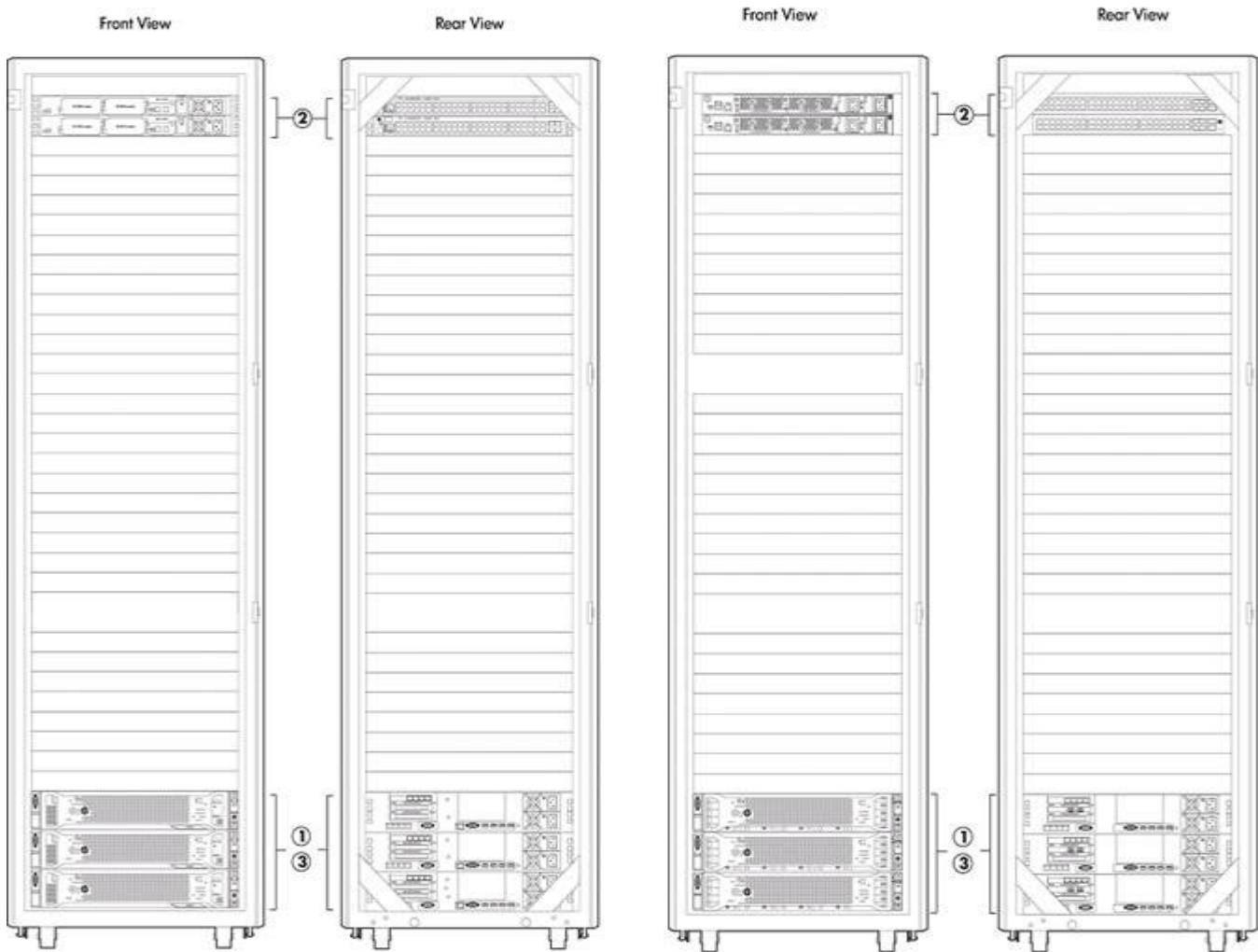


Overview



HP ConvergedSystem 300 for Virtualization (Standard and Performance)

1. Three (3) to Eight (8) HP ProLiant DL380p Gen8 Servers.
2. Two (2) HP 2920-48G switches for HP ConvergedSystem 300 for Virtualization Standard or two (2) HP 5900AF-48G-4XG-2QSFP+ switches for the HP ConvergedSystem 300 for Virtualization Performance.
3. Three (3) to Eight (8) HP StoreVirtual VSA software instances.

