



Configuring WLANs

- [Finding Feature Information](#), on page 1
- [Prerequisites for WLANs](#), on page 1
- [Restrictions for WLANs](#), on page 2
- [Information About WLANs](#), on page 3
- [How to Configure WLANs](#), on page 6
- [Monitoring WLAN Properties \(CLI\)](#), on page 14
- [Where to Go Next](#), on page 14
- [Additional References](#), on page 15
- [Feature Information for WLANs](#), on page 15

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the Feature Information Table at the end of this document.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

Prerequisites for WLANs

- You can associate up to 16 WLANs with each access point group and assign specific access points to each group. Each access point advertises only the enabled WLANs that belong to its access point group. The access point (AP) does not advertise disabled WLANs in its access point group or WLANs that belong to another group.
- We recommend that you assign one set of VLANs for WLANs and a different set of VLANs for management interfaces to ensure that devices properly route VLAN traffic.

Related Topics

- [Creating WLANs \(CLI\)](#), on page 6
- [Configuring General WLAN Properties \(CLI\)](#), on page 10

[Deleting WLANs \(CLI\)](#), on page 7
[Configuring Advanced WLAN Properties \(CLI\)](#), on page 11
[Band Selection](#), on page 3
[Off-Channel Scanning Defer](#)
[DTIM Period](#)
[Session Timeout](#)
[Cisco Client Extensions](#), on page 5
[Peer-to-Peer Blocking](#), on page 5
[Diagnostic Channel](#)
[Client Count Per WLAN](#)
[Enabling WLANs \(CLI\)](#), on page 8
[Disabling WLANs \(CLI\)](#), on page 9

Restrictions for WLANs

- Peer-to-peer blocking does not apply to multicast traffic.
- You can configure a maximum of up to 1000 clients.
- The WLAN name and SSID can have up to 32 characters. Spaces are not allowed in the WLAN profile name and SSID. WLAN name cannot be a keyword; for example, if you try to create a WLAN with the name as 's' by entering the **wlan s** command, it results in shutting down all WLANs because 's' is used as a keyword for shutdown.
- You cannot map a WLAN to VLAN0, and you cannot map VLANs 1002 to 1006.
- Dual stack clients with a static-IPv4 address is not supported.
- When creating a WLAN with the same SSID, you must create a unique profile name for each WLAN.
- When multiple WLANs with the same SSID get assigned to the same AP radio, you must have a unique Layer 2 security policy so that clients can safely select between them.
- When WLAN is local switching, associate the client to local-switching WLAN where AVC is enabled. Send some traffic from client, when you check the AVC stats after 90 sec. Cisco WLC shows stats under top-apps but does not show under client. There is timer issue so for the first slot Cisco WLC might not show stats for the clients. Earlier only 1 sec stats for a client is seen if the timers at AP and at WLC are off by 89 seconds. Now clearing of the stats is after 180 seconds so stats from 91 secs to 179 secs for a client is seen. This is done since two copies of the stats per client cannot be kept due to memory constraint in 5500.



Caution

Some clients might not be able to connect to WLANs properly if they detect the same SSID with multiple security policies. Use this feature with care.

Related Topics

[Creating WLANs \(CLI\)](#), on page 6
[Configuring General WLAN Properties \(CLI\)](#), on page 10
[Deleting WLANs \(CLI\)](#), on page 7
[Configuring Advanced WLAN Properties \(CLI\)](#), on page 11
[Band Selection](#), on page 3
[Off-Channel Scanning Defer](#)

[DTIM Period](#)
[Session Timeout](#)
[Cisco Client Extensions](#), on page 5
[Peer-to-Peer Blocking](#), on page 5
[Diagnostic Channel](#)
[Client Count Per WLAN](#)
[Enabling WLANs \(CLI\)](#), on page 8
[Disabling WLANs \(CLI\)](#), on page 9

Information About WLANs

This feature enables you to control up to 64 WLANs for lightweight access points. Each WLAN has a separate WLAN ID, a separate profile name, and a WLAN SSID. All devices publish up to 16 WLANs to each connected access point, but you can create up to the maximum number of WLANs supported and then selectively publish these WLANs (using access point groups) to different access points to better manage your wireless network.

You can configure WLANs with different SSIDs or with the same SSID. An SSID identifies the specific wireless network that you want the device to access.

Band Selection

Band selection enables client radios that are capable of dual-band (2.4- and 5-GHz) operation to move to a less congested 5-GHz access point. The 2.4-GHz band is often congested. Clients on this band typically experience interference from Bluetooth devices, microwave ovens, and cordless phones as well as co-channel interference from other access points because of the 802.11b/g limit of three nonoverlapping channels. To prevent these sources of interference and improve overall network performance, you can configure band selection on the device.

