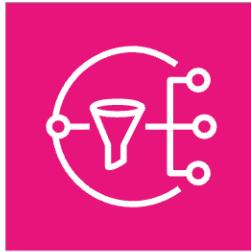


Eventbridge와 Bedrock으로 구현하는 알람봇 만들기

이번 발표에서 다뤄볼 서비스



EventBridge



SNS



Lambda



Slack



CloudTrail

실습 준비물

- AWS 계정
 - 개인 계정 혹은 회사 내 sandbox 계정 (개인 계정 권장)
- Slack 워크스페이스
 - 개인 워크스페이스를 권장
- PC
 - 운영체제는 상관 없으나 실습은 맥으로 진행합니다.
- Software
 - Insomnia
 - Web browser

알람, 왜 필요할까요 ?

알람, 왜 필요할까요 ?

alarm

noun

UK  /ə'la:m/ US  /ə'la:rm/

alarm noun (WARNING)

[C]

a warning of danger, usually a loud noise or flashing light:

- *If there's any trouble, **raise/sound the** alarm by pulling the emergency cord.*
- *The first two bomb alerts were **false** alarms, but the third was for real.*

알람, 왜 필요할까요 ?

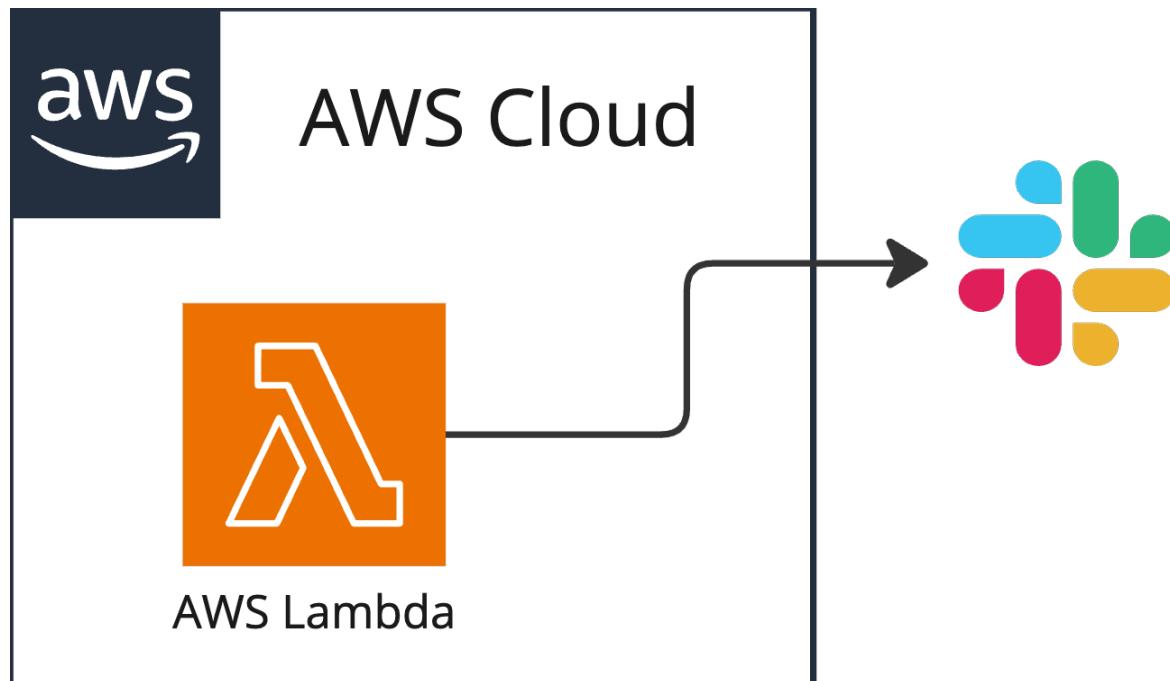
- 비정상적인 리소스 생성
- 비정상적인 클라우드 비용
- 불안감 조성
- 경보기
- 공포

어떻게 알려야 할까요 ?

- 이메일
- 문자 (SMS)
- 메신저 (카카오톡, 텔레그램, 슬랙)



간단히 클라우드 알람을 구성하는 방법?



```
function.py •
incoming-webhook > function.py
...
1 import requests
2
3 url = "HOOK_URL"
4 channel_id = "CHANNEL_ID"
5
6 payload = {
7     "channel_id": channel_id,
8     "message": "message",
9     "blocks": [
10         {
11             "type": "section",
12             "text": {
13                 "type": "plain_text",
14                 "text": "hello world"
15             }
16         }
17     ]
18 }
19 headers = {
20     "Content-Type": "application/json",
21 }
22
23 response = requests.request("POST", url, json=payload, headers=headers)
24
25 print(response.text)
```

실습 1

목표

- Slack incoming webhook 생성
- 메시지 템플릿 구성
- Slack으로 메시지 생성

슬랙봇 생성

<https://api.slack.com/apps>



Name app & choose workspace

X

App Name

awskrug-beginner-poc

Don't worry - you'll be able to change this later.

Pick a workspace to develop your app in:



여리공간



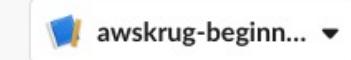
Keep in mind that you can't change this app's workspace later. If you leave the workspace, you won't be able to manage any apps you've built for it. The workspace will control the app even if you leave the workspace.

[Sign into a different workspace](#)

By creating a **Web API Application**, you agree to the [Slack API Terms of Service](#).

Cancel

Create App



Incoming Webhooks

Activate Incoming Webhooks

On

Incoming webhooks are a simple way to post messages from external sources into Slack. They make use of normal HTTP requests with a JSON payload, which includes the message and a few other optional details. You can include message attachments to display richly-formatted messages.

Adding incoming webhooks requires a bot user. If your app doesn't have a bot user, we'll add one for you.

Each time your app is installed, a new Webhook URL will be generated.

If you deactivate incoming webhooks, new Webhook URLs will not be generated when your app is installed to your team. If you'd like to remove access to existing Webhook URLs, you will need to [Revoke All OAuth Tokens](#).

Webhook URLs for Your Workspace

To dispatch messages with your webhook URL, send your [message](#) in JSON as the body of an [application/json](#) POST request.

Add this webhook to your workspace below to activate this curl example.

Sample curl request to post to a channel:

```
curl -X POST -H 'Content-type: application/json' --data '{"text":"Hello, World!"}'  
https://hooks.slack.com/services/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
```

[Copy](#)

Webhook URL	Channel	Added By
-------------	---------	----------

No webhooks have been added yet.

[Add New Webhook to Workspace](#)



**awskrug-beginner-poc에서 여러공간 Slack 워크스
페이스에 액세스하기 위해 권한을 요청합니다.**

awskrug-beginner-poc은(는) 어디에 게시해야 합니까?

awskrug-beginner-poc에는 앱으로 게시할 채널이 필요합니다.

일반

취소

허용

Success!

Incoming Webhooks

Activate Incoming Webhooks

On

Incoming webhooks are a simple way to post messages from external sources into Slack. They make use of normal HTTP requests with a JSON payload, which includes the message and a few other optional details. You can include [message attachments](#) to display richly-formatted messages.

