

# HP SAN Solution Service (Level 1, Level 2 and Level 3)

HP Care Pack Services



HP SAN Solution Service provides three levels of service to meet your diverse needs. Efficient and professional installation of fibre switches in a storage area network (SAN) means faster deployment and startup.



The HP SAN Solution Service is specifically designed for the implementation of the fibre switches in a SAN environment. There are different levels of service depending on the size and complexity of your SAN environment – there are two pre-configured levels for the more straightforward installations and a Statement of Work approach for those installations requiring a more customised approach. Using trained service-delivery professionals, HP ensures that your fibre switch is installed in line with HP and ISV standards of quality and that the time and effort undertaken by your own staff is limited to knowledge transfer and orientation tasks – so they can get on with more vital work.

**Service benefits**

This service includes installation of fibre switches in the SAN environment according to HP quality standards by a trained service-delivery specialist and provides:

- Installation in accordance with product manufacturer's specifications and your business's configuration requirements
- Validation of the design, configuration and utilisation of storage systems
- A project manager to manage the implementation of the service (Level 2 and Level 3 only)
- Reduced implementation time and impact on the storage environment
- The ability to achieve more effective data management
- Expedited installation, with all service prerequisites met before the service is performed
- Availability of a service-delivery specialist to answer questions during the onsite portion of the delivery
- Delivery of the service at a mutually scheduled time
- For Level 3, availability of custom installation through the SOW (Statement of Work)
- Documentation of the deployed fibre switches in your SAN environment

**Service-feature highlights**

	Level 1	Level 2	Level 3	
<p>The HP SAN Solution Service offers three levels of service to meet your diverse needs. All three levels include the following service features:</p> <ul style="list-style-type: none"> <li>• Service planning</li> <li>• Service deployment</li> <li>• Installation-verification tests</li> <li>• Customer orientation session</li> <li>• Project management</li> </ul> <p>The service-deployment activities for the three levels include the following:</p>	<b>Environment assessment</b>	•	•	
	<b>High-level design</b>		•	•
	<b>Detailed design planning</b>	•	•	•
	<b>Implementation planning and scheduling</b>	•	•	•
	<b>Site preparation</b>	•	•	•
	<b>Product configuration</b>	•	•	•
	<b>Functional connectivity testing of hardware and software</b>	•	•	•
	<b>Integration, verification and testing of the SAN environment</b>		•	•
	<b>Integration testing and verification with IT management systems</b>			•

Specifications  
Table 1. Service features

Feature	Delivery specifications
<b>Service planning</b>	<p>An HP service-delivery specialist or project manager will schedule the delivery of the service at a time mutually agreed upon between HP and the customer, which shall be during local HP standard business hours, excluding HP holidays, unless otherwise agreed by HP. Any services provided outside of HP standard business hours may be subject to additional charges.</p> <p><b>SAN Solution Service Level 1</b> is designed for small SAN environments that are located in a single building and have up to 32 physical ports and a single operating system environment.</p> <p><b>SAN Solution Service Level 2</b> is designed for more complex SAN environments that are located within a single building or a campus environment (up to 10 km if using direct fibre with no converters) and that have up to 512 physical ports. The SAN may have either a homogeneous or heterogeneous operating system environment. Level 2 includes HP project management that provides the customer with a single contact person for the implementation of the SAN.</p> <p><b>SAN Solution Service Level 3</b> is designed for complex SAN environments that span multiple sites (or where converters are used between sites) and that have more than 512 physical ports. This level of service may include integration with management systems and is quoted via a custom SOW.</p>
<b>Service deployment</b>	<p><b>Level 1 deployment activities</b> will include the following:</p> <ul style="list-style-type: none"><li>• <b>Detailed design planning</b> – review and verification of the logical and physical design of the SAN and its components</li><li>• <b>Implementation planning and scheduling</b> – development of the implementation plan and identification of the steps, roles, responsibilities and timeline for the implementation</li><li>• <b>Site preparation</b> – review of facilities and verification of the prerequisite SAN environment (arrays, tape libraries, hosts)</li><li>• <b>Product configuration</b> – configuration of the fibre switches and connection to the array, tape libraries and hosts, according to the reviewed logical and physical design</li><li>• <b>Functional connectivity testing of hardware and software</b> – execution of hardware and software diagnostics and connectivity tests</li></ul> <p><b>Level 2 deployment activities</b> will include the following:</p> <ul style="list-style-type: none"><li>• <b>Environment assessment</b> – analysis of the overall customer storage environment and how the SAN will integrate into that environment</li><li>• <b>High-level design</b> – identify the SAN configuration to match the customer's environment and business needs</li><li>• <b>Detailed design planning</b> – review and verification of the logical and physical design of the SAN and its components</li><li>• <b>Implementation planning and scheduling</b> – development of the project plan and identification of the steps, roles, responsibilities and timeline for the implementation</li><li>• <b>Site preparation</b> – review of facilities and verification of the prerequisite SAN environment (arrays, tape libraries, hosts)</li><li>• <b>Product configuration</b> – configuration of the fibre switches and their connection to the array, tape libraries and hosts, according to the reviewed logical and physical design</li><li>• <b>Functional connectivity testing of hardware and software</b> – execution of hardware and software diagnostics and connectivity tests</li></ul> <p><b>Level 3 deployment activities</b> will include the following:</p> <ul style="list-style-type: none"><li>• <b>Environment assessment</b> – analysis of the overall customer storage environment and how the SAN will integrate into that environment</li><li>• <b>High-level design</b> – creation and documentation of the SAN design to match the customer's environment and business needs</li><li>• <b>Detailed design planning</b> – review and verification of the logical and physical design of the SAN and its components</li><li>• <b>Implementation planning and scheduling</b> – development of the project plan and identification of the steps, roles, responsibilities and timeline for the implementation</li><li>• <b>Site preparation</b> – review of facilities and verification of the prerequisite SAN environment (arrays, tape libraries, hosts)</li><li>• <b>Product configuration</b> – configuration of the fibre switches and their connection to the array, tape libraries and hosts, according to the reviewed logical and physical design</li><li>• <b>Integration</b> of the SAN environment with the customer's existing and installed management environment</li><li>• <b>Functional connectivity testing of hardware and software</b> – execution of hardware and software diagnostics and connectivity tests</li></ul>

