

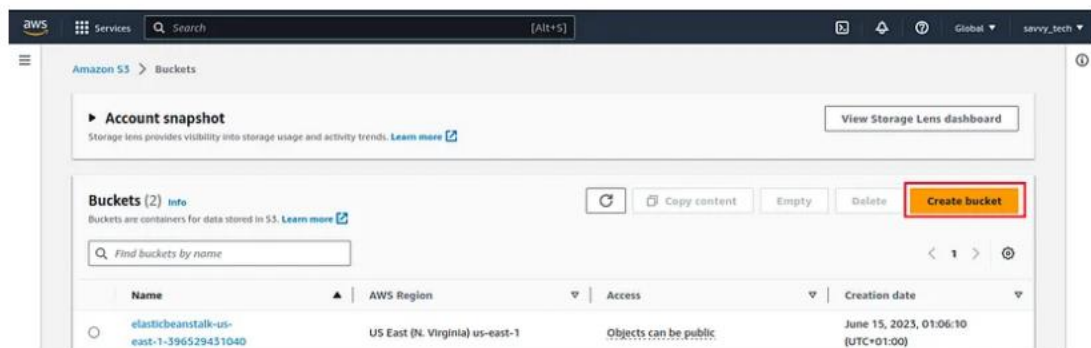
## S3 bucket and Route 53

### 1. Create an S3 Bucket for static website hosting

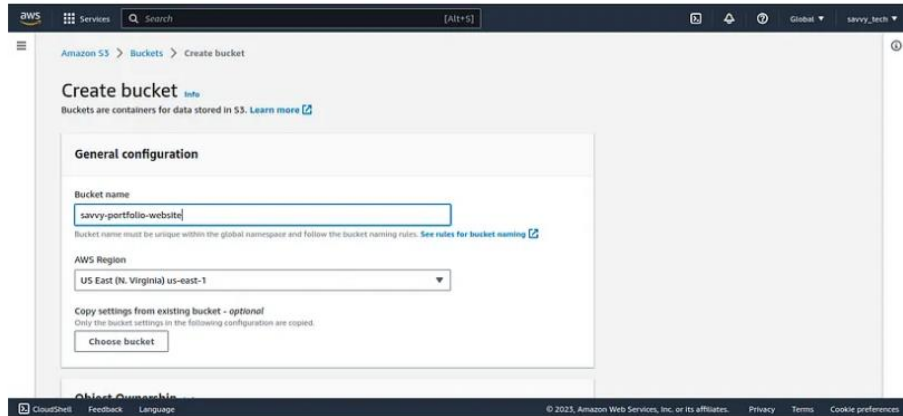
Search for the S3 service on the AWS console.



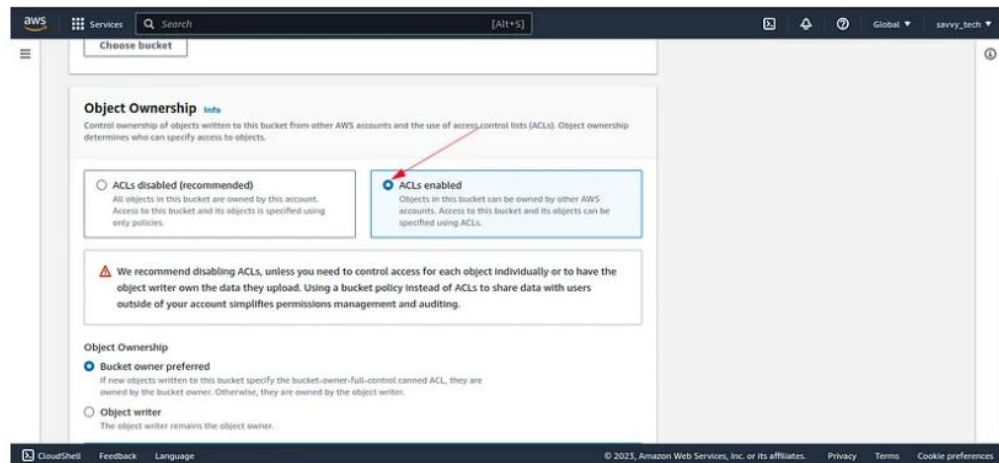
On the S3 dashboard, click “create bucket”



