

Lambda-Assignment 1

Problem Statement:

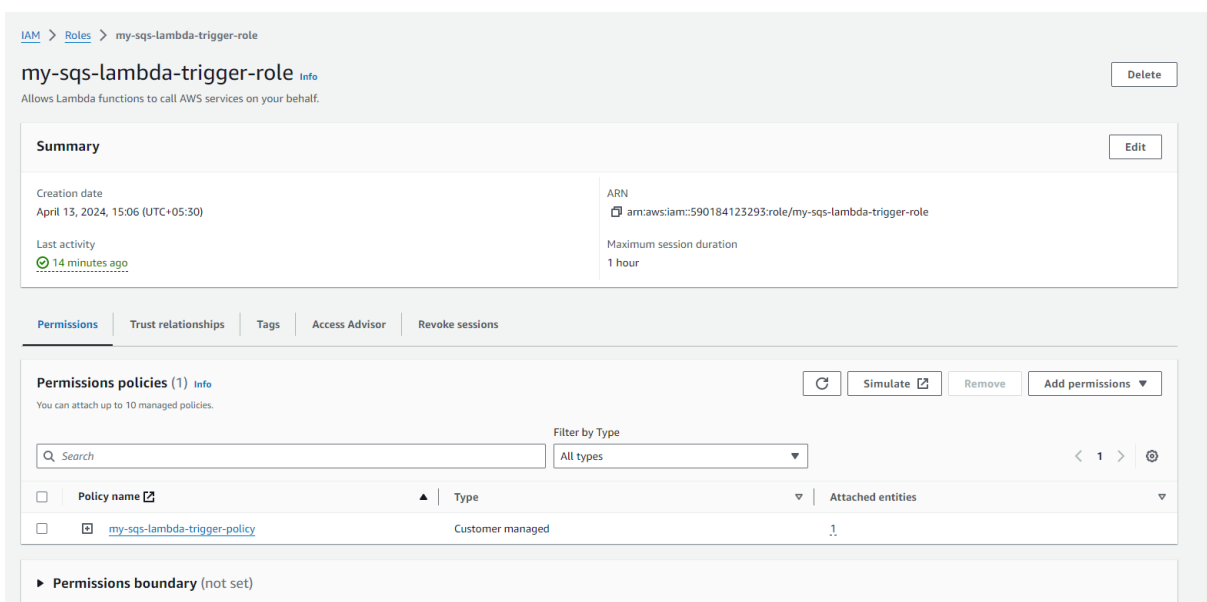
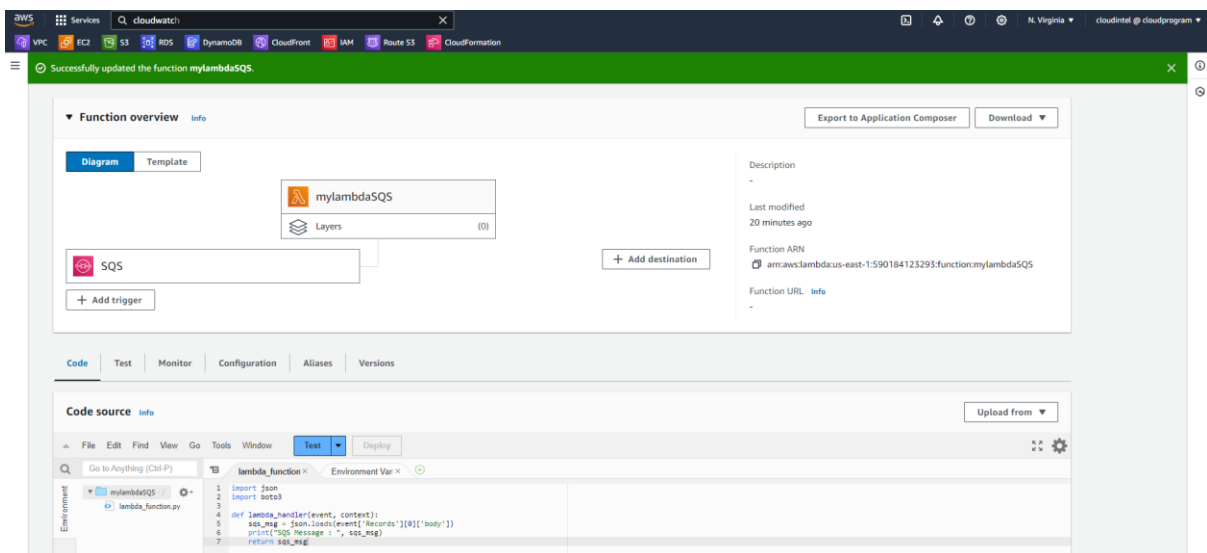
You work for XYZ Corporation. Your corporation wants to launch a new web-based application and they do not want their servers to be running all the time. It should also be managed by AWS. Implement suitable solutions.

