

## Static Hosting [Exp 1(a)]

**Aim:** To develop a website and host it on:-

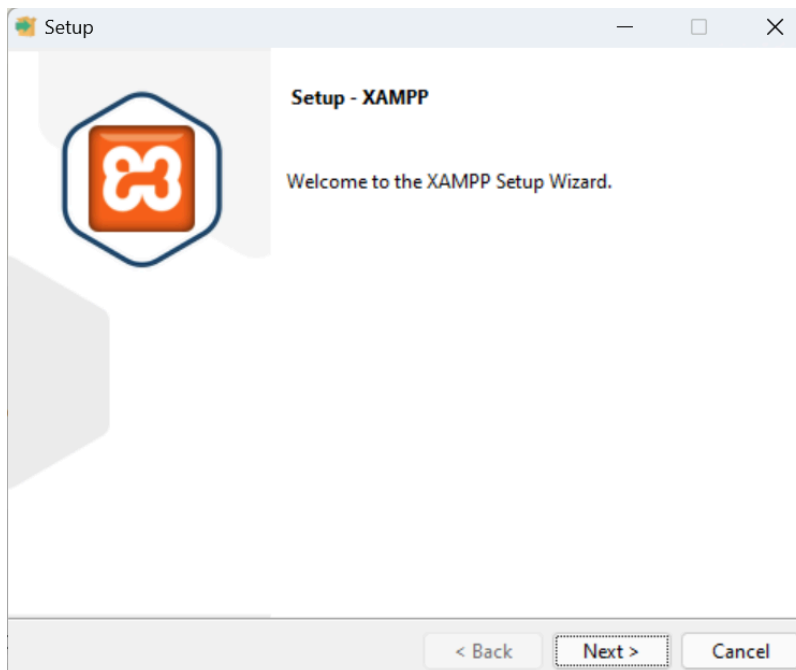
1. Local machine or virtual machine.
2. Amazon S3 bucket.

### Steps:-

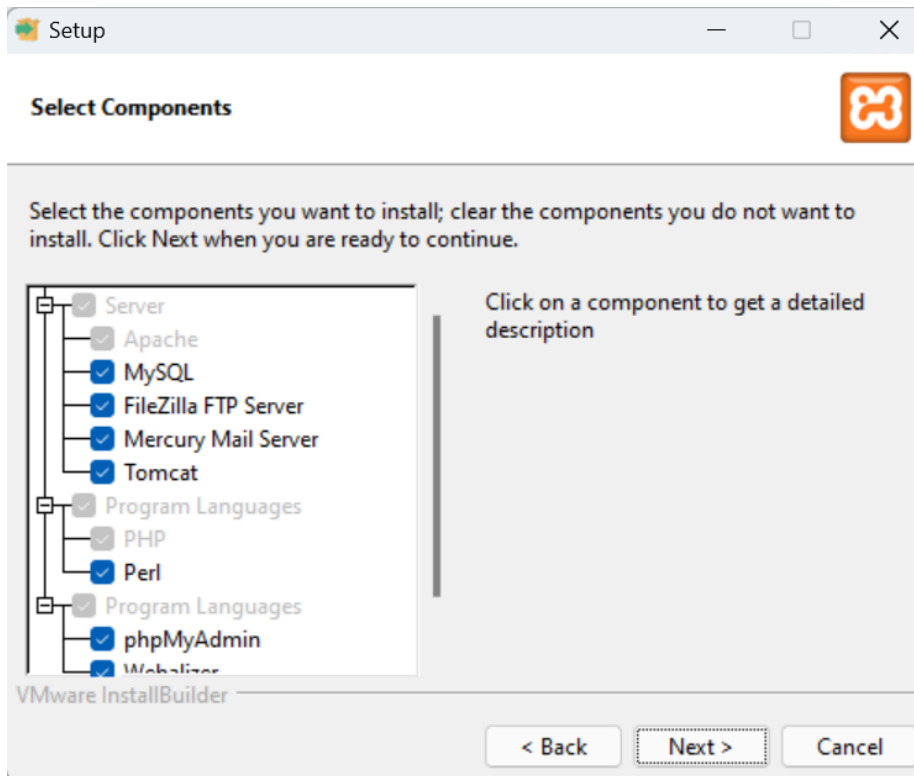
- On local server using XAMPP:-

Step 1: Install XAMPP.

