

Enterprise mobility management: Embracing BYOD through secure app and data delivery

Why Citrix XenMobile
is the best approach



Introduction

The transformation of computing through mobility, consumerization, bring-your-own device (BYOD) and flex-work offers powerful benefits for today's organizations—but it poses significant challenges for IT. These trends make it possible to increase business agility, individual productivity and job satisfaction by freeing people to choose the best time, place and device to get their work done. To allow this flexibility, though, IT must be able to secure apps and data on a potentially unlimited variety of devices, over any kind of network, in any location—even when the same devices likely also contain personal apps and data.

Given the paramount importance of security in IT's mission, the natural instinct may be to try to limit peoples' choice of devices or otherwise constrain the endpoint environment, even if it means sacrificing the benefits of greater productivity and flexibility. But simply barring the door to consumer device usage and BYOD is neither realistic nor desirable—it is inevitable that IT will face increasing pressure to provide access to any kind of app, anywhere, on any type of device. Simply put, IT has no choice but to enable and support consumer devices and BYOD; the only remaining question is how.

The first response of many IT organizations to the influx of consumer-grade and employee-owned mobile devices has been to lock down and control every mobile device in the enterprise through mobile device management (MDM) solutions. MDM solutions can be highly effective for protecting sensitive business information, controlling the mobile apps that can be used, wiping lost or stolen devices remotely and other essential functions. As mobile device types, operating systems and apps proliferate, most IT organizations with MDM find that they're forced to impose limits on the mobile apps available on employee-owned devices to avoid rising security risks and management complexity. Other types of apps, including Windows®, web and SaaS, remain unavailable, limiting mobile productivity. While suitable for many types of workers, many MDM solutions were not built with the flexibility to address diverse use cases in different ways based on individual requirements for security, compliance and mobile functionality. As a result, organizations are adopting a new approach in which MDM is only one component of a more comprehensive set of capabilities through which IT can manage not only the devices themselves, but also their apps and data. This is called enterprise mobility management (EMM) and it's playing an increasingly central role in the new era of IT.

The challenge: A diversifying enterprise computing environment

Consumerization has blurred the lines between work and personal life—especially when it comes to mobile devices. Executives and next-generation knowledge workers now typically buy smartphones and tablets for their own personal use and don't see any reason why they shouldn't be able to use them for work as well. After all, in today's business environment work is a thing you do, not a place you go, and it can happen anywhere at any time of day or night. The focus is on productivity, not on abstract notions of ownership or IT standards. Indeed, 67 percent of the people who use a smartphone for work—and 70 percent of those who use a tablet for work are choosing the device themselves—not necessarily thinking about whether their enterprise will support it.¹ They have become comfortable using the device in multiple settings, and the distance between personal use and recognizing its potential for getting work done is negligible.

¹ Forrsights Workforce Employee Survey, Q2 2012, Forrester Research, Inc., 2012.

This isn't a bad thing, of course; any business would want its workforce to be thinking about ways to be more productive and effective. But the scale of consumerization can be daunting for the IT organization. According to Forrester Research, two-thirds of tablets in 2016 will be sold to individuals, many of whom will take them to work.²

Without IT playing its customary role in enforcing standardization, the mobile devices flooding into the workplace come in all varieties: not just Apple iOS® and Google Android®, but also proprietary third-party Android and Microsoft® Windows® platforms. How can IT hope to secure and control the full diversity of mobile devices, even as new varieties continue to come to market—without limiting its flexibility over the types of apps people can use, or the ways diverse use cases are supported? The key is to deploy a complete EMM solution with comprehensive capabilities to secure and control not only devices, but also the apps and data they contain.

Mobile device management: An important step toward secure BYOD

For organizations seeking to get control over the consumer devices in their environment and the way they are used, MDM can be an important step. Citrix provides this capability through Citrix XenMobile MDM, which provides role-based management, configuration and security for business and employee-owned devices throughout the device lifecycle. IT can enroll and manage any device, detect jailbroken devices and perform a full or selective wipe of a device that is out of compliance, lost, stolen or belongs to a departed employee. Application security is ensured through secure application access via app tunnels, blacklisting, whitelisting and dynamic, context-aware policies. Network security capabilities provide visibility into and protection against internal and external mobile threats; blocking of rogue devices, unauthorized users and non-compliant apps; and integration with security information and event management (SIEM) systems. As a result, IT can provide people with the freedom to choose the devices they want to use while ensuring compliance requirements are met and business information on the device is secured.

As effective as MDM can be, it is only one component of a complete strategy for securing consumer devices used for business. Many mobile apps can introduce unacceptable security gaps, such as those which move or store data via third-party clouds. Simply blacklisting these apps for all users would limit the capabilities available in the enterprise; a better approach would be to focus on controlling the way the data within these apps is secured, stored and used, enabling IT to allow them for select use cases. More fundamentally, mobile apps are only one element of the mobile workstyles people embrace today. To unlock the full benefits of user mobility, IT needs the flexibility to be able to deliver any type of app—mobile, web, Windows or SaaS—on any type of device, with full security and compliance for the enterprise and a convenient, productive experience for users. Without access to these capabilities, MDM becomes just another point solution in an increasingly complex and unmanageable mobile infrastructure.

