



科技系列課程

AWS雲計算實務班第01期

課程講師：金力鵬



建立S3 bucket



Step 1 : <https://aws.amazon.com/tw/> Login AWS Console



登入主控台



Step 2 : Search for the S3 service

The screenshot displays the AWS Management Console interface. On the left, a sidebar lists various AWS service categories. A red arrow points from the 'Services' icon in the sidebar to a red-bordered box containing the text 'Services'. In the main content area, a search bar at the top contains the text 's3'. A red arrow points from this search bar to another red-bordered box containing the text 'Search for services, features, blogs, docs, and more [Alt+S]'. Below the search bar, a list of services is shown. A red arrow points from the 'S3' service entry to a red-bordered box containing the text 'Storage S3'. The 'S3' service entry is highlighted in blue. Other visible services include AWS Backup, AWS Elastic Disaster Recovery, FSx, S3 Glacier, Storage Gateway, and various other categories like Compute, Containers, and Database.

aws Services

Management

- Compute
- Containers
- Customer Enablement
- Database
- Developer Tools
- End User Computing
- Front-end Web & Mobile
- Game Development
- Internet of Things
- Machine Learning
- Management & Governance
- Media Services
- Migration & Transfer
- Networking & Content Delivery
- Quantum Technologies
- Robotics
- Satellite
- Security, Identity, & Compliance
- Storage

Storage

Search for services, features, blogs, docs, and more [Alt+S]

AWS Backup
Managed File Storage for EC2

AWS Elastic Disaster Recovery
Scalable, cost-effective application recovery to AWS

FSx
Fully managed third-party file systems optimized for a variety of workloads

S3
Scalable Storage in the Cloud

S3 Glacier
Archive Storage in the Cloud

Storage Gateway
Hybrid Storage Integration

Storage S3



Step 3 : Click **Create bucket** in S3 to create a bucket

The screenshot shows the Amazon S3 console interface. The left sidebar contains navigation links for Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, Access analyzer for S3, Block Public Access settings, Storage Lens, Dashboards, AWS Organizations settings, Feature spotlight, and AWS Marketplace for S3. The main content area displays the 'Account snapshot' and 'Buckets (0)' section. The 'Buckets (0)' section includes a search bar, a table with columns for Name, AWS Region, Access, and Creation date, and a 'Create bucket' button. A red box highlights the 'Create bucket' button in the top right corner of the 'Buckets (0)' section, with a red arrow pointing down to a larger orange box with the text 'Create bucket'.

Amazon S3

Account snapshot

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

View Storage Lens dashboard

Buckets (0) [info](#)

Buckets are containers for data stored in S3. [Learn more](#)

Find buckets by name

Name	AWS Region	Access	Creation date
No buckets			
You don't have any buckets.			
Create bucket			

Create bucket



Step 4 : Enter bucket name in **Bucket Name** field

aws Services Search [Alt+S]

Amazon S3 > Buckets > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

AWS Region
US East (N. Virginia) us-east-1

Bucket type [Info](#)

☒ General purpose
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

☐ Default storage class
Default storage class for S3 buckets. Objects are stored in the Standard storage class.

Bucket name [Info](#)

image009

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

Copy settings from existing bucket (optional)

Bucket name

image009



Step 5 : Change Object Ownership item to be **ACLs enabled**

aws Services Search for services, features, blogs, docs, and more [Alt+S] Global

Copy settings from existing bucket - optional
Only the bucket settings in the following configuration are copied.
Choose bucket

Object Ownership Info
Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☐ ACLs disabled (recommended)
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☒ **ACLs enabled**
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership
☒ **Bucket owner preferred**
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.
☐ Object writer
The object writer remains the object owner.

Block Public Access settings for this bucket
Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to

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ACLs enabled

Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.



Step 6 : Remove the select of **Block all public access**, select **I Acknowledge that...**

Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, and their access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, applications will work correctly without public access. If you require some level of public access to this bucket or object, customize the individual settings below to suit your specific storage use cases. [Learn more](#)

- ☐ **Block all public access**
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.
- ☐ **Block public access to buckets and objects granted through *new* access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- ☐ **Block public access to buckets and objects granted through *any* access control lists (ACLs)**
S3 will ignore all ACLs that grant public access to buckets and objects.
- ☐ **Block public access to buckets and objects granted through *new* public bucket or access point policies**
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- ☐ **Block public and cross-account access to buckets and objects through *any* public bucket or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.



