HPE StoreOnce Data Replication Solution Service

HPE Lifecycle Event Services

HPE StoreOnce Data Replication Solution Service provides implementation and verification of the HPE StoreOnce replication feature.

This service provides the analysis, design, implementation, and testing services necessary to deploy increased functionality of real-time data replication on your HPE StoreOnce systems. The service provides comprehensive implementation and test plans for data replication at your location. With special consideration for data availability, deduplication, compression, consistency, currency, and I/O performance, a Hewlett Packard Enterprise storage specialist will collaborate with your designated IT storage administrator to plan, design, and enhance the configuration.

Working with you, the Hewlett Packard Enterprise storage specialist will perform an initial examination of your application and provide the business-specific considerations required to enhance the overall availability of data during implementation and long-term operation. Implementation and test plans will be developed with you as part of the engagement.

To help ensure that the implementation is completed to address your requirements, a Hewlett Packard Enterprise storage specialist will provide verification and testing, a brief demonstration of the replication operation, and clear and concise documentation outlining the custom configuration.

This service can be customized to various degrees of complexity to better suit your needs and is offered at three service levels, ranging from basic installation to a more comprehensive implementation that can be tailored to meet the specific needs of your organization's storage environment.

Level 1 service for HPE StoreOnce Replication provides installation and startup. Setup replication is provided for a new HPE StoreOnce installation in a production environment between two devices and at up to two different sites, including the integration of the backup applications that your organization is already using. The service is limited to setup at up to five virtual tape library (VTL) and NAS shares for backup and to configure the shares for replication. The service includes HPE StoreOnce software installation, configuration, testing, and documentation, as well as a customer orientation session.

Level 2 service for HPE StoreOnce Replication provides the deliverables of the Level 1 service along with project management. Setup replication is provided for a new HPE StoreOnce installation in a production environment for up to five sites.

Level 3 service, which includes all the features of the Level 2 service, provides your organization with a custom Statement of Work (SOW) that includes your specific requirements, such as complex deployments at multiple sites, implementation of backup applications that exceed the limits of the Level 2 service, integration of HPE StoreOnce Replication into your organization's IT system management framework, creation of ad hoc or custom reports, and other custom design services.

Service benefits

This service includes implementation of HPE StoreOnce Replication in your storage environment, according to HPE quality standards, by a trained service specialist, providing:

- Delivery of the service at a mutually scheduled time
- Availability of a Hewlett Packard Enterprise service specialist to answer basic questions during the delivery of this service
- Basic installation and configuration
- Reduced implementation time and cost
- Verification that HPE StoreOnce Data Replication is installed, configured, and operational
- A project manager to manage the implementation of the service engagement (Implementation Service only)
- Availability of custom implementation through a Statement of Work (Level 3 service only)
- Installation and configuration of the StoreOnce VSA appliances

Service feature highlights

- Service planning
- Service deployment
- Installation verification tests (IVT)
- Customer orientation session
- Project management

Table 1. Service features

Feature	Delivery specifications
Service planning	For Level 1 service planning deliverables, the service specialist will work with the Customer to: • Collect the information needed to plan the deployment of HPE StoreOnce Replication software specified by the Customer • Conduct a kickoff discussion with the Customer to review the installation plan • Identify the source and target VTL and NAS shares • Review deliverables and completion criteria for this service • Discuss, identify, and assign ownerships to any service prerequisites and agree upon a completion timeline • Document the environment in which HPE StoreOnce Replication software will be implemented • Communicate the proposed configuration and review service completion criteria Level 2 service deliverables include all Level 1 service deliverables plus the following: • Work with the Customer to devise a configuration plan • Identify and consider backup sets to be configured within the scope of the service (During a one-time meeting, the Hewlett Packard Enterprise service specialist will work with the Customer to determine an applicable configuration for the environment with respect to data being replicated, deduplication ratios, capacity requirements and retention periods, bandwidth requirements, and backup set related priorities and unique replication requirements. Multiphase or incremental rollouts over a period of time are not in the scope of the service but can be accommodated at added cost.) • Identify a supported Customer backup set to be integrated and tested end to end, including backup and restore from a remote HPE StoreOnce system
Service deployment	Level 1 service deployment activities include the following: • Install and configure HPE Replication Manager software for one multinode appliance • Create baseline Replication Manager reports and review the reports with teams • Implement improvements and review refreshed Replication Manager reports to compare them to baseline reports and: – Improve, meet, or exceed backup windows

– Improve, meet, or exceed deduplication
– Improve, meet, or exceed compression
– Optimize data streams

