



The Cisco Mobile Workspace Solution: A Whole New Level of Employee Mobility

BENEFITS

- Increase workforce agility as application, mobile device, and use case needs grow and evolve.
- Simplify IT management with integrated on-premise or cloudmanaged solutions for deploying and managing mobility environments.
- Maximize mobile security through seamless integration of mobile device management, network infrastructure and security.
- Boost employee productivity by optimizing the complete mobile user experience

Imagine what your employees could achieve with a mobile workspace. All the applications, data, communications, and services they need to be productive, anywhere, anytime. All delivered to any device in the office, at home, or on the go. Move beyond simple mobile access and discover the benefits of a completely empowered mobile workforce.

While few of us are completely abandoning our laptops or desktops anytime soon, most of us increasingly rely on smartphones and tablets for work-related activities. As more companies implement corporate-liable or bring-your-own-device (BYOD) initiatives to give workers mobile access to

basic messaging and communications, they're discovering there is still a lot of unrealized potential. Now a new concept is emerging, one that goes beyond simple mobility to enable a full-blown mobile workspace. With the Cisco[®] Mobile Workspace Solution, employees can securely access their complete set of work apps, collaboration services, and data and experience them in a similar way on any device, from anywhere. It's a whole new level of satisfaction and productivity.

And Cisco can help you achieve it.

With the Cisco Mobile Workspace Solution, you can support employee mobility initiatives beyond just providing secure mobile access. As a complete, portable digital work environment that can be delivered across multiple devices, the entire workspace is mobile, not just the device. And it includes all the applications, data, communications, services, and user preferences your employees need to be productive.

With the choice between an intuitive cloud-managed solution and a comprehensive on-premises solution, Cisco gives you more than a way to just identify and onboard devices. They are integrated mobility solutions that get mobile workers working productively, inside or outside the office, regardless of the number and types of devices you must support, whether they're employee or corporate owned. Now you can accommodate diverse work styles and emerging business processes, and enforce internal policies and industry regulatory requirements with one mobility solution.

Moving Beyond BYOD to Mobile Workspaces

Mobility has evolved to a top priority for most organizations. In a recent survey of 400 global IT executives, Accenture¹ found that 73 percent feel that "mobility will impact their business as much as or more so than the web did" in the late 90s.

By 2017, 650 million mobile devices will be used in the workplace on corporate networks, according to IDC Research². IT must build an infrastructure to support and manage this deluge of devices and the fast-growing set of rich business apps they run. IT must secure data and applications on all mobile devices regardless of who owns them and controls them.

Moving beyond the status quo for supporting mobility means you need:

- An end-to-end experience. Mobility has crept into the enterprise piece by piece over time. This has
 resulted in different user capabilities, depending on the device and operating system in each user's hand.
 The differences have grown particularly apparent since BYOD programs have entered the picture. Users
 have been able to connect when mobile; however, after they are connected, what work-related tasks they
 can actually do is limited and varies. That can be frustrating and unproductive. It also affects the way users
 can collaborate and respond to colleagues and customers.
- A flexible approach. Employees have differing work styles, roles, and responsibilities. You need a flexible
 mobility infrastructure platform that can support them all. There are multiple approaches to delivering
 applications to mobile devices, and no one model supports all your business and user experience
 requirements.
- Ways to plug security holes. Mobile devices and work practices open up a whole new set of security risks and many opinions about the best way to deal with these risks. Do you need to just manage the device policy? What about controlling network access for those devices? How do you differentiate employee, partner, and guest access? Should you also manage which applications can be used, on which devices, and from which location? What about secure access to data and content, not to mention offering protection and recovery from malware attacks? While there isn't a single answer, there are some pretty good guidelines you can follow.
- A future-proof solution. Today, the idea of mobility focuses primarily on personal mobile devices and
 applications, but many of you are already experiencing the increasing connections that are occurring
 through the Internet of Things (IoT). These connected systems, services, and devices can transform
 organizations as we discover new use cases for smart machinery, business analytics, and automated
 processes. Because many of these connected devices are mobile, your mobility strategy also needs to
 manage and support these capabilities over time.

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¹ Accenture CIO Mobility Survey 2013

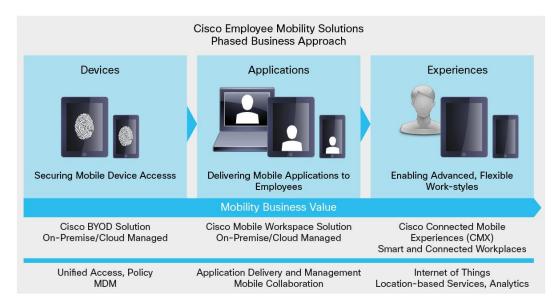
² International Data Corporation (IDC) Worldwide Quarterly Smart Connected Device Tracker

Mobilizing the Workspace with Cloud-Managed and On-Premise Solutions

The Cisco Workspace Mobility Solution combines all the diverse technologies (including enterprise mobility management) required to reliably deliver a mobile workspace to any device. Choose between the simplicity of a cloud-managed solution or the flexibility of an approach that is deployed and managed on your premises. With both choices, you can deliver the applications and services employees need with the security you require and the intuitive user experience your employees expect.

