

# HPE Alletra 9000 Replication Software Installation and Startup Service

## HPE Lifecycle Services

HPE Alletra 9000 Replication Software Installation and Startup Service provides a limited implementation of the HPE Alletra 9000 Remote Copy, HPE Alletra 9000 Peer Motion, and HPE Alletra 9000 Peer Persistence components of the replication software. HPE Alletra 9000 Replication Software is designed to provide enhanced availability and disaster recovery protection.

To help ensure a timely, cost-effective deployment that can reduce risk and shorten your time to results, the HPE service professionals efficiently handle your implementation tasks.

The service provides installation and startup for the Remote Copy, Peer Motion, and Peer Persistence functionalities of HPE Alletra 9000 Replication Software in your storage environment. It is designed to help you get the replication software up and running quickly while demonstrating the product's key features using sample or test data only.

This service excludes implementing the HPE Cluster Extension Software component of the HPE Alletra 9000 Replication Software product, which provides host cluster failover. Deployment of the cluster extension software component is provided by ordering [HPE Cluster Extension Solution Implementation Service](#).

The following are excluded from this service but are available via the HPE Data Replication Solution Service for HPE Alletra 9000 Remote Copy and Peer Persistence software (for details, see Notes in the [Ordering information](#) section):

- Implementation and testing of the HPE Alletra 9000 Remote Copy and HPE Alletra 9000 Peer Persistence software configuration using production volumes or a production application
- Other services that address the unique requirements of your organization, such as verification of multiple applications you have configured; scripting; or HPE integration and configuration of your applications, backup environment, or databases

Refer to additional exclusions in the [Service limitations](#) section.

### Service benefits

- Allows your IT resources to stay focused on their core tasks and priorities
- Is designed to help reduce implementation time, as well as the impact and risk to your storage environment
- Helps ensure a successful implementation by providing HPE installation planning and coordination
- Provides service delivered by a trained specialist and based upon HPE recommended configurations and best practices
- Helps you to effectively utilize your HPE Alletra 9000 software through knowledge sharing with the service specialist during on-site delivery of the service



## Service feature highlights

- Service planning and coordination
- Service deployment
- Installation verification tests (IVTs)
- Customer-orientation session

**Table 1.** Service features

Feature	Delivery specifications
<b>Service planning and coordination</b>	<p>An HPE service specialist will schedule the service delivery at a time mutually agreed upon between Hewlett Packard Enterprise and the Customer, which shall be during local HPE standard business days and hours, excluding HPE holidays, unless otherwise agreed by HPE. Any services outside 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"> <li>• Schedule and coordinate the service</li> <li>• Communicate with the Customer, including handling queries from the Customer regarding service delivery</li> <li>• Verify, using a predelivery checklist, that all service prerequisites that the Customer is responsible for have been met</li> <li>• Provide the planning activities associated with working through the prerequisites of implementing HPE Alletra 9000 Remote Copy and HPE Alletra 9000 Peer Persistence, identifying volumes (nonproduction) that will be used for a sample copy set, and finding a suitable host that will be used for the quorum witness virtual machine (VM) component of HPE Alletra 9000 Peer Persistence</li> <li>• Collect preliminary documentation for the installation plan on the array, volumes, and hosts involved; volumes may be virtual (Remote Copy IP snapshots) or physical copies (Remote Copy Fibre Channel [FC]), as designated by the Customer</li> </ul>
<b>Service deployment</b>	<p>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>• Activating HPE Alletra 9000 software licensing, if necessary</li> <li>• HPE Alletra 9000 Remote Copy: <ul style="list-style-type: none"> <li>– Configuring dependent SAN switches to establish connectivity between the HPE Alletra 9000 storage environment as needed for Remote Copy FC (for Remote Copy IP, a dedicated subnet is required)</li> <li>– Configuring Remote Copy connectivity on a single source and target array pair and establishing Remote Copy functionality between the arrays for the single source-target relationship</li> <li>– Creating a sample Remote Copy group compatible with the Customer's array configuration</li> </ul> </li> </ul> <p>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 500 GB containing no production data.</p> <ul style="list-style-type: none"> <li>• HPE Alletra 9000 Peer Motion: <ul style="list-style-type: none"> <li>– Configuring source and target HPE Alletra 9000 arrays and demonstrating data mobility</li> </ul> </li> <li>• HPE Alletra 9000 Peer Persistence: <ul style="list-style-type: none"> <li>– Assisting the Customer with the deployment of a quorum witness VM on a suitable host provided by the Customer</li> <li>– Supporting the Customer with the configuration of a quorum witness VM for automatic transparent failover between the primary and secondary HPE Alletra 9000 Storage arrays</li> <li>– Configuring sample volumes for transparent failover between the source and target arrays, where the sample group will contain a maximum of one Peer Persistence source-target relationship, one standalone host or host cluster (where the standalone host or host cluster is associated with both the primary and secondary arrays), and sample/test volumes of up to a total of 500 GB containing no production data</li> </ul> </li> </ul>



