

HPE Solutions with Scality QuickSpecs

HPE Solutions with Scality are scale-out software-defined object storage solutions which may be deployed on HPE Alletra Storage Server 4000, HPE Apollo 4000 Systems, and HPE ProLiant DL Servers, with customizable capacity and media options, making it easy to deploy object storage with a range of performance/price points including hybrid, all-SSD, or all-NVMe flash.

Overview

With a native S3 API and built-in tools for multi-cloud federated data management, enterprise line of business owners, IT Storage admins, and Service Providers can quickly build cloud storage solutions hosting a nearly unlimited number of items in a single namespace, deployable both inside and outside of data centers, in new performance-optimized and small-footprint form factors. The HPE Solutions with Scality offer two products – Scality RING for multi-application environments needing to store unstructured data at petabyte scale, and Scality ARTESCA designed for cloud-native applications needing S3-compatible persistent storage with automated deployment via Kubernetes.

Scality RING employs both replication and distributed erasure coding, across single or multiple sites, allowing customers to achieve up to 14 nines (9s) of data durability with higher storage efficiency, requiring less raw storage and therefore less cost than comparable solutions. Scality RING supports object (S3/REST) and file (NFS/SMB) protocols, easily integrating into many standard and custom applications. The software enables continuous availability through hardware failures, capacity expansions, software upgrades, and hardware upgrades, enabling customers to take advantage of future innovations in the HPE Alletra Storage Server 4000 family including performance, capacity, components, and architecture.

Scality ARTESCA is a lightweight cloud-native object storage solution with an enterprise-class S3 API. Scality ARTESCA uses a dual-layer erasure coding (EC) schema that operates both across the cluster fabric and simultaneously within each server node providing more granular scaling and a significantly higher level of data durability without increasing overhead. The ARTESCA solution provides an easy entry point starting with as little as a single server node, making it possible to build production-ready object storage solutions for remote, field, or edge deployment – any time a full data center’s infrastructure and support is not available. Even a single-node solution is fully-featured and erasure coded so you can seamlessly scale without interruption. And with the built-in Scality tools for federated data management, you can easily copy, move, archive, or expire data from one Scality object storage system to any number of clouds or S3 storage targets, plus easily search for keywords in customized metadata.

HPE offers these two solutions on a variety of industry-standard server platforms including the HPE Alletra Storage Server 4000 family of systems which are specifically optimized for storage-centric workloads, and selected HPE Apollo 4000 and HPE ProLiant DL servers for additional footprint capacity choices.

What’s New

HPE packaged solutions for Scality object storage

- Pre-configured HPE servers with Scality ARTESCA object storage software
 - 1N systems: 55 TB, 110 TB, 220 TB usable
 - 3N high availability clusters: 503 TB, 1PB usable
 - 3 or 5-year support term
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Standard Features

Scality RING

An HPE Scality RING solution consists of HPE server systems, Scality RING software license and maintenance, and Scality installation services. Scality RING software licensing is based on unique usable data. Up to five data replicas can be made without a purchase of more licensing which provides significant savings when storing copies of data. All Scality RING configurations start with a minimum of 200 TB of licensed usable capacity. Hardware and software are sold separately, and HPE solutions can be precisely customized for specific workloads. Total raw capacity will vary depending on the desired level of server and site fault protection. Consult with your HPE or Scality architect to determine how much raw capacity you need for your solution.

Single and Geo-site deployment

- Mono-site starting with clusters of 3 nodes
- Two-sites replicated with clusters of 3 or more nodes on each site (6 or more servers total)
- Two-site stretched, erasure coded across sites, with clusters of 3 or more servers per site (6 or more servers total)
- Three-site stretched, erasure coded across sites, with clusters of 2 or more servers per site (6 or more servers total)

Notes:

- A Linux OS is not included. Red Hat Enterprise Linux and Rocky Linux are supported by Scality.
- For all configurations, a virtual machine should be provided for the RING supervisor.
- A network load balancer is highly recommended for all S3 workloads.
- Stretched-site configurations increase data durability with much less overhead than full site replication.
- Stretched-site configurations require 10mSec or less round-trip latency between sites. For longer distances, use the two-site replicated configuration.
- The two-site stretched configuration requires a witness server.

Access protocols

- AWS S3 API native protocol
- NFSv3 and NFSv4 file connector with IPV6 support
- SMB 2.0/3.0 file connector with IPV6 support
- CDMI REST
- FUSE (sfused) connector, local Linux host file system access to RING storage services
- Fully parallel and POSIX compliant file system

Scality S3 API

Supports the standard AWS S3 protocols and bucket commands plus:

- Identity Access management (IAM)
- S3 connector with KMIP for KMS and S3 Quotas
- AWS S3 object locking for WORM, certified by Cohasset Associates for SEC 17a-4(f) and FINRA 4511(c) compliance

RING Extended Data Management (XDM)

A modular feature residing on infrastructure outside of the storage servers. No-cost management of data on multiple Scality systems or other clouds.

- Data orchestration and mobility across RINGs and other clouds with no additional licensing required

Standard Features

- Lifecycle policies, 1-to-many replication, transition, and expiration
- Searchable global namespace
- Supported on SE Linux

RING Email connector and Class of Service (COS) translator

An integrated RING feature enabled with purchase of a separate license, the Scality RING email connector uses Scality's sproxyd interface to efficiently manage billions of emails with object's unlimited scalability. Email connector can be purchased separately, or with an additional license for the Class or Service (COS) translator feature. The COS translator is designed to manage multi-site RING with fail-over capability, while meeting the service level agreements (SLAs) required by email applications.