Step 7 : Click **Create bucket** to create bucket

aws Services Search for services, features, blogs, docs, and more [Alt+S] Global

Tags (0) - optional
Track storage cost or other criteria by tagging your bucket. [Learn more](#)

No tags associated with this bucket.

[Add tag](#)

Default encryption
Automatically encrypt new objects stored in this bucket. [Learn more](#)

Server-side encryption

☒ 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](#)

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Step 8 : You can see the bucket in the list of Dashboard

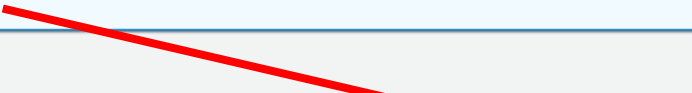
General purpose buckets (2) [Info](#) [All AWS Regions](#)

Buckets are containers for data stored in S3.

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

< 1 > [Settings](#)

	Name ▲	AWS Region ▼	IAM Access Analyzer	Creation date ▼
<input type="radio"/>	elasticbeanstalk-us-east-1-165714642706	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 10, 2024, 14:57:58 (UTC+08:00)
<input checked="" type="radio"/>	image009	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 11, 2024, 09:25:52 (UTC+08:00)





Upload a file to S3 bucket



Step 1 : You can see the bucket in the list of Dashboard

General purpose buckets (2) [Info](#) All AWS Regions

Buckets are containers for data stored in S3.

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

< 1 > [Settings](#)

	Name ▲	AWS Region ▼	IAM Access Analyzer	Creation date ▼
<input type="radio"/>	elasticbeanstalk-us-east-1-165714642706	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 10, 2024, 14:57:58 (UTC+08:00)
<input checked="" type="radio"/>	image009	US East (N. Virginia) us-east-1	View analyzer for us-east-1	July 11, 2024, 09:25:52 (UTC+08:00)





Step 2 : Click **upload**

Objects (0)

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](#)

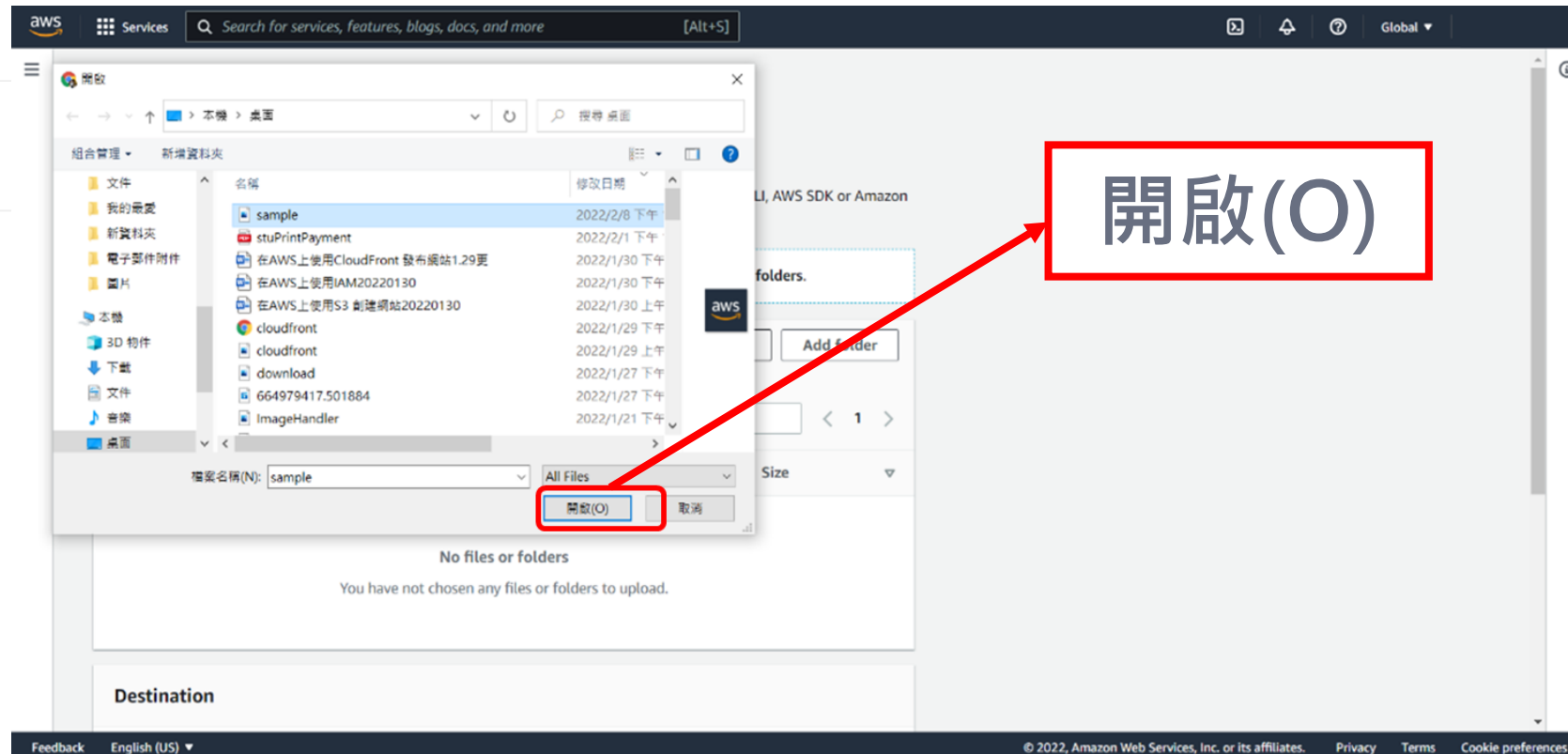
Copy S3 URI Copy URL Download Open Delete Actions Create folder **Upload**

