



Protect, recover, and secure your data with HPE GreenLake for Data Protection

Suite of cloud services available from HPE GreenLake to protect your data for every SLA

Why do you need to rethink your data protection strategy?

Modernizing data protection is essential for every business:

51%

of IT decision-makers view enhancing data security and protection as the #1 priority.¹

91%

of industrial organizations are vulnerable to cyberattacks.²

50%

of organizations have suffered an unrecoverable data loss.³

Data is at the heart of every organization and must be kept protected, recoverable, and secure. Data is being generated faster than ever from the edge to cloud. As a result, organizations must modernize data protection to rapidly counter security threats such as ransomware. Organizations also must safeguard against natural disasters and hardware failures while meeting the challenges of shrinking recovery-point objectives (RPOs) and recovery-time objectives (RTOs), as well as simplifying operations and effectively aligning resources with actual use.

The basic approach to data protection has remained the same over the years: during off-peak hours, copy the data that changed in your production environments, and store that copy in another, secondary location. But this approach poses many challenges:

- **Performance impact:** The data is read directly from production systems and sent across the network. At best, the virtual machines (VMs) are sluggish—at worst, they are temporarily unusable.
- **Complexity and cost:** Managing and sizing the backup infrastructure requires dedicated specialists within the IT team. The data protection components, complexities, and hidden costs translate into a high total cost of ownership (TCO).
- **Granularity:** Backups cannot be made multiple times a day—thus the prevalence of the daily backup. However, this means when data needs to be recovered, the last available copy could be 24+ hours old and any changes since then are entirely lost.
- **Inconsistent recovery:** Applications are typically spread across different VMs with different roles and have dependencies on other applications. The inconsistency in recovering individual VMs makes application recovery troublesome, complex, and time-consuming. It is also the reason backup RTOs—how long it takes to get back up and running—are so lengthy.

These shortcomings lead to challenges that organizations face in protecting, recovering, and securing their data, including:

- Inability to quickly counter cyberattacks like ransomware and to rapidly recover from natural disasters, hardware failures, and human errors
- Complex management, operation, and maintenance of backup software and hardware on-premises or in hybrid cloud environments
- Increased cost, capacity over-provisioning, and underutilization of resources as a result of ineffective planning for data growth, or—in a worst case—under-provisioning resulting in increased risk
- Inability of fragmented point solutions to balance meeting near zero RPOs and RTOs and complying with regulatory requirements
- Exploding data growth, demanding recovery SLA requirements, and an evolving threat and compliance landscape—all continuing to put pressure on costs and intensifying risk.

Hewlett Packard Enterprise responds to these challenges with [HPE GreenLake for Data Protection](#), a suite of cloud services designed to protect your data for every SLA. It eliminates risk of data loss, mitigates threats from ransomware, and delivers rapid data recovery.

Journal-based recovery with continuous data protection technology helps organizations to instantly recover from ransomware attacks by bringing data back to its original state just seconds before the attack. It delivers industry-leading restore time without impacting business operations for all recovery scenarios including natural disasters, hardware failures, human errors, and outages. Policy-based orchestration and automation removes the complexity of protecting data and applications at scale, enabling IT resources to focus on business priorities.

HPE GreenLake for Data Protection eliminates lock-in by providing broad and deep integration across a large ecosystem of market-leading ISV partners. It enables customers to protect their application workloads effortlessly, secure their data against ransomware and other cyberattacks, and recover from any disruption.

¹ ESG Market Research of IT Decision-Makers, April 2021

² Information security risks report, September 2021

³ Data Protection for hybrid cloud, Containers, and Virtual Machines, IDC Infobyte





HPE GreenLake for Data Protection consists of two offerings:

- Zerto, a Hewlett Packard Enterprise company—Market-leading journal-based Continuous Data Protection (CDP) technology for disaster recovery, backup, and application and data mobility across hybrid and multicloud environments
- HPE GreenLake for Backup and Recovery—Backup as a service built for protecting on-premises VMs, and cloud-native workloads like Amazon EBS volumes and EC2 instances⁴ with flexibility of instant recovery via snapshots, rapid recovery or leverage the cloud for cost-effective long-term retention

HPE GreenLake for Backup and Recovery

As a result of unrelenting data growth, stringent recovery and restore service-level agreements (SLAs), and increasingly virtualized environments, protecting and recovering VMware® VMs and Amazon EBS volumes and EC2 instances⁴ becomes even more challenging. Traditional agent-based and proxy server-based processes provide reliable backup, recovery, and retention, but they can also impact application performance and add cost and complexity. Table 1 highlights the major differences between HPE GreenLake for Backup and Recovery and traditional data protection solutions.