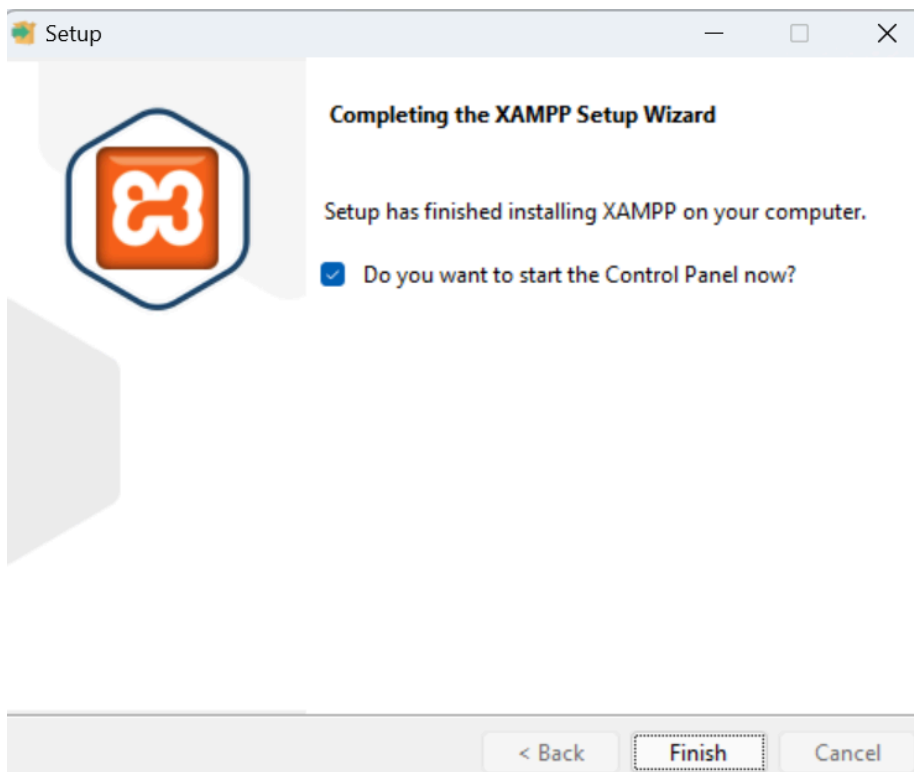
1. Begin the setup process.



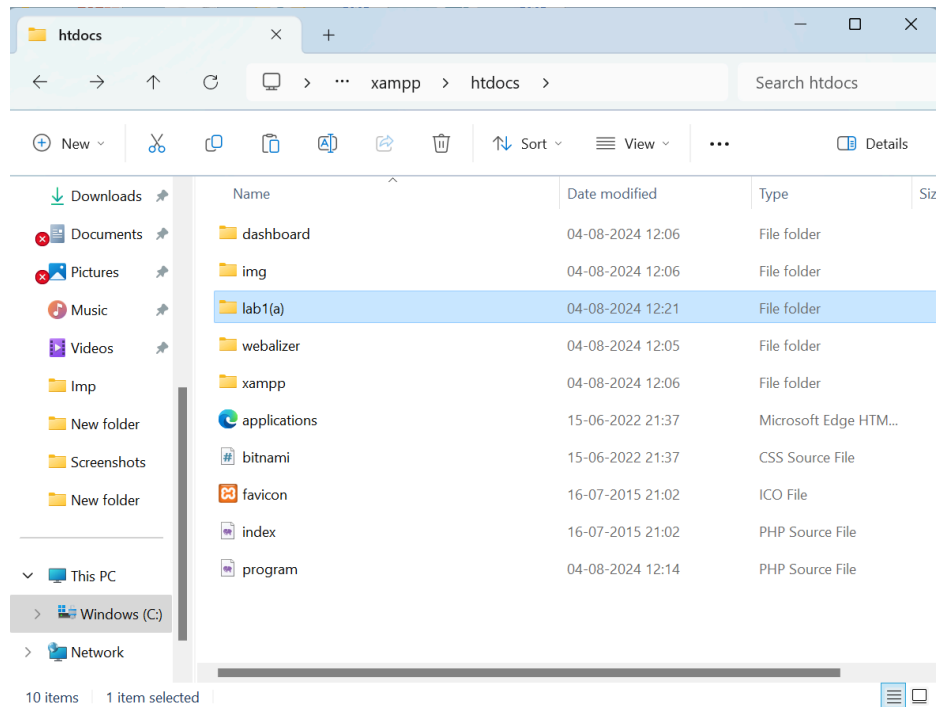
2. Select the components you want to install and click Next.



