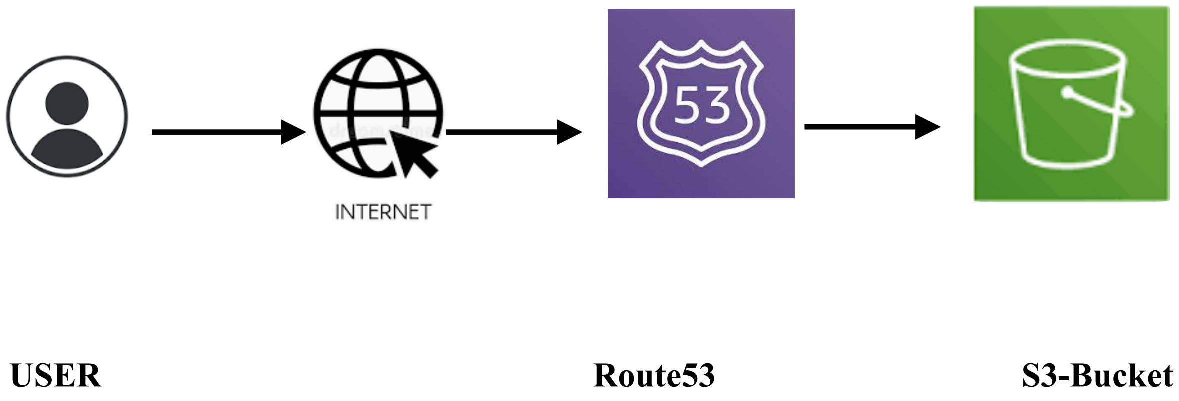
HOSTED A STATIC WEBSITE USING AMAZON S3

Aws services we are going to use in this project:

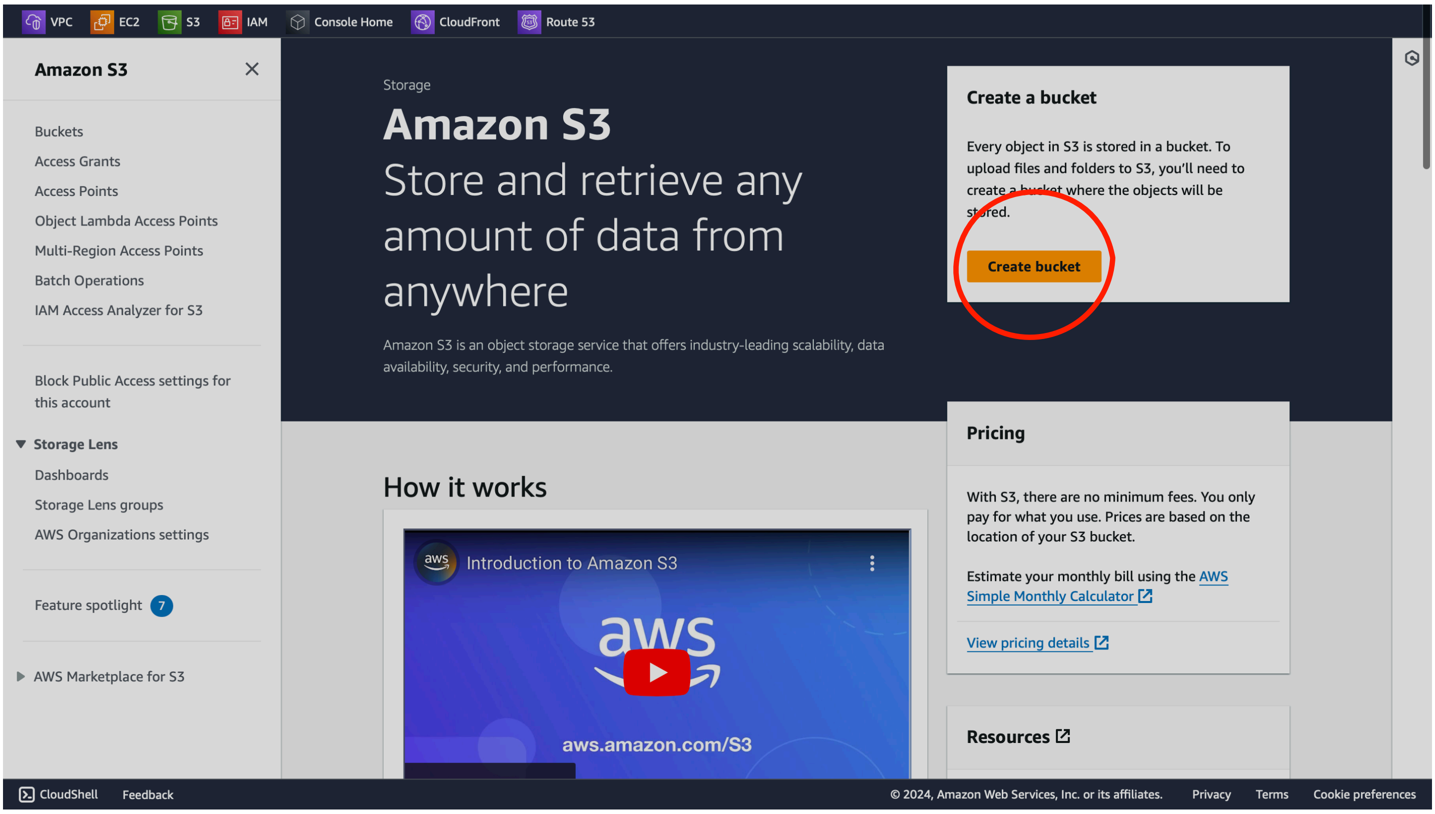
1. Route 53
2. S3 Bucket

Project Architecture



Steps to host a static website with custom domain:

1. Initially you need to purchase a domain in your name.
2. Create a hosted zone in route53.
3. Go to S3. And create a bucket



Storage

Amazon S3

Store and retrieve any amount of data from anywhere

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

Create a bucket

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

Pricing

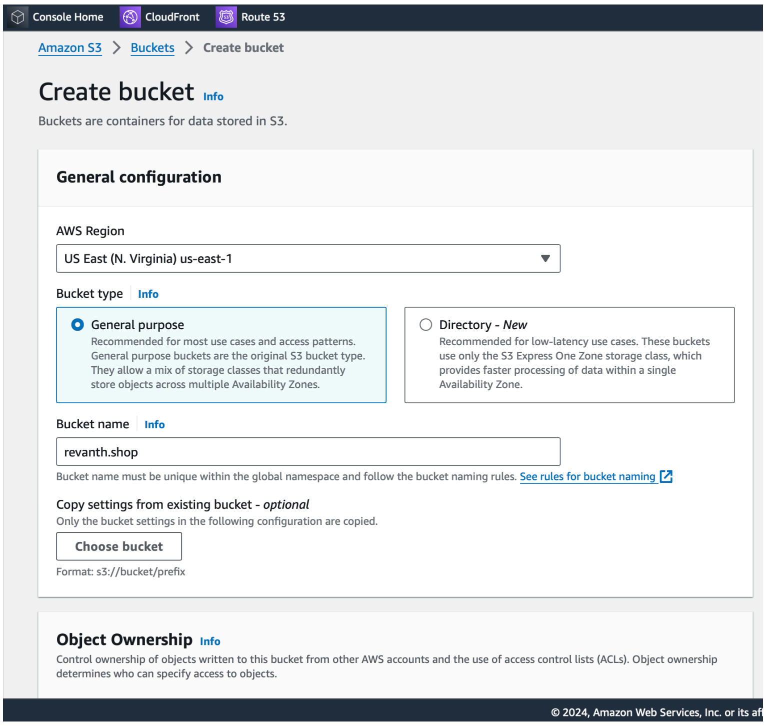
With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the AWS Simple Monthly Calculator

How it works

© 2024, Amazon Web Services, Inc. or its affiliates.

4. Fill the bucket details and create bucket. Give bucket name as your domain name.



Create bucket Info

Buckets are containers for data stored in S3.

General configuration

AWS Region

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

Bucket type Info

● General purpose
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.

○ Directory - *New*
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name Info

revanth.shop

Bucket name must be unique within the global namespace and follow the bucket naming rules. See rules for bucket naming

Copy settings from existing bucket - *optional*
Only the bucket settings in the following configuration are copied.

Choose bucket

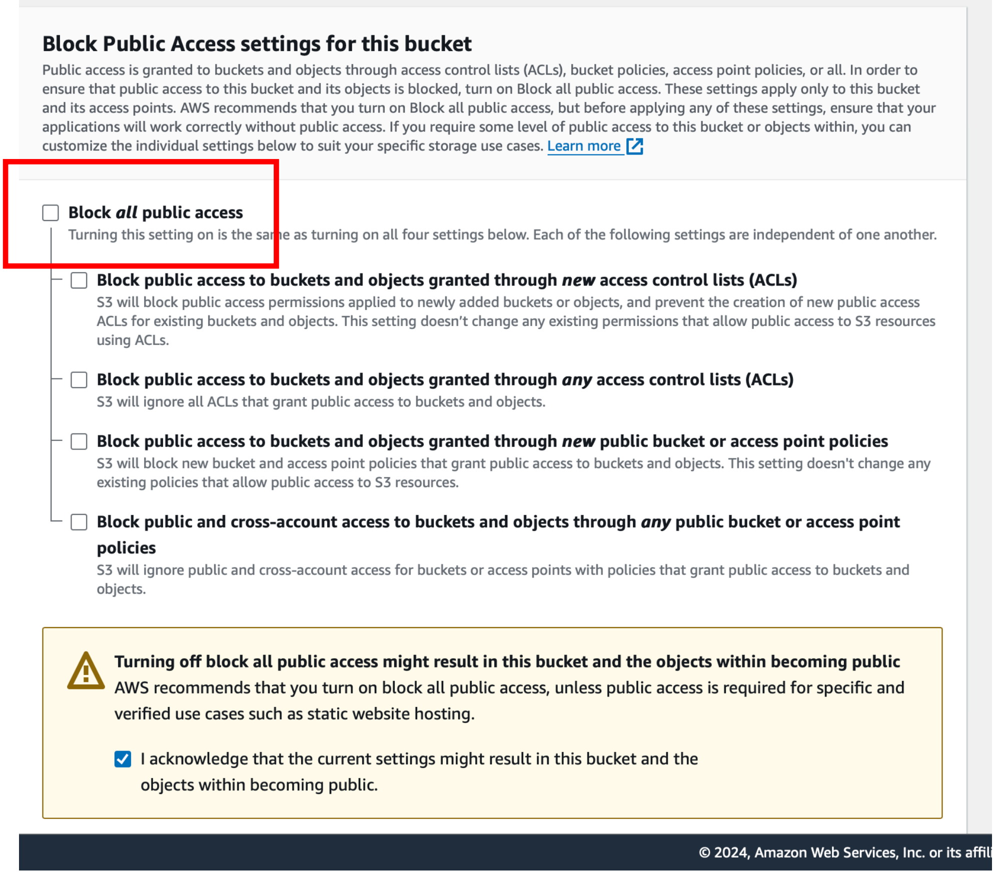
Format: s3://bucket/prefix

Object Ownership Info

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.

© 2024, Amazon Web Services, Inc. or its af

5. Uncheck the “block pubic access setting”.



Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. Learn more

□ **Block *all* public access**
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

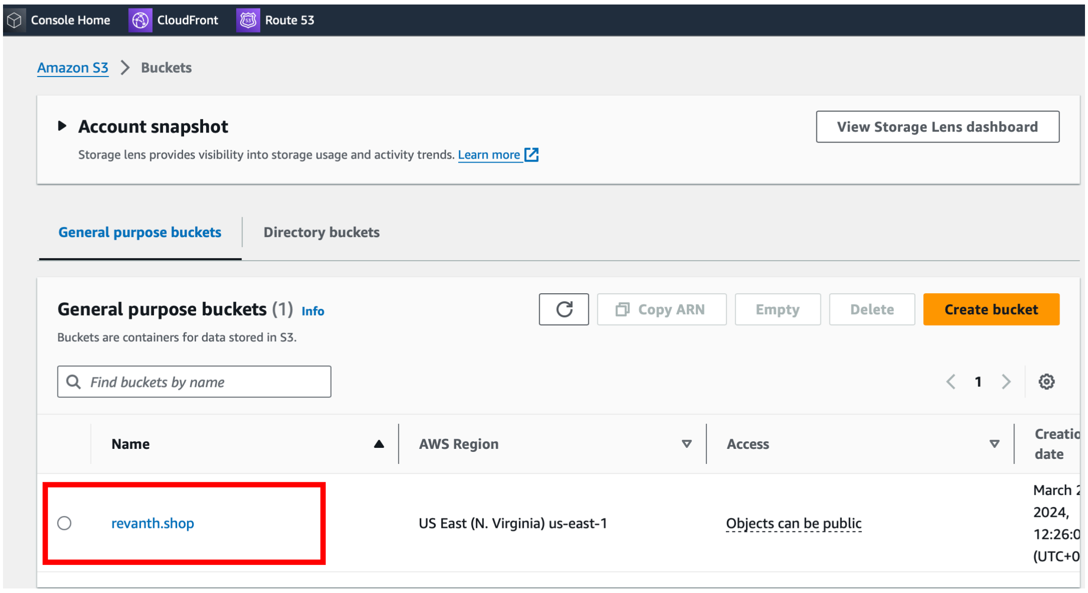
- □ **Block public access to buckets and objects granted through *new* access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- □ **Block public access to buckets and objects granted through *any* access control lists (ACLs)**
S3 will ignore all ACLs that grant public access to buckets and objects.
- □ **Block public access to buckets and objects granted through *new* public bucket or access point policies**
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- □ **Block public and cross-account access to buckets and objects through *any* public bucket or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

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.

