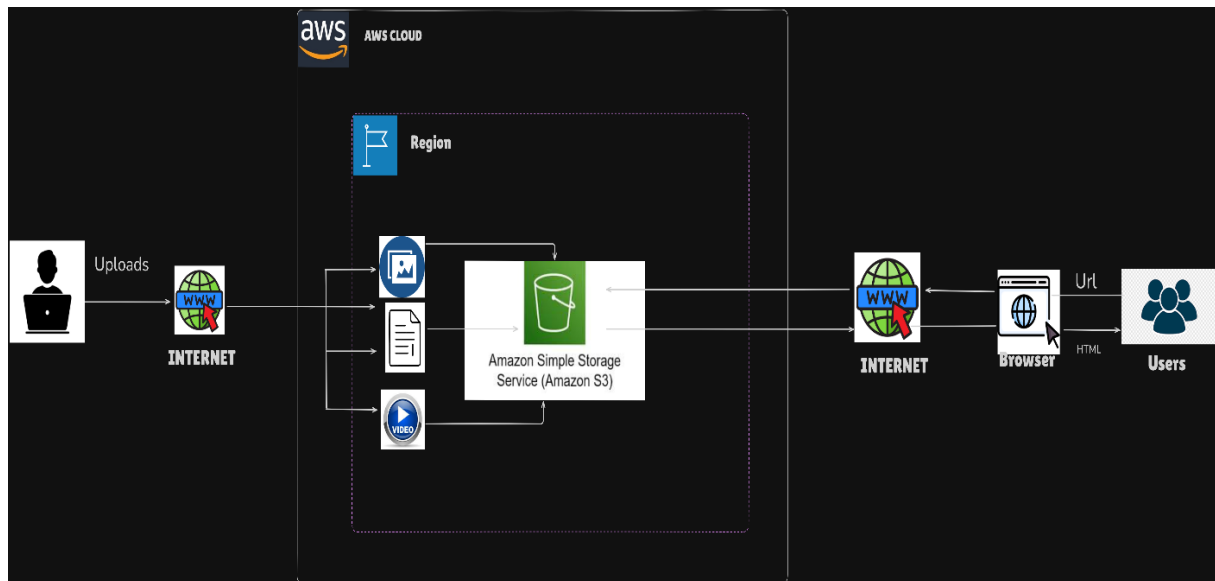


# CREATING A STATIC WEBSITE USING AMAZON S3

## Architecture Diagram of Hosting Static Website on AmazonS3



**AMAZON S3 (Simple Storage Service)** - It is an 'Object Storage' where we can store the data (like **Images, Files, Videos, Audio, Documents, Application data**) in 'Buckets' and the data can be accessed by End-users (customers).

### What is the primary objective of Static Website?

- Showcase Simple personal **websites, Portfolios** which has simple **text, images** and **html/xml** files to load with less latency and high security on Amazon S3.
- Can make **documentation** for a topic or a technical concept, **User guides, Manuals**.
- Used for **Dedicated landing pages** for Business or Marketing **feedback forms**.
- Hosting **Single-Page Applications** with built-in frameworks like React or Angular JavaScript.

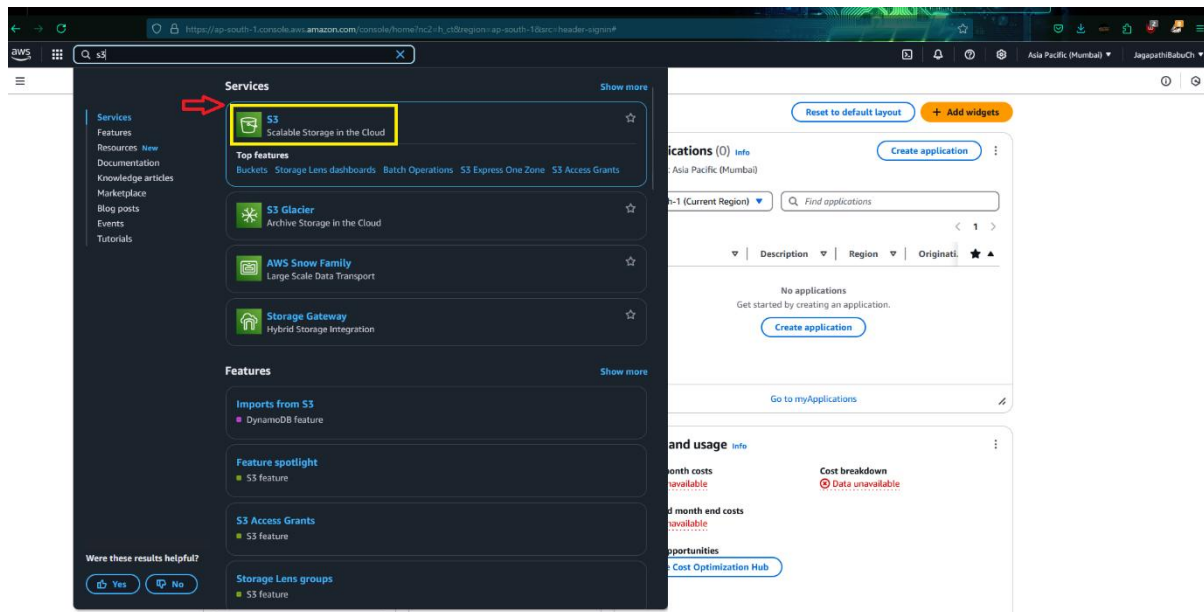
**This project is of various types we can do with 1 or more services**