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```
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https://hooks.slack.com/services/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
```

Copy

Webhook URL	Channel	Added By
https://hooks.slack.com/services/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	#일반	구경열 Sep 30, 2024

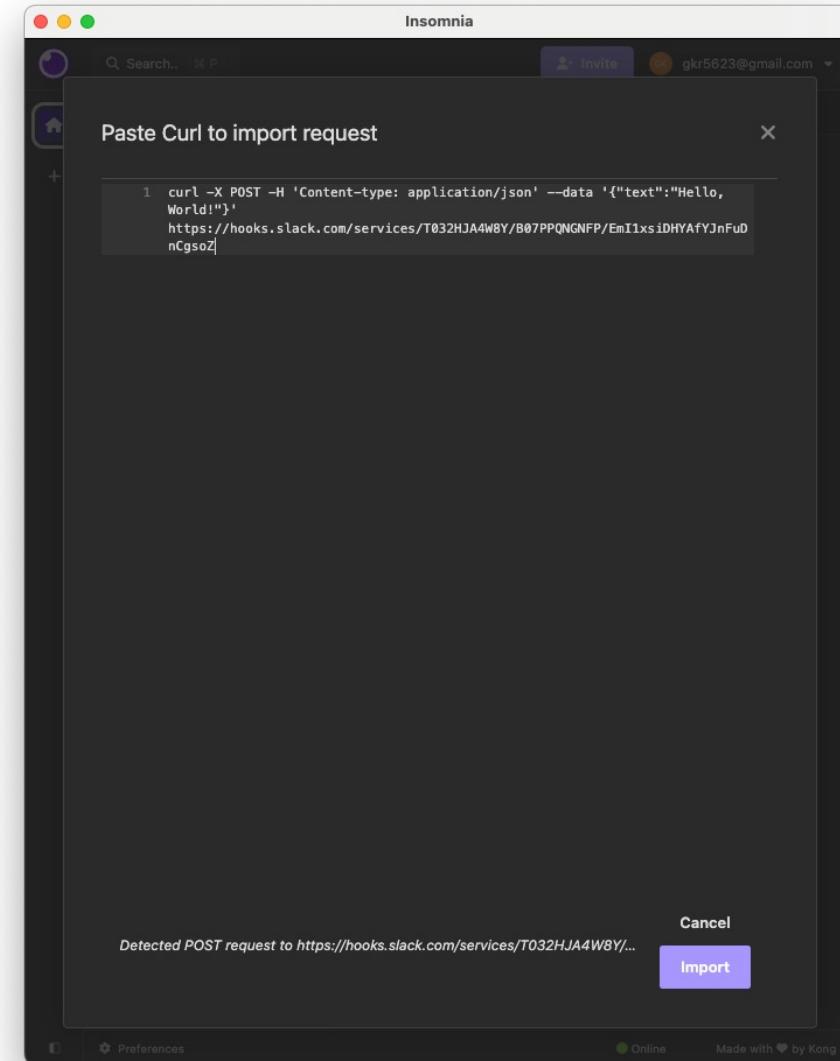
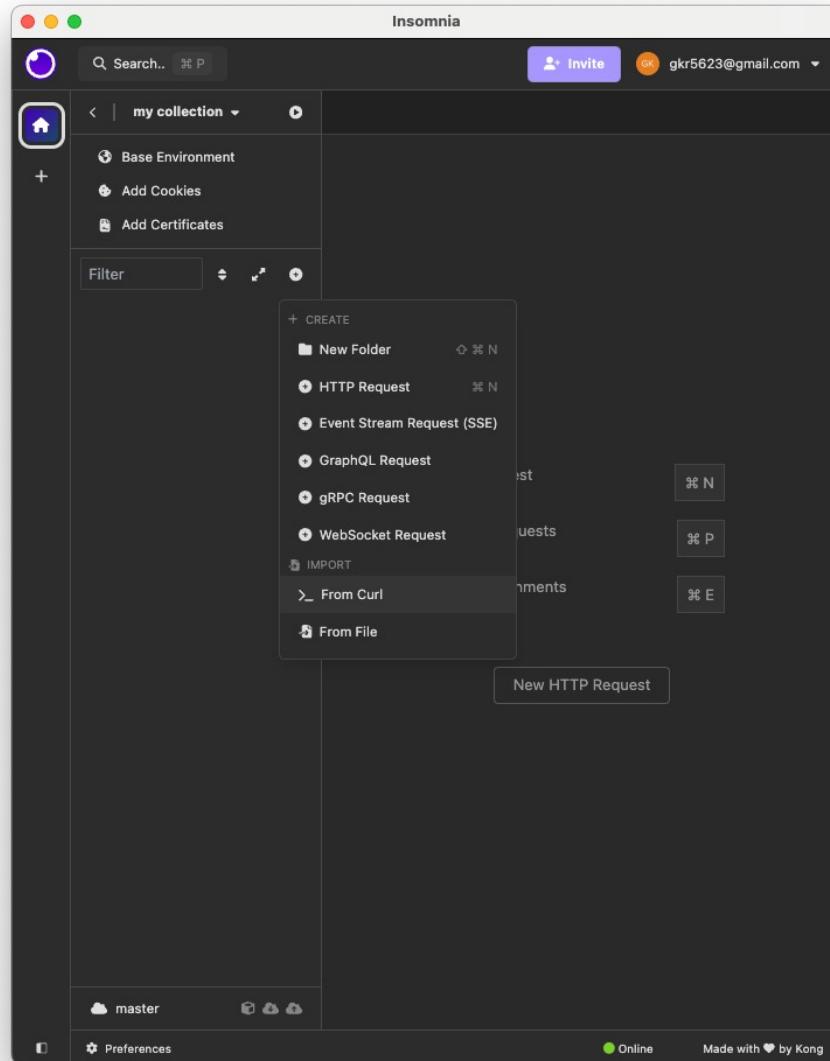
Add New Webhook to Workspace

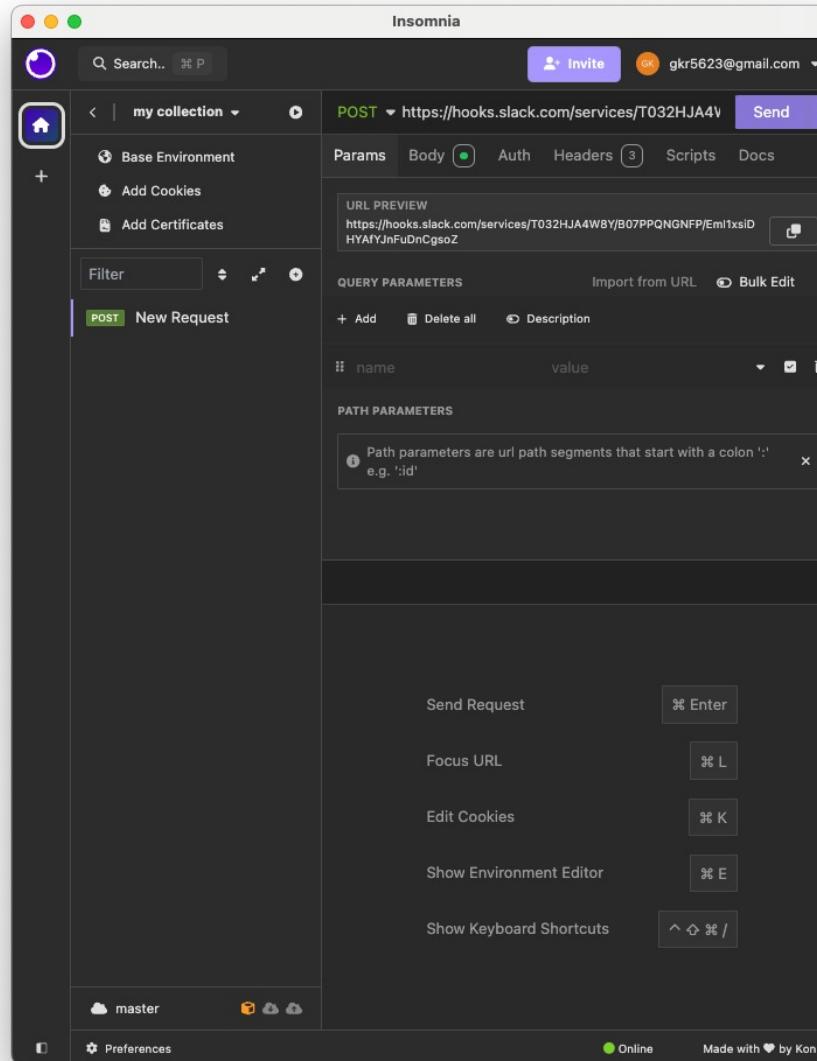
<https://hooks.slack.com/services/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>

Sample curl request to post to a channel:

```
curl -X POST -H 'Content-type: application/json' --data '{"text":"Hello, World!"}'  
https://hooks.slack.com/services/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
```

Copy





The screenshot shows the Slack Block Kit Builder interface. It displays a JSON payload for a message block:

```
1 {  
2   "blocks": []  
3 }
```

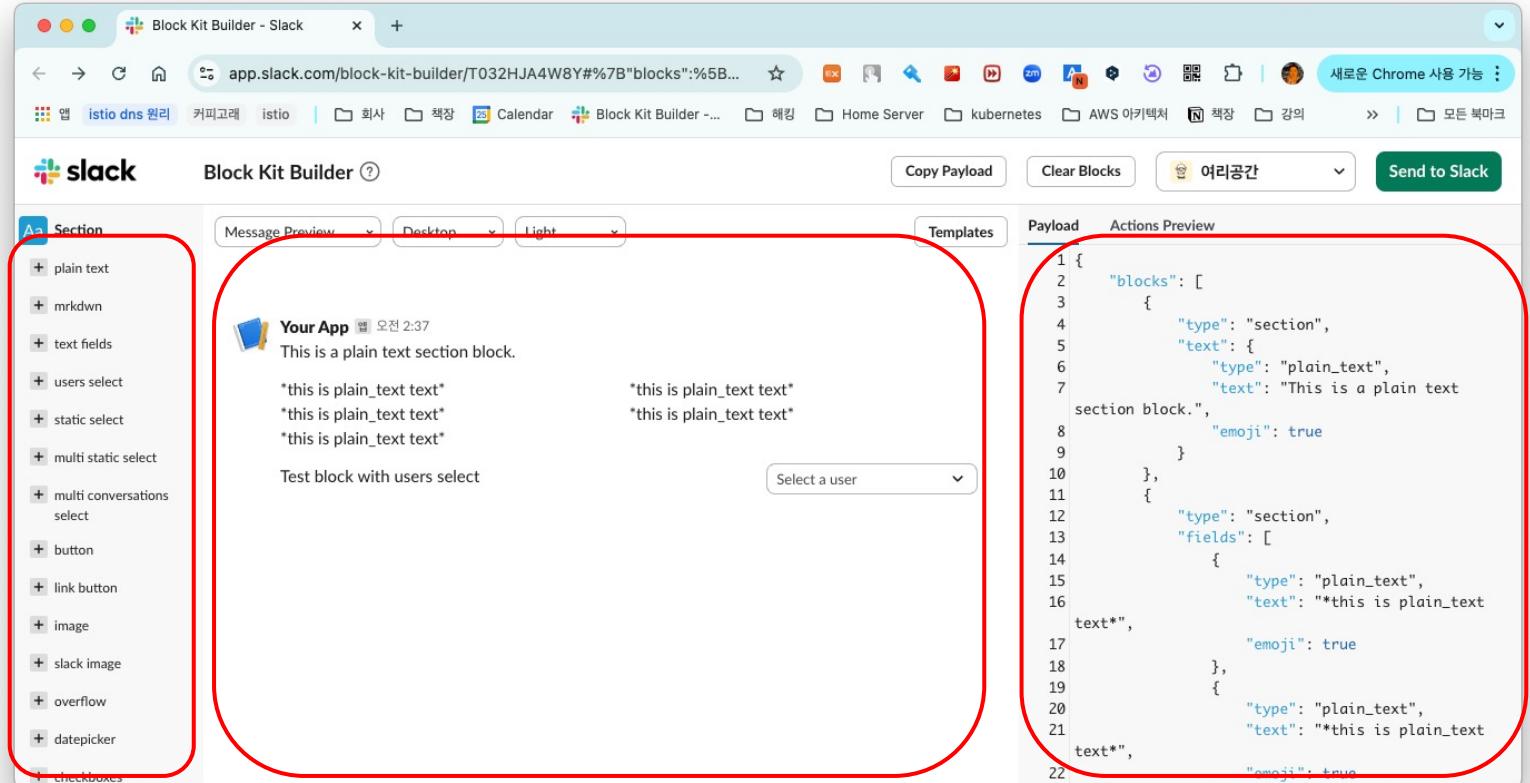
The interface includes sections for:

- Section**: plain text, mrkdwn, text fields, users select, static select, multi static select, multi conversations select, button, link button, image, slack image, overflow, datepicker, checkboxes, radio buttons, timepicker.
- Actions**: all selects, filtered conversations select, selects with initial options, button, datepickers.

A message from 'Your App' is shown: "이 메시지를 완전히 표시할 수 없습니다." (This message cannot be displayed completely).

At the top right, there are buttons for Copy Payload, Clear Blocks, and Send to Slack.

<https://app.slack.com/block-kit-builder>



1. 메뉴 선택

3. 미리보기

2. 내용 추가

Block Kit Builder ?

Message Preview

Desktop

Light

Templates

Approval

Example message for receiving and responding to requests.

 **Approvals** 오전 2:37
You have a new request:
Fred Enriquez - New device request

Type:
Computer (laptop)
Last Update:
Mar 10, 2015 (3 years, 5 months)
Specs:
"Cheetah Pro 15" - Fast, really fast"

When:
Submitted Aut 10
Reason:
All vowel keys aren't working.

Approve **Deny**

Use Message Template

 **Approvals** 오전 2:37
You have a new request:
Fred Enriquez - Time Off request

Type:
Paid time off
When:
Aug 10-Aug 13
Hours: 16.0 (2 days)
Remaining balance: 32.0 hours (4 days)
Comments: "Family in town, going camping!"



Approve **Deny**

Use Message Template

Onboarding

Example message for engaging new users.

 **Taskbot** 오전 2:37
Hey there! I'm TaskBot. I'm here to help you create and manage tasks in Slack.

There are two ways to quickly create tasks:

- 1 Use the `/task` command. Type `/task` followed by a short description of your tasks and I'll ask for a due date (if applicable). Try it out by using the `/task` command in this channel.
- 2 Use the `Create a Task` action. If you want to create a task from a message, select `Create a Task` in a message's context menu. Try it out by selecting the `Create a Task` action for this message (shown below).

image1 (900B) ▾



Follow message
Any replies will show up in Threads

Copy link to message
Copy text
Mark unread
Remind me about this
Pin to this conversation...

 Kenji Seam 12:51 PM

I think we can divide this up into two jobs, the first being

Create a task **Pinned**

More message actions...

Select a channel... ▾

+ To start tracking your team's tasks, add me to a channel and I'll introduce myself. I'm usually added to a team or project channel. Type `/invite @TaskBot` from the channel or pick a channel on the right.

⌚ View all tasks with `/task list`

❓ Get help at any time with `/task help` or type `help` in a DM with me

Use Message Template

Insomnia

my collection POST https://hooks.slack.com/services/T032HJA4V Send

Base Environment Add Cookies Add Certificates

Filter POST New Request

