

Overview

HPE Scalable Object Storage with Scality RING

HPE Scalable Object Storage with Scality RING is a scale-out software-defined storage platform that runs on HPE ProLiant and Apollo 4000 Servers and is designed for multi-application environments with mixed-workload performance requirements at petabyte scale. The Scality RING collapses traditional object storage and NAS, to addresses file and object storage workloads that do not require expensive flash-based SAN. Leveraging the power and flexibility of the HPE Apollo and ProLiant DL servers Scality RING provides an enterprise-class storage solution designed to scale linearly across multiple active sites and thousands of servers. Acting as a single, distributed system, this combination supports scaling beyond petabyte and hosting an unlimited number of objects. Powered by a rich choice of protocols and interfaces, and a wide range of data protection schemes, Scality RING provides high throughput with a predictable, linear performance pattern. The software enables continuous availability through hardware failures, capacity expansions, software upgrades, and hardware upgrades. A unique hardware-agnostic architecture enables customers to take advantage of future innovations in the HPE Apollo 4000 and ProLiant server families including performance, capacity, components, and architecture.

Enterprises and Service Providers building cloud storage solutions are challenged to build scale-out storage infrastructures to support multiple application workloads and provide the highest data resiliency with the current technical limitations and costs of current traditional vendors. To stay flexible, efficient and cost-effective, Scality RING provides different methods to protect data including replication and erasure coding – allowing customers to achieve up to 14 nines (9s) of data durability. Organizations wishing to deploy an HPE + Scality storage infrastructure can do so without having to make significant changes to their applications. Scality RING supports object (S3/REST) and file (SMB/NFS) protocols, easily integrating into many standard and custom applications.

What's New

Apollo 4000 options include 12TB HDD drives and solid state NVME PCIe cards for increased bulk storage capacity on each node.

Scality RING v7.4 Long Term Support version with:

- Improved installer with automated hardware and operating system environment checks
- New geo-aware user interface with additional business metrics for useable and capacity planning
- File connector policies – built-in Geo-replication, new Undelete and Versioning capabilities per volume
- S3 connector policies – built-in Geo-replication, bucket-level versioning enables data restore from older versions, Geo-aware S3 bucket location control, unlimited bucket scalability
- Automated disk replacement supported with HPE Apollo 4000 servers only.

Platform Information

Models

Scality HDD RING SKUS

| | |
|---|----------|
| Scality RING Single Site Perpetual License per TB (Min 200TB) E-LTU for HPE Servers | P8Y89AAE |
| NOTE: Required Licensing SKU for Perpetual Single Site License – a minimum of 200TB is required on initial deployments. Single site installation only. If multiple site, P8Y91AAE is required. | |
| Scality RING Single Site Hardware Lifetime License per TB (Min 200TB) E-LTU for HPE Servers | P8Y90AAE |
| NOTE: Required Licensing SKU for HW Lifetime Single Site License – a minimum of 200TB is required on initial deployments. Single site installation only. If multiple site, P8Y92AAE is required. | |
| Scality RING Geo Perpetual License per TB (Min 200TB) E-LTU for HPE Servers | P8Y91AAE |
| NOTE: Required Licensing SKU for Perpetual Multi site License – a minimum of 200TB is required on initial deployments. Multi-site installation only. If single site, P8Y89AAE is required. | |
| Scality RING Geo Hardware Lifetime License per TB (Min 200TB) E-LTU for HPE Servers | P8Y92AAE |
| NOTE: Required Licensing SKU for HW Lifetime Multi site License – a minimum of 200TB is required on initial deployments. Multi-site installation only. If single site, P8Y90AAE is required. . | |
| Scality RING Connector for Email App per TB (min 200TB) E-LTU | P8Y93AAE |
| Scality RING Engineer Professional Services (per Day) E-LTU | P8Y94AAE |
| Scality RING Installation Package (up to 3 Geographical Sites) E-LTU | P8Y95AAE |
| Scality RING Capacity Expansion Professional Services per TB of Usable Capacity Expansion E-LTU | P8Y96AAE |
| NOTE: For upgrades of capacity - mandatory with addition of capacity. | |
| Scality RING Advanced 3-day Operation Training with Scality Engineer E-LTU | P8Y98AAE |
| Scality RING Certification Course (base) per Person E-LTU | P8Y99AAE |
| Scality RING Dedicated Care Service Extended Yearly Fee E-LTU | P8Z00AAE |
| Scality RING 24/7 Maintenance and Support per TB (Min 200TB) per year E-LTU for HPE Servers | P8Z01AAE |
| Scality RING Dedicated Care Service Fundamentals Yearly Fee E-LTU | P8Z02AAE |
| Scality RING 24/7 Maintenance and Support Geo Site per TB (Min 200TB) per Year E-LTU | P8Z03AAE |
| NOTE: Purchase of maintenance and support, either P8Z01AAE or P8Z0AAE, is required for every Scality RING installation. | |

