Secure application delivery for a mobile workforce

Empowering people to use any application on any type of device—with full security

Mobility has given people the freedom to work anywhere, at any time—but it has also brought endless complications to IT. Instead of relying solely on Windows applications running on Windows-based devices, people now use native mobile and web apps for work as well, and they need access to all of these types of apps on any type of device, from Windows and Mac laptops to tablets and smartphones.
While Windows and web apps have been used for some time, native mobile apps have introduced user experience challenges. Why? Because mobile apps distance the client from the back-end database, introducing user experience challenges—as does the tendency of mobile apps to work differently on different mobile platforms. Application management and delivery has become more complex as well; how do you get the latest applications to mobile employees on all their devices? As people roam across locations and devices, can you ensure strict security for the most sensitive enterprise content, while allowing more flexibility for less sensitive data?

Citrix Workspace Suite™ empowers new levels of enterprise mobility and productivity by providing a streamlined way to deliver Windows, native mobile and web applications and data securely on any device, anywhere people choose to work, with a great user experience. Providing a complete, mobile workspace solution, Citrix Workspace Suite lets IT support any device people choose—corporate-owned or personal—as well as the applications and data they use.

**Delivering the applications people need, the way they need them**

When people need to get work done, it’s all about the applications. In less mobile times, IT could simply deploy enterprise applications on desktop computers to provide people with the productivity tools they depended on. Now enterprise applications are only part of the picture—and the devices people use come in more shapes and platforms than ever. To address the broader requirements of today’s mobile workforce, it’s important to begin with a clear understanding of the evolving application landscape.

**Traditional enterprise (Windows) applications** still play a vital role in most organizations. While they support a variety of business processes and use cases, they also share certain core attributes. Built for a Windows operating system, they provide a broad set of functionality and a robust user interface to support interactions with large data sets—often including highly sensitive business information. While some applications, such as the Microsoft Office suite, run natively on a Windows device, other enterprise applications require an available network connection between the client and a back-end database. Typically these networked applications are powerful, mission-critical applications that drive the business, such as SAP and Siebel.

**Web apps** are becoming increasingly popular as organizations look to implement applications that are available from anywhere, on any device. These apps run in a web browser or are created in a browser-supported programming language and rely on a common web browser to render the application. The primary benefit to web apps are the ability to
update and maintain these apps without distributing and installing software to all the devices in the environment as well as the inherent support for any device or operating system. Like traditional enterprise applications, they require an available network connection between the browser and application hosted by the provider. Applications that fall into this category are apps such as SalesForce.com and Microsoft Outlook Web Access.

**Enterprise mobile apps** are enterprise applications designed to run on mobile devices such as tablets and smartphones—but their distinctions from traditional apps go further. Enterprise mobile apps often exist in multiple versions, each built for a different mobile platform such as Apple iOS or Google Android. Smaller than enterprise applications, they offer more narrowly defined functionality and manipulate a limited set of data. Instead of offering a sprawling, Windows-style interface, they are optimized for a small screen, with quick access to the most popular functions. Touch-screen controls take the place of track pad or two-button mouse inputs. Usually lightweight in design, an enterprise mobile app either pulls a small data set across the mobile network to the mobile device or sends commands over the mobile network to a backend database. Depending on how it handles data, a mobile app may also be usable offline.

Enterprise mobile apps come in three forms:

- **Mobilized Windows applications** – versions of traditional enterprise applications adapted by IT for use on mobile devices
- **Native mobile apps** – apps built, often by third party vendors, explicitly and exclusively for use on mobile platforms
- **Web apps** – apps that are inherently mobile as they are built to run with any browser on any device

To enable full enterprise mobility, IT needs to be able to mobilize Windows apps securely and efficiently—as well as to secure native mobile and web apps for use within the enterprise.

**Mobilizing Windows applications with Citrix Workspace Suite**

Your organization has invested vast resources procuring and developing Windows applications to support every aspect of your business; 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 an ever increasing variety of device types and mobile operating systems. To enable full productivity, you need to give people a native mobile-like experience for their Windows applications, including touch-screen inputs and an interface optimized for smaller displays. You also need to ensure that 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 store to make the full range of applications available on any device people choose.
- **Security** – While some types of information needs 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.