Whatever option you choose, we can guide you toward an end-to-end mobility infrastructure that can be built incrementally. By choosing one of these options, your organization can adopt and evolve your mobility strategy at a pace that meets your business priorities (Figure 1).

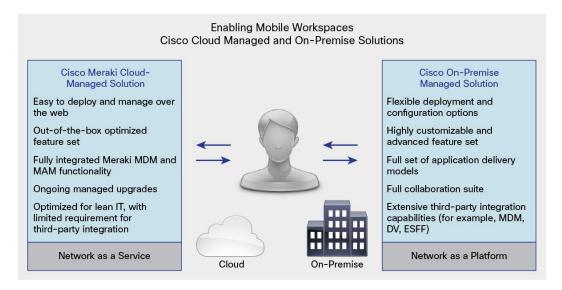
Figure 1. The Cisco Mobile Workspace Solution Is Organized in a Phased Business Approach That Grows as Your Business Needs Grow, Maintaining Strong Security and Advanced, Flexible Work Styles.



A phased mobility approach begins with the devices, ensuring that your workforce can get secure access to the corporate network and basic services on whatever devices they choose. You can then address how you manage and deliver the applications, services, and data to those mobile devices, so employees can easily collaborate, make transactions, do research, and create content. You can also focus on offering a range of personalized user experiences to fit everyone's different work styles either in the office or outside. This flexibility is enhanced by location-based services, advanced analytics, IoT applications, and smart workplace services that adapt to specific user needs.

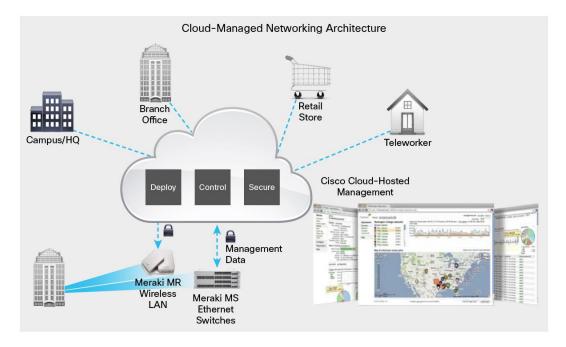
One of the great things about Cisco Mobile Workspace Solution is that it alleviates the need to patch disparate technologies together to get all the capabilities you need and want. Our cloud-managed solution integrates hardware and software technologies that make it easy to deploy and use right out of the box. The on-premise solution integrates leading technologies from Cisco and our partners to provide the most comprehensive and full-featured employee mobility features on the market. Both solutions are customizable to meet your specific IT strategy and deployment priorities.

Figure 2. Get the Service or Platform You Need to Help You Manage All of Your Business Needs and Provide the Best User Experience for Your Employees.



Cisco Meraki Cloud Managed Mobility Solution

Figure 3. Give Employees the Apps They Need on a Secure Cloud-Managed Solution That You Can Customize and Control.



Use the Cisco cloud-managed solution to manage BYOD and mobile device environments and increase productivity and management, and here's what you can do:

- Receive ongoing managed upgrades that greatly reduce operational overhead.
- Give lean IT an optimized and self-contained solution that has limited requirements for supporting thirdparty integrations.
- Support a growing number of client devices on the network with Cisco Meraki SME.
- Manage and enforce your network security by choosing applications and resources that BYOD clients can access.
- Centralize network and device policy management by integrating your solution with Cisco Identity Services Engine (ISE).
- Deliver high performance in high-density environments and under challenging interference conditions with RF optimization.
- Have a seamless, end-to-end implementation that offers predictable treatment to traffic and fulfills desired network policies with Layer 7 quality of service (QoS).
- Smooth the onboarding of mobile clients by setting access policies, applying security settings, and deploying enterprise applications.