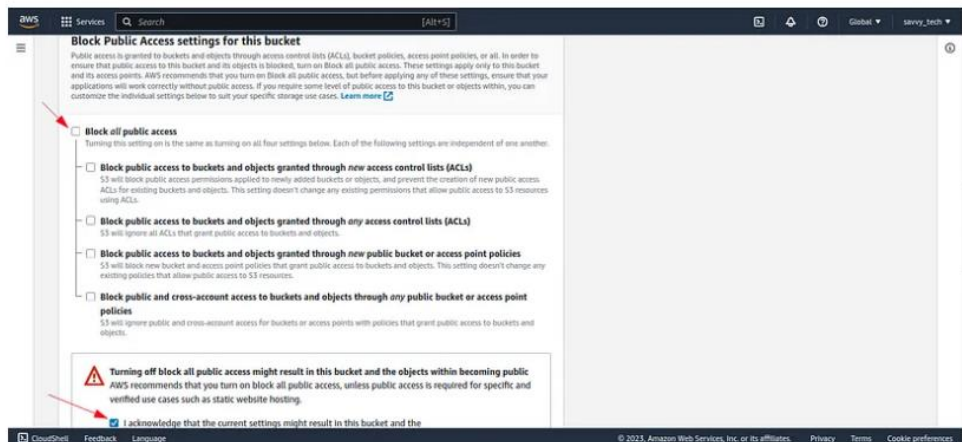
Enter a unique name for your bucket, this is important because S3 bucket names are globally unique, then select the region you want the bucket to be hosted in.



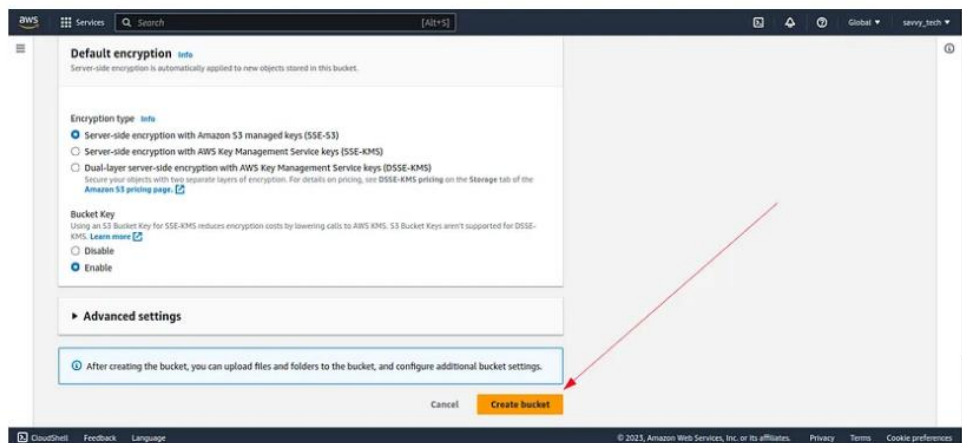
Scroll down and click on ACLs (Access Control Lists) enabled, this will allow you to specify access to the bucket using Access Control Lists.



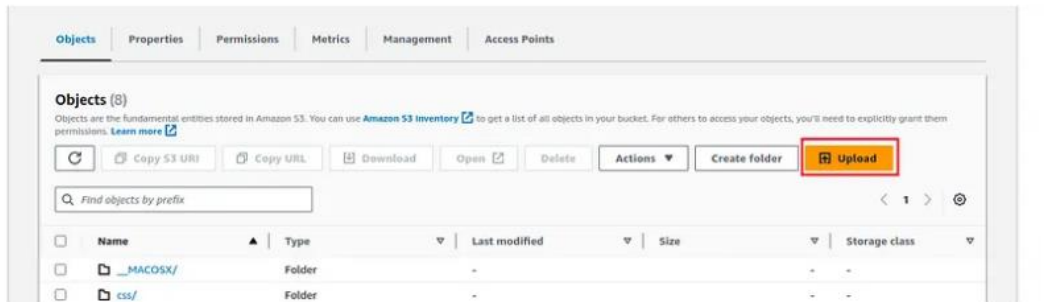
For now, uncheck “Block all Public access”. This allows your bucket contents to be publicly accessible.