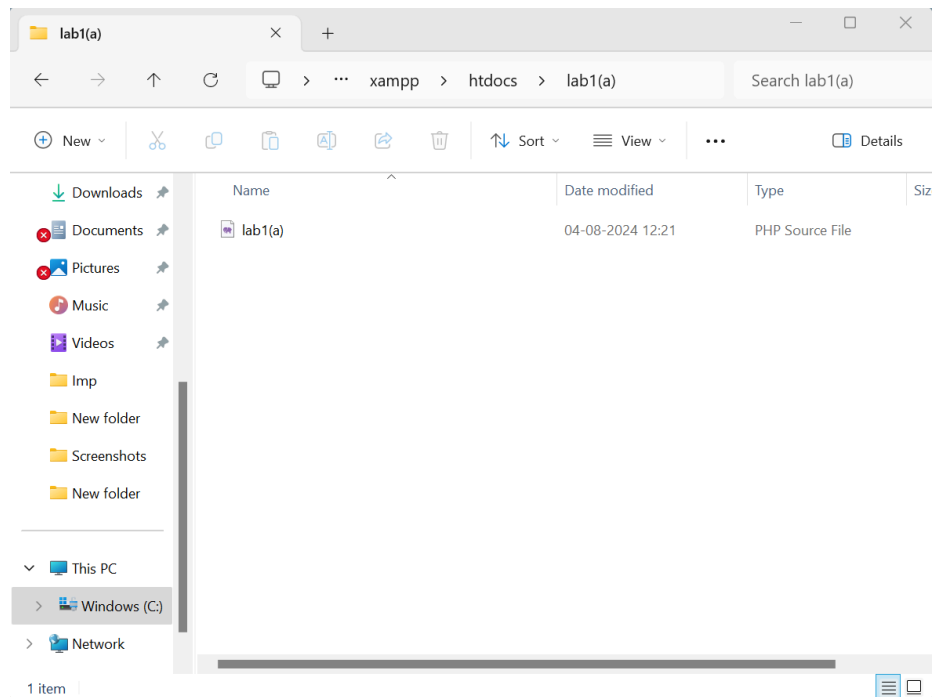
3. Go through the subsequent installation steps (keeping the default options) and finish the installation.



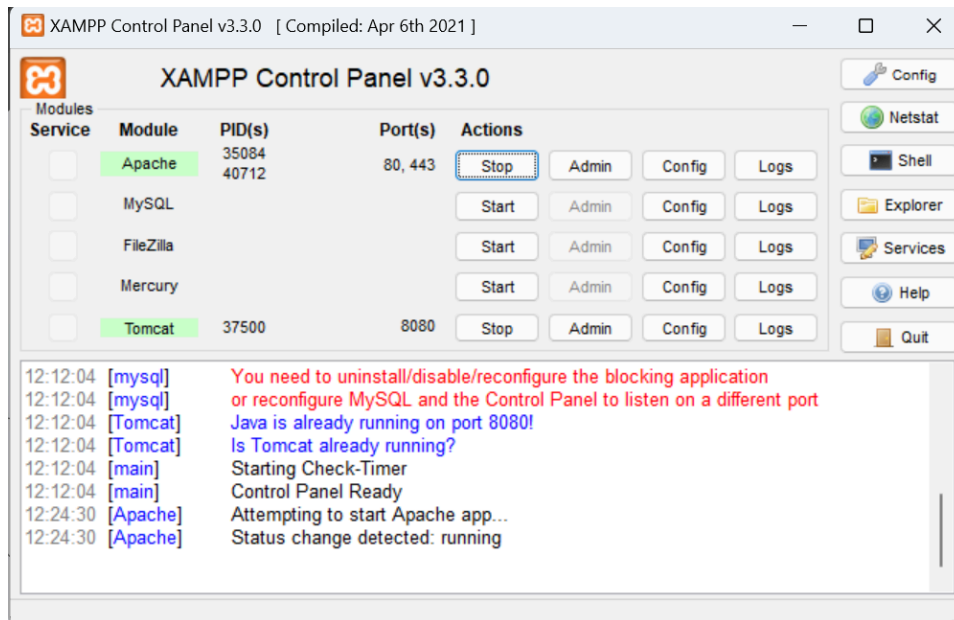
Step 2: Inside the htdocs folder inside of the xampp folder create a new folder.



