

Hosting a Static Website in Storage

(LAB-M02-01)

Part A: Create AWS S3 Bucket & Upload Static Pages

Step 1: **Create a Bucket in Amazon S3**

1. In the AWS Management Console, on the **Services** menu, click **S3**.
2. Click **Create bucket**

An Amazon S3 bucket name is globally unique, and the namespace is shared by all AWS accounts. This means that after a bucket is created, the name of that bucket cannot be used by another AWS account in any AWS Region until the bucket is deleted.

Therefore, for this lab you will use a bucket name with a random number, such as: *website-<your-name>-123*

3. For **Bucket name** enter: **website-<your-name>-123**

(Replace <your-name> with your name and 123 with a random number to make bucket name unique)

Like: website-ahmad-123

4. For Region, select **US East (N. Virginia)**
5. Click **Next**
6. Under **Tags**, Click **Next**

Public access to buckets is blocked by default. The files in your static website will need to be publicly accessible, so you will need to permit access.

7. **Deselect** (turn off) **Block all public access** option.

Note: You can grant access to specific users after you create the bucket.

Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, or both. 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. 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 policies**
S3 will block new bucket 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 policies**
S3 will ignore public and cross-account access for buckets with policies that grant public access to buckets and objects.

8. Select **I acknowledge ...**

⚠ Disabling Block all public access may result in this bucket and the objects within becoming public
AWS recommends that you block all public access to your bucket, unless public access is required for specific and verified use cases such as static website hosting.

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

☒ **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.

9. Click **Next**

10. Click **Create bucket**

Note: Once bucket created, you will see the name of the Bucket you have created in previous step. You can see the access type is **"Objects can be public"**.

11. Open on the name **website-<your-name>-123** of your **new bucket**.

S3 buckets

🔍 Search for buckets

+ Create bucket Edit public access settings Empty Delete

<input type="checkbox"/>	Bucket name ▼	Access ⓘ ▼
<input type="checkbox"/>	website-ahmad-123	Objects can be public

Step 2: **Configure the bucket for Static Website Hosting**

11. Click the **Properties** tab.

12. Click **Static website hosting**

13. Click the **Endpoint** link.

It will open new tab & you will receive a **404 Not Found** error because the website has not been configured yet. Keep this tab open in your web browser so that you can return to it later.

14. Return to the web browser tab with the Amazon S3 management console (but do not close the website tab).

15. Click **Use this bucket to host a website**.

16. For **Index document**, enter: **index.html** (You will need to enter this even though it is already displayed)

17. For **Index document**, enter: **error404.html** You will need to enter this even though it is already displayed)

18. Click **Save**

Your bucket has now been configured to host a static website.

Step 3: **Upload Content to your Bucket**

19. **Unzip** the **aws-s2-website-code** Code

Note: **aws-s3-website-code** is available in the Lab manual folder

Ensure that each file keeps the same filename, including the extension!

- [index.html](#)
- [error404.html](#)

20. **Copy** the static website host **endpoint**

Static website hosting

Endpoint : <http://website-ahmad-123.s3-website-us-east-1.amazonaws.com>

☒ Use this bucket to host a website [Learn more](#)

Index document [i](#)

index.html

Error document [i](#)

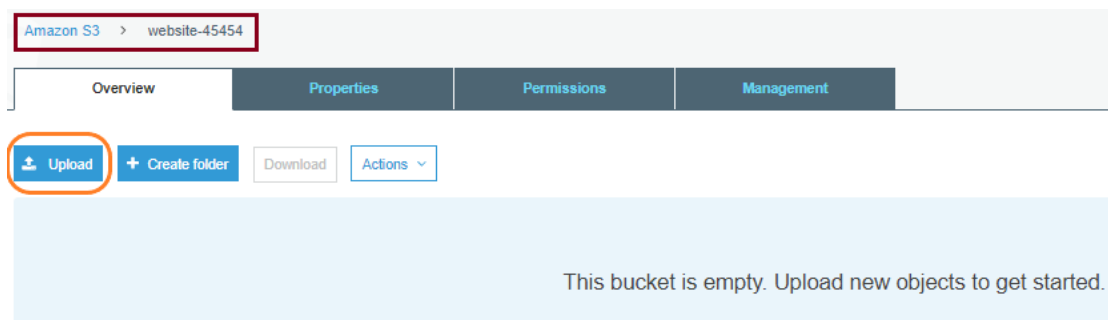
error404.html

21. Copy the static website host **endpoint** in web browser, which you have copied in the previous step.
22. Return to the web browser tab that showed the **404 Not Found** error.
23. Return to the **S3 management console** and click the **Overview** tab under **website-<your-name>-123** of your **bucket**.

