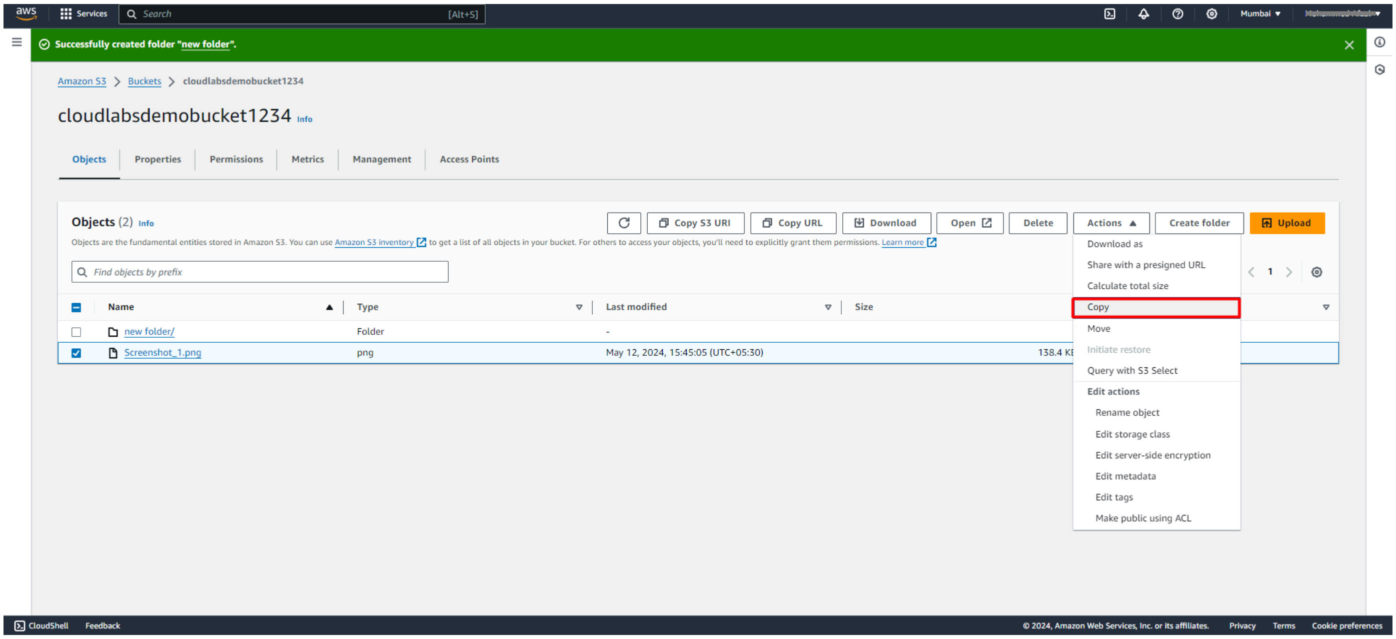
Exercise 3: Managing Objects in Your S3 Bucket

In this lab, you will learn how to **manage objects** in your S3 bucket by performing various operations such as **copying, moving, and deleting objects**.

Additionally, you will gain an understanding of **object permissions**, including **Access Control Lists (ACLs)** and Bucket Policies.

Task 1. Copying Objects from one Bucket/folder to another:

- Select the **object(s)** you want to copy within your S3 bucket.
- Click on the **"Actions"** dropdown menu and choose **"Copy."**



Successfully created folder "new folder".

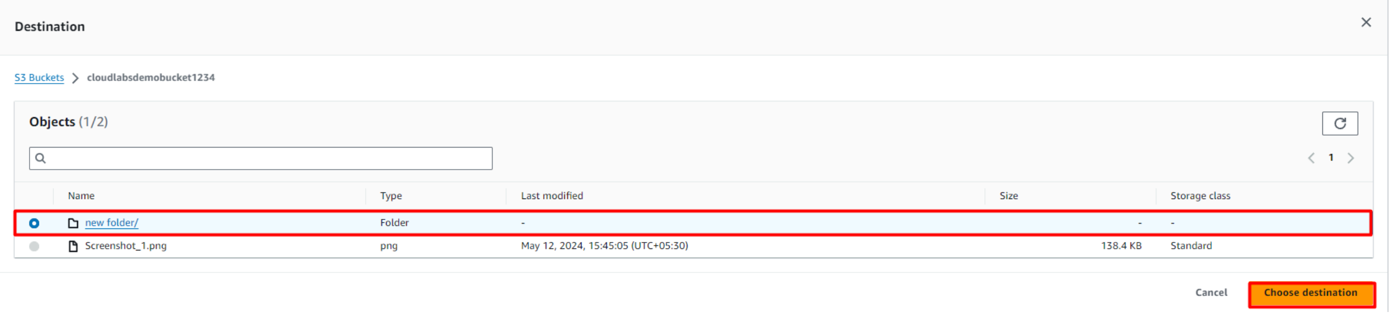
cloudlabsdemobucket1234

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
☐	new folder/	Folder	-	
☑	Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KI

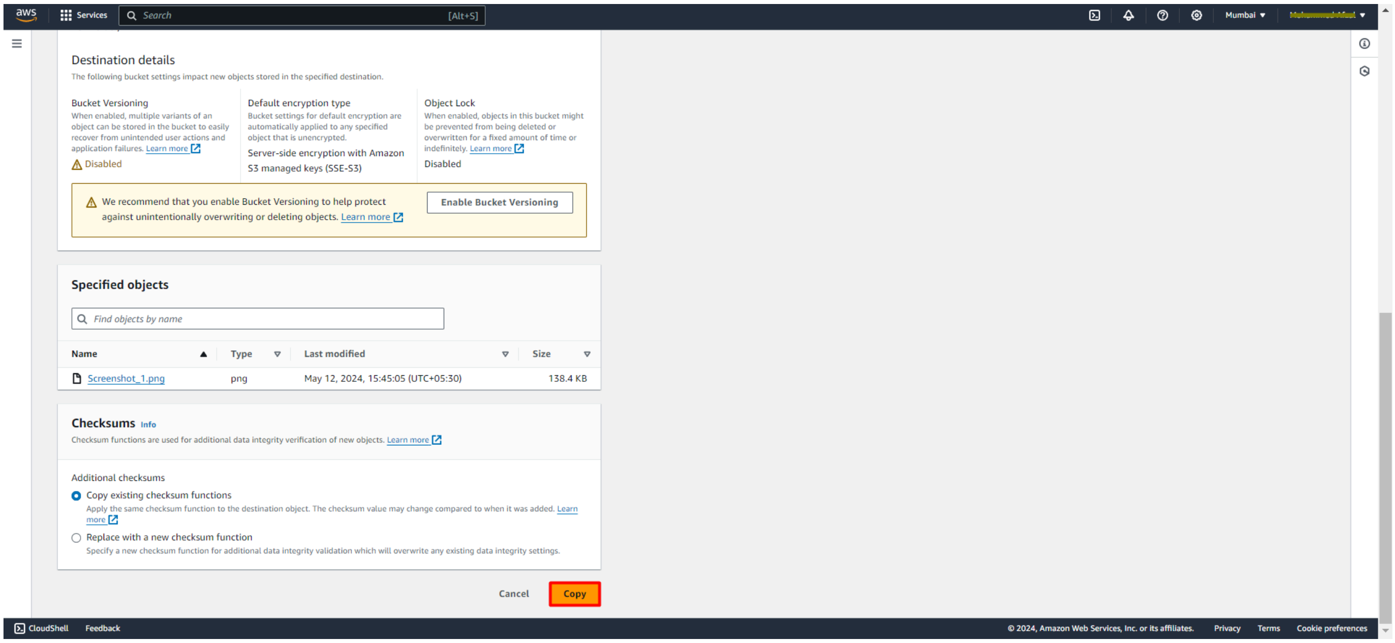
- Select the **destination bucket** and **folder** (if applicable) for the copied objects.



