Overview

HPE vSAN Ready Node Solutions

VMware vSAN™ is a software-defined storage product that pools direct-attached storage devices across a VMware vSphere server virtualization cluster to create a distributed, shared data store.

Hewlett Packard Enterprise supports, certifies, and offers VMware vSAN Ready Node™ configurations based on HPE ProLiant servers. These easy-to-order configurable bundles are built on HPE ProLiant DL325, DL360 and DL380 Gen10 servers and are certified under the HPE vSAN Ready Node specification.

Each configurable bundle is optimized for either virtualization, data management and processing, accelerated infrastructure, or data warehousing to provide ideal performance based on the customer's workload.

VMware software from Hewlett Packard Enterprise includes either one, three, or five years of unlimited, 24x7 installation, configuration, and troubleshooting support.

A complete list of supported and certified ProLiant servers is available either in the Hewlett Packard Enterprise support matrix at **http://www.hpe.com/servers/vmwarecert**

Or in the VMware hardware compatibility list (HCL) at **http://www.vmware.com/resources/compatibility/search.php**.

What's New

- HPE DL325 Gen10 CTO vSAN FIO Ready Node
- HPE DL360 Gen10 CTO vSAN FIO Ready Node
- HPE DL380 8SFF Gen10 CTO vSAN FIO Ready Node
- HPE DL380 24SFF Gen10 CTO vSAN FIO Ready Node

At A Glance

HPE vSAN Ready Nodes provide customers with the fastest path to optimized workloads, delivered on platforms that provide broad scalability and flexibility for each unique environment. The end-to-end solutions are covered by HPE Proactive Care support and can be sourced entirely from Hewlett Packard Enterprise, inclusive of VMware software licenses. Key features and benefits include:

- Optimized solutions – Each vSAN Ready Node offering is optimized to provide ideal performance on the following workloads:
  - Virtualization – The HPE ProLiant DL325 offering is optimized for heavily virtualized and/or web infrastructure environments, making this solution ideal as a computing power add-on to increase output in media streaming or web serving services or manage IT infrastructure.
  - Data management and processing – The HPE ProLiant DL360 offering provides a solution to data storage aimed at optimizing data management and analytics. With high disk throughput and low latency, this solution will be a great addition for a variety of storage structures.
  - Accelerated Infrastructure – The HPE ProLiant DL380 8SFF offering comes graphics-ready to optimize next-generation compute performance via dedicated coprocessors. A great addition for high-end 2D/3D visualization or virtual desktop infrastructures.
  - Data warehousing – The HPE ProLiant DL380 24SFF offering provides the storage needed to assist with heavy collaboration and data intensive or large analytics processing environments. Optimized for capacity with additional expansions slots available, this server is geared to handle a wide range of storage requirements.
- Custom and scalable build- All nodes default to a configuration optimized for both cost and performance; however, each has a full suite of options to upgrade. The customer can tailor each server to fit their specific environment.
- Factory built -The hardware is assembled and configured in the HPE factory using extensively tested configuration guidelines.
- Solution-level support - Hewlett Packard Enterprise offers its HPE 4-hour 24x7 Proactive Care Service as base support, with options for Proactive Care Advanced as well as DataCenter Care. This solution-level support experience is designed to accelerate time to resolution and is delivered by an HPE Center of Excellence capable of supporting the complete solution, including the HPE hardware, software, VMware software, and Microsoft software. HPE solution support experts are well versed in all aspects of the offering. Customers also have the ability to select from various service level options such as HPE 6-Hour Call-to-Repair Hardware Support, or options for defective media retention.

