Overview

HP OneView

HP OneView is converged management that eliminates infrastructure complexity with automation simplicity. This modern management architecture is designed to accelerate your IT operations for managing servers, storage, and network resources.

The HP OneView design is:

- **Converged**, with a unified and consistent management experience across servers, storage, and networking.
- **Software-Defined**, providing software-based control and a user-centric approach to ensure rapid, repeatable, and reliable operations at a lower cost.
- **Automated**, working as an intelligent hub to streamline the delivery of IT services and to speed the transition to IT-as-a-Service and to the hybrid cloud.

Individualized management tools, silo'ed infrastructure, and custom processes result in more steps, time, and errors. Non-standard manual tasks, tedious demands on subject matter experts, and the ever-expanding project backlogs are increasing both complexity and stress in IT organizations. These factors, coupled with incomplete process automation, are slowing the implementation of infrastructure deliveries for cloud services.

Converged management platforms like HP OneView are designed to unify the processes, user interfaces, and APIs across servers, storage, and networking. Converged management should provide simple, software-defined approaches for "get-it-right" repeatability every time. It should prevent unplanned outages caused by human error or device failure. And converged management should be architected to "plug-in" to existing tools to streamline operations and increase automation.

HP OneView automates the delivery and operations of IT services, transforming everyday management of server, storage and network resources in physical and virtual environments. Its unique Fusion architecture features a software-defined approach to converged management that shifts the focus from 'devices' to 'how people work'. HP OneView is also an intelligent automation hub that provides out-of-the-box integration with HP, VMware, Microsoft, and Red Hat solutions, and also provides easy integration with many other management products.

This innovative platform reduces OpEx and improves agility, to free-up your resources for new business initiatives. From Lights-out automation to "enabling infrastructure" for any hybrid heterogeneous cloud, HP OneView is your converged management foundation. HP OneView allows you to efficiently transition from your current HP and third party infrastructure, tools, and processes to your vision of IT-as-a-Service.

What's New

HP OneView 1.10 provides the following enhancements for converged management:

Storage Management

- Automated storage provisioning and attachment to server profiles for 3PAR StoreServ Storage in traditional Fibre Channel SAN fabrics, and Direct Connect (FlatSAN) architectures.
- Simple importing of 3PAR StoreServ systems and storage pools
- Simple importing of SAN switches and policy based SAN Zoning to securely eliminate configuration errors
- Automated carving of 3PAR StoreServ volumes and zoning the SAN fabric on the fly, and attaching of volumes to server profiles.
- Integration of Storage with Server Profiles enables attaching private/shared volumes and Direct Attach (FlatSAN) profile mobility across enclosures.

Overview

Network Management using Virtual Connect

- Fibre Channel support for HP Virtual Connect 8Gb 24-Port Fibre Channel Module and HP Virtual Connect 8Gb 20-Port Fibre Channel Module.
- FlexFabric support for next-generation HP Virtual Connect FlexFabric-20/40 F8 Module.
- Advanced capabilities supporting untagged traffic, VLAN tunneling, and configurable Link Aggregation Control Protocol (LACP) timers.
- Min/max bandwidth settings per FlexNIC for bandwidth optimization.
- Visibility to MAC address tables.
- Detection and protection against Network loops due to misconfiguration and against flooding of pause frames.
- Bulk creation of Ethernet networks via the user interface and REST API.

General Enhancements

- Microsoft Hyper-V appliance support.
- Labels can be applied to resources for rapid search, filter, and operation invocation.
- Multi-select enables operations to be performed on resources in bulk, such as powering on servers and updating enclosure configurations.
- Inventory view of Cisco Nexus 5000 series switches and Cisco Fabric Extender for HP BladeSystem modules (B22HP interconnect modules).
- Localization support for Japanese and Chinese.

Server and Enclosure Management

- Server profile support for SAN storage provisioning.
- Server profile configuration support Firmware updates on HP ProLiant DL (rack) servers.
- Enclosure configuration from customization scripts.
- Simple renaming of enclosures.
- Native Fibre Channel connectivity support.
- HP ProLiant WS460c and DL380z Workstation server hardware support.
- Launch of iLO Graphical remote console from the server profile page.

Partner Integrations

- HP OneView for Microsoft System Center integration for health monitoring and alerting with server profile provisioning to create or grow a Microsoft Hyper-V cluster.
- HP OneView for VMware vCenter Server has enhanced integration with VMware vCenter Operations Manager and Log Insight -- with HP unique entitlement to use HP vCenter Operations Manager integration on the standard edition – and leverages HP 3PAR shared storage and/or boot from SAN for creating or growing clusters using an automated workflow.
- HP OneView for Red Hat Enterprise Virtualization integration for HP ProLiant and BladeSystem, with network diagram viewing and health monitoring.
- HP CloudSystem with HP OneView utilize similar API's, terminology, and user experience for a complete management experience in 'HP CloudSystem built on ConvergedSystem 700x'.
- HP Operations Orchestration integration for accelerated automation.
- REST API enhancements for Storage control to allow custom integrations (Python and PowerShell scripts).

QuickSpecs

Models

HP OneView standalone licenses	**HP OneView with iLO Advanced**	
	HP OneView incl 3yr 24x7 Supp Phys 1 Svr Lic	E5Y34A
	HP OneView incl 3yr 24x7 Supp Phys Flex Qty Lic	E5Y35A
	NOTE: The SKU listed immediately above is available in CHINA ONLY.	
	HP OneView incl 3yr 24x7 Supp Flex Qty E-LTU	E5Y35AAE
	HP OneView incl 3yr 24x7 Supp Track 1 Svr Lic	E5Y36A
	HP OneView Media Kit Phys No Lic	E5Y37A
	HP OneView without iLO Advanced	
	HP OneView w/o iLO Adv incl 3yr 24x7 Supp Phys 1 Svr Lic	E5Y38A
	NOTE: The SKU listed immediately above can also be factory integrated [#0D1].	
	HP OneView w/o iLO Adv incl 3yr 24x7 Supp Phys Flex Qty Lic	E5Y39A
	NOTE: The SKU listed immediately above is available in CHINA ONLY.	
	HP OneView w/o iLO Adv inc 3yr 24x7 Supp Flex Qty E-LTU	E5Y39AAE
	HP OneView w/o iLO Adv incl 3yr 24x7 Supp Track 1 Svr Lic	E5Y40A

NOTE: Server provisioning capability (i.e. 'Insight Control server provisioning') is included and licensed as part of HP OneView. This capability is ideal for multi-server OS and driver provisioning to ProLiant and BladeSystem servers. A media kit ('HP Insight Control server provisioning USB media kit', #BD883A), which includes a USB flash drive, is available for customers who require a physical copy of the software on media. This media kit is separate and in addition to the "HP OneView Media Kit" (#E5Y37A).

