



# **HPE Supported Customer Designed Factory Express Solution Integration Service**

## **HPE Lifecycle Event Services**

HPE Supported Customer Designed Factory Express Solution Integration Service (formerly known as Package 5) provides the services included in HPE Factory Express Customer Designed Solution Integration, along with design advice and technical assistance. Order this service if you want Hewlett Packard Enterprise to assist and support in designing your solution. HPE Supported Customer Designed Factory Express Solution Integration Service allows you to leverage HPE's factory capabilities along with those of a Hewlett Packard Enterprise Services consultant and a field delivery specialist, who work with you to design and deliver a solution that helps address your unique needs and requirements.

A technical consultant and a deployment project manager are assigned to manage your solution from start to finish.

In addition to design assistance, integration, configuration and deployment activities, all solutions receive comprehensive testing, as well as a complete documentation package that details the configuration and settings of the delivered solution.

The service is recommended if you want HPE to work directly with you to support and assist you in developing technical specifications for the integration and configuration of your solution.

### **Service benefits**

- A Hewlett Packard Enterprise technical consultant assists you in designing the integration and configuration of your solution, based on your requirements
- Engagement with a dedicated team that collaborates with you, from planning and design through implementation
- Enhanced IT resources and operations
- A solution built to validated specifications in accordance with ISO 9000:2000 quality standards and then tested, shipped, and deployed with skilled onsite deployment assistance

### **Service feature highlights**

- Project management
- Solution design support
- Service planning
- Server hardware configuration and integration
- HPE BladeSystem hardware configuration and integration
- Server and BladeSystem operating system environment installation and configuration

- HPE disk array and storage server integration and configuration
- HPE tape library and autoloader integration and configuration
- Virtual library system integration
- Network switch integration and configuration
- Included à la carte services
- Comprehensive solution testing
- Onsite final installation
- System documentation

## Table 1. Service features

Feature	Delivery specifications
<b>Project management</b>	<p>Hewlett Packard Enterprise will assign a project manager as a single point of contact to manage the solution implementation from start to end. The project manager will oversee the following:</p> <ul style="list-style-type: none"> <li>• Service planning</li> <li>• Updates and reporting on the status of the solution (if required)</li> <li>• Coordinating the delivery and scheduling of the onsite installation of the solution</li> </ul>
<b>Solution design support</b>	<p>A Hewlett Packard Enterprise consultant will assist and support the Customer to develop the technical design specifications. The consultant will consolidate the requirements and facilitate a design review with the Customer's IT team using Visio drawings and questionnaires. The goal of this activity is to help deliver a solution that is 'operation-ready.' The output of this work will be a technical integration package showing a system design, including partitioning, disk configuration, kernel customization, software load information, and Visio drawings of the hardware layout.</p>
<b>Service planning</b>	<p>Hewlett Packard Enterprise will manage the project to the point where the solution is operation-ready and will facilitate the onsite deployment. During this time, the Hewlett Packard Enterprise project manager will act as the single point of contact for all aspects of the deployment. HPE will proactively contact the Customer to develop a mutually agreed-upon implementation schedule.</p>
<b>Server hardware configuration and integration</b>	<p>Server hardware configuration and integration includes the following deliverables:</p> <ul style="list-style-type: none"> <li>• Custom slotting of relevant system components (e.g., I/O cards, disks)</li> <li>• Installation of interface cards, including jumper and terminator settings</li> <li>• Custom placement within the rack of Hewlett Packard Enterprise rackable products in accordance with the Customer's specifications</li> <li>• Cabling of all hardware components within the rack (Customer-specified or in accordance with HPE best practices)</li> <li>• Cable labeling (in accordance with HPE best practices)</li> <li>• Cabling and labeling of systems between racks to facilitate rapid installation</li> </ul>
<b>HPE BladeSystem hardware configuration and integration</b>	<p>In addition to the hardware integration and configuration activities detailed in the server section, Hewlett Packard Enterprise will integrate any combination of the following HPE BladeSystem solution components:</p> <ul style="list-style-type: none"> <li>• Blade enclosures</li> <li>• Server blades</li> <li>• Power enclosures</li> <li>• Network Ethernet interconnects (patch panel or switch)</li> <li>• Virtual Connect modules</li> <li>• SAN interconnects</li> <li>• Integrated Lights-Out (iLO) management processor configuration</li> <li>• Onboard Administrator configuration</li> </ul>

