

Practical 2: Storage as a Service (S3) using AWS

Name: Aditi Kothawade

Roll No. A074

Steps to Create an S3 Bucket

1. **Log in to AWS Management Console:**

- Go to [AWS Management Console](#).
- Sign in with your credentials.



Sign in

☒ **Root user**

Account owner that performs tasks requiring unrestricted access. [Learn more](#)

☐ **IAM user**

User within an account that performs daily tasks. [Learn more](#)

Root user email address

username@example.com

Next

By continuing, you agree to the [AWS Customer Agreement](#) or other agreement for AWS services, and the [Privacy Notice](#). This site uses essential cookies. See our [Cookie Notice](#) for more information.

New to AWS?

Create a new AWS account

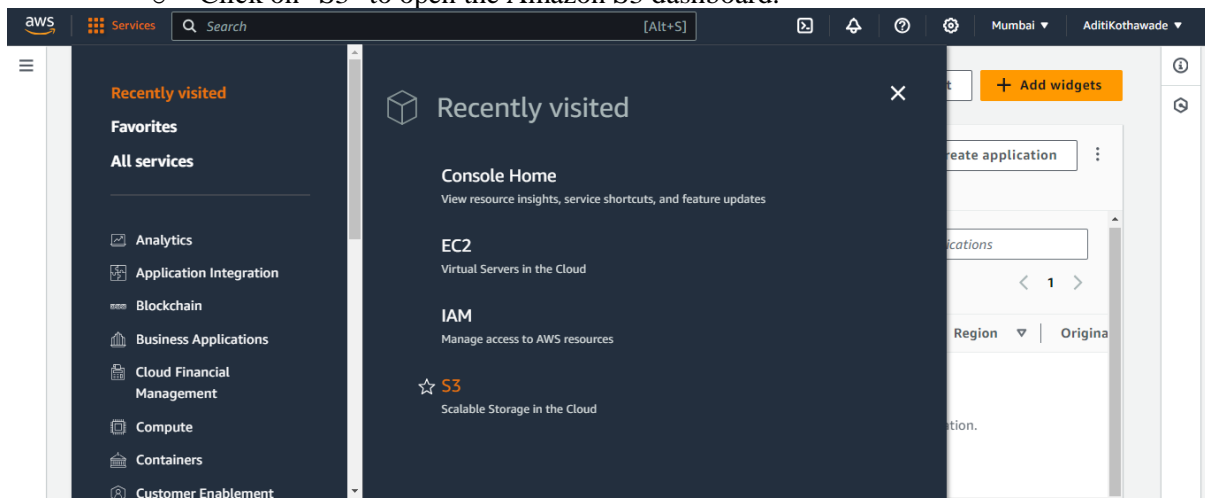
Try analytics services for free

AWS is the fastest way to get answers from all your data to all your users

[Learn more >](#)

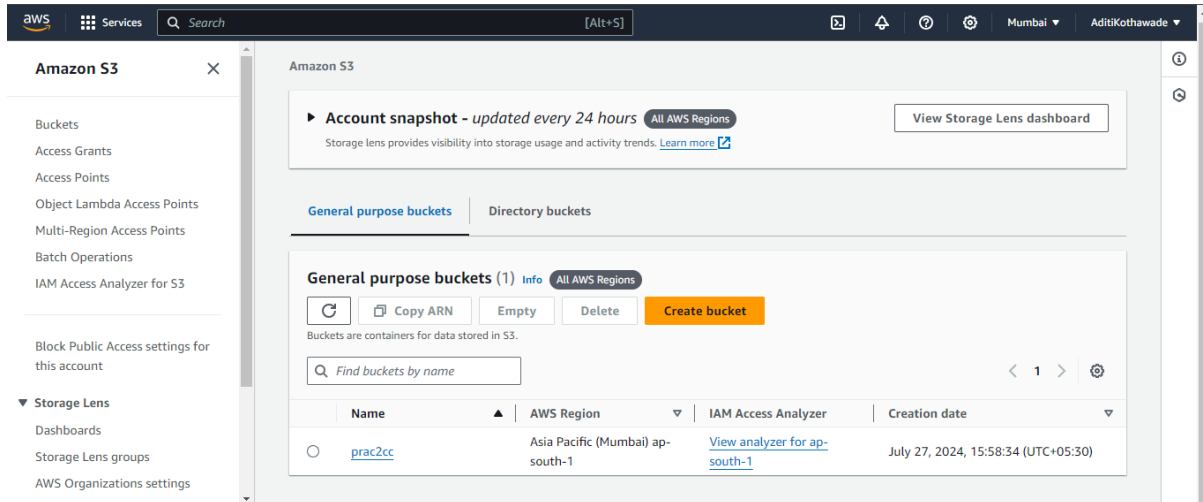
2. **Navigate to S3:**

- In the AWS Management Console, search for "S3."
- Click on "S3" to open the Amazon S3 dashboard.



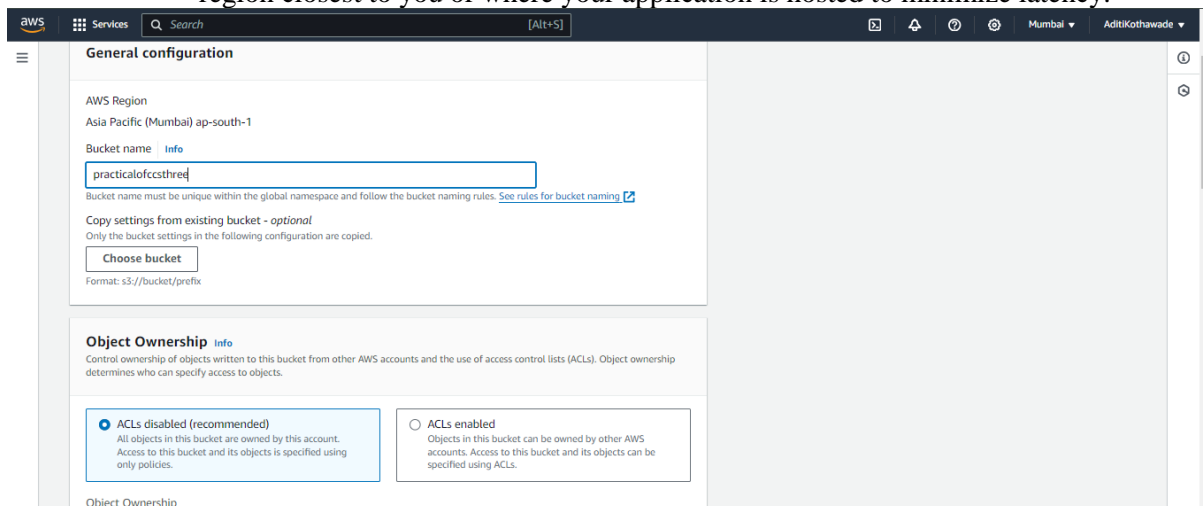
3. **Create a Bucket:**

- Click on the “Create bucket” button.



