



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:

- [Accessing the Latest Troubleshooting Information, page 10-2](#)
- [Interpreting the Indicator LEDs, page 10-2](#)
- [Troubleshooting the Client Adapter, page 10-3](#)
- [Error Messages, page 10-13](#)

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/en/US/support/index.html>

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

Interpreting the Indicator LEDs



Note

Mini PCI cards do not have 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 10-1](#) interprets the LED messages during normal operation. [Table 10-2](#) interprets the LED error condition messages.

Table 10-1 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 10-2 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 10-2 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. Use [Table 10-3](#) to quickly locate specific troubleshooting information.

Table 10-3 Locating Troubleshooting Information

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Using the Troubleshooting Utility

The Cisco Wireless LAN Adapter Troubleshooting Utility enables you to identify and resolve configuration and association problems with your client adapter. It is meant to be used only when the client adapter is in infrastructure mode as it assesses the connection between the adapter and an access point.

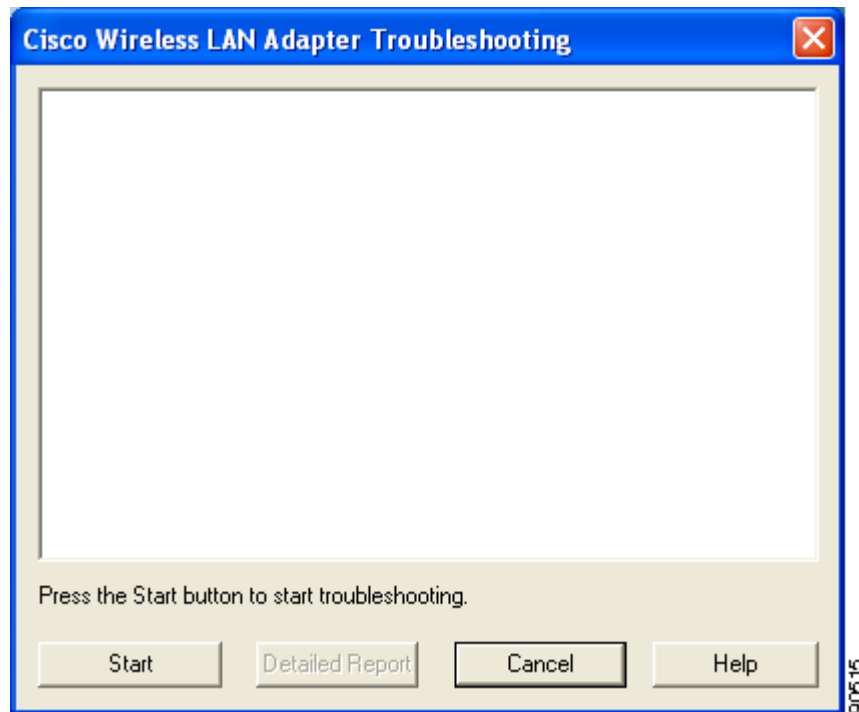
Follow the instructions in one of the subsections below to use the utility to diagnose your client adapter's operation, save a detailed report to a text file, or access online help.

Diagnosing Your Client Adapter's Operation

- Step 1** Perform one of the following to activate the troubleshooting utility:
- Open ACU; select **Troubleshooting** from the Options drop-down menu.
 - Right-click the ACM icon; select **Troubleshooting** from the pop-up menu.

The Cisco Wireless LAN Adapter Troubleshooting screen appears (see [Figure 10-1](#)).

Figure 10-1 Cisco Wireless LAN Adapter Troubleshooting Screen



Step 2 Click **Start**. The utility performs the following series of eight tests to check the operation of your client adapter and to pinpoint specific problems if they exist:

1. Checking driver installation
2. Checking client adapter insertion
3. Checking the client adapter's radio (to see if it is turned on)
4. Checking the client adapter's association to an access point
5. Checking authentication
6. Checking the receive interrupt
7. Checking network settings
8. Checking the client adapter's connection to the access point

The utility runs until it completes successfully or a problem is discovered. It then displays the results (see [Figure 10-2](#)).

Figure 10-2 Cisco Wireless LAN Adapter Troubleshooting Screen (with Test Results)



One of the following status messages appears for each test:

- **GOOD**—The test completed successfully.
- **ERROR**—The test failed because the client adapter is not configured properly to establish a connection with an access point.
- **WARNING**—The test failed for one of the following reasons:
 - The utility is unable to access the client’s IP address. Either an incorrect IP address was entered, or an IP address was not received from the DHCP server. Contact your system administrator.
 - The utility is unable to access the access point’s IP address. Contact your system administrator.
 - The exact cause cannot be determined. Contact your system administrator.



Note You can click **Stop** at any time to stop the testing process, or you can click **Restart** once the testing process has stopped to run the test again.



Note If auto profile selection is enabled but the client adapter is not associated or authenticated, the utility repeats the testing process continually so the client adapter can be tested with new profiles.

Step 3 To view more detailed information, click **Detailed Report**. A report appears that explains the purpose of each test and the results for your client adapter.



Note The report contains valuable information that, if necessary, could be used by TAC to analyze any problems. Follow the instructions in the next section if you want to save the report to a text file.

Step 4 If a problem is discovered, the report provides some possible repair suggestions. Follow the repair instructions carefully and run the troubleshooting utility again.

Step 5 Click **Close** to exit the detailed report.

Step 6 Click **Cancel** to exit the troubleshooting utility.

Saving the Detailed Report to a Text File

Follow the steps below to save the detailed troubleshooting report to your computer’s hard drive.

Step 1 Click **Save** on the detailed report screen. The Save As screen appears. A filename of the following format appears automatically in the File name field: *TSyymmddhhmm*, where *yymmddhhmm* represents the date and time that the troubleshooting utility was started. For example, *TS0211211230* indicates that the utility was started on 11/21/02 at 12:30.



