* S3: Amazon Simple Storage Service is a massively scalable storage service based on object storage technology. It provides a very high level of durability, with high availability & high performance. Data can be accessed from anywhere via the Internet, through the amazon console & the powerful S3 API.

S3 storage provides the following key features:-

i) Buckets - data is stored in buckets. Each bucket can store an unlimited amount of unstructured data.

ii) Elastic Scalability - S3 has no storage limit. Individual objects can be upto 5TB in size

iii) Flexible data structure - each object is identified using a unique key, and you can use metadata to flexible organize data.

iv) Downloading data - easily share data with anyone inside or outside your organisation & enable them to download data over the Internet

v) Permissions - assign permissions at the bucket or object level to ensure only authorized users can access data

vi) APIs - the S3 API provided both as REST and SOAP interfaces has become an industry standard & is integrated w/ a large number of existing tools.

* Use Cases for S3 Storage.

1. Backup and Archival

One of the primary use case for S3 Storage is backup & archival. Organizations can leverage S3's durability & availability to ensure the safety and longetivity of their data. S3's redundant architecture and distributed data storage make it possible to store critical data that needs to be accessed quickly & securely.

S3 also offers seamless integration with various backup & archival software. This allows business to automate the backup & archival processes, reducing the risk of human error & ensuring data is consistently protected. With S3's versioning capabilities, organizations can also retain multiple versions of their files enabling roll back to previous versions 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 with content delivery networks (CDNs) further enhances its content distribution capabilities, ensuring that files are delivered quickly & efficiently

3. Disaster Recovery

With S3's cross-region replication, bosinesses can automatically save their data in multiple amazon regions, ensuring that it is protected against regional

disasters. In the event of a disaster, orgs can quickly restore their data from the ~~replacement~~ replicated copies stored in S3, minimizing downtime & data loss.

4. Big Data & Analytics

S3's low cost storage object make it suitable for storing large volumes raw data. Organizations can ingest data from various sources into S3, including log files, sensor data, and social media feeds. S3's integration w/ big data processing framework like Apache Hadoop & Apache Spark enables business to process & analyze this data at scale

5. Software & Object Distribution

S3 is commonly used by organizations to distribute software packages, firmware updates & other digital assets to user, customers or employees. S3's global network of edge locations ensures fast and efficient delivery of these files, regardless of the users' location.

* Steps for S3

Step 1 Create a Bucket

To get started w/ Amazon S3 the first step is to create an S3 bucket. A bucket is a container for storing objects in S3. follow these steps to create S3 bucket:

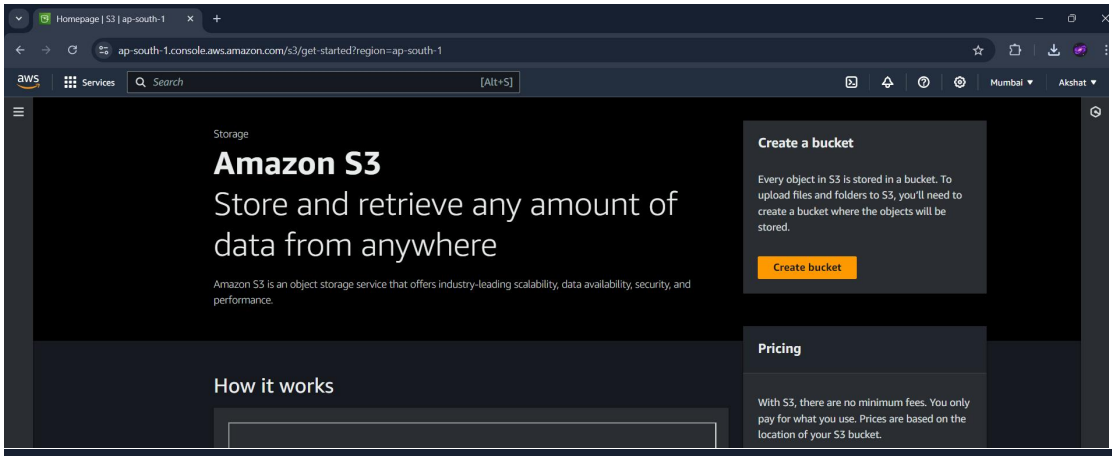
i) Log into the aws management console & navigate to S3 service

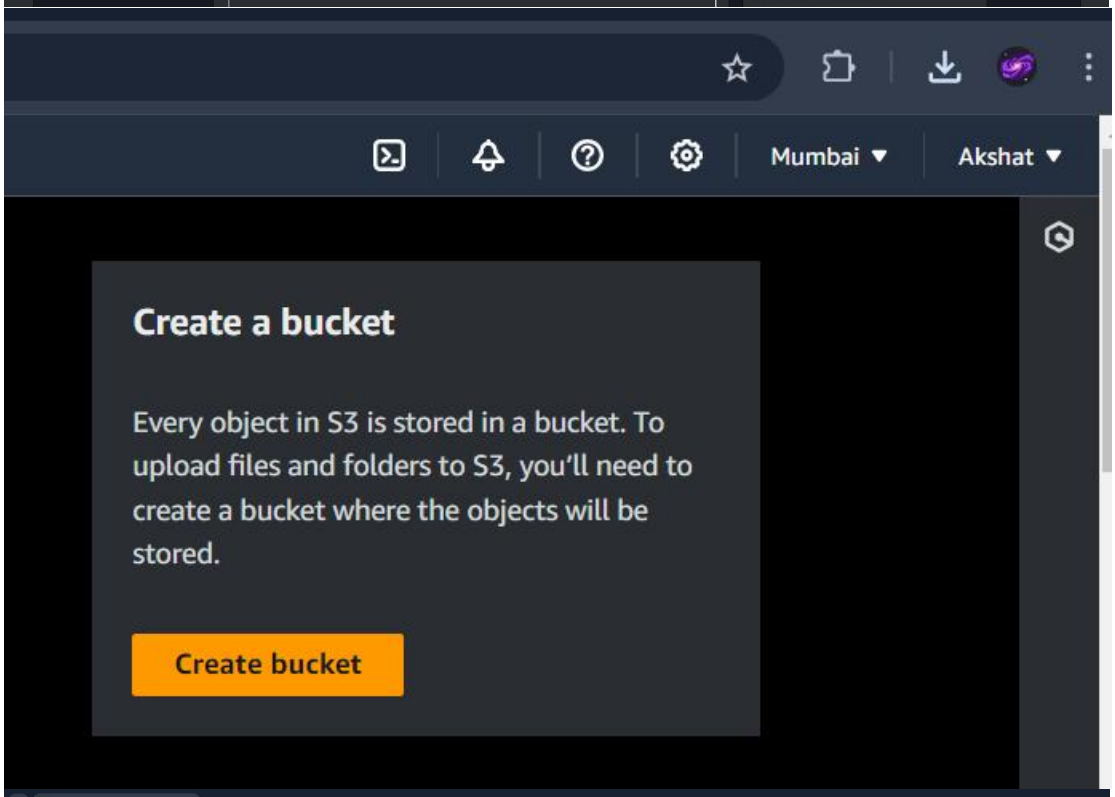
ii) Click the create bucket button
iii) Enter a unique bucket name.
iv) Choose the region where you want to create the bucket. The region selection is important.
v) Configure settings as needed
vi) Click on Create bucket.

