

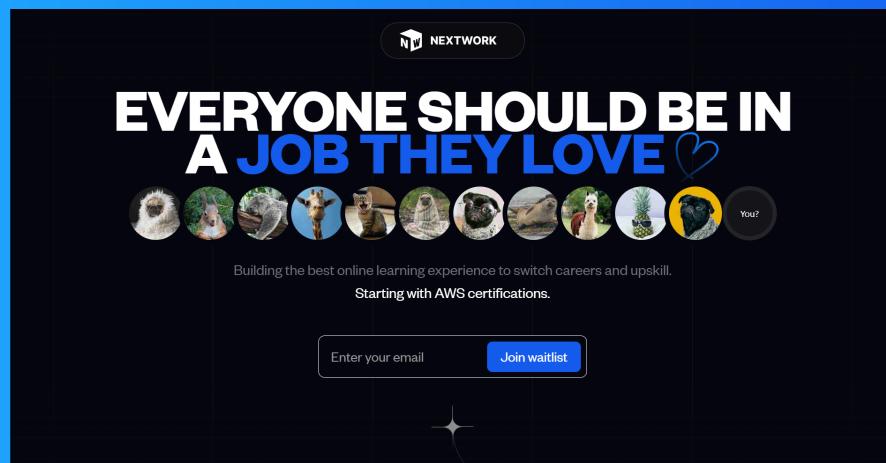


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Host a Website on Amazon S3



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Introducing Today's Project!

What is Amazon S3

Amazon S3 is a cloud storage service that lets you store files and folders. It's useful because it allows you to host files publicly by setting ACL permissions and provides a URL to access the files online.

How I used Amazon S3 in this project

In today's project, I used Amazon S3 to store and host an HTML page and images, made them public with ACL permissions, and enabled static website hosting to access the content online.

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

One thing I didn't expect in this project was spending time understanding the error and realizing that after each file upload, I had to enable public access again when re-uploading the folder.

This project took me...

The project took me around an hour, but it was fun!

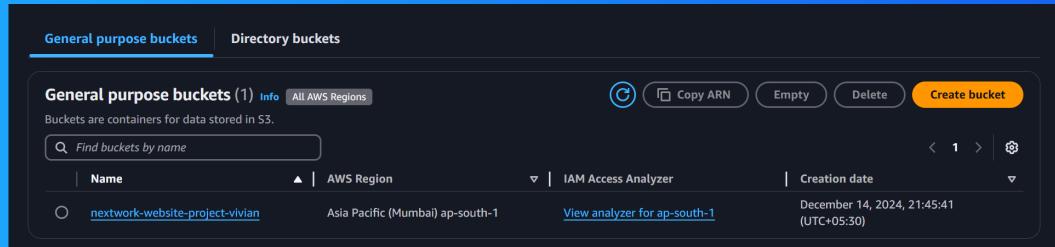


How I Set Up an S3 Bucket

Creating an S3 bucket took me around 5 to 6 minutes because I took the time to understand each feature and its purpose.

I chose the Mumbai region for my S3 bucket because it's closest to where I am, so it's faster and more convenient. Plus, it's easier to remember which region I'm working in.

S3 bucket names are globally unique! This means the bucket name is part of a publicly accessible URL, like, if two buckets had the same name, it would cause conflicts in identifying the correct bucket.





Upload Website Files to S3

index.html and image assets

I uploaded two files to my S3 bucket - they were an HTML page that displays my name and three pictures labeled as my wallpapers, and three PNG images that are shown on the HTML page.

Both files are necessary for this project as they show how the webpage will look to the public and how it will be hosted on S3. The HTML file creates the structure of the page, while the image files add visual content to it.

The screenshot shows the AWS S3 console interface with a list of objects in a bucket. The objects are:

Name	Type	Last modified	Size	Storage class
vivians.html	html	December 14, 2024, 22:04:20 (UTC+05:30)	644.0 B	Standard
wallpaperflare.com_wallpaper_(1).jpg	jpg	December 14, 2024, 22:04:20 (UTC+05:30)	1.3 MB	Standard
wallpaperflare.com_wallpaper_.jpg	jpg	December 14, 2024, 22:04:21 (UTC+05:30)	1.7 MB	Standard
wallpapersden.com_firewatch.jpg	jpg	December 14, 2024, 22:04:21 (UTC+05:30)	996.5 KB	Standard



Static Website Hosting on S3

Website hosting means storing a website's files on a server so that they can be accessed over the Internet. It allows users to view and interact with your website using a URL.

