VCE™ INTEGRATED SOLUTION FOR CLOUD MANAGEMENT WITH VMWARE

Going Beyond Converged Infrastructure

VCE and Vblock® Systems offer the fastest deployment of infrastructure and applications, the highest application performance and availability, the lowest TCO, and unmatched lifecycle assurance.

As cloud adoption rates rapidly increase, IT departments and service providers look to Vblock Systems as the best foundation for providing highly secure, reliable cloud services. Important first steps for successful delivery of cloud services include:

- Automating, managing, and orchestrating Vblock Systems.
- Finding the right foundational infrastructure and cloud management platform for your business.
- Avoiding the extensive, on-site service integration engagements typically required to “stand up” these technologies—often leading to project delays, cost overruns, and negative customer experiences.
- Ensuring you can reliably maintain, upgrade, and support that environment—to provide a superior experience for IT and business users.

High-Value “Starter” for Private Cloud

Building on the proven success of VCE™ Vblock System converged infrastructure, and with our customers’ challenges in mind, VCE is evolving its portfolio to include new integrated solutions.

Jointly developed with VMware, VCE™ Integrated Solution for Cloud Management with VMware provides a “starter kit” to quickly deliver private cloud services—increasing IT agility while reducing complexity and costs.

The solution pre-integrates VMware vCloud Automation Center (vCAC) and related VMware cloud management software components on a Vblock System in the VCE factory. Backed by its brief on-site configuration services, the solution enables you to manage your Vblock System infrastructure and deliver infrastructure- or VM-as-a-service about 15 days after your Vblock System arrives. Now, you can rapidly address the needs of customers by offering catalog-style, pre-configured workflows through this integrated solution built on VCE proven converged infrastructure and industry-leading technology from VMware.

Best of all, you enjoy the signature “VCE Experience”—including lifecycle assurance and validation for the software, plus single-number support.

A Smooth Onramp to Hybrid Cloud

Continuing our close collaboration with VMware, VCE is enhancing the integrated solution to combine VMware vRealize® suite cloud management software into the Vblock System, providing a foundational private cloud that is hybrid cloud-ready, with the technology to migrate workloads to selected “end-points” in the VMware vCloud Air Service. These end-points or next-generation clients will supply account and credentials for a seamless hybrid cloud experience between a Vblock System based private cloud and vCloud Air public cloud.

This enhanced solution will also integrate extensions to enable VMware’s DR-as-a-Service. This creates an ideal hybrid cloud solution for customer disaster recovery requirements by enabling capacity bursting or VM failover for a Vblock System based private cloud.

The VCE and VMware Difference

The solution provides everything you need to quickly deliver foundational cloud services to your customers with unmatched simplicity and industry-leading customer experience:

- Best-in-class cloud management software pre-installed on a Vblock System 300 family or Vblock System 700 family
- Pretesting of all the software components, including purpose-built workflows for the Vblock System
- VMware vCenter Operations Manager (vCOps) integrated with VCE Vision™ Intelligent Operations software—a centralized control point for cloud provisioning, monitoring, and management
- Ongoing release validation with VCE™ Support—for lifecycle assurance with the “VCE Experience”
- A proven foundation from which to rapidly develop private and hybrid cloud capabilities and deploy into production
Pre-Integrated Cloud Management Software Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
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<tr>
<td>VMware vCloud Automation Center (vCAC) Advanced Edition</td>
<td>The foundation for self-service portal and cloud management capabilities orchestrated by vCenter Orchestrator (vCO) (compute and network) and EMC ViPR (storage) provisioning.</td>
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<tr>
<td>VMware vCenter Operations Management suite (vCOps)</td>
<td>Provides a visual representation of infrastructure health and efficiency.</td>
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<tr>
<td>VCE Vision™ Intelligent Operations</td>
<td>Integrated with vCOps to provide compliance checks for the Vblock System.</td>
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<tr>
<td>VMware IT Business Management (ITBM) suite</td>
<td>Provides cost and business management capabilities within the Vblock System.</td>
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<tr>
<td>VMware Log Insight</td>
<td>Provides real-time log management and log analysis.</td>
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Solution Benefits

Operational simplicity
- Get foundational cloud management and orchestration capabilities “out-of-the-box” with pre-integrated, pre-validated VMware software delivered on a Vblock System.
- Gain centralized visibility keeping IT operations in control and knowledgeable of the health and status of Vblock System infrastructure and configurations.
- Free IT staff from mundane manual tasks, allowing them to focus on new Vblock System based cloud services.
- Enjoy full lifecycle assurance (ongoing release certification and VCE Support).

