



**Hewlett Packard
Enterprise**



VEEAM

Brochure



Better data availability for the Always-On Enterprise

HPE StoreOnce Systems with Veeam

Take a fresh approach

The consumerization of IT—and business competition—have forced the need for Always-On computing and instant access to applications. Data centers are increasingly adopting technologies such as flash memory to improve application performance, reduce latency, and so on. Backup windows are shrinking and recovery point objective (RPO)/recovery time objective (RTO) parameters are shifting toward application recovery criteria. Data protection must evolve. As a result, we see large portions of IT budgets getting directed toward improving overall application availability, which requires modernizing data protection.

In the Always-On Enterprise, more and more workloads are mission-critical and are being deployed on virtualized infrastructure, leading to virtual machine (VM) sprawl. Unfortunately, this has created a staggering increase in the amount of backup storage space required, which ultimately results in storage inefficiencies. Virtual machine sprawl and increased data storage size requirements have also caused legacy backup tools to become impractical due to shrinking backup windows, cost, manageability, and poor performance.

Data backup and availability are critical business requirements that have to be planned and deployed correctly. HPE StoreOnce, combined with HPE StoreOnce Catalyst and Veeam, addresses the challenges facing backup administrators who need to consolidate and improve storage efficiencies while addressing these common problems.

- **Backup sprawl**—As you add VMs, hosts, and storage to keep pace with demands, you may need to add more backup infrastructure in order to maintain your backup window. This increases the overhead needed to run multiple backup processes and manage additional devices.
- **Backup overspill**—If your overnight backup solution can't complete the backup in time, it may spill over into the working day. This means slower system performance for your users, or application inaccessibility. You may have to terminate the process in mid-backup—resulting in incomplete protection.
- **Unreliable backup and recovery**—Managing virtual machines, snapshots, backup agents, and planning appropriate backup schedules, is a complex task. Add to that the potential for unforeseen circumstances leading to backup failures, and you may find your backup—and more importantly, the recovery—isn't as reliable as it needs to be, increasing your exposure to data loss and downtime.

IT departments need a data protection solution to address evolving needs

IT departments need a solution that can:

- **Deliver industry-leading performance to meet growing data volumes and shrinking backup windows**—Reduce impact on VM workloads without the need for backup agents, and store multiple simultaneous backup streams—or full synthetic backups—to a single device at breakneck speeds with HPE StoreOnce Catalyst. This shortens backup windows and accelerates recovery, so you can regain access to data when you need it the most.
- **Keep pace with data and VM growth to enable future-proofing with easy scale-out**—With HPE's StoreOnce pay-as-you-grow architecture, you can start small and scale up to 2240 TB (raw) or 1728 TB (usable) capacity, without any disruption to service. Simply add expansion shelves or couplets. Plus, Veeam's simple per-socket licensing structure scales easily to protect all your VMs as your environment grows.
- **Lower ongoing backup costs**—The HPE StoreOnce federated deduplication solution provides highly-efficient backup storage that reduces the size of data stored on disk. Instead of storing duplicate data, deduplication lets you store only unique data blocks, and places pointers to them when other instances of the same data blocks are needed—without having to store them more than once. With HPE StoreOnce, you can achieve up to a 95% reduction in your backup footprint, reducing your cost per gigabyte of storage while also increasing the number of recovery points.
- **Deliver reliability**—With the combination of HPE StoreOnce and Veeam, you can be confident your data was backed up reliably and that applications are available. HPE solutions are uniquely designed to offer high availability with full redundancy and autonomic restart to reduce single point hardware failures.¹
- **Provide restore flexibility**—Veeam image-level backup allows for fast, efficient, and flexible VM recovery. It also includes granular file or item-level recovery for applications including Microsoft® Active Directory, SQL Server, Exchange, SharePoint, and Oracle, without use of any agents.

¹ Dependent upon the HPE StoreOnce System selected.

