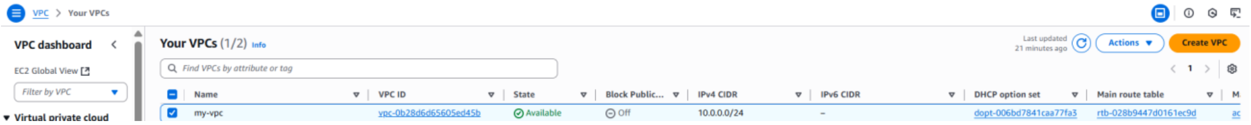
1. Configure VPC peering in cross regions.

Enabling VPC Peering for Cross Region in the Same Account:

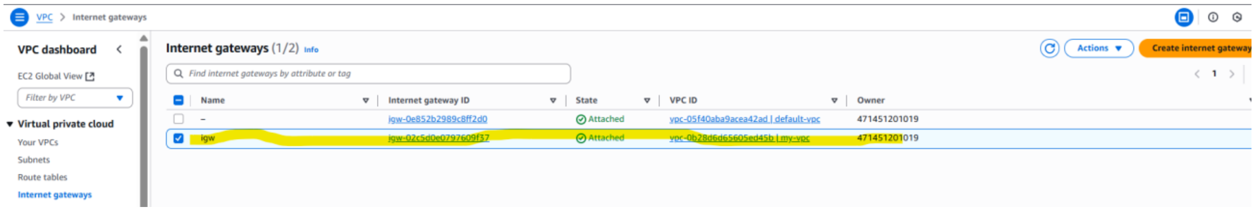
Create one vpc in Virginia Region with CIDR: 10.0.0.0/24



Your VPCs (1/2) Info

☐	Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table	M
☑	my-vpc	vpc-0b28d6d65605ed45b	Available	Off	10.0.0.0/24	–	dopt-006bd7841caa77fa3	rtb-028b9447d0161ec9d	ac

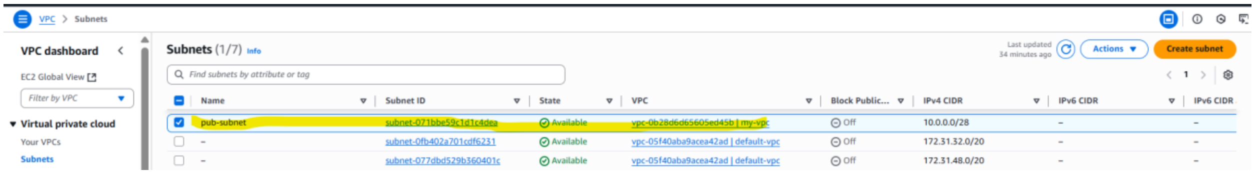
Create an Internet Gateway and attach to the above created VPC:



Internet gateways (1/2) Info

☐	Name	Internet gateway ID	State	VPC ID	Owner
☐	–	igw-0e852b2989c8ff2d0	Attached	vpc-05f40aba9acea42ad | default-vpc	471451201019
☑	igw	igw-02c5d0e0797609f37	Attached	vpc-0b28d6d65605ed45b | my-vpc	471451201019

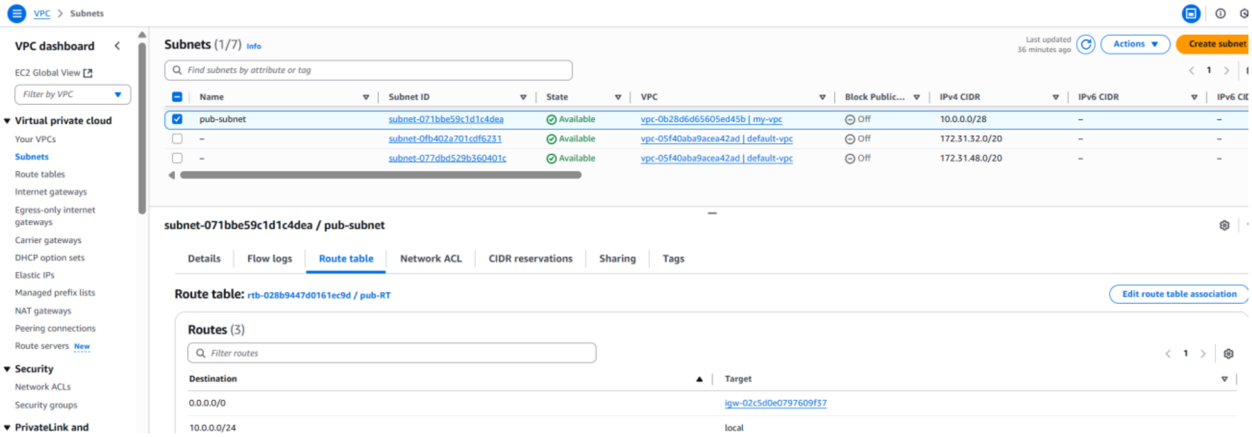
Create a subnet in the above vpc:



Subnets (1/7) Info

☐	Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR	IPv6 CIDR
☑	pub-subnet	subnet-071bbe59c1d1c4dea	Available	vpc-0b28d6d65605ed45b | my-vpc	Off	10.0.0.0/28	–	–
☐	–	subnet-0fb402a701cdf6231	Available	vpc-05f40aba9acea42ad | default-vpc	Off	172.31.32.0/20	–	–
☐	–	subnet-077dbd529b360401c	Available	vpc-05f40aba9acea42ad | default-vpc	Off	172.31.48.0/20	–	–

Add in the Routes 'IGW' in the route table and add the public subnet association:



Subnets (1/7) Info

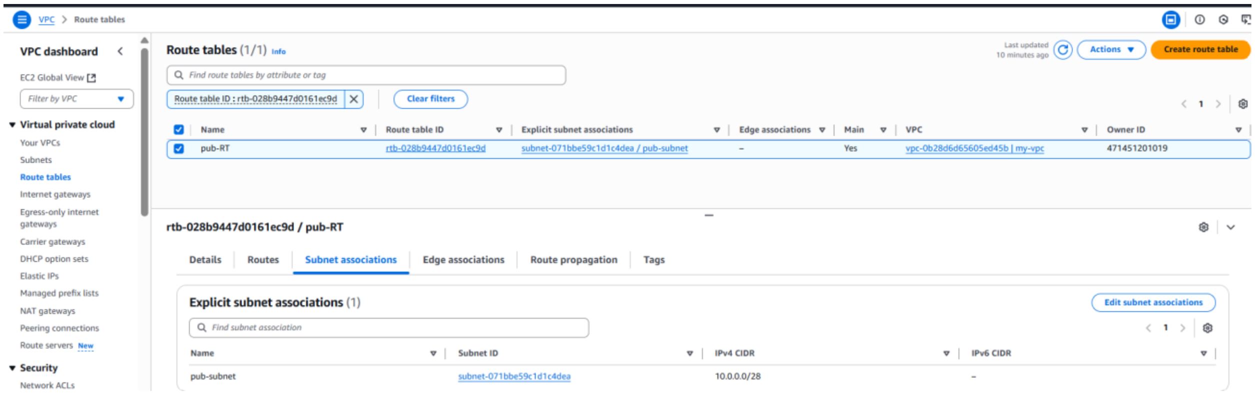
☐	Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR	IPv6 CIDR
☑	pub-subnet	subnet-071bbe59c1d1c4dea	Available	vpc-0b28d6d65605ed45b | my-vpc	Off	10.0.0.0/28	–	–
☐	–	subnet-0fb402a701cdf6231	Available	vpc-05f40aba9acea42ad | default-vpc	Off	172.31.32.0/20	–	–
☐	–	subnet-077dbd529b360401c	Available	vpc-05f40aba9acea42ad | default-vpc	Off	172.31.48.0/20	–	–

subnet-071bbe59c1d1c4dea / pub-subnet

Route table: rtb-028b9447d0161ec9d / pub-RT

Routes (3)

Destination	Target
0.0.0.0/0	igw-02c5d0e0797609f37
10.0.0.0/24	local



Route tables (1/1) Info

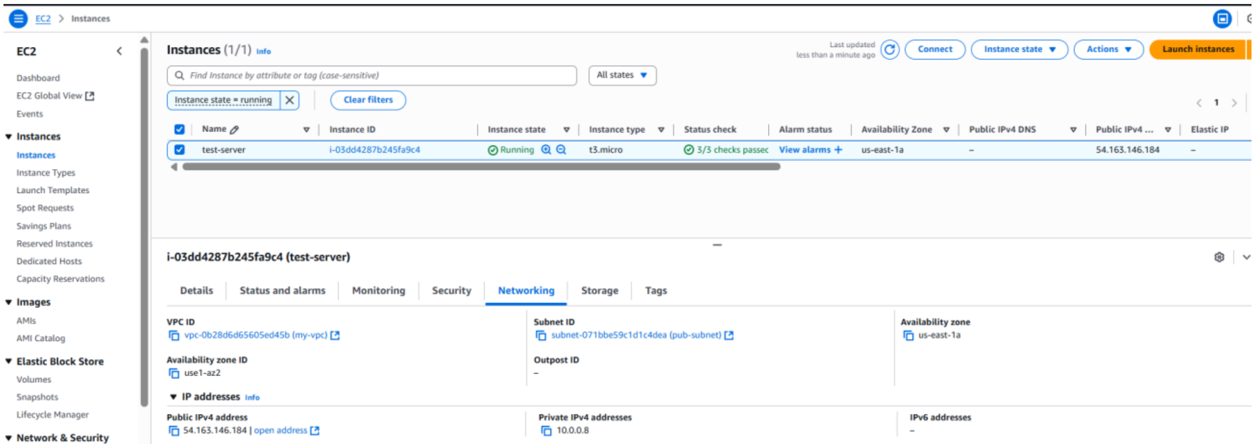
☑	Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
☑	pub-RT	rtb-028b9447d0161ec9d	subnet-071bbe59c1d1c4dea / pub-subnet	–	Yes	vpc-0b28d6d65605ed45b | my-vpc	471451201019

rtb-028b9447d0161ec9d / pub-RT

Explicit subnet associations (1)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
pub-subnet	subnet-071bbe59c1d1c4dea	10.0.0.0/28	–