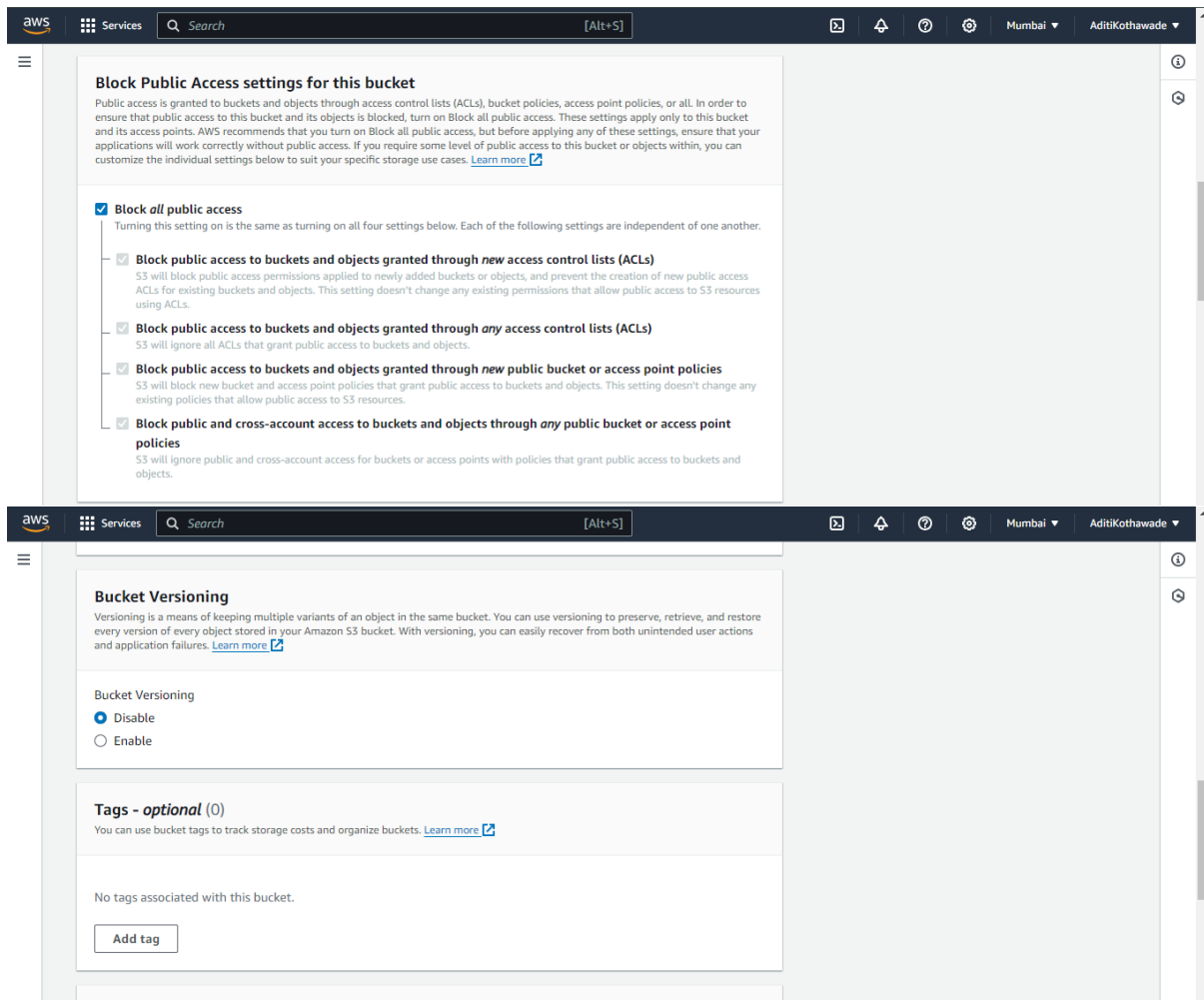
4. Configure Bucket Settings:

- **Bucket Name:** Enter a unique name for your bucket (bucket names must be globally unique across all AWS users).
- **Region:** Choose the AWS region where you want to create the bucket. Select the region closest to you or where your application is hosted to minimize latency.



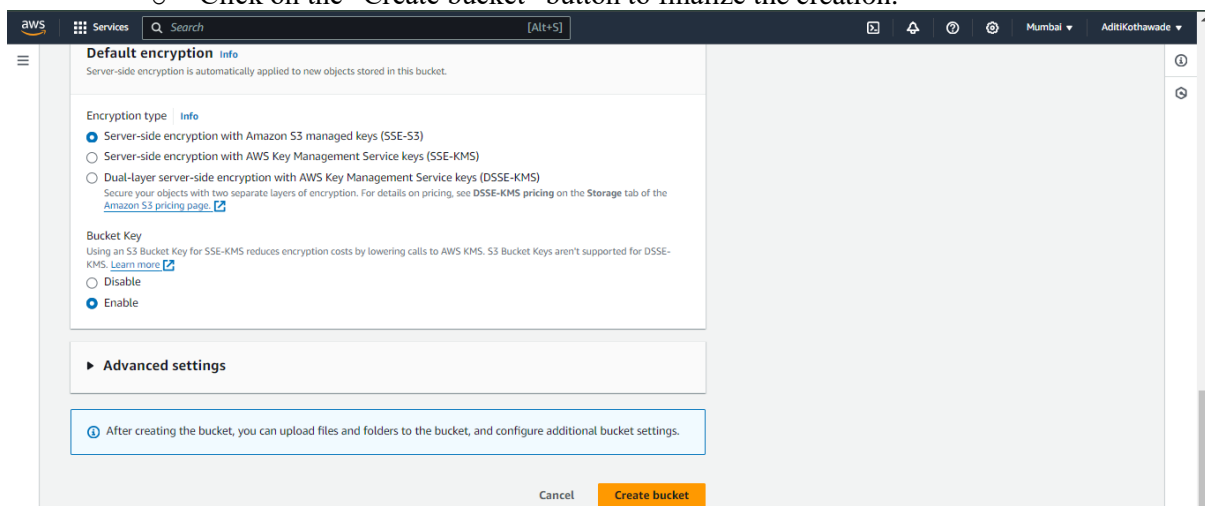
5. Configure Bucket Options:

- **Block Public Access:** By default, block all public access to keep your data private. You can modify this later if needed.
- **Versioning:** Enable versioning if you want to keep multiple versions of objects in the bucket.
- **Tags:** Add any tags to categorize and manage your bucket.
- **Object Lock:** Enable if you need to prevent objects from being deleted or overwritten (often used for regulatory compliance).



