

Interactive Troubleshooter

Welcome to the Interactive Troubleshooter, a tool you can use to find solutions to common connection problems. Before you use the troubleshooter, we recommend you run Connection Doctor. In addition, you should also restart Windows, as problems with communications programs can often be resolved by restarting.

What would you like to try?

{button ,JI(`nme_trb.HLP`,`T_Restarting_Windows_before_troubleshooting')}} Restart Windows before continuing to troubleshoot



Start Norton Connection Doctor.

{button ,JI(``,`T_When_does_the_problem_occur')}} Continue troubleshooting.



Norton Connection Doctor does not test ISDN or other digital telephone connections.

Restarting Windows before continuing to troubleshoot

Each time you start Windows, Windows starts all of the programs in your StartUp group. Some of these programs start and run in the background invisible to you, while others run as icons on the Windows taskbar. Because of the ways these StartUp programs run, you may not be aware that they are running.

These programs could cause connection problems. For example, if a background program is “holding onto” the modem, it may prevent other communications programs from accessing the COM port to use the modem.

To avoid problems with background programs, start Windows without starting the programs in the StartUp group.

To restart Windows without starting programs in the StartUp group:

- 1** Click the Windows Start button and click Shut Down. The Shut Down Windows dialog appears.
- 2** Select Restart The Computer and click Yes. Windows closes and restarts the computer.
- 3** Follow the steps you normally use to start Windows.
- 4** When Windows displays the first splash screen (the Windows logo), hold down the left Shift key. Continue holding until Windows has started and the Windows desktop appears. You should notice that the StartUp group items do not appear on the Windows taskbar.

Restarting Windows

- 1** Click the Windows Start button, and then click Shut Down. The Shut Down Windows dialog appears.
- 2** Select Restart The Computer and click Yes. The computer screen changes and the computer restarts. This may take a few minutes.
- 3** When your computer restarts, follow the steps you normally take to start Windows. Windows starts.

When does the problem occur?

To get started, click a button to answer the troubleshooting questions. When a solution appears, follow the suggested steps and then try to connect again.

When does the problem occur?

- | | |
|---|--|
| {button ,JI('`,`T_Before_dialing')} | <u>Before dialing</u> |
| {button ,JI('`,`T_During_dialing')} | <u>During dialing</u> |
| {button ,JI('`,`T_Before_the_other_end_answers')} | <u>Before the other end answers</u> |
| {button ,JI('`,`T_While_establishing_a_connection')} | <u>While establishing a connection (during</u> |
| <u>negotiation, login, or anytime afterwards)</u> | |
| {button ,JI('`,`T_When_was_the_last_time_your_program_worked')} | <u>While using my</u> |
| <u>communications program</u> | |

Before dialing

A variety of problems can prevent your program from dialing. Usually, these problems are caused when your computer is not connected properly, your computer cannot find or access a modem, or the modem cannot access a phone line.

Possible problems:

{button ,JI('`,`T_What_type_of_modem_are_you_connecting')}} Is your modem properly connected to your computer and to the phone line?

{button ,JI('`,`T_analog_digital_phone_lines_and_modems')}} Is your modem compatible with the phone line you are using?

{button ,JI('`,`T_What_type_of_modem_are_you_installing')}} Is the modem software installed properly?

{button ,JI('`,`T_modems_resetting')}} Is the modem turned on?

{button ,JI('`,`T_Setting_up_programs_to_use_the_correct_modem')}} Is your communications program set up to use the correct modem?

{button ,JI('`,`T_Investigating_program_incompatibilities')}} Is the modem currently being used by another program?

For example, an older 16-bit program (Windows 3.x) may be "holding onto" the modem and not allowing other programs to use it.

{button ,JI('`,`T_Working_with_weak_or_unusual_dial_tones')}} Is the dial tone weak? Is the dial tone unusual? Is the dial tone different from the dial tone you usually work with?

{button ,JI('`,`T_Activating_a_phone_line')}} Is the phone line active?

{button ,JI('`,`T_Checking_for_modem_damage')}} Is the modem damaged or overheated, or is the modem cable damaged?

During dialing

A variety of problems can cause your modem to dial incorrectly. Usually, these problems are caused when there is something wrong with the dial sequence your program is trying to dial.

Possible problems:

{button ,JI('`,`T_busy_signals')}} Are you getting a busy signal – either a regular busy signal or a fast busy signal?

{button ,JI('`,`Call_Waiting')}} Do you have a call waiting service on your phone line?

{button ,JI('`,`T_Working_with_prefixes')}} Do you need to include a prefix to obtain an outside line, such as "9"?

{button ,JI('`,`T_Placing_toll_free_calls')}} If you are using a prefix, are you also trying to dial a toll free number (1-800-xxxx or 1-888-xxxx)?

{button ,JI('`,`T_Working_with_commas_after_prefixes')}} If you are using a prefix, have you added a comma after it to pause for the second dial tone?

{button ,JI('`,`T_Working_with_phone_numbers')}} Is the phone number entered correctly?

{button ,JI('`,`T_Working_with_calling_cards')}} Are you using a calling card? If so, have you entered the calling card dial sequence correctly?

{button ,JI('`,`T_Split_area_codes')}} Are you dialing a local number in another area code, or a long distance number in your current area code?

{button ,JI('`,`T_Activating_long_distance_access')}} Do you need to use a special code that activates long distance dialing?

{button ,JI('`,`T_Tone_pulse_dialing_settings')}} Is your communications program set up to use the correct tone or pulse dialing settings?

Before the other end answers

A variety of problems can prevent the computer or device on the other end from answering your call. Usually, if you have been able to successfully dial, the problem is with the other end. In that situation, the problem needs to be fixed on the remote end by the person responsible for the device.

Possible problems on your end:

{button ,JI('`,`T_Increase_the_number_of_rings')}} