



Troubleshooting

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

The following topics are covered in this chapter:

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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:

<http://www.cisco.com/en/US/support/index.html>

Select **Wireless Troubleshooting Center** under Tools & Utilities.

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 9-1](#) interprets the LED messages during normal operation. [Table 9-2](#) interprets the LED error condition messages.

Table 9-1 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 quickly	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 9-2 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, static 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.

Table 9-2 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 should 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, tap the **Renew** button on the ACU Status screen, 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 that 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, WEP activation, EAP 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 or EAP 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.

Prioritizing Network Connections (Windows CE .NET Only)

If you have a Windows CE .NET device and more than one network adapter is enabled, you can select which one is used by assigning a priority to your network connections. Follow the steps below to prioritize your network connections.

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- Step 1** Select **Start > Settings > Network and Dial-up Connections**.
 - Step 2** Select the **Advanced** menu option at the top of the screen.
 - Step 3** Select **Advanced Settings**. Your network connections are listed in the Connections box on the Advanced Adapter Settings screen.
 - Step 4** Use the arrows beside the Connections box to move the network connection that you want to use to the top.
 - Step 5** Tap **OK**.
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Reauthenticating After LEAP Times Out

If your client adapter times out while trying to LEAP authenticate, open WLM, enter your LEAP credentials, and try again to authenticate.

**Note**

If you use the same password for your laptop or PC as for your Windows CE device, your session may expire on your Windows CE device if you change the password on your laptop or PC. In this event, simply open WLM, enter your new password, and try again to authenticate.

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 Authentication attempt timed out. Rerun WLM and try again.

Explanation The client adapter was unable to LEAP authenticate within a specified amount of time.

Recommended Action Tap **OK**. Then open WLM, enter your LEAP credentials, and try to authenticate again.

Error Message Can't delete active profile

Explanation An attempt was made to delete the active profile, which cannot be removed.

Recommended Action Tap **OK**. Then select a different active profile and delete the profile that you want to remove.

Error Message Certificate enrollment failed.

Explanation Your attempt to import a user certificate on a PPC 2002 device failed.

Recommended Action Re-enter your username, password, and server name for your certificate server on the Certificate Enrollment screen and tap the **Enroll** button. If the second attempt also fails, try to import a new certificate.

Error Message The certificate server was not found.

Explanation A certificate server could not be found during certificate enrollment on a PPC 2002 device.

Recommended Action Re-enter your username, password, and server name for your certificate server on the Certificate Enrollment screen and tap the **Enroll** button. If the second attempt also fails, enter your credentials for a different certificate server on your network.

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 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 Tap **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” section on page 3-2](#).

Error Message Cisco Wireless LAN Adapter Not Found!

Explanation ACU or WLM was activated without a client adapter being inserted in the Windows CE device, or the client adapter was ejected while ACU was running. WLM cannot execute if a client adapter is not running because it needs to be able to read from and write to the adapter.

Recommended Action Tap **OK** to acknowledge the message on WLM. Insert a client adapter into the Windows CE device.

Error Message Client adapter not found.

Explanation A client adapter is not inserted in the Windows CE device.

Recommended Action Insert a client adapter if you want to start wireless communications. If necessary, reset the Windows CE device.

Error Message The combination of the domain name and user name is too long. It exceeds the maximum of 255 characters allowed. Please use shorter ones.

Explanation The combination of characters entered for the username and domain name in the Static Password screen exceeds the maximum number supported by PEAP, which is 255.

Recommended Action Enter a set of credentials (username, password, and domain name) with fewer characters.

Error Message Could NOT find all of the appropriate files for this installation. Make sure that all of the files are installed to the same directory.

Explanation Some of the client adapter installation files could not be found.

Recommended Action Download the **WinCE-PCMCIA-LMC-v230.exe** file again and extract its files to a folder, making sure that you keep all of the extracted files together in the one folder.

Error Message File not valid for this radio! Firmware Upgrade Failed!

Explanation Your attempt to upgrade the client adapter firmware failed because an invalid file was selected. The firmware file should have a .img extension.

Recommended Action Tap the **Browse** button and select a new firmware image file.

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

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

Recommended Action Tap **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) enter a different saved or temporary LEAP 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 tap **OK**.

Error Message An internal error has occurred.

Explanation An error has occurred.

Recommended Action Reset the Windows CE device and try the operation again.

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 Tap **OK** to acknowledge the message and terminate the utility. Then enable LEAP in ACU. WLM restarts automatically, provided you are using a temporary LEAP username and password.

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 Tap **OK** to acknowledge the message. Then enter your LEAP username in the User Name field on the Wireless Login Module screen and tap **OK**.