Note You can change the filename by typing a new name in the File name field.

Step 2 Use the Save in box at the top of the screen to specify the location on your computer's hard drive where the file will be saved. The default location is My Documents.



Note If you specify a different location, the new location becomes the default location going forward.

Step 3 Click **Save**. The file is saved as a text file in the location specified.

Accessing Online Help

Follow the steps below to access general troubleshooting information about your client adapter.

Step 1 Click **Help** on the Cisco Wireless LAN Adapter Troubleshooting screen. An overview of the troubleshooting utility appears.

Step 2 Click **Help Topics** at the top of the screen. From the Help Topics screen, you can access additional information.

- To access information on specific topics, double-click **Troubleshooting Tips** on the Contents page, the desired topic (such as Radio LEDs), and the desired subtopic (such as LED Error Condition Messages).
- To search for a specific topic, click the **Index** tab, select an index entry, and click **Display**.
- To search for a specific word or phrase, click the **Find** tab, and follow the instructions in the Find Setup Wizard window.

Step 3 Click **Cancel** to exit the Help Topics screen.

Client Adapter Recognition Problems



Note This section does not apply to mini PCI cards.

If your client adapter is not being recognized by your computer's PCMCIA adapter, check your computer's BIOS and make sure that the PC card controller mode is set to PCIC compatible.



Note A computer's BIOS varies depending on the manufacturer. For support on BIOS-related issues, consult your computer's manufacturer.

Resolving Resource Conflicts



Note This section does not apply to mini PCI cards.

If you encounter problems while installing your client adapter on a computer running a Windows operating system, you may need to specify a different interrupt request (IRQ) or I/O range for the adapter.

The default IRQ for the client adapter is IRQ 10, which may not work for all systems. Follow the steps for your specific operating system to obtain an available IRQ.

During installation the adapter's driver installation script scans for an unused I/O range. The installation can fail if the I/O range found by the driver installation script is occupied by another device but not reported by Windows. An I/O range might not be reported if a device is physically present in the system but not enabled under Windows. Follow the steps for your specific operating system to obtain an available I/O range.

Resolving Resource Conflicts in Windows 98, 98 SE, and Me

-
- Step 1** Double-click **My Computer**, **Control Panel**, and **System**.
 - Step 2** Click the **Device Manager** tab.
 - Step 3** Double-click **Network Adapters**.
 - Step 4** Select the Cisco Systems Wireless LAN Adapter.
 - Step 5** Click the **Properties** button.
 - Step 6** In the General screen, the Device Status field indicates if a resource problem exists. If a problem is indicated, click the **Resources** tab.
 - Step 7** Uncheck the **Use automatic settings** check box.
 - Step 8** Under Resource Settings or Resource Type, click **Input/Output Range**.
 - Step 9** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the range is being used by another device, click the **Change Setting** button.
 - Step 10** Scroll through the ranges in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the range is already being used.
 - Step 11** Click **OK**.
 - Step 12** Under Resource Settings or Resource Type, click **Interrupt Request**.
 - Step 13** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the IRQ is being used by another device, click the **Change Setting** button.
 - Step 14** Scroll through the IRQs in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the IRQ is already being used.
 - Step 15** Click **OK**.
 - Step 16** Reboot your computer.
-

Resolving Resource Conflicts in Windows NT

- Step 1** Select **Start > Programs > Administrative Tools > Windows NT Diagnostics**.
 - Step 2** Click the **Resources** tab.
 - Step 3** Click the **IRQ** button.
 - Step 4** The used IRQs are listed in numerical order along the left side of the Resources window. Write down the number of an IRQ that is not being used; you will need it for Step 11.
 - Step 5** Click the **I/O Port** button.
 - Step 6** The used I/O ranges are listed in numerical order along the left side of the Resources window under Address. Write down an I/O range that is not being used (for example, if range 0100-013F is followed by 0170-0177 in the list, then 0140-0169 is an available range); you will need it for Step 13.
 - Step 7** Double-click **My Computer, Control Panel, and Network**.
 - Step 8** Click the **Adapters** tab and select the Cisco Aironet Wireless LAN Adapter.
 - Step 9** Click **Properties**.
 - Step 10** Select **Interrupt** under Property.
 - Step 11** Select the number of the unused interrupt from Step 4 in the Value drop-down box.
 - Step 12** Select **IO Base Address** under Property.
 - Step 13** Select a value that is within the unused range you determined in Step 6. For example, if your unused range is 0140-0169, you could select 0150.
 - Step 14** Click **OK**.
-

Resolving Resource Conflicts in Windows 2000

- Step 1** Double-click **My Computer, Control Panel, and System**.
- Step 2** Click the **Hardware** tab and **Device Manager**.
- Step 3** Double-click **Network Adapters** and the Cisco Systems Wireless LAN Adapter.
- Step 4** In the General screen, the Device Status field indicates if a resource problem exists. If a problem is indicated, click the **Resources** tab.
- Step 5** Uncheck the **Use automatic settings** check box.
- Step 6** Under Resource Settings or Resource Type, click **Input/Output Range**.
- Step 7** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the range is being used by another device, click the **Change Setting** button.
- Step 8** Scroll through the ranges in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the range is already being used.
- Step 9** Click **OK**.

- Step 10** Under Resource Settings or Resource Type, click **Interrupt Request**.
 - Step 11** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the IRQ is being used by another device, click the **Change Setting** button.
 - Step 12** Scroll through the IRQs in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the IRQ is already being used.
 - Step 13** Click **OK**.
 - Step 14** Reboot your computer.
-

Resolving Resource Conflicts in Windows XP



Note These instructions assume you are using Windows XP's classic view, not its category view.

