

# **Installing and Configuring the Access Point**

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#### **Before You Begin**

The following sections provide information on how to install and configure the Cisco Aironet 1810 Series OfficeExtend Access Point. The specifications of the access point (AP), the parts, mounting options, powering options and other hardware installation procedures are provided in the *Getting Started Guide - Cisco Aironet 1810 Series OfficeExtend Access Points*, at:

http://www.cisco.com/c/en/us/td/docs/wireless/access\_point/1810/quick/guide/oeap1810getstart.html

Ensure that the AP is properly mounted and ready to be powered up before proceeding with the sections that follow. This document is meant to be used in conjunction with the following guides:

• Getting Started Guide - Cisco Aironet 1810 Series OfficeExtend Access Points, at:

http://www.cisco.com/c/en/us/td/docs/wireless/access\_point/1810/quick/guide/oeap1810getstart.html

• Cisco Aironet 1810 Series OfficeExtend Access Points Deployment Guide, at:

http://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-3/b\_Cisco\_OfficeExtend\_Access \_Point\_.html

#### **Installing the Access Point in the Network**

Figure 1-1 Cisco Aironet 1810 Series OfficeExtend AP Network Deployment Overview





In some cases your broadband modem may have an integrated router capability and therefore you do not require a separate router placed between the broadband modem and the Cisco Aironet 1810 Series OfficeExtend Access Point.

To install the Cisco Aironet 1810 Series OfficeExtend AP, follow these steps:

Step 1 Connect the WAN port of the Cisco OfficeExtend Access Point 1810 to your home router/gateway. The Cisco OfficeExtend Access Point gets an IP address from the home router/ gateway.



The Cisco OfficeExtend Access Point is not designed to replace the functionality of a home router, and it should not be connected directly to the service provider gateway.

- Step 2 After the Cisco OfficeExtend Access Point has started, connect a computer to the port labeled as LAN3. LAN3 is a dedicated local port on OEAP1810. The computer gets an IP address from the default DHCP address pool of 10.0.0.0/24.
- **Step 3** Open an Internet browser and go to the IP address of the access point. The default IP address is 10.0.0.1



Note

Make sure your laptop is not connected to your company's network using a virtual private network (VPN) connection.

- **Step 4** At the OfficeExtend Access Point login window, click **Login**, and then enter the username and password to log into the access point. The default username and password are *admin* and *admin*.
- **Step 5** Choose **Configuration > WAN**.
- Step 6 Enter the IP address of the Wireless LAN Controller in the Controller IP Address field.
- **Step 7** Leave the Static IP check box unchecked to allow the WAN IP address to be assigned by DHCP.
- **Step 8** Click **Apply** to commit your changes.
- Step 9 On the verification screen, click Continue.

The AP connects to the controller and downloads the current software image. Allow 5 minutes for the device to download and reboot with the new code and configuration.



Note

The AP restarts when any change is applied on local the GUI. For example, changing the settings for the personal SSID causes interruption to the corporate SSID. It recovers only after the AP rejoins the controller.



You do not need to configure any SSIDs for your AP to connect to your company network. The access point receives the company SSID when it connects to the company network by way of the Internet. If you have problems connecting to your company network, contact your IT administrator. You can configure your local SSID WLAN for other devices. See the "Configuring Radio Channels on the Access Point" section on page 1-4.



Cisco Aironet 1810 Series OfficeExtend access points are designed to work behind a router or other gateway device that is using network address translation (NAT). NAT allows a device, such as a home router or gateway, to act as an agent between the Internet (public) and a personal network (private), thereby enabling an entire group of computers to be represented by a single IP address. There is not limit to the number of Cisco Aironet 1810 Series OfficeExtend access points that can be deployed behind a single NAT device.

#### Configuring the Wireless LAN Controller IP Address on the Access Point

Follow these steps to configure the IP address of the Wireless LAN Controller on your Cisco Aironet 1810 Series OfficeExtend access point.

- **Step 1** Obtain the IP address of your Wireless LAN controller from your company's IT professional.
- Step 2 Access the 1810 Series OfficeExtend access point GUI as described in "Accessing the GUI" section on page 2-1.
- Step 3 Choose Configuration > WAN tab.
- **Step 4** Enter the IP address of the primary controller in the **Controller IP Address** field.
- **Step 5** Leave the Static IP check box unchecked to allow the WAN IP address to be assigned by DHCP.
- **Step 6** Click **Apply** to commit your changes.

A verification screen is displayed.

Step 7 Click Continue.

The 1810 Series OfficeExtend Access point will connect to the controller and download the current software image. Allow the device 5 minutes to download and reboot with the new code and configuration.

## **Configuring Radio Channels on the Access Point**

Follow these steps to configure a radio channel for your 1810 Series OfficeExtend access point.

- Step 1 Access the 1810 Series OfficeExtend access point GUI as described in "Accessing the GUI" section on page 2-1.
- Step 2 Choose **Configuration > System**.
- Choose the desired radio interface either 2.4 GHz or 5 GHz. Step 3
- Step 4 From the **Status** drop-down list, choose **Enabled** to enable the wireless interface.
- Step 5 From the **Channel Selection** drop-down list, choose the channel on which this interface will operate.



802.11n mode should be enabled by default. If it is disabled, choose Enabled from the **802.11 n-mode** drop-down list.

Step 6 Click **Apply** to commit your changes.

## **Configuring Personal Wireless LANs**

- Access the 1810 Series OfficeExtend access point GUI as described in "Accessing the GUI" section on Step 1 page 2-1.
- Choose Configuration > SSID. Step 2
- Choose the radio band, which can be either 2.4 GHz or 5.0 GHz. You can duplicate the configuration on Step 3 both bands, or have different settings on each band.
- Step 4 In the **Personal Network** section:
  - a. Check the **Enabled** check box to enable this wireless connection. By default it is disabled.
  - b. Check the **Broadcast** check box to broadcast the SSID over the air. By default it is unchecked.
  - c. In the SSID field, enter the personal SSID that you want to assign to this access point. This SSID will be locally switched.



Note

Your personal SSID Wireless LAN and your company SSID Wireless LAN are different. When you configure your personal Wireless LAN, use an SSID name that is different from your company's SSID to help avoid confusion.

- Step 5 In the **Security Section**, enable **WPA2-PSK** with AES encryption.
- Step 6 Click **Apply** to commit your changes.
- Step 7 In the verification screen, click **Continue**.

# **Troubleshooting**

Problem	LED Status	Reasons	Possible Solution
Private WLAN clients can connect to the Internet; but WLANs provided by the controller are unable to connect or not being broadcast.	Cycling through Green, Red and Amber	Access Point is in CAPWAP Discovery mode.	Verify that the correct Wireless LAN Controller IP address is entered in the WAN page of the 1810 Series; verify that CAPWAP ports are allowed through the personal firewalls if any are present on a router between the 1810 series and the modem.
WLANs provided by the controller are not broadcast or clients are unable to connect.	Blinking Amber	Software Upgrade in Process.	Wait for 1810 series to finish code download and perform an automatic reboot.
No connectivity is available through 1810 Series access point.	Blinking Red	No IP address on the 1810 Series access point, waiting for DHCP address.	Restart your home router/gateway or modem followed by your 1810 Series access point.
No connectivity is available through 1810 Series access point, local GUI unavailable, or other issues.	Red	Software Failure	Disconnect and reconnect power to the 1810 Series access point.
The access point signal strength is low.	Not applicable	The access point may not be in the optimal position in relation to your device(s). If the access point is in close proximity and above your device, the signal may become skewed.	Position the access point lower than or with the LED side facing your devices.

Troubleshooting