



**Hewlett Packard
Enterprise**

HPE XP Storage Installation and Startup Service

HPE Lifecycle Services

For a smooth startup, HPE XP Storage Installation and Startup Service provides installation and integration of your HPE XP8, HPE XP7, or HPE P9500 disk array family to help you get the most from your storage investment.

For HPE XP8, HPE XP7, or HPE P9500 hardware and software products, for which these services have been purchased, the service helps provide you with the necessary activities required to deploy your HPE XP8, HPE XP7, or HPE P9500 disk array family into operation. With the assistance of your designated IT storage administrator, an HPE service specialist plans, designs, and deploys a customized array configuration.

The service may also be purchased for deployment of hardware and software upgrades/add-ons to your existing HPE XP8, HPE XP7, or HPE P9500 disk array.

Service limit

- **New arrays:** Configuration and presentation of LUNs/LDEVs are provided with up to 16 hosts of a single operating system type.
- **Array upgrades:** Installation and configuration of the array upgrade products and the minimum SAN configuration required to present the upgrade products to designated hosts are included. Reconfiguration of existing arrays, for example, LDEVs/LUNs, pools, hosts, or SANs, is excluded.
- **Add-on software:** Configuration includes minimum actions, as determined by Hewlett Packard Enterprise, required to confirm that the product is functioning normally.

Additional configuration/integration activities can be accommodated but will be subject to additional charges.

Service benefits

- Allows your IT staff to stay focused on core tasks and priorities
- Enables you to help meet your business's configuration requirements
- Designed to help reduce implementation time, impact, and risk to your storage environment
- Facilitates a successful implementation for complex deployments by providing HPE installation planning and coordination
- Helps you more effectively utilize HPE products as a result of knowledge gained from the HPE 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
Service planning and coordination	<p>Prior to service delivery, an HPE service specialist, working remotely with the Customer's designated representative, will plan all the necessary activities, including the identification of any prerequisites, and schedule the delivery of the service at a time mutually agreed upon by HPE and the Customer, which shall be during local HPE standard business days and hours excluding HPE holidays, unless otherwise agreed by HPE. Any services provided outside of HPE standard business days and hours may be subject to additional charges.</p> <p>Installation planning and coordination activities include:</p> <ul style="list-style-type: none"> • Communication with the Customer, including queries by the Customer regarding service delivery • Verification, using a predelivery checklist, that all service prerequisites have been met prior to the scheduled delivery date • Scheduling of the array deployment at a mutually agreed upon time during HPE standard business days and hours, excluding HPE holidays • A brief remote consultation to guide the Customer in defining the array configuration requirements based on application performance, availability needs, and HPE best practices • Development of a customized LUN design to meet the array configuration objectives as mutually agreed upon with the Customer • The mutually agreed upon installation plan will serve as the guide for the coordination of the installation and startup deliverables
Service deployment	<p>Array deployment activities include:</p> <ul style="list-style-type: none"> • Coordination of the installation plan • Confirmation of appropriate operating system patch levels on a selected number of hosts identified in the installation plan • Validation that the Customer's array configuration objectives have not changed since the service planning and coordination phase • Finalization and implementation of the configuration previously agreed upon by the Customer as set forth in the installation plan; performance testing or modeling is not included with the service, but can be provided, subject to additional charges • Installation of HPE XP8, HPE XP7, or HPE P9500 array hardware and hardware/software upgrades/add-ons by an HPE service specialist according to the product specifications <ul style="list-style-type: none"> – Note: Base installation of mainframe software titles is provided via an HPE installation service; mainframe software title configuration or customization services are available, subject to additional charges. • Initialization of the array • For initial array hardware, service deployment includes configuration in accordance with the agreed-upon installation plan and LUN design. For software installed as part of the initial array configuration, the service specialist will perform installation, startup, and verification procedures, including: <ul style="list-style-type: none"> – For array-based software titles, integration of the software in accordance with the agreed-upon installation plan and LUN design – For software titles external to the array, depositing the software on a Customer-supplied server and operating environment that meets minimum product prerequisites, software activation, and configuration necessary to establish connectivity to the HPE XP8, HPE XP7, or HPE P9500 storage array in accordance with the agreed-upon installation plan. For products that utilize a host agent, a single agent will be configured to confirm normal product function and communication with the agent • For add-on/upgrade hardware, service deployment includes, as applicable, installation and configuration of disk drives, LDEVs/LUNs, channel adapters, etc., as specified in the agreed-upon installation plan. For add-on/upgrade software installed after the initial array installation, service deployment includes performing installation, startup, and verification procedures, including the following: <ul style="list-style-type: none"> – For array-based software titles, activation of the title and the tasks necessary to confirm that the product is available and ready for use by the Customer in accordance with the agreed-upon installation plan – For software titles external to the array, depositing the software on a Customer-supplied server and operating environment that meets minimum product prerequisites, software activation, and configuration necessary to establish connectivity to the HPE XP8, HPE XP7, or HPE P9500 storage array. For products that utilize a host agent, a single agent will be configured to confirm normal product function and communication with the agent • Limited integration of up to 16 hosts (physical or virtual) running a single OS into a preexisting operational SAN consisting of switch technologies that meet supportability standards of the HPE SAN Design Reference Guide or other HPE supported configurations. The integration of a host is defined as the essential tasks necessary to establish and confirm the visibility of the desired LDEVs/LUNs to the intended host • Creation of configuration documentation utilizing standard HPE configuration collection and documentation tools • Installation of appropriate supported HPE remote monitoring and support solutions, as applicable



