

# VCE HARDWARE EXPANSION FOR VXBLOCK SYSTEM

PSVC-HWEX-00-A02, PSVC-HEBL-00-A03, PSVC-HEME-00-A01, PSVC-HECH-00-A02, PSVC-HEFI-00-A02, PSVC-HENE-00-A02, PSVC-HES1-00-A03, PSVC-HES2-00-A03, PSVC-HES3-00-A02

## Service Overview

VCE Hardware Expansion for VxBlock System (“Services”) provide turnkey solutions for expanding the capacity of the customer’s existing Vblock System or VxBlock System (“VCE System”).

The customer may purchase a combination of the Blade and/or Memory Expansion, Single Chassis Upgrade, VNX Storage Expansion, VMAX Storage Expansion, Single X-Brick Storage Add-On for Modular VCE Systems, Fabric Interconnect Expansion, and/or Nexus Switch Expansion with VCE Hardware Expansion Project Management to facilitate expansion needs. The components that will be installed and/or configured as part of these Services will be listed on the final quote.

Below is a listing of the Services by expansion component (“Expansion Component”), the activity scope (“Installation” and/or “Logical Configuration”), and the associated SKU that is shown on the quote.

Expansion Component	SKU
<b>Hardware Expansion Project Management—One (1) SKU quantity required for each VCE System expanded</b>	PSVC-HWEX-00-A02
<b>Blade Expansion: Two (2) to eight (8) B-Series blade servers, or one (1) to four (4) C-Series rack servers (Installation and Logical Configuration)</b>	PSVC-HEBL-00-A03
<b>Memory Expansion: Up to eight (8) half-width or four (4) full-width B-Series blade servers, or up to four (4) C-Series rack servers</b> <b>Service provides for a memory upgrade up to the maximum capacity for a particular blade/server type</b> <b>Service includes Project Management and does not require the separate Project Management service (PSVC-HWEX-00-A02) unless additional Hardware Expansion activities are being performed</b>	PSVC-HEME-00-A01
<b>Single-Chassis Upgrade (Installation)</b>	PSVC-HECH-00-A02
<b>VNX or Unity Storage Expansion (Installation and Logical Configuration)</b>	PSVC-HES1-00-A03
<b>VMAX Storage Expansion (Logical Configuration)</b>	PSVC-HES2-00-A03
<b>Single X-Brick Add-On for Modular Systems (Logical Configuration)</b>	PSVC-HES3-00-A02
<b>Fabric Interconnect Expansion—One (1) pair (Installation and Logical Configuration)</b>	PSVC-HEFI-00-A02
<b>Nexus Switch Expansion—One (1) pair (Installation and Logical Configuration)</b>	PSVC-HENE-00-A02

## Service Scope

Subject to “Customer Responsibilities,” VCE personnel or authorized agents shall work with the customer to perform the following activities as part of the Services:

- Initiate a kickoff meeting in a timely manner to review project scope, expectations, communication plans, and availability of required resources
- Determine the engagement process and schedule
- Develop a high-level project plan with critical-path events and milestones
- Provide oversight and coordination during the preparation, execution, and closure of the Services
- Coordinate with an assigned customer project manager to perform the Services during the customer’s scheduled maintenance windows
- Assign and schedule VCE resources required for execution of the Services
- Provide a consultant to physically install the Expansion Component and verify that the Expansion Component passes the power-on self-test and does not exhibit failures
- In the case of a VMAX or XtremIO storage hardware expansion, provide verification that the purchased hardware components (including disk drives, DAEs, and X-bricks) have been physically installed correctly with an updated BIN file to support configuration changes where applicable
- In the case of a VNX or Unity storage hardware expansion, provide physical installation and verification of the purchased hardware components (disk drives and DAEs)

VCE shall perform the following Logical Configuration activities associated with an Expansion Component, as necessary:

- Validate firmware versions within the existing VCE System and upgrade or downgrade installed Expansion Component
- Apply required Logical Configurations to blade, memory, or management hardware, including, but not limited to, ESXi, Nexus 1000V, and PowerPath
- Add resources to VMware vCenter
- Create storage pools and LUNs
- Configure aggregation and fabric devices for integration to the customer’s environment
- Test and validate new Expansion Components and configurations

## Roles and Responsibilities

- VCE Consultant(s): Conducts the engagement, which includes Installation and Logical Configuration of the VCE System with the Expansion Components purchased
- VCE Project Manager: Plans and coordinates all VCE engagement-related activities
- Customer Project Manager: Plans and coordinates all customer engagement-related activities
- Customer Technical Lead(s): Responsible for any components not sold as part of the VCE System, including server hardware, storage, and networking; responsible for backing up or migrating workloads that may be affected during the Installation and Logical Configuration activities

## Key Activities

The following table represents the key tasks delivered as part of the standard Services, and shows the responsible parties involved.

Task	Responsibility
<b>Project kickoff</b>	All
<b>Installation of designated components</b>	VCE
<b>Functional verification</b>	VCE
<b>Firmware validation and modification</b>	VCE
<b>Service profiles added to UIM, if applicable</b>	VCE
<b>Add resources to VMware vCenter</b>	VCE
<b>Resource configuration and provisioning</b>	VCE
<b>Verification testing</b>	VCE
<b>Customer acceptance</b>	Customer

## VCE Staffing

VCE provides appropriate on-site and/or off-site representatives to perform the Services specified in the Service Scope section.

## Customer Responsibilities

Customer must

- Obtain and provide all appropriate software licenses necessary to deliver the Services, including, but not limited to, licenses for third party software.
- Obtain and provide all appropriate hardware components, including, but not limited to, the Expansion Components, necessary to deliver the Services.
- Make reasonable facilities accommodations for the VCE project team for engagement activities that occur at the installation location. These accommodations will include a desk/cubicle, voice telephone, Internet access, and shared access to laser printer, copier, fax, and conference room facilities.
- Complete VCE-supplied questionnaires within required timelines.
- Ensure that all environment and operational requirements are met prior to the commencement of the Services.
- Verify that the VCE System is operational prior to the commencement of the Services.
- Participate in VCE-hosted remote web conferencing sessions, as required.
- Provide VCE representatives with access to the customer's systems and networks (including, without limitation, remote systems and remote network access) as necessary to perform the Services during normal VCE business hours or at mutually agreed times.
- Manage interface with customer's technical support and application teams, including all vendors and third parties, as necessary.
- Ensure that authorized representatives of the customer will perform activities, attend meetings, make decisions, and complete documentation requested by VCE in a timely fashion and in accordance with the times specified in the agreed project plan. Such activities include project kickoff, project planning, attending interviews, responding to questionnaires and surveys, and agreeing upon an implementation test plan.
- Assign a Project Manager with the authority to make project decisions and represent the customer in all matters related to these Services. Customer's Project Manager will provide a single consolidated response to any review, approval, change, or decision request.
- Provide Customer Technical Leads with relevant domain, business, and/or technical expertise as required. Customer Technical Leads are the acknowledged spokespersons for the areas they represent, and the VCE project team requires regular and timely access to them. If the customer's Technical Leads are unable to attend a scheduled meeting, then the customer's Project Manager shall represent the customer's staff as the final authority, with respect to customer on all items of discussion.
- Provide VCE at least one technical contact with system administration responsibilities and appropriate system/information access privileges.
- Be responsible for, and assume any risk associated with any problems resulting from the accuracy, content, completeness, and consistency of any data, materials, or information supplied by the customer.
- Acknowledge receipt and acceptance/rejection of all deliverables associated with the Services as quickly as commercially reasonable, but in all events within ten (10) business days of delivery (not including local public holidays). Customer will use the VCE project milestone completion form to indicate acceptance of deliverables. If such acknowledgment is not received within this period, all deliverables will be deemed acknowledged and accepted.
- Complete all required communications and change management processes with server owners.
- Make appropriate system maintenance window(s) available for VCE (including authorized agents of VCE) as needed to prepare equipment.
- Complete all data backup and migration of workloads prior to the scheduled maintenance window.
- Manage interface with the customer's technical support and application teams, including all vendors and third parties, as necessary.
- Assume all responsibility for network connectivity, performance, and configuration issues.
- Assume all responsibility for determining the customer's requirements and retain overall responsibility for any business process impact and any process change implementations.
- Assume full responsibility for data backup and recovery. VCE is not responsible for any loss of, damage to, or corruption of data, including unrecoverable data in connection with the Services.
- Restrict and prevent VCE access to data not pertinent to the configuration and deployment of the VCE System, including, but not limited to, personally identifiable information.

