

# Cisco Unified Access: Solution At-a-Glance

## The Intelligent Platform for a Connected World



### Value of Cisco Unified Access

Cisco Unified Access™ is an intelligent network platform that enables new connected experiences and new operational efficiency. It is the business foundation for bring-your-own-device (BYOD) initiatives and the Internet of Everything (IoE), intelligently connecting people, processes, data, and things.

The Cisco Unified Access solution delivers an integrated and simplified intelligent network platform that enables IT to spend less time running the network and more time focusing on innovations that can differentiate and transform the business.

### Problems That Cisco Unified Access Helps Solve

Faced with the major trends of IoE, BYOD, and mobility, businesses are confronted with the inevitable proliferation of devices at the workplace. Businesses must meet the growing demands for bandwidth and network performance, mitigate the security risks of company data on mobile devices, and maintain control over and visibility into mobile users and devices accessing their networks. When addressing these technological trends, enterprises are challenged with:

- Inconsistency of disparate networks, policies, user experiences, and solutions, making it difficult to roll out new applications consistently across the entire organization, or have the time to focus on new innovative business experiences
- Complexity of planning to scale for the growth of clients and networks while maintaining security compliance and managing the BYOD trend and increase in mobile devices and traffic

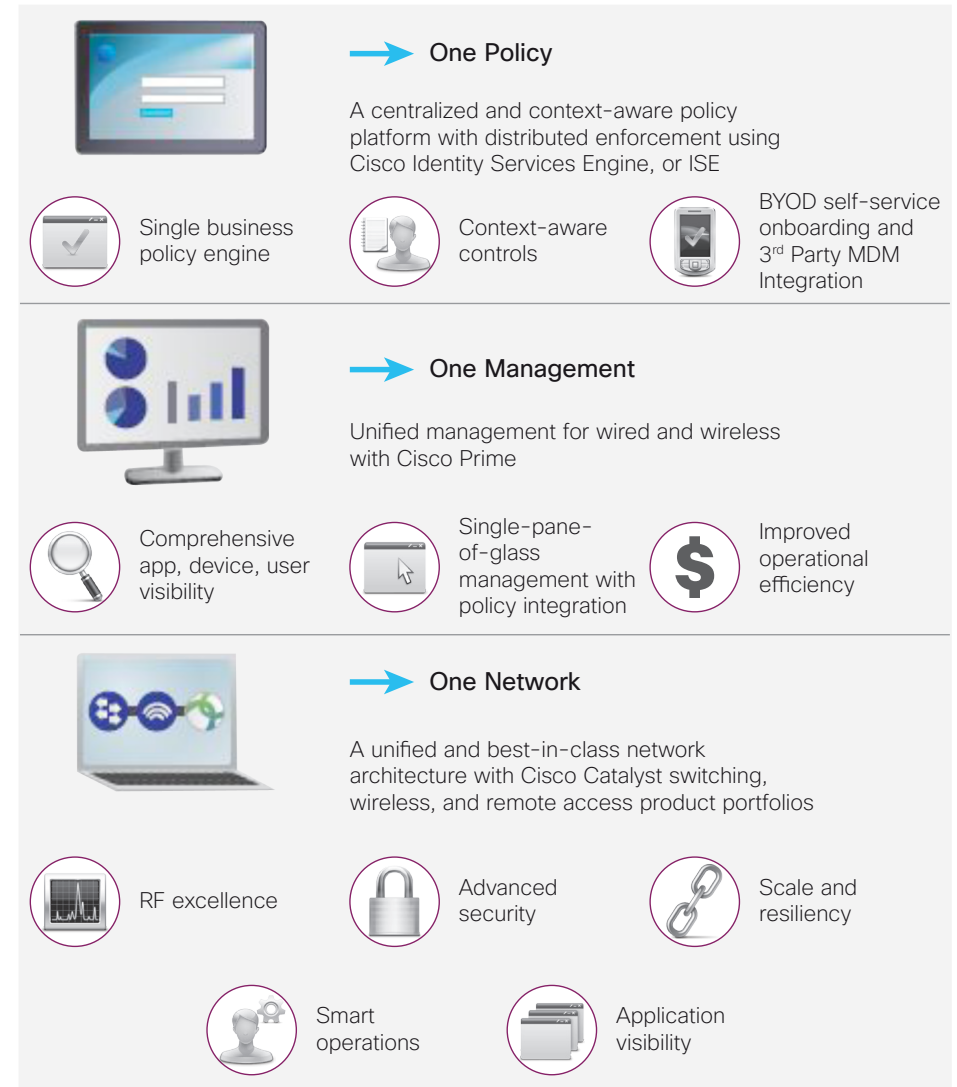
### Cisco Unified Access Solution

Cisco Unified Access provides IT with the platform it needs to adapt to rapidly changing business, technologies, and user expectations with a unified policy, management, and network platform that employs a single network infrastructure with common policy and management across wired and wireless networks and VPNs.

The three pillars of Cisco Unified Access (Figure 1) are:

- One Policy: World-class unified policy platform and distributed enforcement
- One Management: Single solution for comprehensive lifecycle management and visibility
- One Network: Wired and wireless networks converged into a single unified infrastructure

Figure 1. Three Pillars of Cisco Unified Access





## One Policy

Cisco® One Policy is delivered by the Cisco [Identity Services Engine](#) (ISE), which simplifies design and implementation of policy and security with one policy across the entire wired and wireless network and VPN infrastructure. Cisco ISE 1.2\* allows:

- Consistent enforcement of context-aware policies and control with comprehensive input information, including information about the user, device, location, time, and applications
- Compliance and improved user experience with self-service on-boarding, guest handling, and location-based services
- Third-party mobile device management (MDM) integration (with AirWatch, Good Technology, MobileIron, Zenprise, and SAP), providing the flexibility to choose an MDM vendor, and simplified single-pane policy management
- Device profiler feed service to provide dynamic new device information updates
- International language support and greater scalability, to up to 250,000 endpoint devices

## One Management

Cisco One Management is delivered by [Cisco Prime™ Infrastructure](#), which provides comprehensive unified access lifecycle management, end-user connectivity, and application performance visibility to enable IT departments to deliver services that meet today's business demands.

Coupling client awareness with application performance visibility and network control, Cisco Prime Infrastructure enables an uncompromised end-user experience and makes BYOD a reality:

- Cisco Prime 360-degree experience views for devices, applications, and users, simplifying management and troubleshooting to improve the end user experience and service assurance
- Enhanced automated workflows and integrated best practices for easy deployment and management of Cisco advanced technologies and services, including Cisco Adaptive Wireless Intrusion Prevention System (wIPS) Software, Cisco CleanAir® Technology, VPN, zone-based firewall, Cisco web security, and application visibility and control
- Converged wired and wireless lifecycle management to reduce operation overhead and increase productivity
- Representational State Transfer (REST)-based APIs for improved operations, capacity planning, and business intelligence

Cisco One Management is further enhanced with the [Cisco Mobility Services Engine](#) (MSE), which provides advanced spectrum analysis, and Cisco Adaptive wIPS, which can detect, track, and trace rogue devices, interferers, Wi-Fi clients, and radio frequency ID (RFID) tags as well as identify over-the-air threats, with location and mitigation capabilities. Advanced location services in the Cisco Mobile Concierge, part of the Cisco [Connected Mobile Experiences](#) Solution, enables wireless LAN monetization and location analytics.