NOTE: The HP ConvergedSystem 300 for Virtualization is a standardized virtualization platform based on rack servers that includes 3 to 8 servers with HP StoreVirtual VSA software. This configuration allows for expansion kits that add a single HP ProLiant DL380p Gen8 server up to a total of five (5) expansion kits for a total of eight (8) servers.

NOTE: The HP ConvergedSystem 300 for Virtualization can be ordered in Standard or Performance configurations. Standard comes with Intel® Xeon® E5-2640v2 processors and 96GB of RAM with 12x 300GB of raw storage while the Performance configuration with Intel® Xeon® E5-2680v2 processors and 192GB of RAM with 16x300GB of raw storage.

Overview

What's New?

- HP ConvergedSystem 300 for Virtualization delivers a simplified, pre-designed, scalable virtualization platform for mid-market customers than can be expanded to meet business needs.
- HP ConvergedSystem 300 for Virtualization provides virtualization solutions for customers desiring rack server based virtualization systems.

At A Glance

HP ConvergedSystem 300 for Virtualization is a pre-engineered virtualization workload-optimized system that is easy to procure, manage, scale and support that dramatically simplifies IT. Based on market leading HP Converged Infrastructure, it is designed to help businesses quickly harness the full potential of virtualization.

The HP ConvergedSystem 300 for Virtualization provides faster deployment, simpler lifecycle management, and unified support. This optimized solution is built on standardized infrastructure, lowering the cost and reducing the risk of virtualization deployments. With modular scalability, they easily grow to meet business demands. The end-to-end solution is designed to be reliable and is covered by HP Proactive Care support and can be sourced entirely from HP, inclusive of VMware software licenses if needed. Key features and benefits include:

- **Complete, optimized system** - HP ConvergedSystem 300 for Virtualization is delivered as a turn-key solution built on the latest HP Converged Infrastructure technology including HP ProLiant DL380p Gen8 servers, HP StoreVirtual VSA storage, and HP Networking, all optimized and pre-integrated with VMware vCenter Server and vSphere Enterprise Plus, creating an ideal virtualization platform for business applications for mid-market customers.
- **Standardized architecture** - The system is based on a common architecture of HP Converged Infrastructure that shortens deployment time resulting in the saving of IT resources.
- **Pre-designed system** - The system is pre-designed and integrated in the HP factory based on extensively tested configuration guidelines. Included implementation services quickly get the system up and running to peak performance, reducing the risk of disruption to the existing environment.
- **Easily Expandable** - HP ConvergedSystem 300 for Virtualization is built with modular building blocks and is easy to expand infrastructure.
- **Simplified, consolidated management** - HP Insight Control for VMware vCenter Server integrates the manageability features of HP Converged Infrastructure products into the VMware vCenter management and monitoring console. This combination provides administrators increased control and insight.
- **Solution level support** - Personalized and Proactive - HP offers Proactive Care to support the complete solution, including the HP hardware, software and VMware software supported by a single point of contact.

The HP ConvergedSystem 300 for Virtualization is built on well-established HP technologies and services including:

- HP ProLiant DL380p Gen8 servers
- HP StoreVirtual VSA storage software
- HP Networking HP 2920-48G or 5900AF-48G-4XG-2QSFP+ switches
- HP 642 42U i-Series Shock Racks
- HP Insight Control v7.2 - including iLO Advanced and the HP Insight Control extension for VMware vCenter
- HP Factory Integration provides solution integration, validation, and on-site installation.
- HP Proactive Care provides a single source support for the complete HP ConvergedSystem 300 for Virtualization system, including the VMware software.

For more information about the HP ConvergedSystem 300 for Virtualization, see:

<http://www.hp.com/go/convergedsystems/cs300virt>

For more information about HP Insight Control, see: <http://www.hp.com/go/insightcontrol>

For more information about HP and VMware see: <http://www.hp.com/go/vmware>

Overview

For more information about HP Virtual SAN Appliance see: <http://www.hp.com/go/vsa>

For more information about HP Factory Express see: www.hp.com/go/factoryexpress

Software

HP ConvergedSystem 300 for Virtualization software The HP ConvergedSystem 300 for Virtualization comes standard with HP Insight Control v7.2 software, the HP Insight Control plug-in for vCenter, VMware vSphere 5.1 Enterprise Plus and VMware vCenter Server Standard. HP Insight Control is installed and configured at the customer site. VMware software is factory installed for convenience and licenses are included, if purchased with the solution. VMware license registration and acceptance of the End User License Agreement (EULA) takes place onsite at time of installation. For customers that have existing VMware ELAs (Enterprise License Agreements) - please inform your sales team so that you are able to take advantage of your site license. For a complete Solution Level Support experience from HP, customers will need to purchase their VMware licenses from HP. This will include HP support covering the VMware software. Customers will need to supply OS licensing for the VMs they deploy.