Leverage HPE primary storage with Veeam Backup and Replication and HPE StoreOnce. Add 6-nines reliability with Veeam Instant VM recovery (IVMR) from storage snapshots and achieve higher application availability. With Veeam's integration of Veeam Explorer for storage snapshots and Veeam Backup from storage snapshots with HPE storage, customers are able to implement comprehensive data protection with enterprise capabilities and maximize their investment.

HPE StoreOnce Catalyst for the Veeam backup repository enables fast restore of Veeam IVMR and the other vPower NFS features combining benefits such as space saving and backup efficiency of an in-line deduplication appliance.

Veeam Explorer for Storage Snapshots provides advanced recovery capabilities of VMs and Guest OS, as well as item recovery for Exchange, SharePoint, SQL Server, Active Directory, and Oracle. Application owners can easily recover items and provide maintenance/software upgrades anytime, without disrupting service.

Veeam Explorer integrates with HPE RMC for VMware® (RMC-V). By extending the functionality of Veeam Backup & Replication, application items can be viewed and recovered from within the application VM backup or replica. Combining the speed and affordability of RMC with the granularity of Veeam Explorer, Active Directory, SQL Server, SharePoint, Exchange, and Oracle items can be recovered directly from RMC-V Express Protect backups in addition to the file, VMDK and Datastore level recovery already provided by RMC-V.

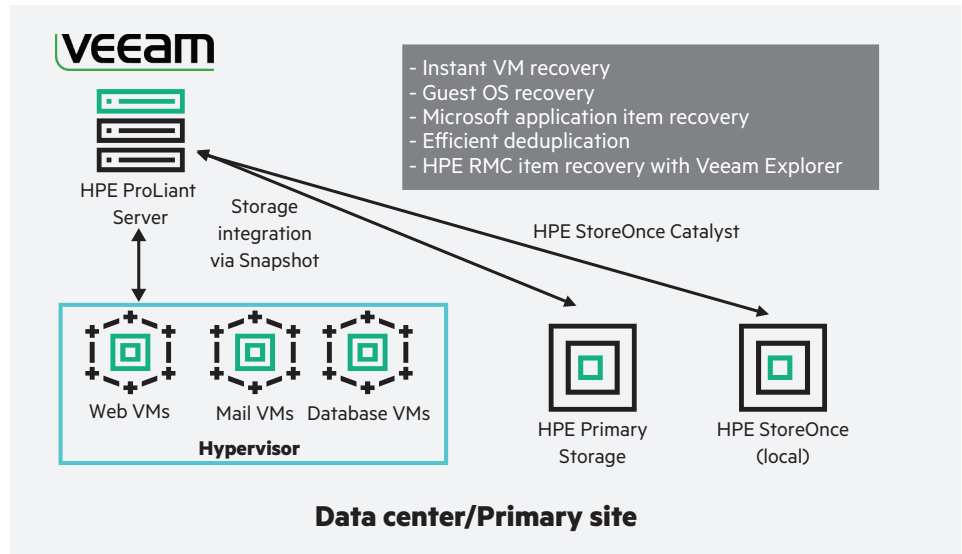


Figure 1. HPE StoreOnce is an industry-leading disk-based deduplication and backup appliance. HPE StoreOnce Catalyst is a backup and recovery optimized device type that uses a more efficient protocol than NAS or VTL for faster performance. Another significant advantage of Catalyst is that it controls where the backup data deduplication processing takes place (i.e., application server, backup server, or the target device) to optimize the use of available server resources and network bandwidth

