

S3 Web Hosting and Cloud Front

Step 1: Create S3 Bucket

Step 2: Upload Objects inside the bucket

Step 3: Static Website Hosting

Step 4: Create Distribution at Cloud Front using created S3 bucket

Step 1: Create S3 Bucket

- Login AWS – Create S3 Bucket – S3 is a global Service. Bucket name should be unique and should not contain spaces or uppercase letters.
- Bucket Name: **s3webhosting23nov** – AWS Region – Create

General configuration

Bucket name

Bucket name must be globally unique and must not contain spaces or uppercase letters. See rules for bucket naming [↗](#)

AWS Region

Asia Pacific (Mumbai) ap-south-1

Copy settings from existing bucket - *optional*
Only the bucket settings in the following configuration are copied.

Choose bucket

Object Ownership [Info](#)

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☐ ACLs disabled (recommended)
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☒ ACLs enabled
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership

☒ Bucket owner preferred
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.

☐ Object writer
The object writer remains the object owner.

- Unblock all public access – everyone can view the bucket.

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.

 **Turning off block all public access might result in this bucket and the objects within becoming public**
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

- Enable Bucket Versioning – Restore the deleted objects

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

Tags (0) - optional

You can use bucket tags to track storage costs and organize buckets. [Learn more](#)

No tags associated with this bucket.

Add tag

Default encryption

Automatically encrypt new objects stored in this bucket. [Learn more](#)

Server-side encryption

☒ Disable

☐ Enable

- Disable Bucket Lock – If enable no one can delete the bucket, even the bucket owner can't delete/modify.

Default encryption

Automatically encrypt new objects stored in this bucket. [Learn more](#)

Server-side encryption

☒ Disable

☐ Enable

▼ Advanced settings

Object Lock

Store objects using a write-once-read-many (WORM) model to help you prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely. [Learn more](#)

☒ Disable

☐ Enable

Permanently allows objects in this bucket to be locked. Additional Object Lock configuration is required in bucket details after bucket creation to protect objects in this bucket from being deleted or overwritten.

