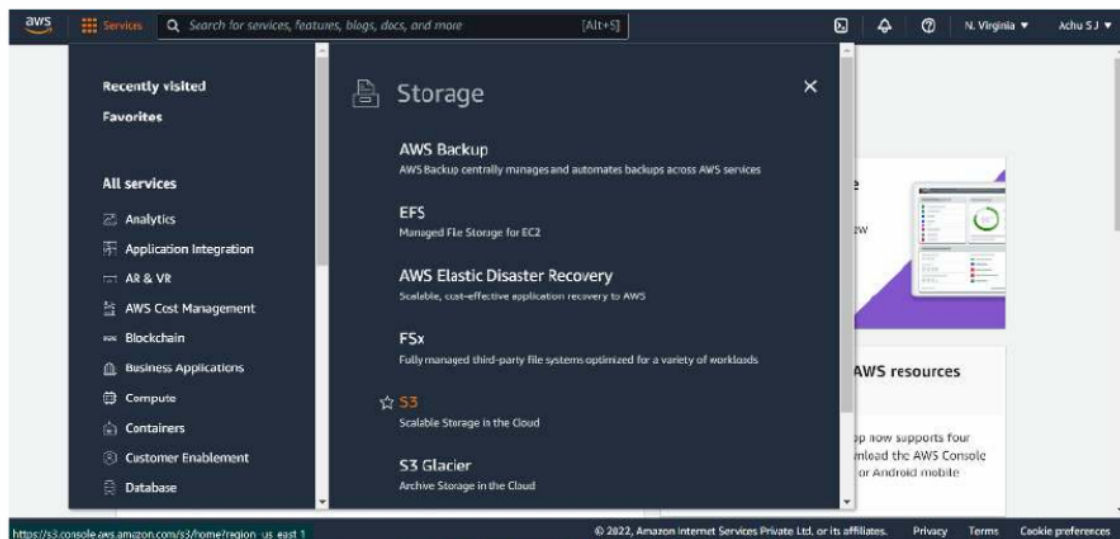
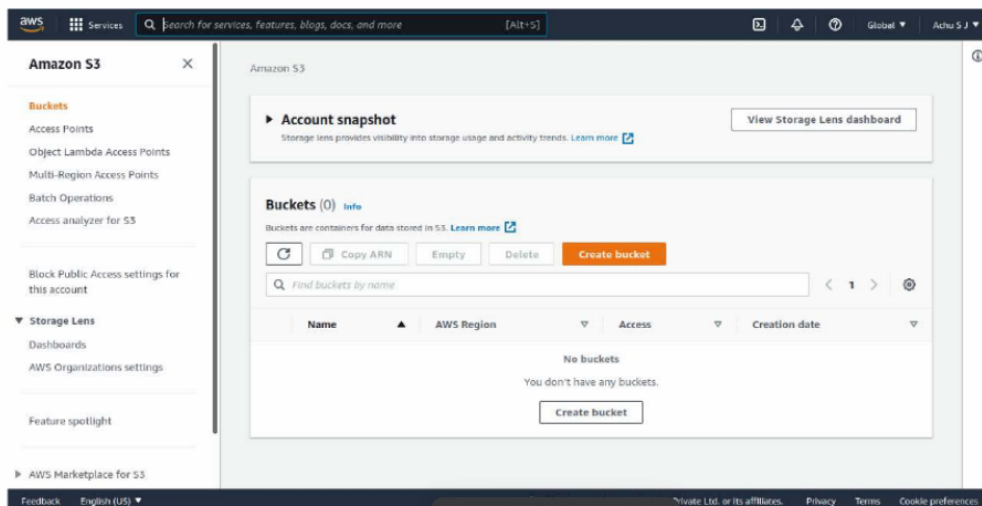


Implementation:

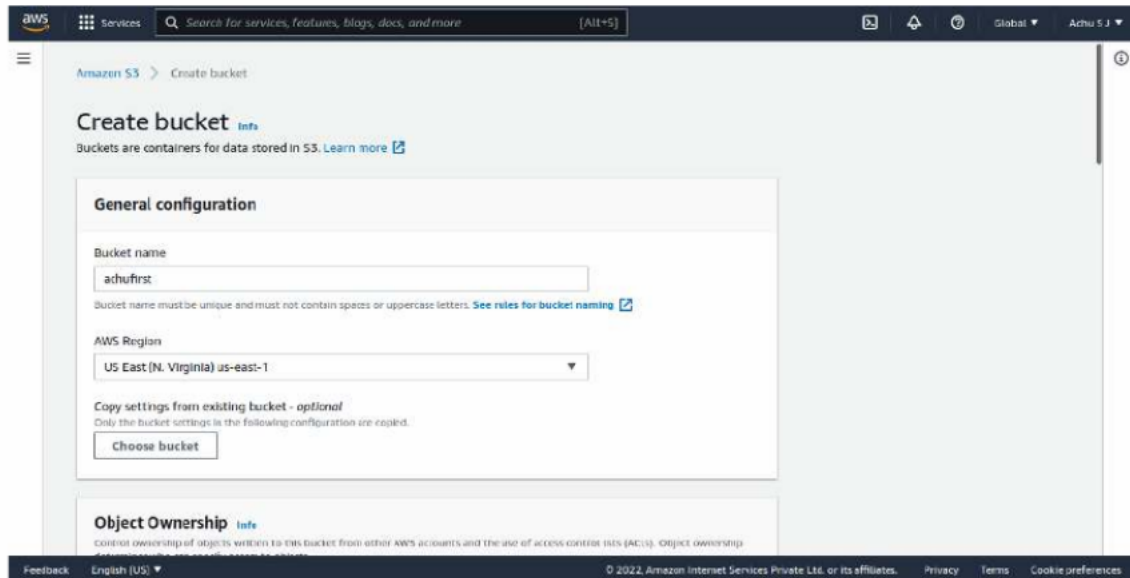
Step 1: In AWS, Services->Storage-> S3



Step 2: Click on Create bucket



Step 3: Adding Bucket name and choosing AWS Region



The screenshot shows the 'Create bucket' page in the AWS Management Console. The breadcrumb navigation at the top left reads 'Amazon S3 > Create bucket'. The main heading is 'Create bucket' with a link to 'Info'. Below this, a sub-header states 'Buckets are containers for data stored in S3. Learn more'. The 'General configuration' section contains a 'Bucket name' input field with the text 'achufirst', a note that the name must be unique and cannot contain spaces or uppercase letters, and a link to 'See rules for bucket naming'. The 'AWS Region' is set to 'US East (N. Virginia) us-east-1'. There is an optional section for 'Copy settings from existing bucket' with a 'Choose bucket' button. The 'Object Ownership' section is partially visible at the bottom. The footer includes 'Feedback', 'English (US)', and copyright information for 2022.

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Amazon S3 > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

General configuration

Bucket name

achufirst

Bucket name must be unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

AWS Region

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

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

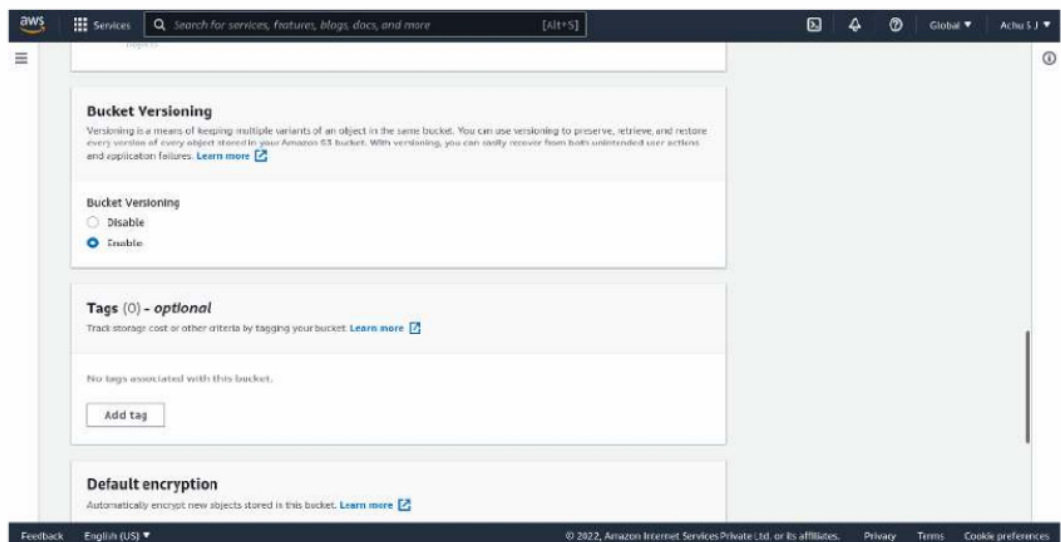
[Choose bucket](#)