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
No objects					
You don't have any objects in this bucket.					
Upload					





Step 4 : Select the image file and click 開啟 or Open





Step 5 : Click **Upload** to upload file

The screenshot shows the AWS console interface for uploading a file. At the top, there's a search bar and navigation links. Below, the 'Files and folders' section shows a table with one file: 'sample.jpg' (13.2 KB). The 'Destination' section shows the path 's3://image009'. At the bottom right, there are 'Cancel' and 'Upload' buttons. A red box highlights the 'Upload' button, and a red arrow points to it from a larger 'Upload' box in the center of the screen.

Files and folders (1 Total, 13.2 KB)

All files and folders in this table will be uploaded.

Remove Add files Add folder

Find by name

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	sample.jpg	-	image/jpeg	13.2 KB

Destination

Destination
s3://image009

► **Destination details**
Bucket settings that impact new objects stored in the specified destination.

► **Permissions**
Grant public access and access to other AWS accounts.

► **Properties**
Specify storage class, encryption settings, tags, and more.

Cancel Upload

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Step 3 : Select **Add files** to upload image file

The screenshot shows the AWS S3 'Upload' page for a bucket named 'image009'. The page has a dark header with the AWS logo, a search bar, and navigation icons. The main content area is titled 'Upload' and includes instructions: 'Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)'. Below this is a dashed box with the text 'Drag and drop files and folders you want to upload here, or choose **Add files**, or **Add folders**.' Underneath is a section titled 'Files and folders (0)' with a 'Remove' button and 'Add files' and 'Add folder' buttons. The 'Add files' button is highlighted with a red box, and a red arrow points from it to a larger box on the right labeled 'Add files'. Below the buttons is a search bar labeled 'Find by name' and a table with columns: Name, Folder, Type, and Size. The table is empty, showing 'No files or folders' and 'You have not chosen any files or folders to upload.' At the bottom, there is a 'Destination' section and a footer with 'Feedback', 'English (US)', and copyright information.

Amazon S3 > image009 > Upload

Upload Info

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose **Add files**, or **Add folders**.

Files and folders (0) Remove Add files Add folder

All files and folders in this table will be uploaded.

<input type="checkbox"/>	Name	Folder	Type	Size
No files or folders				
You have not chosen any files or folders to upload.				