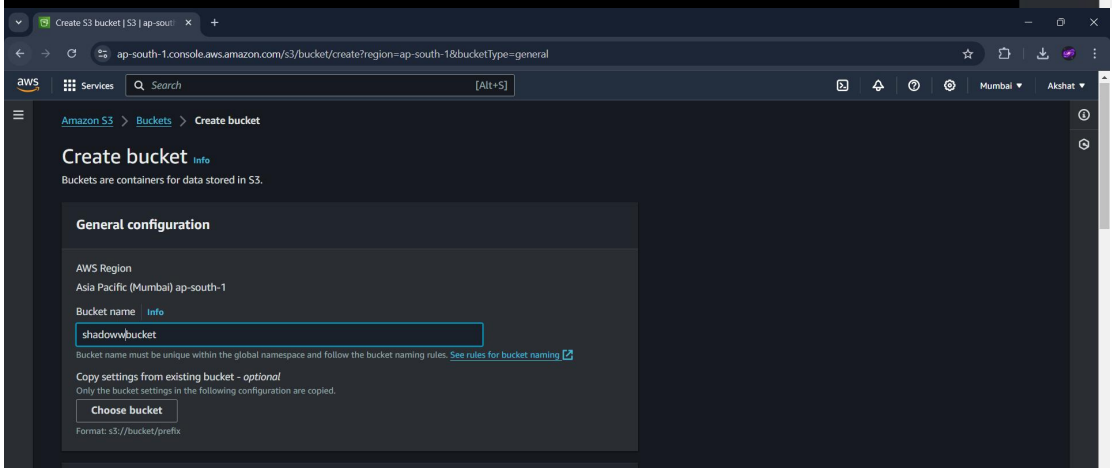
Step 2 Uploading object to a Bucket

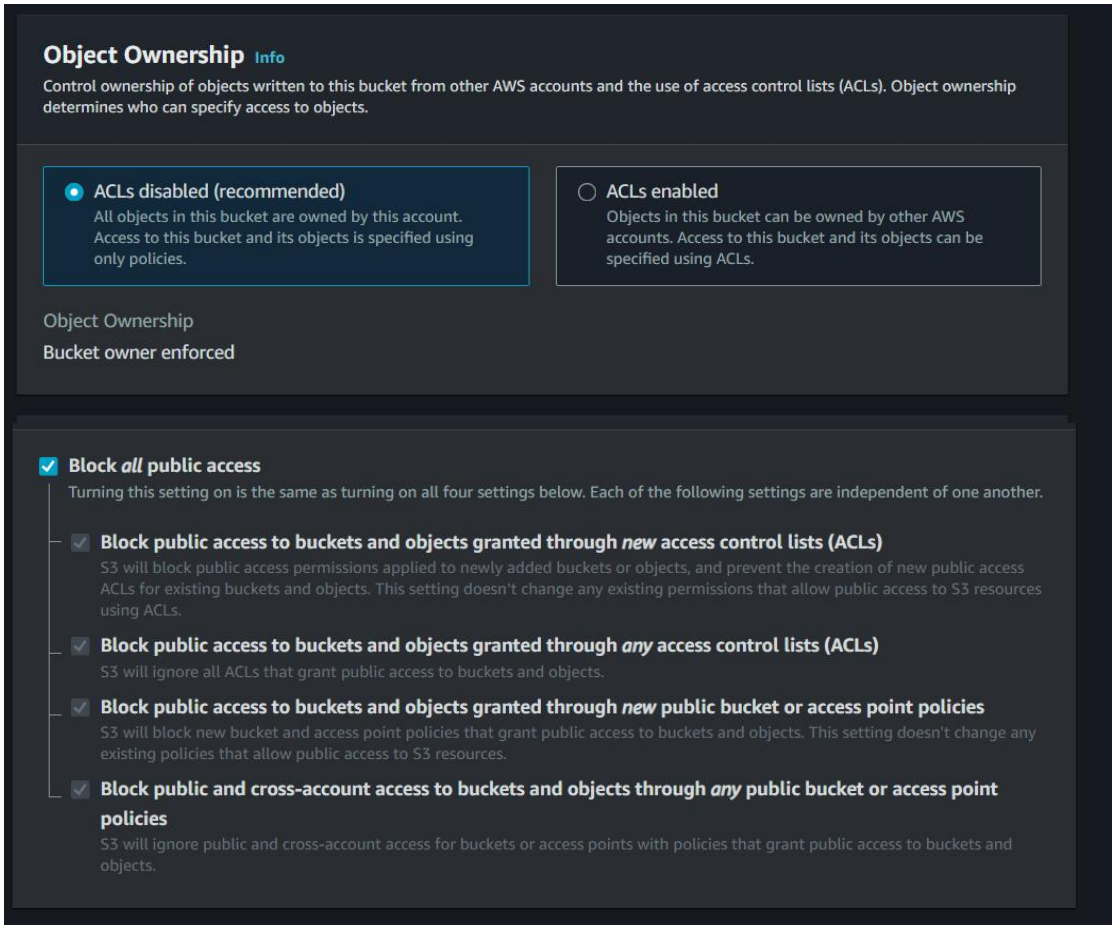
Uploading objects to an S3 bucket is straightforward. You can upload files, images, videos or any other type of data. Here's how you can upload an object to S3 bucket:

