

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 WLC
- 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.

SUMMARY STEPS

- 1. enable
- 2. show wireless country supported
- 3. configure terminal
- 4. ap dot11 24ghz shutdown
- 5. ap dot11 5ghz shutdown
- 6. ap country country_code
- **7**. end
- 8. show wireless country channels
- 9. configure terminal
- 10. no ap dot11 5ghz shutdown

- 11. no ap dot11 24ghz shutdown
- **12**. end
- 13. ap name Cisco_AP shutdown
- 14. configure terminal
- 15. ap country country_code
- **16**. end
- 17. ap name Cisco_AP no shutdown

DETAILED STEPS

	Command or Action	Purpose	
Step 1	enable	Enters privileged EXEC mode.	
	Example:		
	Switch# enable		
Step 2	show wireless country supported	Displays a list of all available country codes.	
	Example:		
	Switch# show wireless country supported		
Step 3	configure terminal	Enters global configuration mode.	
	Example:		
	Switch# configure terminal		
Step 4	ap dot11 24ghz shutdown	Disables the 802.11a network.	
	Example:		
	Switch(config)# ap dot11 5ghz shutdown		
Step 5	ap dot11 5ghz shutdown	Disables the 802.11b/g network.	
	Example:		
	Switch(config)# ap dot11 24ghz shutdown		
Step 6	ap country country_code	Assigns access points to a specific country.	
	Example:	Note Make sure that the country code you choose is	
	Switch(config)# ap country IN	compatible with the regulatory domain of at least one of the access point's radios.	
Step 7	end	Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.	
	Example:		
	Switch(config)# end		
Step 8	show wireless country channels	Displays the list of available channels for the country code configured on your switch.	
	Example:		
	Switch# show wireless country channels	Note Perform Steps 9 through 17 only if you have configured multiple country codes in Step 6.	

	Command or Action	Purpos	Purpose		
Step 9	configure terminal	Enters g	Enters global configuration mode.		
	Example:				
	Switch# configure terminal				
Step 10	no ap dot11 5ghz shutdown	Enables the 802.11a network.			
	Example:				
	Switch(config)# no ap dot11 5ghz shutdown				
Step 11	no ap dot11 24ghz shutdown	Enables the 802.11b/g network.			
	Example:				
	Switch(config)# no ap dot11 24ghz shutdown				
Step 12	end	Returns to privileged EXEC mode. Alternatively, you can			
	Example:	also press Ctrl-Z to exit global configuration mode.			
	Switch(config)# end				
Step 13	ap name Cisco_AP shutdown	Disable	Disables the access point.		
	Example:	Note	Ensure that you disable only the access point		
	Switch# ap name AP02 shutdown		for which you are configuring country codes.		
Step 14	configure terminal	Enters §	Enters global configuration mode.		
	Example:				
	Switch# configure terminal				
Step 15	ap country country_code	Assigns	Assigns an access point to a specific country.		
	Example: Switch# 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 <i>country_code</i> command, the specified country code is configured on only the disabled access points. All other access points are ignored.		
Step 16	end		Returns to privileged EXEC mode. Alternatively, you car also press Ctrl-Z to exit global configuration mode.		
	Example:	also pre			
	Switch(config)# end				
Step 17	ap name Cisco_AP no shutdown	Enables	Enables the access point.		
	Example:				
	Switch# 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:

Switch# 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 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