Cloud

上奇集團 30

CHASE EXCELLENCE

S3 &CF 每月寄送用量到email

Agenda

- S3 自動化寄送設定
  - 設定SNS Topic
  - 設定Lambda
  - 設定EventBridge
- CloudFront自動化寄送設定

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S3 自動化寄送設定

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設定SNS Topic

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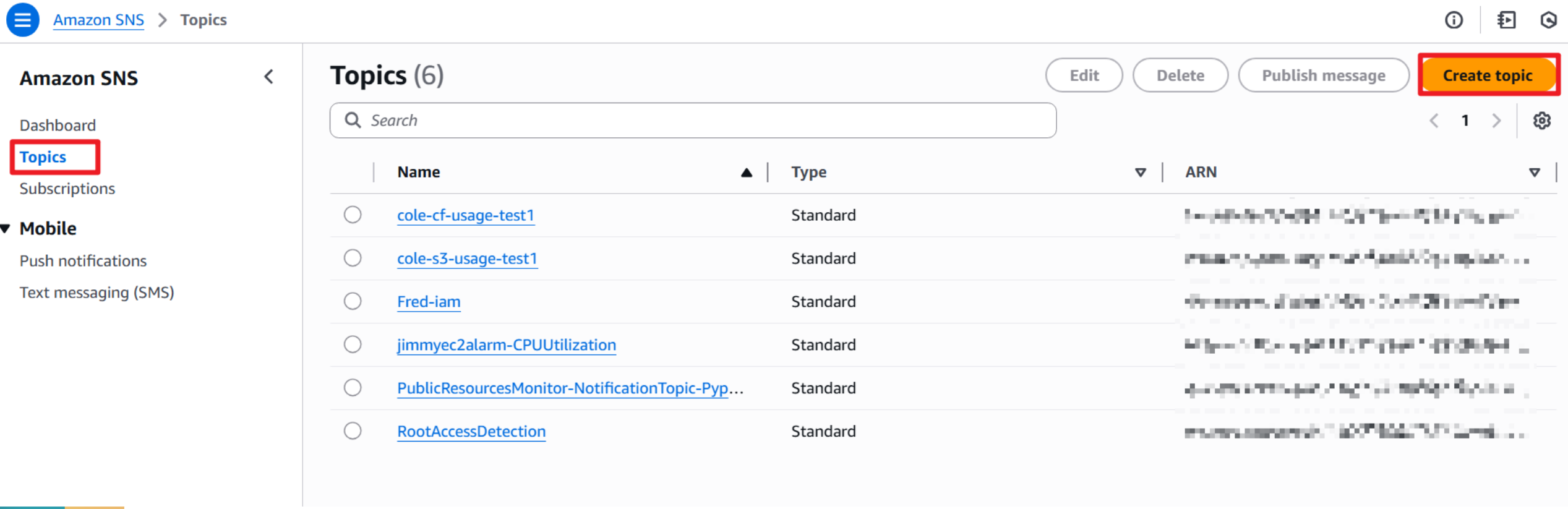

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設定SNS Topic

上奇集團 CHASE EXCELLENCE

Amazon SNS > Topics > Create topic

Create topic

Details

Type | Info

Topic type cannot be modified after topic is created

- FIFO (first-in, first-out)
  - Strictly-preserved message ordering
  - Exactly-once message delivery
  - Subscription protocols: SQS
- **Standard**
  - Best-effort message ordering
  - At-least once message delivery
  - Subscription protocols: SQS, Lambda, Data Firehose, HTTP, SMS, email, mobile application endpoints

Name

cole-s3-usage-test2

Maximum 256 characters. Can include alphanumeric characters, hyphens (-) and underscores (_).

Display name - *optional* | Info

To use this topic with SMS subscriptions, enter a display name. Only the first 10 characters are displayed in an SMS message.

設定SNS Topic

上奇集團 CHASE EXCELLENCE

The policy defines how Amazon SNS retries failed deliveries to HTTP/S endpoints. To modify the default settings, expand this section.

▶ **Delivery status logging - *optional*** Info

These settings configure the logging of message delivery status to CloudWatch Logs.

▶ **Tags - *optional***

A tag is a metadata label that you can assign to an Amazon SNS topic. Each tag consists of a key and an optional value. You can use tags to search and filter your topics and track your costs. Learn more

▶ **Active tracing - *optional*** Info

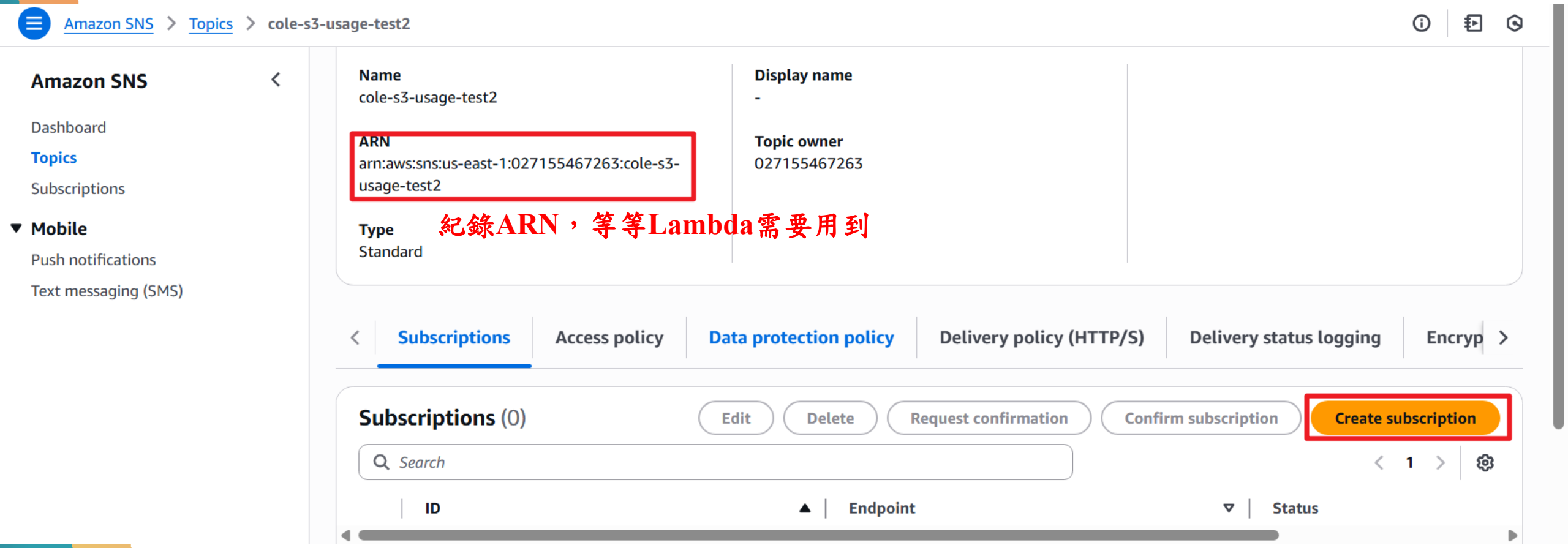
Use AWS X-Ray active tracing for this topic to view its traces and service map in Amazon CloudWatch. Additional costs apply.

[無標題]

其他保持預設，點Create topic

Cancel | Create topic

設定SNS Topic


Amazon SNS > Topics > cole-s3-usage-test2
Amazon SNS
Dashboard
Topics
Subscriptions
Mobile
Push notifications
Text messaging (SMS)
Name
cole-s3-usage-test2
Display name
-
ARN
arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2
Topic owner
027155467263
Type
Standard
紀錄ARN，等等Lambda需要用到
Subscriptions
Access policy
Data protection policy
Delivery policy (HTTP/S)
Delivery status logging
Encryp
Subscriptions (0)
Edit
Delete
Request confirmation
Confirm subscription
Create subscription
Search
1
ID
Endpoint
Status

設定SNS Topic

上奇集團 CHASE EXCELLENCE

Amazon SNS > Subscriptions > Create subscription

Topic ARN

arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2

Protocol

The type of endpoint to subscribe

Email

Endpoint

An email address that can receive notifications from Amazon SNS.

colelin@grandtechcloud.com

選擇要收信的email

After your subscription is created, you must confirm it. Info

▶ **Subscription filter policy - *optional*** Info

This policy filters the messages that a subscriber receives.

設定SNS Topic

上奇集團 CHASE EXCELLENCE

Amazon SNS > Topics > cole-s3-usage-test2 > Subscription: 791c66b6-e556-49de-aec8-8fe92ac87a0b

Amazon SNS

- Dashboard
- Topics
- **Subscriptions**

▼ **Mobile**

- Push notifications
- Text messaging (SMS)

Subscription to cole-s3-usage-test2 created successfully.
The ARN of the subscription is arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2:791c66b6-e556-49de-aec8-8fe92ac87a0b.