**Table 1.** Service features (continued)

Feature	Delivery specifications
<b>IVTs</b>	<p>The service specialist will perform the appropriate IVTs to confirm product functionality, as follows:</p> <p>The IVT will be performed with the Customer's system administrator using replication jobs. It will be followed by comprehensive testing on the sample volumes (with no application integration or testing), verifying the operation of HPE Alletra 9000 Remote Copy and HPE Alletra 9000 Peer Persistence volumes.</p> <ul style="list-style-type: none"> <li>• For HPE Alletra 9000 Remote Copy, testing will verify the operational status, including replication, failover, and failback using the sample copy group and switching from a primary to an alternate management server. It also includes tasks such as: <ul style="list-style-type: none"> <li>– Demonstration of the secondary site becoming the primary one for the sample group after a line failure occurs</li> <li>– Demonstration of role reversal of the primary and secondary sites for the sample group with resynchronization after a simulated failback</li> </ul> </li> <li>• For HPE Alletra 9000 Peer Motion, validate that the source and target arrays are connected and display array configuration status</li> <li>• For HPE Alletra 9000 Peer Persistence, testing activities include demonstrating and verifying the operation of common Peer Persistence functions: <ul style="list-style-type: none"> <li>– Demo from the standalone host or host cluster of a transparent failover operation of Peer Persistence volumes from the primary to a secondary array, as applicable</li> <li>– Showcase from the standalone host or host cluster of a transparent failback from a secondary to the primary array for the Peer Persistence volumes, as applicable</li> </ul> </li> </ul>
<b>Customer-orientation session</b>	<p>Upon completion of the service, the HPE service specialist will provide one (1) orientation session of up to two (2) hours' duration on the product and/or technology. During this process, the service specialist may cover the following topics:</p> <ul style="list-style-type: none"> <li>• Familiarize the Customer with HPE Alletra 9000 Management Console and HPE Alletra 9000 Command Line Interface (CLI)</li> <li>• Review the HPE Alletra 9000 Remote Copy and HPE Alletra 9000 Peer Persistence management console interface and review the basic features of each software product with the Customer, as applicable; demonstrate the functionality of the HPE Alletra 9000 Peer Motion migration manager for data migration and/or load balancing</li> <li>• Evaluate the configuration details with the Customer, as implemented</li> <li>• Verify if the Customer knows how to access product documentation</li> <li>• Confirm that the Customer is aware of how to obtain service documentation and support</li> <li>• Hold a brief question and answer forum with the Customer</li> </ul> <p>The orientation session is informal, provided on the same day as the installation, and is typically conducted at a management console with selected members of the Customer's staff. It is not intended as a classroom activity or substitute for formal product training. The Customer's participation in the product deployment and IVT is also a key component of the orientation session.</p>

## Service eligibility

To be eligible for this service, the Customer must:

- Provide access to the HPE Alletra 9000 Management Console and HPE Alletra 9000 CLI

For HPE Alletra 9000 Remote Copy:

- Offer an operational management station with IP connectivity to both source and target arrays
- Ensure that the HPE Alletra 9000 storage, SAN, and host environment (that is, HPE Alletra 9000 Operating System, topology, firmware, patches, and more) are compatible with HPE Alletra 9000 Remote Copy; operational and verified by HPE
- Confirm that network requirements are met, including provisioning of physical Ethernet ports and subnets, as required; for example, for Remote Copy IP (RCIP), a dedicated subnet is required
- Ensure that connectivity is implemented and operational between source and target locations and/or arrays, as applicable
- Make sure that sufficient bandwidth is provided to support the expected sustained and maximum I/O rates



