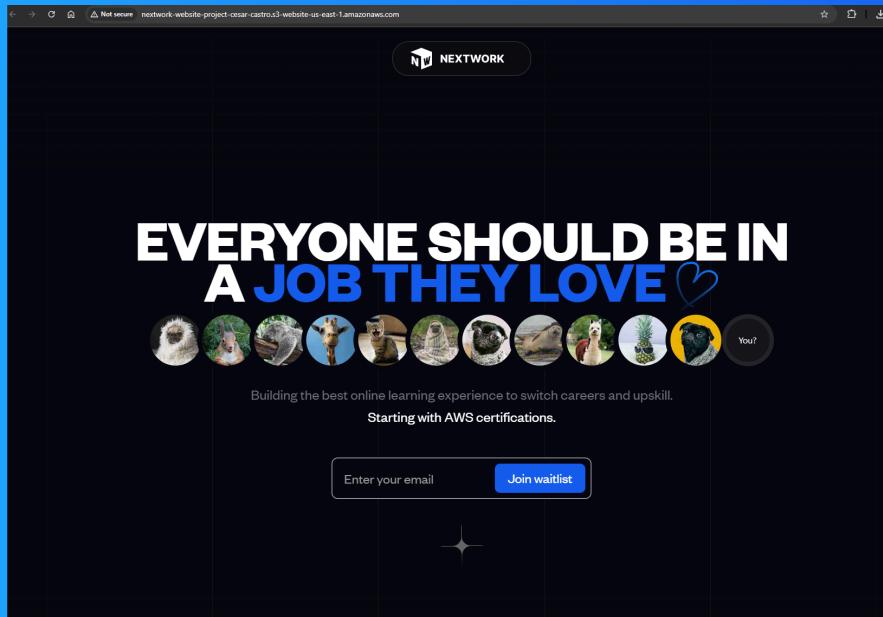




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Host a Website on Amazon S3

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Introducing Today's Project!

What is Amazon S3

Amazon S3 (Simple Storage Service) is a scalable cloud storage solution for storing and retrieving data from anywhere. It's useful due to its scalability, high durability, cost-effectiveness, accessibility via APIs, and robust security features.

How I used Amazon S3 in this project

In today's project, I used Amazon S3 to host a static website by uploading the index.html file and project folder. I configured public access permissions and used the bucket endpoint URL to make the website accessible online.

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

One thing I didn't expect in this project was how strict the default S3 permissions are, requiring additional configuration to make the content publicly accessible for the static website.

This project took me...

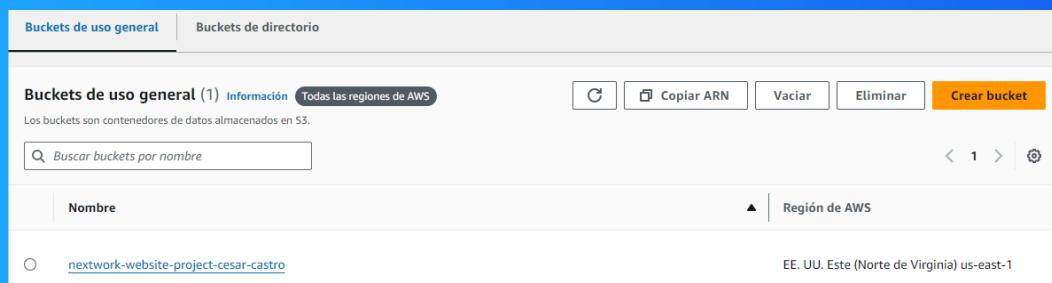
Only 10 minutes.

How I Set Up an S3 Bucket

Creating a new bucket in S3 is a simple and efficient process. It only takes a few minutes to configure the bucket settings, such as name, region, and permissions, and your bucket is ready to use.

Choosing us-east-1 offers lower costs, broad service availability, and high reliability due to multiple Availability Zones.

S3 bucket names are globally unique! This means that no two AWS accounts across the world can have the same bucket name. Each bucket's name must be distinct across all AWS regions to ensure accessibility via a unique URL or endpoint globally.



Upload Website Files to S3

index.html and image assets

I uploaded two files to my S3 bucket: an index.html file to serve as the entry point for the website and a folder containing the remaining project files.

The index.html file acts as the homepage of the website, and the folder contains the necessary assets like images, stylesheets, and scripts that support the site's functionality. Together, they ensure the complete website is properly displayed.

The screenshot shows the AWS S3 console interface. At the top, there are buttons for 'Copiar URI de S3', 'Copiar URL', 'Descargar', 'Abrir', 'Eliminar', 'Acciones', and 'Crear carpeta'. Below these buttons is a yellow 'Cargar' button. A message in Spanish informs users that objects are fundamental entities stored in Amazon S3 and provides a link to the inventory. There is also a search bar labeled 'Buscar objetos por prefijo' and a 'Mostrar versiones' checkbox. The main area displays a table of objects:

	Nombre	Tipo	Última modificación	Tamaño	Clase de almacenamiento
<input type="checkbox"/>	index.html	html	22 Sep 2024 8:37:27 PM MST	58.8 KB	Estándar
<input type="checkbox"/>	NextWork - Everyone should be in a job they love_files/	Carpeta	-	-	-



