



Complete your converged IT strategy

with Hewlett Packard Enterprise Hyper Converged Systems and Veeam Availability

Key benefits

- **Fast, flexible restores**—Quickly recover what you need in the form you need it
- **Agile replication**—Granularly replicate at the virtual machine level to HPE VSA or any other storage
- **Efficient backup**—Built-in protection reduces backup times and minimizes risk of data loss
- **Visibility**—Virtualization monitoring and capacity planning that maximizes return on investment
- **Simple IT**—A fast, efficient, and agile solution that eases deployment, management, and enables data Availability

Increasing user and business expectations force IT to continue to evolve in order to meet business demands. The need to constantly evolve created IT sprawl and complexity, leading to rising operation costs and limiting IT agility and flexibility. To confront these issues Hewlett Packard Enterprise (HPE) pioneered Converged Infrastructure, which consolidated compute, networking, and storage with a common management environment to give power and efficiency back to IT departments. More recently, the rapid expansion of virtualization and increasing demands for more diverse IT services and applications have driven more innovation with HPE Hyper Converged Systems. By integrating virtualization and leveraging Software-Defined components to create a new type of converged solution, these systems are the next evolution in providing a pre-configured, simple to deploy and cost-effective IT solution.

HPE currently offers two Hyper Converged models in their portfolio; the HPE Hyper-Converged 380 and 250. The HPE Hyper-Converged 380 is a highly-scalable virtualization platform that can be extended to private and hybrid cloud. The Hyper-Converged 250 series is specifically designed for either VMware or Microsoft deployments. All HPE Hyper Converged models are designed from the ground up to simplify deployment of virtual infrastructure that support business-critical applications, virtual desktops, and integration to the cloud.

With increased globalization, mobility, and the requirement for access to all applications, data, and services 24x7, data availability has never been more important. Any amount of downtime brings loss of worker productivity and ever-increasing financial impacts. The requirement for data backup only for protection against data loss has expanded into the necessity to access applications and data when needed. Virtualization, snapshot, replication, and other technologies have emerged to meet these needs, but often introduce additional complexities and strain on IT resources. Veeam's tightly integrated solution with the HPE's Hyper-Converged series enables aggressive recovery time objectives (RTOs), meets stringent recovery point objectives (RPOs), and improves application uptime resulting in better business continuity and Veeam Availability for the Always-On Enterprise™.



