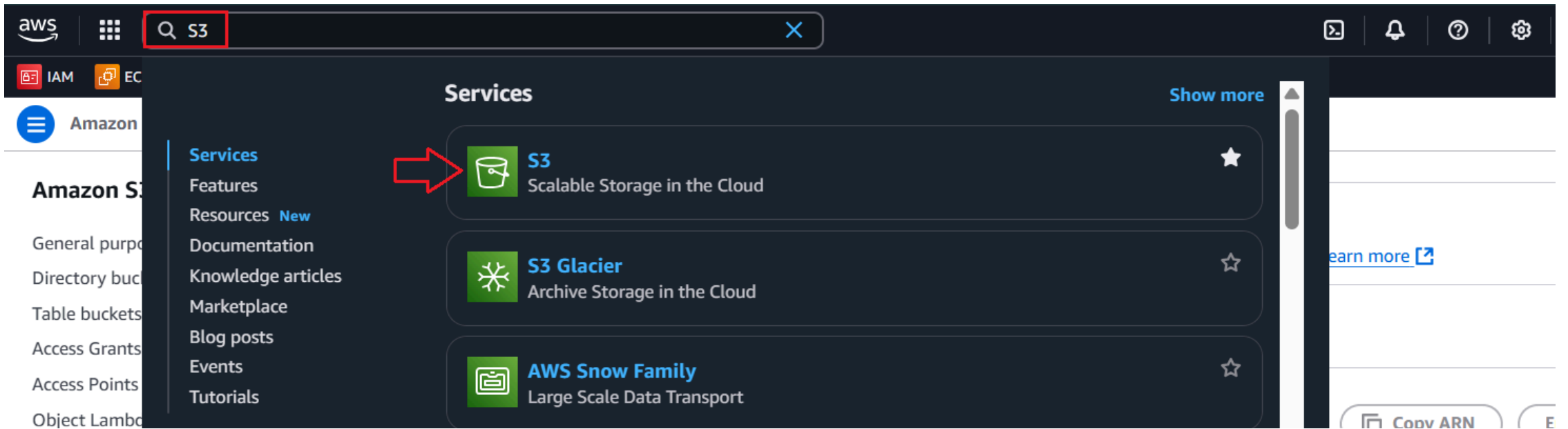


Layer 생성하기

Amazon S3

- Amazon Simple Storage Service(S3)는 업계 최고 수준의 확장성, 데이터 가용성, 보안 및 성능을 제공하는 객체 스토리지 서비스입니다.
- 규모와 업종에 관계없이 수백만 명의 고객이 데이터 레이크, 클라우드 네이티브 애플리케이션, 모바일 앱 등 거의 모든 사용 사례에서 모든 양의 데이터를 저장, 관리, 분석, 보호하고 있습니다.

단계1: S3 접속



단계2: Create bucket

Amazon S3

General purpose buckets

Directory buckets

Table buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Account snapshot - updated every 24 hours

All AWS Regions

View Storage Lens dashboard

General purpose buckets

Directory buckets

General purpose buckets (3)

Info

All AWS Regions

Refresh

Copy ARN

Empty

Delete

Create bucket

Find buckets by name

Name

▲

AWS Region

▼

IAM Access Analyzer

▼

Creation date

▼

4

- Bucket name은 Global하게 유일해야함

General configuration

AWS Region

Asia Pacific (Seoul) ap-northeast-2

Bucket name | [Info](#)

lambda-good593

Bucket names must be 3 to 63 characters and unique within the global namespace. Bucket names must also begin and end with a letter or number. Valid characters are a-z, 0-9, periods (.), and hyphens (-).

Copy settings from existing bucket - *optional*


Only the bucket settings in the following configuration are copied.

[Choose bucket](#)

Format: s3://bucket/prefix

• Bucket 생성하기


Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#) 

☐ Disable

☒ Enable

▶ Advanced settings

 After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.

[Cancel](#)

[Create bucket](#)

● 생성 확인

Amazon S3

General purpose buckets

Directory buckets

Table buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

▼ Storage Lens

Dashboards

Storage Lens groups

▶ Account snapshot - updated every 24 hours All AWS Regions

Storage lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. [Learn more](#)

[View Storage Lens dashboard](#)

General purpose buckets

Directory buckets

General purpose buckets (4) Info All AWS Regions

Buckets are containers for data stored in S3.

Q lambda X 1 match




Copy ARN

Empty

Delete

Create bucket

< 1 > ⚙

Name	AWS Region	IAM Access Analyzer	Creation date
 lambda-good593	Asia Pacific (Seoul) ap-northeast-2	View analyzer for ap-northeast-2	April 14, 2025, 12:21:30 (UTC+09:00)

Amazon S3

<

General purpose buckets

Directory buckets

Table buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

▼ Storage Lens

Dashboards

lambda-good593

Info

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (0)

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix

< 1 >

Name

Type

Last modified

Size

Storage class

No objects

You don't have any objects in this bucket.

