

BYOD Smart Solution

Providing a work-your-way solution for diverse users with multiple devices, anytime, anywhere

Figure 1. Healthcare: Layered Access for Doctors, Administrators, Patients, and Visitors



Figure 2. Retail: Productivity for Stock Room and Sales Staff, Personalized Service for Customers



Figure 3. Education: Segmented Access to Assignments, Records, and Research for Teachers and Students



Figure 4. Finance/Insurance: Secure, Compliant Financial Data with Personalized Claims Information for Clients



The Mobile Experience - Your Way

Today's CIO must deliver innovative business solutions and give employees more freedom to work the way they want - all while reducing IT complexity. Consumer devices have proven to be a cost effective and attractive way to keep employees engaged and productive, but many organizations struggle with securely introducing these devices into the network. Securing corporate data, applications, and systems is essential to any BYOD strategy and IT organizations need to ensure a secure experience from both a device and network access perspective. As corporations develop an any device, anywhere strategy, IT needs to know who is on the network, the location of the person, and the type and status of the device.

- **End users** need a productive session that includes essential business and collaboration applications, on any device being used and a consistent experience across multiple device types.
- To innovate, **IT organizations** must move quickly while navigating multiple products and IT silos and understand the operational impacts of enabling BYOD for employees, partners, and/or customers. IT organizations need technologies that can evolve with business trends and deliver sustainable business results.

BYOD Smart Solution Delivers End-to-End Value

Now, IT organizations can do more than just add a device. The Cisco BYOD Smart Solution transforms the workspace and boosts productivity. It simplifies IT operations with end-to-end and network lifecycle management, delivers an uncompromising work-your-way user experience, and enables organizations to secure data with unified policy and essential controls necessary to support this beyond BYOD work environment.

The BYOD Smart Solution provides an architectural approach incorporating pre-tested network designs and comprehensive services, allowing an enterprise to focus on innovation rather than implementation. The solution delivers a unified workspace that increases workforce productivity with high quality collaboration on any device, anywhere.

Smart Solutions from Cisco take customers beyond BYOD with three main benefits:

- **Unified Policy for Secure Access** - A single policy secures data, applications, and systems across the entire organization and provides guest, posture, device profiling, network access, and Mobile Device Management (MDM). Cisco also provides data security in the network (on and off premises) to ensure intellectual property (IP) is protected.
- **Uncompromised Experience** - End user productivity is maximized with leading collaboration tools and mission-critical wireless access.
- **Simplified Operations** - Services from Cisco and our partners help simplify deployment, accelerate the business benefits of BYOD, and manage and lower operating costs so IT organizations can focus on innovation.

Unified Policy to Secure Data on Any Device

Cisco is the only provider of a single policy plane across the entire organization, including: guest, posture, device profiling, network access, and Mobile Device Management (MDM). Innovations in the Cisco Identity Services Engine (ISE) include new zero-touch on-boarding, central policy integration via open APIs with MDM solutions (including setting of MDM wipe policy or network access policy based on MDM posture). Cisco ISE is the only solution to provide both network-based and endpoint based scanning. Cisco also provides data security in the

network (on and off premises) to help ensure intellectual property (IP) is protected. Unified Security solutions include:

- **Enhanced Cisco Identity Services Engine (ISE):** Enables IT to offer mobile business freedom with policy for when, where and how users may access the network. Enhancements improve user experience by allowing them to easily self-provision. Device sensor capabilities offer the most accurate identification of new device types in the network, including a wide range of device types, offering the industry's most scalable and comprehensive view across the network. ISE also provides real-time endpoint scans based on policy to gain more relevant insight. These automated features result in a better user experience and more secure devices. Cisco is the only vendor to offer a single source of policy across the entire organization for wired, wireless and VPN networks, dramatically increasing organization-wide security and simplifying management.
- **New Mobile Device Management (MDM) integration:** To protect data on mobile devices and ensure compliance, Cisco partners with several Mobile Device Management vendors. This approach gives IT greater visibility into the endpoint as well control over endpoint access based on the compliance of these devices to company policy (such as requiring pin lock or disallowing jailbroken devices), and the ability to remotely wipe data from lost or stolen mobile devices. Cisco leverages context from the MDM to set policy. Cisco is the only vendor to announce an evolving ecosystem for Integrated MDM policy controls.
- **New Device Profiling Sensor:** Cisco Wireless LAN controllers now support scalable network embedded device sensors that assist with device identification and classification.
- **Cisco AnyConnect Secure Mobility Client:** Make the VPN experience simpler and more secure with the enhanced remote access technology of Cisco AnyConnect™ VPN client. This software includes 802.1x authentication and provides an always-on VPN experience across the industry's broadest array of laptop and smartphone-based mobile devices, including iOS®, Android®, and Microsoft Windows Mobile® platforms.

Uncompromised Experience

Cisco network and virtualization infrastructure solutions enable IT organizations to meet both user and IT experience expectations, on and off the corporate network, with virtual or native desktops. With a high-performance, intelligent 802.11n wireless network from Cisco, customers have the performance and reliability needed to support the high density of mobile devices per user, running high-bandwidth applications like voice, video, and virtual desktops on any device client type.