Objects (1/2)

	Name	Type	Last modified	Size	Storage class
●	new folder/	Folder	-	-	-
○	Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KB	Standard

- Review and confirm the copy operation.



Destination details

The following bucket settings impact new objects stored in the specified destination.

Bucket Versioning
When enabled, multiple variants of an object can be stored in the bucket to easily recover from unintended user actions and application failures. Learn more
⚠ Disabled

Default encryption type
Bucket settings for default encryption are automatically applied to any specified object that is unencrypted.
Server-side encryption with Amazon S3 managed keys (SSE-S3)

Object Lock
When enabled, objects in this bucket might be prevented from being deleted or overwritten for a fixed amount of time or indefinitely. Learn more
Disabled

⚠ We recommend that you enable Bucket Versioning to help protect against unintentionally overwriting or deleting objects. Learn more

Specified objects

Name	Type	Last modified	Size
Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KB

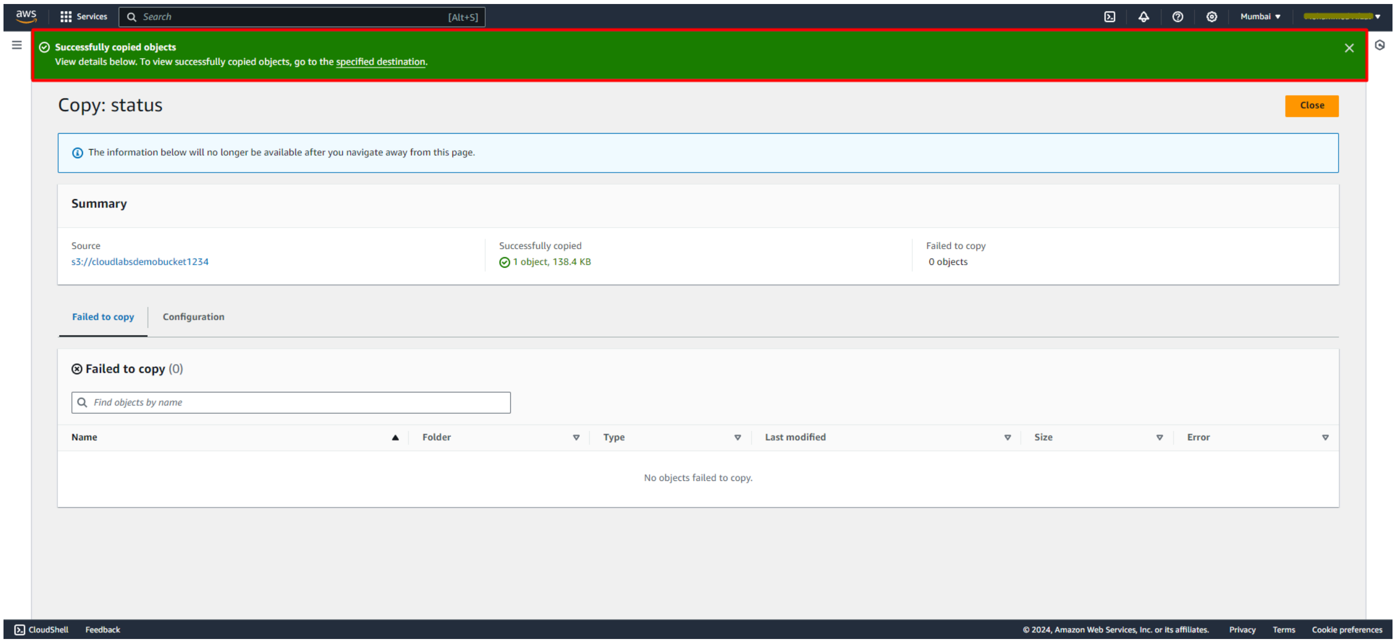
Checksums Info

Checksum functions are used for additional data integrity verification of new objects. Learn more

Additional checksums

● Copy existing checksum functions
Apply the same checksum function to the destination object. The checksum value may change compared to when it was added. Learn more

○ Replace with a new checksum function
Specify a new checksum function for additional data integrity validation which will overwrite any existing data integrity settings.



Successfully copied objects
View details below. To view successfully copied objects, go to the specified destination.

Copy: status

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

Summary

Source	Successfully copied	Failed to copy
s3://cloudlabsdemobucket1234	1 object, 138.4 KB	0 objects

