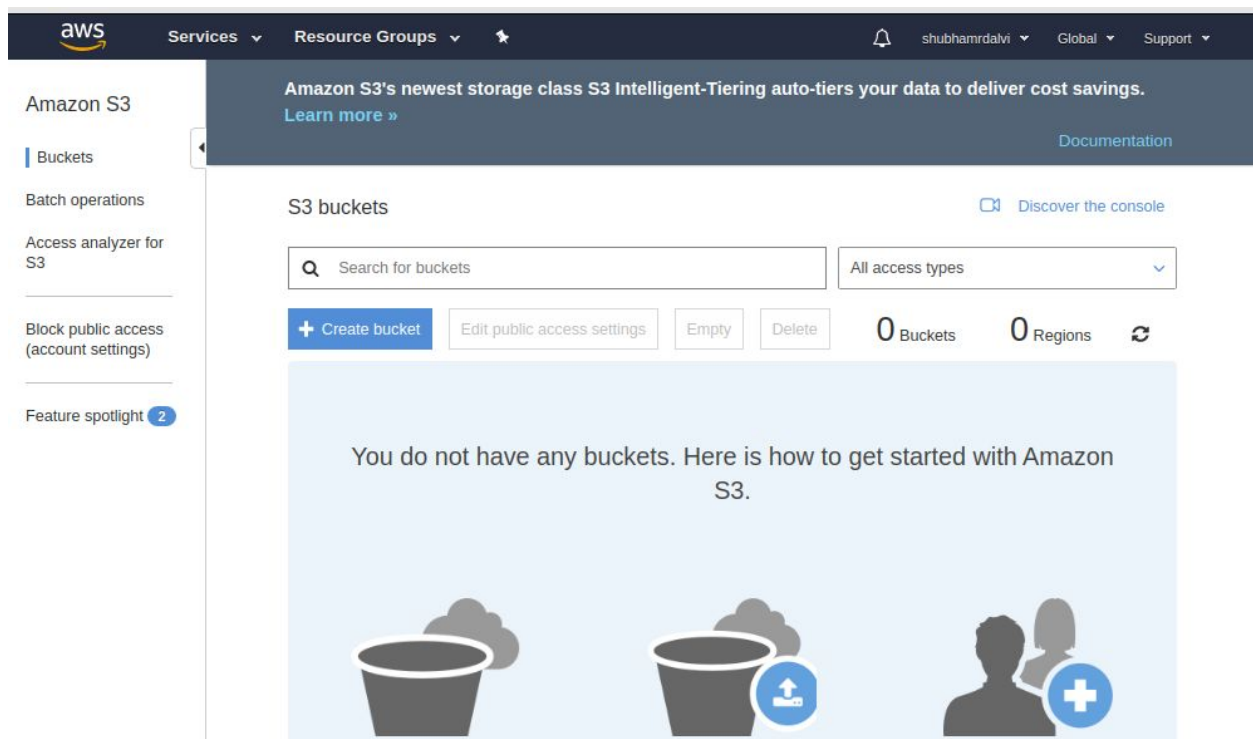


Lab 10 - Simple Storage Service S3

1. Create a S3 bucket
2. Make versioning on
3. Host a static website on S3
4. Make cross-region replication on
5. Create a life cycle policy to move data from standard class IA after 30 days, IA to the glacier after 90 days, and expire after 360 days.

1. Create a S3 bucket.

1. Select **S3** from AWS services.




The screenshot shows the AWS Management Console interface for Amazon S3. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information 'shubhamrdalvi' in the 'Global' region. A sidebar on the left lists navigation options: 'Amazon S3', 'Buckets', 'Batch operations', 'Access analyzer for S3', 'Block public access (account settings)', and 'Feature spotlight 2'. The main content area is titled 'S3 buckets' and features a search bar, a dropdown for 'All access types', and buttons for '+ Create bucket', 'Edit public access settings', 'Empty', and 'Delete'. It also shows '0 Buckets' and '0 Regions'. A large blue banner contains the text: 'You do not have any buckets. Here is how to get started with Amazon S3.' Below the banner are three icons: a bucket, a bucket with an upload arrow, and a person icon with a plus sign.

