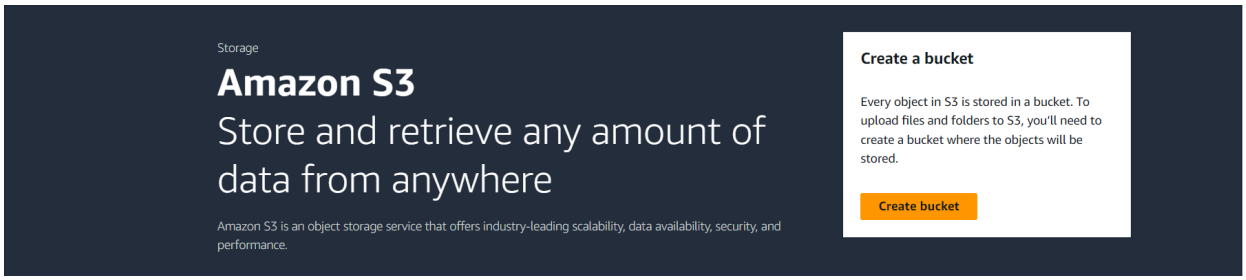
# Experiment no-12

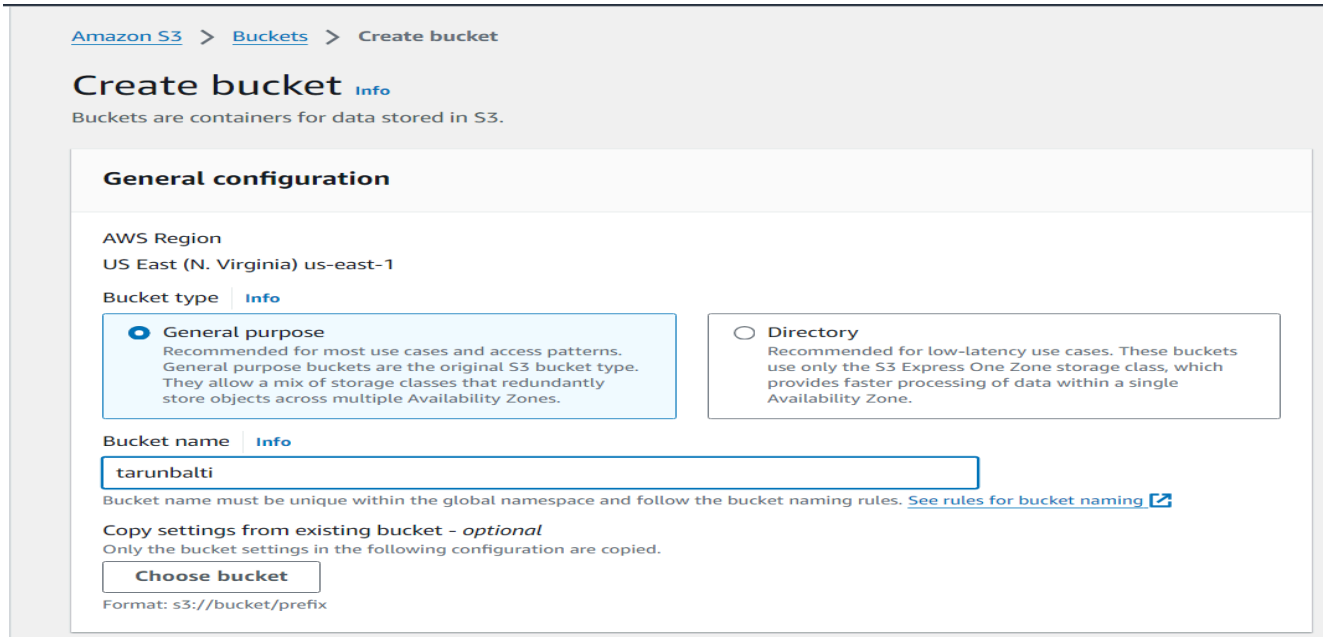
## Aim:To create a Lambda function which will log “An Image has been added” once you add an object to a specific bucket in S3

