

Productive and Secure Enterprise Mobility with Cisco and Citrix

**Cisco Mobile Workspace Solution with Citrix:
A Comprehensive Mobility Infrastructure Solution**



A Compelling Productivity Imperative

Modern workers increasingly see work not as a physical location, but as an activity, facilitated and made more productive by a dynamic choice of evolving mobile technologies. An ever-increasing array of laptops, tablets, and smartphones has fundamentally changed the ways people collaborate and communicate for work, raising new business expectations for productivity and streamlined operations. Though adopting enterprise mobility helps attract and enable talented workers, it can also present new concerns for IT departments.

Traditionally, employers provided access to necessary enterprise systems and productivity applications from desktop and laptop computers that were often the most advanced tools available to employees. With the explosion in the availability of consumer devices, however, employees now typically possess highly advanced productivity tools for their own personal use, and want to use them for work. Cloud delivery and new application models, are opening new opportunities for organizations to enhance productivity and competitive advantage through support of enterprise mobility.

While many IT departments initially resisted supporting mobile devices for work-related activities, doing so has become imperative, not just for employee productivity and satisfaction, but also for business growth and agility. Moreover, while mobile devices were initially the property of employees, many organizations now provide tablets and smartphones to their workforce, specifically to enhance productivity.

Mobile devices provide anywhere, anytime access to resources needed for productive work, along with a seemingly endless choice of hardware and software tools. Employees can enjoy the freedom to

select the right tool for the job, and the portability of applications, desktops, data, and communications tools, independent of platform and operating system. New productivity solutions are constantly improving the quality of the mobile experience and providing access to new kinds of rich media including video and collaboration.

Organizations of all kinds must come to terms with this new reality, whether supporting bring-your-own (BYO) devices or corporate-owned, personally enabled (COPE) devices. Many have attempted to accommodate this new class of mobile user on existing infrastructure, with less than desirable security, performance, and user experiences. Failing to address these critical requirements can present risks to the enterprise, hamper expansion of a mobile and productive workforce, and inhibit the organization's agility and competitiveness in the process.

Cisco Mobile Workspace Solution with Citrix

With a wealth of experience and expertise, Cisco and Citrix bring their industry-leading technologies together in a tested and validated enterprise mobility solution. Cisco Mobile Workspace Solution with Citrix presents an architectural approach that includes important integration for simplified deployment and operation. Building on this joint framework as mobility requirements emerge, organizations can be confident that their current and future mobility investments will result in positive business outcomes.

Addressing Key Mobility Challenges

Effective enterprise mobility solutions must honor seemingly contrasting goals. Infrastructure solutions must streamline delivery of applications, information,



and communications services to mobile devices to enhance user productivity and flexibility. At the same time, they must protect the fundamental interests of the organizations that deploy them.

From an end-user perspective, mobility infrastructure must enhance, rather than distract from, the benefits of mobile devices.

- **Simplifying access.** Effective mobility solutions need to be as simple as possible, presenting a consistent experience independent of location, and considerable similarity across device types.
- **Securely using personal devices for work.** Corporate data must remain safe from malware, loss, and theft, while privacy must be respected for personal data and apps.
- **Retaining productivity advantages.** If corporate security measures are too intrusive or cumbersome, they can quickly erase mobile productivity gains.

At the same time, IT departments also face significant issues in supporting enterprise mobility, including:

- **Security challenges.** To ensure corporate security IT departments must maintain secure access to the corporate network, protect data, and prevent data loss, all while enforcing company usage policies.
- **Operational challenges.** Operational challenges include supporting myriad devices and operating environments, facilitating rapid expansion and control of mobile applications, managing the mobile device life-cycle, and developing mobile apps both quickly and affordably.
- **Performance and user experience challenges.** In order to offer good performance and an optimal user experience, IT departments must maintain wireless LAN performance and reliability while delivering applications to mobile devices across any network—all while meeting user experience expectations.

Deploying Secure Mobile Infrastructure

To address these enterprise mobility challenges, Cisco and Citrix have collaborated to deliver a comprehensive mobility architecture and solution. The result of this collaboration promotes user experience and productivity along with simplified and secure IT infrastructure that is cost-effective to manage. Because enterprises have a broad range of users with different workstyles and application requirements, the Cisco® and Citrix enterprise mobility architecture is flexible and extensible to support different needs.

