

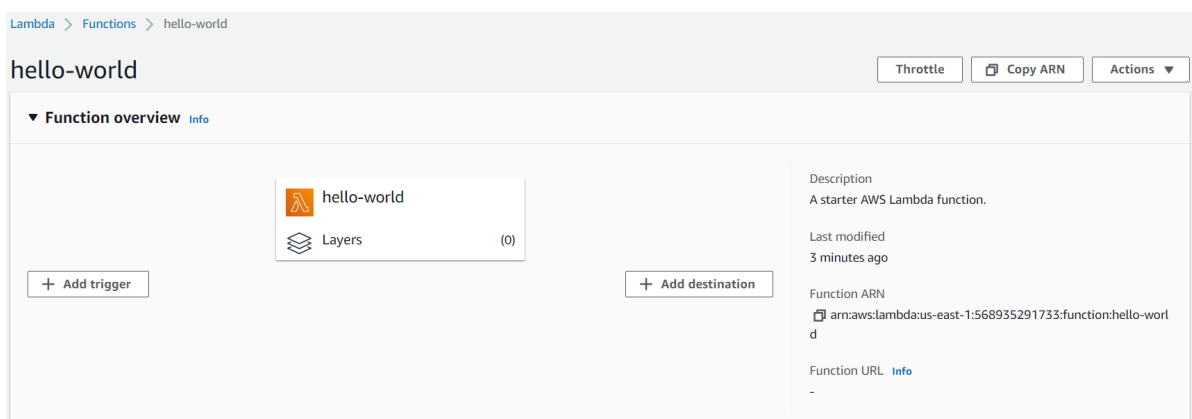
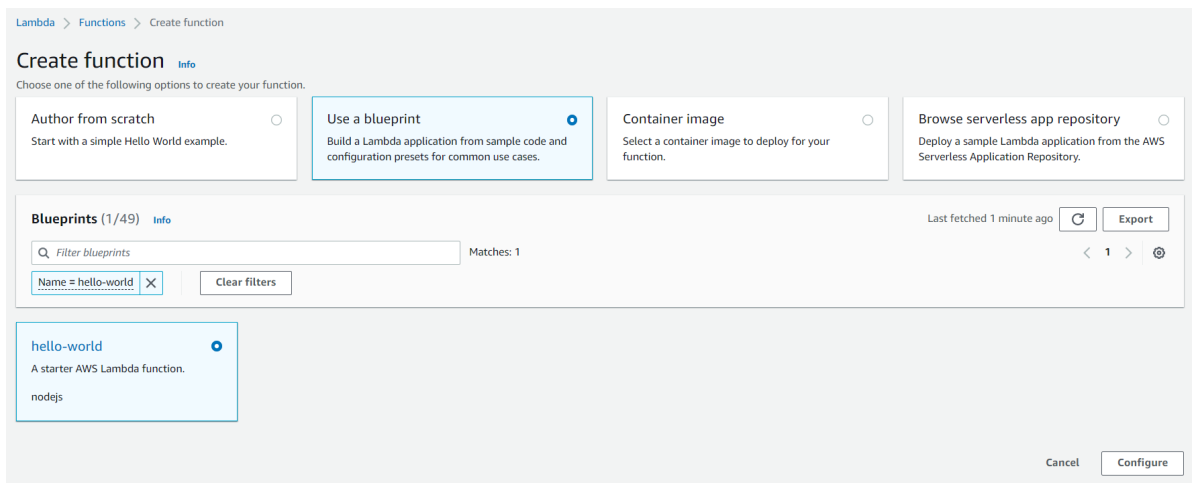
# Core Assignment 3: Create an AWS Event Bridge to Trigger a Lambda Function at a Scheduled Time

Muhannad Sinan

1. Create a lambda function in any programming language of your choice (You can also use a simple hello-world function as well for this)
2. Create an AWS event bridge to trigger this above lambda function at regular intervals (say every 15 minutes)
3. Monitor the trigger of the events
4. Share the screenshot of the event-triggered and the logs from the lambda function execution

## Step1:

Let's create a [Lambda](#) function first. (You can also use a simple hello-world function blueprint)



creating a test event and deploy a new test

Code source Info

Upload from

File Edit Find View Go Tools Window Test Deploy

Go to Anything (Ctrl-P)

