

Amazon CloudFront Tutorials: Creating a CloudFront distribution for a static website content in S3 Bucket.

1. Step 1: Upload content to Amazon S3

In the console -> S3 -> Create bucket -> Name bucket -> Leave all other settings at default -> Click create bucket.

Once bucket is successfully created -> Click on bucket name -> click upload (The orange button) -> click on add files -> browse and pick an object to upload -> scroll down and click on upload button once done, close the upload page.

To view the object in the bucket, click on the object name -> copy object URL and paste in a new browser (There will be an error because the object and the bucket, is not public. By default, the bucket is private).

To create a CloudFront Distribution for the static content in the S3 bucket and to Store the objects in edge locations for a default duration of 24 hours.

Step 2: Open the CloudFront console (type the name "CloudFront in the console search bar)

Step 3: Choose Create Distribution -> Under Origin Domain Name, choose the Amazon S3 bucket that you have created earlier -> Under Origin access, choose Origin Access Control -> Click on create new OAC -> Create. (Note the information that comes on the screen after the OAC is created)

NB: Origin Access Control (OAC) is a more secure way to restrict access to your S3 bucket only through CloudFront,

When using S3 as the origin for a CloudFront distribution, you don't want users to bypass CloudFront and directly access your S3 bucket using its URL. OAC helps you prevent direct access and enforce CloudFront-only access.

Step 4: For all other settings, accept the default values. For Web Application Firewall, choose "Do not enable security protection"

Step 5: At the bottom of the page -> Create Distribution.

Step 6: A message with the S3 bucket policy will appear on the screen, click on the **copy policy**

Step 7: Navigate to S3 console (type S3 in the search bar) -> click on bucket name -> click on "permissions tab" -> scroll down to bucket policy -> edit -> Paste the policy you copied from cloudFront into the editor. (Note what the policy says) -> Scroll down to end of the page and click on **save changes**

Navigate back to CloudFront console (Type CloudFront in the search bar)

After CloudFront creates your distribution, the value of the Status column for your distribution changes from In Progress to Enabled. (This typically takes a few minutes). A domain name is assigned to your distribution, which appears in the list of distributions.

It looks similar to: **<https://d3n9rpy47p32th.cloudfront.net>**

Access your content through CloudFront

To access content, combine your AWS CloudFront distribution domain name with the path to your content in S3.

Step 8: This is done by clicking on the Distribution ID → → copy the distribution domain name → paste it in a new browser → then type /name of the object in the S3 bucket

Eg. **<https://d3n9rpy47p32th.cloudfront.net/Kitty.jpg>**

You are now able to view the content from your bucket via CloudFront. This URL can be shared with users that you would want them to have access to your content.

If you intend to make it publicly accessible to everyone, you allow public access to the bucket and when creating the distribution, you choose public instead of Origin Access control.