# HP StoreVirtual 4000 Storage Installation and Startup Service



**HP Services** 

HP StoreVirtual 4000 Storage Installation and Startup Service provides planning, service deployment, installation verification testing (IVT), and an orientation session to facilitate deployment of the features and functionality of HP StoreVirtual 4000 Storage products.

#### **Service benefits**

- · Installation and startup by an HP technical specialist
- Availability of an HP service specialist to answer basic questions during the delivery of this service
- · Expedited installation, provided all service prerequisites are met prior to commencement of service
- Allows your IT resources to stay focused on their core tasks and priorities
- Verification prior to installation that all service prerequisites are met
- Reduced implementation time and cost

# Service feature highlights

- · Service planning
- · Service deployment
- Installation verification tests (IVT)
- Customer orientation session

# **Service features**

Table 1. Service features	
Feature	Delivery specifications
Service planning	An HP service specialist will contact the Customer to review expectations and to validate that all predelivery requirements have been or will be met prior to installation.
	The HP service specialist will work with the Customer to plan all the necessary activities. The service planning activities will include:
	<ul> <li>Communication and verification of the OS, hardware, software, driver, and environmental prerequisites required for the installation of HP StoreVirtual 4000 Storage</li> </ul>
	<ul> <li>Collection, using a predelivery checklist, of the information needed to plan the deployment, including:</li> </ul>
	<ul> <li>Confirmation that the application servers are supported and determination of any steps needed to bring them within specifications</li> <li>Hardware RAID levels to be implemented</li> </ul>
	<ul> <li>Information on any volume design, up to a limit of 20 volumes, that the Customer wishes to have implemented</li> <li>If applicable, verify the proposed Fibre Channel configuration</li> </ul>
	<ul> <li>Agreement on the proposed configuration and review of the service completion criteria</li> </ul>
	<ul> <li>Creation of a written installation plan to serve as both the project plan and completion point for this service</li> </ul>
	Scheduling the service delivery at a time mutually agreed upon by HP and the Customer
Service deployment	Service deployment activities will include:
	<ul> <li>Installation of the hardware into a customer-supplied rack</li> </ul>
	<ul> <li>Connection of customer-supplied and pre-run network and Fibre Channel cabling to the storage nodes, if applicable</li> </ul>
	<ul> <li>Installation of the central management console (CMC)</li> </ul>
	Installation of any licensing
	<ul> <li>Creation of a management group</li> </ul>
	<ul> <li>Creation of a storage cluster</li> </ul>
	<ul> <li>Creation of up to 20 storage volumes, as specified by the Customer</li> </ul>

- · Configuration of the Failover Manager (if appropriate)
- Connection of up to four application servers—on supported Windows® and VMware platforms only—to the volumes on the SAN
- Installation of either HP Insight Remote Support Advanced (RSA) Software or discovery of the HP StoreVirtual 4000 Storage hardware within an
  existing implementation of HP Remote Tool software

# Installation verification tests (IVT)

- HP will run the appropriate installation verification tests (IVT) required to verify operation of the HP StoreVirtual Storage configuration, including but not limited to, the following:
- · Confirmation that clusters and management groups can be built successfully
- · Local network failover review
- · Verification that monitoring is set up correctly

#### Customer orientation session

- The service specialist will conduct an orientation session of up to two (2) hours' duration, specifically covering a discussion/demonstration of the SAN/iQ basic features. The following will be included as part of this session:
- Management groups, clusters, and volumes
- RAID options
- Review of the CMC to assess the SAN condition
- · Review of basic maintenance tasks to be performed on a regular basis
- · Help locating troubleshooting information, including demonstration of online help

Orientation is informal and is not intended as a classroom activity or as a substitute for formal product training. Other subject areas, such as hardware management, security, volume management, and snapshots, are covered by HP Education training courses.

