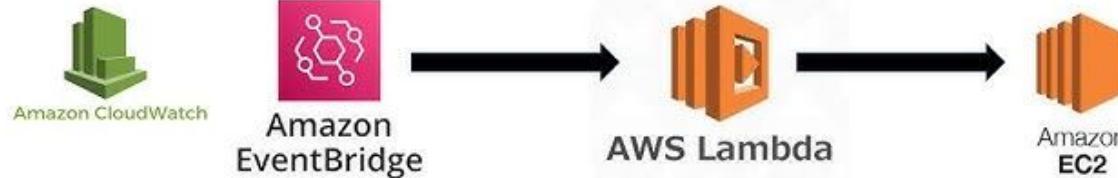


Exploring AWS Lambda, Cloudwatch And AWS EventBridge

Hands on Exercise with AWS simulearn



AWS Skill Builder AWS Skill Builder AWS Skill Builder Exploring AWS Lambda and A MonitorLabInstance | Function

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MonitorLabInstance?newFunction=true&tab=code

LeetCode - The W... 100 Days Of Data... community hango... AWS Skill Builder Upwork Clusters | Cloud... JDoodle - Online... Study partner All Bookmarks

aws Search [Option+S] United States (N. Virginia) Account ID: 0153-4631-5432 AWSLabsUser-g3sysLjcsSiapdENLpuWQXX/60d9873...

Lambda > Functions > MonitorLabInstance

Successfully created the function MonitorLabInstance. You can now change its code and configuration. To invoke your function with a test event, choose "Test".

MonitorLabInstance

Throttle Copy ARN Actions ▾

▼ Function overview Info

Diagram Template

 MonitorLabInstance
Layers (0)

+ Add trigger + Add destination

Description

Last modified 21 seconds ago

Function ARN arn:aws:lambda:us-east-1:015346315432:function:MonitorLabInstance

Function URL Info

Code Test Monitor Configuration Aliases Versions

Code source Info Open in Visual Studio Code ↗ Upload from ▾

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Python Code in AWS Lambda function

```
import json

import boto3

from pprint import pprint

def lambda_handler(event, context):

    client = boto3.client("ec2")

    status = client.describe_instance_status(IncludeAllInstances = True)

    for i in status["InstanceStatuses"]:

        print("This is the Lambda function from Lab 1 - an EC2 instance has just started running!")

        print("AvailabilityZone :", i["AvailabilityZone"])

        print("InstanceId :", i["InstanceId"])

        print("InstanceState :", i["InstanceState"])

        print("InstanceStatus", i["InstanceStatus"])

    return {

        'statusCode': 200,

        'body': json.dumps('Hello from Lambda!') }
```



Search

[Option+S]



United States (N. Virginia) ▾

Account ID: 0153-4631-5432

AWSLabsUser-g3ysLjcsSiapdENLpuWQXX/60d9873...

Edit basic settings

Basic settings [Info](#)

Description - *optional*

Memory [Info](#)

Your function is allocated CPU proportional to the memory configured.

128 MB

Set memory to between 128 MB and 10240 MB

Ephemeral storage [Info](#)

You can configure up to 10 GB of ephemeral storage (/tmp) for your function. [View pricing ↗](#)

512 MB

Set ephemeral storage (/tmp) to between 512 MB and 10240 MB.

SnapStart [Info](#)

Reduce startup time by having Lambda cache a snapshot of your function after the function has initialized. To evaluate whether your function code is resilient to snapshot operations, review the [SnapStart compatibility considerations ↗](#). For Python and .NET runtimes, [view pricing ↗](#).

None

Supported runtimes: .NET 8 (C#/F#/PowerShell), Java 11, Java 17, Java 21, Java 25, Python 3.12, Python 3.13, Python 3.14.

Timeout

0 min 3 sec

Execution role

Choose a role that defines the permissions of your function. To create a custom role, go to the [IAM console ↗](#).



Amazon EventBridge

[Dashboard](#)

Developer resources

[Learn](#)[Sandbox](#)[Quick starts](#)

Buses

[Event buses](#)

Rules Updated

[Global endpoints](#)[Archives](#)[Replays](#)

Pipes

[Pipes](#)

Scheduler

[Schedules](#)[Schedule groups](#)

Integration

[Partner event sources](#)[API destinations](#)

Rules

A rule watches for specific types of events. When a matching event occurs, the event is routed to the targets associated with the rule. A rule can be associated with one or more targets.

