Citrix XenServer

Industry-leading open source platform for cost-effective cloud, server and desktop virtualization.
While the core server virtualization market has matured, virtualization itself is seeing continued innovation and momentum in the growing cloud market where enterprises and service providers are building private and public clouds. Citrix XenServer and the Linux Foundation Xen Project™ already power many of the world’s largest clouds and are quickly becoming the de facto standard for cloud infrastructures. To meet these new demands, XenServer has undergone a platform modernization for maximum horizontal scalability and increased performance, density, flexibility and cloud readiness.

Citrix is focused on delivering the best possible virtualization platform for cloud builders and providing customers a seamless path to the cloud. To accelerate this mission, XenServer is available as a fully open source package to ensure a strong platform, a vibrant ecosystem and a community of users who are collaborating toward this common goal. The net result is a better XenServer product that benefits all customer use cases—cloud, server or desktop—in any datacenter type, cloud or traditional.

**XenServer**  
**Industry-leading open source virtualization platform**

A value leader in the virtualization space, XenServer is an open source platform for cloud, server and desktop virtualization infrastructures. Organizations of any size can install XenServer in less than 10 minutes to virtualize even the most demanding workloads and automate management processes, thereby increasing IT flexibility and agility and lowering TCO. With a rich set of management and automation capabilities, a simple and affordable pricing model and optimizations for virtual desktops and cloud computing, XenServer is designed to optimize datacenters and clouds today and in the future.

**Key XenServer benefits**

- **Cloud-proven virtualization** that is used by the world’s largest clouds, directly integrates with Citrix CloudPlatform and Apache™ CloudStack™ and is built on an open and resilient cloud architecture

- **Open source, community-driven** virtualization from a strong community of users, ecosystem partners and industry contributors that accelerates innovation, feature richness and third-party integration
Value without compromise from a cost-effective and enterprise-ready cloud-proven platform that is trusted to power the largest clouds and run mission-critical applications and large-scale desktop virtualization deployments

Virtualize any infrastructure including clouds, servers and desktops, with a proven, high-performance platform

What open source means to XenServer customers
Open source solutions are already driving innovation and capturing the cloud market, rapidly outpacing proprietary software in cloud infrastructures. Underpinning the evolution of XenServer for cloud enablement was the move to make it fully open source. An open source XenServer aligns with the dominant cloud orchestration platforms of Citrix CloudPlatform, Apache CloudStack and OpenStack™ —and meets the expectations of cloud builders for source code availability, open APIs and ecosystem contribution and integration.

Customers benefit from a better XenServer product, a more comprehensive feature set, direct product influence through user communities, early access to features and code and better third-party integrations. Specifically, XenServer customers receive:

• A commercially packaged and certified product. XenServer is rigorously tested and includes certified product lifecycles and guaranteed support statements.

• Simple, automated patches and updates. The Citrix XenCenter management console enables simple, automated, GUI-driven upgrades and patch management.

• Citrix Premier Support: XenServer customers are provided unlimited 24/7 access to Citrix Premier Support for configuration and troubleshooting assistance.

• Citrix Knowledge Center and MyAccount portal. Customers enjoy complimentary access the Citrix Knowledge Center, where they can to obtain information and tools for configuring, optimizing and troubleshooting their XenServer environment.

Industry validated
Info-Tech Research Group recognized XenServer as a “champion” in its 2013 Server Virtualization Vendor Landscape report. Info-Tech defines a champion as “offering excellent value,” “having a strong market presence” and acting as “trend setters for the industry.” Info-Tech says, “Citrix provides a comprehensive server virtualization solution that is scalable with a good consolidation ratio. It has developed a strong solution with a focus on cloud infrastructure.” The report goes on to say that XenServer is the value leader in the space, offering the broadest feature set at the lowest cost.
**Key features**

**Cloud ready**

XenServer is a cloud-proven virtualization platform used by the world’s leading public clouds across all major cloud orchestration platforms including CloudPlatform, Apache CloudStack and OpenStack. XenServer is cloud ready; designed for horizontal scale, cloud-scale performance, security, openness and simplicity.