**Amazon CloudFront**(Content Delivery Network) [used for less latency and high data transfer speed] and **Amazon Route 53** which is a **Domain Name System(DNS)** Service which is used for routing end users by translating domain

names(google.com) to IP Addresses(192.168.10.0) and also allow users to register new domain names or transfer existing ones.

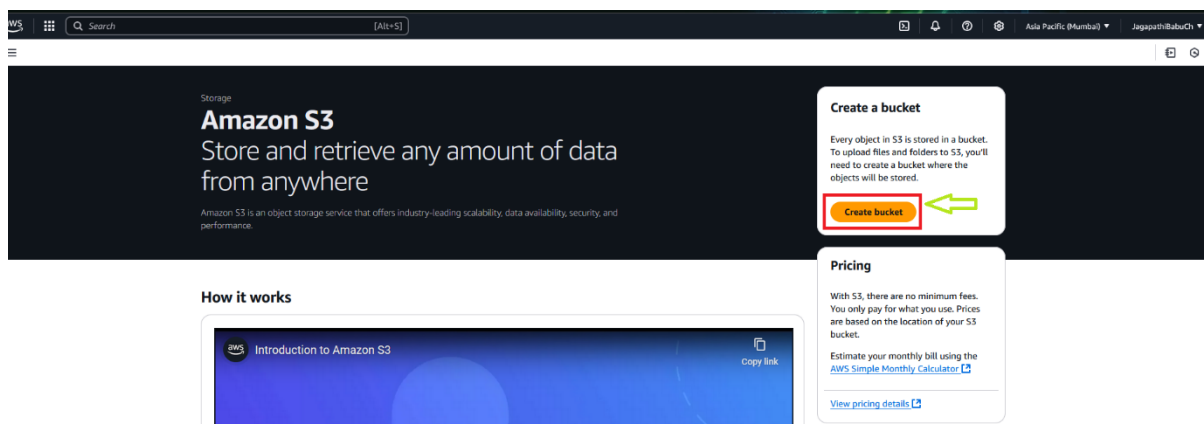
For this project it is simple Solution hosting resources on Amazon S3 .

**STEP – 1** Login to AWS Console Management and search for Amazon S3 and click on S3



**STEP – 2**

Create a new bucket



## STEP – 3

Bucket name should be 'unique' (Globally) i had used bucket name 'mystaticwebsite-jb2025'

Name can have (Small characters, dot/periods(.), Numbers and Hyphens (-))

**Create bucket** [info](#)

Buckets are containers for data stored in S3.

**General configuration**

**AWS Region**  
Asia Pacific (Mumbai) ap-south-1

**Bucket type** [info](#)

☒ **General purpose**  
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

☐ **Directory**  
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

**Bucket name** [info](#)

mystaticwebsite-jb2025

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

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

[Choose bucket](#)

Format: s3://bucket/prefix

**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 enforced

**Block Public Access settings for this bucket**

## STEP – 4

Create Bucket with unblock the tick mark for public accessing files.

☒ **Block all public access** [info](#)

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.

**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 - optional** (0)

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

No tags associated with this bucket.

