

# Infrastructure automation made simple

HPE OneView





# Transform HPE servers, storage, and networking into software-defined infrastructure

Make your complex hybrid IT infrastructure simple to deploy and manage. HPE OneView is your infrastructure automation engine—increasing the speed of IT delivery for new applications and services, while still efficiently managing your traditional IT.

### Facing new challenges, new requirements, and new operating models

In today's age of digital disruption, success requires you to turn ideas into value faster than your competition. But all too often, you're held back by an IT infrastructure that is not designed to handle today's demands. Complex manual processes and non-integrated tools fail to provide the speed and simplicity you need to support current tasks, nor do they offer the flexibility and performance to help you capitalize on new ideas and drive new applications.

Adding to these challenges are managing and consuming IT services across a complex hybrid infrastructure that combines traditional IT and private, managed, and public clouds. To manage this complexity, you need a breakthrough tool that simplifies hybrid IT, enabling you to move faster, smarter, and more cost-efficiently.

HPE OneView meets all these needs and many more. With HPE OneView, you can:

- Deploy infrastructure at cloud-like speed
- Simplify IT operations
- Increase productivity in developing new applications and services faster

#### Deploy infrastructure at cloud-like speed

#### Simplify IT operations

Through software-defined intelligence, HPE OneView takes a template-driven approach to provisioning, updating, and integrating compute, storage, firmware/device drivers, and networking infrastructure. This approach not only reduces the risk of human error by enabling you to develop the template once and then replicate as needed, but also helps boost productivity of administrators and software developers. In addition, change operations—such as adding more storage to a service, modifying network connectivity, or updating firmware—can also be implemented via templates so that changes are implemented automatically.

Continuous, automated lifecycle operations reduce cost, save time, and increase time to value for your business. Templates go far beyond just initial deployment. With them, you can also simplify system updates and enforce compliance to ensure infrastructure stability. You can manage deployment plans and create bootable images from capturing, cloning, or customizing golden images. Further, you can enforce compliance using templates to quickly provision, update, or roll back images to minimize maintenance windows.

#### Faster composable storage automation

In addition to HPE 3PAR StoreServ Storage, the industry-leading HPE StoreVirtual software-defined storage (SDS) iSCSI storage is also fully integrated with HPE OneView server profiles. SDS offers significant cost savings through a consolidated storage infrastructure that can run multiple applications simultaneously. Embedded automation speeds provisioning and lowers operating expenses. In addition, SDS provides high reliability with templates that ensure repeatability and control.

#### Faster network fabric management automation

For customers with HPE BladeSystem, HPE OneView automates the creation of Fibre Channel and Ethernet connections—reducing setup time from hours to minutes. Integration with HPE Networking's Intelligent Management Center (IMC) and Virtual Connect advances this process one-step further. IMC listens for newly provisioned HPE BladeSystem enclosures, and then automatically connects them to the production network.

#### Faster setup

You can get up and running faster with guided online setup for the HPE OneView Virtual Appliance and HPE Synergy—speeding time to deployment and value. HPE OneView eliminates complexity, removes silos across the various IT organizations, and simplifies the overall lifecycle management of your infrastructure. This alleviates the burden and time spent managing hardware, and frees up more time to spend developing and delivering new applications and IT services.

With HPE OneView, your infrastructure runs at peak performance with minimal workload disruption. Infrastructure device drivers and firmware updates can be automated with the least possible impact to your production environment. Profile templates used in combination with HPE Smart Update Tools enable updates to be staged, scheduled, and installed without rebooting the system. Changes to the templates are immediately reflected in the profile compliance status, allowing you to quickly pinpoint systems that need attention, and efficiently roll out updates. Using a single interface, you can rapidly design, provision, monitor, and update your IT resources.

Additional functionality is provided with the HPE OneView Global Dashboard software, which provides a unified view and health status of shared storage pools, servers, profiles, and enclosures across your HPE OneView-managed environment—up to 12,800 servers and 20 appliances. HPE OneView Global Dashboard supports the following HPE platforms: HPE's BladeSystem, ProLiant DL and ML servers, Hyper Converged 380, Apollo 2000/4000/6000, Synergy (using Synergy Composer, powered by HPE OneView), and Superdome X, as well as HPE Networking and HPE 3PAR StoreServ and StoreVirtual storage.

With the latest enhancements to the Global Dashboard, IT administrators can back up and restore appliances, as well as customize and filter reporting. The HPE OneView Global Dashboard also enables you to simplify compliance, view current inventory, quickly understand resource status, and automate global reporting.

HPE OneView now supports the Red Hat\* KVM hypervisor, in addition to Microsoft\* Hyper-V\* and VMware\* ESX\*, for ease of integration to existing solutions. To simplify IT operations even further, HPE OneView provides integrated remote support, enabling 24x7 monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Services are also available to provide a personalized and proactive hands-on approach to maintaining an agile, healthy, and reliable infrastructure and accelerate time to value in your HPE OneView deployment.

