

Sesión 4 - Infraestructura de almacenamiento

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Actividad 1. Creación bucket S3

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.

☐ **Directory**
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name [Info](#)

mi-primer-bucket-laboratorio

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 (-). [Learn more](#)

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

[Choose bucket](#)

Format: s3://bucket/prefix

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.


Object Ownership

☒ **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 enforced

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 ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can 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.

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#) 

Bucket Versioning

☒ Disable

☐ Enable

Tags - optional

You can use bucket tags to analyze, manage and specify permissions for a bucket. [Learn more](#)

- i** You can use `s3:ListTagsForResource`, `s3:TagResource`, and `s3:UntagResource` APIs to manage tags on S3 general purpose buckets for access control in addition to cost allocation and resource organization. To ensure a seamless transition, please provide permissions to `s3:ListTagsForResource`, `s3:TagResource`, and `s3:UntagResource` actions. [Learn more](#)

No tags associated with this bucket.

[Add new tag](#)

You can add up to 50 tags.

Default encryption [Info](#)

Server-side encryption is automatically applied to new objects stored in this bucket.

Encryption type [Info](#)

Secure your objects with two separate layers of encryption. For details on pricing, see [DSSE-KMS pricing](#) on the **Storage** tab of the [Amazon S3 pricing page](#).

- ☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)
- ☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)
- ☐ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)

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

General purpose buckets

All AWS Regions

Directory buckets

General purpose buckets (1) [Info](#)



Copy ARN

Empty

Delete

Create bucket

Buckets are containers for data stored in S3.

Find buckets by name

< 1 >

Name	AWS Region	Creation date
<input type="radio"/> mi-primer-bucket-laboratorio	US East (N. Virginia) us-east-1	February 8, 2026, 12:21:48 (UTC-05:00)

Actividad 2. Acciones con los buckets S3

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 SDKs or Amazon S3 REST API. [Learn more](#)

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

Files and folders (1 total, 23.0 B)

Remove

Add files

Add folder

All files and folders in this table will be uploaded.

Find by name

< 1 >

<input type="checkbox"/>	Name	▼	Folder	▼	Type	▼	Size	▼
<input type="checkbox"/>	README.md		-		text/markdown		23.0 B	

Destination Info

Destination

[s3://mi-primer-bucket-laboratorio](#)

► 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

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 SDKs or Amazon S3 REST API. [Learn more](#)

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

Files and folders (1 total, 23.0 B)

Remove

Add files

Add folder

All files and folders in this table will be uploaded.

Find by name

< 1 >

<input type="checkbox"/>	Name	▼	Folder	▼	Type	▼	Size	▼
<input type="checkbox"/>	README.md		-		text/markdown		23.0 B	

Destination Info

Destination

[s3://mi-primer-bucket-laboratorio](#)

► 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

Delete objects Info



- If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.
- Deleting the specified objects can't be undone.

[Learn more](#)

Specified objects

Find objects by name

Name	Type	Last modified	Size
README.md	md	February 8, 2026, 12:23:12 (UTC-05:00)	23.0 B

Permanently delete objects?

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

permanently delete

Cancel

Delete objects



Successfully deleted objects

View details below.

Delete objects: status

Close

After you navigate away from this page, the following information is no longer available.

Summary

Source

s3://mi-primer-bucket-laboratorio

Successfully deleted

1 object, 23.0 B

Failed to delete

0 objects

Failed to delete

Configuration

Failed to delete (0)

Find objects by name

Name	Folder	Type	Last modified	Size	Error
------	--------	------	---------------	------	-------

No objects failed to delete.

Actividad 3. EBS

Create volume [Info](#)

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type [Info](#)

General Purpose SSD (gp3) ▼

Size (GiB) [Info](#)

5 ▲▼

Min: 1 GiB, Max: 65536 GiB.

IOPS [Info](#)

3000 ▲▼

Min: 3000 IOPS, Max: 80000 IOPS.