2. [+ Create Bucket](#)
3. Bucket Name: **BUCKET1010** (Replace 1010 with any other no).
4. Region: US East (Ohio)
5. [Create](#)

S3 buckets [Discover the console](#)

Search for buckets All access types ▼

[+ Create bucket](#) [Edit public access settings](#) [Empty](#) [Delete](#) **1** Buckets **1** Regions [Refresh](#)

<input type="checkbox"/>	Bucket name ▼	Access ℹ ▼	Region ▼	Date created ▼
<input type="checkbox"/>	 bucket1995	Bucket and objects not public	US East (Ohio)	Dec 16, 2019 6:13:19 PM GMT+0530

6. Click on Bucket name.

Amazon S3 > bucket1995

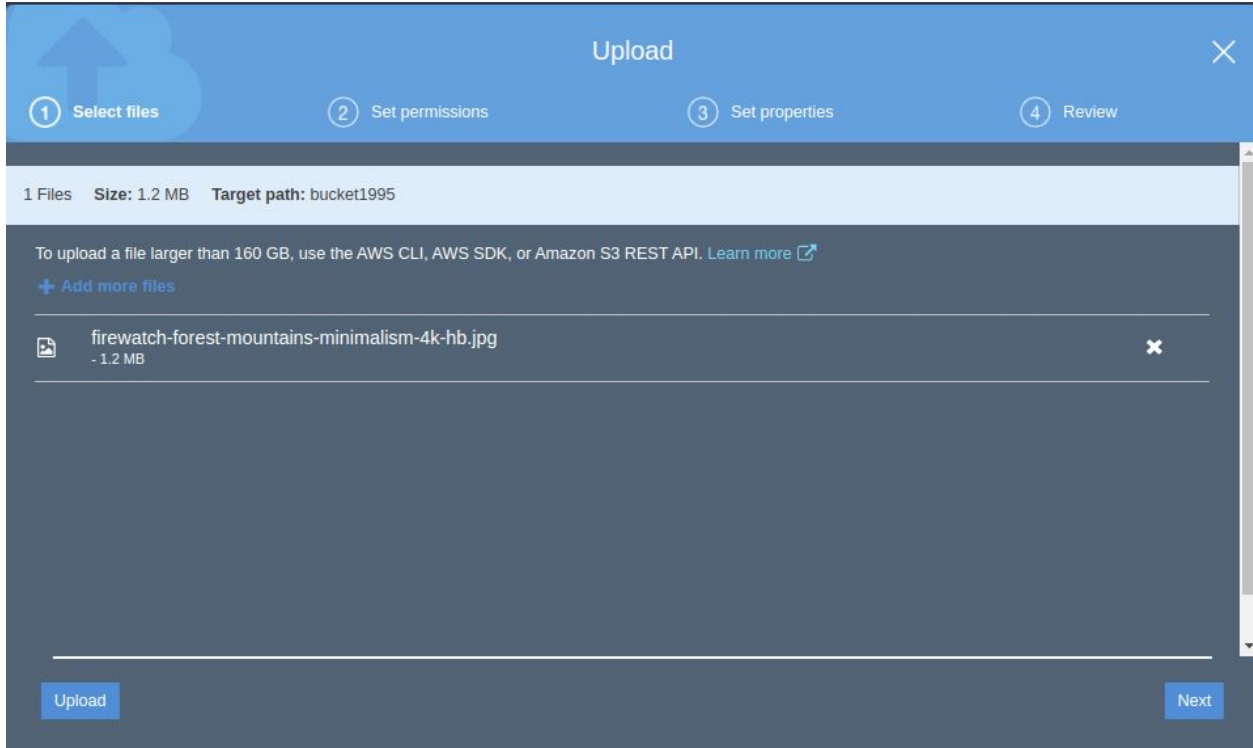
bucket1995

[Overview](#) [Properties](#) [Permissions](#) [Management](#) [Access points](#)

