INTELLIGENT HYPERCONVERGED INFRASTRUCTURE

HPE SimpliVity with Composable Fabric

HPE SimpliVity

An intelligent, hyperconverged platform that streamlines IT operations by combining IT infrastructure, advanced data services, and AI-driven operations into a single, integrated solution.

- Advanced data services
  - Streamline operations with policy-based, VM-centric management
  - Protect data with built-in backup, resiliency, and disaster recovery
  - Reduce capacity utilization by up to 10X guaranteed with always-on deduplication and compression

- Software-defined networking with HPE Composable Fabric
  - Centralized management from VMware® vSphere® improves visibility and simplifies troubleshooting
  - Networking management for compute and storage lifecycle events
  - Cost-effective network performance for HPE SimpliVity storage and federation

Global Intelligence with HPE InfoSight for HPE SimpliVity

- Visibility to system details at the federation, cluster, and node level
- Predictive analytics provides insights into historical cluster capacity consumption and prediction to full
- Proactive wellness alerts alleviates support issues and reduces operational expenses with automated alerts and case creation
- VM resource utilization provides visibility into VM neighbors and insights into VM storage utilization to identify high consuming VMs and implement corrective actions

Secondary backup with HPE StoreOnce for HPE SimpliVity

- Managed from your HPE SimpliVity hypervisor UI
- Simple 3 click backups
- 20:1 deduplication ratios
- Up to 7x lower cost

- Multi hypervisor strategy
- Choose to deploy in either VMware® vSphere® or Microsoft Hyper-V® private clouds

- Multiplatform strategy
- HPE SimpliVity 380
  - Ideal for storage intensive workloads
  - Multiple all-flash configuration options including backup and archive hybrid flash node
  - Hardware accelerated or software optimized always-on deduplication and compression

- HPE SimpliVity 325
  - Ideal for small ROBO and edge use cases
  - Highly dense: 12U single AMD processor node with high core count
  - Lower TCO
  - Full-HPE SimpliVity software functionality

Reimagine hyperconverged: Software-defined to AI-driven

A NEW ERA IN HCI

It is under pressure to keep up with the demands of the digital enterprise. Customers with virtualized environments seek to address complexity in the data center and at distributed sites (edge, ROBO). They want to simplify by streamlining overall operations, improving efficiency, overcoming rigid architectures and processes, and finding new ways to innovate and grow.

Since debuting over a decade ago, hyperconverged infrastructure (HCI) remains a popular choice for IT transformation. IDC estimates that sales of hyperconverged systems grew 70% in 2018 to nearly $6.6 billion in total value and are poised to grow at a 25.2% CAGR through 2022. According to Gartner the HCI appliance market is expected to reach $8.5 billion by 2023.\(^1\)

HPE SimpliVity has always been about simplifying the software-defined IT experience by streamlining IT operations, enabling VM management and mobility, and providing built-in data efficiency and data protection.

Today, we’re entering a new era for hyperconverged infrastructure—one that shifts the focus from software-defined infrastructure to AI-driven operations. With groundbreaking capabilities and the introduction of HPE InfoSight for HPE SimpliVity, HCI has risen to a new level of performance. One that is key to creating an intelligent foundation for your private cloud.

INTELLIGENTLY SIMPLE

Intelligent HCI simplifies deployment, management, scale, and troubleshooting through software-defined infrastructure, policy-based automation, unified management, and AI.

All-in-One system

- An all-HPE solution engineered and fully integrated for HPE SimpliVity
- Start small and scale as your business grows
- Save costs with smaller footprint, power/cooling, space, and licensing
- Reduce costs by 69%\(^2\)

HPE Composable Fabric

- HPE SimpliVity offers not only software-defined compute and storage but HPE Composable Fabric networking as well
- HPE SimpliVity with Composable Fabric includes an intent-based networking fabric that dynamically allocates bandwidth based on application awareness and automation
- The fabric adjusts in real time to the needs of specific traffic types and data needs, enabling the creation and enforcement of application-level service-level agreements (SLAs)

Global unified management

- Centrally manage data center and edge computing resources from a single interface, including global federations, infrastructure, hypervisor, and data protection
- Manage VMs and seamlessly move data across sites using the intuitive and familiar VMware vCenter® or Microsoft System Center Virtual Machine Manager interface
- Role-based access for backup users to search for and restore crash consistent backups
- Increase time to spend on innovation and new projects by 91%\(^3\)

One-click upgrades

- Simplify lifecycle management with orchestrated, one-click software, hypervisor, and firmware upgrades

Rapid deployment and zero-downtime refresh cycles

- Rapidly deploy and scale hyperconverged building blocks to meet changing demands
- Deploy virtualized workloads quickly and easily across your entire environment, including SQL Server, VDI, Collaboration, DevOps, and Docker
- 88% of customers see dramatic application performance improvement
- Flexibly add or remove modular systems non-disruptively to meet business needs

