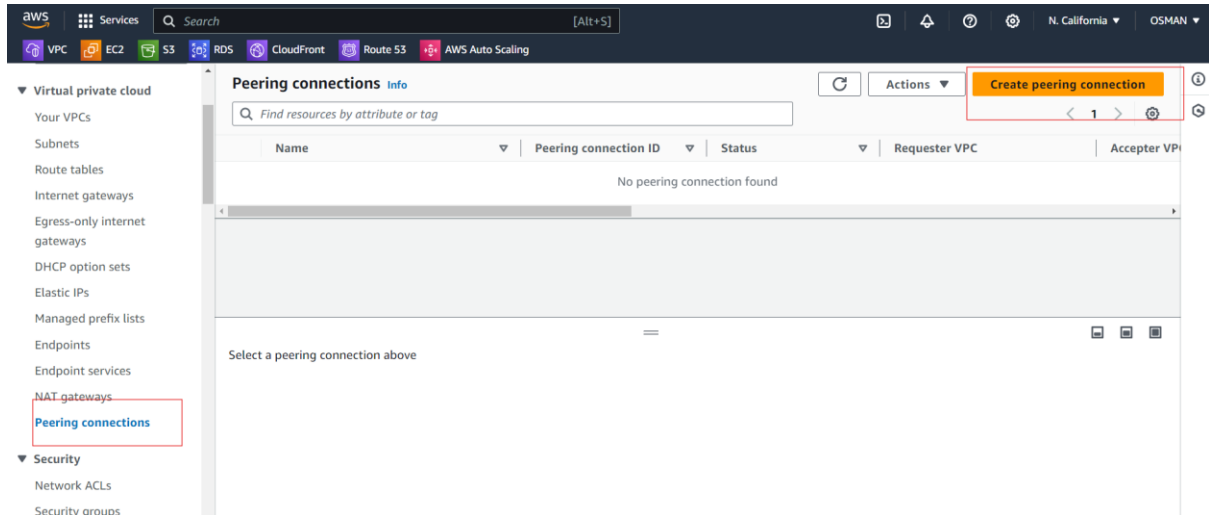
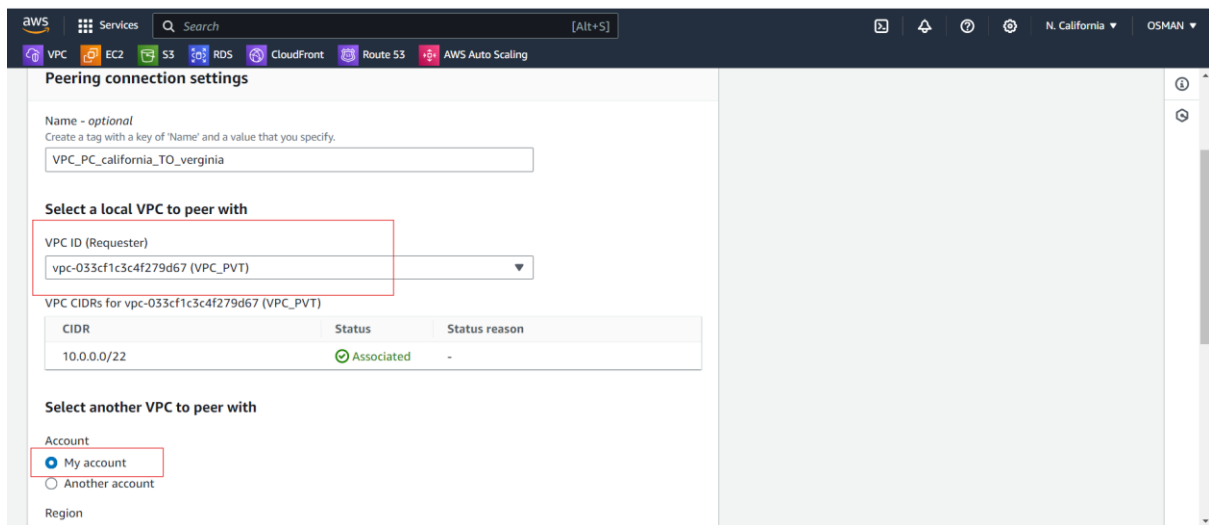


1) Configure VPC peering in cross regions.

- First you have to Login into the AWS.
- Search for the VPC.
- Click on peering connections and click on create peering connection.



- Give Name:
- VPC ID(requester) ---- select VPC
- Account --- here you want select Account with in the account VPC or another account like we want select.



- After that select the region and give the VPC Id.
- Click on create VPC.

aws Services Search [Alt+S] N. California OSMAN

VPC EC2 S3 RDS CloudFront Route 53 AWS Auto Scaling

my account

Another account

Region

Another Region

US East (N. Virginia) (us-east-1)

VPC ID (Accepter)

vpc-0b08d13536bc0cb55

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key Value - optional

Q Name X Q VPC\_PC\_california\_TO\_verginia X Remove

Add new tag

You can add 49 more tags.

Cancel Create peering connection

- Now VPC Peering connection status is pending now.
- To activate the status go to the another region and accept the request then status will be active.

aws Services Search [Alt+S] N. California OSMAN

VPC EC2 S3 RDS CloudFront Route 53 AWS Auto Scaling

VPC dashboard x

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

Endpoints

pcx-04e7993dc36834e9d

pcx-04e7993dc36834e9d / VPC\_PC\_california\_TO\_verginia

Actions

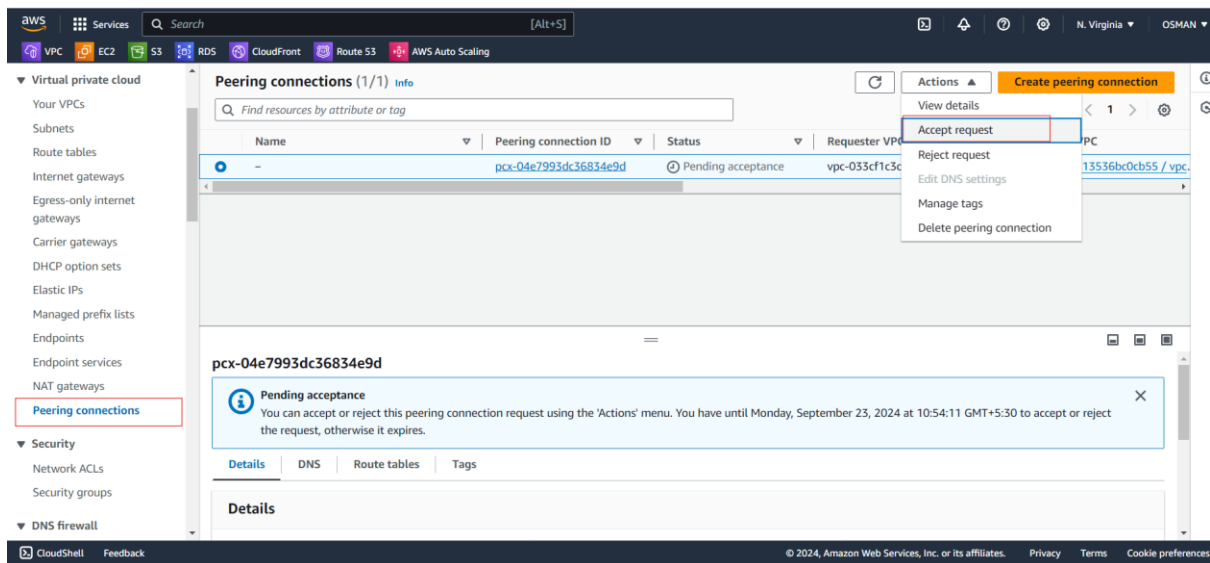
Details Info

Requester owner ID 471112562646	Accepter owner ID 471112562646	VPC Peering connection ARN arn:aws:ec2:us-west-1:471112562646:vpc-peering-connection/pcx-04e7993dc36834e9d
Peering connection ID pcx-04e7993dc36834e9d	Requester VPC vpc-033cf1c3c4f279d67 / VPC_PVT	Accepter VPC vpc-0b08d13536bc0cb55
Status Pending Acceptance by 471112562646	Requester CIDRs 10.0.0.0/22	Accepter CIDRs -
Expiration time Monday, September 23, 2024 at 10:54:11 GMT+5:30	Requester Region N. California (us-west-1)	Accepter Region N. Virginia (us-east-1)