NOTE: Licenses ship without media. The HP OneView Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates

NOTE: Tracking licenses may only be purchased by customers that have implemented an activation key agreement (AKA) with HP. For more information on Activation Key Agreements please visit: http://h18013.www1.hp.com/products/servers/proliantessentials/license/options.html

HP OneView licenses for bundling with ProLiant DL servers	**HP OneView with iLO Advanced - Server hardware required on same purchase order**	
	NOTE: The following HP OneView part numbers can only be used when ordered on the same order as a supported ProLiant DL server.	
	HP OneView for ProLiant DL Server incl 3yr 24x7 Supp FIO Bundle Physical 1 Svr Lic	E5Y43A
	HP OneView incl 3yr 24x7 Supp Bundle 1 Svr E-LTU	E5Y43AAE
	HP OneView for ProLiant DL Server incl 3yr 24x7 Supp Bundle Track 1 Svr Lic	E5Y44A

NOTE: Server provisioning capability (i.e. 'Insight Control server provisioning') is included and licensed as part of HP OneView. This capability is ideal for multi-server OS and driver provisioning to ProLiant and BladeSystem servers. A media kit ('HP Insight Control server provisioning USB media kit', #BD883A), which includes a USB flash drive, is available for customers who require a physical copy of the software on media. This media kit is separate and in addition to the "HP OneView Media Kit" (#E5Y37A).

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HP OneView licenses for bundling with ProLiant BL server blades	**HP OneView with iLO Advanced - Server hardware required on same purchase order**	
	NOTE: The following HP OneView part numbers can only be used when ordered on the same order as a supported ProLiant BL server blade.	
	HP OneView for Blade Server incl 3yr 24x7 Supp FIO Bundle Physical 1 Svr Lic	F6Q89A
	HP OneView for Blade Server incl 3yr 24x7 Supp FIO Bundle 1 Svr E-LTU	F6Q89AAE

Models

	HP OneView for Blade Server incl 3yr 24x7 Supp Bundle Track 1 Svr Lic	F6Q90A

NOTE: Server provisioning capability (i.e. 'Insight Control server provisioning') is included and licensed as part of HP OneView. This capability is ideal for multi-server OS and driver provisioning to ProLiant and BladeSystem servers. A media kit ('HP Insight Control server provisioning USB media kit', #BD883A), which includes a USB flash drive, is available for customers who require a physical copy of the software on media. This media kit is separate and in addition to the "HP OneView Media Kit" (#E5Y37A).

NOTE: Licenses ship without media. The HP OneView Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates

NOTE: Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

NOTE: Tracking licenses may only be purchased by customers that have implemented an activation key agreement (AKA) with HP. For more information on Activation Key Agreements please visit: http://h18013.www1.hp.com/products/servers/proliantessentials/license/options.html

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HP OneView licenses for bundling with BladeSystem enclosures

HP OneView with iLO Advanced - c7000 enclosure required on same purchase order
NOTE: The following HP OneView part numbers can only be used when ordered on the same order as a BladeSystem c7000 enclosure.

HP OneView incl 3yr 24x7 Supp Enclosure FIO Bundle Phys 16 Svr Lic	E5Y41A
HP OneView incl 3yr 24x7 Supp Enclosure Bundle 16 Svr E-LTU	E5Y41AAE
HP OneView incl 3yr 24x7 Supp Enclosure Bundle Track 16 Svr Lic	E5Y42A

NOTE: Server provisioning capability (i.e. 'Insight Control server provisioning') is included and licensed as part of HP OneView. This capability is ideal for multi-server OS and driver provisioning to ProLiant and BladeSystem servers. A media kit ('HP Insight Control server provisioning USB media kit', #BD883A), which includes a USB flash drive, is available for customers who require a physical copy of the software on media. This media kit is separate and in addition to the "HP OneView Media Kit" (#E5Y37A).

NOTE: Licenses ship without media. The HP OneView Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates

NOTE: Tracking licenses may only be purchased by customers that have implemented an activation key agreement (AKA) with HP. For more information on Activation Key Agreements please visit: http://h18013.www1.hp.com/products/servers/proliantessentials/license/options.html

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HP OneView upgrade licenses

HP OneView upgrade licenses from iLO Advanced, Insight Control, or VCEM
NOTE: For use in environments where iLO Advanced, Insight Control, or Virtual Connect Enterprise Manager (VCEM) is already licensed. Upgrades do not include iLO Advanced licenses.

HP OneView Upgrade from Insight Management incl 3yr 24x7 Supp Physical 1 Svr Lic	F6Q91A
HP OneView Upgrade from Insight Management incl 3yr 24x7 Supp Flex Qty E-LTU	E5Y45AAE
HP OneView Upgrade from Insight Management incl 3yr 24x7 Supp Phys Flex Qty Lic	E5Y45A

NOTE: The SKU listed immediately above is available in CHINA ONLY.
NOTE: Licenses ship without media. The HP OneView Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates
NOTE: Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

Standard Features

Modern Architecture	HP OneView is a lifecycle management platform for the converged infrastructure. It manages the physical infrastructure needed to support virtualization, cloud computing, and mixed computing environments. Deploying, managing, troubleshooting, and maintaining a converged infrastructure for thousands of workloads is handled as easily as one.

One Model, One Data, One View

HP OneView is a **resource-oriented solution** focused on the entire hardware lifecycle -- from initial configuration to on-going monitoring and maintenance of both logical resources (like server profiles, networks, connections) and physical resources (like servers, interconnects, enclosures). Labels can be applied to resources to rapidly search, filter, and invoke operations. And operations can be performed on resources in bulk using Multi-select (like to power on servers or update enclosure configurations).

This advanced architecture connects the resources with a **common representation of the servers, networks, and storage for the converged infrastructure**. This powerful domain-specific representation of resources also models their associations and interdependencies, which enables each area to contribute to the 'one view' of the converged infrastructure. This modern architecture incorporates other notable industry practices, such as the **separation of management and data backplanes**, which offloads management traffic from production networks and can be particularly critical in stopping denial-of-services (DoS) attacks.

Converged Platform

The single, integrated platform in HP OneView increases the productivity every member of the IT team - across servers, storage, and networking. It facilitates collaboration, removes friction, and accelerates time to value. When performing an action, you have **one tool for all tasks with one operating model** that provides a consistent way of viewing your resources and results. You can access all resources that you need and for which you are authorized. Your actions can match your business processes, without being limited by the assumptions and constraints imposed by the software developer. For example, with HP OneView you can deploy complete server profiles in a single step with a single resource.

