

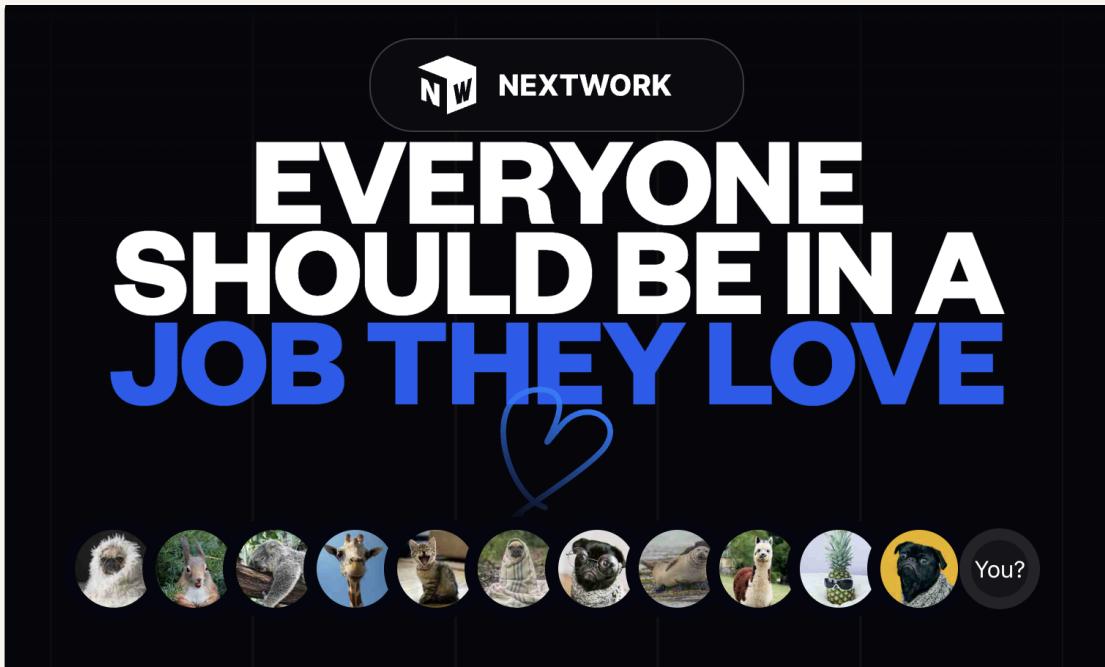


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Host a Website on Amazon S3

J

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Introducing Today's Project!

In this project, I will demonstrate how to host static website using AWS cloud services. I'm doing this project to learn about AWS cloud services and how to host static websites.

Tools and concepts

Services I used were Amazon S3, Key concepts I learnt include bucket policies, bucket endpoint URLs, index.html, ACLS and how they control access

Project reflection

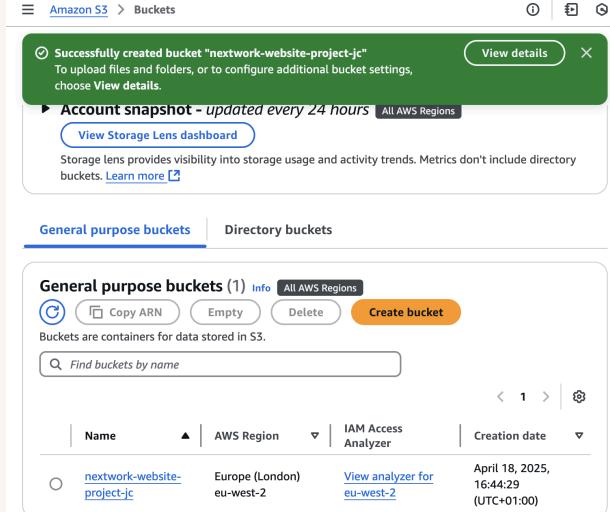
This project took me approximately 30mins. The most challenging part was resolving the 403 error. It was most rewarding to see the webpage load live.

How I Set Up an S3 Bucket

Creating an S3 bucket took me less than 5 minutes.

The Region I picked for my S3 bucket was london because it is the region closest to me. It is best practice to pick the region closest to you because it lowers time to retrieve your things (Latency)

S3 bucket names are globally unique! This means no 2 Amazon S3 buckets worldwide can have the same name. They have to be completely unique regardless of the region





Upload Website Files to S3

index.html and image assets

I uploaded two files to my S3 bucket - they were the index.html file and a folder of images and assets

Both files are necessary for this project as index.html determines the structure, but the structure alone does not illustrate the website's content. E.g An image may not be displayed, because you need to supply the image.

The screenshot shows the 'Objects (2)' section of the Amazon S3 console. At the top, there are several buttons: 'Copy S3 URI', 'Copy URL', 'Download', 'Open', and 'Delete'. Below these are 'Actions' and 'Create folder' buttons, followed by an 'Upload' button which is highlighted with an orange border. A descriptive text block explains that objects are fundamental entities stored in Amazon S3, and provides links to 'Amazon S3 inventory' and 'Learn more'. A search bar labeled 'Find objects by prefix' and a 'Show versions' checkbox are also present. The main table lists the two uploaded objects:

	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	index.html	html	April 18, 2025, 16:58:43 (UTC+01:00)	58.8 KB	Standard
<input type="checkbox"/>	NextWork - Everyone should be in a job they love_files/	Folder	-	-	-



Static Website Hosting on S3

Website hosting means putting website files on a web server which is a computer designed to turn the files into a website page that people can visit.

To enable website hosting with the S3 bucket, I went to the properties tab of the bucket, enabled static website hosting and labelled index.html as the index document. i.e this is the document I am trying to host.

An ACL is an access control list to configure permission settings inside a bucket. I enabled ACL so I can control access to my website files later. There was a pop-up recommendation from AWS.

Edit static website hosting Info

Static website hosting
Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting
 Disable
 Enable

Hosting type
 Host a static website
Use the bucket endpoint as the web address. [Learn more](#)
 Redirect requests for an object
Redirect requests to another bucket or domain. [Learn more](#)

ⓘ 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](#)

Index document
Specify the home or default page of the website.

Error document - optional

Bucket Endpoints

Once static website is enabled, S3 produces a bucket endpoint URL, which is a URL that takes anyone on the internet to the website that is being hosted.

When I first visited the bucket endpoint URL, I saw an error (403 forbidden error). The reason for this error was that objects in a bucket are public by default even though I turned off block app public access. The website files are still private.

403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: VY9G1S0WYNMCN71V
- HostId: JFTlt/0hns9QeZ24rMi9EJ/NqJ5r6MBh297HEg9WjU062sopjZGo3GVEyUE3eiUftsiO7TM2YU=

Success!

To resolve this 403 Forbidden error, I updated the access settings of the files inside the bucket. Using ACLs I made the bucket files public.





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