Table 1. Service features (continued)

Feature	Delivery specifications
IVTs	<p>The service specialist will perform the appropriate installation verification tests to confirm product functionality, including:</p> <ul style="list-style-type: none"> • Confirming that event logs are accumulating data • Verifying visibility of LUNs to target hosts and the ability to read and write to selected LUNs • Confirming path failover and failback functionality • Verifying that remote support tools are installed and operational
Customer orientation session	<p>The service specialist will conduct an orientation session of up to eight hours duration, with the goal of reviewing the installation report and demonstrating basic operation of the installed HPE XP8, HPE XP7, or HPE P9500 disk array family product. Topics generally include:</p> <ul style="list-style-type: none"> • A review of the configuration documentation that outlines the storage LUN design and related host topology • Highlights of the basic operation of the array hardware and/or software • Locating and using online help • A brief question-and-answer forum <p>The orientation is informal, 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.</p>

Service limitations

This service is limited to a single HPE XP8, HPE XP7, or HPE P9500 disk array at a single physical site and only for those array products for which these services have been purchased.

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

- A full site inspection, such as a comprehensive analysis of the Customer's power, cooling and humidity, airborne contaminants, vibration, and the sufficient structural capability of the data center raised floor to accommodate the weight of the array to be installed; separate services are available
- Integration with any hardware or software components not supported by the HPE XP8, HPE XP7, or HPE P9500 disk array family products
- Implementation of software revisions, including hot fixes, patches, service packs, or upgrades from prior versions, on the Customer's existing SAN and host environment
- Integration of more than 16 hosts (physical or virtual) running more than a single OS into a preexisting operational SAN consisting of switch technologies that meet supportability standards of the [HPE SAN Design Reference Guide](#), or other HPE supported configuration
- Extensive reracking or cabling activities, including cabling activities involving conduits, raceways, patch panels, and movement/configuration of computer room floor panels
- 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 cabling
- Implementation of major revisions to the HPE XP8, HPE XP7, or HPE P9500 disk array factory configuration; if needed, it may require additional services
- Configuration of HPE Data Protection Manager, HPE Continuous Access, HPE High Availability, HPE Business Copy, HPE Business Continuity Manager, and HPE Cluster Extension Software; separate services are available for these products
- Configuration of Hitachi Dynamic Link Manager (HDLM) Software on more than four hosts; configuration on additional hosts can be accommodated at additional cost
- Configuration of add-on HPE Smart Tiers software for more than one thin-provisioning pool on a previously configured HPE XP8, HPE XP7, or HPE P9500 array; additional pools can be accommodated at additional cost
- Configuration of mainframe software beyond license activation; additional configuration or customization services can be accommodated at additional cost
- Configuration on the HPE XP8, HPE XP7, or HPE P9500 disk array of more than a single external storage device using external storage software; the storage device must be fully operational and visible through the SAN
- Redesign the existing array configuration for hardware upgrades or software add-ons