Supported platforms

HPE provides a wide range of highly customizable platforms certified for use with RING. Unless otherwise noted, all standard data capacity and networking options offered by each platform can be selected for use with RING.

- HPE Alletra Storage Server 4140 4U server with up to 84LFF data bays, with EDSFF all-NVMe for flash metadata and for the RING Storage Accelerator file tier
- HPE Alletra Storage Server 4120 2U server for hybrid storage, with EDSFF all-NVMe for flash metadata and for the RING Storage Accelerator file tier
- HPE Alletra Storage Server 4110 1U server for all-NVMe flash capacity storage
- HPE Apollo 4510 Gen10 4U server with LFF cage for hybrid storage
- HPE Apollo 4200 Gen10 Plus 2U server with LFF cage options for hybrid storage

The HPE Alletra Storage Server 4000 and HPE Apollo 4000 systems are orderable for this solution with the standard server options.

Installation

A RING installation service is required with all new deployments.

A choice of onsite or remote basic installation service with basic user training is available for all configurations.

HPE Solutions with Scality with Scality RING ship as bare-metal servers. Customers may install their own Red Hat Enterprise Linux or Rocky Linux or may purchase Red Hat Enterprise Linux with OS factory installation from HPE. The Scality RING application is installed once the hardware cluster is assembled and networked. Scality RING is designed for platform flexibility and does not require platform re-qualification with most hardware or firmware updates. In RING clusters, heterogenous scaling is supported, making it easy to refresh or adopt newer platforms as you grow. Each server must have a minimum of ten data drives and at least one metadata drive per server node. RING Storage Accelerator is sized separately and when used requires a minimum of one additional flash device per server node.

Performance on HPE Alletra Storage Server 4000 and HPE Apollo 4000 systems

- Object performance:
 - Writes: up to 850 MB/sec on very large files (50 MB and greater)
 - Reads: up to 1.3 GB/sec on very large files
 - Additional performance characterization available upon request

Standard Features

- File performance:
 - 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:
 - Near-linear scalability across multiple connector types

Notes: I/O throughput may be scaled independently of data capacity by using optional external connector servers

Scality ARTESCA

Scality ARTESCA is a lightweight cloud-native object storage supporting an S3 API. An HPE Scality ARTESCA solution consists of HPE server systems, Scality ARTESCA software license and maintenance, and Scality installation services. A minimum solution consists of one HPE server system and licensing for 50 TB of usable capacity. Also supported are standard cluster sizes of 3 or 6 nodes. ARTESCA includes a supported Linux operating system and Kubernetes image for bare-metal deployments. ARTESCA is licensed by unique usable TB of capacity, with no additional licensing needed for data replicas. ARTESCA includes a single pane of glass UI to control multi-cloud data, workflow management, and metadata search. Hardware and software are sold separately, and solutions can be precisely customized for your specific needs. Consult your HPE or Scality architect to determine how much raw capacity you need for your configuration.

HPE now offers easy-order packaged solutions for Scality ARTESCA system. These are described in detail in the Supported Platforms section.

Single site and cloud replication

- Virtual Machine deployment supported with VMware vSphere/ESXi
- Mono-site deployment starts with a single-node server or cluster of 3 or 6 server nodes
- Replication and data lifecycle to a separate RING, a separate ARTESCA, or to other cloud storage uses the built-in ARTESCA federated data management tools at no additional cost

Notes:

- ARTESCA includes a supported Linux and Kubernetes image. The system software (drivers) is delivered by Scality as part of its upgrade package. Scality will address issues related to operating systems, including drivers. For more details, please refer to the [ARTESCA upgrade](#) documentation. HPE will continue to provide BIOS and firmware for the hardware.
- No external infrastructure (supervisor, access connectors, witness servers, or data lifecycle management system) is required with Scality ARTESCA
- When deploying ARTESCA clusters of 3 nodes or more, a network load balancer is highly recommended for all S3 workloads

Scality S3 API

Supports the standard AWS S3 protocols and bucket commands plus:

- AWS S3 object locking for WORM, certified by Cohasset Associates for SEC 17a-4(f) and FINRA 4511(c) compliance
- Identity Access management (IAM)
- S3 connector with KMIP for KMS and S3 Quotas

Standard Features

ARTESCA Federated Data Management

An integrated suite of tools providing edge to core to cloud data management for workflow automation. There is no additional licensing cost for management of data ingested by an ARTESCA systems and held locally or dispersed through data lifecycle policies onto multiple Scality or cloud systems.

- Lifecycle policies, 1-to-many replication, transition, and expiration
- Searchable global namespace

Supported platforms

Scality ARTESCA is designed for platform flexibility and does not require re-qualification with most hardware or firmware updates. In Scality ARTESCA clusters, heterogenous scaling is supported, making it easy to grow with newer platforms and technologies. Each server must have a minimum of twelve data drives and at least two metadata drives per server node. Metadata is sized by workload, see your HPE Scality solution architect.

HPE provides a wide range of highly customizable platforms certified for use with Scality ARTESCA. Unless otherwise noted, all can be configured as single-node object stores, with a choice of multiple options for data capacity and networking options for each platform.