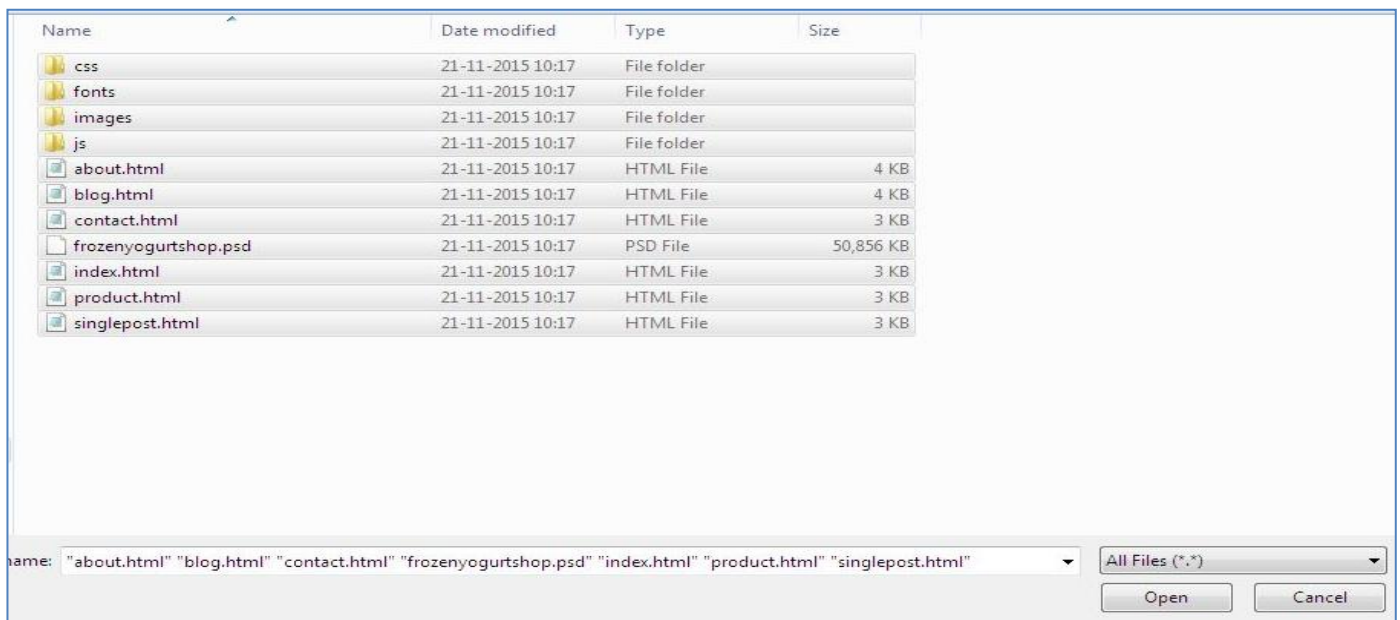
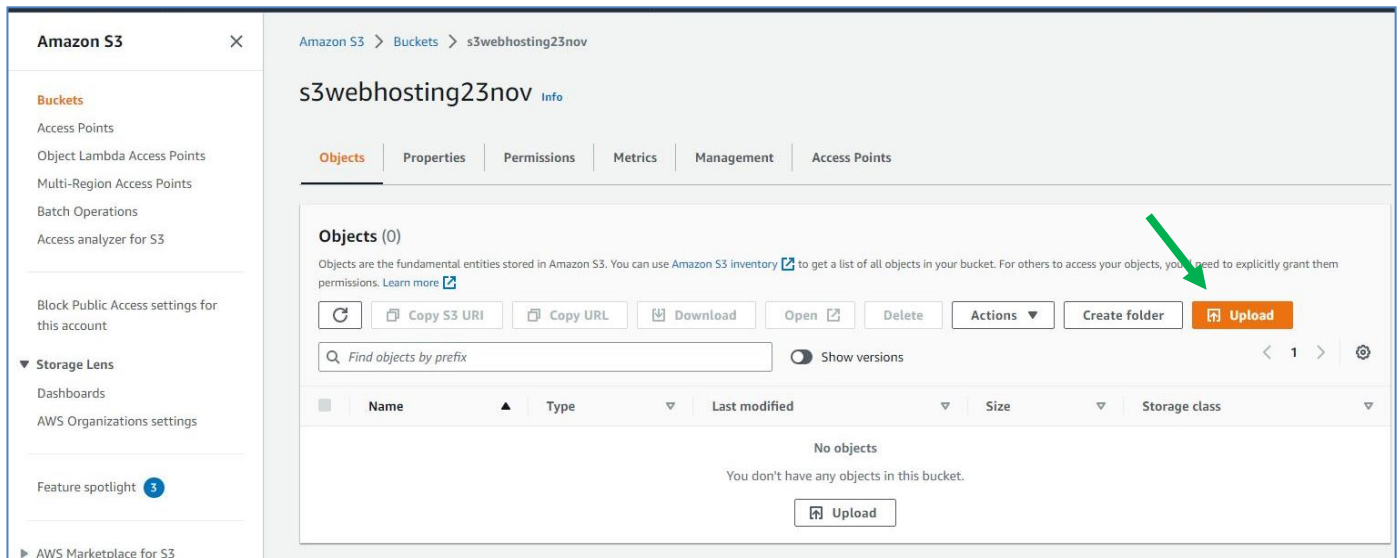
Object Lock works only in versioned buckets. Enabling Object Lock automatically enables Bucket Versioning.

After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.