- Implementation of high-availability and other complex configurations, such as host clustering
- 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
- Service deployment on hardware covered by a third-party maintenance contract
- Installation or configuration of any hardware or software products external to the array subsystem, including, but not limited to, servers, host operating systems, multipathing software, tape libraries, host bus adapters, and enterprise backup software
- Migration of existing data to the new array or a new configuration within an existing array, such as the migration of existing data to thin-provisioned LUNs
- Loading, management, or manipulation of Customer data
- Operational testing of applications or troubleshooting of interconnectivity, network, compatibility, or non-HPE XP8, HPE XP7, or HPE P9500 disk array-related product problems

Service eligibility

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

- The Customer's existing computing operating system platform(s) must be supported by and be compatible with the HPE XP8, XP7, or HPE P9500 disk array family product being installed.
- The Customer's existing SAN environment must be fully operational and in a supported configuration as defined in the [HPE SAN Design Reference Guide](#).
- The Customer must provide a suitable physical operating environment for the array product, including implementation of any power, cooling, and other environmental requirements.
- The Customer must install any recommended host- or SAN-based software upgrades, patches, device drivers, or multipathing software.
- Provide server and network provisioning that meet the requirements for additional software products, as applicable.
- 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 Storage product must be fully operational, in a supported configuration, and physically located where the upgrade will be installed.
- The Customer must provide appropriate network provisioning to enable the HPE remote support and monitoring solution.

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 hardware or software (if applicable) with the HPE service specialist
- Ensure that all service prerequisites have been met prior to the scheduled delivery date
- Complete and return the prerequisite HPE predelivery checklist to the service specialist at least two weeks prior to the start of the service
- If available, supply a previously designed LUN map for a new configuration, or, for upgrades/add-ons, supply the currently implemented LUN configuration
- 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 in order to deliver this service are available and that software products are properly licensed; and otherwise be available to assist HPE in facilitating the delivery of this service
- 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 all necessary network and administration assistance to allow HPE remote monitoring and support tools to connect with the HPE Support Center
- Ensure that any and all prerequisite firmware or driver dependencies for the environment are completed before on-site service delivery begins
- Ensure the availability of all hardware, firmware, and software that the HPE service specialist will need in order to deliver this service
- Provide all administration necessary to enable end-to-end connectivity of the HPE XP Storage product, including network, SAN fabric, and host
- Provide server and network provisioning that meet the requirements for additional software products, as applicable
- Provide all network and administration assistance necessary to enable connectivity to the HPE Storage product in order to allow HPE remote monitoring and support tools to communicate with the HPE Support Center
- Ensure that any and all prerequisite firmware or driver dependencies for the environment are handled before on-site service delivery begins
- Place HPE 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, if applicable
- 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

- HPE reserves the right to reprice 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 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 HPE, as well as the accuracy and completeness of any information and data the Customer provides to HPE.
- The service is delivered during local HPE standard business days and hours. Service delivery outside these hours is available, subject to additional charges.
- This service is delivered as a single, contiguous event. If Customer resource availability or other Customer restrictions delay installation and require additional visits beyond the defined scope of the service, additional charges may apply.
- Portions of the service may be 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 a 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 service 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 order HPE XP Storage Installation and Startup Services, contact a local HPE sales representative and reference the following product numbers:

HPE XP8 services

HA124A1#508 for HPE XP8 Storage Array Installation and Startup Service ([see Note 1](#) for more information)

HA124A1#5UX for HPE XP8 Storage Expansion Rack Installation and Startup Service

HA124A1#5UY for HPE XP8 Storage Base Field Integration Unit of Service Installation and Startup Service ([see Note 2](#) for more information)