```
1 {  
2   "blocks": [  
3     {  
4       "type": "section",  
5       "text": {  
6         "type": "plain_text",  
7         "text": "This is a plain text section  
block.",  
8         "emoji": true  
9       },  
10      },  
11      {  
12        "type": "section",  
13        "fields": [  
14          {  
15            "type": "plain_text",  
16            "text": "*this is plain_text text*",  
17            "emoji": true  
18          },  
19          {  
20            "type": "plain_text",  
21            "text": "*this is plain_text text*",  
22            "emoji": true  
23          },  
24          {  
25            "type": "plain_text",  
26            "text": "*this is plain_text text*",  
27            "emoji": true  
28          }  
1.  },  
2.  200 OK 391 ms 2 B 8 Minutes Ago  
3.  Preview Headers 19 Cookies Tests 0 / 0 → Mock Cons  
4.  Preview ok  
5.  master Preferences Online Made with ❤ by Kong
```



awskrug-beginner-poc 월 오후 12:11

This is a plain text section block.

this is plain_text text

this is plain_text text

this is plain_text text

this is plain_text text

실습 2

목표

- 실습 1에서 생성한 코드를 클라우드에 구성하기
- AWS에서 발생하는 로그 알람 받기
 - Cloudwatch + SNS + LAMBDA 구성
- 예제, 람다 호출시 알람

Insomnia

POST https://hooks.slack.com/services/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

Send 200 5 Minutes Ago

Preview Headers 19

URL PREVIEW https://hooks.slack.com/services/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

QUERY PARAMETERS Import from URL Bulk Edit

+ Add Delete all Description

ok

EXPORT Generate Code Copy as cURL

ACTIONS Pin Duplicate Rename Delete Settings

value

path segments that start with a colon ':' e.g. 'id'

master Preferences Online Made with ❤ by Kong

Insomnia

Generate Client Code

Copy to Clipboard

http.client

Requests Connection("hooks.slack.com")

```
5 payload = '{"text":"Hello, World!"}'
6
7 headers = { 'Content-type': "application/json" }
8
9 conn.request("POST", "/services/T032HJA4W8Y/B07PUAD8CJE/gViczyMxtQLsAxNoQvSr9kmE", payload,
headers)
10
11 res = conn.getresponse()
12 data = res.read()
13
14 print(data.decode("utf-8"))
```

* Code snippets generated by httpsnippet

Done

master Preferences Online Made with ❤ by Kong

```
import json
import http.client

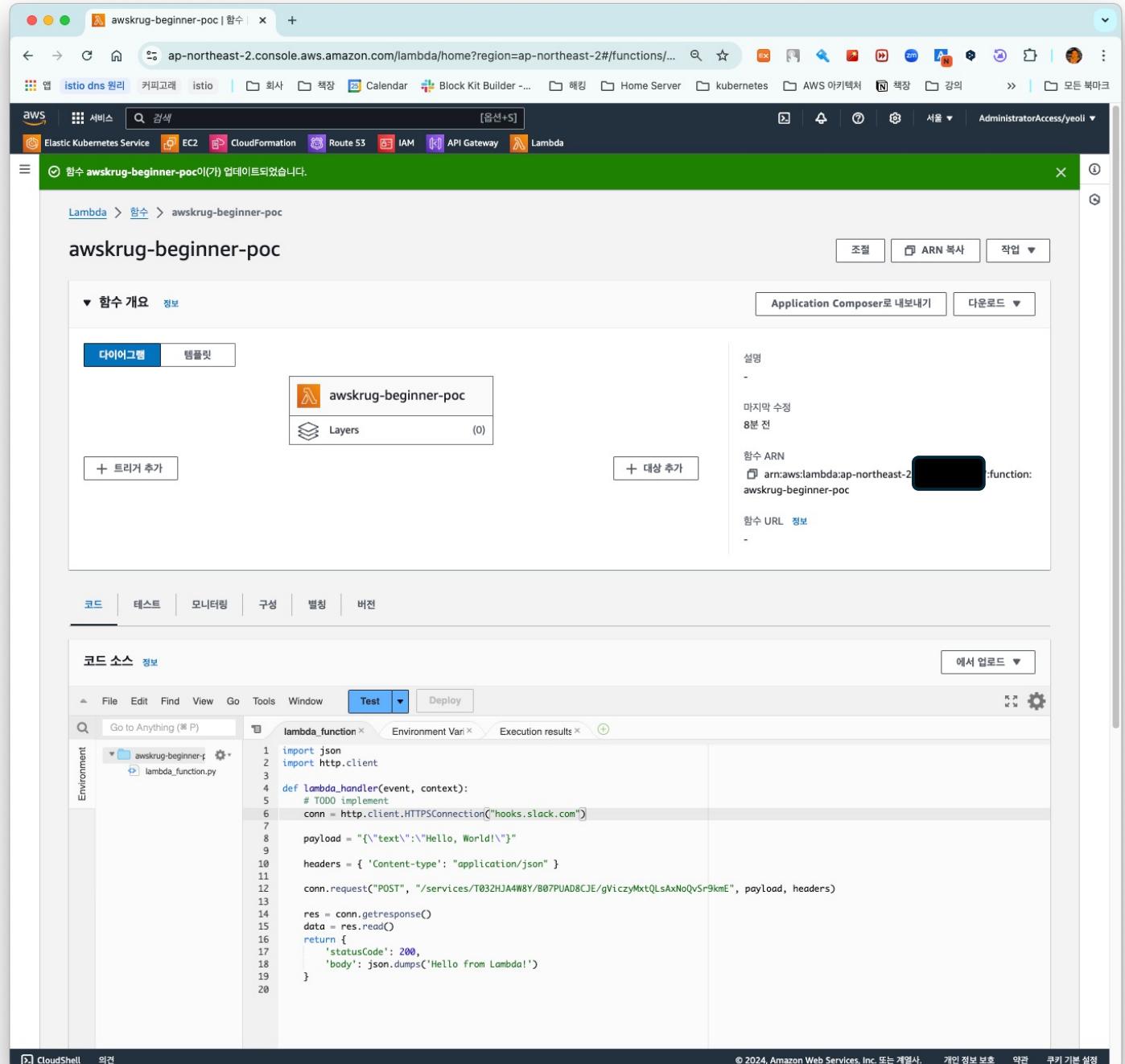
def lambda_handler(event, context):
    # TODO implement
    conn = http.client.HTTPSConnection("hooks.slack.com")

    payload = "{\"text\":\"Hello, World!\"}"

    headers = { 'Content-type': "application/json" }

    conn.request("POST", "/services/T032HJA4W8Y/B07PUAD8CJE/gViczyMxtQLsAxNo0vSr9kmE", payload, headers)

