# Data Backup Storage in the Cloud
## Simple as 3-2-1

Backups are essential for protecting valuable data. Hardware failures and human error are inevitable no matter how many years of admin experience you have under your belt. The only surefire way to subvert disaster is to take preventative measures.

The industry-favorite "3-2-1 rule" of backup was coined by photographer Peter Krogh who said that there are two kinds of people: those who have had a hard drive failure, and those who will. The question is not if disaster will strike, but when.

## Apply the 3-2-1 Backup Rule of Thumb with Cloud Storage

The phrase "3-2-1 rule" is a popular way to remember the concept for securely preserving data. Simply put, the 3-2-1 backup rule means you should:

- Have at least **three** copies of your data
- Store the copies on **two** different media types
- Keep **one** backup copy offsite

## Keep One Backup Copy Offsite

The original 3-2-1 rule was established when backup technology options were limited, and cloud storage was in its infancy. Physical separation between copies is important. It's unwise to keep your external storage device in the same room as your production storage. Magnetic tape (LTO) was a popular target for the "one copy offsite" because it would be taken offline and shipped to a storage facility where it was air gapped for added protection. However, users reported that using LTO was the worst part of the 3-2-1 backup process. Tape libraries are prone to mechanical problems, it takes a long time to retrieve files, tapes get lost, and managing the LTO system can be a labor-intensive process.

Obviously, the cloud meets the requirement for geographical separation of primary and backup data.  But when cloud first came on the scene, some IT professionals were concerned with security and cost and LTO became an industry standard for data protection.

**Key Features**

- **Ultra-low-cost pricing**
- **Instant accessibility**
- **Digital evidence preservation and protection**
- **Regulatory compliance**
- **Industry-leading performance**

**Benefits**

- **Store more data for longer at less cost**
- **No need to choose between keeping saving money and keeping data**
- **Pay-as-you-grow scalability**
- **Inherent resiliency and data integrity**

# Immutability Provides "Air Gapped" Protection for Backup Copies in the Cloud

With Wasabi Hot Cloud Storage, organizations can configure their backup storage bucket to be immutable for a user defined retention period (in increments of days, weeks, months or years). Data written to that bucket cannot be deleted or altered in any way, by anyone, throughout its storage lifetime. For this reason, it is possible to treat immutable data as "air gapped," virtually untouchable by anyone.

Data immutability can help with compliance for state and local government regulations for securing and preserving electronic records, transaction data and activity logs. Wasabi's adherence to major industry compliance standards gives you the peace of mind to store your data in a secure and compliant manner. Wasabi is built and managed according to security best practices and standards and is designed to comply with a range of industry and government regulations including HIPAA, HITECH, CJIS and FERPA.

Wasabi uses security best practices and technologies to ensure the physical security of its facilities and to maintain the privacy, security and integrity of electronic data and digital records.

## Instant Accessibility to the Backup Data

Unlike so-called "Cloud Archive Tiers" offered by some hyperscalers, Wasabi keeps all video files instantly accessible.  With "Archive Tiers", it can take many hours to return video footage when requested. Organizations that need to access their video quickly and/or move the video in and out of cloud storage should steer clear of these tiers.

## Wasabi Hot Cloud Storage Delivers Breakthrough Economics

The industry's lowest-priced cloud storage service, Wasabi lets you maintain massive data collections in the cloud with breakthrough economics. Law enforcement agencies can use Wasabi for a variety of CJIS-compliant purposes including primary storage, secondary storage for backup or disaster recovery, and cold storage for data archival. Healthcare providers can safely store medical records, images, and patient information in our HIPAA-compliant cloud storage. Every business struggles with data at some point. Wasabi's low-cost, high-performance cloud storage can help you tackle any data challenge you face.

**ABOUT WASABI**

Wasabi provides simple, predictable and affordable hot cloud storage for businesses all over the world. It enables organizations to store and instantly access an infinite amount of data at 1/5th the price of the competition with no complex tiers or unpredictable egress fees. Trusted by customers worldwide, Wasabi has been recognized as one of technology's fastest growing and most visionary companies. Created by Carbonite co-founders and cloud storage pioneers David Friend and Jeff Flowers, Wasabi has secured $110 million in funding to date and is a privately held company based in Boston.

www.wasabi.com