

HP StorageWorks MSA Family Disk Array Installation and Startup Service

HP Services

Technical data



Complementing your new HP StorageWorks modular storage array, the HP Installation and Startup Service provides the necessary activities required to integrate your disk array into your environment.

With the assistance of your designated IT storage administrator, an HP certified service specialist will engage in a discovery process designed to help HP understand your business and storage application needs. The collaboration provides the groundwork to plan, design, and implement a customized storage array configuration. The HP certified service specialist will then apply the customer-approved configuration and perform a suite of installation verification tests and a customer orientation session as described below in the “Service features” section.

Service benefits

- Verification that any service prerequisites are met prior to installation
- Delivery of the service at a mutually scheduled time
- Installation of HP StorageWorks MSA and SAN deployment according to product specifications
- Availability of an HP service specialist to answer basic questions during the onsite delivery of this service
- Customized installation plan to support your unique configuration requirements.

Service feature highlights

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

Specifications

Table 1. Service features

Feature	Delivery specifications
Service planning	<p>An HP service specialist will plan all the necessary activities and schedule the delivery of the service at a mutually agreed-upon time between HP or an HP certified channel partner and the Customer, which shall be during local HP standard business hours, excluding HP holidays, unless otherwise agreed by HP or the HP certified channel partner. Any services provided outside of HP standard business hours will be subject to additional charges.</p> <p>The service planning activities will include:</p> <ul style="list-style-type: none">• Communication with the Customer, including queries by the Customer regarding service delivery• Verification, using a pre-delivery checklist, that all service prerequisites have been met• Scheduling of the service delivery at a mutually agreed-upon time• Creation of a written installation plan, which will serve as the project plan for this service
Service deployment	<p>The service deployment activities will include:</p> <ul style="list-style-type: none">• Presentation of the service delivery agenda• Confirmation of appropriate operating system patch levels on a selected number of hosts, as identified in the installation plan• Verification and update (as needed) of prerequisite array and HBA firmware versions• Installation/Update of HP array management (ACU) software, as appropriate• Brief consultation to provide guidance to the Customer in defining the array configuration objectives based upon application performance and availability needs• Development of a customized LUN disk design that includes all of the physical disk drives directly attached to the MSA controllers to meet the array configuration objectives defined by the Customer, as long as those objectives do not exceed the limits specified in the product specifications• Deployment of the StorageWorks MSA into a pre-existing SAN. The SAN may consist of Fibre Channel switches, hubs, or SCSI bridge technology; deployment includes the installation and customization of the MSA attached to a maximum of eight host bus adapters across four host servers and up to four multi-path software licenses that are HP branded or distributed and supported by HP (HP Secure Path, MPIO, QLogic failover, etc.)• Creation of configuration documentation <p>If the Customer does not have a pre-existing SAN, HP will implement a new SAN up to a maximum size of 16 ports into which the MSA will be integrated. The new SAN implementation will include Fibre Channel switch installation and racking, configuration of network parameters, and any fabric configuration or zoning necessary to provide required connectivity between the MSA and associated hosts. (Hardware and software products needed to construct the new SAN are to be supplied by the Customer.)</p>
Installation verifications tests	<p>HP will perform the appropriate installation verification tests required for this service, including, but not limited to, power-on self tests (POSTs).</p>
Customer orientation session	<p>The HP service specialist will provide a one-hour onsite orientation on the installed HP StorageWorks MSA at the completion of the service. This orientation may include the following:</p> <ul style="list-style-type: none">• Review of the configuration documentation, mentioned above, that outlines the storage virtual disk design and related host topology

- Highlights of the basic operation of the array hardware
 - A brief question-and-answer forum
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Service eligibility

The Customer must meet the following prerequisites for delivery of this service:

- The Customer must provide a suitable physical operating environment for the array product, including implementation of any environmental recommendations made by HP.
- The Customer's existing computer operating system platform(s) must be supported by and be compatible with the HP Storageworks MSA being installed.
- The Customer must install any recommended host-based patches or software upgrades, including device drivers.

Service limitations

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

- 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 other complex configurations such as host clustering, virtual replication, mirroring, and SAN management software
- Implementation of host-based logical volumes and associated file-system structures
- Installation of operating-system patches and any associated device drivers
- Migration of existing data to the new array configuration
- Configuration of any optional software products, such as Continuous Access or Business Copy; additional services will be required for implementation of software solutions deemed complex by HP
- Service deployment on hardware covered by a third-party maintenance contract
- Services required due to causes external to the HP-maintained hardware or software
- Any services not clearly specified in this document
- Services that, in the opinion of the HP service specialist, are required due to unauthorized attempts by non-HP certified personnel to install, repair, maintain, or modify hardware, firmware, or software
- Planning, design, implementation, or assessment of the Customer's new or pre-existing SAN or fabric architecture beyond what is outlined in the "Service deployment" section
- Deployment activities, including planning, design, assessment, and configuration, related to the redeployment of an existing SAN

Customer responsibilities

The Customer will:

- Contact an HP service specialist within 90 days of date of purchase to schedule the delivery of the service
- Coordinate service deployment on third-party-maintained hardware and software (if applicable) with HP

- 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
- Ensure that all service prerequisites as identified in the 'Service eligibility' section have been met
- Ensure availability of all hardware, firmware, and software that the HP service specialist will need in order to deliver this service
- Allow HP full access to all locations where the service is to be delivered
- 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
- Ensure participation of the Customer IT storage administrator, database administrator, and selected other staff in discussions of the Customer organization's business and operational objectives, plus any special requirements
- Supply a previously designed virtual disk map, if available

For more information

For more information on HP Services, contact any of our worldwide sales offices or visit our Web site at:

www.hp.com/hps/support

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