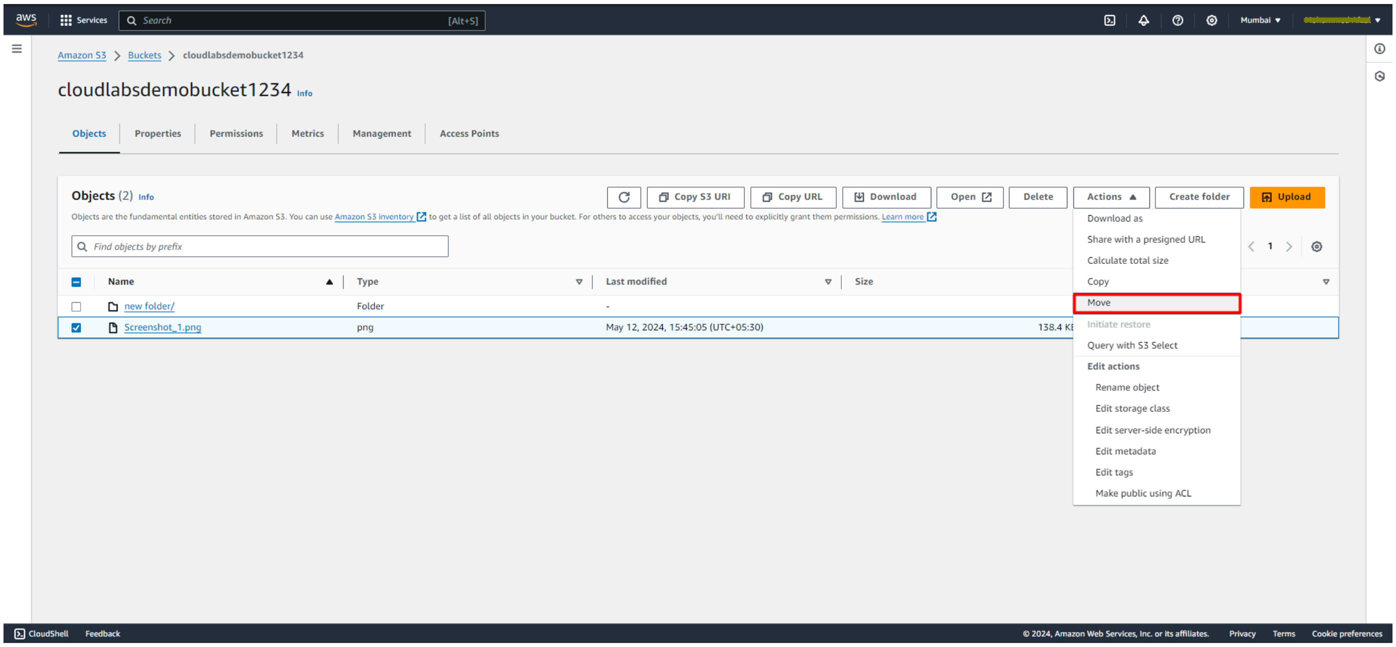
Failed to copy (0)

Name	Folder	Type	Last modified	Size	Error

No objects failed to copy.

Task 2. Moving Objects from one Bucket/folder to another:

- Select the object(s) you want to move within your S3 bucket.
- Click on the **"Actions"** dropdown menu and choose **"Move."**



Amazon S3 > Buckets > cloudlabsdemobucket1234

cloudlabsdemobucket1234 Info

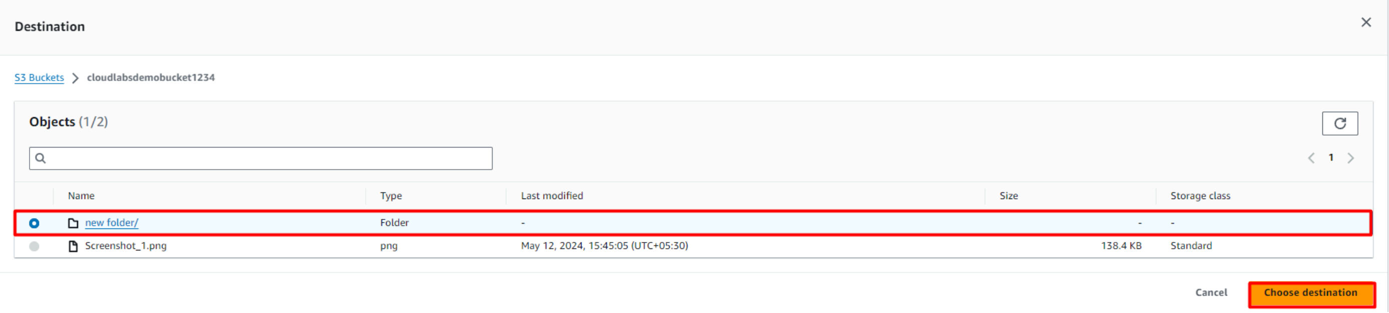
Objects (2) Info

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

Find objects by prefix

☑	Name ▲	Type	Last modified	Size
☐	new folder/	Folder	-	
☑	Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KI

- Select the **destination bucket** and **folder** (if applicable) for the moved objects.

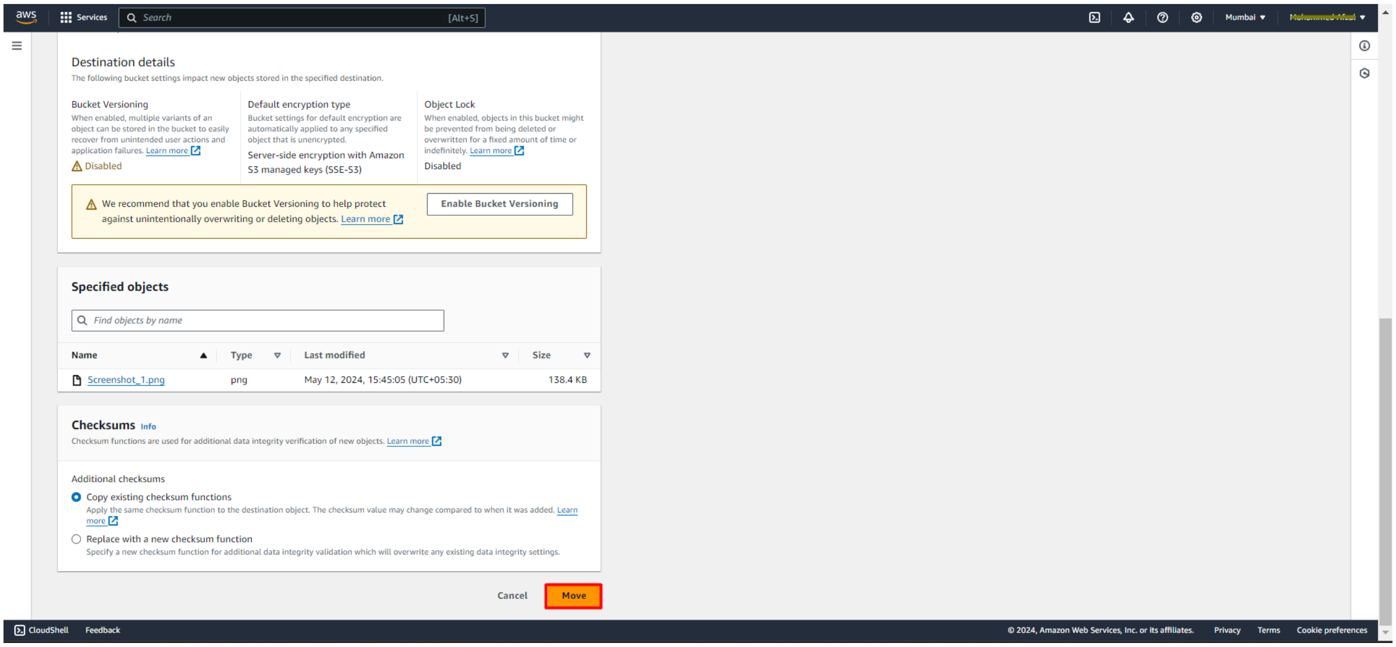


S3 Buckets > cloudlabsdemobucket1234

Objects (1/2)

	Name	Type	Last modified	Size	Storage class
●	new folder/	Folder	-	-	-
○	Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KB	Standard

- Review and click on **move** to move operation.