## One Network

Cisco One Network is the convergence of wired and wireless networks into one physical infrastructure with greater intelligence and performance and with open interfaces that enable software-defined networking. Cisco One Network delivers:

- Converged wired and wireless infrastructure: One physical infrastructure that increases business agility and scalability and delivers greater operation efficiency
- Consistent networkwide intelligence and operations: One common set of network capabilities and context-aware intelligence for policy, visibility, and analytics and detailed quality-of-service (QoS) control across the entire wired and wireless infrastructure, providing simplicity and a consistent user experience
- Integration with Cisco Open Network Environment (ONE): The industry's first common interface across wired and wireless networks, providing a blueprint for the delivery of a programmable data plane with the Cisco ONE Platform Kit (onePK) for the enterprise campus, support for software-defined networking (SDN), and enhanced business agility

Cisco One Network includes the following core products:

- [Cisco Catalyst® 3850 Series Switch](#), which is a converged access switch for wired and wireless networks: This series brings the best of wired and wireless together by supporting wireless tunnel termination and full wireless LAN controller capabilities. Main features of the Cisco Catalyst 3850 Series include the following:
  - The Cisco Catalyst 3850 Series currently offers the industry's highest 480-Gbps stacking bandwidth, meeting network demand, including the demands of gigabit desktop and IEEE 802.11ac wireless technologies. The series delivers advanced capabilities such as high-performance 24- and 48-port Gigabit Ethernet switching, 480-Gbps stacking, full Enhanced Power over Ethernet (PoE+), and Cisco Flexible NetFlow on all ports as well as many other features.

\* Availability in 2<sup>nd</sup> Quarter of CY2013



- Converged wired and wireless access: The Cisco Catalyst 3850 Series brings the excellence of Cisco IOS® Software to wireless networking by extending wired infrastructure features, resiliency, granular and hierarchical QoS control, and scalability to wireless networks. It provides one common set of network capabilities and context-aware intelligence across wired and wireless access for operation simplicity, accelerated service deployment, and easier change management. The Cisco Catalyst 3850 Series provides built-in wireless controller capabilities with 40-Gbps wireless throughput, support for 50 access points and 2000 wireless clients per switch or stack, and support for IEEE 802.11ac.
- Distributed intelligent services: The Cisco Catalyst 3850 Series delivers rich common intelligent services across wired and wireless networks for security and policy, application visibility and control, network resiliency, smart operations, and more. Only the Cisco Catalyst 3850 Series enables granular and hierarchical QoS based on detailed information such as the service set ID (SSID), client, radio, and application and the fair share policies for wireless networks.
- Foundation for Cisco Open Network Environment with programmable application-specific integrated circuit (ASIC): The core of the Cisco Catalyst 3850 Series is the new ASIC with programmability for future features and intelligence, providing investment protection. The new ASIC provides a foundation for converged APIs across wired and wireless networks, SDN support, and Cisco onePK.
- [Cisco 5760 Wireless LAN Controller](#), which is an industry-leading, standalone appliance that supports both centralized and converged wireless infrastructure: The Cisco 5760 is the first controller based on Cisco IOS Software; it provides the industry's highest wireless throughput (60 Gbps) and consistent networkwide intelligence and operations. The Cisco 5760 supports a highly scalable mobility architecture and a large Layer 3 roaming domain, with up to 72,000 access points and 864,000 wireless clients.
- Software enhancement for the [Cisco Catalyst 6500 Series Wireless Services Module 2](#) (WiSM2), which is an integrated switch blade for Cisco Catalyst 6500 Series Switch chassis: This module is an optional alternative to the Cisco 5760 to support the scalable Cisco Unified Access mobility architecture.

## Cisco BYOD Smart Solution

The [Cisco BYOD Smart Solution](#) provides a comprehensive approach to effectively designing, managing, and controlling the access of a BYOD network. By consolidating professional and technical services, products, and design guides, the Cisco BYOD Smart Solution helps deliver a more comprehensive, predictable, and successful deployment.

## Complete Lifecycle Services

Cisco also offers complete lifecycle professional and technical services, including architecture strategy workshops, assessment, design, and optimization for efficient deployment of Cisco Unified Access architecture.

## Benefits of Cisco Unified Access

Cisco Unified Access helps customers achieve:

- Accelerated business innovations and growth: Quickly scale to meet new BYOD, IoT, and mobility demands with simplified network management so that IT can focus on business innovation and create new experiences.
- Greater business efficiency: Simplified and converged infrastructure, policy, and management provide greater consistency of network services and the user experience.

## For More Information

Please visit <http://www.cisco.com/go/unifiedaccess>.