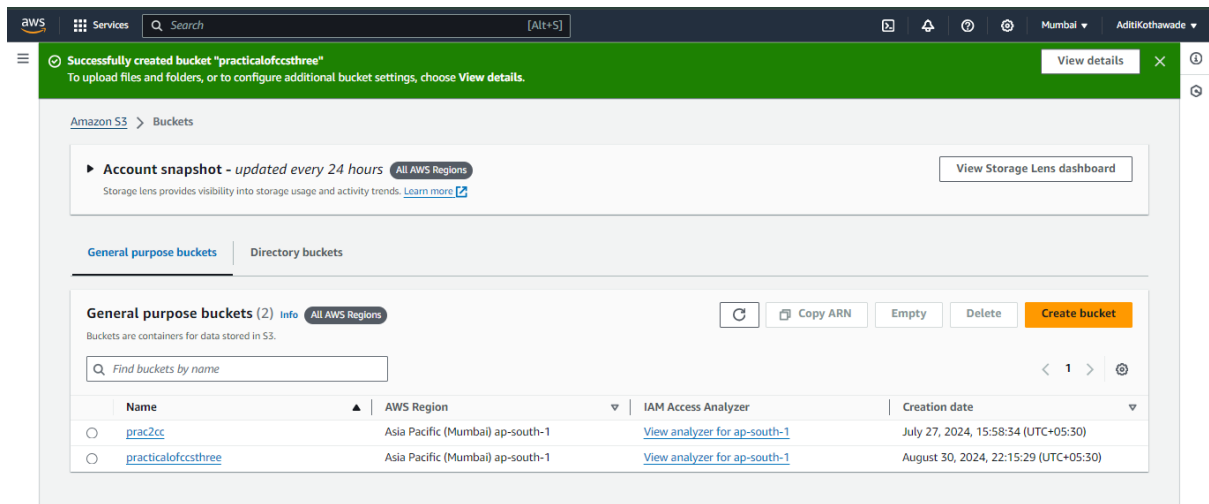
6. Review and Create:

- Review your settings to ensure everything is configured as needed.
- Click on the “Create bucket” button to finalize the creation.



7. Bucket Created:

- Your S3 bucket is now created and ready to use. You'll be redirected to the bucket's overview page.



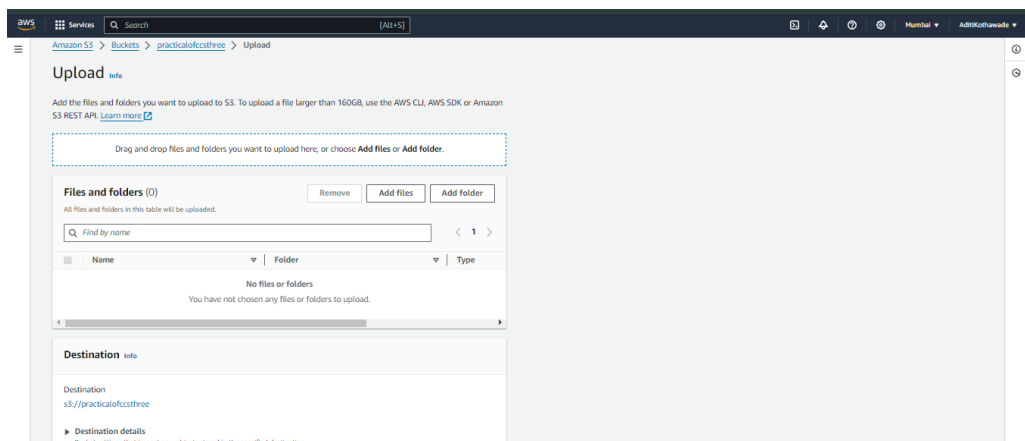
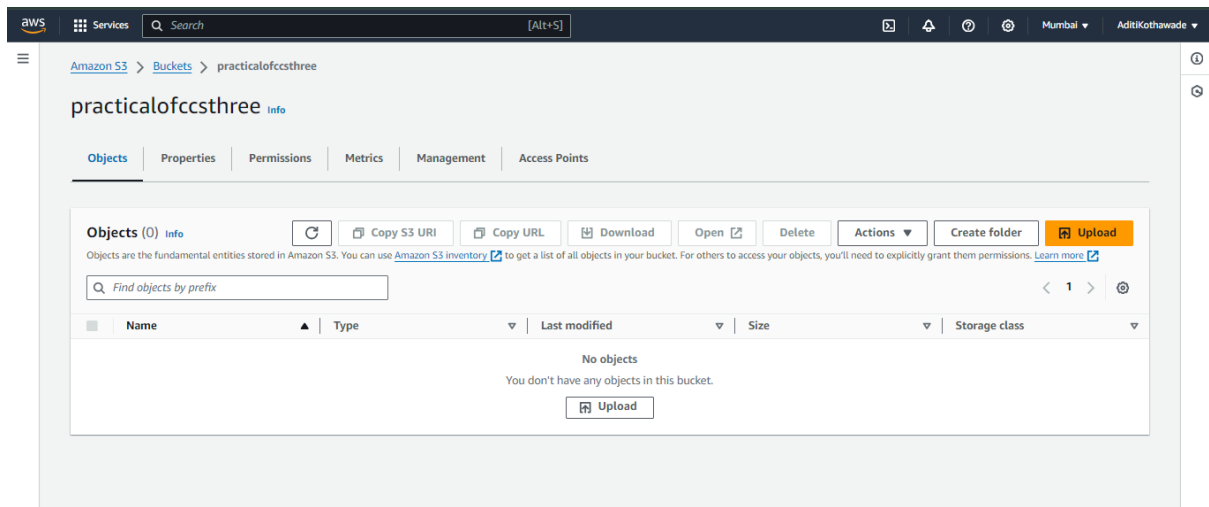
Uploading Files to Your S3 Bucket