- Step 1** Double-click **My Computer**, **Control Panel**, and **System**.
 - Step 2** Click the **Hardware** tab and **Device Manager**.
 - Step 3** Under Network Adapters, double-click the Cisco Systems Wireless LAN Adapter.
 - Step 4** In the General screen, the Device Status field indicates if a resource problem exists. If a problem is indicated, click the **Resources** tab.
 - Step 5** Uncheck the **Use automatic settings** check box.
 - Step 6** Under Resource Settings, click **I/O Range**.
 - Step 7** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the range is being used by another device, click the **Change Setting** button.
 - Step 8** Scroll through the ranges in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the range is already being used.
 - Step 9** Click **OK**.
 - Step 10** Under Resource Settings, click **IRQ**.
 - Step 11** Look in the Conflicting Device list at the bottom of the screen. If it indicates that the IRQ is being used by another device, click the **Change Setting** button.
 - Step 12** Scroll through the IRQs in the Value dialog box and select one that does not conflict with another device. The Conflict Information window at the bottom of the screen indicates if the IRQ is already being used.
 - Step 13** Click **OK**.
 - Step 14** Reboot your computer.
-

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 workstation a few feet closer to an access point and try again.
- Make sure that the client adapter is securely inserted in your computer's client adapter slot.
- If you are using a PCI client adapter, make sure that the antenna is securely attached.
- Make sure that the access point is turned on and operating.
- Check that all parameters are set properly for both the client adapter and the access point. These include the SSID, EAP authentication, WEP activation, network type, channel, etc.
- Follow the instructions in the previous section to resolve any resource conflicts. If you are using Windows NT, you may also want to try disabling the Ethernet port.
- 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 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 firmware, driver, client utilities, and security modules, contact your IS department if you have a problem connecting to the network. Proxy server, network protocols, and further authentication information might be needed to connect to the network.

Prioritizing Network Connections (Windows 2000 and XP Only)

If your computer is running Windows 2000 or XP and more than one network adapter is enabled (such as a Cisco Aironet client adapter and an Ethernet card), you can select which one to use by assigning a priority to your network connections.

**Note**

This procedure does not apply to Windows 98, 98 SE, NT, and Me because these operating systems allow only one network adapter to be enabled at a time.

Follow the steps below to prioritize your network connections.

-
- Step 1** Right-click the **My Network Places** icon on your desktop.
 - Step 2** Click **Properties**.
 - Step 3** Select the **Advanced** menu option at the top of the screen.
 - Step 4** Select **Advanced Settings**. Your network connections are listed in the Connections box on the Adapters and Bindings tab.
 - Step 5** Use the arrows beside the Connections box to move the network connection that you want to use to the top.
 - Step 6** Click **OK**.
-

Losing Association upon Resuming from Suspend Mode (Windows NT and Mini PCI Cards Only)

Because Windows NT does not support resuming of mini PCI cards, your client adapter loses its association to an access point upon resuming from suspend mode. If this occurs, restart your client adapter to reassociate.

Parameters Missing from Profile Manager Screen

If some parameters are unavailable on the Profile Manager screen, your system administrator may have used an administrative tool to deactivate these parameters. In this case, these parameters cannot be selected.

Windows Wireless Network Connection Icon Shows Unavailable Connection (Windows XP Only)

If your computer is running Windows XP and you configured your client adapter using ACU, the Windows Wireless Network Connection icon in the Windows system tray may be marked with a red *X* and show an unavailable connection even though a wireless connection exists. This condition is caused by a conflict between ACU and Windows XP's wireless network settings. Simply ignore the Windows icon and use the ACM icon to check the status of your client adapter's wireless connection.

LEAP Login Screen Does Not Appear Before Windows Login Screen (Windows 98, 98 SE, and Me Only)

If you are using Windows 98, 98 SE, or Me and your client adapter is configured to use LEAP authentication with an automatically prompted login, the LEAP login screen should appear before the Windows screen after you reboot. If the Windows screen appears first, follow the steps below.

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- Step 1** On the Windows desktop, right-click the **My Network Places** icon.
 - Step 2** Click **Properties**.
 - Step 3** On the Network - Configuration screen, click the arrow on the right side of the Primary Network Logon box.
 - Step 4** Select **Cisco Aironet Wireless Logon** and click **OK**.
 - Step 5** When prompted to restart your computer, click **Yes**.
-

Microsoft Hot Fix (Windows 98 and 98 SE Only)

When the LEAP security module is selected during installation on a Windows 98 or 98 SE device, a Microsoft hot fix is also installed to fix two problems related to the use of LEAP. You can obtain a description of this hot fix and the problems it resolves at the following Microsoft URL:

<http://support.microsoft.com/support/kb/articles/Q247/8/05.asp>



Note

Only the English version of the hot fix is installed. Foreign language versions of these operating systems require a hot fix specific to those languages. Contact Microsoft Product Support Services to obtain the hot fix for languages other than English. Without the hot fix installed, you may be prompted to enter your credentials at the Windows login prompt twice. To work around this problem, enter your login credentials again.

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 divided into four sections (general, LEAP authentication, PEAP authentication, and EAP-SIM authentication). The messages are listed in alphabetical order within each section, and an explanation as well as a recommended user action are provided for each message. [Table 10-4](#) enables you to quickly locate the error messages you need.

Table 10-4 Locating Error Messages

Error Message Category	Page Number
General	10-14
LEAP authentication	10-18
PEAP authentication	10-21
EAP-SIM authentication	10-26

General Error Messages

This section lists general error messages that may appear at any time and are not related to authentication attempts.

Error Message Bad Firmware Image File (*filename*)

Explanation The selected firmware file is corrupt and will not be sent to the client adapter.