Configurable platforms:

- HPE Alletra Storage Server 4140 4U server with up to 84LFF data bays, with EDSFF all-NVMe flash metadata
- HPE Alletra Storage Server 4120 2U server for hybrid storage, with EDSFF cage options for all-NVMe flash metadata
- HPE Alletra Storage Server 4110 1U server for all-NVMe flash capacity storage
- HPE Apollo 4510 Gen10 4U server with LFF cage for hybrid storage
- HPE Apollo 4200 Gen10 Plus 2U server with LFF cage options for hybrid storage
- HPE ProLiant DL380 Gen11 or Gen10 2U server with LFF cage option for hybrid storage
- VMs supported with VMware vSphere/ESXi, in 1 or 3 node VMs

Notes: ProLiant DL380 Gen 11 or Gen10 is supported as a single-node solution for remote office deployment, not intended for scale-out.

ARTESCA packaged solutions

HPE also offers packaged solutions with Scality ARTESCA that are easily ordered by selecting the capacity you need. These are offered in both 1 Node solutions and in high availability 3 Node clusters with whole-server fault tolerance. Please refer to the Configuration Information section for SKU numbers and ordering requirements.

Standard Features

Detailed product information

Usable capacity	55 TB solution	110 TB solution	220 TB solution	503 TB solution	1 PB solution
Nodes per solution	1 node	1 node	1 node	3 node HA cluster	3 node HA cluster
Base platform	ProLiant DL380 Gen11	ProLiant DL380 Gen11	Alletra Storage Server 4120	Alletra Storage Server 4120	Alletra Storage Server 4120
Solution rack units	2U	2U	2U	6U (3 servers) 2U (2 switches)	6U (3 servers) 2U (2 switches)
SKU number	S4N30A	S4N31A	S4N32A	S4N33A	S4N34A
Min/Max order quantity	1	1	1	3	3
Per Node specifications					
Raw capacity	77 TB	144 TB	288 TB	288 TB	576 TB
Processor	2x Intel 12c 2.0GHz	2x Intel 12c 2.0GHz	1x Intel 36c 2.1GHz	1x Intel 36c 2.1GHz	1x Intel 36c 2.1GHz
Memory	256 GB	256 GB	256 GB	256 GB	256 GB
Data drives	12x 6TB SAS 12G 7.2K LFF HDD	12x 12TB SAS 12G 7.2K LFF HDD	24x 12TB SAS 12G 7.2K LFF HDD	24x 12TB SAS 12G 7.2K LFF HDD	24x24TB SAS 12G 7.2K LFF HDD
Service drives (Metadata)	Two 960GB NVMe SSD RAID 1	Two 1.92TB NVMe SSD RAID1	Two 1.92TB NVMe SSD RAID1	Two 3.84TB NVMe SSD RAID1	Two 7.68TB NVMe SSD RAID1
Boot drives	Two internal 480GB NVMe U.3 SSD RAID1	Two internal 480GB NVMe U.3 SSD RAID1	Two internal 480GB NVMe U.3 SSD RAID1	Two internal 480GB NVMe U.3 SSD RAID1	Two internal 480GB NVMe U.3 SSD RAID1
Networking (Data fabric)	2 ports 10/25 GbE	2 ports 10/25 GbE	2 ports 10/25 GbE	2 ports 10/25 GbE	2 ports 10/25 GbE
Networking (Management fabric)	4 ports 1 GbE	4 ports 1 GbE	4 ports 1 GbE	4 ports 1 GbE	4 ports 1 GbE
Power supply	Redundant 1000W	Redundant 1000W	Redundant 1800W	Redundant 1800W	Redundant 1800W
Rack mounting	Rail kit	Rail kit	Rail kit	Rail kit	Rail kit
Server remote management	iLO 6, Advanced license 3 yr support	iLO 6, Advanced license 3 yr support	iLO 6, Advanced license 3 yr support	iLO 6, Advanced license 3 yr support	iLO 6, Advanced license 3 yr support
Required options					
	Scality ARTESCA 55 TB license, 3 or 5 year term	Scality ARTESCA 110 TB license, 3 or 5 year term	Scality ARTESCA 220 TB license, 3 or 5 year term	Scality ARTESCA 503 TB license, 3 or 5 year term	Scality ARTESCA 1 PB license, 3 or 5 year term
	Scality ARTESCA remote installation service	Scality ARTESCA remote installation service	Scality ARTESCA remote installation service	Scality ARTESCA remote installation service	Scality ARTESCA remote installation service

Standard Features

Usable capacity	55 TB solution	110 TB solution	220 TB solution	503 TB solution	1 PB solution
Required options					
	HPE Compute Ops Management or HPE OneView	HPE Compute Ops Management or HPE OneView	HPE Compute Ops Management or HPE OneView	HPE Compute Ops Management or HPE OneView	HPE Compute Ops Management or HPE OneView
				Redundant 10/25GbE data fabric 48 port network switches	Redundant 10/25GbE data fabric 48 port network switches
Expansion					
	Scale-out expansion with one or two nodes, up to 165 TB usable	Scale-out expansion with one or two nodes, up to 330 TB usable	Scale-out expansion with one or two nodes, up to 660 TB usable	Cluster expansion from 3 to 6 nodes, 1.5 PB usable	Cluster expansion from 3 to 6 nodes, 3 PB usable

Installation

An ARTESCA installation service is required with all new deployments.

