



Preparing for Installation

This chapter provides information that you need to know before installing a client adapter.

The following topics are covered in this chapter:

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Safety Information

Follow the guidelines in this section to ensure proper operation and safe use of the client adapter.

FCC Safety Compliance Statement

The FCC, with its action in ET Docket 96-8, has adopted a safety standard for human exposure to RF electromagnetic energy emitted by FCC-certified equipment. When used with approved Cisco Aironet antennas, Cisco Aironet products meet the uncontrolled environmental limits found in OET-65 and ANSI C95.1, 1991. Proper operation of this radio device according to the instructions in this publication will result in user exposure substantially below the FCC recommended limits.

Safety Guidelines

- Do not touch or move the antenna while the unit is transmitting or receiving.
- Do not hold any component containing a radio such that the antenna is very close to or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; otherwise, the radio may be damaged.
- High-gain, wall-mount, or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 12 inches (30 cm) or more from the body of all persons. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.
- Use in specific environments:
 - The use of wireless devices in hazardous locations is limited to the constraints posed by the safety directors of such environments.
 - The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
 - The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.

Warnings

Observe the following warnings when operating the client adapter:



Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.



In order to comply with FCC radio frequency (RF) exposure limits, dipole antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons.



In order to comply with RF exposure limits established in the ANSI C95.1 standards, it is recommended when using a laptop with a PC card client adapter that the adapter's integrated antenna is positioned more than 2 inches (5 cm) from your body or nearby persons during extended periods of transmitting or operating time. If the antenna is positioned less than 2 inches (5 cm) from the user, it is recommended that the user limit exposure time.

Translated versions of these safety warnings are provided in [Appendix B](#).

Unpacking the Client Adapter

Follow these steps to unpack the client adapter:

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- Step 1** Open the shipping container and carefully remove the contents.
- Step 2** Return all packing materials to the shipping container and save it.
- Step 3** Ensure that all items listed in the “[Package Contents](#)” section below are included in the shipment. Check each item for damage.



Note

If any item is damaged or missing, notify your authorized Cisco sales representative. Any remote antenna and its associated wiring are shipped separately.

Package Contents

Each client adapter is shipped with the following items:

- *Quick Start Guide: Cisco Aironet Wireless LAN Client Adapters*
- Cisco Aironet Wireless LAN Client Adapters CD
- Cisco product registration card

System Requirements

In addition to the items shipped with the client adapter, you will also need the following in order to install and use the adapter:

- One of the following Windows CE devices equipped with a Type II or Type III PC card slot:
 - Pocket PC (PPC) running Windows CE 3.0 with an ARM, StrongARM, MIPS, SH3, or X86 processor
 - Handheld PC (HPC) running Windows CE 3.0 with an ARM, StrongARM, MIPS, SH4, or X86 processor
 - A computing device running Windows CE .NET 4.0 or 4.1 with an ARM, StrongARM, or X86 processor



Note ViewSonic devices running Windows CE .NET are not supported.



Note All drivers and supporting software (Card and Socket Services) for the PC card slot must be loaded and configured.

- Laptop or PC with a CD-ROM drive and running a Windows operating system and ActiveSync
- Serial or USB connection to the Windows CE device
- A PPC 2002 device, if your wireless network uses EAP-TLS or PEAP authentication
- Certificate Authority (CA) and user certificates for EAP-TLS authentication or CA certificate for PEAP authentication
- If your wireless network uses PEAP authentication with a One-Time Password (OTP) user database:
 - The hardware token from an OTP vendor
 - Your hardware token password
- The following information from your system administrator:
 - The logical name for your Windows CE device (also referred to as *client name*)
 - The case-sensitive service set identifier (SSID) for your RF network
 - The primary and secondary Domain Name System (DNS) and Windows Internet Name Service (WINS) to be assigned to your Windows CE device
 - If your Windows CE device is not connected to a DHCP server, the IP address, subnet mask, and default gateway address to be assigned to your device
 - The wired equivalent privacy (WEP) keys of the access points with which your client adapter will communicate, if your wireless network uses static WEP for security
 - Your username and password for LEAP or PEAP authentication, if your wireless network uses one of these authentication types
 - Your username for EAP-TLS authentication, if your wireless network uses EAP-TLS authentication

Site Requirements

This section discusses the site requirements for both infrastructure and client devices.

For Infrastructure Devices

Because of differences in component configuration, placement, and physical environment, every network application is a unique installation. Therefore, before you install any wireless infrastructure devices (such as access points, bridges, and base stations, which connect your client adapters to a wired LAN), a site survey must be performed to determine the optimum placement of these devices to maximize range, coverage, and network performance. [Appendix F](#), which is provided for people who are responsible for conducting a site survey, explains how ACU's site survey tool can be used to determine the best placement for infrastructure devices within a wireless network.



Note

Infrastructure devices are installed and initially configured prior to client devices.

For Client Devices

Because the client adapter is a radio device, it is susceptible to RF obstructions and common sources of interference that can reduce throughput and range. Follow these guidelines to ensure the best possible performance:

- Install the client adapter in an area where large steel structures such as shelving units, bookcases, and filing cabinets will not obstruct radio signals to and from the client adapter.
- Install the client adapter away from microwave ovens. Microwave ovens operate on the same frequency as the client adapter and can cause signal interference.

