

AWS Project: Hosting a Static Website with S3

1. Project Overview

This project demonstrates how to host a static website using **Amazon S3 (Simple Storage Service)**. The goal is to display a simple, fast and cost-efficient website without needing a web server.

2. Objective

- Learn how to create and configure an S3 bucket for website hosting.
 - Understand how to manage permissions using Bucket policies
 - Enable public access for website files securely
 - Test and verify that the website is publicly accessible
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3. Tools and Services used

- Amazon S3
 - IAM (Identity and Access Management)
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4. What is an S3 bucket?

An **Amazon S3 bucket** is the **fundamental storage container** in **Amazon Simple Storage Service (S3)**. It's where all your data such as files, documents, images, videos, backups, and even static websites are stored in the cloud. You can think of it as the **top-level directory or folder** inside S3 that holds your data, but it comes with **powerful management, security, and scalability features** that go far beyond a normal folder on your computer.

5. Steps taken to complete the project

a) Create an S3 bucket

- Open the **AWS Management Console** → S3 service.
- Click **"Create bucket."**
- Choose a **globally unique name** (e.g., my-cafe-website).
- Select the region (in this case I selected a region closest to my location, Europe-Ireland).
- **Uncheck** "Block all public access."
- Click **Create bucket**.

b) Upload Website file

- Open the bucket → **Upload** the index.html, style.css, and any image files.
- Ensure the main file is named index.html (default entry point).

c) Enable Static Website Hosting

- Go to **Properties** tab → scroll to **Static website hosting**.
- Click **Edit** → Enable it.
- Specify: **Index document:** index.html
- Save changes.
- Copy the **Bucket website endpoint** — this will be the website's URL.

d) Set Bucket Policy for Public Access

- Go to Permissions
- Click Bucket policy
- Click Edit – replace the bucket name accordingly

e) Test the Website

- Open your **S3 Website Endpoint URL** in the browser
 - Static website is live!
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6. Outcome

- Successfully hosted and configured a fully functional static website on Amazon S3.
- Gained practical experience with AWS permissions, bucket policies, and hosting setup.
- Learned how to make cloud-based deployments simple and cost-effective.