



HPE Data Replication Solution Service for HPE Business Copy for P9000 XP Disk Array Family

HPE Lifecycle Event Services

HPE Data Replication Solution Service provides implementation of the HPE Business Copy (BC) Snapshot feature of the HPE P9000 XP Disk Array family. This service provides the analysis, design, implementation, and testing services necessary to deploy the functionality of real-time data mirroring or snapshots.

HPE Business Copy provides enhanced availability and disaster recovery protection. To help ensure a timely, cost-effective deployment that cuts risk and shortens your time to results, Hewlett Packard Enterprise service professionals efficiently handle the entire gamut of complex implementation tasks. The service is offered at three service levels, ranging from installation and startup through comprehensive implementation tailored to address the specific needs of your storage environment. Additionally, RAID Manager implementation will be performed on designated hosts attached to the P9000 XP Disk Array.

Level I is designed to help you get the product up and running quickly and to provide a demonstration of the product's key features using sample or test data only.

Level II provides the necessary effort to implement and test the Business Copy configuration using volumes you designate and to verify operation of the designated volumes with one application configured by you.

Level III is a tailored service based on a Statement of Work (SOW) created by HPE that addresses your organization's unique requirements not included in Levels I and II. Verification of more than one application you've configured; scripting; or integration and configuration of your applications, backup environment, or databases can be accommodated via the Level III service.

Service benefits

- Installation of HPE Business Copy is in accordance with product specifications (Level I) and your business's configuration requirements (Levels II and III).
- Service is delivered by a trained specialist and based upon Hewlett Packard Enterprise recommended configurations and industry best practices.
- Your IT staff can stay focused on their core tasks and priorities, resulting in less impact to your business.
- Hewlett Packard Enterprise's expertise with data replication helps ensure that issues are avoided and risks are minimized.
- Service scheduling and coordination are provided to manage the implementation of the service.
- A Hewlett Packard Enterprise service specialist is available to answer questions during the onsite delivery of the service.
- Custom solution implementation and project management are provided, as detailed in the SOW (Level III only).

Service feature highlights

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

Table 1. Service features

Feature	Delivery specifications
Service planning	<p>A service specialist or project manager will schedule the delivery of the service at a time mutually agreed upon between Hewlett Packard Enterprise and the Customer, which shall be during local HPE standard business hours, excluding HPE holidays, unless otherwise agreed by HPE. Any services provided outside of HPE standard business hours may be subject to additional charges.</p> <p>The service specialist will perform the following installation planning and coordination activities:</p> <ul style="list-style-type: none"> • Schedule and coordinate service • Communicate with the Customer, including handling queries by the Customer regarding service delivery • Verify, using a pre-delivery checklist, that all service prerequisites that the Customer is responsible for meeting have been met • Provide preliminary documentation of the information collected around the array, volumes, and hosts to be involved in the installation report <p>Level I provides the planning activities associated with working through the prerequisites of installing Business Copy and RAID Manager software and identifying volumes to be used for testing.</p> <p>Level II contains the deliverables of Level I, plus the planning activities to identify and configure the Snapshot volume pools and Customer-designated volumes for a single Customer application.</p> <p>Level III may include planning deliverable of levels I and II in addition to any requirements specified by the Customer and documented in the SOW.</p>
Service deployment	<p>Level I deployment activities include:</p> <ul style="list-style-type: none"> • Reviewing the engagement with the Customer, using the pre-delivery checklist • Activating Business Copy licensing using Command View AE or Remote Web Console (if applicable) • Implementing a sample replication job for up to two different operating systems utilizing two test servers per OS; one server serves as the data source and the second as the Business Copy volume mount point for a given operating system • Documenting the Business Copy configuration in the Customer's environment in the installation report <p>Level II deployment activities include:</p> <ul style="list-style-type: none"> • Examining application and volumes with the Customer to determine specific configuration parameters required • Configuring the Snapshot volume pool and building configuration files for Customer-designated volumes based upon results of the application examination • Implementing RAID Manager on designated hosts • Documenting the Customer's Business Copy environment <p>Level III deployment activities will be defined by a Statement of Work created for the Customer. It may contain or leverage elements of Level I or Level II activities and/or other deliverables based upon Customer needs. Activities are defined by the specific SOW, but may include:</p> <ul style="list-style-type: none"> • Assessment, design, and deployment of HPE Business Copy with volumes corresponding to multiple applications • Scripting, implementation with more than one Customer application, or integration of Business Copy with Hewlett Packard Enterprise or third-party application functions • Overall project management • Implementation of a customized configuration • Customized deployment, documentation, and test plans • Additional or incremental deliverables as requested by the Customer
Installation verification tests (IVT)	<p>The IVT will be performed with the Customer's system administrator using replication jobs, followed by comprehensive testing on the sample or designated volumes, verifying operation of snapshot and mirror Business Copy volumes.</p>

Level I testing activities include:

- Verify installation of RAID Manager software on the relevant hosts
- Demonstrate and verify operation of pair creation, split, deletion, and re-synchronization capabilities on sample volumes

Level II testing activities includes Level I activities, plus:

- Demonstrate and verify operation of pair creation, split, deletion, and re-synchronization capabilities on designated volumes for one Customer application

In lieu of an installation verification test, Level III service will include acceptance testing to validate those features and functions requested in the SOW.