Subscription: 791c66b6-e556-49de-aec8-8fe92ac87a0b

Edit | Delete

Details

ARN
arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2:791c66b6-e556-49de-aec8-8fe92ac87a0b

Endpoint
colelin@grandtechcloud.com

Topic
cole-s3-usage-test2

Subscription Principal
arn:aws:iam::027155467263:role/aws-reserved/sso.amazonaws.com/eu-west-2/AWSReservedSSO_AdministratorAccess_ad73b4a3ff9b7341

Status
Pending confirmation

收驗證信

Protocol
EMAIL

設定SNS Topic

上奇集團 CHASE EXCELLENCE

AWS Notification - Subscription Confirmation

AN AWS Notifications <no-reply@sns.amazonaws.com>
收件者 Cole Lin - GCS

回覆 全部回覆 轉寄

2025/11/7 (週五) 下午 02:22

將郵件翻譯為: 繁體中文 (繁體) 一律不翻譯自: 英文 翻譯喜好設定

You have chosen to subscribe to the topic:
arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2

To confirm this subscription, click or visit the link below (If this was in error no action is necessary):
Confirm subscription

Please do not reply directly to this email. If you wish to remove yourself from receiv

aws Simple Notification Service

Subscription confirmed!

You have successfully subscribed.

Your subscription's id is:
arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2:791c66b6-e556-49de-aec8-8fe92ac87a0b

If it was not your intention to subscribe, click here to unsubscribe.

SNS設定完成

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設定Lambda

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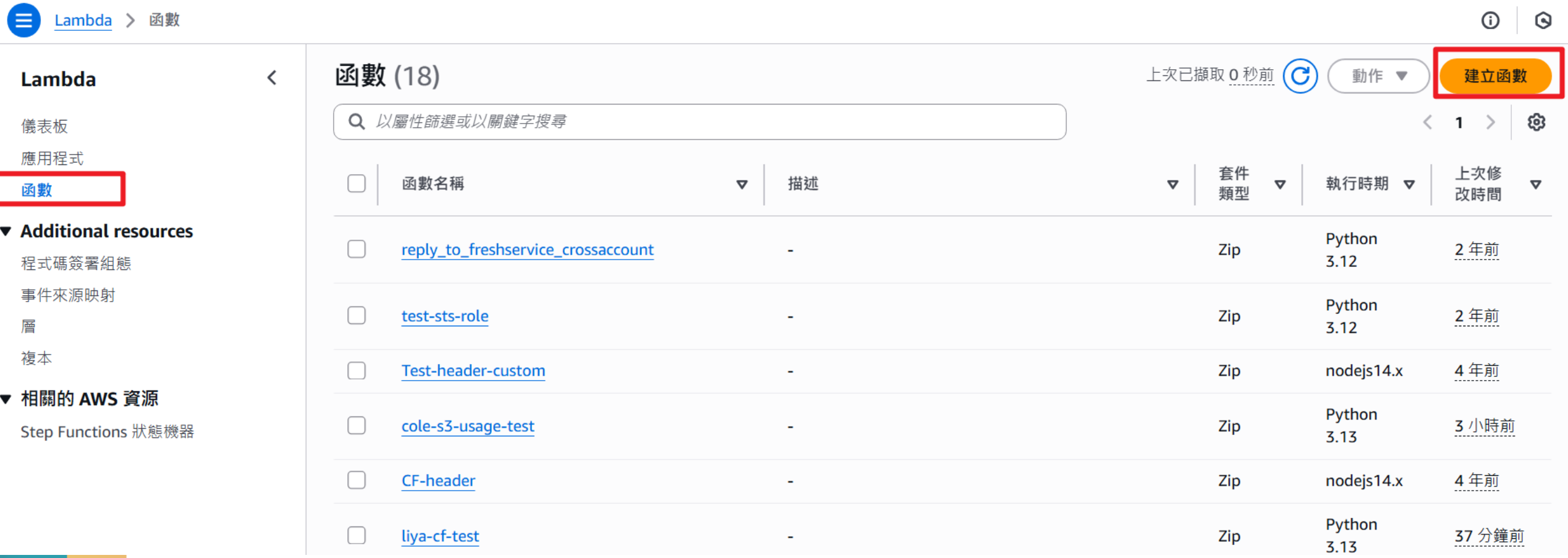

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > 建立函式

建立函式 資訊

選擇下列選項之一來建立您的函式。

- (●) 從頭開始撰寫
  從簡單的 Hello World 範例開始。
- ( ) 使用藍圖
  透過常用案例的範本程式碼與組態預設，建置 Lambda 應用程式。
- ( ) 容器映像
  選取要為函數部署的容器映像。

基本資訊

函數名稱

輸入描述函式目的之名稱。

cole-s3-usage-test2

函數名稱必須為 1 至 64 個字元，對於區域而言必須是唯一的，且不能包含空格。有效的字元為 a-z、A-Z、0-9、連字號 (-) 及底線 (_)。

執行時間 | 資訊

選擇用於編寫功能的語言。請注意，控制台代碼編輯器僅支持Node.js，Python和Ruby。

Python 3.13

此範例是使用python

架構 | 資訊

為您的函式程式碼選擇您需要的指令集架構。

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > 建立函式

Python 3.13

架構 | 資訊

為您的函式程式碼選擇您需要的指令集架構。

- ○ arm64
- ◉ x86_64

許可 資訊

預設情況下，Lambda 會建立具有將日誌上傳至 Amazon CloudWatch Logs 許可的執行角色。您可以在稍後新增觸發條件時，自訂此預設角色。

▶ **變更預設執行角色**

▶ **其他組態**

[無標題]

Use additional configurations to set up networking, security, and governance for your function. These settings help secure and customize your Lambda function deployment.

取消 建立函式

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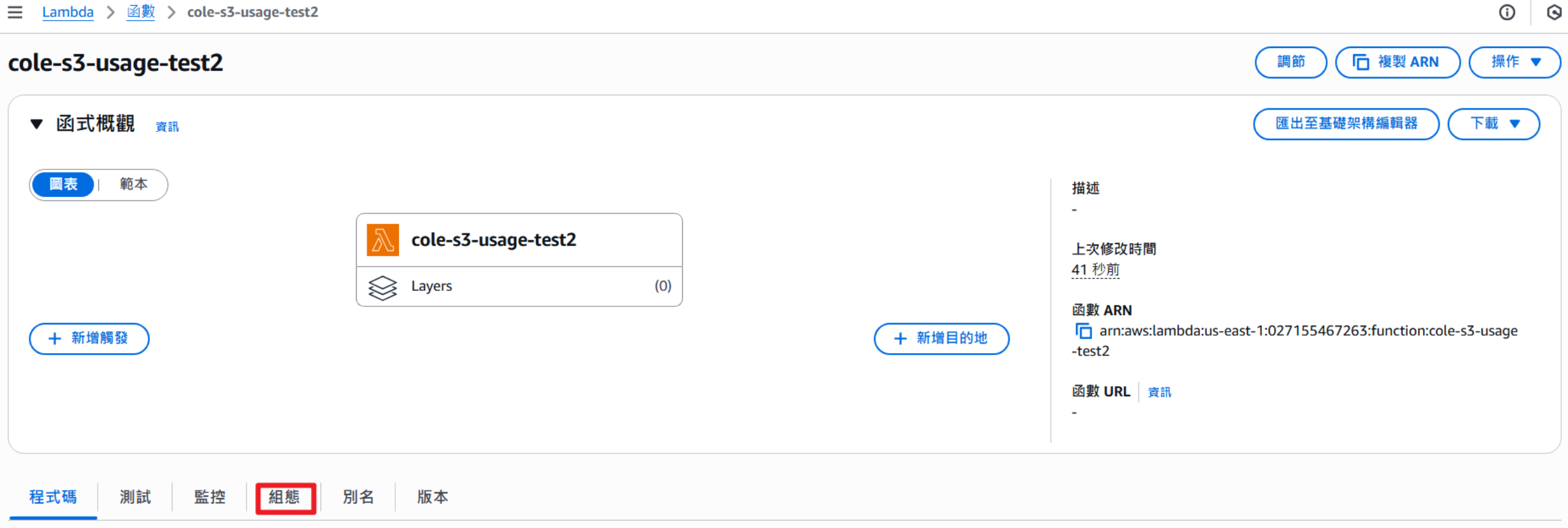
設定Lambda

