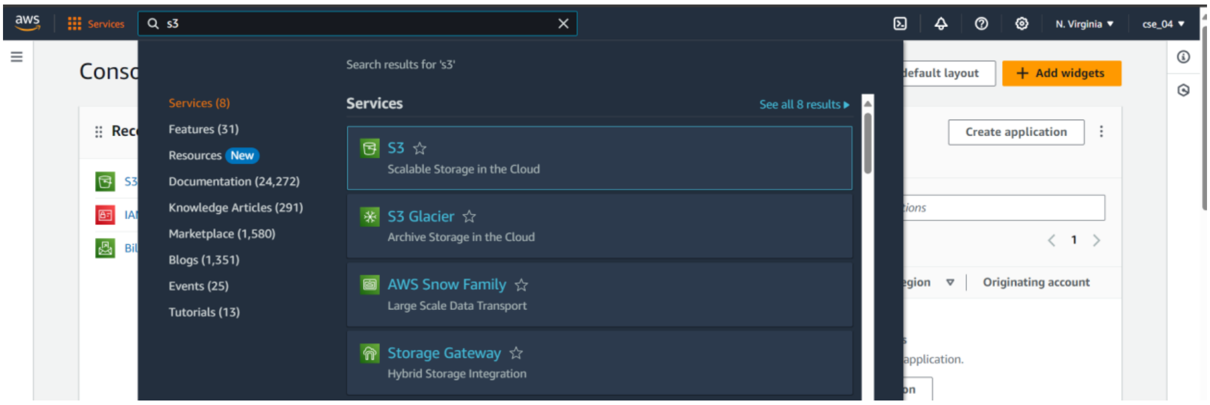
Assignment 4:

Problem Statement: Create a private bucket in AWS Upload a file and check by reassigned URL whether you can access the file or not.

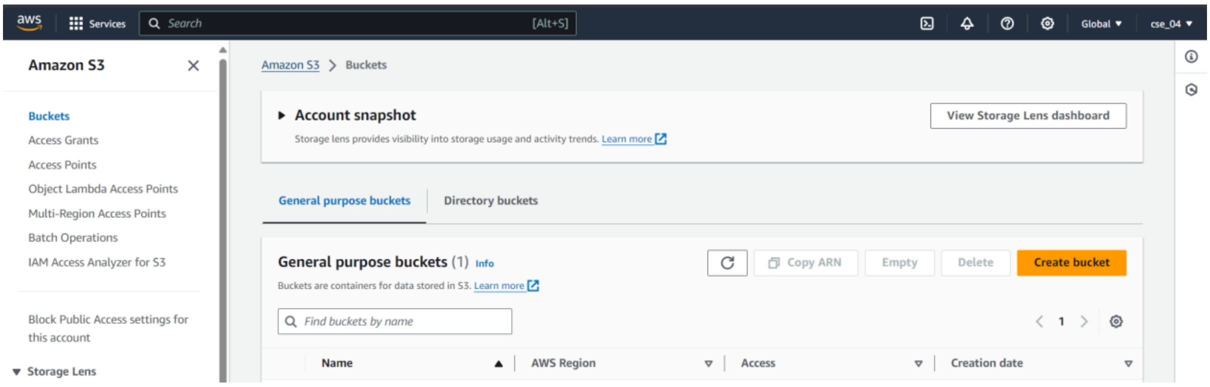
Steps:

Bucket is folder which is used to keep our file. For this these following steps will be followed:

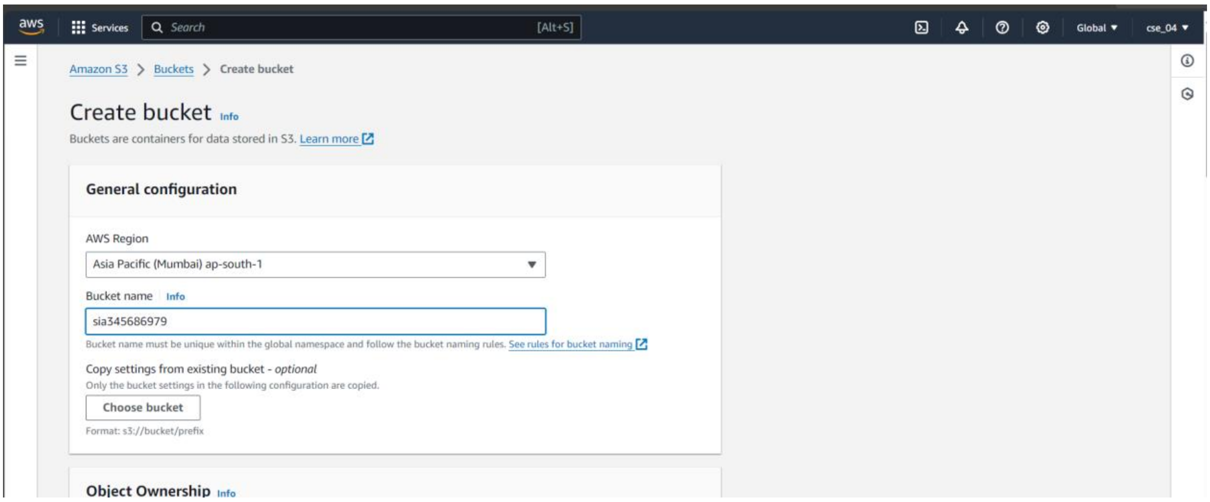
1. At first search **S3** in search bar and click on it.