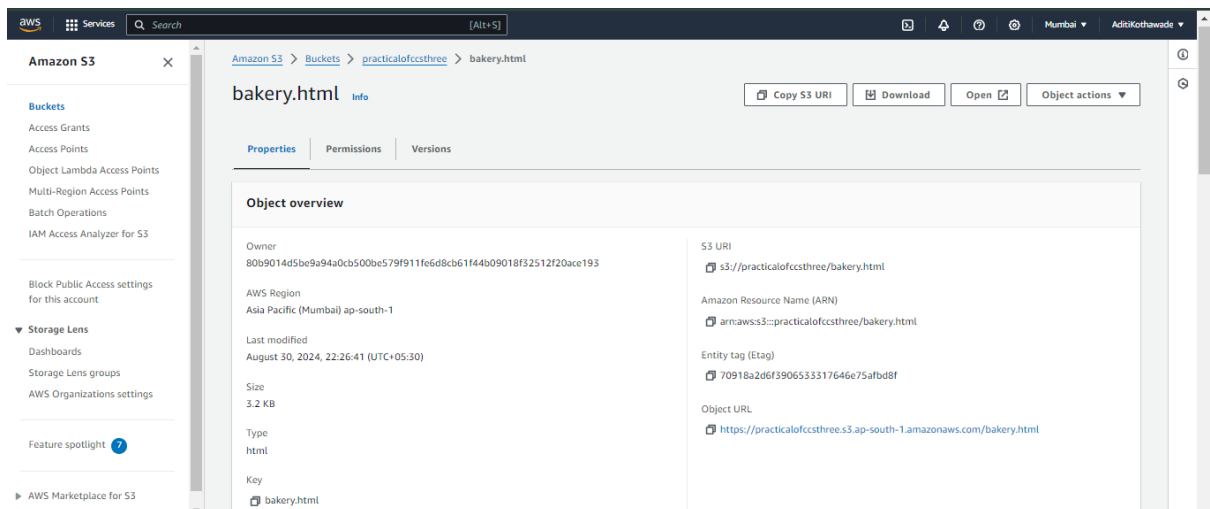
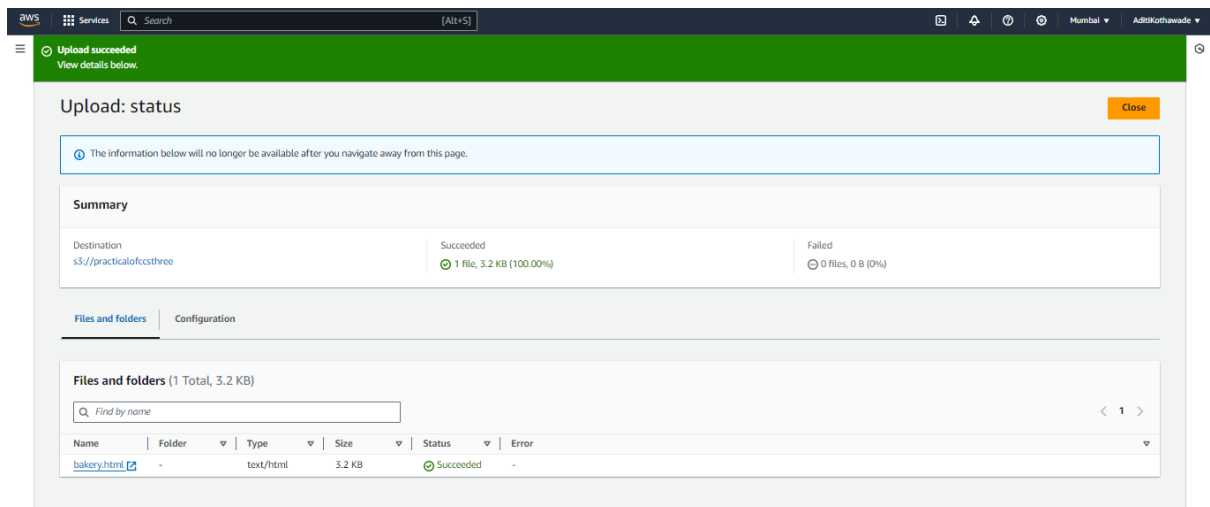
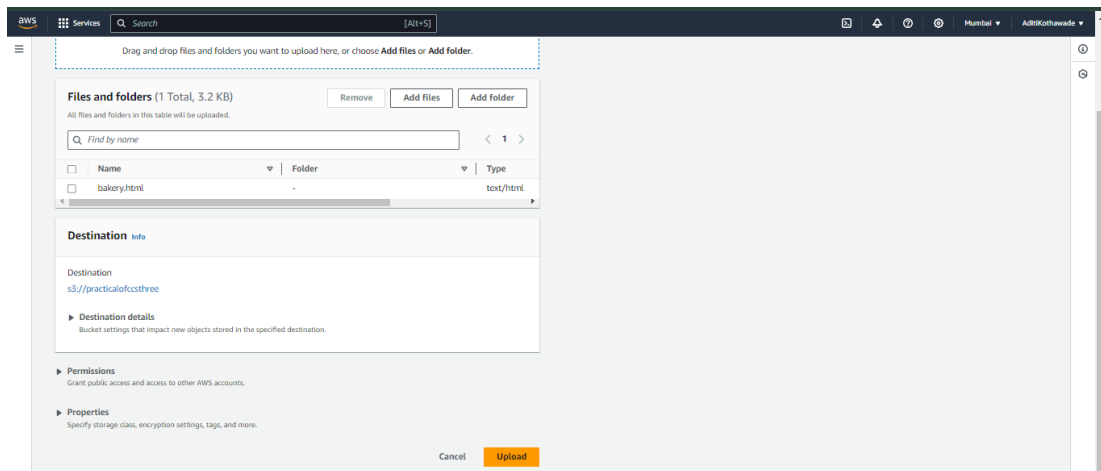
1. Open Your Bucket:

- Click on your newly created bucket in the S3 dashboard.

2. Upload Files:

- Click on the "Upload" button.
- Drag and drop files into the console or click "Add files" to browse your computer.
- Optionally, click "Add folder" to upload entire folders.





Click on buckets

Amazon S3 > Buckets > practicalofcsthree > bakery.html

bakery.html Info

Copy S3 URI Download Open Object actions

Properties Permissions Versions

Object overview

Owner: 80b9014d5be9a94a0cb500be579f911f6d8cb61f44b09018f32512f20ace193

AWS Region: Asia Pacific (Mumbai) ap-south-1

Last modified: August 30, 2024, 22:26:41 (UTC+05:30)

Size: 3.2 KB

Type: html

Key: bakery.html

S3 URI: s3://practicalofcsthree/bakery.html

Amazon Resource Name (ARN): arn:aws:s3::practicalofcsthree/bakery.html

Entity tag (Etag): 70918a2d6f390653317646e75afb8df

Object URL: https://practicalofcsthree.s3.ap-south-1.amazonaws.com/bakery.html

Amazon S3 > Buckets

Account snapshot - updated every 24 hours All AWS Regions View Storage Lens dashboard

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

General purpose buckets Directory buckets

General purpose buckets (2) All AWS Regions

Buckets are containers for data stored in S3.

Find buckets by name

Name	AWS Region	IAM Access Analyzer	Creation date
prac2cc	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	July 27, 2024, 15:58:34 (UTC+05:30)
practicalofcsthree	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	August 30, 2024, 22:15:29 (UTC+05:30)

Then again open practicalofcsthree

Amazon S3 > Buckets > practicalofcsthree

practicalofcsthree Info

Objects Properties Permissions Metrics Management Access Points

Objects (1) Info

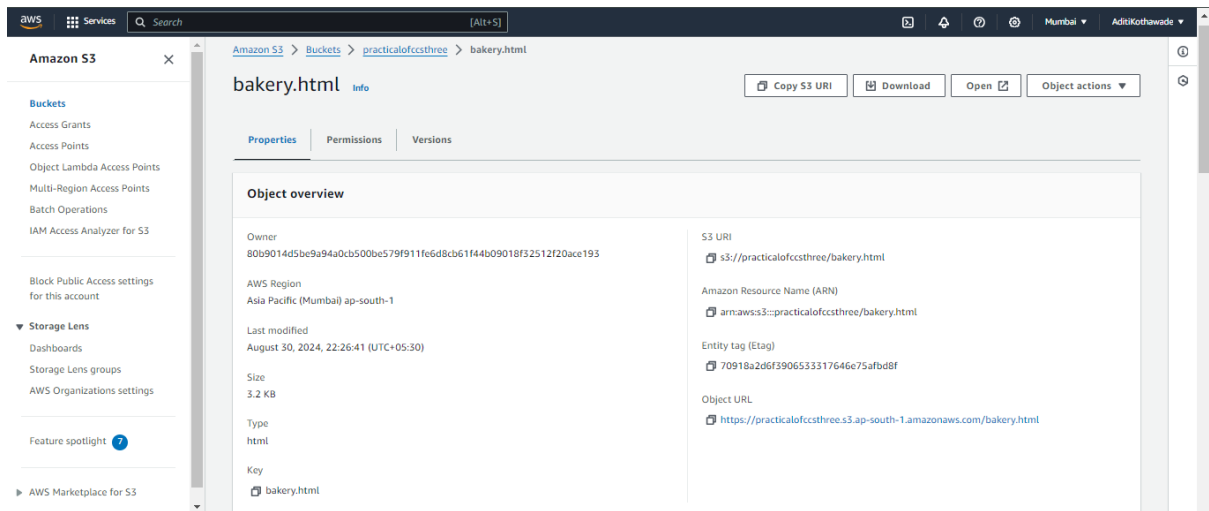
Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