VMware vSphere, vCenter Server HP and VMware together provide powerful integrated solutions for customers who want the confidence of deploying VMware virtualization and cloud software on certified systems with comprehensive services and seamless support. The long-standing partnership between HP and VMware, based on over 12 years of collaboration in engineering, sales, and marketing, has resulted in leading market positions and customer successes across a wide range of industries including financial services, health care, telecommunications, manufacturing and the public sector.

VMware vSphere and vCenter are preinstalled on the HP ConvergedSystem for Virtualization and necessary licenses are included, unless removed from the order based on an existing customer ELA. For customers that maintain ELAs (Enterprise License Agreements) for VMware software - please inform your sales team that your ConvergedSystem should take advantage of your site license. For a complete Solution Level Support experience from, customers will need to purchase their VMware licenses from HP. When purchasing licenses with HP ConvergedSystem 300 for Virtualization, one (1) VMware vSphere Enterprise Plus license per socket is included by default. Please ensure that you meet minimum entitlement requirements for your particular configuration.

For more information on VMware software licensing and packaging from HP, see:

http://h18004.www1.hp.com/products/quickspecs/12307_div/12307_div.html#Overview

For more information about VMware vSphere Enterprise Plus, see:

<http://www.vmware.com/products/datacenter-virtualization/vsphere/overview.html>

For more information about VMware vCenter Server, see:

<http://www.vmware.com/products/vcenter-server/overview.html>

Software

HP Insight management software

HP Insight Control

HP Insight Control plug-in for vCenter

HP Integrated Lights-Out 4 (iLO 4)

- HP Insight Control is essential server management software that enables you to fully utilize the management capability built into your ProLiant servers. The combination of HP ProLiant with Insight Control delivers the best managed servers in the industry. For more information, see: www.hp.com/go/insightcontrol.
- HP Insight Control for VMware vCenter adds integrated extensions to make the ProLiant management information available through the vCenter console, and also adds health monitoring and alerts, proactive virtual machine management, and ProLiant OS deployment and update capabilities. For more information, see: www.hp.com/go/icvc.
- HP Insight Control remote management, featuring HP Integrated Lights-Out 4 (iLO) Advanced, provides comprehensive lights-out remote management capabilities for ProLiant servers, including high-performance virtual KVM for routine and emergency remote administration, remote access to server power control and event logs, virtual media for simple deployment and update of remote servers, and single server power measurement and regulation. For more information, see: www.hp.com/go/iLO.

Other Services

Warranty services

The HP ConvergedSystem 300 for Virtualization is covered by a global limited warranty and supported by HP Services. Beyond the warranty, Proactive Care is the minimum support with a choice of reactive response of 24x7 4hr onsite response.

HP Financial Services

To support customers' transition, HP Financial Services (HPFS) can help in a way that you may not have considered. HPFS can help you invest in your business while preserving precious capital.

For more information, contact your local HP Financial Services Representative. In the United States, call 1-888-277-5942. In Canada, dial 1-800-HP-LEASE. For more information please visit: www.hp.com/hpfinancialservices for links to HP Financial Services around the world.

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.

Installation, Startup and Support Services

HP ConvergedSystem 300 for Virtualization Services The following services are included with all HP ConvergedSystem 300 for Virtualization systems:

- Factory integration services to rack, cable, and configure the hardware and software (including VMware vSphere and vCenter) infrastructure, based in part on Customer Intent Document (CID) to ensure that system is built and ready for datacenter integration (see NOTE below).
- Integration services into customer data center, using customer settings such as IP addresses, hostnames, and other information needed for datacenter integration. HP
- Installation and Startup start up services, including:
 - Unpack system and inspect for damages
 - Connection of HP ConvergedSystem into customer network environment
 - Basic configuration of the network uplinks to the customer environment and connection verification
 - Assistance with license redemption and End User License Agreement (EULA) acceptance assurance
 - Installation of HP Insight Control (and associated components)
 - Basic solution level functionality testing
 - Review equipment and basic processes, including process for placing calls to request support
- 3yr HP Proactive Care 4hr Call-to-Repair with Personalized Support Option is the recommended support level. Additional support levels and services are available. See Step 2 in How to Order section below.