Standard Features

HPE Web Sites
Alliance page: **https://www.hpe.com/us/en/alliance/vmware.html**
Support Matrix: **http://www.hpe.com/servers/vmwarecert**

License activation instructions:
https://hpe.sharepoint.com/teams/Team_VMware/Shared%20Documents/Licensing/c04430317_VMware%20Activation%20Instructions.pdf

VMware from Hewlett Packard Enterprise:
https://buy.hpe.com/b2c/us/en/software/virtualization-software/vmware-virtualization-software/vmware-vsphere-software-series/vmware-vsphere-software/p/4010459

VMware websites
https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/product/vmware-product-guide.pdf
https://vsansizer.vmware.com/login?src=%2Fhome
https://www.vmware.com/resources/compatibility/search.php
Download software at **http://downloads.vmware.com**

Licensing
VMware server products are available on a per-processor license. You must have the same number of licenses as processors installed in your system. Note that VMware solution bundles (i.e. Essentials products) and acceleration kits have specific server and processor boundaries within these licenses. To view the licenses for which you are entitled, log in to your VMware portal.

License Activation and Software Download Instructions
Retrieve your entitlement order number from the Entitlement Certificate. If you have opted for physical delivery, your entitlement certificate will be part of your shipment. If you have opted for electronic delivery, you will receive an email from Hewlett Packard Enterprise with a link for retrieving your entitlement certificate.
Visit **MyEnterpriseLicense.hpe.com** and login with your Hewlett Packard Enterprise Passport to generate your Partner Activation Code (PAC). You will receive an email from Hewlett Packard Enterprise with various activation codes, including your PAC, for your VMware products.
Visit **http://vmware.com/code/hp** to register your PAC and generate your serial number.
Visit **http://downloads.vmware.com** to download your VMware software and follow the prompts to install your VMware product.
Visit**https://hpe.sharepoint.com/teams/Team_VMware/Shared%20Documents/Licensing/c04430317_VMware%20Activation%20Instructions.pdf** for License Activation Instructions.

Supported Media for vSphere 6
Acquire your choice of Hewlett Packard Enterprise supported and qualified media. Please note that all devices will need to be imaged for vSphere 6
- Any HPE hard drive
- HPE flash devices are listed under the Hardware Specs below

---

Entitlement Mappings
For complete details on upgrades and entitlements, visit **http://www.vmware.com/go/vsphere** and review the Upgrade Center.

Downgrade Information
vSphere downgradeable to currently supported products. Downgrades and entitlements for valid subscriptions will be available in your profile in the VMware license portal. VMware vSphere supported products are listed in the VMware lifecycle matrix https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/support/product-lifecycle-matrix.pdf

For more information on how to downgrade license keys in the VMware portal visit **https://kb.vmware.com/s/article/2006975**

Configuration Information

How to order

Customers can purchase VMware vSAN Ready Nodes directly from Hewlett Packard Enterprise or through Hewlett Packard Enterprise authorized resellers

Virtualization

HPE ProLiant DL325 Gen10 Sever for VMware vSAN FIO Ready Node Tracking   P17504-B21

Data Management and Processing

HPE ProLiant DL360 Gen10 Sever for VMware vSAN FIO Ready Node Tracking   P17393-B21

Accelerated Infrastructure

HPE ProLiant DL380 Gen10 Sever for VMware vSAN FIO Ready Node Tracking   P17481-B21

Data Warehouse

HPE ProLiant DL380 Gen10 Sever for VMware vSAN FIO Ready Node Tracking   P17481-B21

Installation, Startup, and Support Services

HPE VMware SW/FW Update Service

To ensure optimal solution performance and quick time to resolution for support issues, Hewlett Packard Enterprise recommends that all customers maintain their software (SW)/firmware (FW) at the latest recommended recipe level. HPE publishes a SW/FW recipe twice a year with prescribed versions for all FW and SW elements. At a minimum, a system should be maintained at no more than N-2 versions.

For those customers with the appropriate hardware (HW)/SW capabilities, HPE publishes a thorough update guide with each recipe release that authorized customers can download from the HPE Support Center and use to perform their own updates.

HPE strongly recommends that customer utilize our existing SW/FW updated services to ensure that an update does not unnecessarily impact your business model.