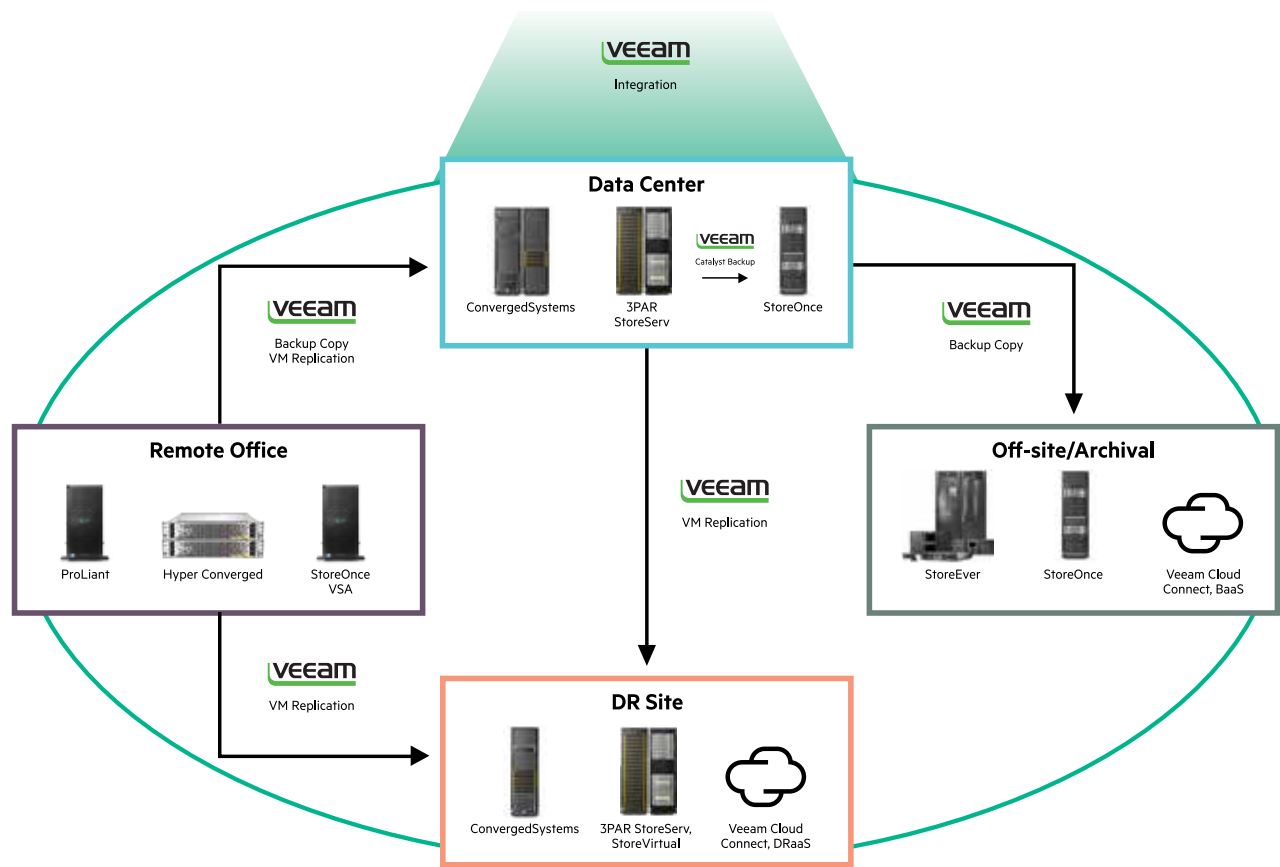


Figure 1: The Convergence of Comprehensive Data Availability for HPE's platform portfolio

Restore

IT CHALLENGES	VEEAM SOLUTIONS
Lengthy and inflexible restore process <ul style="list-style-type: none">• Backups typically lack application-level visibility• Multi-stage restores can take hours or days, and require manual processes using multiple tools	Fast restores <ul style="list-style-type: none">• Guest OS and application awareness enables fast recoveries in five minutes or less• High speed recovery with Instant VM Recovery using existing backup files• 47+ ways to restore—maximizes flexibility for any scenario requiring data retrieval
Restore reliability <ul style="list-style-type: none">• Not all restores can be verified or are successful when needed	VM restorability <ul style="list-style-type: none">• Recovery of files, application or virtual server, with SureBackup® and SureReplica®
Single file requests can involve multiple tools and steps <ul style="list-style-type: none">• 80% of restore requests are single file requests, not full VMs• Single file restores can take time and may require restoring the whole VM to extract a single file	Simple granular restores <ul style="list-style-type: none">• Integration of Veeam Explorer and Storage Snapshots quickly restores VMs, Guest OS, individual files, OS files, emails, SQL, Exchange, AD, SharePoint, and Oracle
Costly application downtime <ul style="list-style-type: none">• Application downtime costs money, time, productivity, company image, and potentially customers	Maximize critical application uptime <ul style="list-style-type: none">• Recovery time (RPO) and point objectives (RTO) of < 15 minutes for all applications and data• Quickly restore SQL, Exchange, AD, SharePoint, and Oracle with ease

Replication

IT CHALLENGES	VEEAM SOLUTIONS
Long recovery and failover times from replicas <ul style="list-style-type: none">• Volume replication includes a mix of multiple VMs, limited VM prioritization• Failover requires manual IP assignment and complicated scripts• Most replication is at the device or volume level	Fast failover from replicas <ul style="list-style-type: none">• Automated re-IP for fast recovery• VM-level replication allows custom and more aggressive protection schedules of key systems, while deprioritizing less critical systems
High cost, remote replication technologies <ul style="list-style-type: none">• Many options require the expensive matching of hardware and software, creating a cost barrier for smaller IT firms	Hardware-agnostic replication <ul style="list-style-type: none">• No specialized hardware required<ul style="list-style-type: none">– Use existing HPE storage and server investments for replication targets

Backup

IT CHALLENGES	VEEAM SOLUTIONS
Virtualization workload impact <ul style="list-style-type: none">• Backup of production systems can impact VM performance of transactional applications	Reduce impact on the virtualization infrastructure <ul style="list-style-type: none">• Eliminate VM “snapshot stun” on highly transactional applications by leveraging HPE Storage Snapshots• Application consistent VM backups up to 20% faster to other solutions available that also backup from storage snapshots
Potential data loss because of long Recovery Point Objectives (RPO) <ul style="list-style-type: none">• Not enough recovery points because of VM “snapshot stun” issue• Inability to leverage existing HPE storage processing resources to lower overhead• Unable to complete backups during allowed backup windows	Eliminate data loss and recover from disasters faster <ul style="list-style-type: none">• Take more frequent backups using HPE Storage Snapshots to reduces application impact and meet limited backup windows• Reduce VM workload leveraging storage array processing resources• Have RPO and RTO of < 15 minutes for all applications and data



Configuration components

- HPE Hyper Converged System with VMware virtualization software
- Veeam Availability Suite Enterprise Plus **OR** Backup and Replication Enterprise Plus (v8 or 9)
- **Optional:** HPE StoreOnce Backup

Conclusion

Adopting a converged IT strategy is an efficient way to simplify your processes and maximize IT efficiency. It enables scalability to match your changing business demands, delivered as a pre-packaged solution that is easy to deploy and manage. As more data gets consolidated using this approach, the need to provide a comprehensive data availability solution becomes more critical. This is why the integration of HPE's Hyper Converged with Veeam Availability for the Always-On Enterprise™ is the perfect solution.

Complete your hyper-converged strategy by deploying an integrated solution including storage, virtualization, and **data availability software**. By including Veeam, common challenges in data and application recovery, replication, backup management, and application availability are easily resolved.

Learn more at

hpe.com/info/hyperconverge

veeam.com/hp-veeam-availability-solution.html



Sign up for updates

★ Rate this document



© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft is a registered trademark of the Microsoft group of companies. Oracle is a registered trademark of Oracle and/or its affiliates.

4AA6-3909ENW, May 2016, Rev. 1