

PROJECT-2

Deploy a Static Website on AWS

❖ In this project, we will learn how to create a static website and deploy it using AWS services. A static website is a site that consists of HTML, CSS, and JavaScript files, and it doesn't require server-side processing or a database.

• LAB STEPS:-

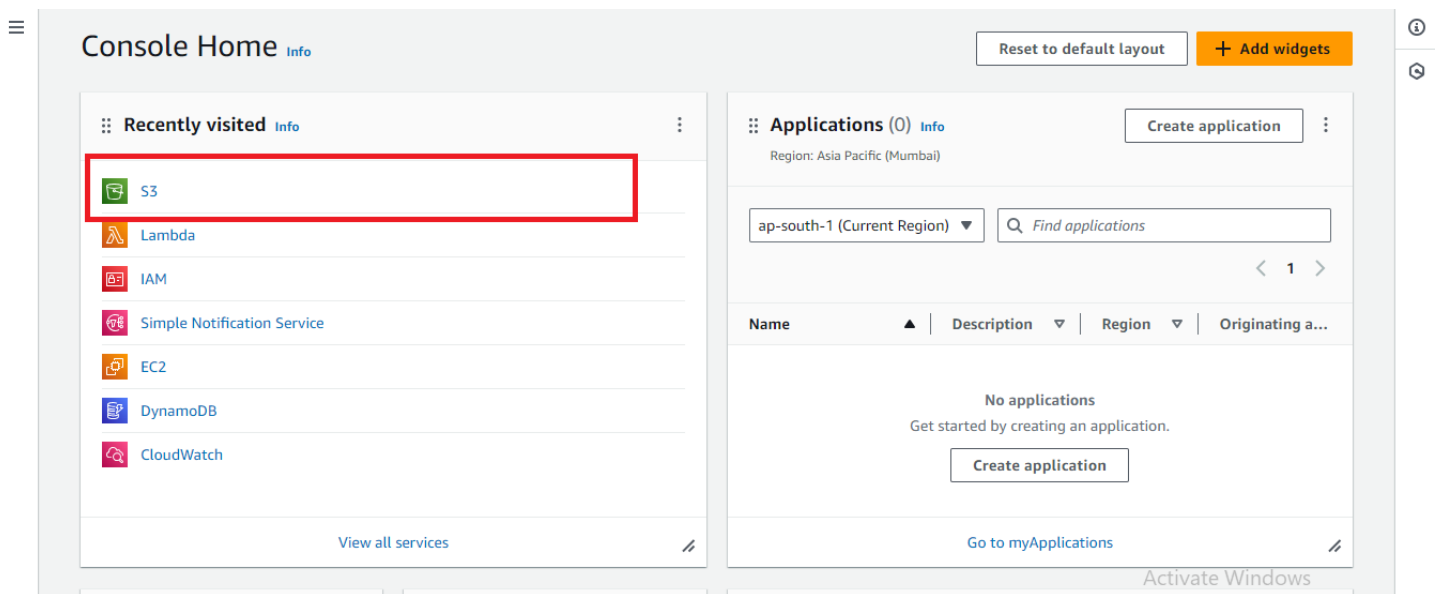
Task 1: Sign in to AWS Management Console

1. Click on the Open Console button, and you will get redirected to AWS Console in a new browser tab.
2. On the AWS sign-in page,
 - Leave the Account ID as default. Never edit/remove the 12-digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab.
 - Now copy your User Name and Password in the Lab Console to the IAM Username and Password in AWS Console and click on the Sign in button.
3. Once Signed In to the AWS Management Console, Make the default AWS Region as US East (N. Virginia) us-east-1.