This single management platform supports converged management across HP ProLiant DL servers, BladeSystems, HP Virtual Connect, and HP 3PAR StoreServ Storage – with inventory viewing of Cisco Nexus 5000 switches and Cisco Fabric Extender for HP BladeSystem modules and with environment support for BladeSystem enclosures with B22HP interconnect modules.

Automate with Software-defined Approaches

Software-defined approaches in HP OneView are coupled with a unique state change message bus and REST APIs to provide automation and a closed loop method of ensuring compliance. Intelligent change monitoring allows automation to be closed-looped. These capabilities allow virtualization administrators to automate control of HP compute, storage, and networking resources without a detailed knowledge of each device.

Use of configuration profiles and groups enables push-button builds that instantly deliver resources and captures best-practices and policies, without mistakes or variations, to ensure compliance and consistency. Profiles and groups can be created once and rolled out to hundreds of enclosures and systems. Software-defined control and closed-loop automation streamlines the delivery of IT services, so they are rapid, repeatable, and reliable at a lower cost. |

Standard Features

Enterprise Integration

HP OneView is an open development platform which is designed to work in conjunction with HP and third-party tools to extend the software-defined data center. All HP OneView telemetry and control functions can be accessed using simple REST API commands that interface to the state change message bus. You can efficiently integrate your infrastructure, tools, and processes for application awareness and control of your IT operations.

HP provides integrations for several large enterprise software solutions which demonstrate the tight control of HP OneView physical converged infrastructure from their management consoles:

- HP OneView for VMware vCenter Server,
- HP OneView for Microsoft System Center,
- HP OneView for Red Hat Enterprise Virtualization, and
- HP Operations Orchestration
- Complete management experience in 'HP CloudSystem built on ConvergedSystem 700x'

The HP OneView consistent APIs, data model, and message bus replace the 'eclectic conglomeration' of traditional system approaches and 'future-proof' your environment with a converged management approach. HP OneView has the modern architecture to get you to the 'IT as a Service' in your future.

Product Features   HP OneView includes the following features:

- Converged by design
- Software-defined control
- Open integration using the REST API
- Automated Storage provisioning
- Virtual Connect management
- Remote management with iLO Advanced
- Environmental management
- System Health
- Firmware updates and Configuration change management
- Server provisioning
- Security
- Appliance Backups
- VMware vCenter integration
- Microsoft System Center integration
- Red Hat Enterprise Virtualization integration
- HP CloudSystem on ConvergedSystem 700x
- HP Operations Orchestration integration

Appliance simplicity   The HP OneView management appliance is the lifecycle management tool that provisions, monitors, updates, and repairs your infrastructure. Appliance upgrade support is also provided to help existing users to move to the current version of HP OneView.

This management appliance is delivered as a virtual appliance running in a VMware ESXi or Microsoft Hyper-V virtual machine. The appliance is 'OS-agnostic': for example, it can manage servers running both Windows and Linux operating systems. (Server operating systems are not included and must be purchased separately.)

Obtaining HP OneView   HP OneView management software can be downloaded for free and used for 60-days without charge.

Standard Features

software	The software can be obtained in one of two ways:

    (1) Software download from HP Software Depot (OVA), or
    (2) Purchase of the HP OneView Media Kit (contains a USB flash drive).

Licenses

HP OneView is licensed 'per physical server'. **Three years of 24x7 Technical Support and Updates (TS&U) is included with all license purchases**, along with web-based training (WBT) to build basic product proficiency. A variety of license types are provided to meet different user needs:

- Standalone licenses,
- Factory integrated licenses (purchased with HP ProLiant servers and BladeSystems),
- Tracking licenses (providing customer-specific, pay-as-you-go enterprise licensing),
- Upgrade licenses.

HP OneView software ordered with **factory integrated licenses will have the license keys preloaded** onto the HP ProLiant servers or HP BladeSystem enclosure for immediate license recognition when connected to the management appliance. This is a 'Connect and Go' user experience.

Tracking licenses require customer pre-approval of an Activation Key Agreement (AKA) contract.

Customers ordering HP OneView standalone or upgrade licenses will receive a license entitlement certificate via physical shipment or via email, which then must be redeemed online in order to obtain the license activation key.

Upgrades from Integrated Lights-Out (iLO) Advanced, Insight Control, or Virtual Connect Enterprise Manager (VCEM) include three years of 24x7 Technical Support and Updates and web-based training.

For more information, see: http://www.hp.com/go/insightlicense

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Converged by Design

HP OneView radically simplifies everyday management of server, storage, and network resources. A unified user experience, combined with integration to partner operations management tools, simplifies everyday tasks and processes. Converged management provides you with a variety of powerful, easy-to-use tools in a single interface that's designed for the way you think and work:

- **Dashboard** provides capacity and health information at your fingertips
- **Map View** allows you to visualize the relationships between your devices, up to the highest levels of your datacenter infrastructure
- **Smart Search** instantly gets you the information you want for increased productivity, with search support for all the elements in your inventory (for example, to search for alerts)
- **Activity View** allows you to display and filter all system tasks and alerts
- **Group management** enables administration, troubleshooting, and monitoring of large enterprises as though they were a fraction of their size
- **Mobile access** using a scalable, modern user interface based on HTML5

Dynamic collaboration among experts replaces static manual use of whiteboards, sticky notes, emails, and spreadsheets. The single integrated platform provides one view across the converged infrastructure, enabling collaboration through real-time, context-sensitive information sharing.

Software-defined Control

The software-defined nature of HP OneView for converged management enables you to grow by capturing and standardizing your IT team's best practices. This approach leverages your best expertise across the organization and still allows for customization so that you maintain ultimate control.

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Profiles capture the entire configuration for a given converged infrastructure resource into a single place, making them easy to configure. Server profiles define the critical characteristics of your server: firmware levels, boot order configuration, BIOS settings, network connections (LAN and SAN), etc. Possible uses of profiles might include:

- Create a new server profile from a predefined server template profile (or a 'golden image').
- Assign a pre-configured server profile to any appropriate hardware without resetting factors.
- Assign SAN storage provisioning from the server profile.
- Configure firmware updates for HP ProLiant Gen8 DL rack servers.

Groups are the recipes for building all or part of your infrastructure environment, specific to the kind of environment you want to build. Your own experts specify the capabilities and constraints for the groups in their area, which guarantees that your best practices are built into your environment in the best manner. These groups can then be delivered to lower-level administrators to replicate best practices without requiring excessive communications. This software-defined structure decouples and abstracts resources from the typical manual-linear-individual processes to eliminate process steps that cause delays and to scale solutions that can be re-used across organizations. And groups are designed to work with all your important tasks in HP OneView.

