

Practical-2

S3: Amazon Simple Storage service is a massively scalable storage service based on object storage technology. It provides a very high level of durability w/ high availability & ↑ performance. Data can be accessed from anywhere via internet from Amazon console & the powerful S3 API.

S3 storage provides the following key features:-

- ① Buckets: Data is stored in buckets.
- ② Elastic Scalability: S3 has no storage limit. can store upto 5TB in size.
- ③ Flexible data structure - each obj. is identified using a unique key & you can use metadata to flexible organise data.
- ④ Downloading data - easily share data w/ anyone inside or outside your organisation & enable them to download data over the internet.
- ⑤ Permissions: Assign permissions at the bucket or object level to ensure only authorized users can access data.
- ⑥ API: The S3 API provided both as REST & SOAP interface has become an industry standard & is integrated w/ a large # of existing tools.



## # Use cases. 1

### ① Backup & Archival

One of the 1<sup>st</sup> usecase for S3 storage is backup & archival. S3's redundant architecture & distributed data storage make it possible to store critical data that needs to be accessed quickly & securely.

It also offers seamless integration w/ various backup & archival software. This allows business to automate the backup & archival processes reducing the risk of human error & ensuring data is consistently protected.

w/ S3's versioning capabilities, organisations can also retain multiple version of their files enabling roll back if needed.

### ② Content distribution & hosting.

By leveraging S3's global network of edge locations content creators can distribute their files seamlessly to end-users, reducing latency & improving user experience. S3's integration w/ content delivery networks ensuring that files are delivered quickly.

### ③ Big Data & Analytics

S3's low cost storage object make it suitable for storing large volumes raw data. Organisations can ingest data from various sources into S3.



## for A Steps S3

### Step 1: Create a Bucket

To get started w/ Amazon S3, first step is to create an S3 bucket. by:-

- ① log into AWS Mgt console & navigate to S3 service.
- ② click create button
- ③ Enter a unique bucket name
- ④ choose the region where ~~selection is in~~ you want to create the bucket.
- ⑤ configure as needed
- ⑥ click on create bucket.

### Step 2: Uploading object to a bucket.

- ① open S3 console & navigate your bucket
- ② click on upload bucket.
- ③ choose files you wanna upload from your device
- ④ optionally, ~~you can~~ set permissions & encryption options.
- ⑤ click upload & start the upload process.

## Go to S3

Amazon S3

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 (1)** All AWS Regions [Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Buckets are containers for data stored in S3.

	Name	AWS Region	IAM Access Analyzer	Creation date
<input type="radio"/>	<a href="#">bucketnumberoneog</a>	Asia Pacific (Mumbai) ap-south-1	<a href="#">View analyzer for ap-south-1</a>	July 27, 2024, 15:57:13 (UTC+05:30)

## 2. Create bucket and name your bucket

Amazon S3 > Buckets > Create bucket

### Create bucket Info

Buckets are containers for data stored in S3.

**General configuration**

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

Bucket name Info

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

**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



## 5. Upload in folder

The screenshot shows the AWS S3 console interface for a bucket named 'bucky1111'. The breadcrumb navigation is 'Amazon S3 > Buckets > bucky1111 > buckyfolder/'. The main heading is 'buckyfolder/'. Below the heading, there are tabs for 'Objects' and 'Properties'. The 'Objects' tab is active, showing 'Objects (0) Info'. A search bar is present with the placeholder text 'Find objects by prefix'. Below the search bar, there is a table with columns: Name, Type, Last modified, Size, and Storage class. The table is empty, and a message states 'No objects. You don't have any objects in this folder.' with an 'Upload' button.

## 6. Get the link and access

The screenshot shows the AWS S3 console interface for the 'logs.png' object. The breadcrumb navigation is 'Amazon S3 > Buckets > bucky1111 > buckyfolder/ > logs.png'. The main heading is 'logs.png Info'. Below the heading, there are tabs for 'Properties', 'Permissions', and 'Versions'. The 'Properties' tab is active, showing the 'Object overview' section. The 'Object overview' section displays the following metadata:

Property	Value
Owner	2075a7f7f824a21d59e81e12c316b47c08200a55738d8f7657f37dbcfd87103
AWS Region	Asia Pacific (Mumbai) ap-south-1
Last modified	August 3, 2024, 13:44:52 (UTC+05:30)
Size	5.5 KB
Type	png
Key	buckyfolder/logs.png
S3 URI	s3://bucky1111/buckyfolder/logs.png
Amazon Resource Name (ARN)	arn:aws:s3::bucky1111/buckyfolder/logs.png
Entity tag (Etag)	a1b4c9c670fe9d7dde63317d3a9eb80
Object URL	https://bucky1111.s3.ap-south-1.amazonaws.com/buckyfolder/logs.png

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Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

**Files and folders** (1 Total, 1.4 KB)

Remove

Add files

Add folder

All files and folders in this table will be uploaded.

Find by name

< 1 >

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	aws_site.rtf	-	text/rtf

**Destination** info

Destination

s3://bucky1111/buckyfolder/

► 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

NOW, WE MAY UPLOAD A TXT OR HTML FILE ^

## Grant permission

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**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

Dashboards

Storage Lens groups

AWS Organizations settings

Feature spotlight

**Object Ownership**

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.

⚠ We recommend disabling ACLs, unless you need to control access for each object individually or to have the object writer own the data they upload. Using a bucket policy instead of ACLs to share data with users outside of your account simplifies permissions management and auditing.

⚠ Enabling ACLs turns off the bucket owner enforced setting for Object Ownership

Once the bucket owner enforced setting is turned off, access control lists (ACLs) and their associated permissions are restored. Access to objects that you do not own will be based on ACLs and not the bucket policy.

☒ I acknowledge that ACLs will be restored.

Object Ownership

☒ Bucket owner preferred

If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.

☐ Object writer

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Feature spotlight

**Grant basic read/write permissions to other AWS accounts.**

Grantee	Objects	Bucket ACL
Bucket owner (your AWS account) Canonical ID: 2075a7f7f824a21d59e81e12c316b47c08200a55738d8f7657f37dbcfdd87103	<input checked="" type="checkbox"/> List <input checked="" type="checkbox"/> Write	<input checked="" type="checkbox"/> Read <input checked="" type="checkbox"/> Write
Everyone (public access) Group: http://acs.amazonaws.com/groups/global/AllUsers	<input type="checkbox"/> List <input type="checkbox"/> Write	<input checked="" type="checkbox"/> <div>Read</div> <input type="checkbox"/> <div>Write</div>
Authenticated users group (anyone with an AWS account) Group: http://acs.amazonaws.com/groups/global/AuthenticatedUsers	<input type="checkbox"/> List <input type="checkbox"/> Write	<input checked="" type="checkbox"/> <div>Read</div> <input type="checkbox"/> <div>Write</div>
S3 log delivery group Group: http://acs.amazonaws.com/groups/s3/LogDelivery	<input type="checkbox"/> List <input type="checkbox"/> Write	<input checked="" type="checkbox"/> Read <input type="checkbox"/> Write

⚠ When you grant access to the Everyone or Authenticated users group grantees, anyone in the world can access the objects in this bucket.

[Learn more](#)

☒ I understand the effects of these changes on my objects and buckets.

Html doc is also uploaded!



## Welcome to My Website

- [Home](#)
- [About](#)
- [Contact](#)

### Home

This is the home section of my static website.

### About

This section contains information about the website.