AWS Lambda

SERVERLESS IMAGE PROCESSING

PROJECT

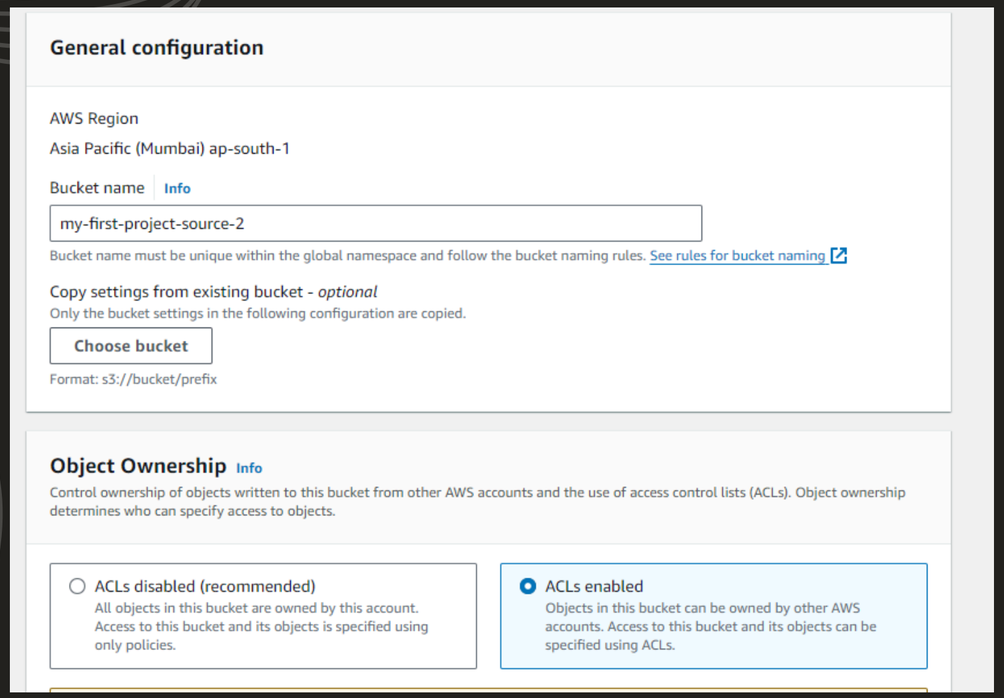
Content

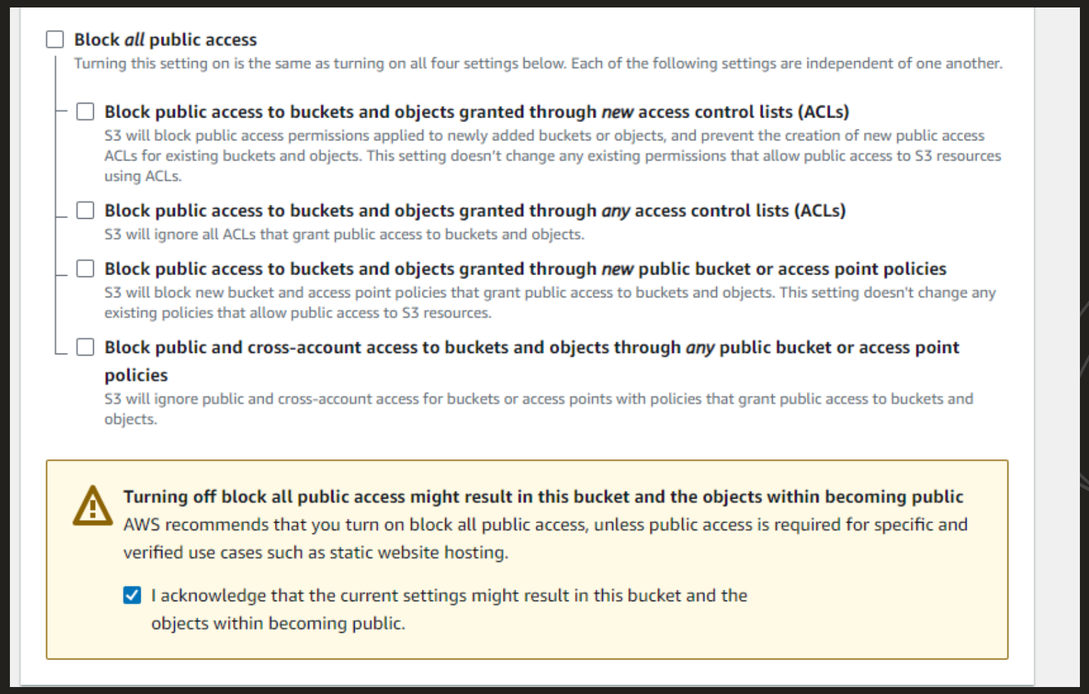
- Login to AWS Console
- Create s3 Bucket
- Create Lambda Function
- Create Policy and Role
- For Executing Function correctly test JSON code
- Check The Result