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

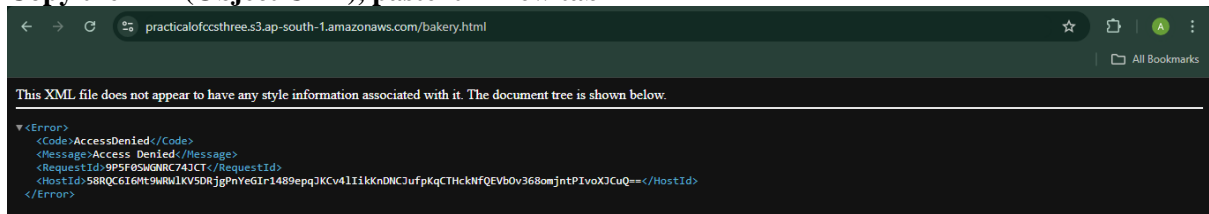
Find objects by prefix

Name	Type	Last modified	Size	Storage class
bakery.html	html	August 30, 2024, 22:26:41 (UTC+05:30)	3.2 KB	Standard

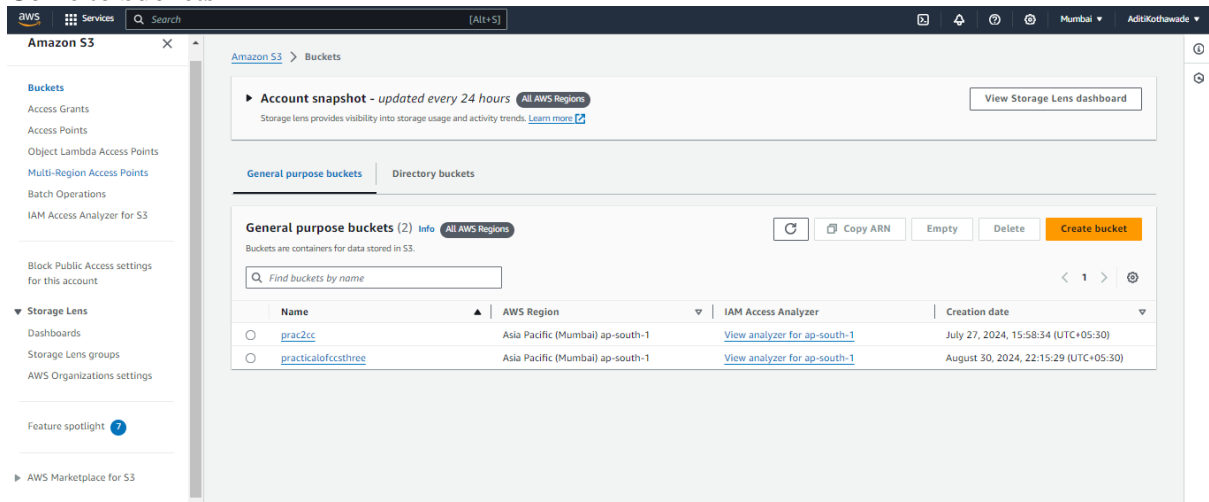
Again open it by double clicking on it



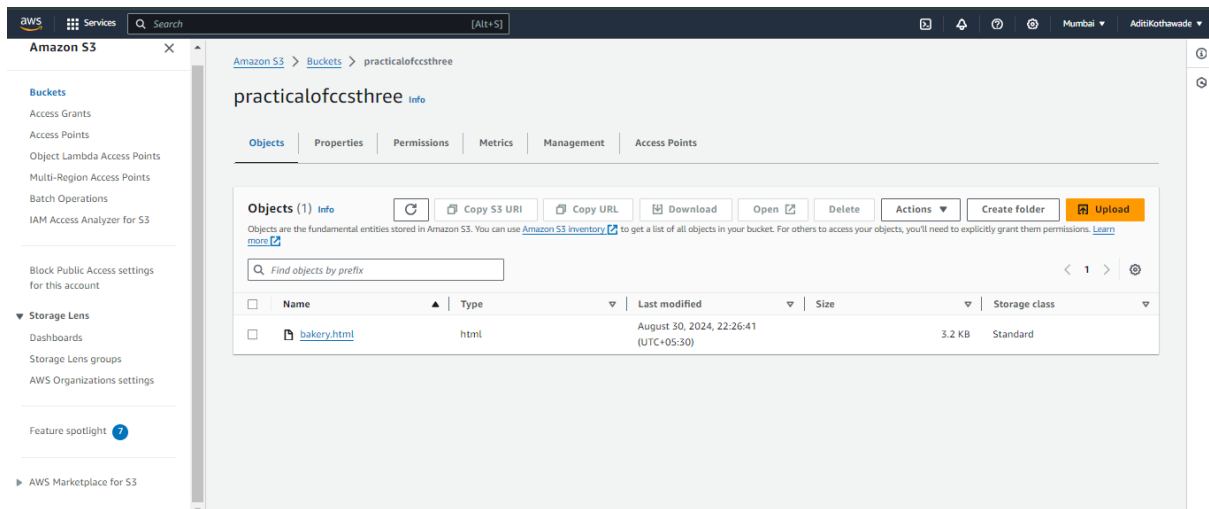
Copy the link (Object URL), paste it in new tab



