Zerto
a Hewlett Packard Enterprise company

# Continuous Data Protection

## Competitive Landscape Overview

## What Is Continuous Data Protection (CDP)?

CDP is a protection mechanism that allows organizations to continuously capture and track block-level changes. CDP can enable users to restore data and applications to any point in time with ultra-high levels of granularity.

CDP with Zerto, a Hewlett Packard Enterprise company, leverages three core technologies:

1. **Near-Synchronous Replication:** Zerto uses block-level and near-synchronous replication, allowing us to deliver the best of both synchronous and asynchronous approaches.
2. **Journal-Based Recovery:** Zerto's dynamic, efficient journal tracks every change made in your application or on your virtualized or containerized server, logs these as recovery checkpoints every 5 or 10 seconds, and can store the changed data for 1 hour up to 30 days.
3. **Application-Centric Protection:** Zerto delivers application-centric protection through a feature called virtual protection groups (VPGs). VPGs allow you to protect and recover applications or multi-VM app stacks by adding all VMs that make up an application to a single group. VPGs maintain write-order fidelity and consistent recovery points even if servers are on different hosts or data stores. This means when you recover a VPG to a specific point in time, all the corresponding VMs will be automatically recovered to the exact same point in time.

## Zerto I/O Filtering Technology

Zerto's CDP technology is made possible with our patented, proprietary I/O filter that has been battle-tested at scale—thousands of VMs with single-digit RPOs—for well over a decade. This driver is injected into the data path to capture and track blocks at the kernel level. Because Zerto has created its own technology, we are able to support and deliver services with various types of hypervisors, virtualized environments, and containerized environments, such as Kubernetes. Wide platform support combined with hyper-low RPOs and RTOs means enterprises can radically reduce data loss and downtime no matter what kind of disruption, outage, or disaster they're faced with.

## Why Are There So Many New CDP Products?

VMware introduced vSphere APIs for I/O Filtering (VAIO) in vSphere 6 Update 1. VAIO I/O filters enable any vendor to use their API to intercept and manipulate the I/O in order to build their own version of "CDP" limited to VMware environments specifically.

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# CDP Feature Comparison

| Comparison Matrix | | | | | |
|---|---|---|---|---|---|
| | **Zerto** | **Veritas** | **Rubrik** | **Veeam** | **RecoverPoint** |
| Proprietary, Patented IO Filter | ● | No | No | No | ● |
| Dependent on VAIO | No | ● | ● | ● | ● |
| Scale-Out Architecture | ● | No. Requires Careful Sizing | ● Limited. Requires Hardware & Sizing | ● Limited. Requires Proxy Servers | No. Requires Careful Sizing |
| RPOs of Seconds | ● 5-10 Secs | No | ● Limited to VMware | ● 15+ Secs. Limited to VMware | ● 5-10 Secs |
| Journal History | ● Up to 30 days | ● Based on Sizing | ● Up to 24 Hrs | ● Up to 24 Hrs | ● Based on Sizing |
| One-to-Many Replication | ● | No | ● | No | ● |
| Multi-Hypervisor Support | ● | No | No | No | ● |
| CDP To/From Cloud | ● | No | No | No | No. Snapshot Only |
| Multi-VM Consistency | ● | No. Per-VM Only | No. Per-VM Only | No. Per-VM Only | ● |
| CDP for Kubernetes | ● | No | No | No | No |

**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**



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