Cisco Meraki System Manager Enterprise

Cisco Meraki SME software is at the core of the cloud-managed solution. It provides built-in mobile device support, all managed from the cloud. The solution securely supports user-owned and company-issued mobile devices. The Cisco Meraki SME includes the following features to help keep mobile employees and your organization secure:

- **Visibility.** Gain insight into the users, devices, and applications on your network; view network-wide reports and trends: drill down to the client level.
- Client fingerprints. Client devices are automatically inspected and classified, letting you distinguish iPads from iPhones and Androids.
- Application fingerprinting. The system classifies applications using Layer 7 deep-packet inspection (DPI). This extends far beyond host and port inspection to classify evasive and encrypted apps.
- Security. Automatically apply policies by user and device type, securing LAN resources and protecting
 against viruses.
- **Identity-based group policies.** Customize authentication, firewall, and traffic-shaping rules, as well as bandwidth restrictions based on users' identities.
- Apply policies by device type. Device-specific policies automatically restrict, quarantine, or throttle userowned and untrusted devices.
- LAN isolation. With just two clicks, provide Internet-only access to untrusted devices, isolating your network from viruses and blocking access to internal resources.
- Antivirus scan. Automatically scan PCs for running antivirus software, blocking vulnerable devices from your network.
- Capacity. Ensure wireless performance under challenging conditions with cloud-based RF planning and application traffic shaping.
- Auto RF. Optimize performance and avoid interference with cloud-based analyst that tunes the RF parameters of each access point.
- **Traffic shaping.** Prioritize applications, such as voice and video, while throttling bandwidth-intensive recreational traffic; set networkwide policies by user or by client.

Our cloud-managed solution with Cisco Meraki SME is ideal for your organization if you have distributed sites or lean IT resources, or want to move your mobility management to the cloud.

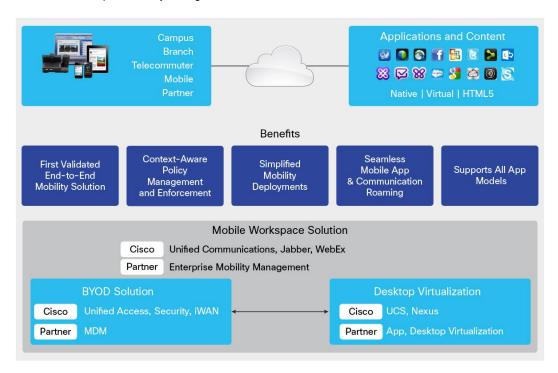
On-Premise Cisco Mobile Workspace Solution

The on-premise Cisco Mobile Workspace Solution delivers a fully featured mobility infrastructure platform that has the flexibility and security you need to support the broadest set of mobile use cases. It also supports any application delivery model to ensure that mobile users get the apps they need, when they need them, and in the most secure way. This is important because you might still be evaluating which apps should run natively, which should run in a browser environment, or which should run in a hybrid of both. Which apps should use application virtualization delivered from the data center? And which apps should be cloud-delivered in a software-as-a-service (SaaS) model? Whatever you decide, your choices depend on important factors such as user experience, security, cost, back-end integration, and time to market. So you may end up with a mix of app models, each posing unique demands on your mobility infrastructure. The on-premise Cisco solution ensures that you can deliver each application with the delivery model that is best suited for it to any device and with maximum control and speed.

The solution is built on wired and wireless Cisco Unified Access[™] infrastructure, ranked by Gartner as the leading technology in the industry. Currently, it's the only mobility solution on the market that gives you a single source for policy management and enforcement from anywhere across your entire organization.

The on-premise Cisco managed solution also supports context-aware security policy management and enforcement, so only authorized employees can access resources. Secure access is provided through a traditional VPN tunnel, per-application VPN, or a combination of the two for maximum flexibility.

Figure 4. Build Your Mobile Workspace Incrementally: BYOD Secure Access, Desktop Virtualization, Mobile Collaboration, Enterprise Mobility Management.



Cisco Mobile Workspace Solution with Citrix

Cisco Mobile Workspace Solution is a modular mobility architecture that includes hardware and software from Cisco and our technology partners. The first release of the complete Cisco end-to-end on-premise solution has been developed jointly with Citrix. It's fully integrated, validated, and tested to work together, so it simplifies your projects and allows you to make users fully mobile faster and with lower risk. Figure 4 outlines the modular solution approach along with its benefits for IT.

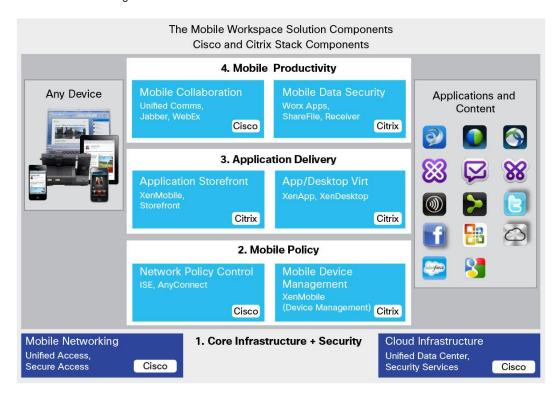
The solution includes a range of Cisco technologies, such as networking, policy, security, collaboration, and data center with leading mobility software tools from Citrix for mobile device management (MDM), enterprise mobility management (EMM), and app and desktop virtualization. Then we bring everything together as a prescriptive design that can be deployed incrementally based on your employee use case requirements. You get the mobility you need in one well-engineered solution that works for all your employee use cases.