    res = conn.getresponse()
    data = res.read()
    return {
        'statusCode': 200,
        'body': json.dumps('Hello from Lambda!')
    }
```



주제 생성 | 주제 | Simple Notification

ap-northeast-2.console.aws.amazon.com/sns/v3/home?region=ap... +

aws istio dns 원리 커피고래 istio 회사 책장 Calendar Block Kit Builder ... 해킹 Home Server kubernetes 모든 북마크

Amazon SNS > 주제 > 주제 생성

주제 생성

세부 정보

유형 정보
주제를 생성한 후에는 주제 유형을 수정할 수 있음

FIFO(선입선출)

- 연락처가 보존된 메시지 순서 지정
- 정확히 1회 메시지 전송
- 높은 처리량, 총당 최대 300회 개시
- 구독 프로토콜: SQS, Lambda, HTTP, SMS, 이메일, 모바일 애플리케이션 엔드포인트

표준

- 최신의 메시지 순서 지정
- 최소 1회 메시지 전송
- 가장 높은 처리량(총당 개시 횟수)
- 구독 프로토콜: SQS, Lambda, HTTP, SMS, 이메일, 모바일 애플리케이션 엔드포인트

이름 awskrung-beginner-poc
최대 256자이며 영숫자, 하이픈(-) 및 일줄(_)을 포함할 수 있습니다.

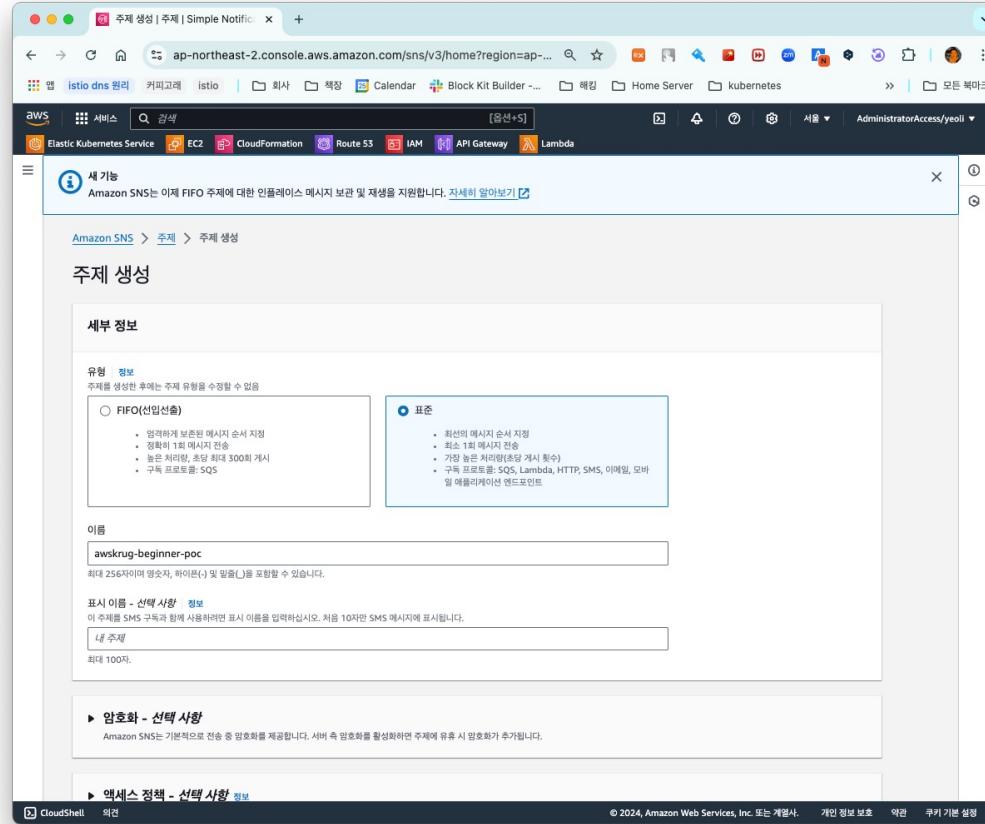
표시 이름 - 선택 사용 정보
이 주제를 SMS 구독과 함께 사용하려면 표시 이름을 입력하십시오. 최대 10자만 SMS 메시지에 표시됩니다.

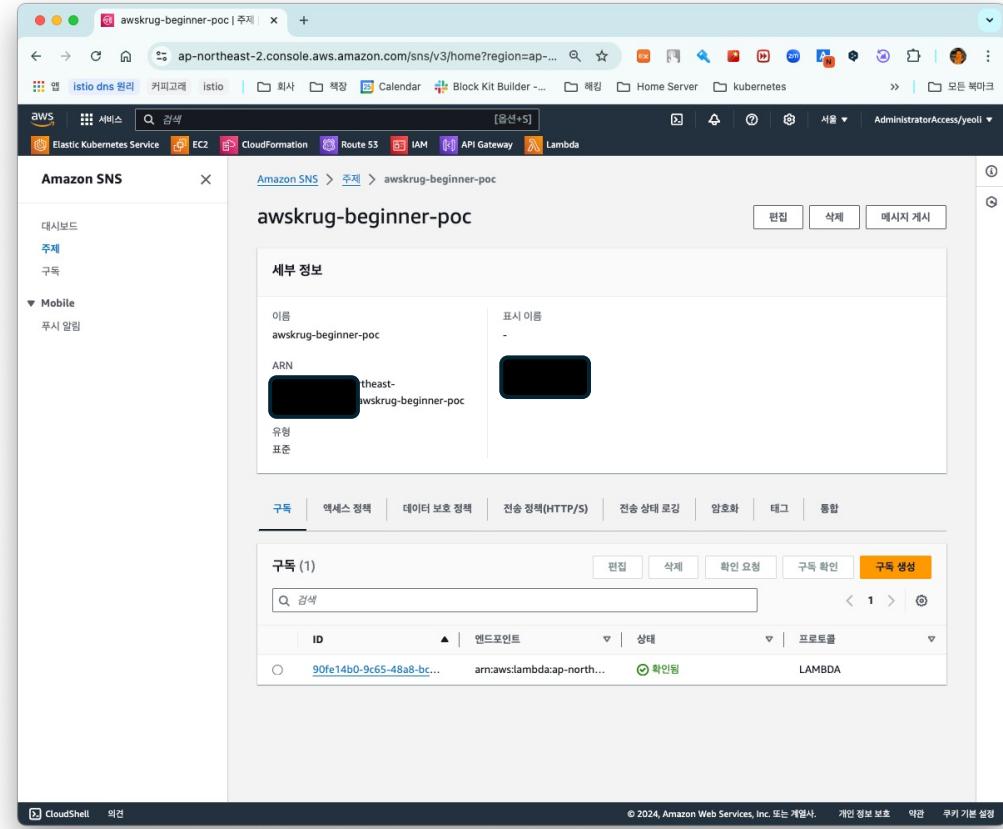
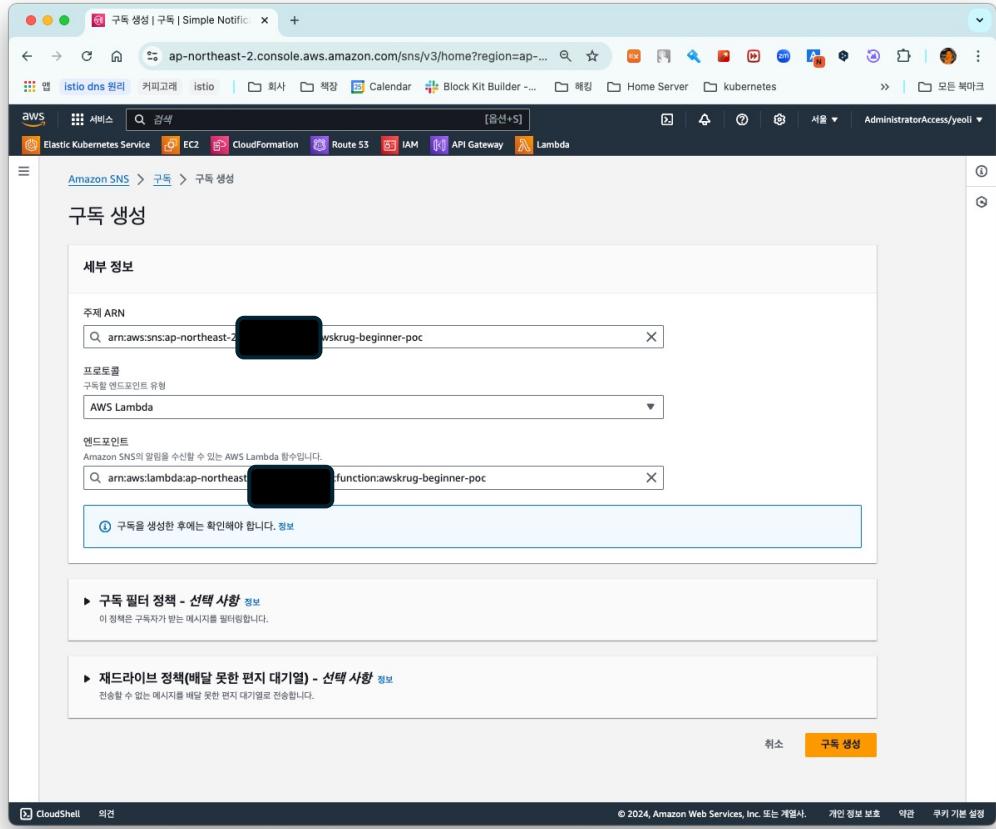
내 주제
최대 100자.

▶ 암호화 - 선택 사용
Amazon SNS는 기본적으로 전송 중 암호화를 제공합니다. 시비 측 암호화를 활성화하면 주제에 유동 시 암호화가 추가됩니다.

▶ 액세스 정책 - 선택 사용 정보

CloudShell 의견 © 2024, Amazon Web Services, Inc. 또는 계열사. 개인 정보 보호 약관 쿠키 기본 설정





시표 및 조건 지정 - 선택 사항

시표

그래프
이 경보는 1 분 내 1개의 데이터 포인트에 대해 피란색 줄이 빨간색 줄을 초과할 때 트리거됩니다.

Count
20
10.5
1
08:00 09:00 10:00
Invocations

네임스페이스
AWS/Lambda

시표 이름
Invocations

FunctionName
alert-poc

통계
합계

기간
1분

조건

임계값 유형
 정적
값을 임계값으로 사용
 이상 탐지
대역을 임계값으로 사용

Invocations이(가) 다음과 같은 경우에 항상...
경보 조건을 정의합니다.

보다 큼
> 임계값
 보다 크거나 같음
>= 임계값
 보다 작거나 같음
<= 임계값
 보다 작음
< 임계값

보다
임계값을 정의합니다.
1
숫자여야 함

▶ 추가 구성

취소 미리 보기 및 생성 건너뛰기 다음

작업 구성 - 선택 사항

알림

경보 상태 트리거

이 작업을 트리거하는 경보 상태를 정의합니다.

경보 상태

시표 또는 표현식이 정의된 임계값을 벗어났습니다.

정상

시표 또는 표현식이 정의된 임계값 범위에 있습니다.

제거

데이터 부족

경보가 빙글 시작되었거나 사용 가능한 데이터가 부족합니다.

다음 SNS 주제에 알림을 보냅니다.

알림을 수신할 SNS(Simple Notification Service) 주제를 정의합니다.

기존 SNS 주제 선택

- 새 주제 생성
- 주제 ARN을 사용하여 다른 계정에 알림

다음으로 알림 전송...

awskrug-beginner-poc

이 계정에 속한 주제만 여기에 나열됩니다. 선택한 주제를 구독하는 모든 사람과 애플리케이션이 알림을 받게 됩니다.

이메일(엔드포인트)

arn:aws:lambda:ap-northeast-2:[REDACTED]function:awskrug-beginner-poc - SNS 콘솔에서 보기

알림 추가

Lambda 작업

Lambda 작업 추가

Auto Scaling 작업

Auto Scaling 작업 추가

The screenshot shows the AWS CloudWatch Logs interface. On the left, there's a sidebar with navigation links like 'CloudWatch' (selected), 'Logs Insights', 'Contributor Insights', 'Logs', 'X-Ray 기록', '이벤트', '애플리케이션 신호', '네트워크 모니터링', and '인사이트'. The main area displays a log event for a Lambda function named 'awslambda/awskrug-beginner-poc'. The log message is as follows:

```
2024-10-01T10:42:29.150Z INIT_START Runtime Version: python:3.12.v36 Runtime Version ARN: arn:aws:lambda:ap-northeast-2:234867465581:function:awslambda/awskrug-beginner-poc RequestId: 2ddae2f5-aea7-4be1-9bc5-fa15568132e4 Version: $LATEST
2024-10-01T10:42:29.307Z START RequestId: 2ddae2f5-aea7-4be1-9bc5-fa15568132e4 Version: $LATEST
2024-10-01T10:42:29.308Z {"Records": [{"EventSource": "aws:sns", "EventVersion": "1.0", "EventSubscriptionArn": "arn:aws:sns:ap-northeast-2:234867465581:topic:test1", "Message": "{\"AlarmName\":\"test1\", \"AlarmDescription\":\"Test SNS Topic\", \"MetricName\":\"CPUUtilization\", \"Namespace\":\"AWS/CloudWatch Metrics\", \"Period\":60, \"EvaluationPeriods\":1, \"ComparisonOperator\":\"GreaterThanOrEqualToThreshold\", \"Thresh...\", \"TopicArn\": \"arn:aws:sns:ap-northeast-2:234867465581:topic:test1\", \"UnsubscribeUrl\": \"https://sns.ap-northeast-2.amazonaws.com/Action=Unsubscribe&SubscriptionArn=arn:aws:sns:ap-northeast-2:234867465581:topic:...\", \"Timestamp\": \"2024-10-01T10:42:28.942Z\", \"SignatureVersion\": \"1\", \"Signature\": \"f5WyuL6XpJ5jwEZt0/ga+Nof9rf1VKqrrABTPfEHMSg/gtw4UYdGYduitAvofKANNX3yuz/YNtfc+5XbomeQ2b1XaismEH0zsgkCZR2k5bPUis2Ror4rplfSSC01DQ1UvN1\", \"SigningCertUrl\": \"https://sns.ap-northeast-2.amazonaws.com/S...\", \"UnsubscribeUrl\": \"https://sns.ap-northeast-2.amazonaws.com/Action=Unsubscribe&SubscriptionArn=arn:aws:sns:ap-northeast-2:234867465581:topic:...\", \"MessageAttributes\": {}}], "EventSource": "aws:sns", "EventVersion": "1.0", "EventSubscriptionArn": "arn:aws:sns:ap-northeast-2:234867465581:topic:..."}]
```

The screenshot shows a code editor displaying a JSON file named 'test.json'. The file content is as follows:

```
{
  "Records": [
    {
      "EventSource": "aws:sns",
      "EventVersion": "1.0",
      "EventSubscriptionArn": "arn:aws:sns:ap-northeast-2:234867465581:topic:...",
      "Message": "{\"AlarmName\":\"test1\", \"AlarmDescription\":\"Test SNS Topic\", \"MetricName\":\"CPUUtilization\", \"Namespace\":\"AWS/CloudWatch Metrics\", \"Period\":60, \"EvaluationPeriods\":1, \"ComparisonOperator\":\"GreaterThanOrEqualToThreshold\", \"Thresh...\", \"TopicArn\": \"arn:aws:sns:ap-northeast-2:234867465581:topic:...\", \"UnsubscribeUrl\": \"https://sns.ap-northeast-2.amazonaws.com/Action=Unsubscribe&SubscriptionArn=arn:aws:sns:ap-northeast-2:234867465581:topic:...\", \"Timestamp\": \"2024-10-01T10:42:28.942Z\", \"SignatureVersion\": \"1\", \"Signature\": \"f5WyuL6XpJ5jwEZt0/ga+Nof9rf1VKqrrABTPfEHMSg/gtw4UYdGYduitAvofKANNX3yuz/YNtfc+5XbomeQ2b1XaismEH0zsgkCZR2k5bPUis2Ror4rplfSSC01DQ1UvN1\", \"SigningCertUrl\": \"https://sns.ap-northeast-2.amazonaws.com/S...\", \"UnsubscribeUrl\": \"https://sns.ap-northeast-2.amazonaws.com/Action=Unsubscribe&SubscriptionArn=arn:aws:sns:ap-northeast-2:234867465581:topic:...\", \"MessageAttributes\": {}}"
    }
  ]
}
```

The 'Message' field of the first record is highlighted with a red box, showing the alarm details: 'AlarmName': 'test1' and 'AlarmDescription': 'Test SNS Topic'.

실습 3

목표

- 실습 1에서 생성한 코드를 클라우드에 구성하기
- AWS에서 발생하는 이벤트 알람 받기
 - Event bridge+ (SNS) + LAMBA 구성
- 예제, 스팟 인스턴스 종료 알람

규칙 세부 정보 정의 정보

규칙 세부 정보

이름

test

숫자, 대/소문자, 마침표(.) , 대시(-), 밑줄(_)을 사용하여 최대 64자로 지정합니다.

설명 - 선택 사항

설명 입력

이벤트 버스 정보

이 규칙이 적용되는 이벤트 버스(기본 이벤트 버스 또는 사용자 지정 또는 파트너 이벤트 버스)를 선택합니다.

default

선택한 이벤트 버스에 대해 규칙 활성화

규칙 유형 정보

이벤트 패턴이 있는 규칙

이벤트가 정의된 이벤트 패턴과 일치할 때 실행되는 규칙입니다.
EventBridge는 지정된 대상으로 이벤트를 전송합니다.

일정

일정에 따라 실행되는 규칙입니다.

이벤트 패턴 정보

이벤트 소스

AWS 서비스 또는 EventBridge 파트너를 스스로 제공

AWS 서비스

AWS 서비스

이벤트 소스로 사용되는 AWS 서비스 이름

EC2

이벤트 유형

패턴을 매칭하는 대 소문자 구분无关의 이벤트 유형

EC2 Spot Instance Interruption Warning

이벤트 패턴

이벤트 패턴 또는 이벤트와 일치하는 필터