Destination

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Step 6 : After **Upload succeeded** shown and click **sample.jpg** for setup

The screenshot displays the AWS Management Console interface. At the top, a green banner indicates "Upload succeeded" with a link to "View details below." Below this, a summary section shows the upload status: "Succeeded" with a green checkmark and "1 file, 13.2 KB (100.00%)". The "Failed" section shows "0 files, 0 B (0%)". The "Files and folders" tab is selected, showing a list of files. A red box highlights the "sample.jpg" file in the list, and a red arrow points from it to a larger red box containing the text "Sample.jpg".

Name	Folder	Type	Size	Status	Error
sample.jpg	-	image/jpeg	13.2 KB	✓ Succeeded	-



Step 7 : Click Object URL to view image using browser

The screenshot shows the Amazon S3 console interface. The left sidebar contains navigation options like Buckets, Access Points, and Storage Lens. The main content area displays the details for the object 'sample.jpg' under the bucket 'image009'. The 'Object overview' section lists various metadata fields. A red box highlights the 'Object URL' field, which contains the URL 'https://image009.s3.amazonaws.com/sample.jpg'. A red arrow points from this URL to a larger red box at the bottom of the slide that also contains the same URL, preceded by a document icon.

Amazon S3 > image009 > sample.jpg

sample.jpg Info

Copy S3 URI Download Open Object actions

Properties Permissions Versions

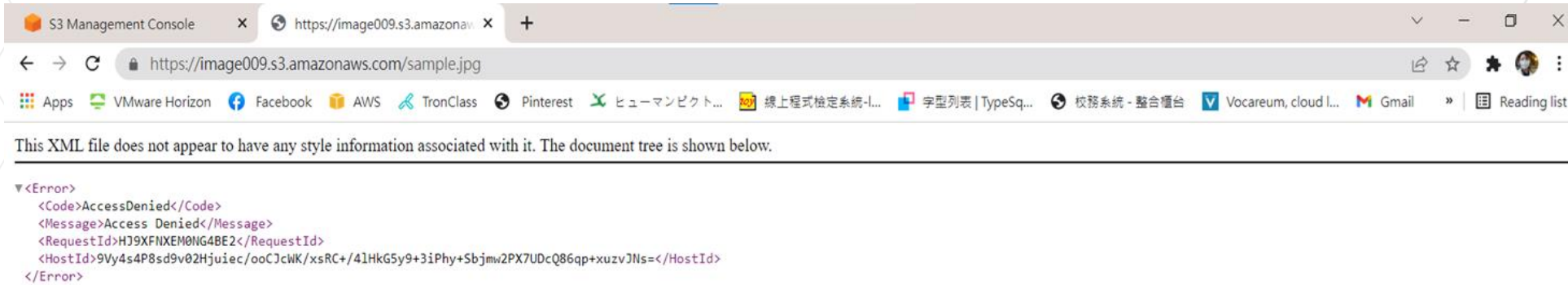
Object overview

Owner	moment04100
AWS Region	US East (N. Virginia) us-east-1
Last modified	February 9, 2022, 15:44:32 (UTC+08:00)
Size	13.2 KB
Type	jpg
Key	
S3 URI	s3://image009/sample.jpg
Amazon Resource Name (ARN)	arn:aws:s3:::image009/sample.jpg
Entity tag (Etag)	567e5abbec892be2b0014c82b77ab686
Object URL	https://image009.s3.amazonaws.com/sample.jpg

[https : //image009.s3.amazonaws.com/sample.jpg](https://image009.s3.amazonaws.com/sample.jpg)



Image can not be displayed due to Access Denied so as to modify the ACL setting





Step 8 : Click Permissions, and click Edit to edit ACL of this file

Amazon S3 > image009 > sample.jpg

sample.jpg Info

Download Open Object actions

Properties **Permissions** Versions

Permissions

Access control list (ACL)
Grant basic read/write permissions to AWS accounts. [Learn more](#)

Grantee	Object	Object ACL
Object owner (your AWS account) Canonical ID: 17518f3250ad6e8502e4f6aa4da727077b4fccb83e91d770beafe0eb9048ac7	Read	Read, Write
Everyone (public access) Group: http://acs.amazonaws.com/groups/global/AllUsers	-	-
Authenticated users group (anyone with an AWS account) Group: http://acs.amazonaws.com/groups/global/AuthenticatedUsers	-	-

