Lesson 04 Demo 05

Object Replication Between S3 Buckets

Objective: To demonstrate the replication of an object from a source to a destination S3 bucket using replication rules
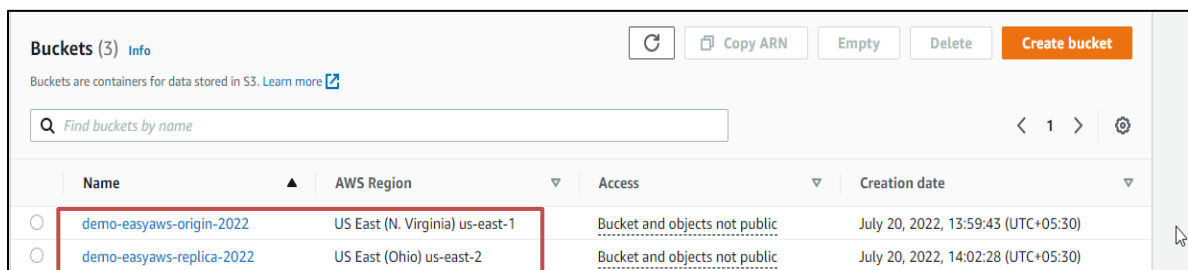
Tools required: None

Prerequisites: None

Steps to be followed:
1. Create two S3 buckets for source and destination
2. Add a file to the source bucket
3. Create a replication rule from the source bucket
4. Replicate the object file from the source to destination bucket
5. Delete and verify the replicated object file

Step 1: Create two S3 buckets for source and destination

1.1 Create two new S3 buckets and use the different AWS regions

Note: Refer to the previous demos to understand how to create an S3 bucket

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** [↗]
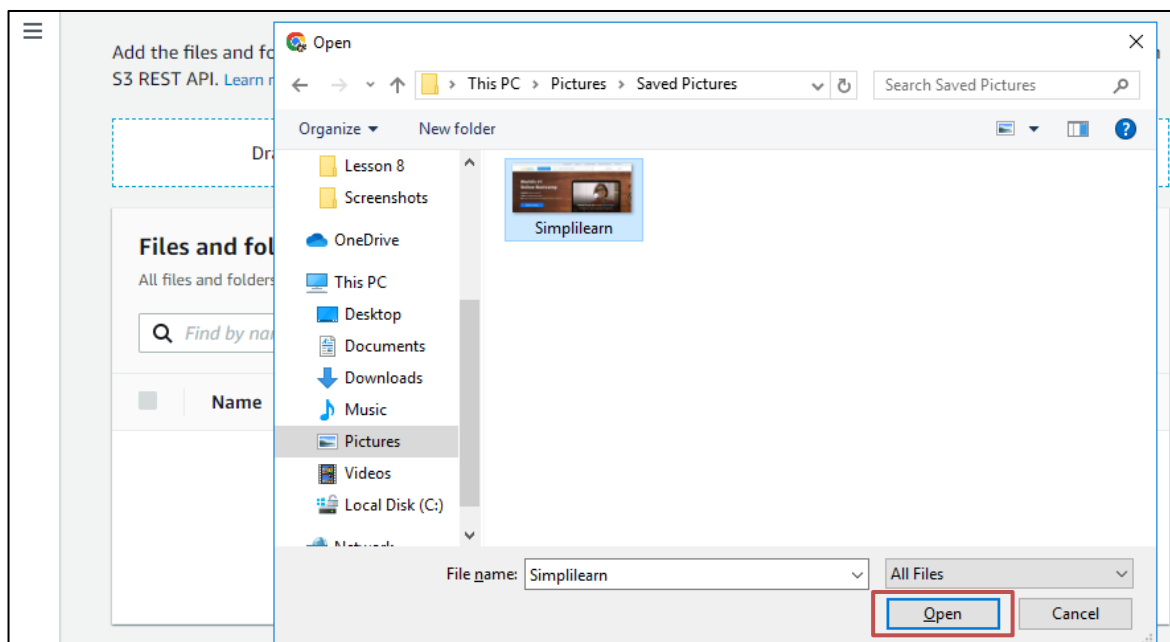
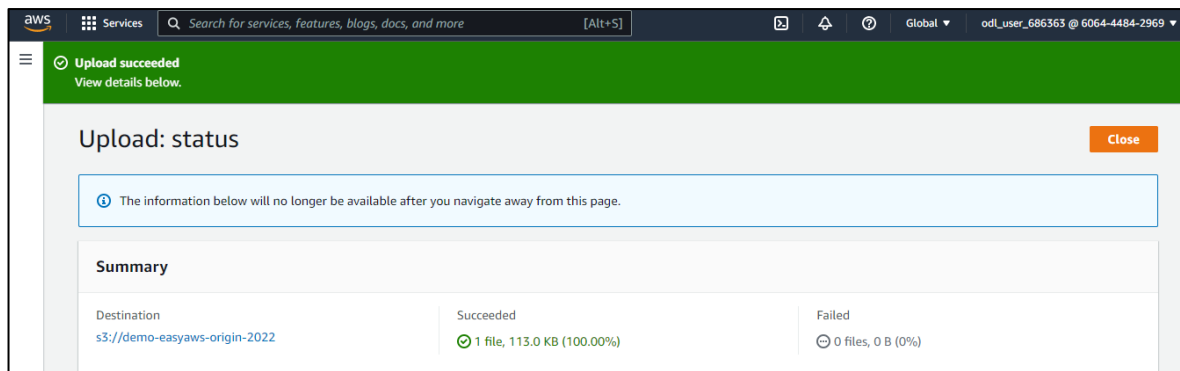Bucket Versioning