```
1 {  
2   "source": ["aws.ec2"],  
3   "detail-type": ["EC2 Spot Instance Interruption Warning"]  
4 }
```

복사

테스트 패턴

패턴 편집

대상 선택



권한

참고: EventBridge 콘솔을 사용할 때, EventBridge는 선택된 대상에 대한 적절한 권한을 자동으로 구성합니다. AWS CLI, SDK 또는 CloudFormation을 사용하는 경우 적절한 권한을 구성해야 합니다.

대상 1개

대상 유형

EventBridge 이벤트 버스, EventBridge API 대상(SaaS 파트너) 또는 다른 AWS 서비스를 대상으로 선택합니다.

- EventBridge 이벤트 버스
- EventBridge API 대상
- AWS 서비스

대상 선택 정보

이벤트가 이벤트 패턴과 일치하거나 일정이 트리거될 때 호출할 대상을 선택합니다(규칙당 5개의 대상으로 제한).

SNS 주제

주제

awskrug-beginner-poc

▶ 추가 설정

다른 대상 추가

취소

검토 및 생성단계로 건너뛰기

이전

다음

대상 선택



권한

참고: EventBridge 콘솔을 사용할 때, EventBridge는 선택된 대상에 대한 적절한 권한을 자동으로 구성합니다. AWS CLI, SDK 또는 CloudFormation을 사용하는 경우 적절한 권한을 구성해야 합니다.

대상 1개

대상 유형

EventBridge 이벤트 버스, EventBridge API 대상(SaaS 파트너) 또는 다른 AWS 서비스를 대상으로 선택합니다.

- EventBridge 이벤트 버스
- EventBridge API 대상
- AWS 서비스

대상 선택 정보

이벤트가 이벤트 패턴과 일치하거나 일정이 트리거될 때 호출할 대상을 선택합니다(규칙당 5개의 대상으로 제한).

Lambda 함수

함수

awskrug-beginner-poc

▶ 버전/별칭 구성

▶ 추가 설정

다른 대상 추가

취소

검토 및 생성단계로 건너뛰기

이전

다음

CloudWatch > 로그 그룹 > /aws/lambda/awskrug-beginner-poc > 2024/10/01/[\$.LATEST]4e0b2bc747b94c2cb93da3d053a1946e

로그 이벤트

아래의 필터 막대를 사용하여 로그 이벤트의 용어, 구문 또는 값을 검색하고 매칭할 수 있습니다. [필터 패턴에 대해 자세히 알아보기](#)

로그 키워드: 이벤트 필터링 - Enter 키를 눌러 검색

작업 ▾ 테일링 시작 지표 필터 생성

지우기 1분 30분 1시간 12시간 사용자 지정 UTC 시간대 디스플레이 ▾

타임스탬프 메시지

현재 이전 이벤트가 없습니다. [제거](#)

2024-10-01T11:14:40.124Z INIT_START Runtime Version: python:3.12.v36 Runtime Version ARN: arn:aws:lambda:ap-northeast-2::runtime:188d9co2e2714ff5637bd2bbe06ceb81ec3bc408a0f277dab104c...
2024-10-01T11:14:40.261Z START RequestId: 7c3e1f96-3263-4c61-9e75-cf39db064871 Version: \$LATEST
2024-10-01T11:14:40.262Z {"version": "0", "id": "5b116b5b-bfbc-43f8-a4d6-b993b0a6cd0c", "detail-type": "EC2 Spot Instance Interruption Warning", "source": "aws.ec2", "account": "2348...
{"version": "0", "id": "5b116b5b-bfbc-43f8-a4d6-b993b0a6cd0c", "detail-type": "EC2 Spot Instance Interruption Warning", "source": "aws.ec2", "account": "2348...", "time": "2024-10-01T11:14:38Z", "region": "ap-northeast-2", "resources": ["arn:aws:ec2:ap-northeast-2d:instance/i-0207644a0049036ec"], "detail": {"instance-id": "i-0207644a0049036ec", "instance-action": "terminate"}
2024-10-01T11:14:41.504Z END RequestId: 7c3e1f96-3263-4c61-9e75-cf39db064871
2024-10-01T11:14:41.504Z REPORT RequestId: 7c3e1f96-3263-4c61-9e75-cf39db064871 Duration: 1241.84 ms Billed Duration: 1242 ms Memory Size: 128 MB Max Memory Used: 46 MB Init Duration: 0 ms
현재 최신 이벤트가 없습니다. 자동 재시도를 일시 중지했습니다. [제거](#)

{} test.json X

Users > kyungyeol > {} test.json > {} detail > [ab] instance-action

```
1  {
2   "version": "0",
3   "id": "5b116b5b-bfbc-43f8-a4d6-b993b0a6cd0c",
4   "detail-type": "EC2 Spot Instance Interruption Warning",
5   "source": "aws.ec2",
6   "account": "234867461837",
7   "time": "2024-10-01T11:14:38Z",
8   "region": "ap-northeast-2",
9   "resources": ["arn:aws:ec2:ap-northeast-2d:instance/i-0207644a0049036ec"],
10  "detail": [
11    "instance-id": "i-0207644a0049036ec",
12    "instance-action": "terminate"
13  ]
14 }
15 
```

Launchpad 0 ▲ 0 ⚡ 0 AWS: profile:default ▷ Amazon Q ⓘ Go Live ✓ Prettier

실습 4

목표

- 이벤트에 생성형 AI 도입
- Bedrock 사용가능한 Lambda 생성
- AI가 요약해주는 AWS 이벤트

Amazon Bedrock

ap-northeast-2.console.aws.amazon.com/bedrock/home?region=ap-northeast-2#/providers?model=anthropic.claude-3-5-s

No access to models
Only models with access will be available for use by other users of this account. Request access to models in Model access.

Amazon Bedrock > Providers

Providers info

Amazon Bedrock is a fully managed service that makes FMs from leading AI startups and Amazon available via an API, so you can

Anthropic

Anthropic overview

Anthropic is an AI safety and research company that creates reliable, interpretable, and performance.

Learn more about Anthropic

Anthropic examples

AI Claude 3 Opus (coming soon)

Create a Side-Scrolling Game

An example of generating an interactive typing game in a single HTML file, featuring side-scrolling gameplay and Tailwind CSS styling.

Claude models

Anthropic's latest models are Claude 3 Haiku, Claude 3 Opus, and Claude 3.5 Sonnet in ascending order of capability. Each suc

Claude 3.5 Sonnet **Claude 3 Sonnet** **Claude 3 Haiku**

This account does not currently have access to this model. Request access in Model access.

About model

Claude 3.5 Sonnet raises the industry bar for intelligence, outperforming competitor models and Claude 3 Opus in a wide ran

Supported use cases

Claude 3.5 excels at complex tasks like customer support, coding, data analysis, and visual processing. It streamlines workflow quality, natural-sounding content.

Model attributes

Code generation, text generation, complex reasoning and analysis

Model ID

anthropic.claude-3-5-sonnet-20240620-v1:0

CloudShell Feedback

Amazon Bedrock

ap-northeast-2.console.aws.amazon.com/bedrock/home?region=ap-northeast-2#/n

Amazon Bedrock > Model access > Request model access

Step 1 Edit model access

Step 2 Add use case details for Anthropic

Step 3 Review and submit

Edit model access

Base models (1/4)

Not seeing a model you're interested in? Check out all supported models!

Find model

Models Access status EULA

Models	Access status	EULA
Amazon (1)	0/1 access granted	
Titan Text Embeddings V2	Available to request	EULA
Anthropic (3)	0/3 access granted	
Claude 3.5 Sonnet	Available to request	EULA
Claude 3 Sonnet	Available to request	EULA
Claude 3 Haiku	Available to request	EULA

Cancel Next

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Create role | IAM | Global

us-east-1.console.aws.amazon.com/iam/home?region=ap-northeast-2#roles/create

IAM > Roles > Create role

Select trusted entity

Step 1 Select trusted entity

Step 2 Add permissions

Step 3 Name, review, and create

Trusted entity type

- AWS service Allow AWS services like EC2, Lambda, or others to perform actions in this account.
- AWS account Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.
- Web identity Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

SAML 2.0 federation Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

Custom trust policy Create a custom trust policy to enable others to perform actions in this account.

Use case

Allow an AWS service like EC2, Lambda, or others to perform actions in this account.

Lambda

Choose a use case for the specified service.

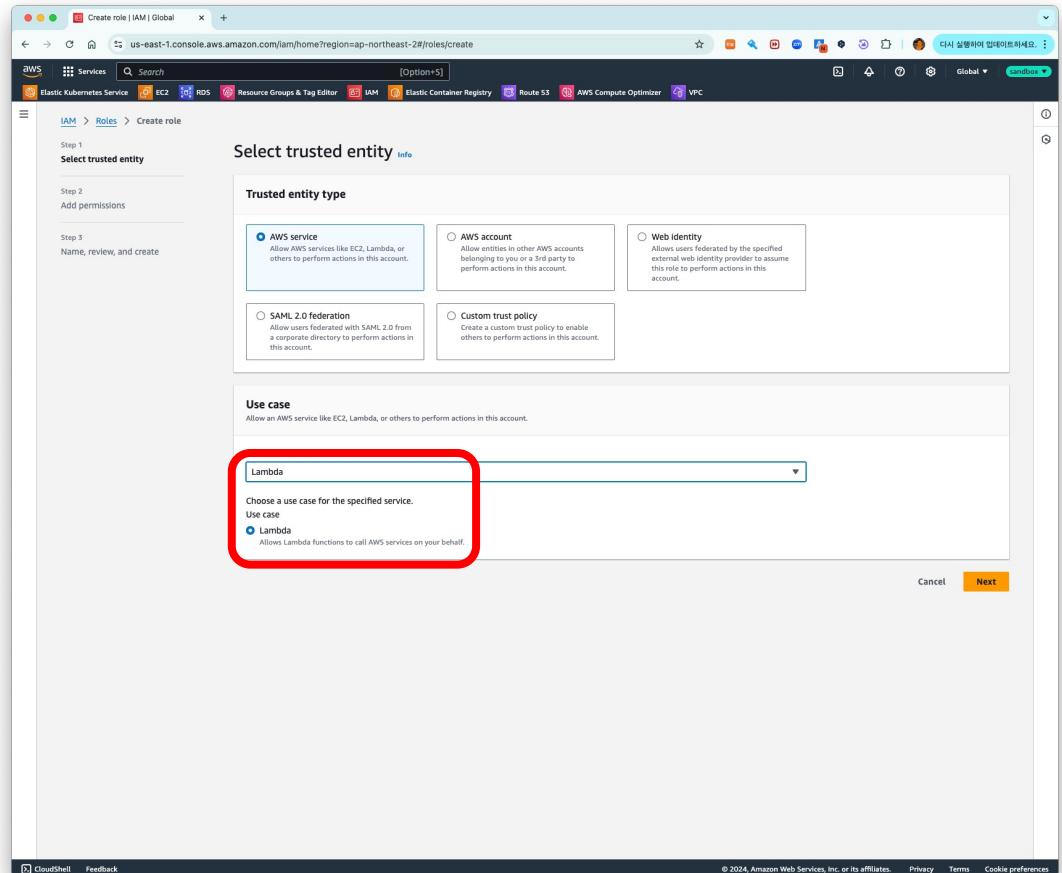
Use case

Lambda Allows Lambda functions to call AWS services on your behalf.

Cancel Next

CloudShell Feedback

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Create role | IAM | Global

us-east-1.console.aws.amazon.com/iam/home?region=ap-northeast-2#roles/create?trustedEntityType=AWS_SERVICE&selectedService=Lambda

IAM > Roles > Create role

Name, review, and create

Role details

Role name

awskrug-beginner-demo-lambda-role

Add a short explanation for this role.

Allows Lambda functions to call AWS services on your behalf.

Maximum 1000 characters. Use letters (A-Z and a-z), numbers (0-9), tabs, new lines, or any of the following characters: _+-.@/\!#\$%^&`~;

Step 1: Select trusted entities

Trust policy

