

# HP Data Replication Solution Service for Continuous Access P9000 XP Disk Family

## HP Care Pack Services

### Technical data



HP Data Replication Solution Service for Continuous Access provides implementation of the Continuous Access (CA) feature of HP P9000 XP disk arrays. This service provides your organization with the analysis, design, implementation, and testing services necessary to deploy real-time data mirroring functionality between a local and a remote disk array.

This service provides comprehensive implementation and test plans for remote data mirroring at two predetermined locations. With special consideration for data availability, consistency, and I/O performance, an experienced HP storage specialist will collaborate with your organization's designated IT storage administrator to plan, design, and deploy your configuration. The service can be customized to accommodate your needs.

Three levels of service are offered, ranging from basic implementation to more comprehensive implementation and integration activities:

- The Level I service 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.
- The Level II service provides implementation and testing of the Continuous Access configuration using volumes you designate and verifies operation of the designated volumes with one customer-configured application.
- The Level III service is a tailored service based on a Statement of Work (SOW) created by HP that addresses your organization's unique requirements not addressed by Level I and II services. The Level III service can accommodate more than one application you've configured; scripting; or integration and configuration of your applications, backup environment, or databases.

## Service benefits

- Installation of the Continuous Access feature in accordance with product specifications (Level I) and your organization's configuration requirements (Levels II and III)
- Reduced implementation time
- Availability of an HP service specialist to answer questions during the onsite delivery of the service
- Project management and custom solution implementation, as detailed in the Statement of Work (Level III only)
- Your IT staff can stay focused on their core tasks and priorities, resulting in less impact on your business
- HP's expertise with data replication to help ensure that issues are avoided and risks are reduced

## Service feature highlights

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

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### Specifications

**Table 1. Service features**

<b>Feature</b>	<b>Delivery specifications</b>
<b>Service planning</b>	<p>A HP service specialist or project manager will schedule the delivery of the service at a time mutually agreed upon between HP and the Customer, which shall be during local HP standard business hours excluding HP holidays, unless otherwise agreed by HP. Any services provided outside of HP 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"><li>• Scheduling and coordinating the service</li><li>• Communicating with the Customer, including handling queries from the Customer regarding service delivery</li><li>• Verifying, using a predelivery checklist, that all service prerequisites that the Customer is responsible for meeting have been met</li><li>• Gathering preliminary documentation for the installation report on the array, volumes, and hosts involved</li></ul> <p>Level I provides the planning activities associated with working through the prerequisites of installing Continuous Access and RAID Manager software and identifying nonproduction volumes that will be used for sample or test volume testing.</p> <p>Level II contains the deliverables of the Level I service, plus the planning activities to identify, configure, and verify the Customer-designated volume pairs for a single customer application.</p> <p>Level III may include planning the deliverables of Level I and II services in addition to any requirements specified by the Customer and documented in the Statement of Work.</p>
<b>Service deployment</b>	<p>Level I deployment activities include:</p> <ul style="list-style-type: none"><li>• Reviewing the engagement with the Customer using the predelivery checklist and verifying that all service prerequisites have been met</li><li>• Configuring any dependent SAN switches to establish connectivity between HP disk arrays</li><li>• Configuring source and target arrays to establish Continuous Access functionality between the arrays for a single source/target relationship</li><li>• Installing or updating RAID Manager software on existing Customer servers for a maximum of two hosts</li></ul>

- Creating a sample volume pair compatible with the Customer's array configuration; the sample configuration will contain a maximum of one Continuous Access source/target relationship, two hosts, and sample/test volumes containing no production data of up to 500 GB in size.
- Documenting the sample configuration details in the installation report

Level II deployment activities include all those listed under Level I, plus the following:

- Working with the Customer to identify volumes associated with the Customer's single chosen application
- Performing Continuous Access pair configuration with volumes associated with the Customer's designated application
- Documenting the deployed configuration details in the installation report

Level III deployment activities will be defined by a Statement of Work that HP creates for the Customer. It may contain or leverage elements of Level I or II service activities and/or other deliverables based upon the Customer's needs. Activities are defined by the specific Statement of Work but may include:

- Managing the project
- Assessing, designing, and deploying HP Continuous Access with volumes corresponding to multiple applications
- Scripting, providing implementation with more than one Customer application, or integration of Continuous Access with HP or third-party application functions
- Providing customized deployment, documentation, and test plan deliverables requested by the Customer
- Configuring multisite clustering

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**Installation verification tests (IVT)**

HP will run the appropriate installation verification tests required for the level of service being provided to the Customer.

Level I testing activities include:

- Running tests to verify Continuous Access operational status, including pair creation, split, failover, resynchronization, and failback using a sample volume pair. This includes tasks such as:

- Completing an initial copy of the sample volume pair
- Verifying host level access to a remote copy of the data after a simulated failure
- Demonstrating resynchronization after a link failure
- Demonstrating resynchronization after a simulated failback

- Validating remote availability for the sample volume pair

Level II testing activities extend Level I testing activities to include the volumes associated with the single Customer designated application.

