AWS PROJECT

OBJECTIVE:

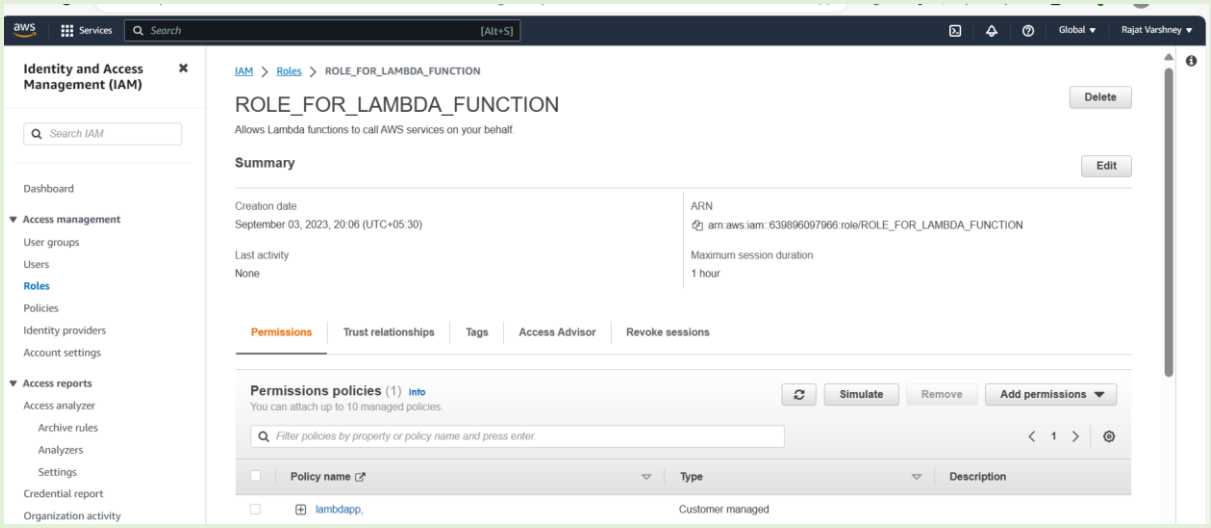
I USED LAMBDA TO STOP AND START EC2 INSTANCE AT REGULAR INTERVALS

REQUIREMENT:

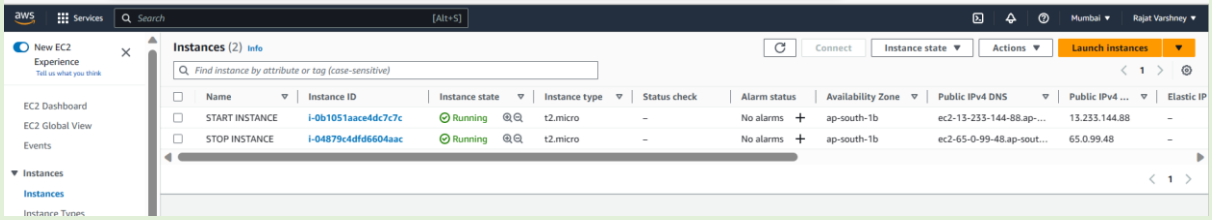
- IAM ROLE
- EC2 INSTANCE
- LAMBDA FUNCTION
- CLOUD TRAIL
- AMAZON EVENTBRIDGE

USE AWS LAMBDA AND AMAZON EVENTBRIGE TO AUTOMATICALLY STOP AND START AMAZON EC2 INSTANCE

STEP1: Create a custom AWS Identity and Access Management (IAM) policy and IAM role for your Lambda function.