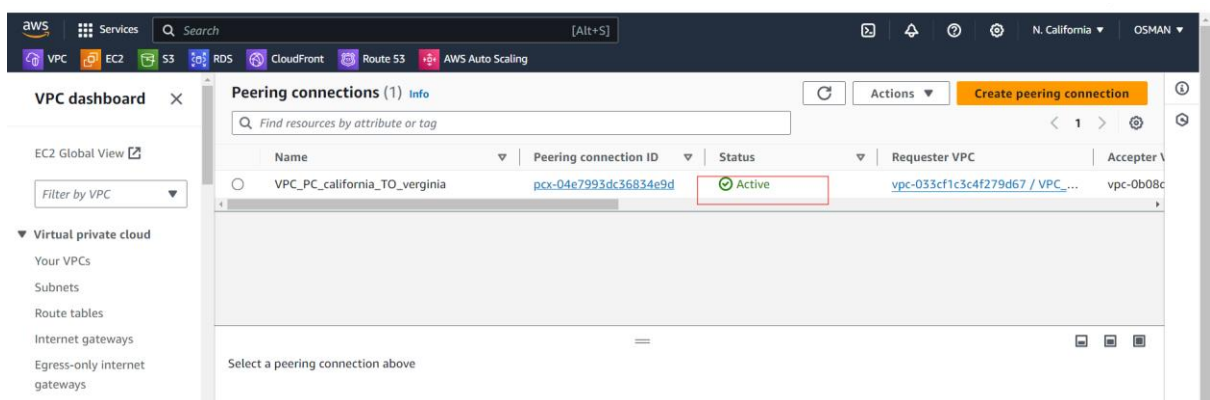
DNS Route tables Tags

DNS settings Edit DNS settings

GO to the N.virginia and accept the request.

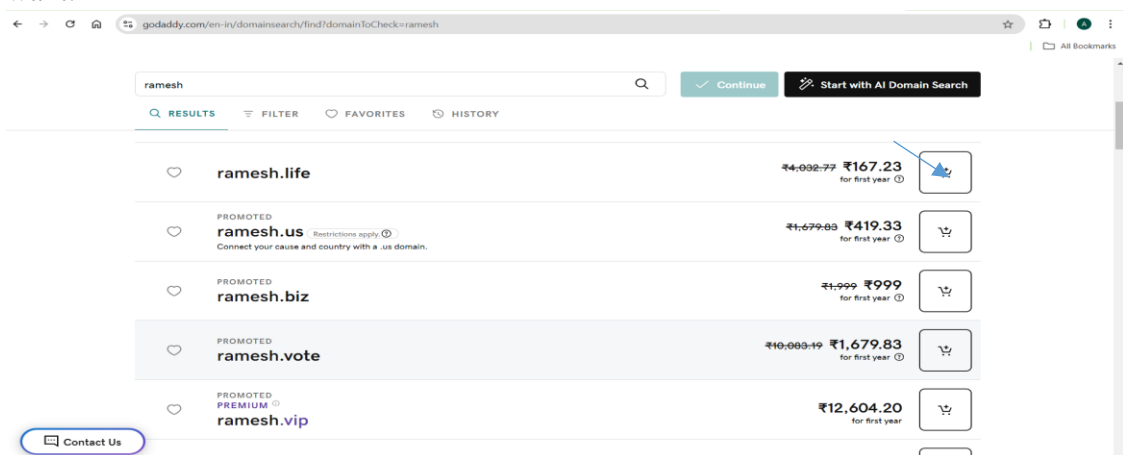


Now Peering connection is active.

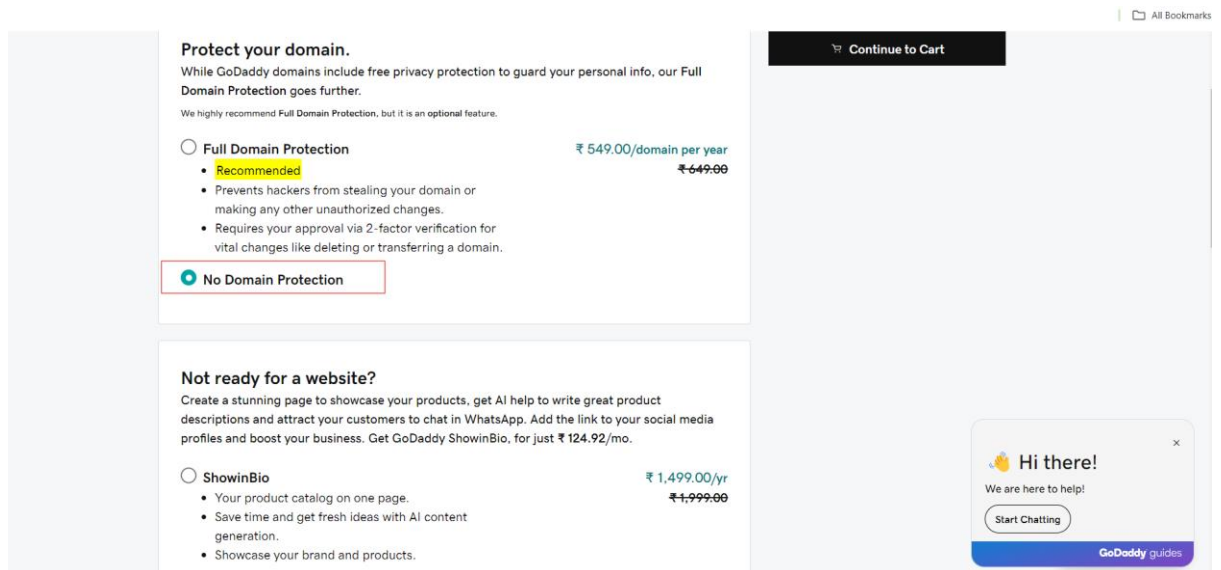


2) Purchase one domain from godaddy.

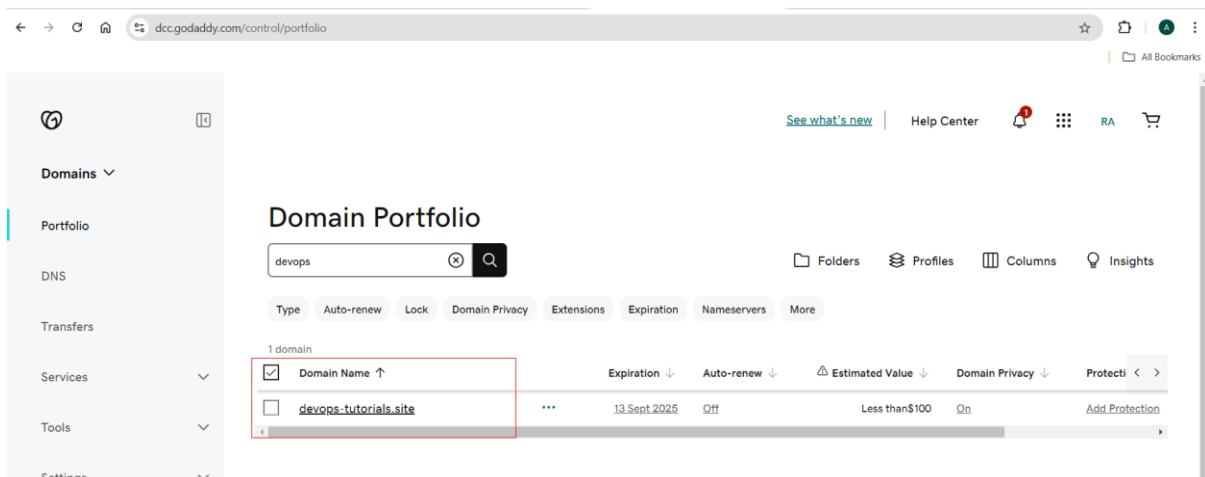
- To purchase one domain from go daddy. First you need to go the Go daddy website.
- Then click on the Domain and search for domains and select one domain what you want.



- Now click on continue to cart and here click on no need to protection.
- Disable the all extra things here and click on the continue chart.
- Next you will be redirect the payment page



After payment you will receive the domain.



The above task is done.

### 3) Deploy static website in s3.

- Now we have to go the S3 and create one bucket.
- The bucket name give you domain name only.