2. Now click on **Buckets** in left side panel. Now click on **Create bucket.**


aws
Services
Search
[Alt+S]
Global
cse_04
Amazon S3
Buckets
Access Grants
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
IAM Access Analyzer for S3
Block Public Access settings for this account
Storage Lens
Amazon S3 > Buckets
Account snapshot
Storage lens provides visibility into storage usage and activity trends. Learn more
View Storage Lens dashboard
General purpose buckets
Directory buckets
General purpose buckets (1) Info
Buckets are containers for data stored in S3. Learn more
Copy ARN
Empty
Delete
Create bucket
Find buckets by name
Name
AWS Region
Access
Creation date

3. Select **AWS region** Mumbai and give **bucket name** and remember this name should be unique as it is global.



Amazon S3 > Buckets > Create bucket

Create bucket Info

Buckets are containers for data stored in S3. Learn more

General configuration

AWS Region

Asia Pacific (Mumbai) ap-south-1

Bucket name Info

sia345686979

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

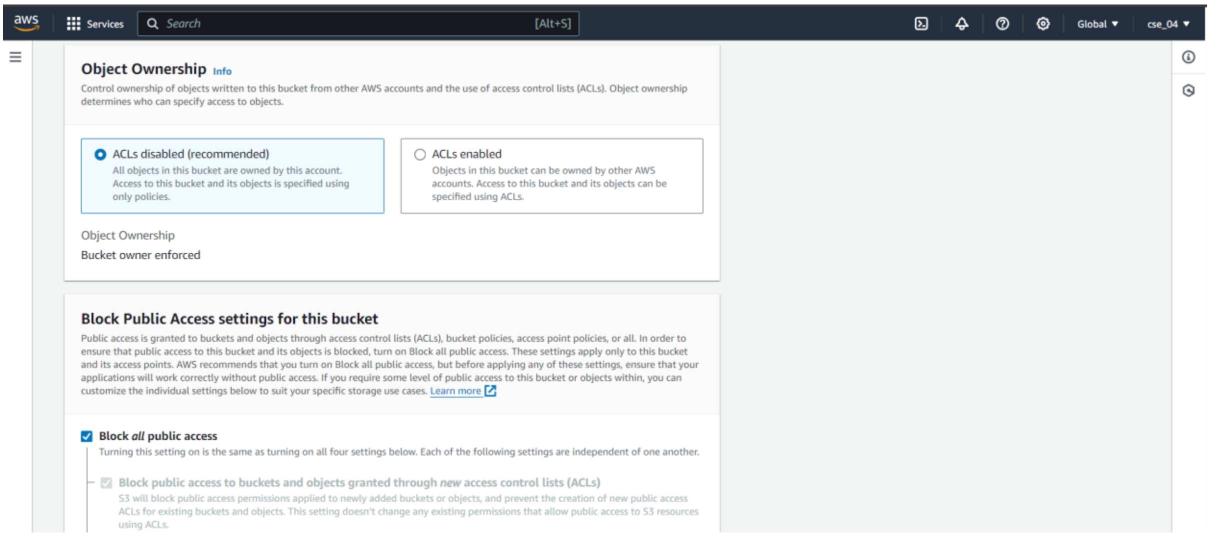
Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

Format: s3://bucket/prefix

Object Ownership Info

4. Now **ACLs(**Access Control List) is disabled. And we have also kept **Block all public access check.**



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.

● ACLs disabled (recommended)
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

○ ACLs enabled
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership

Bucket owner enforced

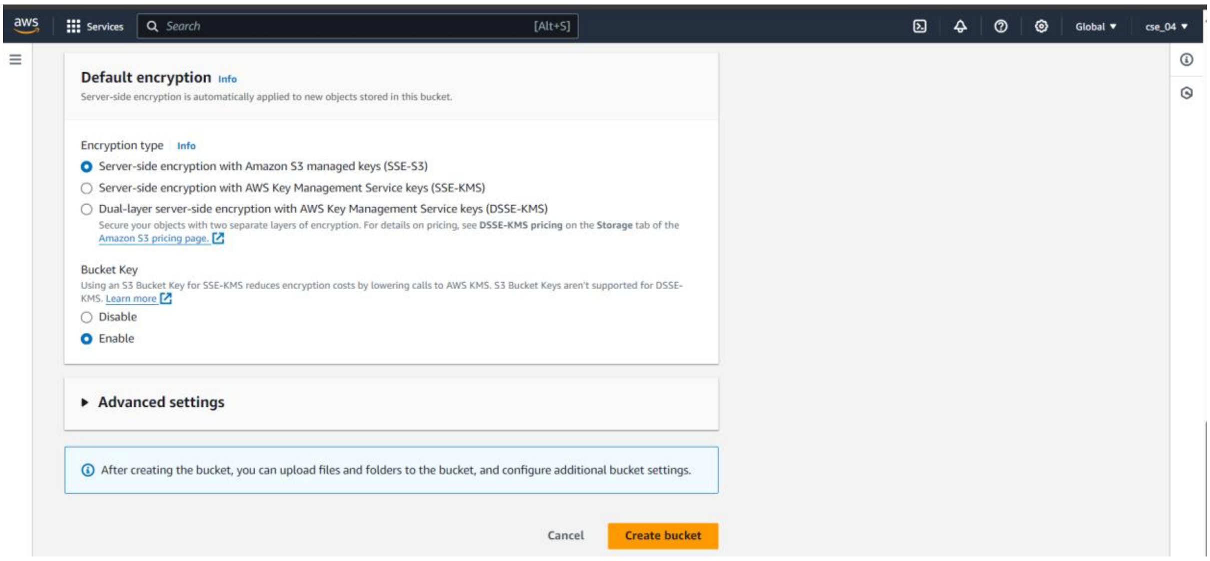
Block Public Access settings for this bucket