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

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Step 4: Enable Bucket Versioning



The screenshot shows the 'Bucket Versioning' page in the AWS Management Console. The breadcrumb navigation at the top left reads 'Amazon S3 > Buckets > achufirst > Bucket Versioning'. The main heading is 'Bucket Versioning' with a link to 'Info'. A sub-header explains that versioning allows keeping multiple variants of an object. The 'Bucket Versioning' section has two radio buttons: 'Disable' and 'Enable', with 'Enable' selected. The 'Tags (0) - optional' section has a note about tracking storage cost and an 'Add tag' button. The 'Default encryption' section is partially visible at the bottom. The footer includes 'Feedback', 'English (US)', and copyright information for 2022.

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Amazon S3 > Buckets > achufirst > Bucket Versioning

Bucket Versioning [Info](#)

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Bucket Versioning

☐ Disable

☒ Enable

Tags (0) - optional

Track storage cost or other criteria by tagging your bucket. [Learn more](#)

No tags associated with this bucket.

[Add tag](#)

Default encryption

Automatically encrypt new objects stored in this bucket. [Learn more](#)

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Step 5: Disable Default encryption and click Create bucket

The screenshot shows the 'Create bucket' wizard in the AWS console. The 'Default encryption' section is highlighted, showing the 'Server-side encryption' options. The 'Disable' radio button is selected, and the 'Enable' radio button is unselected. Below this, there is an 'Advanced settings' section. At the bottom, there are 'Cancel' and 'Create bucket' buttons. A footer bar contains 'Feedback', 'English (US)', and copyright information.

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No tags associated with this bucket.

Add tag

Default encryption
Automatically encrypt new objects stored in this bucket. [Learn more](#)

Server-side encryption

☒ Disable
☐ Enable

► Advanced settings

4 After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel Create bucket

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Step 6: Bucket 'achufirst' is created

The screenshot shows the AWS console after the bucket 'achufirst' has been created. A green banner at the top says 'Successfully created bucket "achufirst"'. Below this, the 'Buckets' section shows a list of buckets. The bucket 'achufirst' is listed with the following details:

Name	AWS Region	Access	Creation date
achufirst	US East (N. Virginia) us-east-1	Bucket and objects not public	March 8, 2022, 10:38:57 (UTC+05:30)

The left sidebar shows the 'Amazon S3' navigation menu with options like 'Buckets', 'Access Points', 'Object Lambda Access Points', 'Multi-Region Access Points', 'Batch Operations', 'Access analyzer for S3', 'Storage Lens', 'Dashboards', 'AWS Organizations settings', 'Feature spotlight', and 'AWS Marketplace for S3'.

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Amazon S3

Buckets

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

Access analyzer for S3

Block Public Access settings for this account:

▼ Storage Lens

Dashboards

AWS Organizations settings

Feature spotlight

► AWS Marketplace for S3

Successfully created bucket "achufirst"
To upload files and folders, or to configure additional bucket settings choose [View details](#).

[View details](#)

Amazon S3

► Account snapshot
Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

[View Storage Lens dashboard](#)

Buckets (1) [View](#)

Buckets are containers for data stored in S3. [Learn more](#)

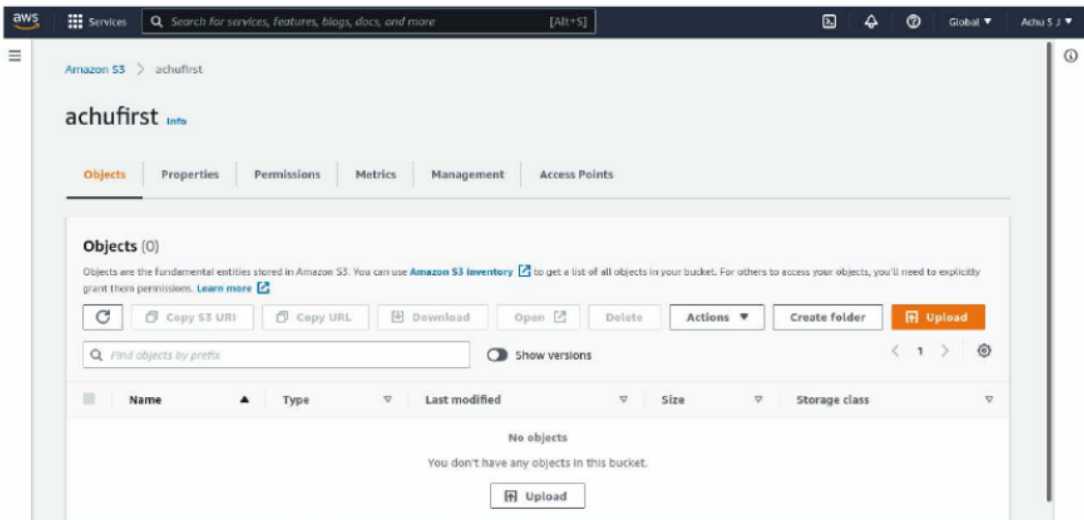
[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Find buckets by name

