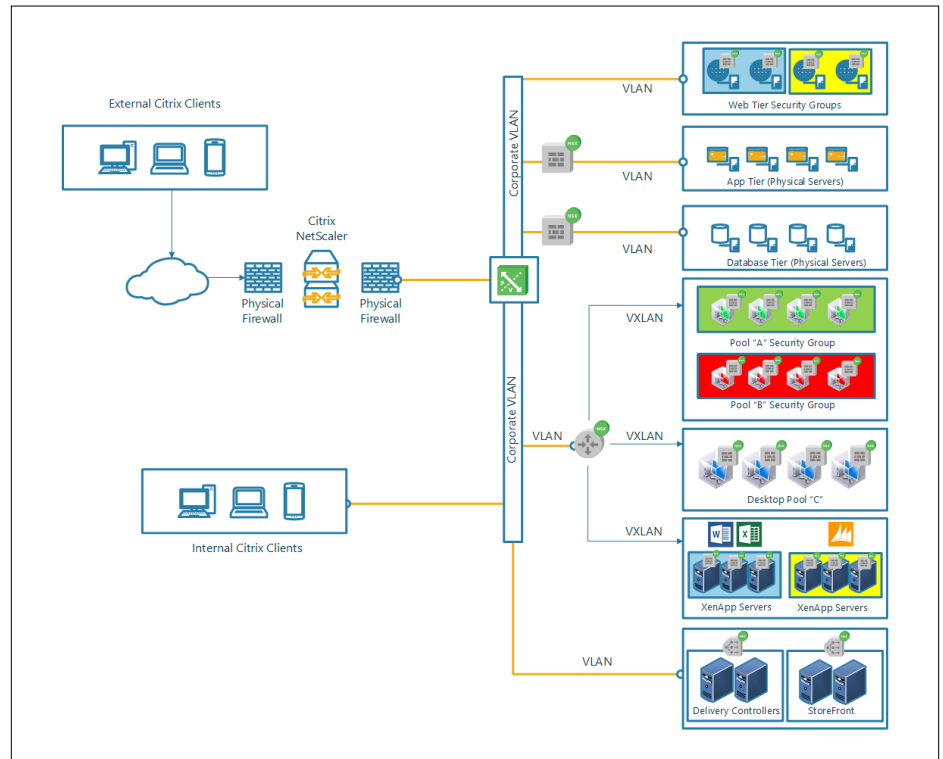


OPTIMIZING CITRIX XenApp AND XenDesktop USING VMWARE APP VOLUMES, NSX, AND vSAN

AT A GLANCE

Managing Citrix XenApp and XenDesktop environments can be challenging and costly, leading to vulnerabilities, poor performance or failures of critical applications that impact the business. Using VMware App Volumes™, VMware NSX®, and VMware vSAN™, organizations can optimize and secure their Citrix deployments by providing radically faster application delivery, unified application and user management, while reducing storage and operational costs by up to 70%.



The Challenge

Delivering published applications or virtual desktops using Citrix XenApp or XenDesktop has provided many benefits for organizations over the years. These benefits include increased agility, consolidation of hardware, centralized management, and security for data at rest. Yet organizations continue to use legacy tools and complicated management approaches to manage Citrix environments, which prove to be unpredictable. The challenges IT administrators face managing Citrix environments include:

- **Slow and Painful Application Install and Maintenance** – Applications need to be packaged, delivered, updated, and retired on a regular basis, which can be slow, unreliable, and painful. Template version control and image sprawl creates nightmares for IT.
- **Complex Processes and Outdated Architecture** – Without much innovation in application packaging, maintenance, and user management, IT tends to rely on habits that require complicated processes and outdated architecture to manage heterogeneous environments.
- **High Infrastructure, Support, and Operational Costs** – Supporting thousands, hundreds, or even dozens of apps can be resource and time intensive, and incur high infrastructure costs such as storage costs. Without insight into how users and apps are performing, helpdesk tickets can spiral out of control.

BENEFITS

- Reduce storage and operational costs by up to 70% with one-to-many provisioning, painless packaging, and stable installation
- Free up crucial IT resources from repetitive application and user profile maintenance tasks, and decrease the time spent managing images by up to 95%
- Protect investments with role-based network policy that delivers fast, easy, and extensible security
- Increase employee productivity and satisfaction, without increasing IT staff, by delivering personalized applications and user environments that drive the business forward rather than maintain dated architectures

LEARN MORE

For information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit <http://www.vmware.com/products> or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the App Volumes documentation.

- **Security Threats and Compliance Mandates** - Malware and other attacks can move from virtual desktop to published application host, exposing a large attack surface within the data center, known as an “east-west” threat scenario. Organizations seeking to protect against these threats have typically relied on hardware-centric architecture that is CapEx-intensive, complex to operate, and slow to adapt to dynamic business environments.

End users expect real-time access to their XenApp applications and XenDesktop virtual desktops across devices and locations. Supporting the requirement for persistent and secure access while keeping costs in check has been challenging. Combining the use of VMware App Volumes, NSX, and vSAN helps overcome these challenges to reduce costs, deliver superior user experience, and secure Citrix environments.

The Solution

App Volumes, NSX, and vSAN take Citrix XenApp and XenDesktop environments to the next level by providing radically faster application delivery, unified application and user management, while reducing storage and operational costs by up to 70%. App Volumes fundamentally shifts how applications are installed and maintained through their lifecycle, how user environments are managed, and gives IT a single vendor management solution that is unparalleled. NSX effectively secures east-west traffic within the data center, while ensuring that IT can quickly and easily administer networking and security policy that dynamically follows end users’ desktops and apps across infrastructure, devices, and locations. vSAN delivers radically simple and scalable storage for XenDesktop virtual desktops and XenApp published application hosts, with superior performance and dramatically lower TCO. Now, IT has an end-to-end approach to agile services delivery in Citrix environments, that boosts user productivity to help drive your business.

- **Deliver Agile Services** - Eliminate the pain in application packaging with instant delivery, update, and retirement of applications and user environment settings in XenDesktop virtual desktops and XenApp hosts. Decoupling operating system images and applications with App Volumes helps reduce the number of images being managed by up to 95%.
- **Modern Architecture Enables Reliability** - Built on a modern management and monitoring platform, App Volumes provides reliable application delivery and user environment management with powerful workflows. Provision applications faster, deliver context-aware user policy, and isolate apps as needed, enabling “follow-me” applications and user settings for a personalized and consistent user experience.
- **Realize Savings in Infrastructure, Support, and Operational Costs** - Support a truly stateless desktop or published app host with no trade-off between user experience and costs. One-to-many provisioning lowers storage and operational costs. Provisioning storage with vSAN takes just a few clicks, with consistently great performance through intelligent, automated management of storage policies that dynamically adjusts to desktop and application demand. Proactive monitoring reduces helpdesk costs.
- **Bring Speed and Simplicity to Networking and Security** - Address east-west threats by enabling administrators to define policy centrally. Using NSX distributed virtual firewalling, implement “micro-segmentation” to eliminate unauthorized access and provide each virtual desktop or host its own perimeter defense.