[Add tag](#)

**Default encryption** [info](#)

Server-side encryption is automatically applied to new objects stored in this 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**

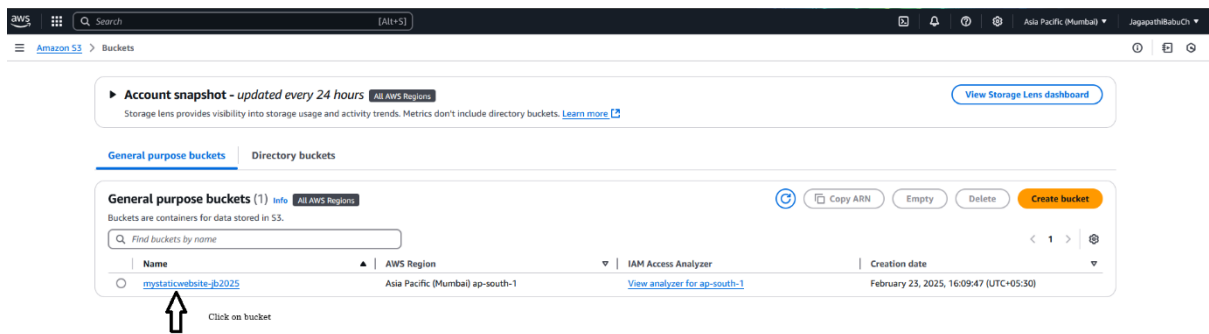
**Advanced settings**

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

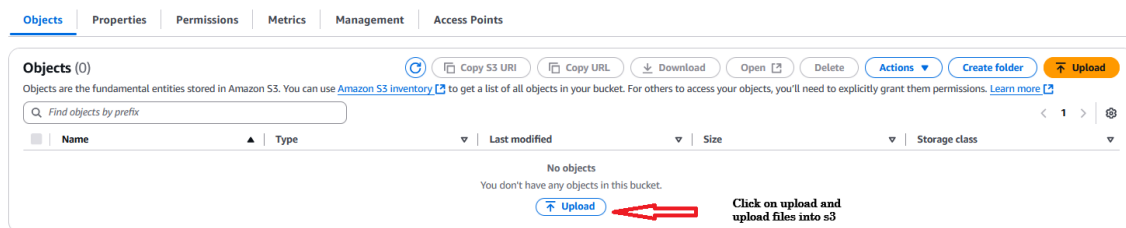
[Cancel](#) [Create bucket](#)

