

HP OneView

Eliminating infrastructure complexity with automation simplicity



Too many management obstacles?

Today, siloed infrastructure and management processes make it difficult for IT organizations to keep up with the demands of the business. Non-standard manual tasks; multiple hand-offs between server, storage, and network administrators; and incomplete process automation complicate IT service roll-outs and ongoing management. They can also lead to costly errors.

To address these issues, you need:

- A converged management platform that unifies management of servers, storage, and network—breaking down the walls between infrastructure silos
- Simple, software-defined process templates that allow connectivity, compute, and firmware settings to be programmed once and rolled out the same way every time
- A platform that can be accessed programmatically through industry-standard application programming interfaces (APIs) to exponentially accelerate the speed of management task execution

You need HP OneView.

Figure 1. Converged infrastructure management

HP OneView is:

- **Converged**—Manage across compute, storage, and networking and enjoy a 50 percent reduction in tools to learn, manage, deploy, and integrate.¹
- **Software-defined**—Capture best practice knowledge in templates to guarantee that infrastructure is deployed and managed the right way every time.
- **Automated**—Use HP OneView REST APIs to deploy a VMware vSphere cluster in just five easy steps² and leverage HP OneView as the infrastructure automation hub for your enterprise.

Exciting new approach to infrastructure management

To eliminate infrastructure complexity, HP OneView automates the delivery and operations of IT services—transforming everyday management of server, storage, and network resources in physical and virtual environments. Based on the unique HP Fusion architecture, HP OneView improves IT administrator efficiency by converging management of HP server, storage, and networking resources. It speeds IT service roll-outs and helps actively prevent error-induced downtime through a template-based, software-defined approach to management. And HP OneView saves time by acting as an automation hub that performs infrastructure configuration and management tasks at the request of other applications.

HP OneView reduces OpEx and improves agility, so you can free-up resources to focus on new initiatives that will help grow your business. HP OneView interoperates closely with HP CloudSystem, VMware® vCenter, and Microsoft® System Center. It helps lay the foundation for Infrastructure-as-a-Service delivery through the cloud solution of your choice.

What's new?

Storage resource management	Easily discover storage arrays, storage pools, and existing storage volumes, and understand how they are connected to compute and network resources
Automated LUN provisioning and zoning	Automate the creation of shared or private storage volumes, associate storage volumes with server profiles, and automatically zone the SAN. Now with automated storage management, you can reduce the time required to deploy a 32-node cluster from 16 hours to two and one-half hours—that's 6X faster than with current server, SAN, and storage management tools. ³
Support for DL servers	Delivering profile-driven configuration of firmware baselines for HP ProLiant DL Gen8 servers. Server profiles also include ROM BIOS configuration settings for DL360 and DL380 Gen8 server models.
Support for HP CloudSystem	HP OneView provides the essential converged infrastructure management for HP CloudSystem. It simplifies the management of resource pools across physical, virtual, and cloud environments.
Expanded Virtual Connect support	Use HP OneView to configure the new Virtual Connect FlexFabric 20/40 F8 and native Fiber Channel models. HP OneView also allows networks to be added, removed, or updated dynamically without a server restart.
Out-of-the-box integration	With plugins for VMware, Microsoft System Center, and Red Hat® virtualization solutions, as well as HP 3PAR StoreServ storage solutions and many other management products; enables you to provision and manage infrastructure lifecycles with your console of choice
VMware vCenter Operations Manager integration	Providing analytics for performance and health, as well as proactive monitoring; facilitating faster resolution of performance problems with HP OneView-managed hosts

Transform the way you manage your IT infrastructure

Converge your management experience

You can use HP OneView to automate the deployment, update, and ongoing management of HP ConvergedSystem offerings and HP Converged Infrastructure components. The HP OneView dashboard provides an easy-to-understand summary/status of servers, storage pools, and enclosures. Color-coded icons tell you which systems are functioning properly and which ones need help—whether you manage five systems or 500.

- One platform manages HP ProLiant DL servers, HP BladeSystem, and 3PAR StoreServ storage.
- Smart Search instantly finds what you are looking for without forcing you to search through long and complicated tree views.
- 3-D Power/Thermal Mapping provides intuitive power management.

Together, OneView and VMware vCenter Operations Manager simplify capacity forecasting across your VMware virtualized infrastructure including storage volumes.

¹Based on HP internal analysis, May 2014, comparing OneView 1.10 vs. the traditional approach to infrastructure management requiring eight tools.

²Determined during HP internal testing in January 2014, comparing HP OneView 1.05 with the HP Insight Control for VMware vCenter Server v7.30 plugin vs. traditional HP management tools.

³Based on HP internal testing as of May 2014, comparing HP OneView v1.10 vs. traditional HP management tools to deploy 32 server clusters on HP ProLiant blades, 3PAR 7200 storage arrays, and Brocade switches. The test was to create server profiles for all 32 servers with 10 private volumes and six shared volumes per server, then zone and attach all 326 volumes to the server profiles. HP OneView requires 2.5 hours of an admin's time vs. traditional HP management tools requiring 16 hours.

Proof by the numbers

It's one thing to claim excellence. It's another to prove it with verifiable facts and figures.