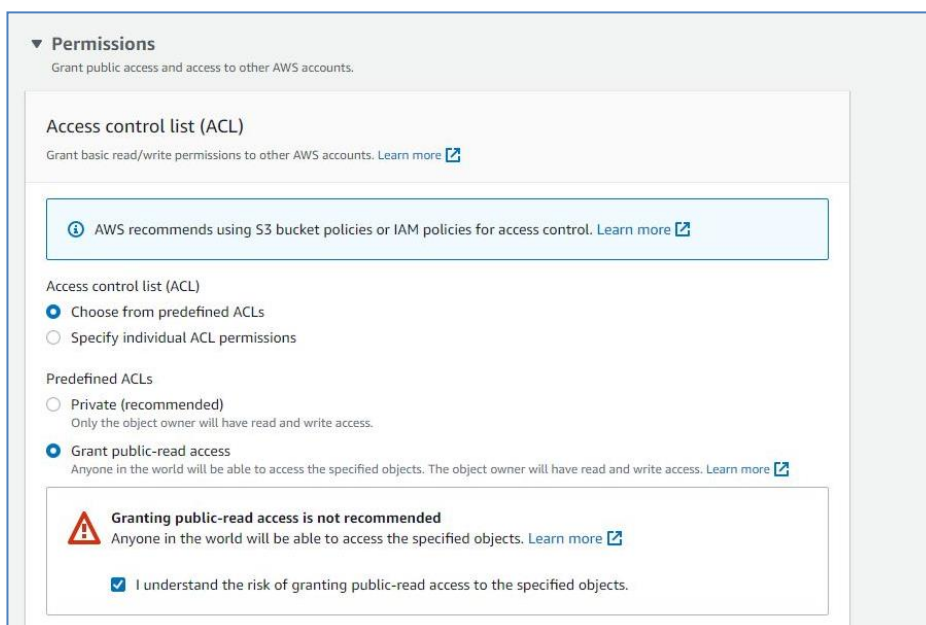
Cancel **Create bucket**

Step 2: Upload Objects inside the bucket

- Download a free website templates and unzip the template
- Upload the file inside the bucket



- Permissions – Grant Public Access – select a Storage class – Upload Files



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

Storage class

Amazon S3 offers a range of storage classes designed for different use cases. [Learn more](#) or see [Amazon S3 pricing](#)

	Storage class	Designed for	Availability Zones	Min storage duration	Min storage
<input checked="" type="radio"/>	Standard	Frequently accessed data (more than once a month) with milliseconds access	≥ 3	-	-
<input type="radio"/>	Intelligent-Tiering	Data with changing or unknown access patterns	≥ 3	-	-
<input type="radio"/>	Standard-IA	Infrequently accessed data (once a month) with milliseconds access	≥ 3	30 days	1
<input type="radio"/>	One Zone-IA	Recreatable, infrequently accessed data (once a month) stored in a single Availability Zone with milliseconds access	1	30 days	1
<input type="radio"/>	Glacier Instant Retrieval	Long-lived archive data accessed once a quarter with instant retrieval in milliseconds	≥ 3	90 days	1
<input type="radio"/>	Glacier Flexible Retrieval (formerly Glacier)	Long-lived archive data accessed once a year with retrieval of minutes to hours	≥ 3	90 days	-
<input type="radio"/>	Glacier Deep Archive	Long-lived archive data accessed less than	≥ 3	180 days	-

Server-side encryption

Server-side encryption protects data at rest. [Learn more](#)

Server-side encryption

☒ Do not specify an encryption key

☐ Specify an encryption key

⚠ If your bucket policy requires encrypted uploads, you must specify an encryption key or your upload will fail.

i Since default encryption is disabled for this bucket, no encryption settings will be applied to the objects when storing them in Amazon S3.

Additional checksums

Checksum functions are used for additional data integrity verification of new objects. [Learn more](#)

Additional checksums

☒ Off
Amazon S3 will use a combination of MD5 checksums and Etags to verify data integrity.

☐ On
Specify a checksum function for additional data integrity validation.

Step 3: Static Website Hosting

- Open created bucket – select – Properties – Static Website Hosting – Enable – Host a Static website – Index document name is case sensitive. So copy and paste the index name of website templates.
- Index document – **index.html** – save
- Copy the generated URL and check. Results came


s3webhosting23nov [Info](#)[Objects](#) | **[Properties](#)** | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Bucket overview

AWS Region

Asia Pacific (Mumbai) ap-south-1

Amazon Resource Name (ARN)

 am:aws:s3::s3webhosting23nov

Creation date

November 26, 2022, 11:10:09 (UTC+05:30)

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](#)

[Edit](#)

Bucket Versioning

Enabled

Multi-factor authentication (MFA) delete

An additional layer of security that requires multi-factor authentication for changing Bucket Versioning settings and permanently deleting object versions. To modify MFA delete settings, use the AWS CLI, AWS SDK, or the Amazon S3 REST API. [Learn more](#)

Disabled


Object Lock

Store objects using a write-once-read-many (WORM) model to help you prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely. [Learn more](#)

[Edit](#)

Object Lock

Disabled

 Amazon S3 currently does not support enabling Object Lock after a bucket has been created. To enable Object Lock for this bucket, contact [Customer Support](#)

Requester pays

When enabled, the requester pays for requests and data transfer costs, and anonymous access to this bucket is disabled. [Learn more](#)

[Edit](#)

Requester pays

Disabled

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

[Edit](#)

Static website hosting

Disabled

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting

☐ Disable☒ Enable

Hosting type

☒ Host a static website

Use the bucket endpoint as the web address. [Learn more](#)

☐ Redirect requests for an object

Redirect requests to another bucket or domain. [Learn more](#)

 For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see [Using Amazon S3 Block Public Access](#)

Index document

Specify the home or default page of the website.