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.

5. Now click on **Create bucket.**



Default encryption Info

Server-side encryption is automatically applied to new objects stored in this bucket.

Encryption type Info

● Server-side encryption with Amazon S3 managed keys (SSE-S3)

○ Server-side encryption with AWS Key Management Service keys (SSE-KMS)

○ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)

Secure your objects with two separate layers of encryption. For details on pricing, see **DSSE-KMS pricing** on the **Storage** tab of the Amazon S3 pricing page.

Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. Learn more

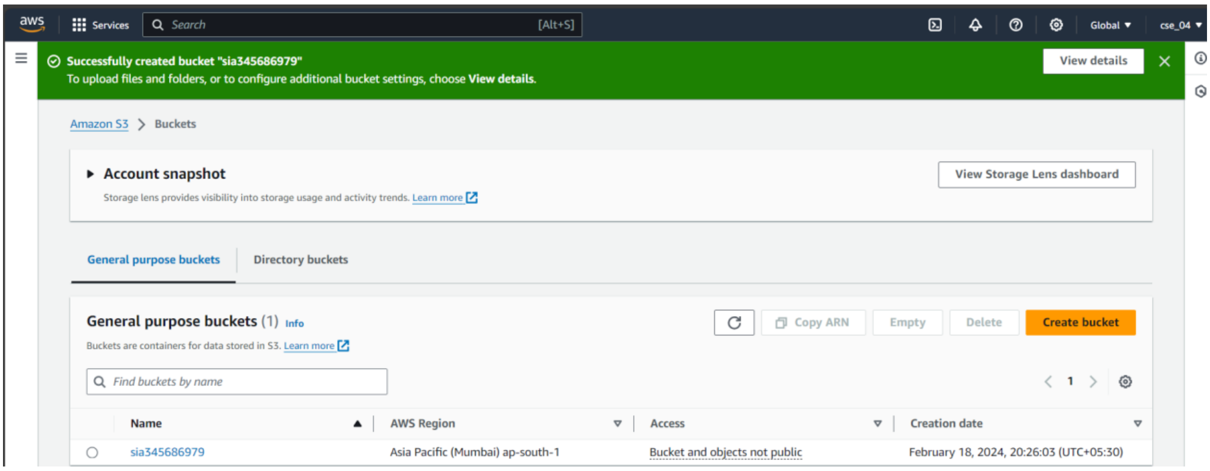
○ Disable

● Enable

▸ **Advanced settings**

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

6. Now click on **newly created bucket.**



Successfully created bucket "sia345686979"

To upload files and folders, or to configure additional bucket settings, choose **View details**.

Amazon S3 > Buckets

▸ **Account snapshot**

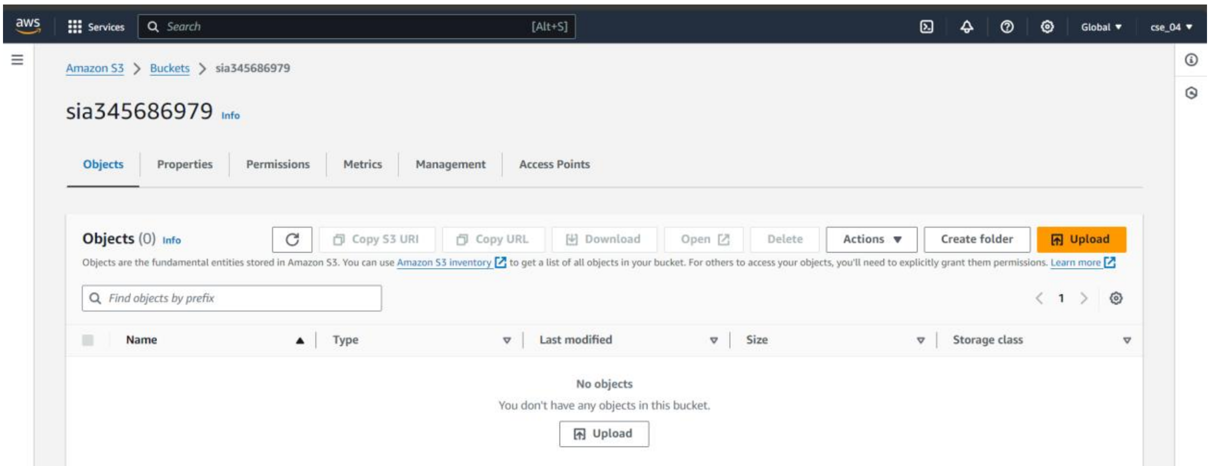
Storage lens provides visibility into storage usage and activity trends. Learn more