Launch the ec2 instance in the above created VPC:



Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
test-server	i-03dd4287b245fa9c4	Running	t3.micro	3/3 checks passec	View alarms +	us-east-1a	–	54.163.146.184	–

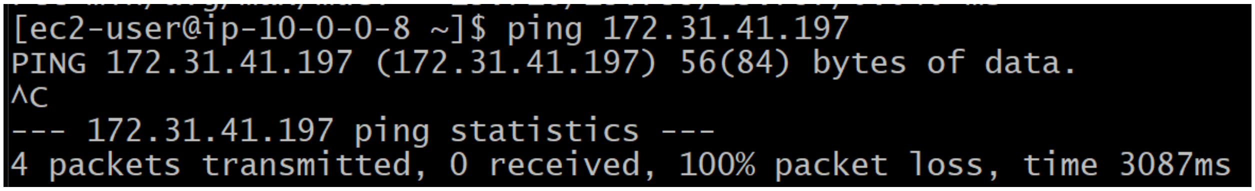
i-03dd4287b245fa9c4 (test-server)

VPC ID: vpc-0b28d6d65605ed45b (my-vpc)
Subnet ID: subnet-071bbe59c1d1c4dea (pub-subnet)
Availability zone: us-east-1a
Availability zone ID: use1-az2
Outpost ID: –

IP addresses Info

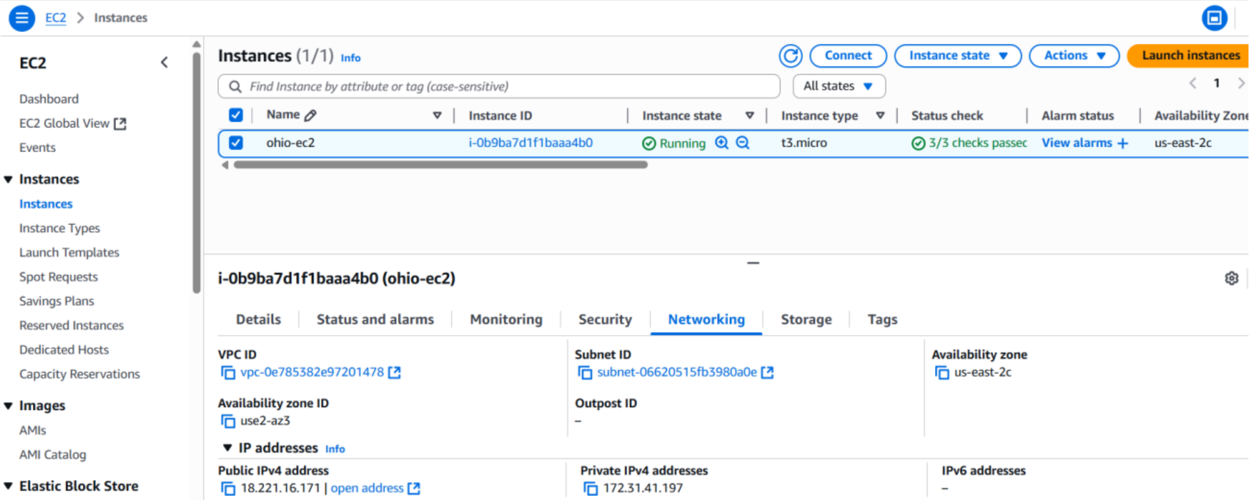
Public IPv4 address: 54.163.146.184 | open address
Private IPv4 addresses: 10.0.0.8
IPv6 addresses: –

Try to access the ohio-Region ec2 private ip by login to N.Virginia ec2 then it will not get connec:



```
[ec2-user@ip-10-0-0-8 ~]$ ping 172.31.41.197
PING 172.31.41.197 (172.31.41.197) 56(84) bytes of data.
^C
--- 172.31.41.197 ping statistics ---
4 packets transmitted, 0 received, 100% packet loss, time 3087ms
```

Launch an ec2 instance in the ohio Region with default vpc:



Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
ohio-ec2	i-0b9ba7d1f1baaa4b0	Running	t3.micro	3/3 checks passec	View alarms +	us-east-2c

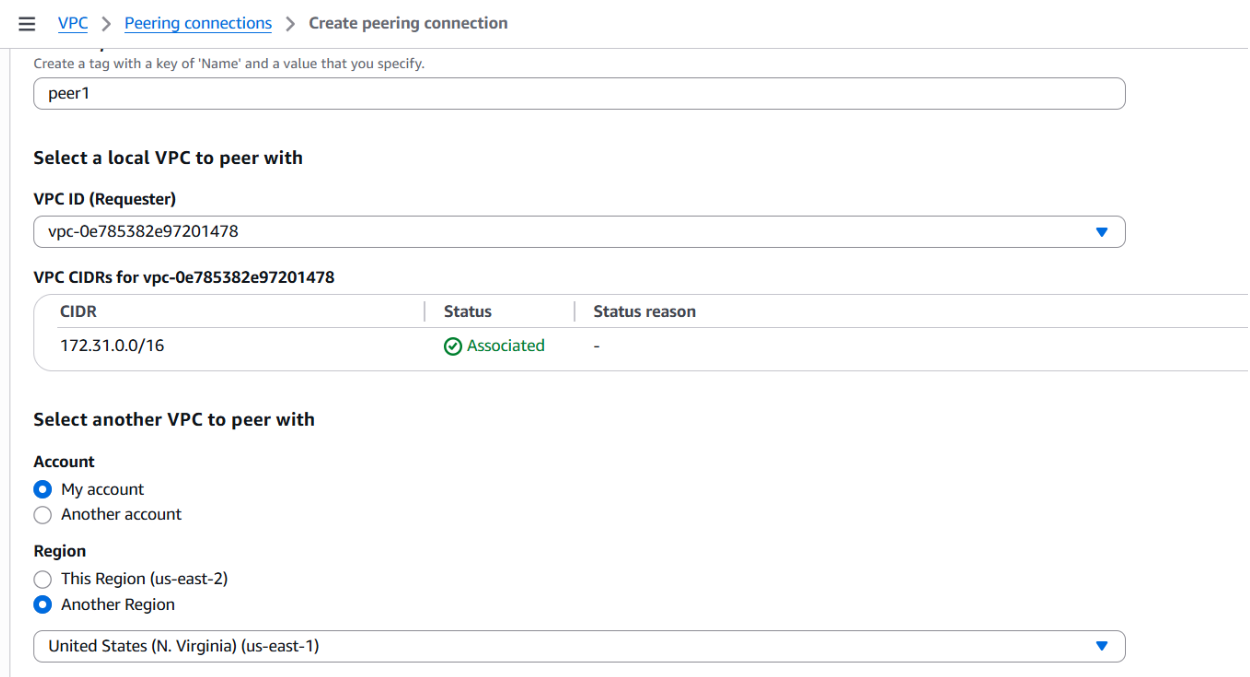
i-0b9ba7d1f1baaa4b0 (ohio-ec2)

VPC ID: vpc-0e785382e97201478
Subnet ID: subnet-06620515fb3980a0e
Availability zone: us-east-2c
Availability zone ID: use2-az3
Outpost ID: –

IP addresses Info

Public IPv4 address: 18.221.16.171 | open address
Private IPv4 addresses: 172.31.41.197
IPv6 addresses: –

Create a vpc connection in ohio Region, give Requestor as ohio vpc id,and select the same Account and Different Region and give Region name:



Create a tag with a key of 'Name' and a value that you specify.

peer1

Select a local VPC to peer with

VPC ID (Requester)

vpc-0e785382e97201478

VPC CIDRs for vpc-0e785382e97201478

CIDR	Status	Status reason
172.31.0.0/16	✓ Associated	-

Select another VPC to peer with

Account

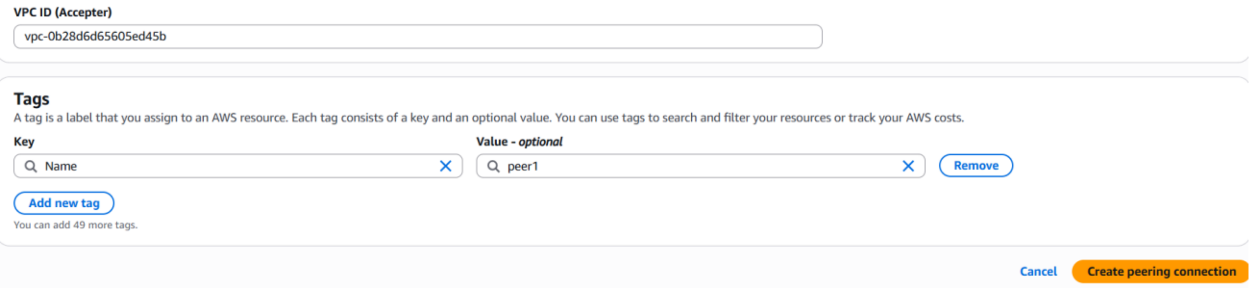
● My account
○ Another account

Region

○ This Region (us-east-2)
● Another Region

United States (N. Virginia) (us-east-1)

Give the Acceptor vpc id (in this case N.Virginia vpc id which is Acceptor) and create peering connection:


VPC ID (Accepter)

