Managing Data in S3 with Versioning and Lifecycle Rules

⧖ **00:39:44**   Exit Lab   ✅ Complete Lab

⏱ 1 hour duration

📶 Practitioner

👍 👎 Rate this lab

VIDEOS   GUIDE

Managing Data in S3 with Versioning and Lifecycle Rules

Introduction

In this hands-on lab, we'll start with enabling versioning in an S3 bucket, then we will configure the lifecycle rules to automatically transition objects to lower-cost storage classes, and finally, we will change the image files to reduced redundancy storage as the organization has means to recreate them if they are lost.

Understanding and utilizing these S3 features are at the core of S3 data management. Common use cases include recovery from accidental deletions, and lifecycle policies allow for automated migration to lower cost storage classes when appropriate.

Good luck, and enjoy the lab!

Solution

Log in to the AWS Management Console using the credentials provided on the lab instructions page. Make sure you're using the *us-east-1* region.

Enable Versioning on the Provided S3 Bucket

1. Navigate to **S3**.
2. Open the lab-provided S3 bucket.
3. Click the **Properties** tab.
4. Under *Bucket Versioning* click **Edit**, and **Enable**.
5. Click **Save changes**.

Assign a Lifecycle Rule to Objects in the Log Folder

1. In the *Management* tab of the bucket, click **Create lifecycle rule**.

2. Enter a name for the rule (e.g., "log-rule").
3. For *Prefix*, enter "Logs".
4. Under *Lifecycle rule actions*, select **Transition current versions of objects between storage classes**.
5. Under **Transition current versions of objects between storage classes**, set the following values:
   - *Storage class transitions*: **Standard-IA**
   - *Days after object creation*: **90**
6. Click **Create rule**.

Assign a Lifecycle Rule to Objects in the Images Folder

1. Back in the *Management* tab, click **Create lifecycle rule** again.
2. Enter a name for the rule (e.g., "image-rule").
3. For the *Prefix*, enter "Images".
4. Under *Lifecycle rule actions*, select **Transition current versions of objects between storage classes**.
5. Under **Transition current versions of objects between storage classes**, set the following values:
   - *Storage class transitions*: **One Zone-IA**
   - *Days after object creation*: **30**
6. Click **Create rule**.

Add a Lifecycle Rule to Move the Older Log File to Glacier after 180 Days
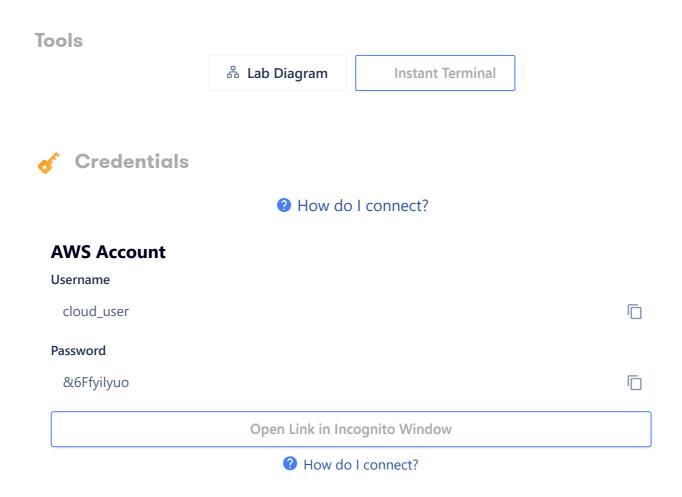
1. Navigate back to **S3** and open the bucket.
2. Click the `Logs/` folder.
3. Open the file titled **2019.csv**.
4. In the top-right corner, click **Object actions**, and from the drop-down select **Edit tags**.
5. Click **Add tag**, and set the following values:
   - *Key*: **Type**
   - *Value*: **OldLogs**
6. Click **Save changes**.
7. Navigate back to the bucket, and click the *Management* tab.
8. Click **Create lifecycle rule**.
9. Enter a name for the rule (e.g., "tagged-logs").
10. Under *Object tags*, enter the following:
    - *Key*: **Type**
    - *Value*: **OldLogs**
11. Under *Lifecycle rule actions*, select **Transition current versions of objects between storage classes**.
12. Under **Transition current versions of objects between storage classes**, set the following values:
    - *Storage class transitions*: **Glacier**
    - *Days after object creation*: **180**

Note: You will be asked if you understand that the lifecycle rule will increase the one-time lifecycle request cost if it transitions small objects.

13. Click **Create rule**.

Conclusion

Congratulations — you've completed this hands-on lab!

Tools

⊹ Lab Diagram   Instant Terminal

🔑 Credentials

❓ How do I connect?

AWS Account

Username

cloud_user   ⧉

Password

&6Ffyilyuo   ⧉

Open Link in Incognito Window

❓ How do I connect?

🖇 Additional Resources

Please log in to the lab environment with the `cloud_user` credentials provided.

Make sure you are using the `us-east-1` region throughout the learning activity.

NOTE: For even more information, including the latest updates, see:

- Amazon S3 Storage Classes
- How Do I Create a Lifecycle Policy for an S3 Bucket?
- Object Lifecycle Management

☑ Learning Objectives

0 of 0 completed

☐ **Enable Versioning on the Provided S3 Bucket**

☐ **Assign a Lifecycle Rule to Objects in the Logs Folder**

☐ **Assign a Lifecycle Rule to Objects in the Images Folder**

☐ **Add a Lifecycle Rule to Move the Older Log File to Glacier after 180 Days**