- A remote software installation service with basic user training is available for all configurations.

All Scality ARTESCA installations include a supported Linux operating system image and Kubernetes image for easy deployment on bare-metal servers.

Service and Support

Scality Software Support

Scality provides worldwide, 24-hour, support for the Scality RING and Scality ARTESCA 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 Scality RING software, supported HPE server systems, and HPE Services operational support such as Tech Care Service or Complete Care Service, customers get first-call response support handling when contacting HPE for product support, with HPE support tracking through to problem resolution.

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.

HPE Services - Service and Support

No matter where you are in your digital transformation journey, you can count on HPE Services to provide the expertise you need, when and where you need it.

Advisory and Professional Services

Our Digital Next Advisory approach can help you identify, prioritize, and implement the right transformation initiatives to create new edge experiences, get real-time insights from all your data, and modernize your IT to enable new opportunities.

Operational Services

Take your IT operations to the next level with expertise and tools that can help save your staff time, manage complexity, and identify new ways to drive efficiency and effectiveness in your IT.

HPE Services Tech Care

HPE Services Tech Care is the new operational service experience for HPE products. Tech Care goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Services Tech Care has been reimagined from the ground up to support a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Services Tech Care is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

<https://www.hpe.com/services/techcare>

Service and Support

HPE Services Complete Care

HPE Services Complete Care is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Services experts. HPE Services Complete Care provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

<https://www.hpe.com/services/completecure>

HPE Lifecycle Services

Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Installation and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- HPE Implementation Assistance Service: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

For a list of the most frequently purchased services using service credits, see the: [Universal Service Credits Menu](#)

Other related services from HPE Services:

HPE Education Services

Provides comprehensive training designed to expand the skills of your IT staff and keep them up to speed with the latest technologies.

Defective Media Retention

An option available with HPE Services Complete Care and HPE Services Tech Care and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

Service and 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 QuickSpecs, 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.

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a brand-new digital and data driven customer experience.

Sign into the new HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts, and powerful troubleshooting support through a new intelligent virtual agent with seamless transition when needed to a live support agent.

Learn more: <https://support.hpe.com/hpesc/public/home/signin>

HPE Support Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find HPE Support Services at <https://ssc.hpe.com/portal/site/ssc/>

Consume IT on your terms

[HPE GreenLake](#) brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

Managed services to run your IT operations

[HPE GreenLake Management Services](#) provide services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

Service and Support

Related Services

HPE Installation of ProLiant Add-On Options Service

This easy-to-buy, easy-to-use HPE Services operational 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. Hewlett Packard Enterprise 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 Hewlett Packard Enterprise 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.

Notes: 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 downtime, 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 Tech Care Service and HPE Complete 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.

Notes:

- ¹ IDC Whitepaper
 - ² HPE CSC Reports 2014-2015
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HPE Support Services Central

Personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with the Hewlett Packard Enterprise Authorized Channel experts, access support resources or collaborate with peers. Learn more at the [HPE Support Services Central](#). The Hewlett Packard Enterprise 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 personalized IT support anywhere, anytime. HPE Insight Remote Support and HPE Support Services Central are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Support Service or HPE contractual support agreement.

Notes: The Hewlett Packard Enterprise Support Center Mobile App is subject to local availability.

Configuration Information

Models

Scalality RING software SKUs

Notes: HPE Solutions with Scalality with Scalality RING ship as bare-metal servers. Customers may install their own Red Hat Enterprise Linux or Rocky Linux or may purchase Red Hat Enterprise Linux with OS factory installation from HPE.

Description	SKU
Scalality RING Single Site Perpetual License per TB (Min 200TB) E-LTU for HPE Servers	P8Y89AAE
Scalality RING Single Site Hardware Lifetime License per TB (Min 200TB) E-LTU for HPE Servers	P8Y90AAE
Notes: License for RING Single Site configurations only. Sold by usable terabyte of capacity. P8Y89AAE and P8Y90AAE are recommended for expanding existing environments with the same license as used in the original purchase. Required minimum of 200 TB for new RING installations.	
Scalality RING Geo Perpetual License per TB (Min 200TB) E-LTU for HPE Servers	P8Y91AAE
Scalality RING Geo Hardware Lifetime License per TB (Min 200TB) E-LTU for HPE Servers	P8Y92AAE
Notes: License for all RING Geo Site configurations including 2-site replicated, 2-site stretched, and 3-site stretched. Sold by usable terabyte of capacity. P8Y91AAE P8Y92AAE are recommended for expanding existing environments with the same license as used in the original purchase. Required minimum of 200 TB for new RING installations.	
Scalality RING Single Site per TB Min 200TB Annual Subscription 24x7 Maintenance and Support	P8Z01AAE
Scalality RING Geo Site per TB Min 200TB Annual Subscription 24x7 Maintenance and Support	P8Z03AAE
Notes: SW Maintenance for P8Y89AAE, P8Y90AAE, P8Y91AAE, P8Y92AAE. Sold by usable terabyte of capacity per desired year(s) of support, for new, renewal, and expansions. A minimum of one year for new installations.	
Scalality RING Single Site per TB Min 200TB 1-year E-LTU	R7H65AAE
Scalality RING Single Site per TB Min 200TB 3-year E-LTU	R7H67AAE
Scalality RING Single Site per TB Min 200TB 5-year E-LTU	R7H69AAE
Notes: Term-based licensing inclusive of software maintenance, for new configurations, expansions, and renewals. License for RING Single Site configurations only. Sold by usable terabyte of capacity. Required minimum of 200 TB for new RING installations.	
Scalality RING Geo Site per TB Min 200TB 1-year E-LTU	R7H70AAE
Scalality RING Geo Site per TB Min 200TB 3-year E-LTU	R7H72AAE
Scalality RING Geo Site per TB Min 200TB 5-year E-LTU	R7U07AAE
Notes: Term-based licensing inclusive of software maintenance, for new configurations, expansions, and renewals. License for RING Geo Site configurations including 2-site replicated, 2-site stretched, and 3-site stretched. Sold by usable terabyte of capacity. Required minimum of 200 TB for new RING installations.	
Scalality RING Single Site per TB Min 20TB 1-month E-LTU	R7H75AAE
Scalality RING Geo Site per TB Min 20TB 1-month E-LTU	R7H76AAE
Notes: 1-month term-based licensing inclusive of software maintenance, use only to co-term support dates.	