And finally, you can use the SmartSearch and MapView features—together with HPE Integrated Lights Out (iLO)—to rapidly find any device and improve troubleshooting through visual representations of the managed environment.

#### Increase productivity in developing new applications and services faster

Designed with a modern standards-based API and supported by a large and growing HPE Composable partner ecosystem, HPE OneView extends the power of infrastructure automation to every aspect of the data center—virtualization, facilities, cloud, and application development. This unified API (native to HPE OneView) increases productivity by enabling developers and IT administrators to automate infrastructure deployment and updates without detailed knowledge of how the underlying hardware works.

Instead of automating your servers, storage, and networking using complex automation across multiple APIs, you can now automate using a single line of code. The unified API lets you spend less time controlling infrastructure, so you can spend more time creating value for the business. The API also provides performance, health, and configuration data to data center infrastructure management (DCIM) applications to ensure a unified view of infrastructure.

#### HPE Composable Ecosystem

By integrating with the unified API in HPE OneView, ISVs can provide a new breed of solutions that reduce the time spent integrating islands of management within the data center.

With the HPE OneView API, DevOps can automate applications through infrastructure deployment, scaling, and updates. The unified API provides a programmatic interface for high-level orchestration tools. The API aggregates physical resources in the same way as virtual and public cloud resources, so developers can code without having a detailed understanding of the underlying physical elements. Now you can compose and manage infrastructure with a single line of code instead of thousands of custom scripts. Bare-metal provisioning is as simple as provisioning from the public cloud. By providing interoperability, this unified API enables you to meet the requirements for both traditional IT and the rapidly growing hybrid IT environment.

A growing number of ISV partners are taking advantage of HPE OneView's unified API to offer greater flexibility and choice—enabling customers to meet the ever-increasing demands on IT. HPE Composable Ecosystem partners range from large and established vendors such as VMware<sup>\*</sup> and Microsoft to focused solution providers such as Ansible, Chef, **Densify.com**, Docker, F5, Harpa Italia, Mesosphere, nLyte, Puppet, Red Hat OpenShift, ServiceNow, Schneider-Electric, Terraform, and more.

#### Stepping up to hybrid IT

HPE OneView helps improve productivity in a hybrid IT environment by deploying HPE Synergy with HPE Helion CloudSystem 10—the first solution that enables businesses to run private cloud services and traditional applications on a shared infrastructure. With HPE OneView working in concert with HPE Synergy and HPE Helion CloudSystem 10, your business receives a more agile solution for hybrid IT—one that drives up productivity and drives down IT staff costs.

#### Accelerate time to value

Many HPE systems management and cloud solutions can now take advantage of the HPE OneView infrastructure automation engine. These solutions include:

- HPE Helion CloudSystem 10—Improve productivity by enabling infrastructure control and updates via service definitions.
- HPE Intelligent Management Center—Save time with comprehensive, multi-vendor, wired, and wireless network management that senses when HPE OneView has provisioned new infrastructure and connects it to the network core.

#### **HPE Pointnext Services**

- HPE Deployment Services help you speed time to value.
- HPE OneView Implementation Services (H1TK2A1) provide HPE Pointnext custom consulting and system integration for configuration and implementation, as well as identify organizational impact and training requirements.
- HPE OneView Installation and Configuration Service (fixed, U1V78E; flex, H6K67A1) includes an orientation session on how to use the software.
- HPE OneView Installation and HPE BladeSystem c7000 Migration Service (fixed, U1V79E; flex, H6K68A1) assist you in transitioning to HPE OneView, as well as accelerating and simplifying deployment.

#### **HPE Education Services**

- HPE OneView Overview is a one-hour online course that demonstrates key solution elements to help you get started.
- Migrating to HPE OneView is a one-day course on migrating to HPE OneView from legacy tools.
- HPE OneView Quick Start (H7H10S HPEOV Quick Start) is a one-day course that provides basic information on how to install, manage, configure, and update the HPE OneView Appliance.
- HPE OneView Administration (H4C04 HPEOV Administration) is a three-day course that covers deeper-level HPE OneView administration with Virtual Connect network and storage configurations, scripting skills, and performing day-to-day administration and troubleshooting tasks.

