



Troubleshooting

This chapter provides information for diagnosing and correcting common problems encountered when installing or operating the client adapter.

The following topics are covered in this chapter:

- [Accessing the Latest Troubleshooting Information, page 8-2](#)
- [Interpreting the Indicator LEDs, page 8-2](#)
- [Troubleshooting the Client Adapter, page 8-3](#)
- [Error Messages, page 8-4](#)
- [Getting Help, page 8-7](#)

Accessing the Latest Troubleshooting Information

This chapter provides basic troubleshooting tips for your client adapter. For more up-to-date and complex troubleshooting information, refer to the TAC web site at <http://www.cisco.com/public/support/tac/home.shtml>. Select **Wireless Technologies** under Top Issues.

Interpreting the Indicator LEDs

The client adapter shows messages and error conditions through its two LEDs:

- **Link Integrity/Power LED (green)** – This LED lights when the client adapter is receiving power and blinks slowly when the adapter is linked with the network.
- **Link Activity LED (amber)** – This LED blinks quickly when the client adapter is receiving or transmitting data and blinks in a repeating pattern to indicate an error condition.

[Table 8-1](#) interprets the LED messages during normal operation. [Table 8-2](#) interprets the LED error condition messages.

Table 8-1 LED Normal Operating Messages

Green LED	Amber LED	Condition
Blinking quickly	Blinking quickly	Power is on, self-test is OK, and client adapter is scanning for a network.
Blinking slowly	Blinking quickly	Client adapter is associated to an access point.
Continuously on or blinking slowly	Blinking	Client adapter is transmitting or receiving data while associated to an access point.
Off	Blinking quickly	Client adapter is in power save mode.
On continuously	Blinking quickly	Client adapter is in ad hoc mode.

Table 8-2 LED Error Condition Messages

Green LED	Amber LED	Condition/Recommended Action
Off	Off	Client adapter is not receiving power or an error has occurred.
Off	1 blink at 2-second rate	RAM failure. Refer to the “ Obtaining Technical Assistance ” section in the Preface for technical support information.
Off	2-second pause, 2 fast blinks, 1-second pause, 1 blink	A configuration error has occurred (for example, WEP is enabled in ACU, but the client adapter has not been programmed with a valid WEP key). Recheck your client adapter’s configuration settings in ACU.

Table 8-2 LED Error Condition Messages (continued)

Green LED	Amber LED	Condition/Recommended Action
Off	2 fast blinks, 2-second pause	Flash boot block checksum failure. Refer to the “Obtaining Technical Assistance” section in the Preface for technical support information.
Off	3 fast blinks, 2-second pause	Firmware checksum failure. Reload the firmware.
Off	4 fast blinks, 2-second pause	MAC address error (error reading MAC chip). Reload the firmware.
Off	5 fast blinks, 2-second pause	Physical layer (PHY) access error. Refer to the “Obtaining Technical Assistance” section in the Preface for technical support information.
Off	6 fast blinks, 2-second pause	Incompatible firmware. Load the correct firmware version.

Troubleshooting the Client Adapter

This section provides troubleshooting tips if you encounter problems with your client adapter.

Problems Obtaining an IP Address

If your network is set up to use DHCP to acquire an IP address, the DHCP lease renewal may fail, especially in suspend/resume situations. To force DHCP to try to reacquire an IP address, power your Windows CE device off and on or eject and reinsert your client adapter.

Problems Associating to an Access Point

Follow the instructions below if your client adapter fails to associate to an access point.

- If possible, move your Windows CE device a few feet closer to an access point and try again.
- Make sure the client adapter is securely inserted in your device’s PC card slot.
- Make sure the access point is turned on and operating.
- Ensure that all parameters are set properly for both the client adapter and the access point. These include the SSID, LEAP activation, WEP activation, infrastructure mode, etc.
- If the client adapter still fails to establish contact, refer to the [“Obtaining Technical Assistance”](#) section in the Preface for technical support information.

Problems Authenticating to an Access Point

If your client adapter is a 40-bit card and LEAP is enabled, the adapter can associate to but not authenticate to access points using 128-bit encryption. To authenticate to an access point using 128-bit encryption, you have two options:

- Purchase a 128-bit client adapter. This is the most secure option.
- Disable static WEP for the client adapter and configure the adapter and the access point to associate to mixed cells. This option presents a security risk because your data is not encrypted as it is sent over the RF network.

Problems Connecting to the Network

After you have installed the appropriate driver and client utilities, contact your IS department if you have a problem connecting to the network. Proxy server, DNS or WINS, and further authentication information might be needed to connect to the network.

Error Messages

This section provides a list of error messages that may appear during the installation, configuration, or use of your client adapter. The error messages are listed in alphabetical order, and an explanation as well as a recommended user action are provided for each message.

Error Message Cisco Aironet Wireless LAN Adapter does not support the connected device type. Application Manager will make the application available for installation when a supported device type is connected.