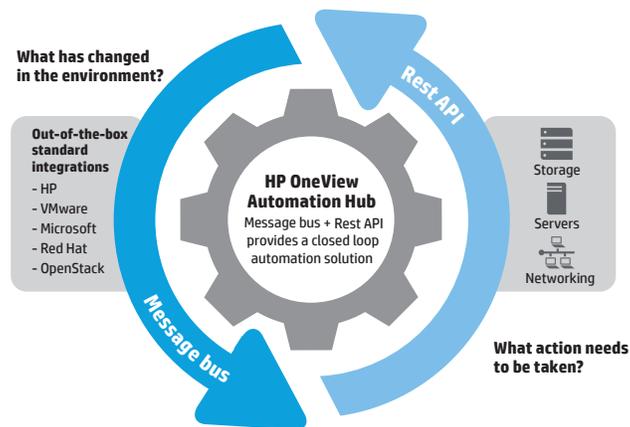
- Five easy steps to deploy a VMware vSphere cluster⁴
- Ability to create clusters in hours instead of the days required with current server, SAN, and storage management tools⁵
- 96 percent reduction in server configuration times⁶
- 20 minutes to configure a new HP ConvergedSystem⁷
- Four commands to access all HP OneView telemetry and control functions
- 24X faster to change network configurations⁸

Software-defined infrastructure management

The beauty of software-defined management is that it allows you to establish templates that define infrastructure services. This way, you can deliver IT services in a fast, repeatable, and reliable manner at lower cost and with fewer errors.

- Profiles and groups capture best-practices and policies. You can create profiles and groups once, and then roll them out to as many enclosures, servers, and storage arrays as you like. Doing so increases productivity and guarantees compliance and consistency.
- OneView visualizes the connections between infrastructure elements, so you can better understand the impact of hardware faults, performance bottlenecks, or other conditions on the surrounding infrastructure.
- You can take advantage of intelligent configuration checking to make certain that changes to network or storage configurations don't inadvertently disrupt production workloads.

Figure 2. HP OneView is an intelligent automation hub



Automated platform

An essential feature of the software-defined data center is automation—which becomes more powerful when numerous tasks from multiple tools are linked together using industry standards. HP OneView creates a closed-loop automation hub with consistent, industry-standard APIs; a uniform data model; and a subscription-based message bus. With HP OneView, you can automate deployment of multiple enclosures, blades, storage, and networking programmatically—using the industry-standard REST interface or your choice of PowerShell and Python language bindings. With HP OneView automation capabilities, you can:

- Inform multiple management tools or systems administrators of changes to the infrastructure managed by HP OneView
- Quickly react to environmental changes by deploying or updating resources, updating asset management records, or automatically creating service tickets
- Enable virtualization administrators to automate control of all HP resources—with no detailed knowledge of each device—via integration with VMware vCenter and VMware vCenter Operations and Microsoft System Center
- Automate power and location discovery

“This people-centric approach to unifying and automating the full spectrum of HP systems administration capabilities delivers significant productivity benefits across IT administration teams, while improving business agility.”

— IDC⁹

⁴ The number of steps was determined by HP internal testing in January 2014, comparing HP OneView 1.05 with the HP Insight Control for VMware vCenter Server v7.30 plugin vs. traditional HP management tools.

⁵ Based on HP internal testing in May 2014, comparing HP OneView 1.10 vs. traditional management tools to deploy 32 server clusters on HP ProLiant blades, 3PAR 7200 storage arrays, and Brocade switches.

⁶ Based on HP internal testing in August 2013, comparing HP OneView 1.0 vs. traditional HP management tools, each deploying 16 servers. The test was to configure the networks, enclosure, template, and profiles. HP OneView takes 14 minutes of an admin's time vs. traditional HP management tools taking 170 minutes of an admin's time.

⁷ Based on internal estimates made by HP for the standard time to configure an HP ConvergedSystem 300 for Virtualization.

⁸ Based on HP internal testing of HP OneView 1.0 vs. manual operations, as of September 2013. With HP OneView, it takes 30 seconds of a user's time to add a network vs. 12 minutes with manual operations.

⁹ IDC, "HP OneView Expected to Play Critical Role in Differentiating HP ConvergedSystem Sharks," Doc #lCUS24777314, Mar 2014.

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Why HP for converging your IT?

Delivering systems that are purpose-built by design

Uniting market-leading HP Converged Infrastructure with decades of experience in solution design, HP delivers the ConvergedSystem portfolio—offering a purpose-built system that dramatically simplifies your IT. There's no need to build your own systems, because HP has done all the pre-engineering, validations, and testing for you—saving a considerable amount of your IT administrators' time. Through quick deployment, automated management with HP OneView, and system-level support, your IT staff can be freed up to innovate. With HP OneView built into your HP ConvergedSystem, you can:

- Simplify management with one consistent infrastructure management platform that replaces several tools, and includes unified physical and virtual management through VMware vCenter or Microsoft System Center
- Free up your IT staff's time by automating everyday tasks using software-defined templates to create resource profiles and groups once, and then roll them out to hundreds of enclosures and systems in minutes
- Deploy complete VMware vSphere or Hyper-V clusters in minutes

With HP ConvergedSystem, you don't get disparate technologies from different vendors bolted together and called "converged." Instead, you receive components designed from the start for convergence, coupled with integrated OneView management and workload optimization based on decades of expertise. The result—a single holistic computing ecosystem.

Get the support you need with comprehensive HP Services

You can count on smooth operations with HP by your side. We offer a range of support services to deliver the precise level of assistance you need.

- Three-year, 24x7 HP Technical Support is included in the purchase of OneView software. You can extend this coverage to four or five years to match your hardware support coverage and make sure your solution is completely supported.
- HP Proactive Care Service offers access to enhanced call center support for your HP ProLiant BladeSystem servers running HP OneView. HP Proactive Care provides a personalized and simplified support experience.
- HP Education Services can help familiarize your staff with HP OneView.
- HP Installation and Data Migration Services are available to ease your transition to HP OneView, and allow you to plan your data migration with expert assistance.

How do I get started?

- [Explore HP OneView demos](#)
- Contact your HP representative or authorized channel partner today for a live demo
- Download the [free 60-day trial](#)

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