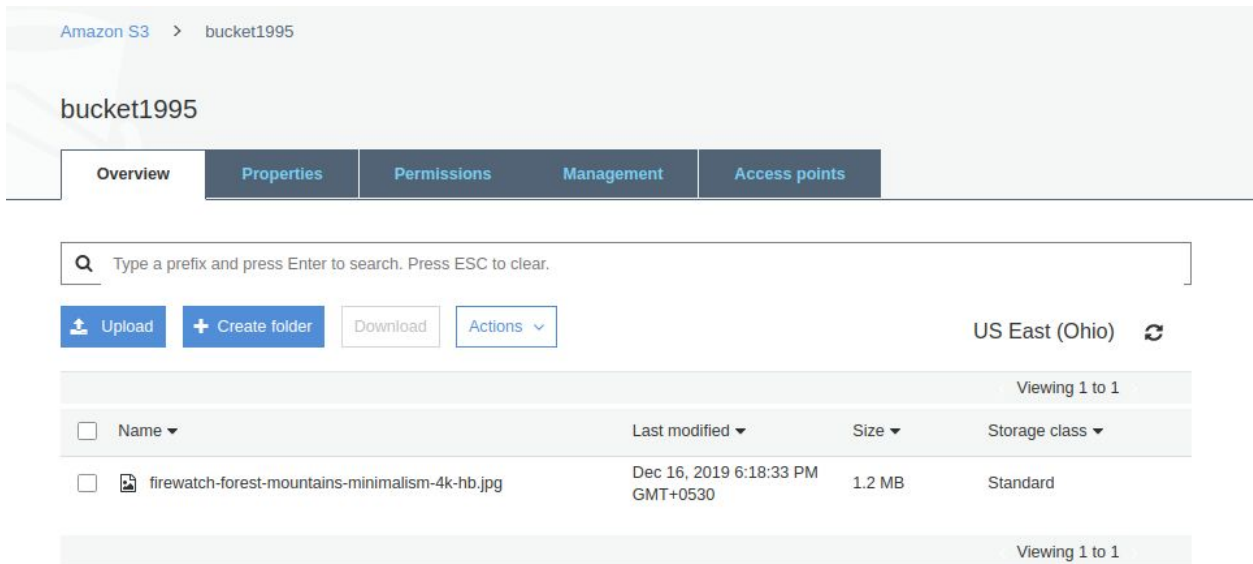
[Upload](#) [+ Create folder](#) [Download](#) [Actions](#) ▼ US East (Ohio) [Refresh](#)

This bucket is empty. Upload new objects to get started.

7. [Upload](#)
9. [Add Files](#)
8. Select any picture to upload.