General purpose buckets (1) Info

Buckets are containers for data stored in S3. Learn more

	Name	AWS Region	Access	Creation date
○	sia345686979	Asia Pacific (Mumbai) ap-south-1	Bucket and objects not public	February 18, 2024, 20:26:03 (UTC+05:30)

7. Click on **Upload.**



Amazon S3 > Buckets > sia345686979

sia345686979 Info

Objects (0) Info

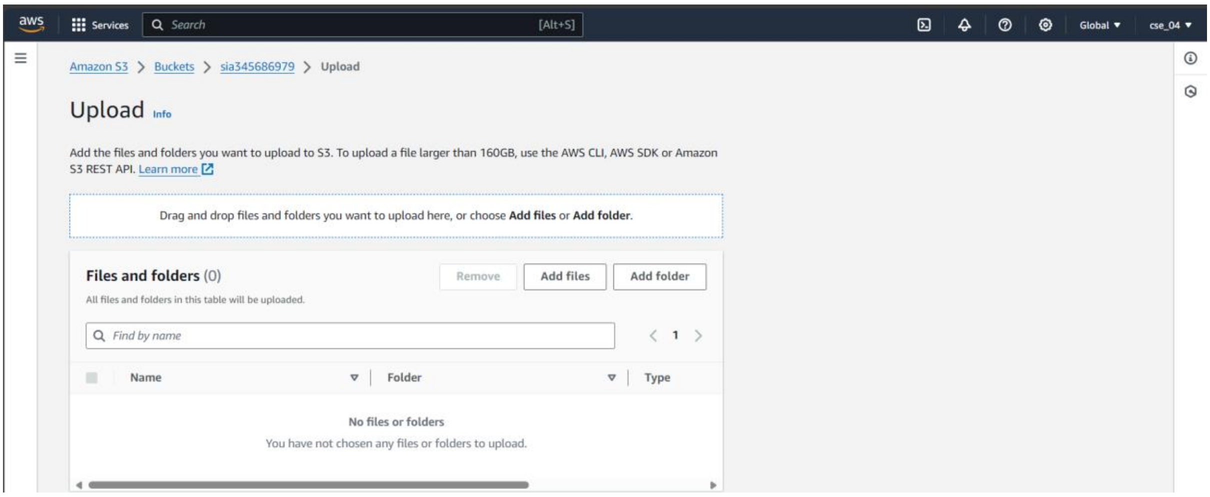
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more

Name	Type	Last modified	Size	Storage class

No objects

You don't have any objects in this bucket.

8. Click on **Add files.**



Amazon S3 > Buckets > sia345686979 > 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 (0)

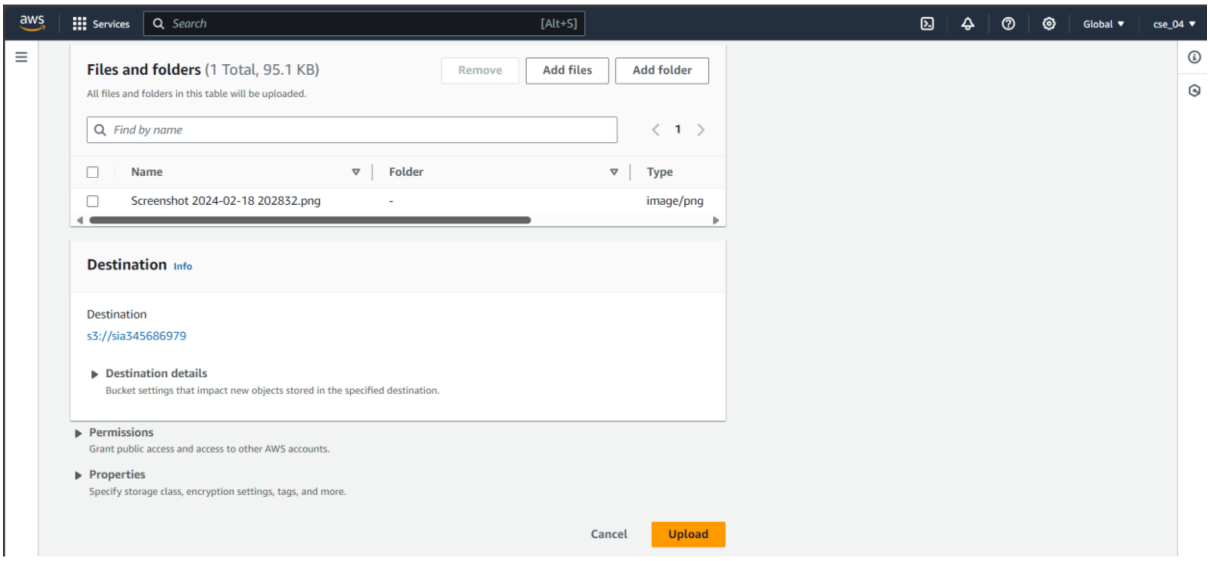
All files and folders in this table will be uploaded.