\(^1\) HPE SimpliVity Hyper Guarantee
\(^2\) HPE Internal testing, 2019
\(^3\) Worldwide and U.S. Enterprise Storage Systems Forecast, May 2018, IDC #US45023719
\(^4\) Forecast Analysis: Integrated Systems, Worldwide, Gartner, 2019
\(^5\) Forrester Report: The total economic impact of HPE SimpliVity hyperconverged infrastructure, May 2018
\(^6\) http://www.simplivity.com/Link/Content/D09N7CAPQ9RF55BN1SE, IDC, August 2018
HPE SimpliVity 2600
• Ideal for compute-intensive workloads
• High density server for space-constrained environments
• Highest GPU per rack unit (RU) density
• Software optimized for always-on deduplication and compression
• Edge and VDI workloads

Mixed federation strategy
• Mix clusters within the same federation, e.g., HPE SimpliVity 380 at the core data center, HPE SimpliVity 380, 325, or 2600 at the edge

What makes HPE SimpliVity with Composable Fabric different from other solutions?
Agility
• Deploy new apps in minutes with auto-workload optimization
Empowerment
• Automate data management and networking to empower virtualization admins
Cost savings
• Reduce complexity, automate tasks, and increase data efficiency
Hybrid cloud
• Deliver apps at cloud speed and with cloud economics

High-end graphics support
High-end graphics virtualization is supported by NVIDIA® GPUs.

Automated tuning
• Always optimal performance, efficiency, resiliency without knobs or tradeoffs

Global Intelligence
• HPE InfoSight uses telemetry and machine learning to equip HPE SimpliVity environments with the ability to predict and prevent infrastructure problems before they happen
• Features include system details at the federation, cluster, and node level, predictive analytics for insights into capacity consumption and predictions to full, proactive wellness alerts to alleviate support
• 86% of problems diagnosed before you become aware of an issue

HYPER EFFICIENT
HPE SimpliVity is so remarkably efficient, it’s guaranteed. Plus, we offer built-in backup, DR, and secondary storage—no third parties required.

Superior data efficiency
• All VM data is globally deduplicated, at inception—only unique data is written to disk—resulting in superior capacity savings and real cost savings for you
• 90% (or 10X) capacity savings across storage and backup combined, guaranteed

Data protection your way
• Mitigate data loss, collapse the stack, and remove silos with built-in backup, resiliency, and disaster recovery (DR)
• Back up or recover a 1 TB VM in 60 seconds or less
• Reduce complexity, cost, and risk with HPE StoreOnce for HPE SimpliVity, an on-premises, secondary backup solution for customers who require backups reside outside the federation
• Provide disaster recovery protection across primary and secondary sites with integrated and automated HPE SimpliVity RapidDR

EDGE OPTIMIZED
HPE SimpliVity is especially tuned for Edge and ROBO deployments. Reduce complexity and lower overhead for manufacturing sites, retail sites, as well as small and mid-market data centers.
• Achieve high availability in a small footprint with only two nodes
• Centralized management simplifies edge site control where staff resources are scarce

Built-in backup and automated, edge to core, off-site failover for disaster recovery

HPE SIMPLIVITY PORTFOLIO
The HPE SimpliVity portfolio intelligently simplifies IT by combining AI, infrastructure, and advanced data services for virtualized workloads—into one, simple solution. Based on HPE ProLiant or Apollo-based servers, this fully integrated, all-HPE solution, engineered and optimized for HPE HCI. Delivered in single, high-value building blocks, start small and scale to 16 nodes per cluster/96 nodes per federation and for large ROBO environments, 48 clusters per federation. For campus-scale deployments, 16-node stretch clusters are available.

HPE SIMPLIVITY 380
HPE SimpliVity 380 is based on the HPE ProLiant DL380 server, and is part of the world’s most secure industry-standard server portfolio.
Ideal for high performance, storage intensive workloads, this solution is available with either hardware accelerated or software-optimized data efficiency capabilities. It includes all flash storage, easy management, robust data efficiency, and built-in data protection—all at a very attractive price point.

HPE SIMPLIVITY 325
The HPE SimpliVity 325 provides security and performance in a highly dense, 1U model—and has the smallest footprint in the portfolio. It includes an AMD EPYC™ single CPU processor, all-flash storage and is built on the HPE ProLiant DL325 Gen10 server platform, ideal for ROBO/edge deployments and for customers who have space constrained IT environments.

HPE SIMPLIVITY 2600
The HPE SimpliVity 2600 is an ideal solution for edge and VDI workloads and is based on HPE Apollo 2000 servers. It’s optimized for environments that require higher density nodes. And is the first to deliver consistent performance with software-enabled dedupe and compression and has been tested and validated by HPE and Login VSI.

SERVICES
With access to new self-serve tools, expert advice, and an enhanced support call experience, HPE Proactive Care for HPE SimpliVity can give you the support experience your IT and business need.