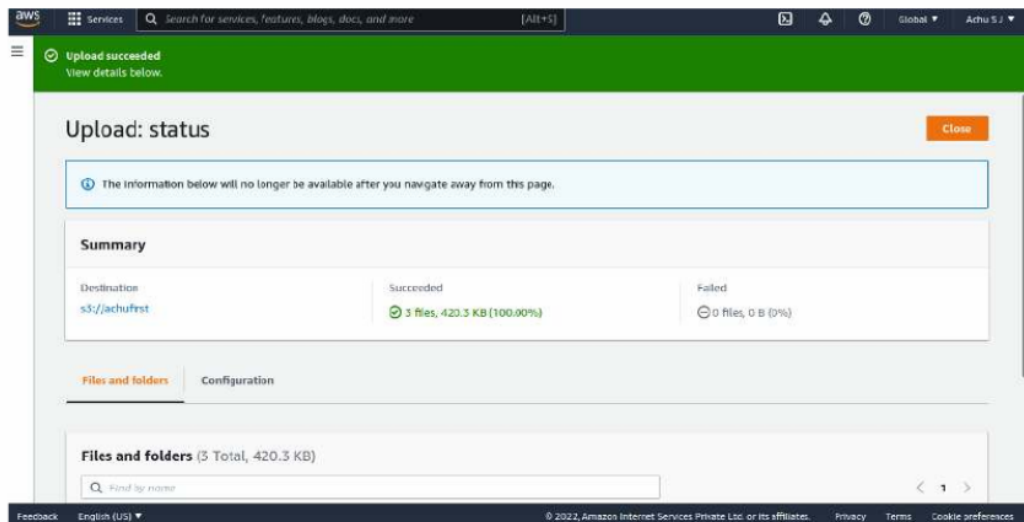
Name	AWS Region	Access	Creation date
achufirst	US East (N. Virginia) us-east-1	Bucket and objects not public	March 8, 2022, 10:38:57 (UTC+05:30)

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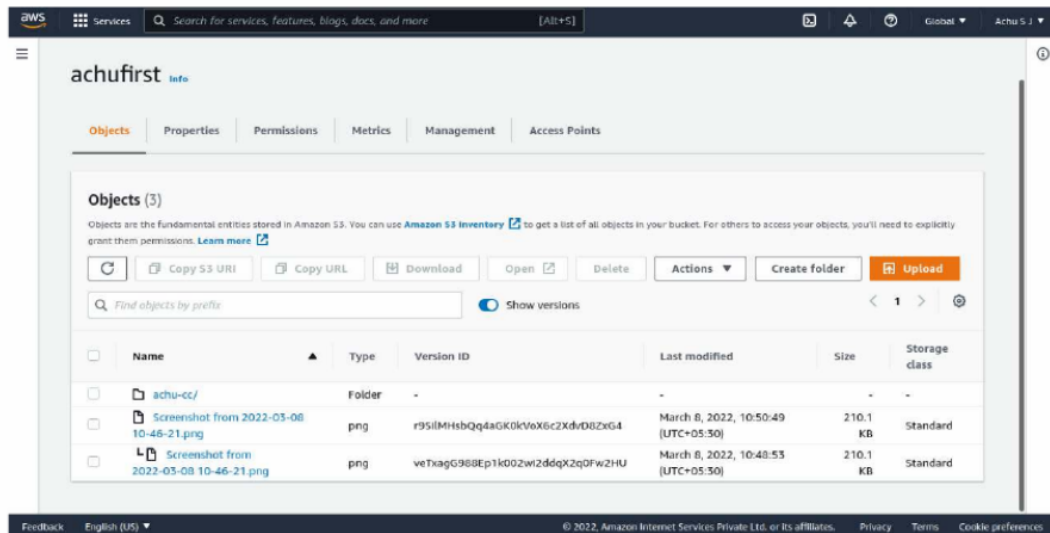
Step 7: Selecting 'achufirst' and uploading files