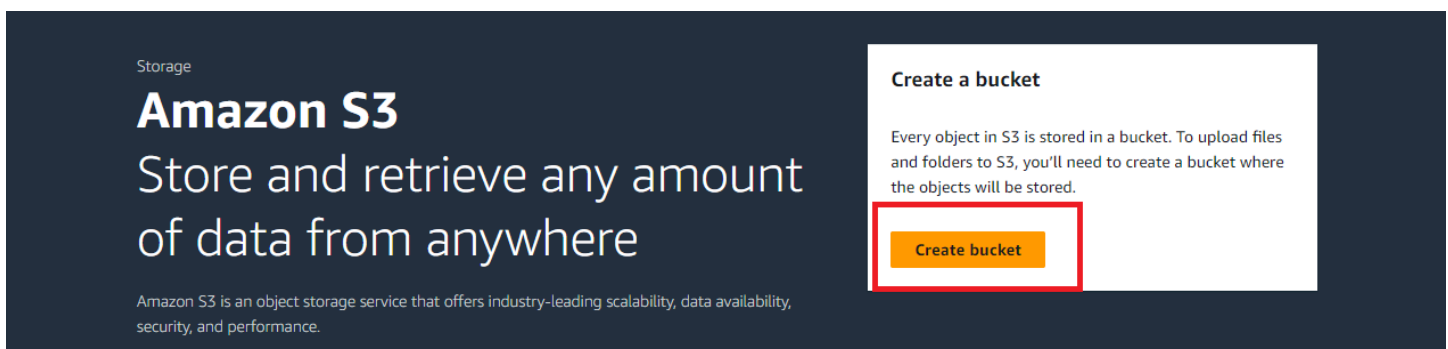
Task 2: Creating a S3 Bucket

In this task, we are going to create a new S3 bucket in the US East (N. Virginia) region with a unique name disabling ACLs, and allowing public access for hosting the static website.

1. Navigate to S3 by clicking on the Services menu at the top, then click on S3 in the Storage section.



2. In the S3 dashboard, click on the **Create Bucket** button.



3. In the General Configuration, **Bucket name**: Enter abcxzy

- **Note:** S3 Bucket names are globally unique, choose a name that is available. Maybe you can enter your name and create one.

Amazon S3 > Buckets > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

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

Bucket name [Info](#)

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.

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

Activate Windows
Go to Settings to activate Windows.

4. Object ownership: Select **ACLs enabled** option.

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

5. In the option of **Block Public Access** settings for this bucket, Uncheck the option of **Block all public access**.

☐ **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.

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



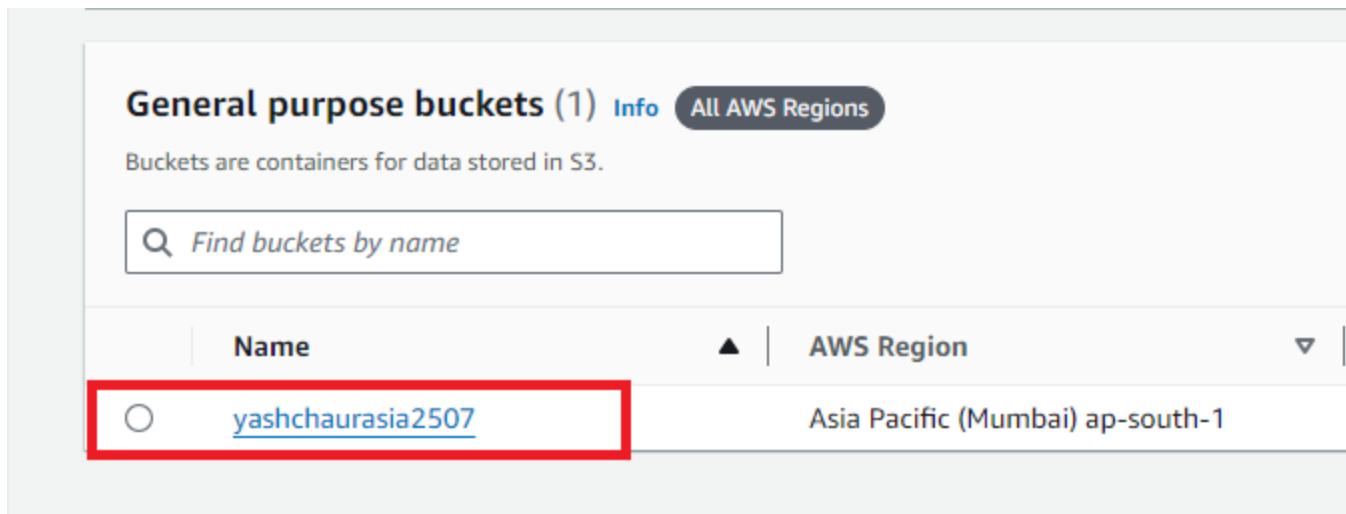
Turning off block all public access might result in this bucket and the objects within becoming public. AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