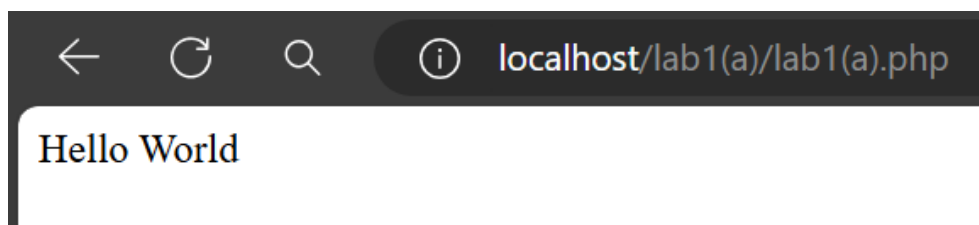
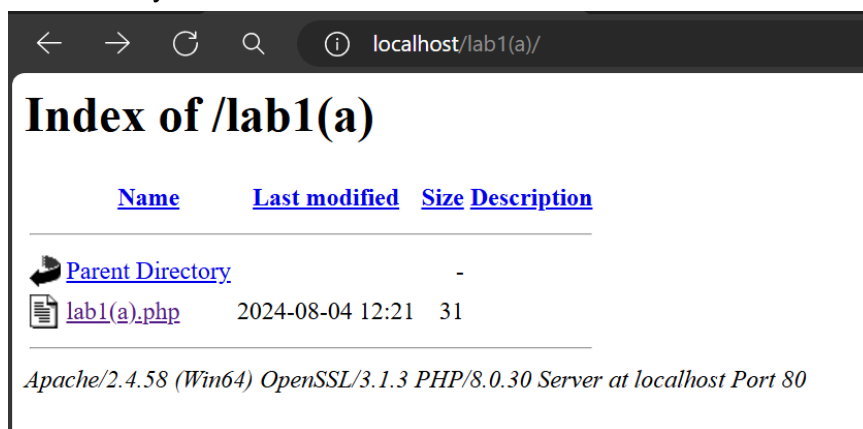
Step 3: Create a file (with extension: .php) that is to be hosted on the local server.



Step 4: Open the XAMPP Control Panel and start the Apache service.

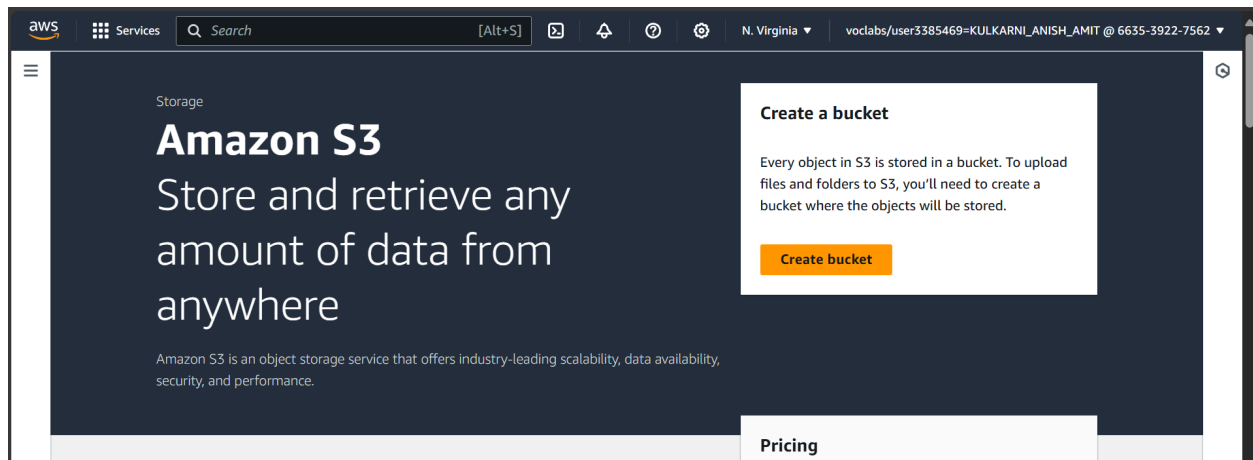


Step 5: Type 'localhost/YOUR\_FILENAME.php' into your web browser. This will open your website on your browser.

