

S3 Storage Fundamentals Lab

- **Objective:** To gain hands-on experience with Amazon S3 by performing basic storage operations.
- **Approach:** This lab involves creating an S3 bucket, uploading files to it, and setting up bucket policies for access control. Students will explore the S3 management console, learn about object storage, and understand the concepts of buckets and objects.
- **Goal:** Students will understand how to use S3 for storing and managing data, learn about S3 security and permissions, and become familiar with S3's user interface.

1. A bucket with unique name is created.

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

upeshbasiclab

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

2. Now we can see this bucket in console like this.

General purpose buckets (4) [Info](#)

[Copy](#)

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

	Name ▲	AWS Region ▼	Access ▼	Creation date
<input type="radio"/>	upeshbasiclab	US East (N. Virginia) us-east-1	Bucket and objects not public	February 22, 2024, 22:28:41 (UTC+05:45)
		US East (N. Virginia) us-east-1		

3.Now we can upload files in this bucket.

Files and folders (1 Total, 9.0 B)

[Remove](#)[Add files](#)[Add folder](#)

All files and folders in this table will be uploaded.

[< 1 >](#)

<input type="checkbox"/>	Name ▼	Folder ▼	Type ▼	Size ▼
<input type="checkbox"/>	They.txt	-	text/plain	9.0 B

Destination [Info](#)

Destination

s3://upeshbasiclab

► 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.

[Cancel](#)[Upload](#)

4.Now we can set the policies by clicking the bucket name and selecting permission tab and now we can see bucket policy so we click edit to set policies.


Bucket policy

[Edit](#)[Delete](#)

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](#) 



Public access is blocked because Block Public Access settings are turned on for this bucket

To determine which settings are turned on, check your Block Public Access settings for this bucket. Learn more about [using Amazon S3 Block Public Access](#) 

No policy to display.

[Copy](#)

Select required actions

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

Principal(s)	Effect	Action	Resource	Conditions
<ul style="list-style-type: none">*	Allow	<ul style="list-style-type: none">s3:CreateBuckets3>DeleteObjects3:GetObjects3:PutBucketPolicys3:PutObject	arn:aws:s3:::upeshbasiclab	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](#)

5.Generated JSON

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": "Policy1708621220074",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1708621185181",
      "Action": [
        "s3:CreateBucket",
        "s3:DeleteObject",
        "s3:GetObject",
        "s3:PutBucketPolicy",
        "s3:PutObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::upeshbasiclab",
      "Principal": "*"
    }
  ]
}
```

Close

6.Put that json into Policy Part

Bucket policy

[Edit](#)[Delete](#)

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](#) 

```
{
  "Version": "2012-10-17",
  "Id": "Policy1708622303420",
  "Statement": [
    {
      "Sid": "Stmt1708622299650",
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::upeshbasiclab/*"
    }
  ]
}
```

[Copy](#)