Environment

index.js

Execution results

Status: Succeeded Max memory used: 56 MB Time: 5.29 ms

Test Event Name

Test1

Response

"value1"

Function Logs

START RequestId: 09125c79-80c4-4a3f-84b4-c8a9ed9fd77 Version: \$LATEST

2022-07-30T12:17:00.170Z undefined INFO Loading Function

2022-07-30T12:17:00.174Z 09125c79-80c4-4a3f-84b4-c8a9ed9fd77 INFO value1 = value1

2022-07-30T12:17:00.174Z 09125c79-80c4-4a3f-84b4-c8a9ed9fd77 INFO value2 = value2

2022-07-30T12:17:00.174Z 09125c79-80c4-4a3f-84b4-c8a9ed9fd77 INFO value3 = value3

END RequestId: 09125c79-80c4-4a3f-84b4-c8a9ed9fd77

REPORT RequestId: 09125c79-80c4-4a3f-84b4-c8a9ed9fd77 Duration: 5.29 ms Billed Duration: 6 ms Memory Size: 128 MB Max Memory Used: 56 MB Init Duration: 157.10 ms

Request ID

09125c79-80c4-4a3f-84b4-c8a9ed9fd77

## Step2:

Creating an AWS [EventBridge](#) to trigger this above lambda function at regular intervals (say every 15 minutes)

### Define rule detail Info

#### Rule detail

Name

TriggerLambda

Maximum of 64 characters consisting of numbers, lower/upper case letters, -, \_.

Description - optional

Enter description

Event bus Info

Select the event bus this rule applies to, either the default event bus or a custom or partner event bus.

default

☒ Enable the rule on the selected event bus

Rule type Info

☐

Rule with an event pattern

A rule that runs when an event matches the defined event pattern. EventBridge sends the event to the specified target.

☒

Schedule

A rule that runs on a schedule

Cancel

Next

# Define schedule [Info](#)

## Schedule pattern

### Schedule pattern


Choose the schedule type that best meets your needs.

- ☒ A fine-grained schedule that runs at a specific time, such as 8:00 a.m. PST on the first Monday of every month.

- ☐ A schedule that runs at a regular rate, such as every 10 minutes.

### Cron expression [Info](#)

Define the cron expression for the schedule

 cron (       )

Minutes      Hours      Day of month      Month      Day of week      Year

### Next 10 trigger date(s)

Local time zone ▼

Jul 30, 2022, 04:15 PM GMT+3  
Jul 30, 2022, 05:15 PM GMT+3  
Jul 30, 2022, 06:15 PM GMT+3  
Jul 30, 2022, 07:15 PM GMT+3  
Jul 30, 2022, 08:15 PM GMT+3  
Jul 30, 2022, 09:15 PM GMT+3  
Jul 30, 2022, 10:15 PM GMT+3  
Jul 30, 2022, 11:15 PM GMT+3  
Jul 31, 2022, 12:15 AM GMT+3  
Jul 31, 2022, 01:15 AM GMT+3

Cancel

Previous

Next

## Select target(s)



### Permissions

Note: When using the EventBridge console, EventBridge will automatically configure the proper permissions for the selected targets. If you're using the AWS CLI, SDK, or CloudFormation, you'll need to configure the proper permissions.

### Target 1

#### Target types

Select an EventBridge event bus, EventBridge API destination (SaaS partner), or another AWS service as a target.

- ☐ EventBridge event bus
- ☐ EventBridge API destination
- ☒ AWS service

#### Select a target [Info](#)

Select target(s) to invoke when an event matches your event pattern or when schedule is triggered (limit of 5 targets per rule)

Lambda function ▼

#### Function

hello-world ▼



► [Configure version/alias](#)

► [Additional settings](#)

[Add another target](#)

[Cancel](#)

[Previous](#)

[Next](#)