☑ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

© 2024, Amazon Web Services, Inc. or its affil

6. After you create bucket it looks like this.



Amazon S3 > Buckets

Account snapshot

Storage lens provides visibility into storage usage and activity trends. Learn more

General purpose buckets | Directory buckets

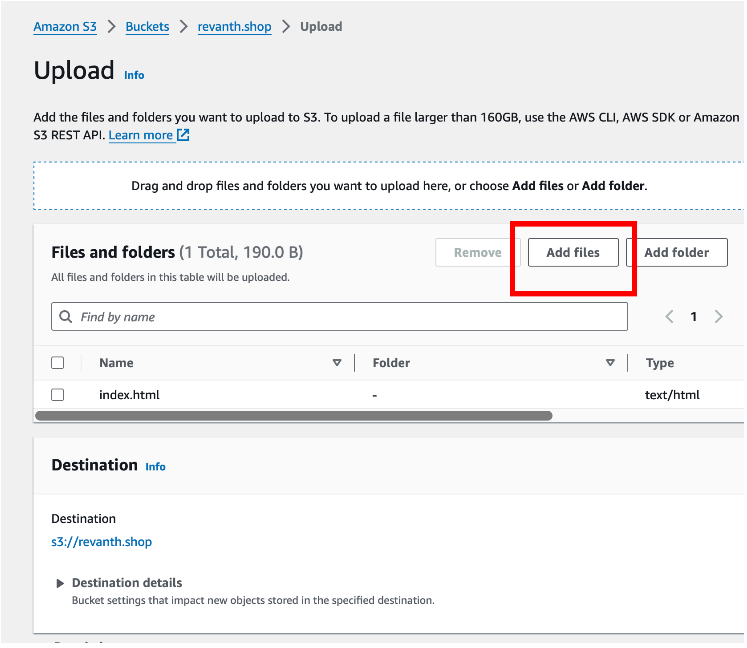
General purpose buckets (1) Info

Buckets are containers for data stored in S3.

Find buckets by name

	Name	AWS Region	Access	Creatio date
○	revanth.shop	US East (N. Virginia) us-east-1	Objects can be public	March 2 2024, 12:26:0 (UTC+0

7. Open bucket and upload a file which contains website interface.(index.html)



Amazon S3 > Buckets > revanth.shop > Upload

Upload Info

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. Learn more

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

Files and folders (1 Total, 190.0 B)

All files and folders in this table will be uploaded.

Find by name

□	Name	Folder	Type
□	index.html	-	text/html

Destination Info

Destination

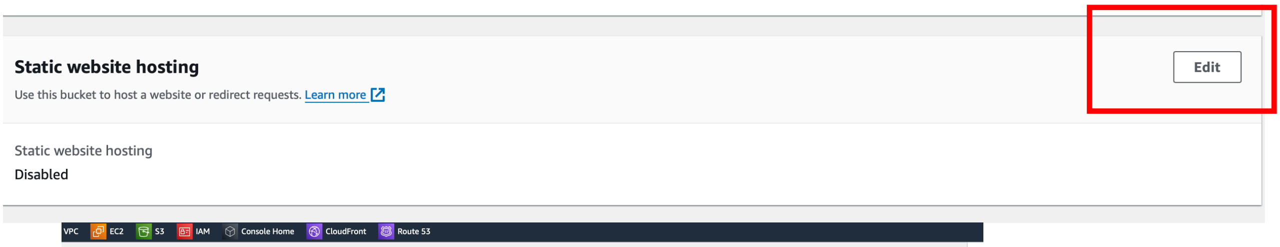
s3://revanth.shop

Destination details

Bucket settings that impact new objects stored in the specified destination.

8. Make sure that bucket is enabled static webhosting.

- It has right permissions for users to access it.
- Enable it and save.

