Quick Start Guide

347551

Cisco WAP551 and WAP561 Wireless-N Access Points

Welcome

Thank you for choosing the Cisco WAP551 and WAP561 Wireless-N Access Points. The Cisco WAP551 is a single-radio, selectable-band, 450Mbps data rate 802.11n access point, and the Cisco WAP561 is a dual-radio variant of the Cisco WAP551.

This guide is designed to familiarize you with the general layout of the access point, describe how to deploy the device in your network, and describe how to configure the device. Your access point has more features and functionality than what is described in this guide. For additional information, see the Administration Guide. A link to the Administration Guide is found in **"Where to Go From Here" on page 11**.

Package Contents

- Wireless Access Point
- Mounting kit
- This Quick Start Guide
- Product CD
- Ethernet Cable
- Technical Support Contacts
- China RoHS (for China SKU only)

1 Before You Begin

Before you begin the installation, make sure that you have the following equipment and services:

- A computer with Browser support for:
    - Internet Explorer v7.0 or later
    - Chrome v5.0 or later
    - Firefox v3.0 or later
    - Safari v3.0 or later
- Tools for installing the hardware
- One or more Ethernet network switches with PoE

2 Cisco WAP551 and WAP561 Wireless-N Access Points Features

Front Panel

The front panel of the devices consists of three lights: Power, WLAN, and LAN. For full descriptions of the colors of the lights and their indications, see **"Verifying the Hardware Installation"**.

A Kensington lock slot is found under the lights.

Back Panel

The back panel of the devices has an RJ-45 Ethernet port. Use the Ethernet port to power your device using PoE. It is an auto-sensing, Gigabit Ethernet (802.3) port used to connect your WAP devices to network devices, such as computers, routers, or switches. Cisco strongly recommends using Category 5e or better cable for Gigabit connectivity.

Side Panel

The side panel of the devices has a Reset button. See **"Rebooting the Devices or Returning them to their Factory Default Settings"** for information on the Reset button.

Default Settings

Parameter	Default Value
Username	cisco
Password	cisco
LAN IP Address	DHCP address assigned by server
Fallback LAN IP	192.168.1.245
Subnetwork Mask	255.255.255.0

If you are using a Cisco RV Series router, the default range for the DHCP assigned address is from 192.168.1.100 to 192.168.1.254. Any device connecting to the same LAN will be assigned an IP address in this range.

3 Mounting the Cisco WAP551 and WAP561 Wireless-N Access Points

You can place your access point on a desktop, or mount it on a wall or ceiling.

Placement Tips

- **Ambient Temperature**—To prevent the access point from overheating, do not operate it in an area that exceeds an ambient temperature of 104°F (40°C).

- **Air Flow**—Both side panels have vents which must be unobstructed to prevent overheating.

- **Mechanical Loading**—The device should be level, stable, and secure to prevent it from sliding or shifting out of position.

Wall and Ceiling Mounting

The Cisco WAP551 and WAP561 can be wall or ceiling-mounted. There is a mounting kit packed with your device. The kit is designed to install your device to the wall or the ceiling.

The mounting bracket has some flexibility so that you can reuse existing holes drilled for a Cisco WAP121 or WAP321 device. The installer can remove the Cisco WAP121 or WAP321 and mount the Cisco WAP5xx.

The dimensions for the mount kit screws are as follows:
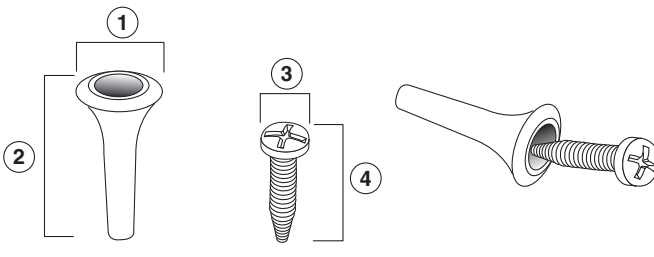
1 7.8 to 8.3 mm/ .31 to .33 in	**2** 21.8 to 22.3 mm/ .86 to .88 in	**3** 5.5 to 6.0 mm/ .22 to .24 in	**4** 17.5 to 18.2mm/ .69 to .72 in

⚠ **WARNING** Insecure mounting might damage the device or cause injury. Cisco is not responsible for damages incurred by insecure wall or ceiling mounting.

To mount the WAP device to a wall or ceiling:

STEP 1 Determine where you want to mount the device. Verify that the surface is smooth, flat, dry, and sturdy.