□	Name	Folder	Type

No files or folders

You have not chosen any files or folders to upload.

9. After selecting file click on **Upload.**



Files and folders (1 Total, 95.1 KB)

All files and folders in this table will be uploaded.

□	Name	Folder	Type
□	Screenshot 2024-02-18 202832.png	-	image/png

Destination Info

Destination

s3://sia345686979

▶ Destination details

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

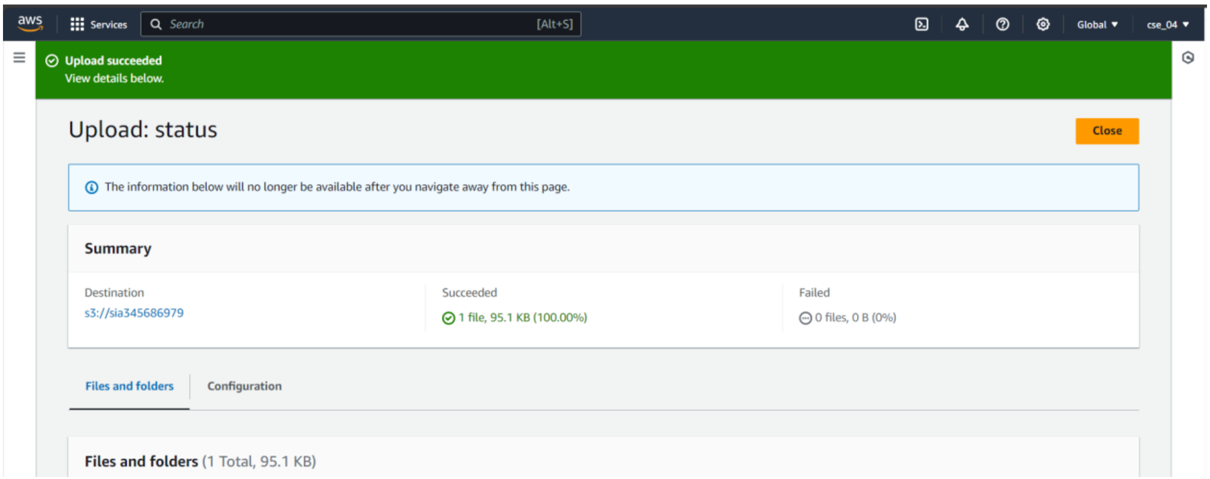
▶ Permissions

Grant public access and access to other AWS accounts.

▶ Properties

Specify storage class, encryption settings, tags, and more.

10. Now you can see Upload succeeded. Click on **close.**



Upload succeeded

View details below.

Upload: status

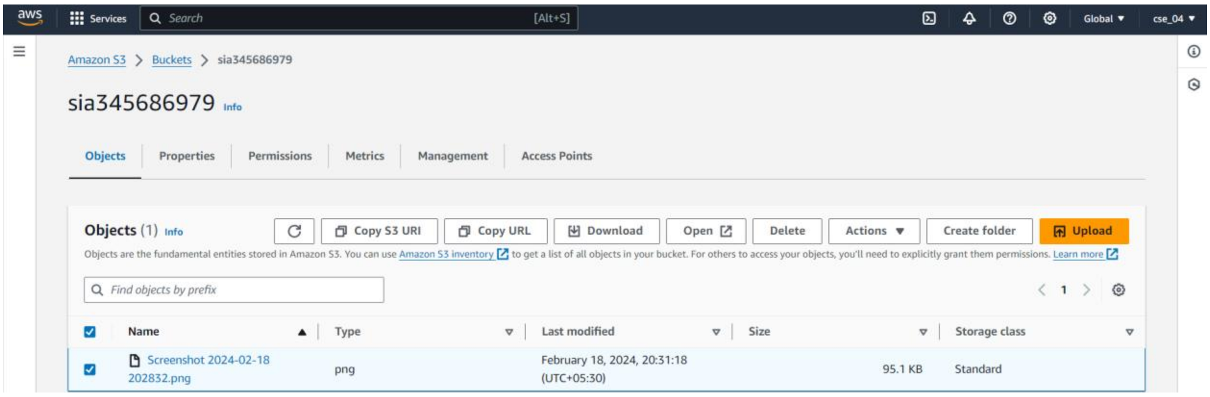
The information below will no longer be available after you navigate away from this page.