Destination details

The following bucket settings impact new objects stored in the specified destination.

Bucket Versioning

When enabled, multiple variants of an object can be stored in the bucket to easily recover from unintended user actions and application failures. Learn more

⚠ Disabled

Default encryption type

Bucket settings for default encryption are automatically applied to any specified object that is unencrypted.

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

Object Lock

When enabled, objects in this bucket might be prevented from being deleted or overwritten for a fixed amount of time or indefinitely. Learn more

Disabled

⚠ We recommend that you enable Bucket Versioning to help protect against unintentionally overwriting or deleting objects. Learn more

Specified objects

Find objects by name

Name ▲	Type	Last modified	Size
Screenshot_1.png	png	May 12, 2024, 15:45:05 (UTC+05:30)	138.4 KB

Checksums Info

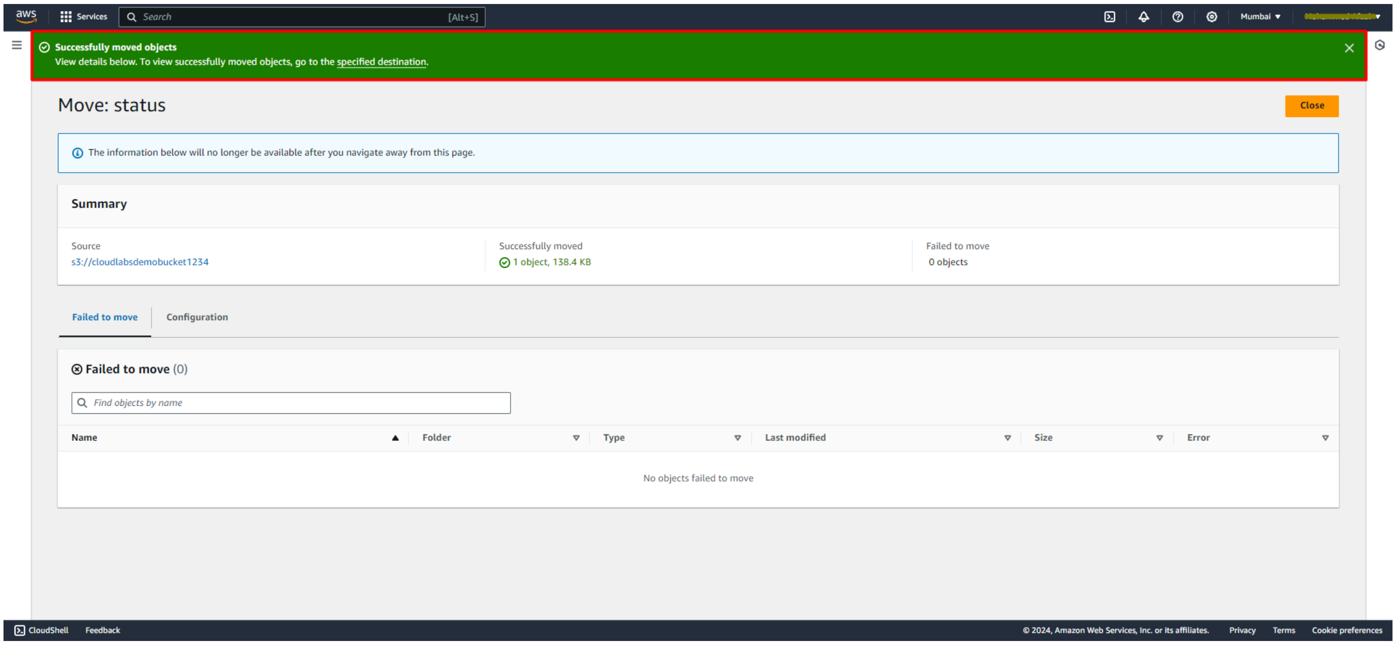
Checksum functions are used for additional data integrity verification of new objects. Learn more

Additional checksums

● Copy existing checksum functions
Apply the same checksum function to the destination object. The checksum value may change compared to when it was added. Learn more

○ Replace with a new checksum function
Specify a new checksum function for additional data integrity validation which will overwrite any existing data integrity settings.

- Now you have succesfully **moved** an object into the new folder



Successfully moved objects
View details below. To view successfully moved objects, go to the specified destination.

Move: status

Close

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

Summary

Source	Successfully moved	Failed to move
s3://cloudlabsdemobucket1234	1 object, 138.4 KB	0 objects

Failed to move | Configuration

Failed to move (0)

