### AWS CloudTrail Setup and S3 Logging Configuration-Task2

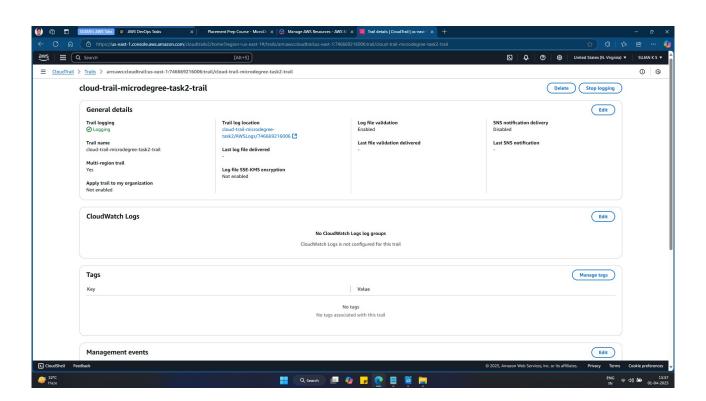
#### Task2 Overview:

This document outlines the steps taken to set up AWS CloudTrail for logging all events across multiple AWS regions, with a focus on logging S3 bucket events. These logs are stored in an Amazon S3 bucket named cloud-trail-microdegree-task2, which was created specifically for this task. This configuration enables tracking of all activities performed within the AWS environment, providing insights into resource access and modifications.

## Steps for Configuration:

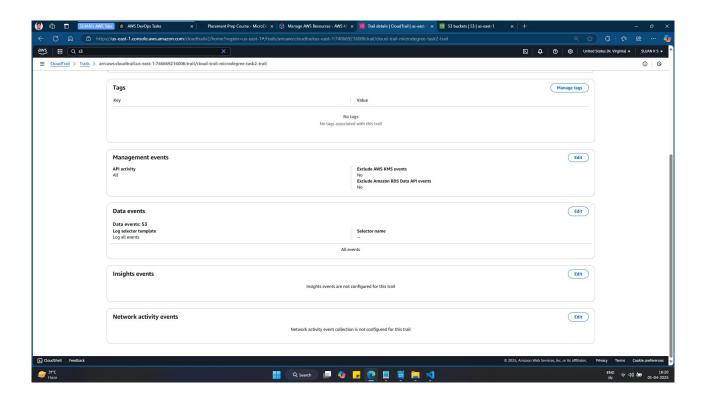
### Step 1: Create a CloudTrail Trail with Multi-Region Logging

- 1. Log into AWS Management Console and navigate to CloudTrail.
- 2. Click on Create trail.
- 3. Provide the Trail Name as cloud-trail-microdegree-task2-trail.
- 4. Enable Multi-Region Logging to ensure that activities across all regions are captured.
- 5. Create a new S3 bucket named cloud-trail-microdegree-task2 to store the logs.
- 6. Enable Log file validation to ensure the integrity of the log files.
- 7. Click Create to finalize the setup.



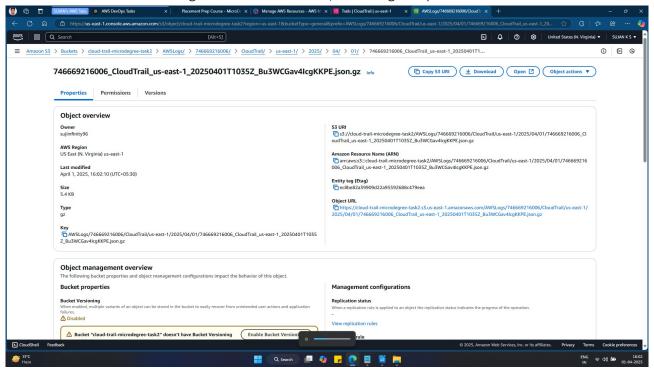
# Step 2: Enable Data Events for S3

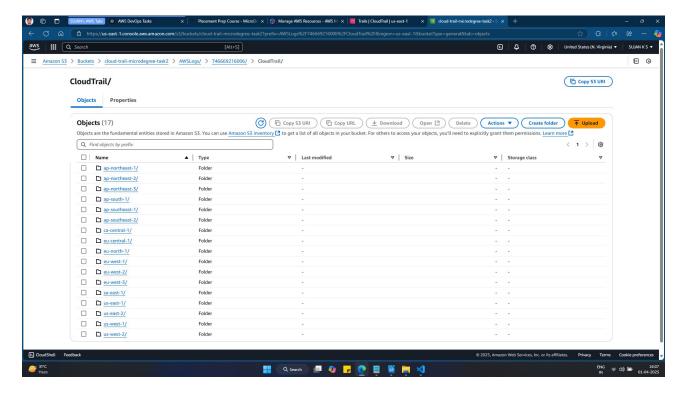
- 1. From the CloudTrail console, select the created trail (cloud-trail-microdegree-task2-trail).
- 2. Click on Edit under the Data Events section.
- 3. Select S3 as the event source.
- 4. Enable logging for All read and write events to capture detailed S3 actions.
- 5. Save the settings to apply the changes.

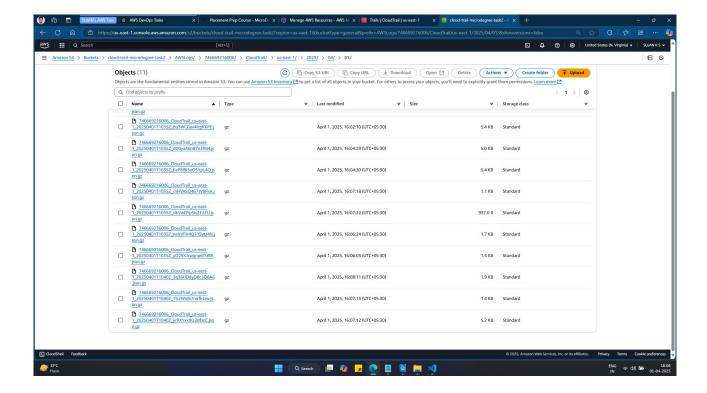


## Step 3: Verify Log File Storage in S3

- 1. Navigate to the S3 console and select the bucket cloud-trail-microdegree-task2.
- 2. Inside the bucket, you will see folders structured by AWS region (e.g., us-east-1, ap-south-1).
- 3. Click on the us-east-1 folder to view CloudTrail logs.
- 4. You should see the logs for various API calls, including S3 operations.







#### Conclusion:

The configuration of AWS CloudTrail for multi-region logging and the tracking of S3 events provides comprehensive monitoring and auditing capabilities. By storing the logs in the newly created S3 bucket (cloud-trail-microdegree-task2), organizations can ensure secure and scalable log storage. The event data captured in CloudTrail logs allows for detailed insights into the actions performed on AWS resources, aiding in security, compliance, and troubleshooting.

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