Configuration Information

Description	SKU
Scality RING Single Site 2-year 24x7 Long Term Support	R7R91AAE
Scality RING Geo Site 2-year 24x7 Long Term Support	R7R92AAE

Notes: Long Term Support (LTS) duration extension up to 2-years with a requirement that it is extended prior to the End of Maintenance Period for Single Site Support. LTS limited to existing use cases in production prior to EOM date with expansions made on similar hardware and operating system version.

Scality RING installation services

Description	SKU
Scality RING Remote Standard Installation per RING Service	S2M80AAE
Scality RING Onsite Standard Installation per RING Service	S2M81AAE

Notes: One of S2M80AAE or S2M81AAE is required with every new RING purchase and does a full install for each new single site system or each new geo 2- or 3- site system. RING installation services include software installation, configuration, and standard operational training. S2M80AAE remote installation requires VPN access to the customer's site.

Scality RING optional features, training, and professional services SKUs

Description	SKU
Scality RING Connector for Email App per TB (min 200TB) E-LTU	P8Y93AAE
Scality COS Translator per TB Min 200TB Perpetual E-LTU	S2L91AAE

Notes: Email Connector and Class of Service Translator add-on features enabled with P8Y93AAE and S2L91AAE should be sold only for RING environments licensed under RING perpetual licenses. Email and COS are sold by usable terabyte of capacity.

Scality RING Email Application per TB Min 200TB 1-year Subscription E-LTU	S2L92AAE
Scality RING Email Application per TB Min 200TB 3-year Subscription E-LTU	S2L93AAE
Scality RING Email Application per TB Min 200TB 5-year Subscription E-LTU	S2L94AAE
Scality COS Translator per TB Min 200TB 1-year Subscription E-LTU	S2L95AAE
Scality COS Translator per TB Min 200TB 3-year Subscription E-LTU	S2L96AAE
Scality COS Translator per TB Min 200TB 5-year Subscription E-LTU	S2L97AAE

Notes: Email Connector and Class of Service Translator add-on features enabled with S2L92AAE, S2L93AAE, S2L94AAE, S2L95AAE, S2L96AAE, S2L97AAE should be sold only for RING environments licensed under RING term-based subscriptions. Email and COS are sold by usable terabyte of capacity.

Scality RING Engineer per Day Professional Service	P8Y94AAE
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Notes: A customized services product for needs such as application-specific integration, quantity of days must be quoted by a Scality sales team

Scality Unit Custom Statement of Work Professional Service	S2M76AAE
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Notes: A customized service delivered to meet a SOW, units must be quoted by a Scality sales team

Configuration Information

Description	SKU
Scality AOT up to 6 Seats 3-day Remote Customized Advanced Operation Training Service	S2M77AAE
Scality AOT up to 6 Seats 3-day Onsite Customized Advanced Operation Training Service	S2M78AAE
Scality AOT per Person 3-day Remote Advanced Operation Training Service	S2M79AAE
Notes: An advanced training course customized for RING environments. S2M77AAE and S2M78AAE are customized for one customer environment, up to 6 seats per course. S2M79AAE is group class with general information. Each class provides RING Certification upon completion	
Scality Enterprise Scale Care for RING Annual Service	R9D85AAE
Notes: For first RING environment, includes 5 professional services days and customized metrics	
Scality Enterprise Scale Care Extension for Additional RING Annual Service	R9D86AAE
Notes: For each additional RING environment. Must have R9D85AAE to order this.	
Scality Business Scale Care for RING Annual Service	R9D87AAE
Notes: For first RING environment, standard metrics	
Scality Business Scale Care Extension for Additional RING Annual Service	R9D88AAE
Notes: For each additional RING environment. Must have R9D88AAE to order this.	
Scality Secure Site Care without Cloud Monitoring for RING Annual Service	R9D89AAE
Notes: For first RING environment, where cloud monitoring is not available	

Scality ARTESCA software SKUs

Notes: HPE Solutions with Scality with Scality ARTESCA ship as bare-metal servers. ARTESCA includes a supported Linux OS. Optionally, customers may purchase Red Hat Enterprise Linux with OS factory installation from HPE.