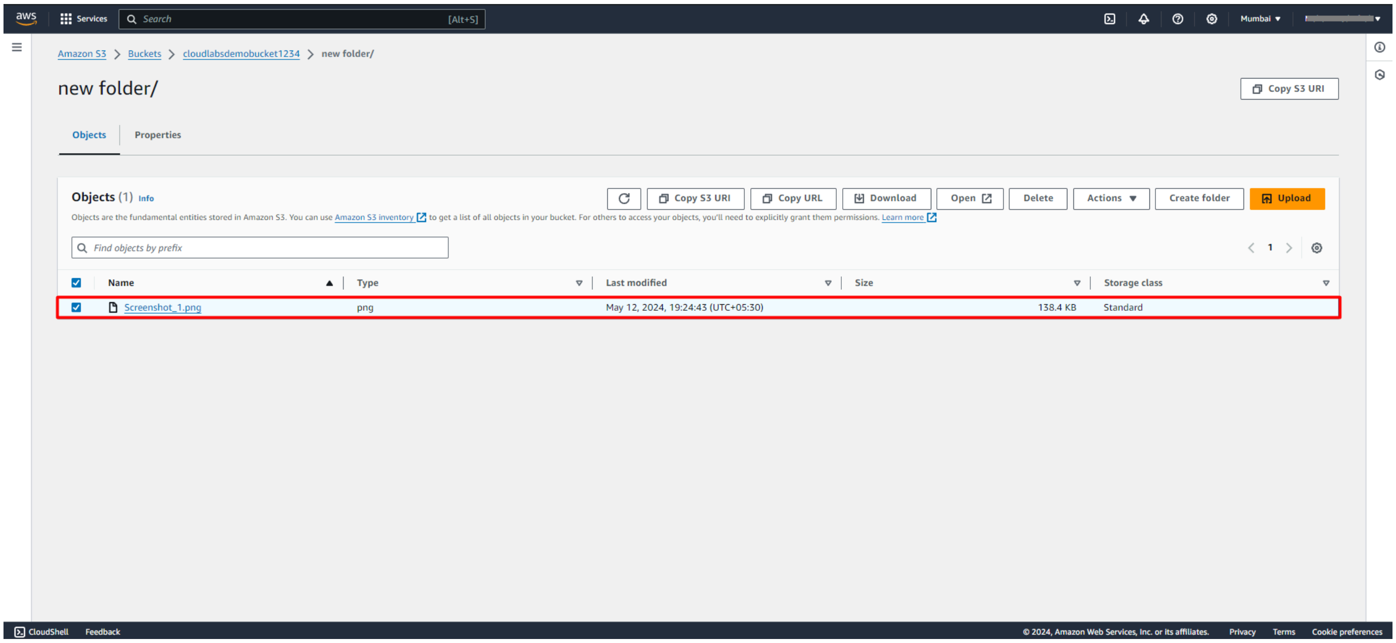
Find objects by name

Name	Folder	Type	Last modified	Size	Error

No objects failed to move

Task 3. Deleting Objects present in Bucket/folder:

- Select the **object(s)** you want to **delete** within your S3 bucket.



Amazon S3 > Buckets > cloudlabsdemobucket1234 > new folder/

new folder/

Objects | Properties

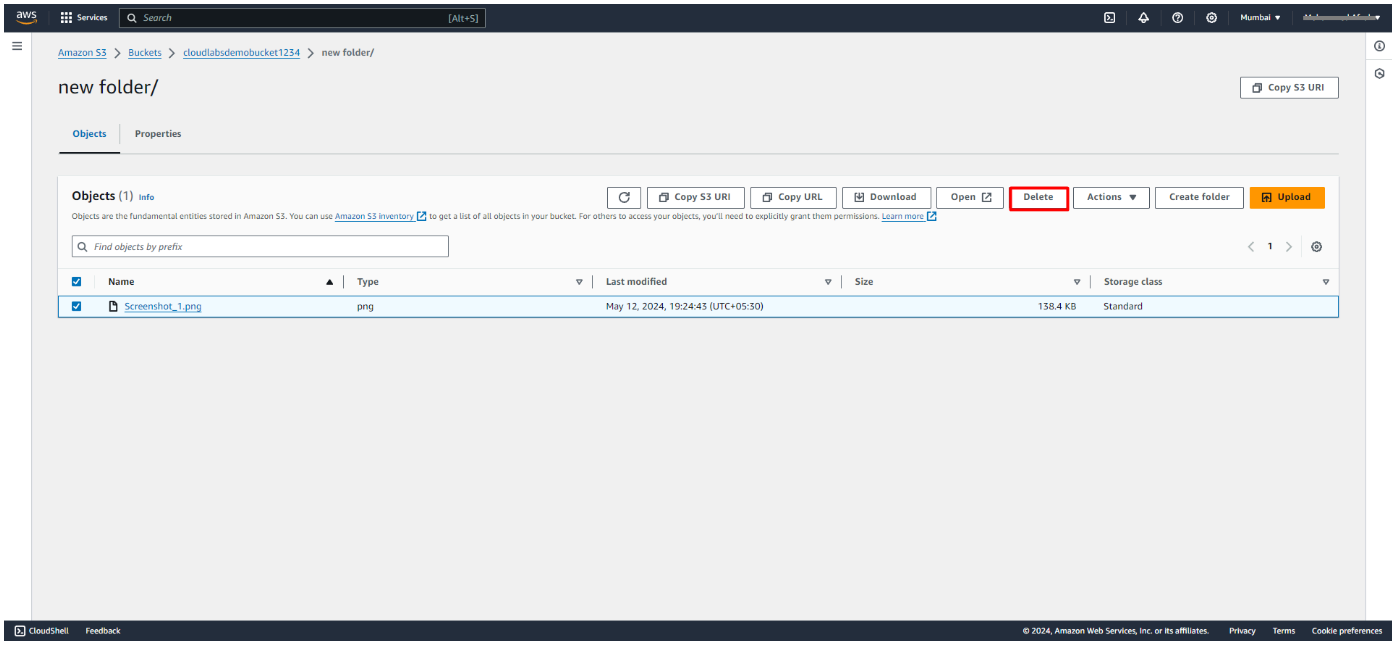
Objects (1) Info

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

Find objects by prefix

☑	Name	Type	Last modified	Size	Storage class
☑	Screenshot_1.png	png	May 12, 2024, 19:24:43 (UTC+05:30)	138.4 KB	Standard

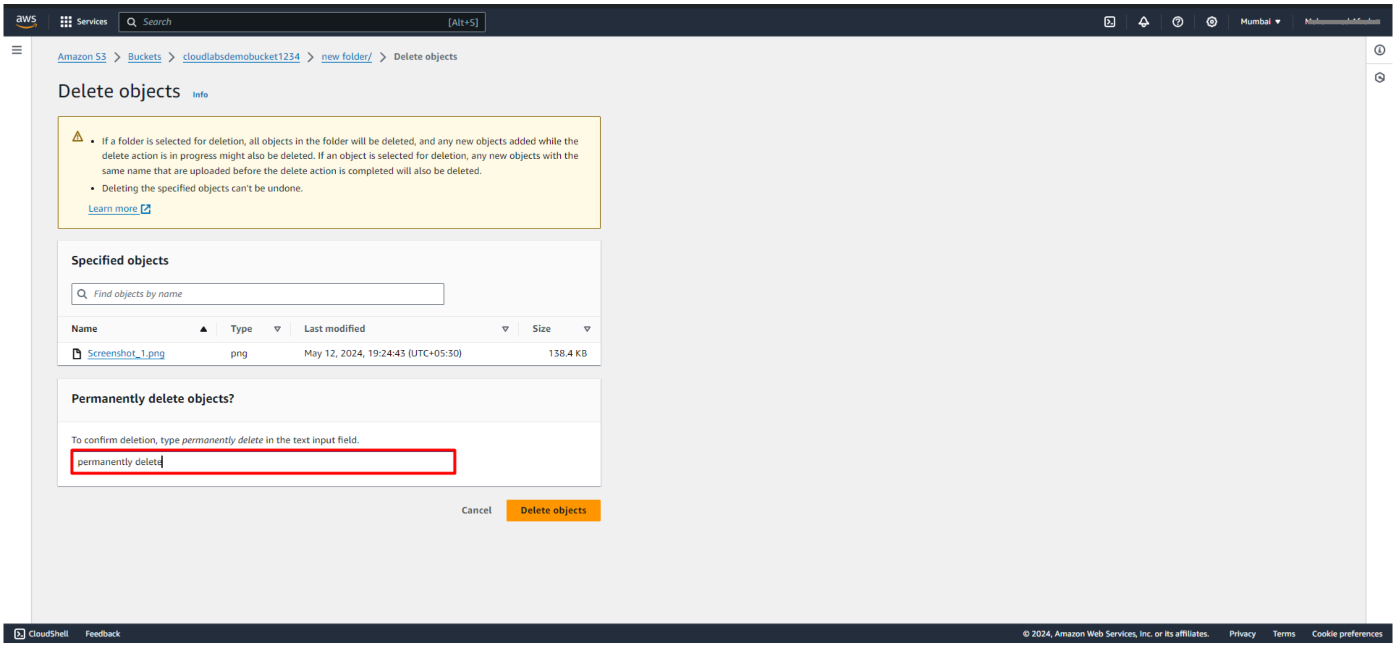
- Click on **"Delete"** option.



