

# 1. Creating a S3 Bucket and Configuring as a Static Website

## 1. Steps to create a S3 bucket and configure it as an static website.

- Sign in to the AWS Management Console and in the **Find Services** search box type s3 and choose **S3**.
- Click **Create bucket**.
  - In the **Bucket name** field, type a unique DNS-compliant name for your new bucket.
  - Example: `2019-03-01-er-website` *\*IMPORTANT: Use your own initials and the current date.\**
  - For **Region** choose US East (N. Virginia).
- Click **Next**. Leave the current settings alone:

**Versioning**  
☐ Keep all versions of an object in the same bucket. [Learn more](#)

**Server access logging**  
☐ Log requests for access to your bucket. [Learn more](#)

**Tags**  
You can use tags to track project costs. [Learn more](#)

Key	Value
<a href="#">+ Add another</a>	

**Object-level logging**  
☐ Record object-level API activity using AWS CloudTrail for an additional cost. See [CloudTrail pricing](#) or [learn more](#)

**Default encryption**  
☐ Automatically encrypt objects when they are stored in S3. [Learn more](#)

[Advanced settings](#)

**Management**

**CloudWatch request metrics**  
☐ Monitor requests in your bucket for an additional cost. See [CloudWatch pricing](#) or [learn more](#)

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- Click **Next** again.
- Under **Public access settings for this bucket** de-select the following:
  - **Block new public ACLs and uploading public objects.**
  - **Remove public access granted through public ACLs.**
  - **Block new public bucket policies.**
  - **Block public and cross-account access if bucket has public policies.**

- Click **Next**.
- Click **Create bucket**.
- Click on the bucket and select the **Properties** pane, choose **Static Website Hosting**.
  - Select **Use this bucket to host a website**.
  - Under **Index document** type in `text.html`. *NOT index.html*
  - Under **Error document** type in `error.html`.

**Static website hosting** [X]

Endpoint : <http://2019-03-01-er-website.s3-website-us-east-1.amazonaws.com>

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

Index document ⓘ

Error document ⓘ

Redirection rules (optional) ⓘ

☐ Redirect requests ⓘ [Learn more](#)

☐ Disable website hosting

- Click the endpoint. It should open in a new tab and show an error 403 forbidden. Which is exactly what we would expect right now, as no permissions have been added yet.

## 403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: 9D930D9176FB6D3E
- HostId: xPjHzQf8gIq1jB9yJ4b5YpgFCsYx0kvTZPcqShr4QbD1889nn95kc6FLVPpGI665fpB+LTNX4bI=

### An Error Occurred While Attempting to Retrieve a Custom Error Document

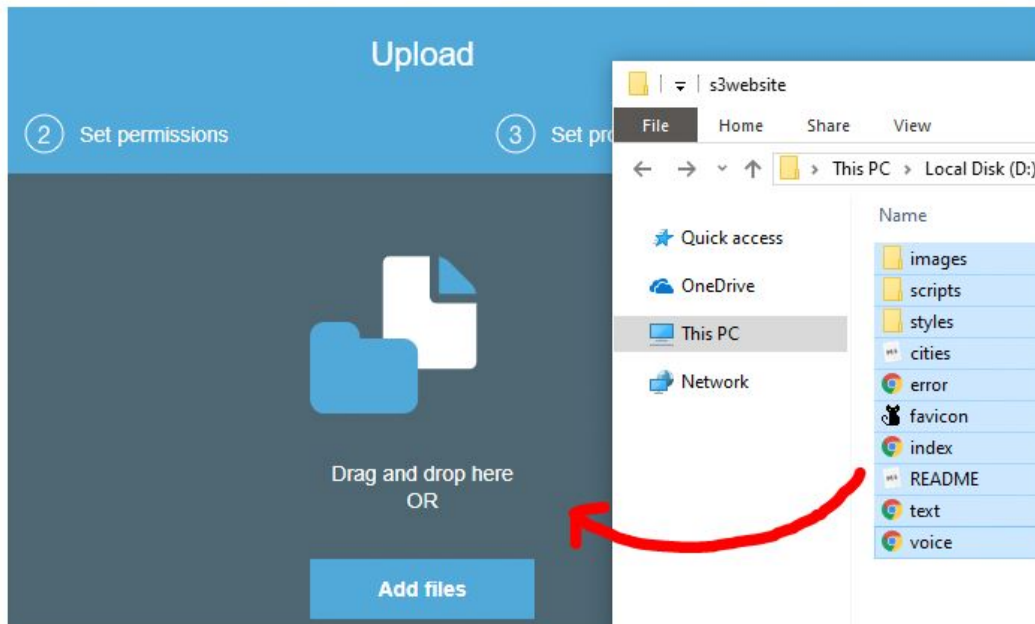
- Code: AccessDenied
- Message: Access Denied
- Click **Save**. So we can move on to adding public permissions to this bucket.
  - Select the **Permissions** tab and choose **Bucket Policy**.
  - Paste the following code below in the Bucket policy editor. Make sure to change the Resource arn with your bucket name.
  - You must change `arn:aws:s3:::2019-03-01-er-website/*` to your bucket. e.g  
`arn:aws:s3:::2019-mm-dd-xx-website/*`