上奇集團 CHASE EXCELLENCE



點選組態，這個步驟要給予Lambda權限

1. **抓取CloudWatch的metrics**
2. **發佈到SNS**
3. **List S3所有bucket**

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

程式碼 | 測試 | 監控 | 組態 | 別名 | 版本

一般組態
觸發
許可
目的地
函數 URL
環境變數
標籤
VPC
RDS 資料庫
監控和操作工具

執行角色

編輯 | 檢視角色文件

角色名稱
cole-s3-usage-test2-role-xi811ms9

點選該角色，會自動跳到IAM

資源摘要

若要檢視函式有權存取的資源和操作，請選擇一項服務。

Amazon CloudWatch Logs
3 actions, 2 resources

依操作 | 依資源

資源	操作
arn:aws:logs:us-east-1:027155467263:*	Allow : logs:CreateLogGroup

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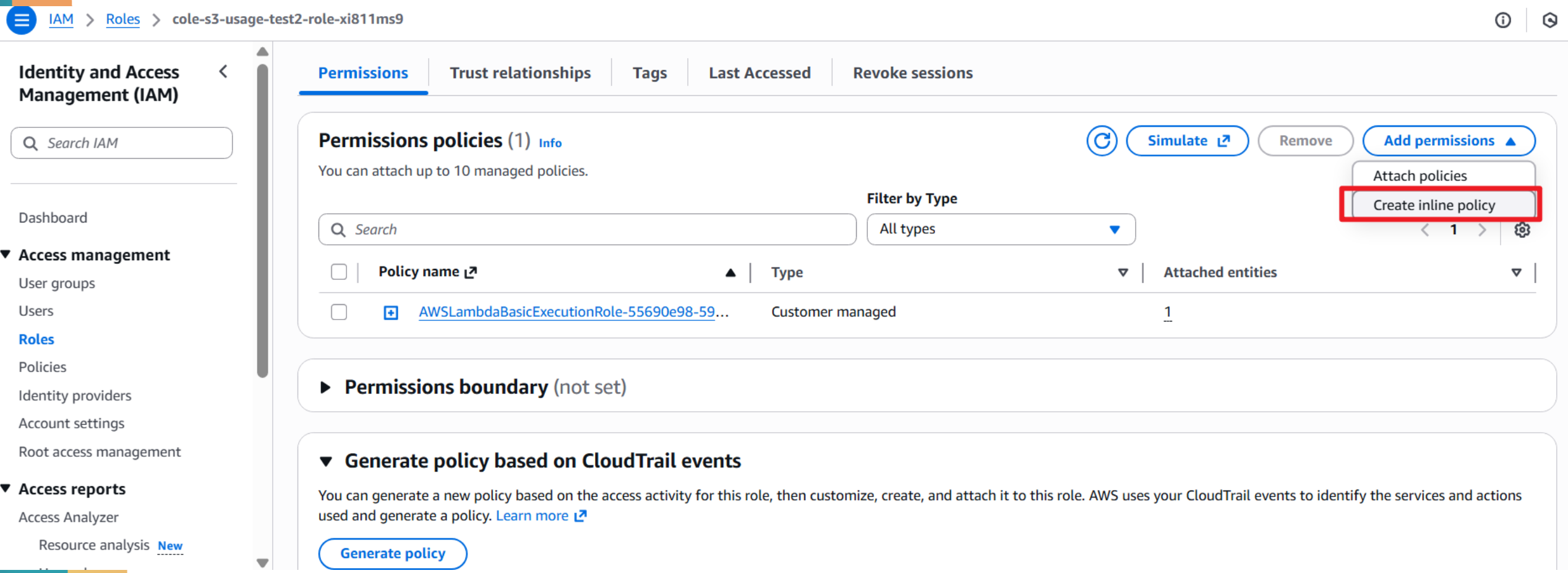
設定Lambda

上奇集團 CHASE EXCELLENCE



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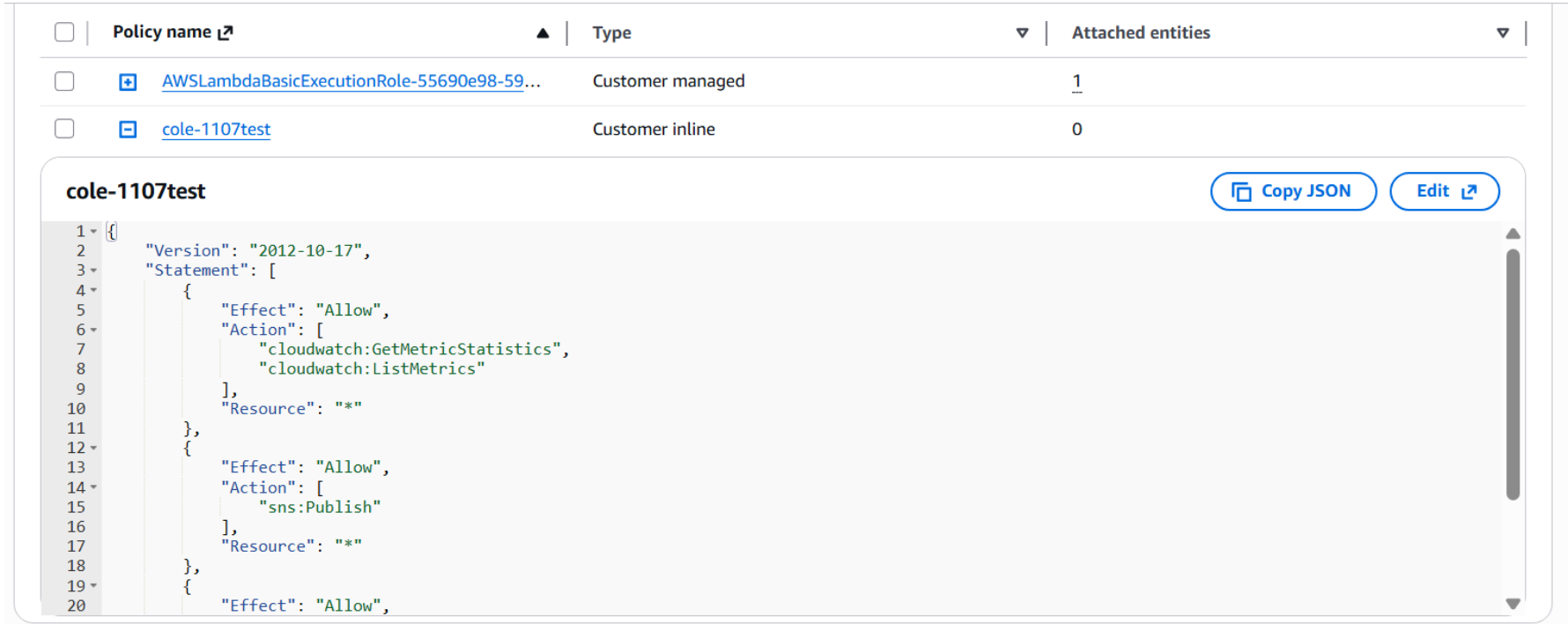
設定Lambda

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "cloudwatch:GetMetricStatistics",
        "cloudwatch:ListMetrics"
      ],
      "Resource": "*"
    },
    {
      "Effect": "Allow",
      "Action": [
        "sns:Publish"
      ],
      "Resource": "*"
    }
  ]
}
```

新增一個自訂policy，左邊是JSON範例
該policy給予:

1. **抓取CloudWatch的metrics**
2. **發佈到SNS**



設定Lambda

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management
User groups
Users
Roles
Policies
Identity providers
Account settings
Root access management

Access reports
Access Analyzer
Resource analysis New

Creation date
November 07, 2025, 14:26 (UTC+08:00)

Last activity
-

ARN
arn:aws:iam::027155467263:role/service-role/cole-s3-usage-test2-role-xi811ms9

Maximum session duration
1 hour

Permissions | Trust relationships | Tags | Last Accessed | Revoke sessions

Permissions policies (2) Info

You can attach up to 10 managed policies.

Simulate | Remove | Add permissions

Attach policies
Create inline policy

Filter by Type

Search

All types

1

Policy name	Type	Attached entities
AWSLambdaBasicExecutionRole-55690e98-59...	Customer managed	1
cole-1107test	Customer inline	0

cole-1107test

Copy JSON | Edit

```
1 {
```

設定Lambda

上奇集團 CHASE EXCELLENCE

IAM > Roles > cole-s3-usage-test2-role-xi811ms9 > Add Permissions

Attach policy to cole-s3-usage-test2-role-xi811ms9

▶ **Current permissions policies** (1)

Other permissions policies (1239)

Filter by Type

s3rea | All types | 1 match | 1

Policy name	Type	Description
AmazonS3ReadOnlyAccess	AWS managed	Provides read only access to all buckets vi...

給予S3 list的權限

Cancel | Add permissions

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設定Lambda

上奇集團 CHASE EXCELLENCE

IAM > Roles > cole-s3-usage-test2-role-xi811ms9

Identity and Access Management (IAM)

Search IAM

Dashboard

Access management
- User groups
- Users
- Roles
- Policies
- Identity providers
- Account settings
- Root access management

Access reports
- Access Analyzer
- Resource analysis New

Policy was successfully attached to role.

Permissions policies (3) Info

You can attach up to 10 managed policies.

Simulate | Remove | Add permissions

Filter by Type

Search | All types

Policy name	Type	Attached entities
AmazonS3ReadOnlyAccess	AWS managed	5
AWSLambdaBasicExecutionRole-55690e98-59...	Customer managed	1
cole-1107test	Customer inline	0

Permissions boundary (not set)

總共會有3個policy

Generate policy based on CloudTrail events

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設定Lambda

修改逾時時間，先前測試跑抓S3的metric需要20幾秒
如果稍後測試超過逾時時間，需回來這邊修改

設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2 > 編輯基本設定

將暫時性儲存 (/tmp) 設為介於 512 MB 與 10,240 MB 之間。

SnapStart 資訊

透過讓 Lambda 在函數初始化後快取函數的快照來縮短啟動時間。若要評估您的函數程式碼是否能夠對快照操作做出靈活反應，請檢閱 SnapStart 相容性考量。針對 Python 和 .NET 執行時期，請檢視定價。

None

支援的執行時間：.NET 8 (C#/F#/PowerShell), Java 11, Java 17, Java 21, Python 3.12, Python 3.13。

逾時

0 分鐘 30 秒

執行角色

選擇定義函數許可的角色。欲建立自訂角色，請前往 IAM 主控台。

- 使用現有的角色
- 透過 AWS 政策模板建立新的角色

現有角色

選擇您已建立的現有角色，以搭配此 Lambda 函式使用。該角色必須擁有將日誌上傳至 Amazon CloudWatch Logs 的許可。

service-role/cole-s3-usage-test2-role-xi811ms9

在 IAM 主控台上檢視 cole-s3-usage-test2-role-xi811ms9 角色。

取消 儲存

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

程式碼 | 測試 | 監控 | 組態 | 別名 | 版本

程式碼來源 資訊

Open in Visual Studio Code | 上傳於

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > Functions > cole-s3-usage-test

Code source Info

Open in Visual Studio Code | Upload from

cole-s3-usage-test

EXPLORER

COLE-S3-USAGE-TEST

lambda_function.py

DEPLOY [UNDEPLOYED CHANGES]

⚠ You have undeployed changes.

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [SELECTED: TEST]

Create new test event

Private saved events

lambda_function.py