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

7. Keep Everything default and click on **Create Bucket** button.

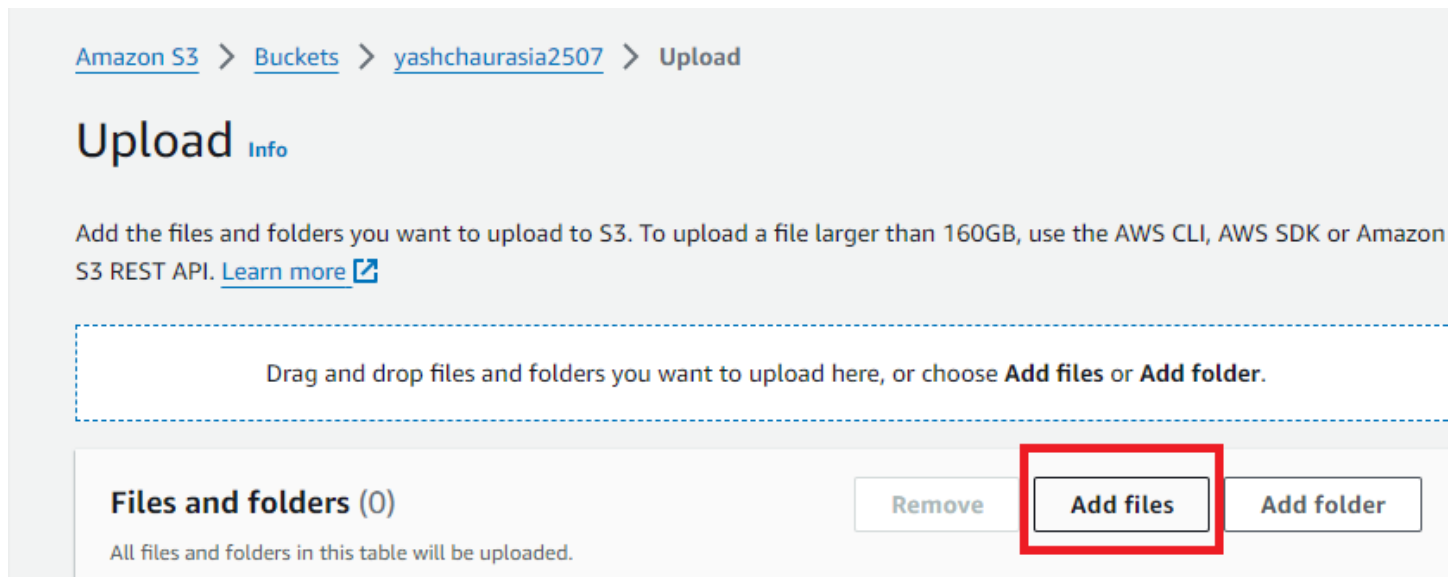
Task 3: Uploading HTML File

1. To proceed, go to the **S3 Bucket Name** that you created and click on it.



2. After that click on **Upload**

Click on Add Files

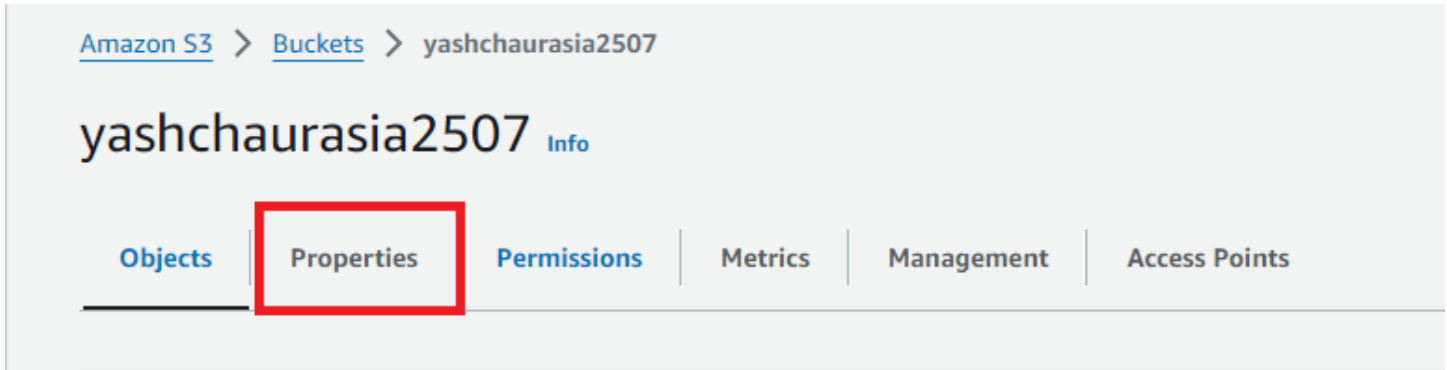


3. Select your files and upload.

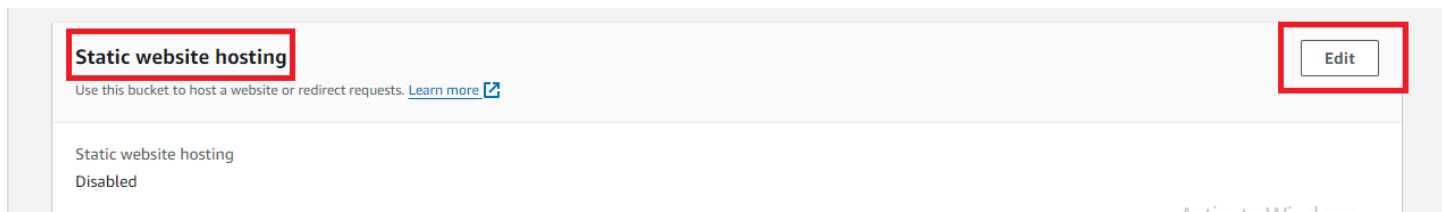
Task 4: Enable Static Website Hosting settings

In this task, we will enable static website hosting for our S3 bucket, configure it to use index.html and error.html.

1. To proceed, go to the S3 bucket name that you created and click on it. After that, navigate to the Properties tab which can be found at the top of the screen.



2. Scroll down to the **Static website hosting** section and click on **Edit** button.



3. Static website hosting: Select **Enable**

Amazon S3 > Buckets > yashchaurasia2507 > Edit static website hosting

Edit static website hosting [Info](#)

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](#)

i 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

Activate Windows
Go to Settings to activate Windows

4. Index document: Type **index.html**

Error document: Type **error.html**

Index document
Specify the home or default page of the website.

index.html

Error document - *optional*
This is returned when an error occurs.