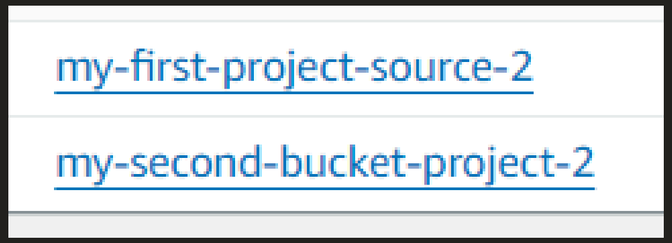
Create Bucket

Source Bucket and Destination Bucket

Source Bucket for uploading the images and files, and the destination bucket for their results





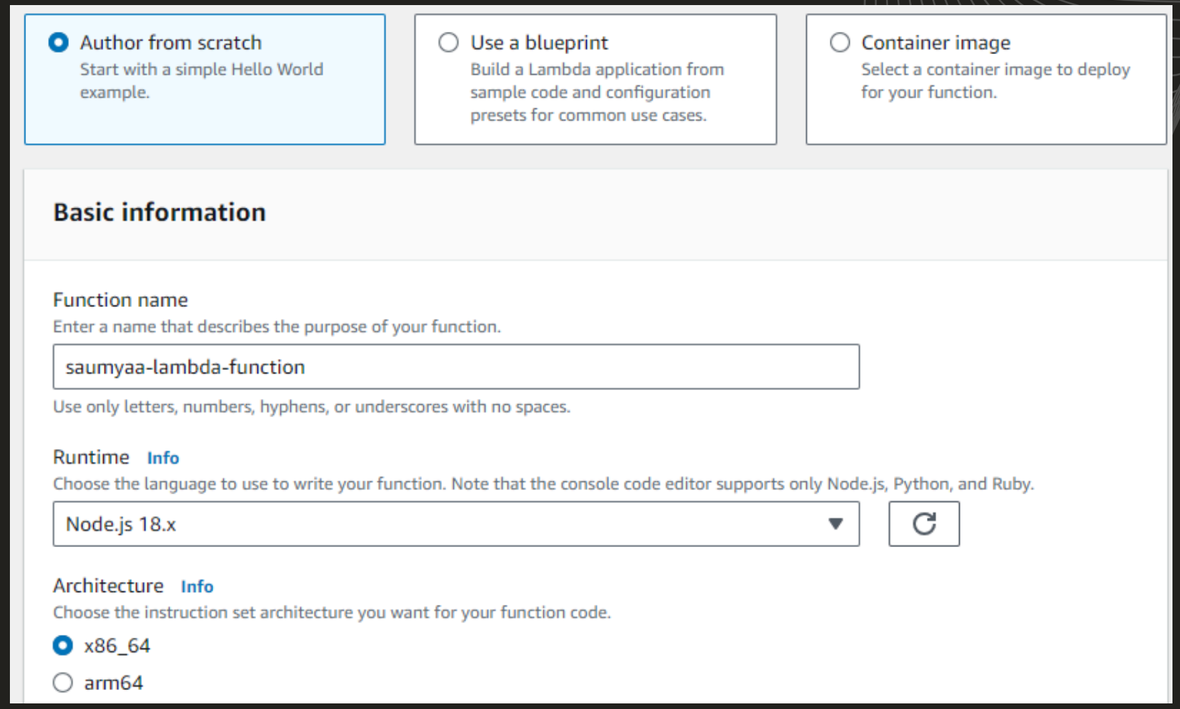


Both Bucket Name

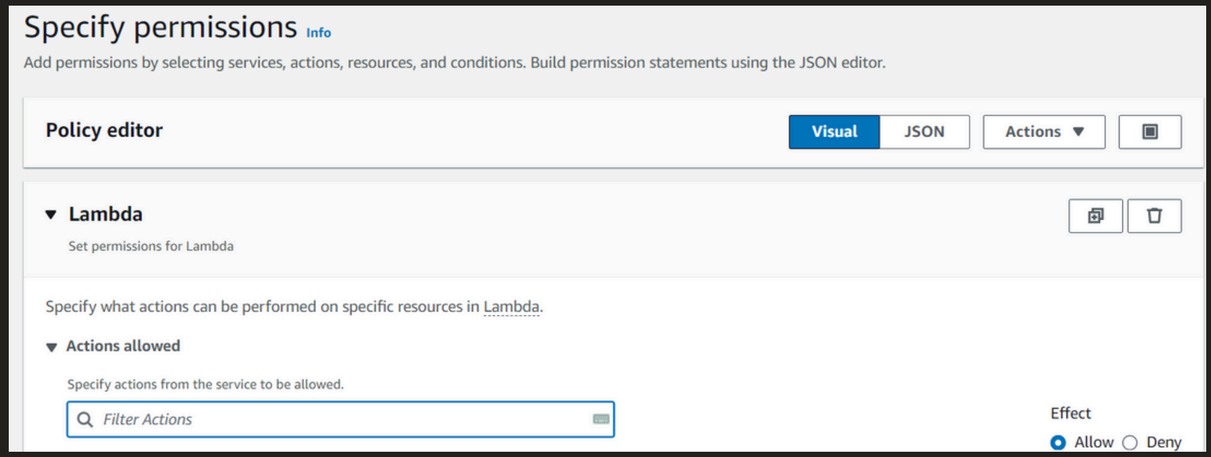
Create Lambda Function

Create function

- Create a Function
- Select Node.js 18.x
- Click on Change default Execution Role
- Choose Use an Existing Role
- Go to the IAM console
- Go to the policy tab
- Create Policy