Configuration Information

HPE VMware vSAN Products

NOTE: Software requirements: VMware vCenter Server 6.x and either VMware vSphere 6.x (any edition) or VMware vCloud Suite 6.x (any edition).

VMware vSAN Standard 1 Processor 1yr LTU	G4Y17A
VMware vSAN 1 Processor 1yr E-LTU	G4Y17AAE
VMware vSAN Standard 1 Processor 3yr LTU	G4Y18A
VMware vSAN 1 Processor 3yr E-LTU	G4Y18AAE
VMware vSAN Standard 1 Processor 5yr LTU	G4Y19A
VMware vSAN 1 Processor 5yr E-LTU	G4Y19AAE
VMware vSAN Advanced 1 Processor 1yr LTU	P9H44A
VMware vSAN Advanced 1 Processor 1yr E-LTU	P9H44AAE
VMware vSAN Advanced 1 Processor 3yr LTU	P9H45A
VMware vSAN Advanced 1 Processor 3yr E-LTU	P9H45AAE
VMware vSAN Advanced 1 Processor 5yr LTU	P9H46A
VMware vSAN Advanced 1 Processor 5yr E-LTU	P9H46AAE
VMware vSAN Enterprise 1 Processor 1yr LTU	P9U52B
VMware vSAN Enterprise 1 Processor 1yr E-LTU	P9U52BAE
VMware vSAN Enterprise 1 Processor 3yr LTU	P9U53B
VMware vSAN Enterprise 1 Processor 3yr E-LTU	P9U53BAE
VMware vSAN Enterprise 1 Processor 5yr LTU	P9U54B
VMware vSAN Enterprise 1 Processor 5yr E-LTU	P9U54BAE
VMware vSAN for Remote Office Branch Office 25 VM Pack 1yr E-LTU	Q0E37BAE
VMware vSAN for Remote Office Branch Office 25 VM Pack 3yr E-LTU	Q0E38BAE
VMware vSAN for Remote Office Branch Office 25 VM Pack 5yr E-LTU	Q0E39BAE
VMware vSAN 6 Advanced for Remote Office Branch Office 25 VM Pack 1yr E-LTUvSAN	Q5T24AAE
VMware vSAN 6 Advanced for Remote Office Branch Office 25 VM Pack 3yr E-LTUvSAN	Q5T25AAE
VMware vSAN 6 Advanced for Remote Office Branch Office 25 VM Pack 5yr E-LTUvSAN	Q5T26AAE

HPE VMware vSAN Upgrades

NOTE: Software requirements: VMware vCenter Server 6.x and either VMware vSphere 6.x (any edition) or VMware vCloud Suite 6.x (any edition).

VMware vSAN Standard to vSAN Advanced Upgrade 1 Processor 1yr E-LTU	Q9N14AAE
VMware vSAN Standard to vSAN Advanced Upgrade 1 Processor 3yr E-LTU	Q9N15AAE
VMware vSAN Standard to vSAN Advanced Upgrade 1 Processor 5yr E-LTU	Q9N16AAE
VMware vSAN Standard to vSAN Enterprise Upgrade 1 Processor 1yr E-LTU	R2H05AAE
VMware vSAN Standard to vSAN Enterprise Upgrade 1 Processor 3yr E-LTU	R2H06AAE
VMware vSAN Standard to vSAN Enterprise Upgrade 1 Processor 5yr E-LTU	R2H07AAE
VMware vSAN Advanced to vSAN Enterprise Upgrade 1 Processor 1yr E-LTU	Q9N17AAE
VMware vSAN Advanced to vSAN Enterprise Upgrade 1 Processor 3yr E-LTU	Q9N18AAE
VMware vSAN Advanced to vSAN Enterprise Upgrade 1 Processor 5yr E-LTU	Q9N19AAE