## Steps to Create the Setup

### 1. Create an S3 Bucket

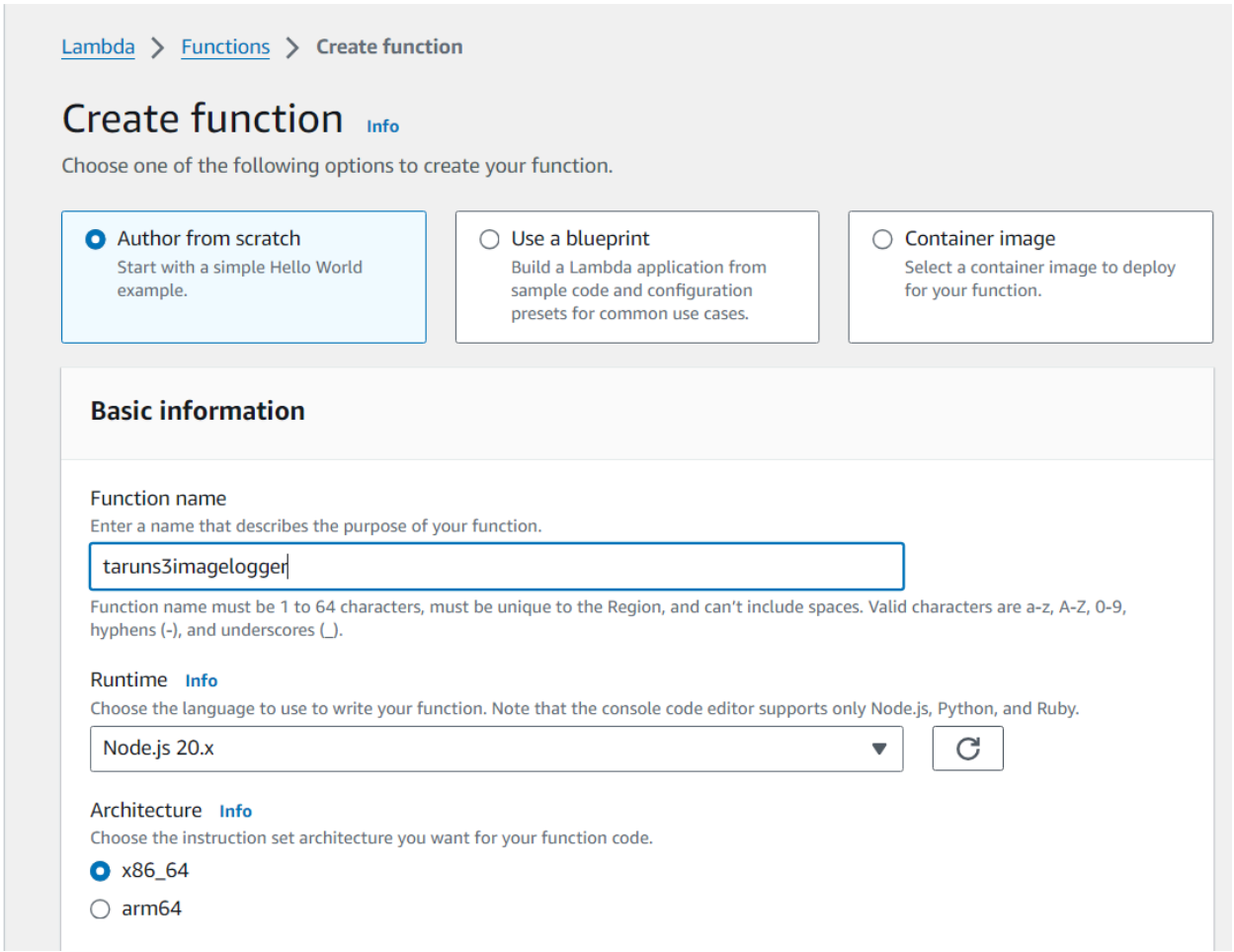
- **Navigate to S3**: Go to the AWS Management Console and select the S3 service.
- **Create Bucket**: Click on "Create bucket."
- **Bucket Name and Region**: Enter a unique name for your bucket and select the desired AWS region.
- **Settings**: Configure additional settings (versioning, encryption, etc.) as needed and click "Create bucket."




