

Vblock 0 QuickStart Implementation Service Brief

Summary of Benefits

This service delivers the expertise, knowledge, and best practices to integrate the Vblock 0 infrastructure safely and efficiently into your environment. Benefits include the following:

- Consolidate your infrastructure from hundreds of individual server, storage, and network devices into one predesigned, pretested, pre-integrated infrastructure.
- Reduce total cost of ownership (TCO) through data center infrastructure consolidation.
- Simplify implementation efforts to support your business initiatives faster.
- Increase business agility through virtual machine-optimized services.
- Improve business performance through higher levels of operational availability.

Project Overview

This service brief details the Ahead Implementation for Vblock 0 QuickStart service: Vblock 0 architecture, installation, and implementation. Ahead Service Delivery concentrates on designing and delivering a highly available storage area network (SAN) solution, working closely with client staff to plan the project, conduct meetings, and gather the information to baseline the project's configuration design and implementation requirements. This service is performed by Ahead Service Delivery in phases as described below.

Planning and Design Phase

- Determine required staffing level and subject matter experts (SMEs) to complete the project as stated in this service brief. Ahead Service Delivery reviews its proposed staffing levels with client.
- Determine escalation points of contact within client.
- Conduct a kickoff meeting with client team and any third-party resources identified by client.
- Plan hardware implementation and verify all requirements are met.
- Plan software implementation and verify all requirements are met.
- Meet with client to ensure that all environment and operational implementation requirements (hardware,

software, and infrastructure) are met; provide client with a list of available updates.

- Plan and schedule installation and configuration tasks defined in this service brief.
- Participate (as required) with client-assigned resources to develop a detailed project plan with tasks and dates that are agreeable to both Ahead Service Delivery and client.
- Determine the system implementation process and schedule.
- Provide client locations with the proposed configuration documentation.
- Ensure that site preparation prerequisites are identified, defined, and in place.

Implementation and Testing Phase

- Coordinate all resources necessary to successfully complete the engagement.
- Implement hardware in accordance with designs developed in the Planning and Design Phase.
- Install software in accordance with designs developed in the Planning and Design Phase.
- Configure the system in accordance with the *Configuration Guide*.
- Perform system testing to determine that all tasks performed are successfully completed.

Documentation, Functional Overview, and Acceptance Phase

- Review the system configuration documentation.
- Conduct a basic product functional overview to familiarize the client staff with the Vblock 0 products delivered in their storage, server, and network environment. The functional overview explains the basic operations of the products installed by Ahead Service Delivery. *The functional overview is not a detailed tutorial or training manual for the operability or technical functionality of the products. Clients without previous experience in the technology should not expect to become proficient as a result of the functional overview. Proficiency can only be achieved through formal training and experience. Ahead Service Delivery strongly encourages attending customer education classes to gain further insight into the product architecture and its integration into client's environment.*

- Provide client with a *Configuration Guide* that details the implementation and documents all configuration parameters.
- Obtain client acceptance and sign-off for the services.

Project Scope

Experienced Ahead Service Delivery personnel work closely with client staff to perform the Ahead Service Delivery Vblock 0 Implementation, which includes the following elements:

- Site validation
- SAN storage configuration
 - Configure RAID groups, LUNs within RAID groups, storage groups, host binding, and LUN masking.
- Network attached storage
 - Configure CIFS, NFS, and iSCSI protocols (as required).
 - Configure and export/share file systems.
 - Enable quotas.
 - Set up and configure snapshot/checkpoints.
- Host Blade Center and Network Configuration
 - Implement up to eight blade servers.
 - Install solution-supported HBA, CAN, and NIC drivers/firmware.
 - Configure IP addresses.
 - Run initial Express script.
 - Create the UUID, MAC, and WWN pools.
 - Add production VLAN and VSANs (should be one VSAN per fabric).
 - Configure LAN uplinks and uplink port, UUID, local storage policy, WWNN assignments, LAN, fabric, Ethernet, VLAN, and adaptor policy with the OS to be loaded.
 - Define server boot order, server assignment, and operational policies.
 - Configure boot from SAN.
- Storage area network configuration
 - Implement up to two departmental switches.
 - Configure pathway.
 - Create nicknames/aliases for WWNs on switches.
 - Create zoning on fabrics.
 - Configure LUN masking.