- Review and implement effective housekeeping to:
  – Enable the space occupied by 'expired' backups to be returned for re-use
  – Enable asymmetric expiration of data
  – Ensure that replication and housekeeping are not occurring at overlapping intervals over backup jobs
  – Implement improvements and review performance gains

Level 2 deployment activities include all those listed for the Level 1 service plus the following:

- Configure the HPE StoreOnce solution in accordance with the previously defined configuration plan, including:
  – Configure VTL and NAS CIFS shares in a many-to-one scenario (with the maximum being a four-to-one solution)
  – Create VTL and NAS CIFS shares on the remote libraries, as needed
  – Verify functionality by performing backup and restore to and from a remote HPE StoreOnce system using the Customer's designated supported backup set
  – Provide installation at up to five sites

Level 3 deployment activities will include all those listed for Levels 1 and 2 services and, based on the SOW created for the Customer during the pre-sales cycle, may include the following:

- Review the engagement with the Customer using the SOW
- Perform the configuration examination and design outlined in the SOW
- Review the design with the Customer to facilitate its compatibility with the Customer's environment and its consistency with the SOW objectives
- Implement the design, as defined in the SOW
- Verify backup and restore operations, as specified in the SOW
- Provide additional integration and testing deliverables, as specified in the SOW

Installation verification tests (IVT)	Hewlett Packard Enterprise will run the appropriate installation verification tests required for the service provided. Testing activities include the following:
	
	- Hardware and firmware diagnostics
	- Tests to verify replication operational status, including replication, failover, and failback for the sample copy sets, specifically:
	  – Normalization of a small sample copy set
	  – Verified access to remote copy after a simulated failure
	  – Assumption by an alternate dedicated management server or a general-purpose server after a simulated failure
	  – Tests to validate notification mechanisms

Customer orientation session	The service specialist will conduct an orientation session of up to four (4) hours' duration for HPE StoreOnce Replication software. The orientation session is informal, typically conducted at a management console with selected members of the Customer's staff, and is not intended as a classroom activity or substitute for formal product training. During this process, the Hewlett Packard Enterprise service specialist will: - Familiarize the Customer with the verification of firmware and driver levels of the various components - Familiarize the Customer with the Replication User Interface application - Familiarize the Customer with the details of the installation report (or similar design document), which has been provided to the Customer - Review the basic maintenance tasks performed on a regular basis - Review the features and functionality provided by the implemented StoreOnce Replication software - Help the Customer locate troubleshooting information, including demonstration of online help - Set up Readers Choice or Subscribers Choice so that the Customer will receive HPE alert information for software upgrades and other communications related to HPE StoreOnce products
Project management	The Hewlett Packard Enterprise project manager will work with the Customer to manage the integration, development, and delivery of the service during standard HPE business hours. The project manager will provide the activities detailed below either remotely or onsite, at the discretion of HPE. The project manager will: - Manage any HPE resources required for the delivery of the service - Develop a project plan defining the scope of the services to be delivered - Identify the Customer's responsibilities and other requirements in order to facilitate service delivery - Act as the liaison and single point of contact between HPE and the Customer regarding the service - Develop the project schedule and manage the project against defined timelines - Facilitate the completion of a site survey to identify prerequisites that must be met prior to service delivery

Service limitations

Activities such as, but not limited to, the following are excluded from this service:

- Service deployment on hardware not covered by a Hewlett Packard Enterprise warranty or Hewlett Packard Enterprise support agreement

- Any services not clearly specified in this document or the associated Statement of Work

- Backup, recovery, and support of the operating system, other software, and data

- Application integration or integration of third-party products or peripherals not included with the system

- Services that, in the opinion of Hewlett Packard Enterprise, are required due to unauthorized attempts by non-HPE personnel to install, repair, maintain, or modify hardware, firmware, or software

- Service deployment on hardware covered by a third-party maintenance contract

- Installation and configuration of network gateways not provided by Hewlett Packard Enterprise as part of this solution

- Planning, design, implementation, or assessment of the Customer's overall SAN or fabric architecture

- Performance modeling, testing, and optimization of the HPE StoreOnce Replication environment beyond the initial implementation

- Migration of Customer data from prior storage volumes; Hewlett Packard Enterprise can provide data migration services at an additional charge

- Migration from prior HPE StoreOnce Replication versions

- Any documentation other than what is mentioned in this data sheet

- Integration with any hardware or software components not supported by the HPE StoreOnce Replication license

- Implementation of HPE StoreOnce Replication software revisions, including hot fixes, patches, service packs, or upgrades from earlier versions (the service will deploy the software version currently available at the time that the service engagement begins)

- Migration of data between storage devices or hosts, or migration or deinstallation of the Customer's legacy storage resource management environment

- Implementation of hardware and software products other than those specified in this document, including the Customer's server, application, database, storage, SAN, and network; the host servers used with the HPE StoreOnce Replication license must be fully implemented in a configuration supported by Hewlett Packard Enterprise prior to delivery of HPE StoreOnce Data Replication Solution Service

- Onsite delivery for one location and remote delivery for any additional location.