With the Cisco on-premise solution, you can adopt employee mobility capabilities at a pace that meets your business priorities (Figure 5). It includes the following capabilities to help deliver a secure mobile workspace with great user experience:

- Core Infrastructure. Start by using the most advanced wireless technologies, such as 802.11ac and Cisco's HDX to support increasing numbers of mobile users, devices and applications. You can identify and prioritize thousands of applications across the network to deliver the desired user experience. Use Cisco data center technologies if you plan to deliver virtualized application or desktops to your users.
- Security. Apply security at multiple levels to protect the network, devices, applications, and data without impacting the user experience. Choose from client VPN and per-app VPN technologies to seamlessly secure the devices and applications. Extensive Cisco threat detection and defense technology provide protection before, during, and after attacks.
- **Mobile Policy.** Apply an integrated single-source policy to manage and enforce enterprise compliance policies by user, device, location, application across wired, wireless, and VPN networks.
- Application Delivery. Consistently manage and securely deliver applications across all delivery models, including native, web, web, SaaS and virtual applications, using an enterprise application storefont and mobile application management (MAM); support Windows applications with virtual apps and desktops hosted in your data center.
- **Mobile Collaboration.** Deliver the most advanced set of tools to allow employees to communicate and collaborate consistently across all types of fixed and mobile devices.
- Mobile Data Security. Use Enterprise File Share and Synch technology to securely share content with company and partner colleagues.

However you decide to deploy mobility capabilities in your organization, our on-premises mobile workspace solution with Citrix opens doors for users while alleviating multivendor buying, management, integration, and technology roadmap headaches. It is a most holistic and flexible solution, designed to provide a platform for delivering all your applications with maximum levels of security and user experience and minimum delay.

Figure 5. Build Your Complete Mobile Workspace Solution with the Most Comprehensive Set of Leading Mobility Technologies from Cisco and Citrix.



Use Cases

The benefits of deploying Cisco Mobile Workspace can be experienced across multiple industries.

Table 1. Benefits of Using Cisco Mobile Workspace

Manufacturing	 Mobile access to operational and technical data from factory floor Flexible working environment for plant managers and engineers Mobile collaboration for fast problem resolution
Finance	 Financial consultant access to data and financial records from any branch Faster insurance claims submission and processing
Government	Secure employee telecommutingMobile collaboration between agencies and field workers
Healthcare	 Secure, seamless, clinician mobility among patients, stations, and locations Mobile collaboration with HD video for consultations and improved patient care BYOD and flexible working environment for permanent staff and consultants
Education	 Easy-to-manage wireless and BYOD to an entire school district or campus New learning and teaching models with mobile devices and video
Retail	 Store associate access to inventory and product information for better customer experience In-shop and remote real-time access to store key performance indicators

A Mobilized Work Day: Maximize Productivity from Anywhere

Sales representative Maria has a busy day ahead. Before she leaves the house in the morning, she checks her email and calendar on her personal smartphone. Once she's at the office, she registers her new tablet for secure access to the corporate network and her work applications are automatically downloaded. Now Maria is ready to attend her weekly sales video conference from her tablet. Next, to complete her customer presentation, she logs on to her virtual desktop from an available shared workplace. With her tablet in hand, Maria leaves for client meetings, where she shares her presentation and shows the latest product demos.

At home that evening, Maria uses her personal laptop to securely connect to her virtual desktop to complete reports and attend one final meeting before calling it a day. Thanks to the Cisco Mobile Workspace Solution, Maria was available, productive, and responsive all day.

Get More Out of Your Mobility Investment with Cisco Services

Cisco Mobile Workspace services help you design and implement a secure solution that enables your employees to enjoy a mobile work environment on any device, anywhere. With Cisco Mobile Workspace, people can connect all mobile and enterprise applications, content, communication, and collaboration services so they can do their job well. Cisco Mobile Workspace services help you align your mobility investment to your business goals, assess your current network, and deliver a mobile workspace design. We can help you with optimization and ongoing solution support.

Why Cisco?

The Cisco Mobile Workspace Solution brings together best-in-class technologies and support to give you a strategic platform for your immediate and long-term mobility initiatives. With Cisco Mobile Workspace Solution, you can accommodate your employee work style needs together with an exceptional user experience and robust protection. Plus, enjoy centralized control of devices, data, applications, communications, and infrastructure.

Choose Cisco Mobile Workspace for your enterprise mobility initiatives. Empower your business with a solution that can maximize your ROI with an optimized infrastructure, simplified operations, more productive employees, and long term investment protection.

Next Steps

To learn more about adopting the Cisco Mobile Workspace Solution for your business, visit http://www.cisco.com/go/mobileworkspace.



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