Keep all other contents at their default settings and proceed by clicking on the “create bucket” option.

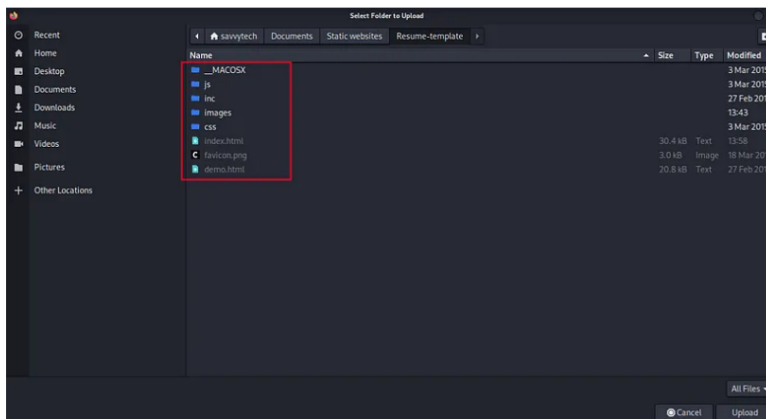


Now, click on the bucket name from the list of buckets and click upload.



Git repo for sample code: <https://github.com/seanmiles/example-webpage>

Next, click add files or add folders to add the html, css and javascript files of your website.



Configure S3 Bucket Permissions for Website Access. Click on the permissions tab in your S3 bucket, click on edit permission, and paste the JSON configuration below:

```
{
  "Version": "2008-10-17",
  "Id": "PolicyForCloudFrontPrivateContent",
  "Statement": [
    {
      "Sid": "AllowCloudFrontServicePrincipal",
      "Effect": "Allow",
      "Principal": {
        "Service": "cloudfront.amazonaws.com"
      },
    },
  ],
}
```

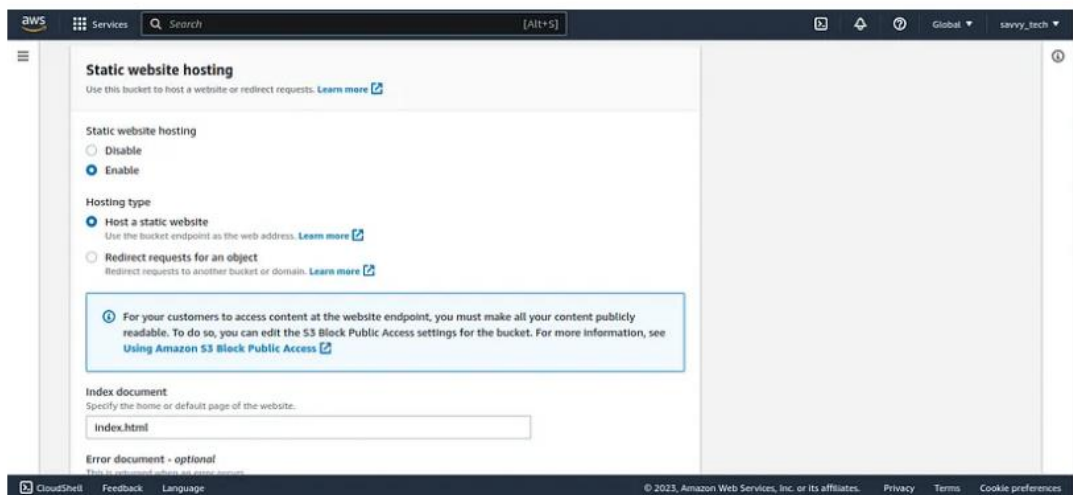
```

        "Action": "s3:GetObject",
        "Resource": "arn:aws:s3:::YOUR_BUCKET_NAME/*",
        "Condition": {
            "StringEquals": {
                "AWS:SourceArn":
"arn:aws:cloudfront::396529431040:distribution/E2TM1KE84PM7EN"
            }
        }
    ]
}