• **User 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.

Citrix® XenApp®, an application virtualization solution, helped power the last transformation of IT by enabling on-demand delivery of centrally managed applications to any computer in the enterprise. Now, as mobility and BYOD bring new requirements for IT, Citrix Workspace Suite helps enterprises transform their application environment once more to let people access the applications they need on any type of device—including their own personal tablets and smartphones.

**Mobilize Windows-based enterprise applications**

Citrix Workspace Suite makes it simple to mobilize Windows applications for use on smartphones and tablets. Instead of writing new mobile versions of your enterprise applications, you can use the Mobile SDK for Windows Apps to tweak their interfaces so they 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-fledged enterprise application 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 workforce, Citrix Workspace Suite makes accessing Windows applications on mobile devices as easy as it would be on a traditional computer. Using a universal client, people get self-service access to every kind of application in your environment—Windows, native mobile and web—on any kind of device.

**Secure sensitive data while allowing user flexibility**

Instead of transferring data to the device, as mobile apps do, Citrix Workspace Suite 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**

With Citrix Workspace Suite, Windows applications run in the datacenter, alongside their databases. This delivers better performance than a locally installed mobile app sending queries across mobile networks. The suite 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.
Managing, securing and deploying native mobile and web apps with Citrix Workspace Suite

We know Citrix Workspace Suite provides a simple and efficient solution to mobilize Windows applications—but what about native mobile and web apps? These aren’t just wildly popular with consumers; they’re quickly catching on in the enterprise as well. As lines between corporate and consumer technology continue to blur, people may prefer—or insist on—using an increasing variety of apps on a variety of different devices. To allow people to work more productively, IT needs a way to enforce enterprise security for any kind of app, as well as its data, on any kind of device. This means ensuring the security of the device itself: has it been jailbroken? What password protections have been applied? Can local enterprise data be protected effectively?

Citrix Workspace Suite provides a single, unified solution to support your enterprise mobility strategy by complementing the Windows application mobilization with capabilities to manage, secure and deploy native mobile and web apps.

Security – Citrix Workspace Suite enhances security for any native mobile or web app by letting you apply more than 60 different policies, including passwords, PINs, camera disablement and more, without disrupting the apps’ native code. For native mobile apps, a micro-VPN connects the mobile app to the back-end database for secure data access. For web apps, single sign-on capabilities connect people to their apps instantly for a simplified user experience. For any data transferred to the mobile device as permitted by policy, the solution allows full encryption at rest and in motion. Enterprise mobile apps can be containerized to separate them from personal apps on the same device and prevent data transfer. Comprehensive mobile device management (MDM) features let you enforce password protection, restrict corporate network access from jailbroken devices and lock or wipe data selectively on lost or stolen devices.

User experience – In the past, mobile workers often carried two different smartphones: a corporate-owned device provisioned and locked-down by IT and another device for personal use with all their favorite apps. With Citrix Workspace Suite, people can experience the best of both worlds, using the same device for both work and personal life. IT can fully control and secure enterprise apps and data on the device without interfering with personal content. In the event of device loss or theft, remote lock and wipe capabilities let IT selectively wipe business content on BYOD devices while leaving personal data and apps untouched.

Citrix Workspace Suite provides a single, integrated solution to mobilize your workforce and enable BYOD.

Management – Secure device push and wipe processes make it much simpler to provision and remove apps from mobile devices. IT can push a set of enterprise mobile apps to any device to fully equip a new BYO device or to speed on-boarding for a new employee without the need to navigate an app store and download them one by one. When an employee leaves the company, IT can remotely wipe all enterprise content from the device without touching any personal apps or data it contains.
Conclusion
Citrix Workspace Suite enables mobility by supporting people’s requirements to get their work done wherever they can be most productive. It provides a complete mobile workspace solution that delivers secure access to apps, data and services from any device. This powerful solution can securely mobilize any Windows application to provide an optimal experience on any type of device while at the same time can manage, secure and deploy native mobile and web apps—through the same, integrated solution. Designed to help people become as productive as possible, the solution empowers mobile workers with freedom and flexibility to choose how they work without compromising on security.

For more information
Citrix Workspace Suite