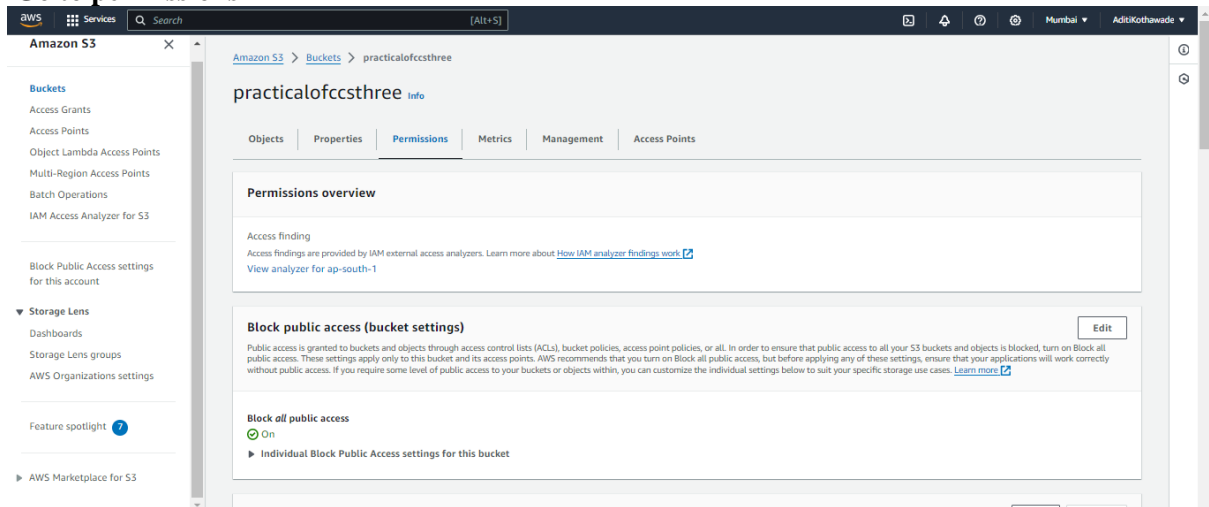
Come to buckets



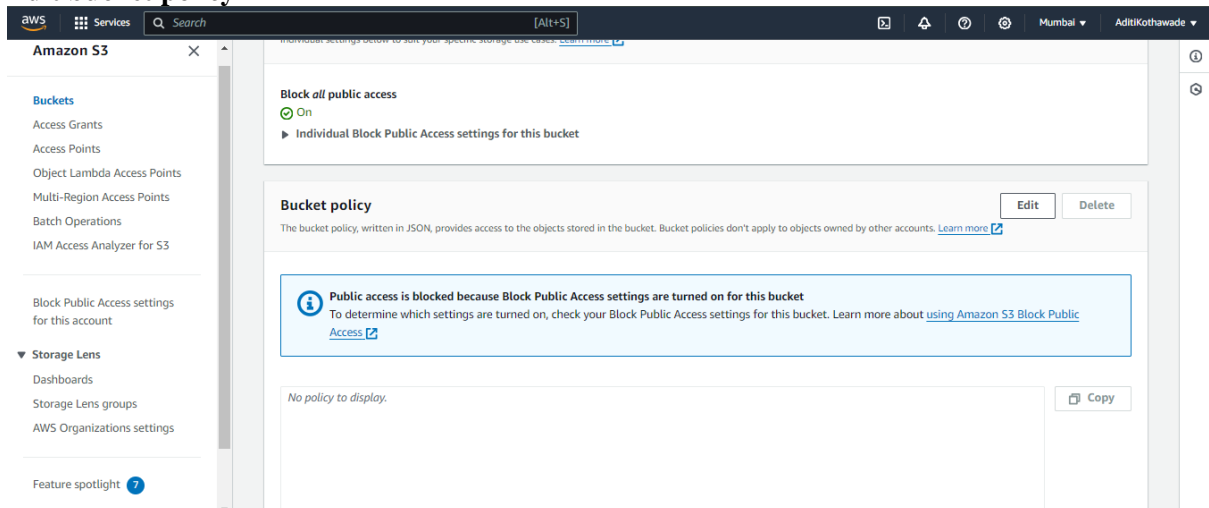
Open practicalofcsthree



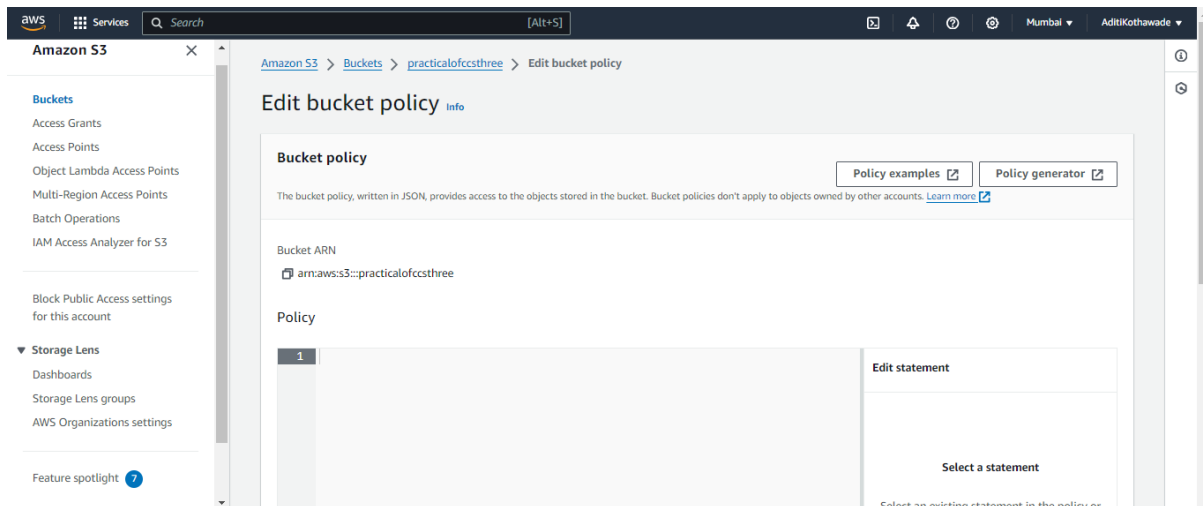
Go to permissions



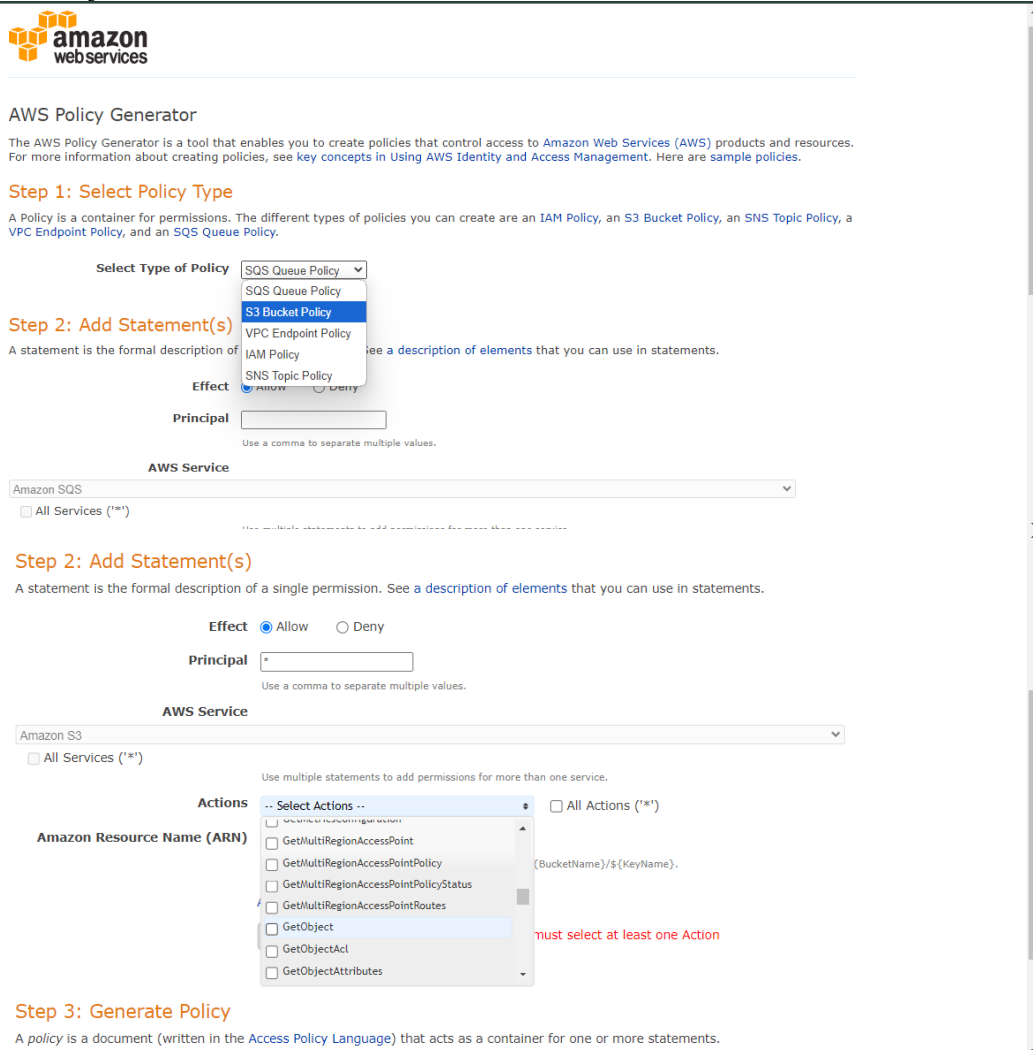
Edit bucket policy



Then go to policy generator



Go to policy generator and then in **select Policy Type, Bucket Policy**
 In add statements put *
 In ARN select GetObject



AWS Policy Generator

The AWS Policy Generator is a tool that enables you to create policies that control access to Amazon Web Services (AWS) products and resources. For more information about creating policies, see [key concepts in Using AWS Identity and Access Management](#). Here are [sample policies](#).