Band selection works by regulating probe responses to clients and it can be enabled on a per-WLAN basis. It makes 5-GHz channels more attractive to clients by delaying probe responses to clients on 2.4-GHz channels. In the access point, the band select table can be viewed by giving `show dot11 band-select` command. It can also be viewed from `show cont d0/d1 | begin Lru`.



Note The WMM default configuration will not be shown in **show running-config** output.

Related Topics

[Configuring Advanced WLAN Properties \(CLI\)](#), on page 11
[Prerequisites for WLANs](#), on page 1
[Restrictions for WLANs](#), on page 2

Off-Channel Scanning Defer

In deployments with certain power-save clients, you sometimes need to defer the Radio Resource Management's (RRM) normal off-channel scanning to avoid missing critical information from low-volume clients (for example, medical devices that use power-save mode and periodically send telemetry information). This feature improves the way that Quality of Service (QoS) interacts with the RRM scan defer feature.

You can use a client's Wi-Fi Multimedia (WMM) UP marking to configure the access point to defer off-channel scanning for a configurable period of time if it receives a packet marked UP.

Off-Channel Scanning Defer is essential to the operation of RRM, which gathers information about alternate channel choices such as noise and interference. Additionally, Off-Channel Scanning Defer is responsible for rogue detection. Devices that need to defer Off-Channel Scanning Defer should use the same WLAN as often as possible. If there are many of these devices (and the possibility exists that Off-Channel Defer scanning could be completely disabled by the use of this feature), you should implement an alternative to local AP Off-Channel Scanning Defer, such as monitoring access points, or other access points in the same location that do not have this WLAN assigned.

You can assign a QoS policy (bronze, silver, gold, and platinum) to a WLAN to affect how packets are marked on the downlink connection from the access point regardless of how they were received on the uplink from the client. UP=1,2 is the lowest priority, and UP=0,3 is the next higher priority. The marking results of each QoS policy are as follows:

- Bronze marks all downlink traffic to UP= 1.
- Silver marks all downlink traffic to UP= 0.
- Gold marks all downlink traffic to UP=4.
- Platinum marks all downlink traffic to UP=6.

DTIM Period

In the 802.11 networks, lightweight access points broadcast a beacon at regular intervals, which coincides with the Delivery Traffic Indication Map (DTIM). After the access point broadcasts the beacon, it transmits any buffered broadcast and multicast frames based on the value set for the DTIM period. This feature allows power-saving clients to wake up at the appropriate time if they are expecting broadcast or multicast data.

Typically, the DTIM value is set to 1 (to transmit broadcast and multicast frames after every beacon) or 2 (to transmit after every other beacon). For instance, if the beacon period of the 802.11 network is 100 ms and the DTIM value is set to 1, the access point transmits buffered broadcast and multicast frames 10 times per second. If the beacon period is 100 ms and the DTIM value is set to 2, the access point transmits buffered broadcast and multicast frames 5 times per second. Either of these settings are suitable for applications, including Voice Over IP (VoIP), that expect frequent broadcast and multicast frames.

However, the DTIM value can be set as high as 255 (to transmit broadcast and multicast frames after every 255th beacon) if all 802.11 clients have power save enabled. Because the clients have to listen only when the DTIM period is reached, they can be set to listen for broadcasts and multicasts less frequently which results in a longer battery life. For example, if the beacon period is 100 ms and you set the DTIM value to 100, the access point transmits buffered broadcast and multicast frames once every 10 seconds. This rate allows the power-saving clients to sleep longer before they have to wake up and listen for broadcasts and multicasts, which results in a longer battery life.



Note

A beacon period, which is specified in milliseconds on the device, is converted internally by the software to 802.11 Time Units (TUs), where 1 TU = 1.024 milliseconds. On Cisco's 802.11n access points, this value is rounded to the nearest multiple of 17 TUs. For example, a configured beacon period of 100 ms results in an actual beacon period of 104 ms.

Many applications cannot tolerate a long time between broadcast and multicast messages, which results in poor protocol and application performance. We recommend that you set a low DTIM value for 802.11 networks that support such clients.

Session Timeouts

You can configure a WLAN with a session timeout. The session timeout is the maximum time for a client session to remain active before requiring reauthorization.

Cisco Client Extensions

The Cisco Client Extensions (CCX) software is licensed to manufacturers and vendors of third-party client devices. The CCX code resident on these clients enables them to communicate wirelessly with Cisco access points and to support Cisco features that other client devices do not, including those features that are related to increased security, enhanced performance, fast roaming, and power management.