Table 1. Differences between HPE GreenLake for Backup and Recovery and traditional data protection solutions

	HPE GreenLake for Backup and Recovery	Traditional data protection solutions
Delivery of new features	Microservice architecture enabling regular updates to deliver new features faster	Monolithic architecture requiring scheduled annual major releases with slow availability of new features
Updates	Automatic service updates without need for planning	Required planning, testing, and downtime for software updates
Interoperability	Integrated Local Protection Stores and Cloud Protection Store managed as part of service	User-managed interoperability between backup software and backup storage hardware
Backup infrastructure	All managed and operated by the service	Provisioned media servers and backup servers as well as catalog protection
Protection of new workloads	Instant protection of workloads on-premises or in the cloud	Need for dedicated on-premises infrastructure and resources before new workloads can be protected

HPE GreenLake for Backup and Recovery is backup as a service designed for protecting on-premises VMware VMs and Amazon EBS volumes and EC2 instances.⁴ Delivered through HPE GreenLake cloud data services providing a comprehensive data management service consolidating all the data silos to deploy compute resources, provision storage, and protect workloads with a single unified access and cloud operation experience. This service is designed to protect on-premises and cloud native workloads in a simple and efficient manner, with global protection policy for consistent protection on-prem or in the cloud via a single SaaS console. It brings policy-based automation to protect your VMware VMs, Amazon EBS volumes and EC2 instances⁴ in a few simple steps, within minutes eliminating the complexities of managing your backup and recovery operations on-premises or in the cloud. There are no additional cloud gateways, agents, backup software, proxies, media servers, or backup targets to manage, and cloud storage is fully managed and scaled automatically by the service. Threats like ransomware and malware are neutralized with built-in encryption, data immutability, dual authorization, and flexibility to store backup copies in an air-gap manner making them inaccessible to cybercriminals. Organizations lower the cost of protecting data on-prem or in the cloud with consumption-based pricing and ultra-efficient data reduction technologies.

⁴ Enhancement to HPE GreenLake for Backup and Recovery to protect cloud native workloads will be available from December 2022





Evaluate HPE GreenLake for Backup and Recovery for free

You can try HPE GreenLake for Backup and Recovery for VMware with [90-day free trial and experience the benefits for yourself](#). All features of the service with HPE support are available during the trial period and after evaluation, you can easily purchase the subscription.

This service provides:

- **Simple and efficient to meet stringent SLAs with:**

- Policy based orchestration and automation to easily protect your VMware VMs and cloud native workloads like Amazon EBS volumes and EC2 instances⁵ in few simple steps with minutes
- Unified management to eliminate data silos and easily consolidate backup and recovery operations through a single cloud console
- No additional media server, appliances, or backup targets to manage
- Delivers superior storage space efficiency reducing backup storage consumption, network utilization with efficient source side deduplication and compression technologies
- Pay-as-you-consume model or fixed commitment for 1 to 5 years with predictable consumption-based billing based on only two metrics: the number of protected virtual machines (per month) or number of AWS resources (per month) protected and the capacity of the Cloud Protection Store utilized per month

- **Comprehensive and consistent data protection:**

- One service to protect data on-prem or in the cloud—with a global protection policy
- Delivered through HPE GreenLake edge-to-cloud platform delivering a comprehensive data management approach across compute, storage, networking, and data protection breaking down all data silos with agility and cloud operational experience
- Single interface for protecting on-premises VMware VMs, or cloud native workloads⁵ driven by automatic or custom protection groups with flexible protection policies that define backup schedule and data retention

- **Secure by design with:**

- Safeguard your data with encrypted backups that makes backups inaccessible to cyberattacks including ransomware
- Backup data immutability to protect your backup data from being deleted or modified by cybercriminals
- Dual authorization to ensure that a user will not be able to unilaterally delete any recovery points without the second approver
- HPE GreenLake for Backup and Recovery enables to store backups outside of the customer's production environment creating an air gap that are immutable and cannot be deleted. This ensures hackers or bad actors cannot compromise the backup copies
- It is built on secure HPE GreenLake platform that provides multi-level security for access, authentication, authorization, and communications