Throughput (MiB/s) [Info](#)

125 ▲▼


Min: 125 MiB, Max: 2000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

us-east-1d ▼

Snapshot ID - optional [Info](#)

Don't create volume from a snapshot ▼




Encryption [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

☐ Encrypt this volume

Volumes (3) [Info](#)

Last updated less than a minute ago 

[Recycle Bin](#)

[Actions ▼](#)


Create volume


Saved filter sets

Choose filter set ▼

Search

< 1 >



<input type="checkbox"/>	Name 	Volume ID	Type	Size	IOPS	Throughput
<input type="checkbox"/>		vol-04e3a09cde3be3278	gp3	8 GiB	3000	125
<input type="checkbox"/>	EBS-Filesystem...	vol-0ed4b33532290b86f	gp3	5 GiB	3000	125
<input type="checkbox"/>		vol-040e38c5fb98eeb02	gp3	8 GiB	3000	125

Attach volume [Info](#)

Attach a volume to an instance to use it as you would a regular physical hard disk drive.

Basic details

Volume ID

 vol-0ed4b33532290b86f (EBS-Filesystem-EC2)

Availability Zone

use1-az6 (us-east-1d)

Instance [Info](#)

i-03101a1a13dc55098
(EBS-test-server_1) (running)



Only instances in the same Availability Zone as the selected volume are displayed.

Device name [Info](#)

Select a device name

Recommended device names for Linux: /dev/xvda for root volume. /dev/sd[f-p] for data volumes.

[Cancel](#)

[Attach volume](#)


```
[ec2-user@ip-172-31-41-222 ~]$ lsblk
NAME                MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
nvme0n1              259:0    0   8G  0 disk
├─nvme0n1p1          259:1    0   8G  0 part /
├─nvme0n1p127        259:2    0   1M  0 part
└─nvme0n1p128        259:3    0  10M  0 part /boot/efi
nvme1n1              259:4    0   5G  0 disk
[ec2-user@ip-172-31-41-222 ~]$
```

```
[0] 0: bash* "ip-172-31-41-222.ec2." 18:12 08-Feb-26
```

```
[ec2-user@ip-172-31-41-222 ~]$ sudo mkfs -t xfs /dev/nvme1n1
meta-data=/dev/nvme1n1      isize=512    agcount=8, agsize=163840 blks
                        =               sectsz=512   attr=2, projid32bit=1
                        =               crc=1        finobt=1, sparse=1, rmapbt=0
                        =               reflink=1     bigtime=1 inobtcount=1 nrext64=
0
                        =               exchange=0
data        =               bsize=4096   blocks=1310720, imaxpct=25
                        =               sunit=1     swidth=1 blks
naming      =version 2       bsize=4096   ascii-ci=0, ftype=1, parent=0
log         =internal log    bsize=4096   blocks=16384, version=2
                        =               sectsz=512   sunit=1 blks, lazy-count=1
realtime    =none           extsz=4096   blocks=0, rtextents=0
[ec2-user@ip-172-31-41-222 ~]$
```

```
[0] 0: sudo* "ip-172-31-41-222.ec2." 18:13 08-Feb-26
```

```
[ec2-user@ip-172-31-41-222 ~]$ sudo mkdir /ebs
[ec2-user@ip-172-31-41-222 ~]$ sudo mount /dev/nvme1n1 /ebs
[ec2-user@ip-172-31-41-222 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0   4.0M   0% /dev
tmpfs           459M   0   459M   0% /dev/shm
tmpfs           184M  440K  183M   1% /run
/dev/nvme0n1p1   8.0G  1.6G   6.4G  20% /
tmpfs           459M   0   459M   0% /tmp
/dev/nvme0n1p128 10M   1.3M   8.7M  13% /boot/efi
tmpfs           92M   0    92M   0% /run/user/1000
/dev/nvme1n1     5.0G   68M   4.9G   2% /ebs
[ec2-user@ip-172-31-41-222 ~]$
```

Actividad 4. EFS

No se usaron EFS durante la practica