Monitoring the trigger of the events

# Triger-Hello-Lambda

Edit

Disable

Delete

## Rule details [Info](#)

Rule name  
Triger-Hello-Lambda

Description

Status  
Enabled

Rule ARN  
 arn:aws:events:us-east-1:56893529:1733:rule/Triger-Hello-Lambda

Event bus name  
default

Event bus ARN  
 arn:aws:events:us-east-1:56893529:1733:event-bus/default

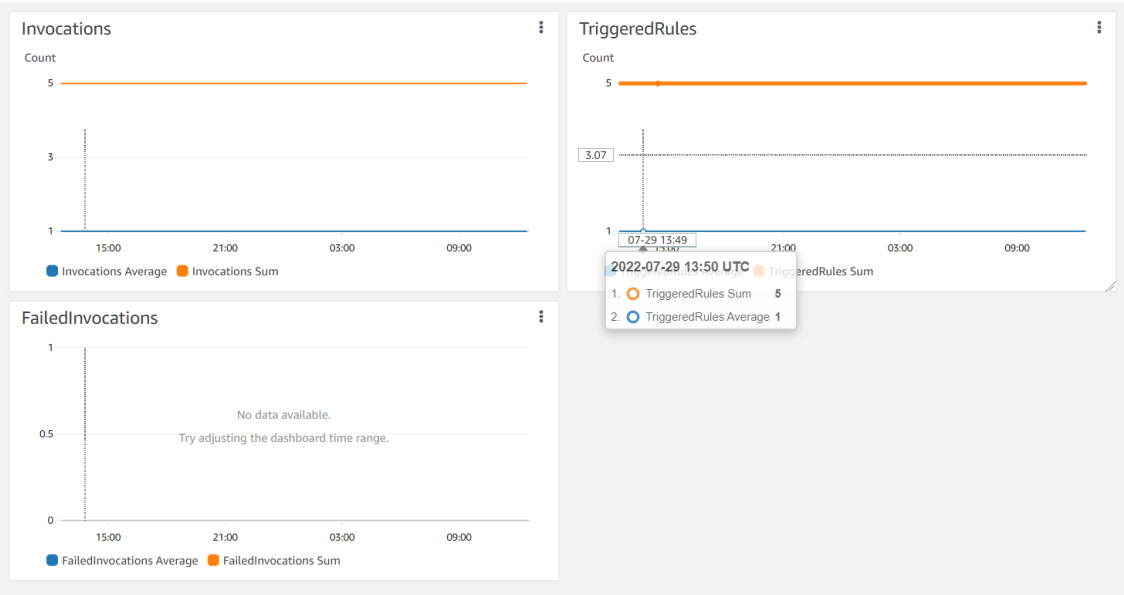
Type

Event schedule | Targets | **Monitoring** | Tags

## Monitoring

The dashboard below shows metrics for the rule. [View the metrics in CloudWatch](#)


1h 3h 12h 1d 3d 1w Custom [Add to dashboard](#)





# hello-world

Throttle Copy ARN Actions

## Function overview


**hello-world**


 Layers (0)


 EventBridge (CloudWatch Events)

+ Add trigger

+ Add destination

Description  
 A starter AWS Lambda function.

Last modified  
 7 minutes ago

Function ARN  
 arn:aws:lambda:us-east-1:568935291733:function:hello-world

Function URL [Info](#)  
 -

Code Test **Monitor** Configuration Aliases Versions

Metrics **Logs** Traces View logs in CloudWatch View X-Ray traces in ServiceLens View Lambda Insights View profiles in CodeGuru

## CloudWatch Logs Insights

Lambda logs all requests handled by your function and automatically stores logs generated by your code through Amazon CloudWatch Logs. To validate your code, instrument it with custom logging statements. The following tables list the most recent and most expensive function invocations across all function activity. To view logs for a specific function version or alias, visit the **Monitor** section at that level.

1h 3h 12h 1d 3d 1w Custom Refresh Filter Add to dashboard

| # | Timestamp                | RequestID                            | LogStream   | DurationInMS | BilledDurationInMS | MemorySetInMB |
|---|--------------------------|--------------------------------------|---|--------------|--------------------|---------------|
| 1 | 2022-07-30T12:40:29.913Z | ead83461-1b1b-4f04-afad-005d2c61e9ed | 2022/07/30/[\$LATEST]72c08de39220426ebe20cf37bb5397dd | 14.93        | 15.0               | 128           |

| # | Timestamp                | RequestID                            | LogStream   | BilledDurationInMS | MemorySetInMB | BilledDurationInMS |
|---|--------------------------|--------------------------------------|---|--------------------|---------------|--------------------|
| 1 | 2022-07-30T12:40:29.913Z | ead83461-1b1b-4f04-afad-005d2c61e9ed | 2022/07/30/[\$LATEST]72c08de39220426ebe20cf37bb5397dd | 15.0               | 128           | 0.001875           |