## STEP – 5

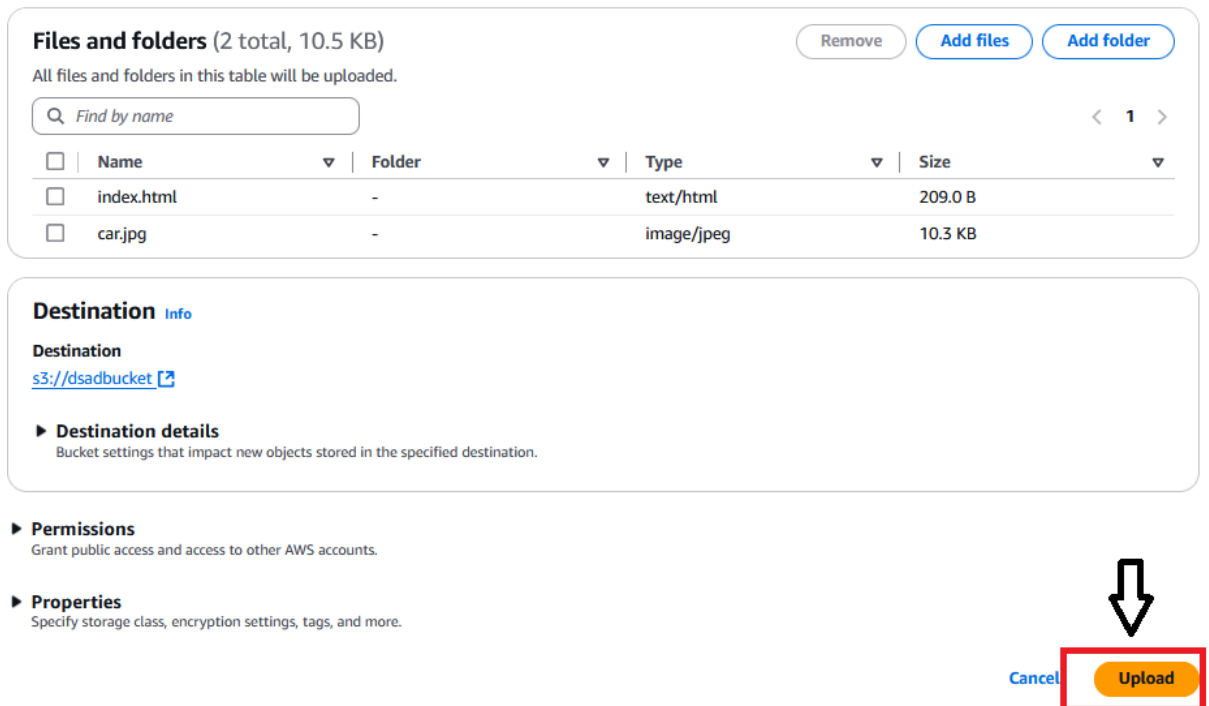
Click on bucket name



Drag and drop files into the Bucket or Add files/folders.



Click on upload button



Files will be uploaded successfully it will show **green** notification and next click on close.

The screenshot shows the AWS S3 console interface. At the top, a green notification bar states "Upload succeeded" with a close button. Below this, the "Upload: status" section indicates that after navigating away, information is no longer available. The "Summary" section shows the destination as "s3://mystaticwebsite-jb2025" and the upload status as "Succeeded" with 2 files (10.5 KB) at 100.00%. The "Files and folders" tab is selected, showing a table with 2 total items. The table lists "car.jpg" (image/peg, 10.3 KB) and "index.html" (text/html, 209.0 B), both with a status of "Succeeded".

Name	Folder	Type	Size	Status	Error
<a href="#">car.jpg</a>	-	image/peg	10.3 KB	Succeeded	-
<a href="#">index.html</a>	-	text/html	209.0 B	Succeeded	-

## STEP – 6 at 2 number (type index.html)

Click on properties and scroll down **Edit** static website hosting should be enabled and save .

This screenshot shows the "Properties" tab of an S3 bucket. It includes sections for "Object Lock" (Disabled), "Requester pays" (Disabled), and "Static website hosting" (Disabled). The "Static website hosting" section has an "Edit" button highlighted with a red box. Below this, a recommendation for AWS Amplify Hosting is shown.

The screenshot shows the "Edit static website hosting" configuration page. It includes sections for "Static website hosting" (with "Enable" selected), "Hosting type" (with "Host a static website" selected), "Index document" (set to "index.html"), "Error document" (set to "error.html"), and "Redirection rules" (empty table). A red arrow labeled "1" points to the "Enable" radio button. A red box labeled "2" highlights the "index.html" text input. At the bottom right, a red box labeled "3" highlights the "Save changes" button.

## STEP – 7

Go to permissions and at bucket policy click edit and write policy to Read Object (to View)

Bucket ARN  
arn:aws:s3:::dsadbucket

Policy

```
1 {  
2   "Version": "2012-10-17",  
3   "Statement": [  
4     {  
5       "Sid": "PublicReadGetObject",  
6       "Effect": "Allow",  
7       "Principal": "*",  
8       "Action": [  
9         "s3:GetObject"  
10      ],  
11      "Resource": [  
12        "arn:aws:s3:::bucket-name/*"  
13      ]  
14    }  
15  ]  
16 }
```

Replace the bucket name with your bucket name here i used dsadbucket

JSON Ln 16, Col 1

Security: 0 Errors: 0 Warnings: 0 Suggestions: 0

Preview external access

Cancel Save changes

## Updated bucket policy

Successfully edited bucket policy.

Permissions overview

Access finding

Access findings are provided by IAM external access analyzers. Learn more about [How IAM analyzer findings work](#)

View analyzer for ap-south-1

Block public access (bucket settings)

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 all your S3 buckets and 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 your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

Block all public access

Off

Individual Block Public Access settings for this bucket

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

Edit Delete

```
{  
  "Version": "2012-10-17",  
  "Statement": [  
    {  
      "Sid": "PublicReadGetObject",  
      "Effect": "Allow",  
      "Principal": "*",  
      "Action": [  
        "s3:GetObject",  
        "Resource": "arn:aws:s3:::dsadbucket/*"  
      ]  
    }  
  ]  
}
```