```
1 - [
2 -   "Version": "2012-10-17",
3 -   "Statement": [
4 -     {
5 -       "Effect": "Allow",
6 -       "Action": [
7 -         "sts:AssumeRole"
8 -       ],
9 -       "Principal": [
10 -         {
11 -           "Service": [
12 -             "lambda.amazonaws.com"
13 -           ]
14 -         }
15 -     ]
16 -   }
]
```

Step 2: Add permissions

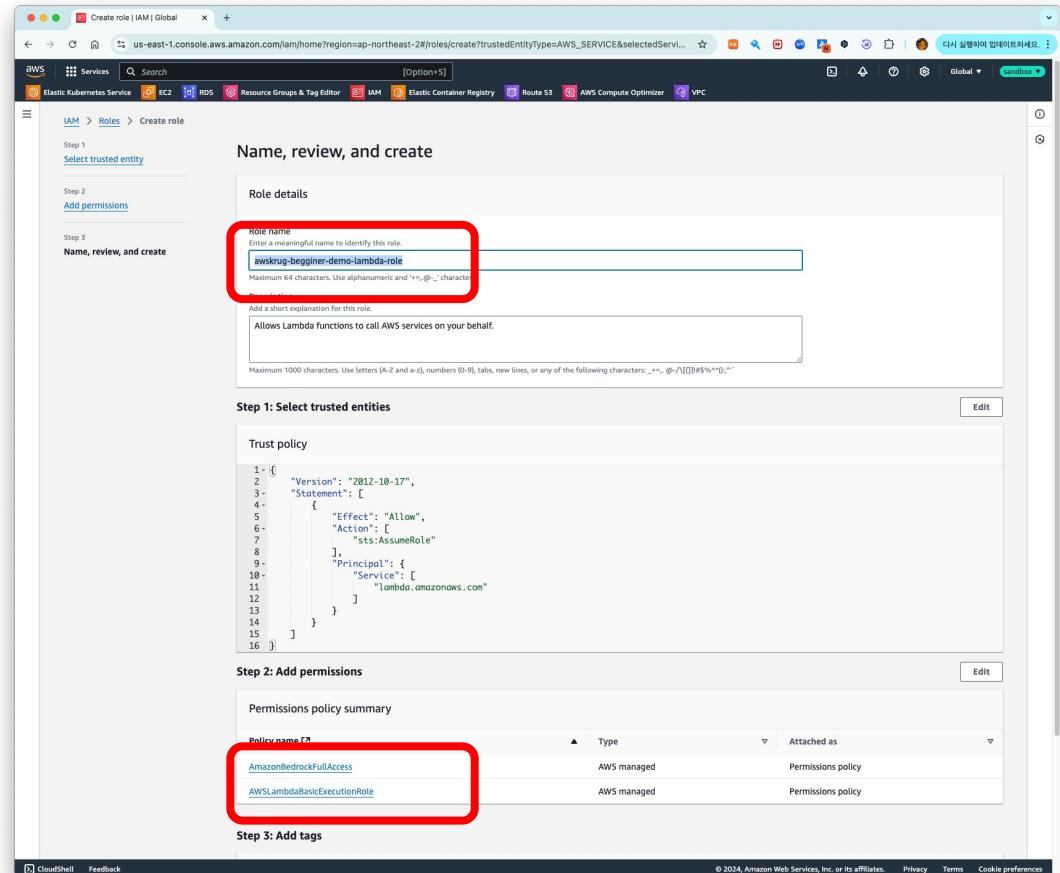
Permissions policy summary

Policy name	Type	Attached as
AmazonBedrockFullAccess	AWS managed	Permissions policy
AWSLambdaBasicExecutionRole	AWS managed	Permissions policy

Step 3: Add tags

CloudShell Feedback

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Create function | Functions | +

ap-northeast-2.console.aws.amazon.com/lambda/home?region=ap-northeast-2#/create/function

AWS Services Search Option+G

Elastic Kubernetes Service FC2 RDS Resource Groups & Tag Editor IAM Elastic Container Registry Route 53 AWS Compute Optimizer VPC

Lambda > Functions > Create function

Create function

Choose one of the following options to create your function.

- Author from scratch Start with a simple Hello World example.
- Use a sample Lambda application from sample code and configuration presets for common use cases.
- Container image Select a container image to deploy for your function.

Basic information

Function name Enter a name that describes the purpose of your function.
awsruk-beginner-demo-lambda-role

Function name must be 1 to 64 characters, must be unique to the Region, and can't include spaces. Valid characters are a-z, A-Z, 0-9, hyphens (-), and underscores (_).

Runtime info Choose the language to use for your function. Note that the console code editor supports only Node.js, Python, and Ruby.
Python 3.12

Architecture info Choose the instruction set architecture you want for your function code.
 x86_64
 arm64

Permissions info By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

Change default execution role

Execution role Choose a role that defines the permissions of your function. To create a custom role, go to the IAM console.
 Create a new role with basic Lambda permissions
 Use an existing role
 Create a new role from AWS policy templates

Existing role Choose an existing role that you've created to be used with this Lambda function. The role must have permission to upload logs to Amazon CloudWatch Logs.
awsruk-beginner-demo-lambda-role

View the awsruk-beginner-demo-lambda-role role [on the IAM console](#).

Additional Configurations

Use additional configurations to set up code signing, function URL, tags, and Amazon VPC access for your function.

[Create function](#)

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Rule details | Amazon EventBridge

ap-northeast-2.console.aws.amazon.com/events/home?region=ap-northeast-2#/eventbus/default/rules/lambda-invoke-rule

AWS Services Search Option+G

Elastic Kubernetes Service FC2 RDS Resource Groups & Tag Editor IAM Elastic Container Registry Route 53 AWS Compute Optimizer VPC

Amazon EventBridge > Rules > lambda-invoke-rule

lambda-invoke-rule

Rule details Info

Rule name	Status	Event bus name	Type
lambda-invoke-rule	Enabled	default	Standard

Description

Targets

Details	Target Name	Type	Arn	Input	Role
awsruk-beginner-demo	awsruk-beginner-demo	Lambda function	Matched event	Matched event	-

Input to target: Matched event
Additional parameters: --
Dead-letter queue (DLQ): -

Event pattern Targets Monitoring Tags

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https://docs.aws.amazon.com/ko_kr/code-library/latest/ug/python_3_bedrock-runtime_code_examples.html#anthropic_claude

```
# Use the native inference API to send a text message to Anthropic Claude.

import boto3
import json

from botocore.exceptions import ClientError

# Create a Bedrock Runtime client in the AWS Region of your choice.
client = boto3.client("bedrock-runtime", region_name="ap-northeast-2")

# Set the model ID, e.g., Claude 3 Haiku.
model_id = "anthropic.claude-3-5-sonnet-20240620-v1:0"

# Define the prompt for the model.
prompt = "Describe the purpose of a 'hello world' program in one line."

# Format the request payload using the model's native structure.
native_request = {
    "anthropic_version": "bedrock-2023-05-31",
    "max_tokens": 512,
    "temperature": 0.5,
    "messages": [
        {
            "role": "user",
            "content": [{"type": "text", "text": prompt}],
        }
    ],
}

# Convert the native request to JSON.
request = json.dumps(native_request)

try:
    # Invoke the model with the request.
    response = client.invoke_model(modelId=model_id, body=request)

except (ClientError, Exception) as e:
    print(f"ERROR: Can't invoke '{model_id}'. Reason: {e}")
    exit(1)

# Decode the response body.
model_response = json.loads(response["body"].read())

# Extract and print the response text.
response_text = model_response["content"][0]["text"]
print(response_text)
```

```
lambda_function.py ✘
lambda_function.py
1  # Use the native inference API to send a text message to Anthropic Claude.
2
3  import boto3
4  import json
5
6  from botocore.exceptions import ClientError
7
8  # Create a Bedrock Runtime client in the AWS Region of your choice.
9  client = boto3.client("bedrock-runtime", region_name="ap-northeast-2")
10
11 # Set the model ID, e.g., Claude 3 Haiku.
12 model_id = "anthropic.claude-3-5-sonnet-20240620-v1:0"
13
14 # Define the prompt for the model.
15 prompt = "Describe the purpose of a 'hello world' program in one line."
16
17 # Format the request payload using the model's native structure.
18 native_request = {
19     "anthropic_version": "bedrock-2023-05-31",
20     "max_tokens": 512,
21     "temperature": 0.5,
22     "messages": [
23         {
24             "role": "user",
25             "content": [{"type": "text", "text": prompt}],
26         }
27     ],
28
29
30 # Convert the native request to JSON.
31 request = json.dumps(native_request)
32
33 true
```

```

# Use the native inference API to send a text message to Anthropic Claude.

import boto3
import json

from botocore.exceptions import ClientError

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    "temperature": 0.5,
    "messages": [
        {
            "role": "user",
            "content": [{"type": "text", "text": prompt}]
        }
    ],
}

# Convert the native request to JSON.
request = json.dumps(native_request)

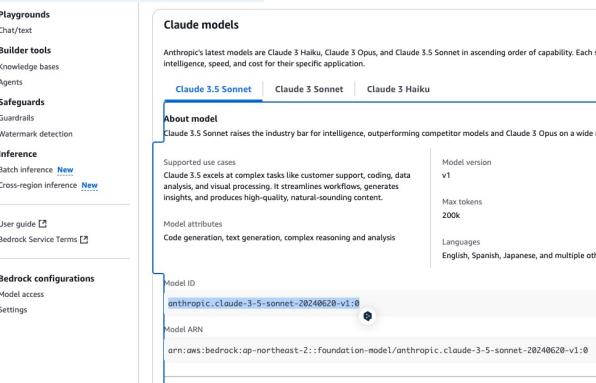
try:
    # Invoke the model with the request.
    response = client.invoke_model(modelId=model_id, body=request)

except (ClientError, Exception) as e:
    print(f"ERROR: Can't invoke '{model_id}'. Reason: {e}")
    exit(1)

