# Static Website Hosting on Amazon S3

## Overview

This guide explains how to host a static website using an Amazon S3 bucket. Amazon S3 provides a scalable and cost-effective way to serve static content such as HTML, CSS, JavaScript, and images.

## Prerequisites

* An AWS account
* An S3 bucket (configured for public access or CloudFront for secure distribution)
* Static website files (HTML, CSS, JS, images, etc.)

## Step-by-Step Guide

### 1. Create an S3 Bucket

1. Sign in to the AWS Management Console.
2. Navigate to **S3**.
3. Click **Create bucket**.
4. Enter a globally unique bucket name (e.g., my-static-website).
5. Select the desired AWS Region.
6. Uncheck "Block all public access" if you want a public website.
7. Click **Create bucket**.

### 2. Enable Static Website Hosting

1. Open the **Properties** tab of your S3 bucket.
2. Scroll to **Static website hosting**.
3. Select **Enable**.
4. Choose **Host a static website**.
5. Set the **Index document** (e.g., index.html).
6. (Optional) Set an **Error document** (e.g., 404.html).
7. Click **Save changes**.

### 3. Upload Website Files

1. Open the **Objects** tab in the S3 bucket.
2. Click **Upload**.
3. Add your static files (index.html, styles.css, etc.).
4. Click **Upload**.

### 4. Configure Bucket Policy for Public Access (Optional)

1. Navigate to the **Permissions** tab.
2. Click **Bucket Policy**.
3. Add the following policy (replace my-static-website with your bucket name):

{

"Version": "2012-10-17",

"Statement": [

{

"Effect": "Allow",

"Principal": "\*",

"Action": "s3:GetObject",

"Resource": "arn:aws:s3:::my-static-website/\*"

}

]

}

1. Click **Save changes**.

### 5. Access Your Website

1. Navigate to the **Properties** tab.
2. Copy the **Bucket website endpoint** URL.
3. Open the URL in a web browser to view your website.

### 6. (Optional) Use Amazon CloudFront for HTTPS

To serve your website over HTTPS, create a **CloudFront distribution** pointing to your S3 bucket and attach an SSL certificate using AWS Certificate Manager (ACM).

## Conclusion

Your static website is now hosted on Amazon S3. For additional security and scalability, consider integrating AWS CloudFront and Route 53.

# Author: Tafazdzwa Mwerenga