Step 1: Select Policy Type

A Policy is a container for permissions. The different types of policies you can create are an [IAM Policy](#), an [S3 Bucket Policy](#), an [SNS Topic Policy](#), a [VPC Endpoint Policy](#), and an [SQS Queue Policy](#).

Select Type of Policy S3 Bucket Policy

Step 2: Add Statement(s)

A statement is the formal description of a single permission. See a [description of elements](#) that you can use in statements.

Effect ☒ Allow ☐ Deny

Principal

Use a comma to separate multiple values.

AWS Service

Amazon S3

☐ All Services ("*")

Use multiple statements to add permissions for more than one service.

Actions 1 Action(s) Selected ☐ All Actions ("*")

Amazon Resource Name (ARN) arn:aws:s3::practicalofccsthree

ARN should follow the following format: arn:aws:s3:::{BucketName}/{Key/Name}.
Use a comma to separate multiple values.

[Add Conditions \(Optional\)](#)

[Add Statement](#)

Then Add Statement,
Then generate policy

AWS Service

Amazon S3

☐ All Services ("*")

Use multiple statements to add permissions for more than one service.

Actions -- Select Actions -- ☐ All Actions ("*")

Amazon Resource Name (ARN)

ARN should follow the following format: arn:aws:s3:::{BucketName}/{Key/Name}.
Use a comma to separate multiple values.

[Add Conditions \(Optional\)](#)

[Add Statement](#)

You added the following statements. Click the button below to Generate a policy.

Principal(s)	Effect	Action	Resource	Conditions
* *	Allow	s3:GetObject	arn:aws:s3::practicalofccsthree	None

Step 3: Generate Policy

A [policy](#) is a document (written in the [Access Policy Language](#)) that acts as a container for one or more statements.

[Generate Policy](#) [Start Over](#)

This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

Then copy the code

AWS Service

Amazon S3

☐ All Services ("*")

Use multiple statements to add permissions for more than one service.

Policy JSON Document

Click below to edit. To save the policy, copy the text below to a text editor. Changes made below will not be reflected in the policy generator tool.

```
{
  "Id": "Policy172503886270",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1725038863249",
      "Action": [
        "s3:GetObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3::practicalofccsthree",
      "Principal": "*"
    }
  ]
}
```

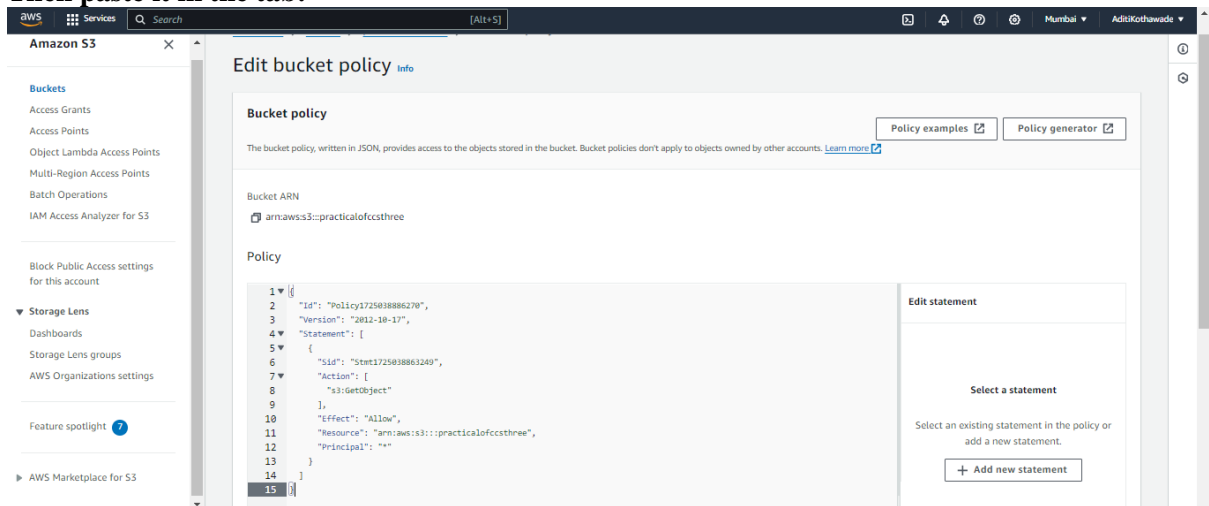
This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

[Close](#)

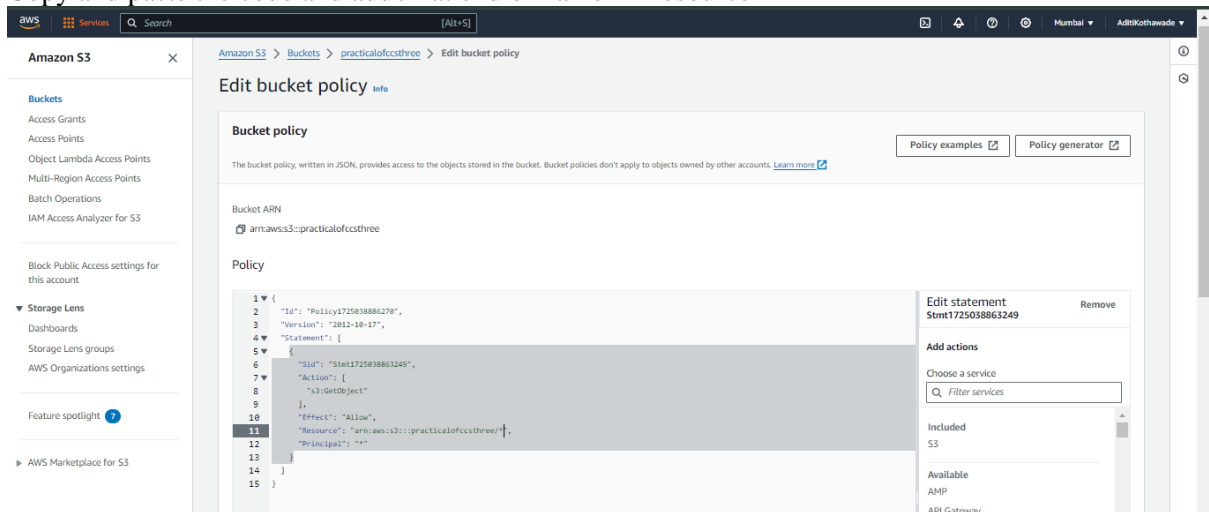
This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is without warranty of any kind, whether express, implied, or statutory. This AWS Policy Generator does not modify the applicable terms and conditions governing your use of Amazon Web Services technologies.