The screenshot shows the 'Create bucket' page in the AWS Management Console. The page title is 'Create bucket' with an 'info' link. Below the title, it says 'Buckets are containers for data stored in S3.' The 'General configuration' section is active. It shows the 'AWS Region' as 'US East (N. Virginia) us-east-1'. Under 'Bucket type', 'General purpose' is selected with a radio button, and 'Directory' is unselected. The 'General purpose' option has a description: 'Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.' The 'Bucket name' field contains 'devops-tutorials.site'. Below the field, it says 'Bucket name must be unique within the global namespace and follow the bucket naming rules. See rules for bucket naming'. There is a 'Copy settings from existing bucket - optional' section with a 'Choose bucket' button. At the bottom, it says 'Format: s3://bucket/prefix'.

### Object ownership --- ACL's Enabled

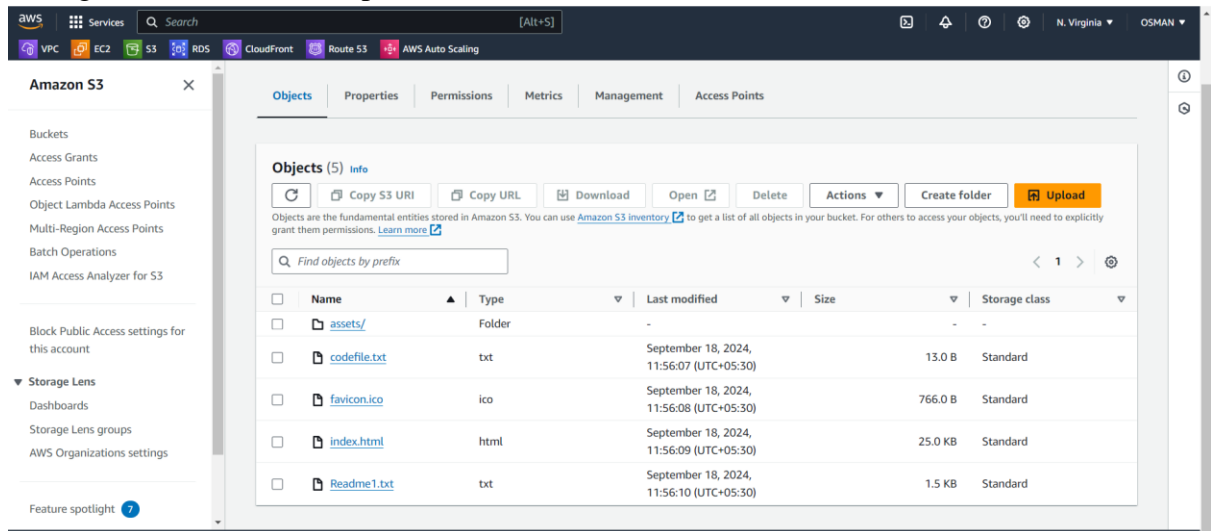
The screenshot shows the 'Object Ownership' page in the AWS Management Console. The page title is 'Object Ownership' with an 'info' link. Below the title, it says 'Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.' There are two radio button options: 'ACLs disabled (recommended)' and 'ACLs enabled'. The 'ACLs enabled' option is selected. Below these options, there is a warning box that says 'We recommend disabling ACLs, unless you need to control access for each object individually or to have the object writer own the data they upload. Using a bucket policy instead of ACLs to share data with users outside of your account simplifies permissions management and auditing.' Under 'Object Ownership', there are two radio button options: 'Bucket owner preferred' and 'Object writer'. The 'Bucket owner preferred' option is selected. Below these options, there is a blue box with an information icon that says 'If you want to enforce object ownership for new objects only, your bucket policy must specify that the bucket-owner-full-control canned ACL is required for object uploads. Learn more'.

Here below steps follow disable the check box.

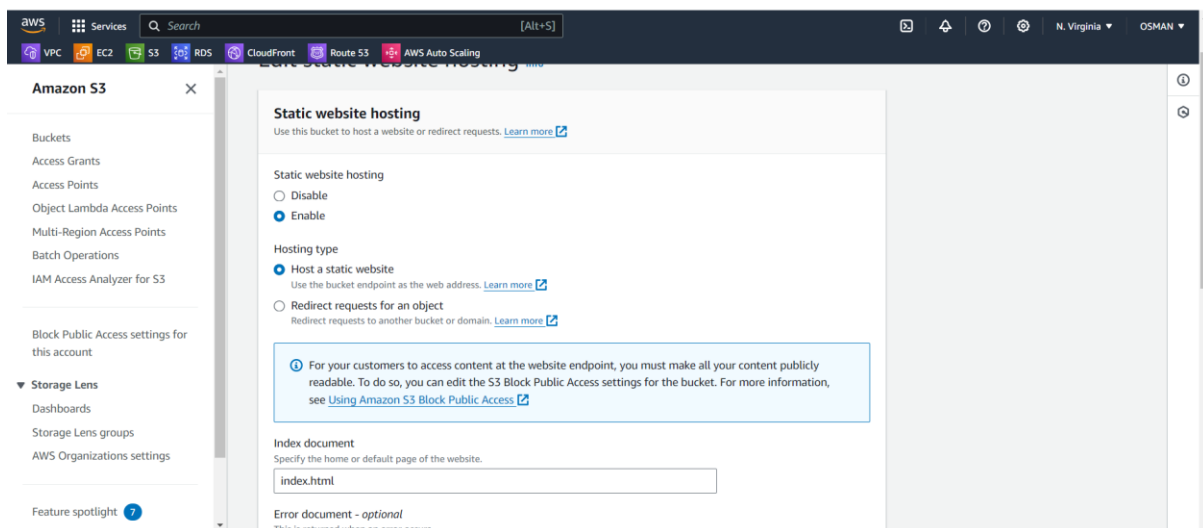
Click on check box ---- I acknowledgement.

The screenshot shows the 'Block all public access' page in the AWS Management Console. The page title is 'Block all public access'. Below the title, it says 'Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.' There are four checkboxes, all of which are unchecked: 'Block public access to buckets and objects granted through new access control lists (ACLs)', 'Block public access to buckets and objects granted through any access control lists (ACLs)', 'Block public access to buckets and objects granted through new public bucket or access point policies', and 'Block public and cross-account access to buckets and objects through any public bucket or access point policies'. At the bottom, there is a warning box that says 'Turning off block all public access might result in this bucket and the objects within becoming public. AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.' Below the warning box, there is a checkbox labeled 'I acknowledge that the current settings might result in this bucket and the objects within becoming public.' which is checked.

- If you want the bucket versioning enable otherwise leave it click on the create bucket.
- Now go to the bucket and upload the files.



Go to the static website hosting enable.



Give the index.html.

And click on the save changes.

Now try to access the content through static web hosting URL but you facing the issue.

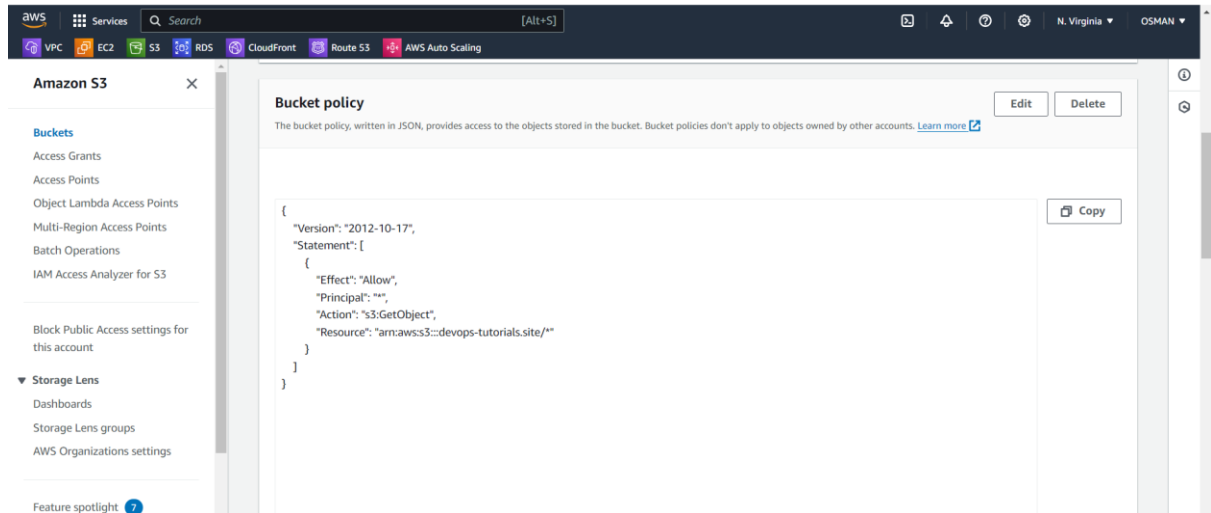
Because we haven't create policy for the all objects.

