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 Cisco 526 controller and the Cisco 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).

As your business needs grow, the Cisco Mobility Express solution (Figure 1) 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. Mobility Express is part of the Cisco Smart Business Communications System – a complete 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 customer relationship management (CRM).

**Figure 1.**   Cisco Mobility Express Solution Elements

Cisco Mobility Express solution elements include the Cisco 526 Wireless Express Mobility Controller (left), Cisco Configuration Assistant software (center), and Cisco 521 Wireless Express Access Point (right).

Cisco 526 Wireless Express Mobility Controller

The Cisco 526 Wireless Express Mobility Controller harnesses the power of Cisco Lightweight Access Point Protocol (LWAPP) technology, best-in-class automatic radio optimization, mobility performance, and multi-access-point management. On top of the basic transport layer, the controller supports Cisco Secure Guest Access and Voice-over-WLAN advanced mobility services. As part of the Smart Business Communications System, this controller is managed by the Cisco Configuration Assistant, easing deployment and decreasing the cost of ongoing maintenance. A single Cisco 526 controller supports up to six Cisco 521 access points and up to two controllers can be deployed per network, delivering the capacity, simplicity, and price point appropriate for the SMB.

Figure 2.   Easy Configuration of Secure Guest Access
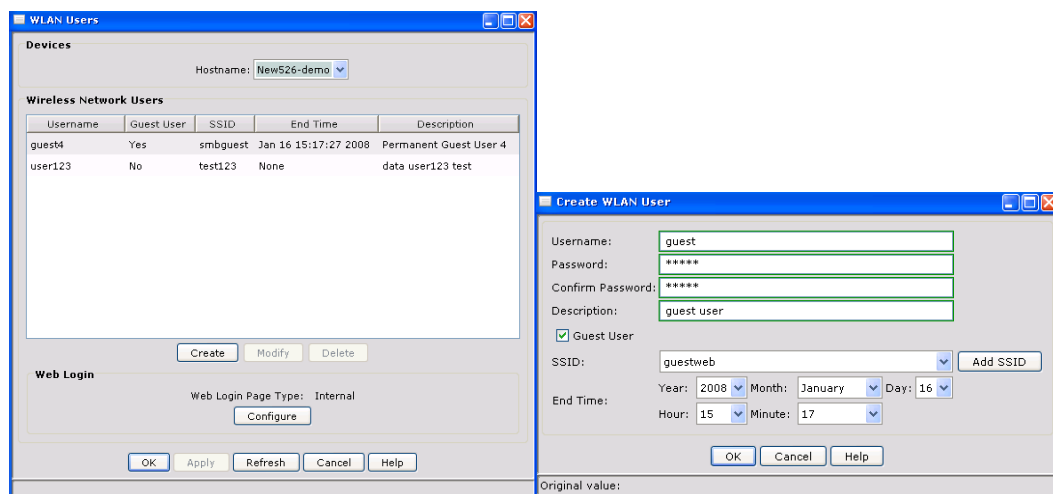
Features and Benefits

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

Features	Benefits
Secure network access for guest users	With Secure Guest Access, organizations can easily create and manage a virtual guest network with a Web login portal page for users such as customers, vendors, and contractors. Visitors can have Internet access while safely partitioned from the sensitive corporate LAN.
Support for Cisco voice-over-WLAN optimization	Voice-over-WLAN optimization is a package of features that deliver quality of service, call admission control, and fast, secure inter-access-point handoff to improve the quality of a wireless voice infrastructure.
Easy management tool	Includes Cisco Configuration Assistant, GUI-based management software that automatically discovers and dynamically configures Cisco 521 access points in order to simplify and accelerate wireless network setup.
Support for Cisco Lightweight Access Point Protocol (LWAPP)	Uses Cisco LWAPP for communication between Cisco 521 access points and 526 controllers to simplify deployment and management, and to automate functions required for a pervasive WLAN end-user experience.
Support for up to 6 access points per controller and up to 2 controllers per network for a total of 12 access points	The wireless network easily expands as business requirements for additional wireless coverage and mobility services increase.
Multi-access-point Radio Resource Management (RRM)	RRM automatically optimizes radio coverage and capacity while working around potential points of interference. This real-time radio coordination simplifies deploying multiple access points.