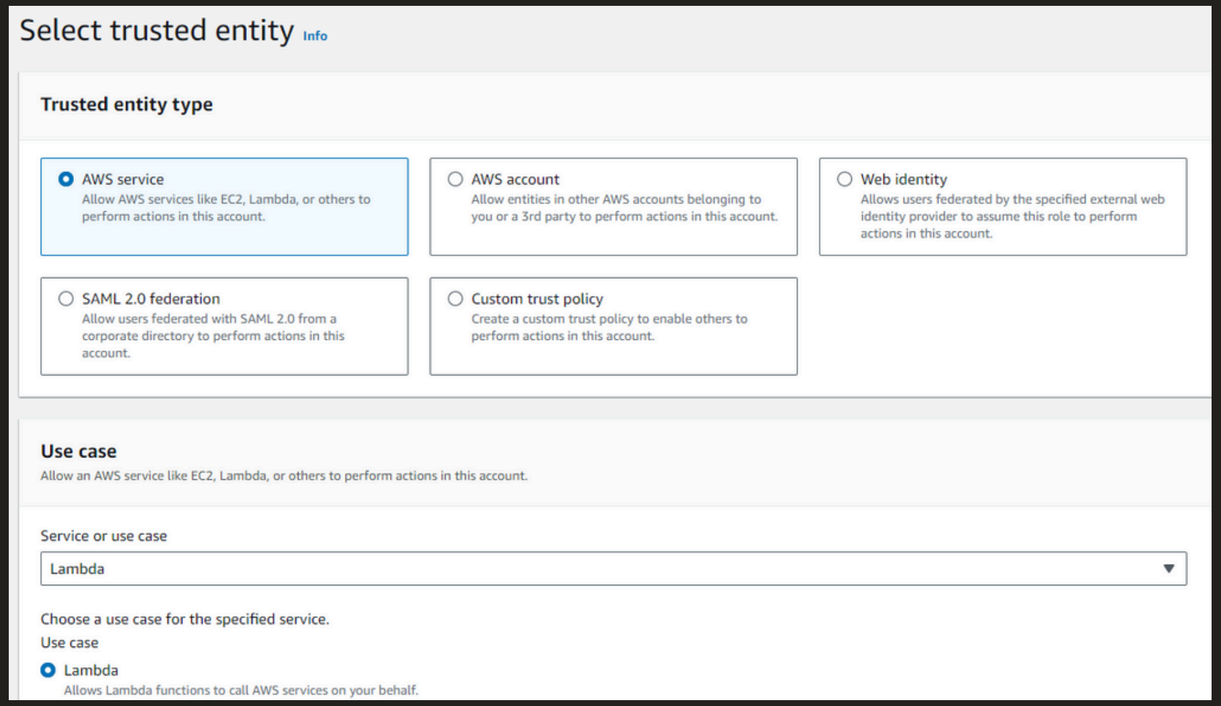
Create policy



Click on the JSON tab

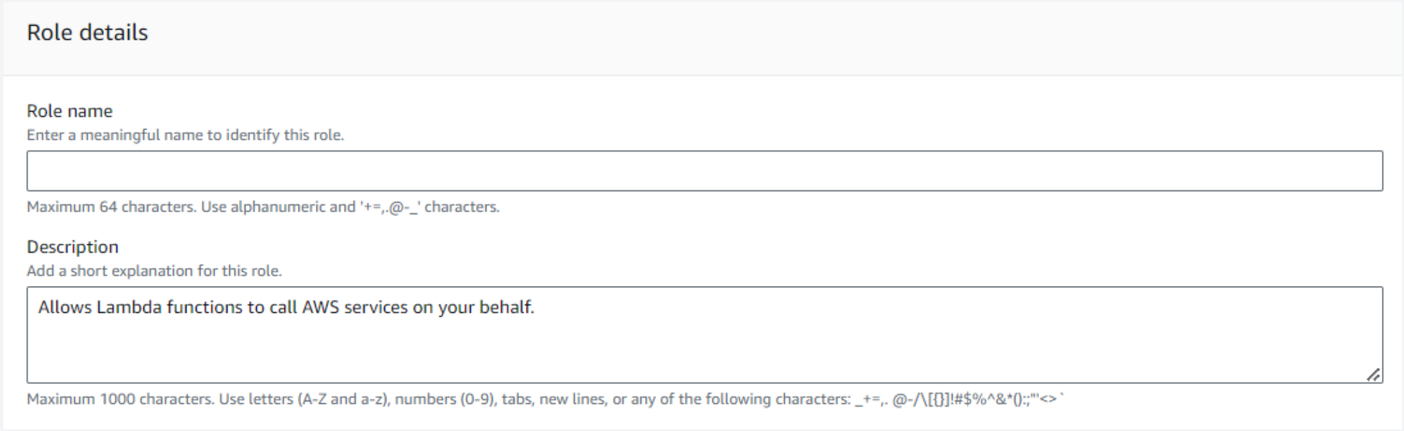
Write the code to the Policy Editor

- Now From the service dropdown, go to Role tab

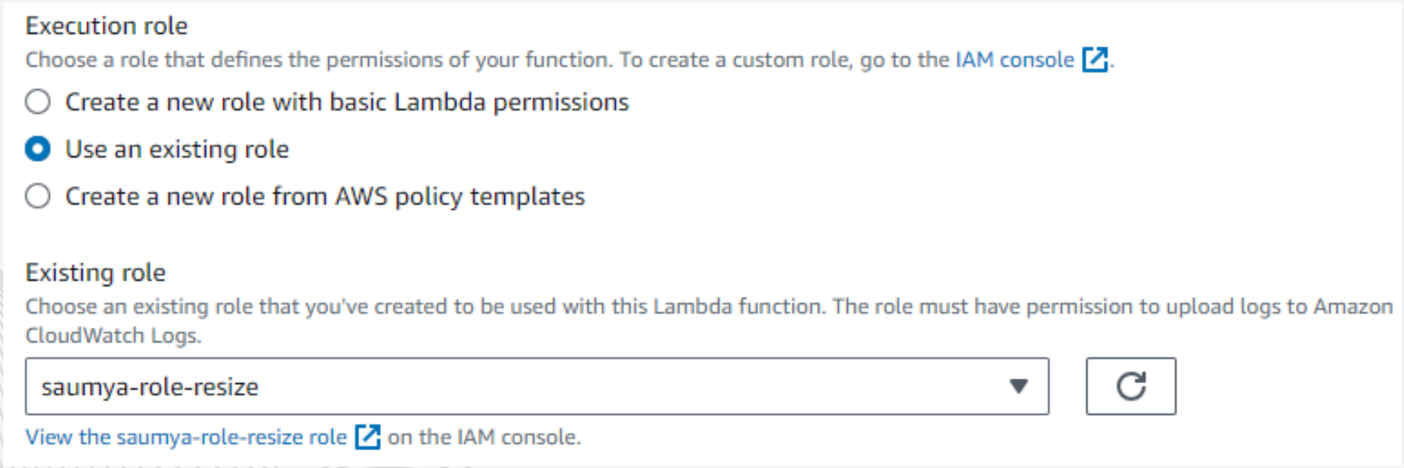