- The software supports CCX versions 1 through 5, which enables devices and their access points to communicate wirelessly with third-party client devices that support CCX. CCX support is enabled automatically for every WLAN on the device and cannot be disabled. However, you can configure Aironet information elements (IEs).
- If Aironet IE support is enabled, the access point sends an Aironet IE 0x85 (which contains the access point name, load, number of associated clients, and so on) in the beacon and probe responses of this WLAN, and the device sends Aironet IEs 0x85 and 0x95 (which contains the management IP address of the device and the IP address of the access point) in the reassociation response if it receives Aironet IE 0x85 in the reassociation request.

Related Topics

[Configuring Advanced WLAN Properties \(CLI\)](#), on page 11

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Peer-to-Peer Blocking

Peer-to-peer blocking is applied to individual WLANs, and each client inherits the peer-to-peer blocking setting of the WLAN to which it is associated. Peer-to-Peer enables you to have more control over how traffic is directed. For example, you can choose to have traffic bridged locally within the device, dropped by the device, or forwarded to the upstream VLAN.

Peer-to-peer blocking is supported for clients that are associated with the local switching WLAN.

Related Topics

[Configuring Advanced WLAN Properties \(CLI\)](#), on page 11

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Diagnostic Channel

You can choose a diagnostic channel to troubleshoot why the client is having communication problems with a WLAN. You can test the client and access points to identify the difficulties that the client is experiencing

and allow corrective measures to be taken to make the client operational on the network. You can use the device GUI or CLI to enable the diagnostic channel, and you can use the device CLI to run the diagnostic tests.

**Note**

We recommend that you enable the diagnostic channel feature only for nonanchored SSIDs that use the management interface. CCX Diagnostic feature has been tested only with clients having Cisco ADU card

Per-WLAN Radius Source Support

The device sources RADIUS traffic from the IP address of its management interface unless the configured RADIUS server exists on a VLAN accessible via one of the device Dynamic interfaces. If a RADIUS server is reachable via a device Dynamic interface, RADIUS requests to this specific RADIUS server will be sourced from the controller via the corresponding Dynamic interface.

By default, RADIUS packets sourced from the device will set the NAS-IP-Address attribute to that of the management interface's IP Address, regardless of the packet's source IP Address (Management or Dynamic, depending on topology).

When you enable per-WLAN RADIUS source support (Radius Server Overwrite interface) the NAS-IP-Address attribute is overwritten by the device to reflect the sourced interface. Also, RADIUS attributes are modified accordingly to match the identity. This feature virtualizes the device on the per-WLAN RADIUS traffic, where each WLAN can have a separate layer 3 identity. This feature is useful in deployments that integrate with ACS Network Access Restrictions and Network Access Profiles.

To filter WLANs, use the callStationID that is set by RFC 3580 to be in the APMAC:SSID format. You can also extend the filtering on the authentication server to be on a per-WLAN source interface by using the NAS-IP-Address attribute.

You can combine per-WLAN RADIUS source support with the normal RADIUS traffic source and some WLANs that use the management interface and others using the per-WLAN dynamic interface as the address source.

How to Configure WLANs

Creating WLANs (CLI)

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	wlan profile-name wlan-id [ssid] Example:	Specifies the WLAN name and ID:

	Command or Action	Purpose
	<pre>Device(config)# wlan mywlan 34 mywlan-ssid</pre>	<ul style="list-style-type: none"> • For the <i>profile-name</i>, enter the profile name. The range is from 1 to 32 alphanumeric characters. • For the <i>wlan-id</i>, enter the WLAN ID. The range is from 1 to 512. • For the <i>ssid</i>, enter the Service Set Identifier (SSID) for this WLAN. If the SSID is not specified, the WLAN profile name is set as the SSID. <p>Note By default, the WLAN is disabled.</p>
Step 3	<pre>end</pre> <p>Example:</p> <pre>Device(config)# end</pre>	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Related Topics

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Deleting WLANs (CLI)

Procedure

	Command or Action	Purpose
Step 1	<pre>configure terminal</pre> <p>Example:</p> <pre>Device# configure terminal</pre>	Enters global configuration mode.
Step 2	<pre>no wlan wlan-name wlan-id ssid</pre> <p>Example:</p> <pre>Device(config)# no wlan test2</pre>	<p>Deletes the WLAN. The arguments are as follows:</p> <ul style="list-style-type: none"> • The <i>wlan-name</i> is the WLAN profile name. • The <i>wlan-id</i> is the WLAN ID. • The <i>ssid</i> is the WLAN SSID name configured for the WLAN. <p>Note If you delete a WLAN that is part of an AP group, the WLAN is removed from the AP group and from the AP's radio.</p>

	Command or Action	Purpose
Step 3	end Example: Device (config) # end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Related Topics
[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Searching WLANs (CLI)

Procedure

	Command or Action	Purpose
Step 1	show wlan summary Example: Device# show wlan summary	Displays the list of all WLANs configured on the device. You can search for the WLAN in the output.