Description	SKU
Scality ARTESCA Single Site per TB 1-year E-LTU	R7H46AAE
Scality ARTESCA Single Site per TB 3-year E-LTU	R7H48AAE
Scality ARTESCA Single Site per TB 5-year E-LTU	R7H50AAE
Notes: Term-based licensing inclusive of software maintenance for new configurations, expansions, and renewals. Required minimum of 50 TB for new ARTESCA installations.	
Scality ARTESCA Single Site per TB 1-month E-LTU	R7H56AAE
Notes: Term-based licensing inclusive of software maintenance, per month, use only to co-term support dates	
Scality ARTESCA 1 Server Standard Remote Installation Service	S2M82AAE
Scality ARTESCA 3 Servers Cluster Standard Remote Installation Service	S2M83AAE
Scality ARTESCA 6 Servers Cluster Standard Remote Installation Service	S2M84AAE
Notes: Remote installation service with basic operational training for certified HPE Alletra Storage Server 4000, HPE Apollo 4000 and ProLiant DL server configurations only. Contact your HPE sales team for a list of supported configurations. Remote installation requires VPN access to the customer's site.	

Configuration Information

Description	SKU
Scality ARTESCA Promotion for HCI Solutions 50TB 1-year Subscription and Support E-LTU	S2T33AAE

Notes: This SKU enables 50TB of ARTESCA to be run in a virtual-machine for dHCI environments only. This limited promotion SKU is not offered in all countries. Contact your local sales team for information.

Scality ARTESCA packaged solution SKUs

Notes: Scality ARTESCA packaged solutions offer easy ordering in five pre-configured sizes. Each solution contains hardware and software which must be purchased at the same time. There are no configurable hardware options. A choice of 3 year or 5 year term on software is offered. Each hardware system requires purchase of either HPE Compute Ops Manager or HPE OneView. The 3 node high availability clusters also require data fabric switches which must be purchased at the same time.

Description	SKU
55TB single node solution	
Scality ARTESCA 55TB Usable 3-year Subscription E-LTU	S4N35AAE
Scality ARTESCA 55TB Usable 5-year Subscription E-LTU	S4N36AAE

Notes: Order quantity one of the server node and quantity one of either 3-year or 5-year software subscription.

110TB single node solution

HPE ProLiant DL380 Gen11 Server for Scality ARTESCA 1 Node 110TB Usable	S4N31A
Scality ARTESCA 110TB Usable 3-year Subscription E-LTU	S4N37AAE
Scality ARTESCA 110TB Usable 5-year Subscription E-LTU	S4N38AAE

Notes: Order quantity one of the server node and quantity one of either 3-year or 5-year software subscription.

220TB single node solution

HPE Alletra Storage Server 4120 Node for Scality ARTESCA 1 Node 220TB Usable	S4N32A
Scality ARTESCA 220TB Usable 3-year Subscription E-LTU	S4N39AAE
Scality ARTESCA 220TB Usable 5-year Subscription E-LTU	S4N40AAE

Notes: Order quantity one of the server node and quantity one of either 3-year or 5-year software subscription.

503TB high availability cluster solution

HPE Alletra Storage Server 4120 CTO Node for Scality ARTESCA 3 Node 503TB Usable Cluster	S4N33A
Scality ARTESCA 503TB Usable 3-year Subscription E-LTU	S4N41AAE
Scality ARTESCA 503TB Usable 5-year Subscription E-LTU	S4N42AAE

Notes: Order quantity three of the server nodes and quantity one of either 3-year or 5-year software subscription. For example, quantity three of S4N33A plus quantity one of S4N41AA or S4N42AA is required to build a 503TB usable solution.

1PB high availability cluster solution

HPE Alletra Storage Server 4120 CTO Node for Scality ARTESCA 3 Node 1PB Usable Cluster	S4N34A
Scality ARTESCA 1PB Usable 3-year Subscription E-LTU	S4N43AAE

Configuration Information

Description

Scality ARTESCA 1PB Usable 5-year Subscription E-LTU

SKU

S4N44AAE

Notes: Order quantity three of the server nodes and quantity one of either 3-year or 5-year software subscription. For example, quantity three of S4N34A plus quantity one of S4N43AA or S4N44AA is required to build a 1PB usable solution.

Required networking switch and cables (for 503TB or 1PB high availability cluster solutions only)

HPE 25GbE 48SFP28 12QSFP28 Power to Connector Airflow Switch SN3420M with NVIDIA Cumulus

S2T77A

Notes: required quantity two per solution

HPE 100Gb QSFP28 to QSFP28 0.5m Direct Attach Copper Cable

R8M59A

Notes: required quantity two per solution

HPE Aruba Networking 25G SFP28 to SFP28 3m Direct Attach Copper Cable

JL488A

Notes: required quantity six per solution

Required management framework (all solutions)

HPE Compute Ops Management Standard 3-year Upfront ProLiant SaaS

R7A11AAE

HPE Compute Ops Management Standard 5-year Upfront ProLiant SaaS

R7A12AAE

HPE Compute Ops Management Standard 3-year Upfront Alletra 4000 SaaS

S1E12AAE

HPE Compute Ops Management Standard 5-year Upfront Alletra 4000 SaaS

S1E13AAE

HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU

P8B26AAE

Notes: With each of the solution nodes, S4N30A, S4N31A, either HPE Compute Ops ProLiant SaaS or HPE OneView is required. With each of S4N32A, S4N33A, and S4N34A, either HPE Compute Ops Alletra 4000 SaaS or HPE OneView is required. Select the management framework and term that meets your business needs.