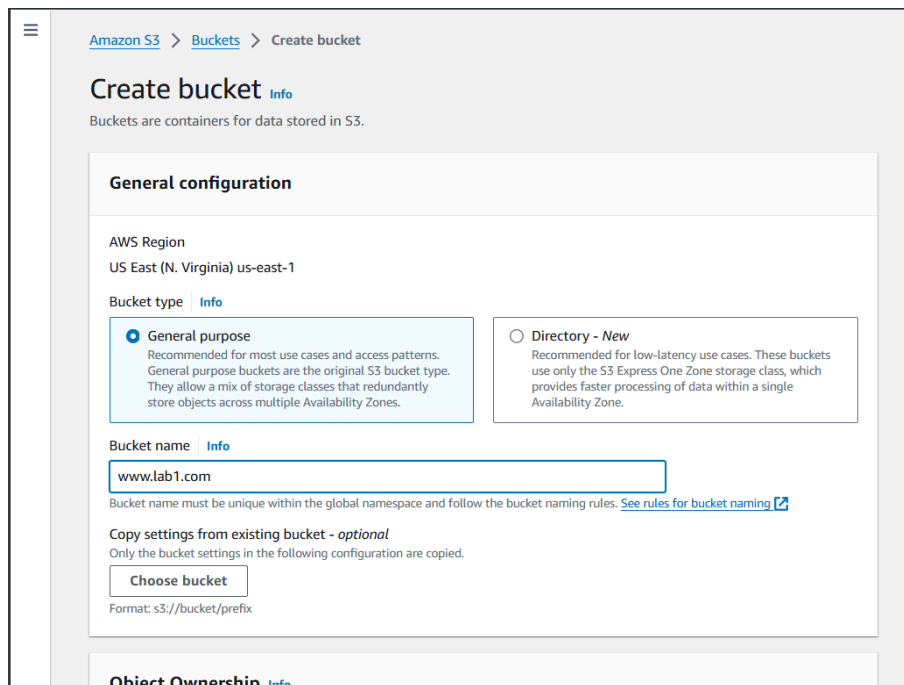


- On AWS S3:-

Step 1: Login into your AWS account, choose the S3 option in the 'Services' tab and click on 'Create Bucket'.



Step 2: Give a name to your bucket and keeping the others options default, click on 'Create Bucket'.



Step 3: In the properties of your bucket, navigate to the 'Edit static website hosting' tab and click on 'Enable'. Also, in the 'Index document' and 'Error document' boxes, enter the names of your index and error websites respectively.

### 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

Specify the home or default page of the website.

lab1.html

Error document - *optional*

This is returned when an error occurs.