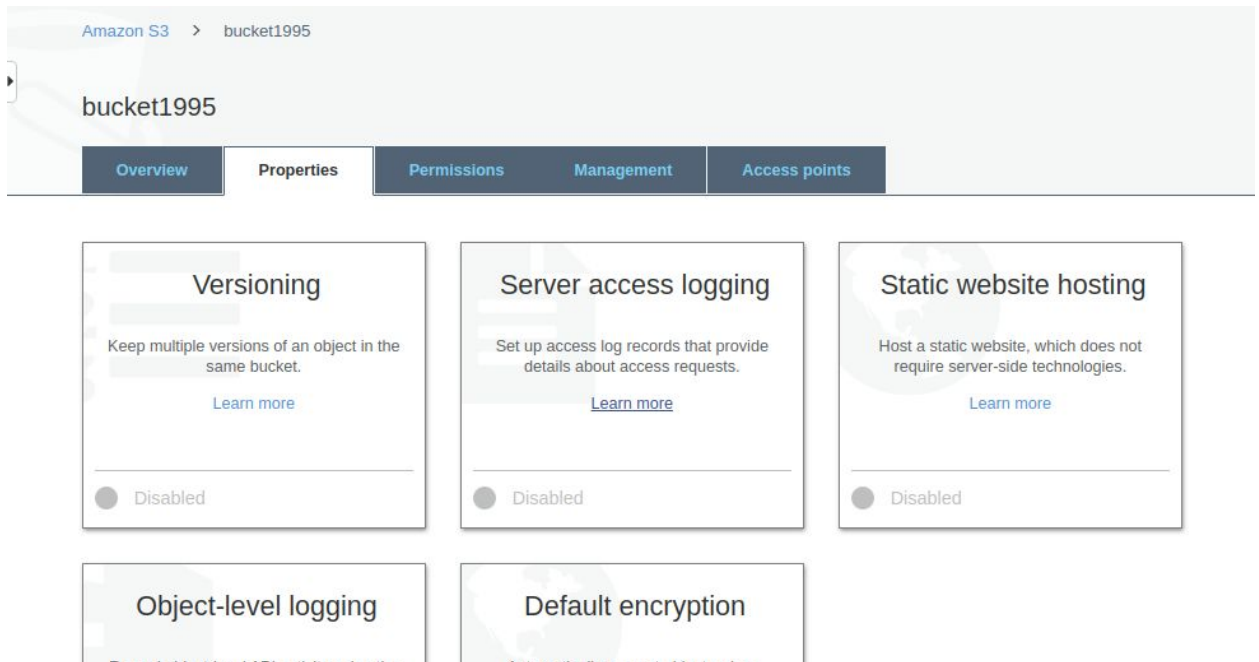


9. Upload



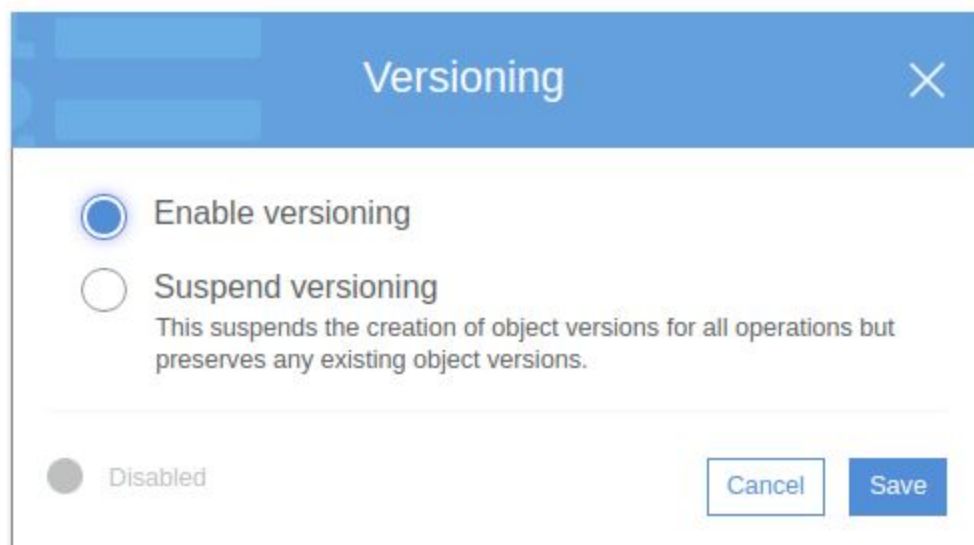
2. Enable Versioning.

1. Click on properties inside your s3 bucket.



2. Click on Versioning

Make it **Enable** and **Save**.



3. Click on Overview and upload the same image.
4. Make **Versions Show**

5. You will get to see both versions of the same file.

bucket1995

Overview Properties Permissions Management Access points

Q Type a prefix and press Enter to search. Press ESC to clear.

Upload + Create folder Download Actions Versions Hide Show US East (Ohio) ↻

Viewing 1 to 2

<input type="checkbox"/>	Name	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	firewatch-forest-mountains-minimalism-...		Dec 16, 2019 6:32:19 PM		
<input type="checkbox"/>	Dec 16, 2019 6:32:19 PM (Late...)	v2pPpFz9Xq_cdrI4RcCp...		1.2 MB	Standard
<input type="checkbox"/>	Dec 16, 2019 6:18:33 PM	null		1.2 MB	Standard

Viewing 1 to 2

6. **Hide Versions** again and delete the image you just uploaded.
7. **Select file --> Actions --> Delete**
8. Show version again.
9. You will get to see the file is still there and just delete the marker is added on versions.
10. Select the Delete marker and go to Action and delete it.
11. And Hide versions. You will get your file back.
12. For deleting files permanently show versions, select all versions of file and delete it.