○ Disable

● Enable

Note: Please make sure the versioning is enabled while creating the buckets and select different AWS regions
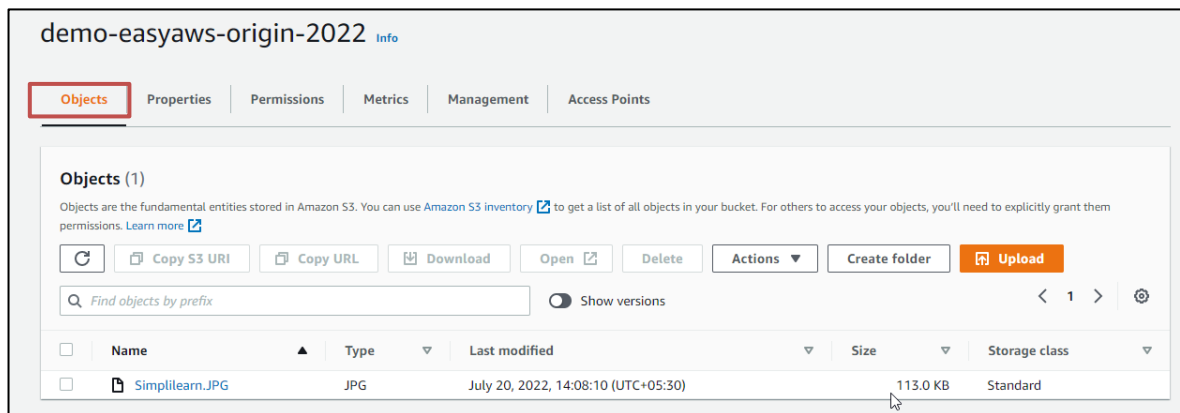
Step 2: Add a file to the source bucket

2.1 Upload a JPG file to the source bucket, named **demo-easyaws-origin-2022**, and click **Open**

The image is uploaded successfully.

2.2 Navigate to the **demo-easyaws-origin-2022** bucket and click on **Objects** to verify the file upload

Step 3: Create a Replication rule from the source bucket

3.1 Navigate to the **Management** tab of the source bucket, demo-easyaws-origin-2022, enter the name **Demo rule** under **Replication rule name**, and click on **Enabled** in Status

