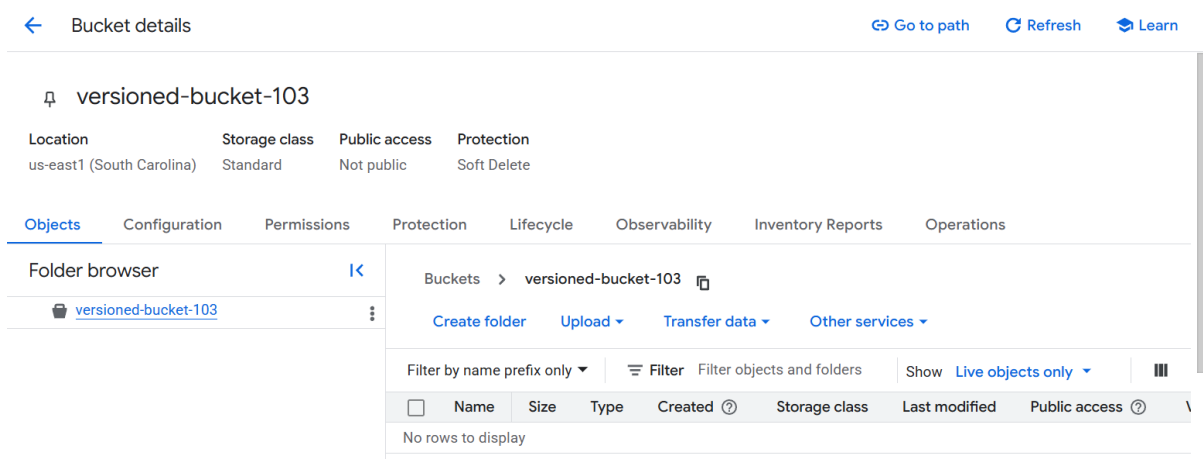
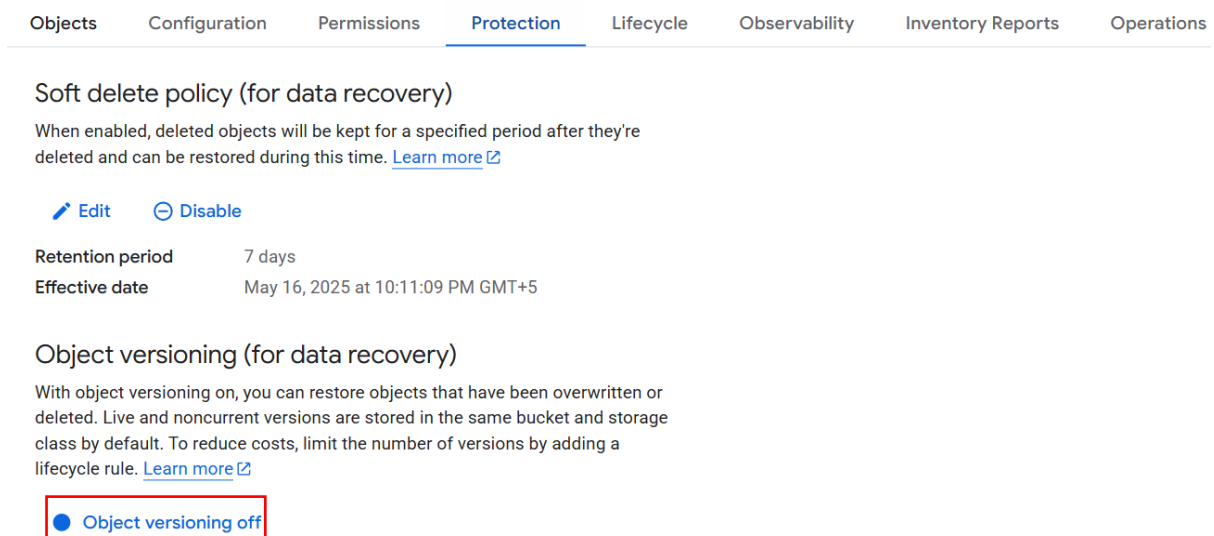


Enable Bucket Versioning and Restore Deleted Files

1. Create a new bucket with the default settings just give it a name and choose your region.



2. After creation, click the bucket → Go to **Protection** → Look for **Object Versioning**.
3. You can see that currently, Versioning is off. Click on it.




4. Leave it to the default setting, just click on confirm to turn on object versioning.

Turn on object versioning?

With object versioning on, live and noncurrent versions will be stored in the same bucket and storage class by default.

Save on version costs by adding lifecycle rules


Object lifecycle rules keep versioning costs under control. Without any lifecycle rules, versioning will be unlimited. Rules can be added or modified at any time. [Learn more](#) 

☐ Add recommended lifecycle rules to manage version costs

Cancel [Confirm](#)

5. Here you can see that object versioning is turned on now.

Object versioning (for data recovery)

With object versioning on, you can restore objects that have been overwritten or deleted. Live and noncurrent versions are stored in the same bucket and storage class by default. To reduce costs, limit the number of versions by adding a lifecycle rule. [Learn more](#) 

✔ [Object versioning on](#)



You have no lifecycle rules that apply to noncurrent versions

[Manage rules](#)

6. Now we need to upload a file here in our bucket. Here you can see that an object has been uploaded to our bucket.

versioned-bucket-103

Location

us-east1 (South Carolina)

Storage class

Standard

Public access

Not public

Protection

Soft Delete, Object versioning

Objects

Configuration

Permissions

Protection

Lifecycle

Observability

Inventory Reports

Operations

Folder browser

versioned-bucket-103

Buckets > versioned-bucket-103

Create folderUploadTransfer dataOther services

Filter by name prefix onlyFilterFilter objects and foldersShowLive objects only

<input type="checkbox"/>	Name	Size	Type	Created	
<input type="checkbox"/>	Athena_Report.pdf	5 MB	application/pdf	May 16, 2025, 10:17:22 PM	

- Now we are going to upload another version of our file, which is nothing but the same file again, to our bucket.
- Then it will ask you to resolve the object conflict, just choose the overwrite object and click on continue uploading.

