# HPE Primera Storage Installation and Startup Service

# **HPE Lifecycle Services**

Designed to provide a smooth startup, HPE Primera Storage Installation and Startup Service provides deployment of your HPE Primera storage, helping to ensure proper installation in your storage environment as well as helping you increase the benefit from your storage investment.

The service provides activities required to help you deploy your HPE Primera storage into operation. With the assistance of your designated IT storage administrator, an HPE service specialist deploys your array. The features are fully described in the "Service features" table.

When ordered with hardware upgrade products, the service also provides deployment of hardware upgrades to your existing HPE Primera storage.

The service includes the following:

- For new arrays, configuration and presentation of a test virtual volume using nonproduction data for up to two hosts
- For array upgrades, installation and configuration of the array upgrade products as further detailed in the following sections

 $Reconfiguration \ of \ your \ existing \ array \ -- for \ example, \ virtual \ volumes, \ hosts, \ or \ a \ SAN \ -- is \ outside \ the \ scope \ of \ this \ service.$ 

For installation of the array into a Customer-supplied rack — assembly, configuration, and positioning of the rack are excluded from this service. See additional exclusions in the "Service limitations" section.

### **Service benefits**

- Allows your IT resources to stay focused on their core tasks and priorities
- Reduces implementation time, as well as the impact on 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 on HPE recommended configurations and best practices
- Customer-orientation session
- Helps you more effectively utilize your HPE Primera storage, thanks to the knowledge you gain from the service specialist during delivery
  of the service

# Service feature highlights

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



# **Specifications**

### Table 1. Service features

### Feature

### **Delivery specifications**

### Service planning and coordination

An HPE service specialist will plan all the necessary activities, including the identification of any prerequisites (<u>see the "Service eligibility"</u> section) and schedule the delivery of the service at a time mutually agreed upon by Hewlett Packard Enterprise and the Customer. This will 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. The service specialist will provide the planning and coordination activities either remotely or on-site, at HPE's discretion.

The service specialist will perform the following installation planning and coordination activities:

- Communicate with the Customer, which includes fielding the Customer's queries regarding service delivery as well as requesting any information needed from the Customer
- Verify, using a predelivery checklist, that all service prerequisites have been met, including that the Customer
  has completed verification that their host and SAN environment are compatible with any required HPE Primera
  operating system upgrades or patches prior to delivery of the installation services
- Schedule the array deployment at a mutually agreed-upon time
- Facilitate a brief discussion to guide the Customer in defining array configuration objectives based on application performance, availability needs, virtual volume layout, and HPE best practices

### Service deployment

The service specialist will perform the following array deployment activities:

- Coordinate the installation
- Install HPE Primera storage hardware and upgrades according to the product specifications
- Upgrade to the latest release of HPE Primera operating system and confirm that the operating system is at a supported and appropriate version
- Initialize the array
- · Assist the Customer with accessing the HPE Primera management console, if requested by Customer
- Verify that the license keys for the purchased HPE Primera array-based software features are installed. The
  Customer should have access to appropriate product documentation and understand how to obtain additional
  optional integration assistance if required
- Create and present a test virtual volume for the initial installation of an array using nonproduction data for up to two hosts
- Verify that the required HPE Primera operating system version or patches are installed for hardware
  performance, capacity, and functionality upgrades, as applicable; if they are not installed and the Customer
  is entitled to updates, install the required updates or patches, as well as install and initialize any purchased
  upgrade components
- Provide the Customer with instructions on how to access appropriate product documentation and how to obtain additional optional integration assistance if required
- Offer limited integration of up to two hosts (physical or virtual) running a single OS into a preexisting operational SAN/network in a HPE supported configuration; integration of a host is defined as performance of the following essential tasks necessary to establish and confirm visibility of a test virtual volume to the intended host:
  - Advise the Customer of zoning and multipathing requirements based on the host implementation guides; including, as applicable, limited use of HPE Smart SAN to demonstrate zoning for the two hosts referenced previously if the Customer's environment is HPE Smart SAN capable and the array being deployed via this service has HPE Smart SAN licensed
  - Verify that the Customer has read/write access to virtual volumes from the target hosts
  - Confirm that the Customer has path failover and failback functionality to the target hosts
- Configure the appropriate supported HPE remote support and monitoring solution

# IVTs

The service specialist will perform the appropriate installation verification tests to confirm product functionality, including verification that:

- The event logs are accumulating data.
- · Visibility of a test virtual volume using nonproduction data for up to two hosts, as applicable, can be confirmed.
- The remote support and monitoring solution is installed and operational, as applicable.