- **A comprehensive mobility infrastructure solution.** Cisco and Citrix recognize how combining their complementary mobility technologies helps IT simplify and accelerate their mobility initiatives. Cisco provides strengths as a leading computing, networking, and security provider with expertise in unified communications and collaboration. Citrix offers expertise and leadership in application and desktop virtualization as well as emerging mobile device management (MDM), mobile application management (MAM), and enterprise file sharing.
- **Optimizing the user experience.** The smooth and seamless operation of most modern mobile devices implies that users will have little patience for enterprise mobility solutions that are cumbersome or difficult to configure. Cisco Mobile Workspace Solution with Citrix creates a simplified and elegant user experience that features extensive self-service and automation. Users can easily onboard and provision multiple devices with network and application access, and can also easily de-provision or off-board applications as they switch or upgrade devices.
- **Simplified IT infrastructure and secure operations.** A combined approach allows IT to simplify the secure delivery of all application types, including native, web, hybrid, and virtual applications. In addition, the Citrix end-to-end application lifecycle approach allows IT to accelerate mobile application delivery aligned to security, user experience, and cost requirements. Technology integration (including Cisco ISE and XenMobile MDM integration) simplifies how organizations provide secure and seamless access and management for mobile devices.

Architecture Overview

Cisco and Citrix understand that creating effective mobile infrastructure requires a comprehensive and integrated solution that solves challenges up and down the technology stack. The end-to-end solution combines best-in-class technologies from both companies. This approach provides all of the components needed for a complete enterprise mobility infrastructure solution, taking complexity and cost out of the decision-making process, the design and deployment process, and ongoing operations.

The Cisco Mobile Workspace Solution with Citrix architecture (Figure 1) promotes business efficiency and agility through consistent, seamless, and highly secure access to any combination of virtualized, cloud-based, web, and native applications, as well as providing access to content and communications on any mobile device from any location. While comprehensive, the solution is modular and easily adaptable to existing infrastructure and specific mobility requirements.

- Core infrastructure.** The core infrastructure layer of the joint mobility architecture is designed to support and deliver the full range of applications and content required by mobile devices. It includes proven Cisco mobile networking technologies for securely connecting end-user devices as well as virtual data center and cloud technologies for hosting native, web, software-as-a-service (SaaS), virtual, and HTML5 applications and their associated data.
- Mobile policy.** The mobile policy layer helps maintain appropriate levels of security and access control, even as the architecture improves the experience for mobile users. Integration of Cisco Identity Services Engine (ISE) and Citrix XenMobile MDM brings considerable power to the Cisco Mobile Workspace Solution with Citrix. XenMobile delivers enterprise-grade MDM with role-based management, configuration, security, and support for both corporate-owned and employee-owned devices.

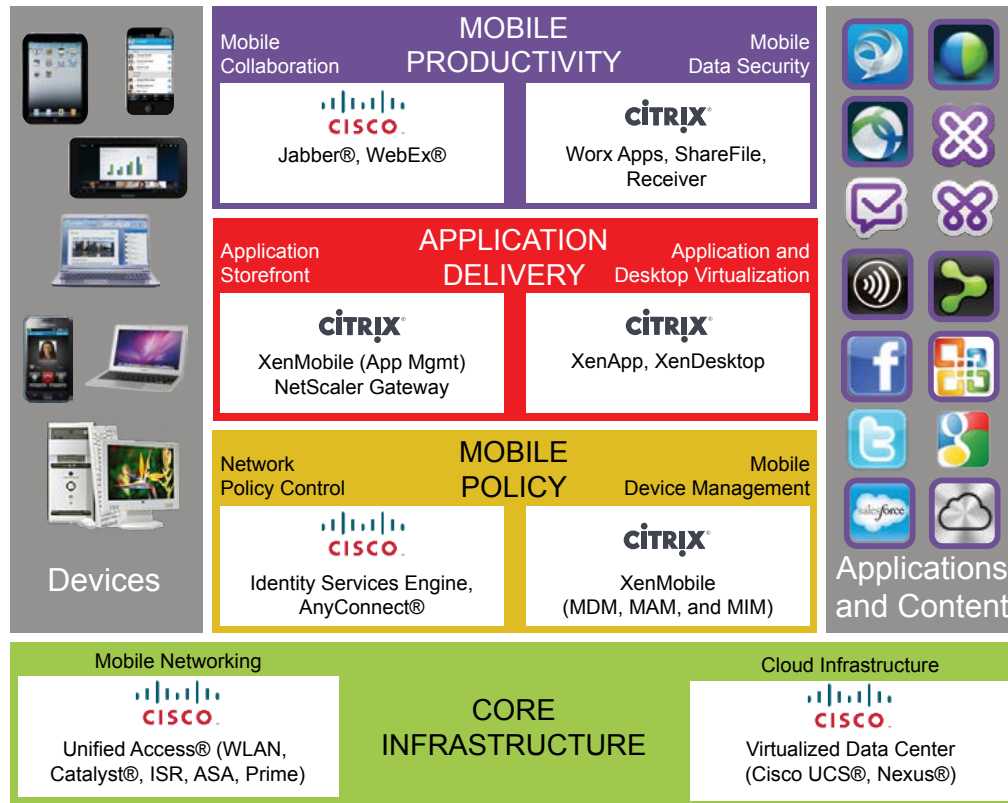


Figure 1. Cisco and Citrix Mobile Workspace provides a comprehensive architectural approach to enterprise mobility infrastructure, securely connecting users with the applications and content they need.