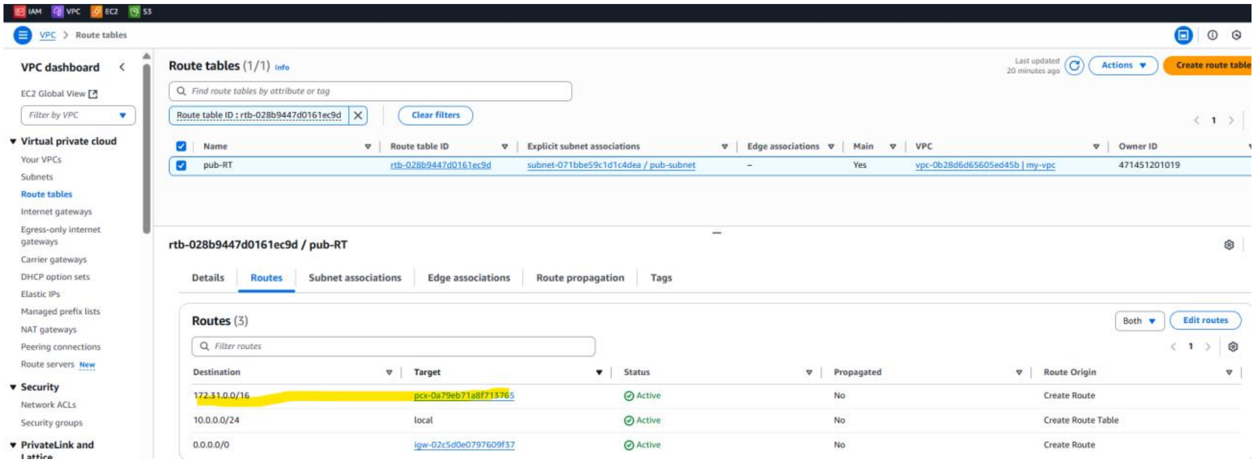
vpc-0b28d6d65605ed45b

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*
Name	peer1

Add the ohio vpc CIDR to peering connection in the route table of N.Virginia vpc subnet:



Route tables (1/1) Info

Route table ID : rtb-028b9447d0161ec9d

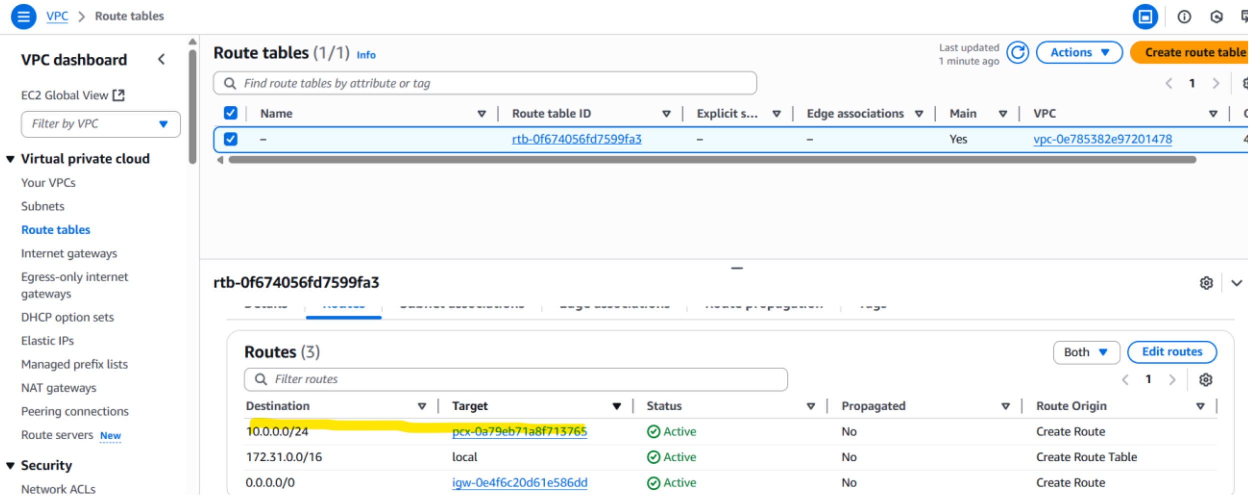
Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC	Owner ID
pub-RT	rtb-028b9447d0161ec9d	subnet-071bbe59c1d1c4dea / pub-subnet	–	Yes	vpc-0b28d6d65605ed45b | my-vpc	471451201019

rtb-028b9447d0161ec9d / pub-RT

Routes (3)

Destination	Target	Status	Propagated	Route Origin
172.31.0.0/16	pcx-0a79eb71a8f713765	✓ Active	No	Create Route
10.0.0.0/24	local	✓ Active	No	Create Route Table
0.0.0.0/0	igw-02c5d0e0797609f37	✓ Active	No	Create Route

And Add the N.Virginia vpc CIDR to peering connection in the route table of ohio vpc subnet:



Route tables (1/1) Info

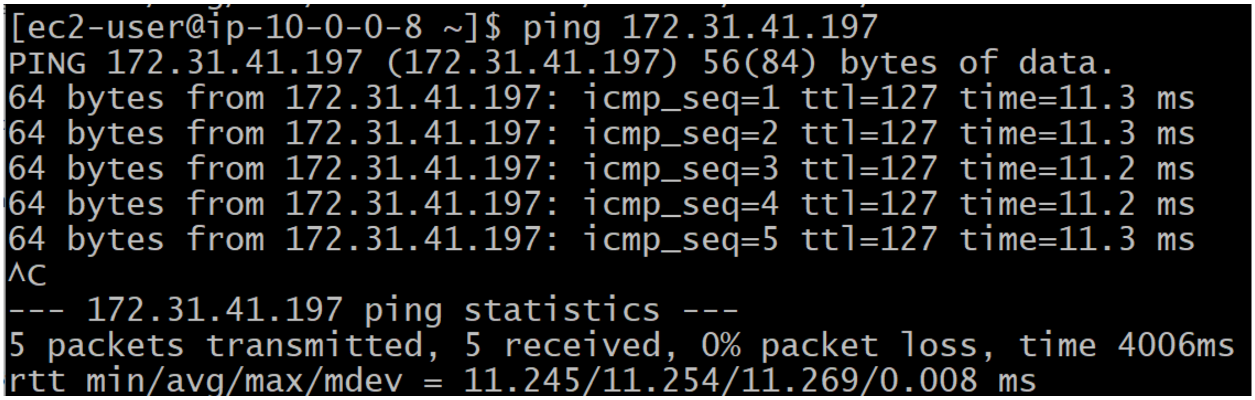
☑	Name	Route table ID	Explicit s...	Edge associations	Main	VPC
☑	–	rtb-0f674056fd7599fa3	–	–	Yes	vpc-0e785382e97201478

rtb-0f674056fd7599fa3

Routes (3)

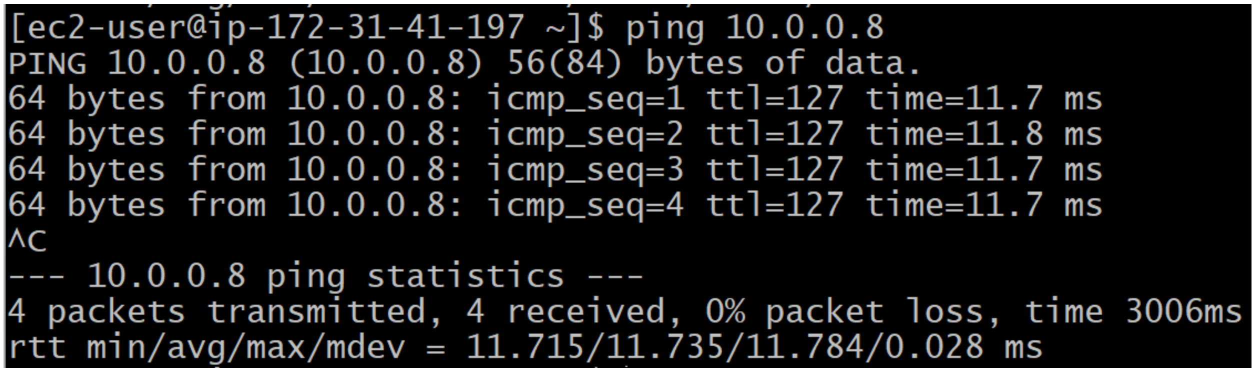
Destination	Target	Status	Propagated	Route Origin
10.0.0.0/24	pcx-0a79eb71a8f713765	✓ Active	No	Create Route
172.31.0.0/16	local	✓ Active	No	Create Route Table
0.0.0.0/0	igw-0e4f6c20d61e586dd	✓ Active	No	Create Route

Now try to access the private ip of ohio ec2 from N.virginia ec2 then we are able to connect now:



```
[ec2-user@ip-10-0-0-8 ~]$ ping 172.31.41.197
PING 172.31.41.197 (172.31.41.197) 56(84) bytes of data.
64 bytes from 172.31.41.197: icmp_seq=1 ttl=127 time=11.3 ms
64 bytes from 172.31.41.197: icmp_seq=2 ttl=127 time=11.3 ms
64 bytes from 172.31.41.197: icmp_seq=3 ttl=127 time=11.2 ms
64 bytes from 172.31.41.197: icmp_seq=4 ttl=127 time=11.2 ms
64 bytes from 172.31.41.197: icmp_seq=5 ttl=127 time=11.3 ms
^C
--- 172.31.41.197 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4006ms
rtt min/avg/max/mdev = 11.245/11.254/11.269/0.008 ms
```

And try to access the private ip of N.Virginia ec2 from ohio ec2 then we are able to connect now:



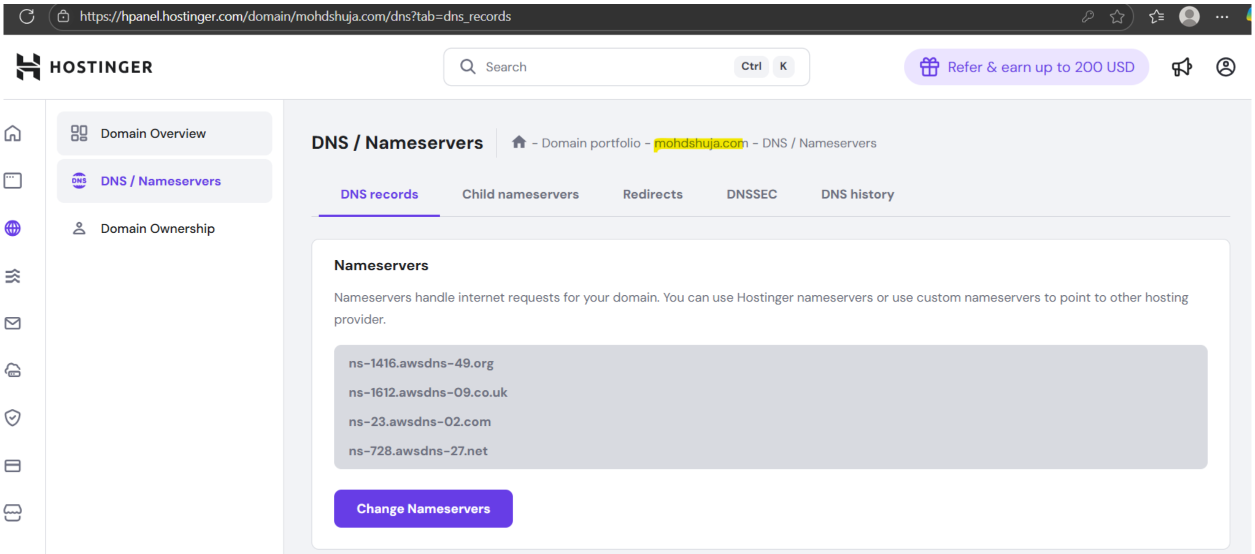
```
[ec2-user@ip-172-31-41-197 ~]$ ping 10.0.0.8
PING 10.0.0.8 (10.0.0.8) 56(84) bytes of data.
64 bytes from 10.0.0.8: icmp_seq=1 ttl=127 time=11.7 ms
64 bytes from 10.0.0.8: icmp_seq=2 ttl=127 time=11.8 ms
64 bytes from 10.0.0.8: icmp_seq=3 ttl=127 time=11.7 ms
64 bytes from 10.0.0.8: icmp_seq=4 ttl=127 time=11.7 ms
^C
--- 10.0.0.8 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3006ms
rtt min/avg/max/mdev = 11.715/11.735/11.784/0.028 ms
```

----------done------

2. Purchase one domain from GoDaddy.

Login to Hostinger or any Domain Vendor by creating account and select your required domain name and make payment then you will get a domain then you have to create a

Hosted zone in Route53 Service of AWS and copy the 4 records and paste here by replacing it into the Nameservers of Hostinger:



https://hpanel.hostinger.com/domain/mohdshuja.com/dns?tab=dns_records

DNS / Nameservers

Domain portfolio - mohdshuja.com - DNS / Nameservers

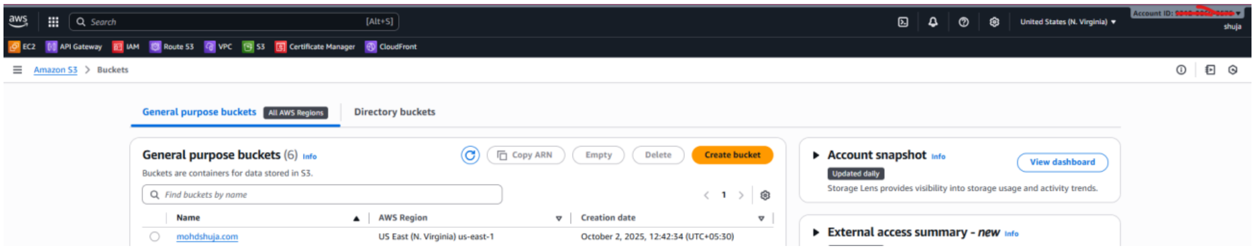
Nameservers

Nameservers handle internet requests for your domain. You can use Hostinger nameservers or use custom nameservers to point to other hosting provider.

ns-1416.awsdns-49.org
ns-1612.awsdns-09.co.uk
ns-23.awsdns-02.com
ns-728.awsdns-27.net

3. Deploy static website in S3.

Create a bucket in S3 with the same name as of your Domain name:



Account ID: [redacted]

Amazon S3 > Buckets

General purpose buckets (6) Info

Buckets are containers for data stored in S3.

Find buckets by name

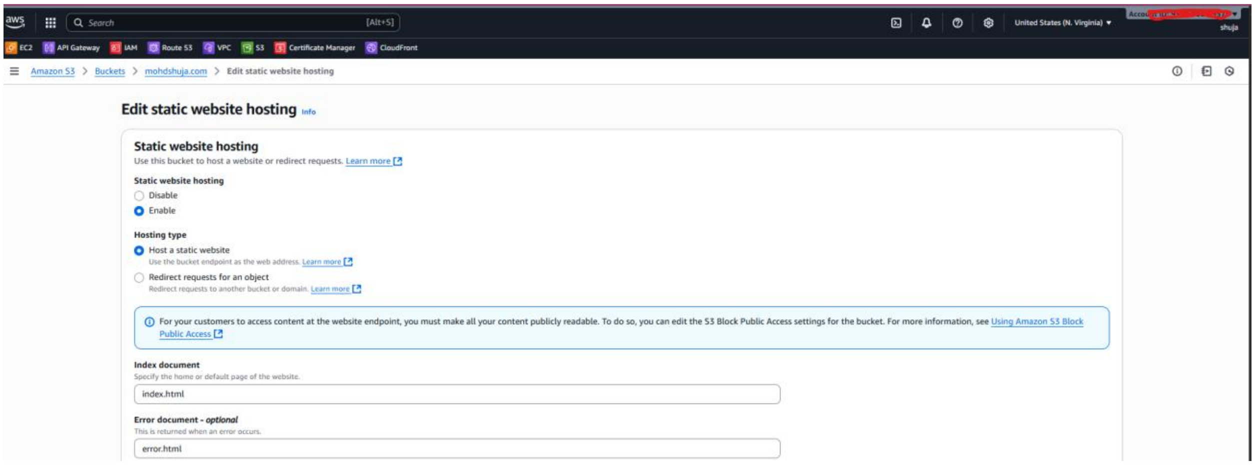
Name	AWS Region	Creation date
○ mohdshuja.com	US East (N. Virginia) us-east-1	October 2, 2025, 12:42:34 (UTC+05:30)

▸ **Account snapshot** Info

Storage Lens provides visibility into storage usage and activity trends.

▸ **External access summary - *new*** Info

Goto Properties ->static website hosting and enable and give the file names:



Account ID: [redacted]

Amazon S3 > Buckets > mohdshuja.com > Edit static website hosting

Edit static website hosting Info

Static website hosting

Use this bucket to host a website or redirect requests. Learn more

Static website hosting
○ Disable
● Enable

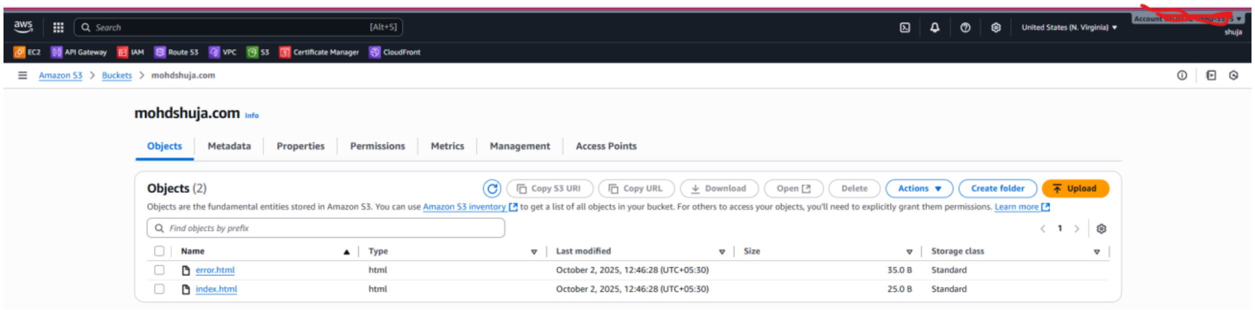
Hosting type
● Host a static website
Use the bucket endpoint as the web address. Learn more
○ Redirect requests for an object
Redirect requests to another bucket or domain. Learn more

For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see Using Amazon S3 Block Public Access

Index document
Specify the home or default page of the website.
index.html

Error document - *optional*
This is returned when an error occurs.
error.html

Goto objects tab and upload the files:



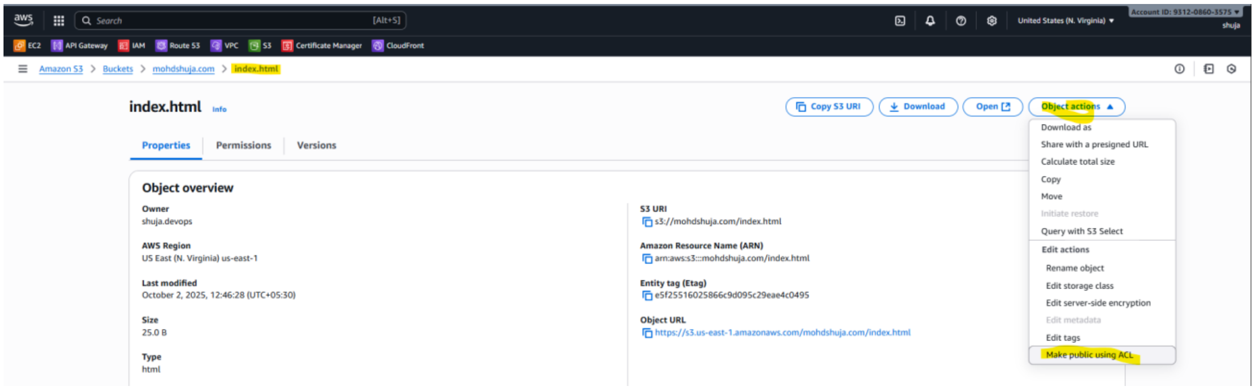
mohdshuja.com

Objects (2)

Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more

□	Name	Type	Last modified	Size	Storage class
□	error.html	html	October 2, 2025, 12:46:28 (UTC+05:30)	35.0 B	Standard
□	index.html	html	October 2, 2025, 12:46:28 (UTC+05:30)	25.0 B	Standard

Goto each object i.e., the uploaded files and make them public:



index.html

Object overview

Owner
shuja.devops

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

Last modified
October 2, 2025, 12:46:28 (UTC+05:30)

Size
25.0 B

Type
html

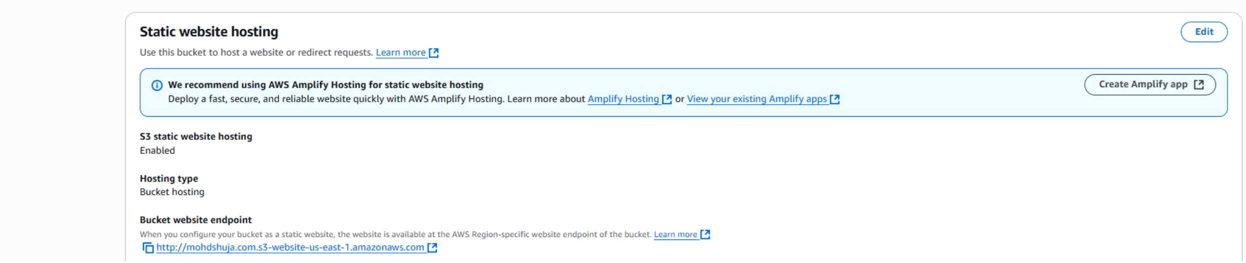
S3 URI
s3://mohdshuja.com/index.html

Amazon Resource Name (ARN)
arn:aws:s3:::mohdshuja.com/index.html

Entity tag (Etag)
e5f25516025866c9d095c29eae4c0495

Object URL
https://s3.us-east-1.amazonaws.com/mohdshuja.com/index.html

Then you will get a static website url in the properties tab:



Static website hosting

Use this bucket to host a website or redirect requests. Learn more

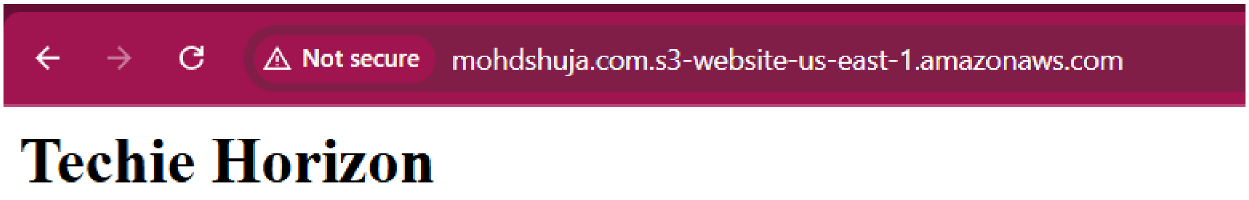
We recommend using AWS Amplify Hosting for static website hosting
Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. Learn more about Amplify Hosting or View your existing Amplify apps

S3 static website hosting
Enabled

Hosting type
Bucket hosting

Bucket website endpoint
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. Learn more
http://mohdshuja.com.s3-website-us-east-1.amazonaws.com

We can access that from browser:

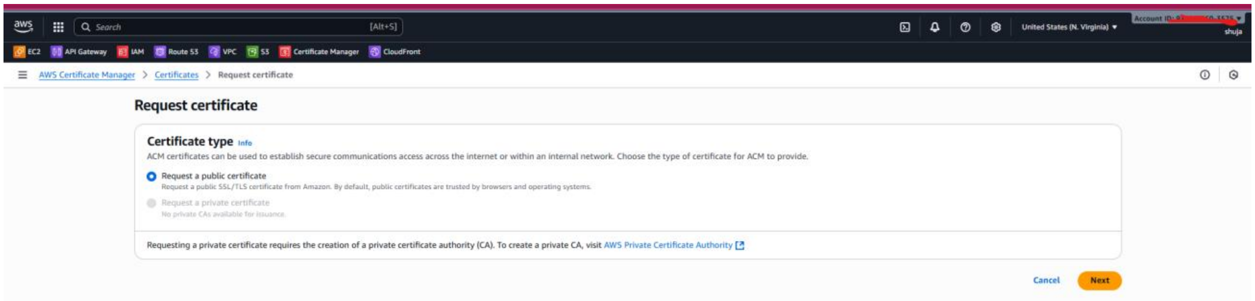


Techie Horizon

---------------done------------

4. Create a CDN and attach one SSL certificate.

Goto ACM(Amazon Certificate Manager)service of AWS and click on ‘Request Certificate’:



Request certificate

Certificate type Info

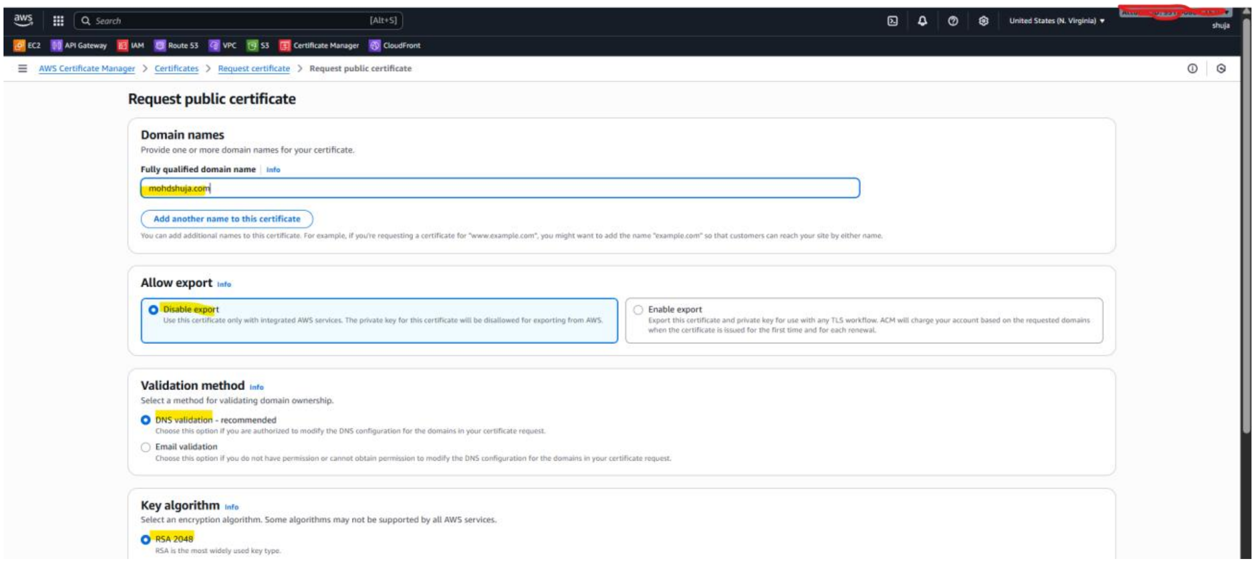
ACM certificates can be used to establish secure communications access across the internet or within an internal network. Choose the type of certificate for ACM to provide.

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

○ Request a private certificate
No private CAs available for issuance.

Requesting a private certificate requires the creation of a private certificate authority (CA). To create a private CA, visit AWS Private Certificate Authority

And here give your domain name, and disable export, Validation method select as ‘DNS Validation’ and key algorithm as ‘RSA’:


Search
[Alt+S]
United States (N. Virginia) ▾
[redacted]
shuja
EC2
API Gateway
IAM
Route 53
VPC
S3
Certificate Manager
CloudFront
AWS Certificate Manager > Certificates > Request certificate > Request public certificate
Add another name to this certificate

Request public certificate

Domain names

Provide one or more domain names for your certificate.

Fully qualified domain name | Info

mohdshuja.com

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.

Allow export Info

● Disable export
Use this certificate only with integrated AWS services. The private key for this certificate will be disallowed for exporting from AWS.

○ Enable export
Export this certificate and private key for use with any TLS workflow. ACM will charge your account based on the requested domains when the certificate is issued for the first time and for each renewal.

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.

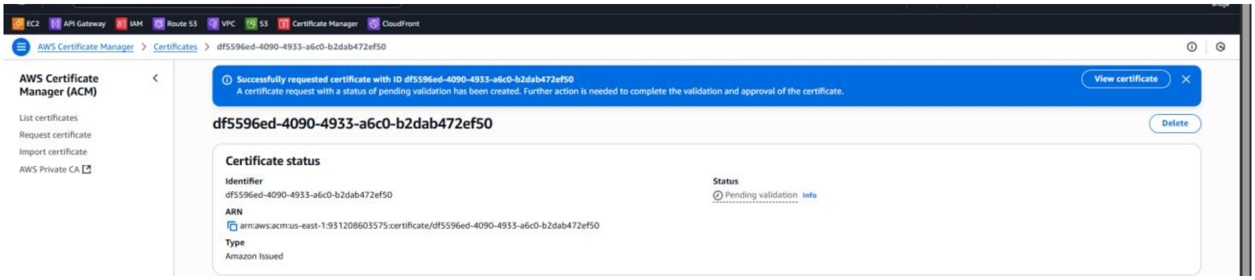
○ Email validation
Choose this option if you do not have permission or cannot obtain permission to modify the DNS configuration for the domains in your certificate request.

