

HP Data Replication Solution Services for Continuous Access XP

HP network storage

Technical data



HP Data Replication Solution Services provide implementation of the Continuous Access (CA) feature of the XP storage array. This service provides analysis, design, implementation, and testing services necessary to deploy optimal functionality of real-time data mirroring between a local and a remote XP 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, currency, and I/O performance, our experienced storage specialist will collaborate with your designated IT storage administrator to plan, design, and optimize your configuration. Our storage specialist will perform an initial discovery and assessment of your application and provide the business-specific consideration required to optimize the overall availability of your data during implementation and long-term operation. Detailed implementation and test plans will be submitted for your review and approval prior to the engagement. To help ensure that the implementation is completed to address your requirements, our storage specialist will provide verification, testing, a demonstration forum of the mirroring operation, and clear, concise documentation outlining your custom configuration. The service can be customized to various degrees of complexity to better suit your needs. Three levels of service are offered, ranging from basic implementation to more comprehensive implementation and integration activities.

Service benefits

Choose from a selection of services that provide:

- An environment that keeps your mission-critical data safe, secure, and highly available
- Installation that adheres to the product specifications and supports your business's configuration requirements and business objectives
- Design and implementation delivered by a trained HP specialist and based upon HP recommended configurations and industry best practices
- Verification of the implementation against your design objectives
- Minimization of implementation impact through the use of high-availability technologies and best practices
- Knowledge transfer that may assist your local administrator in managing your solution
- Delivery of the service at a mutually scheduled time
- Availability of an HP service specialist to answer questions during the onsite delivery of the service

- Coordination by a project manager of the service engagement implementation and resolution of reported issues
- Documentation of the Continuous Access configuration as implemented
- Availability of advanced customization beyond the standard service through the Statement of Work (SOW) process (level 3 only)

Specifications

Table 1. Service feature highlights

Three levels of Data Replication Solution Services for Continuous Access XP are offered to address your needs. The following table highlights what is included at each level of service.

Level 1	Level 2	Level 3
Provide planning, scheduling, and implementation services		
Perform project management		
	Complete application assessment to establish design parameters to address your needs	Complete application assessment to establish design parameters to address your extended specific needs as listed in the SOW
Design for a basic configuration of a sample volume pair in a non-production environment	Design to match the needs determined by the assessment	Design to match the needs determined by the SOW
	Draft detailed implementation plan to deploy Continuous Access and RAID Manager as determined in the assessment	Draft detailed implementation plan to deploy Continuous Access and RAID Manager as specified in the SOW
Perform product configuration	Perform product configuration and volume pair configuration using volumes you designate	Perform product configuration and volume pair configuration using volumes you designate and provide the additional deliverables required by the SOW, including such requirements as failover and failback scripting, replication design and configuration that can include the integration of supported application and database environments
Test functional operation of pair creation, split, failover, and re-synchronization capabilities in a non-production environment with sample volume pair (Data Migration Services are available at additional cost)	Test functional operation of pair creation, split, failover, and re-synchronization capabilities in a production environment with one application You are responsible for full integration and testing of applications and databases associated with the replication environment. (Data Migration Services are available at additional cost)	Test functional operation of pair creation, split, failover, and re-synchronization capabilities on your volumes as defined in the SOW (Data Migration Services are available at additional cost)
Perform formal installation verification test (IVT) with your system administrator on sample volume pair		Perform formal installation verification test (IVT) with your system administrator on sample volume pair based on SOW
	Perform orientation	Perform orientation as specified in the SOW
Document the configuration		

Specifications

Table 2. Service features

Feature	Delivery specifications
Service planning	<p>An 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>Data Replication Solution Service Level 1 provides basic planning, scheduling, configuring, testing, and documenting a simple non-production sample volume pair.</p> <p>Data Replication Solution Service Level 2 provides the necessary effort to design, implement, and test the Continuous Access configuration using Customer-designated volumes and to verify operation of one application with the resultant volume pairs.</p> <p>Data Replication Solution Service Level 3 is a tailored service that is designed based on a Statement of Work (SOW) created by HP that addresses unique Customer requirements not included in level 2.</p>
Service deployment	<p>Level 1 deployment activities include:</p> <ul style="list-style-type: none">• Reviewing the engagement with the Customer using the predelivery checklist• Reviewing the basic design with a sample volume pair• Implementing the design• Activating and configuring Continuous Access XP using Command View (if applicable)• Implementing RAID Manager• Configuring Continuous Access XP• Configuring dependent switches, including any zoning requirements• Reviewing the design with the Customer to address its compatibility with the Customer's environment• Verifying pair creation, split, failover, and re-synchronization capabilities with one sample volume pair• Documenting the Customer environment• Providing Customer orientation <p>Level 2 deployment activities include:</p> <ul style="list-style-type: none">• Reviewing the engagement with the Customer using the predelivery checklist• Reviewing the basic design with a sample volume pair• Implementing the design• Activating and configuring Continuous Access XP using Command View (if applicable)• Implementing RAID Manager• Configuring Continuous Access XP• Configuring dependent switches, including any zoning requirements• Performing the application assessment and design• Reviewing the design with the customer to assure its compatibility with the Customer's environment• Verifying pair creation, split, failover, and re-synchronization capabilities on Customer volumes for one application• Documenting the Customer environment• Providing Customer orientation <p>Level 3 deployment activities will include the following, based on the SOW created for the customer during the pre-sales cycle:</p> <ul style="list-style-type: none">• All activities listed under level 2• Reviewing the engagement with the Customer, using the SOW• Performing the application assessment and design scoped in the SOW• Reviewing the design with the Customer to address its compatibility with the Customer's environment and its consistency with the SOW objectives• Implementing the design as defined in the SOW• Verifying pair creation, split, failover, and re-synchronization capabilities on Customer volumes with applications, as specified in the SOW• Integrating and testing deliverables as specified in the SOW• Providing Customer orientation