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, 802.1X, and EAP).
Wired/wireless network virtualization	Supports the use of up to 8 SSID/VLANs so that one physical WLAN infrastructure can be safely shared by different users, applications, or organizations as virtual wired/wireless networks.
Wireless component of the Cisco Smart Business Communications System	Part of a portfolio of switching, routing, security, wireless, and voice products designed to work both individually and together as a system to maximize the value of each product in the network.

Architectural Feature Comparison

With Cisco 521 Wireless Express Access Points, the Cisco Mobility Express 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)[2]	○	○	●	●
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	○	○	●	●

[1] The Cisco Unified Wireless Network Architecture uses Cisco Wireless Control System (WCS) Software or the command-line interface instead of the Cisco Configuration Assistant.
[2] Cisco 500 Series Wireless Express Access Points can use LWAPP technology for a controller-based deployment but these access points can not be used in a Cisco Unified Wireless Network.

Product Specifications

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
System logs	Message logs for critical failures, software errors, unexpected software events, and significant system events
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, WPA-TKIP, WPA2/AES CCMP Web-Auth with Open, WPA-PSK, WPA2-PSK, WEP Supported EAP types include PEAP, LEAP, EAP-FAST, EAP-TLS, EAP-GTC, and EAP-SIM
RADIUS authentication	IEEE 802.1X RADIUS authentication; external RADIUS server required
Multiple Service Set Identifiers (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 Web login page using Cisco Configuration Assistant
Support for voice-over-WLAN optimization	Delivers quality of service, call admission control, fast inter-access-point handoff, and other optimization features to improve the quality of a wireless voice infrastructure
Warranty	1 year

Physical and Environmental	• Dimensions: 2.7-in. H x 10.6-in. W x 7.0-in. D (6.9 x 27 x 17.8 cm)
	• Weight: 4.8 lbs (2.8 kg)
	• Temperature:
	  ◦ Operating: 32 to 104°F (0 to 40°C)
	  ◦ Storage: –13 to 158°F (–25 to 70°C)
	• Humidity:
	  ◦ Operating humidity: 10 to 90%, noncondensing
	  ◦ Storage humidity: Up to 95%
	• Power adapter:
	Input power: 100 to 240 VAC; 50/60 Hz
	• Heat dissipation: 75 BTU per hour maximum

Regulatory Compliance	• Safety: • UL 60950-1 • CAN CSA C22.2 No. 60950-1 • IEC 60950-1 • EN 60950-1 • EN 60950:2000 • EMI and susceptibility (Class B): • U.S.: FCC Part 15.107 and 15.109 • Canada: ICES-003 • Japan: VCCI • Europe: EN 55022, EN 55024

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	Operating humidity: 10 to 90%, noncondensing
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Ordering Information

Table 4 provides ordering information for the Cisco 526 Wireless Express Mobility Controller and the Cisco 521 Wireless Express Access Point. To find a reseller near you, visit: http://www.cisco.com/go/partnerlocator

Or to purchase through a Cisco online partner, visit: http://www.cisco.com/go/online

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

Part Number	Product Name
AIR-WLC526-K9	Cisco 526 Wireless Express Mobility Controller for up to six Cisco 500 Series Wireless Express Access Points
AIR-AP521G-x-K9	Cisco 521 Wireless Express Access Point (standalone)
AIR-LAP521G-x-K9	Cisco 521 Wireless Express Access Point (Controller mode)

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. Cisco SMARTnet® Service for SBCS provides direct access anytime to Cisco network experts and award-winning resources to help rapidly resolve problems and protect customer investment. Cisco SMARTnet Service for the Smart Business Communications System (SBCS) delivers rapid issue resolution and complete, solutions-level technical support for the SBCS. 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 SMARTnet services, visit: http://www.cisco.com/go/smartnet

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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