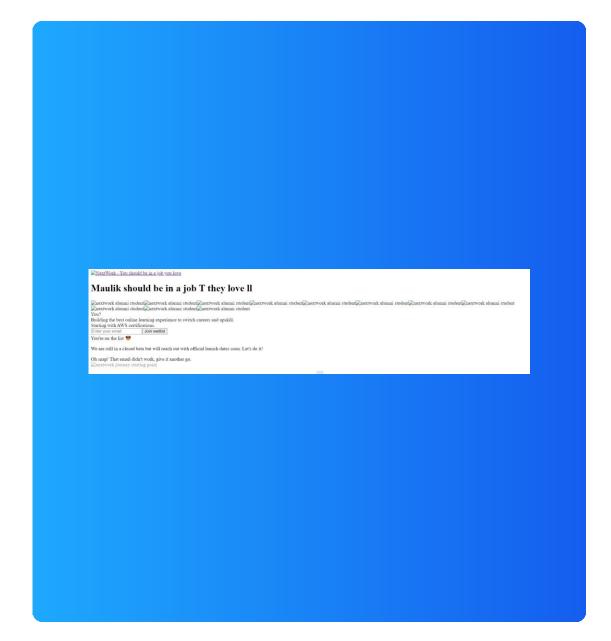
# Host a Website on Amazon S3







## **Introducing Today's Project!**

#### What is Amazon S3

Amazon S3 (Simple Storage Service) is a scalable object storage service for storing and retrieving data over the web. It's useful for its durability, security, and flexibility, making it ideal for backup, archiving, and hosting static websites.

#### How I used Amazon S3 in this project

In today's project, I used Amazon S3 to host static website content by uploading HTML files and their associated assets. I enabled static website hosting, configured the necessary permissions, and accessed the site via the bucket endpoint URL

#### One thing I didn't expect in this project was...

One thing I didn't expect in this project was the complexity of configuring permissions correctly for public access. I initially encountered issues accessing the site due to the need for specific ACL settings and ensuring all files were made public.

#### This project took me...

This project took me about a few hours to complete, including time for uploading files, configuring settings, and troubleshooting permissions to ensure everything was set up correctly for website hosting.

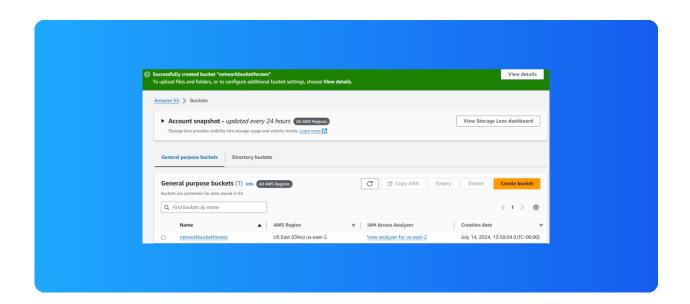


## How I Set Up an S3 Bucket

Creating an S3 bucket usually takes me just a few seconds after specifying the name and region. AWS handles it almost instantly once configurations are set.

I chose the Ohio region for my S3 bucket because it's set as my default region, making it convenient for quick access and management.

S3 buckets must be globally unique, meaning each bucket name can only exist once across all AWS accounts and regions worldwide. This ensures that bucket names are distinctive and accessible via unique URLs.



