Cisco IOS Wireless LAN Features Roadmap

This roadmap lists the features documented in the *Cisco IOS Wireless LAN Configuration Guide* and maps them to the modules in which they appear.

Roadmap History

This roadmap was first published on December 15, 2005. It was last updated on June 20, 2007.

Feature and Release Support

Table 1 lists Cisco IOS wireless LAN feature support for the following Cisco IOS software release trains:

- Cisco IOS Release 12.4T

Only features that were introduced or modified in Cisco IOS Release 12.4T or a later release appear in the table. *Not all features may be supported in your Cisco IOS software release*.

Cisco IOS software images are specific to a Cisco IOS software release, a feature set, and a platform. Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at http://www.cisco.com/go/fn. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

Note Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

Table 1 Supported Cisco IOS Wireless LAN Features

Release	Feature Name	Feature Description	Where Documented
Cisco IOS Release 12.4(2)T			
	Broadcast Key Rotation	This feature allows users to set a timeout for the shared broadcast key, which causes a new broadcast key to be generated.	Securing a Wireless LAN

Table 1   *Supported Cisco IOS Wireless LAN Features (continued)*

Release	Feature Name	Feature Description	Where Documented
	Cisco Compatible Extensions Information Element	This feature allows a Cisco access point to inform Cisco Compatible Extensions client devices about the Cisco-compatible release version that the access point supports.	Configuring Radio Settings on an Access Point
	Configurable Radio Transmit Power	This feature allows a user to set the transmit power of the access point.	Configuring Radio Settings on an Access Point
	IEEE 802.11 Wireless Standards Support	This feature provides support for IEEE 802.11 standards for wireless networking. Support for 802.11 standards allows you to set the Service Set Identifier (SSID), authentication type, channel selection, transmission rates, power-save mode, and security based on Wired Equivalent Privacy (WEP), among other configurable fields.	Securing a Wireless LAN Configuring Radio Settings on an Access Point
	IEEE 802.11a Support	This feature provides support for 802.11a standards for wireless networking. Support for 802.11a standards allows you to set the SSID, authentication type, channel selection, transmission rates, power-save mode, and security based on WEP, among other configurable fields.	Securing a Wireless LAN Configuring Radio Settings on an Access Point
	IEEE 802.11b Support	This feature provides support for 802.11a standards for wireless networking. Support for 802.11a standards allows you to set the SSID, authentication type, channel selection, transmission rates, power-save mode, and security based on WEP, among other configurable fields.	Securing a Wireless LAN Configuring Radio Settings on an Access Point
	IEEE 802.11d Support	This feature allows the access point to inform 802.11d clients which settings the client should use to conform to local regulations.	Configuring Radio Settings on an Access Point
	IEEE 802.11g Support	This feature provides support for 802.11a standards for wireless networking. Support for 802.11a standards allows you to set the SSID, authentication type, channel selection, transmission rates, power-save mode, and security based on WEP, among other configurable fields.	Securing a Wireless LAN Configuring Radio Settings on an Access Point
	MAC Address Local Authentication	This feature provides support for MAC authentication of users on an access point. You can configure an access point to act as a local authentication server to provide authentication service for small wireless LANs without a RADIUS server or to provide backup authentication service in case of a WAN link or a server failure.	Securing a Wireless LAN
	Multiple SSIDs	This feature allows a user to configure up to 10 SSIDs on Cisco 800 series access points and up to 16 SSIDs on Cisco 1800 series access points or access points equipped with the access point high-speed WAN interface card (AP HWIC), such as the Cisco 2800 and 3800 series access points.	Securing a Wireless LAN

Table 1   Supported Cisco IOS Wireless LAN Features (continued)