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_1.png	png	May 12, 2024, 19:24:43 (UTC+05:30)	138.4 KB	Standard

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



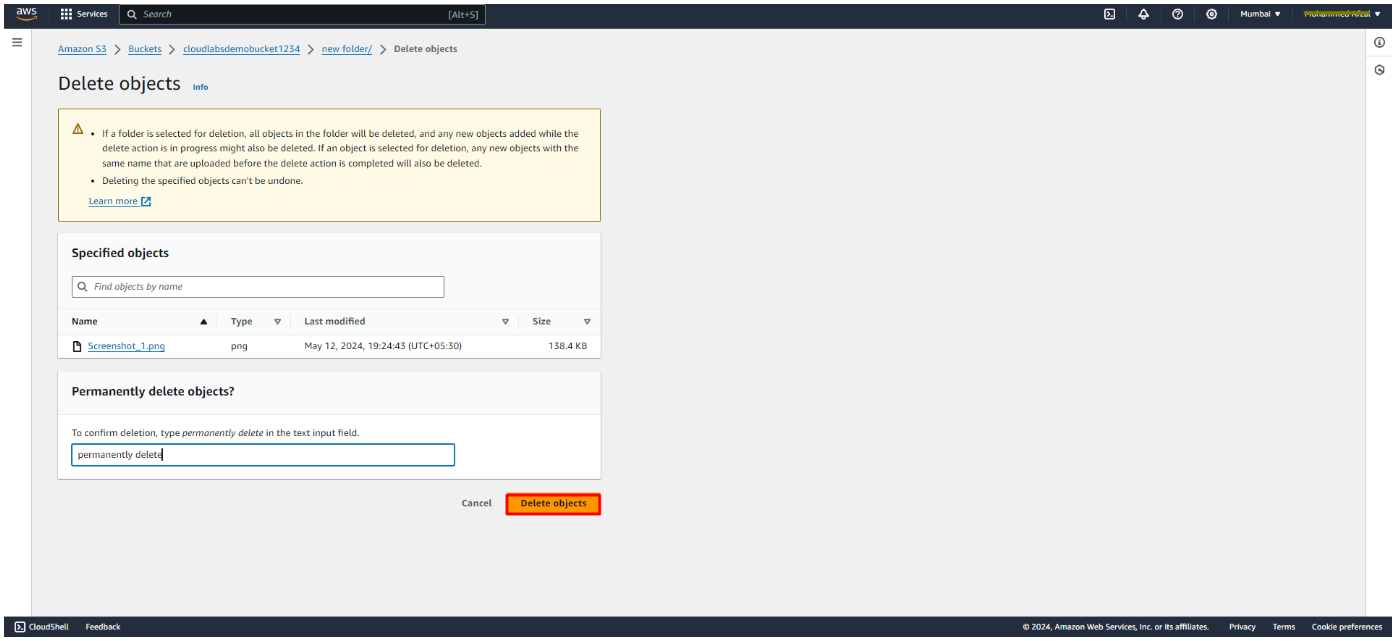
- If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.
- Deleting the specified objects can't be undone.

Name	Type	Last modified	Size
Screenshot_1.png	png	May 12, 2024, 19:24:43 (UTC+05:30)	138.4 KB

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

permanently delete

- Confirm and click on **delete** to move operation.



Amazon S3 > Buckets > cloudlabsdemobucket1234 > new folder/ > Delete objects

Delete objects Info

- If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.
- Deleting the specified objects can't be undone.

Learn more

Specified objects

Find objects by name

Name	Type	Last modified	Size
Screenshot_1.png	png	May 12, 2024, 19:24:43 (UTC+05:30)	138.4 KB

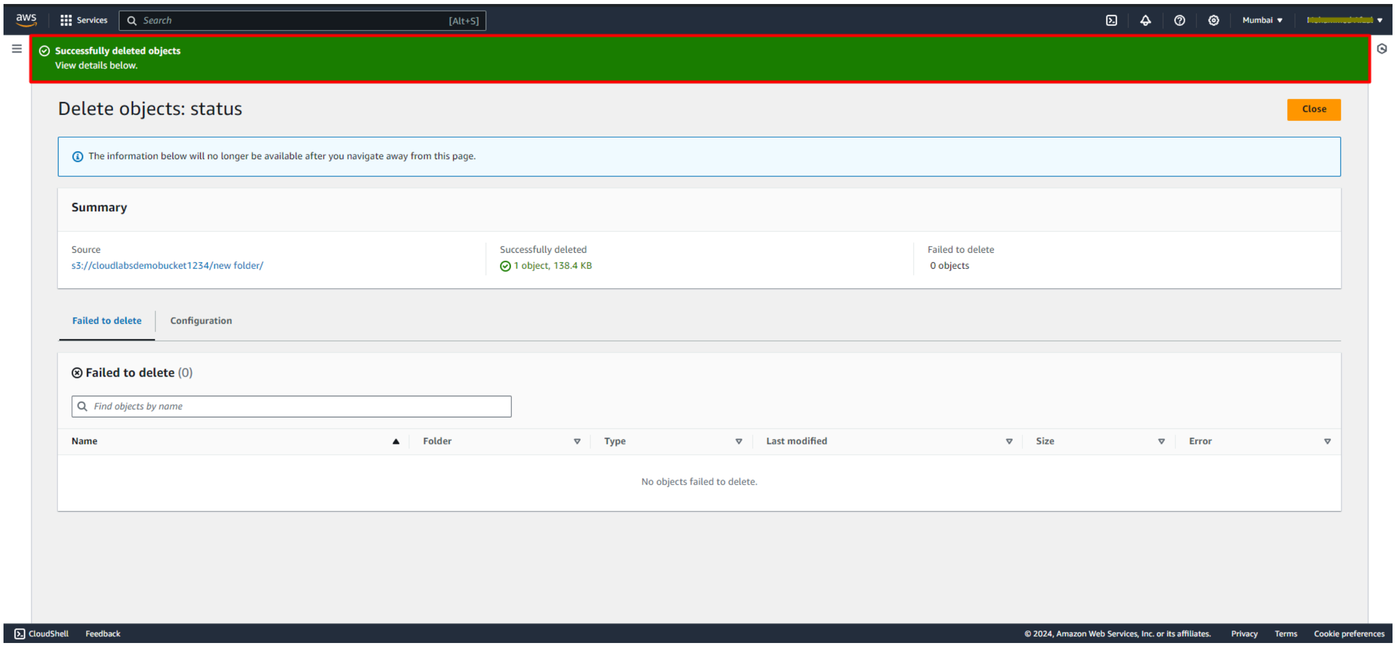
Permanently delete objects?