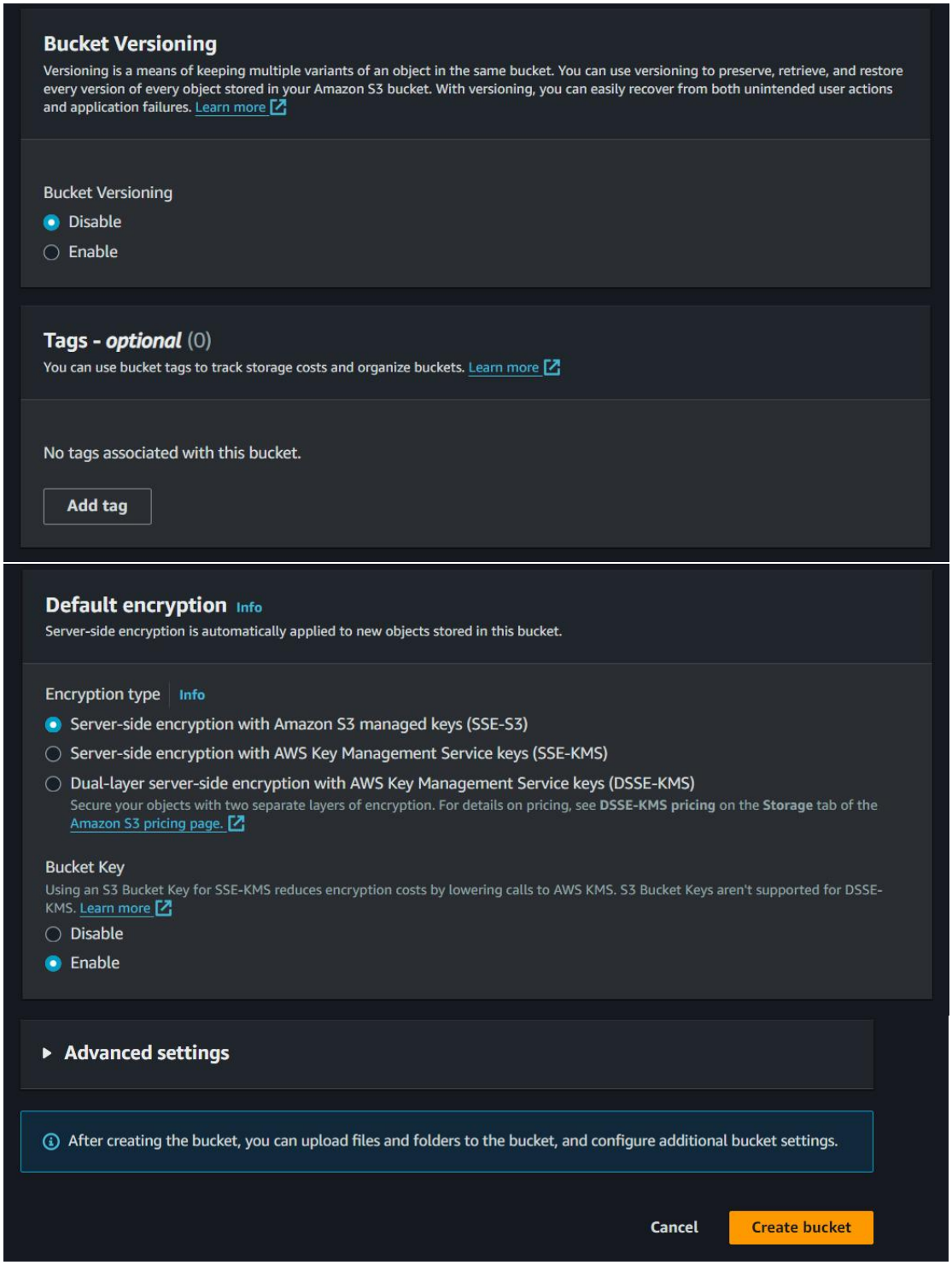
i, Open S3 console & navigate your bucket
ii. Click on upload bucket
iii Choose files you wanna upload from your device
iv. optionally, you can set permissions, metadata & encryption options for uploaded objects
v. Click upload button to start the upload process