Note: You will see your bucket access as **Objects can be public**.

S3 buckets		Discover the console	
<input type="text" value="Search for buckets"/>		All access types v	
+ Create bucket Edit public access settings Empty Delete		4 Buckets 2 Regions ↻	
<input type="checkbox"/>	Bucket name v	Access i v	Region v Date created v
<input type="checkbox"/>	website-ahmad-123	Objects can be public	US East (N. Virginia) Jan 16, 2020 11:37:57 AM GMT+0530

24. Click **Upload**



25. Upload all files and folders under **my-s3-website** by using **Drag and Drop**

- a. In a window, select the files and folders that you want to upload.
- b. Drag and drop files and folders to the AWS S3 Upload dialog box.

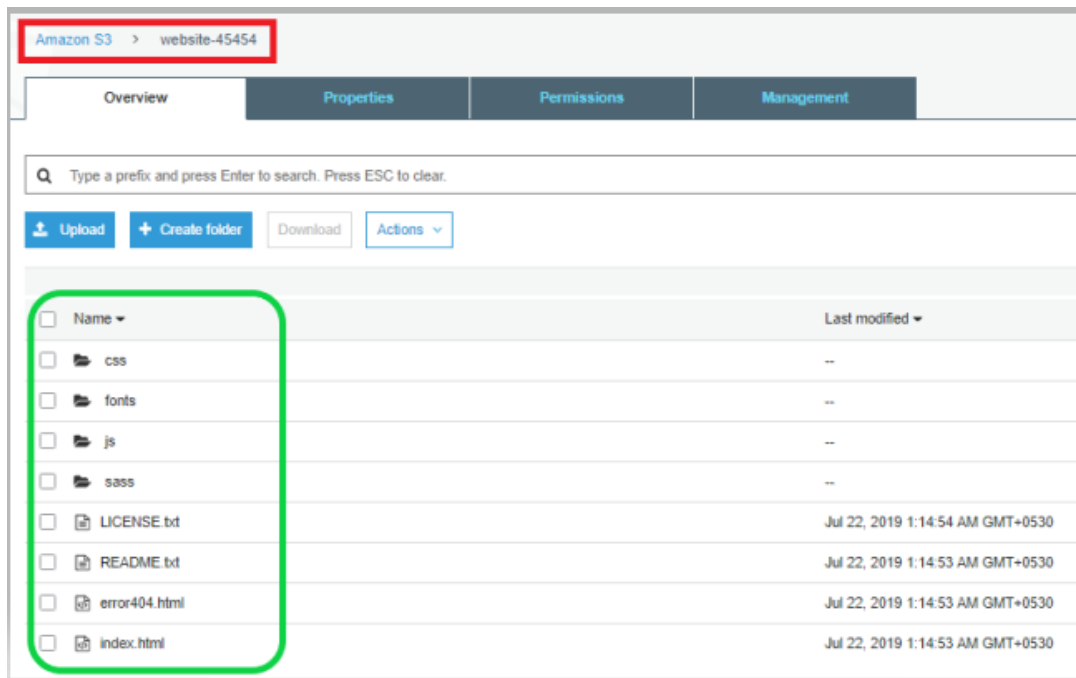
Note:

1. Don't upload the **aws-s3-website-code** folder directly in bucket.
2. You need upload the contents of **my-s3-website** in Bucket.
3. Unzip the **aws-s3-website-code** before drag & drop.

26. Click **Upload**

Here you will also see the progress of file & folders uploading to S3 bucket. Now your files will be uploaded to the bucket.

Verify all folders & files are same in the S3 bucket & my-s3-website folder



Step 4: **Enable Access to the Objects**

24.Refresh the static website host **endpoint** web page.

If you accidentally closed this tab, go to the **Properties** tab, click **Static website hosting** and click the **Endpoint** link again.

You should now see a **403 Forbidden** message. This is good! This indicates that your static website is being hosted by Amazon S3, but that the content is private.