Upload

8

AWS SDK for Python(Boto3)

- Boto3를 사용하면 Python 애플리케이션, 라이브러리 또는 스크립트를 Amazon S3, Amazon EC2, Amazon DynamoDB 등 AWS 서비스와 쉽게 통합할 수 있습니다.

Boto3 API 문서

Boto3에는 뚜렷이 구별되는 두 가지 수준의 API가 있습니다.

- Client(또는"낮은 수준") API는 기본 HTTP API 작업에 일대일 매핑을 제공합니다.
- Resource(리소스) API 명시적인 네트워크 호출을 숨기지만 대신 속성에 액세스하고 작업을 수행하도록 리소스 객체 및 리소스 모음을 제공합니다.

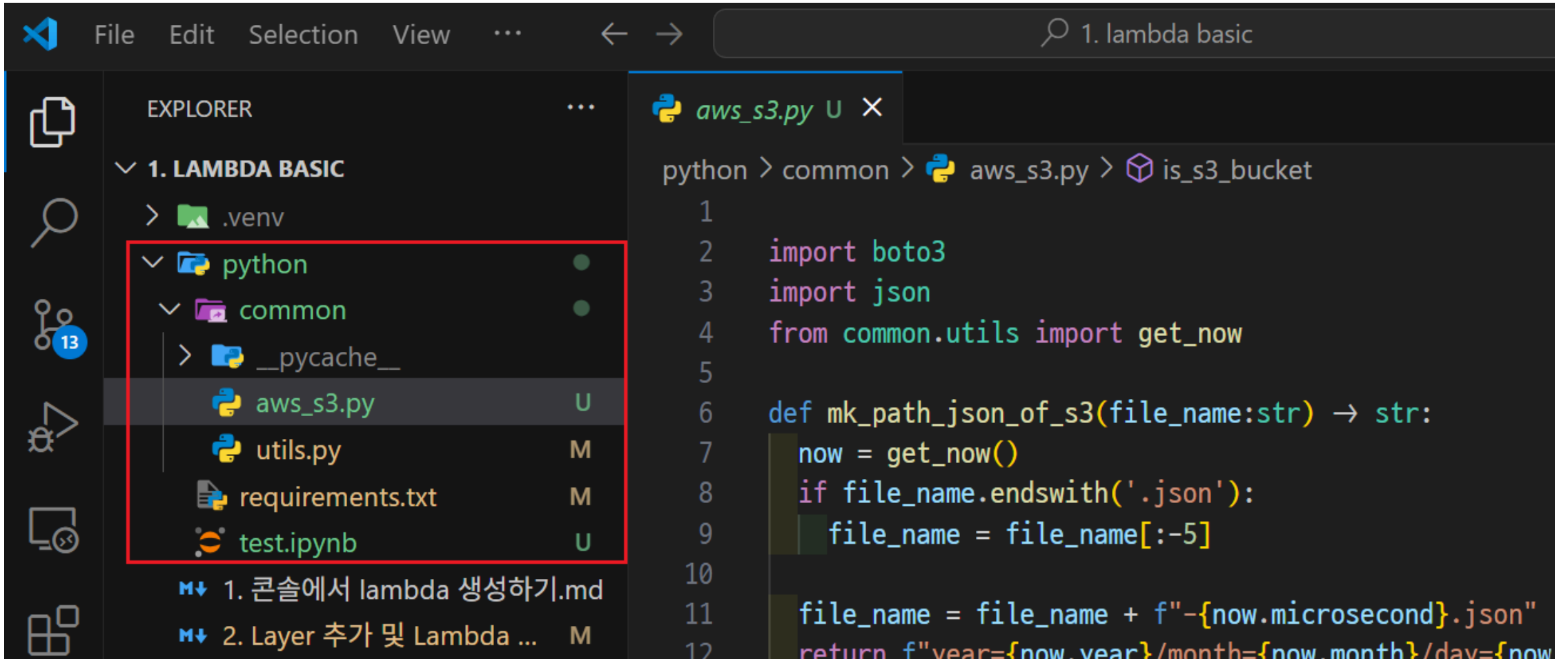
- Client 공식 문서

```
import boto3  
  
client = boto3.client('s3')
```

