Deploy a secure static website using CloudFront and R53 DNS

Service needed

- S3
- CloudFront
- Acm
- Route 53

- **Amazon S3**: This will store your static website files.
- **Amazon CloudFront**: This will act as a Content Delivery Network (CDN) to cache and serve your website's content from locations closer to the end-users, improving performance.
- **Amazon Route 53**: This will be used to manage your domain's DNS records.

Let's go through the steps:

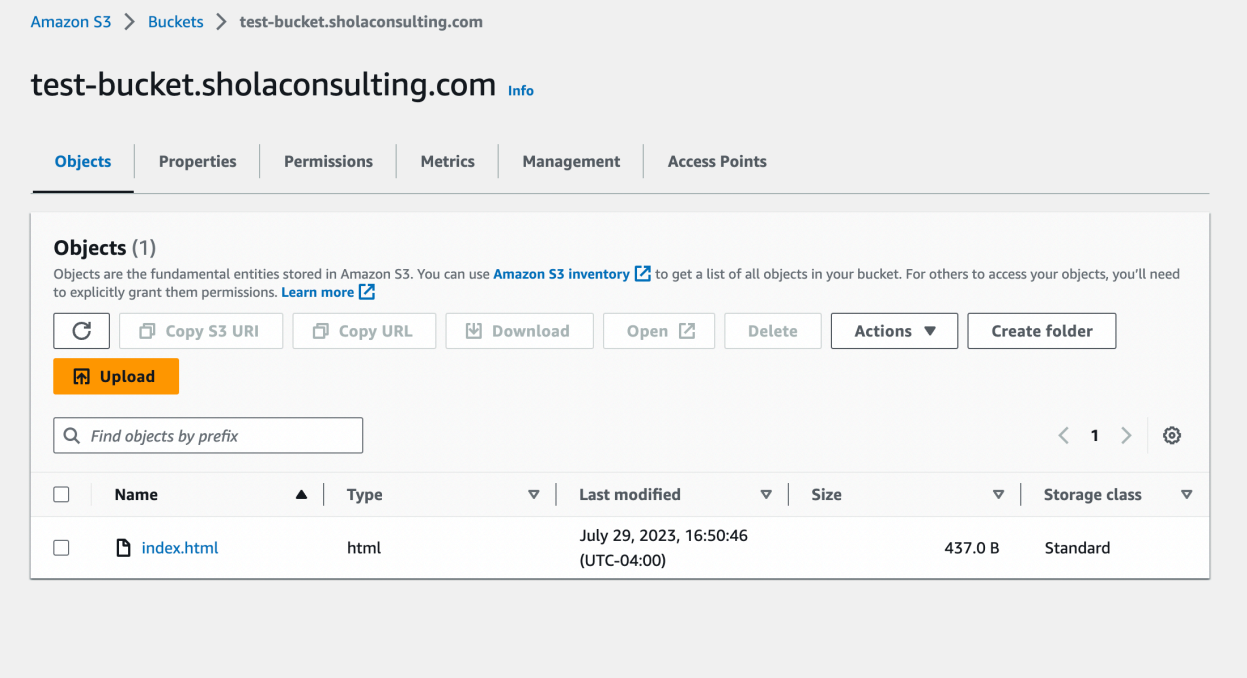
Step 1: Prepare your static website files

- Create a directory on your local machine containing all your static website files (HTML, CSS, JS, images, etc.).
- Make sure all your files are correctly linked and ready for deployment.

Step 2: Upload your website files to Amazon S3

- Go to the AWS Management Console:
- Navigate to the Amazon S3 service.
- Click "Create bucket" and follow the steps to create a new bucket with a unique name.
- Upload your website files to the bucket. Make sure to grant public read permissions to the objects so that CloudFront can access them.
- Choose "Use this bucket to host a website" and set the "Index document" to your main HTML file (e.g., "index.html").
- Save the changes.
- Here is our s3 bucket with the html files uploaded in it

- Our bucket name is tes-bucket.sholaconsulting.com
- And the html file name is index