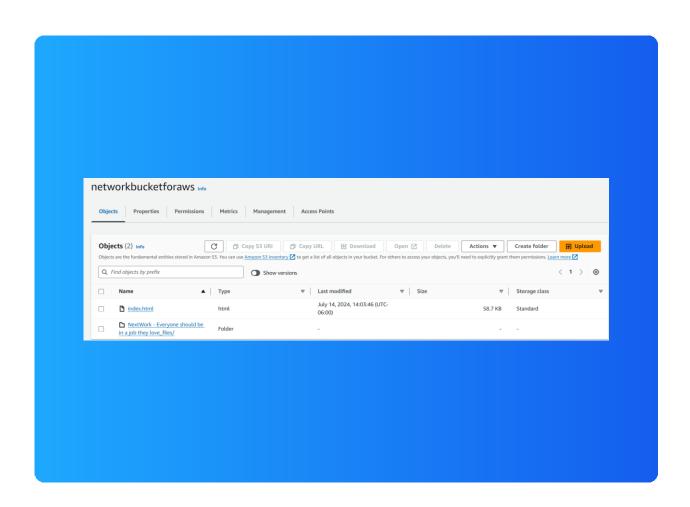


## **Upload Website Files to S3**

#### index.html and image assets

I uploaded two files to my S3 bucket - they were index.html and NextWork - Everyone should be in a job they love files folder.

I uploaded HTML files and a folder containing related assets to test S3's ability to host static web content. This setup lets me check file accessibility, folder structure, and how S3 serves web resources.





## Static Website Hosting on S3

Website hosting refers to the service that allows individuals or organizations to make their websites accessible on the internet. It involves storing the website's files on a server.

I enabled website hosting on my S3 bucket by navigating to the bucket properties, selecting the "Static website hosting" option, and specifying the index and error documents. This configuration allows S3 to serve my HTML files as a static website

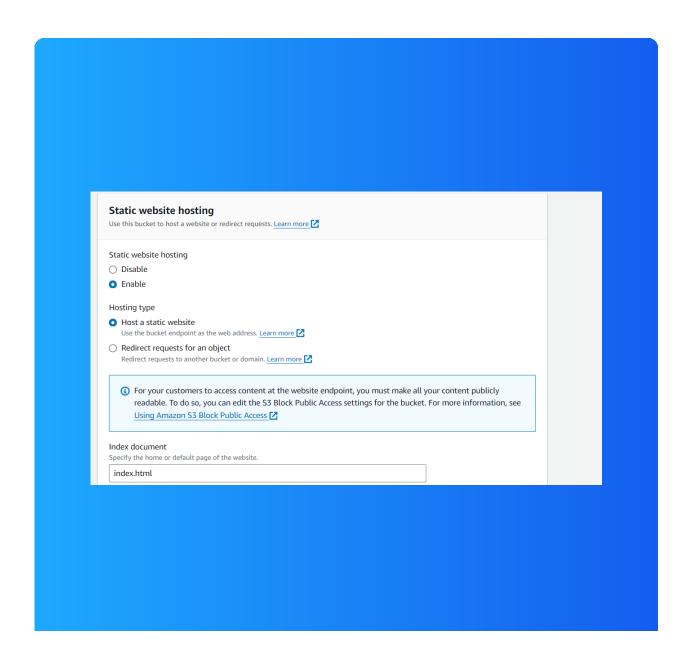
#### **Access Control Lists ACL**

An Access Control List (ACL) in S3 manages permissions at the bucket or object level. I disabled ACLs, following AWS best practices to use Bucket Policies and IAM roles for access control.



## **Bucket Endpoints**

A bucket website endpoint URL is a unique web address provided by AWS S3 that allows users to access the static website hosted on an S3 bucket. It typically follows the format http://<bucket-name>.s3-website-<br/><region>.amazonaws.com





### An error!

When I visited the bucket endpoint URL in my browser, I saw the homepage of my static website, displaying the content of my index HTML file.

I received this error because the requested file was not found and the files needed to be made public using the ACL function to allow access. Without proper permissions, S3 won't serve the content to users.

#### 403 Forbidden

- Code: AccessDenied
- Message: Access Denied
  RequestId: JPTKJYMVK0AT98RJ
- HostId: qnAufYeg7dc/nLaNRNUtNZudl3zddpE20h6W3tqN1NxeSxU2BVSV0K3eLAZ/MKObzv76s2cDqFM=



## Success!

I resolved the connection error by making the files public using the ACL function, ensuring the appropriate permissions were set for public access. This allowed the S3 bucket to serve the content without restrictions.