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.

Then you have to create the Records in Route53 with the ‘CNAME’ name and ‘CNAME’ value:



Successfully requested certificate with ID df5596ed-4090-4933-a6c0-b2dab472ef50
A certificate request with a status of pending validation has been created. Further action is needed to complete the validation and approval of the certificate.

df5596ed-4090-4933-a6c0-b2dab472ef50

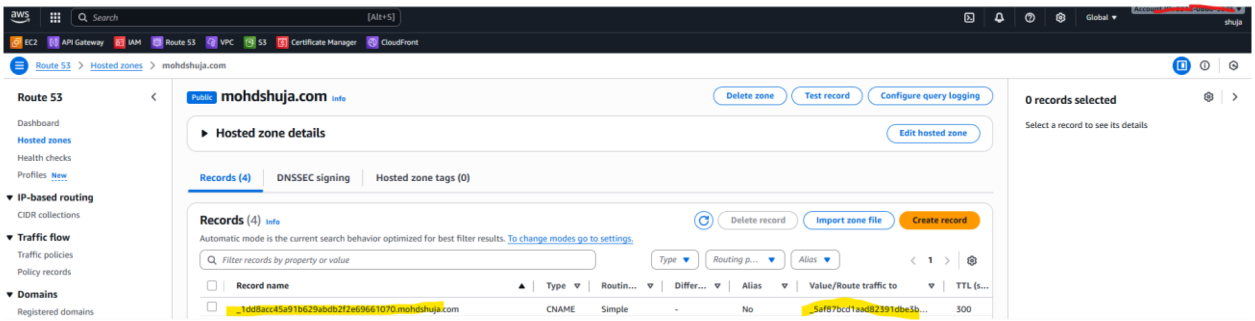
Certificate status

Identifier
df5596ed-4090-4933-a6c0-b2dab472ef50

Status
Pending validation Info

ARN
arn:aws:acm:us-east-1:931208603575:certificate/df5596ed-4090-4933-a6c0-b2dab472ef50

Type
Amazon Issued



Public **mohdshuja.com** Info

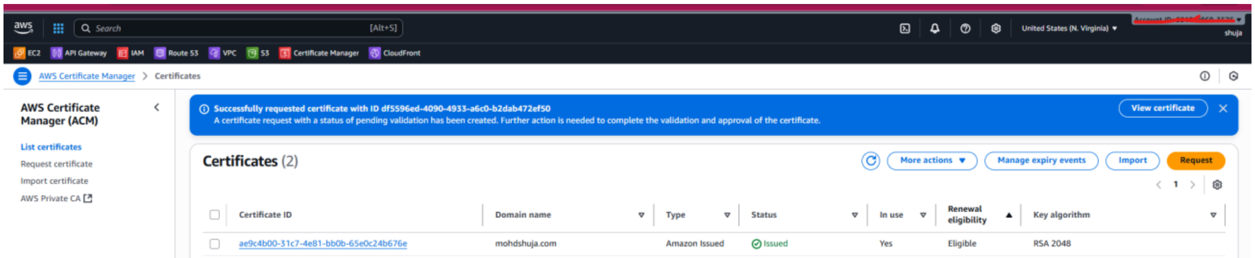
▸ Hosted zone details

Records (4) Info

Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.

☐	Record name	Type	Routin...	Differ...	Alias	Value/Route traffic to	TTL (s...
☐	_1dd8acc45a91b629abdb2f2e69661070.mohdshuja.com	CNAME	Simple	-	No	_5af87bcd1aad82391dbe3b...	300

Then you will get the status as issued and Renewal Eligibility as ‘Eligible’:

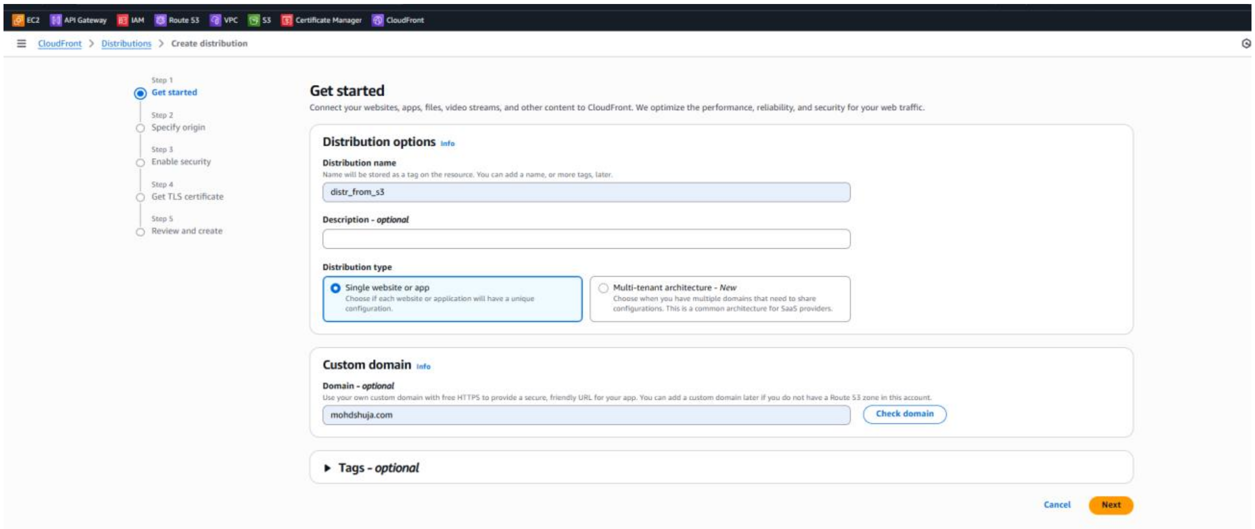


Successfully requested certificate with ID df5596ed-4090-4933-a6c0-b2dab472ef50
A certificate request with a status of pending validation has been created. Further action is needed to complete the validation and approval of the certificate.

Certificates (2)

☐	Certificate ID	Domain name	Type	Status	In use	Renewal eligibility	Key algorithm
☐	ae9c4b00-31c7-4e81-bb0b-65e0c24b676e	mohdshuja.com	Amazon Issued	✓ Issued	Yes	Eligible	RSA 2048

Next, Create the cloudFront Distribution and give any name and give your domain name:



Get started

Connect your websites, apps, files, video streams, and other content to CloudFront. We optimize the performance, reliability, and security for your web traffic.

Distribution options Info

Distribution name
Name will be stored as a tag on the resource. You can add a name, or more tags, later.
distr_from_s3

Description - *optional*

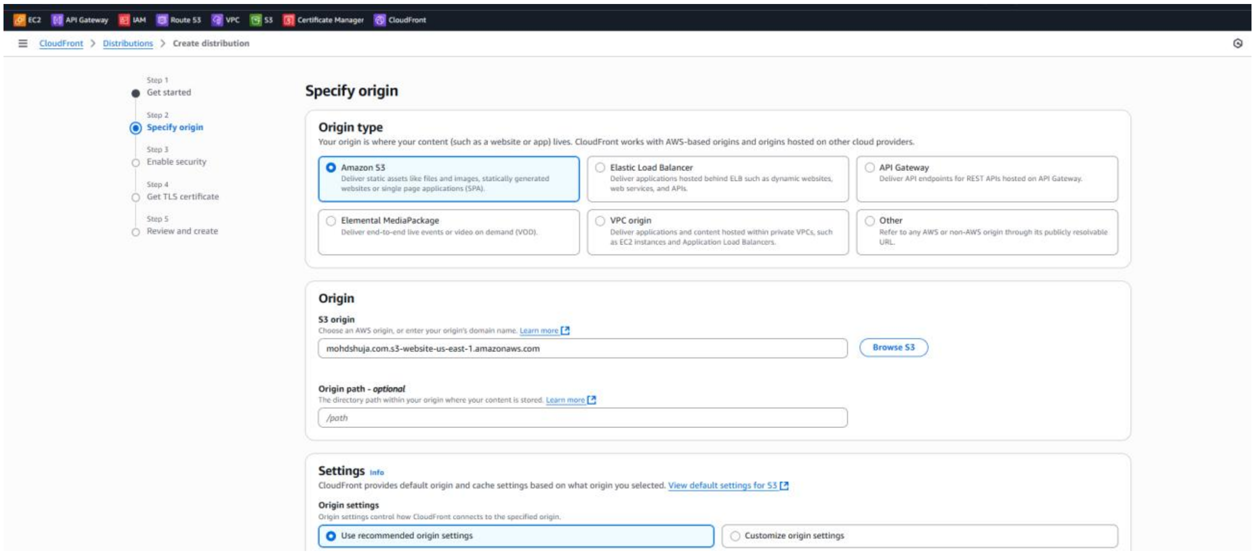
Distribution type
● Single website or app
Choose if each website or application will have a unique configuration.
○ Multi-tenant architecture - *New*
Choose when you have multiple domains that need to share configurations. This is a common architecture for SaaS providers.

Custom domain Info

Domain - *optional*
Use your own custom domain with free HTTPS to provide a secure, friendly URL for your app. You can add a custom domain later if you do not have a Route 53 zone in this account.
mohdshuja.com

▸ **Tags - *optional***

Select origin type as ‘amazon s3’ and give origin as your s3 bucket static website url and keep as it is the settings recommended:



Specify origin

Origin type

Your origin is where your content (such as a website or app) lives. CloudFront works with AWS-based origins and origins hosted on other cloud providers.

