

[Immutable backup storage - the last line of defence](#)

Breadcrumb

1. [Home](#) /
2. [Print](#) /
3. [Pdf](#) /
4. [Node](#) /
5. [Entity Print](#)

Insight navigation

- [Latest insights](#)
- [Latest news](#)
- [Articles](#)
- [Case studies](#)

[Download PDF](#)

Apr 2024

Immutable backup storage - the last line of defence

We all know that using an air gap within a backup solution to put space between you and cyber criminals is vital, but with discussion around the security – or lack thereof - of data more prevalent than ever, we wanted to share insight into immutable backup storage and how it can support your business.

Categories [Data & Analytics](#), [Data Protection and GDPR](#), [Technology Consulting](#)

Apr 2024

-
-
-
-



[Chris Anderson](#)

Lead Solutions Architect: Infrastructure

Email

chris.anderson@waterstons.com

LinkedIn

<https://www.linkedin.com/in/chris-anderson-4350358b/>

What does immutable mean?

The definition of immutable is 'unable to be changed'; immutable backups are therefore backups that cannot be altered, meaning

they are safe from unauthorised change or deletion.

Why is it crucial to backup infrastructure?

The industry standard approach to backups observes the 3-2-1 backup rule:

- 3 copies of production data are maintained across
- 2 different types of media with
- 1 copy offsite.

This has recently been developed to 3-2-1-1-0 (snappy, we know), incorporating 1 immutable copy of data and 0 errors throughout the backup environment.

With the continued increase in ransomware attacks, and threat actors actively targeting backup data, the integrity of the backup data is critical for recovery.

How can I achieve backup immutability?

Introducing immutable cloud storage satisfies this requirement and provides a 'last line of defence' mechanism in the event of malicious cyber activity.

We recently announced a partnership with Wasabi to do just that – offering offsite *and* immutable data backup (two birds, one stone) using Wasabi, with Veeam Backup and Replication.

The low TCO with cloud storage also enables a suitable repository for long-term GFS (grandfather-father-son) data retention.

As Wasabi does not charge for data ingress or egress, it provides a predictable, cost-effective cloud storage platform.

What else can be leveraged?

As Veeam VASP, our go-to backup product is Veeam Backup and Replication, which also supports the Linux Hardened Repository. Veeam's technology leverages the XFS file system to facilitate backup immutability, but – as we've said before - tape is not dead yet!

Rotated tape media provides a fully air-gapped copy of data and still provides a use-case.

To find out more about data and storage backups, get in touch with chris.anderson@waterstons.com

<http://waterstons.co.uk/print/pdf/node/8717>