Customer orientation session

One (1) orientation session of up to two (2) hours' duration will be provided at the installation site on the product and/or technology, during which the Hewlett Packard Enterprise service specialist will, in general:

- Highlight the basic operations of the Business Copy software
- Familiarize the Customer with RAID Manager
- Review the installation report and configuration details as implemented
- Confirm that the Customer is aware of how to gain access to documentation and support
- Hold a brief question-and-answer forum

The orientation 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. The Customer's participation in the product deployment and installation verification testing is a key component of the orientation.

Project management (Level III only)

The project manager will work with the Customer to manage the integration, development, and delivery of the service during normal HPE business hours. The project manager will provide the activities detailed below either remotely or onsite (at the discretion of Hewlett Packard Enterprise). The project manager will:

- Develop a project plan, based on the SOW, defining the scope of the service to be delivered
 - Identify the Customer's responsibilities and other requirements in order to facilitate the delivery of this service
 - Act as the liaison and single point of contact between HPE and the Customer
 - Develop the project schedule and manage the project against defined timelines
 - Manage any Hewlett Packard Enterprise resources required for the delivery of the service
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Service limitations

Unless specified in this document or in a separate Statement of Work, activities such as but not limited to the following are excluded from this service:

- For level I, configuration of HPE Business Copy with more than 500 GB test data, with Customer production data, or with more than four servers running more than two operating systems
- For level II, configuration of HPE Business Copy with more than one production application
- Planning, design, implementation, or assessment of the Customer's overall SAN or fabric architecture
- Any documentation other than that mentioned in this data sheet
- Installation or configuration of any hardware or software products external to the array subsystem, including but not limited to tape libraries and enterprise backup software
- Any hardware reconfigurations of existing environments, such as removal or movement of array disk drives and adapter cards, or conversion and reformatting of existing storage between RAID levels or emulation types
- Migrations or upgrades from prior Business Copy versions
- Firmware upgrades required for supported version of Business Copy
- Implementation of software revisions, including hot fixes, patches, service packs, or upgrades from prior versions, on the Customer's existing SAN, host, and application environment
- Any implementation of applications or products that integrate with Business Copy or Snapshot via APIs (e.g., SAP, HPE Data Protector) or extensive Customer-specific scripting (unless provided for in the SOW)

- Migration of existing data to a new array or to a new configuration within an existing array
- Design or implementation of high-availability and other complex configurations, such as host clustering
- Operational testing or troubleshooting of Customer applications
- Performance testing or modeling
- Any services not clearly specified in this document or in an associated Statement of Work

Service eligibility

The Customer must meet certain hardware and software prerequisites prior to beginning onsite delivery of the service. These prerequisites include, but are not limited to, the following:

- The Customer must have an operational and Hewlett Packard Enterprise supported P9000 XP storage/SAN solution already in place, at firmware revision levels as specified by HPE.
- The Customer is responsible for providing servers that meet the minimum requirements of HPE Business Copy and management software, such as RAID Manager.
- The Customer must install any recommended host- or SAN-based software upgrades, patches, device drivers, or multipathing software.
- For Business Copy, the Customer must ensure that applications are installed, configured, and operational; that application server(s) are in a supported configuration; and that application data resides on the P9000 XP.

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
- 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
- Ensure the availability, at all times during service delivery, of one or more individuals who will provide administrator-level access to the systems where the work is to be performed
- Be responsible for the pulling and installation of all fiber cables
- Be responsible for all data backup and restore operations
- Complete and return the prerequisite Hewlett Packard Enterprise pre-delivery checklist to the service specialist at least two weeks prior to the start of the service, including array configuration information, as necessary
- Assume responsibility for access to and manipulation of the application(s) related to the implementation of the Business Copy software, unless otherwise specified in a Level III Statement of Work
- Ensure that prerequisite volume capacity and shared memory is available in the P9000 XP array to support the Business Copy or Snapshot implementation
- Ensure any and all prerequisite firmware or driver dependencies for the environment are completed before onsite service delivery begins
- 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
- Coordinate service deployment on third-party-maintained products (if applicable) with Hewlett Packard Enterprise
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required

Data sheet

- Allow Hewlett Packard Enterprise full and unrestricted or escorted access to all locations where the service is to be delivered
- Perform other reasonable activities to help Hewlett Packard Enterprise identify or resolve problems, as requested by HPE

General provisions/Other exclusions

- 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.
- 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.
- Portions of the service are delivered remotely or onsite, at Hewlett Packard Enterprise's discretion.
- The service is delivered during HPE standard business hours. Service delivery outside these hours is available at additional cost.
- 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.
- Travel charges may apply; please consult your local office.

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

- 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 required due to causes external to the Hewlett Packard Enterprise maintained hardware or software
- Service deployment on hardware not covered by a Hewlett Packard Enterprise warranty or service maintenance contract
- Service deployment on hardware covered by a third-party maintenance contract
- Any services not clearly specified in this document

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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