Benefits beyond backup

- **Reduces the cost of replication, both on and off-site**—Veeam's built-in, VM-centric replication provides highly available off-site disaster recovery of Tier 1 applications, and HPE StoreOnce replication enables you to send deduplicated backup data over lower bandwidth links for a more network and cost-efficient off-site disaster protection. You can now enjoy the complementary benefits of disaster recovery (DR) resiliency for Tier 1 applications, as well as for backup data.
- **Instant recovery and better application uptime for HPE StoreVirtual and 3PAR StoreServ customers**—Leverage your existing or new purchase of HPE primary storage for even greater benefits with Veeam's integration of Veeam Explorer, Backup, and On-Demand-Sandbox for Storage Snapshots. Deliver the shortest RPOs and RTOs, fastest backups in the industry, and deployment testing that leverages existing backup data as the test environment. Now you can recover all your data in the exact form you need it, to bring applications back online in minutes—significantly reducing downtime and avoiding wasted hours or days in recovery.
- **Immunize the backup repository against virus/malware**—Catalyst based repositories are not directly accessible by the OS and thus a virus or malware cannot access or even see backup objects.
- **Benefit**—The backup repository is protected against virus or malware.

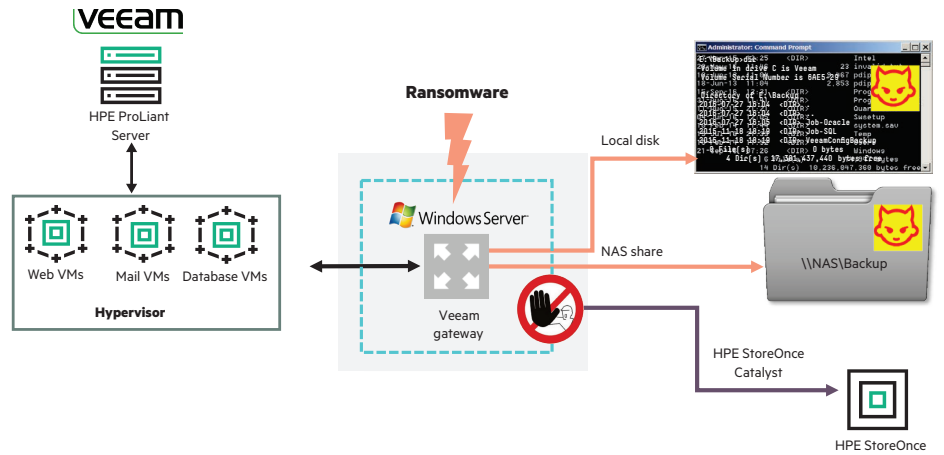
“Veeam proved its value a second time when one of our critical VMs became inoperable after a change. The issue hadn't been identified during testing, and it was initially unclear why the change had caused an outage. Had this situation persisted, it could have caused an airport disruption and a reputational knock. However, Veeam restored the VM quickly, and we placed it back in service.”

– Sherif Darwish, Head of IT Infrastructure, Gatwick Airport

With HPE StoreOnce you can achieve up to

95%

reduction in your backup footprint²



Access denied to Virus. Repository visible only using Catalyst API

Figure 2. Protection against virus or malware with HPE StoreOnce and Veeam

Ready to overcome the virtualization backup challenge?

You wouldn't choose to operate your company without property liability and other key insurance. Why put your valuable data assets at risk? You never know when or where a disaster will strike, so let us evaluate your environment and propose a solution that improves data protection and availability across your organization, while reducing complexity and lowering costs. A free backup assessment can be obtained with **HPE's Ninja Protected+ Backup Assessment** to provide insights into how healthy your backup environment is and to uncover opportunities for you to reduce cost, risk and complexities involved in protecting your data and application.

Insuring your data with HPE StoreOnce and Veeam means you can be confident that it is protected, recoverable, and readily available. This allows you to meet stringent backup windows, while reducing your management overhead, complexity, and cost. It seamlessly integrates into your virtual environment allowing simple, agentless deployment, along with reduction and consolidation of storage.

To learn more, contact your certified HPE or Veeam partner.

Learn more at

hpe.com/storage/burasolutions

hpe.com/partners/technology

veeam.com/hpe-availability-solution.html

² StoreOnce deduplication ratio from HPE internal lab tests has shown 20:1 reduction in data. The results are not typical and the number could vary based on number of factors including data change rate, backup retention, etc.

Make the right purchase decision. Chat with our presales specialists.



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