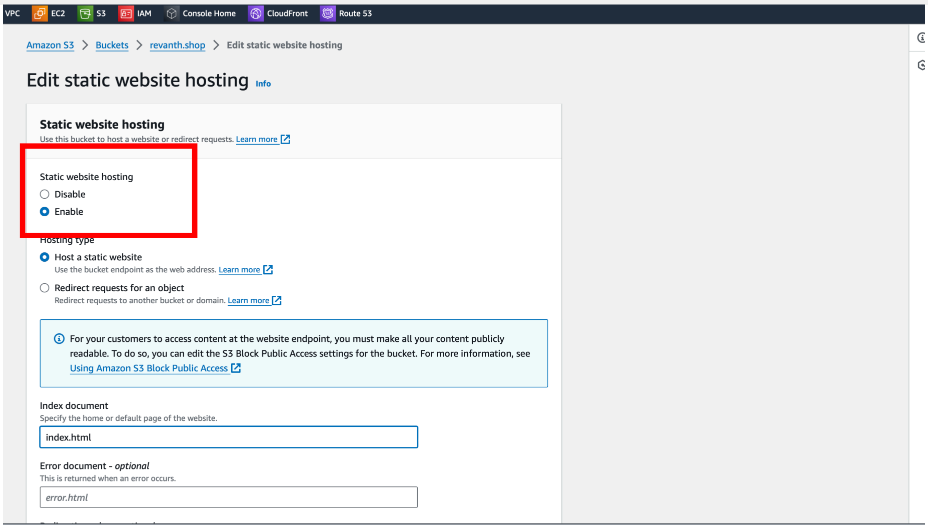


Static website hosting

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

Static website hosting

Disabled



VPC
EC2
S3
IAM
Console Home
CloudFront
Route 53
Amazon S3 > Buckets > revanth.shop > Edit static website hosting
Info

Edit static website hosting

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.

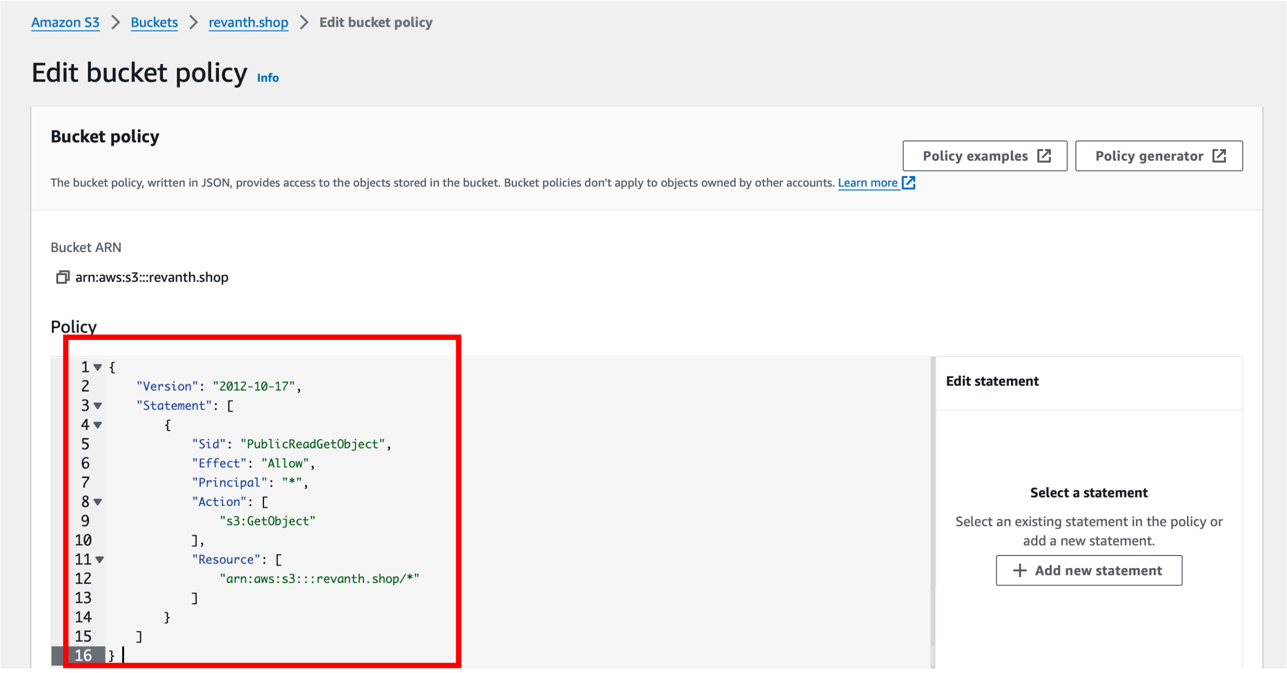
index.html

Error document - *optional*

This is returned when an error occurs.