Software renewal

Scality ARTESCA 55TB Usable 3-year Subscription Renewal E-LTU

S4N45AAE

Scality ARTESCA 55TB Usable 5-year Subscription Renewal E-LTU

S4N46AAE

Scality ARTESCA 110TB Usable 3-year Subscription Renewal E-LTU

S4N47AAE

Scality ARTESCA 110TB Usable 5-year Subscription Renewal E-LTU

S4N48AAE

Scality ARTESCA 220TB Usable 3-year Subscription Renewal E-LTU

S4N49AAE

Scality ARTESCA 220TB Usable 5-year Subscription Renewal E-LTU

S4N50AAE

Scality ARTESCA 503TB Usable 3-year Subscription Renewal E-LTU

S4N51AAE

Scality ARTESCA 503TB Usable 5-year Subscription Renewal E-LTU

S4N52AAE

Scality ARTESCA 1PB Usable 3-year Subscription Renewal E-LTU

S4N53AAE

Scality ARTESCA 1PB Usable 5-year Subscription Renewal E-LTU

S4N54AAE

Notes: Renewal SKUs are for the package solutions only, do not use these with custom configured hardware systems.

ProLiant platforms for Scality

Notes: This is a bare metal base platform to be configured by an HPE architect for use with specific workloads. The base system includes chassis, redundant 1600W power supplies, LFF drive cages for up to (12) data drives and a rail kit. Configurable options for processors, boot drives, memory, capacity storage, and networking are ordered separately. Configure with 12 data drives and 2 metadata drives. Maximum capacity of 240 TB raw capacity with Scality solutions. Must be ordered with Scality ARTESCA software. ARTESCA includes a Linux OS, or customers may install their own Red Hat Enterprise Linux.

Technical Specifications

Licensing Requirements

Scality RING and Scality ARTESCA licensing is based on unique usable capacity. Only the original data counts against this capacity. For example, a 10 MB file replicated five times within the same solution counts only as 10 MB of unique capacity. Software licensing can be selected for either a single-site (RING and ARTESCA) or geo-site (RING) configuration. There is a choice of either license and maintenance, or term-based licensing. For RING, there is an additional choice of hardware lifetime (non-transferable) and perpetual licensing.

Operating System Support

For Scality RING, Linux OS is not included. Customers may install their own Red Hat Enterprise Linux or Rocky Linux, or may purchase Red Hat Enterprise Linux with OS factory installation from HPE.

Scality RING OS requirements

- Rocky Linux 9 on x86_64
- Red Hat RHEL 7 on x86_64

For ARTESCA, the software includes a supported Linux OS

Additional infrastructure for RING environments

- A networking load balancer is recommended when using the S3 API interface
 - A virtual machine or physical system must be provided for the RING supervisor
-

Hardware Requirements

Scality RING has been tested and validated on select HPE servers listed in the configuration section.

- A single site configuration requires a minimum of 3 servers and may be replicated to a second site
- A 2-site stretched configuration requires a minimum of 6 servers (3 per site)
- A 3-site stretched configuration requires a minimum of 6 servers (2 per site)

Scality ARTESCA has been tested and validated on select HPE servers listed in the configuration section.

- A single site configuration requires a minimum of 1 Virtual Machine, 1 server, or a minimum cluster of 3 physical servers

For all physical server configurations, each server must have a minimum of 10 data drives (RING) or 12 data drives (ARTESCA) and 1 or more metadata drives unless otherwise noted. All Scality products are expanded by adding capacity to each server in the cluster, or by adding whole servers to the cluster. Metadata is sized by workload requirements. See your HPE sales representative for flexible expansion guidelines for single- and geo-site clusters.

HPE M-series Switches

Networking optimized for Storage

HPE M-series Ethernet switches are designed and optimized for high performance, flexibility and value for all storage environments. HPE M-series switches are ideal for the cluster network at the heart of HPE Apollo 4000 systems with Scality RING Scalable storage, providing high-bandwidth networks from 1 to 100Gb/S of Ethernet speeds. HPE M-series provides high performance Ethernet for converged storage solutions, supporting block, file, and object storage. HPE recommends 40GbE or faster for Scality RING Scalable Storage.

Technical Specifications

To help choose the right HPE M-series switch for you, please go to:

- [HPE M-series SN2100M Switch](#)
 - [HPE M-series SN2410M Switch](#)
 - [HPE M-series SN2700M Switch](#)
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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: <https://www.hpe.com/recycle>.