Error Message This name already exists. Please use a different name.

Explanation An attempt was made to create or rename a profile using the name of an existing profile.

Recommended Action Tap **OK**. Then create or rename the profile using a unique name.

Error Message New Password and Confirm New Password entered do not match. Please try it again.

Explanation Different values were entered in the New Password and Confirm New Password fields on the Change Password screen. They must be identical.

Recommended Action Re-enter your new password in both fields.

Error Message No CE services are currently running on this computer. Please run ActiveSync and make sure you are connected to a supported device. NOTE: This Install is for 3.0 CE devices and greater.

Explanation An attempt was made to install the client adapter installation file without an ActiveSync connection established between your laptop or PC and your Windows CE device.

Recommended Action Follow the instructions in the [“Installing the Driver and Client Utilities” section on page 3-2](#) to establish an ActiveSync connection.

Error Message No profiles found. (Use ACU to create a profile.)

Explanation Profiles have not been created for your client adapter.

Recommended Action Create a profile in ACU for the client adapter to use. If necessary, reset the Windows CE device.

Error Message The object or property already exists.

Explanation An attempt was made to import a certificate file that was already installed.

Recommended Action Tap **OK** and select a different certificate to import.

Error Message The old password you supplied doesn't match what you entered previously. Please try it again.

Explanation The password entered in the Old Password field on the Change Password screen does not match the password that was used previously.

Recommended Action Re-enter your old password in the Old Password field.

Error Message PEAP failed initialization. Please make sure that PEAP is installed correctly and Trusted Root Certificate Authority certificate is installed correctly.

Explanation The PEAP authentication process failed during initialization, most likely because the specified root certificate is missing from the system.

Recommended Action Make sure that PEAP and the Trusted Root Certificate Authority certificate are installed correctly.

Error Message Please select one of the profiles.

Explanation The Edit, Rename, or Delete button on the ACU Profiles screen was tapped before a profile was selected.

Recommended Action Tap **OK** to acknowledge the message. Then select a profile and tap the button for the action you want to take.

Error Message The selected profile does not support EAP. (Use ACU to modify the security settings.)

Explanation The Authentication Manager (AuthMgr) was activated on a PPC 2002 device although the current profile does not have host-based EAP enabled.

Recommended Action Tap **OK** twice. Then select a profile in ACU that uses host-based EAP and reactivate the Authentication Manager. If necessary, reset the Windows CE device.

Error Message Unable to configure connection settings.

Explanation An error occurred after you tapped the Connect button on the Authentication screen.

Recommended Action Reset the Windows CE device and try the operation again.

Error Message Unable to load the Wireless Zero Configuration interface.

Explanation An error occurred during installation, or the system is not working properly.

Recommended Action Reset the Windows CE device; then reinstall the client adapter software.

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 Tap **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 Tap **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 Tap **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 have connected to a server that is signed by Root Certification Authority xxx, which is different than the specified trusted CA. Do you want to accept this connection? Warning: Connecting to a server signed with untrusted CA might compromise your security.

Explanation The client adapter has established a connection to a certificate server other than the specified trusted CA.

Recommended Action If you want the client adapter to connect to this server although it may present a security risk, tap **Yes**. Otherwise, tap **No**.

Error Message You have connected to server xxx. Do you want to accept the connection? Warning: Connecting to an unsecured server might compromise your security.

Explanation The client adapter has established a connection to the server specified.

Recommended Action If you want the client adapter to connect to this server although it may present a security risk, tap **Yes**. Otherwise, tap **No**.

Error Message You must enter a server name.

Explanation The server name for your certificate server was not entered on the Certificate Enrollment screen.

Recommended Action Enter the server name for your certificate server. Then tap the **Enroll** button.

Error Message You must enter a user name.

Explanation Your username for your certificate server was not entered on the Certificate Enrollment screen.

Recommended Action Enter your username for your certificate server. Then tap the **Enroll** button.

Error Message You must enter a WEP Key!

Explanation A WEP key was not entered on the WEP Keys screen.

Recommended Action Tap **OK** to acknowledge the message. Then enter a WEP key on the WEP Keys screen and tap **OK** to save the WEP key settings or tap **Cancel** to exit the WEP Keys screen without entering a WEP key.

Error Message Your password has expired. Please enter a new one.

Explanation The password that you have been using to PEAP authenticate has expired.

Recommended Action Follow the instructions in the [“After Your Password Expires \(Windows NT or 2000 Domain Databases Only\)”](#) section on page 6-7 to change your password.

Getting Help

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

PPC Devices

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

HPC and Windows CE .NET Devices

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