You will now configure the individual objects to be publicly accessible.

26.Return to the web browser tab with the Amazon S3 management console (but do not close the website tab).

27.Select **all objects**.

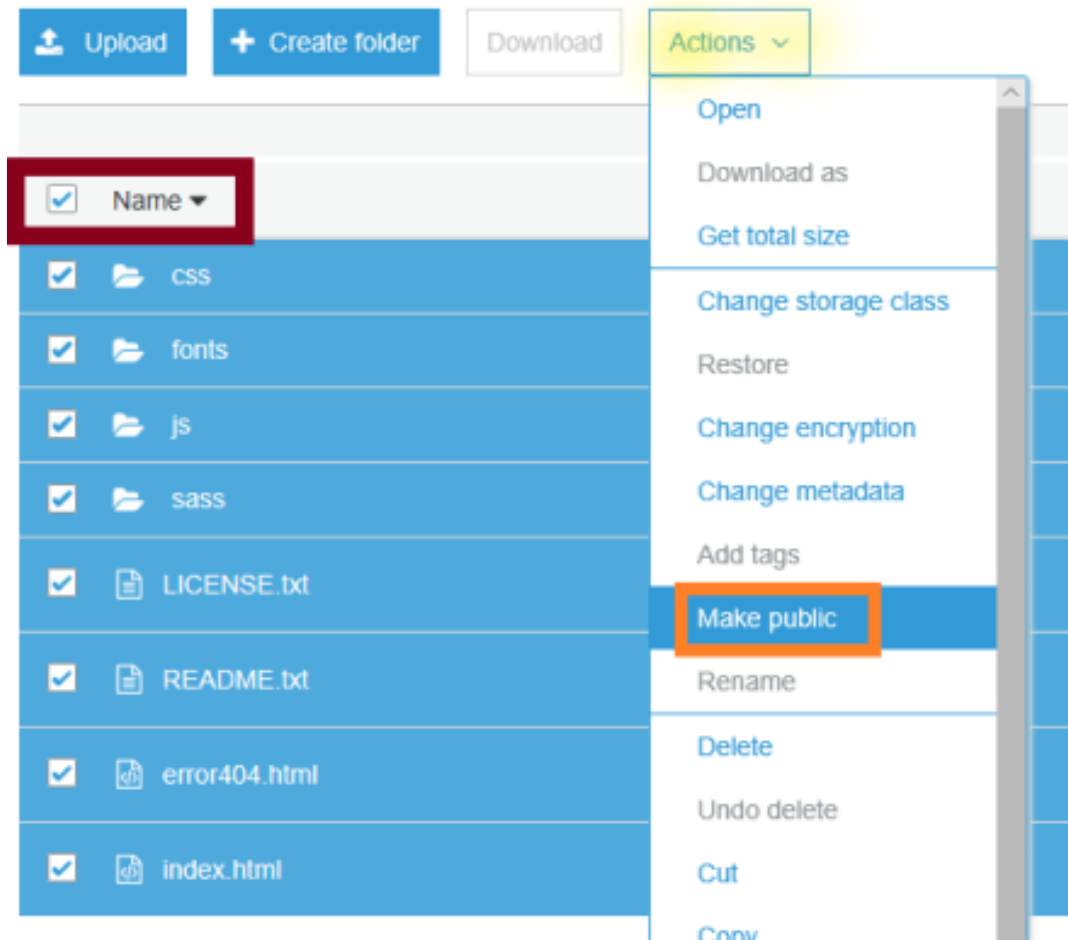
28.In the **Actions** menu, select **Make public**

A list of the all objects will be displayed.

29.Click **Make public**

Here you will also see the progress of file & folders converting to public

That's it! Your static website will now be publicly accessible.



