Secure App Delivery for Today’s Mobile-Ready Campus

How XenApp dramatically simplifies data protection, access control and other critical security tasks.
Mobility is transforming education. Students, faculty and staff already rely extensively on consumer technologies and anywhere, anytime access to applications and data for personal use. Now they expect the same kind of convenience and productivity on campus as well. As the institution’s IT organization seeks to make resources available on mobile devices, though, they encounter numerous challenges, beginning with the delivery on tablets and smartphones of Windows®-based education and business apps designed for a keyboard and mouse interface. With multiple mobile platforms to support and new types of devices continually entering the environment, application development on native device operating systems simply isn’t practical or cost-effective. IT must also find a way to extend application access to mobile devices while adhering to their institution’s information security guidelines.

This white paper discusses an approach to empower full mobility and productivity for users at educational institutions. With Citrix® XenApp®, campus IT can streamline the delivery Windows applications and data securely, with a like-native experience, on any device, anywhere students, faculty and staff choose to teach, learn and work.

Delivering the applications students need, the way they need them

When students, teachers and administrators need to get work done, it’s all about the applications. In less mobile times, campus IT could simply deploy Windows applications on desktop computers to provide constituents with all the tools their learning and productivity depended on. Now, however, the devices students and faculty use come in more shapes and platforms than ever. For IT, the challenge is to make applications available on every endpoint people use while maintaining security, manageability and IT efficiency.

Your institution and school has invested vast resources procuring and developing Windows applications to support every aspect of student and staff work. now, you need a simple, efficient way to mobilize them. That means addressing challenges in several areas.

Development – Mobilizing the huge number of Windows applications in your environment would be challenging enough if you only had to do it for one platform—but as bring-your-own device (BYOD) becomes the norm, you need to ensure full compatibility with a proliferating variety of device types and mobile operating systems. To enable full productivity, you need to provide constituents with a native mobile-like experience with Windows applications, including touch-screen inputs and an interface optimized for smaller displays. You also need to ensure that

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1 Audience Survey on Technology in Higher Ed, University Business, June 2014
the custom applications you develop in the future will be fully mobile, accessible and optimized for any-device productivity.

**Management and delivery** – Mobility is supposed to enable seamless, convenient access across devices and locations—not confuse people with multiple methods for accessing the latest applications depending on the type of application or device they’re using. IT needs a single, unified channel to make the full range of applications available on any device people choose.

**Security** – While some types of information need to remain secure in the datacenter to meet compliance or risk management mandates, other types, such as Microsoft Exchange account data used to access email through a local client, can be allowed to reside on mobile devices for offline use—provided it can be stored securely. Your mobility strategy should provide the flexibility to handle different types of mobile data differently.

**Constituent experience** – Windows applications were designed to run best in a traditional enterprise environment—not on mobile devices where packets may have to travel over mobile networks and connections of varying quality to reach the datacenter. Poor Windows application performance on mobile devices can quickly disillusion users about the effectiveness of your mobility strategy.

**Mobilizing Windows applications with Citrix XenApp**

The Windows applications used on campus support a wide variety of business and learning processes and use cases. While they share certain core attributes, such as a robust user interface to interact with large data sets and the need for an available network connection between the client and a back-end database, they may call for different approaches to delivery. A business app used by an administrator, a design suite used by a student and an ERP platform used by a facilities worker place different demands on system resources; the network being used has implications as well.

Citrix XenApp is a flexible, on-demand application delivery platform that can dynamically select the best delivery method based on the user, application and network. Depending upon the delivery method, IT departments can host applications in the datacenter or centralized on virtual machines, and deliver apps via a high-speed protocol to any endpoint. XenApp is based on Remote Desktop Shared Hosted (RDSH) technology, where multiple user sessions share the applications and resources of a single Windows server instance.

XenApp has long played a key role in many educational institutions by enabling on-demand delivery of centrally managed applications to any computer students, faculty and staff use. Now, as mobility and BYOD bring new requirements for IT, XenApp helps institutions transform their application environment to let users access the applications they need on any type of device—including their own personal tablets and smartphones.

**Mobilize Windows-based enterprise applications**

XenApp makes it simple to mobilize Windows applications for use on smartphones and tablets. Instead of writing new mobile versions of your applications, you can use Citrix HDX™ Mobile technologies to tweak their interfaces to act like native mobile apps on mobile devices—without having to touch their back-end code. An optimized mobile look and feel includes a touch interface, multi-touch gestures, native menu controls, camera and
GPS support. A smaller subset of functions fits mobile use cases more efficiently than the full version. By using a single, centrally managed application to support users on any type of device—desktop, laptop, thin client, tablet or smartphone—you can dramatically reduce development cycles while making new applications available in every usage scenario simultaneously.

**Simplify application management and delivery on any device**
For your students, faculty and staff, XenApp makes accessing Windows applications on mobile devices as easy as it would be on a traditional computer. Citrix Receiver™ provides a single point of access to every kind of application in your environment—including Windows as well as native mobile apps—on any kind of device.

**Secure sensitive student and research data while allowing user flexibility**
Instead of transferring data to the device, as mobile apps do, XenApp provides remote access to centrally managed content. Although devices—and the people who use them—are mobile, the data itself stays secure and protected within the datacenter.

Ensure a native-like user experience for mobilized Windows applications
Because a XenApp-powered Windows application runs in the datacenter, alongside its database, it delivers better performance than a locally installed mobile app sending queries across mobile networks. XenApp further enhances the performance of Windows applications accessed on mobile devices by intelligently coping with the variability and packet loss of mobile networks and improving graphics and multimedia with hardware acceleration on tablets and smartphones.

**Conclusion**
Citrix XenApp transforms education IT to help institutions deliver the fully modern, mobile experience students, faculty and staff now expect. Providing complete tools to securely mobilize any Windows application with an optimal experience on any type of device, XenApp gives users the freedom to work, teach and learn wherever they can be most productive.

**Additional Resources**
- **How to Mobilize Windows Apps with HDX Mobile** (3:21 minutes)
- **Secure by Design**
- Learn more about XenApp

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**About Citrix**
Citrix (NASDAQ:CTXS) is a leader in mobile workspaces, providing virtualization, mobility management, networking and cloud services to enable new ways to work better. Citrix solutions power business mobility through secure, personal workspaces that provide people with instant access to apps, desktops, data and communications on any device, over any network and cloud. This year Citrix is celebrating 25 years of innovation, making IT simpler and people more productive. With annual revenue in 2013 of $2.9 billion, Citrix solutions are in use at more than 330,000 organizations and by over 100 million users globally. Learn more at www.citrix.com.

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