

GCS Retention and holds

Retention policy and locks

GCS retention policies allows the objects stored in the buckets to be retained before being deleted from the bucket.

Retention policy can be configured on the bucket level using cloud sdk or client libraries.

Policy can be removed from the bucket if it is not locked.

Retention locks can be applied on the buckets if policy needs to be set permanently on bucket for any compliance or regulatory purposes.

Locks once applied cannot be reversed and the bucket can be deleted once all the objects crosses the retention period set.

Object Holds

Object holds are metadata flags associated with the objects in GCS. If the hold is activated on any object, the object cannot be deleted unless the hold is released.

Holds can be set by editing the metadata on objects using cloud sdk or client libraries. It can also be enforced at the bucket level.

There are two types of holds in GCS.

- Event-based Hold
- Temporary Hold

Retention Policy and holds

Both type of holds behave same when retention policy is not configured on the bucket.

In cases where retention policy is activated for bucket then temporary hold does not affects the lifetime of object in bucket, but event-based hold resets the object lifetime for retention period.

Example – Object X and Y are configured with 6 month retention period. Suppose we apply event-based hold on X and temporary hold on Y after 5 months. Now, object Y can be deleted after 1 month once it crosses retention period while object X lifetime is reset and its retention period will start from time when event-based hold was applied on it and it has to wait for complete 6 months before being deleted.