TECHNICAL PAPER 03

A restore point is a promise

03

On verification, immutability, and never failing silently.

> A green tick in a backup report means a job finished. It does not mean the data is complete, intact, or still there next month. At ImmuBDR, a restore point is not something a job produces. It is something the platform has proven, and keeps proving.

It doesn’t exist until it’s verified

A restore point becomes visible only after every byte has been checked. Until then, as far as the platform is concerned, there is no backup. An interrupted upload resumes where it stopped; it never turns into a half-written point that looks complete.

After that, the checking doesn’t stop. Copies are re-checked on schedule, and damage is repaired automatically.

We don’t trust shortcuts we haven’t proven

Every hypervisor offers ways to read less data. Some are excellent. Some are not as correct as they look.

> In our own testing, one widely used “allocated areas only” shortcut omitted **1.75 GB of real file system data** from a Windows disk. The resulting copy booted into recovery mode. Backup software using that shortcut would have reported success.

So our rule is simple: a shortcut is trusted only where it has been proven correct. Where we can’t prove it, we read more, and we say so.

Never silent

Every compromise is recorded on the restore point, with its reason, and shown in the job. You may not need to act on it. But we should know, and so should you.

Immutable means immutable

Each customer's data lives in its own isolated storage, with daily snapshots under a time lock that is set per customer.

- The platform cannot release a lock early, and neither can any phished account.
- Shortening the retention setting never unlocks existing snapshots.
- Even deleting a customer waits until its locks have expired.
- Early deletion is only possible with two engineers physically present in the data centre.

300.1 → 7 GB

A forced full read, stored as an increment after deduplication. Restored byte-identical.

34,000 files/s

Unchanged incremental of a 1.2 million-file share. The first full ran at 8,600 files/s.

ABOUT IMMUBDR

ImmuBDR is Immutec's backup and disaster-recovery platform, delivered as a fully managed service. It protects virtual machines, physical servers, databases and file shares, keeps every restore point verified and immutable, and recovers them on our own infrastructure, even when your own hypervisor or site is gone.

Our engineers run the platform for you. Customers have no access to backup or restore functions; every request runs through a ticket. Your production and your recovery are held by different people, by design.

Need the technical detail? A full version of this paper is available under NDA.

Proven weekly
Every system booted and tested, with evidence.

Immutable
Time-locked restore points nobody can release early.

Own infrastructure
Storage, DR capacity, network and AI, run by us.

Want to see a failover live? Ask us for a demo. **www.immutec.eu**