**CloudPlatform integrations**

XenServer includes security and scalability enhancements for cloud environments and direct integrations with CloudPlatform, Apache CloudStack and OpenStack.

**Resilient architecture**

XenServer is designed with an agile, fully replicated architecture that implements a master/slave model, where any slave can become a master with no loss of functionality or configuration. This architecture enables cloud builders to cluster hosts without incurring any additional configuration or management complexity.

"Look closely at Citrix as an alternative to VMware. [Citrix] offers many of the same features as VMware with more flexibility and a lower price."

— Info-Tech Research Group

"Citrix’s focus on Cloud is unparalleled by other vendors. As a result, Citrix has become the go-to vendor when looking at cloud-ready solutions."

— Info-Tech Research Group
Network isolation and protection

XenServer scales to 800 VLANs per pool, enabling cloud builders to provide isolation between virtual machines (VMs) and users in a multi-tenant cloud environment. Linux iptables firewall partitioning enables host segmentation, while security and network spoofing and traffic sniffing tools prevent IP address spoofing, denial of service attacks and session hijacking.

Strong open source heritage

Access to the source of technology is a key aspect of understanding and managing the risk associated with selecting cloud solutions. Xen has been under development for 10 years as an open source project, and is now part of the Linux Foundation as the Xen Project under a GPLv2 license.

High-performance virtual infrastructure

XenServer provides a complete virtual infrastructure including a 64-bit hypervisor with live migration, centralized management for virtual machines and hosts and a full complement of tools to get virtual environments up and running quickly.

XenServer

XenServer provides a highly reliable, available and secure open source virtualization platform that offers near-native performance and best-in-class VM density. The solution takes just 10 minutes to install using an intuitive, wizard-driven utility for easy server, storage and network setup.

XenCenter management

XenCenter provides all VM monitoring, management and general administration functions through a single, intuitive interface. XenCenter is a highly available management architecture with no single point of failure, as it shares all management and configuration data across all servers in a resource pool without the need for a separate database.

XenMotion

Citrix XenMotion eliminates the need for planned downtime to perform hardware and software upgrades. It allows live, running VMs to be moved from one host to another within a resource pool with no application or service outage.

XenServer Conversion Manager

XenServer Conversion Manager provides a simple batch conversion tool to automate the process of converting VMware VMs into XenServer VMs.
Datacenter automation

Use XenServer to streamline critical tasks, maintain a manageable disaster recovery plan, increase server performance and reduce power consumption.

High availability

Automatic restart capability allows IT teams to restart VMs if a failure occurs at the VM, hypervisor or server level, and to bond network interfaces for network redundancy. Auto restart helps protect virtualized applications and bring higher levels of availability to the business.

Site recovery

Create a site-to-site disaster recovery plan for virtual environments. Site recovery is easy to set up and fast to recover, and allows frequent testing to ensure disaster recovery plans remain valid.

Host power management

Take advantage of embedded hardware features to lower datacenter electricity consumption by dynamically consolidating VMs on fewer systems and then powering off underutilized servers as demand for services fluctuates.

VM snapshots

Create snapshots of VMs to capture disk and metadata settings for backups, archives and configuration changes.

Memory optimization

Reduce costs and improve application performance and protection by sharing unused server memory among VMs on the host server.

XenMotion

Move live, running VMs and their associated virtual disk image within and across resource pools, leveraging local and shared storage.

Advanced integration and management

XenServer optimizes computing resources with a deep integration between physical and virtual resources that enables rapid provisioning, storage integration, tiered access to VMs and granular management of virtual environments.

IntelliCache

Optimize XenServer for Citrix XenDesktop deployments by utilizing local storage for boot images and non-persistent data.

Heterogeneous pools

Enable resource pools that contain host servers with different processor types while fully supporting XenMotion, high availability and shared storage functionality.
Role-based administration

Improve VM security by maintaining a tiered access structure with varying levels of permissions.

Performance reporting and alerting

Receive immediate notification with historical reporting of VM performance for rapid identification and diagnosis of fault or failure in the virtual infrastructure.

Notes

1. 2013 Info-Tech Vendor Landscape: Server Virtualization