error.html

9. In permissions add a bucket policy.



Edit bucket policy

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. Learn more

Bucket ARN

arn:aws:s3:::revanth.shop

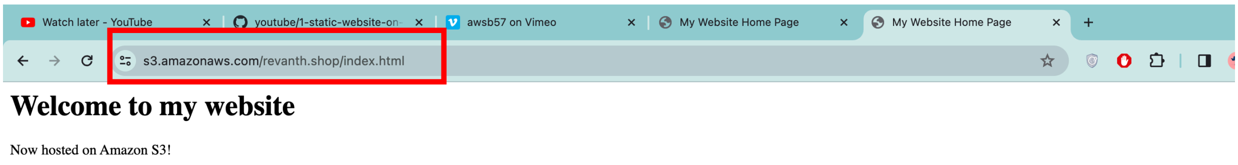
Policy

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "PublicReadGetObject",
            "Effect": "Allow",
            "Principal": "*",
            "Action": [
                "s3:GetObject"
            ],
            "Resource": [
                "arn:aws:s3:::revanth.shop/*"
            ]
        }
    ]
}
```

Select a statement

Select an existing statement in the policy or add a new statement.

10. This permission allows you to access with your web page using domain name.
11. Now it is publicly accessible.
12. You can open your website by clicking index.html under open url.
13. Now you can access only with that link. It is not possible to share that link with every one, so you need to access with your domain name it;s easy to remember for users.



Welcome to my website

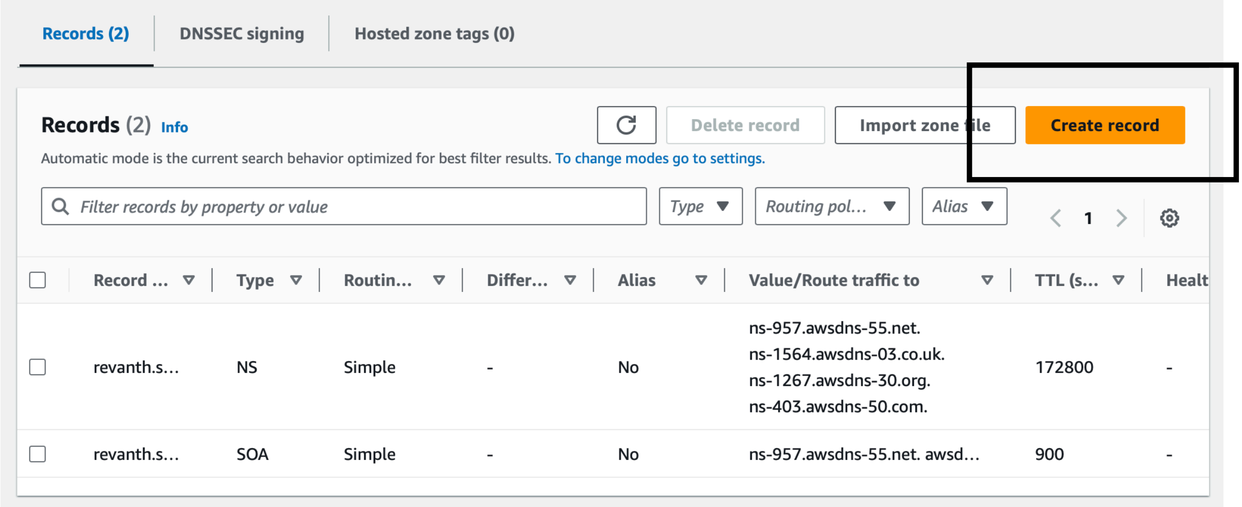
Now hosted on Amazon S3!

14. To make that link simplified.

15. Add a additional record in Route53 hosted zone.

16. Create a record with the following type.

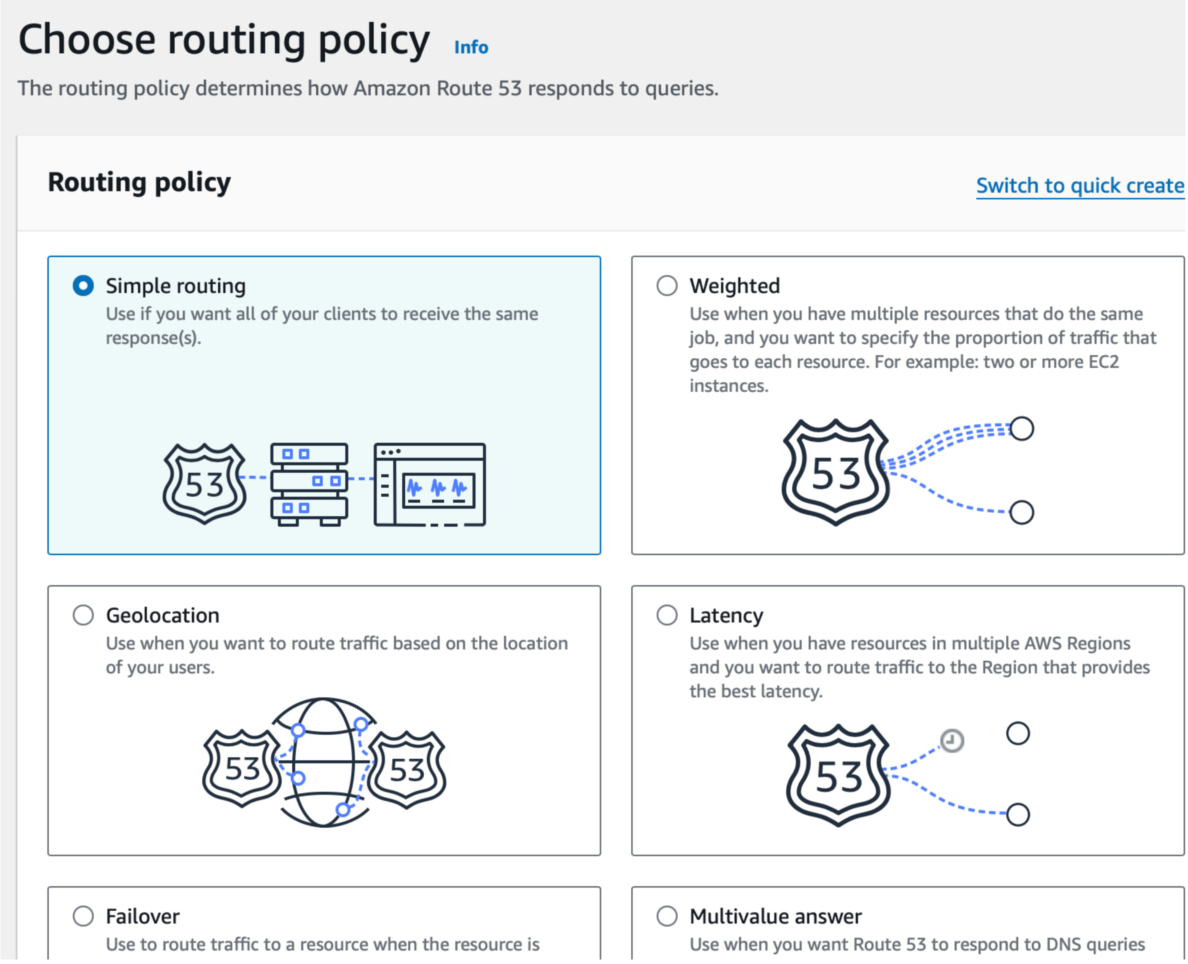
- Simple routing
- Define simple record