Sets allow you to designate collections of resource groups by a single name. 'Network sets' are an example of this software structure, which use a single name for a collection of Ethernet links. These software structures provide for easy re-use and assignments that scale quickly.

Software-defined infrastructure – like Profiles, Groups, and Sets -- helps you to specify configurations, provisioning quickly and consistently, simplify changes, and control change management.

Open Integration

HP OneView is designed with an Open API and a State-Change Message Bus to allow easy integration into the full capabilities of the management architecture. A single, consistent resource model is embodied in a new HTML5 user interface and the Representational State Transfer (REST) API. You can **use the REST API to automate, integrate, and customize** anything you can do from the UI using your favorite scripting or programming language.

- Automate standard work flows, troubleshooting steps, and integrations such as configuration management databases (CMDB).
- Connect to Service Desks.
- Monitor resources, collect data, map/model systems, and export data to custom formats.
- Attach custom databases, data warehouses, or 3rd party business intelligence tools.
- Integrate in-house user customizations.

State-Change Message Bus (SCMB) is an interface that notifies custom scripts/integrations of any and all changes to managed resources (both logical and physical resources) via asynchronous messaging. Integration scripts are notified of additions or changes to status without having to continuously poll for status via the REST APIs. This message bus returns commands in 500 milliseconds to give you fast response for your custom integration of applications, processes, and devices.

Open integration gives **access to the full power of the management architecture**, assuming appropriate permissions, via the REST API and State-Change Message Bus.

The REST API now has Storage control enhancements and **Python and PowerShell scripts** are freely available to assist your custom integrations. See the *HP OneView technical documentation* at and the *HP OneView Community forum*

Automated Storage Provisioning

HP OneView provides **automated, policy-driven provisioning of storage resources**. It is fully integrated with server profiles so that you can manage your new or existing HP 3PAR storage

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infrastructure. The software-defined nature of HP OneView for converged management enables you to:

- View and manage your storage system and storage pools,
- Add existing volumes and create new volumes, and
- Create volume templates to provision multiple volumes with the same configuration.

Switched fabric, Direct Attach (FlatSAN), **and VSAN SAN topologies** are supported for communication between devices:

- HP 3PAR StoreServ Storage systems connected directly to an enclosure via Fibre Channel are dynamically discovered by HP OneView.
- HP 3PAR StoreServ Storage Systems connected to an HP B-series Fibre Channel SAN configurations (SANs and MetaSANs - managed through the HP B-Series SAN Network Advisor software).
- HP 3PAR StoreServ Storage Systems connected to a Brocade Fibre Channel SAN configurations (SANs and MetaSANs - managed through Brocade Network Advisor (BNA) software).

Using 3PAR StoreServ Storage and attaching volumes to server profiles within HP OneView is simple:

- Add a storage system and storage pools to the appliance
- Add SAN managers and discovered SANs
- Associate SANs with Fibre Channel networks
- Create or add volumes
- Attach volumes to server profiles (utilizing automated SAN zoning)

Automatic SAN zoning

You can also add Storage Area Network (SAN) managers to bring their managed SANs under management of the appliance. Managed SANs can be associated with Fibre Channel networks on the appliance to enable automated zoning and automatic detection of Fibre Channel connectivity. HP OneView automatically configures SAN zoning through server profile volume attachments.

Storage integration through server profiles

Storage integration with server profiles saves you time and makes you more productive. You can attach private or shared storage volumes to HP OneView server profiles to enable automated boot target configuration and to move Direct Attach (FlatSAN) profiles across enclosures.

Storage monitoring, connectivity, and synchronization

HP OneView monitors storage systems and issues alerts when there is a change in health or connectivity status of storage systems. Storage systems are also monitored to ensure that they are synchronized with changes to hardware and configuration settings. Should the appliance lose connectivity with a storage system, an alert is displayed until connectivity is restored. Storage topology is also available in the HP OneView Map View.

See the *HP OneView Support Matrix* for a list of supported storage systems.

Virtual Connect   HP Virtual Connect provides **wire-once, change-ready environment** to make it easy for administrators

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management	to manage their dynamic network environment at the server edge. HP OneView simplifies the deployment of various Virtual Connect environments: single enclosure, racks of enclosures in a single data center, and across data centers. The software-defined nature of HP OneView extends HP Virtual Connect features using Profiles, Logical Interconnect Groups, and Network Sets to simplify management and capture best practices:

- **Profiles** enable HP OneView to configure the Virtual Connect capabilities and support dynamic network changes. Virtual Connect administrators can change pre-existing connection networks and connection bandwidth without powering down blade servers.
- **Logical Interconnect Groups** are created for configuring the Virtual Connect module with its uplinks and associated networks, enabling efficient application to multiple Virtual Connect environments.
- **Network Sets** are used to easily update multiple networks in various profiles from a single location, rather than updating each network separately. Network sets are useful in virtual environments where each profile connection needs to access multiple networks.

Fibre Channel support in HP Virtual Connect includes the HP Virtual Connect 8Gb 24-Port Fibre Channel Module and HP Virtual Connect 8Gb 20-Port Fibre Channel Module, and FlexFabric supports the next-generation HP Virtual Connect FlexFabric-20/40 F8 Module.

Active-Active configuration support for Virtual Connect allows full use of all uplink ports in an uplink set, reduces the oversubscription rates for server-to-network-core traffic for more predictable traffic patterns, and provides faster link failure detection and failover times. Optimized for North/South traffic patterns, the Active/Active configuration support can be combined with the SmartLink to allow NIC teaming drivers to transmit on both adapter ports and maintain redundancy.

Advanced capabilities support untagged traffic, VLAN tunneling, and configurable Link Aggregation Control Protocol (LACP) timers, min/max bandwidth settings on connections, visibility to MAC address tables, 'per FlexNIC' traffic statistics and performance monitoring, and enhanced detection-protection-reporting of Pause Flood and Network Loops. Other enhancements, like inventory views of Cisco Nexus 5000 series switches and Cisco Fabric Extender for HP BladeSystem modules, and bulk creation of Ethernet networks via the UI and REST API, can provide additional productivity for users.

See the *HP OneView Support Matrix* for HP Virtual Connect hardware requirements.

Remote management (iLO Advanced)	HP OneView licenses iLO Advanced, HP's **comprehensive lights-out remote management** solution for ProLiant servers. This environment-management solution includes numerous key features to help solve complex IT problems, including:

- **Remote access** to server power control and event logs.
- **Graphical Remote Console** turns a supported browser into a virtual desktop, giving the user full control over the display, keyboard, and mouse of the host server. The OS-independent console displays remote host server activities (like shutdown/startup operations) and can be launched from the HP OneView server profile page.
- **Shared console and Console replay** allows up to six team members to view and share control of a single virtual KVM session, while capturing and saving screen video for later review.
- **USB-based Virtual Media** allows an IT administrator to boot the remote server from the client machine (or anywhere on the client's network), and execute functions remotely.
- **Integration with Microsoft Terminal Services** provides a graphical remote console when the OS is fully-loaded/available on the host system; and a secure, hardware-based Lights-Out console for remote access to the host server when the OS is not operational.
- **Serial record and play back** saves the text-based output data for later access and play back.