Recommended Action Select a different firmware file and try to load it.

Error Message Card Removed at *xx:xx*

Explanation The client adapter was ejected from the computer.

Recommended Action Reinsert the client adapter if you wish to resume wireless communications.

Error Message An error occurred while trying to make the selected profile active.

Explanation An error occurred when you selected a profile in ACM.

Recommended Action Check the profile's configuration parameters in ACU or select a new profile.

Error Message Error Reading *filename*

Explanation A problem occurred while the computer was reading the firmware file from the disk.

Recommended Action Re-copy the firmware file to a floppy disk or to your computer's hard drive and try to load it again or select a different firmware file and try to load it.

Error Message Error Writing to Flash Memory

Explanation A problem occurred while the firmware was being flashed.

Recommended Action Eject the client adapter and reinsert it. If the client adapter functions properly, the firmware was flashed successfully. If the client adapter does not function or functions improperly, your client adapter may need to be returned for service. Refer to the ["Technical Assistance Center"](#) section in the Preface for information on contacting TAC.

Error Message Firmware Incompatible with Hardware

Explanation The selected firmware file does not work with the client adapter.

Recommended Action Select a different firmware file and try to load it.

Error Message Firmware Upgrade Failed

Explanation A problem occurred while the firmware was being flashed.

Recommended Action Eject the client adapter and reinsert it. If the client adapter functions properly, the firmware was flashed successfully. If the client adapter does not function or functions improperly, your client adapter may need to be returned for service. Refer to the “[Technical Assistance Center](#)” section in the Preface for information on contacting TAC.

Error Message The installation will complete and applications will be installed when a wireless LAN client adapter is inserted. If an adapter is already inserted, remove and reinsert the adapter or reboot the machine.

Explanation The installation program was most likely run without a client adapter inserted in the computer.

Recommended Action Insert a client adapter into your computer’s client adapter slot. The installation program will then complete. If a client adapter was already inserted in your computer, eject and reinsert the adapter or reboot your computer.

Error Message LEAP support has not been installed on this computer. You will not be able to authenticate with this or any other profile configured to use LEAP.

Explanation A LEAP profile was selected for use in ACM, but the LEAP security module was not selected during installation. Therefore, the client adapter will not be able to authenticate using this profile (or any other profile that is configured for LEAP).

Recommended Action Run the installation program again and enable the LEAP security module.

Error Message Maximum power save mode will be temporarily disabled while you are running this application!

Explanation The client adapter cannot be run in Max PSP mode while ACU is running.

Recommended Action No user action is required. The client adapter automatically runs in Fast PSP mode while ACU is running.

Error Message No Cisco Aironet client adapters have been installed on this computer.

Explanation ACM started but found no installed client adapters.

Recommended Action Follow the instructions in [Chapter 3](#) to install a client adapter.

Error Message No Wireless LAN Client Adapters Found

Explanation A client adapter is not inserted in the computer.

Recommended Action Insert a client adapter if you wish to start wireless communications.

Error Message No Wireless LAN Client Adapters Installed!

Explanation An attempt was made to start ACU without a client adapter being inserted in the computer. ACU cannot execute if a client adapter is not inserted because it needs to be able to read from and write to the adapter.

Recommended Action Insert a client adapter and start ACU.

Error Message Please close ACU in order to use it with the Wireless LAN Adapter you selected using the System Tray Icon.

Explanation Only one instance of ACU can be running at a time. However, an attempt was made to activate ACU for a second client adapter when ACU was already running.

Recommended Action Click **OK**, close ACU, and then activate ACU for the desired adapter.

Error Message This program is already running.

Explanation ACM started when another instance of ACM was already running.

Recommended Action No action is required. The new instance of ACM exits.

Error Message Reauthenticate Failed

Explanation The Reauthenticate option was selected from the Commands drop-down menu in ACU, but the reauthentication attempt failed.

Recommended Action Re-enter your username and password and try to authenticate again or select another EAP profile.

Error Message Restarting the client adapter will cause you to lose your network connection. Are you sure you want to restart your client adapter?

Explanation The Restart Card option was selected from the Commands drop-down menu in ACU, which may cause you to lose your network connection.

Recommended Action If you want to reinitialize your client adapter, click **Yes**. Otherwise, click **No**.

Error Message Unable to Open *filename*

Explanation The selected firmware file cannot be found.

Recommended Action Re-copy the firmware file to a floppy disk or to your computer's hard drive and try to load it again or select a different firmware file and try to load it.

Error Message Wireless Connection Unavailable. (Windows XP only)

Explanation ACU was used to configure the client adapter on Windows XP, but the **Use Windows to configure my wireless network settings** check box in Windows XP is checked. This message appears even if the client adapter is associated to an access point.

Recommended Action Uncheck the **Use Windows to configure my wireless network settings** check box in Windows XP to force Windows to display the correct status.

Error Message You cannot run a link test because your client adapter is not associated.

Explanation An attempt was made to run a link test while the client adapter was not associated to an access point or other wireless device.

Recommended Action Run the link test after the client adapter is associated to an access point or another wireless device.

Error Message You cannot run a link test because your client adapter's radio is turned off.

Explanation An attempt was made to run a link test while the client adapter's radio was off.

Recommended Action Turn on the client adapter's radio by selecting **Radio On** from the Commands drop-down menu in ACU; then run the link test.

Error Message You must specify an IP address before running a link test.

Explanation An attempt was made to run a link test although the IP address of the access point or other wireless device with which to test the RF link was not specified.

Recommended Action In the Linktest screen's IP Address of Access Point field, enter the IP address of the access point or other wireless device with which you want to test the RF link.

Error Message You need to be an administrator or a user with administrative rights to install Aironet Client Utility. Please log on as a different user and try again.