#### **Service limitations**

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

- 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
- · Application integration or integration of third-party products or peripherals not included with the system
- · Backup, recovery, and support of the operating system, other software, and data
- Operational testing of applications, or additional tests requested or required by the Customer
- · Planning, design, or implementation of the Customer's overall SAN, blade, or fabric architecture
- Reorganization of existing racks to create space for the HP StoreVirtual 4000 Storage hardware
- · Installation and configuration of switches, routers, or network gateways
- Integration with any hardware or software components not supported by HP StoreVirtual VSA Software
- Installation of any cabling to connect the hardware to the network environment
- Configuration of any network, internal or external, or Virtual Connect domain
- Customized design of storage volumes to meet the Customer's unique environment
- Configuration of additional features such as remote IP copy, smartclones, and snapshots that are not clearly specified as included with this service
- Development of scripting, such as for snapshots
- Implementation of hardware and software products other than those specified in this document, including the Customer's server, application, database, storage, SAN, and network
- Performance testing or modeling
- 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
- Any other services not clearly specified in this document

# **Service eligibility**

Customers are eligible for the delivery of this service if they meet the following prerequisites:

- · The Customer must have applied for and obtained the required licensing.
- The Customer's existing computing operating system platform(s) and network must be fully operational and supported.
- If appropriate, HP StoreVirtual nodes must be properly configured as a part of the HP Virtual Connect domain for the enclosure.
- Where geographically separate sites are being configured, networks and gateways must be fully operational between locations.
- Network and Fibre Channel addresses for each node must be available.
- The Customer's Fibre Channel SAN must be implemented and fully operational at all locations at currently supported firmware levels, if applicable (for HP StoreVirtual 4330 FC 900GB SAS Storage only).
- A supported machine, either physical or virtual, to be used for the CMC must be supplied to HP by the Customer. It must be preconfigured with the correct operating platform and connected to the network.
- The application servers must be supported and be part of the same subnet as the HP StoreVirtual nodes.
- The supported rack(s) must have sufficient space to mount the appropriate hardware.
- All cabling must be supplied and pre-run.
- If the Customer wishes to have additional volumes created (up to 20), then the design must be supplied. Customized storage volume design is not included as part of this service.
- An Ethernet/IP infrastructure must be installed, configured, and operating normally.
- Host systems and the Ethernet network must be implemented and operational at all locations.
- If applicable. Fibre Channel SAN must be implemented and operational at all locations.

# **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
- · Uncrate products and place the boxes in the immediate location where the installation service will take place
- 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 HP 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 HP in facilitating the delivery of this service
- Adhere to licensing terms and conditions regarding the use of any HP service tools used to facilitate the delivery of this service, if applicable
- Be responsible for all data backup and restore operations
- · Be responsible for the pulling and installation of cables outside the immediate work area
- 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 access to all locations where the service is to be performed
- Allow HP personnel full and unconditional access to all software products to be supported; if security restrictions apply to any supported systems, the Customer may be required to assume additional responsibilities for maintaining these systems and their associated software
- Retain, and provide to HP upon request, all original software licenses, license agreements, license keys, and subscription service registration information, as applicable for this service
- Coordinate service deployment on third-party-maintained products with HP, if applicable

### **General provisions/Other exclusions**

HP 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.

HP reserves the right to re-price 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 provides to HP.

The service is delivered as a single, contiguous event. Environments that require multiple engagements over a longer period of time are not included with this service and are available at additional cost.

Please check with a local HP authorized representative to find out whether a specific location is eligible for this service.

Portions of the service are delivered remotely or onsite, at HP's discretion.

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

- Any services not clearly specified in this document
- Travel charges may apply in some geographic locations. Please contact a local HP representative for details.

# **Ordering information**

This service can be ordered using the following service part number:

HA114A1#5U4

# For more information

For more information on HP Services, contact any of our worldwide sales offices or visit one of the following websites:

HP support services: www.hp.com/services/alwayson HP Care Pack services: www.hp.com/services/carepack

© Copyright 2012 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty or condition, express or implied, in fact or in law. HP shall not be liable for technical or editorial errors or omissions contained herein.

This data sheet is governed by HP's current standard sales terms or, if applicable, the Customer's purchase agreement with HP



Windows is a U.S. registered trademark of Microsoft Corporation.