After Writing the code click on Next button

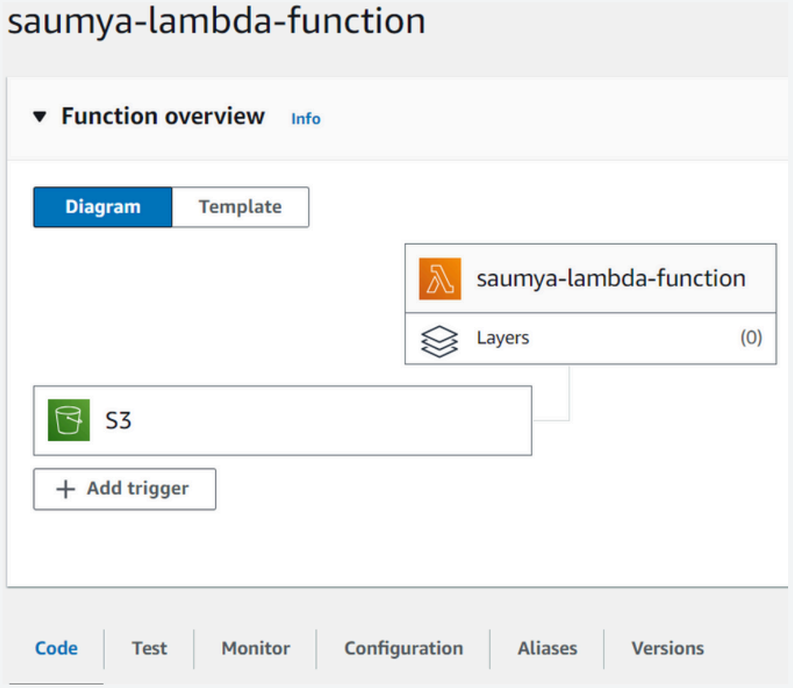
1. Now, add Role Details



2. Again come back to the lambda function, and where you choose the option Choose an Existing Role

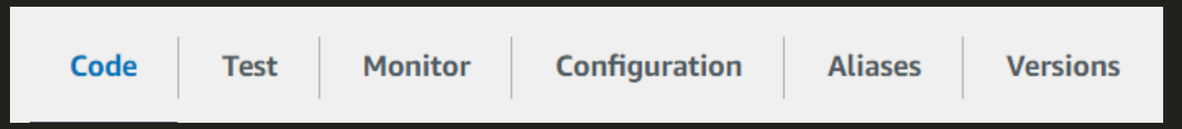