- Resource 공식 문서

```
import boto3  
  
s3 = boto3.resource('s3')
```


단계1: python 폴더 압축하기



The screenshot shows the Visual Studio Code interface. The Explorer view on the left displays the project structure under '1. LAMBDA BASIC'. The 'python' folder is expanded, and the 'common' subfolder is also expanded. The 'aws_s3.py' file is highlighted with a red box. The editor view on the right shows the code for 'aws_s3.py'.

```
python > common > aws_s3.py > is_s3_bucket
1
2 import boto3
3 import json
4 from common.utils import get_now
5
6 def mk_path_json_of_s3(file_name:str) → str:
7     now = get_now()
8     if file_name.endswith('.json'):
9         file_name = file_name[:-5]
10
11     file_name = file_name + f"-{now.microsecond}.json"
12     return f"year={now.year}/month={now.month}/day={now.day}/hour={now.hour}/minute={now.minute}/second={now.second}/{file_name}"
```

단계2: AWS Lambda Layer 생성

 [Lambda](#) > [Layers](#)

Lambda

Dashboard

Applications

Functions

▼ Additional resources

Code signing configurations

Event source mappings


[Layers](#)

Replicas


Layers (2)

Q Filter by attributes or search by keyword

Name	Version	Description	Compatible runtimes	Compatible architectures	Created
investment-CRYPTO_UPBIT-shared-layer	5	Provides the base backend shared library and dependencies	python3.11	-	4 months ago
investment-common-shared-layer	7	Provides the base backend shared library and dependencies	python3.11	-	4 months ago

Last fetched 4 minutes ago 

Create layer

< 1 > 

- 압축파일 업로드

Layer configuration

Name

common_python

Description - *optional*

- ☒ Upload a .zip file
☐ Upload a file from Amazon S3

↑ Choose file

python.zip
5.50 KB

For files larger than 10 MB, consider uploading using Amazon S3.

- Create

Compatible architectures - optional | [Info](#)


Choose the compatible instruction set architectures for your layer.

x86_64 

Compatible runtimes - optional | [Info](#)

Choose up to 15 runtimes.



Python 3.13 

License - optional | [Info](#)

[Cancel](#)

Create

- 결과 확인

Lambda

<

Dashboard

Applications

Functions

▼ Additional resources

Code signing configurations

Event source mappings

Layers

Replicas

▼ Related AWS resources

Step Functions state machines

Layers (3)

Last fetched 30 seconds ago

Create layer

Q Filter by attributes or search by keyword

< 1 >

Name	Version	Description	Compatible runtimes	Compatible architectures	Created
common_python	1	-	python3.13	x86_64	42 seconds ago
investment-CRYPTO_UPBIT-shared-layer	5	Provides the base backend shared library and dependencies	python3.11	-	4 months ago
investment-common-shared-layer	7	Provides the base backend shared library and dependencies	python3.11	-	4 months ago

Lambda with Layer

단계1: Lambda 선택

Lambda

Dashboard

Applications

Functions

▼ Additional resources

Code signing configurations

Event source mappings

Layers

Replicas

Functions (3)

Last fetched 5 minutes ago

Actions

Create function

Filter by attributes or search by keyword

< 1 >

<input type="checkbox"/>	Function name	▲	Description	▼	Package type	▼	Runtime	▼	Last modified	▼
<input checked="" type="checkbox"/>	FirstLambda		-		Zip		Python 3.13		48 minutes ago	
<input type="checkbox"/>	investment-CRYPTO_UPBIT-etl-lambda		-		Zip		Python 3.11		4 months ago	
<input type="checkbox"/>	investment-slack-alarm-lambda		-		Zip		Python 3.11		4 months ago	


단계2: Add Layder


▼ Function overview [Info](#)


Diagram

Template

+ Add trigger

 **FirstLambda**

 Layers (0)



+ Add destination

Export to Infrastructure C


Description

-

Last modified

50 minutes ago

Function ARN

 arn:aws:lambda:ap-north
rstLambda

Function URL [Info](#)

-

► Runtime management configuration

Layers [Info](#)

[Edit](#) [Add a layer](#)

Merge order	Name	Layer version	Compatible runtimes	Compatible architectures	Version ARN
-------------	------	---------------	---------------------	--------------------------	-------------

There is no data to display.

Layer source [Info](#)

Choose from layers with a compatible runtime and instruction set architecture or specify the Amazon Resource Name (ARN) of a layer version. You can also [create a new layer](#).

☐ **AWS layers**

Choose a layer from a list of layers provided by AWS.

☒ **Custom layers**

Choose a layer from a list of layers created by your AWS account.

☐ **Specify an ARN**

Specify a layer by providing the ARN.

Custom layers

Layers created by your AWS account that are compatible with your function's runtime.

common_python



Version

1



[Cancel](#)  **Add**

Permissions 수정

단계1: IAM Role 접속

Code

Test

Monitor

Configuration

Aliases

Versions

General configuration

Triggers

Permissions

Destinations

Function URL

Environment variables

Execution role

↻


Edit

View role document

Role name
FirstLambda-role-1l7yhpca [↗](#)

Resource summary

To view the resources and actions that your function has permission to access, choose a service.

