Serverless Image Processing

1. Create S3 Buckets

Login to AWS Console → S3.

Click Create Bucket.

Bucket Name: **upload-buck-01**

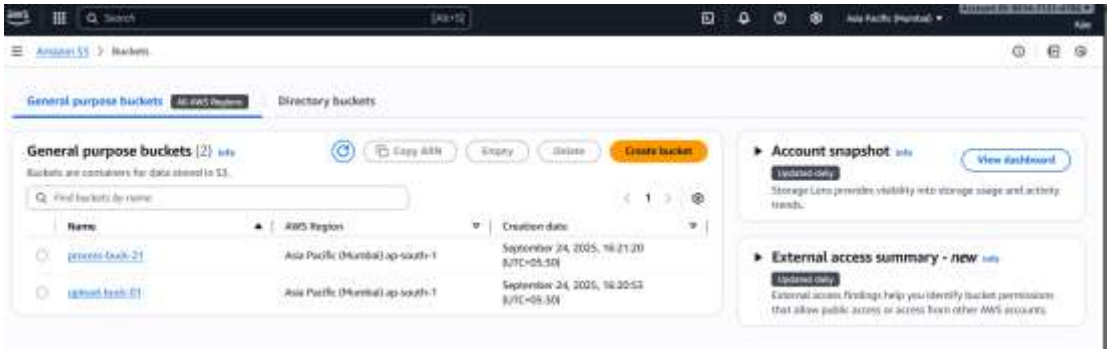
Region: ap-south-1

Enable Block Public Access.

Click Create.

Repeat to create processed bucket:

Bucket Name: **process-buck-21**



2. Create IAM Role for Lambda

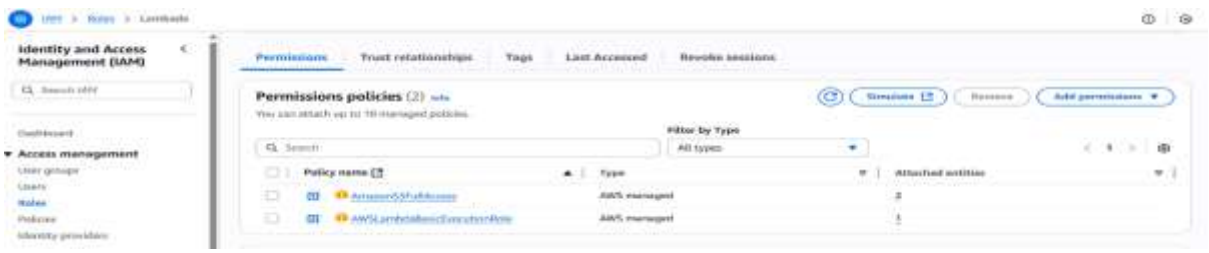
Go to IAM → Roles → Create Role.

Select Trusted Entity: AWS Service → Lambda.

Permissions: Attach policies:

AmazonS3FullAccess

AWSLambdaBasicExecutionRole (for CloudWatch logs)



Name: **Lambda** → Create Role

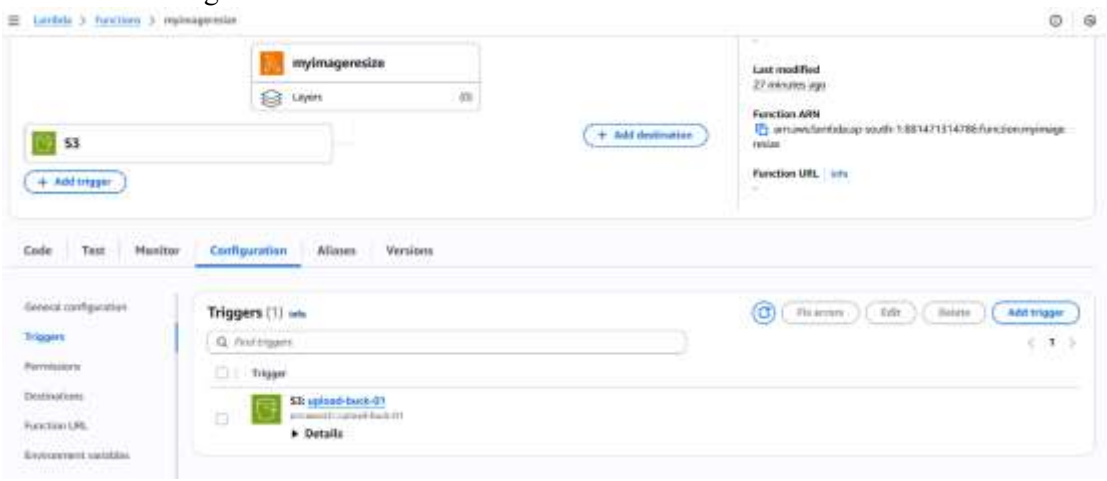
3.Create Lambda Function

Go to AWS Lambda → Create Function → Author from Scratch.