Network Infrastructure

Cisco's network infrastructure **RF Excellence** features that have been developed into Cisco's custom chipsets, such as Cisco CleanAir™ technology for proactive spectrum intelligence and mitigation; Cisco ClientLink beamforming technology to accelerate connections to 802.11a/g/n clients; and Cisco VideoStream technology to provide 5.0 mean opinion scores (MOS scores) for twice the number concurrent client connections compared to competition. Solutions include:

- **Cisco Aironet® Access Points**, including the new Cisco Aironet 3600 Series which delivers up to 30 percent faster performance for mobile devices, compared with competing solutions. The Cisco Aironet family includes a range of feature and performance options, including teleworker solutions.

- **Enhanced Cisco Wireless Controllers**, with new scalability allowing management of up to 3000 access points from a single data center appliance. The Cisco Wireless Controller family includes a range of performance and form-factor options.
- **Enhanced mobility services**, including location tracking, wireless intrusion prevention system (WIPS) and rogue detection, and Cisco CleanAir location, correlation, and history data. Our mobility services now come with high availability and “friendly rogue” handling.

Mobile Collaboration Applications Let You Securely Communicate, Anywhere on Any Device

Cisco provides mobile collaboration applications for leading devices, such as Windows, Mac, iPhone, iPad, Android and Blackberry. Cisco mobile collaboration applications enable emerging anytime, anywhere mobile use cases. With functionality that lets you be as productive from your mobile device as you are at your desk, organizations can transform processes to improve productivity, customer service and reduce costs

- **Cisco Jabber** lets you see user availability, communicate with instant messaging, access voice messages, and make and manage voice and video calls over Wi-Fi networks.
- **Cisco WebEx** mobile applications let you join meetings, see shared applications, and see and share video for a rich collaborative experience.

The Cisco Difference

- Highest performance, highest quality Wireless infrastructure - up to 30% faster compared with the competition, delivers best user experience
- Single source of policy for the entire organization; wired, wireless, remote networks, physical or virtual devices
- Broadest mobile device OS support in AnyConnect VPN software, including iOS®, Android® and Windows Mobile
- Deepest, broadest and most accurate device knowledge
- Optimized experience for Virtual and Native desktop infrastructure
- Unified management across wired, wireless and policy

Simplified Operations and Management

The BYOD Smart Solution helps simplify deployment, accelerate troubleshooting and lower operating costs so IT organizations can focus on innovation. This holistic offer delivers an end-to-end solution that works across the enterprise and cross-silo issues, including compliance. Cisco Professional and Technical Support Services accelerate planning, deployment, and management across the entire solution - not just individual products and help accelerate the business benefits of BYOD. Cisco Validated Designs speed the deployment of workspace and business services while reducing risk as the infrastructure evolves to meet current and future needs.

Solutions include:

- **Cisco Prime Assurance Manager:** A management tool that provides visibility for applications and services end to end by collecting and normalizing data from multiple sources of intelligent instrumentation across the network. This data is used to show end hop-by-hop application performance, and troubleshoot any problems in end user experience.
- **Cisco Prime Infrastructure:** A single package that provides complete infrastructure - wired and wireless, and mobility lifecycle management - configuration, monitoring, troubleshooting, remediation, and reporting. This solution includes: Prime **Network Control System (NCS)** for converged wired/wireless monitoring and troubleshooting, plus wireless lifecycle management, with new branch management functionality; and Prime **LAN Management Solution**, for wired lifecycle management and Borderless Networks services management.
- **Updated wired/wireless functionality:** Updated controller modules for the Cisco ISR G2 router and Cisco Catalyst 6500 switch lower cost of ownership and simplify operations.

-
- **Advanced Services:** Our comprehensive services for the Unified Workspace help you plan, build, and manage a seamless and secure experience that empowers your employees and customers to work their way on any device from anywhere.

Why Cisco?

With the “One Network, One Policy, One Management” strategy for access networks, Cisco is the only solution provider to have all the components to efficiently create a secure and seamless user experience across all scenarios. Cisco empowers IT to provide greater business freedom with high-performance, context-aware network solutions that go beyond BYOD to fully address many types of users with different device, security and business requirements.

One Network

One Network: Cisco wired, Wi-Fi and 3G/4G networks are converging. Hotspot 2.0 unifies cellular and Wi-Fi, and Cisco is developing small-cell solutions to remove the border between networks. Policy and management for wired and Wi-Fi are unified in a single platform. And Cisco VXi offers policy-based access to desktops from anywhere, regardless of underlying device or network. This provides a scalable platform for deploying new services and secures enterprise data off the device to take advantage of new mobility and BYOD trends. The network is the place where the business policy is enforced through a combination of ISE and infrastructure (wireless or wired).

One Policy

To handle the rate of increase of mobile devices on enterprise networks, IT must set policy centrally with automated enforcement. The Cisco Identity Services Engine provides a single point of policy across the organization, rather than several that must be kept manually in synch. This allows IT to create centralized policy governing access to the network, whether wired or wireless.

One Management

With ever-increasing numbers of mobile devices on the network, IT managers need solutions that give a single entry point into solving access and experience problems. Cisco Prime management solutions have a single workflow to identify problem by user, rather than network element. Experience monitoring, fed with network instrumentation and intelligence, provides a single source of truth for application performance.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

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)