← → ↺ 🏠 ⚠ Not secure devops-tutorials.site.s3-website-us-west-1.amazonaws.com

## 403 Forbidden

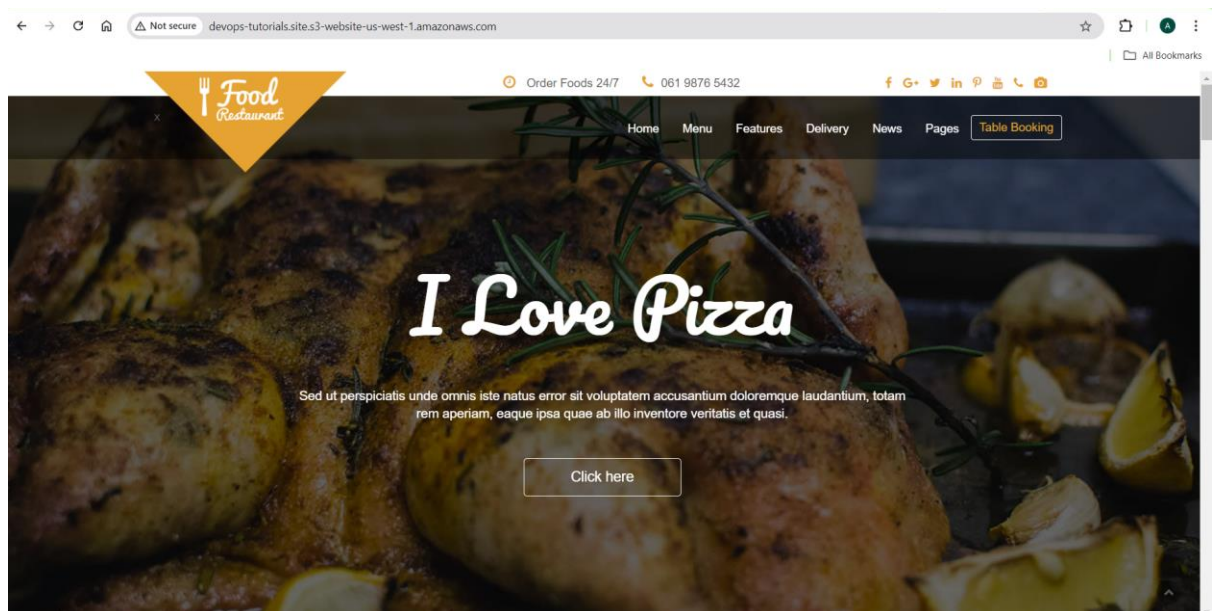
- Code: AccessDenied
- Message: Access Denied
- RequestId: STCDGQREAJ5T5VP6
- HostId: EAUtlBpc7/9YRTDu7Kv4wcm8S6TRNX8C4qdQOPXUGiYLIIfQvafZJY1n35BPA6mAKDS6eiZERYb4=

- Go to permissions and click on the edit bucket policy.



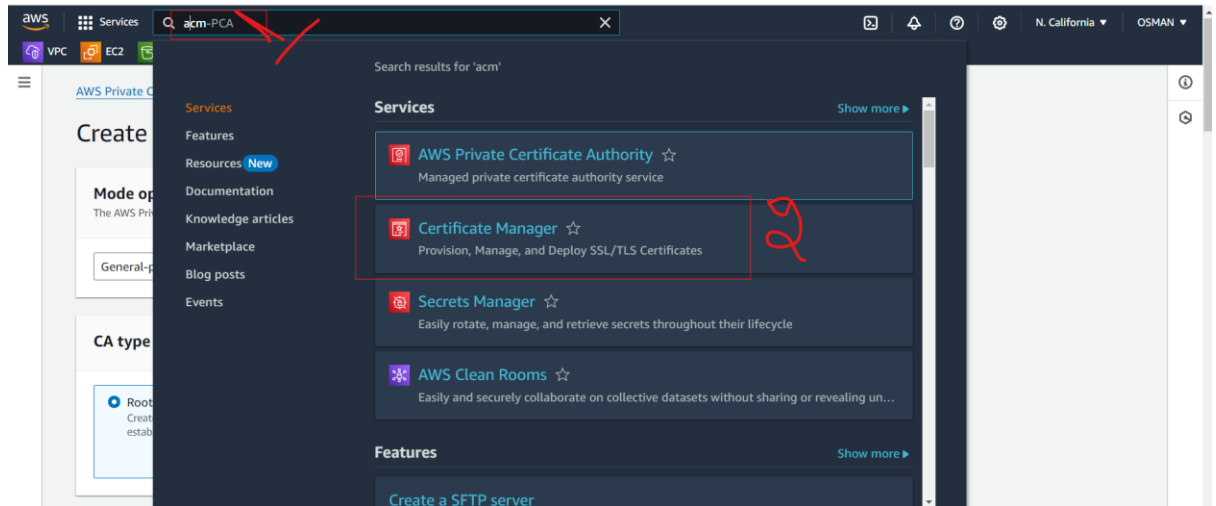
And click on the save changes.

- Go to static web hosting and copy the Bucket website endpoint.
- Now paste in the browser and see your Application.

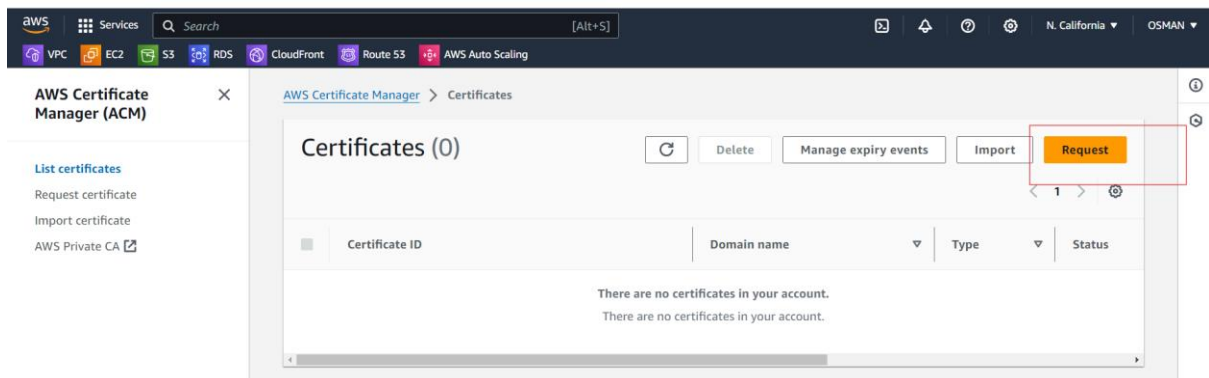


#### 4) Create CDN and attach one SSL certificate.

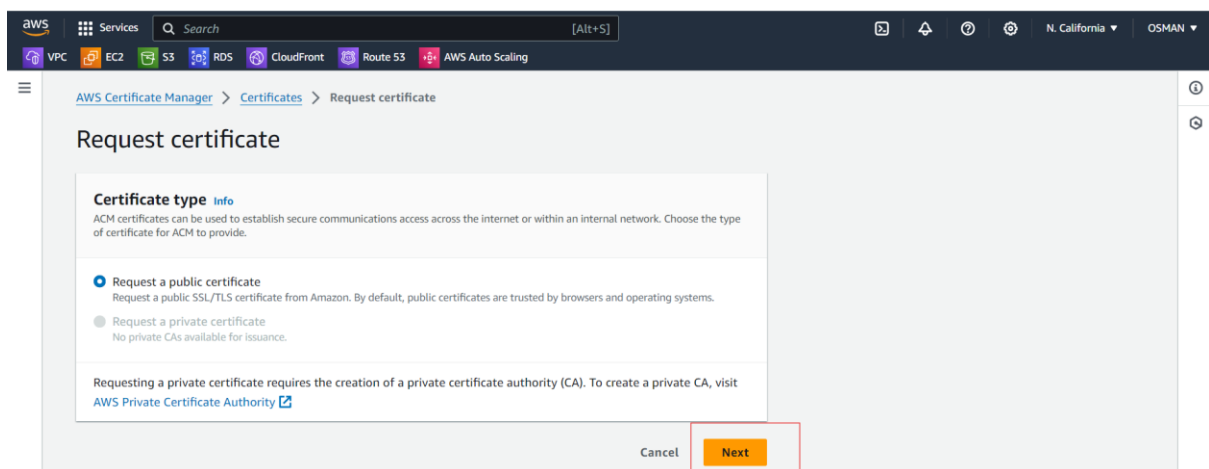
- First we have to go to the ACM there we have to get the ssl certificate.
- Click on Certificate Manager.