Select event bus

Event bus

Select or enter event bus name

Rules on default event bus (5)

[Delete](#)[Enable](#)[Edit](#)[CloudFormation Template](#)[Create rule](#)

<input type="checkbox"/>	Name	Status	Type	Event bus	ARN	Description
<input type="checkbox"/>	LabStack-60d98734-faaa-4b-GblLabMonitoringmonitoring-6dl1wuwu0KTu	Enabled	Standard	default	arn:aws:events:us-east-1:01534631543:rule/LabStack-60d98734-faaa-4b-GblLabMonitoringmonitoring-6dl1wuwu0KTu	-
<input type="checkbox"/>	LabStack-60d98734-faaa-4b-				arn:aws:events:us-east-1:01534631543:rule/LabStack-60d98734-faaa-4b-	

[LabStack-60d98734-](#)[faaa-4b-](#)[GblLabMonitoringmo-](#)[nitorin-](#)[6dl1wuwu0KTu](#)[LabStack-60d98734-](#)[faaa-4b-](#)



Amazon EventBridge



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Pipes

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Schedules

Schedule groups

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API destinations

Rule EC2-Launched was created successfully



Rules

A rule watches for specific types of events. When a matching event occurs, the event is routed to the targets associated with the rule. A rule can be associated with one or more targets.

Select event bus

Event bus

Select or enter event bus name

default



Rules on default event bus (6)



Delete

Enable

Edit

CloudFormation Template ▾

Create rule



Find rules

Any status ▾

< 1 >



<input type="checkbox"/>	Name	Status	Type	Event bus	ARN	Description
--------------------------	------	--------	------	-----------	-----	-------------

<input type="checkbox"/>	EC2-Launched	Enabled	Standard	default	arn:aws:events:us-east-1:015346315432:rule/EC2-Launched	Call when an ec2 instance is launched
--------------------------	------------------------------	----------------------	----------	---------	---	---------------------------------------

LabStack-
e0000771-f6e1-4...

Success

Successfully initiated launch of instance ([i-0f30d84e2cbaar35e3](#))

▶ Launch log

Next Steps

 What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing usage thresholds.

[Create billing alerts ↗](#)**Connect to your instance**

Once your instance is running, log into it from your local computer.

[Connect to instance ↗](#)[Learn more ↗](#)**Connect an RDS database**

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

[Connect an RDS database ↗](#)[Create a new RDS database ↗](#)[Learn more ↗](#)**Create EBS snapshot policy**

Create a policy that automates the creation, retention, and deletion of EBS snapshots

[Create EBS snapshot policy ↗](#)**Manage detailed monitoring**

Enable or disable detailed monitoring for the

Create Load Balancer

Create a application, network gateway or

Create AWS budget

AWS Budgets allows you to create budgets

Manage CloudWatch alarms

Create or update Amazon CloudWatch alarms



EC2



Dashboard

EC2 Global View ▾

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Capacity Manager [New](#)

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Instance summary for i-0f30d84e2cbbaa35e3 (TestMyLabInstance) [Info](#)

Updated less than a minute ago



Connect

Instance state ▾

Actions ▾

Instance ID

[i-0f30d84e2cbbaa35e3](#)

Public IPv4 address

[98.82.3.189 | open address ↗](#)

Private IPv4 addresses

[10.10.0.232](#)

IPv6 address

-

Instance state

[Running](#)

Public DNS

[ec2-98-82-3-189.compute-1.amazonaws.com | open address ↗](#)

Hostname type

IP name: ip-10-10-0-232.ec2.internal

Private IP DNS name (IPv4 only)

[ip-10-10-0-232.ec2.internal](#)

Elastic IP addresses

-

Answer private resource DNS name

-

Instance type

t3.micro

AWS Compute Optimizer finding

[Opt-in to AWS Compute Optimizer for recommendations.](#)[| Learn more ↗](#)

Auto-assigned IP address

[98.82.3.189 \[Public IP\]](#)

VPC ID

[vpc-0b79afdf0dcf4e9 \(LabVPC\) ↗](#)

Auto Scaling Group name

-

IAM Role

-

Subnet ID

[subnet-09dd2cf0eccfa81d
\(CdkLabce0ea48bStack/LabVPC/public-subnetSubnet1\) ↗](#)