² Tablets Will Rule the Future Personal Computing Landscape, Forrester Research, Inc., April 23, 2012.

Moving beyond MDM: Enterprise mobility management

As a leader in mobility, Citrix has developed a new approach to empower people to use their choice of mobile devices while maintaining effective security and control over corporate apps and data. Most Citrix customers have already used solutions such as Citrix XenDesktop, Citrix XenApp and Citrix NetScaler to support mobile users and remote use cases because of the device-agnostic technology that allows Windows-based apps to be delivered to any device, anywhere, for all users. Now Citrix has leveraged this expertise and proven technology into a full enterprise mobility management offering that allows IT to deliver all applications—including web, SaaS, mobile and Windows—as well as data to any type of device.

The essence of the Citrix approach for enterprise mobility management is simple: enable IT to manage not only devices, but also the apps and data—all through a single-vendor offering. Citrix delivers EMM through Citrix XenMobile™, which is designed to radically simplify the delivery and management of apps, data and IT services. XenMobile allows IT to create a secure container on any device to ensure that corporate applications and data are isolated from personal content. This container enables full control over all the business content via both automated usage policies and direct administrative actions while delivering a rich, native user experience. All content within the secure container can be remotely locked and can also be wiped as needed to support regulatory compliance requirements. These features allow IT to secure and protect corporate content even when the organization does not own the device. XenMobile includes Citrix MDX Technologies™, which securely deliver native iOS, Android and mobile web applications within a secure container, while also providing the best mobile device experience for users and full control for IT. MDX Technologies include:

- **MDX Vault** – MDX Vault separates corporate mobile apps and data from personal apps on mobile devices in a secure business container. Using MDX Vault, IT is able to manage and control native mobile business apps and data, instead of managing an employee's device. The business apps in MDX Vault can be secured with encryption and mobile DLP technologies and can be remotely locked and wiped by IT.
- **MDX Interapp** – MDX Interapp ensures that all MDX-enabled apps can interact with each other for a seamless experience. With MDX Interapp, MDX-enabled apps are integrated so that these apps only open other MDX-enabled apps; for example, a link clicked in the Citrix @WorkMail email app automatically opens the Citrix @WorkWeb mobile browser, not Safari. In addition, MDX Interapp controls the communications between apps so that IT can enforce policies around activities such as cut-and-paste between apps—for example, allowing cut-and-paste between MDX-enabled apps but not to apps not protected by MDX, or by preventing use of a camera when using a specific MDX-enabled app.
- **MDX Access** – MDX Access provides granular policy-based management and access controls over all native and HTML5 mobile apps. IT can centrally control and configure policies specific to mobile apps such as the type of device or network that is being used, the device passcode, or upon detection of a jailbroken device. MDX Access also provides the industry's first application-specific VPN access into a company's internal network. Using a micro VPN allows businesses

to not require a device-wide VPN that can compromise security. Instead, an app-specific VPN tunnel gets created for the mobile and web apps accessing a company's internal network remotely.

From an IT management perspective, scenario-based controls and identity-based provisioning help IT maintain security and control whenever, wherever and on whatever device people use to access corporate apps and data—regardless of platform. XenMobile leverages existing corporate directory and authentication systems to provision, deliver and control usage of mobile, intranet, web, SaaS and Windows apps and data based on user identity and role as well as endpoint analysis. IT can instantly provision all of a user's applications and data as soon as the person is added to Active Directory. Conversely, IT can immediately prevent access by specific users by disabling them or removing them from the directory system and closing their accounts.

The organizational benefits of enterprise mobility management are compelling, but there are significant advantages from the user's perspective as well. For example, XenMobile makes it easy for IT to implement a unified app store, a growing trend that helps businesses achieve greater application ROI and mitigate security risks. At the same time, the user-centric design of the app store has a unique focus on quality of experience and provides instant access to apps and data through a beautiful user interface. Follow-me apps and data can be accessed from any device at any time for seamless productivity across usage scenarios. Single sign-on to apps enhances convenience and speeds time to productivity. In this way people are not only permitted to use the device of their choice for work; they are empowered with capabilities to achieve even greater productivity, efficiency and enjoyment as they do so.

Enterprise mobility management in the real world

Citrix customers are already leveraging XenMobile to solve mobile management challenges and empower people to leverage the full diversity of mobile devices.