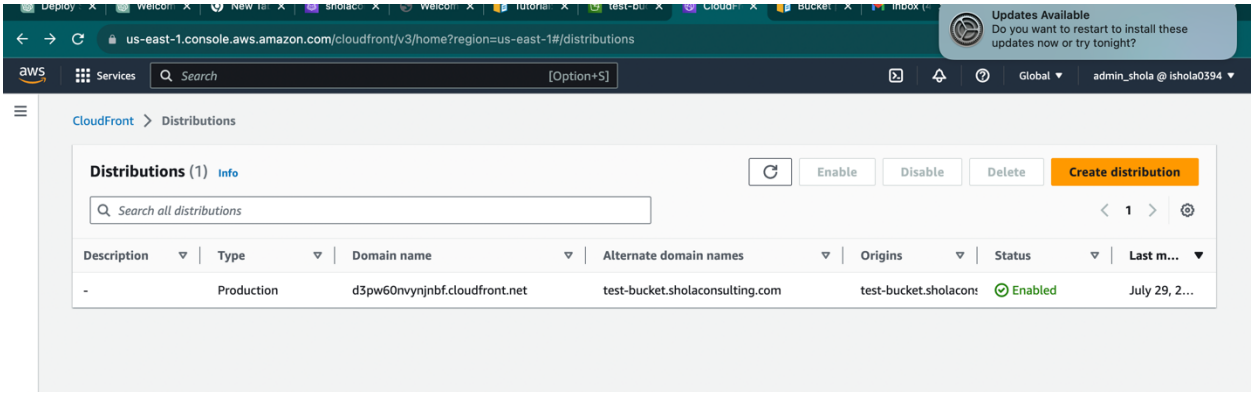


Step 4: Create a CloudFront distribution

- Go to the AWS Management Console and navigate to the CloudFront service.
- Click "Create Distribution."
- In the "Origin Settings" section, select the S3 bucket you created earlier as the "Origin Domain Name."
- Origin path you can keep it default.
- Name your origin.
- Origin access choose legacy access identities.
- OAI choose to create new so aws can create it for you
- Bucket policy click yes update bucket policy.
- Viewer click redirect http to https.
- Scroll down to waf and choose do n ot enable security
- Alternate domain name add the domain you want to give your website
- Custome ssl certificate add your certificate that you ve created earlier scroll down and
- Click "Create Distribution."

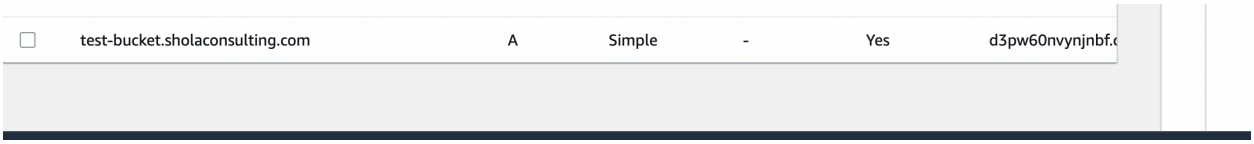
Step 5: Wait for CloudFront distribution deployment

- It may take some time for the CloudFront distribution to be deployed. You can monitor its status in the CloudFront console.



Step 6: Configure Route 53 for your domain

- Go to the AWS Management Console and navigate to the Route 53 service.
- Create a new hosted zone for your domain (e.g., example.com).
- Note the four Route 53 nameservers provided for your hosted zone.
- Go to your hosted zone to locate your hosted zone
- Click create record
- Name your record name as the same altenate domain name your name in your cloudfront distribution
- Click alias
- On the endpoint choose cloud front distribution
- Then click create record



Step 9: Wait for DNS propagation

- DNS changes can take some time to propagate across the internet. It might take a few minutes to a few hours for your website to be accessible via the new domain.

That's it! Your secure static website is now deployed on AWS using CloudFront and Route 53 DNS. Users will access your website securely via HTTPS through your custom domain name linked to the CloudFront distribution.

Welcome to Our Awesome CloudFront Website

Thank you for visiting our website. We hope you have a great experience!

Our website name is
test-bucket.sholaconsulting.com