Summary

Destination	Succeeded	Failed
s3://sia345686979	1 file, 95.1 KB (100.00%)	0 files, 0 B (0%)

Files and folders (1 Total, 95.1 KB)

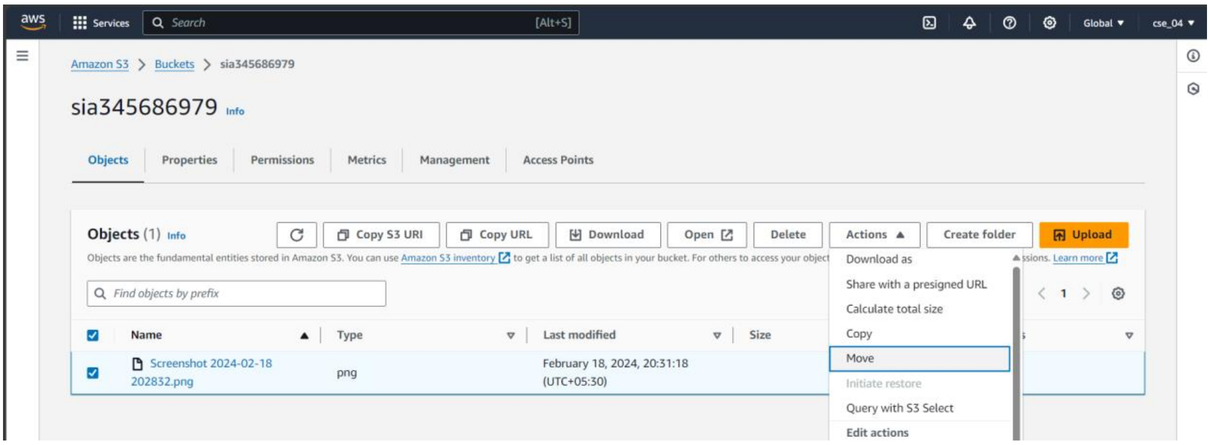
11. Go back to Buckets. Click on **bucket name.** and click on **checkbox of uploaded file name.**



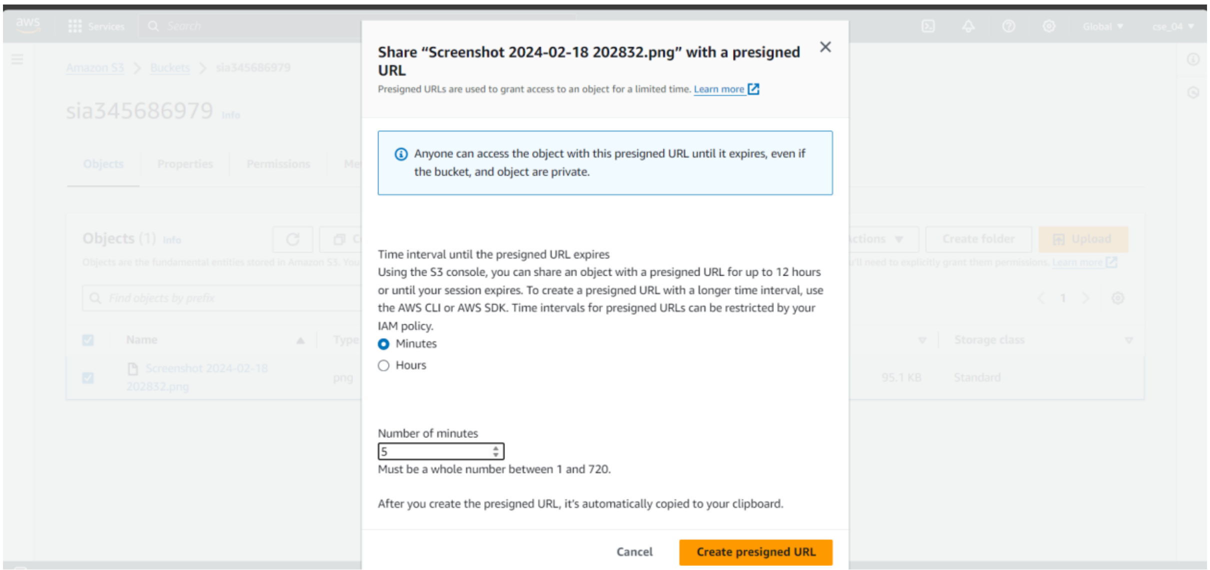
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more

☑	Name	Type	Last modified	Size	Storage class
☑	Screenshot 2024-02-18 202832.png	png	February 18, 2024, 20:31:18 (UTC+05:30)	95.1 KB	Standard

12. Click on **Actions** dropdown and click on **share with a presigned URL.**



13. Select time intervals for presigned URL as Minute. And give 5 as number of minutes and click on **Create presigned URL.**



Share "Screenshot 2024-02-18 202832.png" with a presigned URL

Presigned URLs are used to grant access to an object for a limited time. Learn more

Anyone can access the object with this presigned URL until it expires, even if the bucket, and object are private.

Time interval until the presigned URL expires

Using the S3 console, you can share an object with a presigned URL for up to 12 hours or until your session expires. To create a presigned URL with a longer time interval, use the AWS CLI or AWS SDK. Time intervals for presigned URLs can be restricted by your IAM policy.