3.2 Choose the rule scope as **Apply to all the objects in the bucket**

3.3 Choose the **demo-easyaws-replica-2022,** and click on **Choose path**
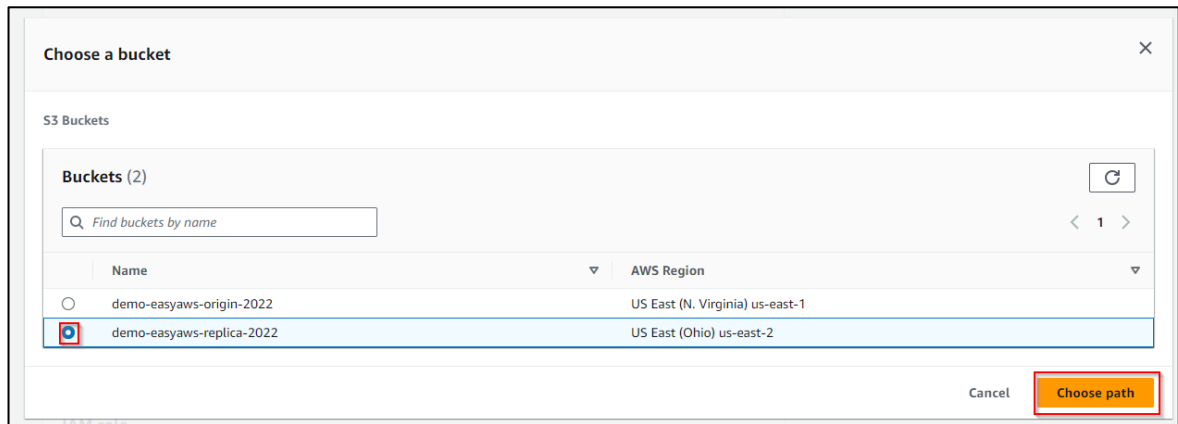
3.4 Click on the **Create new role**
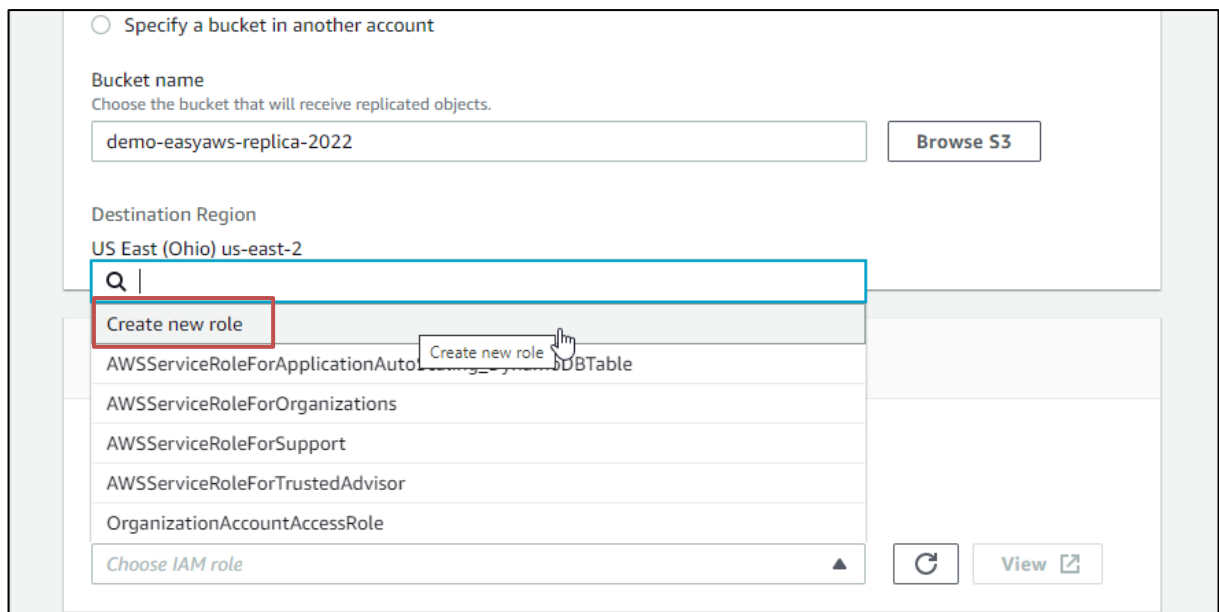
3.5 Click on **Delete marker replication** before saving the replication rule and **save**

Additional replication options

☐ Replication Time Control (RTC)
Replication Time Control replicates 99.99% of new objects within 15 minutes and provides replication metrics and notifications. Additional fees will apply. Learn more 🗗

☐ Replication metrics and notifications
Monitor the progress of your replication rule through Cloudwatch Metrics. Cloudwatch metrics fees apply. Learn more 🗗 or see Amazon Cloudwatch pricing 🗗