Standard Features

Key Features

Optimal performance on HPE Apollo 4000 storage servers

Although the Scality RING software is fully hardware-agnostic, designed for industry standard servers with support for SSD & HDDs, HPE and Scality have qualified RING on select HPE ProLiant and Apollo 4000 servers.

Customers can rapidly adopt new hardware and media innovations, with no need for data migration on hardware refresh. Support is simpler and deployments are highly adaptable. Overall, this significantly reduces acquisition and operating costs and increases project flexibility.

Supports mixed applications & workloads

Scality has the performance and latency characteristics to manage mixed storage workloads in a single pool that encompasses file and S3-compatible object applications. This enables data consolidation to increase utilization and economies of scale, and eliminate storage silos.

Customers can reduce time to market by integrating existing applications using standard protocols and rich APIs. Applications can simply leverage other interfaces (such as object) in the future.

Continuous uptime through hardware failures and maintenance

Customers can maintain availability through hardware failures, capacity expansions, software upgrades, and hardware generations, with minimal intervention. This enables carrier-grade service levels and improved end user satisfaction.

Scales to petabytes and beyond

A RING storage infrastructure scales out linearly as a single system across multiple active sites, thousands of servers, hundreds of petabytes, and unlimited objects without adding administrators or additional disparate components. This enables massive consolidation and significantly reduces operating costs.

One Storage Pool

No storage silos: object storage technology abstracts underlying storage servers to create a uniformly scalable storage pool, and data is concurrently accessible by file and object interfaces.

Peer-to-peer Shared Nothing Design

Unique RING topology with peer-to-peer architecture & scalable routing mechanism.

Carrier-grade Uptime

Designed to keep running through hardware failures, hardware refreshes, capacity upgrades, and software upgrades.

End-to-End Parallelism

Both the access layer and the storage layer are independently scalable to thousands of nodes, all of which can be accessed directly and concurrently.

Flexible Deployment

The RING environment may be deployed to a single site, stretched over multiple sites, or replicated locally and/or across sites.

Advanced & Flexible Data Protection

- ARC (Erasure Coding) to reduce overhead for large objects, COS (Class of Service, replication) for efficient storage of small objects. Both ARC and COS may be used simultaneously in the same RING cluster.
- Replication up to 6 copies (object level replicas)
- Configurable data protection policy at the object level
- All customer configurable – policy driven

Geo-distribution

Active/Active storage pools across physical data centers, Active/Active selective replication at the S3 bucket-level, and asynchronous mirrored clusters for higher-latency DR configurations.