- click on the Request.



**Request a public certificate:** Request a public SSL/TLS certificate from Amazon. By default, public certificates are trusted by browsers and operating systems.





- Next you will be see the below interface.
- Give domain name
- Key algorithm --- RSA 2408
- Leave it as it's default.

**Request public certificate**

**Domain names**  
Provide one or more domain names for your certificate.

Fully qualified domain name [Info](#)  
devops-tutorials.site

[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.

☒ **DNS validation - recommended**  
Choose this option if you are authorized to modify the DNS configuration for the domains in your certificate request.

- click on the the request.

**Key algorithm** [Info](#)  
Select an encryption algorithm. Some algorithms may not be supported by all AWS services.

☒ **RSA 2048**  
RSA is the most widely used key type.

☐ ECDSA P 256  
Equivalent in cryptographic strength to RSA 3072.

☐ ECDSA P 384  
Equivalent in cryptographic strength to RSA 7680.

**Tags** [Info](#)  
No tags associated with the resource.

[Add new tag](#)  
You can add up to 50 tags.

[Cancel](#) [Previous](#) [Request](#)

Next you will the below interface and status is pending validation.

**AWS Certificate Manager (ACM)**

List certificates  
Request certificate  
Import certificate  
AWS Private CA

**Identifier**  
0434bd30-5d01-465f-a0dc-2cc405beed30

**ARN**  
arn:aws:acm:us-west-1:471112562646:certificate/0434bd30-5d01-465f-a0dc-2cc405beed30

**Type**  
Amazon Issued

**Status**  
[Pending validation](#) [Info](#)

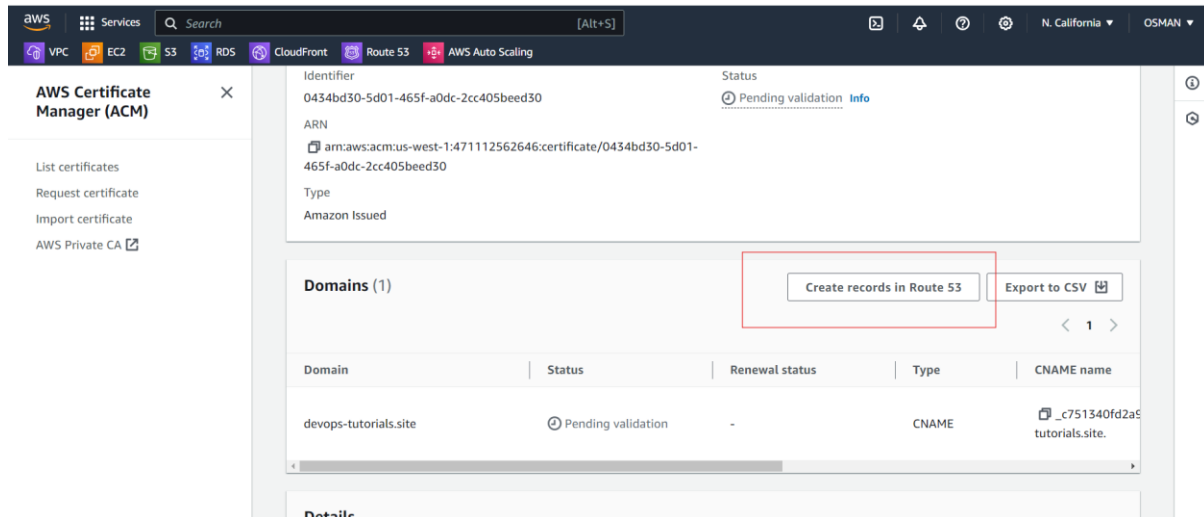
**Domains (1)** [Create records in Route 53](#) [Export to CSV](#)

Domain	Status	Renewal status	Type	CNAME name
devops-tutorials.site	<a href="#">Pending validation</a>		CNAME	_c751340fd2a5.tutorials.site

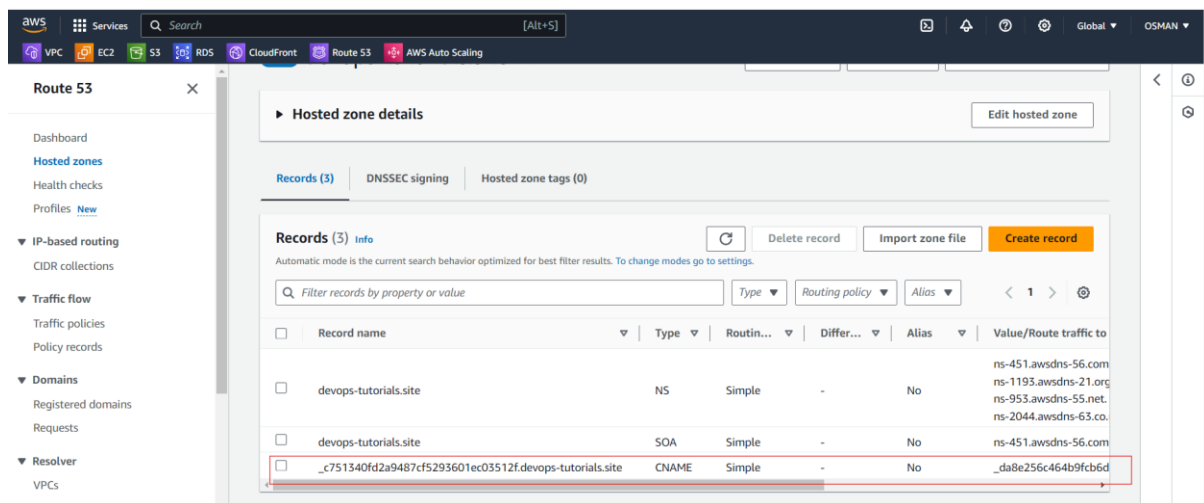
Now we have to go the R53 and create Record then your request will be accept.

So click on the ---- create records in Route 53.

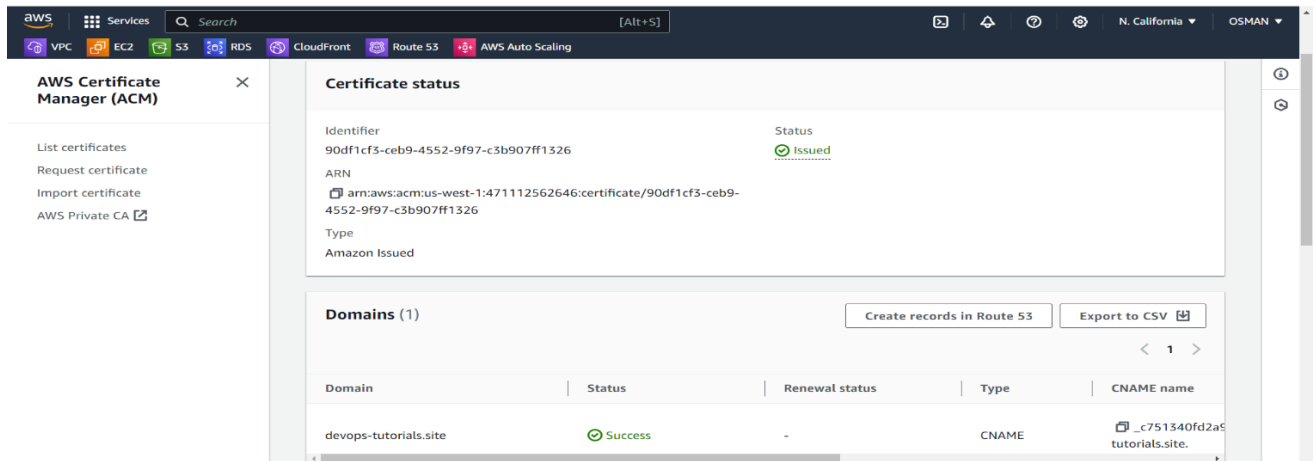
Just click on the Next button I t will be created.