- Value = alias to S3 - endpoint
- Select endpoint



Records (2) Info

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

□	Record ...	Type	Routin...	Differ...	Alias	Value/Route traffic to	TTL (s...	Healt
□	revanth.s...	NS	Simple	-	No	ns-957.awsdns-55.net. ns-1564.awsdns-03.co.uk. ns-1267.awsdns-30.org. ns-403.awsdns-50.com.	172800	-
□	revanth.s...	SOA	Simple	-	No	ns-957.awsdns-55.net. awsd...	900	-



Choose routing policy Info

The routing policy determines how Amazon Route 53 responds to queries.

Routing policy

Switch to quick create

● Simple routing
Use if you want all of your clients to receive the same response(s).

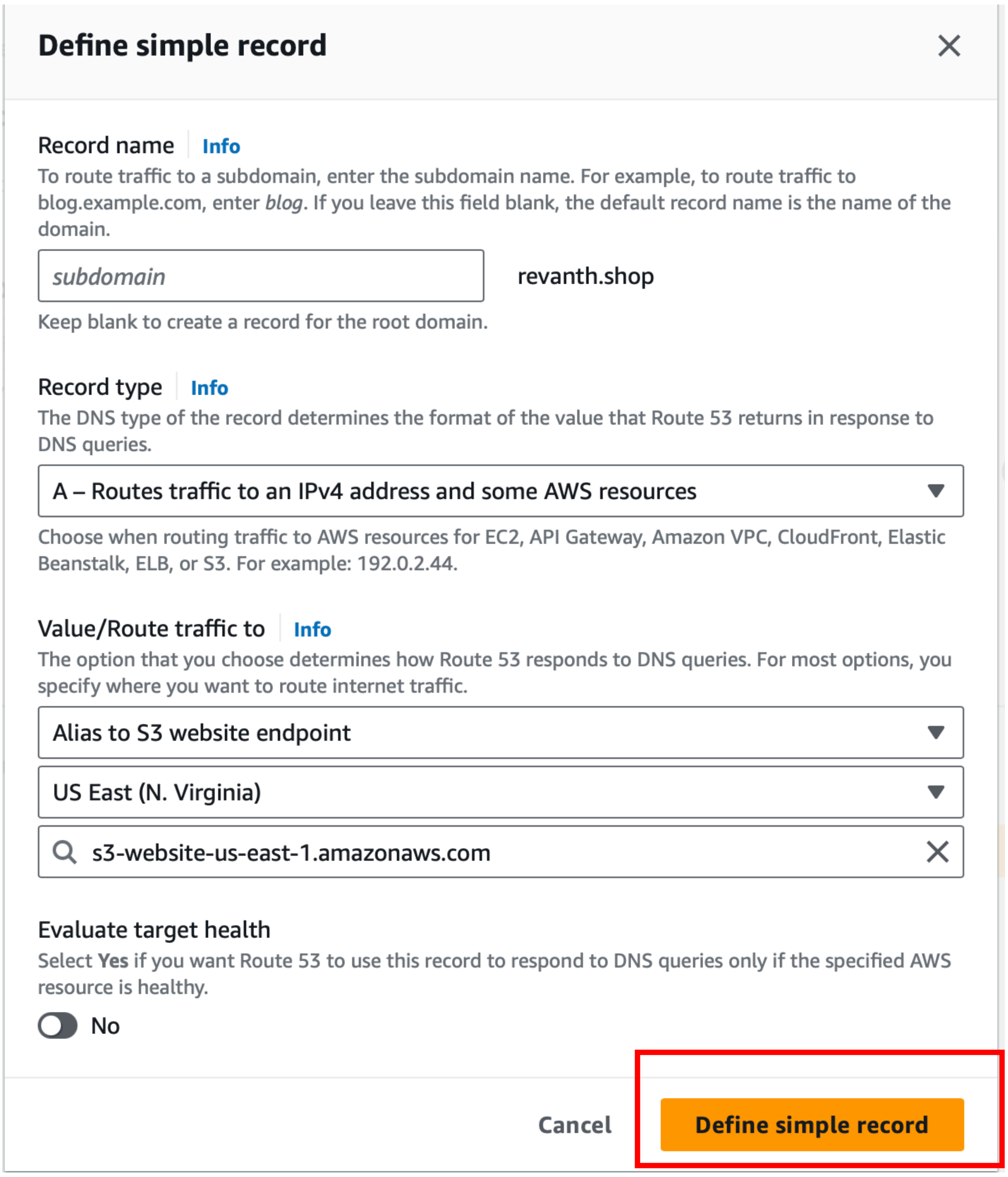
○ Weighted
Use when you have multiple resources that do the same job, and you want to specify the proportion of traffic that goes to each resource. For example: two or more EC2 instances.

○ Geolocation
Use when you want to route traffic based on the location of your users.

○ Latency
Use when you have resources in multiple AWS Regions and you want to route traffic to the Region that provides the best latency.

○ Failover
Use to route traffic to a resource when the resource is

○ Multivalue answer
Use when you want Route 53 to respond to DNS queries



Define simple record

Record name Info