Standard Features

| | |
|--|--|
| Customizable Availability and Failure Domains | User-defined policies to achieve 14 nines (9's) of data durability, tolerance for whole-site (in multi-site configurations) and multiple rack/server/disk failures. |
| Self-healing | Self-healing after component failures. |
| Rich Management Portal and CLI | Full management and control with Supervisor and CLI <ul style="list-style-type: none"> – Full Topology View: RING status with Zone, Server & Node details – SNMP MiB support and graphical usage monitoring |
| Simple Operations & Management | <ul style="list-style-type: none"> – System capacity and performance expansion – Automated disk failure detection and handling framework – Automatically rebuild failed drive data on remaining drives – Automated storage rebalancing – Automated failed disk replacement (Scality RING 7.4 and greater, with HPE Apollo 4000 servers) to bring new hardware on-line quickly |
| Object Main Features | <ul style="list-style-type: none"> – Scality HTTP/REST (sproxyd) – Feature-rich S3 API with Active Directory integration, IAM support with v2 and v4 authentication, bucket and object ACLs, and utilization statistics – CDMI – Virtually unlimited object capacity – No size limit on objects (including multi-part upload for RS2) |
| File Main Features | <ul style="list-style-type: none"> – Fully parallel and POSIX compliant file system – NFS v3, SMB 3.0 (based on Samba 3.5 or later) & FUSE – Persistent shared cache across physical connectors – Software load-balancing supporting continuous ingest during connector failure – Unique internal distributed database (MESA) – for full scale-out support of object key values, file system metadata and POSIX methods, and block volumes – Kerberos-based authentication: NFS client authentication (supports ADS) – Space quotas for NFS & SOFS |
| Performance on Apollo 4000 | <ul style="list-style-type: none"> – Object performance: <ul style="list-style-type: none"> – Writes: up to 850 KB/sec on very large files (50 MB and greater) – Reads: up to 1.3 GB/sec on very large files – File performance: <ul style="list-style-type: none"> – With NFS connector, up to 900 MB/sec reads and writes on very large files – With SMB, up to 400MB/sec reads and writes on very large files – Other performance <ul style="list-style-type: none"> – Near-linear scalability across multiple connector types <ul style="list-style-type: none"> ▫ Connector access points can scale independently of storage by using external connector servers |
| Scality Software Support | Scality provides worldwide, 24-hour, support for the Scality RING software solution. Customers are provided with complete installation services and given access to advanced services such as proactive health checks and migration assistance. With purchase of HPE Scalable Object Storage with Scality RING, HPE Apollo 4000 systems, and HPE care pack support such as Foundation Care Service or Datacenter Care Service, customers get first-call response support handling when contacting HPE for product support, with HPE support tracking through to problem resolution. |

Configuration Information - Factory Integrated Models

NOTE: Sizing for storage servers should be tailored to the specific workload requirement. Data protection strategy and average file size should be taken into account for optimal configuration. As such it is recommended that you engage with your Hewlett Packard Enterprise representative to document your individual solution needs and design an environment with required services to deploy.

HPE Apollo 4000 storage servers are validated designs supported by the **Scality Fast Track program** to speed design processes through standardized configurations.

HPE ProLiant Server Hardware

HPE Apollo 4510 Gen10 Systems

The HPE Apollo 4500 systems are purpose-built for maximizing bulk storage in 4U of rack space. The HPE Apollo 4510 systems supports up to 60 LFF drives for bulk storage, with solid state options in both LFF carriers and as NVMe cards in PCIe slots.

HPE Apollo 4200 Gen9 Server

The HPE Apollo 4200 Server is a 2S/2U storage server optimized for storage density, performance, configuration flexibility and affordability. Solid state options are available in both LFF carriers and as NVMe cards in PCIe slots.

HPE ProLiant DL360p Gen10 Server and HPE ProLiant DL380 Gen10 Server

A space efficient dual socket server with industry-leading features built to protect your investment with reliability, accessibility, and serviceability designed in. ProLiant DL360 servers are recommended for RING configurations requiring external servers as administrative control and scaling up with access connectors.

HPE Pre-installation options

HPE Scalable Object Storage with Scality RING can be ordered pre-installed for easy deployment. Services include customized configurations tailored to customer requirements. All standard HPE Scalable Object Storage ProLiant and Apollo models and options are supported. The RING cluster can be installed and validated before shipping. See your HPE representative for more information on how to order this service.

Warranty of DL360

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: <https://support.hpe.com/hpsc/wc/public/home>

Warranty of DL380

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a

Configuration Information - Factory Integrated Models

Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

<https://support.hpe.com/hpsc/wc/public/home>

Warranty of Apollo 4500

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Apollo 4510 Gen10 Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.

Apollo 4510 Gen9 Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response.

Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

<https://support.hpe.com/hpsc/wc/public/home>

Warranty of Apollo 4200

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Pointnext operational services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Server Warranty includes 3-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: <https://support.hpe.com/hpsc/wc/public/home>

Service and Support

Models

Service and Support **HPE Technology Services for Industry Standard Servers**

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability powered by a rich portfolio of consulting and support services designed to add value to our core products and solutions. Connect to HPE to help prevent problems and solve issues faster. Our support technology lets you 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 offer complete care and support expertise with committed response choices that are designed to meet your IT and business needs.