Explanation A non-administrative user attempted to install ACU. The ACU installation process terminates.

Recommended Action Log on as a different user and attempt the installation process again.

Error Message Your Wireless LAN Adapter is not inserted!

Explanation One of two conditions is present: 1) a client adapter is not inserted in your computer or 2) ACU was started with one variety of client adapter inserted (such as a PCM342), the adapter was subsequently ejected, and another variety was inserted (such as a PCM352).

Recommended Action Perform one of the following: 1) insert a client adapter into your computer if one is not present or 2) shut down ACU and restart it.

LEAP Authentication Error Messages

This section lists error messages that may occur during LEAP authentication.

Error Message The client adapter doesn't support LEAP. Please make sure that you have installed the correct client adapter and updated your firmware.

Explanation LEAP authentication failed because the client adapter's firmware does not support LEAP.

Recommended Action Make sure that you have installed the correct client adapter and are using the firmware included in the Install Wizard file.

Error Message The client adapter doesn't support WEP, so LEAP cannot be run. Please make sure that you have installed the correct client adapter and purchased WEP support.

Explanation LEAP authentication failed because the client adapter's firmware does not support WEP.

Recommended Action Make sure that you have installed the correct client adapter and are using the firmware included in the Install Wizard file.

Error Message The combination of domain name and user name exceeds the maximum number of characters (32) that LEAP supports. Please uncheck Include Windows Logon Domain with User Name in ACU or use shorter names.

Explanation The combination of characters entered for the username and domain name in the Windows login screen or the LEAP login screen exceeds the maximum number supported by LEAP, which is 32.

Recommended Action Perform one of the following:

- Uncheck the **Include Windows Logon Domain with User Name** check box in the LEAP Settings screen of ACU.
- Enter a set of credentials (username, password, and domain name) with fewer characters.

Error Message The current profile is not configured for LEAP.

Explanation The Manual LEAP Login option was selected in ACU, but the active profile is not configured for LEAP. The LEAP authentication process aborts.

Recommended Action If you want the client adapter to LEAP authenticate, select a profile that is configured for LEAP.

Error Message The LEAP password entered exceeds the maximum number of characters (32) that LEAP supports. Please use a shorter password.

Explanation The password that was entered exceeds the maximum number of characters supported by LEAP, which is 32.

Recommended Action Re-enter the password, making sure it contains fewer than 32 characters.

Error Message The xxx profile was disabled because LEAP authentication failed during your last logoff. You can re-enable the profile by selecting the Reauthenticate option.

Explanation A profile that was configured for LEAP failed an authentication attempt during the last logoff process and was disabled. Because error messages cannot be displayed during the logoff process, this message appears after the next logon.

Recommended Action Select **Reauthenticate** from ACM or the Commands drop-down menu in ACU to re-enable the profile.

Error Message The profile will be disabled until you select the Reauthenticate option, Windows restarts, or the card is ejected and reinserted. Are you sure?

Explanation The username and password for your current profile have expired or are no longer valid. When the LEAP login screen appeared, prompting you to enter your new username and password, you selected Cancel. The profile was disabled to prevent accidental authentication attempts in the future.

Recommended Action Click **No**, enter your new username and password when the LEAP login screen reappears, and click **OK**. The client adapter should authenticate using your new credentials. If the profile uses saved credentials, edit the profile in ACU by changing the username and password on the LEAP Settings screen and save your changes. (If you click **Yes**, the profile is disabled until you select **Reauthenticate** from ACM or the Commands drop-down menu in ACU, reboot your system, or eject and reinsert the card.)

**Caution**

If your backend server is set to allow only a limited number of failed authentication attempts, your user account may be locked if you continue trying with an invalid set of user credentials.

Error Message A recently installed program has disabled the Welcome screen and Fast User Switching. To restore these features, you must uninstall the program. The following file name might help you identify the program that made the change: cswGina.dll. (Windows XP only)

Explanation The LEAP security module was selected during installation on a Windows XP computer; then the Change the way users log on or off option was selected under Windows XP's User Accounts.

Recommended Action If the LEAP security module is selected during installation, you cannot use Windows XP's fast user switching feature. If you want to use fast user switching and do not want to use LEAP, you must run the installation program again and deselect the **LEAP** security module.

Error Message The saved user name and password entered for this profile are no longer valid and have failed the LEAP authentication process. Please enter a new user name and password. Remember to change them permanently in the profile using the ACU Profile Manager.

Explanation The username and password for your current profile, which uses saved credentials, have expired or are no longer valid; therefore, your client adapter is unable to LEAP authenticate.

Recommended Action When the LEAP login screen appears, enter your new username and password and click **OK**. The client adapter should authenticate using your new credentials. Then edit the profile in ACU by changing the username and password on the LEAP Settings screen and save your changes.

Error Message To run LEAP successfully, you will have to apply Microsoft Q241052 Update for the language version of your operating system as documented on <http://support.microsoft.com/support/KB/articles/Q247/8/05.asp>. Please contact Microsoft Product Support Services to obtain the fix.

Explanation When the LEAP security module is selected during installation on a Windows 98 or 98 SE device, a Microsoft hot fix is also installed to fix two problems related to the use of LEAP. However, only the English version of the hot fix is installed. Foreign language versions of these operating systems require a hot fix specific to those languages.

Recommended Action Contact Microsoft Product Support Services to obtain the hot fix for languages other than English. Without the hot fix installed, you may be prompted to enter your credentials at the Windows login prompt twice. To work around this problem, enter your login credentials again.

Error Message Unable to LEAP authenticate. Please make sure you have entered the correct user name and password and try again.

Explanation LEAP authentication failed.

