Top 10 reasons to use Citrix XenApp for desktop virtualizaiton

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Desktop virtualization is one of the most strategic IT initiatives organizations are designing and implementing today. It is imperative for helping your business stay ahead of the competition and keep pace with the demands of an increasingly global workforce. Desktop virtualization, as provided by Citrix® XenDesktop® with Citrix® XenApp®, can enable your organization to achieve key strategic goals, including recruiting and retaining the most skilled employees regardless of location, increasing business efficiency by reducing the time required to integrate acquisitions and, most importantly, empowering your people with device choice while keeping critical data safely secured in the datacenter.

Desktop virtualization is not a one-size-fits-all technology; your users need the right type of virtual desktop based on their business needs. However, when embarking on a desktop virtualization initiative, organizations frequently start their technology search by looking at a virtual desktop infrastructure (VDI) solution because many people think VDI is synonymous with desktop virtualization. However, desktop virtualization is so much more than VDI. To meet all your desktop virtualization requirements you need Citrix® FlexCast™ technology, a capability of XenDesktop with XenApp.

Through a single solution, FlexCast technology lets you deliver virtual desktops and applications tailored to meet the diverse performance, security and flexibility requirements of every worker in your organization, whether it's a traveling sales representative who needs offline access, a design engineer who requires high-performance computing resources, an employee working in a highly regulated industry or even a student using a computer lab. A VDI solution will only address a few of those user communities. FlexCast technology not only addresses the full range of desktop and application virtualization scenarios, but also provides a solution designed for user personalization, management efficiency and cost-effectiveness.

FlexCast technology offers various options for desktop virtualization including a server-based virtual desktop, also known as a hosted shared virtual desktop. In many cases, Citrix customers have found that a majority of their users' requirements for desktop virtualization can be met with a non-VDI solution: a hosted shared virtual desktop provided by XenApp. XenApp is a proven solution for delivering Windows® applications and desktops on demand.

This white paper describes the top 10 reasons why you should start your desktop virtualization technology search by considering a hosted shared desktop provided

by XenApp. A hosted shared virtual desktop can offer your user community all the flexibility and mobility benefits of desktop virtualization while IT administrator can reap the centralization, security and management efficiencies of XenApp.

The top 10 reasons

1. Lower hardware requirements

   In most cases, a single XenApp server, physical or virtual, can host 150-200 virtual desktop sessions1 by sharing computing resources and isolating each user session independently. In contrast, a VDI-only solution, where each user has a virtual machine (VM) with dedicated computing resources, requires up to 400 percent more servers than a XenApp hosted shared desktop solution leveraging shared server resources. When you assess the one-to-one user ratio of VDI with the many-to-one ratio of XenApp hosted shared virtual desktops, you can easily see why the server hardware requirements can be significantly lower. This is one reason why XenDesktop with XenApp is a widely adopted desktop virtualization solution in the industry.

2. Reduced storage costs

   Server hardware is only one facet of the larger desktop virtualization solution infrastructure; storage also plays a key role. For both hosted shared and VDI desktop deployment methods, a centralized image management technology should be used to accelerate image deployment and simplify management. This centralized management technology is important for any type of deployment at scale, given its optimizations to reduce the overall amount of high-performance shared storage required. Yet even for smaller deployments, the relationship of many users to one server provided by XenApp hosted shared desktops continues to prove beneficial in regards to both shared and local storage. When XenApp is paired with a central image delivery technology such as Citrix provisioning services, a single XenApp server instance typically requires only 15 GB of high-performance shared storage to support up to 200 user sessions. In contrast, each VM in a VDI solution requires an individual storage allocation, so the same 200 VDI users would need a total of 1,000 GB, or one terabyte, of high-performance local or shared storage. Overall, XenApp hosted shared desktops can dramatically simplify storage requirements and costs.