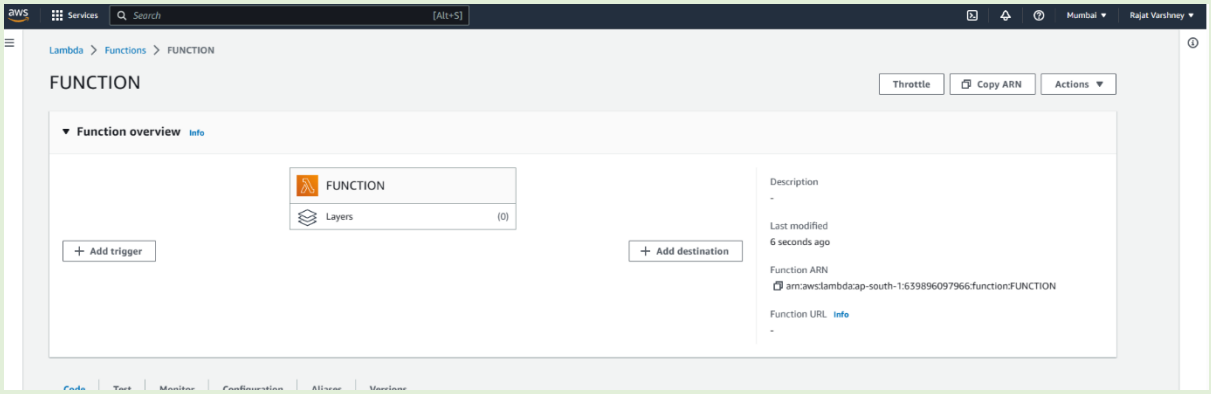


STEP2: Launch Start and Stop EC2 Instance for Ubuntu with t2.micro Instance type



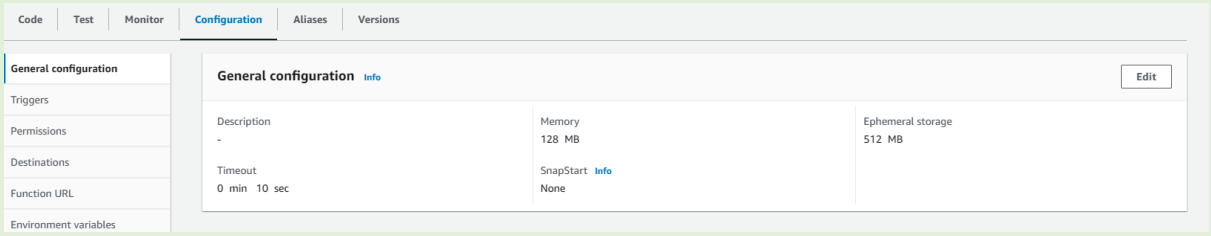
STEP3: Create Lambda functions that stop and start your EC2 instances

- Choose **Author from scratch.**
- For Runtime, choose **Python 3.9.**
- Under Permissions, expand **Change default execution role**.
- Under Execution role, choose Use an existing role.
- Under Existing role, choose the **IAM role** that you created.



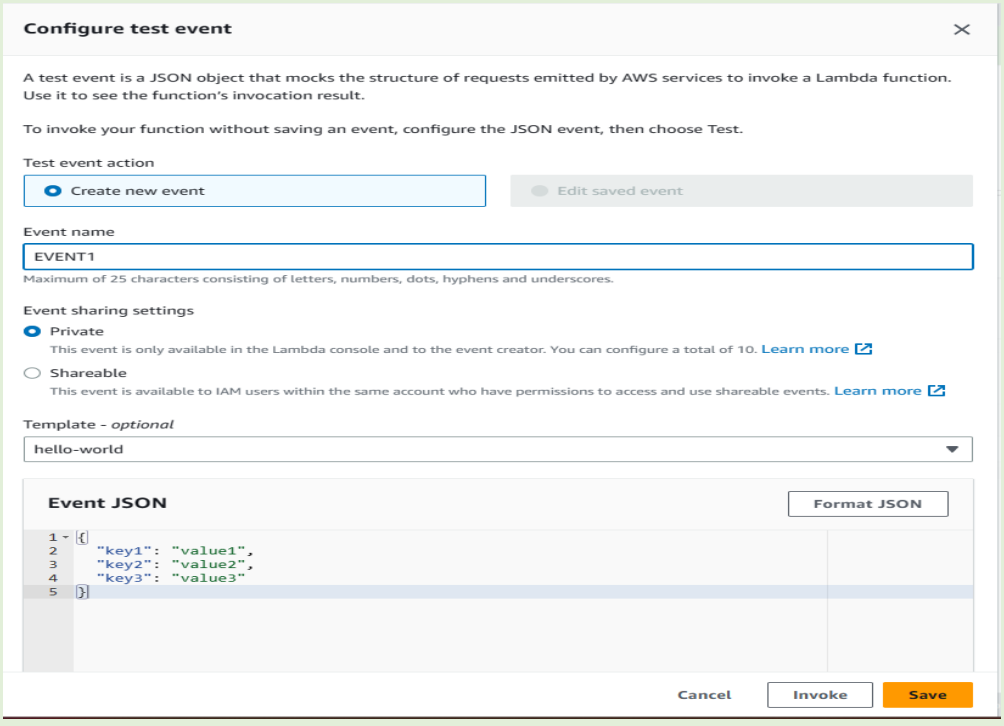
STEP4: On the Configuration tab, choose General configuration, and then choose Edit.