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

permanently delete

Cancel   Delete objects

- your object is now successfully deleted from the bucket



Successfully deleted objects
View details below.

Delete objects: status

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

Summary

Source	Successfully deleted	Failed to delete
s3://cloudlabsdemobucket1234/new folder/	1 object, 138.4 KB	0 objects

Failed to delete   Configuration

Failed to delete (0)

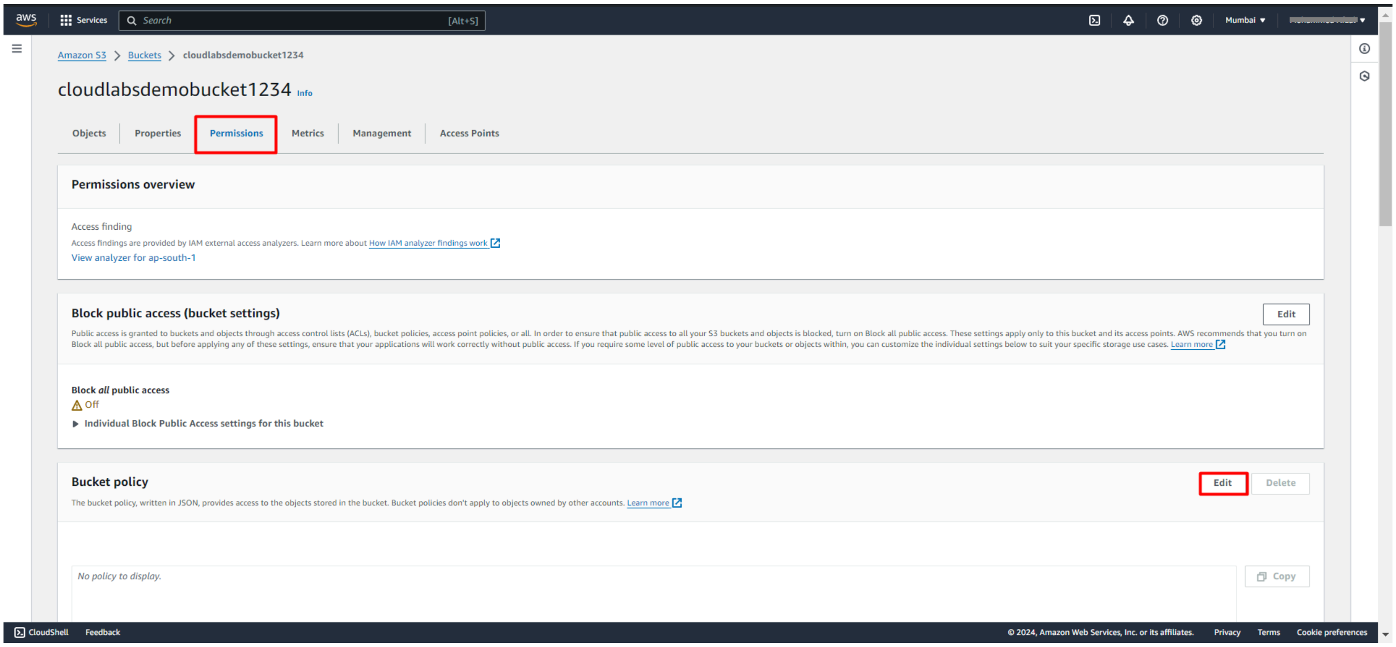
Find objects by name

Name	Folder	Type	Last modified	Size	Error

No objects failed to delete.

Task 4. setting up the Bucket Policiy:

- Bucket Policies are **JSON-based policies** that allow you to **control access** to your S3 bucket at a **bucket level**.
- You can define rules to **grant** or **deny permissions** to specific IP addresses, AWS accounts, or conditions.
- To configure a Bucket Policy, navigate to the **Permissions tab** of your S3 bucket and click on **"Edit"** in Bucket Policy Section.



cloudlabsdemobucket1234 Info

Permissions overview

Access finding

Access findings are provided by IAM external access analyzers. Learn more about How IAM analyzer findings work

View analyzer for ap-south-1

Block public access (bucket settings)

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 all your S3 buckets and 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 your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. Learn more