```

This policy *allows CloudFront to distribute Objects* (website contents) *from the specified S3 bucket* (“Resource”: “arn:aws:s3:::YOUR\_BUCKET\_NAME/\*”) to edge locations. Replace the “YOUR\_BUCKET\_NAME” in the configuration with your bucket name and click on save.

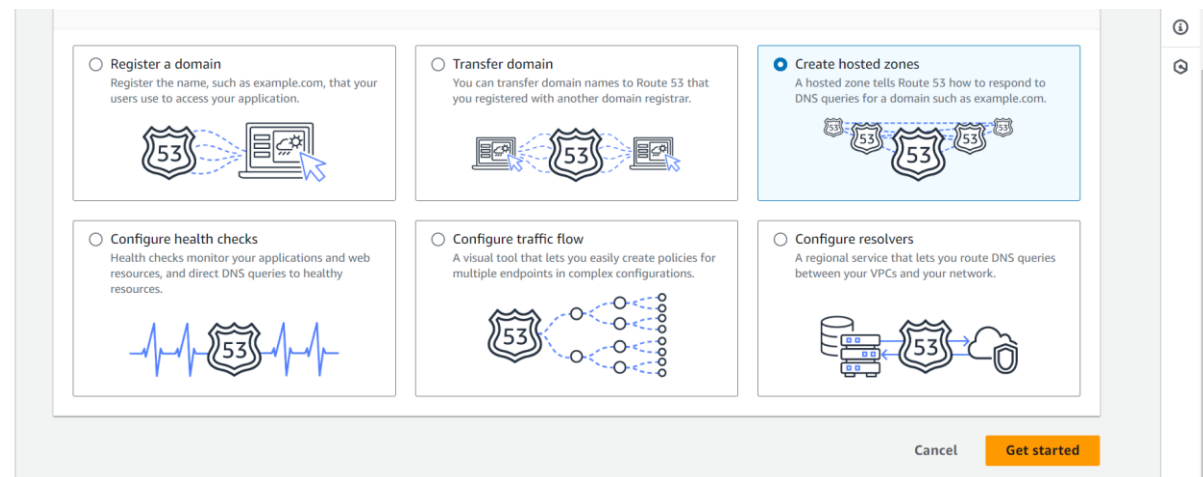
Next, click on properties tab, scroll down to static hosting and click on it, by default it is disabled, click on “Enable”. Under index document, type the index document of your website (index.html)



The website has been successfully hosted on S3. To access it, simply scroll down and locate the “Bucket website endpoint.” Copy this endpoint and paste it into your web browser, granting you full access to our website.

# Configure Route53 for DNS Management

Next, on the AWS Console, search for Route53, click on it then click on hosted zones and create hosted zone.



subdomains.

---

**Domain name** [Info](#)  
This is the name of the domain that you want to route traffic for.

Valid characters: a-z, 0-9, ! " # \$ % & ' ( ) \* + , - / : ; < = > ? @ [ \ ] ^ \_ ` { | } . ~

**Description - optional** [Info](#)  
This value lets you distinguish hosted zones that have the same name.

The description can have up to 256 characters. 0/256

**Type** [Info](#)  
The type indicates whether you want to route traffic on the internet or in an Amazon VPC.

☒ **Public hosted zone**  
A public hosted zone determines how traffic is routed on the internet.

