Citrix XenServer
Product Overview

Unlock the power of server virtualization

Enabling the dynamic datacenter

Citrix XenServer™ is the simplest and most efficient way to virtualize servers and deliver a dynamic data center — a flexible aggregated pool of computing and storage resources. Citrix XenServer extends the development and testing resources of the open source Xen® virtualization engine, delivering easy-to-use dynamic virtualization solutions. Citrix XenServer combines comprehensive server virtualization capabilities with unparalleled scalability, performance, economics, and ease-of-use.

Reducing costs through server consolidation

With XenServer, businesses can deploy multiple virtual servers on shared hardware increasing utilization and reducing the costs of equipment, power, cooling and real estate. Server virtualization can reduce the costs of delivering disaster recovery as server workloads can be instantly provisioned to any available system, local or remote.

Citrix XenServer: Leveraging Xen innovation

The foundation of Citrix XenServer is the open source Xen™ hypervisor, a proven and robust virtualization engine. The inventors and lead developers of Xen, with the rest of the Citrix XenServer product team, take the Xen Engine and build a comprehensive server virtualization platform, with a series of dynamic virtualization services. Citrix XenServer combines the performance, security and openness of Xen technology with easy-to-use management and simplified deployment. Citrix XenServer is perfect for rapid deployment of servers, server consolidation, development and test environments, and disaster recovery.

CITRIX®

Power, flexibility and investment protection

Citrix XenServer is a native 64-bit virtualization platform, with the scalability required by Microsoft® Exchange Server, Microsoft® SQL Server® and other business-critical applications. High capacities for CPU and memory resources, coupled with fine-grained control of CPU, network and disk, enable XenServer to deliver optimal quality of service. Running virtual machines can be migrated to new servers without service interruption, assigning essential workloads and enabling zero-downtime maintenance. Open command-line and programming interfaces make it easy to integrate XenServer with existing processes and management tools.

XenServer Editions

Citrix XenServer is available in three editions:

- Express Edition — a free starter edition, for bringing virtualization to every server
- Standard Edition — a feature-rich server virtualization solution with multi-server management for business-critical workloads
- Enterprise Edition — a powerful virtualization platform supporting flexible, aggregated pools of computing and storage resources with dynamic workload management

Key features

Enterprise-ready performance and scalability	
"Bare metal" implementation	Citrix XenServer runs directly on server hardware rather than on a separate host operating system for highest performance and scalability.
Hardware virtualization assist	The latest optimizations in Intel and AMD processors are utilized for high performance, even when running operating systems that are not delivered virtualization-ready.
XenServer Tools	Bundled I/O enhancements deliver optimized disk and network performance for Windows and Linux guests.
Native 64-bit architecture	The 64-bit Xen hypervisor is built from the ground up to support 32-bit and 64-bit guests, enabling large memory allocations needed by many workloads, as well as 64 bit workloads such as Microsoft Exchange and Microsoft SQL Server.
SMP virtual machines	Support for up to eight virtual CPUs in each virtual machine to deploy processor-intensive applications such as messaging and database servers, and to take advantage of multi-core processing power.
32GB RAM per virtual machine	Server-class virtual memory capacity for memory-intensive workloads.
Simple deployment and installation	
Flexible product installer	Can be installed from a CD, via PXE-based network boot or using server management processors with remote CD or ISO access.
Easy virtual machine deployment	Windows and Linux guests can be installed using CDs or DVDs, ISO images or network-accessible repositories. Virtual machines can be converted to templates for replicated installation.
Broad hardware support	Leverages standard Linux device drivers and optimized guest drivers for broad device support without compromising performance.
Rich local storage support	Support for a wide range of local storage options including IDE, SATA, SCSI and SAS.
Flexible shared infrastructure	
Pooled servers and storage	Managing multiple servers and connected shared storage as unified resource pools enables flexible deployment of virtual machines based on resource needs and business priorities.
Live migration via XenMotion	Virtual machines can be moved from server to server without service interruption for zero-downtime server maintenance. Administrators can move applications to take advantage of available compute power.
Pool-based configuration	Common settings can be set and applied automatically on a pool-wide basis, simplifying reconfiguration.