3. Host a Static Website. Enable Versioning.

1. Open notepad on your system.
2. Paste following code and save as index.html

```
<i><h1> This website is hosted using aws simple storage service </h1></i>
```

3. Open S3 service on the AWS console.
4. Upload index.html file to your s3 bucket.
5. Select **Properties** and then **Static website hosting**.
6. Copy endpoint.
7. Select **Use this bucket to host a website**

8. Index document : index.html --> **Save**
9. Paste endpoint in the new tab.
10. you will get a 403 Forbidden error. Because the file is not publicly available

403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: 354700F6EF1D3001
- HostId: qh+P6lwkd66OTlhVQ42A7k1mVHydKGqMBbSPbYUYxuCWbNqbInfJ8f6VSYsTGdqKiJFI6UOpelQ=

- 11.
12. Select Permission tab inside the bucket

Overview Properties **Permissions** Management Access points

Block public access Access Control List Bucket Policy CORS configuration

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 Edit

13.

14. Select the **Edit** button from the right side.

Block all public access Cancel Save

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.

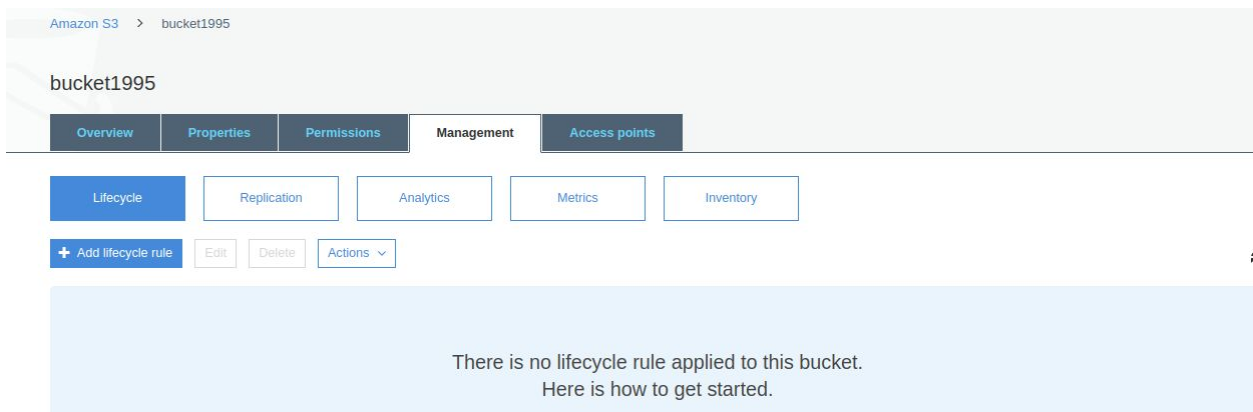
15. Remove the tick mark from **Block all public access.**

16. **Save.**

17. type **confirm**.
18. **Confirm**.
19. Click on **Overview** Tab..
20. Select **index.html** --> **Actions** --> **Make Public** --> **Make Public**.
21. Now try to open the same s3 endpoint you will get your website page.

4. Cross-Region Replication.

1. Create a new bucket with **bucket1010-replica** in Mumbai region **(Note replace 1010 with any other no.)**
2. Make versioning enabled for that bucket.
3. Go inside of the first bucket bucket1010.
4. Select Management --> Replication