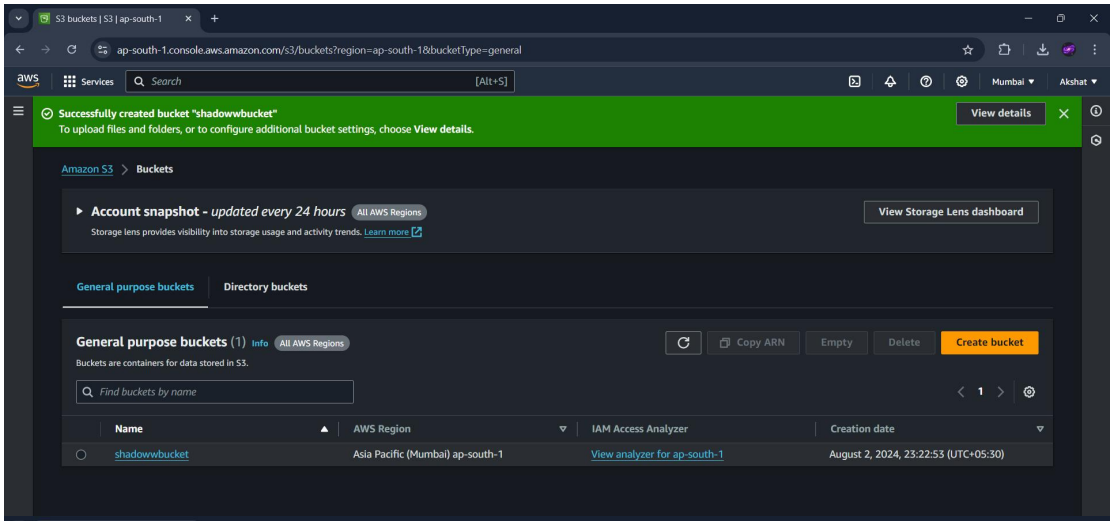

Homepage | S3 | ap-south-1
ap-south-1.console.aws.amazon.com/s3/get-started?region=ap-south-1
aws
Services
Search
[Alt+S]
Mumbai
Akshat
Storage
Amazon S3
Store and retrieve any amount of data from anywhere
Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.
Create a bucket
Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.
Create bucket
Pricing
With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.
How it works

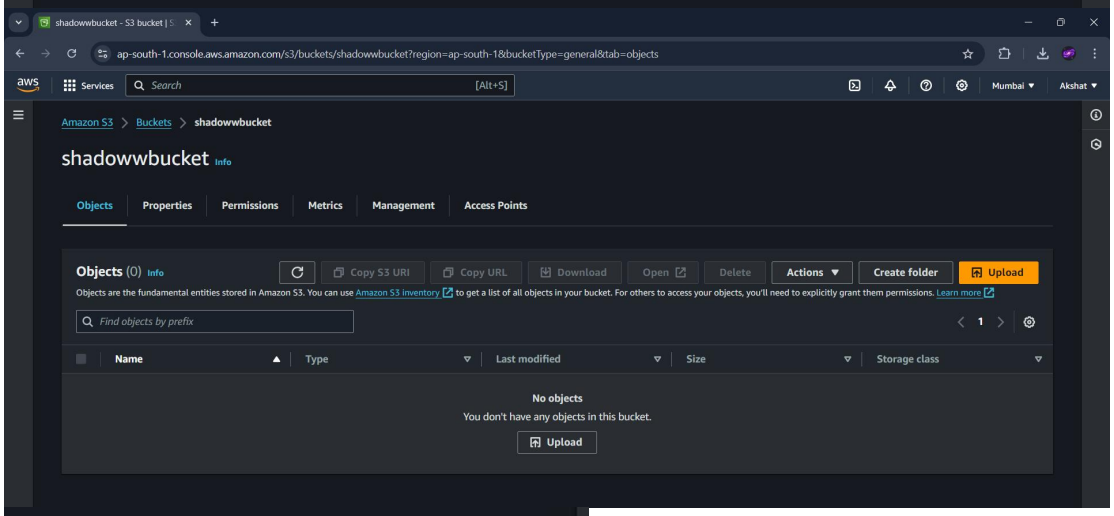

Mumbai
Akshat
Create a bucket
Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.
Create bucket

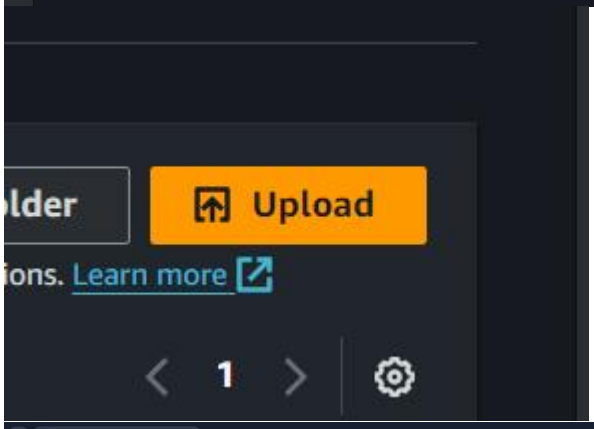

Create S3 bucket | S3 | ap-south-1
ap-south-1.console.aws.amazon.com/s3/bucket/create?region=ap-south-1&bucketType=general
aws
Services
Search
[Alt+S]
Mumbai
Akshat
Amazon S3 > Buckets > Create bucket
Create bucket Info
Buckets are containers for data stored in S3.
General configuration
AWS Region
Asia Pacific (Mumbai) ap-south-1
Bucket name Info
shadowwbucket
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
Bucket owner enforced
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.
Block public access to buckets and objects granted through any access control lists (ACLs)
S3 will ignore all ACLs that grant public access to buckets and objects.
Block public access to buckets and objects granted through new public bucket or access point policies
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
Block public and cross-account access to buckets and objects through any public bucket or access point policies
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.


Bucket Versioning
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 - optional (0)
You can use bucket tags to track storage costs and organize buckets. Learn more
No tags associated with this bucket.
Add tag
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.
Cancel
Create bucket


S3 buckets | S3 | ap-south-1
ap-south-1.console.aws.amazon.com/s3/buckets?region=ap-south-1&bucketType=general
Services
Search
[Alt+S]
Mumbai
Akshat
Successfully created bucket "shadowwbucket"
To upload files and folders, or to configure additional bucket settings, choose View details.
View details
Amazon S3 > Buckets
Account snapshot - updated every 24 hours
All AWS Regions
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
All AWS Regions
Buckets are containers for data stored in S3.
Copy ARN
Empty
Delete
Create bucket
Find buckets by name
Name
AWS Region
IAM Access Analyzer
Creation date
shadowwbucket
Asia Pacific (Mumbai) ap-south-1
View analyzer for ap-south-1
August 2, 2024, 23:22:53 (UTC+05:30)


