

Configuring Wi-Fi with the Cisco SPA 525G2

Connecting Your Phone to the Wireless Network

NOTE The PC port is not supported in wireless operation. The PC port is only supported in a wired operation. The Cisco SPA 525G2 phone supports a direct connection to the wireless network. Before setting up the wireless network, you need to know the wireless security type for your router. The Cisco SPA 525G2 works with the following security types:

- **WEP—Wired Equivalent Privacy.** With this type of security, you need to enter a 64 or 128-bit key on the phone (or a more easily remembered passphrase to generate the key). The phone then authenticates with your router to provide a secure connection.
- **WPA—Wi-Fi Protected Access.** The Cisco SPA 525G/525G2 supports WPA PSK, WPA2 PSK, WPA Enterprise, and WPA2 Enterprise. With this type of security, you will at the very minimum be required to enter a password on the phone. The phone then authenticates with your router to provide a secure connection.

Determining Your Wireless Router Security Type

If you do not know your wireless router security type, you need to log in to the router interface to get this information.

To Set Up the Cisco SPA 525G2 Wireless Connection

STEP 1 If you have plugged in an Ethernet cable to connect the phone to the wired network, remove it and reboot the phone. If an Ethernet connection is present on the phone, it is used instead of the Wi-Fi connection.

STEP 2 Press the **Setup** button on your phone.

STEP 3 Scroll to Network Configuration and press **Select**.

STEP 4 In the Wi-Fi field, press the **Left** or **Right Arrow** key to turn Wi-Fi On. Press the **Save** softkey.

STEP 5 Scroll to Wi-Fi Configuration and press the Right Arrow key. Choose one of the following options:

- **Wireless Profile** – Use this option to add a new wireless profile (either manually or by scanning for available networks), edit an existing wireless profile, or connect to a previously configured network. See [Manually Adding a Wireless Profile on the Cisco SPA 525G](#) below.
- **Wi-Fi Protected Setup** – If your wireless router supports Wi-Fi Protected Setup, use this method to set up your wireless connection. See [Using Wi-Fi Protected Setup with the Cisco SPA 525G2](#).

Using Wi-Fi Protected Setup with the Cisco SPA 525G2

STEP 1 In the Wireless Configuration window, select Wi-Fi Protected Setup.

STEP 2 Choose one of the following options:

Push Button Configuration:

- a. Press the WPS button on your router.
- b. On your phone, with Push Button Configuration highlighted, press **Select**. Your phone may reboot before the Wi-Fi connection is working.

PIN Configuration:

- a. After selecting PIN Configuration on your phone, note the PIN displayed.
- b. Connect to your router's web interface using a web browser. Your computer must be connected to your wireless network. Enter the IP address of the wireless router in the browser address bar.
- c. If required, enter the user name and password.
- d. View the Wireless tab or window. Locate the Wireless Protected Setup configuration menu.
- e. Enter the PIN into the field that allows you to setup wireless devices using a PIN.
- f. Save your changes.
- g. On the Cisco SPA 525G2, with PIN Configuration highlighted, press **Select**. To add the connection as a profile, press **OK**. Your phone may reboot before the Wi-Fi connection is working.

Manually Adding a Wireless Profile on the Cisco SPA 525G/525G2

To add a new wireless network profile:

STEP 1 In the Network Configuration screen, ensure Wi-Fi is enabled.

STEP 2 Scroll to Wi-Fi Configuration. Press the **Right Arrow** key to enter the Wi-Fi Configuration screen.

STEP 3 Select **Wireless Profile**. Any previously configured wireless profiles are displayed.

STEP 4 Do one of the following:

- Scan for available networks. See Scanning for Available Networks below.
- Manually add the network. See Manually Adding a Network below.

Scanning for Available Networks

NOTE If your router has SSID (router name) broadcast disabled, it may not appear in the list of networks. In that case, you need to manually add it (see Manually Adding a Network).

STEP 1 In the Wireless Profile screen, press **Scan**.

STEP 2 In the list of available networks, scroll to the desired network and click Add to select the highlighted network.

STEP 3 (Optional) Press the **Right Arrow** key under Security Mode to set the security options:

- **WEP – Wired Equivalent Privacy:** You must enter the Default Transmit Key, Key Type and Length, and the keys.
- **WPA PSK or WPA2 PSK:** You must enter the Cipher Type (TKIP or AES CCMP) and the shared key.
- **WPA/WPA2 Enterprise:** This type of authentication requires some advanced expertise because it involves setting up a radius server for authentication and, in some cases, creation of certificates for both the radius server and the phone.

You must enter the Cipher Type (TKIP or AES CCMP) and the EAP Type:

- **TTLS –** Enter the anonymous ID, choose whether the phone should check for the server certificate, choose the TTLS Inner Protocol (MSCHV2, MSCHAP, PAP, CHAP, or MD5), and enter the User ID and password.
- **LEAP –** Enter the User ID and password.
- **TLS –** Enter the User ID, choose whether the phone should check for the server certificate, enter the User ID, and configure the Root certificate and User certificate (see the “Uploading Security Certificates to the Phone” below).

STEP 4 To save as a wireless profile, press **Save**.

Manually Adding a Network

STEP 1 From the Wireless Profile screen, press **Option** and select **Add New** to manually add the network.

STEP 2 (Optional) Press the **Right Arrow** key under Security Mode to set the security options:

- WEP – Wired Equivalent Privacy: You must enter the Default Transmit Key, Key Type and Length, and the keys.
- WPA PSK or WPA2 PSK: You must enter the Cipher Type (TKIP or AES CCMP) and the shared key.
- WPA/WPA2 Enterprise: You must enter the Cipher Type (TKIP or AES CCMP) and the EAP Type:
 - TTLS: Enter the anonymous ID, choose whether the phone should check for the server certificate, choose the TTLS Inner Protocol (MSCHV2, MSCHAP, PAP, CHAP, or MD5), and enter the User ID and password.
 - LEAP: Enter the User ID and password.
 - TLS: Enter the User ID, choose whether the phone should check for the server certificate, enter the User ID, and configure the Root certificate and User certificate (see the “Uploading Security Certificates to the Phone” below).

STEP 3 To save as a wireless profile, press **Save**.

Uploading Security Certificates to the Phone

If you are using some types of wireless security (for example, WPA2 Enterprise), you will need to upload security certificates to the phone. Certificates must be in the following format:

- Root certificate: DER encoded binary x.509 (CER)
- User certificate: Personal Information Exchange (PKCS#12(.PFX))

STEP 1 Connect a USB storage device to your PC.

STEP 2 Create a directory named “ca” on the USB device and copy the certificate files into that directory.

STEP 3 Remove the USB device from your PC and insert it into the USB slot on the Cisco SPA 525G2.

STEP 4 After creating a wireless profile, in the Profile screen, press the Right Arrow key under Security Mode to set the security options (WPA Enterprise or WPA2 Enterprise).

STEP 5 Scroll to **Root Certificate** and press the **Right Arrow** key. All files in the “ca” folder are displayed.