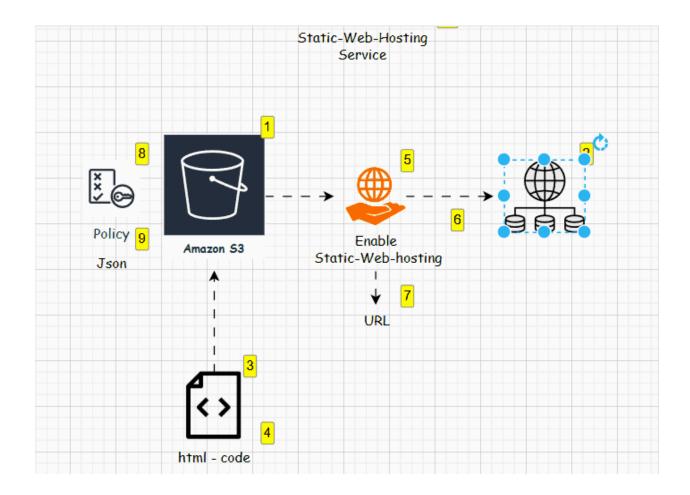
Static web hosting on Amazon S3 (Simple Storage Service) allows you to host static websites directly from an S3 bucket. A **static website** includes files like HTML, CSS, JavaScript, and media files (images, videos) — but no server-side code (e.g., PHP, Node.js).



What Is Static Web Hosting on S3?

When enabled, Amazon S3 serves your website files directly over the internet via HTTP or HTTPS. You can use it to:

- Host a single-page application (SPA)
- Serve static assets for a web app
- Deploy a simple personal or portfolio site

Key Characteristics

- Only static content no dynamic server-side code
- Highly durable and available (Amazon S3 is designed for 99.999999999 durability)
- Can integrate with Amazon CloudFront (CDN) for improved performance and HTTPS
- Can use custom domain names

✓ How to Enable Static Website Hosting on S3

Here's a step-by-step guide:

1. Create an S3 Bucket

- Go to the AWS S3 Console.
- Click "Create bucket".
- Give it a unique name (e.g., my-website-bucket).
- Choose the appropriate region.
- **Important:** Uncheck "Block all public access" if you want the content publicly accessible (you'll be warned about this).

2. Upload Website Files

- Open your new bucket.
- Click "Upload" > add files (e.g., index.html, style.css, etc.) > upload.

3. Enable Static Website Hosting

Go to the bucket settings.

- Click "Properties" tab.
- Scroll to "Static website hosting".
- Click "Edit".
- Choose "Enable".
- Enter:
 - Index document: index.html
 - Error document: error.html (optional)
- Save changes.

4. Make Files Public (Manually or via Bucket Policy)

- For each file: Click the file > Permissions > Make public.
- Or set a **bucket policy** to allow public read access:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
        "Sid": "PublicReadGetObject",
        "Effect": "Allow",
        "Principal": "*",
        "Action": "s3:GetObject",
        "Resource": "arn:aws:s3:::my-website-bucket/*"
    }
]
```

(Replace my-website-bucket with your bucket name)

5. Access Your Website

- In the **Static website hosting** section, you'll see the **Endpoint URL** (e.g., http://my-website-bucket.s3-website-us-east-1.amazonaws.com)
- Visit this URL to see your website live.

→ Optional: Use Custom Domain + HTTPS

- Use **Amazon Route 53** to point your domain to your S3 bucket.
- Use Amazon CloudFront to:
 - Serve content via HTTPS
 - o Improve performance via edge caching
 - Add custom domain support with SSL/TLS