Managed

false

IMDSv2

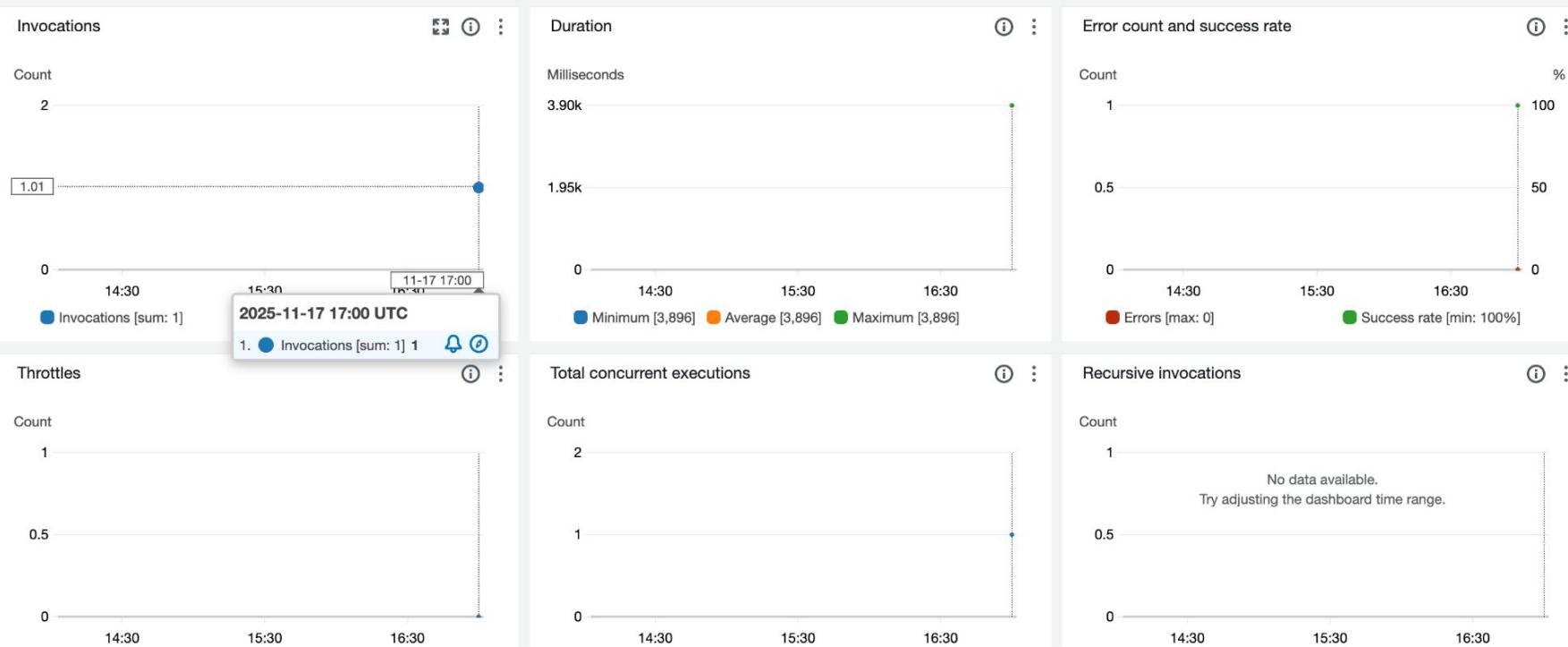
Required

Instance ARN

[arn:aws:ec2:us-east-1:015346315432:instance/i-0f](#)

CloudWatch Metrics

Lambda sends runtime metrics for your functions to Amazon CloudWatch. The metrics shown are an aggregate view of all function runtime activity. To view metrics for the unqualified or \$LATEST resource, choose **Filter metrics by**. To view metrics for a specific function version or alias, choose **Aliases** or **Versions**, select the alias or version, and then choose **Monitor**.





CloudWatch



Favorites and recents

Dashboards New▶ AI Operations New▶ Alarms 0 0 0

▼ Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

Contributor Insights

▶ Metrics New▶ Application Signals (APM) New▶ GenAI Observability New▶ Network Monitoring New▶ Insights New

Log events



Actions ▾

Start tailing

Create metric filter

Filter events - press enter to search

1m

1h



UTC timezone ▾

Display ▾



▶	Timestamp	Message
---	-----------	---------

No older events at this moment. [Retry](#)

- | | |
|----------------------------|--|
| ▶ 2025-11-17T17:00:32.672Z | INIT_START Runtime Version: python:3.14.v24 Runtime Version ARN: arn:aws:lambda:us-east-1::runtime:3faf84aa0c... |
| ▶ 2025-11-17T17:00:33.175Z | START RequestId: ccdbfac7-12da-43ba-9a03-9bc7a6377e2c Version: \$LATEST |
| ▶ 2025-11-17T17:00:37.043Z | This is the Lambda function from Lab 1 - an EC2 instance has just started running! |
| ▶ 2025-11-17T17:00:37.043Z | AvailabilityZone : us-east-1a |
| ▶ 2025-11-17T17:00:37.043Z | InstanceId : i-0f30d84e2cbaa35e3 |
| ▶ 2025-11-17T17:00:37.043Z | InstanceState : {'Code': 16, 'Name': 'running'} |
| ▶ 2025-11-17T17:00:37.043Z | InstanceStatus {'Details': [{'Name': 'reachability', 'Status': 'initializing'}], 'Status': 'initializing'} |
| ▶ 2025-11-17T17:00:37.072Z | END RequestId: ccdbfac7-12da-43ba-9a03-9bc7a6377e2c |
| ▶ 2025-11-17T17:00:37.072Z | REPORT RequestId: ccdbfac7-12da-43ba-9a03-9bc7a6377e2c Duration: 3896.48 ms Billed Duration: 4394 ms Memory S... |

No newer events at this moment. Auto retry paused. [Resume](#)