Release	Feature Name	Feature Description	Where Documented
	RADIUS Server per SSID	This feature allows RADIUS servers to be specified on a per-SSID basis.	Configuring RADIUS or a Local Authenticator in a Wireless LAN
	Transmit Power Control	This feature allows client devices to calculate the path loss and the transmit power necessary for the client to reach the access point, thereby extending client device battery life.	Configuring Radio Settings on an Access Point
	Wi-Fi Protected Access (WPA)	This feature provides support for wireless fidelity protected access, which is a standards-based, interoperable security enhancement that increases the level of data protection and access control for existing and future wireless LAN systems.	Securing a Wireless LAN
	Wireless Access Point High-Speed WAN Interface Card	This feature provides support for two new AP HWICs for the Cisco 1800, 2800, and 3800 series integrated services routers.	Configuring Radio Settings on an Access Point
	World Mode	This feature is only supported on the 2.4-GHz radio and automates client configuration of channel and transmit power settings allowing world-mode-enabled access points to configure the settings on world-mode-enabled clients.	Configuring Radio Settings on an Access Point
Cisco IOS Release 12.4(6)T			
	Dynamic Frequency Selection and Transmit Power Control	This feature applies only to wireless access points shipped to Europe and Japan with 5-GHz radios. You can prevent an access point from selecting specific groups of frequencies to avoid interfering with radar signals.	Configuring Radio Settings on an Access Point
Cisco IOS Release 12.4(15)T			
	Access Point Link Role Flexibility	This feature allows access point radios to operate in a combination of radio roles, such as access point root, access point repeater, bridge root (with or without clients), bridge nonroot (with or without clients), and WGB.	Configuring Radio Settings on an Access Point
	Advanced Encryption Standard (AES) - CCMP	AES-CCMP is a symmetric block cipher that can encrypt and decrypt data using keys of 128, 192, and 256 bits. AES-CCMP is a superior to WEP encryption and is defined in the IEEE 802.11i standard.	Securing a Wireless LAN
	Broadcast Key Rotation	This feature allows users to set a timeout for the shared broadcast key, causing a new broadcast key to be generated. This feature mitigates passive attacks that attempt to determine the broadcast key from weak initialization vectors.	Securing a Wireless LAN

Table 1   *Supported Cisco IOS Wireless LAN Features (continued)*

Release	Feature Name	Feature Description	Where Documented
	IEEE 802.1x Authenticator	IEEE 802.1x is a client-server-based access control and authentication protocol that restricts unauthorized devices from connectiong to a LAN through publicly accessible ports.	http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124newft/124t/124t11/ht_8021x.htm
	IEEE 802.1x Local Authentication Service for EAP-FAST.	This feature allows a Cisco IOS Software enabled device to authenticate wireless clients when connectivity to the AAA server is not available. It incorporates an IEEE 802.1x enabled RADIUS server that supports EAP-FAST authentication types into Cisco IOS software.	http://cisco.com/en/US/products/ps5853/products_configuration_guide_chapter09186a008067eaf6.html
	Microsoft WPS IE SSIDL	This feature allows an access point to broadcast a list of configured SSIDs such as SSID Lists (SSIDL) in the Microsoft Wireless Provisioning Services Information Element (WPS IE). A client with the ability to read the SSIDL can alert the user to the availability of the SSIDs.	Configuring Multiple Basic Service Set Identifiers and Microsoft WPS IE SSIDL
	Multiple Basic Service Set ID (BSSID)	This feature permits a single access point (AP) to appear to the wireless LAN (WLAN) as multiple virtual APs.	Configuring Multiple Basic Service Set Identifiers and Microsoft WPS IE SSIDL
	NAC - L2 IEEE 802.1x	Network Admission Control (NAC) L2 IEEE 802.1x extends NAC support to layer 2 switches and wireless access points.	Configuring Wireless VLANs
	Universal Client Mode	This feature allows a wireless device to associate to other Cisco and third-party APs.	Configuring Radio Settings on an Access Point
	VLAN Assignment by Name	This feature provides the ability for the RADIUS server to assign an 802.11 client to a VLAN identifed by name.	Configuring Wireless VLANs
	Wi-Fi Multimedia (WMM) Required Elements	WMM provides enhancements over basic QoS mode.	Implementing Quality of Service in a Wireless LAN
	Wireless Non-Root Bridge	This feature allows a wireless device to operate as the remote node in a point-to-point or point-to-multi-point network.	Configuring Radio Settings on an Access Point