Function Name: **myimageresize**

Runtime: **python 3.12**

Role: Use existing role → **Lambda**



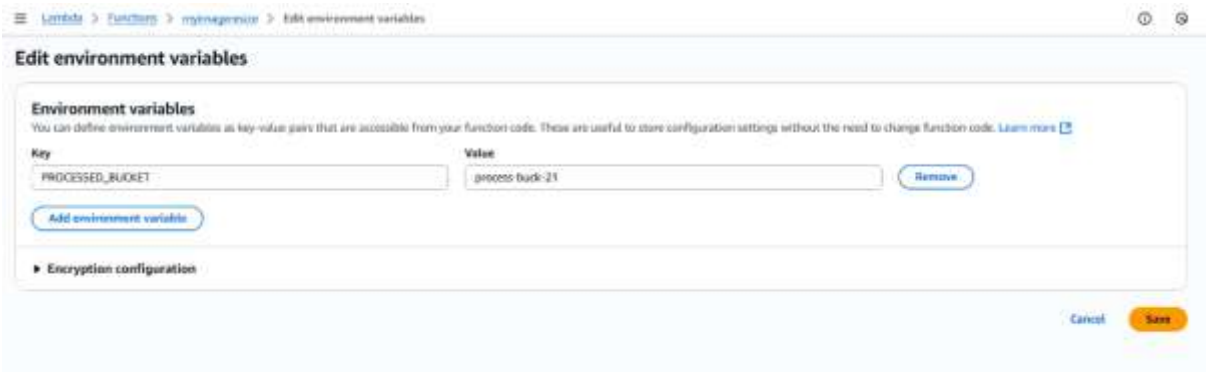
4.Add Environment Variables

In Lambda, go to Configuration → Environment Variables → Edit.

Add a variable:

Key: **PROCESSED_BUCKET**

Value: **process-buck-21**



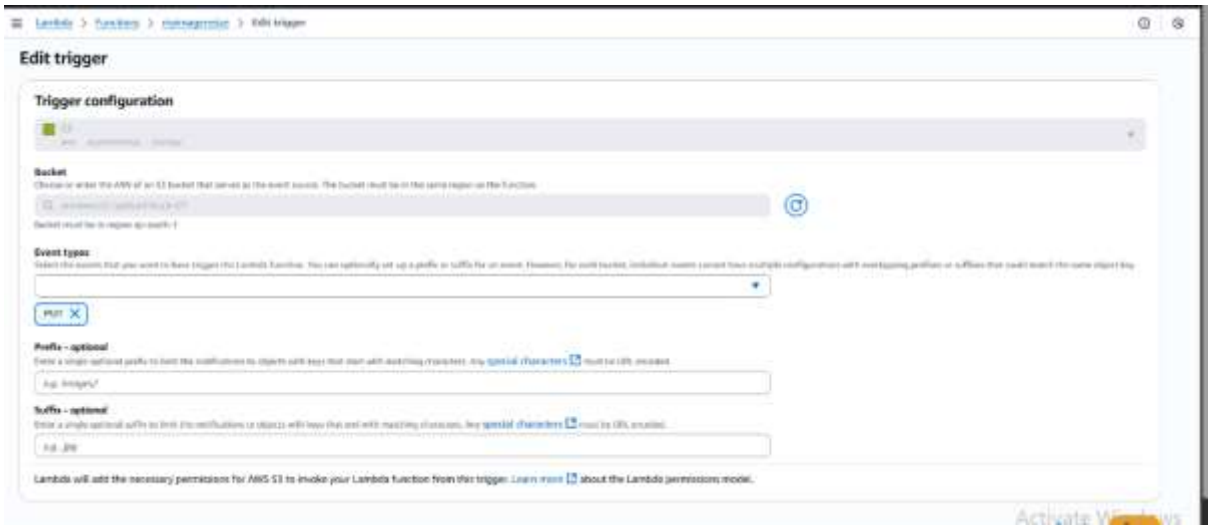
5. Add S3 Trigger

Go to Configuration → Triggers → Add Trigger → S3

Select upload bucket: **process-buck-21**

Event Type: PUT (object created)

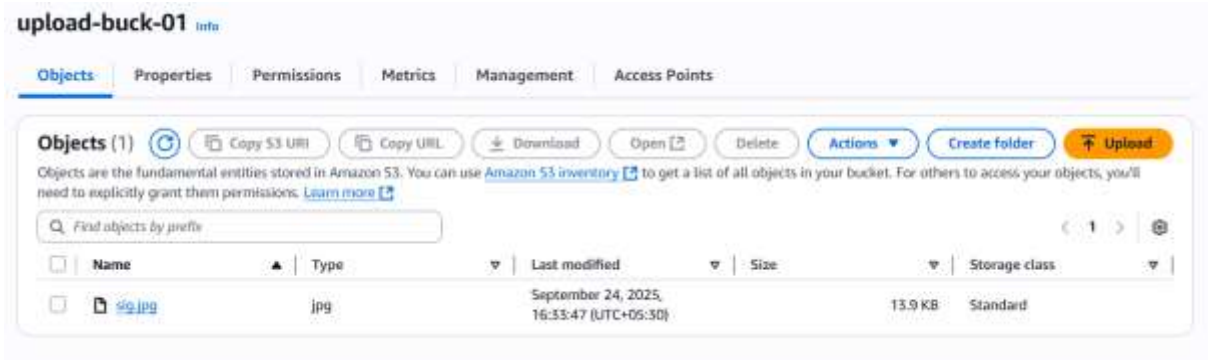
Enable trigger → Add



Now Lambda will automatically run whenever an image is uploaded to my-image-uploads.

6.Test trigger

Uploads → original images uploaded by users.



Processed → resized/compressed images saved by Lambda.

Original Image:

Resize image:

7. Monitor with CloudWatch

Go to **CloudWatch → Logs → Log Groups → /aws/lambda/ myimageresize**