```python
import boto3, datetime
from botocore.config import Config

CFG = Config(retries={'max_attempts': 5}, connect_timeout=2, read_timeout=8)

sns = boto3.client('sns', region_name='us-east-1', config=CFG)   # SNS 放你想用的區
s3  = boto3.client('s3', config=CFG)

TOPIC_ARN = 'arn:aws:sns:us-east-1:027155467263:cole-s3-usage-test2'  # 換成你的

# 快取：不同區域的 CloudWatch client
cw_clients = {}

def cloudwatch_in(region: str):
    if region not in cw_clients:
        cw_clients[region] = boto3.client('cloudwatch', region_name=region, config=CFG)
    return cw_clients[region]

def get_bucket_region(bucket: str) -> str:
```

寫好程式碼 (爬CloudWatch資料並發佈到SNS)

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

已成功更新函數 **cole-s3-usage-test2**。

cole-s3-usage-test2

EXPLORER

COLE-S3-USAGE-TEST2

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

部屬Code

TEST EVENTS [NONE SELECTED]

Create new test event

lambda_function.py

```
69  def lambda_handler(event, context):
78      rows.sort(key=lambda x: (-1 if x[2] is None else x[2]), reverse=True)
79
80      # 明確逐行列印，每個 bucket 獨立一行
81      report_lines = []
82      report_lines.append("📦 S3 Storage Report (All buckets, KB)")
83      report_lines.append(f"Total buckets: {len(rows)}")
84      report_lines.append("")  # 空行
85      for b, region, kb in rows:
86          report_lines.append(f"{b} [{region}]: {'N/A' if kb is None else f'{kb:,.2f} KB'}")
87
88      # 以 \n 連接，確保每行分開
89      msg = "```\n" + "\n\n".join(report_lines) + "\n```"
90
91      sns.publish(
92          TopicArn=TOPIC_ARN,
93          Subject='S3 Monthly Usage Report (KB)',
94          Message=msg
95      )
96
```

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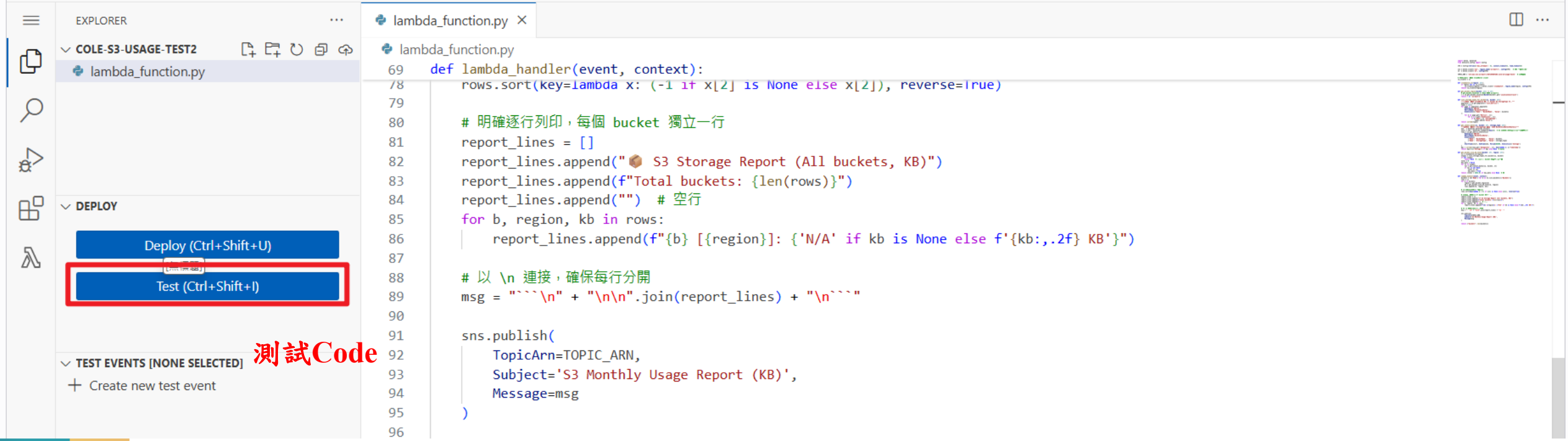
設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

已成功更新函數 **cole-s3-usage-test2**。



測試Code

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

已成功更新函數 **cole-s3-usage-test2**。

Select test event

Choose the saved event that you want to use

Create new test event

EXPLORER

COLE-S3-USAGE-TEST2

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [NONE SELECTED]

Create new test event

```
69  def lambda_handler(event, context):
78      rows.sort(key=lambda x: (-1 if x[2] is None else x[2]), reverse=True)
79
80      # 明確逐行列印，每個 bucket 獨立一行
81      report_lines = []
82      report_lines.append("📦 S3 Storage Report (All buckets, KB)")
83      report_lines.append(f"Total buckets: {len(rows)}")
84      report_lines.append("")  # 空行
85      for b, region, kb in rows:
86          report_lines.append(f"{b} [{region}]: {'N/A' if kb is None else f'{kb:,.2f} KB'}")
87
88      # 以 \n 連接，確保每行分開
89      msg = "```\n" + "\n\n".join(report_lines) + "\n```"
90
91      sns.publish(
92          TopicArn=TOPIC_ARN,
93          Subject='S3 Monthly Usage Report (KB)',
94          Message=msg
95      )
96
```

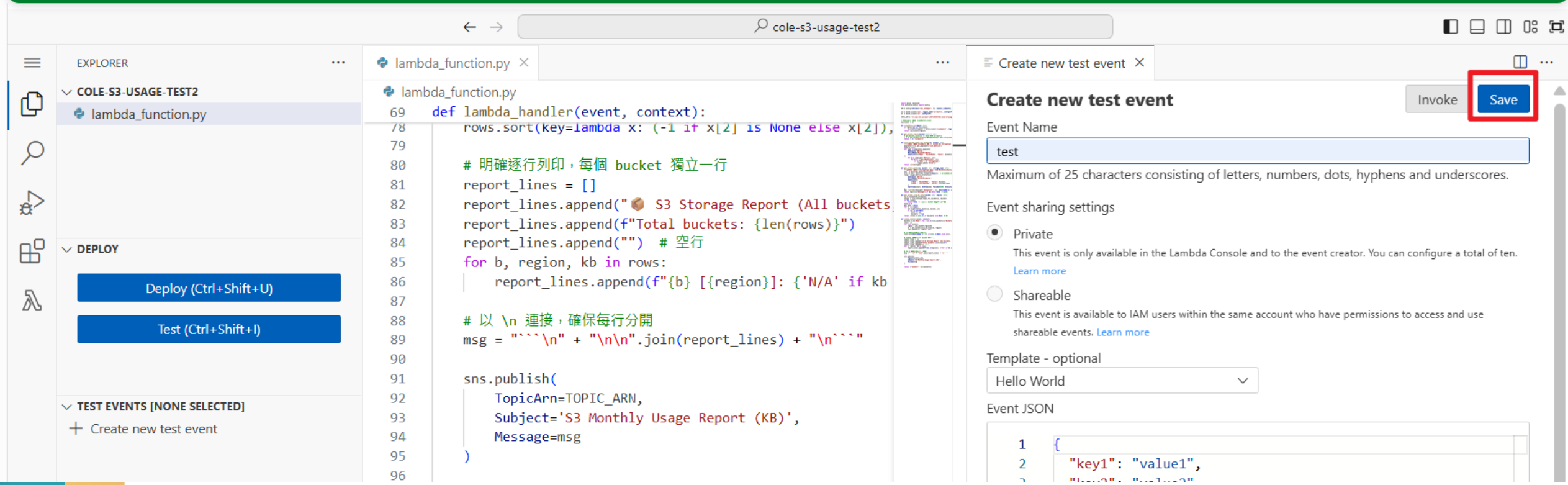
GrandTechCloudServices

設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

已成功更新函數 **cole-s3-usage-test2**。



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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

程式碼來源 資訊

Open in Visual Studio Code | 上傳於

cole-s3-usage-test2

EXPLORER

COLE-S3-USAGE-TEST2

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [SELECTED: TEST]

Create new test event

Private saved events

test

lambda_function.py

```
69  def lambda_handler(event, context):
72      for b in buckets:
76
77      # 依用量排序（N/A 放最後）
78      rows.sort(key=lambda x: (-1 if x[2] is None else x[2]),
79
80      # 明確逐行列印，每個 bucket 獨立一行
81      report_lines = []
82      report_lines.append("📦 S3 Storage Report (All buckets
83      report_lines.append(f"Total buckets: {len(rows)}")
84      report_lines.append("")  # 空行
85      for b, region, kb in rows:
86          report_lines.append(f"{b} [{region}]: {'N/A' if kb
87
88      # 以 \n 連接，確保每行分開
89      msg = "```\n" + "\n\n".join(report_lines) + "\n```"
90
91      sns.publish(
92          TopicArn=TOPIC_ARN,
```

Create new test event

Create new test event

Invoke | Save

Event Name

test

Maximum of 25 characters consisting of letters, numbers, dots, hyphens and underscores.

Event sharing settings

Private

This event is only available in the Lambda Console and to the event creator. You can configure a total of ten.

Learn more

Shareable

This event is available to IAM users within the same account who have permissions to access and use shareable events. Learn more

Template - optional

test

Event JSON