Configuration Information

Support VMware Licences.	Proactive Care Services Description	ProActive Care Services SKU
G4Y18A	HPE 3 year Proactive Care 24x7 VMWare VSAN Standard 1P Service	U7H70E
G4Y18AAE	HPE 3 year Proactive Care 24x7 VMWare VSAN Standard 1P Service	U7H70E
G4Y19A	HPE 5 year Proactive Care 24x7 VMWare VSAN Standard 1P Service	U7H71E
G4Y19AAE	HPE 5 year Proactive Care 24x7 VMWare VSAN Standard 1P Service	U7H71E
P9H45A	HPE 3 year Proactive Care 24x7 VMWare VSAN Advanced 1P Service	U6ZQ7E
P9H45AAE	HPE 3 year Proactive Care 24x7 VMWare VSAN Advanced 1P Service	U6ZQ7E
P9H46A	HPE 5 year Proactive Care 24x7 VMWare VSAN Advanced 1P Service	U6ZQ8E
P9H46AAE	HPE 5 year Proactive Care 24x7 VMWare VSAN Advanced 1P Service	U6ZQ8E
P9U53B	HPE 3 Year Proactive Care 24x7 Vmware VSAN Enterprise 1P Service	U6ZU7E
P9U53BAE	HPE 3 Year Proactive Care 24x7 Vmware VSAN Enterprise 1P Service	U6ZU7E
P9U54B	HPE 5 Year Proactive Care 24x7 Vmware VSAN Enterprise 1P Service	U6ZU9E
P9U54BAE	HPE 5 Year Proactive Care 24x7 Vmware VSAN Enterprise 1P Service	U6ZU9E
Q0E38BAE	HPE 3 Year Proactive Care 24x7 VMware VSAN ROBO 25 VM Pack Service	U6ZX8E
Q0E39BAE	HPE 5 Year Proactive Care 24x7 VMware VSAN ROBO 25 VM Pack Service	U6ZY0E
Q5T25AAE	HPE 3 Year Proactive Care 24x7 VMware vSAN Advanced ROBO 25VM Service	U5JU4E
Q5T26AAE	HPE 5 Year Proactive Care 24x7 VMware vSAN Advanced ROBO 25VM Service	U5JU6E
Q9N15AAE	HPE 3 Year Proactive Care 24x7 VMware vSAN Standard to vSAN Advanced Upgrade 1P Service	U5KK0E
Q9N16AAE	HPE 5 Year Proactive Care 24x7 VMware vSAN Standard to vSAN Advanced Upgrade 1P Service	U5KK2E
Q9N18AAE	HPE 3 Year Proactive Care 24x7 VMware vSAN Advanced to vSAN Enterprise Upgrade 1P Service	U5KK4E
Q9N19AAE	HPE 5 Year Proactive Care 24x7 VMware vSAN Advanced to vSAN Enterprise Upgrade 1P Service	U5KK6E
R2H06AAE	HPE 3 Year Proactive Care 24x7 VMware vSAN Standard to vSAN Enterprise Upgrade 1P Service	U5LH4E
R2H07AAE	HPE 5 Year Proactive Care 24x7 VMware vSAN Standard to vSAN Enterprise Upgrade 1P Service	U5LH6E

Service and Support

Service and Support
HPE Technology Services for industry-standard servers
Hewlett Packard Enterprise Technology Services delivers confidence, reduces risk, and helps customers realize agility and stability. Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HPE Support Services
HPE Support Services enable you to order the right service level, length of coverage, and response time as you purchase your new server, giving you full entitlement for the selected support.

