

Continuous Data Protection (CDP)

Delivering an always-on customer experience

What is CDP?

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 locally or at a 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.

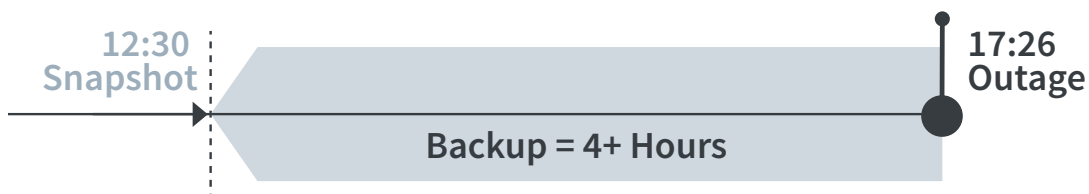
“Because true CDP copies all delta changes, a system can be restored to any point in time ... especially useful if you need to roll back to a point before a corruption event took place, for example. ...true CDP offers a recovery point objective (RPO) of zero, while the equivalent for near-CDP/snapshots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

—Computer Weekly

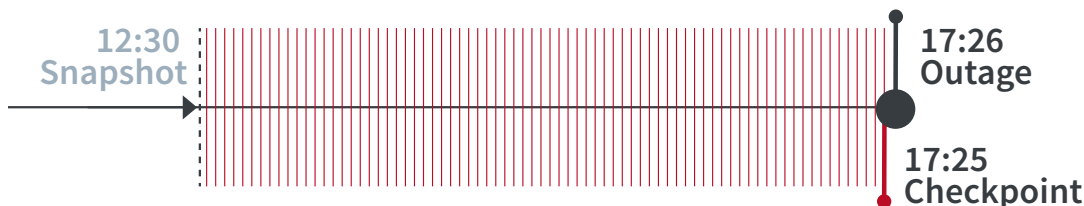
Comparing Continuous Data Protection to Snapshot-based Technologies

Continuous data protection offers the most effective data protection for your business applications and data. CDP also utilizes journal-based technology to keep a log of all the changes occurring in a specified time frame, offering any point-in-time recovery in increments of seconds for the entire length of the journal. Conversely, incremental replication and snapshots put the business 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 that can go back seconds or multiple years as needed. The option to recover to many more granular points in time minimizes data loss to seconds, dramatically reducing the impact of outages and disruptions to the business.

BACKUP



CONTINUOUS DATA PROTECTION (CDP)



Feature	CDP	Snapshots
Real-time block-level replication with RPOs in seconds	✓	✗
No performance impact replication and disaster recovery testing	✓	✗
Journal-based any point-in-time recovery	✓	✗
Enterprise-class scalability	✓	✗
Low-impact storage utilization	✓	✗
Ransomware recovery down to the second	✓	✗

Benefits of Protecting Your Business with Continuous Data Protection

- **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, without the performance impact of many snapshots. Storing multiple snapshots on replica VMs incurs a significant performance penalty when attempting to power on replica VMs.
- **Journal-Based Any Point-In-Time Recovery.** 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 any point-in-time recoverability to within a specified time frame.
- **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. Using snapshots on replicated VMs gives no way of controlling the total space used for snapshots, making them not scalable in terms of SLAs and efficiency.
- **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. Snapshot technologies require significant overhead on the storage arrays, often requiring 20-30% at both the source and target.
- **Ransomware Recovery Down to the Second.** CDP delivers a continuous stream of recovery checkpoints available to use for recovery. 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.

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's cloud data management and protection solution eliminates the risks 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 converge disaster recovery, backup, and data mobility. Zerto is trusted by over 9,500 customers globally and is powering offerings for Microsoft Azure, IBM Cloud, AWS, Google Cloud, Oracle Cloud, and more than 350 managed service providers. www.zerto.com