

HP ProLiant Gen9 servers with VMware vSphere 6.0



World-leading platform for deploying virtual infrastructure



Delivering real-world business results in virtualized environments

By reimagining the server and thinking “compute,” HP ProLiant Gen9 servers allow your business to not only maintain the pace of innovation, but to exceed it. HP ProLiant Gen9 servers are transformational tools that take the necessary shape to meet your business demands and support your VMware ecosystem. These revolutionary servers are:

- **Converged**—Allowing your business to define, move, expand, or scale back resources without having to deal with the physical attributes of a system.
- **Software-defined**—Instead of hardware defining the functions, software takes over. This way, a server can be utilized for processing, storing, or communicating information, and the system can change over time as your business needs evolve.
- **Cloud-ready**—Enabling you to provision workloads instantly across both private and public resources and reallocate them seamlessly.
- **Workload-optimized**—Proactively changing, adjusting, and reprovisioning workloads based on business needs and application conditions.

Capitalize on the New Style of Business

Trust two industry-leading platforms, better together

The IT environment is undergoing a fundamental shift. It is rapidly moving toward a New Style of Business that requires a new IT operating/delivery model that can respond to the escalating demands for speed, scale, and risk management.

This New Style of Business is characterized by a new style of applications designed specifically for mobility and cloud service delivery. To run at optimal levels, these apps require next-generation IT architectures engineered for all-new levels of flexibility, security, scalability, and openness.

Today, you can capitalize on all the New Style of Business has to offer by choosing HP ProLiant Gen9 servers with VMware® vSphere® 6.0. This proven combination empowers you to build a foundation for the New Style of Business—enabling you to create and deliver new value instantly and continuously.

Working in tandem, HP ProLiant Gen9 servers with VMware vSphere 6.0 deliver the right compute for the right virtualization workload at the right economics, every time. Using HP ProLiant Gen9 servers with vSphere 6.0 to support your IT, you can achieve a better virtualization experience through:

- **Dynamic workload acceleration**—ProLiant Gen9 servers converge storage, compute, and I/O to turbo-charge VMware vSphere 6.0 performance.
- **Automated energy optimization**—Drive down costs by maximizing the use of space, power, and cooling.
- **24x7 proactive service and support**—Trust a single source of accountability—HP.

What's new?

HP ProLiant Gen9 servers

The right compute for the right virtualization workload at the right economics, every time

3X compute capacity¹ and lower total cost of ownership²

- More compute and storage capacity
- Right-sized compute with flexible choices
- Lower compute energy and floor space consumption

66X faster service delivery⁴

- Automated lifecycle management
- Faster virtual machine provisioning
- Rapid cloud deployment

4X faster workload performance⁵

- Better compute, memory, and I/O performance for database applications
- Optimized storage performance for compute and read-intensive workloads
- Increased networking performance and lower latency for financial services

VMware vSphere 6.0

Delivering breakthrough capabilities

Compute

Increased scalability—Virtual machines (VMs) will support up to 128 virtual CPUs (vCPUs) and 4 TB virtual RAM (vRAM). Hosts will support up to 480 CPU and 12 TB of RAM, 2,048 virtual machines per host, and 64 nodes per cluster.

Expanded support—Expanded support for the latest x86 chip sets, devices, drivers, and guest operating systems.

Amazing graphics—NVIDIA® GRID vGPU delivers the full benefits of NVIDIA hardware-accelerated graphics to virtualized solutions.

Instant clone—Built-in technology lays the foundation to rapidly clone and deploy virtual machines, as much as 10X faster than what is possible today.³

Storage

Transform storage for your VMs—Virtual Volumes enable your external storage arrays to become VM-aware.

Network

Network I/O control—New support for per-VM Distributed vSwitch bandwidth reservations to guarantee isolation and enforce limits on bandwidth.

Multicast snooping—Supports IGMP snooping for IPv4 packet and MLD snooping for IPv6 packets in VDS. Improves performance and scale with multicast traffic.

Multiple TCP/IP stack for vMotion—Provides a dedicated networking stack for vMotion traffic. Simplifies IP address management with a dedicated default gateway for vMotion traffic.

Availability

vMotion enhancements—Perform non-disruptive live migration of workloads across distributed switches and vCenter servers and over distances of up to 100 ms RTT.

Replication-assisted vMotion—With active-active replication set up between two sites, you can perform a more efficient vMotion, resulting in huge time and resource savings (as much as 95 percent more efficient, depending on the size of the data).

Fault tolerance (up to four vCPUs)—Expanded support for software-based fault tolerance for workloads with up to four virtual CPUs.

Management

Content library—Centralized repository provides simple and effective management for content including VM templates, ISO images, and scripts. You can now store and manage content from a central location and share it through a publish/subscribe model.

Cross-vCenter clone and migration—Copy and move VMs between hosts on different vCenter servers in a single action.

Enhanced user interface—The Web Client is now more responsive, intuitive, and streamlined than ever before.

¹Based on HP internal analysis, August 2014

²Based on HP internal calculation, August 2014

³vmware.com

⁴Based on anonymous HP customer results, January 2014

⁵Based on HP SmartCache Performance done with equivalent controller in a controlled environment, May 2014

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