- Application delivery.** Citrix is in a unique position to deliver the entire mobile device ecosystem with a choice of native or virtual presentations to the device. Citrix can also deliver the complete mobile application lifecycle, from development, deployment, and management to access control and data protection, and ultimate removal of the application. XenMobile includes a unified corporate app store while Citrix XenDesktop transforms Microsoft Windows desktops and applications into an on-demand service. Citrix XenApp enables any Windows application to be virtualized, centralized, and managed in the datacenter and instantly delivered as a service.
- Mobile productivity.** Once people are connected and have appropriate access, they need tools that can make them productive. Cisco provides collaborative tools such as Cisco WebEx that help enable teams to be productive from anywhere, on any device. Citrix Worx Mobile Apps such as WorxMail, WorxWeb, and ShareFile allow separate and highly secure corporate information access and data sharing without affecting device privacy.

Successful adoption of mobile technology must be done at an organization’s preferred pace, and in the context of existing infrastructure. As a result Cisco Mobile Workspace Solution with Citrix allows implementation in distinct phases (Figure 2). Because the phases affect different areas of mobility infrastructure, organizations can take a measured and progressive approach to deployment.

Conclusion

Enterprise mobility now represents an irresistible technology shift that most organizations must embrace in order to survive and prosper in a competitive marketplace. Cisco Mobile Workspace Solution with Citrix provides a compelling and complete enterprise mobility infrastructure and roadmap. Technologies from both firms are carefully combined into a comprehensive solution stack to minimize the time, cost, and risk of deploying mobility infrastructure in the enterprise.

For more information on Cisco Mobile Workspace Solution with Citrix, please visit cisco.com/go/byod and citrix.com/cisco.

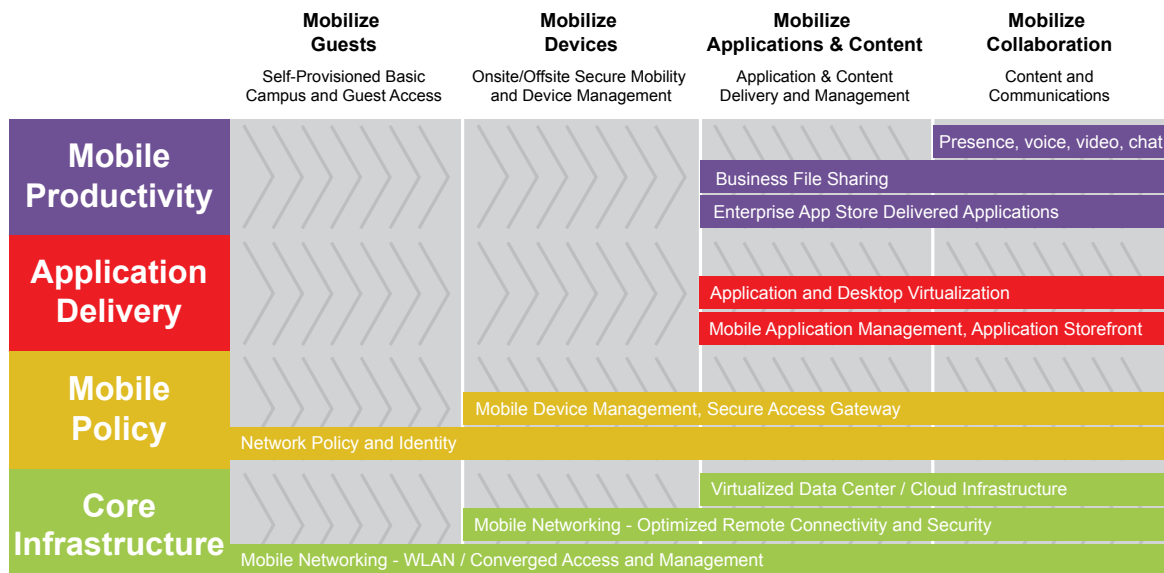


Figure 2. Cisco Mobile Workspace offers a phased approach to mobility infrastructure adoption.



©2013 Citrix Systems, Inc. and Cisco Systems, Inc. All rights reserved. Citrix, XenMobile, XenApp, XenDesktop, Worx, WorxMail, WorxWeb, NetScaler Gateway, Citrix Receiver and ShareFile 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.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)



©2014 Citrix Systems, Inc. and Cisco Systems, Inc. All rights reserved. Citrix®, Citrix Receiver™, Citrix® CloudGateway™, Citrix ShareFile™, HDX™ and Citrix® XenDesktop® 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.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)