HA124A1#5WV for HPE XP8 Base Array Open Systems Limited Software Installation and Startup Service ([see Note 3](#) for more information)

HA124A1#V02 for HPE XP8 Base Array Mainframe Limited Software Installation and Startup Service ([see Note 4](#) for more information)

HA124A1#5WY for HPE XP8 External Capacity Software Installation and Startup Service

HA124A1#5ZE for HPE XP8 AutoLUN Software Installation and Startup Service ([see Note 5](#) for more information)

HA124A1#5ZV for HPE XP8 Dynamic Link Manager Advanced Software Installation and Startup Service

HA124A1#V07 for HPE XP8 Smart Tiers Software Installation and Startup Service

HA114A1#5PL for HPE XP8 Mainframe Performance Advanced Suite Software Installation and Startup Service

HA113A1#5P5 for HPE XP8 DKA Encryption Storage Installation Service

HA114A1#5PP for HPE XP8 Infrastructure Analytics Advisor Software Installation and Startup Service

HA114A1#5PP for HPE XP8 Infrastructure Analytics Advisor Predictive Analytics Software Installation and Startup Service

HA114A1#5PL for HPE XP8 CVAE Suite Software Installation and Startup Service

HA114A1#5PM for HPE XP8 Tiered Storage Manager Software Installation and Startup Service

HA114A1#5PP for HPE XP8 Tuning Manager Software Installation and Startup Service

HA113A1#5P5 for HPE XP8 Data Exchange Server Installation Service

HA114A1#5PK for HPE XP8 Global Link Manager Installation and Startup Service

HA124A1#V09 for HPE XP8 Performance Advisor Software Installation and Startup Service

HA114A1#5PP for HPE XP8 Infrastructure Analytics Advanced for Server/Network Software Installation and Startup Service

Related services

HM9R8A1 for HPE XP8 Mainframe and Open Systems Storage Unit of Service Custom Implementation Service ([see Note 6](#) for more information)

HA124A1#5SL for HPE XP Business Copy Software Installation and Startup Service ([see Note 7](#) for more information)

HA124A1#5K1 for HPE XP Continuous Access/High Availability Software Installation and Startup Service ([see Note 8](#) for more information)

For HPE P9500 and HPE XP7 deployment services, contact a local HPE sales representative

For SAN deployment services, see the [HPE SAN Deployment Service data sheet](#)

For data migration services, see the [HPE XP Data Migration Service data sheet](#)



Note

Service names when ordering may be different than the service names earlier.

1. Excludes field integration of HPE XP hardware components into a Customer-supplied rack. For field integration of HPE XP hardware, order the appropriate quantity of the HPE XP8 Storage Base Field Integration Unit of Service Installation and Startup Service HA124A1#5UY
2. Provides field integration of HPE XP hardware components into a Customer-supplied rack and provides for installation of HPE XP hardware upgrades into an existing HPE XP array. The service is ordered in quantity based on the specific product configuration
3. Excludes deployment of HPE Business Copy, HPE Dynamic Link Manager Advanced, HPE Data Protection Manager, advanced deployment of HPE AutoLUN, HPE Smart Tiers, and deployment in a mainframe environment. Separate services are available for the deployment of these features
4. Excludes deployment of HPE Business Copy, HPE Smart Tiers advanced deployment of HPE AutoLUN, and deployment in an open systems environment. Separate services are available for the deployment of these features
5. Provides advanced deployment of HPE AutoLUN
6. Custom service for deployment of HPE Automation Director, HPE Data Protection Manager, HPE Compatible XRC, and advanced deployment in a mainframe environment. The service is ordered in a quantity as determined by HPE based on specific Customer requirements
7. For a more advanced implementation of HPE Business Copy for HPE XP, see the [HPE Data Replication Solution Service for HPE Business Copy for HPE XP Disk Array Family](#)
8. For a more advanced implementation of HPE Continuous Access for HPE XP, see the [HPE Data Replication Solution Service for HPE Remote Replication Software for HPE XP Disk Array Family](#)

Learn more at

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