For HPE Alletra 9000 Peer Motion:

- The Customer is responsible for providing SAN connectivity between the fully operational HPE Alletra 9000 source and target storage and that the arrays meet minimum HPE Alletra 9000 OS requirements

For HPE Alletra 9000 Peer Persistence:

- Ensure that the host cluster used with HPE Alletra 9000 Peer Persistence is running a supported OS, is operational, and has network connectivity to both primary and secondary HPE Alletra 9000 Storage systems
- Make sure that the host used for the quorum witness VM is running a supported OS, is operational, and has network connectivity to both primary and secondary HPE Alletra 9000 Storage systems

## Service limitations

Unless specified in this document or a separate statement of work (SOW), activities such as, but not limited to, the following are excluded from this service:

- Configuration of HPE Cluster Extension Software and deployment of the software component for the HPE Alletra 9000 Replication Software features is provided in [HPE Cluster Extension Solution Implementation Service](#)
- Configuration of HPE Alletra 9000 Remote Copy with Customer production data, test, or sample data of more than 500 GB more than a single source-target relationship, or more than two hosts running more than a single operating system
- For HPE Alletra 9000 Peer Motion, the configuration of the software for more than a single virtual volume on a single host or configuration of storage ports on more than a single array at more than a single Customer site; implementation of data migration or load balancing using HPE Alletra 9000 Peer Motion is available as a separate service
- Configuration of HPE Alletra 9000 Peer Persistence with Customer production data, test, or sample data of more than 500 GB or more than a single standalone host or host cluster
- Implementation and configuration of host or host cluster failover; separate products and services are required to implement host or host cluster failover
- Any implementation of applications or products that integrate with HPE Alletra 9000 Replication Software via APIs (such as SAP®) or extensive Customer-specific scripting (unless provided for in a separate SOW)
- 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 HPE Alletra 9000 Replication Software, 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 application suite software
- Migration of existing data to the new array or a new configuration within an existing array, including the use of HPE Alletra 9000 Peer Motion for migration of Customer data or load balancing between arrays
- Design or implementation of high-availability and other complex configurations, such as host clustering
- Design or implementation of host-based logical volume managers and associated file system structures
- 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
- HPE Alletra 9000 Operating System upgrades required for supported version of HPE Alletra 9000 Replication Software
- 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
- Integration with any hardware or software components not supported by HPE Alletra 9000 Replication Software
- Configuration, consulting, and training for HPE Replication Software features; separate services are available for this product
- Loading, management, or manipulation of the Customer's data
- Operational testing of applications or troubleshooting of interconnectivity, network compatibility, or problems not related to HPE Alletra 9000 Replication Software



## Customer responsibilities

The Customer will:

- Contact an HPE service specialist within 90 days of the date of purchase to schedule the service delivery
- Ensure that all service prerequisites as identified in the [Service eligibility](#) section, have been met prior to service delivery
- 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 HPE service specialist will need to deliver this service are available and that software products are properly licensed; and otherwise be available to assist HPE in facilitating service delivery
- Ensure that prerequisite volume capacity is available in the HPE Alletra 9000 storage target/secondary array to support the implementation of HPE Alletra 9000 Remote Copy and HPE Alletra 9000 Peer Persistence
- Be responsible for all data backup and restore operations
- Complete and return the prerequisite HPE 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 most recent supported version HPE Alletra 9000 Management Console and HPE Alletra 9000 CLI are installed and operational
- Make sure that all prerequisite HPE Alletra 9000 Operating System, firmware, or driver dependencies for the environment are completed before on-site service delivery begins
- Ensure that all hardware and software that the service specialist will need to deliver this service are available and that software products are properly licensed
- Facilitate 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 the test and sample data used in service delivery, and for HPE Alletra 9000 Peer Persistence, also provide a host for the quorum witness VM that meets minimum requirements
- Offer a suitable work area for service delivery, including access to an outside telephone line, power, and any network connections required
- Allow HPE full and unrestricted access to all locations where the service is to be performed
- 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 HPE Alletra 9000 environment to allow HPE remote monitoring and support tools to communicate with the HPE Support Center
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate service delivery or support tools used to provide ongoing remote monitoring if applicable
- Perform other reasonable activities to help HPE identify or resolve problems, as requested by HPE