Error document - optional

This is returned when an error occurs.

Redirection rules - optional

Redirection rules, written in JSON, automatically redirect webpage requests for specific content. [Learn more](#)

Successfully edited static website hosting.

Amazon S3 currently does not support enabling Object Lock after a bucket has been created. To enable Object Lock for this bucket, contact Customer Support

Requester pays

When enabled, the requester pays for requests and data transfer costs, and anonymous access to this bucket is disabled. [Learn more](#)

Requester pays

Disabled

Edit

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting

Enabled

Hosting type

Bucket hosting

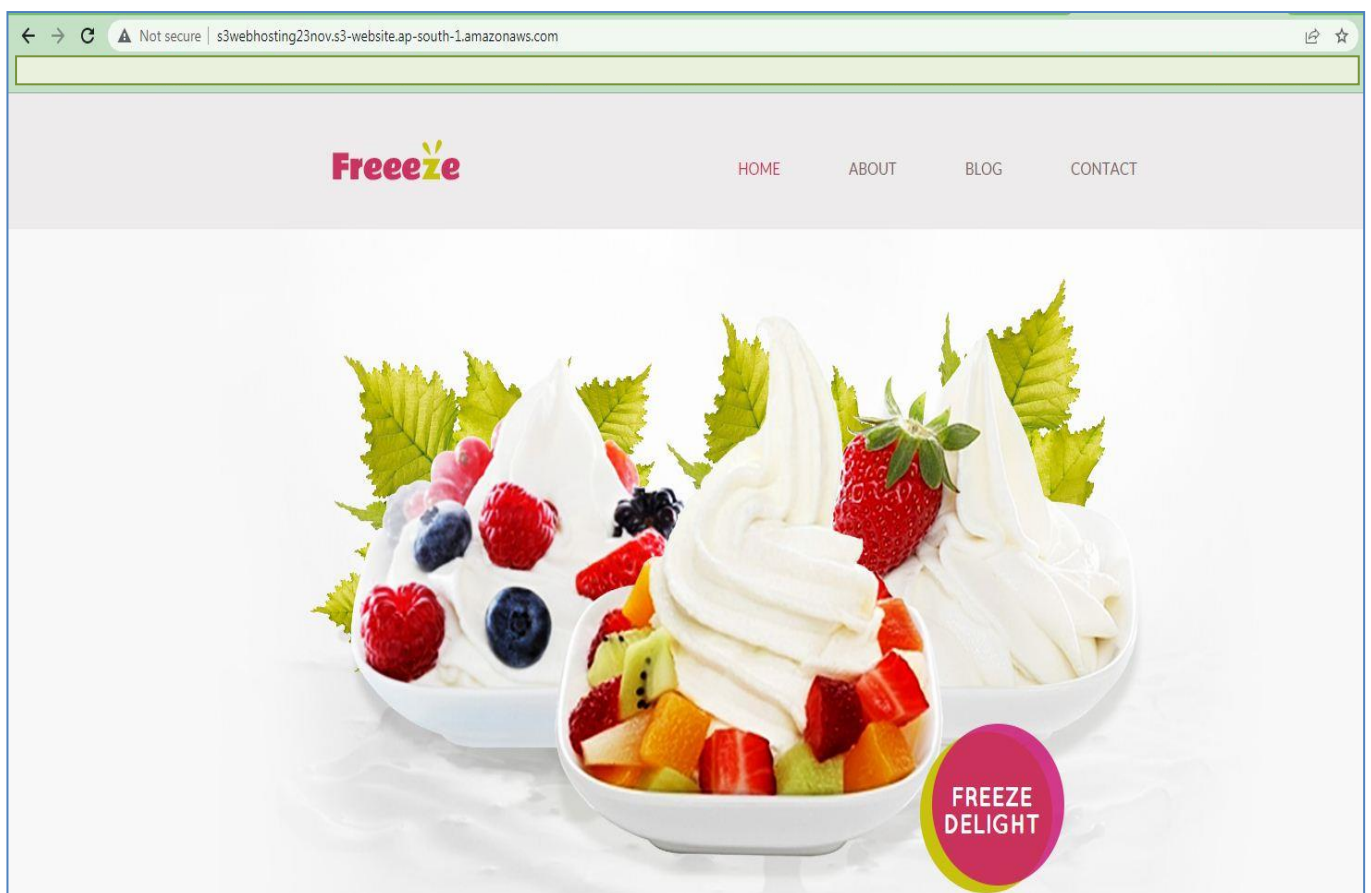
Bucket website endpoint copied

point

our bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://s3webhosting23nov.s3-website-ap-south-1.amazonaws.com>

Edit



Step 4: Create Distribution at Cloud Front using created S3 bucket

- Open Cloud Front – Create CloudFrontDistribution – Follow the steps below

CloudFront > Distributions > create

Create distribution

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.