Block *all* public access
⚠ Off

▶ Individual Block Public Access settings for this bucket

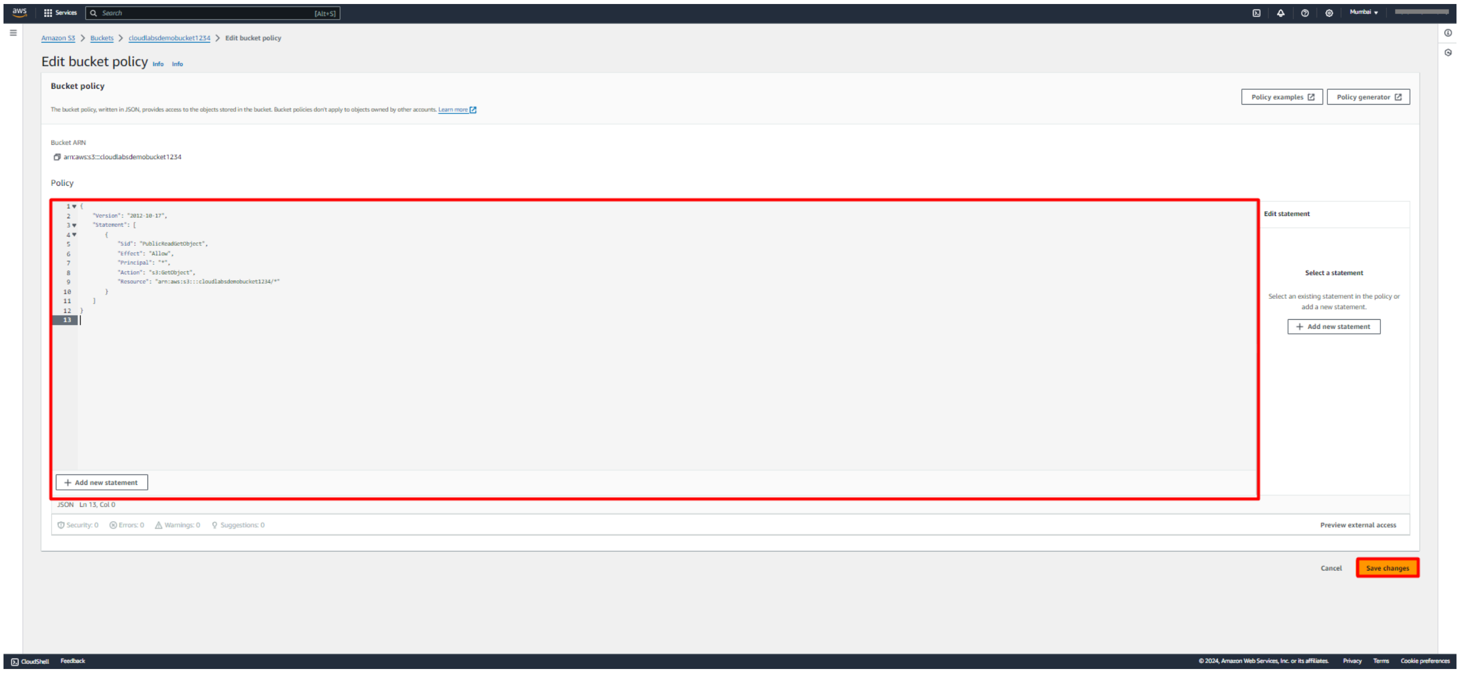
Bucket policy

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

No policy to display.

- Write or paste your Bucket Policy in the policy editor and then **save** the changes.

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



Services
Search [Alt+S]
Mumbai
Amazon S3 > Buckets > cloudlabsdemobucket1234 > Edit bucket policy

Edit bucket policy Info Info

Bucket policy

Policy examples
Policy generator

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:::cloudlabsdemobucket1234

Policy

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "PublicReadGetObject",
            "Effect": "Allow",
            "Principal": "*",
            "Action": "s3:GetObject",
            "Resource": "arn:aws:s3:::cloudlabsdemobucket1234/*"
        }
    ]
}
```

Edit statement

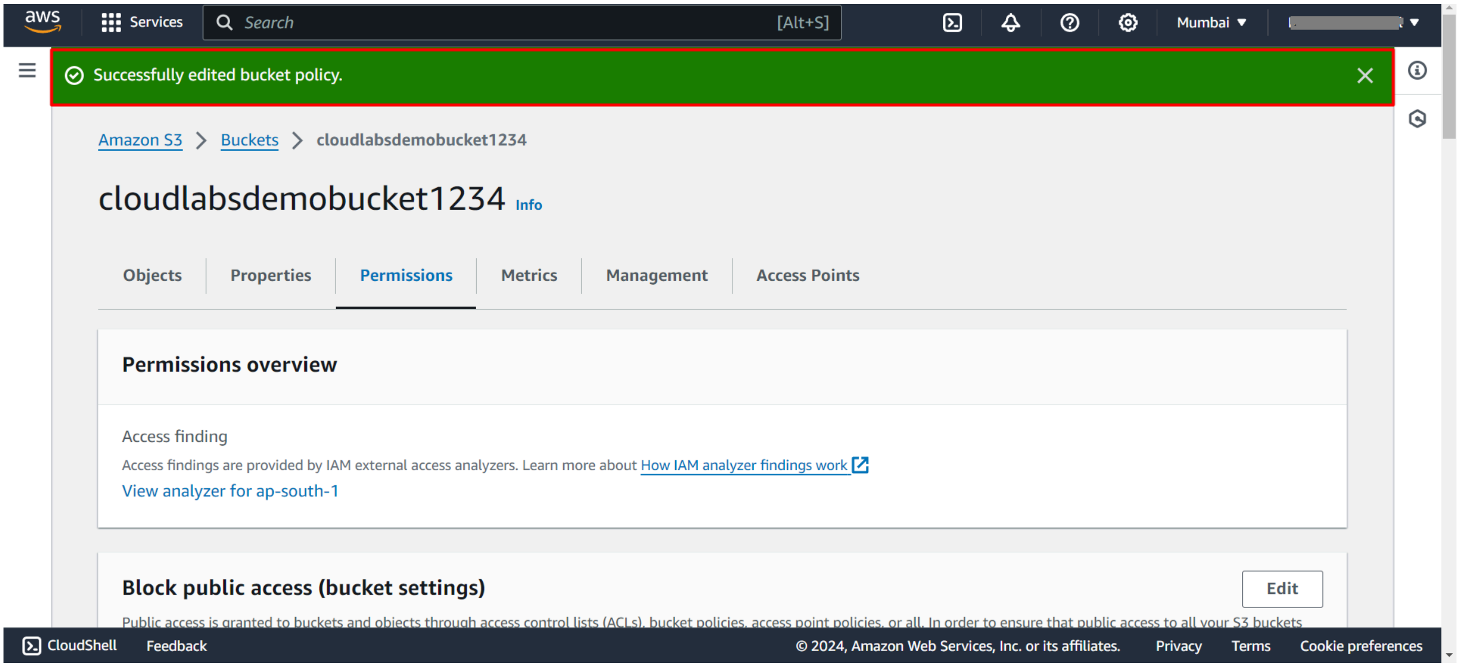
Select a statement

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

JSON Ln 13, Col 0

Security: 0 Errors: 0 Warnings: 0 Suggestions: 0

- Successfully aplied the bucket policy.



Successfully edited bucket policy.

Amazon S3 > Buckets > cloudlabsdemobucket1234

cloudlabsdemobucket1234 Info

Permissions overview

Access finding

Access findings are provided by IAM external access analyzers. Learn more about How IAM analyzer findings work

View analyzer for ap-south-1

Block public access (bucket settings)

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 all your S3 buckets

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