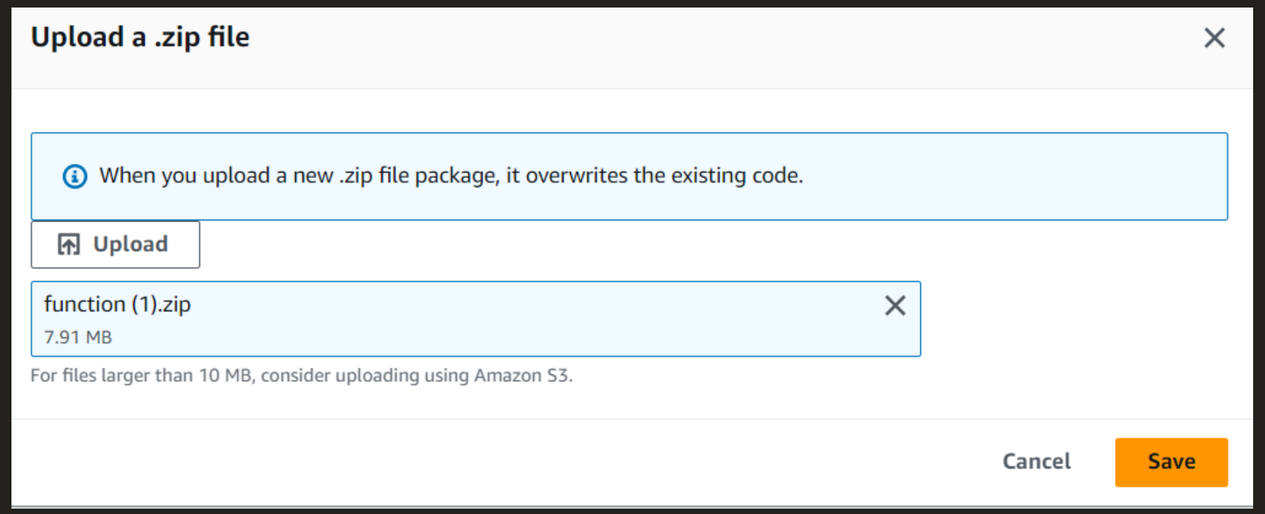
3. In lambda add trigger function



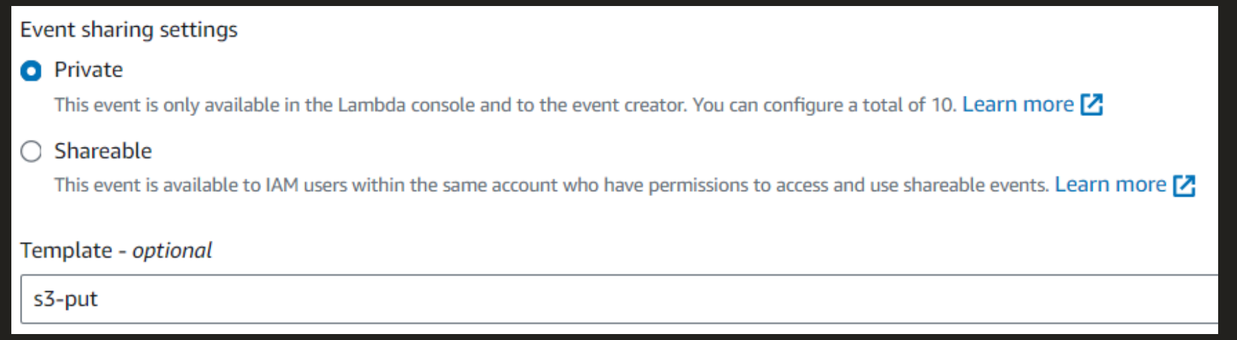
4 . Go to the configuration tab choose environmental variables set key and value where value is your destination bucket name

