

VMware vCloud Suite on System x

Fast, Agile, and Efficient Private Cloud Solution

At a glance

The VMware vCloud Suite® on System x® solution offers an extremely fast, agile, and efficient VMware vSphere®-based private cloud and simplified management solution designed to meet the needs of IT organizations managing today's data-intensive, mission critical workloads.

Key benefits

- **Fast, virtualized, private cloud:** Achieve 100% faster compute performance than previous generation x86 systems, consistent across applications.
- **Agile system design:** Deliver infrastructure, applications and IT services to users across multiple hardware platforms.
- **Operational efficiency:** Decrease TCO with a flexible, scalable system design, and reduce CapEx by 49%¹ and OpEx by 56%² through automated operations management.

Benefits of VMware vCloud Suite on System x

This pre-configured, pre-tested private cloud solution features System x servers built on the sixth generation of enterprise X ARCHITECTURE® (EXA) technology, and VMware vCloud Suite software. An integrated solution for building a VMware vSphere®-based private cloud, the vCloud Suite on System x solution produces transformational levels of IT agility and efficiency.

Technology innovators VMware® and Lenovo®, have combined best-in-class software and hardware that enable customers to dramatically reduce IT complexity and cost, increase business agility, and accelerate their transformation to a software-defined enterprise.

- **Get faster time-to-value:** Speed server deployment and application provisioning from days to minutes, and gain faster database performance through new eXFlash memory-channel storage technology.
- **Provision complete infrastructure, applications and IT services to users across multiple platforms:** Enable authorized users to self-provision infrastructure, platform and desktop services. Rapid provisioning increases IT productivity and enables IT to focus on innovation and high value-add activities.
- **Increase performance by 100% over previous generation systems:** The sixth generation of EXA technology, System x X6, built on Intel® Xeon® processors, speeds data-intensive applications up to 2.5x and provides faster virtualized performance through better bandwidth and lower latencies. Faster data access accelerates application performance and eXFlash memory-channel storage enables IOPS performance of more than 100x HDD.³
- **Achieve 30% more uptime for mission-critical applications with high availability and security:** See higher availability using automated load balancing and extended X6 Reliability, Availability, and Serviceability (RAS).
- **RAS capabilities through VMware vSphere® High Availability⁴:** Deeply integrated hardware management, monitoring and configuration tools create simpler, more productive workflows and allow IT to add, provision and migrate volumes for storage. Proactive alerts monitor security and regulatory issues.
- **See lower TCO due to automated operations management and a flexible, scalable system design:** Ensure SLA compliance and security with policy-driven automation. Pay-as-you-grow, seamlessly scale up and design fit-for-purpose systems as a result of X6 innovative modular rack design that enables you to meet today's needs with intelligent policy-based IT operations, server virtualization and business-critical applications/big data app support, all of which contribute to decreasing TCO. Be ready for changing business requirements.

Key Solution Features and Components

- **VMware vSphere:** Compute virtualization platform automates workloads in compliance with SLAs.
- **VMware vCenter™ Site Recovery Manager™:** Automates disaster recovery planning, testing, and execution.
- **VMware vCloud Networking and Security™:** Networking and security for a virtualized compute environment.
- **VMware vRealize™ Operations™:** Intelligent performance, capacity, and configuration management for vSphere environments.
- **VMware vRealize™ Automation™:** Self-service and policy-based infrastructures and application provisioning for vSphere environments.
- **VMware vCloud Director®:** Secure provisioning of virtual data centers that provide virtualized compute, storage, networking and security.
- **eXFlash memory-channel storage:** Up to 12.8 TB of ultra-low latency memory-channel storage that scales consistently with additional modules and continues to deliver superior performance.
- **FlashCache Storage Accelerator:** Advanced intelligent-caching software that enables eXFlash memory-channel storage and hard disk drive storage to transparently work together to maximize performance and minimize cost.
- **Modular, fit-for-purpose “book” design:** Configure the server to meet unique business requirements; deliver twice the performance for growing environments by scaling capacity and performance from 4-socket to 8-socket — without creating IT sprawl.

The Joint Solution Advantage

The vCloud Suite on System x solution is the most efficient solution to build and manage a private cloud. The solution allows IT to standardize and consolidate data centers with intelligent policy-based IT operations – server virtualization and business-critical applications/big data application support – and decreased TCO with a scalable system that addresses today’s data-intensive workloads and allows the flexibility to evolve tomorrow.

How can the vCloud Suite on System x solution help?

PAIN POINTS	BENEFITS
Decreasing IT budgets are set against increasing IT demands, thus forcing IT leaders to do more.	Experience lower TCO thanks to a scalable system that addresses today’s performance requirements and offers a flexible modular design for future growth.
Data sets are growing exponentially; as data sets increase, legacy data and storage networks are becoming overloaded.	As a result of the faster database performance delivered by new eXFlash memory-channel storage, gain immediate access to actionable information.
As end users demand access to an ever-growing list of applications, stress on IT’s ability to deliver high availability increases.	Achieve faster time-to-value by saving time on configuration, deployment, and provisioning. Enable authorized users to self-provision infrastructure, platform and desktop services.
Large workloads need scalable performance and extremely high availability.	Maintain higher availability due to unique X6 RAS features, Distributed Resource Scheduler (DRS) in vSphere, and load balancing in vSphere HA.
Legacy infrastructures are often poorly utilized, do not perform well, and can be difficult and costly to maintain.	Reduce CapEx by 49% and OpEx by 56% through automated operations management. Reduce operational complexity to lower disaster recovery management costs by 50% ⁵ . Achieve greater resource utilization to increase staff productivity by 67% ⁶ .

Support and Services

Lenovo offers comprehensive support for the entire line of VMware products sold on the Lenovo price list. For customers requiring additional services, Lenovo also offers an extensive list of services from basic server virtualization to comprehensive cloud implementation services. Lenovo is among the leading IT providers of services for VMware environments with thousands of VMware certified sales and technical professionals worldwide. <http://www-03.ibm.com/systems/x/support/>.

How to Buy

Lenovo offers the majority of the VMware software portfolio, through its standard distribution and reseller channels.
<http://www.ibm.com/systems/x/os/vmware/index.html>

Find Out More

Lenovo Alliance with VMware: <http://www.vmware.com/partners/global-alliances/lenovo/overview.html>.

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- 1 VMware. (October, 2014). VMware SDDC: Faster Time to Value.
- 2 Taneja Group, Transforming the Datacenter with VMware's Software-Defined Data Center vCloud Suite, June 2014
- 3 VMware vCloud Suite and IBM X6, A great choice for Cloud Infrastructure (IDC, November 2014)
- 4 Source: Management Insight (2014). Study Shows Business Experience Significant Operational and Business Benefits from VMware vCenter Operations Management Suite. Palo Alto, CA
- 5 Forrester, Total Economic Impact of VMware vCenter Site Recovery Manager, May 2013
- 6 Forrester, Total Economic Impact of VMware vCenter Operations Suite, Dec 2012



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