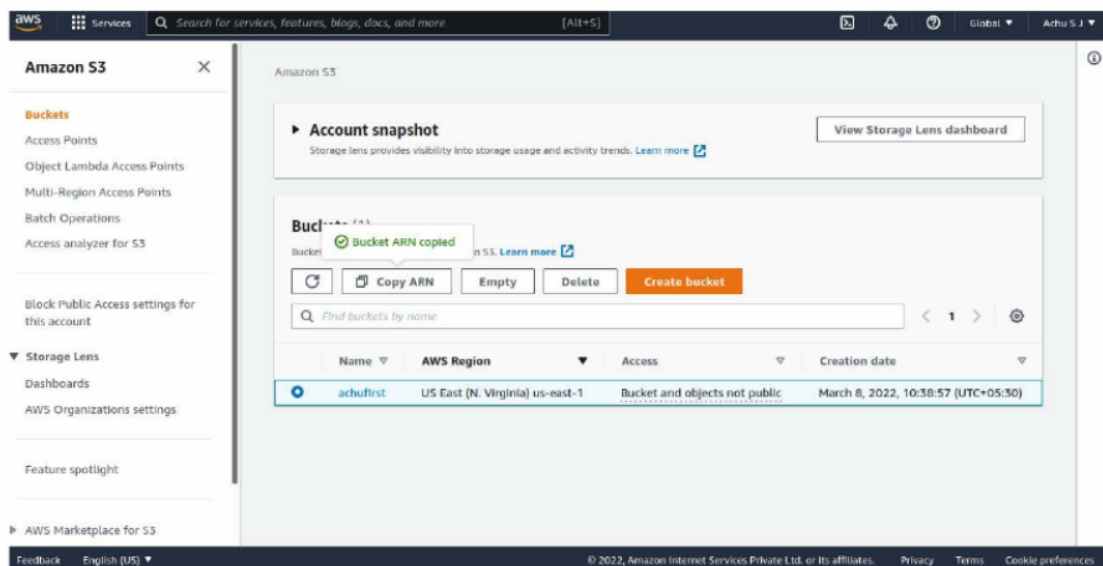
Step 8: Uploaded files successfully



Step 9: After uploading the same png file one by one, clicking on 'Show versions', we can see that the Version ID is different for both



Step 10: Copying ARN for 'achufirst'



Step 11: Going to Permissions -> Edit Bucket Policy -> Policy Generator
Do as shown

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 should follow the following format: arn:aws:s3:::\${BucketName}/\${KeyName}.
Use a comma to separate multiple values.

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

[Add Statement](#)

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 should follow the following format: arn:aws:s3:::\${BucketName}/\${KeyName}.
Use a comma to separate multiple values.

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

[Add Statement](#)

Principal(s)

Use a comma to separate multiple values.

AWS Service ☐ All Services ("*")

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

Actions ☐ All Actions ("*")

Amazon Resource Name (ARN)

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

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

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

Principal(s)	Effect	Action	Resource	Conditions
*	Allow	s3:DeleteObject	arn:aws:s3:::achufirst/*	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.

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.

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ep 12: Click on Generate Policy and the following JSON document is obtained. It is then

Policy JSON Document

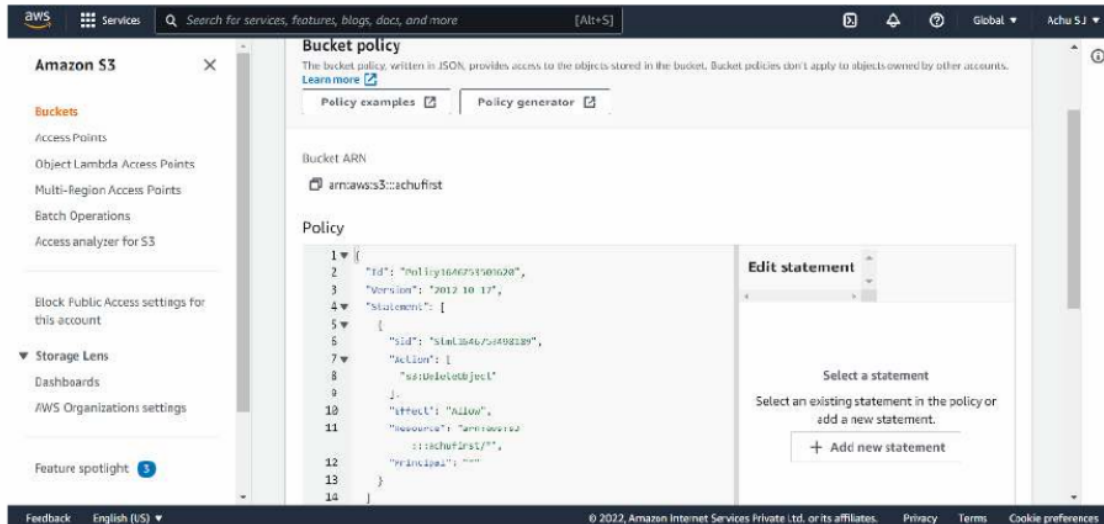
Click below to edit. To save the policy, copy the text below to a text editor.
Changes made below will not be reflected in the policy generator tool.

```
{
  "Id": "Policy1646751501620",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1646751501620",
      "Action": [
        "s3:DeleteObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::achufirst/*",
      "Principal": "*"
    }
  ]
}
```

