WHITEPAPER

Retrospect
A StorCentric Company
Data Protection for Businesses

Retrospect Backup

Anti-Ransomware: Immutable Backups with Google Cloud Storage

Backup Less. Manage Less. Worry Less.

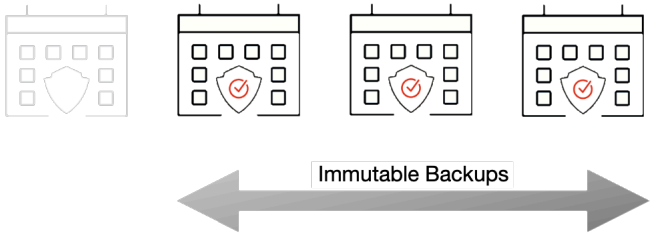
Google Cloud Storage provides a low-cost, scalable cloud storage location for secure off-site data protection. With its Bucket Lock retention policy, Google Cloud enables customers to lock files that are under a certain age in that bucket.

Google Cloud Platform

This per-bucket policy approach differs from Amazon S3's per-object policy approach, such that Retrospect Backup cannot set the retention policies for individual files that make up a backup. However, setting a bucket policy enables customers to lock the files for a certain period of time, so this is a great anti-ransomware solution for Google Cloud customers.

Overview

Ransomware attacks are increasingly sophisticated, having the capability of watching for cloud account credentials, deleting backups and cloud storage, then encrypting everything and demanding a ransom. It's imperative to build defenses against this escalating attack. SMBs and large businesses need a backup target that allows them to lock backups for a designated time period. Many of the major cloud providers now support object locking, also referred to as Write-Once-Read-Many (WORM) storage or immutable storage. Users can mark objects as locked for a designated period of time, preventing them from being deleted or altered by any user.



Backups made to a Google Cloud Bucket with a retention period are immutable backups, with a retention period that prevents deletion by anyone accessing the bucket.

Note that customers are responsible for keeping track of the retention period and modifying it accordingly to ensure all of the backups inside the bucket continue to be marked as immutable backups.

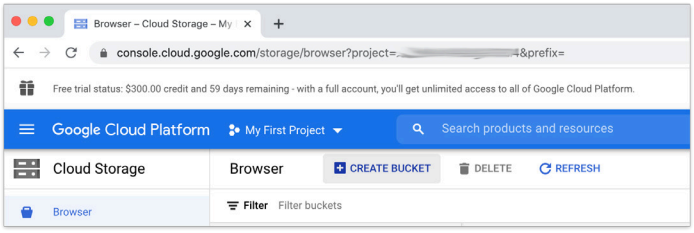
For more information about backing up to Google Cloud Storage with Retrospect Backup, see How to Set Up a Google Cloud Storage Account.

Step-by-Step Guide

Retrospect Backup makes it easy to back up to Google Cloud Storage. Let's walk through the steps for creating a bucket with a Bucket Lock retention policy.

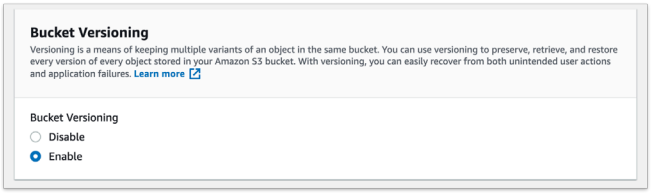
1) Google Cloud Storage: Create a Google Cloud Storage Account if you have not already.

2) Google Cloud Storage: Click "Create Bucket".



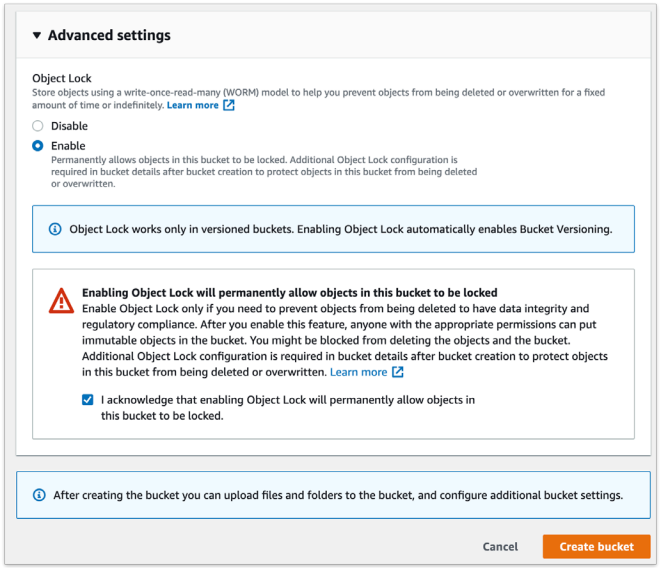
3) Google Cloud Storage: Enter a bucket name.