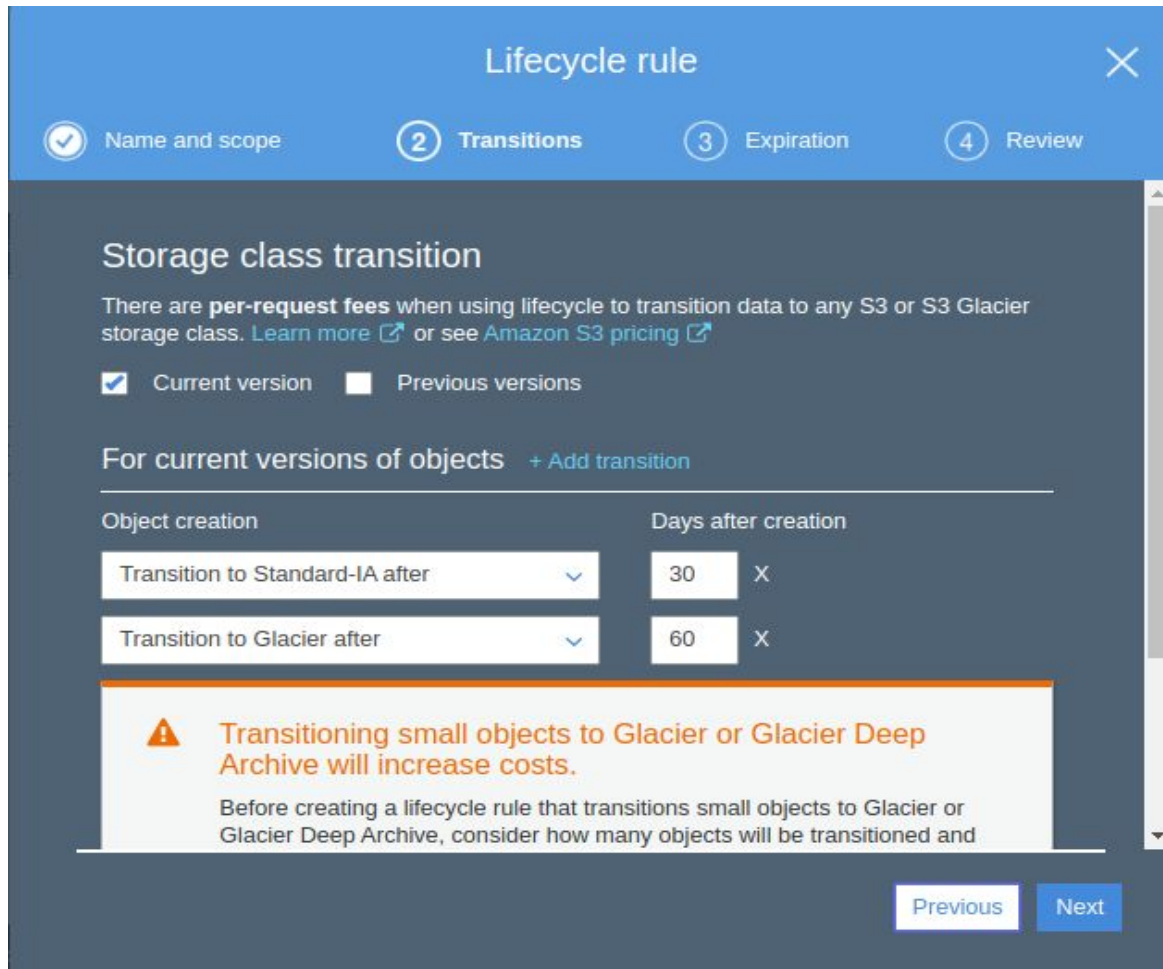


5. **+ Add rule**.
 - a. Entire Bucket

- b. **Next.**
 - c. Destination Bucket: select **bucket1010-replica.**
 - d. Select IAM role --> Create New role
 - e. Name : S3-replica-role
 - f. Status : Enabled
 - g. **Next.**
 - h. **Save.**
6. Upload some new files in **bucket1010** and check out for the same file in **bucket1010-replica.**
 7. Delete newly uploaded files from **bucket1010** check out in **bucket1010-replica.**

5. Life Cycle policy.

1. Select **Management** Tab of **bucket1010** bucket.
2. **+ Add lifecycle rule.**
 - a. Rule Name: Ohio-Mumbai-replica
 - b. **Next.**
 - c. Select Current Version
 - d. **+ Add transition.**
 - e. Transition to standard IA after 30 days
 - f. **+ Add transition.**
 - g. Transition to Glacier after 60 days



- h. **Next.**
3. Configure expiration
 - a. Select Current version and previous version both
 - b. **Next.**
 - c. **Save.**

6. Delete Both Buckets.

1. First Delete all objects from both buckets including versions.
2. Select bucket and **Delete**
3. paste bucket name in the box and **Confirm.**
4. Do it for both buckets one by one.