<b>Server and BladeSystem operating system environment installation and configuration</b>	<p>Hewlett Packard Enterprise installs and configures the operating system environment as follows:</p> <ul style="list-style-type: none"> <li>• Loading of selected operating system version and subsystem elements that are supported by HPE</li> <li>• Installation of HPE-recommended or Customer-specified drivers and patches</li> <li>• Setup of the LVM and kernel parameters, swap space, and memory; BIOS setting; hostname and IP address; and time zone</li> <li>• Customized RAID settings for internal server storage and server-controlled external storage</li> <li>• Loading of operating system on external storage (includes loading on disk enclosure not in the same rack as the server)</li> <li>• Creation and configuration of hardware partitions according to the Customer's specifications regarding cell board and I/O placement (available on server models that support hardware partitioning)</li> <li>• Creation and configuration of unlimited virtual partitions according to the Customer's specifications (available on Superdome 2 servers only)</li> <li>• Creation and configuration of unlimited virtual machines according to the Customer's specifications (available on Superdome 2 servers only)</li> <li>• Enablement of HPE Insight Remote Support agent</li> <li>• Enablement of HPE and third-party application software (file sets only, no configuration)</li> <li>• Code word collection and unlocking for software packages to be enabled on the server</li> </ul>
<b>HPE disk array and storage server integration and configuration</b>	<p>Hewlett Packard Enterprise performs the following integration and configuration activities, as applicable, for disk arrays and storage servers:</p> <ul style="list-style-type: none"> <li>• Integration of the disk array or storage server</li> <li>• Integration of the HPE disk array or storage server with other solution components</li> <li>• RAID level setting</li> <li>• Implementation of a LUN configuration provided by the Customer</li> <li>• Installation of HPE storage software</li> </ul> <p>Some disk array products include bundled services. Factory Express services do not replace but rather extend the services included with the disk array; they are intended for server-centric solutions in which the servers and storage are integrated together in the factory.</p>
<b>HPE tape library and autoloader integration and configuration</b>	<p>Hewlett Packard Enterprise will perform the following tape library and autoloader integration and configuration processes, as applicable:</p> <ul style="list-style-type: none"> <li>• Integration of tape library or tape autoloader</li> <li>• Cabling and labeling of internal and external cables, as required</li> <li>• Integration of tape drives, if applicable (some tape drives cannot be shipped integrated)</li> <li>• Configuration of SCSI/Fibre Channel addresses for tape drives and robotics internal to the tape library</li> <li>• Configuration of tape library network parameters</li> <li>• Installation of a SCSI/Fibre Channel multiplexer, if required</li> <li>• Connection of the tape library to SAN switch (does not include reconfiguration of the Customer's existing SAN)</li> <li>• Labeling of all external tape library cables</li> </ul> <p>These services are an extension of the installation and startup services required with HPE Enterprise Tape Libraries (ESL) and are intended for server-centric solutions where the servers and storage are integrated together in the factory.</p>
<b>Virtual library system integration</b>	<p>Hewlett Packard Enterprise will perform the following integration activities:</p> <ul style="list-style-type: none"> <li>• Integration of virtual library system</li> <li>• Cabling and labeling of internal and external cables, as required</li> </ul>
<b>Network switch integration and configuration</b>	<p>Hewlett Packard Enterprise will perform the following integration and configuration activities on Layer 2 and Layer 3 network switches that are part of a racked solution:</p> <ul style="list-style-type: none"> <li>• Cabling and labeling of networking hardware within a rack</li> <li>• Configuration of standard network parameters (does not include reconfiguration of the Customer's network environment)</li> </ul>
<b>Included à la carte services</b>	<p>A number of 'à la carte' services are included with this service package at no additional charge: server firmware revision, software image load from media, third-party application software load, third-party hardware integration (prerequisite required), and data express rack.</p>

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<b>Comprehensive solution testing</b>	Along with the integration and configuration process, the solution is subjected to a set of functional and integrity checks to help verify that it is working properly and built according to the Customer's specifications. All system elements and cables will be labeled for quicker onsite installation. For applicable systems, Hewlett Packard Enterprise will power-on the system and execute the built-in self test; interrupt the auto-boot sequence; and run I/O map to verify functionality of memory, I/O cards and slots, and external peripheral devices. HPE will also check user-set level, interfaces, devices, and device connectivity of configured file systems and configured networks, as well as verify that appropriate HPE software has been loaded and is recognized by the host.
<b>Onsite final installation and startup</b>	<p>Prior to shipping from the factory, Hewlett Packard Enterprise will contact the Customer to schedule the solution delivery date and to agree on the logistics of the onsite installation process. A Hewlett Packard Enterprise field delivery specialist will contact the Customer to coordinate onsite installation at a mutually agreed-upon time. In addition, Hewlett Packard Enterprise will perform the following tasks, if applicable:</p> <ul style="list-style-type: none"><li>• Pre-installation planning: Prior to delivery, a Site Environmental Requirements document that focuses on power, cooling, space requirements, and network connections is sent to the Customer for use in verifying that all requirements are met prior to delivery of the solution. A Hewlett Packard Enterprise field delivery specialist will then work with the Customer to verify that all environmental requirements have been met.</li><li>• Physical installation: A Hewlett Packard Enterprise field delivery specialist will install, power-on, and connect the pre-integrated and configured solution to external peripherals and network components (includes third-party equipment already at the Customer's site that is under support agreement with HPE). Functional testing will be performed to help verify that there was no damage during shipping and that the solution is properly connected and functioning in the Customer's environment. (See service limitations.)</li><li>• Support activation: HPE will help activate the support agreement and will add new components to existing support agreements. If applicable, HPE Insight Remote Support will be configured, activated, and tested.</li></ul>
<b>System documentation</b>	Hewlett Packard Enterprise will provide a complete documentation package in soft copy that details the configuration and settings of the delivered solution. Included will be a system installation guide, a rack elevation drawing, a system interconnect drawing, and a hardware/software system configuration guide.