Recommended Action Perform one of the following:

- Re-enter the LEAP username and password or cancel the LEAP authentication.
- To start another LEAP authentication process, select **Reauthenticate** from ACM or the Commands drop-down menu in ACU, log off and log in again, or select **Manual LEAP Login** from the Commands drop-down menu in ACU.

Error Message Unable to LEAP authenticate in the specified amount of time. The network infrastructure might be down. You may also want to increase the LEAP timeout value for this profile.

Explanation The client adapter was unable to LEAP authenticate within the amount of time specified by the LEAP authentication timeout value.

Recommended Action Increase the LEAP authentication timeout value on the LEAP Settings screen. Then re-enter the LEAP username and password.

Error Message The user name and password entered are no longer valid and have failed the LEAP authentication process. Please enter a new user name and password.

Explanation The username and password for your current profile have expired or are no longer valid; therefore, your client adapter is unable to LEAP authenticate.

Recommended Action When the LEAP login screen appears, enter your new username and password and click **OK**. The client adapter should authenticate using your new credentials.

Error Message The user name entered is not valid or exceeds the maximum number of characters (32) that LEAP supports.

Explanation The username that was entered is not valid or exceeds the maximum number of characters supported by LEAP, which is 32.

Recommended Action Re-enter the username, making sure it contains fewer than 32 characters.

PEAP Authentication Error Messages

This section lists error messages that may occur during PEAP authentication. The messages are divided into six subsections based on the type of database that is used with PEAP. Use [Table 10-5](#) to quickly locate the error messages for your database.

Table 10-5 Locating PEAP Authentication Error Messages

Error Message Category	Page Number
All PEAP-supported databases	10-21
Windows NT or 2000 domain databases	10-22
All OTP databases	10-23
OTP databases using Secure Computing SofToken version 1.3	10-24
OTP databases using Secure Computing SofToken II version 2.0	10-25
OTP databases using RSA SecurID version 2.5	10-26

For All PEAP-Supported Databases

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 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 even though it may present a security risk, click **Yes**. Otherwise, click **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 even though it may present a security risk, click **Yes**. Otherwise, click **No**.

For Windows NT or 2000 Domain Databases

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

Explanation You entered different values 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 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 Your domain password has been successfully changed on the server. To synchronize any Windows password that might be locally cached, you must also manually change the password in Windows.

Explanation You have successfully changed your domain password using the Static Password screen. However, if you also have a locally cached Windows password, you must manually change it to synchronize it with your domain password.

Recommended Action Press **Ctrl-Alt-Delete**, select **Change Password**, and enter your old password once and your new password twice.

For All OTP Databases

Error Message Failed to change your PIN. Error code xxx. Run Software Token program to fix it.

Explanation Your attempt to change your PIN using the Change PIN screen failed due to a problem with the software token program.

Recommended Action Run the software token program and then try to change your PIN again.

Error Message Invalid PIN. Please try again.

Explanation The PIN that you entered is invalid.

Recommended Action Re-enter your PIN.

Error Message New PIN and Confirm New PIN do not match. Please try them again.

Explanation You entered different values in the New PIN and Confirm New PIN fields on the Change PIN screen. They must be identical.

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

Error Message New PIN is invalid. Please try it again.

Explanation The PIN that you entered in the New PIN field on the Change PIN screen is invalid.

Recommended Action Re-enter your new PIN.

Error Message The old PIN you supplied is invalid. Please try it again.

Explanation The old PIN that you entered on the Change PIN screen is invalid.

Recommended Action Re-enter your old PIN.

Error Message Please check either Support Hardware Token or Support Software Token. One of them must be selected.

Explanation While the client adapter was being configured for PEAP authentication, the One Time Password option was selected on the Generic Token Card Properties screen, but neither the Support Hardware Token nor the Support Software Token option was selected.

Recommended Action Check either the **Support Hardware Token** check box or the **Support Software Token** check box or both.

Error Message Your PIN has expired. Please change your PIN.

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

Recommended Action Follow the instructions in the [“After Your PIN Expires \(OTP Databases Only\)”](#) section on page 6-19 to change your PIN.

For OTP Databases Using Secure Computing SofToken Version 1.3

Error Message Could not find SofToken.exe in the program path specified. Please make sure SofToken is installed correctly and the correct program path is entered.

Explanation SofToken.exe is not located at the path you entered on the Generic Token Card Properties screen.

Recommended Action Make sure that SofToken is installed correctly; then re-enter the program path.

Error Message Error getting data from SofToken server. Please make sure SofToken is installed correctly and the correct program path is entered.

Explanation An error occurred while attempting to get data from the SofToken server.

Recommended Action Make sure that SofToken is installed correctly and the correct program path is entered.

Error Message Initialization of SofToken library failed. Please make sure SofToken is installed correctly and the correct program path is entered.

Explanation An error occurred with the SofToken program.

Recommended Action Make sure that SofToken is installed correctly and the correct program path is entered.

Error Message The program path entered exceeds the maximum length allowed (255).

Explanation The program path entered on the Generic Token Card Properties screen contains more characters than the field allows.

Recommended Action Re-enter the path using a maximum of 255 characters. If necessary, move SofToken.exe to a directory with a shorter path.

Error Message Program path must be specified for SofToken Version 1.3.

Explanation Secure Computing SofToken Version 1.3 was selected from the Supported Type drop-down box on the Generic Token Card Properties screen, but the SofToken program path was not entered.

Recommended Action Enter the path to the SofToken program in the SofToken Program Path field.

Error Message SofToken is not set up to allow processing from SofToken calls. Calls have been disabled from the SofToken Manager, the SofToken program does not have any valid users yet, or the last person to use SofToken was not initialized correctly.

Explanation The SofToken program is not set up to process SofToken API calls.