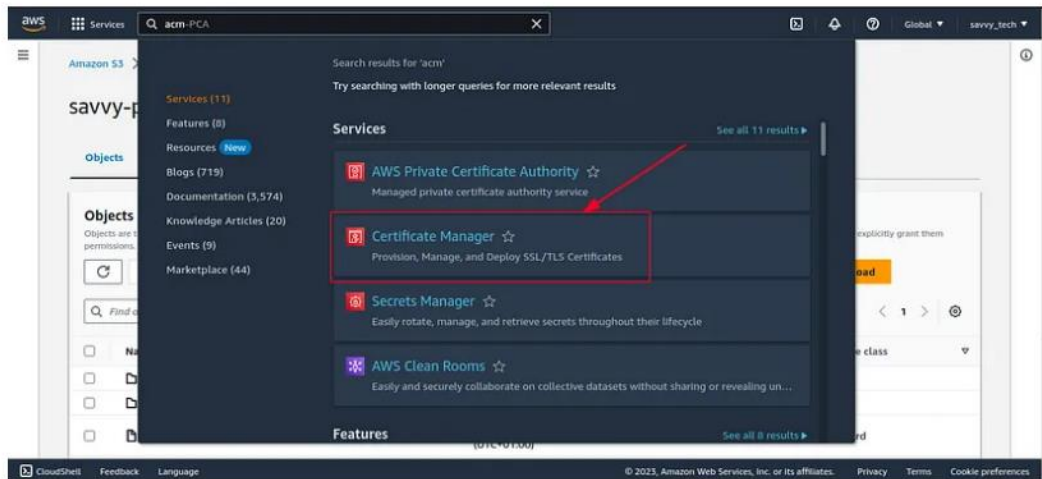
☐ **Private hosted zone**  
A private hosted zone determines how traffic is routed within an Amazon VPC.

Records (2)   DNSSEC signing   Hosted zone tags (0)						
<div> <b>Records (2)</b> <a href="#">Info</a> <span>↻</span> <span>Delete record</span> <span>Import zone file</span> </div> <p>Automatic mode is the current search behavior optimized for best filter results. <a href="#">To change modes go to settings.</a></p> <div> <input type="text" value="Filter records by property or value"/> <span>Type ▼</span> <span>Routing policy ▼</span> <span>Alias ▼</span> </div>						
<input type="checkbox"/>	Record ... ▼	Type ▼	Routin... ▼	Differ... ▼	Alias ▼	Value
<input type="checkbox"/>	openwrite...	NS	Simple	-	No	ns-86 ns-63 ns-20 ns-13
<input type="checkbox"/>	openwrite...	SOA	Simple	-	No	ns-86

Go to your domain registrar (e.g Namecheap or GoDaddy), under Domain List , locate your domain name, click on manage and then paste the NS records copied under “Custom DNS”. Accept changes and move to the next step.

## Create a SSL/TLS Certificate for CloudFront

On the AWS console search for “AWS Certificate Manager” (ACM), click on Certificate Manager



Once there, select “Request a certificate.” In the provided field, enter your custom domain name (e.g., openwriteup.com). Choose DNS validation as the preferred method and proceed by clicking on the “Request”.

[AWS Certificate Manager](#) > [Certificates](#) > [Request certificate](#) > Request public certificate

## Request public certificate

### Domain names

Provide one or more domain names for your certificate.

Fully qualified domain name [Info](#)