Proactive Care	4hr Response	Included solution level support option.
	Personal Option	First level upgrade offering additional level of support and care.
	Personal Option w/ 6hr CTR	Optimal for environments that require significant service level agreement for support.

- Onsite installation services for HP ConvergedSystem 300 for Virtualization HA124A1 #5UQ is included with your system and will cover the onsite installation activities for 3 HP ProLiant DL380p Gen8 servers and up to 5 Expansion kits when included on the same order and incorporated into the same rack. Customers purchasing the non-racked version must include Qty (1) HA124A1#5N5 - HP Startup ISS Additional 1 Day SVC. This will provide the onsite racking and cabling of the HP ConvergedSystem 300 for Virtualization
- It is advised the customer also purchase Proactive Select Credits to provide for any firmware or software updates for Insight Control.
- After the initial purchase of a HP ConvergedSystem 300 for Virtualization your customer may elect to add additional capacity by purchasing and Expansion Kit. For each Expansion kit you must order an HP ConvergedSystem 300 for Virtualization Expansion Kit Installation Service.

NOTE: Customer is required to provide cables for uplinks.

NOTE: The factory integration services included in this solution require a Customer Intent Document (CID) to assist with the configuration and successful installation and implementation of the solution. The CID Reference ID# is required to be in place prior to sale. Before issuing a purchase order against this solution, please contact your HP sales representative to engage an HP Engagement Project Manager (EPM) who will manage the CID process.

NOTE: HP ConvergedSystem 300 for Virtualization does not include advanced data center Network Integration Services. Some customers that do not have networking expertise internally may require Network Integration Services. For these customers, it is highly recommended that a custom network

Installation, Startup and Support Services

integration service be arranged with HP TS Consulting. For more information, please contact your TS sales representative.

**Connecting the HP
ConvergedSystem 300 for
Virtualization solution in
the datacenter**

Each compute rack has either two (2) HP 2920-48G or two (2) HP 5900AF-48G-4XG-2QSFP+ top of rack switches with up to four (4) network uplinks per switch to connect to the datacenter. Cat5e or greater cables need to be ordered or provided separately.

How to Order

NOTE: The HP ConvergedSystem 300 for Virtualization includes all HP hardware, HP software, and VMware software components as well as factory integration, onsite installation and startup, and 3 years of hardware and software support services.

NOTE: All hardware components are factory integrated and have been localized to US English. HP ConvergedSystem 300 for Virtualization comes with vSphere 5.1 Enterprise Plus, vCenter Server Standard, Insight Control v7.2, Insight Control v7.2 for vCenter plug-in, HP integration services and onsite integration as defaults. Customers that have ELAs (Enterprise License Agreements) covering vSphere 5.1 U1 Enterprise Plus and vCenter Server Standard are not required to purchase these licenses from HP.

NOTE: Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels will result in improper cooling that can lead to thermal damage.

Step 1: Order HP ConvergedSystem 300 for Virtualization. Select the appropriate model to meet your virtualization and performance needs.

Models **HP ConvergedSystem 300 for Virtualization configuration includes the following:** Request quote for latest pricing

Choose Physical or Virtual Rack

One (1) HP i-series 42U Rack or One (1) Virtual Rack (No Rack)

AND

Choose Standard or Performance Version

HP ConvergedSystem 300 for Virtualization Standard

- Three (3) HP ConvergedSystem 300 Standard Starter Kit which each include:
 - One (1) HP ProLiant DL380p Gen8 server configured with:
 - Two (2) Intel® Xeon® E5-2640 v2 processors
 - 96 GB of memory
 - One (1) HP 2GB FBWC for P-Series Smart Array
 - Twelve (12) HP 300GB 6G SAS 15K 2.5in SC Enterprise Hard Drives
 - One (1) HP Ethernet 1Gb 4-port 331T Adapter and one (1) HP Ethernet 1GbE 4-port 331FLR FIO Adapter
 - Two (2) HP 750W CS Platinum power supplies
 - **NOTE:** each DL380p runs HP StoreVirtual VSA software which is included in the ConvergedSystem 300 for Virtualization
 - Two (2) HP 2920-48G Switches