shadowwbucket - S3 bucket | S
ap-south-1.console.aws.amazon.com/s3/buckets/shadowwbucket?region=ap-south-1&bucketType=general&tab=objects
Amazon S3 > Buckets > shadowwbucket
shadowwbucket Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects (0) Info
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
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
No objects
You don't have any objects in this bucket.
Upload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Upload
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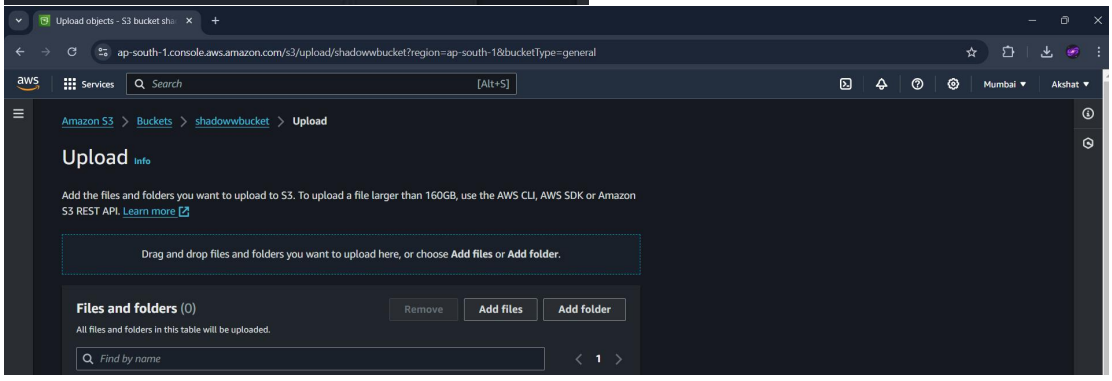
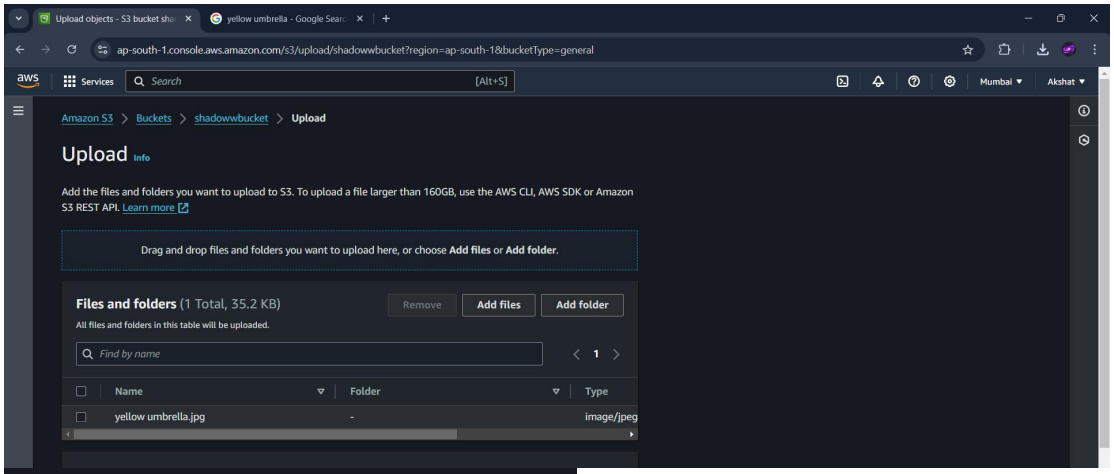
1


Upload objects - S3 bucket sha
ap-south-1.console.aws.amazon.com/s3/upload/shadowwbucket?region=ap-south-1&bucketType=general
Amazon S3 > Buckets > shadowwbucket > 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.
Remove
Add files
Add folder
Find by name


Upload objects - S3 bucket sha
yellow umbrella - Google Sear
ap-south-1.console.aws.amazon.com/s3/upload/shadowwbucket?region=ap-south-1&bucketType=general
aws
Services
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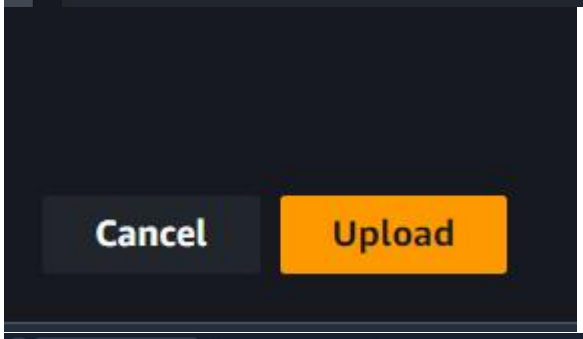
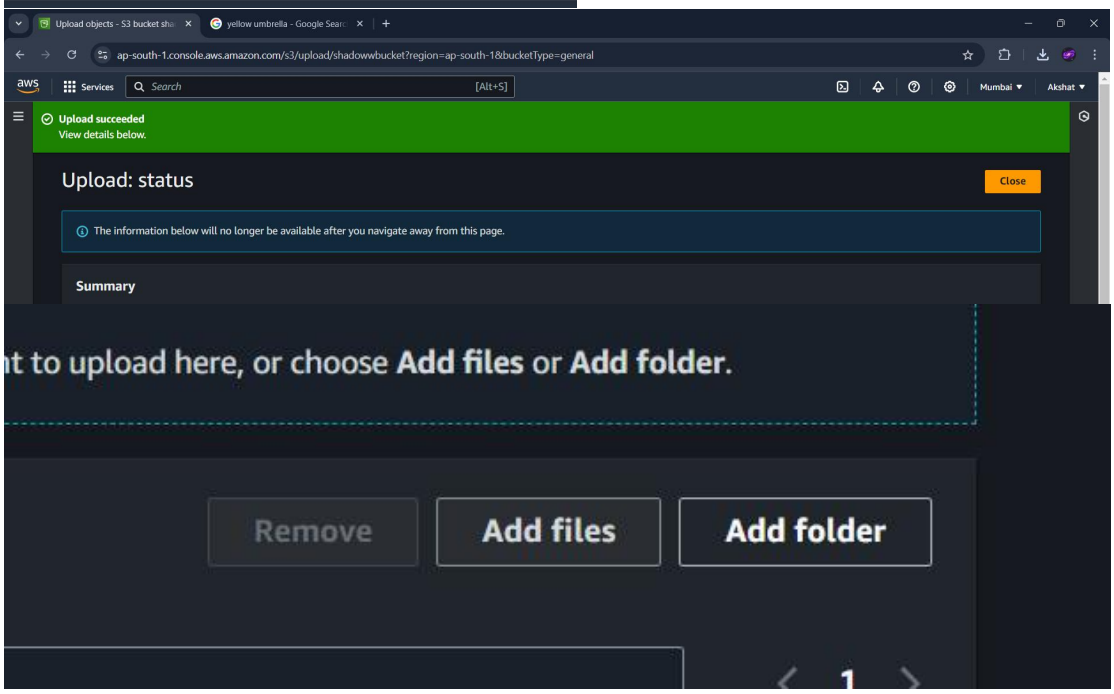
Mumbai
Akshat
Amazon S3 > Buckets > shadowwbucket > Upload
Upload Info
Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. Learn more
Drag and drop files and folders you want to upload here, or choose Add files or Add folder.
Files and folders (1 Total, 35.2 KB)
Remove
Add files
Add folder
All files and folders in this table will be uploaded.
Find by name
1
Name
Folder
Type
yellow umbrella.jpg
-
image/jpeg