## Specifications

Table 1. Service features, continued

Feature	Delivery specifications
<b>Installation verification tests (IVT)</b>	<p>HP will run the appropriate installation verification tests required for the level of the service:</p> <p>Level 1 testing activities will include the following:</p> <ul style="list-style-type: none"><li>• Hardware and firmware diagnostics</li><li>• Tests to validate the presence of the installed fibre switches and their accessibility to the appropriate hosts</li></ul> <p>Level 2 and Level 3 testing activities will include the following:</p> <ul style="list-style-type: none"><li>• Hardware and firmware diagnostics</li><li>• Tests to validate the presence of the installed fibre switches and their accessibility to the appropriate hosts</li><li>• Tests to demonstrate alternate pathing capabilities, if included in the reviewed logical and physical design</li></ul>
<b>Customer orientation session</b>	<p>The HP service-delivery specialist will conduct an orientation session on the product and technology and will:</p> <ul style="list-style-type: none"><li>• Familiarise the customer with how to verify devices through appliance or host-based tests</li><li>• Review the SAN implementation, configuration and documentation</li><li>• Review the customer's support procedures</li><li>• Capture any further customer training requirements that HP can assist with</li></ul>
<b>Project management</b>	<p>The HP project manager will work with the customer to manage the integration, development and delivery of the service during normal HP business hours. The project manager will provide the activities detailed below either remotely or onsite, at the discretion of HP. The project manager will:</p> <ul style="list-style-type: none"><li>• Manage any HP resources required for the delivery of the service</li><li>• Develop the project plan, which defines the scope of the services to be delivered</li><li>• Identify the customer's responsibilities and other requirements in order to facilitate the delivery of this service</li><li>• Act as the liaison and single point of contact between HP and the customer</li><li>• Develop the project schedule and manage the project against the defined timelines</li></ul>

## Service limitations

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

- Service deployment on hardware not covered by an HP warranty or service maintenance contract
- Service deployment on hardware covered by a third-party maintenance contract
- Planning, design, implementation or assessment of the customer's overall SAN or fabric architecture
- Services that, in the opinion of HP, are required due to unauthorised attempts by non-HP personnel to install, repair, maintain or modify hardware, firmware or software
- Services required due to causes external to the HP-maintained hardware or software
- Any services not clearly specified in this document
- Providing documentation other than that mentioned in this document

# This service includes installation according to HP quality standards by a trained service-delivery specialist.

## Service eligibility

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

- The customer must have all HP-supported fibre switches physically installed to HP specifications
- The customer must have all HP-supported disk arrays installed and configured to HP specifications
- The customer must have all HP-supported tape libraries installed and configured to HP specifications
- The customer must have all supported hosts at supported operating-system revision and patch levels

## Customer responsibilities

The customer will:

- Contact an HP service-delivery 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 under "Service eligibility" are met
- Ensure that all hardware, firmware and software needed by the HP service-delivery specialist to deliver this service are available
- Allow HP full and unrestricted access to all locations where the service is to be delivered
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power and any network connections required
- Be responsible for all data backup and restore operations
- Be responsible for complex cabling involving conduits, raceways, under-floor cabling and patch panels

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This service provides reduced implementation time, the ability to achieve more effective data management and expedited installation.

## General provisions/other exclusions

- HP reserves the right to charge, on a time and materials basis, for any additional work over and above this service package pricing that may result from work required to address service prerequisites or other requirements not met by the customer.
- Should the customer not, within 90 days of having purchased the service, contact HP to schedule its subsequent delivery, HP reserves the right to re-evaluate the charges for this service.
- The ability of HP 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 may provide to HP.

## Ordering information

To order the HP SAN Solution Service (Level 1, Level 2 and Level 3), contact your local HP representative and reference the following product numbers:

- HA114A1
- HA115A1

## For more information

For more information on HP SAN Solution Service, contact any of our worldwide sales offices or visit our website at [www.hp.com/hps/support](http://www.hp.com/hps/support)

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