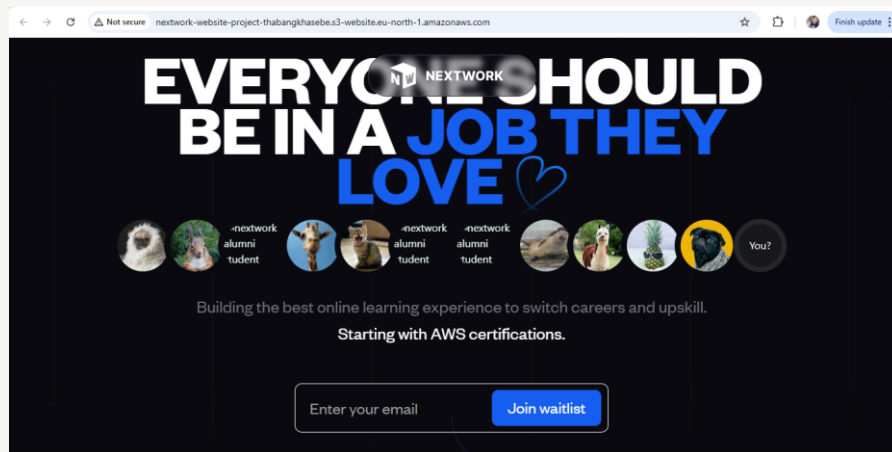


# Host a Website on Amazon S3



Thabang Khasebe





# Introducing Today's Project!

In this project, I will demonstrate how to use Amazon S3 to store and manage website files. I'm doing this to learn how S3 works, upload and organize content, and host static websites efficiently using Amazon's scalable cloud storage service.

## Tools and concepts

Services I used were Amazon S3 for storing and hosting website files. Key concepts I learnt include creating buckets, uploading content, setting public permissions with ACLs, and enabling static website hosting.

## Project reflection

This project took me approximately 1-2 hours to complete. The most challenging part was configuring the permissions correctly to avoid access errors. It was most rewarding to see the website go live and accessible through the S3 bucket URL.



# How I Set Up an S3 Bucket

Creating an S3 bucket took me just a few minutes since the process is straightforward and the AWS console provides a user-friendly interface to set it up quickly.

The Region I picked for my S3 bucket was eu-north-1 because it is one of the most commonly used and cost-effective AWS regions, offering low latency and high availability for hosting a website.

S3 bucket names are globally unique! This means that no two buckets across all AWS accounts worldwide can have the same name. When creating a bucket, you must choose a unique name to avoid conflicts and ensure your storage space is distinct.



# Thabang Khasebe

AWS

Search

[Alt+S]

Europe (Stockholm)

ThabangKhasebe-IAM-Admin @ 4844-6881-9836

Amazon S3 > Buckets

Successfully created bucket "network-website-project-thabangkhasebe"  
To upload files and folders, or to configure additional bucket settings, choose [View details](#).

Account snapshot - updated every 24 hours All AWS Regions  
Storage lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. [Learn more](#) [View Storage Lens dashboard](#)

General purpose buckets | Directory buckets

General purpose buckets (1) Info All AWS Regions  
Buckets are containers for data stored in S3.

☐

network-website-project-thabangkhasebe

Europe (Stockholm) eu-north-1

[View analyzer for eu-north-1](#)

June 11, 2025, 01:13:16 (UTC+02:00)

CloudShell Feedback

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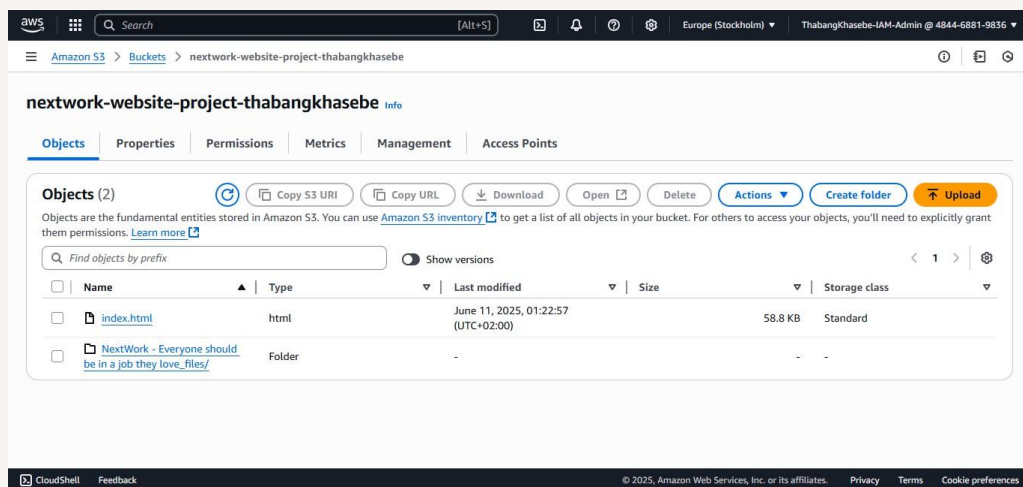


# Upload Website Files to S3

## index.html and image assets

I uploaded two files to my S3 bucket – the index.html file, which is the main webpage, and the NextWork - Everyone should be in a job they love\_files folder containing all the images used on the site.

Both files are necessary for this project as the index.html file provides the webpage structure and content, while the NextWork - Everyone should be in a job they love\_files folder contains the images that make the website visually complete.





# Static Website Hosting on S3

Website hosting means storing your website's files on a server or service, like Amazon S3, so they can be accessed and viewed by anyone on the internet through a web address.

To enable website hosting with my S3 bucket, I configured the bucket's static website hosting settings, specified the index document, and set the bucket policy to allow public access.

An ACL is a set of rules that define who can access your Amazon S3 bucket or its objects and what actions they can perform, such as reading or writing files. In this project, I enabled the ACL to manage permissions for my bucket's contents.

The screenshot shows the AWS Management Console interface for editing static website hosting settings on an S3 bucket. The breadcrumb trail indicates the path: Amazon S3 > Buckets > nextwork-website-project-thabangkhasebe > Edit static website hosting. The page title is 'Edit static website hosting'. Under 'Static website hosting', the 'Enable' radio button is selected. Under 'Hosting type', the 'Host a static website' radio button is selected. A blue information box states: '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.' Below this, the 'Index document' field contains 'index.html'. The 'Error document - optional' field contains 'error.html'. The 'Redirection rules - optional' section is currently empty. The footer of the console shows 'CloudShell' and 'Feedback' on the left, and copyright information and links for 'Privacy', 'Terms', and 'Cookie preferences' on the right.



# Bucket Endpoints

Once static website hosting is enabled, S3 produces a bucket endpoint URL, which is the web address where my website files are publicly accessible and can be viewed by anyone online.

When I first visited the bucket endpoint URL, I saw a 403 Forbidden error. The reason for this error was that the bucket's permissions or website configuration was not properly set to allow public access to the files.

## 403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: YNWRZKRH7SDTTE4D
- HostId: 6ahV4ZB+sydUfw+JfVAgxP1Wa3Na92MPjniaikOodcKYCUXiyUcv1ycxup3q3wDvCOYPpm8+KreRoVQ195/uF2hPAqZwN



# Success!

To resolve this 403 Forbidden error, I updated the files' ACL settings to grant public read access, ensuring that anyone can view the website content hosted in my S3 bucket.