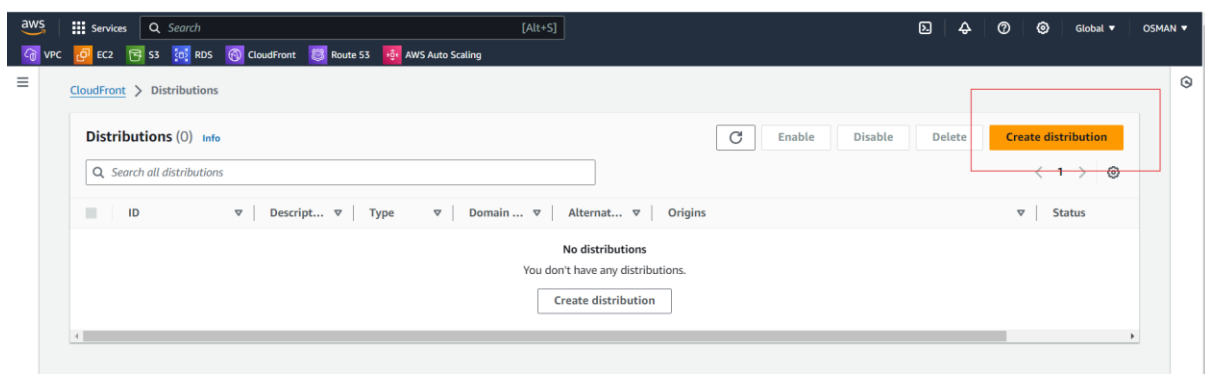
To check these record is created or not Go to the R53 and check in hosted Zones.



After some time you will see the Status is issued.

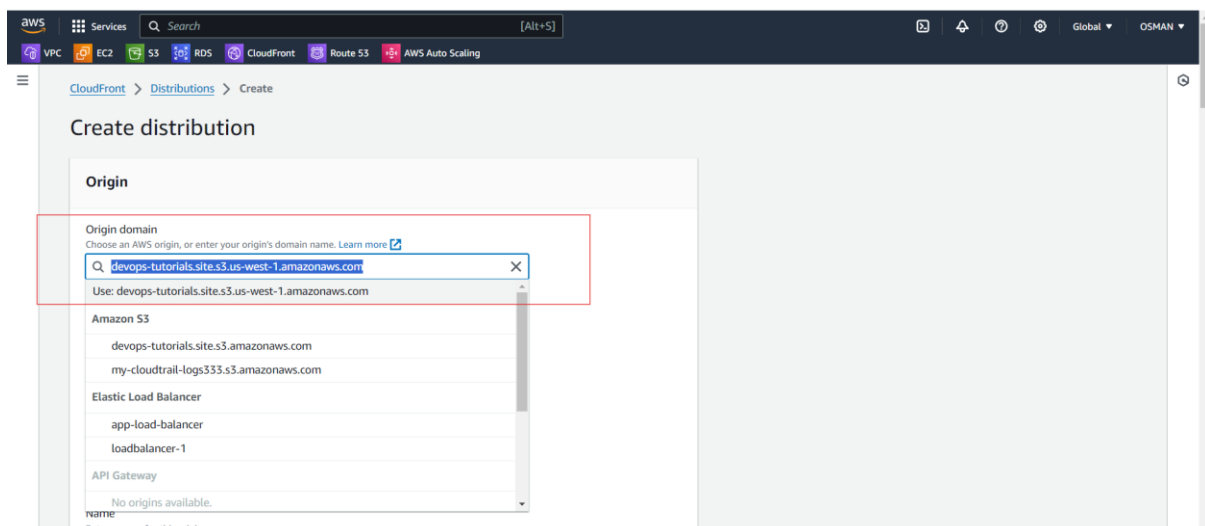


Now go to the Cloudfront and click on Create distribution.



Next you will be see below interface.

Here we have to observe name.



- The below I am given two url's
- Cloudfront url is missing –website–word so copy the s3 static web hosting url only
- Because you browse the cloufront url you haven't seen the website that path is worng.
- That's why you can use the s3 url.

```
s3 -- http://devops-tutorials.site.s3-website-us-west-1.amazonaws.com/
```

Cloudfront gives url ---<http://devops-tutorials.site.s3.us-west-1.amazonaws.com/>

Now I am selecting the S3 static web hosting URL and protocol is http only.

The screenshot shows the 'Origin' configuration page in the AWS Management Console. The 'Origin domain' field is populated with 'devops-tutorials.site.s3-website-us-west-1.amazonaws.com'. The 'Protocol' section has 'HTTP only' selected. The 'HTTP port' field is set to '80'.

Web Application firewall --- as off now –Do not enable

Price Class ---- as off now I am selecting the Asia.

The screenshot shows the 'Web Application Firewall (WAF)' configuration page. Under 'Enable security protections', the option 'Do not enable security protections' is selected. In the 'Settings' section, under 'Price class', the option 'Use North America, Europe, Asia, Middle East, and Africa' is selected. The 'Alternate domain name (CNAME)' section is visible but empty.

Alternate domain I am giving the---- my domain name

ssl certificate --- selected

Alternate domain name (CNAME) - optional

Add the custom domain names that you use in URLs for the files served by this distribution.

devops-tutorials.site Remove

Add item

To add a list of alternative domain names, use the [bulk editor](#).

Custom SSL certificate - optional

Associate a certificate from AWS Certificate Manager. The certificate must be in the US East (N. Virginia) Region (us-east-1).

devops-tutorials.site (cb174e93-9a98-41c1-9418-8b5e7f464c55) Refresh

devops-tutorials.site Request certificate

Legacy clients support - \$600/month prorated charge applies. Most customers do not need this. CloudFront allocates dedicated IP addresses at each CloudFront edge location to serve your content over HTTPS.

Enabled

Security policy

The security policy determines the SSL or TLS protocol and the specific ciphers that CloudFront uses for HTTPS connections with viewers (clients).

☒ TLSv1.2\_2021 (recommended)
 ☐ TLSv1.2\_2019
 ☐ TLSv1.2\_2018
 ☐ TLSv1.1\_2016

Now distribution is created and status is enabled.

CloudFront > Distributions

Distributions (1) Info

Search all distributions

Description	Type	Domain name	Alternate do...	Origins	Status	Last m...
Production		dea5dhbmffxb.cloudfront.net	-	devops-tutorials.site.s3-website-us-west-1.amazonaws.com	Enabled	Septeml

Previously we access our application through S3 static web hosting.

Now we are able to access the application with the Distribution domain name.

CloudFront > Distributions > E2E5FJMVE0WGJR

E2E5FJMVE0WGJR View metrics

General Security Origins Behaviors Error pages Invalidations Tags

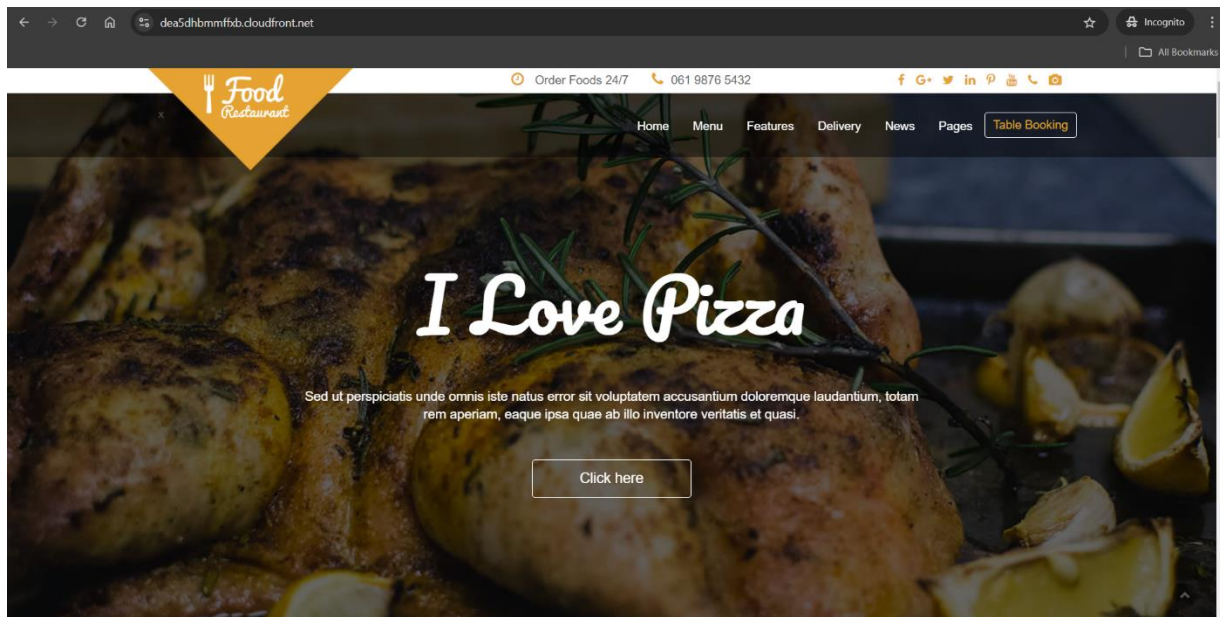
Details

Distribution domain name dea5dhbmffxb.cloudfront.net	ARN arn:aws:cloudfront:471112562646:distribution/E2E5FJMVE0WGJR	Last modified September 16, 2024 at 2:11:03 PM UTC
---	--	---