Example
Device# **show wlan summary**
Number of WLANs: 4

WLAN	Profile Name	SSID	VLAN	Status
1	test1	test1-ssid	137	UP
3	test2	test2-ssid	136	UP
2	test3	test3-ssid	1	UP
45	test4	test4-ssid	1	DOWN

You can also use wild cards to search WLANs. For example **show wlan summary include variable**. Where variable is any search string in the output.

Device# **show wlan summary | include test-wlan-ssid**
1 test-wlan test-wlan-ssid 137 UP

Enabling WLANs (CLI)

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.

	Command or Action	Purpose
Step 2	wlan <i>profile-name</i> Example: Device# wlan test4	Enters the WLAN configuration submenu. The <i>profile-name</i> is the profile name of the configured WLAN.
Step 3	no shutdown Example: Device(config-wlan) # no shutdown	Enables the WLAN.
Step 4	end Example: Device(config) # end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Related Topics

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Disabling WLANs (CLI)

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	wlan <i>profile-name</i> Example: Device# wlan test4	Enters the WLAN configuration submenu. The <i>profile-name</i> is the profile name of the configured WLAN.
Step 3	shutdown Example: Device(config-wlan) # shutdown	Disables the WLAN.
Step 4	end Example: Device(config) # end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.
Step 5	show wlan summary Example: Device# show wlan summary	Displays the list of all WLANs configured on the device. You can search for the WLAN in the output.

Related Topics

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Configuring General WLAN Properties (CLI)

You can configure the following properties:

- Media stream
- Broadcast SSID
- Call Snooping
- Radio
- Interface
- Status

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	wlan <i>profile-name</i> Example: Device# wlan test4	Enters the WLAN configuration submode. The <i>profile-name</i> is the profile name of the configured WLAN.
Step 3	shutdown Example: Device# shutdown	Disables the WLAN before configuring the parameters.
Step 4	broadcast-ssid Example: Device(config-wlan)# broadcast-ssid	Broadcasts the SSID for this WLAN. This field is enabled by default.
Step 5	radio {all dot11a dot11ag dot11bg dot11g} Example: Device# radio all	Enables radios on the WLAN. The keywords are as follows: <ul style="list-style-type: none"> • all—Configures the WLAN on all radio bands. • dot11a—Configures the WLAN on only 802.11a radio bands. • dot11g—Configures the WLAN on 802.11ag radio bands.

	Command or Action	Purpose
		<ul style="list-style-type: none"> • dot11bg—Configures the WLAN on only 802.11b/g radio bands (only 802.11b if 802.11g is disabled). • dot11ag—Configures the wireless LAN on 802.11g radio bands only.
Step 6	client vlan <i>vlan-identifier</i> Example: Device# client vlan test-vlan	Enables an interface group on the WLAN. <i>vlan-identifier</i> —Specifies the VLAN identifier. This can be the VLAN name, VLAN ID, or VLAN group name.
Step 7	ip multicast vlan <i>vlan-name</i> Example: Device(config-wlan)# ip multicast vlan test	Enables IP multicast on a WLAN. The keywords are as follows: <ul style="list-style-type: none"> • vlan—Specifies the VLAN ID. • <i>vlan-name</i>—Specifies the VLAN name.
Step 8	media-stream multicast-direct Example: Device(config-wlan)# media-stream multicast-direct	Enables multicast VLANs on this WLAN.
Step 9	call-snoop Example: Device(config-wlan)# call-snoop	Enables call-snooping support.
Step 10	no shutdown Example: Device(config-wlan)# no shutdown	Enables the WLAN.
Step 11	end Example: Device(config)# end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Related Topics

[Prerequisites for WLANs](#), on page 1

[Restrictions for WLANs](#), on page 2

Configuring Advanced WLAN Properties (CLI)

You can configure the following advanced properties:

- AAA Override
- Coverage Hole Detection

- Session Timeout
- Cisco Client Extensions
- Diagnostic Channels
- Interface Override ACLs
- P2P Blocking
- Client Exclusion
- Maximum Clients Per WLAN
- Off Channel Scan Defer

