

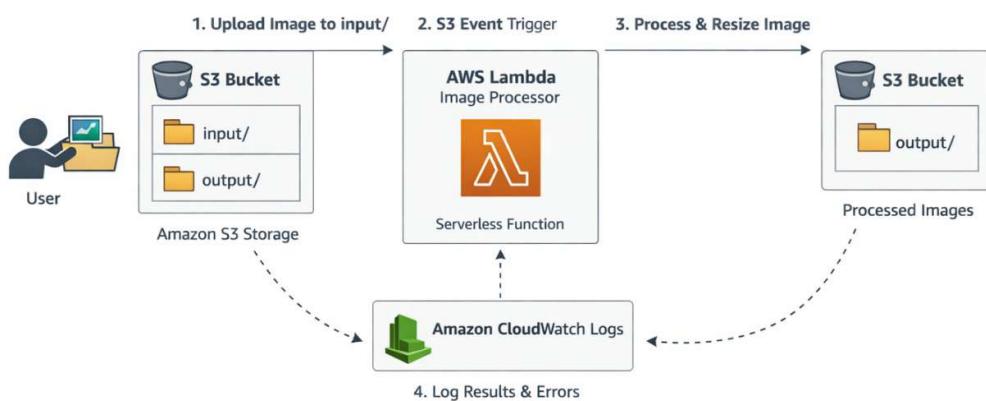
Project-Title: Serverless Image Processing (AWS)

Project Overview:

- This project demonstrates a serverless event-driven architecture using AWS services.
- When a user uploads an image into the input/ folder of an S3 bucket:
- Amazon S3 triggers AWS Lambda
- Lambda processes the file (copy or resize logic)
- The processed file is stored in the output/ folder
- Logs are stored in CloudWatch

The infrastructure is provisioned using CloudFormation (Infrastructure as Code).

Architecture:



Flow:

User uploads image to input/ in S3

S3 triggers Lambda function

Lambda processes the image

Processed image is saved to output/

Logs are stored in CloudWatch

AWS Services Used:

Amazon S3 – Object storage

AWS Lambda – Serverless compute

IAM – Permissions for Lambda

CloudWatch – Logs & monitoring

CloudFormation – Infrastructure as Code

📁 S3 Structure

image-processing-bucket/

 |—— input/

 └—— output/

Upload images inside input/

Processed images appear inside output/

Implementation Steps (Simple Version)

1 Create Infrastructure

Deploy CloudFormation template to create:

S3 bucket

Lambda function

IAM role

Lambda permissions

2 Configure S3 Trigger

In S3 bucket:

Go to Properties → Event Notifications

Create event:

Event type: All object create events

Prefix: input/

Destination: Lambda function

3 Lambda Logic (Simple Copy Version)

Given in repository

How to Test:

Upload any image inside:

input/

Wait a few seconds

Check:

output/

The image will be automatically copied.