

HP Data Replication Solution Service for HP 3PAR Remote Copy

HP Care Pack Services

Technical data



HP Data Replication Solution Service for HP 3PAR Remote Copy provides implementation of the HP 3PAR Storage System's Remote Copy product. This service provides the analysis, design, implementation, and testing services necessary to deploy Remote Copy functionality.

HP 3PAR Remote Copy provides enhanced availability and disaster recovery protection. To help ensure a timely, cost-effective deployment that reduces risk and shortens your time to results, HP 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 HP 3PAR storage environment.

Three levels of service are offered.

The Level I service is designed to help you get 3PAR Remote Copy 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 Remote Copy configuration using volumes you designate and verifies operation of the 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 included in Level I and II services. The Level III service can accommodate verification of more than one application you have configured; scripting; or integration and configuration by HP of your applications, backup environment, or databases.

Service benefits

- Installation of Remote Copy in accordance with product specifications (Level I) and your business'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 SOW (Level III only)
- Your IT staff can stay focused on their core tasks and priorities, resulting in less impact to your business
- HP's expertise with data replication helps ensure issues are avoided and risks are reduced

Service feature highlights

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

Specifications

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 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"> • Schedule and coordinate the service • Communicate with the Customer, including handling queries from the Customer regarding service delivery • Verify, using a predelivery checklist, that all service prerequisites that the Customer is responsible for have been met <p>Level I provides the planning activities associated with working through the prerequisites of enabling Remote Copy through the 3PAR Inform Management Console (IMC) and identifying volumes (non-production) that will be used for a sample copy set.</p> <p>Level II contains the deliverables of the Level I service, plus the planning activities to identify and configure the Customer-designated volumes 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 SOW.</p>
Service delivery	<p>Level I deployment activities include:</p> <ul style="list-style-type: none"> • Reviewing the engagement with the Customer using the predelivery checklist and verifying that all service prerequisites have been met

- Configuring dependent SAN switches to establish connectivity between 3PAR arrays, as needed
- Configuring Remote Copy connectivity on source and target arrays and establishing Remote Copy functionality between the arrays for a single source-target relationship
- Creating a sample Remote Copy group compatible with the Customer's array configuration. The sample group will contain a maximum of one Remote Copy source-target relationship, two hosts (one associated with the source array and another associated with the target array), and sample/test volumes of up to a total of 500 GB containing no production data
- Documenting the installed configuration details in the installation report

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

- Working with the Customer to identify any volumes associated with the Customer's chosen application
- Performing product configuration of Remote Copy groups using one Customer-designated application

Level III activities are defined by the specific Statement of Work, but may include:

- Project management
- Assessment, design, and deployment of Remote Copy with volumes corresponding to multiple applications
- Scripting or configuration of supported multisite clustering
- Integrating Remote Copy with Virtual Copy or other HP or third-party applications
- Customized deployment, documentation, and test plan deliverables, as requested by the Customer

Installation verification tests (IVT)

HP will run the appropriate installation verification tests (IVT) required for the level of service provided.

Level I testing activities include:

- Testing to verify Remote Copy operational status, including replication, failover, and failback using sample copy group, and switching from a primary to an alternate management server, including such tasks as:
 - Demonstration of the secondary site becoming the primary one for the sample group after a line failure occurs
 - Demonstration of the role reversal of the primary and secondary sites for the sample group with resync after simulated failback

Level II will include all tests listed under the Level I service, plus:

- Extend verification of replication, suspend and resume, failover, and failback capabilities listed in Level I to the Remote Copy groups associated with the single Customer application
- Demonstration of the secondary site becoming the primary one for the group associated with the Customer-designated application after a line failure occurs
- Demonstration of the role reversal of the primary and secondary sites for the group associated with the Customer-designated application with resync after a simulated failback occurs

The IVT will be performed with the assistance of the Customer's system or application administrator.

In lieu of a predetermined IVT, the Level III service may include a customer-defined acceptance test to validate the features and functions specified in the SOW.