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "AddPerm",
      "Effect": "Allow",
      "Principal": "*",
      "Action": [
        "s3:GetObject"
      ],
      "Resource": [
        "arn:aws:s3:::2019-03-01-er-website/*"
      ]
    }
  ]
}
```

Step2. Download the zip file.

<https://s3.amazonaws.com/awsu-hosting/CSA-TF-100-SCSRVL-10-EN/s3website.zip>

- Click the **Overview** tab and click on your bucket **2019-mm-dd-xx-website**. (Keep in mind your bucket will have its own unique name that you gave it).
- Click **Upload** and drag the files needed for the site from your local file explorer.
- TIP: You can press "add files" button, but we recommend dragging (like in this image below)



- Click **Next**.
- Leave the permissions settings alone as the defaults.

19 Files    Size: 110.3 KB    Target path: 2019-03-01-er-website

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**Manage users**

User ID	Objects	Object permissions	
rinaldo(Owner)	<input checked="" type="checkbox"/> Read	<input checked="" type="checkbox"/> Read <input checked="" type="checkbox"/> Write	×

Access for other AWS account    [+ Add account](#)

Account	Objects	Object permissions
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**Manage public permissions**

Do not grant public read access to this object(s) (Recommended) ▼

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- Click **Next**.
- Scroll down to **Metadata**.

⚠ This next step about max age is **critical!** If you miss this, you will have problems later on in the future exercises. So type carefully and do not miss this step.

- For **Header** choose `cache-control` and for the **Value** enter `max-age=0` and click **Save**.

**Metadata**

Metadata is a set of name-value pairs. You cannot modify object metadata after it is uploaded.

Header	Value	
Cache-Control ▼	max-age=0	<a href="#">Save</a> <a href="#">Clear</a>

- Click **Next**.
- **Double check it ;)**
- Click **Upload**.
- Verify connectivity by browsing to your tab (website) where you had the 404 error.

You should see your shiny new text based static web based application (see image below).

### 3. Steps to make local changes and upload your adjustments.

We want to make sure that when we make changes to local files that they are propagated correctly. So please make the following change to your local copy of `text.html`

*From*

`<h1>Too cold for my cat?</h1>`

`<h1>Too hot for my cat?</h1>`

- Upload the edited `text.html` to the S3 bucket:
  - Click **Upload**.
  - Click **Add files**.
  - Browse to the location of `text.html` on your local machine or drag and drop like before.
  - Click **Next**. Leave the permissions alone and click **Next**.
  - Again scroll down to **Metadata** and set the **Header** to `Cache-control` and set the **Value** to `max-age=0`.
  - **DOUBLE CHECK IT**.
  - Click **Save** and click **Next**.
  - Finally click **Upload**.
- Refresh your website

You should now see the changes. Awesome!

That's another one off our goal checklists done, let's see our progress.