### 2. Create a Lambda Function

- **Navigate to Lambda**: From the AWS Management Console, go to the Lambda service.
- **Create Function**: Click on "Create function."
- **Author from Scratch**: Choose the "Author from scratch" option.
- **Function Name**: Enter a name for your function (e.g., `S3ImageLogger`).
- **Runtime Selection**: Select a runtime (Python 3.x or Node.js).
- **Create Function**: Click "Create function."



## 3. Write the Lambda Function Code

- In the Lambda function console, scroll down to the code editor.

Replace the default code with the following code snippet (assuming you're using Python):
python
Copy code

```
import json

def lambda_handler(event, context):
    # Extract bucket name and object key from the event
    bucket_name = event['Records'][0]['s3']['bucket']['name']
    object_key = event['Records'][0]['s3']['object']['key']

    # Log a message
    print(f"An Image has been added to the bucket {bucket_name}: {object_key}")

    return {
        'statusCode': 200,
        'body': json.dumps('Log entry created successfully')
    }
```

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- Click "Deploy" to save your changes.
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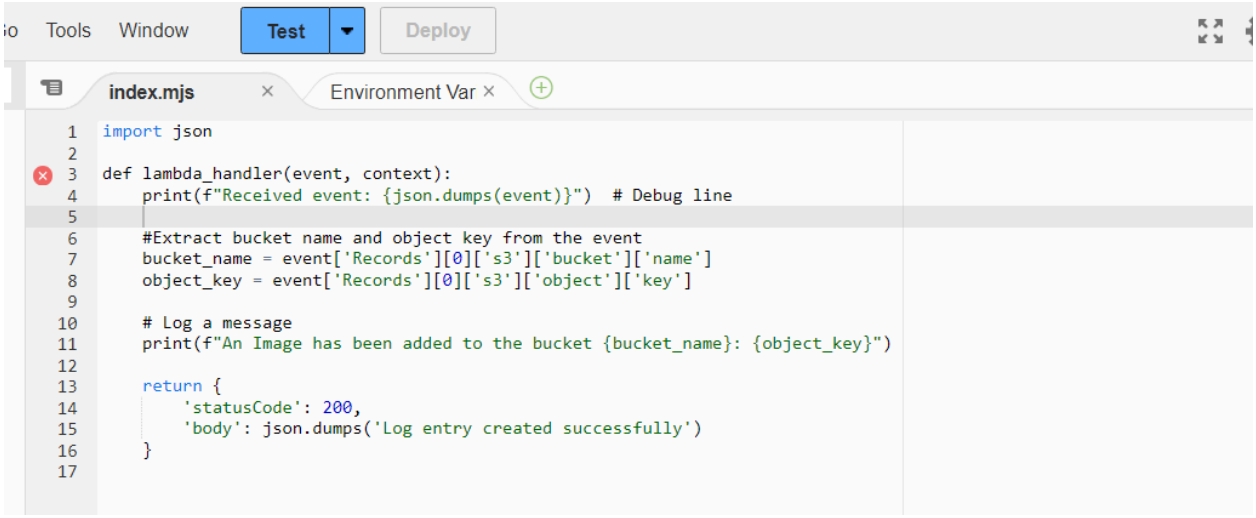
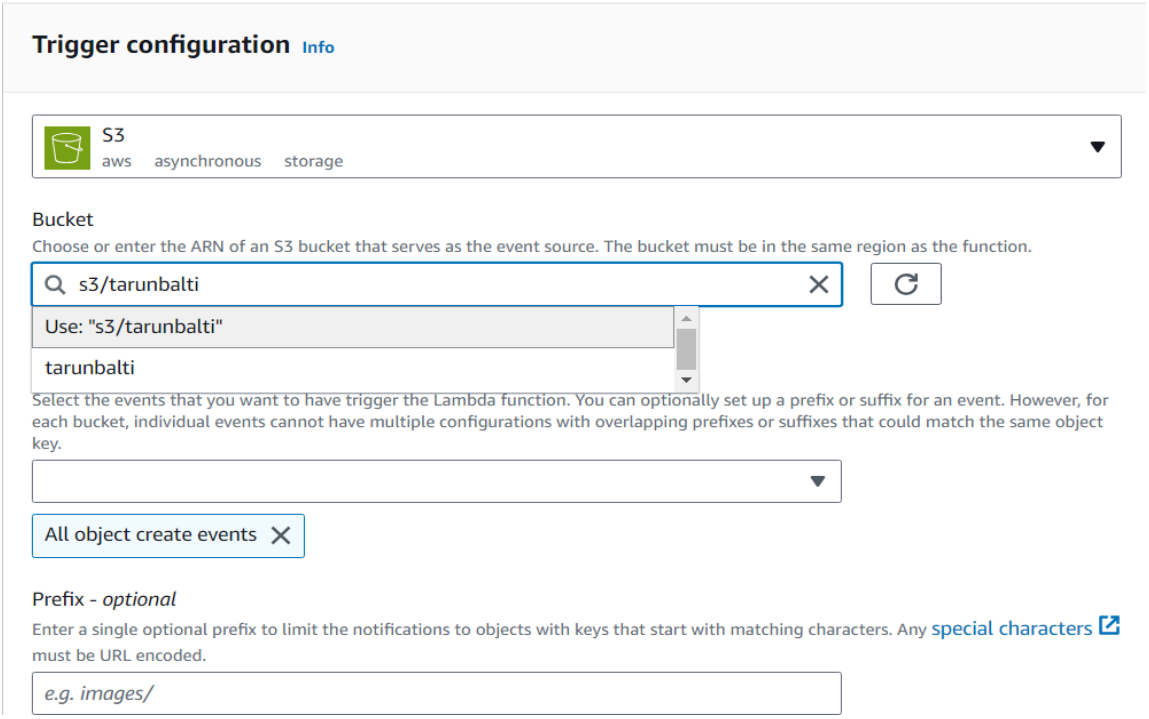
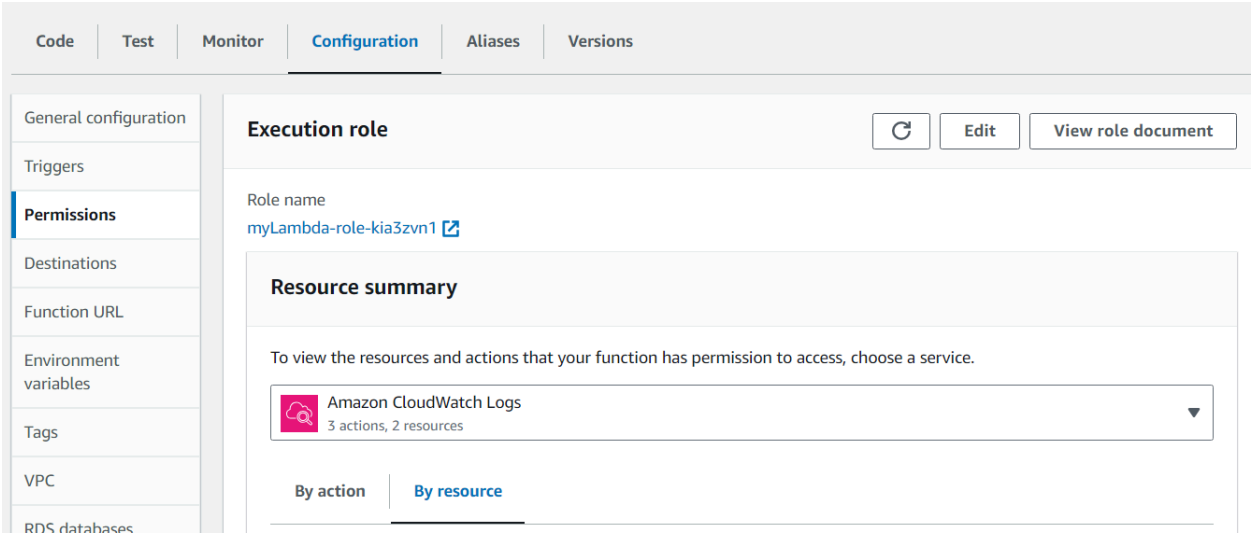