Customer orientation session

Upon completion of the service, the HP service specialist will provide one (1) orientation session of up to two (2) hours' duration at the installation site on the product and/or technology. During this process, the HP service specialist will:

- Review the Remote Copy IMC interface and review the Remote Copy basic features
- Review the details of the installation report provided to the Customer
- Verify that the Customer understands how to gain access to product documentation
- Inform the Customer of how to contact HP for support
- Hold a brief question-and-answer forum

The orientation session is informal, is 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 also a key component of the orientation session.

**Project management
(Level III only)**

The project manager will work with the Customer to manage the integration, development, and delivery of the service. The project manager will:

- Manage any HP resources required for the delivery of the service
 - 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
 - Develop a project plan defining the scope of the services to be delivered
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Service eligibility

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

- Provide access to the 3PAR management interface
- Provide an operational management station with IP connectivity to both source and target arrays
- Ensure an operational, HP supported, and Remote Copy compatible 3PAR storage and SAN environment (i.e. topology, firmware, patches, etc.) verified by HP
- Ensure that network requirements are met, including provisioning of physical Ethernet ports and subnets, as required
- Ensure that connectivity is implemented and operational between source and target locations and/or arrays, as applicable
- Ensure that sufficient bandwidth is 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 Remote Copy with Customer production data, test or sample data of more than 500 GB, or more than two hosts
- For Level II, configuration of Remote Copy with more than one production application
- Planning, design, implementation, or assessment of the Customer's overall network, SAN, or fabric architecture
- Installation or configuration of any hardware or software products other than Remote Copy, including, but not limited to, servers, host operating systems, host agent software, multipathing software, tape libraries, host bus adapters, network, SAN fabric, Enterprise Backup software, and Recovery Manager software
- Migration of existing data to the 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
- 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
- Inform OS upgrades required for supported version of Remote Copy

- Installation or configuration of network gateways or any hardware or software products not specified in this data sheet
- Performance testing or modeling
- Any services or documentation not clearly specified in this document or in an associated Statement of Work
- Integration with any hardware or software components not supported by Remote Copy
- Configuration, consulting, and training for optional HP 3PAR software such as HP 3PAR Adaptive Optimization, Dynamic Optimization, MPIO, Policy Manager, Recovery Manager, System Reporter, System Tuner, Virtual Copy, and Virtual Domains; separate services are available for these products
- Design or implementation of host-based logical volume managers and associated file system structures
- Loading, management, or manipulation of the Customer's data
- Operational testing of applications or troubleshooting of interconnectivity, network, compatibility, or problems not related to Remote Copy

Customer responsibilities

The Customer will:

- Contact an HP 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, and otherwise be available to assist HP in facilitating the delivery of this service
- Assume responsibility for access to and manipulation of the application(s) related to the implementation of the Remote Copy software, unless otherwise specified in a Level III Statement of Work
- Be responsible for all data backup and restore operations
- Complete and return the prerequisite 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 the latest IMC version is installed and operational
- Ensure that any and all prerequisite firmware or driver dependencies for the environment are completed before onsite service delivery begins
- Ensure that all hardware and software that the service specialist will need in order to deliver this service are available and that software products are properly licensed
- 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
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Allow HP full and unrestricted or escorted access to all locations where the service is to be delivered
- Coordinate deployment activities on third-party-maintained hardware or software (if applicable) with the service specialist

- Provide all necessary network and administration assistance to enable connectivity to the HP 3PAR Storage System to allow HP remote monitoring and support tools to communicate with the HP Support Center
- Adhere to licensing terms and conditions regarding the use of any HP service tools used to facilitate the delivery of this service or support tools used to provide ongoing remote monitoring, if applicable
- 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 its subsequent delivery within 90 days of purchasing this service.

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 not met by the Customer, including any wait time incurred by the consultant resulting from the Customer not meeting prerequisite requirements.

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 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.

The service is delivered during HP standard business hours. Service delivery outside these hours is 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:

- 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
- 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
- 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/always-on

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