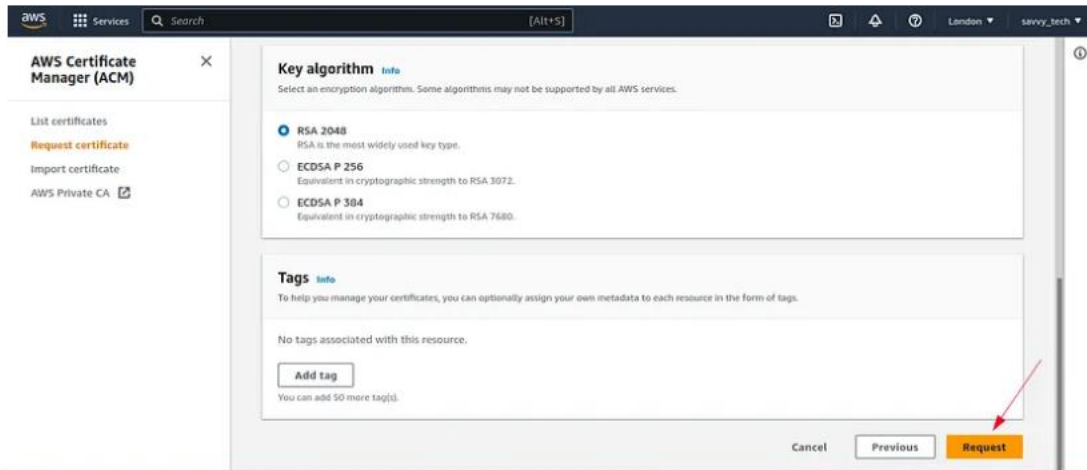
[Add another name to this certificate](#)

You can add additional names to this certificate. For example, if you're requesting a certificate for "www.example.com", you might want to add the name "example.com" so that customers can reach your site by either name.

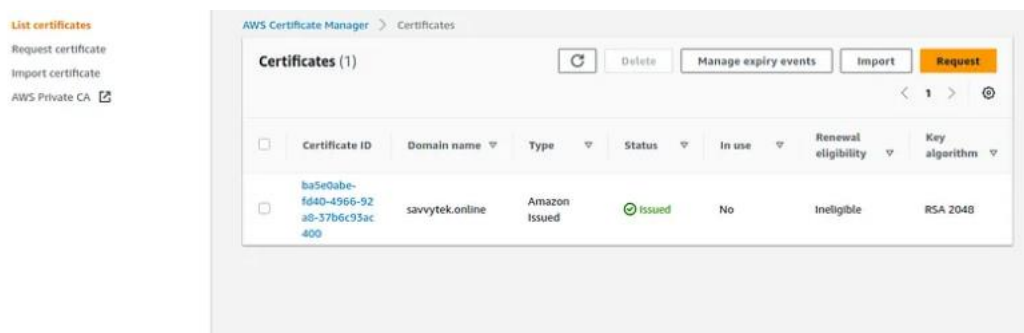
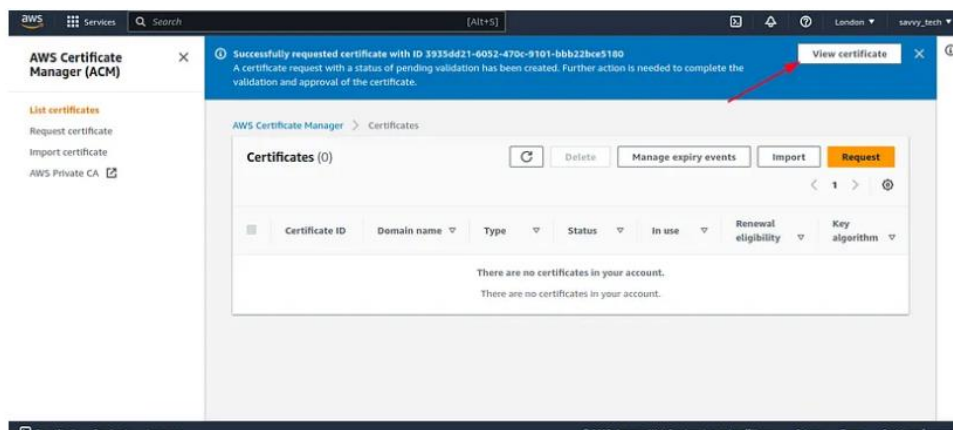
### Validation method [Info](#)

Select a method for validating domain ownership.