⁵ Enhancement to HPE GreenLake for Backup and Recovery to protect cloud-native workloads will be available from December 2022



Zerto, a Hewlett Packard Enterprise company

The importance of keeping your systems up 24 hours per day, 7 days per week has never been higher, but availability means much more than just having systems “up.” Users expect the same experience every time, which requires IT systems to deliver high performance and stability regardless of the time of day. At the same time, the threat of ransomware is increasing quickly, and the impact of an attack is enormous. It is not a question of if, but when you will face this challenge. Choosing between paying the ransom or suffering loss of data is both costly and risky. Using traditional backup methods for recovery can result in more than 24 hours of data loss, and it could take days before all applications and systems are up and running again. This is unacceptable. More granularity in recovery is required while maintaining the same level of performance.

Zerto enables organizations to defend their business from the consequences of ransomware. And with fully orchestrated failover and failback, organizations can recover infected applications and data from just seconds ago. With just a few clicks, Zerto’s journal-based recovery is flexible enough to recover only what is needed—files, VMs, or an entire application stack from a point in time.

Zerto offers the following benefits:

- **Protection from ransomware attacks with:**

- CDP, which enables recovery in minutes from ransomware attacks bringing data back to its original state just seconds before the attack or disruption, minimizing the impact to the business
- Granular restores from any cyberattacks along with security features like encrypted backups, scanning, and threat detection

- **Disaster recovery as a service with:**

- Instant data recovery, delivering industry-leading RPOs of seconds and RTOs of minutes for all data and applications with always-on CDP and journal-based recovery
- Multitenancy software to simplify as-a-service delivery across a network of managed service providers (MSPs)

- **Seamless application and data mobility with:**

- Continuous data replication that delivers industry-leading RPOs of seconds by replicating every change that is generated in real-time while having no performance impact on the production environment
- Orchestration and automation that allows migration of workloads across any platform within minutes
- Flexible migration to any cloud such as Azure, AWS, VMware, Hyper-V, or one of the other 400+ cloud platforms

- **HPE GreenLake for Disaster Recovery (Preview only):**

- Orchestrated disaster recovery directly through the globally available HPE GreenLake platform.
- Getting started is as easy as logging into the HPE GreenLake platform, launching the Disaster Recovery service and pairing with the on-premises data center.
- Perform failover testing, live failover/failback with a few clicks.
- Monitor protection status to ensure that SLAs are met, displaying reports on actual RPOs in the cloud platform.
- If interested in HPE GreenLake for Disaster Recovery, sign up for the preview service by visiting the following link [Sign up to preview the service](#).





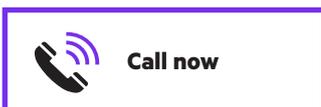
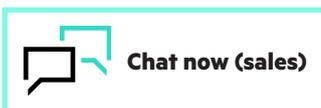
HPE GreenLake and Data Services Cloud Console

With HPE GreenLake, you can deploy a data protection service to meet backup and recovery objectives—from data centers to the edge and into clouds—with end-to-end resilience and risk reduction while putting backup data to work in multiple clouds to derive new business insights. By leveraging the economics of cloud protection in your data center with the HPE GreenLake consumption model, you will have no up-front capital costs and will only pay for the capacity actually consumed beyond your reserved amount. Plus, you can scale on demand from a buffer of capacity provided by HPE GreenLake and still only pay for what is actually used. Make the right purchase decision. Contact our presales specialists.

Data Services Cloud Console is a SaaS-based console that delivers a suite of cloud services designed not only to enable cloud operational agility for data infrastructure everywhere, but also to unify data operations across the data lifecycle. It is a powerful combination of capabilities, and they are made possible by a unique cloud-native architecture that automates and orchestrates integrated infrastructure and data workflows—which transforms complex data operations into a streamlined data management experience across clouds. By bringing the cloud operational model to on-premises environments, Data Services Cloud Console breaks down the silos, fragmentation, and inefficiency that plagues data and infrastructure management today and replaces them with unified data operations as a service.

To get started, evaluate a [HPE GreenLake for Backup and Recovery](#) or [protect 10 VMs for free with Zerto](#).

Make the right purchase decision.
Contact our presales specialists.



Learn more at

hpe.com/storage/backup-and-recovery-service

hpe.com/storage/dataprotection

Visit [HPE GreenLake](#)



Get updates