Tasks To Be Performed:

1. Create a sample Python Lambda function.
2. Set the Lambda Trigger as SQS and send a message to test invocations

SOLUTION:

1. Created a lambda execution role and a Python Lambda function to receive SQS message



2. Created an SQS queue and configure the trigger

The screenshot shows the AWS Lambda console interface. At the top, the 'Function overview' tab is active, displaying a diagram of the 'mylambdaSQS' function with an SQS trigger. The right sidebar shows the function's description, last modified time (21 minutes ago), and its ARN: `arn:aws:lambda:us-east-1:590184123293:function:mylambdaSQS`. Below the overview, the 'Configuration' tab is selected, showing the 'Triggers' section. A single trigger is listed: 'SQS: my-sqs-lambda-triggerQ' with the state 'Enabled'. The trigger's ARN is `arn:aws:sqs:us-east-1:590184123293:my-sqs-lambda-triggerQ`.

The screenshot shows the AWS SQS console interface for the queue 'my-sqs-lambda-triggerQ'. The 'Details' tab is active, displaying the queue's name, type (Standard), and ARN: `arn:aws:sqs:us-east-1:590184123293:my-sqs-lambda-triggerQ`. The queue is configured as a 'Dead-letter queue'. Below the details, the 'Lambda triggers' tab is selected, showing a table of triggers. The table has columns for UUID, ARN, Status, and Last modified. One trigger is listed with the ARN `arn:aws:lambda:us-east-1:590184123293:function:mylambdaSQS` and a status of 'Enabled'.

| UUID | ARN | Status | Last modified |
|--------------------------------------|--|---------|-----------------------|
| 1abe925b-3abc-441c-9923-6139f0a6db85 | arn:aws:lambda:us-east-1:590184123293:function:mylambdaSQS | Enabled | 4/13/2024, 4:07:44 PM |

3. Test the lambda function by sending a message

Amazon SQS > Queues > my-sqs-lambda-triggerQ > Send and receive messages

Send and receive messages

Send messages to and receive messages from a queue.

Send message Info

Clear content Send message

✔ Your message has been sent and is ready to be received.

View details X

Message body

Enter the message to send to the queue.

{ "TestEvent": "Lambda Trigger" }

Delivery delay Info

0 Seconds

Should be between 0 seconds and 15 minutes.

▶ Message attributes - Optional Info

Receive messages Info

Edit poll settings Stop polling Poll for messages

Messages available

0

Polling duration

15

Maximum message count

1

Polling progress

0 receives/second 0%

Messages (0)

View details Delete

VERIFICATION:

CloudWatch > Log groups > /aws/lambda/my/lambdaSQS > 2024/04/13/[\$LATEST]2d015fafdae64b6c8c71af06117e5439

Log events

⌂ Actions Start tailing Create metric filter

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Q Filter events - press enter to search

Clear 1m 30m 1h 12h Custom Local timezone Display

| ▶ Timestamp | Message |
|---|--|
| No older events at this moment. Retry | |
| ▶ 2024-04-13T16:24:49.256+05:30 | INIT_START Runtime Version: python:3.9.v50 Runtime Version ARN: arn:aws:lambda:us-east-1::runtime:8584354aac5dfe68851e14fe6709170ac8a2001379b6a903900e190b422fcc97 |
| ▶ 2024-04-13T16:24:49.522+05:30 | START RequestId: 6f90f9e5-e9ec-506c-ad00-a7718f454553 Version: \$LATEST |
| ▶ 2024-04-13T16:24:49.522+05:30 | SQS Message : { "TestEvent": "Lambda Trigger" } |
| ▶ 2024-04-13T16:24:49.524+05:30 | END RequestId: 6f90f9e5-e9ec-506c-ad00-a7718f454553 |