

Creating a Lambda Function

Lab overview

In this lab, you will create an AWS Lambda function by using the AWS Management Console. You will manually invoke the function by using sample event data. After Lambda runs the function and returns results, you will verify the function results. This will include reviewing the logs that the Lambda function created and examining various metrics in Amazon CloudWatch metrics.

Duration

This lab requires approximately 30 minutes to complete.

Access the AWS Management Console

1. To start the lab session, choose Start Lab in the upper-right corner of the page.
 - The lab session starts.
 - A timer displays at the top of this page and shows the time remaining in the session.
Tip: To refresh the session length at any time, choose Start Lab again before the timer reaches 0:00.
2. Before continuing, wait until the lab environment is ready. The environment is ready when the lab details appear on the right side of the page and the circle icon next to the AWS link in the upper-left corner turns green.
3. To return to these instructions, choose the Readme link in the upper-right corner.
4. To connect to the AWS Management Console, choose the AWS link in the upper-left corner, above the terminal window.

A new browser tab opens and connects you to the AWS Management Console.

Tip: If a new browser tab does not open, a banner or icon is usually at the top of your browser with the message that your browser is preventing the site from opening pop-up windows. Choose the banner or icon, and then choose Allow pop-ups.

Note: You are using the console through the lab environment, so you are not incurring any actual costs. However, in the real world, when using a personal or business account to access the console, users incur charges for use of specific AWS services.

Task 1. Create a Lambda function

4. Choose the Services menu, locate the Compute category, and choose Lambda.
5. Choose Create a function, and configure the following:
 - For Function name, enter my-function

- In the Permissions section, expand the Change default execution role.
- For Execution role, choose Use an existing role.
- For Existing role, choose LambdaAccessToCloudWatch.
- Choose Create function.
Lambda creates a Node.js function that writes the text "Hello from Lambda!".
Note: This lab uses Node.js, but Lambda is able to use several languages, including Python and C#.

Task 2. Test the function

You can use the designer to test your function.

6. Go to the Code source section, and choose the Test tab.
Here you can create new test scripts or modify existing test scripts.
7. For Event name, enter mytestevent and then choose Save.
8. To run the test, choose Test.
The test results display in the Code source section. The status should display Succeeded. In the Function logs section of the results, you can see the Duration, which is how long it took the function to complete. Other information about the test is also displayed.

Task 3. View CloudWatch metrics and logs

9. Choose the Monitor tab.
Metrics for the test you just ran display here. The Invocations graph shows that the function has been called one time. The Duration graph shows how long the function took to complete, and the Error count and success rate graph shows the success rate.
10. Choose View CloudWatch logs.
 - The CloudWatch console opens in a new tab, and the log stream for the Lambda function displays.
 - Choose the log stream entry that displays.
 - In the Log events section, you can expand any of the events to see more detailed information.
 - For more information about monitoring in Lambda, see [Monitoring Functions in the AWS Lambda Console](#).

Lab complete

Congratulations! You have completed the lab.

11. Log out of the AWS Management Console.

- In the upper-right corner of the page, choose your user name. Your user name begins with voclabs/user.
 - Choose Sign Out.
12. Choose End Lab at the top of this page, and then choose Yes to confirm that you want to end the lab.