Continuous Data Protection

Delivering an Always-On Customer Experience

What Is Continuous Data Protection?

Continuous data protection (CDP) is a protection mechanism that allows organizations to continuously capture and track data modifications, automatically saving every version of the data that the user creates to a local or target repository. Writes are saved to a journal file along with the corresponding file changes. By utilizing change block tracking, CDP allows users or administrators the ability to restore data to any point in time with remarkable granularity.
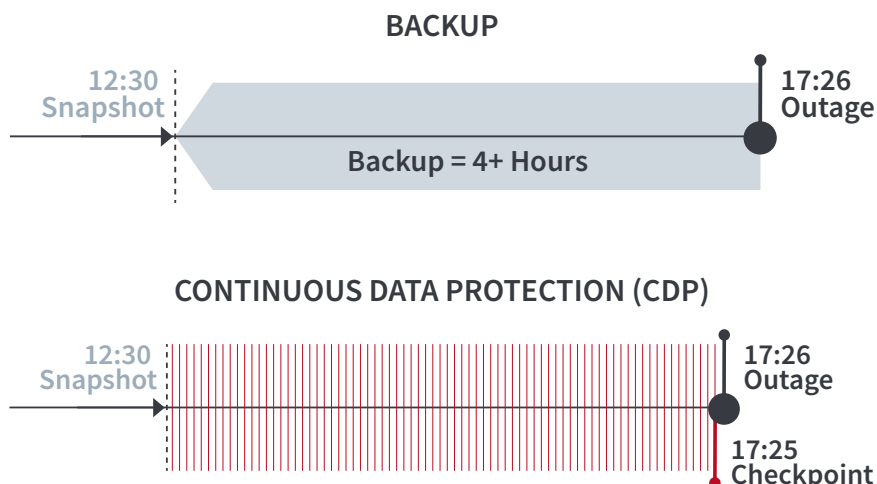
Comparing Zerto Continuous Data Protection to Snapshot-Based Technologies

Zerto, a Hewlett Packard Enterprise company, provides CDP that uses proven journaling technology. It logs all changes for up to 30 days and is configurable down to the second.

Conversely, incremental replication and snapshots put businesses at risk of data loss, corruption, and availability. What companies require now is continuous journal-based recovery that provides granular recovery to within seconds of data, with the ability to rewind from seconds to years as needed. When many granular recovery points minimize data loss to seconds, the impact of outages and disruptions is dramatically reduced.

"Because true CDP copies all delta changes, a system can be restored to any point in time … especially useful if you need to roll back to a point before a corruption event took place, for example. …True CDP offers a recovery point objective (RPO) of zero, while the equivalent for near-CDP/snapshots is the last time a copy took place."

—Computer Weekly

BACKUP

12:30 Snapshot

17:26 Outage

Backup = 4+ Hours

CONTINUOUS DATA PROTECTION (CDP)

12:30 Snapshot

17:26 Outage

17:25 Checkpoint

Benefits of Protecting Your Business with Zerto Continuous Data Protection

Feature	Description	CDP	Snapshots
Real-time block-level replication	CDP utilizes change-block tracking to constantly replicate data as it is written to storage. Because CDP is always on, it offers considerably lower RPOs than snapshot-based solutions.	✔	✘
No performance impact	With CDP, the journal is only used until you commit to the point in time selected, avoiding the performance impact of snapshots.	✔	✘
Journal-based recovery to any point in time	Journal-based recovery keeps a constant log of all the changes users make to applications and data. Because the changes are continuously written to the datastore, CDP delivers recoverability to any point in time within a specified timeframe.	✔	✘
Enterprise scalability	The journal can be placed on any datastore with maximum size limits and warnings— preventing the datastore from filling, which would otherwise break replication.	✔	✘
Storage savings	CDP uses no extra space in the source storage, as no snapshots are created. Only 7–10% of the target storage is used, which frees up significant amounts of space and results in dramatic savings.	✔	✘
Ransomware recovery down to the second	CDP delivers a continuous stream of recovery checkpoints. In the event of ransomware or other malicious attacks, data can be recovered to just seconds before the corruption took place, minimizing impact to the business and the brand.	✔	✘
Real-time encryption detection	The detection and alerting capabilities warn users of encryption-based anomalies to pinpoint and mitigate the earliest stages of a ransomware attack.	✔	✘

With journal-based recovery to any point in time, Zerto CDP significantly outperforms snapshots, making it the replication solution of choice for any always-on business. To learn more about Zerto, you can discover the basics or watch Zerto in action with our free hands-on labs or a free trial.

About Zerto

Zerto, a Hewlett Packard Enterprise company, empowers customers to run an always-on business by simplifying the protection, recovery, and mobility of on-premises and cloud applications. Zerto eliminates the risk and complexity of modernization and cloud adoption across private, public, and hybrid deployments. The simple, software-only solution uses continuous data protection at scale to solve for ransomware resilience, disaster recovery, and multi-cloud mobility. Zerto is trusted by over 9,500 customers globally and is powering offerings for Amazon, Google, IBM, Microsoft, and Oracle and more than 350 managed service providers. **www.zerto.com**