Edit

Edit



Step 9 : select **Read of Everyone** (public access)

aws Services Search for services, features, blogs, docs, and more [Alt+S] Global

Amazon S3 > image009 > sample.jpg > Edit access control list

Edit access control list [Info](#)

Access control list (ACL)
Grant basic read/write permissions to AWS accounts. [Learn more](#)

Grantee	Objects	Object ACL
Object owner (your AWS account) Canonical ID: 17518f3250ad6e8502e4f6aa4da727077b4fccb83e91d770beafe0eb9048acf7	<input checked="" type="checkbox"/> Read	<input checked="" type="checkbox"/> Read <input checked="" type="checkbox"/> Write
Everyone (public access) Group: http://acs.amazonaws.com/groups/global/AllUsers	<input checked="" type="checkbox"/> Read	<input checked="" type="checkbox"/> Read <input type="checkbox"/> Write
Authenticated users group (anyone with an AWS account) Group: http://acs.amazonaws.com/groups/global/AuthenticatedUsers	<input type="checkbox"/> Read	<input type="checkbox"/> Read <input type="checkbox"/> Write

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Step 10 : Select I understand the effects ... and press Save changes

aws Services Search for services, features, blogs, docs, and more [Alt+S] Global

account)
Group: http://acs.amazon
aws.com/groups/global/Authen
ticatedUsers

⚠ When you grant access to the Everyone or Authenticated users group grantees, anyone in the world can access this object.
[Learn more](#)

☒ I understand the effects of these changes on this object.

Access for other AWS accounts
No other AWS accounts associated with the resource.
[Add grantee](#)

Specified objects

Name	Type	Last modified	Size
sample.jpg	jpg	February 9, 2022, 15:44:32 (UTC+08:00)	13.2 KB

Cancel [Save changes](#)

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⚠ When you grant access the Everyone or Authenticated users group grantees, access this object.
[Learn more](#)
☒ I understand the effectd of these changes on this object.

Save changes



Step 11 : Reflash Object URL to view image, you can witness this image shown





釋放資源-刪除檔案

General purpose buckets (37) [Info](#) All AWS Regions

Copy ARN Empty Delete Create bucket

Buckets are containers for data stored in S3.

< 1 >

	Name ▲	AWS Region ▼	IAM Access Analyzer	Creation date ▼
<input type="radio"/>	20240926usc1	US East (N. Virginia) us-east-1	View analyzer for us-east-1	September 26, 2024, 12:41:42 (UTC+08:00)
<input checked="" type="radio"/>	20241023testbucketacldisable	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 23, 2024, 16:53:04 (UTC+08:00)
<input type="radio"/>	a-20240001-han	US East (N. Virginia) us-east-1	View analyzer for us-east-1	June 24, 2024, 15:58:57 (UTC+08:00)
<input type="radio"/>	a-20240003	US East (N. Virginia) us-east-1	View analyzer for us-east-1	August 7, 2024, 14:50:20 (UTC+08:00)
<input type="radio"/>	a-20240004-recognition-input	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 9, 2024, 17:35:45 (UTC+08:00)
<input type="radio"/>	a-20240004-recognition-output	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 9, 2024, 17:37:23 (UTC+08:00)
<input type="radio"/>	a-20240004boss	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 11, 2024, 17:41:46 (UTC+08:00)



20241023testbucketacldisable [Info](#)

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (1) [Info](#)



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 >



<input checked="" type="checkbox"/>	Name	Type ▲	Last modified ▼	Size ▼	Storage class ▼
<input checked="" type="checkbox"/>	sample.jpg	jpg	October 23, 2024, 16:53:43 (UTC+08:00)	9.1 KB	Standard



確認 - 輸入 *permanently delete*

Specified objects

Find objects by name

Name ▲	Type ▼	Last modified ▼	Size ▼
 sample.jpg 	jpg	October 23, 2024, 16:53:43 (UTC+08:00)	9.1 KB

Permanently delete objects?

To confirm deletion, type *permanently delete* in the text input field.

permanently delete



釋放資源-清空bucket

General purpose buckets (37) Info All AWS Regions

Refresh

Copy ARN

Empty

Delete

Create bucket

Buckets are containers for data stored in S3.