AND

- Zero (0) to Five (5) HP ConvergedSystem 300 for Virtualization Standard Expansion Kit which each include:
 - One (1) HP ProLiant DL380p Gen8 servers configured with:
 - Two (2) Intel® Xeon® E5-2640 v2 processors
 - 96 GB of memory
 - One (1) HP 2GB FBWC for P-Series Smart Array
 - Twelve (12) HP 300GB 6G SAS 15K 2.5in SC Enterprise Hard Drives
 - One (1) HP Ethernet 1Gb 4-port 331T Adapter and one (1) HP Ethernet 1GbE 4-port 331FLR FIO Adapter
 - Two (2) HP 750W CS Platinum power supplies

OR

How to Order

HP ConvergedSystem 300 for Virtualization Performance Starter Kit

- Three(3) HP ConvergedSystem 300 for Virtualization Performance Starter Kit which each include:
 - One (1) HP ProLiant DL380p Gen8 server configured with:
 - Two (2) Intel® Xeon® E5-2680 v2 processors
 - 192 GB of memory
 - One (1) HP 2GB FBWC for P-Series Smart Array
 - Sixteen(16) HP 300GB 6G SAS 15K 2.5in SC Enterprise Hard Drives
 - One (1) HP Ethernet 1Gb 4-port 331T Adapter and one (1) HP Ethernet 1GbE 4-port 331FLR FIO Adapter
 - One (1) HP NC552SFP 10GbE 2P Svr Adapter
 - Two (2) HP 750W CS Platinum power supplies
 - **NOTE:** each DL380p runs HP StoreVirtual VSA software which is included in the order
 - Two (2) HP 5900AF-48G-4XG-2QSFP+ Switches

AND

- Zero (0) to Five (5) HP ConvergedSystem 300 for Virtualization Performance Expansion Kits which include:
 - One (1) HP ProLiant DL380p Gen8 servers configured with:
 - Two (2) Intel® Xeon® E5-2680 v2 processors
 - 192 GB of memory
 - One (1) HP 2GB FBWC for P-Series Smart Array
 - Sixteen(16) HP 300GB 6G SAS 15K 2.5in SC Enterprise Hard Drives
 - One (1) HP Ethernet 1Gb 4-port 331T Adapter and one (1) HP Ethernet 1GbE 4-port 331FLR FIO Adapter
 - One (1) HP NC552SFP 10GbE 2P Svr Adapter
 - Two (2) HP 750W CS Platinum power supplies

Technical Specifications

HP ConvergedSystem 300 for Virtualization	Dimensions HP i-Series Shock Rack	Height	42U, 78.82 in (200.2 cm)
		Width	23.54 in (59.8 cm)
		Depth	42.74 in (108.6 cm)
	Weight* (approximate for maximum rack configuration)	HP ConvergedSystem 300 for Virtualization Standard	1177.75lbs (534.22kg)
		HP ConvergedSystem 300 for Virtualization Performance	1230.17 lbs (558.00 kg)
	Color	Doors	Graphite Metallic
		Frame	Carbon
	Clearance (for air flow and access)	Front	48 in (121.9 cm)
		Rear	30 in (76.2 cm)
	Temperature range	Operating	50° to 95° F (10° to 35° C)
		Non-Operating	-22° to 140° F (-30° to 60° C)
	Relative humidity	Operating	15 to 85% relative humidity (Rh) 28°C (82.4°F) maximum wet bulb temperature, non-condensing
		Non-Operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
	Power Usage* - maximum	HP ConvergedSystem 300 for Virtualization Standard	2716.32 W @ 115 Volts
		HP ConvergedSystem 300 for Virtualization Performance	4640W @ 115Volts
	BTU rating*, maximum	HP ConvergedSystem 300 for Virtualization Standard	9263.12 BTU/hour
		HP ConvergedSystem 300 for Virtualization Performance	15823.12 BTU/hour

NOTE: Operating temperature has an altitude derating of 1.8° F (1° C) per 1,000 ft (304.8 m). No direct sustained sunlight. Upper operating limit is 10,000 ft (3,048 m) or 70Kpa/10.1 psia. Upper non-operating limit is 30,000 ft (9,144 m) or 30.3 KPa/4.4 psia.

NOTE: To review maximum server system power ratings for facilities planning purposes use the HP Power Advisor at: <http://www.hp.com/go/hppoweradvisor>.

Technical Specifications

Environmental-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.

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