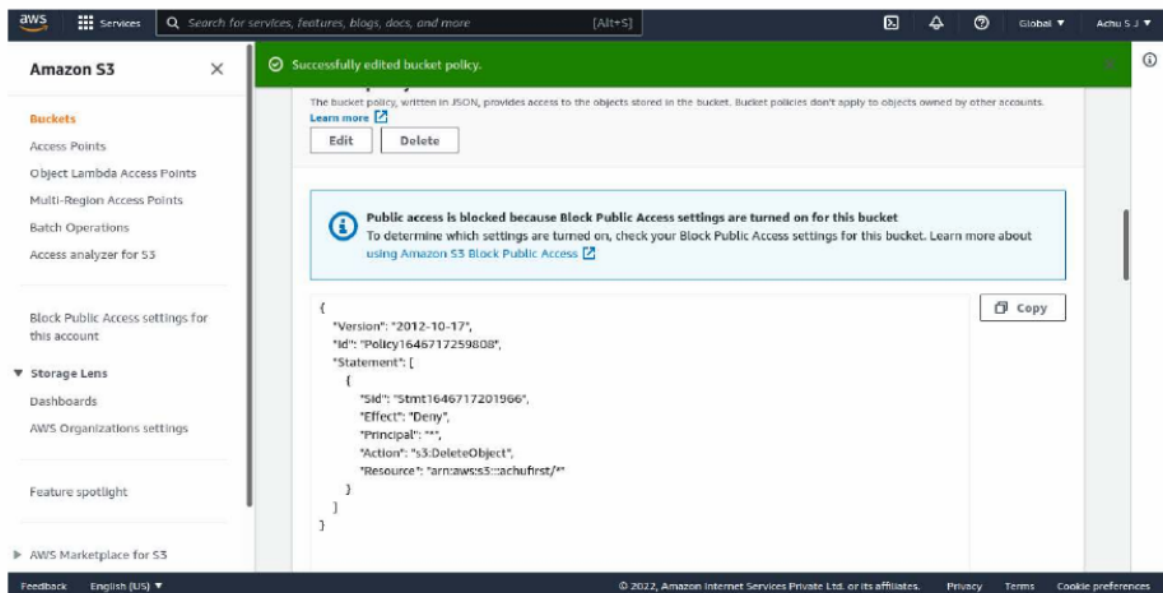
This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that your use is in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is without warranty of any kind, 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.