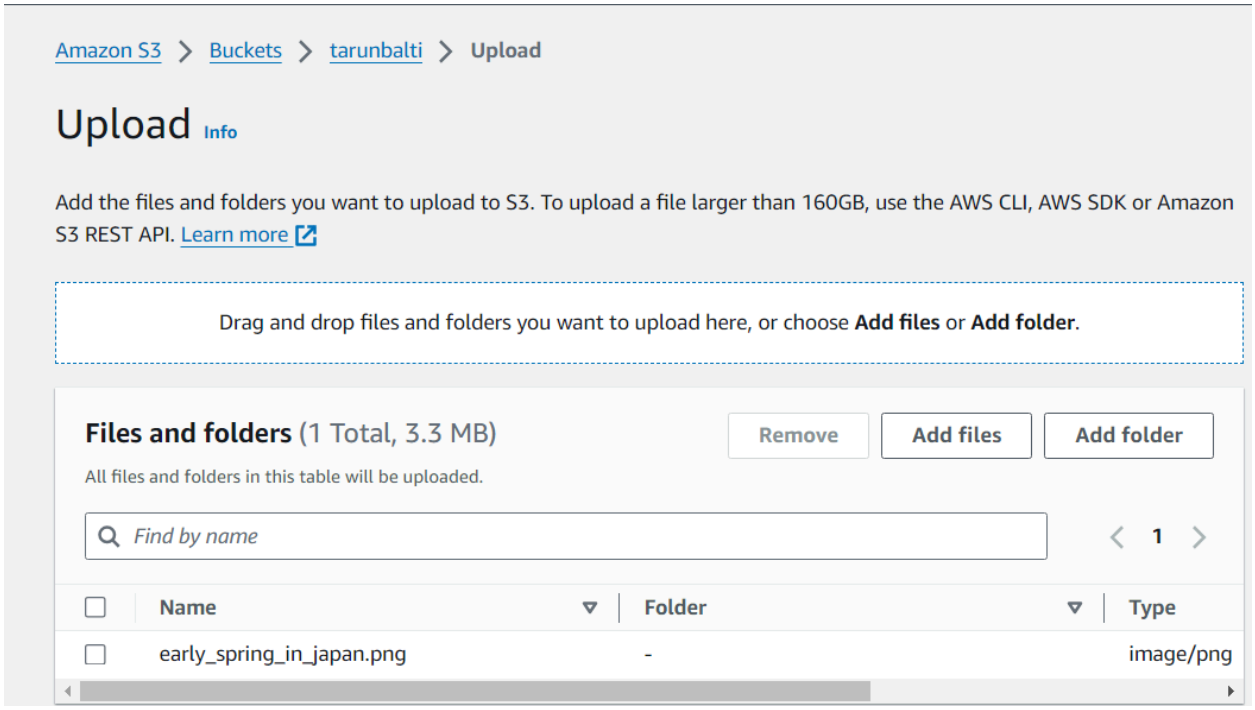

## 4. Set Up S3 Trigger for the Lambda Function




## 5. Test the Setup

- Upload an image file to your S3 bucket.
- Go to the "Monitoring" tab in your Lambda function to check the logs.
- Alternatively, use CloudWatch Logs to view the output and confirm that the message "An Image has been added" has been logged.