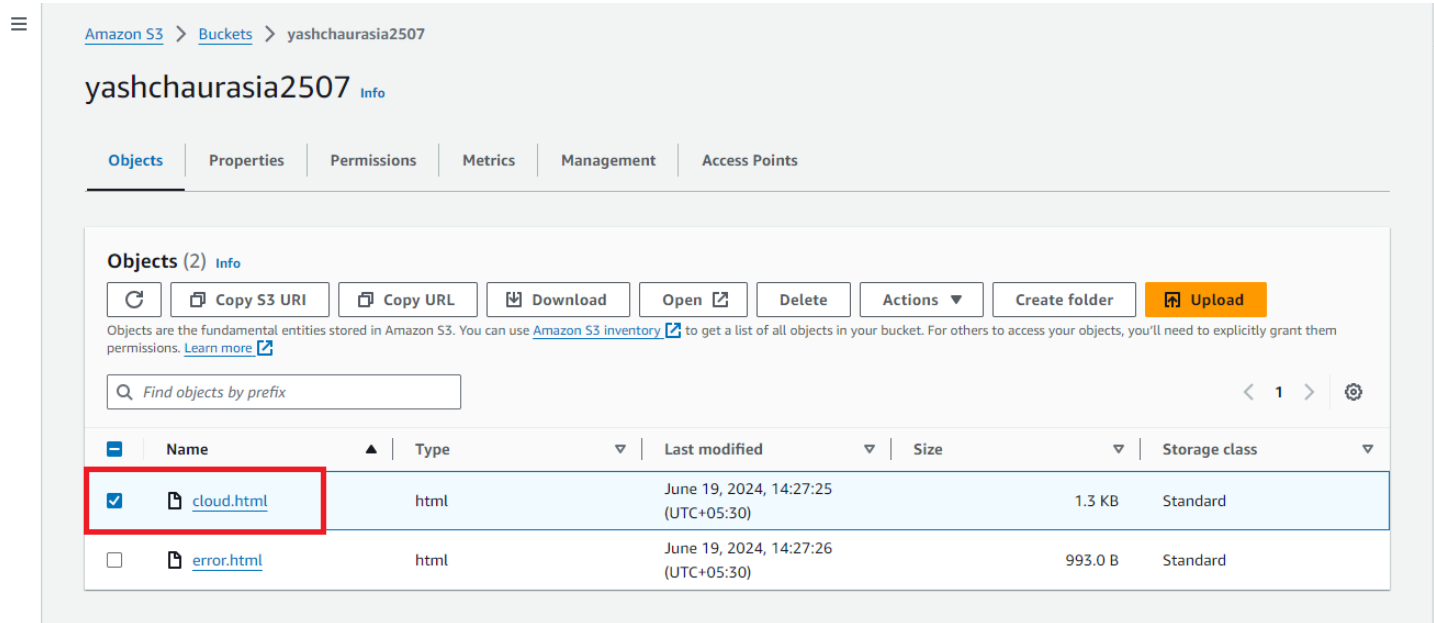
error.html

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

5. Click on the **save Changes**.

Task 5: Test the Website

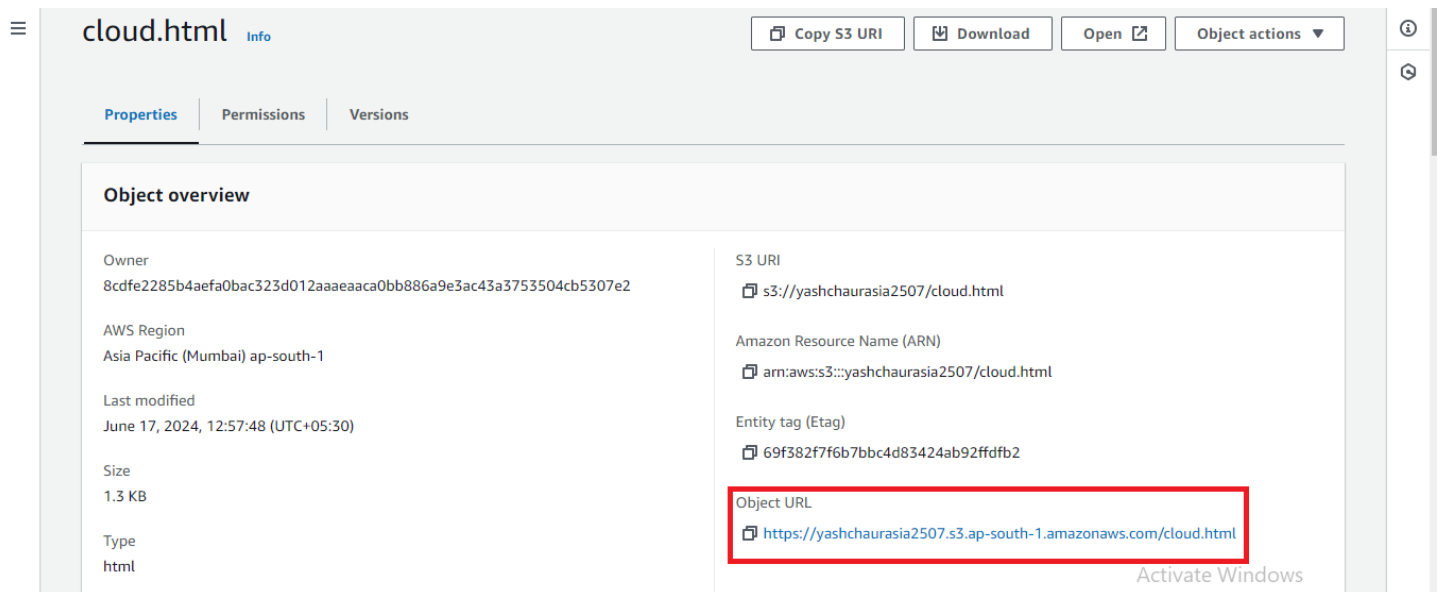
1. Select your **HTML** File



The screenshot shows the Amazon S3 console interface for a bucket named 'yashchaurasia2507'. The 'Objects' tab is active, displaying a list of objects. The 'cloud.html' file is highlighted with a red box, indicating it is selected. The file details are as follows:

Name	Type	Last modified	Size	Storage class
cloud.html	html	June 19, 2024, 14:27:25 (UTC+05:30)	1.3 KB	Standard
error.html	html	June 19, 2024, 14:27:26 (UTC+05:30)	993.0 B	Standard

2. Now copy the Static Website URL



The screenshot shows the 'cloud.html' object details page in the Amazon S3 console. The 'Object overview' section displays various metadata. The 'Object URL' is highlighted with a red box, showing the static website URL:

Object URL: <https://yashchaurasia2507.s3.ap-south-1.amazonaws.com/cloud.html>

3. Then, Run it in your Browser

[Login](#)