# **Hosting a Static Website on Amazon S3**

### 1. Create an S3 Bucket

- Go to the AWS S3 Console
- Click "Create bucket"
- Bucket name: Must be globally unique (e.g., my-website-bucket)
- Region: Choose your preferred AWS region
- Uncheck "Block all public access" (important for website access)
- Acknowledge the warning and create the bucket

## 2. Upload Your Website Files

- Click on your bucket name
- Click "Upload"
- Upload your static files (e.g., index.html, style.css, etc.)
- Click "Upload"

#### 3. Set Permissions

To allow public access:

- 1. Go to your bucket > Permissions tab
- 2. Under Bucket Policy, paste the following JSON (replace your-bucket-name):

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

- "Effect": "Allow" → Grants permission
- "Principal": "\*" → Applies to everyone (public)
- "Action": "s3:GetObject" → Allows downloading (read-only)
- "Resource": "arn:aws:s3:::your-bucket-name/\*"  $\rightarrow$  Applies to all objects in the bucket

## Why Set a Bucket Policy for Static Website Hosting?

By default, S3 buckets are private — no one (not even you via a browser) can access the files unless permissions are explicitly granted.

Without a proper bucket policy:

- Users will get a 403 Forbidden error when visiting your site
- Your website won't load images, CSS, JS, etc.

## 4. Enable Static Website Hosting

- 1. Go to the Properties tab of the bucket
- 2. Scroll to "Static website hosting"
- 3. Click Edit
- 4. Select "Enable"
- 5. Enter:
  - Index document: index.html
  - o (Optional) Error document: error.html
- 6. Save changes

#### 5. Access Your Website

- Go back to the Properties > Static website hosting
- Copy the "Bucket website endpoint" URL (e.g., http://your-bucket-name.s3-website-us-east-1.amazonaws.com)
- Open it in your browser your static website is now live!