Amazon S3 > Buckets > tarunbalti > 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, 3.3 MB)
Remove
Add files
Add folder
All files and folders in this table will be uploaded.
Find by name
1
Name
Folder
Type
early_spring_in_japan.png
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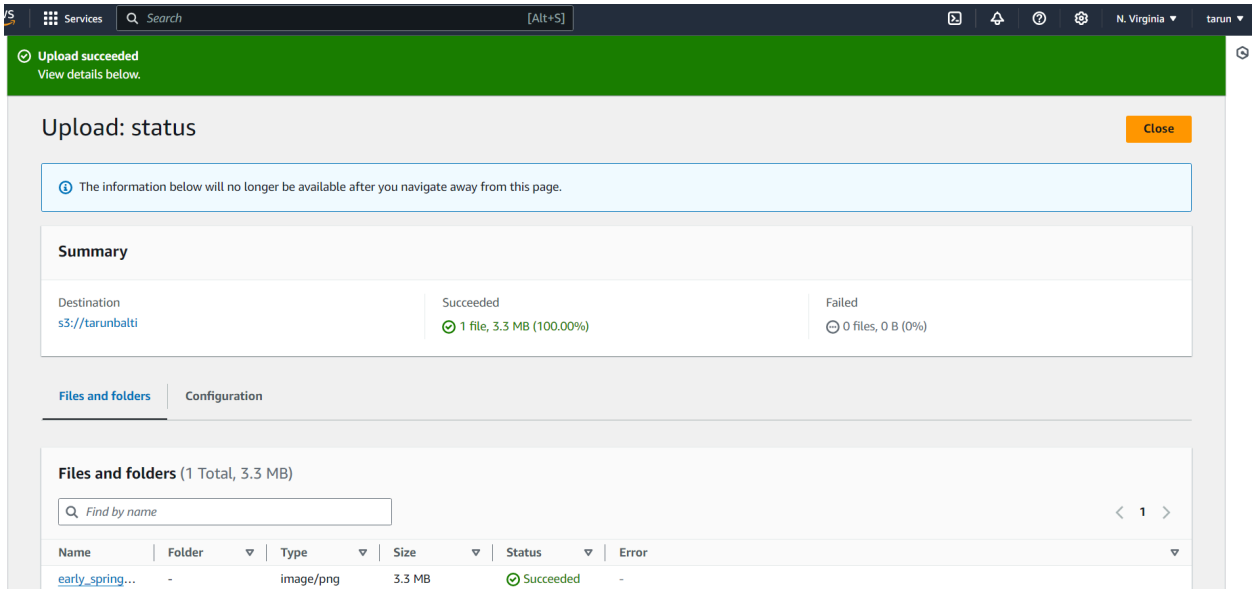
image/png


Services
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tarun
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
s3://tarunbalti
Succeeded
1 file, 3.3 MB (100.00%)
Failed
0 files, 0 B (0%)
Files and folders
Configuration
Files and folders (1 Total, 3.3 MB)
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early_spring...
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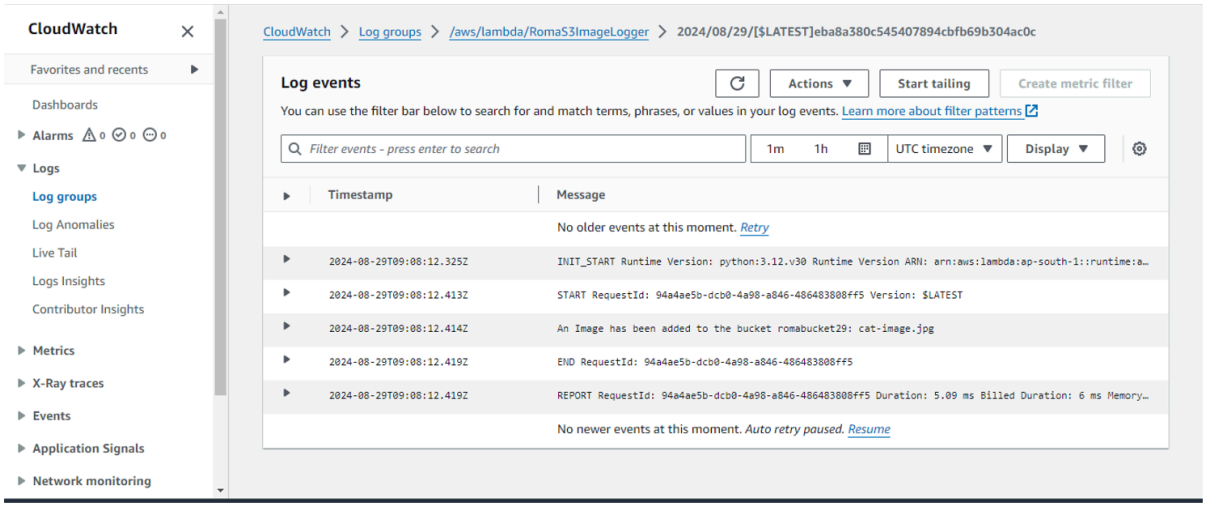


**Conclusion: The integration between AWS S3 and Lambda offers a seamless, event-driven solution that automates tasks like logging image uploads. This enables dynamic responses to changes in S3 without the need for continuously running servers.**