To enable website hosting with my S3 bucket, I went to the bucket's properties, enabled static website hosting, set the index and error pages, and saved the changes. This made the content accessible via the bucket's endpoint URL.

An ACL is an Access Control List defining rules on who can access the resources from the S3 bucket. I have enabled the ACLs for the S3 bucket.

The screenshot shows the 'Edit static website hosting' configuration page. At the top, there is a heading 'Edit static website hosting' with a 'Info' link. Below this, there are two main sections: 'Static website hosting' and 'Hosting type'. Under 'Static website hosting', the 'Enable' option is selected. Under 'Hosting type', the 'Host a static website' option is selected. A note below these sections 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.' In the 'Index document' section, the value 'vivians.html' is entered. In the 'Error document - optional' section, the value 'error.html' is entered. At the bottom, there is a 'Redirection rules - optional' section with a note: 'Redirection rules, written in JSON, automatically redirect webpage requests for specific content.' There is also a 'Learn more' link.

A circular profile picture of a young man with light blue hair and a serious expression, wearing a blue shirt.

Bucket Endpoints

Once static website hosting is enabled, S3 produces a bucket endpoint URL, which is a unique web address for the bucket. This URL allows the public to access the content stored in the bucket over the internet.

When I first visited the bucket endpoint URL, I saw an error message. This happened because the bucket was public, but the contents, such as the HTML page and images, were set to private.

403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: 8RB844F4F60173PM
- HostId: stGv2J6XcuM5ozP8YJbT6yluUrAXmoE/E0ZxqOHCYdINzItu7mWphGnym8l5kIIXf+RsW0ar1tgnuVrsXH+gg6cBqbYmmssQt

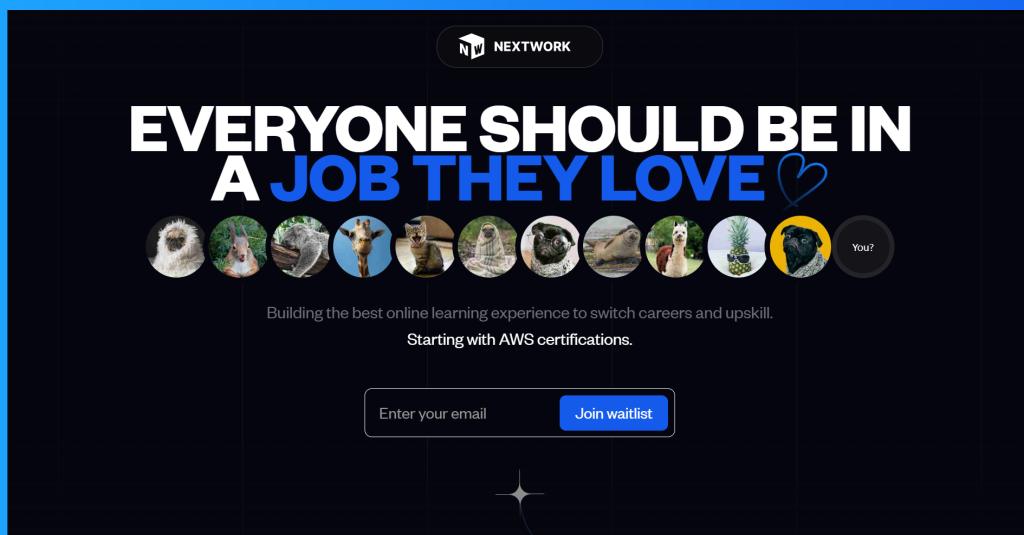


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Success!

To resolve the error, I set the correct ACL permissions for the files and enabled static website hosting in S3. I then made the files public by selecting them, going to Actions > Make public, and reloading the page. The website was live afterward.





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