- ● Amazon S3 — Deliver static assets like files and images, statically generated websites or single page applications (SPA).
- ○ Elastic Load Balancer — Deliver applications hosted behind ELB such as dynamic websites, web services, and APIs.
- ○ API Gateway — Deliver API endpoints for REST APIs hosted on API Gateway.
- ○ Elemental MediaPackage — Deliver end-to-end live events or video on demand (VOD).
- ○ VPC origin — Deliver applications and content hosted within private VPCs, such as EC2 instances and Application Load Balancers.
- ○ Other — Refer to any AWS or non-AWS origin through its publicly resolvable URL.

Origin

S3 origin

Choose an AWS origin, or enter your origin's domain name. Learn more

mohdshuja.com.s3-website-us-east-1.amazonaws.com

Origin path - *optional*

The directory path within your origin where your content is stored. Learn more

/path

Settings

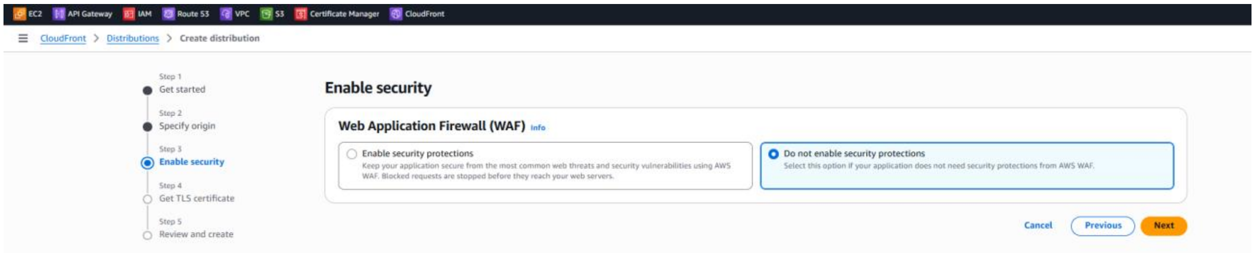
CloudFront provides default origin and cache settings based on what origin you selected. View default settings for S3

Origin settings

Origin settings control how CloudFront connects to the specified origin.

● Use recommended origin settings ○ Customize origin settings

And do not select the WAF:

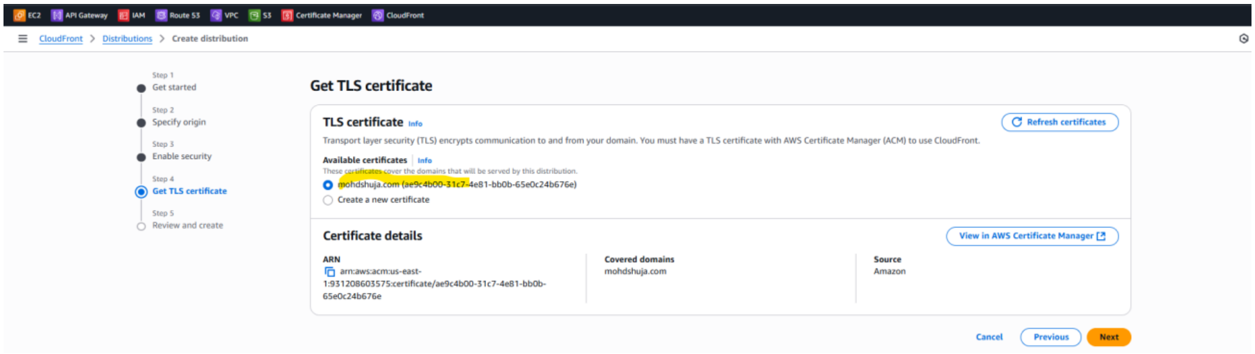


Enable security

Web Application Firewall (WAF)

- ○ Enable security protections — Keep your application secure from the most common web threats and security vulnerabilities using AWS WAF. Blocked requests are stopped before they reach your web servers.
- ● Do not enable security protections — Select this option if your application does not need security protections from AWS WAF.

Select your Certificate i.e., SSL:



Get TLS certificate

TLS certificate

Transport layer security (TLS) encrypts communication to and from your domain. You must have a TLS certificate with AWS Certificate Manager (ACM) to use CloudFront.

Available certificates

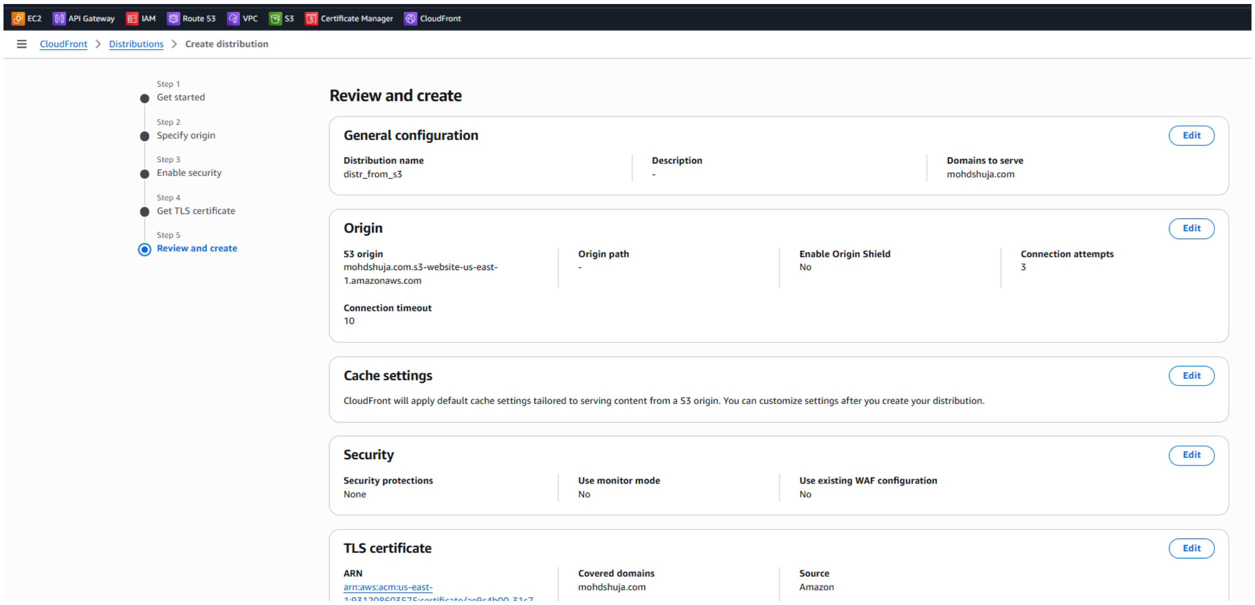
These certificates cover the domains that will be served by this distribution.

- ● mohdshuja.com (ae9c4b00-31c7-4e81-bb0b-65e0c24b676e)
- ○ Create a new certificate

Certificate details

ARN	Covered domains	Source
arn:aws:acm:us-east-1:931208603575:certificate/ae9c4b00-31c7-4e81-bb0b-65e0c24b676e	mohdshuja.com	Amazon

And create:



Review and create

General configuration

Distribution name	Description	Domains to serve
distr_from_s3	-	mohdshuja.com

Origin

S3 origin	Origin path	Enable Origin Shield	Connection attempts
mohdshuja.com.s3-website-us-east-1.amazonaws.com	-	No	3

Connection timeout
10

Cache settings

CloudFront will apply default cache settings tailored to serving content from a S3 origin. You can customize settings after you create your distribution.

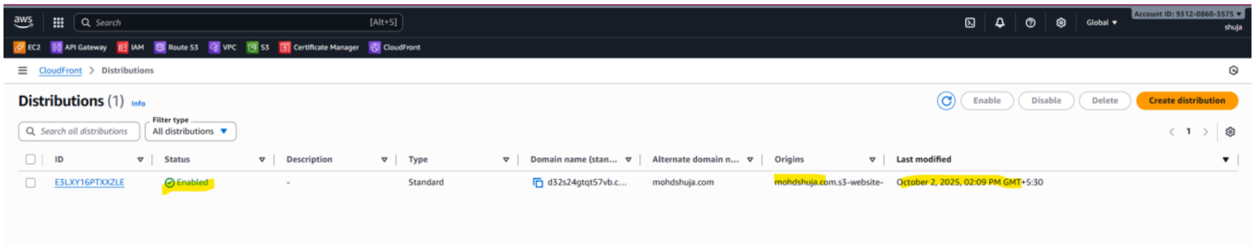
Security

Security protections	Use monitor mode	Use existing WAF configuration
None	No	No

TLS certificate

ARN	Covered domains	Source
arn:aws:acm:us-east-1:931208603575:certificate/ae9c4b00-31c7	mohdshuja.com	Amazon

Then wait for some time then you will get status as ‘Enabled’:



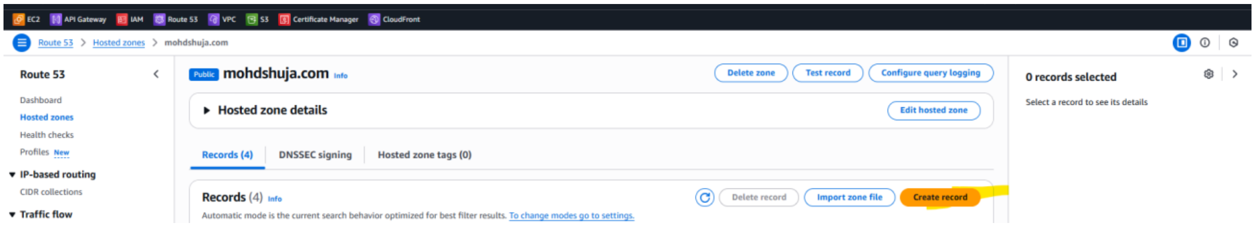
Distributions (1)