● Minutes

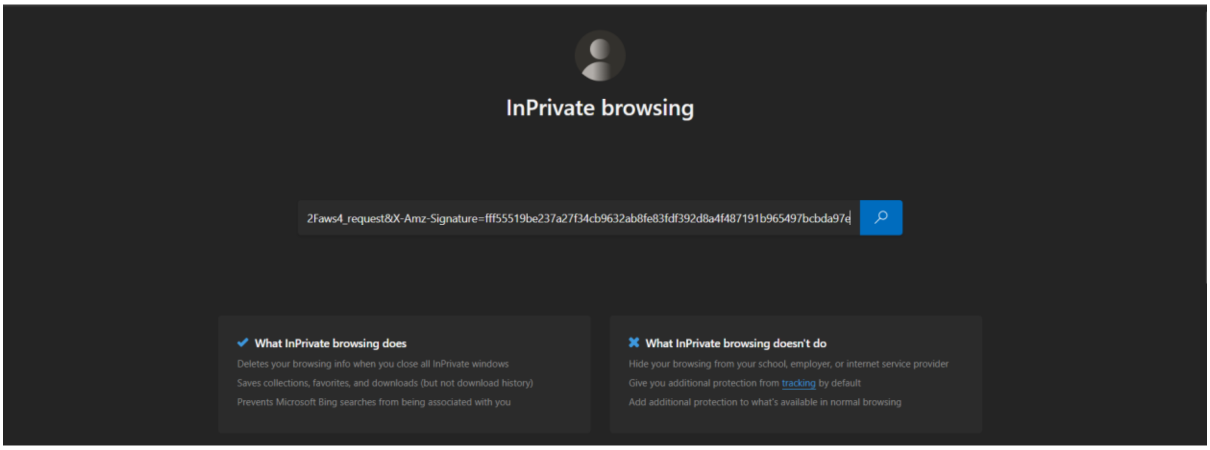
○ Hours

Number of minutes: 5

Must be a whole number between 1 and 720.

After you create the presigned URL, it's automatically copied to your clipboard.

14. Now paste this URL in incognito mode and as we have given 5 minutes time interval so after 5 minutes no one can access it again. After pressing in incognito you can download the file.



InPrivate browsing

2Faws4_request&X-Amz-Signature=fff55519be237a27f34cb9632ab8fe83fdf392d8a4f487191b965497bcbda97e

✓ What InPrivate browsing does

Deletes your browsing info when you close all InPrivate windows

Saves collections, favorites, and downloads (but not download history)

Prevents Microsoft Bing searches from being associated with you

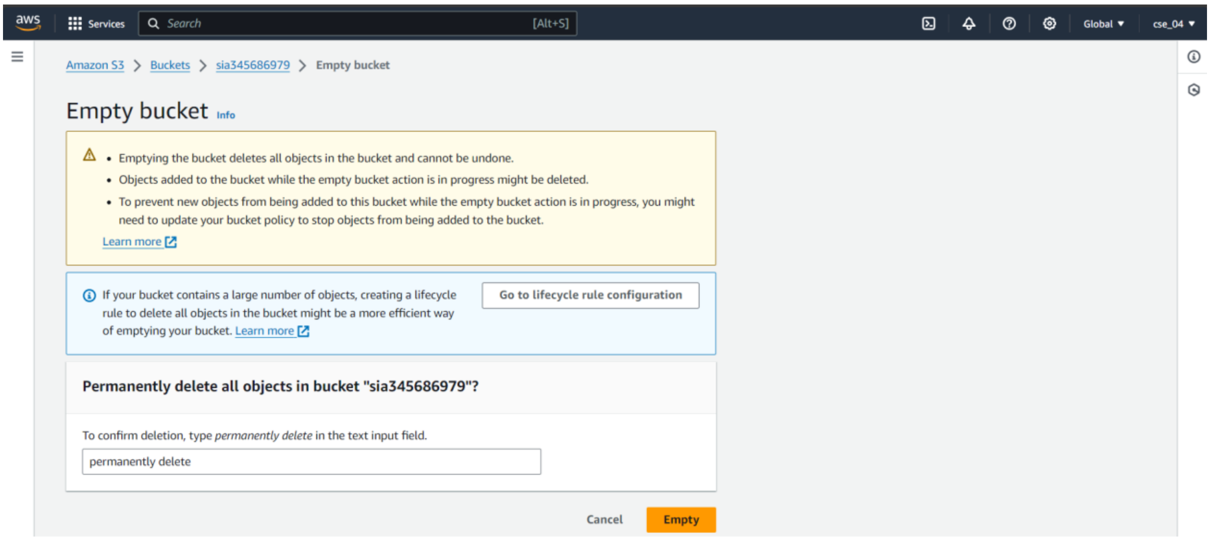
✖ What InPrivate browsing doesn't do

Hide your browsing from your school, employer, or internet service provider

Give you additional protection from tracking by default

Add additional protection to what's available in normal browsing

15. Now to delete it at first click on **bucket option name** and then at first **empty** it. And type permanently **delete**.



