

Lab 2 – The Lambda Console

Create a Basic Lambda Function

1. Log into the AWS console and verify that the N. Virginia region is selected
2. In the services search text box, type in **Lambda**
3. Click **Lambda**

Notice that the region does not change. Lambda is a regional service, and the functions that you create will exist in this specific AWS region.
4. If necessary, expand the menu on the left by clicking on the three horizontal lines
5. Click **Dashboard**
 - *Notice that we currently have 0 Lambda functions.*
 - *Notice that we have a maximum of 75.0 GB of Code storage. The Lambda functions you create are stored here.*
 - *Notice the concurrency maximums. These control how many Lambda Functions can execute simultaneously.*
6. Click **Functions**

If you have created Lambda functions in this region, they will be shown here.
7. Click **Create Function**
 - a. Select Author from scratch
 - b. Function name: Training
 - c. Runtime: Python 3.12
 - d. Click **Create function**
8. Once the Lambda function is created, scroll down and view the auto-populated code.
9. Replace the code with the following text:

```
import json

def lambda_handler(event, context):
    print("Rick Crisci AWS Oreilly")
```
10. Click **Deploy**

The image for this lambda function is going to be updated to include this code. Any time I make changes to the code in my lambda function, deploy pushes those changes live. Deploy saves the updated code to the lambda function.
11. Click **Test**
 - a. Create new event
 - b. Event name: test1
 - c. Private should be selected by default.

These test events can be private, or they can be shareable. If they are private, they'll only be accessible to the IAM user that created them.

- d. Template: Choose **Cloudwatch**

This test will invoke the lambda function using a specific service. There are many services that could potentially invoke this lambda function. This test is going to invoke this lambda function as if it was getting invoked by cloud watch.

- e. Click **Save**

12. Click the **Test** tab (Next to **Code**)

13. Here you can see your saved test event that you can run repeatedly.

14. Click **Test**

When you execute a test you are actually invoking the lambda function.

15. You should see a green check above the test event.

16. Click Details

- a. Here you can see the output of what actually happened.
- b. Under **Log output** notice our print statement here is output to the console.
- c. How long did it take to execute the code? This is the number of seconds I will be billed for.
- d. How much memory was the lambda function equipped with?
- e. How much memory did we actually use at maximum?

17. Click the **Configuration** tab

- a. Click **Edit**
- b. Change the memory to **512**
- c. Click **Save**

18. Click the **Test** tab (Next to **Code**)

- a. Click **Test**
- b. Did the performance of the Lambda function actually improve?

We were not using the maximum memory before, therefore adding more memory doesn't change the performance, it just makes the function more expensive to run.

19. Click the **Versions** tab

- a. Click **Publish new version**
- b. Version description: TrainingV2
- c. Click **Publish**
- d. Look at the Function ARN

Notice that this version of the function has a different ARN than the original version. This makes it possible for us to invoke this version of the function specifically.

- e. Click on the **Code** tab

You can now modify the code here and test code changes without impacting the original function.