4) Google Cloud Storage: Under "Advanced Settings", you'll see "Retention policy". Enable "Set a retention policy" and enter a time period.



5) Google Cloud Storage: Finish setup and create the bucket.

6) Google Cloud Storage: In the bucket, under "Retention", you'll see the policy you set up.



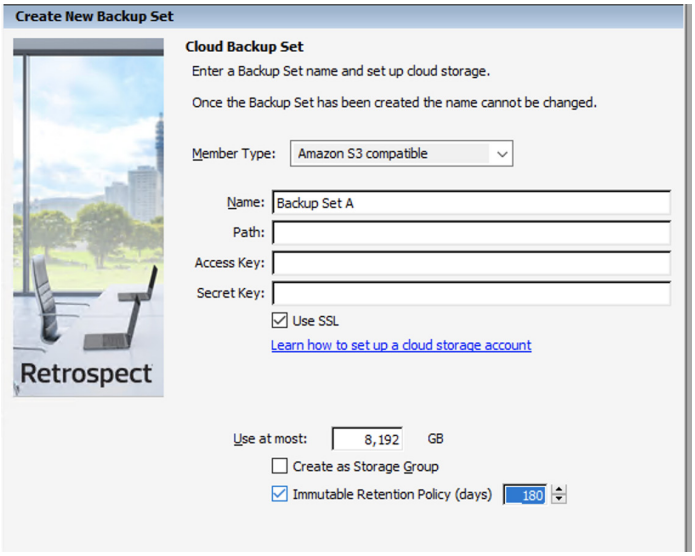
Note that you need to click "Lock" to make the retention policy effective. Once you lock it, you cannot unlock it until all objects are out of the retention period.

7) Retrospect: Add a destination. On Windows, select "Back-up Sets" then "Create". On Mac, select "Media Sets" and click "Add". Select type "Cloud". Note that the "Immutable Retention Policy" checkbox is not relevant because you'll use the Google Cloud Storage bucket with the bucket-level retention policy.

8) Retrospect: Add the destination to a script and start protecting your data in Google Cloud Storage.

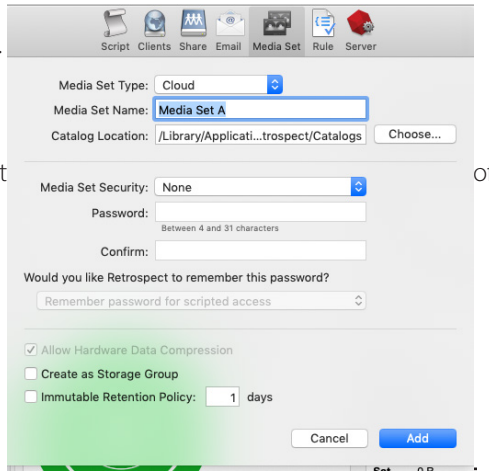
Under The Hood

Every backup within the retention period is an immutable back-up with point-in-time restore capabilities. Because each backup



is incremental, Retrospect only transfers the files that are new or have changed since the last backup. However, you can always restore any part of a backup in Retrospect.

Google Cloud Storage will mark every new backup file with the specified retention policy, protecting your backups from any accidental or malicious deletion. However, you are responsible for ensuring none of the backup files fall out of the retention period, as Google Cloud Storage does not provide the ability to change individual file's retention periods.



About Retrospect, Inc.

Retrospect Backup has been protecting data for small and medium businesses for thirty years. We support businesses where they are, with local sales representation and thousands of partners across the world, on six continents and seven languages. Contact us at https://www.retrospect.com/contact_sales.

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