Recommended Action Make sure that SofToken is configured to enable SofToken calls and verify that you are set up as a valid user.

Error Message Unable to launch SofToken.exe. Please make sure SofToken is installed correctly and the correct program path is entered.

Explanation An error occurred with the SofToken program.

Recommended Action Make sure that SofToken is installed correctly and the correct program path is entered.

Error Message Unable to load SofToken library. Please make sure that SofToken is installed correctly.

Explanation An error occurred with the SofToken program.

Recommended Action Make sure that SofToken is installed correctly and the correct program path is entered.

For OTP Databases Using Secure Computing SofToken II Version 2.0

Error Message Error getting the OTP password for the user. Run SofToken II to ensure the user is set up correctly.

Explanation An error occurred while attempting to obtain the OTP password for the user.

Recommended Action Run the SofToken II program to make sure that the user is set up properly.

Error Message Failed to load data from the OTP database for User ID: xxxx. Run SofToken II to ensure the user is set up correctly.

Explanation An error occurred while attempting to load data from the OTP database for the specified user.

Recommended Action Run the SofToken II program to make sure that the specified user is set up properly.

Error Message Here is the hint you entered when you created your PIN: xxxx.

Explanation You entered an invalid PIN.

Recommended Action Use the hint to help you remember your PIN; then re-enter it.

Error Message Unable to load SofToken II library. Please make sure that SofToken II is installed correctly.

Explanation An error occurred with the SofToken II program.

Recommended Action Make sure that SofToken II is installed correctly.

For OTP Databases Using RSA SecurID Version 2.5

Error Message Error getting password from RSA SecurID Software Token.

Explanation An error occurred while attempting to obtain the user password from the RSA SecurID program.

Recommended Action Run the RSA SecurID program to make sure that the user is set up properly.

Error Message Unable to load RSA library. Please make sure that RSA SecurID Software Token is installed correctly.

Explanation An error occurred with the RSA SecurID program.

Recommended Action Make sure that RSA SecurID is installed correctly.

Error Message Unable to open RSA Token service.

Explanation An error occurred with the RSA SecurID program.

Recommended Action Make sure that RSA SecurID is installed correctly.

EAP-SIM Authentication Error Messages

This section lists error messages that may occur during EAP-SIM authentication.

Error Message `Client_handleResponseIdentity` error.

Explanation When asked to perform an authentication, the EAP-SIM supplicant encountered an error retrieving your network username from the SIM card. This error may occur if an invalid SIM card (such as one intended for mobile phone use) is inserted in the card reader or if Windows encounters a processing error.



Note The eight-digit hexadecimal error code in the message may assist technical support in troubleshooting your problem.

Recommended Action Make sure that you have a valid SIM card that was provided to you for wireless network access and that it is inserted properly. If the problem occurs several times in a row, reboot your computer.

Error Message For the changes to take effect, please restart your WLAN card (or your computer) NOW.

Explanation The changes you made on the SIM Authentication Properties screen can take effect only if you perform a complete reauthentication. Otherwise, your wireless network connection may appear to be stuck in the “Validating identity” state.

Recommended Action Turn off your client adapter’s radio, wait a few seconds, and then turn the radio back on. Refer to the [“Turning Your Client Adapter’s Radio On or Off”](#) section on page 9-15 for instructions.

Error Message GetUserPin returned error.

Explanation Windows encountered an error while prompting for or retrieving the PIN.



Note The eight-digit hexadecimal error code in the message may assist technical support in troubleshooting your problem.

Recommended Action Wait until the system tries to authenticate the client adapter again (approximately 30 to 60 seconds) and enter a valid PIN. Do not click Cancel or otherwise interfere with the normal operation of Windows. If the problem persists, reboot your computer.

Error Message Maximum length of PIN is 8 characters.

Explanation You tried to enter a PIN that is longer than eight characters. SIM card PINs are restricted to a maximum length of eight alphanumeric characters.

Recommended Action Delete one or more characters from the PIN field or delete all of the characters you entered and retype the complete PIN.

Error Message Network authentication aborted.

Explanation When you were asked to enter a PIN, you clicked the Cancel button and cancelled the authentication process. The EAP-SIM supplicant will not attempt to authenticate to the network.



Note The system will try to authenticate automatically within 30 to 60 seconds.

Recommended Action If you want to authenticate to the network and establish a wireless network connection, enter the valid PIN for your SIM card. If you do not want to establish a connection, consider turning off or ejecting the client adapter; otherwise, the system will reprompt you every 30 to 60 seconds.

Error Message Network rejected user authentication.

Explanation The service provider's network has rejected your authentication attempt. This is most likely due to an expired or invalid SIM card or an invalidated account. However, it could also occur if the service provider at your current location does not allow access to the network for subscribers of your service provider.

Recommended Action Make sure that your account is in good standing and that you have a valid SIM card. Switch to a SIM card that is valid at the current location and try again.

Error Message Please check your smartcard reader and insert your SIM card.

Explanation When asked to perform an authentication, the EAP-SIM supplicant could not get the smartcard reader to initialize within a reasonable time (that is, 90 seconds for the first try and 5 minutes for subsequent tries). Most likely, the reader is not plugged in correctly, or the computer no longer recognizes it.



Note The eight-digit hexadecimal error code in the message may assist technical support in troubleshooting your problem.

Recommended Action Follow the steps below.

-
- Step 1** Install a smartcard reader if you have not done so.
 - Step 2** If a reader is installed, make sure that it is inserted completely into the PCMCIA slot (PCMCIA model) or that the connector cable is inserted properly into the serial or USB connector (serial/USB port model).
 - Step 3** Make sure that the system recognizes your reader. It should be listed under Smart card readers in Windows device manager. If your reader is not listed, eject and reinsert the reader (PCMCIA model) or disconnect and reconnect the cable (serial/USB port model).
 - Step 4** If the computer still does not recognize your reader, reboot the computer with the reader installed.
-

Error Message Please check your smartcard reader and SIM card, then try again.