Amazon S3 > Buckets > sia345686979 > Empty bucket

Empty bucket Info

- Emptying the bucket deletes all objects in the bucket and cannot be undone.
- Objects added to the bucket while the empty bucket action is in progress might be deleted.
- To prevent new objects from being added to this bucket while the empty bucket action is in progress, you might need to update your bucket policy to stop objects from being added to the bucket.

Learn more

If your bucket contains a large number of objects, creating a lifecycle rule to delete all objects in the bucket might be a more efficient way of emptying your bucket. Learn more

Go to lifecycle rule configuration

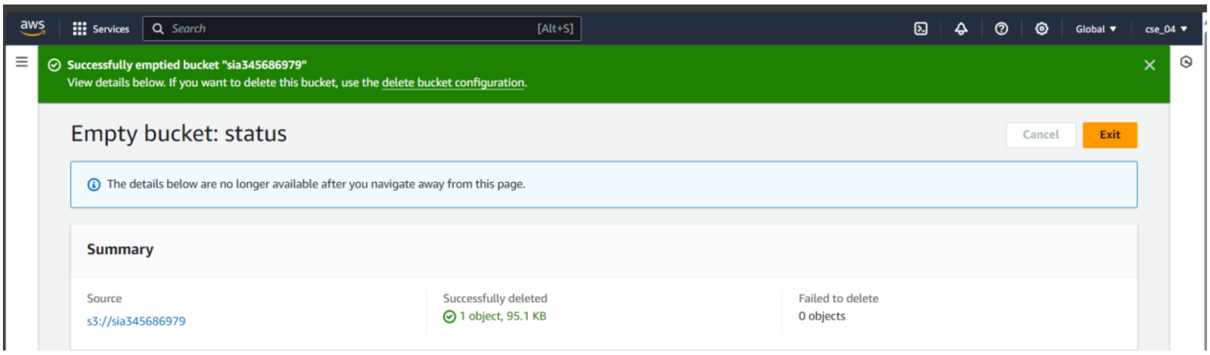
Permanently delete all objects in bucket "sia345686979"?

To confirm deletion, type *permanently delete* in the text input field.

permanently delete

Cancel Empty

16. After successful deletion press on **exit.**



Successfully emptied bucket "sia345686979"

View details below. If you want to delete this bucket, use the delete bucket configuration.

Empty bucket: status

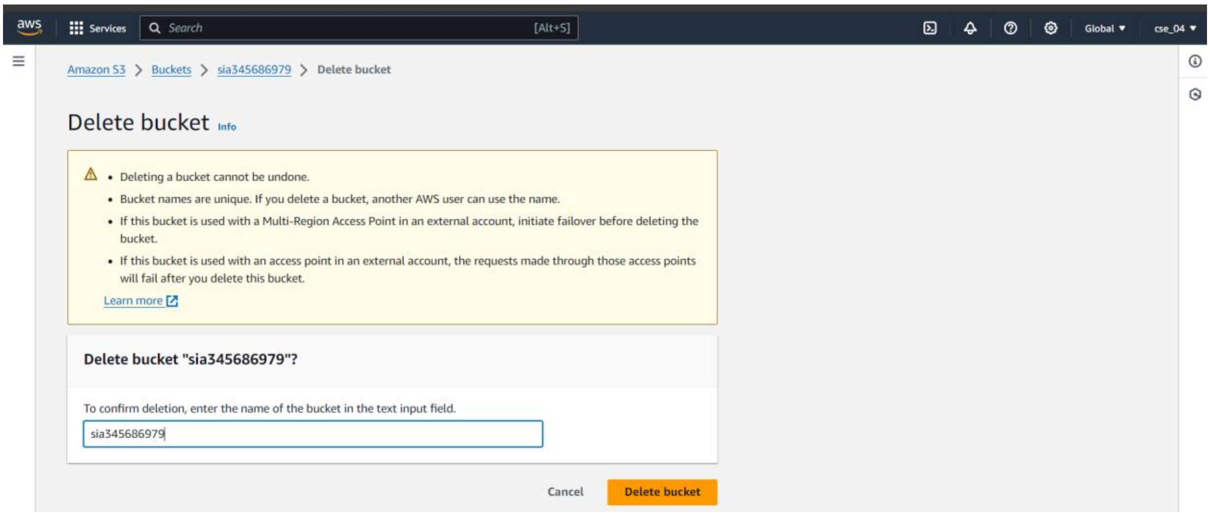
Cancel Exit

The details below are no longer available after you navigate away from this page.

Summary

Source	Successfully deleted	Failed to delete
s3://sia345686979	1 object, 95.1 KB	0 objects

17. Now press on **Delete**. And write confirmation and click on **Delete bucket.**



Delete bucket Info

- Deleting a bucket cannot be undone.
- Bucket names are unique. If you delete a bucket, another AWS user can use the name.
- If this bucket is used with a Multi-Region Access Point in an external account, initiate failover before deleting the bucket.
- If this bucket is used with an access point in an external account, the requests made through those access points will fail after you delete this bucket.

Learn more

Delete bucket "sia345686979"?

To confirm deletion, enter the name of the bucket in the text input field.

sia345686979

18. Thus successfully bucket will be deleted.