



VCE™ FOUNDATION FOR PIVOTAL CLOUD FOUNDRY

Solutions Brief

The agility, flexibility, and speed to compete and thrive in a world of mobile and cloud-based software innovation and disruption

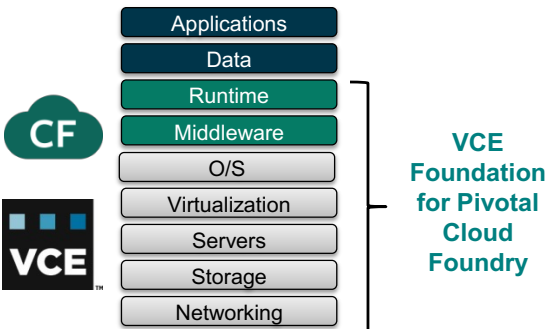
Organizations can meet the challenges of the fast changing world of digital and cloud services via the advanced application development and operational capabilities of this platform-as-a-service solution.

Fast, optimized cloud-native capabilities for mission-critical initiatives

Benefits for business, IT, CIOs, and service providers:

- Development teams gain modern tools for fast application delivery via a resilient structured platform
- Operations (DevOps) teams acquire automation for the launch of new features and to easily optimize system resources to ensure high performing applications.
- Digital business units can achieve much faster web and mobile innovation to beat competitors to market.
- CIOs can offer fast self-service application support and automation to internal users to pre-empt the expense and risks associated with public-cloud alternatives.
- Service providers can offer expanded cloud services to compete with large public-cloud vendors.

A comprehensive cloud-native platform integrated with the world’s leading converged infrastructure



Unique features of this advanced solution include

- Pivotal’s commercially supported version of Cloud Foundry. Cloud Foundry, the top open source platform for web and mobile application development, is backed by 40+ top companies and service providers.
- Pivotal’s cloud-native application development framework and runtime environment with automation for faster, more efficient deployment and operations.
- Factory installation, validation, and ongoing new release support for Pivotal Cloud Foundry and VCE’s best of breed infrastructure.

Leverage Pivotal’s expertise in cloud-native application development and deployment technology

- Pivotal offers both basic and advanced training in cloud-native software development and operations to help customers optimize their investment in the platform.
- Many customers of Pivotal Cloud Foundry also employ the expertise of Pivotal Labs, a services organization that works side-by-side with clients to deliver software applications efficiently while teaching and enabling cloud-native methodologies through pair programming.
- Developers employ Pivotal Cloud Foundry to become more efficient by automating many manual tasks, like provisioning of runtime resources, and to gain access to a marketplace of application, data, and mobile services.
- IT Operations employ Pivotal Cloud Foundry to simplify application deployment and maintenance through automation, reducing time and complexity for security, networking, and resource management.
- DevOps teams use Pivotal Cloud Foundry to automate access and policy controls, while improving scalability, availability, and recovery.

Access Pivotal’s cloud-native ecosystem

The Pivotal Cloud Foundry platform simplifies and accelerates application development via automated integration with an ecosystem of leading cloud-native technologies. These include leading open-source microservices from Spring Cloud Services and an enterprise-ready turnkey distribution of core Netflix OSS components. On-platform integration with GitLab, CloudBees, Jenkins, and JFrog is included. Pivotal provides native support to run .NET and Docker (container) images on Pivotal Cloud Foundry as first-class application workloads.

Self-service convenience and scalability without the ongoing expense and risk of public cloud

A private cloud, based on the VCE™ Foundation for Pivotal Cloud Foundry, provides better control, compliance, security, reliability, and data protection than public-cloud services. Companies can achieve lower total cost of ownership compared to the all-in expenses of constructing enterprise-grade infrastructure on public cloud.