5. Go to code tab and upload a zip file of your automatic resize function code

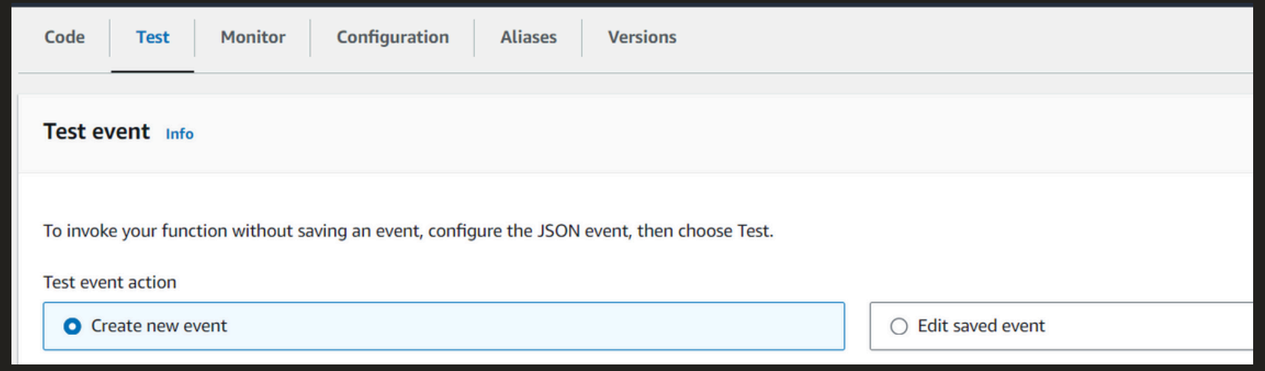




7. Give s3-put to the Template



6. After uploading a file, go to test tab to execute function code successfully

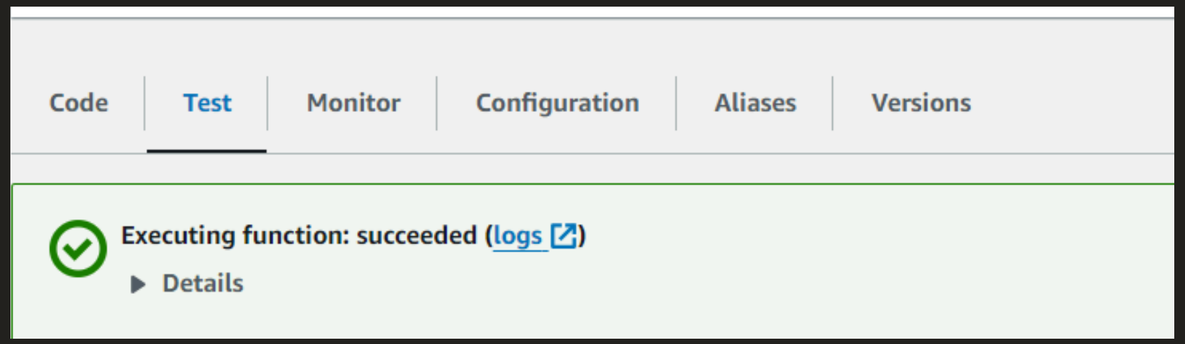


8. now make changes in the code, give the name of your source bucket to the example tag and in the key tag write the name of your uploaded image or file

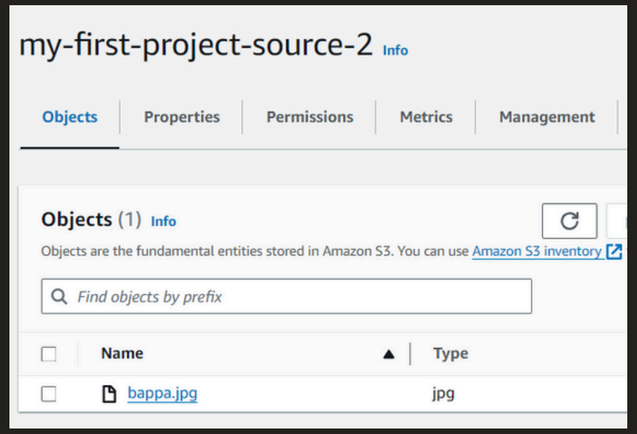
Event JSON

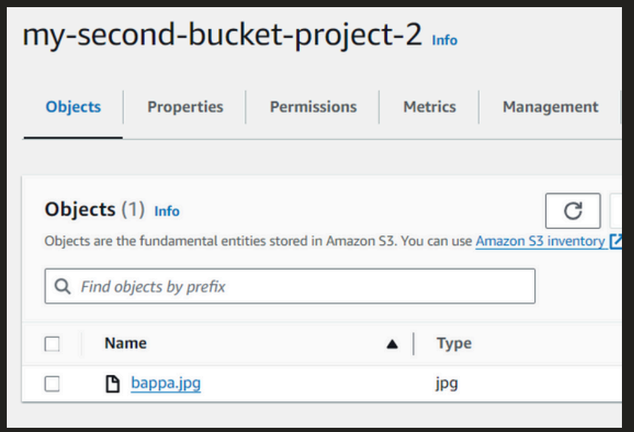

```
{
  "Records": [
    {
      "eventVersion": "2.0",
      "eventSource": "aws:s3",
      "awsRegion": "us-east-1",
      "eventTime": "1970-01-01T00:00:00.000Z",
      "eventName": "ObjectCreated:Put",
      "userIdentity": {
        "principalId": "EXAMPLE"
      },
      "requestParameters": {
        "sourceIPAddress": "127.0.0.1"
      },
      "responseElements": {
        "x-amz-request-id": "EXAMPLE123456789",
        "x-amz-id-2": "EXAMPLE123/5678abcdefghijklambdaisawesome/mnopqrstuvwxyzABCDEFGH"
      },
      "s3": {
        "s3SchemaVersion": "1.0",
        "configurationId": "testConfigRule",
        "bucket": {
          "name": "my-first-project-source-2",
          "ownerIdentity": {
            "principalId": "EXAMPLE"
          },
          "arn": "arn:aws:s3:::my-first-project-source-2"
        },
        "object": {
          "key": "bappa.jpg",
          "size": 1024,
          "eTag": "0123456789abcdef0123456789abcdef",
          "sequencer": "0A1B2C3D4E5F678901"
        }
      }
    }
  ]
}
```


9. Test the code, It must be Executed Successfully



10. Come back to your source bucket , see your uploaded image will be appeared on the Destination Bucket





The Result

Thank You