Cisco 526 Wireless Express Mobility Controller

Product Overview

The Cisco® 526 Wireless Express Mobility Controller is a network appliance that automatically optimizes the basic wireless network and supports advanced mobility services on top of that network. The Cisco Mobility Express Solution brings together the 526 Controller and the 521 Wireless Express Access Point as a flexible, cost-effective wireless solution specifically designed to meet the needs of small and medium-sized businesses (SMBs).

Part of a complete SMB strategy, the Mobility Express Solution aligns with the Cisco Smart Business Communications System—a unified communications solution for SMBs that provides voice, data, video, security and wireless capabilities while integrating with existing desktop applications like calendar, e-mail and CRM. As customer needs change, the Cisco Mobility Express Solution offers the versatility to evolve and scale from a solid mobile foundation delivering business-grade wireless features to a sophisticated yet cost-effective wireless network capable of supporting leading mobility services and applications (Figure 1).

Figure 1. Cisco 526 Wireless Express Mobility Controller and Cisco 521 Wireless Express Access Point

Cisco 526 Wireless Express Mobility Controller   Cisco 521 Wireless Express Access Point

Cisco 526 Wireless Express Mobility Controller

The Cisco 526 Wireless Express Mobility Controller can be used with up to six access points per controller and up to two controllers per network. It harnesses the power of Cisco Lightweight Access Point Protocol (LWAPP) technology—best-in-class automatic radio optimization, mobility performance and multi-access-point management—at the capacity, simplicity, and price point appropriate for the SMB. On top of the basic transport layer, this controller supports Cisco Secure Guest Access and voice-over-WLAN advanced mobility services. Along with other products in the Smart Business Communications System, this controller uses the Cisco Configuration Assistant software rather than a command-line interface, accelerating deployment and decreasing the cost of ongoing maintenance.

Features and Benefits

Table 1 describes the features and benefits of the Cisco 526 Wireless Express Mobility Controller.

Table 1.   Features and Benefits of the Cisco 526 Wireless Express Mobility Controller

Features	Benefits
Part of the Cisco Smart Business Communications System	Part of a portfolio of switching, routing, security, and voice products designed to work both individually and together as a multiproduct system to maximize the value of each product in the network.
Simplifies multi-access-point networks	Addresses issues in multi-access-point infrastructures, including scalable security, radio self-interference, and repetitive management tasks, to help ensure that multi-access-point networks operate at peak efficiency.
Streamlined management tool	Uses Cisco Configuration Assistant management software instead of a command-line interface for configuration to accelerate new and incremental deployments.
Supports Cisco LWAPP	Uses Cisco LWAPP for communication between access points and controllers to simplify deployment and follow-on management, and to automate functions required for a pervasive WLAN end-user experience.
Multi-access-point Radio Resource Management (RRM)	In builds with more than one access point, RRM coordinates access points in real time to optimize radio coverage/capacity while working around potential points of interference.
Secure authentication mechanism support	Support for a wide range of authentication mechanisms to enable scalable security architectures and minimize security interoperability issues (WEP, MAC Filtering, WPA, WPA2, WebAuth, and EAP).
Wired/wireless network virtualization	Supports the use of up to eight SSID/VLANs so that one physical WLAN infrastructure can be safely shared by different users, applications, or organizations as virtual wired/wireless networks.
Supports Cisco Secure Guest Access	With Secure Guest Access, organizations can create a virtual guest network with a login page for non-employees to get Internet access while safely partitioned from the sensitive corporate LAN.
Supports Cisco voice-over-WLAN optimization	Voice over WLAN optimization is a package of features that deliver quality of service, call admission control, and fast inter-access point hand-off to improve the quality of a wireless voice infrastructure.

Architectural Feature Comparison

With Cisco 521 Wireless Express Access Points, the Cisco Wireless Mobility Solution is an ideal fit for the SMB environment. Table 2 highlights the main architectural feature differences between consumer-grade, business-grade, and enterprise-grade WLAN solutions.

Table 2.   WLAN Architectural Feature Comparison

Features	Consumer-Grade Access Points	Cisco 500 Wireless Express Access Point (Standalone Mode)	Cisco 500 Wireless Express Access Point (Controller Mode)	Cisco Enterprise Unified WLAN Architecture
Part of the Cisco Smart Business Communications System	○	●	●	○
Simplifies multi-access-point networks	○	◑	●	●
Cisco Configuration Assistant management tool[1]	○	●	●	○
Support for Cisco Lightweight Access Point Protocol (LWAPP)	○	○	●	●
Multi-access-point Radio Resource Management (RRM)	○	○	●	●
Support for a range of secure authentication mechanisms	○	●	●	●
Wired/wireless network virtualization	○	●	●	●
Advanced-mobility-services-ready: Cisco Secure Guest Access	○	○	●	●
Advanced-mobility-services-ready: Voice over WLAN optimization	○	○	●	●

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[1] The Cisco Enterprise Unified WLAN Architecture uses Cisco Wireless Control System (WCS) Software or the command-line interface instead of the Cisco Configuration Assistant.

Product Specifications

Table 3 lists product specifications for the Cisco 526 Wireless Express Mobility Controller.

Table 3. Product Specifications for the Cisco 526 Wireless Express Mobility Controller

Item	Specification
Physical interfaces	2 10/100 Ethernet ports for uplink and management 2 USB console ports (future expansion) 1 RJ-45 serial port for direct console access
Wired/switching/routing	IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX specification, and IEEE 802.1Q VLAN tagging
Management options	Cisco Configuration Assistant software (recommended) Embedded Web-based device manager Command-line interface for troubleshooting (SHO/DEBUG only) using Telnet, SSH, or console port access
Security/authentication standards	None/Open, WEP/Open, MAC Filtering, WPA/Open with EAP, WPA/Network EAP, WPA-PSK/Open with EAP, WPA-PSK/Network EAP, WPA2/AES CCMP. Supported EAP types include PEAP, LEAP, EAP-TLS, EAP-GTC, and EAP-SIM
RADIUS authentication	IEEE 802.1x RADIUS authentication. External RADIUS server required.
Multiple SSIDs	8 SSIDs supported (each access point may support multiple SSIDs) 1 SSID broadcast in SSID beacon
Support for Cisco Secure Guest Access	Allows for creation of guest SSID/VLAN through Cisco Configuration Assistant, and creation of guest user accounts and configuration of login page using Web-based device manager.
Support for voice-over-WLAN optimization	Delivers quality of service, call admission control, fast inter-access point hand-off, and other optimization features to improve the quality of a wireless voice infrastructure.

Ordering Information

Table 4 provides ordering information for the Cisco 526 Wireless Express Mobility Controller. To place an order, visit the Cisco Ordering Website:

http://www.cisco.com/en/US/ordering/index.shtml

Table 4. Ordering Information for Cisco 526 Wireless Express Mobility Controller

Part Number	Product Name
AIR-WLC526-K9	Cisco 526 Wireless Express Mobility Controller for up to six Cisco 500 Series Wireless Express Access Points

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, visit Cisco Technical Support Services or Cisco Advanced Services.

For More Information

For more information about Cisco wireless LAN controllers or the Cisco Mobility Express Solution, contact your local account representative or visit: http://www.cisco.com/go/wireless

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