- Virtualization server and switch configuration
 - Configure/implement the detailed ESX Server, Virtual Center, and vMotion design.
 - Configure up to 25 virtual machines from pre-implementation Inventory Matrix and configure the system and storage management integration.
 - Configure the VSM virtual machine.
 - Create the system port profile for VSM-VEM communication and configure uplink port profile and data port profile for VM traffic.
 - Configure path failover and load-balancing.
- Solution Management Configuration
- Configure Unified Infrastructure Manager Software
 - Create users and groups and assign system permissions.
 - Create networks, auto-discovery jobs, and update device credentials.

No performance guarantees are offered or implied.

Service Scope Exclusions/Changes

Any additions or changes to the service scope must be mutually agreed upon by Ahead and the client in a separate Ahead statement of work detailing the proposed changes, the impact of the proposed changes on pricing and schedule, and other relevant terms. Depending on the scope of such additions or changes, client may be required to sign Ahead's current standard terms and conditions for professional services. Such changes include, but are not limited to:

- any additional hardware/software configuration not listed in this service brief
- modification of the client's application software
- development of custom solutions, including scripting

Materials

The following materials are provided in connection with this service:

- completed *Test and Acceptance Plan*
- *Configuration Guide* documenting the implementation
- validation of connectivity and user access to Vblock

Client Responsibilities

Client responsibilities are focused on personnel, infrastructure, and engagement planning requirements as outlined below.

- Provide at least one technical contact with system administration responsibilities and appropriate system/information access privileges to perform this service.
- Make appropriate system maintenance windows available for Ahead as needed to prepare equipment.
- Ensure all environment and operational requirements are met prior to implementation.
- Provide access to the client's systems and networks as necessary to perform the services during normal business hours or at mutually agreed timeframes.
- Provide support from technical support teams for all vendors and third parties, as necessary.
- Assume all responsibility for network connectivity, performance, and configuration issues.
- Verify the equipment location/work site is prepared to perform the engagement services.

Service Duration

- The anticipated service start date is a mutually agreed upon start date after receipt and approval by Ahead of the client's purchase order for this service.
- Subject to client satisfying the client responsibilities specified above, Ahead estimates it will complete the services within four months after the actual start date.

Fixed Bid Service Fee and Invoicing Schedule

The services described in this service brief are performed on a fixed-price basis at the fees specified in the applicable Ahead quote. Client will pay Ahead the fixed price specified in the applicable quote for performance of the services described herein, even if such services are completed prior to the end of the service duration specified above.

The services described in this service brief are delivered on consecutive days during Ahead's normal business hours (8 a.m.–6 p.m. local time, Monday through Friday, excluding Ahead and local holidays).

Invoices are issued upon Ahead's receipt and approval of the client's purchase order.

Client authorizes Ahead to invoice for and shall pay additional amounts related to (i) performance outside Ahead's normal business hours or consecutive days, and (ii) reimbursement of travel-related expenses.

Ordering Information

For more information or to schedule a Vblock 0 QuickStart Implementation, contact your Ahead sales representative at 312.329.7880 or visit us on the web at www.ThinkAheadIT.com.

About Ahead

Ahead is a leading provider of Vblock 0 services to clients in all industries. Its experienced consultants deliver robust technology solutions and sustainable results worldwide.

Ahead is an EMC Authorized Services Network (ASN) partner, and shares service methodologies, best practices, and solutions directly with EMC.

Ahead's consultants are EMC Certified Implementation Engineers and carry one or more storage accreditations.

Ahead offers a unique combination of best-practices and implementation experience that enables clients to fully realize the benefits of their infrastructure investment.

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