3. Simplified image management

   Centralized image management with Citrix technologies such as provisioning services is commonly associated with pooled VDI desktops provided by XenDesktop, given its ability to consolidate storage requirements and dramatically simplify desktop maintenance activities such as patching or updating. However, this same technology can also be applied to XenApp servers providing hosted shared desktops. Using provisioning services, available as a feature of XenApp, administrators can build a single server image, known as a vDisk, with all the requested applications, settings and policies. That single vDisk image can be provisioned on demand in a matter of minutes to any number of physical or virtual servers, guaranteeing a rapid and consistent server build across an entire XenApp farm. When it is time to update or patch the servers, provisioning services offers a simple management feature that allows you copy, test and update the vDisk in a few easy-to-follow steps. XenApp hosted shared desktops can leverage all the centralized image management features of a VDI solution, making them just as easy to manage and deploy.

4. Designing for the majority of users, not the minority

The first stage of any desktop virtualization project involves reviewing and assessing users' desktop computing requirements. With a VDI-only solution, you must design your entire desktop virtualization environment based on the requirements of a few of your most demanding users, which typically results in a one—size-fits-all virtual desktop. While this approach can reduce complexity, it dramatically drives up associated costs. Citrix has found that a majority of user computing needs can be met with a hosted shared virtual desktop provided by XenApp. VDI is the right choice for some users, particularly if they need dedicated computing resources (GPU, CPU, RAM or storage), are application developers who need to test code on a specific operating system or simply need administrative control of the desktop. Any user who does not fall into these categories can have all their desktop virtualization needs met with a XenApp hosted shared desktop. XenDesktop with FlexCast delivery technology is the only solution on the market that allows you to provide a hosted shared desktop to the majority of users while addressing the requirements of niche power users with a hosted VDI solution.

5. Delivering a Windows desktop experience even from a server operating system

Many businesses leverage a Windows XP or Windows 7 desktop for their everyday business applications. XenApp server-based virtual desktops leverage a Windows Server® operating system and you may have concerns that providing users an unfamiliar interface may require additional training or hinder adoption. With the release of Windows Server 2008, Microsoft introduced the desktop experience feature,[2] which allows you to install a variety of Windows 7 features and themes on your Windows 2008 R2 server. This feature allows you to transform a XenApp server-based virtual desktop into one that behaves like a Windows 7 desktop. Looking to the future, you can also transform Windows Server 2012 into a Windows 8 user experience. By pairing the mobility and security of desktop virtualization with a Windows desktop experience on a Windows server, XenApp delivers a best-in-class user experience.

6. Citrix license advantage

If you are one of the many Citrix customers already leveraging XenApp for application virtualization, you could easily virtualize the desktop of your XenApp server and begin delivering desktop virtualization to your organization today, without any modifications to licensing. Also, a XenDesktop with XenApp license is much more than just a license for accessing a virtual desktop or virtual application—the Platinum and Enterprise editions include a variety of features and benefits that provide your organization with a complete virtualization solution. One of the easiest-to-use features is Remote PC, which allows you to turn any physical desktop into a virtual desktop and provide users with mobile access. Other features include Citrix® Branch Repeater® VPX™ for WAN acceleration and optimization of all traffic between a branch office and the datacenter, Citrix Access Gateway™ for secure access to virtual desktops and Citrix® XenServer®, a type I hypervisor technology with advanced resource optimizing features. Desktop virtualization with XenApp is the most cost-effective enterprise solution in the marketplace, but a XenDesktop with XenApp license gives you a robust feature set that extends the cost savings beyond those of any other desktop virtualization solution on the market.

7. Leverage your existing XenApp knowledge and experience

A new implementation of a VDI-only solution typically requires detailed analysis of existing use case scenarios, thorough hardware and storage sizing, upfront capital investment and in some cases, a new data recovery or high-availability process. VDI does make sense in specific use cases and if these scenarios are part of the strategy, the IT organization will need to invest in these activities. However, many organizations already have XenApp knowledge and experience. Over 98 percent of all Fortune 500 companies currently have XenApp deployed for application virtualization. Over 70 million users connect to a virtualized application running on a XenApp server for their day-to-day business activities. Your IT organization and user community likely already have XenApp training, design guidance or management processes in place. Publishing a hosted shared virtual desktop is not much different from virtualizing and publishing an application on XenApp, which your IT organization probably is already very familiar with. So it is easy to get started with desktop virtualization by leveraging the investment in knowledge and experience you have today.