## General provisions / other exclusions

- The on-site service deploys a single instance of HPE Alletra 9000 Replication Software product features at one physical site, and for HPE Alletra 9000 Remote Copy, the source and target arrays must be manageable from the same physical site as mentioned here.
- HPE reserves the right to re-price this service if the Customer does not schedule and provide for subsequent delivery within 90 days of purchase.
- HPE 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 the Customer does not meet.
- HPE's ability to deliver this service depends on the Customer's full and timely cooperation with us, 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 on-site at HPE'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 HPE standard business hours and days, excluding HPE holidays. Service delivery outside these hours is available and is subject to additional charges.
- Travel charges may apply; consult a local HPE office.
- Customer acknowledges and agrees that HPE may use resources outside the country of purchase to deliver these services unless otherwise specified as part of a service feature description.

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

- Service deployment on hardware not covered by an HPE warranty or service maintenance contract
- Service deployment on hardware covered by an unauthorized third-party maintenance contract
- Services that, in the opinion of HPE, are required due to unauthorized attempts by third-party personnel to install, repair, maintain, or modify hardware, firmware, or software
- Service required due to causes external to the HPE maintained hardware or software
- Any services not clearly specified in this document
- To the extent HPE process personal data on the Customer's behalf in the course of providing services, the HPE Data Privacy and Security Agreement Schedule — HPE Support and Professional Services found at [hpe.com/us/en/legal/customer-privacy.html](https://hpe.com/us/en/legal/customer-privacy.html) shall apply.

## Supplemental terms

The following supplemental terms apply to these services and take precedence in the event of any conflict:

- Upon receipt of an acceptable order, HPE will contact the Customer within seven (7) business days to organize a service delivery date. Service delivery dates are subject to resource availability and may be scheduled up to 30 days from the order acceptance date.
- The Customer must schedule and receive delivery of these services within 180 days from order acceptance. HPE reserves the right to re-price for services not scheduled and delivered within 180 days. Backorders or shipment delays may affect the delivery timeline. Orders for services will expire after 365 days (one year) from the order acceptance date for services not scheduled and delivered, and the Customer will not be entitled to a refund for the unused services.

## Ordering information

To obtain further information or to order HPE Alletra 9000 Replication Software Installation and Startup Service, contact a local HPE sales representative and reference the following product numbers:

Suite-level deployment services:

- HA124A1#5T0 for HPE Installation Startup Storage System Replication, Peer Motion, Peer Persistence, Remote Copy Service (see Notes for more information)

Individually orderable deployment services:

- HA124A1#5Y6 for HPE Storage System Peer Motion Startup Service
- HA124A1#5U1 for HPE Startup Storage System Peer Persistence Service
- HA115A1#57M for HPE Storage Cluster Extension Implementation Service (see Notes for more information)



### Notes

- Fixed up-front support packages are only available in selected countries. Contact a local HPE sales representative for more information.
- Service is limited to demonstration of the product's key features using sample or test (nonproduction) data only. Refer to additional exclusions in the [Service limitations](#) section.
- For a more advanced implementation of HPE Alletra 9000 Remote Copy, see the [HPE Data Replication Solution Service for HPE Remote Copy](#).
- For advanced implementation of HPE Alletra 9000 Peer Persistence software that provides deliverables beyond the installation and startup service, order product number HA115A1#5U3 for HPE Alletra 9000 Peer Persistence Level 3 Implementation Service.
- For implementation of HPE Cluster Extension Software, see the [HPE Cluster Extension Solution Implementation Service](#), and order custom quote service product number HA115A1#57M.
- For implementation of HPE Alletra 9000 software other than Remote Copy, Peer Motion, and Peer Persistence, see:
  - [HPE Alletra 9000 Base Software Installation and Startup Service](#)
  - [HPE 3PAR, HPE Primera, and HPE Alletra 9000 Software Installation and Startup Service](#)

## Learn more at

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