

White Paper

Commvault and HPE Unite to Defeat Downtime

Delivering Business Value Through HPE Solutions Integration with Commvault Complete Backup and Recovery

By Christophe Bertrand, ESG Senior Analyst

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Data Protection Is a Business Mandate

As many organizations modernize their data centers and undertake their digital transformation initiatives, they increasingly rely on data as one of the most critical and sometimes challenging business and IT assets to manage because of its seemingly unstoppable growth. Like any other asset, data needs to be managed and adequately protected to keep delivering on business processes and outcomes, to comply with regulations, and more generally, and in some cases literally, to “keep the lights on.” This places a significant burden on IT leaders tasked with the data storage and backup/recovery infrastructure.

Highly publicized data-destroying malware attacks have only exacerbated the stringent requirements placed on organizations to deliver on their recovery service levels. Malware is just one of the many factors that can impact uptime and data availability. It is therefore critical for IT leaders to plan ahead and mitigate business risk by deploying a robust and resilient storage and data protection infrastructure.

Service Levels Drive Data Protection Investments

Service levels for data protection (backup/recovery) are typically expressed in terms of recovery point objectives (RPOs, i.e., how much data you can lose) and recovery time objectives (RTOs, i.e., how much time until you are back online/in production). These service levels are directly correlated to the ability to conduct and/or resume business operations. ESG research confirms that organizations have little tolerance for any downtime.

Among the organizations surveyed by ESG, a combined 71% reported that they can tolerate no more than one hour of downtime for their business-critical applications.¹ It is important to note that 14% of respondents reported that their organizations can’t tolerate any downtime at all for high-priority applications. And even “normal” applications are experiencing higher availability demands, with 38% of respondents reporting that they can tolerate only less than one hour of unavailability for these applications.

Time is money, and the more downtime an organization experiences, the more direct and indirect revenue exposure they are subject to. ESG has identified a wide range of consequences that organizations experience as a result of downtime. The five most-reported impacts of downtime or lost data are loss of customer confidence, direct revenue loss, missed business opportunity, loss of employee confidence, and damage to brand integrity.²

Current Data Protection Mandates

Recent ESG research confirms the critical role service level agreements (SLAs) play in the data protection space. Forty-eight percent of organizations indicated that improving SLAs/RPOs/RTOs for data and applications represents one of the top data protection mandates from their IT leadership to the data protection teams, making it the most selected response (see Figure 1).³ This has a significant impact on organizations’ choice of infrastructure and the solutions that must be deployed to support them.

In the context of the stringent expectations mentioned earlier and current cloud adoption trends, organizations must carefully evaluate and adopt technology and vendors that provide advanced capabilities to support the protection and recoverability of their data assets.

¹ Source: ESG Master Survey Results, [Real-world SLAs and Availability Requirements](#), May 2018.

² *ibid.*

³ Source: ESG Master Survey Results, [2018 Data Protection Landscape Survey](#), October 2018.

Figure 1. Data Protection Mandates from IT Leadership

Source: Enterprise Strategy Group

Cloud-based Data Protection Becoming the New Norm

Organizations need cloud technology and services to implement a successful availability strategy, complementing “the first line of defense” provided by on-premises deployments. Hybrid data protection and resilient infrastructures are quickly becoming the norm across enterprises. ESG research shows that 45% of organizations identify that backup or replication to a cloud service will be part of their IT availability strategy moving forward and 19% indicate the same for disaster recovery-as-a-service (DRaaS).⁴ These are significant trends that highlight the fact that IT leaders are and will be investing in these cloud options to deliver on data protection SLAs.

The HPE-Commvault Partnership

Partnership Overview

Both Commvault and HPE are well-known leaders in the IT industry and have in combination hundreds of thousands of customers and partners around the world.

- Commvault is one of the leading providers of backup, recovery, cloud, and information management solutions, with a very complete solution set for enterprise customers.
- Hewlett Packard Enterprise is a global technology leader focused on developing intelligent solutions that allow customers to capture, analyze, and act upon data seamlessly from edge to cloud.