Level III testing activities include an acceptance test to validate the features and functions requested in the Statement of Work, in lieu of fixed installation verification tests.

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**Customer orientation session**

The HP service specialist will provide one orientation session of up to two hours duration at the Customer's installation site on the product and/or technology, which will generally include:

- Highlighting the basic operations of Continuous Access
- Familiarizing the Customer with RAID Manager
- Reviewing the installation report and configuration details with the Customer, as implemented
- Confirming that the Customer is aware of how to gain access to service documentation and support
- Holding a brief question-and-answer forum with the Customer

The orientation session is informal, is typically conducted at a management console or configuration point 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 session.

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**Project management (level 3 only)**

The project manager will work with the Customer to manage the integration, development, and delivery of the service during standard HP business hours. The project manager will provide the following activities, either remotely or onsite (at the discretion of HP):

- Managing any HP resources required for the delivery of the service

- Developing a project plan encompassing the scope of the services defined in the Statement of Work
  - Identifying the Customer's responsibilities and other requirements in order to facilitate the delivery of this service
  - Acting as the liaison and single point of contact between HP and the Customer
  - Developing the project schedule and managing the project against defined timelines
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## Service eligibility

The Customer must meet all of the following prerequisites for delivery of this service. The Customer is responsible for ensuring compliance with the following eligibility requirements:

- Arrays and SAN must be implemented and be operational at all locations at currently supported firmware levels.
- All hosts must be at supported operating system revision and patch levels.
- For Continuous Access, 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 disk array.
- Access must be provided to operational hosts on the target array.
- Intersite infrastructure (IP, SAN, or other) must be installed and configured.
- Sufficient Continuous Access link bandwidth must be provided to support the expected sustained and maximum I/O rates.

## 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 HP Continuous Access with Customer production data on more than two hosts, or with sample/test volumes containing more than 500GB of data
- For Level II, configuration of HP Continuous Access with more than one production application
- Any implementation of applications or products that integrate with Continuous Access via APIs (e.g., SAP, HP Data Protector) or extensive, customer-specific scripting (unless provided for in the Statement of Work)
- Migrations or upgrades from prior versions of HP Continuous Access
- HP disk array firmware upgrades required for the supported version of Continuous Access
- 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 hardware reconfigurations of existing environments, such as removal or movement of host adapters, array disk drives, and adapter cards, or conversion and reformatting of existing storage between RAID levels or emulation types
- Planning, design, implementation, or assessment of the Customer's overall SAN or fabric architecture
- Installation or configuration of the network infrastructure or any hardware or software products not specified in this document
- 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 the Customer's applications
- Performance testing or modeling
- Any services or documentation not clearly specified in this document or in an associated Statement of Work

## Customer responsibilities

The Customer will:

- Contact an HP service specialist within 90 days of date of purchase to schedule the delivery of the service
- 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 HP 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 HP in facilitating the delivery of this service
- Complete and return the HP predelivery checklist to the service specialist at least two weeks prior to the start of the service, including array configuration information, as necessary
- Ensure that all service prerequisites as identified in the 'Service eligibility' section have been met
- Assume responsibility for access to and manipulation of the application(s) related to the implementation of Continuous Access software, unless otherwise specified in a Level III Statement of Work
- Ensure that prerequisite volume capacity and shared memory is available in the HP disk array to support the Continuous Access implementation
- Be responsible for the pulling and installation of all cables external to the disk arrays
- Coordinate service deployment on third-party-maintained products (if applicable) with HP
- Ensure that any and all prerequisite firmware or driver dependencies for the environment are completed before onsite service delivery begins
- 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
- Ensure that all hardware, firmware, and software that the HP service specialist will need in order to deliver this service are available and that software products are properly licensed
- Allow HP full and unrestricted or escorted access to all locations where the service is to be delivered
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Be responsible for all data backup and restore operations
- Perform other reasonable activities to help HP identify or resolve problems, as requested by HP

## General provisions/Other exclusions

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

- HP reserves the right to charge, on a time and materials basis, for any additional work over and above this service package pricing that may result from work required to address service prerequisites or other requirements that are not met by the Customer.
- HP's ability to deliver this service is dependent upon the Customer's full and timely cooperation with HP, as well as the accuracy and completeness of any information and data the Customer provides to HP.
- Portions of the service are delivered remotely or onsite, at HP's discretion.
- The service is delivered during HP standard business hours. Service delivery outside these hours is available at additional cost.
- This service is delivered as a single, contiguous event. If Customer resource availability or other Customer restrictions delay installation or require additional visits beyond the defined scope of the service, additional charges may apply.
- 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 HP, are required due to unauthorized attempts by non-HP personnel to install, repair, maintain, or modify hardware, firmware, or software
- Service required due to causes external to the HP maintained hardware or software
- Service deployment on hardware not covered by an HP 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 HP Services, contact any of our worldwide sales offices or visit our website at:

**[www.hp.com/services/alwayson](http://www.hp.com/services/alwayson)**

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