Part B: Access Static Website

Step 5: Access Static Website hosted in S3 bucket

30. Return to the web browser tab showing **403 Forbidden**.

31. Refresh the web page.

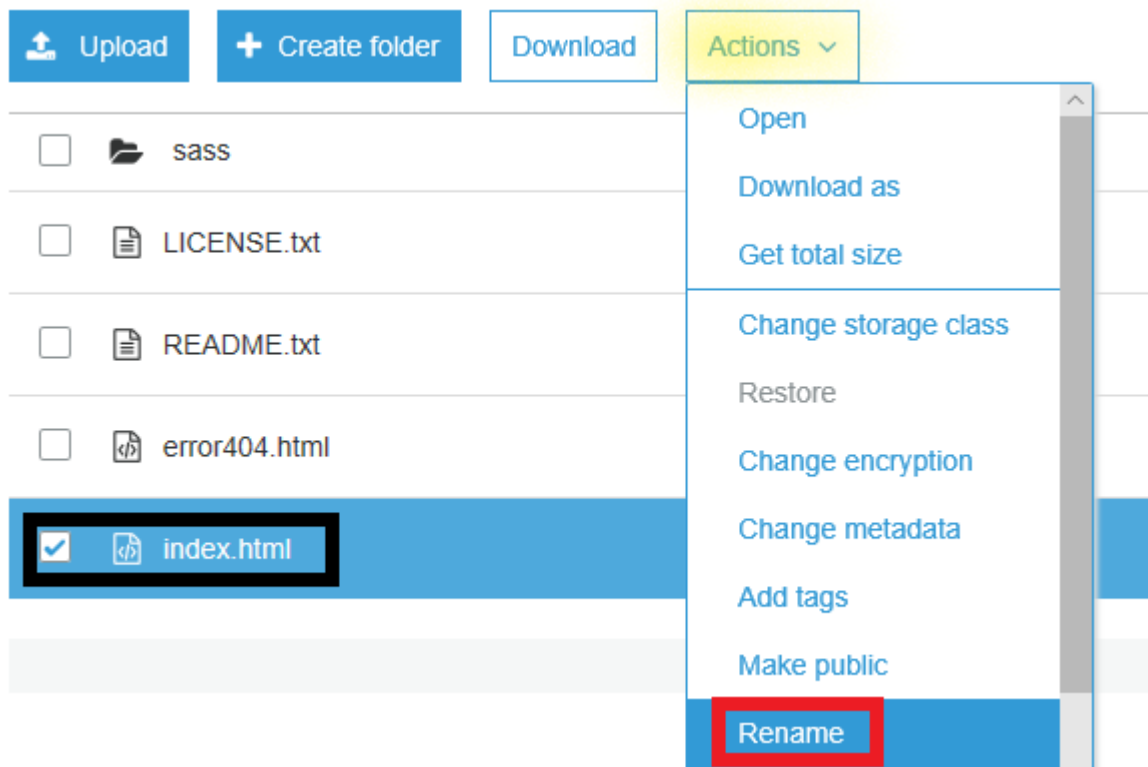
You should now see the static website being hosted by Amazon S3.

Step 6: Rename the index.html file

32. Return to the Amazon S3 management console.

33. Select **index.html** and use the **Actions** menu to **Rename**

34. Rename **index.html** to **index1.html**



35. Click **Save**

36. **Return to the web browser** tab with the Static Website and **refresh the page**.

That's it! Your static website will show you error page.

Part C: Delete S3 Bucket

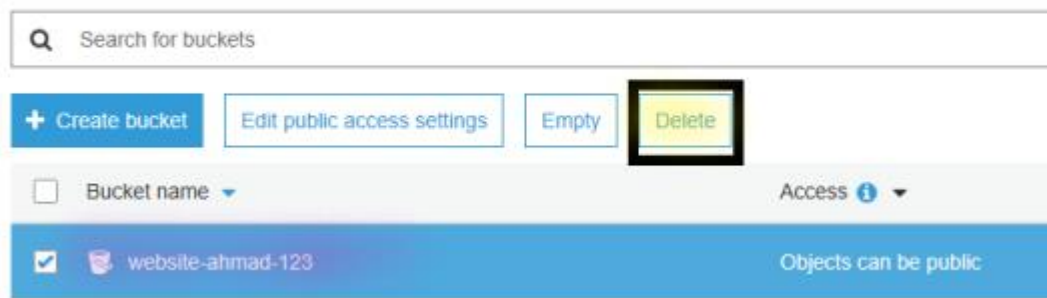
Step 7: **Delete Bucket to clean up your lab environment**

37. In the AWS Management Console, on the **Services** menu, click **S3**

38. Select the bucket **website-<your-name>-123** you have created in previous step

39. Select **Delete**

S3 buckets



Once it prompts for confirmation. **Provide the bucket name** to confirm the deletion