Recommended HPE Support Services for optimal satisfaction with your HPE product

Optimized Care

HPE Proactive Care with 6 hour call-to-repair commitment, three year Support Service

HPE Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice when your products are connected to HPE. This Service combines three years' proactive reporting and advice with our highest level reactive coverage – HPE's 24x7, six hour hardware call-to-repair. Hewlett Packard Enterprise is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. In addition, this service includes collaborative software support for Independent Software Vendors software (Scality, Red Hat, VMware, Microsoft, etc) running on your HPE ProLiant/Apollo server.

<https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855enw.pdf>

Standard Care

Solution software: First-call response from HPE

The standard service delivered by HPE Pointnext assists customers with issues related to Scality RING software and operation, saving customer time with faster issue resolution from a single-vendor support experience. HPE can streamline the customer care experience by initiating support with software partners and tracking problems through to resolution.

Solution platform: HPE Proactive Care with 24x7 coverage, three year Support Service

HPE Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice when your products are connected to Hewlett Packard Enterprise. This Service combines three years' proactive reporting and advice with our 24x7 coverage, four hour hardware response time. In addition, this service includes collaborative software support for Independent Software Vendors software (Red Hat, VMWare, Microsoft, etc) running on your HPE ProLiant/Apollo server.

<https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855enw.pdf>

Related Services

HPE Installation of ProLiant Add On Options Service

This easy-to-buy, easy-to-use HPE Care Pack service helps ensure that your new HPE hardware or software is installed smoothly, efficiently, and with minimal disruption of your IT and business operations.

HPE leasing programs from HPE Financial Services

Purchases can be made easier through flexible financing. HPE offers a step-lease program to minimize up-front costs and distributing payments over a flexible time period, delivering storage capacity ahead of IT demand. See your HPE representative for more information. Learn more

at <https://www.hpe.com/hpefinancialservices>

HPE Proactive Select Service

Provides a flexible way to purchase HPE best-in-class consulting and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.

Service and Support

<https://www.hpe.com/h20195/V2/GetPDF.aspx/4AA2-3842ENW.pdf>

NOTE: Additional Support Services can be found at HPE Support Services Central

<https://www.hpe.com/us/en/services.html>

Connect your devices Unlock all of the benefits of your technology investment by connecting your products to HPE. Achieve up to 77%¹ reduction in down time, near 100%² diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7 monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support.

NOTE:

¹ IDC Whitepaper

² HPE CSC Reports 2014-2015

HPE Support Center Personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with Hewlett Packard Enterprise Authorized Channel experts, access support resources or collaborate with peers. Learn more **HPE Support Center**. HPE's Support Center Mobile App allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalize IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Support Service or HPE contractual support agreement.

NOTE: HPE's Support Center Mobile App is subject to local availability.

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 HPE due to malfunction.

Compatibility Hewlett Packard Enterprise's extensive compatibility testing program assures that you're HPE products work with leading software applications. For the complete and latest list of applications that support the HPE Apollo Storage Servers with Scality Object Storage, reference the HPE Data Availability, Protection and Retention Compatibility Matrix at: <http://www.hpe.com/storage/DAPRcompatibility>.

For more information To learn more on services for HPE ProLiant Servers, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: <https://www.hpe.com/us/en/servers.html>

Technical Specifications

| | | |
|---|---|--|
| Scality RING Specifications | Interfaces | Object Storage: <ul style="list-style-type: none"> – Amazon AWS S3-compatible API – HTTP / REST (Scality sproxyd) – CDMI (SNIA Cloud Data Management Interface) |
| | | File Storage / NAS: <ul style="list-style-type: none"> – FUSE: POSIX-compliant Linux filesystem (Scality sfused) – NFS v3 – SMB 3.0 (based on Samba 3.5 and later) – FTP & AFP for legacy applications |
| | Licensing Requirements | Licensing for the Scality RING software is based on usable capacity. Only the original data counts against this capacity. For example, a 10 MB file replicated 5 times counts only as 10 MB of used capacity. |
| | | The software licensing can be selected for either a single site or multi-geo configuration. <ul style="list-style-type: none"> – The core bundle includes: – HTTP/REST – S3-compatible PAI – FUSE (Filesystem) – SMB/CIFS/NFS – CDMI |
| | Operating System Support | A connector for Email applications is available at additional cost. CentOS 6 and up on x86_64 Red Hat RHEL 6 and up on x86_64 |
| | Hardware Requirements | Scality RING has been tested and validated on select HPE servers listed in the configuration section. |
| HPE StoreFabric M-Series Ethernet Switches | Networking optimized for Storage | HPE StoreFabric M-series Ethernet switch family is designed and optimized for high performance, flexibility and value for all storage environments. StoreFabric M-series switches are ideal for the cluster network at the heart of HPE Scalable Object Storage, providing high-bandwidth networks from 1 to 100Gb/S of Ethernet speeds. StoreFabric M-series provides high performance Ethernet for converged storage solutions, supporting block, file, and object storage. HPE recommends 40GbE or faster for HPE Scalable Object Storage. To help choose the right StoreFabric switch for you, please go to: |
| | | <ul style="list-style-type: none"> • HPE StoreFabric SN2100M • HPE StoreFabric SN2410M • HPE StoreFabric SN2700M |
| Environment-friendly Products and Approach | End-of-life Management and Recycling | Hewlett Packard Enterprise offers end-of-life HPE product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hpe.com/recycle . |
| | | To recycle your product, please go to: http://www.hpe.com/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 Hewlett Packard Enterprise web |

