



Configuring Country Codes

- [Finding Feature Information, page 1](#)
- [Prerequisites for Configuring Country Codes, page 1](#)
- [Information About Configuring Country Codes, page 2](#)
- [How to Configure Country Codes \(CLI\), page 2](#)
- [Configuration Examples for Configuring Country Codes, page 5](#)

Finding Feature Information

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 switches 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 switches 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 switches 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.

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 Example: Switch# enable	Enters privileged EXEC mode.
Step 2	show wireless country supported Example: Switch# show wireless country supported	Displays a list of all available country codes.
Step 3	configure terminal Example: Switch# configure terminal	Enters global configuration mode.
Step 4	ap dot11 24ghz shutdown Example: Switch(config)# ap dot11 5ghz shutdown	Disables the 802.11a network.
Step 5	ap dot11 5ghz shutdown Example: Switch(config)# ap dot11 24ghz shutdown	Disables the 802.11b/g network.

	Command or Action	Purpose
Step 6	<p>ap country <i>country_code</i></p> <p>Example: Switch(config)# ap country IN</p>	<p>Assigns access points to a specific country.</p> <p>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.</p>
Step 7	<p>end</p> <p>Example: Switch(config)# end</p>	<p>Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.</p>
Step 8	<p>show wireless country channels</p> <p>Example: Switch# show wireless country channels</p>	<p>Displays the list of available channels for the country codes configured on your switch.</p> <p>Note Perform Steps 9 through 17 only if you have configured multiple country codes in Step 6.</p>
Step 9	<p>configure terminal</p> <p>Example: Switch# configure terminal</p>	<p>Enters global configuration mode.</p>
Step 10	<p>no ap dot11 5ghz shutdown</p> <p>Example: Switch(config)# no ap dot11 5ghz shutdown</p>	<p>Enables the 802.11a network.</p>
Step 11	<p>no ap dot11 24ghz shutdown</p> <p>Example: Switch(config)# no ap dot11 24ghz shutdown</p>	<p>Enables the 802.11b/g network.</p>
Step 12	<p>end</p> <p>Example: Switch(config)# end</p>	<p>Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.</p>
Step 13	<p>ap name <i>Cisco_AP</i> shutdown</p> <p>Example: Switch# ap name AP02 shutdown</p>	<p>Disables the access point.</p> <p>Note Ensure that you disable only the access point for which you are configuring country codes.</p>
Step 14	<p>configure terminal</p> <p>Example: Switch# configure terminal</p>	<p>Enters global configuration mode.</p>

	Command or Action	Purpose
Step 15	<p>ap country <i>country_code</i></p> <p>Example: Switch# ap country IN</p>	<p>Assigns an access point to a specific country.</p> <p>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.</p> <p>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.</p>
Step 16	<p>end</p> <p>Example: Switch(config)# end</p>	<p>Returns to privileged EXEC mode. Alternatively, you can also press Ctrl-Z to exit global configuration mode.</p>
Step 17	<p>ap name <i>Cisco_AP</i> no shutdown</p> <p>Example: Switch# ap name AP02 no shutdown</p>	<p>Enables the access point.</p>

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 . . .
Auto-RF : . . . . .
-----:+++++-----
802.11a : 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 4 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
-----:+++++-----
(-A,-AB) US : . A . A . A . A A A A * * * * * . . . * * * A A A A
*
Auto-RF : . . . . .
-----:+++++-----
```

Displaying Channel List for Country Codes: Example

```

4.9GHz 802.11a :
Channels : 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2
: 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
-----:+++++-----
US (-A , -AB ) : * * * * * * * * * * * * * * * A * * * * * A
Auto-RF : . . . . .
-----:+++++-----
    
```