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## Service limitations

Because this is a fixed-price service, the following limitations apply:

- This service does not include the configuration of Hewlett Packard Enterprise and third-party application software (this is available as an add-on option at an additional charge).
- This service assumes that the network to which the solution will be connected is TCP/IP over Ethernet, HyperFabric, Token Ring, or FDDI.
- Electronic documentation is to be submitted to Hewlett Packard Enterprise in Microsoft® Word and Visio formats only.
- The service will be delivered at a time mutually agreed upon between Hewlett Packard Enterprise and the Customer. This time shall 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.
- For non-racked orders, physical installation is limited to up to two (2) servers or storage enclosures. Additional services will need to be purchased for any additional non-racked components that require installation.
- The service does not include re-racking or reconfiguration of any work that has been performed in the factory. Any services provided to reconfigure any hardware or software that has been preconfigured in the factory may be subject to additional charges.
- If technical specifications and configuration information are not provided in a timely manner, shipment of the Customer's solution could be delayed.
- The Customer must provide to Hewlett Packard Enterprise accurate technical specifications and/or configuration information, because the delivery and benefits of this service depend upon the quality of the Customer's own information. The Customer's obligation to provide accurate technical specifications and/or configuration information is a material condition to HPE's performance of the service.

- Failure to communicate to Hewlett Packard Enterprise the existence of a problem with the solution integration within five (5) business days of solution delivery and sign-off will imply the Customer's acceptance of the integrated solution.
- Loading of data or modification of the solution in any way prior to solution acceptance constitutes acceptance of the solution by the Customer.
- This service does not include creation or configuration of High Performance Computing (HPC) Linux compute clusters.
- This service does not include planning, design, reconfiguration, implementation, or assessment of the Customer's existing LAN, WAN, or SAN environment (however, these are available from Hewlett Packard Enterprise as separate services).
- This service does not include recommendation of hardware model, sizing of the hardware configuration, or the design of the architecture to integrate a solution in the customer environment.

## Prerequisites

If Hewlett Packard Enterprise is to load a custom image as part of this service, the Customer will need to purchase the Image Preparation Service or provide HPE with the necessary SW media. The Customer will also need to ensure that the custom image is qualified and supported on the platform.

If Hewlett Packard Enterprise is to integrate a third-party product as part of this service, the third-party product needs to be set up before placing the order.

## Customer responsibilities

The Customer will:

- Designate a person from the Customer's staff as a technical contact who, on behalf of the Customer, will grant all approvals, provide information, and otherwise be available to assist Hewlett Packard Enterprise in facilitating the delivery of this service; the name and phone number of this person should be referenced on the order that is sent to HPE
- Ensure that the technical contact provides technical integration and configuration details to Hewlett Packard Enterprise when placing the order; depending on the scope of customization, this integration package may include architecture design along with Visio drawings of the customized hardware layout
- Ensure that site preparation (e.g., power and cooling) has been completed at the location where the hardware will be installed
- Provide the contract number of the contract to which the new solution components need to be added to enable Hewlett Packard Enterprise to activate support
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Ensure that the access path can accommodate rack height and clearance requirements for delivery of the racked solution

## General provisions/Other exclusions

Hewlett Packard Enterprise 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.

Hewlett Packard Enterprise'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 may provide to HPE.

Once the order has been submitted by the Customer and accepted by Hewlett Packard Enterprise, no cancellation by the Customer is permitted.

Only supported configurations of Hewlett Packard Enterprise products will be rack-integrated as part of this service.

## **Ordering information**

HA455A1-000 HPE Supported Customer Designed FE Solution Integration Service

HA455A1-001 ProLiant Servers

HA455A1-003 BladeSystem

HA455A1-011 HPE 9000/Integrity Servers

HA455A1-013 HPE 9000/Integrity Cell-Based Servers

HA455A1-014 HPE Integrity Superdome 2 – 8s Servers

HA455A1-015 HPE Integrity Superdome 2 – 16s Servers

HA455A1-016 HPE Integrity Superdome 2 – 32s Servers

HA455A1-017 HPE Superdome X Servers

HA455A1-021 Storage and Networking

HA455A1-022 Disk Arrays and SAN Director Switches

HA455A1-023 High End Storage

HA455A1-300 HPE Synergy Initial Frame

HA455A1-301 HPE Synergy Add-on Frame

Note: HPE BladeSystem services are sold per blade enclosure.

## **For more information**

For more information on Hewlett Packard Enterprise support services, contact any of our worldwide sales offices or visit the following website:

[www.hpe.com/services/support](http://www.hpe.com/services/support)

[www.hpe.com/services/lifecycleevent](http://www.hpe.com/services/lifecycleevent)