 Amazon CloudWatch Logs
3 actions, 2 resources

▼

단계2: Attach policies

[Permissions](#) | [Trust relationships](#) | [Tags](#) | [Last Accessed](#) | [Revoke sessions](#)

Permissions policies (1) [Info](#)
You can attach up to 10 managed policies.

[Simulate](#)

[Remove](#)

[Add permissions](#)

Attach policies

Create inline policy

< 1 >

Filter by Type
All types

<input type="checkbox"/>	Policy name	Type	Attached entities
<input type="checkbox"/>	AWSLambdaBasicExecutionRole-f3389b67-85...	Customer managed	1

Permissions boundary (not set)

단계3: add AmazonS3FullAccess

▶ Current permissions policies (1)

Other permissions policies (1/1043)


×

Filter by Type

All types ▼

1 match

< 1 > ⚙

<input checked="" type="checkbox"/>	Policy name	Type	Description
<input checked="" type="checkbox"/>	 AmazonS3FullAccess	AWS managed	Provides full access to all buckets via t...

Cancel

Add permissions

Identity and Access Management (IAM)

Q Search IAM

Dashboard

▼ Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

✓ Policy was successfully attached to role.

Permissions

Trust relationships

Tags

Last Accessed

Revoke sessions

Permissions policies (2) [Info](#)

You can attach up to 10 managed policies.



Simulate [↗](#)

Q Search

Filter by Type

All types ▼

<input type="checkbox"/>	Policy name ↗	▲	Type	▼	Attached entities
<input type="checkbox"/>	+ AmazonS3FullAccess		AWS managed		<u>3</u>
<input type="checkbox"/>	+ AWSLambdaBasicExecutionRole-f3389b67-85...		Customer managed		<u>1</u>

테스트

단계1: 코드 수정

```
import json
from common.aws_s3 import mk_path_json_of_s3, upload_json_to_s3, download_json_from_s3

def lambda_handler(event, context):
    # TODO implement
    path_json = mk_path_json_of_s3("lambda_test")
    path_json = "raw/"+path_json
    bucket_name = "생성한 bucket명"

    upload_json_to_s3(data=event, bucket=bucket_name, path=path_json)
    return {
        'statusCode': 200,
        'body': json.dumps(event)
    }
```

단계2: Deploy

[Code](#) | [Test](#) | [Monitor](#) | [Configuration](#) | [Aliases](#) | [Versions](#)

Code source [Info](#)

Upload from ▼

▼

← →

FirstLambda

🔍 📄 📁 📊 🖨

📄

EXPLORER

...

▼ FIRSTLAMBDA

🔗 lambda_function.py

🔍

🚀

⚙️

📁

📌

▼ DEPLOY

➡️ Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

🔗 lambda_function.py

🔗 lambda_function.py

```
1 import json
2 from common.aws_s3 import mk_path_json_of_s3, upload_json_to_s3, download_json_from_s3
3
4 def lambda_handler(event, context):
5     # TODO implement
6     path_json = mk_path_json_of_s3("lambda_test")
7     path_json = "raw/"+path_json
8     bucket_name = "lambda-good593"
9
10    upload_json_to_s3(data=event, bucket=bucket_name, path=path_json)
11    return {
12        'statusCode': 200,
13        'body': json.dumps(event)
14    }
15
```

단계3: Test

☰ [Lambda](#) > [Functions](#) > FirstLambda



Code | **Test** | Monitor | Configuration | Aliases | Versions

✔ Executing function: succeeded ([logs](#))

▶ Details

Test event Info

Delete

CloudWatch Logs Live Tail

Save

Test

To invoke your function without saving an event, modify the event, then choose Test. Lambda uses the modified event to invoke your function, but does not overwrite the original event until you choose Save.

Test event action

☐ Create new event

☒ Edit saved event

Event name

TestEvent



단계4: 파일 확인 in S3

≡ [Amazon S3](#) > [Buckets](#) > [lambda-good593](#)

lambda-good593 [Info](#)

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (1)



Copy S3 URI

Copy URL

Download

Open

Delete

Actions ▼

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly

🔍 Find objects by prefix

<input type="checkbox"/>	Name ▲	Type ▼	Last modified ▼	Size
	raw/	Folder	-	

Amazon S3 > Buckets > lambda-good593 > raw/ > year=2025/ > month=4/ > day=14/ > hour=19/ > minute=14/

minute=14/

Objects

Properties

Objects (1)



Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permission

Find objects by prefix

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	lambda_test-933439.json	json	April 14, 2025, 19:14:48 (UTC+09:00)	54.0 B	Standard