Cancel
Upload


Upload objects - S3 bucket sha
yellow umbrella - Google Sear
ap-south-1.console.aws.amazon.com/s3/upload/shadowwbucket?region=ap-south-1&bucketType=general
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Services
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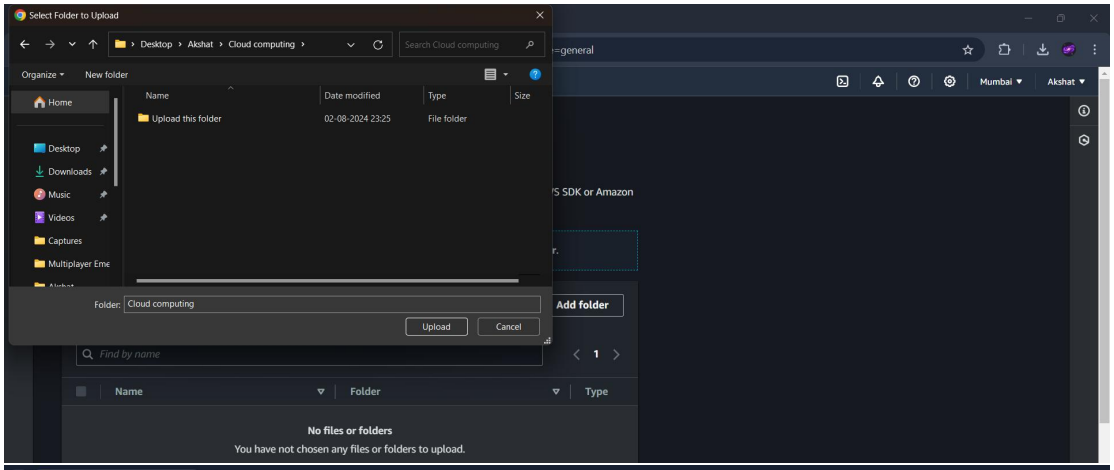
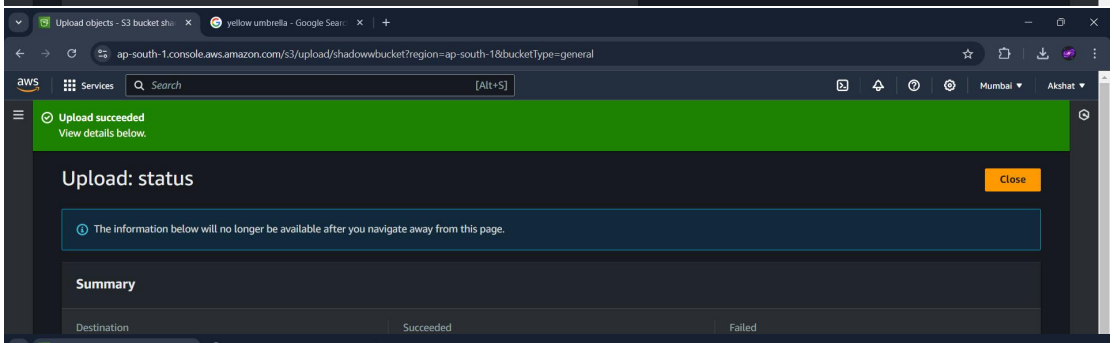
Akshat
Upload succeeded
View details below.
Upload: status
Close
The information below will no longer be available after you navigate away from this page.
Summary
t to upload here, or choose Add files or Add folder.
Remove
Add files
Add folder
1


Select Folder to Upload
Desktop › Akshat › Cloud computing ›
Search Cloud computing
Organize
New folder
Home
Desktop
Downloads
Music
Videos
Captures
Multiplayer Eme
Name
Date modified
Type
Size
Upload this folder
02-08-2024 23:25
File folder
Folder:
Cloud computing
Upload
Cancel
=general
Mumbai
Akshat
S SDK or Amazon
Add folder
Find by name
1
Name
Folder
Type
No files or folders
You have not chosen any files or folders to upload.