Service eligibility

Hardware and software prerequisites for the installation of HPE StoreOnce Replication software must be met prior to the beginning of onsite delivery of this service.

Customers are eligible for the delivery of this service if they meet the following prerequisites:

- An appropriate extended network must be implemented and operational between locations.

- Sufficient link bandwidth must be provided to support the expected sustained and maximum I/O rates; OCS3 or better is suggested.

- Inter-site gateways (IP or other) must be installed and configured. Gateway installation and configuration may be coordinated with delivery of this service; consultation from Hewlett Packard Enterprise may be required to determine gateway parameters.

- The HPE StoreOnce Data Deduplication Capacity LTU is required for the delivery of this solution.

- Firmware and memory on the HPE StoreOnce product family must meet minimum eligibility requirements.

- The Customer's host servers, applications, databases, storage, SAN, and network components must be installed and fully operational at supported OS and revision levels prior to service delivery.

Customer responsibilities

The Customer will:

- Contact a Hewlett Packard Enterprise service specialist within 90 days of date of purchase to schedule the delivery of the service

- Ensure that all service prerequisites as identified in the 'Service eligibility' section have been met

- Provide access to all storage and server platforms at user levels necessary to complete delivery of the service

- Use all software products in accordance with current Hewlett Packard Enterprise software licensing terms corresponding to the Customer's prerequisite underlying software license, or in accordance with the current licensing terms of the third-party software manufacturer, if applicable, including any additional software licensing terms that may accompany such software updates provided under this service

- Be responsible for registering to use a Hewlett Packard Enterprise or third-party hosted electronic facility in order to obtain software product information or to download software patches

- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals; provide information; ensure that all hardware, firmware, and software that the Hewlett Packard Enterprise service specialist will need in order to deliver this service are available and that software products are properly licensed; and otherwise be available to assist HPE in facilitating the delivery of this service

- Retain, and provide to Hewlett Packard Enterprise upon request, all original software licenses, license agreements, license keys, and subscription service registration information, as applicable for this service

- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required

- Install customer-installable firmware updates and patches

- Be responsible for all data backup and restore operations

- Be responsible for the operation of all backup and recovery application software

- Provide remote network connectivity or a solution between local and remote HPE StoreOnce locations (the service is delivered from a single location)

- Allow Hewlett Packard Enterprise full and unrestricted access to all locations where the service is to be performed

- Be responsible for deinstalling non-HPE-branded products, unless such deinstallation is specifically included in the Statement of Work

- Coordinate service deployment on third-party-maintained products with Hewlett Packard Enterprise, if applicable

- Be responsible for installing, in a timely manner, critical customer-installable firmware updates, as well as Customer Self Repair parts and replacement products delivered to the Customer

General provisions/Other exclusions

Activities such as, but not limited to, the following are excluded from this service:

- Any services not clearly specified in this document

- Services that, in the opinion of Hewlett Packard Enterprise, are required due to unauthorized attempts by non-HPE personnel to install, repair, maintain, or modify hardware, firmware, or software

- Service deployment on hardware covered by a third-party maintenance contract

- Service required due to causes external to the Hewlett Packard Enterprise maintained hardware or software

The service is delivered as a single, contiguous event. Environments that require multiple engagements over a longer period of time are not included with this service and are available at additional cost.

Hewlett Packard Enterprise's ability to deliver this service is dependent upon the Customer's full and timely cooperation with HPE, as well as the accuracy and completeness of any information and data the Customer provides to HPE.

Hewlett Packard Enterprise reserves the right to charge, on a time and materials basis, for any additional work over and above the service package pricing that may result from work required to address service prerequisites or other requirements that are not met by the Customer.

Hewlett Packard Enterprise reserves the right to re-price this service if the Customer does not schedule and provide for subsequent delivery within 90 days of purchase.

Portions of the service are delivered remotely or onsite, at Hewlett Packard Enterprise's discretion.

Travel charges may apply in some geographic locations. Please contact your local Hewlett Packard Enterprise representative for details.

Ordering information

To obtain further information or to order HPE StoreOnce Data Replication Solution Service, contact a local Hewlett Packard Enterprise sales representative.

For more information

For more information on Hewlett Packard Enterprise support services, contact any of our worldwide sales offices or visit the following website:

www.hpe.com/services/support
www.hpe.com/services/lifecycleevent

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