### IPv6

- ☐ Off
- ☒ On

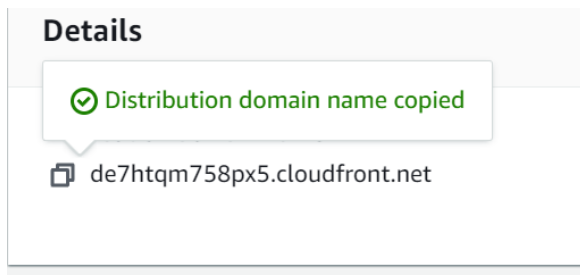
Description - optional

Cancel

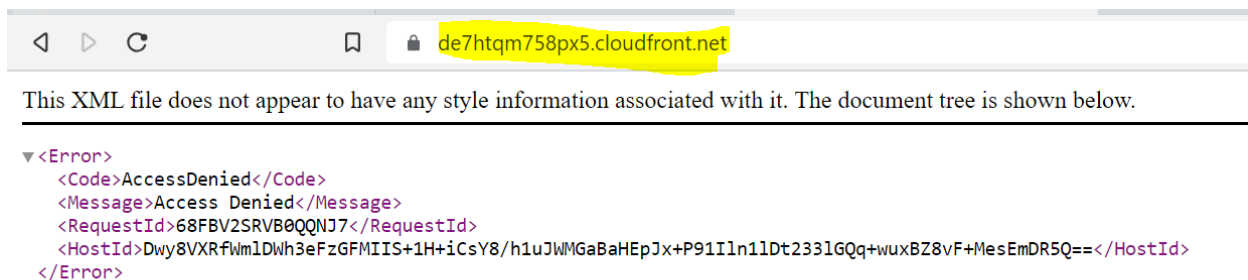
Create distribution




**Copy the Distributed domain name!**



**If you paste only distributed domain name that will not be work.**

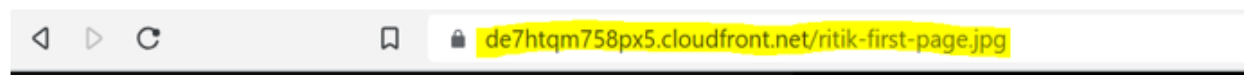


We need to paste uploaded content which is present in our bucket along with distributed domain name.

<input type="checkbox"/>		jpg	August 6, 2023, 11:29:09 (UTC+05:30)	63.8 KB	Standard
--------------------------	---	-----	--------------------------------------	---------	----------

For eg:

If you get error, then below is the steps to resolve the problem.



Go to you bucket > click on you uploaded file > go to permission > edit >.

Amazon S3 > Buckets > my-bucket-cl > ritik-first-page.jpg






ritik-first-page.jpg Info

Copy S3 URI Download Open Object actions

Properties Permissions Versions

**Access control list (ACL)** Edit

Grant basic read/write permissions to AWS accounts. [Learn more](#)

Grantee	Object	Object ACL
Object owner (your AWS account) Canonical ID:  ae19f0c15a3643e132b34b81641e8f1c3cfbfbcf8e67371dd53293e6142d468	Read	Read, Write
Everyone (public access) Group:  http://acs.amazonaws.com/groups/global/AllUsers	 Read	 Read
Authenticated users group (anyone with an AWS account) Group:  http://acs.amazonaws.com/groups/global/AuthenticatedUsers	-	-

Check the mentioned box.

Amazon S3 > Buckets > my-bucket-cf > ritik-first-page.jpg > Edit access control list

## Edit access control list [Info](#)

**Access control list (ACL)**  
Grant basic read/write permissions to AWS accounts. [Learn more](#)

Grantee	Objects	Object ACL
Object owner (your AWS account) Canonical ID: ce19f0c15a3643e132b34b81641e8f1c3cfbbfcbf8e6737fdd53293e6142d468	<input checked="" type="checkbox"/> Read	<input checked="" type="checkbox"/> Read <input checked="" type="checkbox"/> Write
<b>Everyone (public access) Group:</b> http://acs.amazonaws.com/groups/global/AllUsers	<input checked="" type="checkbox"/> Read	<input checked="" type="checkbox"/> Read <input type="checkbox"/> Write
Authenticated users group (anyone with an AWS account) Group: http://acs.amazonaws.com/groups/global/AuthenticatedUsers	<input type="checkbox"/> Read	<input type="checkbox"/> Read <input type="checkbox"/> Write

When you grant access to the Everyone or Authenticated users group grantees, anyone in the world can access this object.  
[Learn more](#)

When you grant access to the Everyone or Authenticated users group grantees, anyone in the world can access this object.  
[Learn more](#)

☒ I understand the effects of these changes on this object.