## Service Schedule

The anticipated on-site Service start date is four (4) weeks after receipt and approval by VCE of the customer's purchase order for this Service or as mutually agreed upon. The Customer shall have twelve (12) months from the date of purchase to complete the Service ("Service Period"), after which this Service shall automatically expire and will be null and void. No refund will be due or paid to customer for unclaimed or incomplete work.

## Service Scope Changes

Any changes to the Services, the schedule, charges, or this Service Scope must be agreed upon in writing by VCE. Until changes are agreed to in writing, VCE will continue to perform work as provided in this document and such work is deemed to be in accordance with the obligations of VCE.

## Service Scope Exclusions

Only the Services stated in this document are included, and any additional work is out of scope of the Services and must be purchased separately. Specifically excluded services include, but are not limited to, the following:

- Procurement of the VCE System, as well as any additional hardware, software, and Expansion Components
- Physical build, logical configuration, or integration of any components that are not sold integrally as part of the VCE System
- Any configuration work to non-virtualized bare-metal servers
- Operational process documentation, or "run books"
- Any database/application installation and/or replatforming
- Archiving, backup, restoration, business continuance and/or disaster recovery services
- Physical or virtual migration services
- Provision of the power, cooling, and environmental standards needed to support a VCE System
- Provision of security-cleared project resources to meet government or customer-specific security requirements
- Any other services offered under a separate part number or SKU

## Terms and Conditions

Customer's issuance of an order to purchase the Services signifies its agreement to the terms and conditions in this document and its acknowledgment that the Services are provided under and are governed by either (a) a separate written agreement between the parties for the delivery of professional services, or in lieu of a signed agreement, (b) the standard VCE™ Professional Services Terms and Conditions available at: [www.vce.com/serviceterms](http://www.vce.com/serviceterms) (the "Governing Agreement").

VCE licensed software is subject to VCE standard end-user license agreement available at [www.vce.com/noindex/legalterms](http://www.vce.com/noindex/legalterms). License rights for any third-party software pass directly from the third-party supplier to customer and are subject to such third party's software terms, which customer authorizes VCE to accept on its behalf or on behalf of its end users as a condition of installing or using such software.

This document constitutes a Service Order, or statement of work (SOW), as defined in the Governing Agreement. This is a fixed-price order. VCE will bill and invoice customer at its standard time and material rates plus travel expenses for any additional services beyond the Services or any costs incurred for customer's failure to meet its responsibilities specified in this document. All project activities will be conducted in English, and all documentation supplied to VCE by customer to support the delivery of the Services will be provided in English.

Unless otherwise provided in the Governing Agreement, customer is deemed to accept the Services rendered if no objection is raised within ten (10) days after customer is presented with a milestone completion form or other statement of completion by VCE. VCE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT.

The Service price is based on the VCE System configuration and is determined by VCE as part of the configuration process (and designated in the brackets in the Service part number above).

Effective for orders placed on or after August 19, 2017.

## For More Information

More information about Dell EMC solutions and services is available from [www.dell.com](http://www.dell.com) and from your local representative.