

Configuring Country Codes

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Finding Feature Information

Your software release may not support all of the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release.

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 Configuring Country Codes

- Generally, you configure one country code per switch; you configure one code that matches the physical location of the switch and its access points. You can configure up to 20 country codes per switch. This multiple-country support enables you to manage access points in various countries from a single switch.
- When the multiple-country feature is used, all switchs that are going to join the same RF group must be configured with the same set of countries, configured in the same order.
- Access points are capable of using all the available legal frequencies. However, access points are assigned to the frequencies that are supported in their relevant domains.
- The country list configured on the RF group leader determines which channels the members would operate on. This list is independent of which countries have been configured on the RF group members.
- For switchs in the Japan regulatory domain, you must have had one or more Japan country codes (JP, J2, or J3) configured on your switch at the time you last booted your switch.
- For switchs in the Japan regulatory domain, you must have at least one access point with a -J regulatory domain joined to your switch.

Information About Configuring Country Codes

Controllers and access points are designed for use in many countries with varying regulatory requirements. The radios within the access points are assigned to a specific regulatory domain at the factory (such as -E for Europe), but the country code enables you to specify a particular country of operation (such as FR for France or ES for Spain). Configuring a country code ensures that each radio's broadcast frequency bands, interfaces, channels, and transmit power levels are compliant with country-specific regulations.

Information About Japanese Country Codes

Country codes define the channels that can be used legally in each country. These country codes are available for Japan:

- JP—Allows only -J radios to join the controller
- J2—Allows only -P radios to join the controller
- J3—Uses the -U frequencies but allows -U, -P and -Q (other than 1550/1600/2600/3600) radios to join the controller
- J4—Allows 2.4G JPQU and 5G PQU to join the controller.



Note

The 1550, 1600, 2600, and 3600 APs require J4.

See the Channels and Maximum Power Settings for Cisco Aironet Lightweight Access Points document for the list of channels and power levels supported by access points in the Japanese regulatory domains.

How to Configure Country Codes (CLI)



Note

The procedure to perform this task using the switch GUI is not currently available.

Procedure

	Command or Action	Purpose
Step 1	enable	Enters privileged EXEC mode.
	Example:	
	Device# enable	
Step 2	show wireless country supported	Displays a list of all available country codes.
	Example:	
	Device# show wireless country supported	

	Command or Action	Purpose
Step 3	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 4	ap dot11 24ghz shutdown Example: Device(config) # ap dot11 5ghz shutdown	Disables the 802.11a network.
Step 5	<pre>ap dot11 5ghz shutdown Example: Device(config)# ap dot11 24ghz shutdown</pre>	Disables the 802.11b/g network.
Step 6	<pre>ap country country_code Example: Device(config) # ap country IN</pre>	Assigns access points to a specific country. Note Make sure that the country code you choose is compatible with the regulatory domain of at least one of the access point's radios.
Step 7	<pre>end Example: Device(config)# end</pre>	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.
Step 8	show wireless country channels Example: Device# show wireless country channels	Displays the list of available channels for the country codes configured on your switch. Note Perform Steps 9 through 17 only if you have configured multiple country codes in Step 6.
Step 9	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 10	no ap dot11 5ghz shutdown Example: Device(config) # no ap dot11 5ghz shutdown	Enables the 802.11a network.
Step 11	no ap dot11 24ghz shutdown Example: Device(config) # no ap dot11 24ghz shutdown	Enables the 802.11b/g network.

	Command or Action	Purpose
Step 12	<pre>end Example: Device(config)# end</pre>	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exglobal configuration mode.
Step 13	ap name Cisco_AP shutdown	Disables the access point.
	Example: Device# ap name AP02 shutdown	Note Ensure that you disable only the access point for which you are configuring country codes.
Step 14	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 15	ap country country_code	Assigns an access point to a specific country
	Example: Device# ap country IN	Note Ensure that the country code that you choose is compatible with the regulatory domain of at least one of the access point's radios.
		Note If you enabled the networks and disabled some access points and then enter the ap country country_code command, the specified country code is configure on only the disabled access points All other access points are ignored
Step 16	end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.
	<pre>Example: Device(config) # end</pre>	
Step 17	ap name Cisco_AP no shutdown	Enables the access point.
	Example:	
	Device# ap name AP02 no shutdown	

Configuration Examples for Configuring Country Codes

Displaying Channel List for Country Codes: Example

This example shows how to display the list of available channels for the country codes configured on your switch:

Device# show wireless country channels

```
Configured Country..... US - United States
KEY: * = Channel is legal in this country and may be configured manually.
A = Channel is the Auto-RF default in this country.
. = Channel is not legal in this country.
C = Channel has been configured for use by Auto-RF.
x = Channel is available to be configured for use by Auto-RF.
(-,-) = (indoor, outdoor) regulatory domain allowed by this country.
 ----:+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-
802.11bg :
Channels : 1 1 1 1 1
: 1 2 3 4 5 6 7 8 9 0 1 2 3 4
(-A ,-AB ) US : A * * * * A * * * * A . . .
802.11a : 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Channels : 3 3 3 4 4 4 4 5 5 6 6 0 0 0 1 1 2 2 2 3 3 4 4 5 5 6 6
: 4 6 8 0 2 4 6 8 2 6 0 4 0 4 8 2 6 0 4 8 2 6 0 9 3 7 1 5
-----:
4.9GHz 802.11a :
Channels : 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
: 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
US (-A ,-AB ): * * * * * * * * * * * * * * * * * A * * * * A
```

Displaying Channel List for Country Codes: Example