Specifications**Table 2. Service features, continued**

Feature	Delivery specifications
Installation verification tests (IVT)	<p>HP will run the appropriate installation verification tests required for the level of service provided.</p> <p>Level 1 testing activities include:</p> <ul style="list-style-type: none">• Tests to verify Continuous Access operational status, including pair creation, split, failover, re-synchronization, and failback for one application using a sample volume pair. This would include such tasks as:<ul style="list-style-type: none">– Completion of initial copy of a small non-production sample volume pair– Verification of access to remote copy after a simulated failure– Demonstration of re-sync after a link failure– Demonstration of re-sync after simulated failback• Validation of remote availability for the sample volume pair <p>Level 2 testing activities include:</p> <ul style="list-style-type: none">• Tests to verify Continuous Access operational status, including pair creation, split, failover, re-synchronization, and failback for one application using a sample volume pair. This would include such tasks as:<ul style="list-style-type: none">– Completion of the initial copy of a small non-production sample volume pair– Verification of access to remote copy after a simulated failure– Demonstration of re-sync after a link failure– Demonstration of re-sync after simulated failback• Validation of remote availability for one application <p>Level 3 testing activities include:</p> <ul style="list-style-type: none">• A formal acceptance test to validate those features and functions requested in the SOW in lieu of an installation verification test.
Customer orientation session	<p>The HP service specialist will provide an orientation session on the product and technology, which will include:</p> <ul style="list-style-type: none">• Familiarization with the Continuous Access feature set and a review of the basic features of the Command View XP application• Familiarization with RAID Manager• Familiarization with the details of the installation report (or similar design document) provided to the Customer• Customer participation in the formal IVT
Project management (levels 2 and 3 only)	<p>The project manager will work with the Customer to manage the integration, development, and delivery of the service during normal HP business hours. The project manager will provide the activities detailed below either remotely or onsite (at the discretion of HP). The project manager will:</p> <ul style="list-style-type: none">• Manage any HP 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 the delivery of this service• Act as the liaison and single point of contact between HP and the Customer• Develop the project schedule and manage the project against defined timelines

Service eligibility

The Customer must meet all of the following prerequisites for delivery of this service:

- XP arrays and SAN must be implemented and operational at all locations.
- XP arrays must be operational and at the currently supported firmware level.
- All supported hosts must be at supported OS revision and patch levels.
- Inter-site infrastructure (IP, SAN, or other) must be installed and configured.
- Infrastructure installation and configuration may be coordinated with delivery of this service; consultation from HP may be required in the definition of infrastructure parameters.
- Sufficient Continuous Access link bandwidth must be provided to support the expected sustained and maximum I/O rates based on the Customer's current infrastructure.

Customer responsibilities

The Customer will:

- Define business/operational objectives and any special requirements
- Provide documentation of the existing storage
- Contact an HP service delivery specialist within 90 days of purchasing this service to schedule its delivery
- Coordinate service deployment on third-party-maintained hardware and software (if applicable) with HP
- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals, provide information, and otherwise be available to assist HP by facilitating the delivery of this service
- Ensure that all service prerequisites as identified above under "Service eligibility" are met
- Ensure the availability of all hardware, firmware, and software that the HP service specialist will need in order to deliver this service
- Allow HP full and unrestricted 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
- Be responsible for the pulling and installation of all fiber cables
- Verify with the Customer's designated IT storage administrator that stated objectives were met after implementation

General provisions/Other exclusions

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

Service limitations

Excluded from this service are activities such as, but not limited to, the following:

- Service deployment on hardware not covered by an HP warranty or service maintenance contract
- Installation and configuration of network gateways not provided by HP as part of this solution
- Service deployment on hardware covered by a third-party maintenance contract
- Planning, design, implementation, or assessment of the Customer's overall SAN or fabric architecture
- Performance testing and optimization of the Continuous Access environment beyond the initial implementation
- Migration of customer data from prior storage volumes (HP can provide Data Migration Services at an additional charge).
- 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
- Services required due to causes external to the HP-maintained hardware or software
- Any services not clearly specified in this document
- Any documentation other than that mentioned in this data sheet
- Any extensive 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

For more information

HP offers an extensive portfolio of HP and mixed-environment storage-specific consulting and support services to assist with your IT storage needs. For more information on HP Data Replication Solution Services, contact any of our worldwide sales offices or visit our Web site at:

www.hp.com/hps/support.

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