To recycle your product, please go to: <https://www.hpe.com/recycle>. Or contact your nearest HPE sales office. Products returned to HPE 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 web site at: <https://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
16-Feb-2026	Version 42	Changed	HPE Rebranding applied
		Removed	Obsolete SKU removed - S4N30A
25-Aug-2025	Version 41	Changed	HPE Compute Ops Management wording update
28-Jul-2025	Version 40	Changed	Update survey link.
07-Jul-2025	Version 39	Changed	Configuration Information section was updated – HPE Compute Ops Management SKUs descriptions were updated.
		Removed	Obsolete SKU removed - R8S35A
14-Apr-2025	Version 38	Changed	Standard Features, and Configuration Information sections were updated
18-Feb-2025	Version 37	Changed	Standard Features section was updated
02-Dec-2024	Version 36	Changed	Standard Features, and Configuration Information sections were updated
03-Sep-2024	Version 35	Changed	Overview, Standard Features, and Configuration Information sections were updated
06-May-2024	Version 34	Changed	Standard Features and Configuration Information sections were updated
04-Dec-2023	Version 33	Changed	Overview, Standard Features, Service and Support and Configuration Information sections were updated Additional ARTESCA SKU added: S2T33AAE Deprecation of ProLiant DL3250 Gen10 Plus SKUs added in Overview section: S2L91AAE, S2L92AAE, S2L93AAE, S2L94AAE, S2L95AAE, S2L96AAE, S2L97AAE, S2M76AAE, S2M77AAE, S2M78AAE, S2M79AAE, S2M80AAE, S2M81AAE, S2M82AAE, S2M83AAE, S2M84AAE Discontinued SKUs deleted: P8Y98AAE, P8Y95AAE, R8D48AAE, R7H64AAE
01-May-2023	Version 32	Changed	Overview and Standard Features sections were updated
06-Feb-2023	Version 31	Changed	Standard Features, Service and Support, Configuration Information and Technical Specifications sections were updated Optional Features and Additional Options sections were removed
06-Sep-2022	Version 30	Changed	ARTESCA virtual machine and included supported Linux was added
18-Apr-2022	Version 29	Changed	Additional Options section was added. Addition of RING9 Configuration Information and Service and Support sections were updated. Deprecation of Zenko stand-alone product
10-Jan-2022	Version 28	Changed	Addition of new Scale Care services Deprecation of Dedicated Care services
04-Oct-2021	Version 27	Changed	Standard Features, Configuration Information and Service and Support sections were updated. Discontinued SKUs deleted: R8D89A, R7S33A
02-Aug-2021	Version 26	Changed	Updated SKU descriptions and notes
07-Jun-2021	Version 25	Changed	HPE Apollo 2000 Gen10 Plus for Scality ARTESCA was added

Summary of Changes

Date	Version History	Action	Description of Change
17-May-2021	Version 24	Changed	Product family name was updated
04-May-2021	Version 23	Changed	Product family name was updated Scality ARTESCA was added HPE supported platforms added HPE ProLiant DL385 Gen10 Plus
07-Dec-2020	Version 22	Changed	Scality NAS Archiver software product
03-Aug-2020	Version 21	Changed	Deprecation of Fast start bundles S3 enhancements for WORM, more complete description of encryption capabilities
06-Jan-2020	Version 20	Added	SKUs added in Overview section for RING8 XMD and Zenko
05-Aug-2019	Version 19	Changed	Standard Features, Configuration Information and Technical Specifications sections were updated.
01-Jul-2019	Version 18	Changed	R3K30AAE Scality RING Bundle per Node Expansion E-LTU
03-Jun-2019	Version 17	Changed	Overview and Standard Features sections were updated.
06-May-2019	Version 16	Changed	Fast start bundle section with: ROQ28A, ROQ29A, R1Z66AAE, R1Z67AAE and R1Z68AAE Overview, Platform Information, Standard Features, Configuration Information, Service and Support sections were updated. SKU removed R1Z69AAE
04-Jun-2018	Version 15	Changed	SKUs added in Overview section: P8Z02AAE P8Z03AAE
12-Feb-2018	Version 14	Changed	Added HPE StoreFabric M-Series Ethernet Switches to the Technical Specifications section.
08-Jan-2018	Version 13	Changed	Updated Standard Care and Related Services.
23-Oct-2017	Version 12	Changed	Care Pack naming and Service and Support- Parts and Materials updated.
25-Sep-2017	Version 11	Changed	Changes made to the Standard Features
04-Sep-2017	Version 10	Changed	Changes made to the Overview and service and support sections
08-May-2017	Version 9	Changed	Technical Specifications section was updated.
28-Nov-2016	Version 8	Changed	Overview and Service and Support sections were updated SKUs added in Overview section: Q1C84AAE, Q1C85AAE, Q1C86AAE, Q1C87AAE, Q1C88AAE, Q1C89AAE.
15-Jul-2016	Version 7	Changed	Overview, Standard Features, Configuration Information, and Technical Specifications sections were updated. URLs were changed to hpe.com.
29-Apr-2016	Version 6	Changed	Overview, Standard Features, Configuration Information - Factory Integrated Models, Service and Support, and Technical Specifications sections were updated.
22-Jan-2016	Version 5	Changed	Overview section was updated.

Summary of Changes

Date	Version History	Action	Description of Change
01-Dec-2015	Version 4	Changed	Overview, Standard Features, Configuration Information - Factory Integrated Models, and Service and Support sections were updated. SKUs added in Overview section: P8Y89AAE, P8Y90AAE, P8Y91AAE, P8Y92AAE, P8Y93AAE, P8Y94AAE, P8Y95AAE, P8Y96AAE, P8Y97AAE, P8Y98AAE, P8Y99AAE, P8Z00AAE, P8Z01AAE. 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	Version 3	Removed	Discontinued SKUs deleted: L4Y37AAE, L4Y38AAE
09-Feb-2015	Version 2	Changed	Overview section was updated SKUs added on models section: L4Y35AAE, L4Y36AAE, L4Y37AAE, L4Y38AAE, L4Y39AAE.
29-Sep-2014	Version 1	New	New QuickSpecs

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