**Access for other AWS accounts**  
No other AWS accounts associated with the resource.

[Add grantee](#)

**Specified objects**

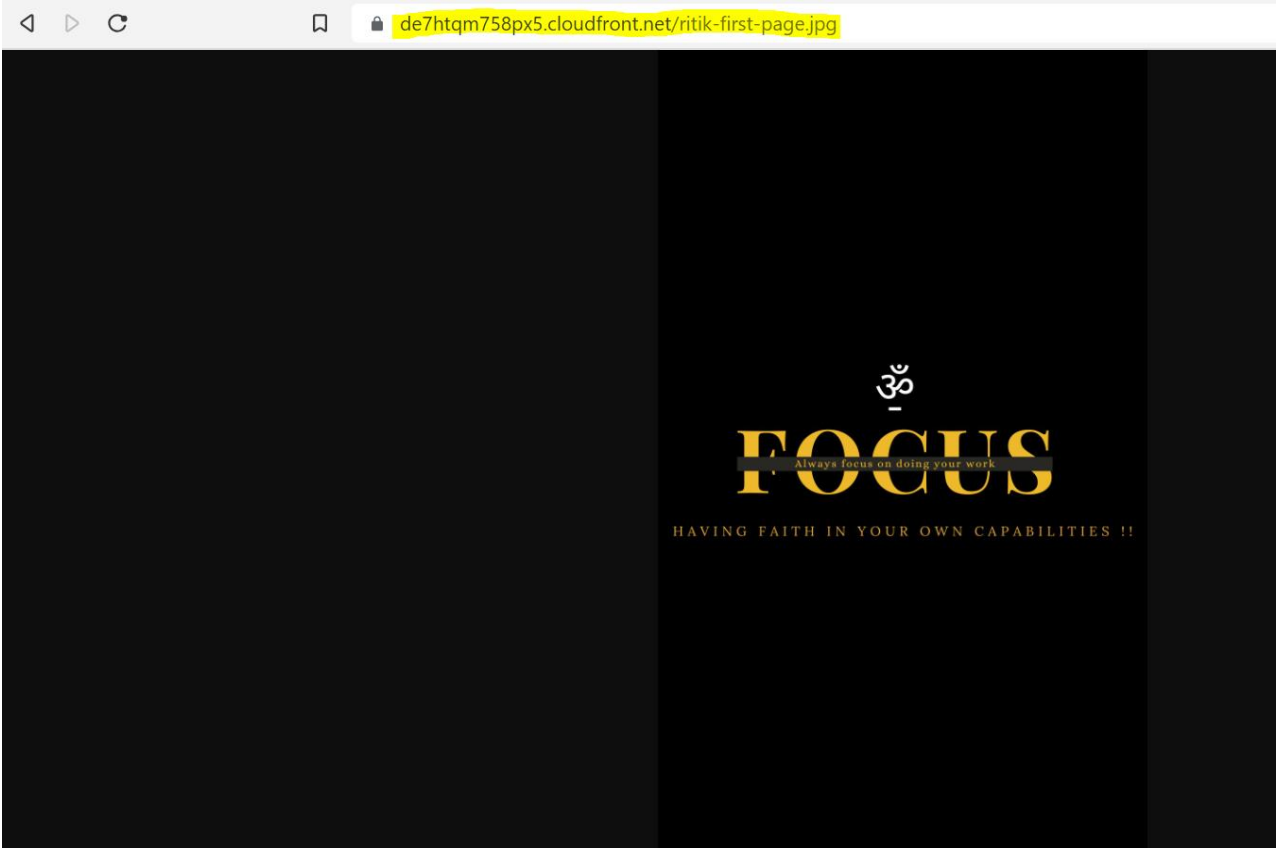
Name	Type	Last modified	Size
ritik-first-page.jpg	jpg	August 6, 2023, 11:29:09 (UTC+05:30)	63.8 KB

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

Then again paste the similar URL like below:

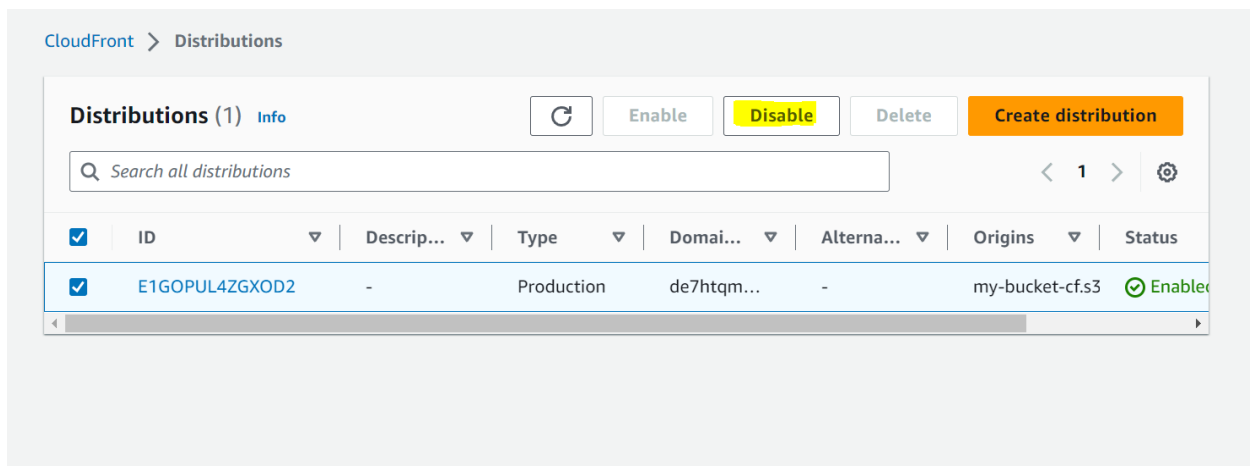


Finally, we can be able to access our object with the help of CDN (Content Delivery Networking).