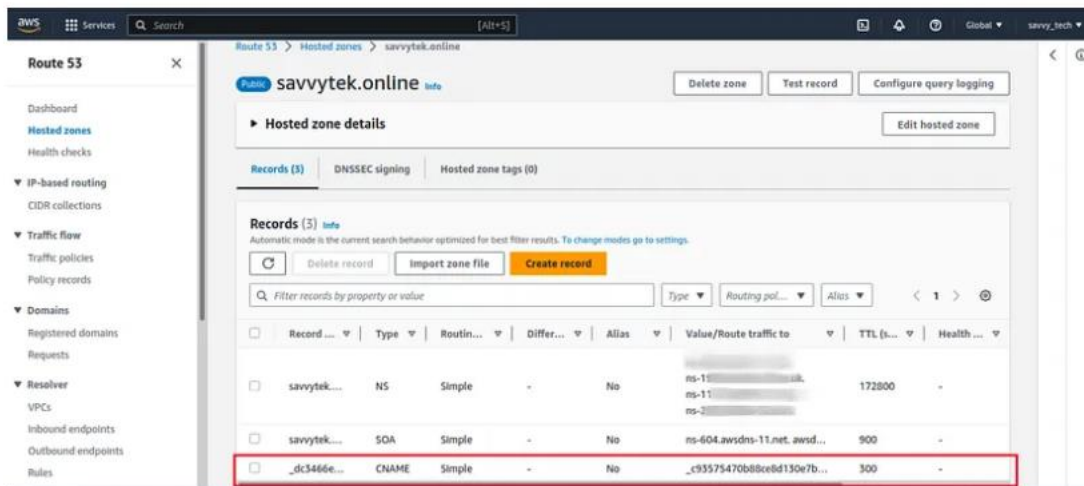




Click on “View Certificate”, then click on the certificate ID and click on “**create records in route53**”, click on “**create records**” then wait while the status change from “pending validation” to “issued”.

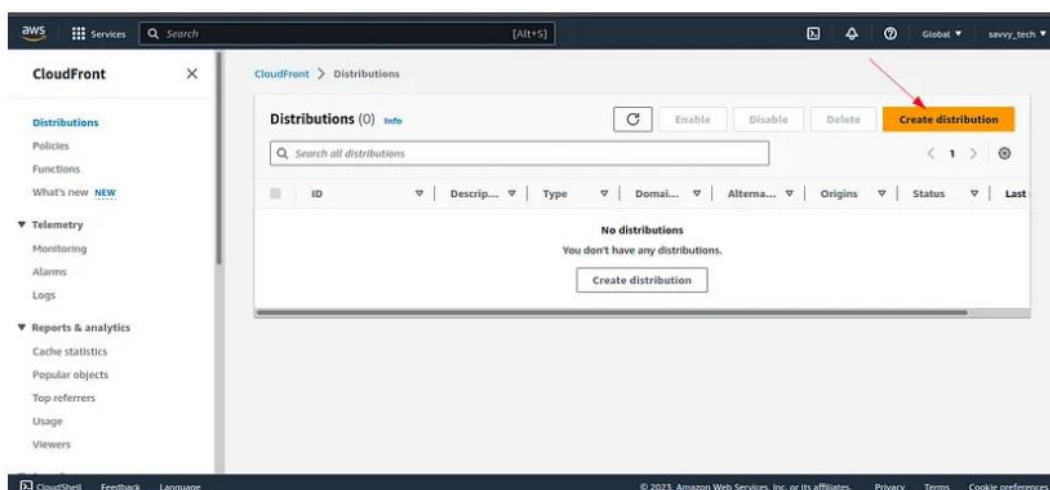


Go back to Route53, refresh the page, you should see a new CNAME record and you are done with ACM.



## Configure CloudFront Distributions for Website Delivery

On the AWS console, search for CloudFront. On the CloudFront dashboard, click on “create CloudFront distribution”, and select your S3 origin domain in the “origin domain” field.