ID	Status	Description	Type	Domain name (stan...	Alternate domain n...	Origins	Last modified
E3LXY16PTXXZLE	Enabled	-	Standard	d32s24gtqt57vb.c...	mohdshuja.com	mohdshuja.com.s3-website-	October 2, 2025, 02:09 PM GMT+5:30

------------done----------

5. Create a Route 53 hosted zone and map the domain with the CDN.

Goto Route53 service of AWS and select the Hosted zones and click on Create Records:



mohdshuja.com

Hosted zone details

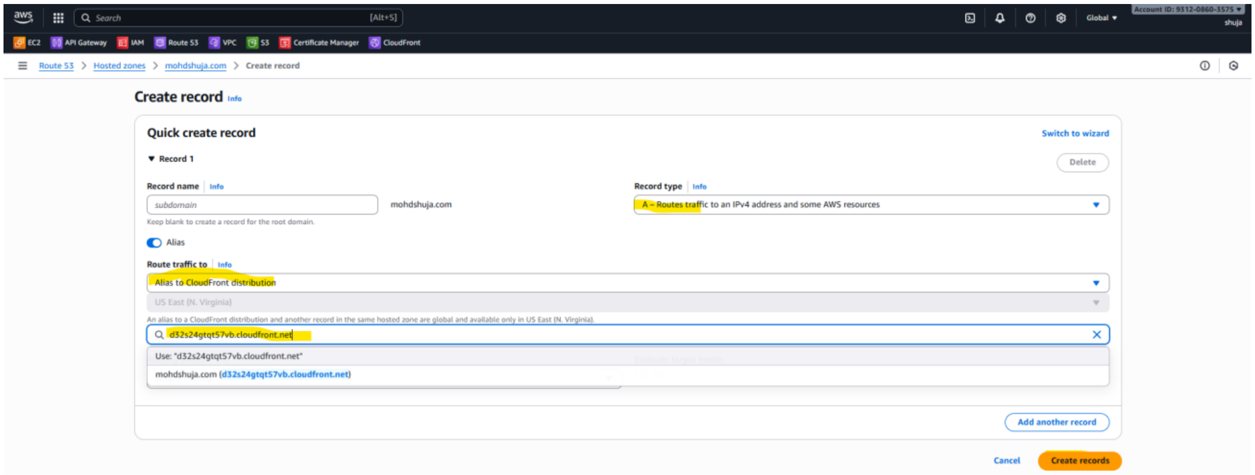
Records (4)

Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.

0 records selected

Select a record to see its details

Enable Alias, and in Route Traffic to select ‘Alias to CloudFront Distribution’ then your CDN will appear in the below so select that and click on Create records:



Create record

Quick create record

▼ Record 1

Record name: subdomain mohdshuja.com

Keep blank to create a record for the root domain.

Alias: on

Record type: A – Routes traffic to an IPv4 address and some AWS resources

Route traffic to: Alias to CloudFront distribution

US East (N. Virginia)

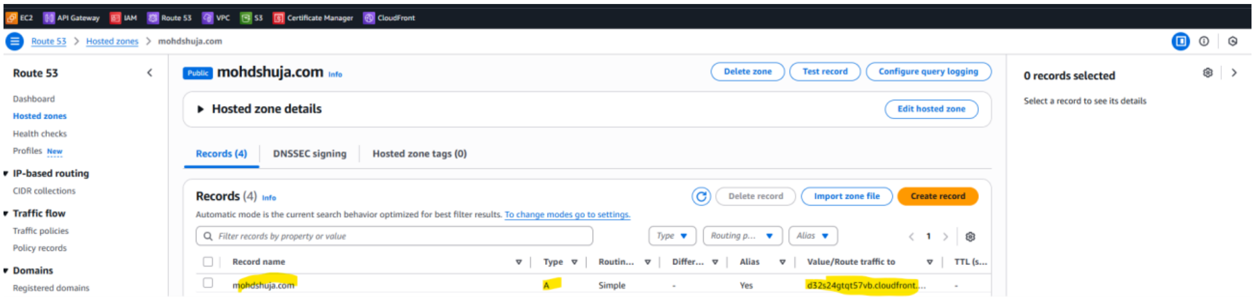
An alias to a CloudFront distribution and another record in the same hosted zone are global and available only in US East (N. Virginia).

d32s24gtqt57vb.cloudfront.net

Use: "d32s24gtqt57vb.cloudfront.net"

mohdshuja.com (d32s24gtqt57vb.cloudfront.net)

That means you have mapped the Domain with CDN;



mohdshuja.com

Records (4)

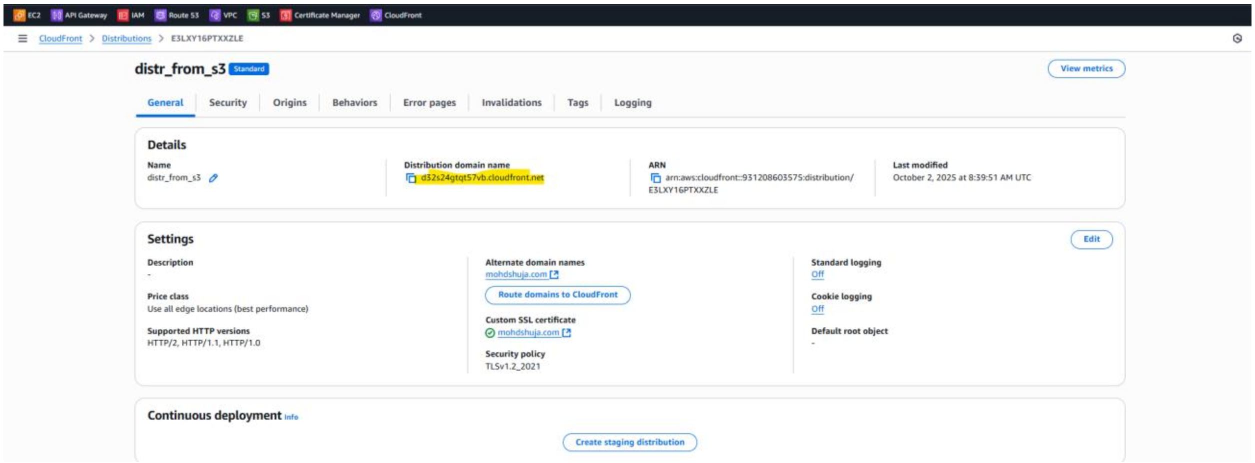
Automatic mode is the current search behavior optimized for best filter results. To change modes go to settings.

Record name	Type	Routin...	Differ...	Alias	Value/Route traffic to	TTL (s...
mohdshuja.com	A	Simple	-	Yes	d32s24gtqt57vb.cloudfront....	-

-----------------done------------

6. Update the index.html in the S3 bucket and ensure the updated file is accessible using the domain name.

Goto CloudFront and copy the Distribution Domain Name:



distr_from_s3

Details

Name: distr_from_s3

Distribution domain name: d32s24gtqt57vb.cloudfront.net

ARN: arn:aws:cloudfront::931208603575:distribution/E3LXY16PTXXZLE

Last modified: October 2, 2025 at 8:39:51 AM UTC

Settings

Description: -

Price class: Use all edge locations (best performance)

Supported HTTP versions: HTTP/2, HTTP/1.1, HTTP/1.0

Alternate domain names: mohdshuja.com

Custom SSL certificate: mohdshuja.com

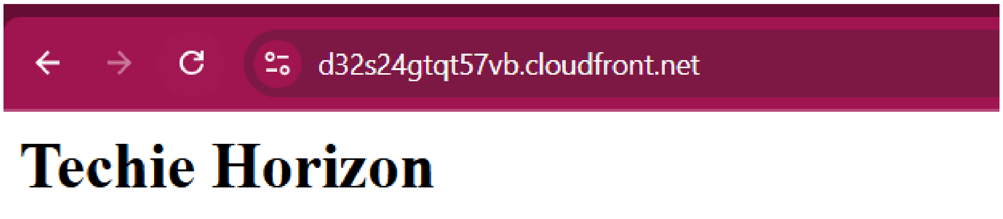
Security policy: TLSv1.2_2021

Standard logging: Off

Cookie logging: Off

Default root object: -

And access from the browser:



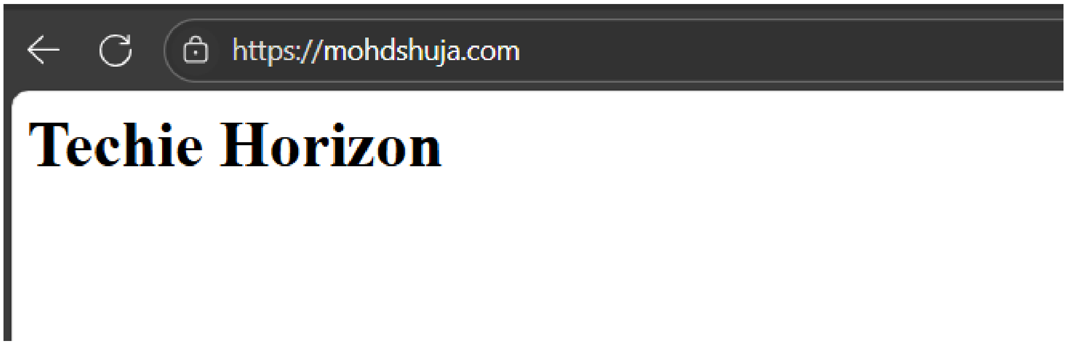
d32s24gtqt57vb.cloudfront.net

Techie Horizon

-----------done------------

7. Share the domain name in Slack to test the connectivity.

https://mohdshuja.com



https://mohdshuja.com

Techie Horizon

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