error.html

### Static website hosting

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

Static website hosting

Enabled

Hosting type

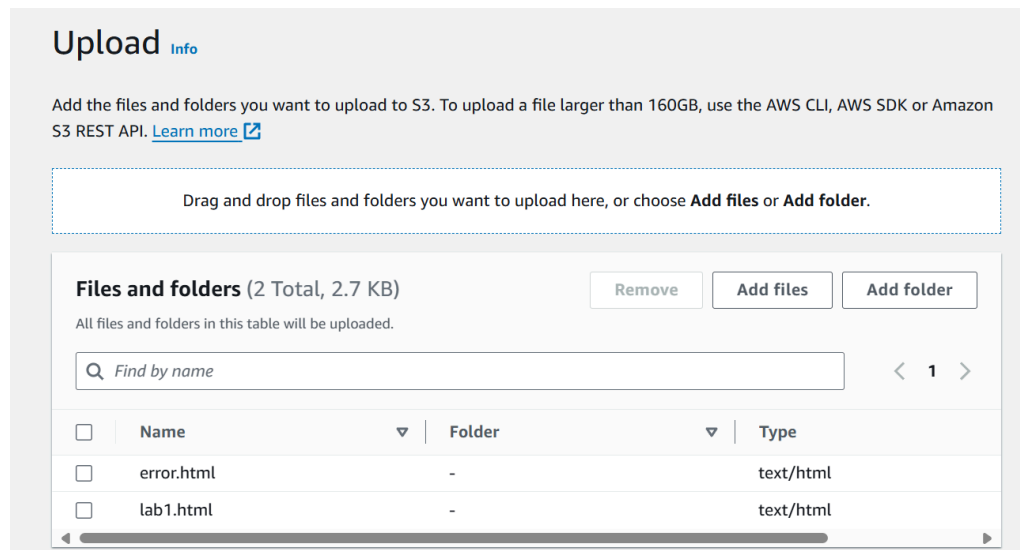
Bucket hosting

Bucket website endpoint

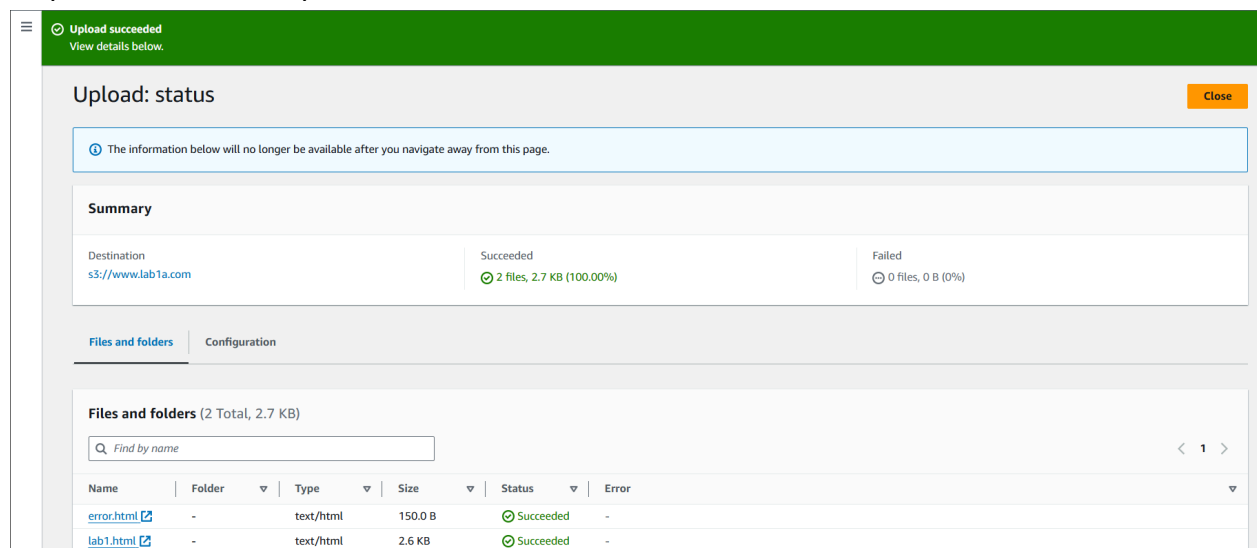
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://www.lab1a.com.s3-website-us-east-1.amazonaws.com>

Step 4: In your bucket, click on 'Upload' option, click on 'Add files' option and select the websites that you want to upload (index and error websites). Then, click on 'Upload'.



Step 5: Your files are uploaded.



Now, as the contents of the bucket are not yet available to the public, the website does not get displayed and an error message is displayed.

Step 6: To make it public, go to permissions tab, go to 'Block public access' and click on edit. Uncheck the 'Block all public access' checkbox and click on save changes.

**Edit Block public access (bucket settings)** [Info](#)

**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**

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.

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

Step 7: Go to 'Bucket policy' tab and click edit. Paste the following code snippet into the text box (replace 'YOUR-BUCKET-NAME-HERE' with the name of your bucket and save changes.

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



Block all public access

Off

Individual Block Public Access settings for this bucket

Bucket policy

Edit

Delete

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](#)

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "PublicReadGetObject",
      "Effect": "Allow",
      "Principal": {
        "AWS": "*"
      },
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::www.lab1a.com/*"
    }
  ]
}
```

Copy

Step 8: Click on 'Bucket website endpoint' in the 'Static website hosting' tab in your bucket. Your website is visible.

← ↻ 🔍 ⚠ Not secure | www.lab1a.com.s3-website-us-east-1.amazonaws.com

# Hello World!

This is a lab1(a) website

← ↻ 🔍 ⚠ Not secure | www.lab1a.com.s3-website-us-east-1.amazonaws.com/lab2.html

# Error Message