[Add custom header - optional](#)

Enable Origin Shield [Info](#)
Origin Shield is an additional caching layer that can help reduce the load on your origin and help protect its availability.

☒ No

☐ Yes

► **Additional settings**

Default cache behavior

Path pattern [Info](#)

Compress objects automatically [Info](#)

☒ No

☐ Yes

Viewer

Viewer protocol policy

☒ HTTP and HTTPS

☐ Redirect HTTP to HTTPS

☐ HTTPS only

Allowed HTTP methods

☒ GET, HEAD

☐ GET, HEAD, OPTIONS

- Object Caching – 240 secs (If we delete the object the cache available for 240 secs after that only the cache delete)

Cache key and origin requests

We recommend using a cache policy and origin request policy to control the cache key and origin requests.

☐ Cache policy and origin request policy (recommended)

☒ Legacy cache settings

Headers

Choose which headers to include in the cache key.

None

Query strings

Choose which query strings to include in the cache key.

None

Cookies

Choose which cookies to include in the cache key.

None

Object caching

☐ Use origin cache headers

☒ Customize

Minimum TTL

Minimum time to live in seconds.

240

Maximum TTL

Maximum time to live in seconds.

240

Default TTL

Default time to live in seconds.

240

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

AWS WAF web ACL - optional

Choose the web ACL in AWS WAF to associate with this distribution.

Choose web ACL

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

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

☒ HTTP/2

☐ HTTP/3

Standard logging

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

☒ Off

☐ On

IPv6

☒ Off

☐ On

Description - optional

Cancel

Create distribution

- Select Distributions – copy domain name and copy the html file name. Then check at webpage
- <https://Distribution domain name/htmlobjectname>

CloudFront > Distributions > E2TR6RAQEXNFL4

E2TR6RAQEXNFL4

[View metrics](#)

General | Origins | Behaviors | Error pages | Geographic restrictions | Invalidations | Tags