Upload objects - S3 bucket sha
yellow umbrella - Google Searc
ap-south-1.console.aws.amazon.com/s3/upload/shadowwbucket?region=ap-south-1&bucketType=general
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Services
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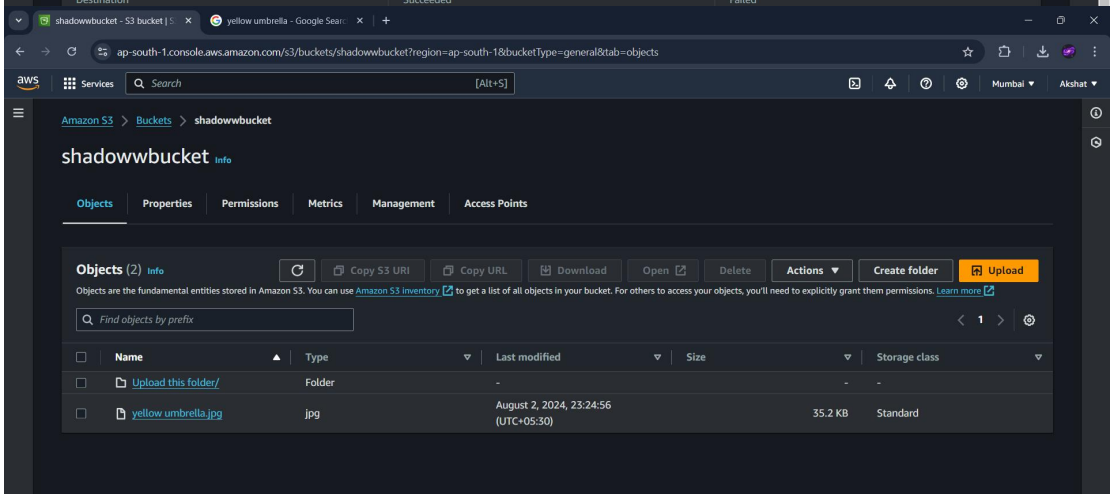
Mumbai
Akshat
Upload succeeded
View details below.
Upload: status
Close
The information below will no longer be available after you navigate away from this page.
Summary
Destination
Succeeded
Failed


shadowwbucket - S3 bucket | S
yellow umbrella - Google Searc
ap-south-1.console.aws.amazon.com/s3/buckets/shadowwbucket?region=ap-south-1&bucketType=general&tab=objects
aws
Services
Search
[Alt+S]
Mumbai
Akshat
Amazon S3 › Buckets › shadowwbucket
shadowwbucket Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects (2) Info
Copy S3 URI
Copy URL
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Open
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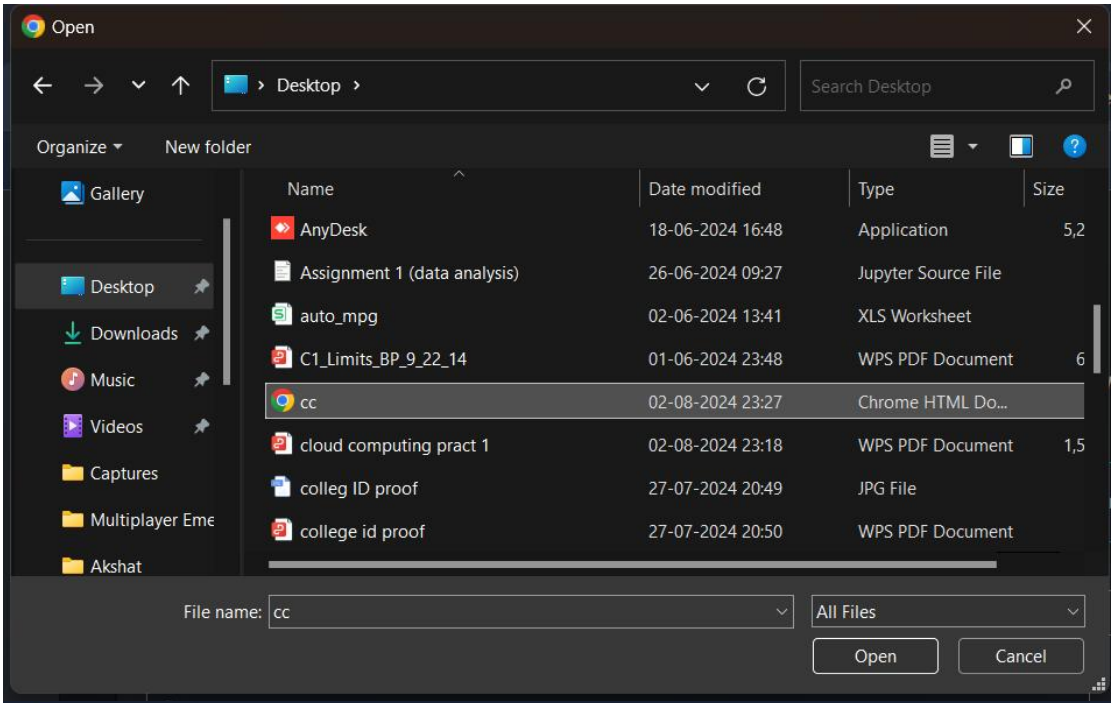
Create folder
Upload
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more
Find objects by prefix
1
Name
Type
Last modified
Size
Storage class
Upload this folder/
Folder
-
-
-
yellow umbrella.jpg
jpg
August 2, 2024, 23:24:56 (UTC+05:30)
35.2 KB
Standard