8. HDX technology for exceptional user experience

A XenApp server-based virtual desktop offers much more than remote access to a server interface. Citrix® HDX™ technology is a key differentiator that provides the highest-definition user experience available for application and desktop virtualization. HDX technology, included with XenApp, is not a single feature or optimization, but rather an aggregate of individual technologies that have been perfected by Citrix over 25 years. As a whole, HDX technology can dynamically evaluate the user device, network connection and destination to tweak configurations on the fly, providing the best user experience possible without any modifications by the administrator or user. For example, to obtain the highest quality of voice and video data UDP/RTP is recommended, whereas content caching over a WAN typically works best with TCP/IP. HDX technology can dynamically assess and evaluate data streams to associate content with the correct protocol and deliver the best experience possible without any tweaking or configuration changes. This is just one example of how HDX technology can deliver the best user experience for your desktop virtualization deployment.

9. Enhanced mobility with Citrix Receiver™

Users are demanding greater mobility and the ability to use personal devices for work tasks (bring your own). Desktop virtualization solutions that restrict users to one type of device or operating system have been shown to dramatically reduce their adoption and satisfaction. Citrix Receiver makes it easier than ever to support user demands for freedom and choice. This easy-to-use client allows users to connect to their XenApp server-based virtual desktop from any device over any type of network connection. By pairing unique features such as the XenApp Mobility Pack with Citrix Receiver, the user can leverage the native device features of a tablet within the virtual desktop, making a Windows desktop easy to navigate on devices that do not provide keyboard functions and right-click mouse buttons. Citrix Receiver is a free, publicly available download from the Citrix website, making it easy for users to self-service configure their BYO devices for desktop virtualization with XenApp.

10. Citrix market leadership and innovation

For 25 years, the focus of the Citrix core business model has been perfecting application and desktop virtualization. XenDesktop with XenApp is the most mature and feature-rich solution on the market. Citrix has achieved market leadership in desktop and application virtualization, as noted by the analyst industry[3], awards and product recognition[4], while continuing to innovate with networking, cloud and data management features that expand and enhance our comprehensive desktop virtualization offering. Desktop and application virtualization is the cornerstone of the Citrix product stack, so you can have confidence that Citrix is as invested in desktop virtualization as you are.

XenApp hosted shared desktops represent just one of the desktop virtualization models Citrix offers via FlexCast technology. These include hosted VDI desktops with our personal vDisk technology, Citrix XenClient for offline mobility and client-level virtualization, our simple-to-use VDI-in-a Box appliance for small to medium business environments, Remote PC for converting local laptops to a teleworking solution and traditional application virtualization with XenApp. With these Citrix desktop virtualization solutions you can meet your organization's desktop and application virtualization needs for today, tomorrow and beyond.

1. http://support.citrix.com/article/CTX132038 [Citrix Knowledge Center, XenDesktop Planning Guide – FlexCast]
2. http://technet.microsoft.com/en-us/library/cc772567.aspx [Microsoft Server, Desktop Experience Overview]
3. SOURCE: IDC MarketScape: Worldwide Client Virtualization 2012 Vendor Analysis, by Brett Waldman and Iris Feng, November, 2012, IDC #237735
4. http://www.citrix.com/news/awards-and-reviews.html

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About Citrix

Citrix (NASDAQ:CTXS) is the company transforming how people, businesses and IT work and collaborate in the cloud era. With market-leading cloud, collaboration, networking and virtualization technologies, Citrix powers mobile workstyles and cloud services, making complex enterprise IT simpler and more accessible for 260,000 enterprises. Citrix touches 75 percent of Internet users each day and partners with more than 10,000 companies in 100 countries. Annual revenue in 2011 was $2.21 billion. Learn more at www.citrix.com.