Static Website Hosting on S3

Website hosting with S3 means using Amazon S3 to store and serve the files of your website, such as HTML, CSS, images, and JavaScript, directly from the cloud. S3 provides scalable storage, making the website accessible to users globally via internet

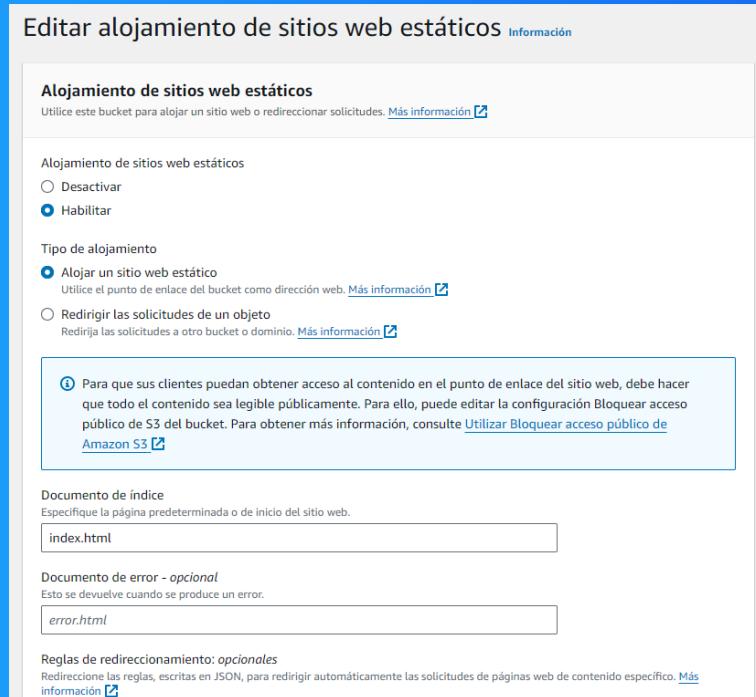
To enable website hosting with my S3 bucket, I configured the following settings in the Properties tab. Static web hosting: Choose Enable Hosting type: Choose Host a static website Index document: Enter index.html

Access Control Lists (ACL)

An ACL = a set of rules that decides who can get access to a resource. Enabling ACLs in this S3 setup lets you control who can access and do things with the objects (i.e. website files) you upload into your bucket.

Bucket Endpoints

Once static website hosting is enabled, S3 produces a bucket endpoint URL, which is a unique web address that allows users to access the content stored in the S3 bucket.



An error!

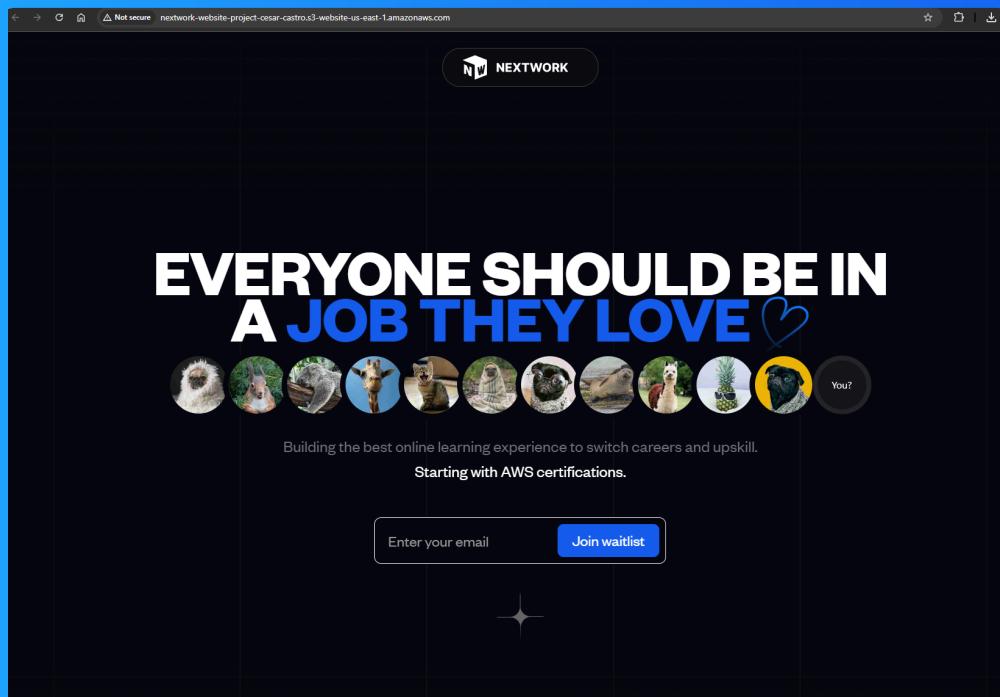
When I first visited the bucket endpoint URL, I saw an error message indicating that access to the content is forbidden. This occurred because the bucket's content is not public, meaning I need to configure the appropriate permissions.

The reason for this error was that the S3 bucket's content is not publicly accessible. By default, S3 enforces strict access controls, so without proper permissions for public access, attempts to view the content result in a forbidden access error.



Success!

To resolve this connection error, I made the S3 bucket content public by updating the Access Control List (ACL). I set the ACL to allow public read access, ensuring that anyone can view the static website files when visiting the bucket endpoint URL.





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