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How I Hosted A Website on S3



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Introducing Amazon s3!

What is it all about?

Amazon S3, offered by Amazon Web Services, is a reliable and flexible object storage solution. Developers and teams choose Amazon S3 for its exceptional durability and secure cloud storage. It features low-latency, high availability, and robust security, making it a top choice for web storage needs.

How do I use it in today's project

For this project, I'm using Amazon S3 to host my first static website.

This project took me....

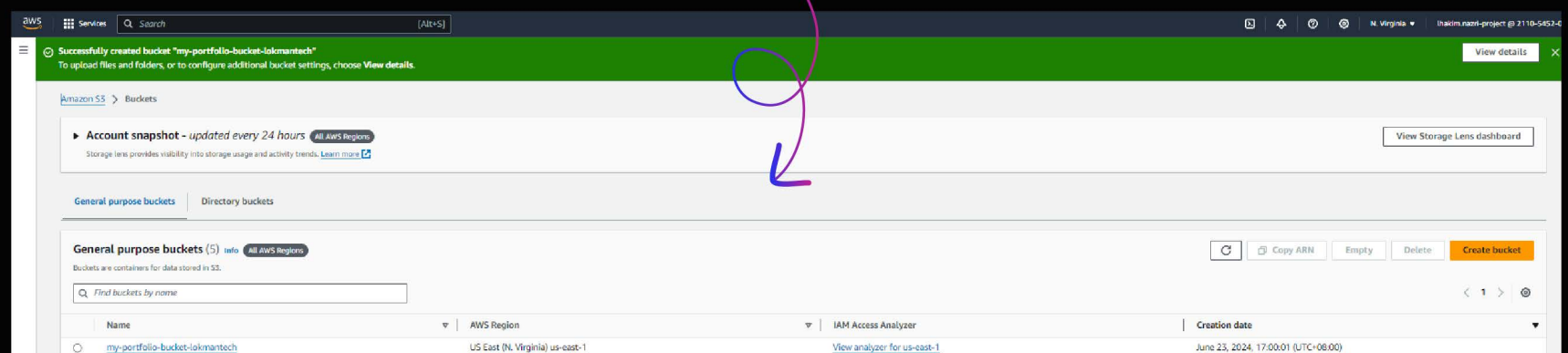
For this project, I'm using Amazon S3 to host my first static website. It should take around half an hour to complete, as the HTML and CSS are already written. I'll just need to upload the files into the S3 bucket.



Create an S3 bucket

- Creating an Amazon S3 bucket took me only few minutes
- Some of the configuration steps include:
 - IAM account: created designated IAM user account, avoid to use root account for security measures.
 - The bucket's Region: Regions that are geographically separate, chosen based on proximity.
 - Enabling Bucket versioning, allowing to rollback if anything happens.
 - Chose wheather public or private version. Since this website I intentionally for public display, I've cleared the checkbox for "Block all public access" in the settings for the bucket. And enabling the ACLs function.
- Amazon make it S3 bucket naming unique, write wisely, can't be changed in the future.

my bucket



view bucket setting





bucket setting (for public view)

Object Ownership [Info](#)
Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☐ **ACLs disabled (recommended)**
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☒ **ACLs enabled**
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

⚠️ We recommend disabling ACLs, unless you need to control access for each object individually or to have the object writer own the data they upload. Using a bucket policy instead of ACLs to share data with users outside of your account simplifies permissions management and auditing.

Object Ownership
☐ **Bucket owner preferred**
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.
☒ **Object writer**
The object writer remains the object owner.

Block Public Access settings for this bucket
Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. 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 this bucket 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 or access point policies**
S3 will block new bucket and access point 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 or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

⚠️ Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

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

Enabling ACLs

Choose the Object Ownership

Unchecked the "Block all public access"



Upload website files to S3

- Next, I uploaded my website's files into my S3 bucket.
- The files uploaded: "index.html" serves as the home page for the website and the folder holds all needed resources like CSS styling, JavaScript for full website display and images.

Files and folders (7 Total, 1.1 MB) [Remove](#) [Add files](#) [Add folder](#)

All files and folders in this table will be uploaded.

Find by name

<input checked="" type="checkbox"/>	Name	Folder
<input checked="" type="checkbox"/>	contact.html	-
<input checked="" type="checkbox"/>	index.html	-
<input checked="" type="checkbox"/>	scripts.js	js/
<input checked="" type="checkbox"/>	styles.css	css/
<input checked="" type="checkbox"/>	favicon.ico	img/favic
<input checked="" type="checkbox"/>	profile.png	img/profi
<input checked="" type="checkbox"/>	Lokman's resume.pdf	assets/res

Destination [Info](#)

Destination
s3://test240623

Destination details
Bucket settings that impact new objects stored in the specified destination.

Permissions
Grant public access and access to other AWS accounts.

Access control list (ACL)
Grant basic read/write permissions to other AWS accounts. [Learn more](#)

AWS recommends using S3 bucket policies or IAM policies for access control. [Learn more](#)

Access control list (ACL)

☒ Choose from predefined ACLs

☐ Specify individual ACL permissions

Predefined ACLs

☐ Private (recommended)
Only the object owner will have read and write access.

☒ Grant public-read access
Anyone in the world will be able to access the specified objects. The object owner will have read and write access. [Learn more](#)

Granting public-read access is not recommended
Anyone in the world will be able to access the specified objects. [Learn more](#)

☒ I understand the risk of granting public-read access to the specified objects.

selecting the uploaded files

"Grant public-read access"



Static web hosting on S3

- Website hosting involves placing your HTML and related files on a web server so they can be accessed online.
- To enable website hosting for my project, I selected "Host a static website" (since the site doesn't fetch any data) and specified "index.html."
- Once the static website is enabled, S3 generates a bucket endpoint URL. This URL serves as the address for accessing the content stored on the web server.

Setting up static website hosting.

The screenshot shows the AWS console interface for configuring static website hosting on an S3 bucket. The page title is "Static website hosting" with a subtitle "Use this bucket to host a website or redirect requests." and a "Learn more" link. The configuration options are as follows:

- Static website hosting:** Radio buttons for "Disable" and "Enable". The "Enable" option is selected.
- Hosting type:** Radio buttons for "Host a static website" and "Redirect requests for an object". The "Host a static website" option is selected. Below it, a note says "Use the bucket endpoint as the web address." with a "Learn more" link.
- Index document:** A text input field containing "index.html". Above it, the text says "Specify the home or default page of the website."
- Error document - optional:** A text input field containing "error.html". Above it, the text says "This is returned when an error occurs."

A light blue information box contains the following text: "For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see [Using Amazon S3 Block Public Access](#)".



That's it! my website was up and running.