Explanation The client adapter's software does not support the Windows CE device on which the adapter is being installed. Refer to the "[System Requirements](#)" section on page 2-4 for the list of Windows CE devices that are supported by the client adapter.

Recommended Action Click **OK** to acknowledge the message and terminate the installation process. To install the client adapter's driver and client utilities on a supported Windows CE device, follow the instructions in the "[Installing the Driver and Client Utilities on Other Windows CE Devices](#)" section on page 3-8.

Error Message Cisco Wireless LAN Adapter Not Found!

Explanation An attempt was made to start a client utility other than ACU without a client adapter being inserted in the Windows CE device. These utilities cannot execute if a client adapter is not running because they need to be able to read from and write to the adapter.

Recommended Action Click **OK** to acknowledge the message and terminate the utility. Then insert a client adapter into the Windows CE device and start the utility.

Error Message Cisco Wireless LAN Adapter removed!

Explanation The client adapter was ejected while a client utility other than ACU or WLM was running.

Recommended Action Click **OK** to acknowledge the message and terminate the utility. Then reinsert the client adapter and restart the utility.

Error Message First Authentication Attempt Timed Out. Radio Will Continue Trying.

Explanation The client adapter timed out while trying to authenticate, possibly because it is out of range of an access point. The client adapter continues trying to authenticate.

Recommended Action Click **OK** to acknowledge the message and terminate WLM. Then perform one of the following: 1) move the Windows CE device closer to an access point so that WLM will continue trying to authenticate or 2) double-click the **WLM icon** and enter a different username and password.

Error Message Incorrect Login -- Please Re-Enter

Explanation The LEAP username or password was entered incorrectly in the Wireless Login Module screen or was not valid for the RADIUS server on the network.

Recommended Action Re-enter the LEAP username and password and click **OK**.

Error Message LEAP Not Enabled on the Cisco Wireless LAN Adapter! Start ACU and Enable LEAP First.

Explanation An attempt was made to start WLM before LEAP was enabled on the client adapter.

Recommended Action Click **OK** to acknowledge the message and terminate the utility. Then enable LEAP in ACU. WLM restarts automatically.

Error Message Must set a User Name

Explanation A password was entered in the Wireless Login Module screen, but a username was not entered. The password is an optional entry, but if a password is entered, a username must also be entered.

Recommended Action Click **OK** to acknowledge the message; then fill in the User Name field in the Wireless Login Module screen and click **OK**.

Error Message New password doesn't match confirm password!

Explanation In CEM's Change Password screen, the characters entered in the New Password and Confirm New Password fields are not identical.

Recommended Action Click **OK** to acknowledge the message; then correct the entries for these fields.

Error Message Password Not Changed - Cancelled By User

Explanation CEM's Change Password screen was exited, but the existing password was not changed.

Recommended Action Click **OK** to acknowledge the message and return to the CEM screen.

Error Message Please enter the correct password!

Explanation The password required to access CEM was entered incorrectly.

Recommended Action Click **OK** to acknowledge the message; then re-enter the password. If the password is entered incorrectly three times in a row, the utility terminates.

Error Message Please enter a valid existing password!

Explanation In CEM's Change Password screen, the existing password was entered incorrectly.

Recommended Action Click **OK** to acknowledge the message; then re-enter the existing password.

Error Message WEP Key x must be 10 Hex digits!

Explanation An invalid number of characters or an incorrect character was entered for the WEP key indicated. 40-bit keys must have 10 characters.

Recommended Action Click **OK** to acknowledge the message; then re-enter the characters for the invalid key.

Error Message WEP Key x must be 26 Hex digits!

Explanation An invalid number of characters or an incorrect character was entered for the WEP key indicated. 128-bit keys must have 26 characters.

Recommended Action Click **OK** to acknowledge the message; then re-enter the characters for the invalid key.

Error Message Windows CE Services not found on this computer. Setup cannot continue and will now exit.

Explanation The driver installation utility cannot locate the ActiveSync directory on the laptop or PC. This directory and the files it contains are needed to copy the client adapter's driver and client utility files from the laptop or PC to a Windows CE device.

Recommended Action Click **OK** to acknowledge the message and terminate the installation utility. Then install Windows CE Services on the laptop or PC and start the driver installation procedure again.



Note Windows CE Services can be obtained from the CD that shipped with your Windows CE device or from the device manufacturer.

Error Message You must enter a WEP Key!

Explanation The OK button on the CEM screen was clicked although a WEP key was not entered.

Recommended Action Click **OK** to acknowledge the message. Then enter a WEP key in the CEM screen and click **OK** to save the WEP key settings or click **Cancel** to exit the CEM screen without entering a WEP key.

Getting Help

To access online help for ACU or CEM, follow the instructions below for your specific Windows CE device.

On HPC Devices

To access help related to ACU, CEM, or SST on an HPC device, open ACU, CEM, or SST and click the ? button on the top of the screen. Select the topic for which you want information.

On PPC Devices

To access help related to ACU, CEM, or SST on a PPC device, open ACU, CEM, or SST and select **Start > Help**. Select the topic for which you want information.