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- **Remote System logs** keep a log of everything being done for later troubleshooting or records.

Environmental management

HP OneView integrates resources to provide you with a power monitoring and energy management solution that is designed to scale to the level of your datacenter. Centralized monitoring of datacenter power consumption and thermal output is complemented with energy instrumentation connected into HP iLO capabilities, allowing compatibility with any operating system residing on the managed server. HP OneView integrates three critical areas for environmental management of the data center: thermal data visualization, power delivery infrastructure representation, and physical asset location in 3D.

Key environmental management features include:

- **3D data center thermal mapping** allows you to view the thermal status of your entire data center at a glance. Thermal data is collected from the managed resources in each data center rack and is presented graphically, allowing easy identification of hot spots in a particular rack.
- **Visualization of CPU, power, and thermal data** for hundreds of servers may be viewed and managed.
- **Power Discovery Services** enable automatic discovery and visualization of power delivery topology for your data center. HP's Intelligent Power Distribution Units (iPDUs) and Platinum level power supplies enable automatic rack power topology mapping in HP OneView, which can automatically detect wiring errors (like lack of redundancy) and can automatically update electrical inventory when new servers are installed. HP OneView also supports per-outlet power control for remote power cycling of each iPDU outlet. (Devices not supporting Power Discovery Services can manually define their power requirements and power topology.)
- **Location Discovery Services** enable HP OneView to automatically know and display the exact 3D location of Gen8 servers within HP Intelligent Series Racks, reducing labor time, lowering operational costs, and eliminating human errors associated with inventory and asset management. (Racks and devices that do not support Location Discovery Services can have their position manually input in the rack/device of the data center.)
- **Utilization dashboards** display key CPU/power/thermal information for the selected server, enclosure, or iPDU. Historical utilization graphs with up to three years of data (depending on storage limitations) help identify poor-performing servers and improve power utilization.

HP OneView environment management can help you save on your operating expenses, and it can even extend data center capacity to avoid additional capital expenses. It provides performance when you need it, and cost savings when you don't.

System health

Efficient data views and effective control enable you to respond to issues for managing the health of HP ProLiant servers. HP OneView simplifies monitoring by providing a streamlined, modern alert management architecture.

When managed resources are added to the appliance, they are **automatically set up for monitoring**, including the automatic registration of SNMP traps and scheduling of health data collection. They are monitored immediately without requiring you to invoke additional configuration or discovery steps.

All monitoring and management of data center devices is **agentless and out-of-band** for increased security and reliability. No OS software is required, no open SNMP ports on the host OS are required (for Gen8), and zero downtime updates can be performed for these embedded agents. ProLiant Gen8 and later servers support agentless monitoring via iLO. ProLiant G7 servers require host OS SNMP agents.

You can view all alerts, filter your alerts, and search your alerts using HP Smart Search. Alerts can be assigned to specific users and annotated with notes from administrators. Notifications or traps can be

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automatically forwarded to enterprise monitoring consoles or to centralized SNMP trap collectors.

A single user interface provides summary views of the detailed hardware and firmware inventory information on servers, storage, networks, and firmware revisions. The data includes HP Smart Search support for elements of inventory and is visible through the user interface and REST API.

Firmware updates and Configuration change management	HP OneView leverages and extends the HP Smart Update portfolio of HP Service Pack for ProLiant (SPP) and HP Smart Update Manager (HP SUM) for breakthrough system maintenance at the scale of your data center. HP SPP and HP SUM provide capabilities to systematically update HP ProLiant servers and blade infrastructures with one-click simplicity. HP OneView extends these capabilities with **software-defined approaches** and with **firmware baselines** for efficient, reliable, non-disruptive, and simple firmware management across the data center. The firmware repository in HP OneView allows you to manage multiple versions of HP Service Pack for ProLiant (SPP). An SPP is a comprehensive collection of firmware and system software components -- all tested together as a single solution stack-- that include drivers, agents, utilities, firmware packages for HP ProLiant servers, controllers, storage, blades, enclosures, and other options. HP OneView deploys the SPP across your environment according to your business practices and provides automatic firmware updates for a variety of uses:

- Identify firmware compatibility issues.
- Set a firmware baseline on devices to establish a desired firmware state.
- Add devices into HP OneView, while performing minimum required firmware checks and highlighting out-of-compliance devices for updates with the selected firmware baseline.
- Update firmware for an entire enclosure, or individually for components.
- Apply firmware baselines to servers as a part of the server profile, while maintaining flexibility for specific servers to differ from an enclosure's baseline.

Firmware updates in HP OneView are driven by server profiles using HP Smart Update Manager (HP SUM) for efficiency at scale. **Firmware update operations do not impact your production LAN** in any way because they are performed entirely via the management LAN. These same processes can be used to simplify configuration change management across your data center.

Server provisioning	HP OneView provides the right-to-use a complete provisioning solution for HP servers, with capabilities for multi-server OS and firmware provisioning to ProLiant and BladeSystem servers. Server provisioning automates the process of deploying and provisioning server software, enabling companies to quickly and easily adapt to changing business demands.

Key server provisioning features include:

- **Multi-Server provisioning** through imaging or through scripting.
- Provisioning of standard server configurations in an automated fashion from a remote web-based console, including HP Smart Array and iLO.
- **Operating System provisioning** for the latest Microsoft Windows, Windows with Microsoft Hyper-V, VMware ESXi, and Linux (Red Hat and SUSE versions), with HP-supplied configuration OS build plans for both Microsoft Windows and Linux to further simplify the initial OS deployment and driver integration steps.
- **Provisioning scripts**, using HP SmartStart technology, maximize productivity by automating the processes and by using HP-optimized drivers and pre-loaded agents.
- **PXE-free deployments** leveraging HP Intelligent Provisioning for ProLiant Gen8 servers (and with additional support for ProLiant G7 and G6 servers).
- **SAN Boot or SAN Attach provisioning** support on ProLiant BL and select DL servers.
- **Fast and easy setup**, installing as a virtual machine appliance at a data center or remotely.