☑ Delete marker replication
Delete markers created by S3 delete operations will be replicated. Delete markers created by lifecycle rules are not replicated. Learn more 🗗

☐ Replica modification sync
Replicate metadata changes made to replicas in this bucket to the destination bucket. Learn more 🗗

Cancel   **Save**

3.6 Click on **Submit** without making any changes

yaws-origin-2022 > Replication rules

Replicate existing objects?   ✕

You can enable a one-time Batch Operations job from this replication configuration to replicate objects that already exist in the bucket and to synchronize the source and destination buckets. Learn more 🗗 or see pricing 🗗

Existing objects
🔘 No, do not replicate existing objects.
⚪ Yes, replicate existing objects.

Cancel   **Submit**

Replication rule is successfully created.

Step 4: Replicate the object file from the source to the destination bucket

4.1 Navigate to the destination bucket **demo-easyaws-replica-2022** to verify if the object file is reflecting or empty

Note: The destination bucket will be empty as we have enabled the property to not replicate the existing objects.

4.2 Go to the source bucket, **demo-easyaws-origin-2022**, to reupload the object file; click on the **Show versions** tab to view both the uploaded files

4.3 Navigate to the destination bucket, **demo-easyaws-replica-2022**, and click on the **refresh** icon to view the replicated object file

Step 5: Delete and verify the replicated object file

5.1 Navigate to the source bucket, demo-easyaws-origin-2022, and **delete** the uploaded object file
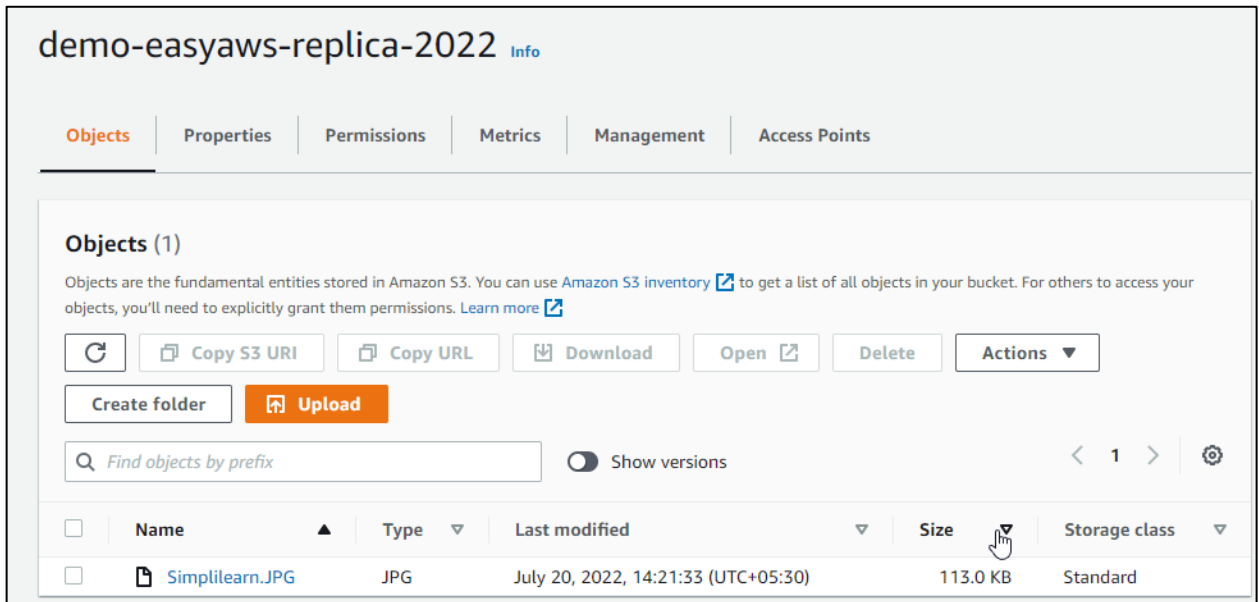
5.2 Navigate to the destination bucket, **demo-easyaws-replica-2022**, and verify if the
replicated object file is still available and not deleted

Note: The object file is available in the **destination bucket** because the **Delete marker replication rule** has been enabled.

By following these steps, you have successfully implemented the process of replicating an object from a source bucket to a destination bucket within Amazon S3.