```
1  {
2    "key1": "value1",
```

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設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

COLE-S3-USAGE-TEST2

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

再點選一次Test

TEST EVENTS [SELECTED: TEST]

Create new test event

Private saved events

test

ENVIRONMENT VARIABLES

```python
def lambda_handler(event, context):
    rows.sort(key=lambda x: (-1 if x[2] is None else x[2]), reverse=True)

    # 明確逐行列印，每個 bucket 獨立一行
    report_lines = []
    report_lines.append("📦 S3 Storage Report (All buckets, KB)")
    report_lines.append(f"Total buckets: {len(rows)}")
    report_lines.append("")  # 空行
    for b, region, kb in rows:
        report_lines.append(f"{b} [{region}]: {'N/A' if kb is None else f'{kb:,.2f} KB'}")
```

PROBLEMS OUTPUT CODE REFERENCE LOG TERMINAL

Execution Results

```
Loading...
Execution started: 下午2:57:34 (0 seconds ago)
Loading...
Execution started: 下午2:57:34 (1 second ago)
Loading...
Execution started: 下午2:57:34 (2 seconds ago)
```

Test event is saved successfully.

0 0 Amazon Q

Ln 12, Col 16 Spaces: 4 UTF-8 LF Python Lambda Layout: US

GrandTechCloudServices

設定Lambda

上奇集團 CHASE EXCELLENCE

Lambda > 函數 > cole-s3-usage-test2

COLE-S3-USAGE-TEST2

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [SELECTED: TEST]

Create new test event

Private saved events

test

ENVIRONMENT VARIABLES

lambda_function.py

```
69  def lambda_handler(event, context):
78      rows.sort(key=lambda x: (-1 if x[2] is None else x[2]), reverse=True)
79
80      # 明確逐行列印，每個 bucket 獨立一行
81      report_lines = []
82      report_lines.append("📦 S3 Storage Report (All buckets, KB)")
83      report_lines.append(f"Total buckets: {len(rows)}")
84      report_lines.append("")  # 空行
85      for b, region, kb in rows:
86          report lines.append(f"{b} [{region}]: {'N/A' if kb is None else f'{kb:,.2f} KB'}")
```

PROBLEMS OUTPUT CODE REFERENCE LOG TERMINAL

Execution Results

```
Status: Succeeded
Test Event Name: test

Response:
{
  "buckets": 43
}

Function Logs:
START RequestId: 9cb2040a-fd5d-4e62-a725-26c5b8b4f390 Version: $LATEST
END RequestId: 9cb2040a-fd5d-4e62-a725-26c5b8b4f390
REPORT RequestId: 9cb2040a-fd5d-4e62-a725-26c5b8b4f390  Duration: 20630.10 ms   Billed Duration: 21272 ms   Memory Size: 128 MB Max Memory Used: 98
MB  Init Duration: 641.08 ms
```

測試成功

0 0 Amazon Q

Ln 12, Col 16 Spaces: 4 UTF-8 LF Python Lambda Layout: US

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設定Lambda

S3 Monthly Usage Report (KB)

AN AWS Notifications <no-reply@sns.amazonaws.com>
收件者 Cole Lin - GCS

回覆 全部回覆 轉寄

2025/11/7 (週五) 下午 02:

將郵件翻譯為: 繁體中文 (繁體) 一律不翻譯自: 英文 翻譯喜好設定