Find buckets by name

< 1 > ⚙

	Name ▲	AWS Region ▼	IAM Access Analyzer	Creation date ▼
<input type="radio"/>	20240926usc1	US East (N. Virginia) us-east-1	View analyzer for us-east-1	September 26, 2024, 12:41:42 (UTC+08:00)
<input checked="" type="radio"/>	20241023testbucketacldisable	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 23, 2024, 16:53:04 (UTC+08:00)
<input type="radio"/>	a-20240001-han	US East (N. Virginia) us-east-1	View analyzer for us-east-1	June 24, 2024, 15:58:57 (UTC+08:00)
<input type="radio"/>	a-20240003	US East (N. Virginia) us-east-1	View analyzer for us-east-1	August 7, 2024, 14:50:20 (UTC+08:00)



確認 - 輸入 *permanently delete*

Empty bucket Info



- Emptying the bucket deletes all objects in the bucket and cannot be undone.
- Objects added to the bucket while the empty bucket action is in progress might be deleted.
- To prevent new objects from being added to this bucket while the empty bucket action is in progress, you might need to update your bucket policy to stop objects from being added to the bucket.

[Learn more](#)



If your bucket contains a large number of objects, creating a lifecycle rule to delete all objects in the bucket might be a more efficient way of emptying your bucket. [Learn more](#)

[Go to lifecycle rule configuration](#)

Permanently delete all objects in bucket "20241023testbucketacldisable"?

To confirm deletion, type *permanently delete* in the text input field.

permanently delete



釋放資源 - 刪除bucket

General purpose buckets (37) Info All AWS Regions

Refresh

Copy ARN

Empty

Delete

Create bucket

Find buckets by name

	Name ▲	AWS Region ▼	IAM Access Analyzer	Creation date ▼
<input type="radio"/>	20240926usc1	US East (N. Virginia) us-east-1	View analyzer for us-east-1	September 26, 2024, 12:41:42 (UTC+08:00)
<input checked="" type="radio"/>	20241023testbucketacldisable	US East (N. Virginia) us-east-1	View analyzer for us-east-1	October 23, 2024, 16:53:04 (UTC+08:00)
<input type="radio"/>	a-20240001-han	US East (N. Virginia) us-east-1	View analyzer for us-east-1	June 24, 2024, 15:58:57 (UTC+08:00)
<input type="radio"/>	a-20240003	US East (N. Virginia) us-east-1	View analyzer for us-east-1	August 7, 2024, 14:50:20 (UTC+08:00)



先清空 bucket

[Amazon S3](#) > [Buckets](#) > [20241023testbucketacldisable](#) > Delete bucket

Delete bucket Info



This bucket is not empty

Buckets must be empty before they can be deleted.

Empty bucket



Diagnose with Amazon Q

Delete bucket "20241023testbucketacldisable"?

To confirm deletion, enter the name of the bucket in the text input field.

20241023testbucketacldisable

Cancel

Delete bucket



確認 - 輸入 *permanently delete*

Empty bucket Info



- Emptying the bucket deletes all objects in the bucket and cannot be undone.
- Objects added to the bucket while the empty bucket action is in progress might be deleted.
- To prevent new objects from being added to this bucket while the empty bucket action is in progress, you might need to update your bucket policy to stop objects from being added to the bucket.

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If your bucket contains a large number of objects, creating a lifecycle rule to delete all objects in the bucket might be a more efficient way of emptying your bucket. [Learn more](#)

[Go to lifecycle rule configuration](#)

Permanently delete all objects in bucket "20241023testbucketacldisable"?

To confirm deletion, type *permanently delete* in the text input field.


permanently delete



確認後按Delete Bucket

Amazon S3 > Buckets > 20241023testbucketacldisable > Delete bucket


Delete bucket Info

 • Deleting a bucket cannot be undone.

• Bucket names are unique. If you delete a bucket, another AWS user can use the name.

• If this bucket is used with a Multi-Region Access Point in an external account, initiate failover before deleting the bucket.

• If this bucket is used with an access point in an external account, the requests made through those access points will fail after you delete this bucket.

[Learn more](#) 

Delete bucket "20241023testbucketacldisable"?

To confirm deletion, enter the name of the bucket in the text input field.

Cancel Delete bucket



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