# New features in HPE OneView v3.1

New features	Description
Support for industry-leading composable HPE StoreVirtual software-defined storage	Simplifies client and server virtualization with a flexible and highly available scale-out platform. Support for iSCSI boot and data volume keeps storage space to a minimum and provides better control and agility with storage templates. HPE 3PAR thin deduplication support delivers inline, block-level deduplication without performance or capacity tradeoffs, which simplifies provisioning of storage volumes and removes inefficiencies.
Extended platform support	Now includes advanced management of HPE ProLiant ML350 Gen9 Servers and Apollo 2000/4000/6000; also includes standard monitoring and reporting of HPE Superdome X and the rest of the HPE ProLiant ML Servers, as well as Red Hat KVM hypervisor support.
Scheduled firmware and device driver updates	Enables updates to occur with minimal disruption to production workloads when you want.
HPE OneView Global Dashboard 1.2	Unifies monitoring of HPE platforms at scale; aggregates contents from up to 20 HPE OneView appliances and manages up to 12,800 devices. Other new features in the Global Dashboard include:
	<ul> <li>Backup/restore appliance, enabling recovery in case of disaster</li> <li>Support for up to 50 HPE Hyper Converged 380 appliances</li> <li>Support for HPE ProLiant ML Servers, Apollo 2000/4000/6000, and Superdome X</li> <li>Easy access to data using customized reports with built-in filtering, sorting, and saving, and viewing what you want</li> <li>Encrypted download logs, created before transmitting to HPE Support (optional)</li> <li>New audit log</li> <li>Support for the Microsoft Edge* browser</li> <li>Enhancements to the user interface</li> </ul>
HPE Synergy and HPE OneView appliance guided setup	Speeds installation and deployment by providing step-by-step guidance with an online tutorial of key concepts and features of HPE OneView and HPE Synergy.
Integrated remote support	Extends to include contract and warranty display for each device, remote support enablement by device, and support for HPE Synergy Composer and Synergy Image Streamer.
Virtual Connect 16 Gb Fibre Channel	Offers bidirectional port mirroring, throughput utilization statistics, detailed connector data, and digital diagnostics.
Role-based access	Provides logical grouping of systems so that IT staff can focus on the systems they are responsible for managing; includes storage, network, and converged administrative roles; adds the role of firmware operator to provide extra security.
New HPE Composable Ecosystem partners	<ul> <li>Mesosphere—For provisioning and extending clusters</li> <li>ServiceNow—For improving service levels with immediate event visibility</li> <li>Densify.com by Cirba—For intelligent capacity optimization</li> <li>Red Hat OpenShift—For bare-metal containers as a service</li> </ul>

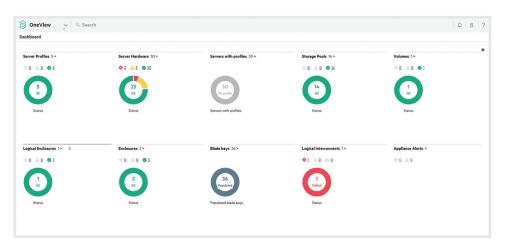


Figure 1. HPE OneView dashboard

## **Real-life results**

**HudsonAlpha** is one of America's leading genome research institutes. To meet its requirements for a robust and versatile platform capable of managing and analyzing massive volumes of data, HudsonAlpha implemented a testing regime for HPE Synergy with integrated management from HPE OneView. The solution supports HudsonAlpha's high-impact research by:

- Delivering the resources researchers need for their life-saving research
- Enabling HudsonAlpha to conduct its work with finite resources
- Accelerating IT service delivery
- Providing an infrastructure automation engine with automated workflows
- Streamlining the provisioning and lifecycle management across compute storage and fabric
- Enabling resources to be controlled through a unified API

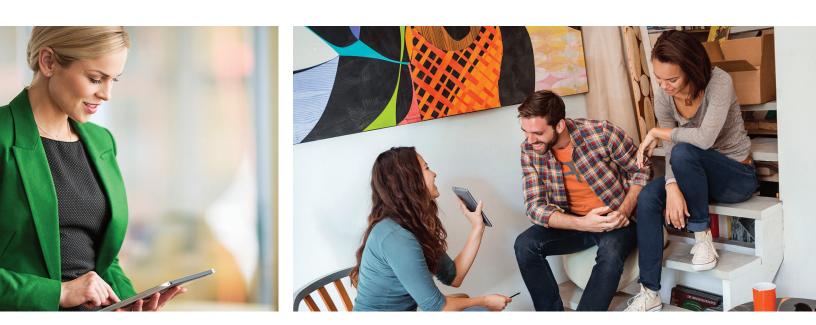
**Porsche AG** needed to ensure its business-critical apps remained highly available 24x7 and drive 100% accuracy of its business outcomes. This global automotive manufacturer chose HPE Synergy and HPE OneView to help them meet these goals. Today, the company benefits from:

- Ninety percent faster new configuration deployment times
- Fifty percent less administrator and engineer management time
- Thirty percent better system availability, ensuring the delivery of business-critical applications
- Freeing IT staff from routine tasks, enabling them to react more quickly to business requirements and work on customer service improvement







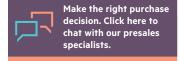


# Let's get started

Contact your HPE sales representative to schedule a live demonstration of the unique capabilities of HPE OneView. View the HPE OneView online demos to discover more about the benefits the solution offers. And when you are ready, download HPE OneView free of charge for 60 days. Discover how HPE OneView's breakthrough capabilities can change your business—forever.

Learn more at hpe.com/info/hpeoneview

Brochure





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4AA6-5815ENW, June 2017, Rev. 2