```
```

S3 Storage Report (All buckets, KB)

Total buckets: 43

n2ws-fredlee [ap-southeast-1]: 21,770,023.84 KB

glueworkshop-027155467263-eu-west-3 [eu-west-3]: 10,403,795.47 KB

rick-s3-for-lambda [ap-northeast-1]: 4,723,732.64 KB

demitest-123 [us-east-1]: 3,300,271.71 KB

aws-cloudtrail-logs--mark-test [ap-southeast-1]: 2,122,496.04 KB

freds3forvmdk [ap-southeast-1]: 826,710.09 KB

fredimportvmdk [ap-southeast-1]: 826,710.04 KB

fredcurbucket [ap-southeast-1]: 792,833.43 KB

cloudtrail-248189907648 [ap-southeast-1]: 295,469.27 KB

aws-quicksetup-patchpolicy-access-log-027155467263-9bee-2mzpi [ap-southeast-1]: 62,518.23 KB

aws-quicksetup-patchpolicy-027155467263-2mzpi [ap-southeast-1]: 43,180.33 KB

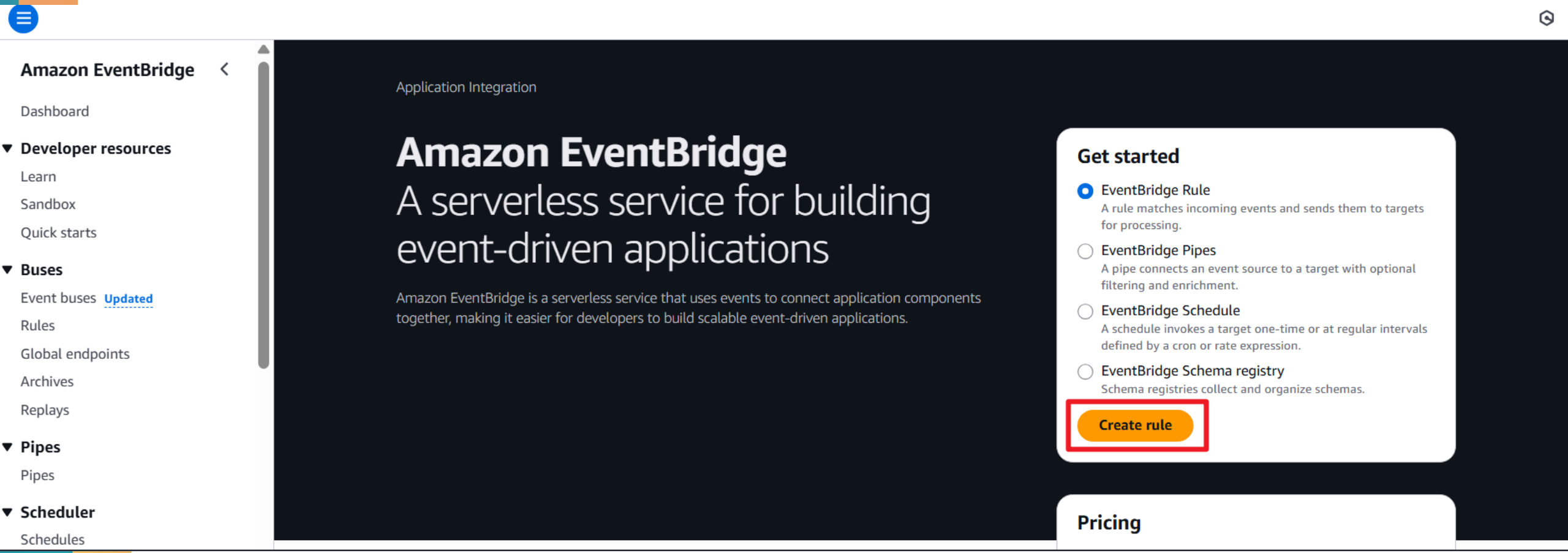
17live.2022.event [ap-southeast-1]: 22,691.92 KB

demietest [us-east-1]: 7,050.99 KB

cole-s3-api-log-bucket [us-east-1]: 456.98 KB

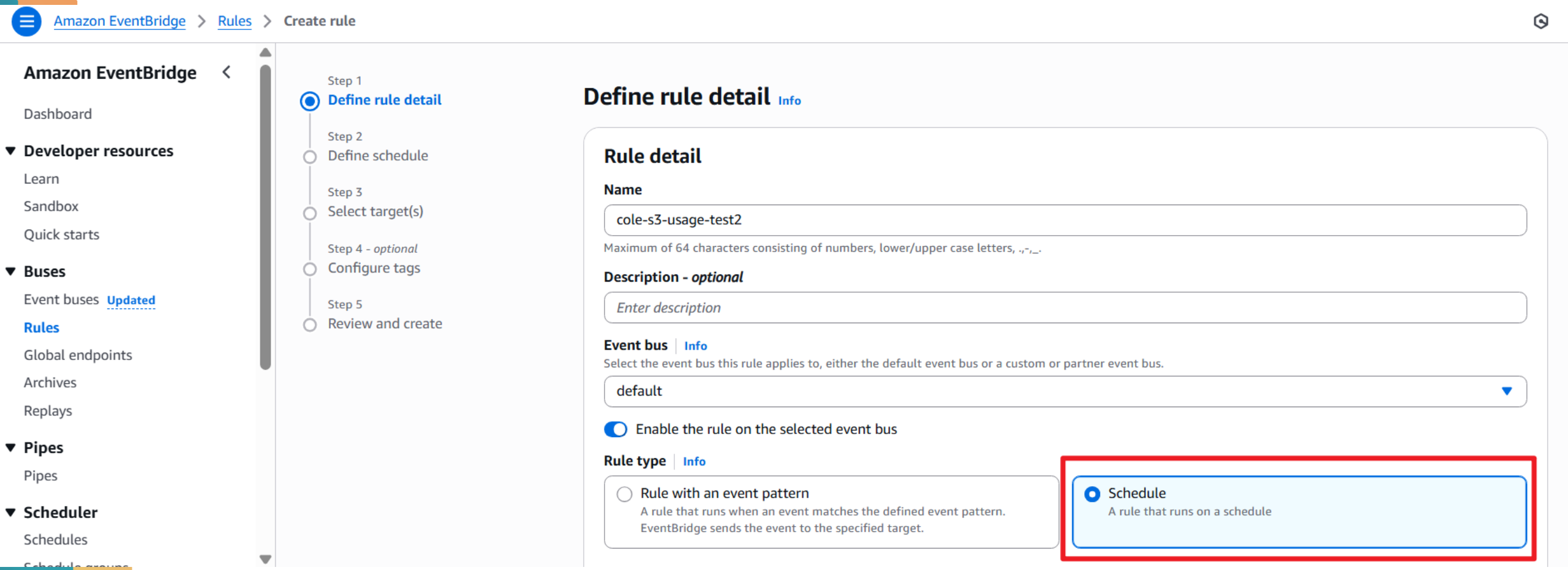
測試會連同發信，Lambda設定完成

設定EventBridge



設定EventBridge

上奇集團 CHASE EXCELLENCE



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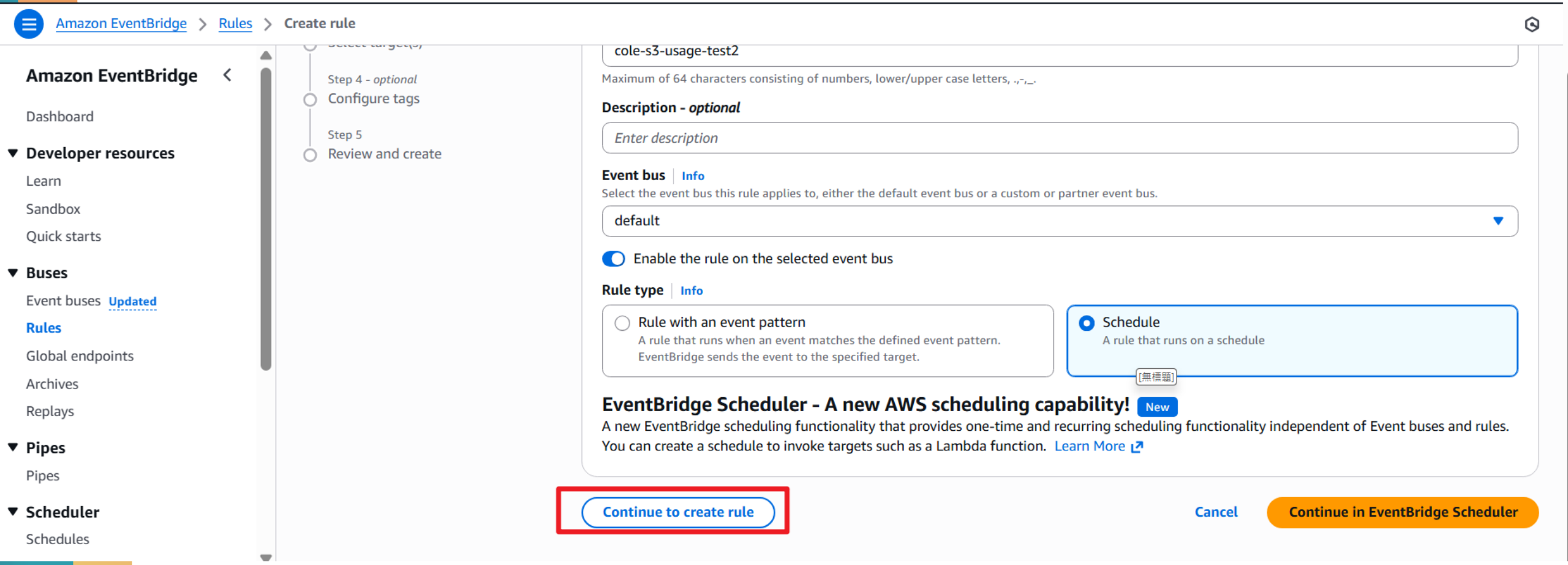
設定EventBridge

上奇集團 CHASE EXCELLENCE



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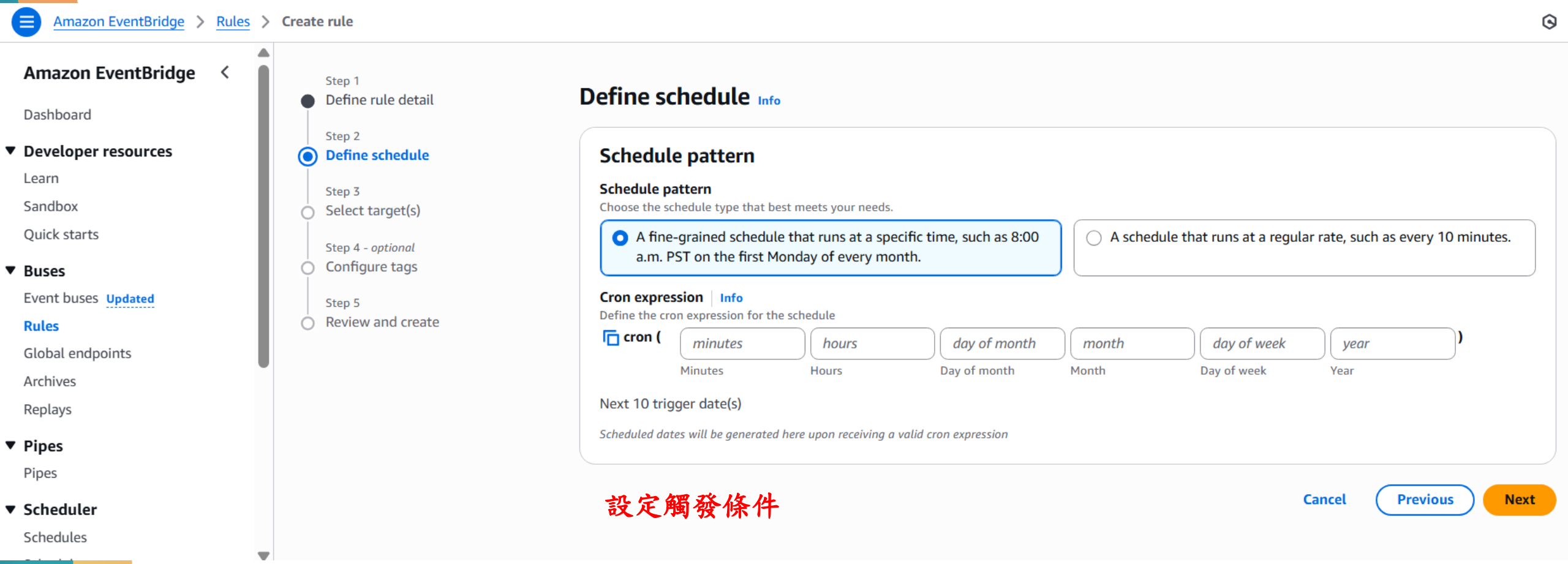
設定EventBridge

上奇集團 CHASE EXCELLENCE