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	wlan <i>profile-name</i> Example: Device# wlan test4	Enters the WLAN configuration submode. The <i>profile-name</i> is the profile name of the configured WLAN.
Step 3	aaa-override Example: Device (config-wlan) # aaa-override	Enables AAA override.
Step 4	chd Example: Device (config-wlan) # chd	Enables coverage hole detection for this WLAN. This field is enabled by default.
Step 5	session-timeout <i>time-in-seconds</i> Example: Device (config-wlan) # session-timeout 450	Sets the session timeout in seconds. The range and default values vary according to the security configuration. If the WLAN security is configured to dot1x, the range is 300 to 86400 seconds and the default value is 1800 seconds. For all other WLAN security configurations, the range is 1 to 65535 seconds and the default value is 0 seconds. A value of 0 indicates no session timeout.
Step 6	ccx aironet-iesupport Example: Device (config-wlan) # ccx aironet-iesupport	Enables support for Aironet IEs for this WLAN. This field is enabled by default.

	Command or Action	Purpose
Step 7	diag-channel Example: Device(config-wlan) # diag-channel	Enables diagnostic channel support to troubleshoot client communication issues on a WLAN.
Step 8	ip access-group [web] acl-name Example: Device(config) # ip access-group test-acl-name	Configures the WLAN ACL group. The variable <i>acl-name</i> specifies the user-defined IPv4 ACL name. The keyword web specifies the IPv4 web ACL.
Step 9	peer-blocking [drop forward-upstream] Example: Device(config) # peer-blocking drop	Configures peer to peer blocking parameters. The keywords are as follows: <ul style="list-style-type: none"> • drop—Enables peer-to-peer blocking on the drop action. • forward-upstream—Enables peer-to-peer blocking on the forward upstream action.
Step 10	exclusionlist time-in-seconds Example: Device(config) # exclusionlist 10	Specifies the timeout in seconds. The valid range is from 0 to 2147483647. Enter 0 for no timeout. A zero (0) timeout indicates that the client is permanently added to the exclusion list.
Step 11	client association limit max-number-of-clients Example: Device(config) # client association limit 200	Sets the maximum number of clients that can be configured on a WLAN.
Step 12	channel-scan defer-priority {defer-priority {0-7} defer-time {0 - 6000}} Example: Device(config) # channel-scan defer-priority 6	Sets the channel scan defer priority and defer time. The arguments are as follows: <ul style="list-style-type: none"> • defer-priority—Specifies the priority markings for packets that can defer off-channel scanning. The range is from 0 to 7. The default is 3. • defer-time—Deferral time in milliseconds. The range is from 0 to 6000. The default is 100.
Step 13	end Example: Device(config) # end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.

Related Topics

[Band Selection](#), on page 3

[Off-Channel Scanning Defer](#)
[DTIM Period](#)
[Session Timeout](#)
[Cisco Client Extensions](#), on page 5
[Peer-to-Peer Blocking](#), on page 5
[Diagnostic Channel](#)
[Client Count Per WLAN](#)
[Prerequisites for WLANs](#), on page 1
[Restrictions for WLANs](#), on page 2
[Information About AAA Override](#)
[Prerequisites for Layer 2 Security](#)

Monitoring WLAN Properties (CLI)

Command	Description
show wlan id <i>wlan-id</i>	Displays WLAN properties based on the WLAN ID.
show wlan name <i>wlan-name</i>	Displays WLAN properties based on the WLAN name.
show wlan all	Displays WLAN properties of all configured WLANs.
show wlan summary	Displays a summary of all WLANs. The summary details includes the following information: <ul style="list-style-type: none"> • WLAN ID • Profile name • SSID • VLAN • Status
show running-config wlan <i>wlan-name</i>	Displays the running configuration of a WLAN based on the WLAN name.
show running-config <i>wlan</i>	Displays the running configuration of all WLANs.

Where to Go Next

Proceed to configure DHCP for WLANs.

Additional References

Related Documents

Related Topic	Document Title
WLAN command reference	<i>WLAN Command Reference, Cisco IOS XE Release 3SE (Catalyst 3650 Switches)</i>
Mobility Anchor configuration	<i>Mobility Configuration Guide, Cisco IOS XE Release 3SE (Catalyst 3650 Switches)</i>
WebAuth Configuration	<i>Security Configuration Guide (Catalyst 3650 Switches)</i>

Error Message Decoder

Description	Link
To help you research and resolve system error messages in this release, use the Error Message Decoder tool.	https://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi

MIBs

MIB	MIBs Link
All supported MIBs for this release.	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	http://www.cisco.com/support

Feature Information for WLANs

This table lists the features in this module and provides links to specific configuration information:

Feature	Release	Modification
WLAN Functionality	Cisco IOS XE 3.3SE Cisco IOS XE 3.3SE	This feature was introduced.