Standard Features

Security	HP OneView provides a secure platform for data center management. Key security characteristics of the architecture provide a holistic basis for security: the separation of data and management planes, incorporation of best practices by using groups, and provisioning control. • **Separation of the data and management planes** is critical to avoid takeover in Denial of Service (DoS) attacks • Use of groups incorporates and institutionalizes best security practices for compliance • Provisioning control assures standardization in mass deployments A common mechanism is used to confirm user identification and control access to compute resources. One administrator can quickly set up authentication and authorization for each user as appropriate to their responsibilities and organizational association, for specific categories of computer resources. HP OneView provides **role-based access control (RBAC) and single-sign-on (SSO)** to iLO and Onboard Administrator. All user actions are logged in an audit log. Options for LDAP/AD-based directory services authentication and authorization are also supported. Also, the HP OneView management **appliance is security-hardened** with limited open ports, limited access to the command prompt, and a restricted "kiosk" graphical user interface (which prevents access to the underlying operating system and other software). Data downloads are also restricted to encrypted support dump files, encrypted backup files, audit logs, and certificates.
Appliance Backups	HP OneView provides a specific user role for appliance backup without permitting access to other resource views and tasks. Backup files are encrypted and contain configuration settings and management data-there is no need to create separate backup files for the appliance and its database files. Backups can be created while the HP OneView appliance is online, and the process can be scheduled from outside the management appliance with file collection according to your site policies.
HP OneView for VMware vCenter Server (integration)	HP OneView for VMware vCenter combines in one download key integrations for VMware management solutions. When used with the automation power of HP OneView, best practices for a Converged Infrastructure can be defined once and reused many times and provision an entire cluster with compute and storage fully configured in five easy steps. New integrations in VMware vCenter Operations Manager and Log Insight deliver powerful Analytics and deeper troubleshooting tools to your VMware administrators. **HP OneView for VMware vCenter**, the rebranded 'HP Insight Control for VMware vCenter' solution, seamlessly integrates the manageability features of HP ProLiant, BladeSystem, Virtual Connect and Storage with VMware solutions. Gain deep control of virtualized HP Converged Infrastructure environment— reducing the time it takes to make important changes, increase capacity or manage planned and unplanned downtime. **Seamlessly Integrate HP's Converged Management in VMware Management solutions** • Simplify administration with easy access in VMware vCenter Server client to health, inventory, and configuration monitoring. Combine physical and virtual views of your virtualized infrastructure from within the VMware vCenter. • Visually trace and monitor your infrastructure network end-to-end, from the host all the way to the individual network modules connected within your domain, delivering comprehensive network management and making it easy for you to review and change HP-specific info. • View and monitor the configuration of your HP Arrays portfolio by using detailed tables that provide relationships between volumes to LUN connections to your VMs or ESX server hosts. • Surface critical trend changes using HP OneView for VMware vCenter Operations Manager. This includes dashboards that facilitate the identification of root cause problems and

Standard Features

impacted resources across the Converged Infrastructure.

Reduce Planned and Unplanned Downtime with Automated Responses

- Automate actions on alerts. Receive pre-failure and failure alerts on HP server components and automate evacuation of VMs based on events that affect your physical systems. Templates are provided and ready to be configured.
- Take control by invoking HP remote management tools, such as iLO, Onboard Administrator, Virtual Connect Manager and Systems Insight Manager, in-context of the host you have selected, directly from the vCenter console.
- Accelerate configuration of VMware host networking and Virtual Connect by viewing required host networking changes and synchronizing configuration with a single click.
- Troubleshoot your environment faster when problems occur, using HP OneView for VMware vCenter Operations Manager and HP OneView for VMware Log Insight.

Increase Capacity on Demand for Provisioning and Deployment

- Provision your HP storage with HP OneView for VMware vCenter. Add a new datastore, delete or expand an existing datastore, create new VMs from template, or clone existing VMs.
- Fully automate the process for provisioning servers and storage from a simple 5-step wizard.

Maintain Stability and Reliability of Your Environment

- Maintain stability by monitoring and deploying firmware on HP ProLiant ESXi hosts that have the HP software bundle installed.
- Role-based security: Assign permissions for single-sign-on (SSO) to segment the level of access and control using the three role levels of VMware vCenter server.

Extensions for VMware vCenter are licensed for use with both HP OneView and Insight Control. (Only one of these two licenses is required on any given host, but advanced provisioning features are only available with HP OneView licensed hosts.) To download, visit: www.hp.com/go/ovvcenter

This integration enables you to provision, modify and recover complex infrastructure -- both virtual and physical together -- from your preferred management console.

NOTE: VMware vCenter Server must be purchased separately and is not included with HP OneView.

HP OneView for Microsoft System Center (integration)	HP OneView integrates with Microsoft System Center Server to deliver powerful HP hardware management capabilities directly from the System Center consoles for comprehensive system health, configuration management, and remote control. In conjunction with HP OneView, it also delivers robust deployment capabilities and is a key integration point for the broader portfolio of infrastructure management, service automation, and IT operations solutions available from HP.

By integrating HP converged management features into Microsoft System Center consoles, administrators can gain greater control of their technology environments. This provides consistency for software deployment and updates and enables a faster response in the event of server failure, reducing the risk of downtime.

HP OneView for Microsoft System Center Server provides the following capabilities from the Microsoft System Center consoles:

System Center Virtual Machine Manager (SCVMM)

Standard Features

- Enhanced provisioning uses HP OneView profiles to create or grow a Microsoft Hyper-V cluster consistently and reliably.
- Visually trace and monitor your infrastructure network end-to-end, from the host to the individual network modules within your domain, delivering comprehensive management of the network and making it easy for you to review and change any HP-specific information.
- Facilitate consistency and improve uptime with simplified driver and firmware updates via a rotating, automated workflow for Microsoft Hyper-V clusters using the HP ProLiant Updates Catalog.
- Take control by invoking HP remote management tools (such as iLO, OA, VCM, and HP OneView) in-context of the host you have selected, directly from the SCVMM console

System Center Operations Manager (SCOM)

- Prevents problems from occurring by proactively monitoring and managing hardware health and intelligently responding to hardware events on servers running Windows and Linux, as well as BladeSystem enclosures and HP Virtual Connect. A consolidated health monitoring view reflects the HP OneView model, showing relationships between managed devices.
- Manage the health of HP ProLiant Gen8 servers without the need for loading OS-based SNMP agents or WBEM providers. It can also be used to monitor the health of servers that do not have an OS yet loaded, as well as ProLiant Gen8 servers running any operating system that has a supported Agentless Monitoring Service (such as VMware ESXi).
- Take control by invoking HP remote management tools (such as iLO, OA, VCM, and HP OneView) in-context of the host you have selected, directly from the SCOM console

System Center Configuration Manager (SCCM)

- Provides quick and reliable Windows deployment to bare metal HP servers
- Ensures consistency and maximize uptime with simplified Windows driver and firmware updates using the HP ProLiant Updates Catalog.
- Provides detailed component level inventory of every managed HP Windows server using the HP ProLiant Inventory Tool.