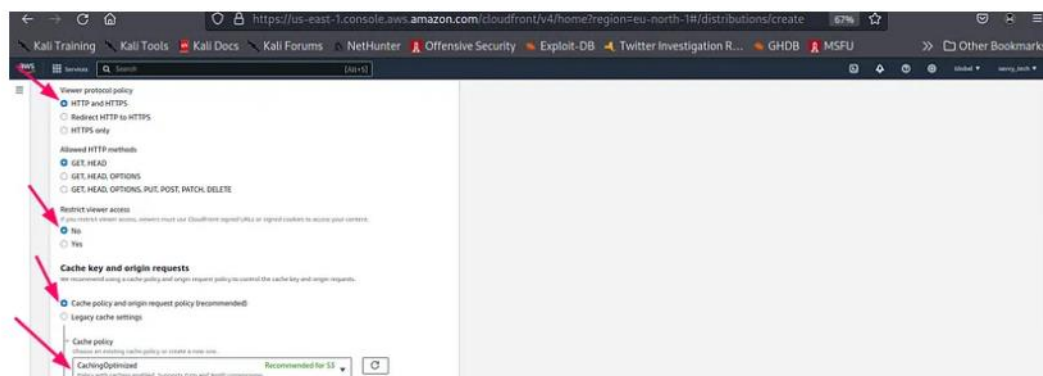


Under origin access, choose, *Origin access control settings (recommended)*. Select the S3 bucket under *Origin access control*.

*Click Copy policy, you will have to update the S3 bucket policy using the copied policy*



*Scroll down, Ensure viewer protocol policy is “HTTP and HTTPS”. Allowed HTTP methods, GET, HEAD.*



**Default root object - optional**  
The object (file name) to return when a viewer requests the root URL (/) instead of a specific object.

index.html

**Standard logging**  
Get logs of viewer requests delivered to an Amazon S3 bucket.

☒ Off  
☐ On

**IPv6**  
☐ Off  
☒ On

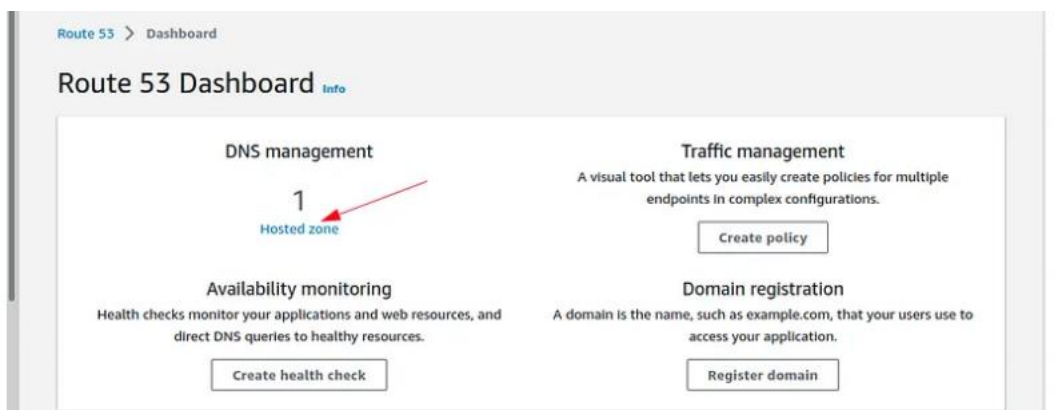
**Description - optional**

Cancel **Save changes**

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## Configuring Route53 for DNS Management

To set up a record in the Route53 dashboard, click on the hosted zone, locate your domain name, and click “Create record.”



Turn on the alias option, specify the record type, in the “Route traffic to” field, select your CloudFront “Distribution domain name” and chose the simple routing policy, then click on “create records”.

Record 1

Delete

Record name

Info

subdomain

savvytek.online

Record type

Info

A - Routes traffic to an IPv4 address and some AWS resources

Keep blank to create a record for the root domain.

Alias

Route traffic to

Info

Alias to CloudFront distribution

US East (N. Virginia)

An alias to a CloudFront distribution and another record in the same hosted zone are global and available only in US East (N. Virginia).

d3goksa7w3omgs.cloudfront.net

Routing policy

Info

Simple routing

Evaluate target health

No

Add another record

Cancel

Create records

CloudShell

Feedback

Language

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