On-demand virtual machine deployment	
Templates	Virtual machines can be converted to templates for rapid provisioning of multiple like systems on a server or resource pool. With local or NFS file-backed storage, new cloned guests can be available in seconds.
Import/export	Virtual machines can be exported and made available to remote locations, archived, used as a basis for disaster recovery sites and restored via import. The import operation can also be used with the XenServer appliance format that is supported by many virtual appliance vendors and other tools.
Bundled Linux P2V tool	Popular Linux distributions can be migrated from physical systems to XenServer virtual machines. (Additional tools for P2V migration are available from Citrix technology partners; see the website for details.)
Virtual Machine migration tool	Convert VMware and Microsoft virtual machines to XenServer format.
Powerful storage management	
Shared iSCSI and NFS NAS storage	Storage connected to IP networks can be configured as shared pools from which disk resources can be allocated to virtual machines, enabling best use of storage infrastructure.
Dedicated Fibre Channel and iSCSI networked storage	Central SAN storage resources can be partitioned among servers.
Optimized file-backed virtual disks	Virtual machines stored on dedicated file systems or NFS NAS storage use the proven Microsoft VHD format, making available transparent access to thin provisioning and fast cloning.
Xen Storage Services API	Storage vendors can make advanced capabilities of their arrays and controllers (including cloning, thin provisioning and snapshots) directly accessible from XenServer administrative interfaces.
Efficient, secure virtual networking	
Virtual NICs	Each virtual machine can be configured with one or more virtual NICS, each having its own IP and MAC addresses. Virtual machines appear as independent physical systems on the network.
Virtual switches	Virtual NICs can be connected to virtual switches offering network isolation. Each virtual switch can connect to the physical network via a physical NIC, or can be configured as a fully virtual network for private guest-to-guest traffic at memory speeds.
VLAN support	Virtual machines can be bound to separate VLANs to isolate traffic from each other and from other physical servers, reducing network load, increasing security and simplifying reconfiguration.
XenCenter Management	
Easy-to-use single point of management	Whether systems are managed one at a time (Express Edition), as multiple independent servers (Standard Edition) or as unified pools of servers and storage (Enterprise Edition), the same XenCenter tool is utilized.
Full VM lifecycle management	Administrators can create, start, stop, reboot, suspend, resume, migrate and uninstall virtual machines, and reboot and shut down physical servers, securely from any location.
Performance monitoring	Administrators can access real-time and trended performance information of virtual machine and server performance metrics for CPU, memory, disk and network utilization.
Resource management	XenCenter provides easy access to quality-of-service controls that allow configuration of priority and limits for CPU, memory, disk and network I/O.
Flexible console support	Administrators can connect to Windows virtual machines via the built-in graphical interface or the native Windows RDP protocol, and access the graphical and text consoles of Linux virtual machines, directly from XenCenter.
Interfaces for management integration and scripting	
XenAPI	The open XML-RPC interface for Xen management, allows partners and customers to integrate virtualization management into their tools with the same interfaces used by XenCenter.
XenAPI language bindings	C, Python and C# language libraries offer flexibility to developers.
Remotable Command Line Interface	The “xe” CLI runs on the managed XenServer or on any Windows or Linux system, and provides a powerful tool for character-based administration sessions as well as script integration.

Compare Citrix XenServer Editions

Feature	Express Edition	Standard Edition	Enterprise Edition
Native 64-bit Xen hypervisor	•	•	•
Windows and Linux guests	•	•	•
XenAPI management and control scripting interface	•	•	•
XenCenter unified virtualization management console	•	•	•
Multi-server management		•	•
Subscription Advantage — first year included		•	•
Resource pools			•
XenMotion live migration			•
Shared IP-based storage			•
VLAN configuration			•
Resource QoS controls			•
Administrative model	Single server	Multiple servers	Multiple servers and pools
Physical memory	1 GB – 4 GB	1 GB – 128 GB	1 GB – 128 GB
CPU sockets	2	Unlimited *	Unlimited *
Guests active simultaneously	4	Unlimited *	Unlimited *
RAM per virtual machine	4 GB	32 GB	32 GB

* No limit imposed by license — consult product documentation for tested limits of current release.

Test-Drive Citrix XenServer

Experience the simplicity, cost-effectiveness and power of XenServer in your own datacenter. Download a 30-day trial at www.citrix.com/xenserver/try today.

About Citrix

Citrix Systems, Inc. (Nasdaq:CTXS) is the global leader and the most trusted name in application delivery infrastructure. More than 180,000 organizations worldwide rely on Citrix to deliver any application to users anywhere with the best performance, highest security and lowest cost. Citrix customers include 100% of the *Fortune* 100 companies and 98% of the *Fortune* Global 500, as well as hundreds of thousands of small businesses and prosumers. Citrix has approximately 6,200 channel and alliance partners in more than 100 countries. Annual revenue in 2006 was $1.1 billion. Learn more at www.citrix.com.

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