Copy

## STEP – 8

Go to properties and click on bucket website

Send a notification when specific events occur in your bucket. [Learn more](#)

Name	Event types	Filters	Destination type	Destination
No event notifications Choose Create event notification to be notified when a specific event occurs. <a href="#">Create event notification</a>				

**Amazon EventBridge** [Edit](#)

For additional capabilities, use Amazon EventBridge to build event-driven applications at scale using S3 event notifications. [Learn more](#) or [see EventBridge pricing](#)

Send notifications to Amazon EventBridge for all events in this bucket  
Off

**Transfer acceleration** [Edit](#)

Use an accelerated endpoint for faster data transfers. [Learn more](#)

Transfer acceleration  
Disabled

**Object Lock** [Edit](#)

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. Object Lock works only in versioned buckets. [Learn more](#)

Object Lock  
Disabled

**Requester pays** [Edit](#)

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

Requester pays  
Disabled

**Static website hosting** [Edit](#)

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

[We recommend using AWS Amplify Hosting for static website hosting](#)  
Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. Learn more about [Amplify Hosting](#) or [view your existing Amplify apps](#). [Create Amplify app](#)

**S3 static website hosting**  
Enabled

Hosting type  
Bucket hosting

**Bucket website endpoint**  
When you configure your bucket as a static website, the website is available at the [static website endpoint](#) of the bucket. [Learn more](#)

<http://dsadbucket.s3-website-ap-south-1.amazonaws.com> [static website link](#)

Good job! This is the static website hosted on **Amazon S3**



# Hello Guys

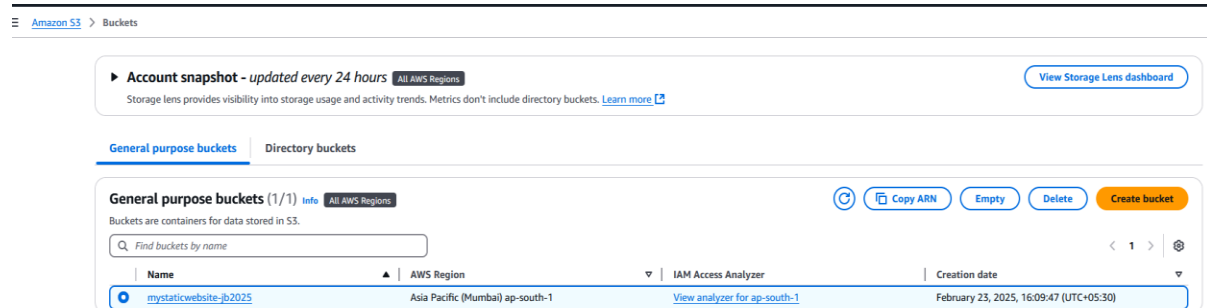
Car image is hosted on Amazon S3 Service



## STEP – 9

At last, don't forget to delete instances after completion to avoid any charges incurring.

Select Bucket and delete



Account snapshot - updated every 24 hours All AWS Regions [View Storage Lens dashboard](#)

Storage lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. [Learn more](#)

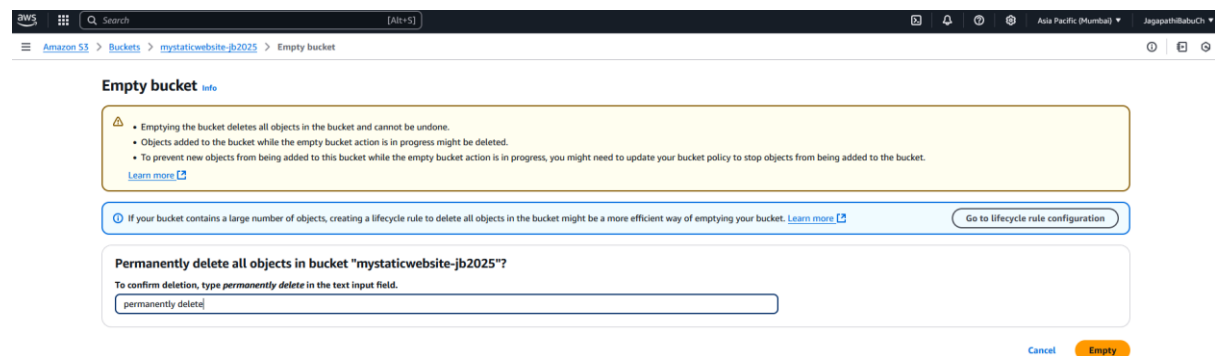
**General purpose buckets** Directory buckets

**General purpose buckets (1/1)** All AWS Regions

Buckets are containers for data stored in S3.

