

Hosting a Static Website on Amazon S3 with CloudFront and Logging

Objective:

The objective of this project is to host a static website using **Amazon S3**, configure appropriate public access permissions using IAM bucket policies, and improve content delivery using **CloudFront CDN**. Additionally, server access logging is enabled to monitor and audit access requests.

1. S3 Website URL:

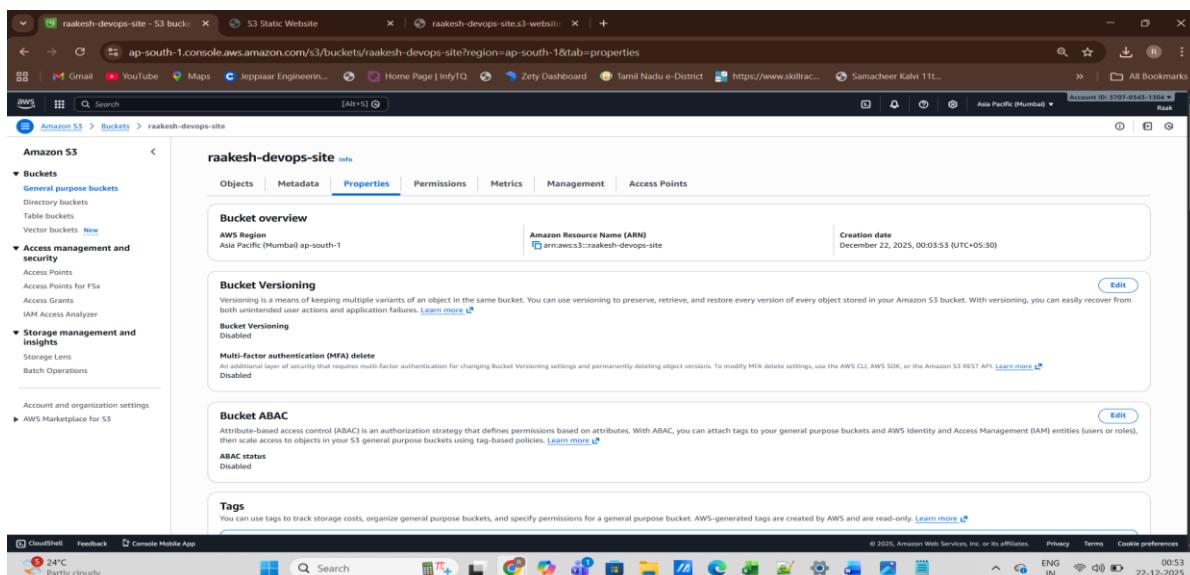
<http://raakesh-devops-site.s3-website.ap-south-1.amazonaws.com>

2. IAM Policy JSON Used for Public Read Access:

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

3. Screenshots:

1. The Amazon S3 bucket creation with public access enabled and static website hosting configured.



The screenshot shows the AWS S3 console with the 'raakesh-devops-site' bucket selected. The left sidebar shows navigation options like Buckets, Access management and security, and Storage management and insights. The main content area is titled 'Object Lock' with a note about preventing deletion or overwriting. It then moves to 'Requester pays', which is disabled. Under 'Static website hosting', it says 'Use this bucket to host a website or redirect requests.' A note recommends using AWS Amplify Hosting for static website hosting. Below that, it shows 'S3 static website hosting' is enabled, and the 'Hosting type' is set to 'Bucket hosting'. At the bottom, there's a note about the 'Bucket website endpoint' and its URL: <http://raakesh-devops-site.s3-website.ap-south-1.amazonaws.com>. The status bar at the bottom indicates it's from 2025, and the taskbar shows a weather icon for 24°C and partly cloudy.

2. Successful access of the static website using the S3 website URL in a web browser.

The screenshot shows a web browser window with the URL raakesh-devops-site.s3-website.ap-south-1.amazonaws.com. The page content is 'Hello from S3!'. The browser toolbar includes icons for Cloudflare, Feedback, and Compile Mobile App. The address bar shows 'Not secure'. The status bar at the bottom indicates it's from 2025, and the taskbar shows a weather icon for 24°C and partly cloudy.

3. The CloudFront distribution created with the S3 static website as the origin and the distribution domain name.

The screenshot shows the AWS CloudFront console with a success message: "Successfully created new distribution." Below it, the "Details" section displays the distribution domain name (dfffuoyr1vtj0.cloudfront.net), ARN (arn:aws:cloudfront::370703431304:distribution/E778N53UM1G0), and last modified date (December 21, 2025 at 6:57:59 PM UTC). The "General" tab is selected. The "Settings" section includes fields for Name (raakesh-devops), Description, Price class (Use all edge locations (best performance)), and Supported HTTP versions (HTTP/2, HTTP/1.1, HTTP/1.0). It also lists Alternate domain names and logging options (Standard logging Off, Cookie logging Off, Default root object). The bottom of the screen shows the Windows taskbar with various pinned icons.

4. server access logging enabled on the S3 bucket with a target logging bucket configured.

The screenshot shows the AWS S3 console under the "Properties" tab for the "raakesh-devops-site" bucket. It displays the "Server access logging" configuration, which is currently set to "Enabled" with a destination bucket of "dfffuoyr1vtj0.s3-website.ap-south-1.amazonaws.com". The "Log object key format" is defined as "[YYYY]-[MM]-[DD]-[hh]-[mm]-[ss]-[UniqueString]". Other sections visible include "Intelligent-Tiering storage class", "AWS CloudTrail data events", and "Event notifications". The bottom of the screen shows the Windows taskbar with various pinned icons.