Accelerate time-to-value, while reducing downtime and total cost of ownership



Source: IDC White Paper, "The Business Value of VCE Vblock® Systems: Leveraging Convergence to Drive Business Agility," May 2015, based on interviews with 16 VCE customers

Engineered, manufactured, managed, supported, and sustained as a single product so benefits extend throughout the system life cycle

- Each custom configured converged or hyper-converged system—with compute, storage, networking, virtualization, and Pivotal Cloud Foundry software—is factory assembled, tested, and is typically delivered within 45 days of order.
- Instead of requiring months of internal and third-party resources for assembly and testing of separate hardware and software components, this solution—with VCE on-site delivery and integration service—is ready for live operations within days.
- While most organizations spend 70 percent or more of their resources just to keep their systems running, VCE Systems owners spend 41 percent less resources for ongoing maintenance and upgrades. (Source: IDC)
- VCE provides one company, single-call support for compute, storage, networking, and virtualization; and has achieved customer satisfaction ratings above 90 percent.
- VCE performs extensive pre-testing of new releases and delivers a release certification matrix with step-by-step instructions for system software upgrades, which helps to reduce downtime by 96 percent. (Source: IDC)
- VCE Vision™ Intelligent Operations system management software provides holistic intelligence, automation, and visualization for key performance indicators to optimize the health, stability, and security of the infrastructure.
- Scalability is engineered into the architecture so compute, storage, and networking can be added in an easy, fast, modular fashion, without disruption.

Advanced Custom-Configured Infrastructure

VCE recommends, assembles, supports, and sustains enterprise-class systems to match each client’s needs and workloads. Options for this VCE Foundation include:

COMPONENT	CONVERGED OPTIONS	HYPER-CONVERGED OPTIONS
VCE System	Vblock System 340 Vblock System 540	VxRack™ Flex 1000
Cloud-Native PaaS	Pivotal Cloud Foundry	Pivotal Cloud Foundry
Hyper-Visor	VMware vSphere	VMware vSphere
Compute	UCS Blade (M3 or M4), up to 192 blades/system	x86-based rack servers
Storage	SSD, Flash, SAS, NL-SAS	Software defined: EMC Scale IO
Storage Capacity	20 TB to 6 PB per system	Up to 1000 nodes
Network	- Nexus 5500UP - Nexus 93xx - MDS 9xxx	Top of Rack, Spine, and Management Switches
System Manager	VCE Vision™ software	VxRack™ Manager VCE Vision software
Data Protection	EMC Data Protection Suite	EMC Data Protection Suite

Pivotal Big Data Suite

The Pivotal Big Data Suite, available separately from VCE, enables companies to become a data-driven enterprise via a suite of integrated open source technologies. Pivotal’s offering provides all the elements for both batch and streaming analytics. The Big Data Suite includes integrations with Pivotal Cloud Foundry.

Pivotal was recognized with one of the highest ratings for completeness of vision in Gartner’s Magic Quadrant for Data Warehouse and Data Management Solutions for Analytics.

For More Information

More information about VCE solutions and services is available from vce.com and from your regional VCE office. For more information about Pivotal, visit pivotal.io

About Pivotal

Pivotal was founded by EMC and VMware with investment by GE. Pivotal’s team includes 1,800 of the world’s top developers, engineers, consultants, and professionals. Companies engage Pivotal Labs to custom develop world-class digital products and applications. More than 1,000 Fortune 2000 companies and organizations across nearly every category of industry and government use Pivotal’s services. The firm is headquartered in Silicon Valley with 14 global offices and has partnerships with more than 130 infrastructure, consulting, and technology providers. For more information, go to pivotal.io

ABOUT VCE

VCE, an EMC Federation Company, is the world market leader in converged infrastructure and converged solutions. VCE accelerates the adoption of converged infrastructure and cloud-based computing models that reduce IT costs while improving time to market. VCE delivers the industry’s only fully integrated and virtualized cloud infrastructure systems, allowing customers to focus on business innovation instead of integrating, validating, and managing IT infrastructure. VCE solutions are available through an extensive partner network, and cover horizontal applications, vertical industry offerings, and application development environments.

For more information, go to vce.com.