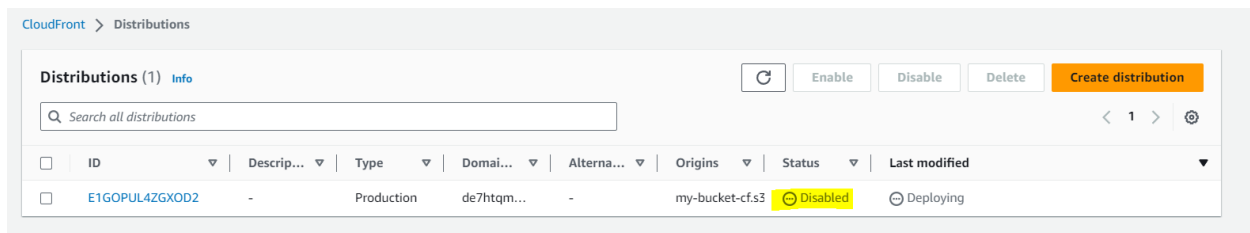


After doing this lab, do not forget to delete your services which is used by you:

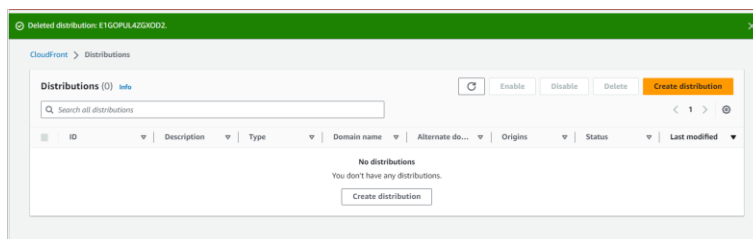
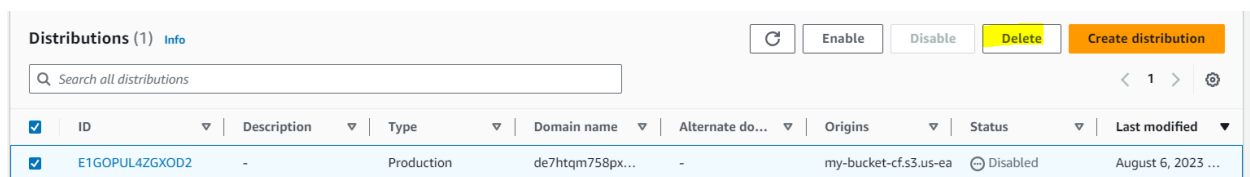
First you must disable then you can delete the Distributed domain name:



It will take time to disable it.




After disabling we can delete



**Without deleting the object which is present in bucket, you cannot delete your bucket so first delete object/files.**


## Delete objects [Info](#)

- If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.
- Deleting the specified objects can't be undone.

[Learn more](#) 

### Specified objects

< 1 >

Name ▲	Type ▼	Last modified ▼	Size ▼
 <a href="#">ritik-first-page.jpg</a>	jpg	August 6, 2023, 11:29:09 (UTC+05:30)	63.8 KB

### Permanently delete objects?

To confirm deletion, type *permanently delete* in the text input field.

Cancel

Delete objects

Successfully deleted objects  
 View details below

## Delete objects: status

The information below will no longer be available after you navigate away from this page.

### Summary

Source	Successfully deleted	Failed to delete
t3://my-bucket-cf	1 object, 63.8 KB	0 objects

### Buckets (1) info

Buckets are containers for data stored in S3. [Learn more](#)

Copy content
 Empty
 Delete
 Create bucket

Name	AWS Region	Access	Creation date
my-bucket-cf	US East (Ohio) us-east-2	Objects can be public	August 6, 2023, 11:24:50 (UTC+05:30)

**After deleting the object, you can delete your bucket now.**

Delete bucket info

⚠

- Deleting a bucket cannot be undone.
- Bucket names are unique. If you delete a bucket, another AWS user can use the name.
- If this bucket is used with a Multi-Region Access Point in an external account, initiate failover before deleting the bucket.
- If this bucket is used with an access point in an external account, the requests made through those access points will fail after you delete this bucket.
- This bucket is configured to host a static website. We recommend that you clean up the Route 53 hosted zone settings that are related to the bucket.

[Learn more](#)

Delete bucket "my-bucket-cf"?

To confirm deletion, enter the name of the bucket in the text input field.

my-bucket-cf

Cancel

Delete bucket

▶ Account snapshot

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

View Storage Lens dashboard

Buckets info

Buckets are containers for data stored in S3. [Learn more](#)

🔄

📄 Copy content

🗑 Empty

🗑 Delete

Create bucket

< 1 > ⌕

Name	AWS Region	Access	Creation date
No buckets			
You don't have any buckets.			
<div>Create bucket</div>			

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Thank you!!