- **Set Timeout to 10 seconds, and then choose Save.**



STEP5: Test your Lambda functions

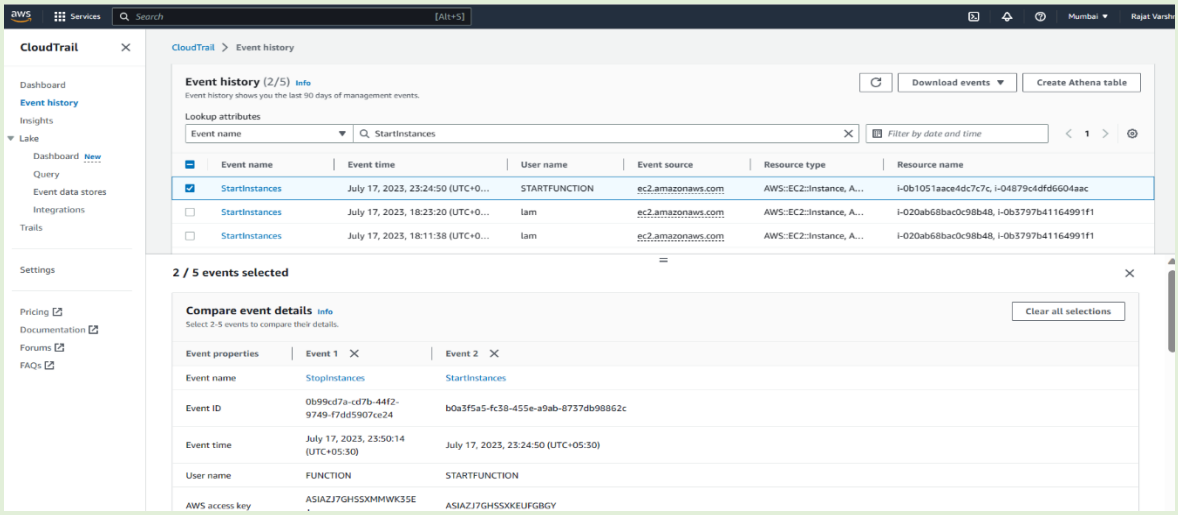
- **Open the Lambda console, and then choose Functions.**
- **Choose one of the functions that you created.**
- **Choose the Code tab.**
- **In the Code source section, choose Test.**
- **In the Configure test event dialog box, choose Create new test event.**
- **Enter an Event name. Then, choose Create.**
- **Choose Test to run the function.**



STEP6: Check the status of your EC2 instances

- **You can check the status of your EC2 instances before and after testing to confirm that your functions work as you expect**

STEP7: You can use CloudTrail to check for events to confirm that the Lambda function stopped or started the EC2 instance.



STEP8: Create Amazon EventBridge rules that run your Lambda functions

- **For Rule type, choose Schedule, and then choose Continue in EventBridge Scheduler.**
- **For Schedule pattern, choose Recurring schedule.**
- **Under Schedule pattern, for Occurrence, choose Recurring schedule.**
- **For Schedule type, choose the type that's right for your need and complete the following steps:**
- **When Schedule type is Rate-based schedule, for Rate expression, enter a rate value and choose an interval of time in minutes, hours, or days.**