Explanation The EAP-SIM supplicant has detected a general smartcard-related error (that is, not one of the specific errors included in this section) and has aborted the authentication process.



Note The eight-digit hexadecimal error code in the title may assist technical support in troubleshooting your problem.

Recommended Action Follow the steps below.

-
- Step 1** Make sure that your smartcard reader is installed properly and that your SIM card is inserted properly.
 - Step 2** Follow the Recommended Action instructions for the “Please check your smartcard reader and try again” error message below.
 - Step 3** Follow the Recommended Action instructions for the “Please insert your SIM card and try again” error message on [page 10-30](#).

- Step 4** If you are sure that the reader and card are both inserted properly, wait until the system tries to authenticate again. This should occur within 30 to 60 seconds.

**Caution**

Never remove your SIM card until the system has completed the authentication process.

- Step 5** If the problem persists, try restarting the client adapter or rebooting your computer.

Error Message Please check your smartcard reader and try again.

Explanation Windows could not detect a smartcard reader in the system. You may not have installed a reader, or this may happen after resuming Windows from suspend or hibernation.

Recommended Action Follow the steps below.

-
- Step 1** Install a smartcard reader if you have not done so.
- Step 2** If a reader is installed, make sure that it is inserted completely into the PCMCIA slot (PCMCIA model) or that the connector cable is inserted properly into the serial or USB connector (serial/USB port model).
- Step 3** Make sure that the system recognizes your reader. It should be listed under Smart card readers in Windows device manager. If your reader is not listed, eject and reinsert the reader (PCMCIA model) or disconnect and reconnect the cable (serial/USB port model).
- Step 4** If the computer still does not recognize your reader, reboot the computer with the reader installed.

Error Message Please contact your service provider to unblock your card.

Explanation You have exceeded your SIM card's retry limit by entering too many incorrect PINs in a row.

Recommended Action Contact your service provider's customer service center to get the card unblocked. The phone number may be printed on your SIM card.

Error Message Please do not switch SIM cards after authenticating.

Explanation The EAP-SIM supplicant has detected that the network username stored on the currently inserted SIM card differs from the username that was used in a previous authentication. Due to this mismatch, authentication may fail.

Recommended Action If the currently inserted SIM card is recognized by the network, authentication may succeed or fail, depending on the network configuration. If your client adapter is authenticated, you may ignore this message. Otherwise, replace the SIM card currently inserted with the SIM card that was used for your first authentication and wait until the system tries to authenticate your client adapter again (approximately 30 to 60 seconds). You may also restart the client adapter or reboot your computer with the new SIM card to try again.

Error Message Please enter a PIN (1 to 8 characters).

Explanation When you were prompted for a PIN, you clicked the OK button before entering the PIN.

Recommended Action Enter the PIN required to access your SIM card. If you do not want to authenticate at this time or do not have your PIN available, click the **Cancel** button instead.

Error Message Please insert your SIM card and try again.

Explanation The system could not detect a SIM card in the smartcard reader.

Recommended Action Make sure that your SIM card is inserted into the reader properly. It should be inserted into the reader all the way and not into the empty space in the PCMCIA slot. Try removing and reinserting the card. You should feel it latch into place and notice a slight resistance when attempting to remove it.

Error Message SimOpenSession error.

Explanation When asked to retrieve your network username, the EAP-SIM supplicant was unable to establish a connection to the SIM card. This can occur if a SIM card is not inserted in the reader, the SIM card is not inserted properly, or the wrong SIM card is inserted.

Recommended Action Make sure that you are using a valid SIM card (that is, the SIM card provided to you for wireless network access, not a SIM card intended for mobile phone use). If that does not correct the error, make sure that your SIM card is inserted into the reader properly. It should be inserted into the reader all the way and not into the empty space in the PCMCIA slot. Try removing and reinserting the card. You should feel it latch into place and notice a slight resistance when attempting to remove it.

Error Message Time-out waiting for smartcard reader initialization.

Explanation When asked to perform an authentication, the EAP-SIM supplicant could not get the smartcard reader to initialize within a reasonable time (90 seconds for the first try and 5 minutes for subsequent tries). Most likely, the reader is not plugged in correctly, or the computer no longer recognizes it.



Note The eight-digit hexadecimal error code in the message may assist technical support in troubleshooting your problem.

Recommended Action Follow the steps below.

-
- Step 1** Install a smartcard reader if you have not done so.
- Step 2** If a reader is installed, make sure that it is inserted completely into the PCMCIA slot (PCMCIA model) or that the connector cable is inserted properly into the serial or USB connector (serial/USB port model).

- Step 3** Make sure that the system recognizes your reader. It should be listed under Smart card readers in Windows device manager. If your reader is not listed, eject and reinsert the reader (PCMCIA model) or disconnect and reconnect the cable (serial/USB port model).
- Step 4** If the computer still does not recognize your reader, reboot the computer with the reader installed.
-

Error Message Wrong PIN entered (X tries left).

Explanation The SIM card could not validate the PIN you have entered. You must have entered the wrong PIN.

Recommended Action Make sure that you enter the correct PIN. If your PIN contains letters, enter them in the correct case as the PIN is case sensitive. Check that the Caps Lock key has not been pressed inadvertently. Also, make sure that you have inserted the correct SIM card.



Note Most SIM cards limit the number of times in a row that you can enter an incorrect PIN. The error message indicates how many attempts you have left. Entering the correct PIN resets the limit to its original value. However, if the number of retries is exhausted, the SIM card locks up and becomes useless.