Open
Desktop
Search Desktop
Organize
New folder
Gallery
Desktop
Downloads
Music
Videos
Captures
Multiplayer Eme
Akshat
Name
Date modified
Type
Size
AnyDesk
18-06-2024 16:48
Application
5,2
Assignment 1 (data analysis)
26-06-2024 09:27
Jupyter Source File
auto_mpg
02-06-2024 13:41
XLS Worksheet
C1_Limits_BP_9_22_14
01-06-2024 23:48
WPS PDF Document
6
cc
02-08-2024 23:27
Chrome HTML Do...
cloud computing pract 1
02-08-2024 23:18
WPS PDF Document
1,5
colleg ID proof
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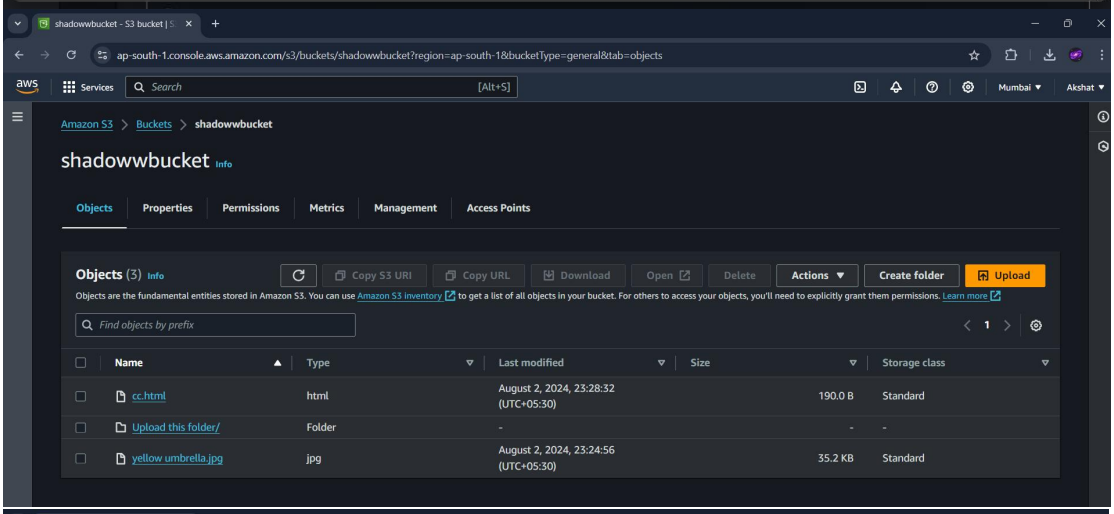
JPG File
college id proof
27-07-2024 20:50
WPS PDF Document
File name:
cc
All Files
Open
Cancel


ap-south-1.console.aws.amazon.com/s3/buckets/shadowwbucket?region=ap-south-1&bucketType=general&tab=objects
Amazon S3 > Buckets > shadowwbucket
shadowwbucket Info
Objects
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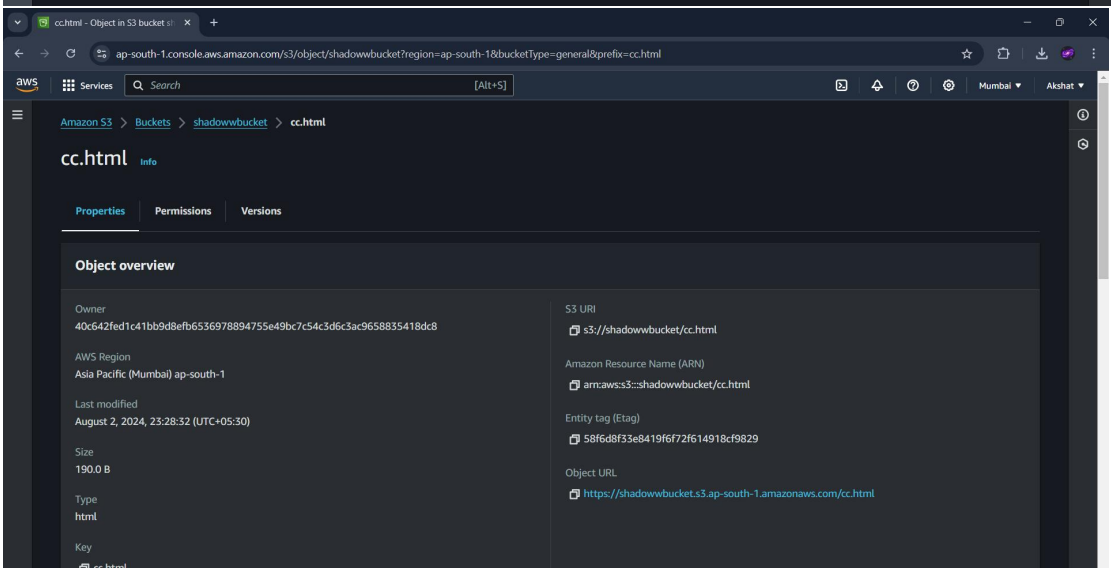
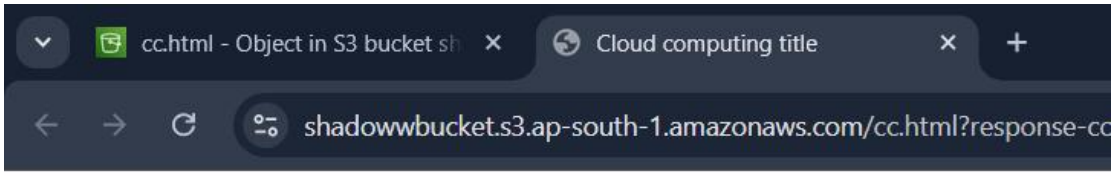
Type
Last modified
Size
Storage class
cc.html
html
August 2, 2024, 23:28:32 (UTC+05:30)
190.0 B
Standard
Upload this folder/
Folder
-
-
-
yellow umbrella.jpg
jpg
August 2, 2024, 23:24:56 (UTC+05:30)
35.2 KB
Standard


ap-south-1.console.aws.amazon.com/s3/object/shadowwbucket?region=ap-south-1&bucketType=general&prefix=cc.html
Amazon S3 > Buckets > shadowwbucket > cc.html
cc.html Info
Properties
Permissions
Versions
Object overview
Owner
40c642fed1c41bb9d8efb6536978894755e49bc7c54c3d6c3ac9658835418dc8
AWS Region
Asia Pacific (Mumbai) ap-south-1
Last modified
August 2, 2024, 23:28:32 (UTC+05:30)
Size
190.0 B
Type
html
Key
S3 URI
s3://shadowwbucket/cc.html
Amazon Resource Name (ARN)
arn:aws:s3:::shadowwbucket/cc.html
Entity tag (Etag)
58f6d8f33e8419f6f72f614918cf9829
Object URL
https://shadowwbucket.s3.ap-south-1.amazonaws.com/cc.html



Write Your First Heading

Write Your First Paragraph.