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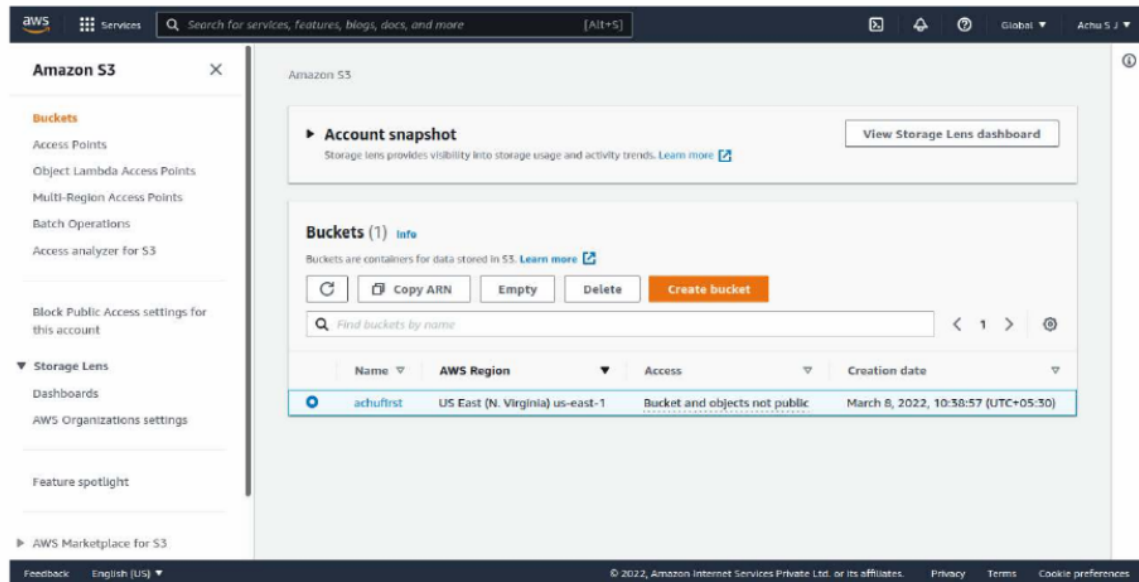
Step 13: The bucket policy is updated and changes are saved.



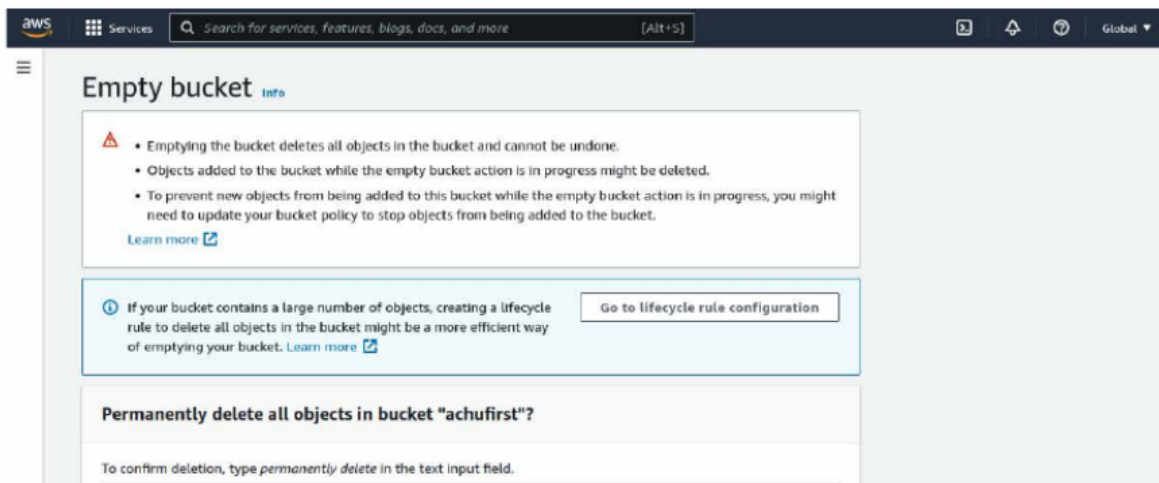
Step 14: Successfully edited bucket policy