STEP 2 Drill two pilot holes into the surface 2.75 inches (70 mm) apart for your Cisco WAP device.

STEP 3 Insert a screw into each hole, leaving a gap between the surface and the base of the screw head.

STEP 4 Place the upper slots of the bracket over the screws, adjust the screws accordingly, and slide the bracket down until the screws fit snugly into the slots.

STEP 5 Using the bracket as a template, drill two more holes for the lower screws.

STEP 6 Insert a screw into each lower hole.

STEP 7 Slide the WAP device into the bracket, placing the cable through the break-out tab found in the back of the bracket.

4 Connecting the Cisco WAP551 and WAP561 Wireless-N Access Points

The default configuration of the device has the Wi-Fi radio turned off. You must perform the initial configuration using a wired Ethernet connection. To connect the device to the wired network:

STEP 1 Connect the Ethernet cable to the Ethernet port of a switch, a router, or a PC.

STEP 2 Connect the other end of the network Ethernet cable to the Ethernet port of the wireless access point.

After installation, all lights should be active. Refer to **Verifying the Hardware Installation, page 6** for details about the different lights on each switch.

5 Verifying the Hardware Installation

To verify the hardware installation, complete the following tasks:

- Check the cable connections.
- Check the state of the indicator lights.

Label	Activity	Description
Power	Off	The device has no power.
	Solid Green	The device is powered on. Normal operation.
	Flashing Green	Upgrading firmware or acquiring an IPv4 address.
	Solid Red	Booting or firmware upgrade failed.
WLAN	Off	Wireless is disabled, for both Radio 1 and Radio 2 wireless networks
	Solid Green	Wireless Radio 1 is in use.
	Solid Amber	Wireless Radio 2 is in use.
	Solid Blue	(Cisco WAP561 only) Wireless Radios 1 and 2 are operating in concurrent mode.
	Flashing	Transmitting or receiving data.
LAN	Off	No Ethernet link.
	Solid Green	GE Ethernet link is active.
	Solid Amber	FE Ethernet link is active.
	Flashing	Transmitting or receiving data.

NOTE If you need help resolving a problem, visit the Cisco Support Community at www.cisco.com/go/smallbizsupport.

6 Getting Started with the Configuration

To configure the wireless access points, follow these steps to access the Wizard and then the web-based configuration utility from your computer.

STEP 1 Connect the wireless access point to the same network (IP subnet) as your computer. The factory default IP address configuration of the access points is DHCP. Make sure your DHCP server is running and can be reached.

See **"Incorrect IP Address" on page 9** for troubleshooting information, or if you do not have a DHCP server.

STEP 2 Locate the IP address of the wireless access point.

a. The wireless access points can be accessed and managed by Cisco network tools and services including the Cisco FindIT Network Discovery Utility that enables you to automatically discover all supported Cisco devices in the same local network segment as your computer. You can get a snapshot view of each device or launch the product configuration utility to view and configure the settings. For more information, see www.cisco.com/go/findit.

b. The wireless access points are Bonjour-enabled and automatically broadcast their services and listen for services being advertised by other Bonjour-enabled devices. If you have a Bonjour-enabled browser, such as Microsoft Internet Explorer with a Bonjour plug-in, or the Apple Mac Safari browser, you can find the wireless access point on your local network without knowing its IP address.

You can download the complete Bonjour for Internet Explorer browser from Apple's Web site by visiting http://www.apple.com/bonjour/.

c. Locate the IP address assigned by your DHCP server by accessing your router/DHCP Server; see your DHCP server instructions for information.

STEP 3 Launch a web browser, such as Internet Explorer or Mozilla Firefox.

STEP 4 In the Address field enter the default DHCP address and press the **Enter** key.

STEP 5 Enter the default user name of **cisco** and password of **cisco** in the User Name and Password fields.

STEP 6 Click **Login**. The Wireless Access Point Setup Wizard appears.

STEP 7 Follow the Setup Wizard instructions to finish the WAP device installation. We strongly recommend you use the Setup Wizard for the first installation. The Setup Wizard turns on the Wi-Fi radio, allowing you to connect wirelessly. For more advanced configurations, see the Administration Guide. A link to the Administration Guide is found in **"Where to Go From Here" on page 11**.

Congratulations, you can now start using your wireless access point.

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7 Suggested Next Steps

In case of an error while installing, try the following troubleshooting procedures:

Troubleshooting

If you cannot display the configuration utility, you can test the ability of the computer to communicate with the device by using **ping**. To use **ping** on a computer running Windows:

STEP 1 Verify that the Cisco WAP551 and WAP561 is powered on and the lights indicate the appropriate links.