Extensions for Microsoft System Center are delivered via 'HP OneView for Microsoft System Center' (previously known as 'HP Insight Control for Microsoft System Center'). To download, visit www.hp.com/go/ovsc

This integration enables you to provision, modify and recover complex infrastructure -- both virtual and physical together -- from your preferred management console.

NOTE: Microsoft System Center must be purchased separately and is not included with HP OneView.

HP OneView for Red Hat Enterprise Virtualization (integration)	HP OneView integrates with Red Hat Enterprise Virtualization (RHEV) to manage your HP converged infrastructure from within the RHEV management console. **HP OneView for Red Hat Enterprise Virtualization (RHEV)** is a user interface (UI) plug-in that seamlessly integrates the manageability features of HP ProLiant, HP BladeSystem, and HP Virtual Connect within the RHEV management console. Shifting from one management tool to another, each with a partial view of available data, is both time consuming and complex. Administrators gain insight and control of their HP infrastructure while supporting their Red Hat virtualized environment from a single screen. This reduces the time to make important changes and to manage downtime. HP OneView for Red Hat Enterprise Virtualization provides the following capabilities from within

Standard Features

the RHEV management console:

- Displays host and infrastructure inventory and health information on a single screen, reducing IT administration time and effort.
- Displays network relationships from the RHEV-defined network to the physical switch.
- Provides single sign-on capability to trusted HP infrastructure tools, including Onboard Administrator, iLO, and Virtual Connect.
- Single screen display of host firmware including: System ROM, iLO, Smart Array, Power management controller, Onboard Administrator, & Virtual Connect module.
- Logs events and delivers notifications into a dedicated newsfeed.

These integration extensions are delivered via 'HP OneView for Red Hat Enterprise Virtualization' (previously known as 'HP Insight Control for Red Hat Enterprise Virtualization'). To download, visit www.hp.com/go/ovrhev

This integration enables you to view both virtual and physical infrastructure together -- from your preferred management console.

NOTE: Red Hat Enterprise Virtualization (RHEV) must be purchased separately and is not included with HP OneView.

HP CloudSystem on ConvergedSystem 700x	HP CloudSystem with HP OneView offers an administrative experience that utilizes similar API's, terminology, and user experience. HP CloudSystem built on ConvergedSystem 700x along with HP OneView and hypervisor interfaces gets you the most complete management experience available, enabling the provisioning physical and virtual resources through a single management screen.
Integration with HP Operations Orchestration	HP Operations Orchestration is an industry-leading IT run-book and process automation solution. It can automate 60% of administrative tasks (like provisioning, configuration, patching, and upgrades) and provides out-of-box codified best practices to enforce standards improve agility. Up-to-date compliance information enables remediation and you can automate across physical and virtual servers to decrease downtime and risk associated with manually intensive error prone tasks. The HP OneView integration helps you to develop, deploy and manage automations with ease. Its comprehensive integration capabilities and out-of-box content span across multiple IT domains to **automate your IT tasks, operations, and processes**. This integration with HP OneView implements a set of workflows that might support HP OneView for tasks and activities, authentication, storage, and various network types (Ethernet, Fibre Channel, Logical interconnects and their groups). It is part of the HP Solutions Content Pack for HP Operations Orchestration 10.0 release.

Supported Product

Hardware Support

HP server hardware platforms
HP OneView supports management of HP ProLiant rack servers (Gen8) and HP BladeSystem (G7 and Gen8) c7000 infrastructure. Customers should consult the detailed HP OneView Support Matrix for specifics on platform support at: http://www.hp.com/go/oneview/docs

Environmental capabilities of HP OneView require target servers with an embedded power meter. Systems that support this power management can be found in the HP OneView Support Matrix at: http://www.hp.com/go/oneview/docs

Appliance support and requirements

The HP OneView management virtual appliance is a free software download at: http://www.hp.com/go/oneview/download
NOTE: See the HP OneView Support Matrix for the most current requirements at: http://www.hp.com/go/oneview/docs

VIRTUALIZATION PLATFORMS FOR THE MANAGEMENT APPLIANCE

Microsoft Hyper-V	Microsoft Hyper-V on Windows Server 2012
	Microsoft Hyper-V on Windows Server 2012 R2
VMware ESXi	VMware ESXi 5.0
	VMware ESXi 5.0 Update 3
	VMware ESXi 5.1
	VMware ESXi 5.1 Update 2
	VMware ESXi 5.5
	VMware ESXi 5.5 Update 1

CLIENT-SIDE SOFTWARE REQUIREMENTS

Supported Internet browsers	Microsoft Internet Explorer 9, 10, and 11
	Mozilla Firefox, latest supported release
	Mozilla Firefox Extended Support Release (ESR) 24.x
	Chrome 33.x
	The browsers listed here have been tested and qualified for use with HP OneView. (Safari has not been tested, but should work.)
	Consult the HP OneView Support Matrix for more detailed information:
	http://www.hp.com/go/oneview/docs
	NOTE: HP makes every effort to support newer versions of and updates to supported web browsers. HP will endeavor to support the newer browser versions in the next maintenance release or full release of HP OneView. If you encounter a problem with a newer, untested version of a web browser, submit a report to your authorized HP support representative. In some cases, the short-term solution might be to revert to an earlier, supported web browser version

Service and Support, HP Care Pack, and Warranty Information

Warranty	HP will replace defective delivery media for a period of 90 days from the date of purchase. This warranty applies to all HP OneView products found on the delivery media.

HP Software Support   HP offers a number of additional software support services, many of which are provided to our customers at no additional charge.

Software Technical Support and Update Service
HP OneView software products include three years of 24 x 7 HP Software Technical Support and Update Service. This service provides access to HP technical resources for assistance in resolving software implementation or operations problems. The service also provides access to software updates and reference manuals in electronic form. With this service, HP OneView customers will benefit from expedited problem resolution as well as proactive notification and delivery of software updates. For more information about this service, see http://www.hp.com/services/insight

Registration for Software and Technical Support and Update Services -
If you received a license entitlement certificate, registration for this service will take place following online redemption of the license certificate/key.

How to Use Your Software Technical Support and Update Service
Once registered, you will receive a service contract in the mail containing the Customer Service phone number and your Service Agreement Identifier (SAID). You will need your SAID when calling for technical support. Using your SAID, you can also go to the HP Support Center web page to view your contract online.

Join the Conversation (www.hp.com/go/hpsc)
The HP Support Center is a community-based, user-supported tool for HP customers to participate in discussions amongst the customer community about HP products. For discussions related to HP OneView software, see the "Management Software and System Tools" area.