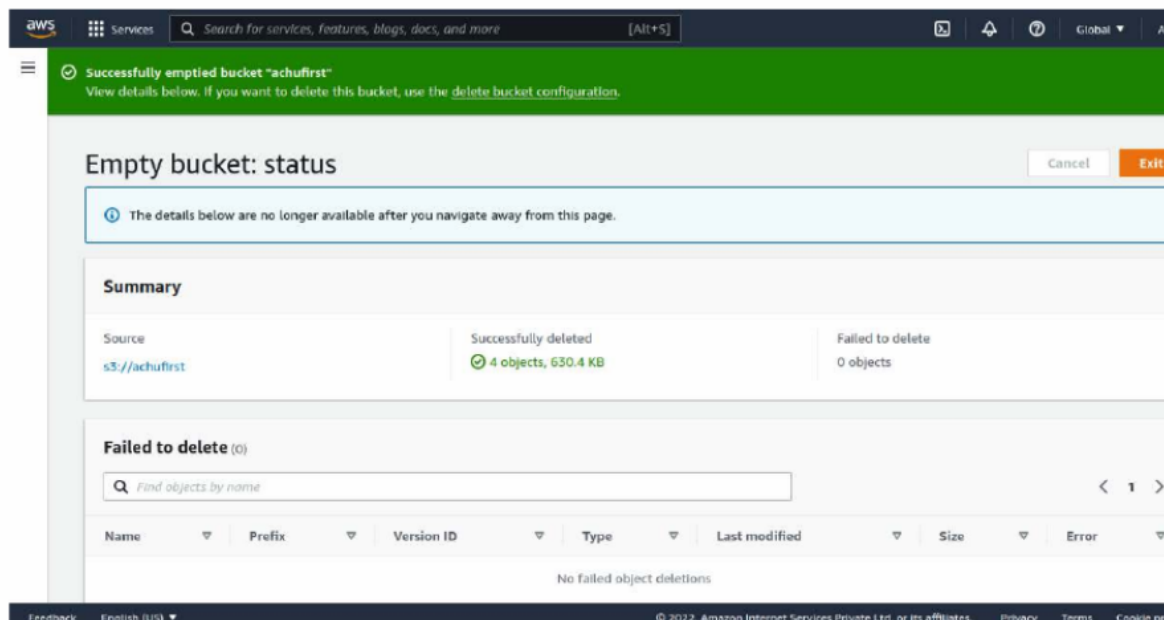
Step 15: Delete objects inside bucket



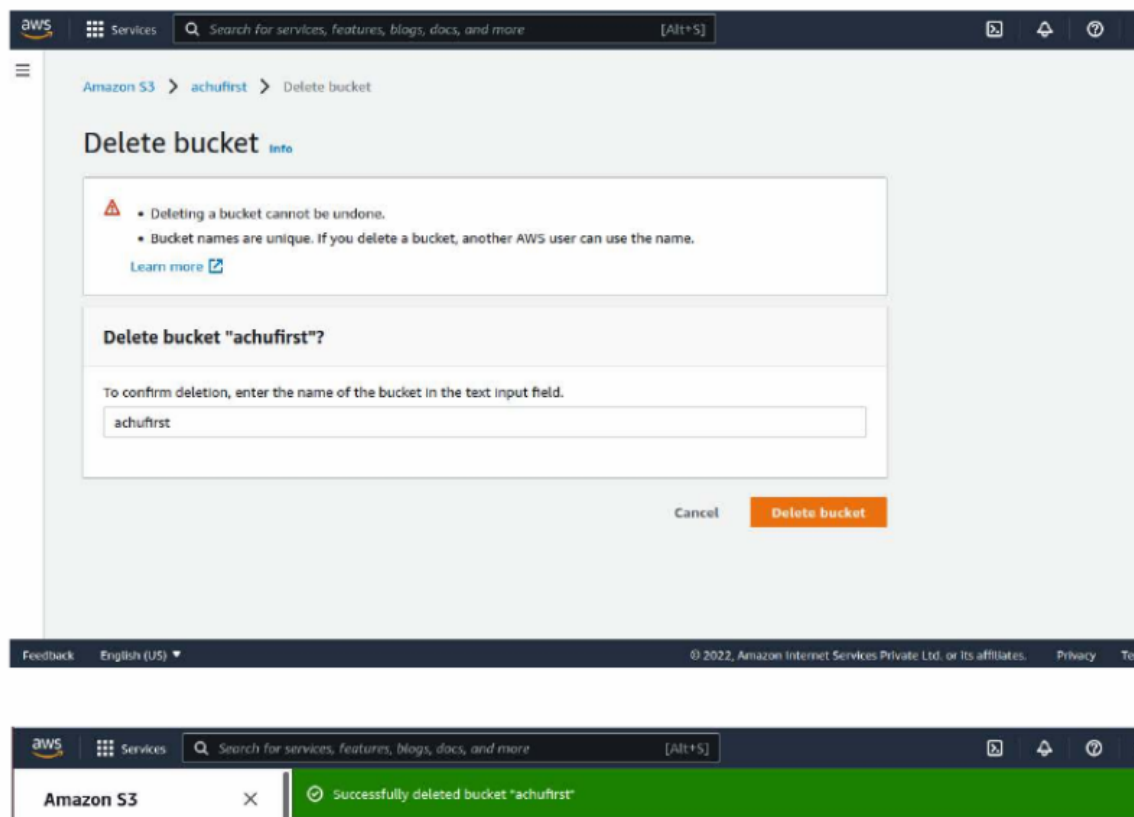
Step 18: Now, emptying bucket



Emptied bucket successfully



Step 19: Deleting bucket



Conclusion:

Thus, we have learnt about Storage as a Service and implemented the same using AWS S3.