Name	AWS Region	IAM Access Analyzer	Creation date
<a href="#">mystaticwebsite-jb2025</a>	Asia Pacific (Mumbai) ap-south-1	<a href="#">View analyzer for ap-south-1</a>	February 23, 2025, 16:09:47 (UTC+05:30)

Empty bucket by typing 'Permanently delete'



**Empty bucket** info

- Emptying the bucket deletes all objects in the bucket and cannot be undone.
- Objects added to the bucket while the empty bucket action is in progress might be deleted.
- To prevent new objects from being added to this bucket while the empty bucket action is in progress, you might need to update your bucket policy to stop objects from being added to the bucket.

[Learn more](#)

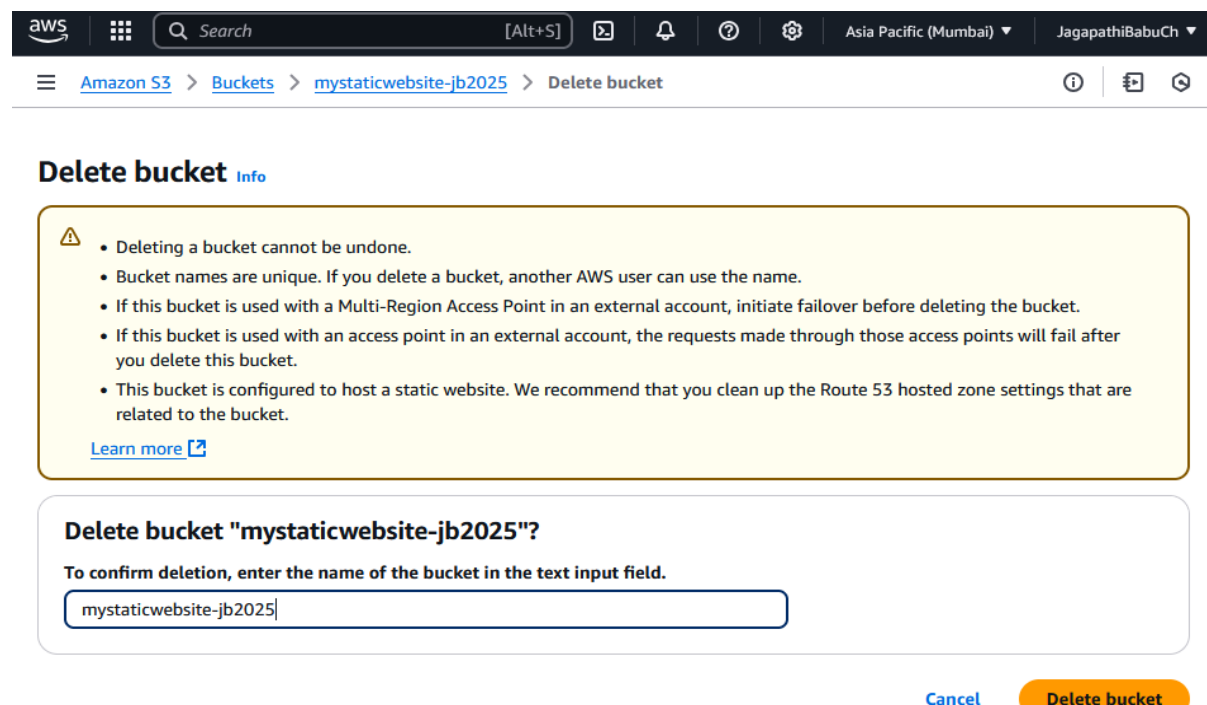
If your bucket contains a large number of objects, creating a lifecycle rule to delete all objects in the bucket might be a more efficient way of emptying your bucket. [Learn more](#) [Go to lifecycle rule configuration](#)

**Permanently delete all objects in bucket "mystaticwebsite-jb2025"?**

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

[Cancel](#) [Empty](#)

Delete Bucket by typing the Bucket Name



**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 "mystaticwebsite-jb2025"?**

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

[Cancel](#) [Delete bucket](#)