Software and Drivers download pages (http://welcome.hp.com/country/us/en/support.htm) provide the latest software and drivers for your ProLiant products.

HP Service Pack for ProLiant (SPP) (www.hp.com/go/spp)
HP Service Pack for ProLiant (SPP) with HP Smart Update Manager (HP SUM), part of the HP Smart Update portfolio, provide breakthrough system maintenance tools that systematically update HP ProLiant servers and blade infrastructures with one-click simplicity at the scale of your data center. They simplify and consolidate system software update processes enabling you to update your ProLiant servers faster, with a reduction in downtime due to the online updates process.

- HP Service Pack for ProLiant (SPP) and HP Smart Update Manager (HP SUM) can be downloaded from http://www.hp.com/go/SmartUpdate
- Product Change Notifications (PCNs), Customer Advisories (CAs), and software driver alerts are proactively delivered through Subscriber's Choice at http://www.hp.com/go/myadvisory

Contact Support
HP Worldwide Customer Service contact numbers are available at http://www.hp.com/country/us/en/wwcontact.html For U.S. customers, say "HP OneView" when prompted for the product name.

Online Community Forum   **Share your Experience** (http://www.hp.com/go/oneviewcommunity)
The HP OneView community is an online forum for customers and partners to share their experiences and pose questions related to HP OneView. Community members along with HP representatives can assist with answering questions.

QuickSpecs

Service and Support, HP Care Pack, and Warranty Information

HP Education and Training Services

Today's business climate is changing rapidly, with requirements for responsiveness, adaptability, and flexibility that are more important than ever before. The ability of individuals and enterprises to learn and utilize technology is key, as well as the new business models and processes such learning supports. After all, these knowledgeable people will prove to be your ultimate competitive advantage. In the end, people are the business, and the business with the best people wins the competitive battle.

Your purchase of HP OneView entitles you access to web-based training to build basic product proficiency. This training includes an overview of the product, features and benefits, architecture, use cases, and expected future enhancements. Product use is demonstrated and information is provided on where to find additional information and support.

Training from HP provides knowledge and skill enhancement for the following critical technologies:

- HP ProLiant and HP BladeSystem management solutions, and their supporting HP Insight and/or Fusion management tools, along with HP Virtual Connect
- HP CloudSystem Matrix and HP VirtualSystem solutions
- HP Hyperscale solutions, including the HP Moonshot portfolio
- Virtualization using HP technologies such as Virtual Machine Monitor (VMM), HP Matrix Operating Environment, and/or third party technologies from VMware, Red Hat and Microsoft
- The operating system of choice - such as Microsoft Windows or Linux - to enable customers to get the most out of their HP ProLiant infrastructure investment.

Unlock the full potential of your HP ProLiant and HP BladeSystem investment with training from HP! Book your training today at http://www.hp.com/learn/proliant

Related Options

HP Care Pack Services	**HP Technical Services**	
	HP Education Care Pack (fixed)	HF385e
	HP Education Care Pack (flex)	HF385A1

Service Offerings (HP Per Event Services)

HP OneView Startup Installation and Configuration Service (fixed)	U1V78E
HP OneView Startup Installation and Configuration Service (flex)	H6K67A1
HP OneView Integration Service (fixed)	U1V79E
HP OneView Integration Service (flex)	H6K68A1

Support Uplifts

HP 4 year 24x7 One View with iLo Software Support	U0SJ3E
HP 5 year 24x7 One View with iLo Software Support	U0SJ4E
HP 4 year 24x7 One View w/o iLo Software Support	U0SJ8E
HP 5 year 24x7 One View w/o iLo Software Support	U0SJ9E
HP 4 year 24x7 One View BL 16-Server Software Support	U0SK3E
HP 5 year 24x7 One View BL 16-Server Software Support	U0SK4E

Proactive Care
NOTE: Proactive Care is recommended for customers running a virtualized infrastructure and/or customers who desire an enhanced call support experience. Proactive Care includes Collaborative Support plus Proactive services delivered by the on-shore/near-shore Advanced Solution Center (ASC) and backed by the global delivery organization. End-to-end case ownership from a Technical Solution Specialists and Technical Account Manager remotely delivers firmware/software revision management, proactive scans, and incident trend reports.

HP 3 year 24x7 One View with iLo Proactive Care Service	U0SJ5E
HP 4 year 24x7 One View with iLo Proactive Care Service	U0SJ6E
HP 5 year 24x7 One View with iLo Proactive Care Service	U0SJ7E
HP 3 year 24x7 One View w/o iLo Proactive Care Service	U0SK0E
HP 4 year 24x7 One View w/o iLo Proactive Care Service	U0SK1E
HP 5y 24x7One View w/o iLo Proactive Care Service	U0SK2E
HP 3 year 24x7 One View BL 16-Server Proactive Care Service	U0SK5E
HP 4 year 24x7 One View BL 16-Server Proactive Care Service	U0SK6E
HP 5 year 24x7 One View BL 16-Server Proactive Care Service	U0SK7E

QuickSpecs

HP OneView

Technical Specifications

Environment-friendly Products and Approach | **End-of-life Management and Recycling** | Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

QuickSpecs

Summary of Changes

Date	Version History	Action	Description of Change:
21-May-2014	From Version 6 to 7	Changed	Text and format in Overview, Standard Features and Support Product sections were updated
18-Feb-2014	From Version 5 to 6	Added	Added the What's New Section: HP OneView 1.05 provides the following enhancements for infrastructure management: VMware vCenter Server integration with HP OneView delivers powerful HP hardware management capabilities directly from the vCenter console to virtualization administrators Active-Active configuration support for Virtual Connect reduces oversubscription rates for more predictable server-to-network-core traffic and provides faster link failure detection and failover times RAID support for HP ProLiant blade servers allows local storage configuration support (ACU/SSA) in server profiles Dynamic network changes supported in server profiles allows Virtual Connect administrators to change pre-existing connection networks and connection bandwidth without powering down blade servers HP OneView appliance upgrade support from versions 1.0 /1.01 to current version 1.05 HP ProLiant Gen8 server support for DL560, DL580, and BL660c Gen8
09-Dec-2013	From Version 4 to 5	Changed	Changes made in the Models and the Supported Product sections.
22-Oct-2013	From Version 3 to 4	Changed	Changes made in the North America Versions only.
04-Oct-2013	From Version 2 to 3	Changed	Changes made to both remove and add various part numbers from the Standard Features and Related Options sections.
26-Sep-2013	From Version 1 to 2	Added	Added "HP" in front of OneView throughout the QuickSpec.

Summary of Changes