設定觸發條件

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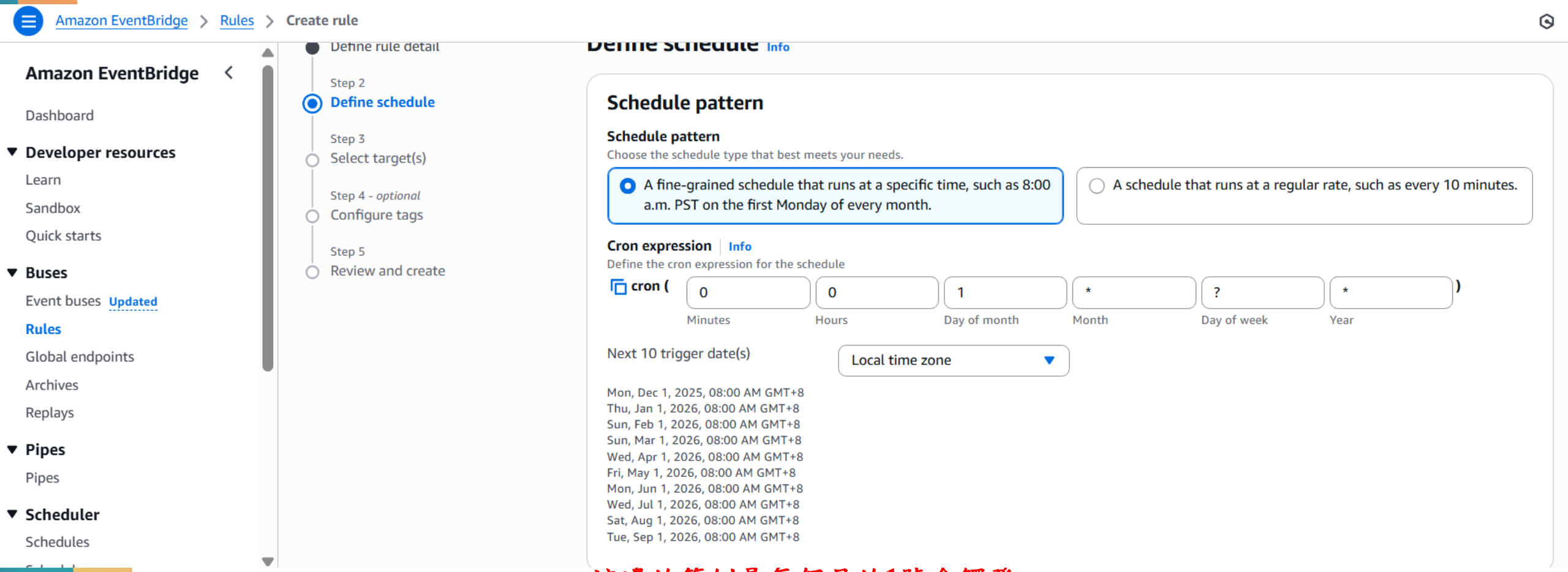
設定EventBridge

上奇集團 CHASE EXCELLENCE



這邊的範例是每個月的1號會觸發

參考文件

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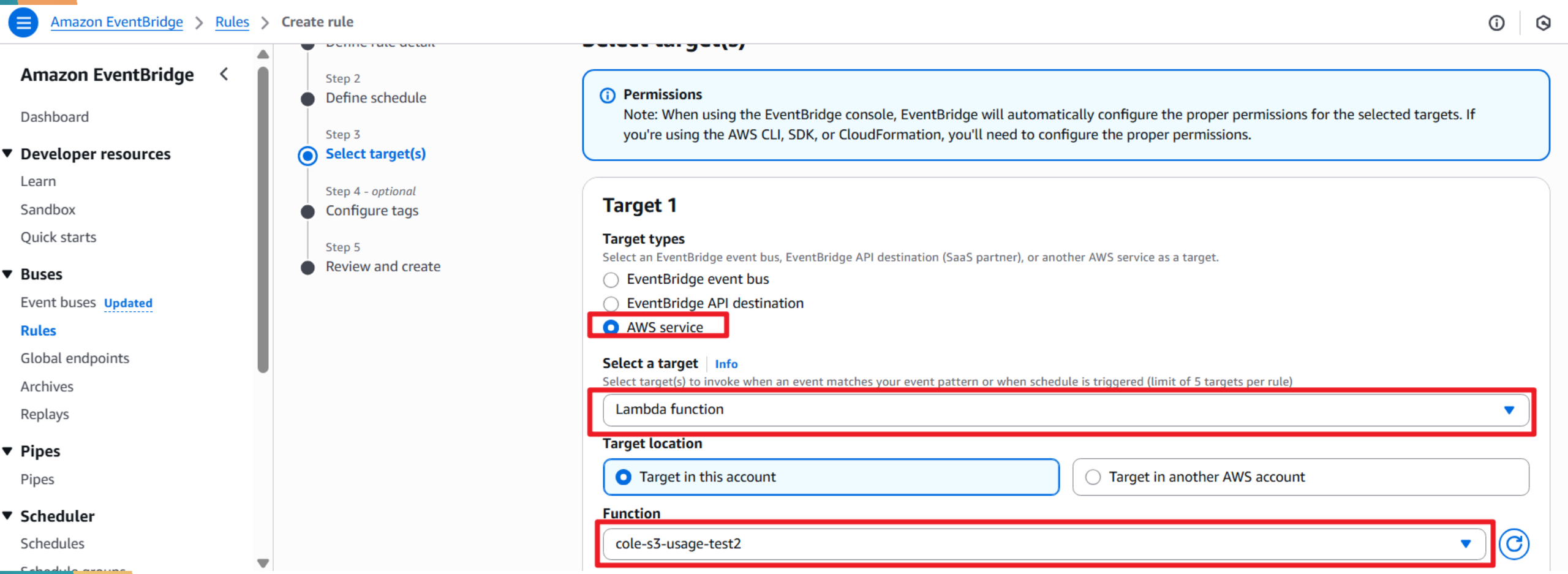
設定EventBridge

上奇集團 CHASE EXCELLENCE



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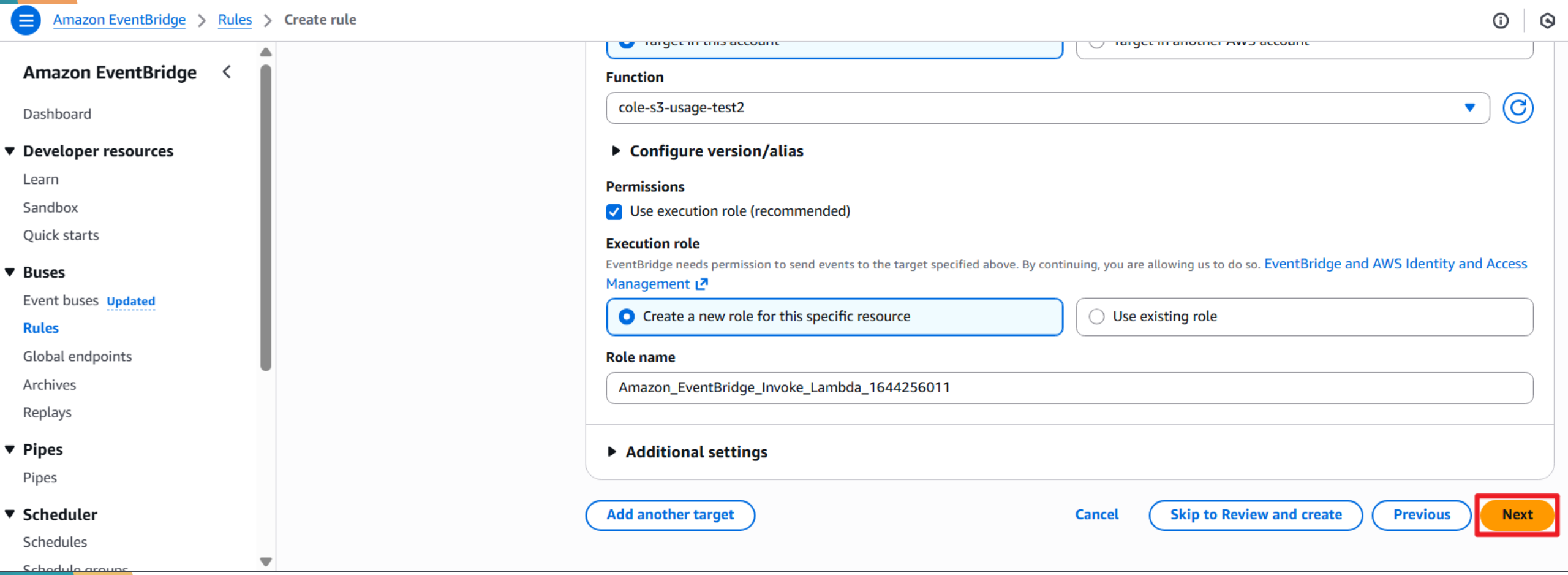
設定EventBridge

上奇集團 CHASE EXCELLENCE



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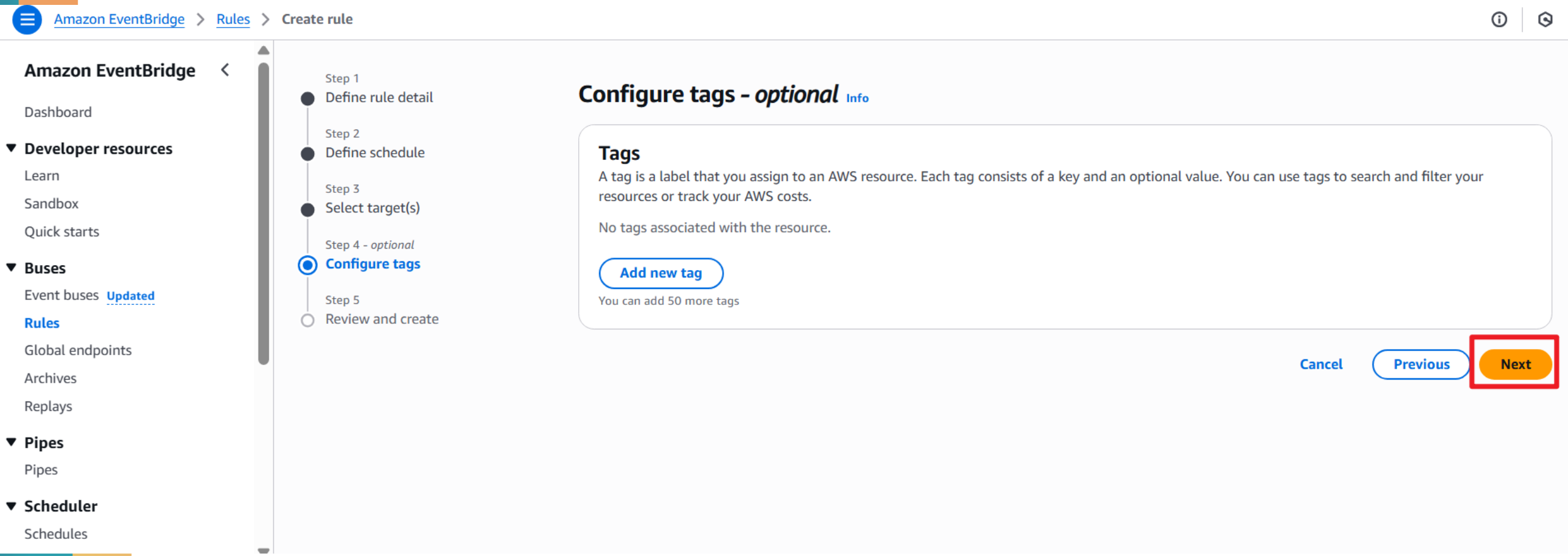
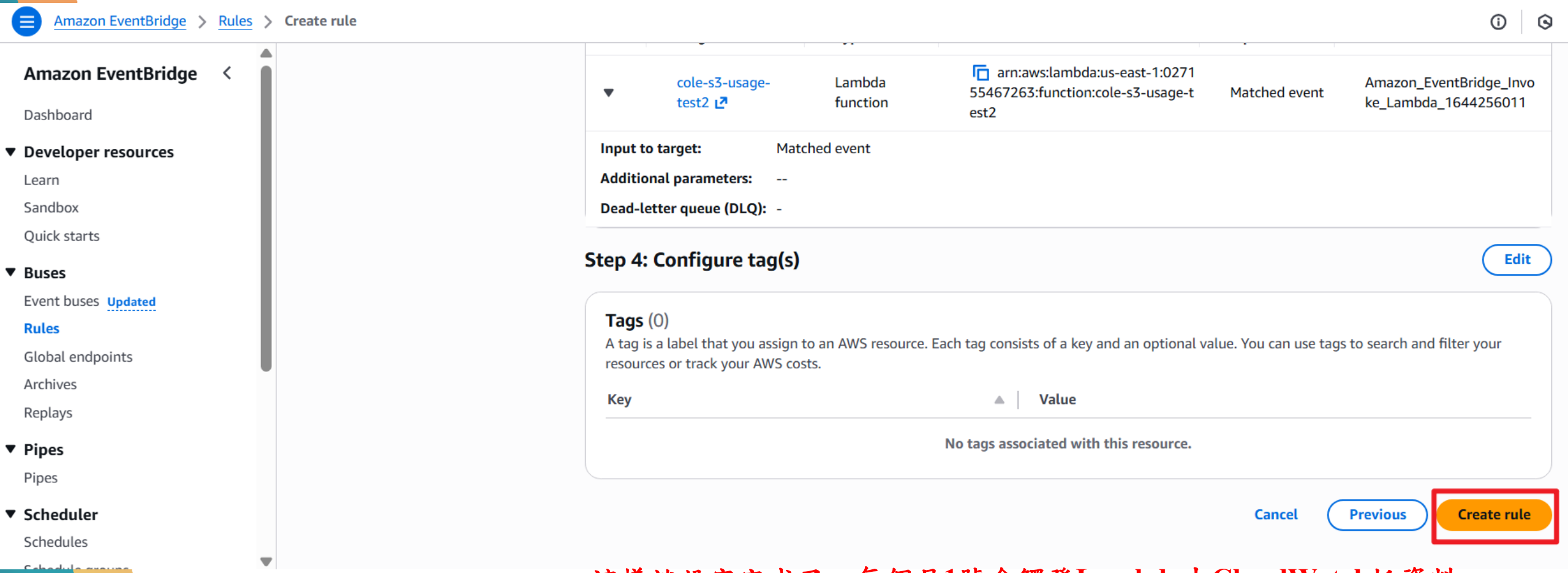
設定EventBridge

上奇集團 CHASE EXCELLENCE



GrandTechCloudServices

設定EventBridge



這樣就設定完成了，每個月1號會觸發Lambda去CloudWatch抓資料，
並發佈到SNS，由SNS發信到用戶端

CF 自動化寄送設定

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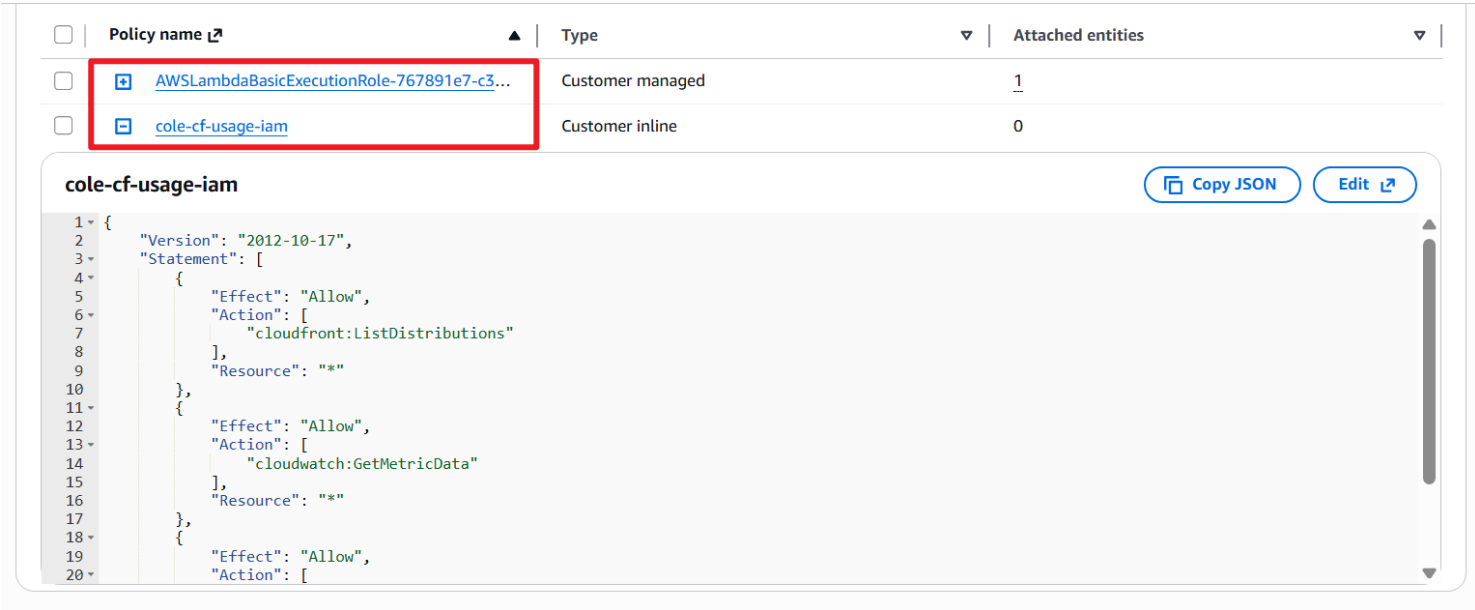
CloudFront的設定步驟跟S3完全一致，可依需求看要不要建立不同的SNS Topic(也可使用同一個)。
其他差在Lambda的程式碼及IAM的部分，因其他步驟都相同，故不再重複。

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "cloudfront:ListDistributions"
      ],
      "Resource": "*"
    },
    {
      "Effect": "Allow",
      "Action": [
        "cloudwatch:GetMetricData"
      ],
      "Resource": "*"
    },
    {
      "Effect": "Allow",
      "Action": [
        "sns:Publish"
      ],
      "Resource": "*"
    }
  ]
}
```