# Decode the response body.
model_response = json.loads(response["body"].read())

# Extract and print the response text.
response_text = model_response["content"][0]["text"]
print(response_text)

```



```

lambda_function.py ✘
lambda_function.py
1  # Use the native inference API to send a text message to Anthropic Claude.
2
3  import boto3
4  import json
5
6  from botocore.exceptions import ClientError
7
8  # Create a Bedrock Runtime client in the AWS Region of your choice.
9  client = boto3.client("bedrock-runtime", region_name="ap-northeast-2")
10
11 # Set the model ID, e.g., Claude 3 Haiku.
12 model_id = "anthropic.claude-3-5-sonnet-20240620-v1:0"
13
14 # Define the prompt for the model.
15 prompt = "Describe the purpose of a 'hello world' program in one line."
16
17 # Format the request payload using the model's native structure.
18 native_request = {
19     "anthropic_version": "bedrock-2023-05-31",
20     "max_tokens": 512,
21     "temperature": 0.5,
22     "messages": [
23         {
24             "role": "user",
25             "content": [{"type": "text", "text": prompt}]
26         }
27     ],
28 }
29
30 # Convert the native request to JSON.
31 request = json.dumps(native_request)
32
33 true

```

Rule details | Amazon EventBridge

ap-northeast-2.console.aws.amazon.com/events/home?region=ap-northeast-2#/eventbus/default/rules/lambda-invoke-rule

Amazon EventBridge > Rules > lambda-invoke-rule

lambda-invoke-rule

Rule details Info

Rule name: lambda-invoke-rule Status: Enabled Event bus name: default Type: Standard

Description: [REDACTED]

Event pattern Info

Event pattern Info

```
{ "source": "aws:ec2" }
```

Targets

Copy

Event pattern Targets Monitoring Tags

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Developer resources

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- Sandbox
- Quick starts
- Buses
 - Event buses
 - Rules**
- Global endpoints
- Archives
- Replays
- Pipes
 - Pipes
- Scheduler
 - Schedules
 - Schedule groups
- Integration
 - Partner event sources
 - API destinations
 - Connections Updated
- Schema registry
 - Schemas

Documentation

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Rule details | Amazon EventBridge

ap-northeast-2.console.aws.amazon.com/events/home?region=ap-northeast-2#/eventbus/default/rules/lambda-invoke-rule

Amazon EventBridge > Rules > lambda-invoke-rule

lambda-invoke-rule

Rule details Info

Rule name: lambda-invoke-rule Status: Enabled Event bus name: default Type: Standard

Description: [REDACTED]

Targets

Details	Target Name	Type	Arn	Input	Role
awskrug-beginner-demo	awskrug-beginner-demo	Lambda function	[REDACTED]	Matched event	-

Input to target: Matched event
Additional parameters: --
Dead-letter queue (DLQ): -

Event pattern Targets Monitoring Tags

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# Use the native inference API to send a text message to Anthropic Claude.

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import http.client
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client = boto3.client("bedrock-runtime", region_name="ap-northeast-2")

# Set the model ID, claude 3.5 sonnet 모델 사용
model_id = "anthropic.claude-3-5-sonnet-20240620-v1:0"

def lambda_handler(event, context):
    print(event)
    # Format the request payload using the model's native structure.
    # prompt을 event로 받습니다.
    native_request = {
        "anthropic_version": "bedrock-2023-05-31",
        "max_tokens": 512,
        "temperature": 0.5,
        "messages": [
            {
                "role": "user",
                "content": [{"type": "text", "text": str(event)}],
            }
        ],
        # system prompt 추가
        "system": "cloudtrail 로그를 가독성있게 100자 이내로 작성해줘"
    }

    request = json.dumps(native_request)
    response = client.invoke_model(modelId=model_id, body=request)

    # Decode the response body.
    model_response = json.loads(response.get("body").read())
    response_text = model_response['content'][0]['text']

    # send slack message
    conn = http.client.HTTPSConnection("hooks.slack.com")
    payload = json.dumps({"text": response_text}).encode('utf-8')
    headers = { 'Content-type': "application/json" }
    conn.request("POST", "/services/T032HJA4W8Y/B07PUAD8CJE/gViczyMxtQLsAxNoQvSr9kmE", payload, headers)
    res = conn.getresponse()

    return {
        'statusCode': 200,
        'body': json.dumps('Hello from Lambda!')
    }

```

```

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◀ → #일반

일반

메시지 캔버스 추가 파일 +

일반에 모두가 있습니다

공지와 회사 뉴스, 향후 이벤트 또는 칭찬받아야 하는 팀원에 대한 업데이트를 공유하세요. ☆

회사 핸드북 추가 유용한 링크, 지침, 정책을 공유합니다

환영 메시지 맞춤화 짧은 비디오 클립 기록

2023년 9월 22일 이후부터

팀의 숨겨진 메시지 및 파일 모두 잡금 해제 PRO
90일 이상 경과된 메시지가 숨겨집니다 무제한 액세스를 위한 무료 30일 평가판을 시작하세요. 자세히 알아보기

무료 평가판 시작

오늘 ▾

awskrug-beginner-poc 웹 오후 9:52
EC2 인스턴스 i-0a91bee0ba1ccc259의 상태가 'pending'으로 변경되었습니다.
시간: 2024-11-05 12:52:28 UTC, 리전: ap-northeast-2, 계정: [REDACTED]
EC2 인스턴스(i-0a91bee0ba1ccc259)가 2024년 11월 5일 12:52:31 UTC에 ap-northeast-2 리전에서 실행 상태로 변경되었습니다.

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#일반에 메시지 보내기

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일반

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메시지 캔버스 추가 파일 +

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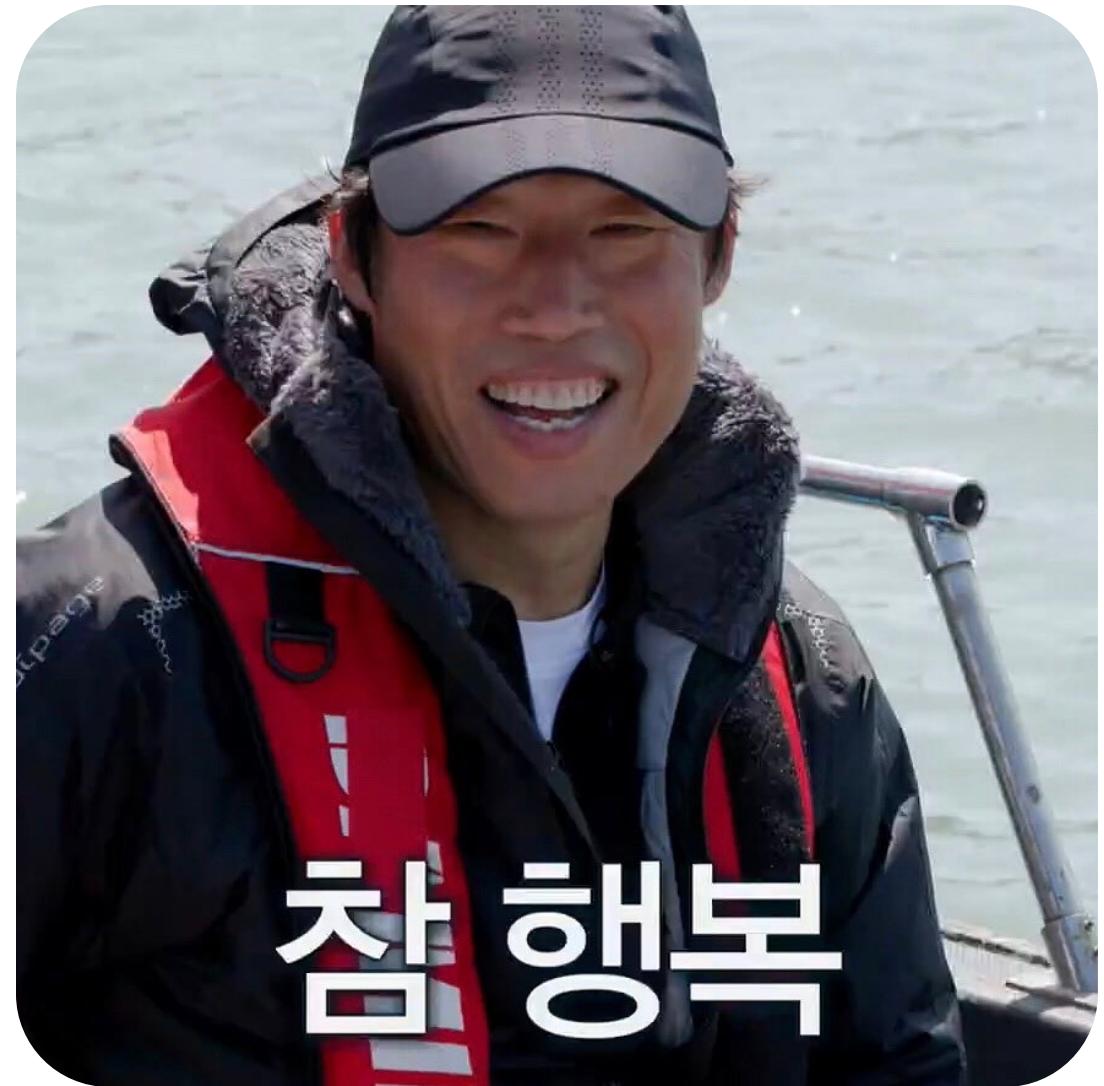
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