Both organizations have the common goal of enabling customers to optimize business outcomes by leveraging their technologies, on premises or in the cloud.

⁴ Source: ESG Master Survey Results, [Real-world SLAs and Availability Requirements](#), May 2018.

The companies have enjoyed a long-standing partnership based on technology integration between server, storage, and software components. This relationship has recently evolved to cover multiple facets:

1. HPE Complete

In early 2018, Commvault joined **Hewlett Packard Enterprise (HPE) Complete**, a worldwide reseller program that allows HPE to resell Commvault software on its global price list. Customers benefit from the convenience of one-stop shopping for tested and validated HPE and Commvault end-to-end solutions across HPE's storage portfolio, which reduces deployment risk. The program includes Commvault Complete Backup and Recovery software integration with HPE StoreOnce Systems, Commvault IntelliSnap technology integration with HPE storage arrays, and Commvault HyperScale Software validated reference designs for HPE ProLiant and Apollo systems.

Figure 2 depicts the technical integrations/solutions offered by HPE and Commvault as part of the HPE Complete Program. To highlight some of these in more detail:

- Commvault validation and integration with HPE servers and storage, including HPE Apollo, ProLiant, 3PAR StoreServ, Nimble Storage, and StoreOnce.
- Commvault IntelliSnap snapshot management integration with HPE 3PAR, Nimble, and XP7. This capability marries the Commvault software with the snapshot technology embedded in HPE's primary storage platforms for faster and more frequent backups. Commvault software technology combines complete data protection lifecycle management features with primary and secondary tiers of HPE storage. This provides consistent point-in-time recovery copies for enterprise applications while incorporating hardware snapshots into the complete data protection process without requiring complex scripting or the use of multiple disparate tools.
- Commvault HyperScale Technology software-defined scale-out validated reference designs on HPE Apollo and ProLiant servers. Commvault HyperScale Technology is a cloud-ready scale-out infrastructure, providing customers deployment flexibility, on-premises simplicity, elasticity, resiliency, and scale for managing secondary data. Together, Commvault and HPE are delivering a pre-validated data protection solution for both primary and secondary storage requirements.
- Commvault integration with HPE StoreOnce Catalyst, which is highlighted in more detail below. This integration is the fruit of a significant joint engineering effort between the two companies that allows Commvault to manage the lifecycle of customers' data in an HPE infrastructure with a single solution, whether that data lives on-premises or in the cloud.

2. HPE GreenLake Backup (see Disaster Recovery Highlight section, p.8)

HPE GreenLake Backup is a solution that covers the whole lifecycle of a backup environment. HPE GreenLake Backup is an on-premises solution that provides a public cloud experience with a service for consumption-based backup. With HPE GreenLake Backup powered by Commvault, everything that is needed for enterprise backup and recovery (i.e. hardware, software and services) — is combined in a single solution.

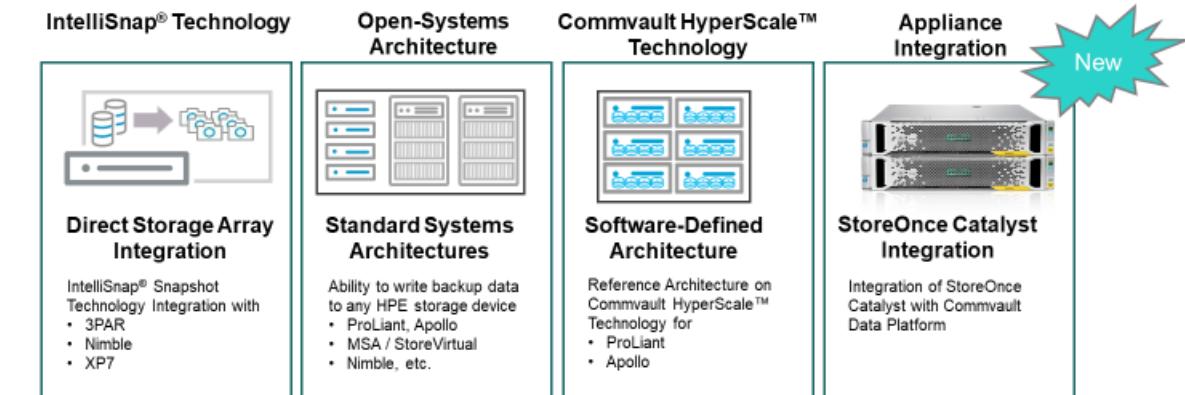
3. HPE ProLiant for Microsoft Azure Stack Using Commvault Software