CF的Lambda只需要預設的policy以及左側的policy

1. 給予list CF Distributions權限
2. 給予抓取CloudWatch metrics權限
3. 發佈到SNS

Lambda > Functions > cole-cf-usage-test

Code source Info

Open in Visual Studio Code | Upload from

cole-cf-usage-test

EXPLORER

COLE-CF-USAGE-TEST

lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [SELECTED: TEST]

Create new test event

Private saved events

lambda_function.py

```python
import boto3
import datetime
from zoneinfo import ZoneInfo
from botocore.config import Config

# ----------- 設定 -----------
SNS_TOPIC_ARN = 'arn:aws:sns:us-east-1:027155467263:cole-cf-usage-test1'
AWS_REGION = 'us-east-1'  # CloudFront metrics 都在 us-east-1 + Region=Global
TZ = ZoneInfo("Asia/Taipei")  # 台灣時間
# ----------------------------
```

PROBLEMS OUTPUT CODE REFERENCE LOG TERMINAL

Execution Results

```
Status: Succeeded
Test Event Name: test

Response:
{
  "ok": true,
  "dists": 3,
  "start_utc": "2025-10-31T16:00:00+00:00",
```

跟S3一樣，寫好程式碼並部屬後，進行測試

上奇集團 CHASE EXCELLENCE

CloudFront 當月用量報表（台北時間）- 2025-11

AN AWS Notifications <no-reply@sns.amazonaws.com>
收件者 Cole Lin - GCS

將郵件翻譯為: 繁體中文 (繁體) | 一律不翻譯自: 英文 | 翻譯喜好設定

```
CloudFront 當月用量報表（台北時間）
月份：2025-11
區間（台北時間）：2025-11-01 00:00:00 CST ~ 2025-11-07 15:00:00 CST
Distributions：3
總 Requests：11
總下載量：0.00 GB

dez39yd4ngysi.cloudfront.net (E1EXMLLF9J0KCB)
  Requests : 11
  Download : 0.00 GB

d3vwj1vp4d8lvk.cloudfront.net (E9UY06JOE3W6M)
  Requests : 0
  Download : 0.00 GB

d2km9pj7ae1xo5.cloudfront.net (E1DJLM3LDFYME2)
  Requests : 0
  Download : 0.00 GB
```

測試成功，接著按照S3那邊的步驟，設定好EventBridge，即可在每月定期自動發信

上奇集團 30
CHASE EXCELLENCE

Thank you

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