Flexibility
- Extend the solution to
  - Create additional or customized workflows.
  - Integrate with your own existing operational systems (i.e. monitoring or ticketing systems).

Fast time-to-value
- Gain a reliable cost-effective “entry” cloud with long-term TCO benefits compared with highly customized, time-consuming solutions that are not supportable.
- Accelerate deployment with embedded VMware-developed management and orchestration assets specific to Vblock Systems.
- Reduce VM provisioning time from weeks to minutes when compared with many current methods.

Built For Today’s IT Organizations
We’ve built the solution to meet vital business demands for today’s cloud infrastructure and operations teams. It’s the perfect solution whether you need to
- Rapidly set up on-demand cloud environments for test/QA or basic production workloads, with the option to “build from there.”
- Build a simple starting point to optimize effectiveness of your operations team.
- Provide cloud services to external customers with the experience they deserve.

Administrators and internal business customers have everything they need for rapid, efficient provisioning:

- Physical data-center orchestration (New/Add/Remove)—Allows the cloud/infrastructure administrator to automatically allocate physical Vblock Systems resources and bare-metal provisioning.
- Virtual data-center orchestration (New/Add/Remove)—Allows the cloud/infrastructure administrator to automatically allocate virtual resources.
- Virtual machine orchestration (New/Add/Modify/Extend Lease/Remove/Archive)—Allows cloud administrators and end-users to provision virtual machines from the VCAC-based service catalog in an automated fashion. End-user self-service reduces deployment times to minutes.
- Compliance validation (VCE Vision™ software integration)—Compliance check for Vblock System including hardening compliance scores.
Extend VCE Experience to Cloud Management

- Greater Agility—Each VCE Integrated Solution for Cloud Management is an extension of the Vblock System that is engineered, manufactured, maintained, and supported as a single system. The solutions can be ordered and delivered within 45 days, with additional time-to-value of about 15 days. Vblock Systems are deployed by our 150 “Vblock Ready™” global qualified partners, giving customers a choice of certified professionals that use standardized, proven services. This translates into faster time-to-production for projects and follow-on activities, and faster time-to-business value.

- Reduce Complexity and Risk—Every Vblock System is pre-engineered and validated in a VCE factory environment. This pre-engineering, pre-test, and pre-validation are applied to VCE Integrated Solutions, greatly reducing deployment time and risk.

- Comprehensive Services—VCE can help you develop a cloud computing roadmap, and deploy and integrate your systems quickly to ensure operational success. Post-deployment, VCE Support proactively identifies and resolves issues to streamline support and deliver a better experience.

- Lifecycle System Assurance—Rely on the latest Release Certification Matrix from VCE to streamline software release planning and configuration management across all hardware and software. VCE is taking this unique customer sought-after VCE Experience to its integrated solutions, enabling an unmatched user experience and supporting a combination of traditional and emerging workloads.

For More Information
More information about VCE solutions and services is available from www.vce.com and from your local VCE representative.

ABOUT VCE
VCE, formed by Cisco and EMC with investments from VMware and Intel, accelerates the adoption of converged infrastructure and cloud-based computing models that dramatically reduce the cost of IT while improving time to market for our customers. VCE, through the Vblock Systems, delivers the industry’s only fully integrated and fully virtualized cloud infrastructure system. VCE solutions are available through an extensive partner network, and cover horizontal applications, vertical industry offerings, and application development environments, allowing customers to focus on business innovation instead of integrating, validating, and managing IT infrastructure.

For more information, go to vce.com.