This provides comprehensive data protection and management for Microsoft Azure Stack, including virtual machine (VM) protection using "LiveSync" for disaster recovery, backup and recovery of Azure Stack blob store, and migration of VMs from external hypervisors to Azure Stack.

Figure 2. Commvault-HPE Integration

HPE and Commvault complement each other

Industry leading backup, recovery, and data management solution optimized for HPE hardware



Source: HPE and Commvault

Highlight: Commvault-StoreOnce Integration

Overview

HPE StoreOnce is a highly scalable disk-based deduplication solution that reduces the amount of storage needed for backups and delivers high-performance backup and recovery. This integration combines storage snapshots, Commvault software, and the StoreOnce System. It includes native integration with StoreOnce Catalyst, including support for Catalyst Copy, Catalyst Clone, and Cloud Bank Storage functionality, ensuring the technologies work together so that they can be managed from a single console.

In a nutshell, the solution will first leverage application snapshots created on primary storage, which are then backed up to HPE StoreOnce for further protection by Commvault. The backups are incremental, so only changed data is actually transferred, which saves significant amounts of bandwidth and increases backup speed. Using the familiar Commvault console, it is possible to move deduplicated data across multiple HPE StoreOnce Systems. HPE StoreOnce supports network-attached storage and virtual tape library modes for Commvault software to store backup copies. Users can also seamlessly move backup data to the public, private, or hybrid cloud for long-term retention and disaster recovery using the HPE Cloud Bank Storage feature.

Customer Benefits

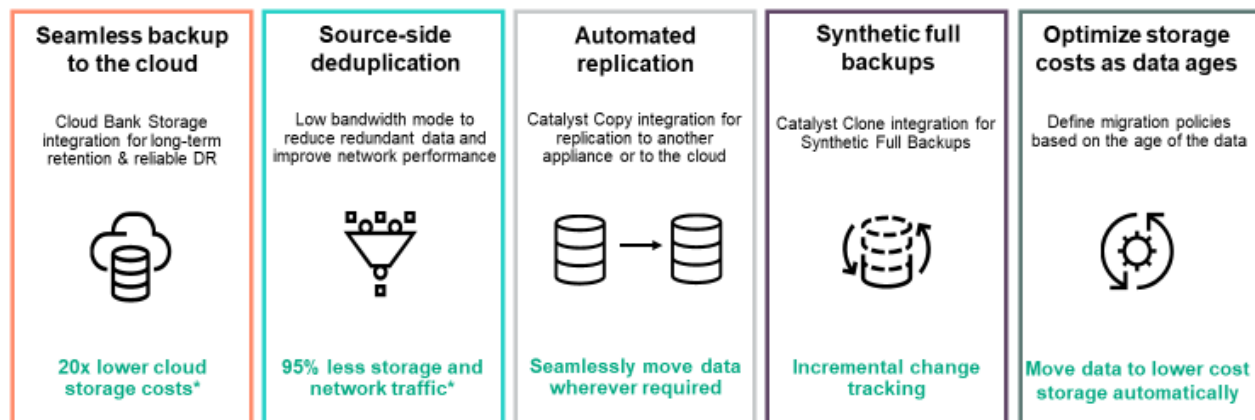
The Commvault and HPE StoreOnce Catalyst integration delivers enterprise-class data protection capabilities and stringent SLAs.

