

WHITE PAPER

# Immutable and Indelible in Data Protection: The Commvault Advantage



### **OVERVIEW**

# Understanding Immutable vs Indelible in Data Protection: The Commvault Advantage

The rise of cyberattacks has elevated data protection to a critical business function, making it the last line of defense against service disruptions. While immutable storage offers a popular solution for data protection, its effectiveness hinges on implementation. While some immutable storage solutions protect against external attacks, they may not prevent data loss due to compromised accounts. Indelible data protection offers an additional layer of security by enforcing data governance rules that hold strong even in the face of compromised privileged accounts. Understanding the distinction between immutable and indelible data protection is key to selecting the most effective solution. Commvault's retention lock functionality provides a unique approach to achieving indelible data protection.

## Immutable vs Indelible Data: The Key Differences

Indelible data goes a step further than immutable data in the realm of data protection. While immutable data focuses on being unchangeable, indelible data adds a layer of governance.

**Immutable data**: This data cannot be erased or overwritten. It is like writing in permanent ink, but it can still be thrown away or lost. This protects against external attacks that try to directly modify backups.

**Indelible data:** Imagine indelible data that is stored within a locked safe. Even if someone gains access to your infrastructure, this safe is inaccessible. This additional safeguard offers a stronger defense against sophisticated cyber threats that exploit internal vulnerabilities.

In short, both types of data offer protection, but indelible data provides a more comprehensive security layer.

Let's look at an example of where immutable data protection would fail but indelible data protection would have kept the solution safe.

- Attacker gains access to the environment and discovers the data protection solution.
- Upon investigation the attacker finds the backup storage and attempts to encrypt then delete the data.
  - Since the data solution was setup with immutability, this was unsuccessful.
- After the failed attempt, the attacker successfully compromises a privileged Active Directory account.
- With the compromised account, the attacker logs into the data protection solution and changes the retention policy. Now backups that fall outside the new retention policy window are purged.
  - If the data protection solution was indelible, the retention policy could not be changed and the data would not have been removed.

### Commvault's Compliance Lock: Flexibility Meets Security

Compliance Lock provides an added layer of security for backups and retention policies by safeguarding against accidental or malicious deletion from internal and external sources. It protects your backups, copies, storage, applications, servers, and retention periods from being altered.

### **Enhanced Security Protocols for Changing Compliance Locks**

Commvault understands the criticality of these locks for safeguarding data. Therefore, any change to the compliance lock itself requires a stringent verification process. This involves an authorized user to confirm their identity directly with Commvault if a change to the compliance lock is needed. This helps prevent rogue actors from bypassing security to alter the compliance lock, providing an extra layer of security against both external breaches and insider threats.



# The Indispensable Need for Indelible Backup

In an era rampant with cyber breaches, the importance of indelible backup cannot be overstated. While immutable storage is a given in most modern backup solutions, the real gamechanger is the indelible backup. This feature prevents backups from being modified and protects them from being prematurely deleted or altered, even when facing malicious events such as a cyber breach or internal malfeasance.





