Parts and Materials
Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

Recommended Services
Hardware and software support services designed specifically for your technology with rapid access to Advanced Solution Center specialists for start-to-finish case management plus proactive reports and recommendations for firmware and software management and best practice advice. **https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf**

Technical Specifications

Technical Specifications

Weight & Dimensions

Dimensions	8.75 x 5.625 x 0.063 in (22.23 x 14.29 x 0.16 cm)
Volume	0.002
Gross Weight (lb)	0.056 lb (0.03 kg)

Default Hardware Specs
NOTE: These are base default specifications for each server.
NOTE: HPE ProLiant DL325 (base vSAN Ready Node configuration. Processor, memory, storage, network interface controllers [NIC], and power supplies are configurable options)

Node Size	1U
Processor	AMD EPYC processors - 24 cores, additional options available
Memory	256 GB, additional options available
Storage	12G SAS Modular LH Controller, one additional option 96W Smart Storage Battery Capacity – 6 x 1.92 TB SATA Read Intensive, additional options available Caching – 2 x 480 GB SATA Mixed Use, additional options available 8 GB Dual MicroSD Flash USB
Network Ports	Ethernet 10 GB FLOM, additional options available
Power Supplies	2 x 800W Flex Slot Platinum Hot Plug Power Supply Kits

NOTE: HPE ProLiant DL360 (base vSAN Ready Node configuration. Processor, memory, storage, NIC, and power supplies are configurable options)

Node Size	1U
Processors	2 x Intel® Xeon® Scalable processors - 14 cores, additional options available
Memory	384 GB, additional options available
Storage	12G SAS Modular LH Controller, one additional option 96W Smart Storage Battery Capacity – 6 x 1.92 TB SATA Read Intensive, additional options available Caching – 2 x 960 GB SATA Mixed Use, additional options available 8GB Dual MicroSD Flash USB
Network Ports	Ethernet 10 GB FLOM, additional options available
Power Supplies	2 x 800W Flex Slot Platinum Hot Plug Power Supply Kits

NOTE: HPE ProLiant DL380 8SFF (base vSAN Ready Node configuration. Processor, memory, storage, NIC, power supplies, and graphics are configurable options)

Node Size	2U
Processors	2 x Intel Xeon Scalable processors - 10 cores, additional options available
Memory	128 GB, additional options available
Storage	12G SAS Modular LH Controller, one additional option 96W Smart Storage Battery Capacity – 3 x 1.92 TB SATA Read Intensive, additional options available Caching – 480 GB SATA Mixed Use, additional options available 8 GB Dual MicroSD Flash USB
Network Ports	Ethernet 10 GB FLOM, additional options available
Power Supplies	2 x 800W Flex Slot Platinum Hot Plug Power Supply Kits
Graphics	Nvidia Tesla T4, additional options

Technical Specifications

NOTE: HPE ProLiant DL380 24SFF (base vSAN Ready Node configuration. Processor, memory, storage, NIC, and power Supplies are configurable options)

Node Size	2U
Processors	2 x Intel Xeon Scalable processors - 12 cores, additional options available
Memory	384 GB, additional options available
Storage	12 G SAS Modular LH Controller, one additional option
	96W Smart Storage Battery
	Capacity - 6 x 2.4 TB SAS HDD, additional options available
	Caching - 2 x 400 GB SAS Write Intensive, additional options available
	8 GB Dual MicroSD Flash USB
Network Ports	Ethernet 10 GB FLOM, additional options available
Power Supplies	2 x 800W Flex Slot Platinum Hot Plug Power Supply Kits

Environment-friendly Products and Approach
End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to **http://www.hpe.com/info/recycle.**

To recycle your product, please go to **http://www.hpe.com/info/recycle** or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise 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 HPE website at
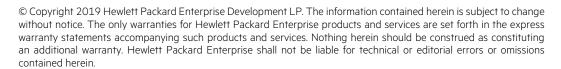
http://www.hpe.com/info/recycle.

These instructions may be used by recyclers and other WEEE treatment facilities as well as HPE OEM customers who integrate and re-sell HPE equipment.

Summary of Changes

Date	Version History	Action	Description of Change
30-Jul-2019	Version 2	Changed	Overview, Standard Features, Configuration Information, Service and Support and Technical Specifications sections were updated.
01-Jul-2019	Version 01	New	New QuickSpecs

f   in   ✉
Sign up for updates

Hewlett Packard Enterprise

a00067741enw - 16427 - Worldwide - V2 - 30-July-2019