Resolve object conflict

Athena_Report.pdf already exists in versioned-bucket-103. How would you like to resolve this conflict?

- ☒ Overwrite object
- ☐ Exclude object from this upload
- ☐ Apply the same action to all remaining object conflicts

Cancel all uploads

Continue Uploading

- Here you can see that our file has been uploaded now.

versioned-bucket-103

Location

us-east1 (South Carolina)

Storage class

Standard

Public access

Not public

Protection

Soft Delete, Object versioning

Objects

Configuration

Permissions

Protection

Lifecycle

Observability

Inventory Reports

Operations

Folder browser

versioned-bucket-103

Buckets > versioned-bucket-103

Create folderUploadTransfer dataOther services

Filter by name prefix onlyFilterFilter objects and foldersShowLive objects only

<input type="checkbox"/>	Name	Size	Type	Created	
<input type="checkbox"/>	Athena_Report.pdf	5 MB	application/pdf	May 16, 2025, 10:19:29 PM	

10. Now we are going to delete our file.

versioned-bucket-103

Location: us-east1 (South Carolina) | Storage class: Standard | Public access: Not public | Protection: Soft Delete, Object versioning

Objects | Configuration | Permissions | Protection | Lifecycle | Observability | Inventory Reports | Operations

Folder browser: versioned-bucket-103

1 object selected | Manage Holds | Edit Retention | Download | Delete

Filter by name prefix only | Filter | Filter objects and folders | Show: Live objects only

<input checked="" type="checkbox"/>	Name	Size	Type	Created	
<input checked="" type="checkbox"/>	Athena_Report.pdf	5 MB	application/pdf	May 16, 2025, 10:19:29 PM	Download Delete

11. Here you can see that we have zero objects in our bucket, but if you change **Live object only** status to **Live and noncurrent objects**.

12. Then you'll be able to see your deleted object here. Now click on it.

versioned-bucket-103

Location: us-east1 (South Carolina) | Storage class: Standard | Public access: Not public | Protection: Soft Delete, Object versioning

Objects | Configuration | Permissions | Protection | Lifecycle | Observability | Inventory Reports | Operations

Folder browser: versioned-bucket-103

Create folder | Upload | Transfer data | Other services

Filter by name prefix only | Filter | Filter objects and folders | Show: Live objects only

No rows to display

Live objects only
Live and noncurrent objects
Soft-deleted objects only

versioned-bucket-103

Location: us-east1 (South Carolina) | Storage class: Standard | Public access: Not public | Protection: Soft Delete, Object versioning

Objects | Configuration | Permissions | Protection | Lifecycle | Observability | Inventory Reports | Operations

Folder browser: versioned-bucket-103

Create folder | Upload | Transfer data | Other services

Filter by name prefix only | Filter | Filter objects and folders | Show: Live and noncurrent objects

<input type="checkbox"/>	Name	Size	Type	Created	Storage class	Last modified
<input type="checkbox"/>	Athena_Report.pdf (Noncurrent)	—	—	—	—	—

13. Now you can also see the version of your object, you can also restore any version of your choice.

← Object details
Learn

Buckets > versioned-bucket-103 > Athena_Report.pdf (deleted)

Live object
[Version history \(2\)](#)

Delete

Filter Enter property name or value ⓘ Show Noncurrent ▾

<input type="checkbox"/>	Object version ↓	MD5 hash	CRC32C hash	Storage class	Size	
<input type="checkbox"/>	May 16, 2025, 10:19:29 PM	.3364	a57cb6f82a3dcd409d8a1609faef2512	1935809956	Standard	1.4 MB Restore ⋮
<input type="checkbox"/>	May 16, 2025, 10:17:22 PM	.0441	a57cb6f82a3dcd409d8a1609faef2512	1935809956	Standard	1.4 MB Restore ⋮

14. If we click on restore on any of the version of our choice then we can just restore it.

Restore this object version?

Confirm that you want this version to become the live version. If there's already a live version of this object, then this action will make the pre-existing live version noncurrent.

Version ID (Creation time)	May 16, 2025, 10:19:29 PM
Generation number	1747414169943364
Hash (MD5)	a57cb6f82a3dcd409d8a1609faef2512
Hash (CRC32C)	1935809956
Last modified	May 16, 2025, 10:19:29 PM
Storage class	Standard
Size	1.4 MB
Type	application/pdf
Metageneration	1
Link for gsutil	gs://versioned-bucket-103/Athena_Report.pdf#1747414169943364

Cancel Confirm

15. Below, you can see that our object is live again.

Buckets > versioned-bucket-103 > Athena_Report.pdf

Live object [Version history \(2\)](#)

Delete

Filter Enter property name or value



Show Noncurrent



<input type="checkbox"/>	Object version ↓		MD5 hash	CRC32C hash	Storage class	Size	
<input type="checkbox"/>	Athena_Report.pdf (Live object)	.1877	a57cb6f82a3dcd409d8a1609faef2512	1935809956	Standard	1.4 MB	
<input type="checkbox"/>	May 16, 2025, 10:19:29 PM	.3364	a57cb6f82a3dcd409d8a1609faef2512	1935809956	Standard	1.4 MB	Restore ⋮
<input type="checkbox"/>	May 16, 2025, 10:17:22 PM	.0441	a57cb6f82a3dcd409d8a1609faef2512	1935809956	Standard	1.4 MB	Restore ⋮

16. Once your lab is done just delete your bucket.