A large **financial services company** uses XenMobile to support a complete mobile strategy. The organization has replaced multiple point solutions for enterprise mobility with a standard, unified management platform for all apps and devices, including mobile. The company-wide mobile app suite incorporates MDX Access to provide access to intranet-based apps based on security level, geography and business unit. Native mobile apps are delivered into a secure container to maintain separation between business apps and data and the worker's personal content. With this complete enterprise mobility management platform in place, the company has introduced BYOD for over 20,000 employees while mobilizing hundreds of disparate apps.

Healthcare organizations are enabling BYOD for doctors and clinicians to bring their own devices so they can be fully productive on their mobile devices anywhere, anytime—for example, accessing patient records on a tablet while making rounds, viewing real-time monitoring data on a smartphone while traveling or joining in online consultations from a remote facility. By ensuring that the appropriate level of access to apps and data is granted for each scenario and that all clinical and patient data is secured and can be remotely locked or wiped, the solution supports regulatory compliance requirements.

A **retailer** with 70 supermarkets has used XenMobile to change the way it delivers IT services throughout its stores to enable BYOD, centralize service and control IT costs. The Citrix solution makes it possible to provide differentiated service to different types of locations; small franchise stores receive basic SaaS apps such as Google Apps® while large corporate stores receive higher-end cloud-based apps such as Microsoft Office® 365. All stores also get a corporate standard point-of-sale package. Users can access their apps on any device, including their own personal consumer devices.

A **transportation and logistics** organization uses XenMobile to allow secure BYOD for third-party contractors and 15,000 partners while providing differentiated service based on partner and geography. Oil and gas customers are rapidly developing native mobile apps and deploying mobile devices for field workers. One company reports that “the unified app store is the only solution we’ve found for effectively delivering the new mobile apps alongside corporate intranet web apps, virtual apps and SaaS apps.”

In **transportation**, enterprises use XenMobile to mobilize assembly line operators and create a secure partner exchange for suppliers. Internal and third-party users can now access apps through a unified environment across the entire value chain, including inbound suppliers, operations, outbound logistics, marketing and sales and delivery.

Telecom customers are creating new revenue-generating services in mobile app and data delivery aligned with their mobile device and voice/data service business.

Additional customers spanning industries from **media and entertainment to construction** are also using XenMobile to mobilize their data, illustrating the need for organizations of all kinds to embrace enterprise mobility management and the unique effectiveness of the Citrix solution for supporting this strategy.

Conclusion

BYOD isn’t just a trend; it’s an important new model for allowing people to choose the best way to work, including full mobility and productivity on their choice of device. In this new mobile enterprise, managing devices is only one element of a complete strategy; MDM solutions need to be complemented with more complete capabilities for delivering, securing and controlling the full range of apps people rely on for work. Now with Citrix XenMobile, a complete enterprise mobility management solution, IT can easily manage the ever-expanding diversity of mobile devices and platforms and expand their value by focusing on managing business content. Through this simple yet comprehensive approach, IT can meet its requirements for security and control while allowing full freedom of choice and a more convenient, productive experience for people. Providing the industry’s most complete and user-centric approach for mobility, along with secure file sharing and collaboration tools, Citrix is helping organizations across industries and around the globe realize the full benefits of BYOD.

Additional resources**Website:** www.citrix.com/xenmobile**White paper:** The 10 “must haves” for secure enterprise mobility**White paper:** Taking your enterprise mobile: The executive checklist**Corporate Headquarters**
Fort Lauderdale, FL, USA**India Development Center**
Bangalore, India**Latin America Headquarters**
Coral Gables, FL, USA**Silicon Valley Headquarters**
Santa Clara, CA, USA**Online Division Headquarters**
Santa Barbara, CA, USA**UK Development Center**
Chalfont, United Kingdom**EMEA Headquarters**
Schaffhausen, Switzerland**Pacific Headquarters**
Hong Kong, China**About Citrix**

Citrix (NASDAQ:CTXS) is the cloud computing company that enables mobile workstyles—empowering people to work and collaborate from anywhere, accessing apps and data on any of the latest devices, as easily as they would in their own office—simply and securely. Citrix cloud computing solutions help IT and service providers build both private and public clouds—leveraging virtualization and networking technologies to deliver high-performance, elastic and cost-effective services for mobile workstyles. With market leading solutions for mobility, desktop virtualization, cloud networking, cloud platforms, collaboration, and data sharing, Citrix helps organizations of all sizes achieve the kind of speed and agility necessary to succeed in an increasingly mobile and dynamic world. Citrix products are in use at more than 260,000 organizations and by over 100 million users globally. Annual revenue in 2012 was \$2.59 billion. Learn more at www.citrix.com.

©2013 Citrix Systems, Inc. All rights reserved. Citrix, XenApp, XenDesktop, XenMobile, XenMobile MDM, ShareFile, Receiver and MDX Technologies are trademarks or registered trademarks of Citrix Systems, Inc. and/or one or more of its subsidiaries, and may be registered in the United States Patent and Trademark Office and in other countries. All other trademarks and registered trademarks are property of their respective owners.