Technical Specifications

site at: <http://www.hpe.com/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 |
|---------------|-----------------------|---------|---|
| 04-Jun-2018 | From Version 14 to 15 | Added | New SKUs added: P8Z02AAE P8Z03AAE |
| | | Changed | Overview, Platform Information, Standard Features, Configuration Information – Factory Integrated Models, and Technical Specifications were revised. |
| 12-Feb-2018 | From Version 13 to 14 | Added | Added HPE StoreFabric M-Series Ethernet Switches to the Technical Specifications section. |
| 08-Jan-2018 | From Version 12 to 13 | Changed | Updated Standard Care and Related Services. |
| 23-Oct-2017 | From Version 11 to 12 | Changed | Care Pack naming and Service and Support- Parts and Materials updated. |
| 25-Sept-2017 | From Version 10 to 11 | Changed | Changes made to the Standard Features |
| 04-Sept-2017 | From version 9 to 10 | Changed | Changes made to the Overview and service and support sections |
| 08-May-2017 | From Version 8 to 9 | Changed | Technical Specifications section was updated. |
| 28-Nov-2016 | From Version 7 to 8 | Changed | Overview and Service and Support sections were updated |
| | | Added | SKUs added in Overview section: Q1C84AAE, Q1C85AAE, Q1C86AAE, Q1C87AAE, Q1C88AAE, Q1C89AAE. |
| 15-July-2016 | From Version 6 to 7 | Changed | Overview, Standard Features, Configuration Information, and Technical Specifications sections were updated. URLs were changed to hpe.com. |
| 29-April-2016 | From Version 5 to 6 | Changed | Overview, Standard Features, Configuration Information - Factory Integrated Models, Service and Support, and Technical Specifications sections were updated. |
| 22-Jan-2016 | From Version 4 to 5 | Changed | Overview section was updated. |
| 01-Dec-2015 | From Version 3 to 4 | Changed | Overview, Standard Features, Configuration Information - Factory Integrated Models, and Service and Support sections were updated. |
| | | Added | SKUs added in Overview section: P8Y89AAE, P8Y90AAE, P8Y91AAE, P8Y92AAE, P8Y93AAE, P8Y94AAE, P8Y95AAE, P8Y96AAE, P8Y97AAE, P8Y98AAE, P8Y99AAE, P8Z00AAE, P8Z01AAE. |
| | | Removed | Discontinued SKUs deleted: K5C92AAE, K5C93AAE, K5C94AAE, K5C95AAE, K5C96AAE, K5C97AAE, K5C98AAE, K5C99AAE, K5D08AAE, K5D09AAE, K5D10AAE, K5D11AAE, K5D12AAE, K5D13AAE, K5D14AAE, K5D15AAE, K5D16AAE, K5D17AAE, L4Y35AAE, L4Y36AAE, L4Y39AAE. |
| 27-Mar-2015 | From Versión 2 to 3 | Removed | Discontinued SKUs deleted: L4Y37AAE, L4Y38AAE |
| 9-Feb-2015 | From Version 1 to 2 | Changed | Overview section was updated |
| | | Added | SKUs added on models section: L4Y35AAE, L4Y36AAE, L4Y37AAE, L4Y38AAE, L4Y39AAE. |

Summary of Changes



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