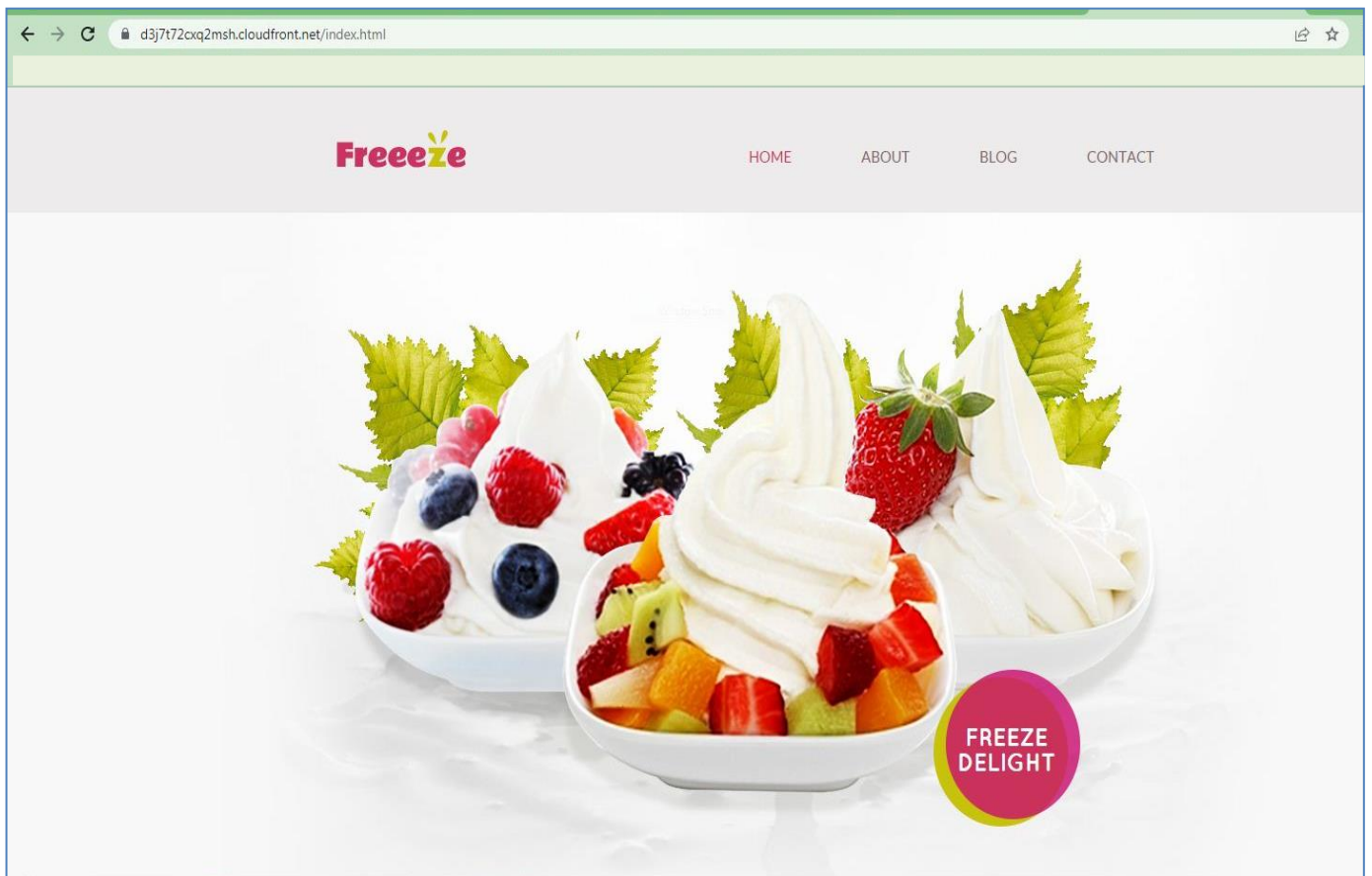
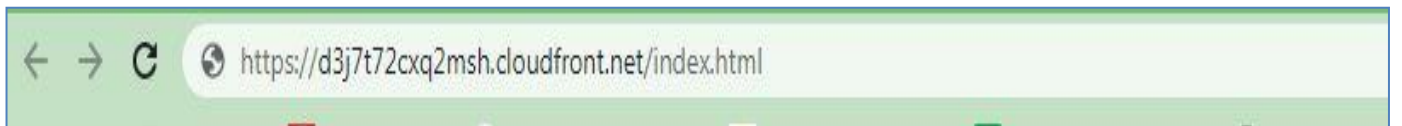
Details

✔ Distribution domain name copied

Distribution domain name: d3j7t72cxq2msh.cloudfront.net

ARN: [arn:aws:cloudfront::592838182709:distribution/E2TR6RAQEXNFL4](#)

Last modified: [Deploying](#)



- If we delete the objects inside the buckets the webpage available for 240 secs.
- The deleted objects can be restored by enable show versions option

Amazon S3 > Buckets > s3webhosting23nov

s3webhosting23nov [Info](#)

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

Objects (18)

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

<input type="checkbox"/>	Name	Type	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	about.html	Delete marker	fVHr512MkCd2VdgT2R8uEWTdZ_VKlp59	November 26, 2022, 12:00:56 (UTC+05:30)	0 B	-
<input type="checkbox"/>	about.html	html	Xspu0pKZD7N9JL7Cw2z849rVMX52UR9Z	November 26, 2022, 11:20:32 (UTC+05:30)	3.4 KB	Standard
<input type="checkbox"/>	blog.html	Delete marker	PEktk7hLakuKi5uNNBXC4A3TQWKVXQLq	November 26, 2022, 12:00:56 (UTC+05:30)	0 B	-
<input type="checkbox"/>	blog.html	html	zVmVYzol4Hl2QXVcok_jVECAcYCGI7xJ	November 26, 2022, 11:20:32 (UTC+05:30)	3.2 KB	Standard
<input type="checkbox"/>	contact.html	Delete marker	F3kwEis4xYn0RCXh9JWH_6Jt3M5Hsv3p	November 26, 2022, 12:00:56 (UTC+05:30)	0 B	-

Delete

- 1) Empty Bucket and Delete Bucket
- 2) Disable Distribution and Delete