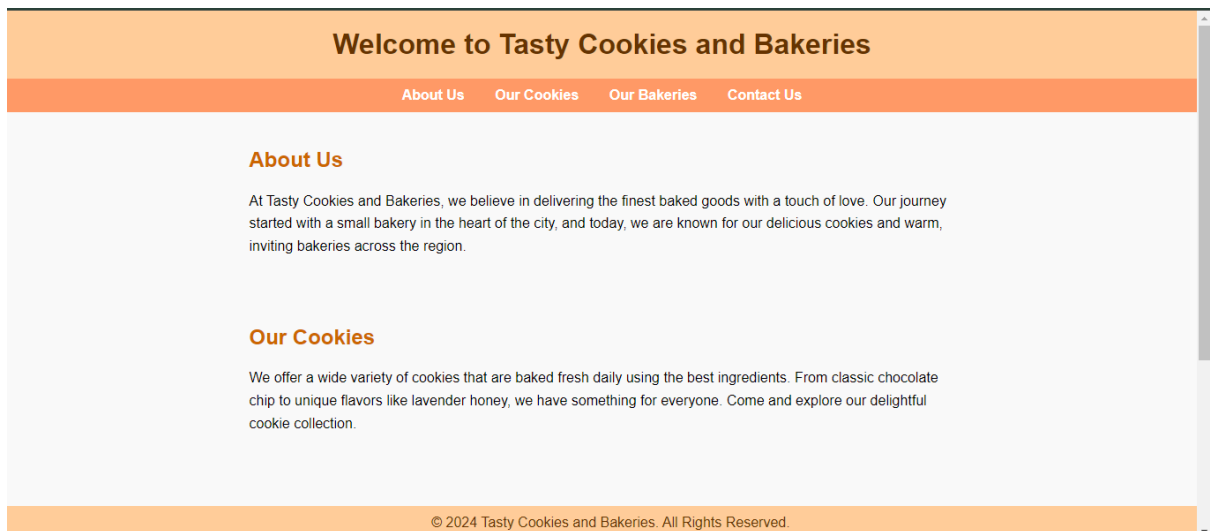
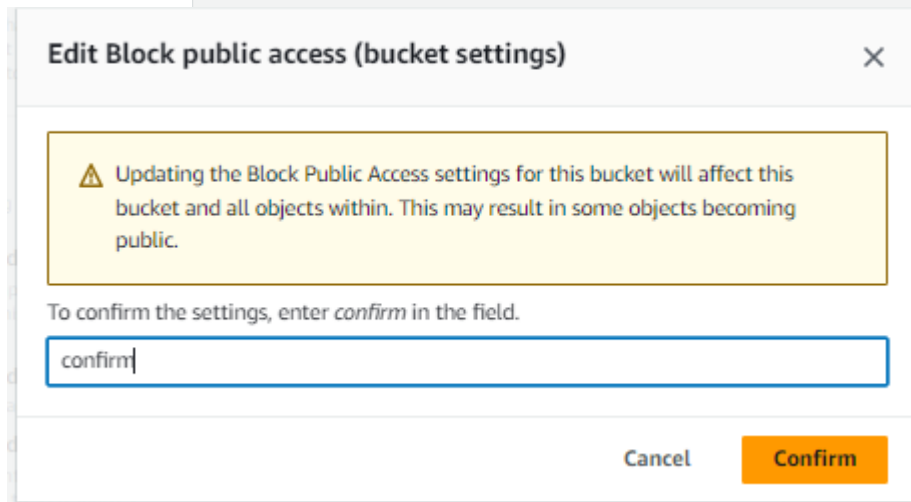
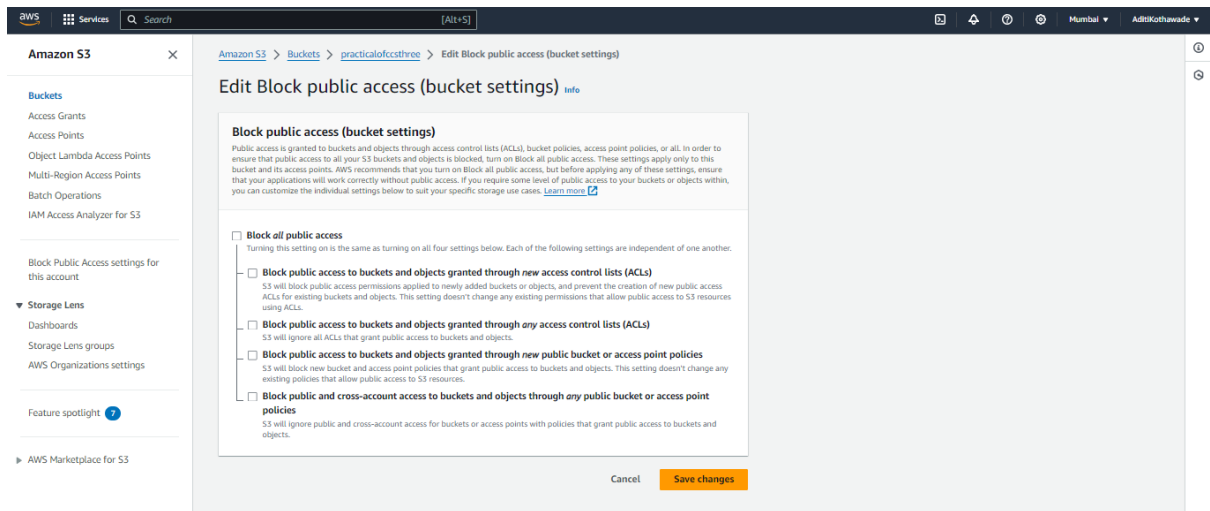
```
{
  "Id": "Policy1725038886270",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1725038863249",
      "Action": [
        "s3:GetObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::practicalofccsthree",
      "Principal": "*"
    }
  ]
}
```

Then paste it in the tab:



Copy and paste the code and add /* at end of name in Resource





For image:

The same steps are repeated by uploading the image and copying the link.

Upload: status

The information below will no longer be available after you navigate away from this page.

Summary

Destination	Succeeded	Failed
s3://practicalofcsthree	1 file, 12.3 KB (100.00%)	0 files, 0 B (0%)

Files and folders | Configuration

Files and folders (1 Total, 12.3 KB)

Find by name

Name	Folder	Type	Size	Status	Error
cake_cookies...	-	image/jpeg	12.3 KB	Succeeded	-

Amazon S3

Object overview

Owner	80b9014d5be9a940cb500be579f911fe6d8cb61f44b09018f32512f20ace193
AWS Region	Asia Pacific (Mumbai) ap-south-1
Last modified	August 30, 2024, 23:10:24 (UTC+05:30)
Size	12.3 KB
Type	jpeg
Key	cake_cookies.jpeg

S3 URI

s3://practicalofcsthree/cake_cookies.jpeg

Amazon Resource Name (ARN)

arn:aws:s3::practicalofcsthree/cake_cookies.jpeg

Entity tag (Etag)

e94d1890h9d5af999156a2b1b7d61395d

Object URL Copied

https://practicalofcsthree.s3.ap-south-1.amazonaws.com/cake_cookies.jpeg

