Hewlett Packard
Enterprise

Simple cloud storage deployment and management

HPE Storage for OpenStack cloud environments

Reduce complexity
Flexible deployment and management across cloud to match your unique needs:

- Private
- Public
- Managed/hosted

No vendor lock-in   Resilient   Manageable   Scalable and agile

Resilient cloud storage

Building an attainable and successful cloud strategy is a necessity to operate and compete in today's "always-connected" and "always-on" environment. Storage infrastructures must accommodate business apps, gaming, or social media services that can easily generate terabytes worth of data daily and present highly unpredictable capacity demands. For many IT departments, deploying a flexible, resilient, and scalable cloud storage solution is not a straightforward proposition.

IT professionals juggling many responsibilities require simplified and comprehensive insights into their environment. One approach for a broad spectrum of cloud workloads, is to unify the management of both file and block storage on a dedicated, flash-optimized physical storage appliance such as the HPE 3PAR StoreServ.

Administrators with variable workloads need agility and flexibility that dedicated storage devices cannot deliver. A software-defined approach—where storage resides inside the cloud servers—creates an agile, scalable, highly available infrastructure that can rapidly change as organizational requirements change. A software-defined storage (SDS) solution with HPE StoreVirtual VSA technology delivers this flexible storage platform.

Solution brief

HPE Helion CloudSystem enables you to build your own efficient, ready-to-run solution that bridges the gap between traditional IT and cloud computing. Helion CloudSystem lets you manage your entire hypervisor-based environment with a common interface, while also incorporating key OpenStack® technology features to provide a secure and flexible, open-sourced cloud environment.

Developed on the OpenStack cloud platform, HPE Helion OpenStack provides enhanced cloud management, portability, and deployment capabilities with no vendor lock-in. Design the cloud that fits the demands of your environment and have your choice of creating a hybrid, private, public, or managed cloud. Compatibility between mixed clouds allows you to move applications from private to public clouds easily without the complexity of code changes. Select the cloud that fits your workloads and applications. It is your cloud—build it your way.

Cloud storage agility and scalability

HPE 3PAR StoreServ
Designed to modernize your cloud data center and handle inconsistent workloads with 99.9999 percent data availability, 3PAR StoreServ's proven architecture can easily scale from a few terabytes to several petabytes worth of cloud data. Maximize your cloud storage performance through 3PAR StoreServ's Adaptive Flash Cache feature that harnesses SSD capacity as a virtual extension of DRAM cache to reduce latency for cloud-based online transactions processing (OLTP) and other read-intensive Web workloads.

With integration into both OpenStack's Cinder and Manila storage drivers, 3PAR StoreServ supports file and block workloads leveraging a single, cost-optimized pool of storage. 3PAR

StoreServ's unified management supports multi-protocol cloud storage to match your unique applications and workloads in a way that is simple to deploy and administer. Take advantage of 3PAR StoreServ's OpenStack plug-in into Horizon's dashboard to gain additional visibility into your storage arrays.

HPE StoreVirtual VSA
HPE SDS solutions help you meet the unpredictable storage demands of the cloud. Leverage your existing x86-based hardware and transform your internal or direct attached storage into fully featured shared storage arrays with HPE StoreVirtual VSA.

StoreVirtual VSA simplifies cloud storage management with tight integration into OpenStack's block storage driver, Cinder. Fully integrated with every Helion OpenStack commercial distribution, StoreVirtual VSA provides enterprise-class features that simplify provisioning and deploying cloud storage with HPE Helion OpenStack, while delivering the added benefits of:

- Heterogeneous environments—supports mixed cloud and hypervisor environments on commodity hardware

- Non-disruptive scalability—provides client provisioning when and where needed

- Centralized management—converged management of compute storage and virtual machines

- High availability—supports business continuity with 99.999 percent high availability by keeping virtual applications online during appliance, rack-level, or site-wide outages[1]

HPE StoreVirtual VSA's unique scale-out architecture lets IT administrators add storage capacity on the fly without compromising performance. Its built-in high availability and disaster recovery features provide business continuity keeping your data online.

Rapidly deploy private cloud storage

HPE Hyper Converged 200
With the powerful Hyper Converged 200 appliance, IT administrators can deploy a data center-in-a-box in less than 15 minutes and manage their cloud with HPE Helion CloudSystem.

The HPE HC 200 is a single 2U, 4-node chassis that combines Helion CloudSystem with all required hardware ready to deliver the necessary I/O performance and workload agility for cloud environments.

Built from the ground up with proven storage, server, networking, and management, the HC 200 provides robust performance and scaling capabilities for a wide variety of cloud demands. Delivering core infrastructure services, Helion CloudSystem enables rapid, reliable and economical cloud infrastructure that is extensibility rooted in open source for future growth and development. This hyper-converged solution leverages compute and storage resources in the same chassis, eliminating dependencies on external resources. It is designed to be deployed easily and yet manage a variety of hybrid cloud workloads including the ability to run on-premises services in the private cloud while simultaneously managing off-premises services or bursting to external public cloud providers. HPE Helion CloudSystem provides customers a fully integrated, end-to-end solution, built for traditional and cloud native workloads, delivering automation, orchestration, and control across multiple clouds.

Learn more at
hpe.com/storage/sds

[1] Based on HP (now Hewlett Packard Enterprise) internal comparative analysis of publicly available data from major competitors, January 2015

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