Data sheet Page 3

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

Feature	Delivery specifications

### **Orientation session**

For installation of a new array, the service specialist will conduct an orientation session of up to 1-hour duration on the HPE Primera storage. The goal is to review the configuration information and demonstrate basic operation of the installed HPE Primera storage product.

During the orientation session, the service specialist may:

- Provide the Customer with information about how to obtain array configuration information
- Demonstrate the creation of a virtual volume
- Highlight the basic operation of the array hardware and HPE Primera operating system
- Verify that the Customer understands how to gain access to product documentation
- Provide an overview of the system architecture
- Inform the Customer how to contact HPE for support
- Hold a brief question and answer session with the Customer

For upgrade installation, the service specialist will conduct an orientation session of up to 1-hour duration, with the goal of reviewing the configuration following service delivery.

The orientation session is provided on the same day as the installation. The session is informal 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.

# **Service eligibility**

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

- The Customer's existing computing operating system platform(s) must be supported by and compatible with the HPE Primera storage product being installed.
- The Customer's SAN environment must be fully operational in a configuration supported by Hewlett Packard Enterprise, and connectivity must be available and operational in the location where the array will be installed.
- The Customer must provide and verify a suitable physical operating environment for the array product, including implementation of any power, cooling, and other environmental requirements.
- For the rackmount version of the array product, the Customer is responsible for assembling and configuring the Customer-supplied rack and positioning it in the location where the array will be installed. This requirement is applicable to any rack (including generic HPE racks).
- For array upgrade installation, the HPE Primera storage product must be fully operational, in a supported configuration and physically located where the upgrade will be installed.
- The Customer is responsible for determining and installing any HPE required host- or SAN-based software upgrades, patches, device drivers, or multipathing software.
- The Customer is responsible for providing servers/workstations and network provisioning that meet the requirements for software
  products as applicable.
- The Customer must provide appropriate network provisioning to enable the HPE remote support and monitoring solution.

### **Service limitations**

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

- Full-site inspection, such as comprehensive analysis of the Customer's power, cooling, humidity, airborne contaminant, and vibration levels; determination of whether the data center's raised floor has sufficient structural capacity to accommodate the weight of the array to be installed; separate services are available for these tasks
- Integration with any hardware or software components not supported by the HPE Primera storage product
- Implementation of software revisions, including hotfixes, patches, service packs, or upgrades from prior versions, on the Customer's existing SAN and host environment
- Implementation of major revisions to the HPE Primera storage factory configuration; if needed, such revisions may require additional services
- Compatibility planning to ensure that required HPE Primera operating system upgrades or patches are compatible with the Customer's host and SAN environment
- Configuration, consulting, customer orientation, and training for HPE Primera software such as HPE Dynamic Optimization Software, HPE Peer Motion Software, and HPE Virtual Copy Software; separate services are available for these products
- Redesign or reconfiguration of the existing array for hardware upgrades or software add-ons, including hardware reconfiguration
- Extensive racking, reracking, or cabling activities, including cabling activities involving conduits, raceways, patch panels, and movement/configuration of computer room floor panels
- Software downgrades to HPE Primera operating system; downgrades are limited to currently supported versions compatible with the HPE Primera storage hardware configuration only
- Reconfiguration of existing environments, such as removal or movement of array disk drives and adapter cards, conversion, and reformatting
  of existing storage between RAID levels or emulation types, or installation of extensive Fibre Channel, network, and/or SAS cabling
- Design or implementation of high availability and other complex configurations, such as host clustering
- Design or implementation of host-based logical volumes and associated file system structures
- Deployment activities, including planning, design, assessment, and configuration of switch technology related to the implementation of a new SAN or the redeployment or extension of an existing SAN
- Performance testing or modeling
- Installation or configuration of any hardware or software products external to the array subsystem, including, but not limited to, servers, host operating systems, host agent software, multipathing software, tape libraries, HBAs, network, SAN fabric, and enterprise backup software
- Migration of existing data to the new array or to a new configuration within an existing array
- Loading, management, or manipulation of the Customer's data
- Operational testing of applications or troubleshooting of interconnectivity, network, compatibility, or problems not related to the HPE Primera storage product
- Assembly, configuration, and positioning of the Customer-supplied rack for the rackmount version of the array product; this limitation is applicable to any rack (including generic HPE racks)
- Design or implementation of seismic bracing or supports
- Relocation services Relocation is available as a separate service that is scheduled separately

For installation of the HPE Primera storage product, additional activities such as, but not limited to, the following are excluded from this service:

- Integration of more than two hosts (physical or virtual) into a preexisting operational SAN, consisting of switch technologies that meet the HPE supported configuration
- Virtual volume design or implementation beyond validation, for up to two hosts, that a test virtual volume is visible; if a virtual volume or host implementation is required, the HPE Storage Virtual Volume Design and Implementation Service is available separately

For installation of HPE Primera storage upgrades, additional activities such as, but not limited to, the following are excluded from this service:

- Physical movement of existing drives or data movement between drives within the array to rebalance data; HPE Rebalance Service is available separately for this purpose
- Integration of hosts (physical or virtual) into a preexisting operational SAN
- SAN reconfiguration activities, including migration of hosts from HBAs replaced during a node upgrade process; SAN services are available separately

### **Customer responsibilities**

The Customer will:

- Contact an HPE service specialist within 90 days of the date of purchase to schedule the delivery of the service
- Coordinate service deployment on third-party-maintained products (if applicable) with HPE
- Ensure that all service prerequisites as identified in the "Service eligibility" section have been met prior to service delivery
- 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 for upgrade installations, as necessary
- 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 HPE in facilitating the delivery of this service
- Ensure that all hardware, firmware, 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 all network and administration assistance necessary to enable connectivity to the HPE Primera storage in order to allow HPE remote
  monitoring and support tools to communicate with the HPE Support Center
- Offer all administration necessary to enable end-to-end connectivity of the HPE Primera storage, including network, SAN fabric, and host
- Provide server and network provisioning that meet the requirements for additional software products, as applicable
- Ensure that any and all prerequisite firmware or driver dependencies for the environment are handled before on-site service delivery begins
- Place HPE Primera storage products in the immediate location where the installation service will take place; HPE will unpack products to be installed in a Customer-supplied rack
- Assemble and configure the Customer-supplied rack for the rackmount version of the array product and position it in the location where the array will be installed; this requirement is applicable to any rack (including generic HPE racks) other than the enclosure that is factory integrated with the array
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service or support tools used to provide ongoing remote monitoring, if applicable
- Prior to upgrade installation by HPE and installation of any required HPE Primera operating system upgrades or patches, ensure that HPE Primera operating system upgrades or patches are compatible with the Customer's host and SAN environment
- Be responsible for all data backup and restore operations
- Provide a suitable work area for delivery of the service, 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
- Perform other reasonable activities to help HPE identify or resolve problems, as requested by HPE

# **General provisions / other exclusions**

- The service is delivered on a single HPE Primera storage product at one physical site.
- HPE reserves the right to reprice this service if the Customer does not schedule and provide 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 that are not met by the Customer.
- HPE's ability to deliver this service is dependent upon 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.
- 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 shall apply.
- The service is delivered during local HPE standard business days and hours, excluding HPE holidays. Service delivery outside these hours is available and subject to additional charges.
- 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.
- The service is delivered remotely or on-site, at HPE's discretion.
- Travel charges may apply; consult a local HPE office.
- Customer acknowledges and agrees that HPE may use resources outside the country of purchase for delivery of 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

# **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 reprice 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 Primera Storage Installation and Startup Service, contact a local HPE sales representative and reference the following product numbers:

For the HPE Primera 600 Storage:

- HA124A1#5SG for HPE Primera 600 2-Node Storage Base Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5SJ for HPE Primera 600 4-Node Storage Base Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5SH for HPE Primera 600 2-Node Storage Base Field Integrated Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5SY for HPE Primera 600 4-Node Storage Base Field Integrated Installation and Startup Service (see "Note 1" for more information)
- HA124A1# 5VE for HPE Primera 600 2-Node Controller Field Integrated Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5P6 for HPE Primera 600 4-Node Controller Field Integrated Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5PJ for HPE Primera 600 Field Integrated Adapter Installation and Startup Service
- HA124A1#5Q3 for HPE Primera 600 Field Integrated Drive Enclosure Installation and Startup Service (see "Note 1" for more information)
- HA124A1#5Q4 for HPE Primera 600 Field Integrated Drive Installation and Startup Service (see "Note 2" for more information)
- HA124A1#5R4 for HPE Primera 600 Expansion Rack Installation and Startup Service

### Notes

- 1. Excludes field integration of drives into a storage base or drive enclosure. For field integration of drives, for HPE Primera 600 Storage, order the appropriate quantity of HPE Primera 600 Field Integrated Drive Installation and Startup Service (HA124A1#5Q4).
- 2. Includes field integration of up to 12 drives in a storage base, upgrade node pair, or drive enclosure. For HPE Primera 600 Storage, order an increment of service HA124A1#5Q4 for each drive quantity of 12 drives that require field integration into a single HPE Primera 600 Storage array.

### Learn more at

HPE.com/services/lifecycleservices