- **Reliable backups** are essential to any data protection effort, as highlighted in ESG research. Commvault offers complete coverage of HPE infrastructure environments across all tiers of storage—from primary to the cloud—to support use cases such as accelerating dev/test, migrating workloads across tiers, and enabling hybrid IT. This coverage also includes support for artificial intelligence and indexing to simplify data management.

- **Faster backup and recovery** can be achieved with the Commvault and HPE StoreOnce Catalyst integration compared to traditional disk-based backup targets, since the deduplication processing is distributed between Commvault media servers and the HPE StoreOnce System. Faster RTOs are critical in the enterprise.
- **Automated disaster recovery:** HPE StoreOnce Catalyst and Commvault software can replicate backups to another HPE StoreOnce System at a secondary/disaster recovery location or to the cloud using Catalyst Copy (which is also a cost benefit). After backups are replicated, Commvault software allows users to restore data from either a local or remote site.
- **Operational efficiency:** The solution is very efficient from a storage consumption perspective, yielding benefits such as 20x lower cloud storage requirements by leveraging Cloud Bank Storage, which enables the seamless, secure, and cost-effective movement of backup data to public/private/hybrid cloud or on-premises object storage environments. In addition, end-users can get faster and more efficient backup and disaster recovery with support for StoreOnce source-side deduplication and low bandwidth replication, enabling 95% less storage and network traffic (see Figure 3).

Figure 3. HPE StoreOnce-Commvault Integration

HPE StoreOnce - Commvault Integration



* <https://community.hpe.com/t5/Around-the-Storage-Block/Cloud-backup-made-simple-with-HPE-Cloud-Bank-Storage/ba-p/5089075&W-2q40KHnR>

Disaster Recovery Highlight: HPE GreenLake Backup

HPE GreenLake Backup combines the user experience and benefits of public cloud with the security and performance benefits of an on-premises backup environment. It is designed as an end-to-end backup solution, including hardware, software, and services. That's where the partnership and integration with Commvault come in. Through its support of HPE GreenLake Backup, Commvault is simplifying the backup experience for customers to meet evolving *data protection and compliance challenges*, tightening resource requirements and ever-expanding data growth.

HPE GreenLake Backup Customer Benefits

- End-to-end backup solution/simplified management.
- Instant on-demand capacity/automatic capacity provisioning.
- Consumption model/metering.
- Improved time to market.
- On-premises backup with cloud agility and economics.

It should also be noted that HPE GreenLake leverages HPE GreenLake Flex Capacity, a service from HPE Pointnext that lets end-users consume their choice of infrastructure. The solution aims at providing the best of both worlds by combining the benefits of on-premises and on-demand without the disadvantages.

The Bigger Truth

There are many alliances and partnerships in the IT world. It is a big ecosystem in which, when the rubber meets the road, marketing sometimes outweighs true technical integration. It takes much more than a data sheet or marketing buzz to deliver a true solution to the market. In the end, end-users expect to derive benefits from combined solutions, and not just a list of SKUs. That's why the deep HPE and Commvault partnership stands out in the sea of IT alliances.

By placing data protection SLAs at the heart of their solutions design, they have understood how to leverage each other's strengths and complement their portfolios with capabilities customers need: reliable backup and recovery that combines storage and software, easy-to-use and feature-rich solutions...and a focus on RPOs and RTOs. The big winner in our view is the customer. "Keeping the lights on" is probably the strongest mandate IT can deliver on, placing the protection of data at the heart of their effort. This enhanced partnership will benefit current and future customers who are looking to achieve higher operational efficiency, shrink their RTOs and RPOs, and improve their overall recovery readiness.

The combination of the two portfolios provides end-users a path to extending their data centers and disaster recovery capabilities into the cloud in a way that enhances automation of processes through hardware and software integration without the complexity and risk of "DIY" architectures.

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www.esg-global.com



contact@esg-global.com



P. 508.482.0188