Settings Edit

Description -	Alternate domain names -	Standard logging Off
Price class Use North America, Europe, Asia, Middle East, and Africa	Custom SSL certificate devops-tutorials.site	Cookie logging Off
Supported HTTP versions	Security policy	Default root object

Just copy the Distribution domain name and search in the browser.



Task 4 is completed.

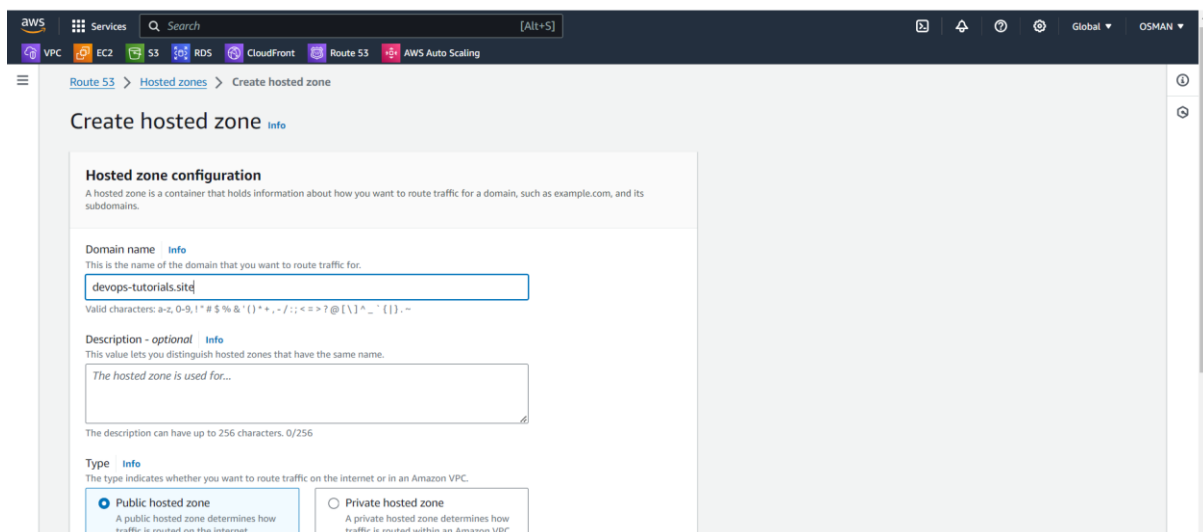
5) Create Route53 hosted zone and MAP the domain with CDN.

Now to create Route hosted zone. We have to go Route 53.

Click on hosted Zone.

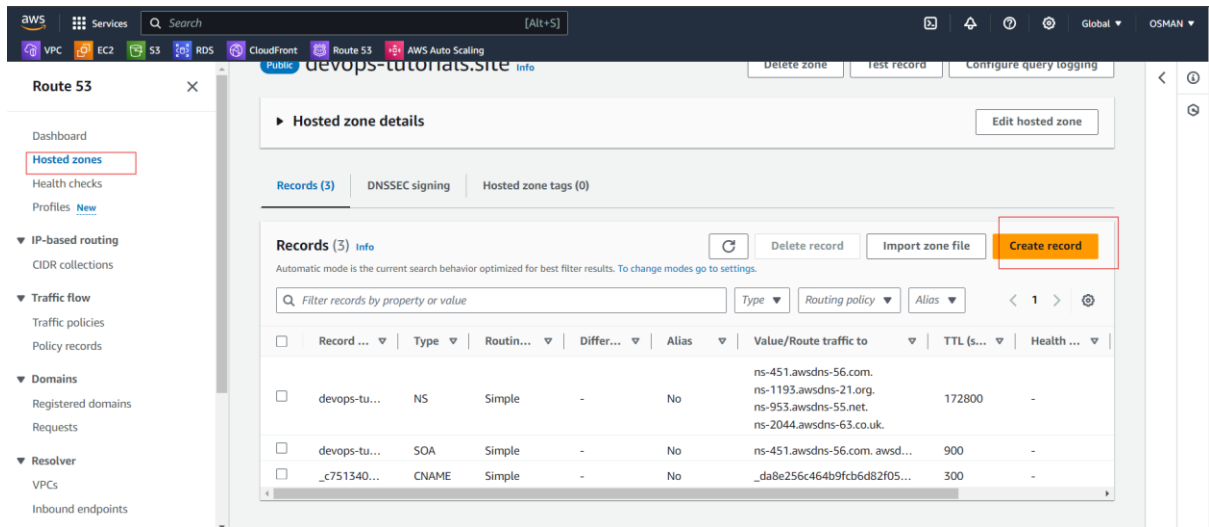
Give domain Name : your perches domain Name.

And leave it as it's and click on create Hosted Zone.

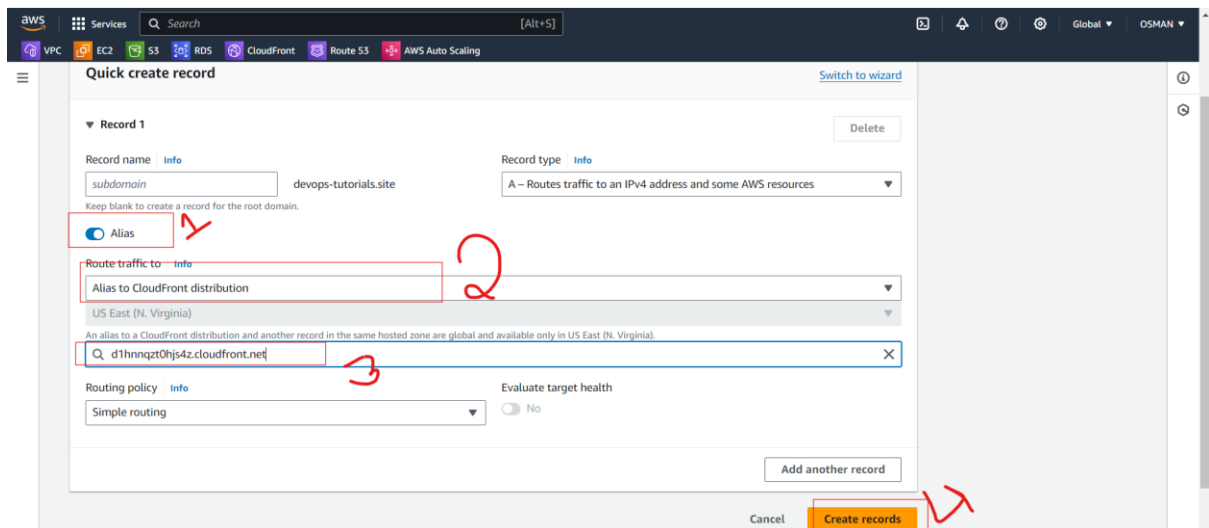


- Click on the create hosted zone.

- MAP the domain with CDN go to the Route 53.
- Click on the hosted Zones and click on the create record.