To route traffic to a subdomain, enter the subdomain name. For example, to route traffic to blog.example.com, enter *blog*. If you leave this field blank, the default record name is the name of the domain.

subdomain revanth.shop

Keep blank to create a record for the root domain.

Record type Info

The DNS type of the record determines the format of the value that Route 53 returns in response to DNS queries.

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

Choose when routing traffic to AWS resources for EC2, API Gateway, Amazon VPC, CloudFront, Elastic Beanstalk, ELB, or S3. For example: 192.0.2.44.

Value/Route traffic to Info

The option that you choose determines how Route 53 responds to DNS queries. For most options, you specify where you want to route internet traffic.

Alias to S3 website endpoint

US East (N. Virginia)

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

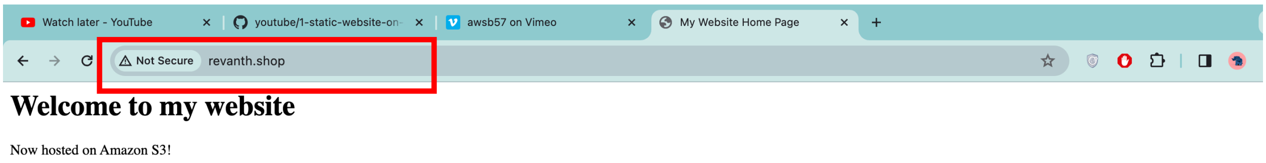
Evaluate target health

Select **Yes** if you want Route 53 to use this record to respond to DNS queries only if the specified AWS resource is healthy.

No

17. Now type your domain name in browser it will redirect to your web page.

18. Observer the change in url before and after creating record.



revanth.shop

Welcome to my website

Now hosted on Amazon S3!