STEP 2 Locate the device's IP address. While there are different ways to locate your device's IP address, this procedure uses Cisco FindIT.

a. If you have previously downloaded Cisco FindIT, open Internet Explorer and launch Cisco FindIT. For more information on downloading Cisco FindIT, see www.cisco.com/go/findit.

b. In the Cisco FindIT display, place your mouse over the device's name. The device IP address is displayed along with other device information.

STEP 3 Open a command window by using **Start** > **Run** and enter **cmd**.

STEP 4 At the **Command** window prompt enter **ping** and the *device IP address*. In this example, we **pinged 192.0.2.10**.

If successful, you should get a reply similar to the following:

```
Pinging 192.0.2.10 with 32 bytes of data:
Reply from 192.0.2.10: bytes=32 time<1ms TTL=128
```

If it fails, you should get a reply similar to the following:

```
Pinging 192.0.2.10 with 32 bytes of data:
Request timed out.
```

Possible Cause of Failure

Devices Can't Connect using Wi-Fi

- Complete the Setup Wizard. The Wi-Fi radio on the device is turned off by default, and the Setup Wizard activates it. For users who do not wish to use the Setup Wizard, log into the device using a Category 5e Ethernet cable, and activate the Wi-Fi radio manually. See the Administration Guide for details on activating the Wi-Fi radio.

No Power

- Power up the switch and your computer if they are turned off.
- Make sure your PoE switch is powered on and the lights indicate that you have a link. See **"Verifying the Hardware Installation" on page 6**.
- Verify that the devices on your network are not plugged into a switchable outlet.

Bad Ethernet Connection

- Check the state of the indicator lights. See **"Verifying the Hardware Installation" on page 6**.
- Check the Ethernet cable to ensure that it is firmly connected to your devices. Devices connected by the Ethernet cable can include the WAP device, and routers, any switches, and your computer.
- Verify the connected switch has auto-negotiation enabled. The access point and the switch need the same negotiation parameters set.

Bad Image

After a new firmware installation, if the Power light is flashing quickly, contact system support; see **"Where to Go From Here" on page 11**.

Incorrect IP Address

The most likely cause of connectivity failure is an incorrect IP address. The Web browser may be pointed to the wrong IP address, or your computer may be configured with an IP address that is not in the same subnet as the device.

Because the factory default IP address configuration is DHCP, make sure that your DHCP server is running and can be reached. You may need to disconnect and reconnect the devices for them to discover their new IP addresses from the DHCP server. You can then query the DHCP server for the new IP address. See **Step 2** of **"Getting Started with the Configuration" on page 7** for more information on how to find the DHCP address.

If the wireless access points do not receive a DHCP response (there is no DHCP server on your network) after 60 seconds, the access points will fallback to the following default static IP address: 192.168.1.245 and a default mask of 255.255.255.0. To reach that IP address, be sure that your computer is on the 192.168.1.xxx network.

8 Rebooting the Devices or Returning them to their Factory Default Settings

To reboot your device:

- Unplug your Ethernet connection for three seconds and plug it back in.

  or

- With the power on, press the Reset button with an opened paper clip for less than three seconds, or until the lights go off.

  - When all the lights go off, release the Reset button.

  - Release the Reset button as soon as the lights go off, or you will restore the device to factory default settings and lose your configurations.

To reset the device to factory default settings:

- To restore the device to the factory default settings, with the power on, press-and-hold the Reset button with an opened paper clip for more than 10 seconds.

  - All of the lights will go off.

  - Release the Reset button when power light turns on.

9   Where to Go From Here

Support	
Cisco Support Community	www.cisco.com/go/smallbizsupport
Cisco Support and Resources	www.cisco.com/go/smallbizhelp
Phone Support Contacts	www.cisco.com/en/US/support/ tsd_cisco_small_business _support_center_contacts.html
Cisco Firmware Downloads	www.cisco.com/go/smallbizfirmware Select a link to download firmware for Cisco Products. No login is required.
Cisco Open Source Requests	www.cisco.com/go/ smallbiz_opensource_request
Cisco Partner Central (Partner Login Required)	www.cisco.com/web/partners/sell/smb
Product Documentation	
Cisco WAP551 and WAP561 Administration Guide	www.cisco.com/go/500_wap_resources
Cisco Power Adaptors	www.cisco.com/go/wap_accessories