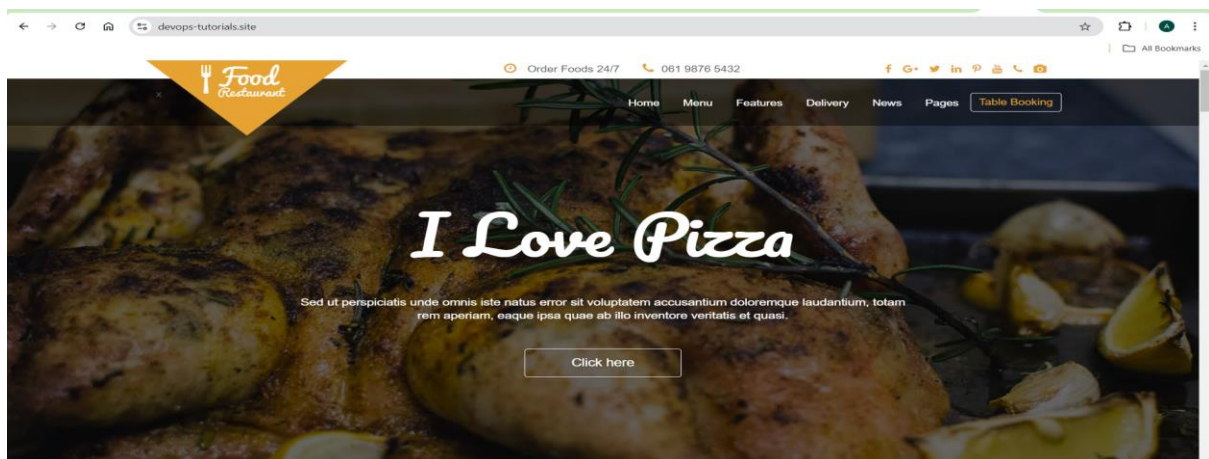


Here the below image steps follow.



Click on create records.

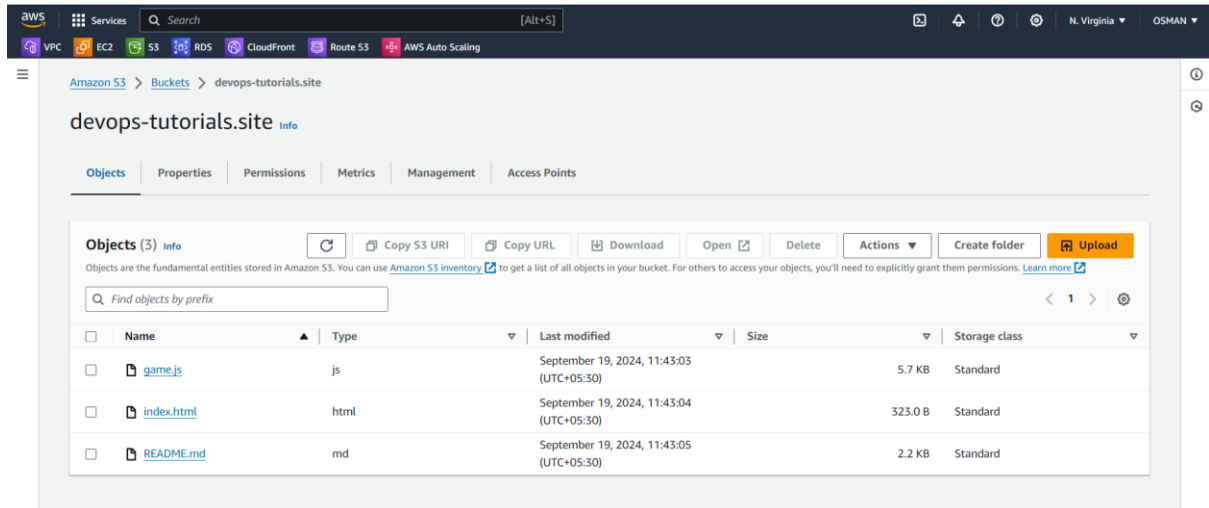
Now you will be able to access application with your domain name.



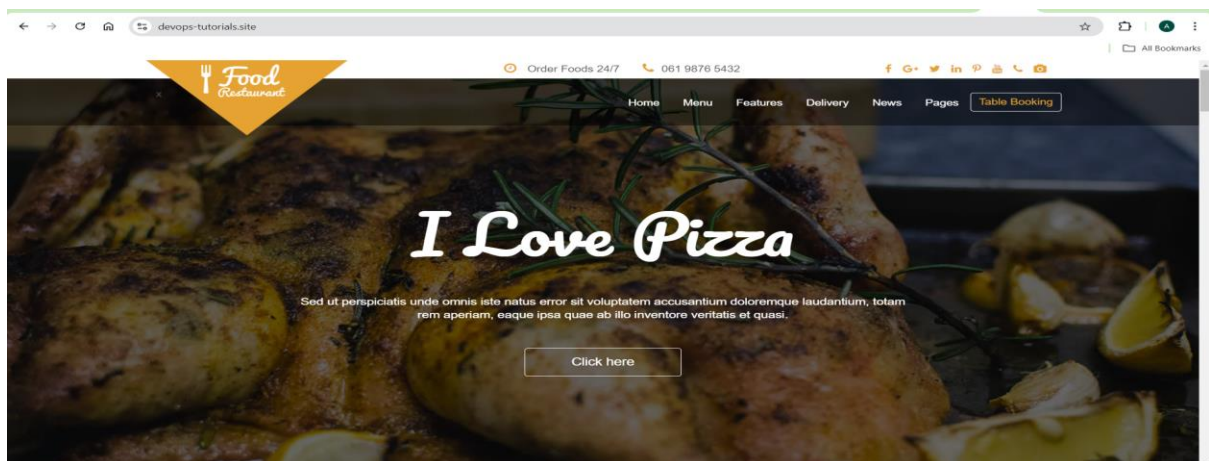


6) Update the index.html in s3 bucket and the updated file should be accessible by using domain name.

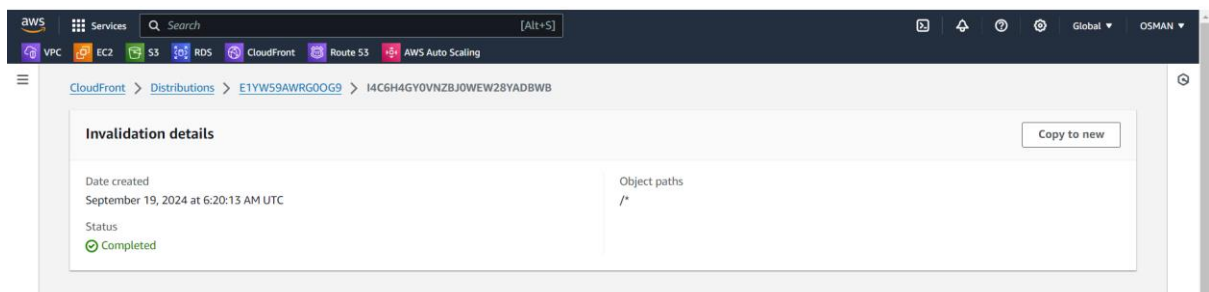
Now I am update the files.



Now I am trying to access you will see the past application.

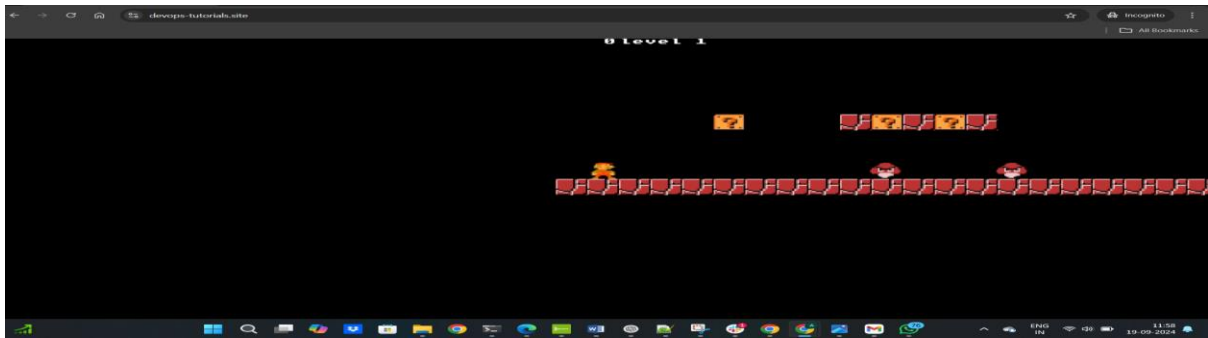


To change that you need go cloudfront change the small config.





Now you can refresh domain name and you will be new application.



7) Share the Domain name in slack to test the connectivity.