S3 Versioning

What is Versioning?

Versioning is a way to keep multiple versions of an object in a bucket.

- It is used to **manage**, **delete**, and **restore any version of any object** saved in an S3 bucket.
- Each time an object in a bucket changed, a new version of the object would be created and act as a new current version.
- By using versioning, all unwanted user behavior and program errors can be quickly recovered.

For example:

- If you delete an object, instead of removing it permanently, Amazon S3 inserts a delete marker, which becomes the current object version. You can always restore the previous version.
- If you overwrite an object, it results in a new object version in the bucket.

States of Versioning

| Unversioned | Versioning-enabled | Versioning-suspended |

You can get buckets in one of the following three states:

- Unversioned (the default),
- Versioning-enabled,
- Versioning-suspended.

The versioning state applies to all (never some) of the objects in that bucket. The first time you enable a bucket for versioning, objects in it are thereafter always versioned and given a unique version ID.

- Objects stored in your bucket before you set the versioning state have a version ID of null.
- When you enable versioning, existing objects in your bucket do not change. What changes is how Amazon S3 handles the objects in future requests.
- The bucket owner (or any user with appropriate permissions) can suspend versioning to stop accruing object versions.
- When you suspend versioning, existing objects in your bucket do not change. What changes is how Amazon S3 handles objects in future requests.

> ⚠️ **Caution! :**
> - Once you enable versioning on a bucket, it can never return to an unversioned state.
> - You can, however, suspend versioning on that bucket.

How to Enable or Suspend Versioning?

- Select the bucket on which versioning will be enabled.
- Click **Properties** tab of that bucket.
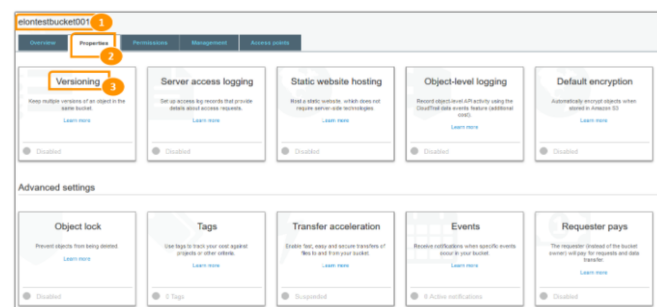
- Click **Versioning** panel.

- Here, the **Enable versioning** option can be selected to enable versioning on a selected bucket.
- Or, **Suspend versioning** option can be selected to stop versioning on an already versioning-enabled bucket.
- After selected either **Enable or Suspend option**, Click the **Save** button.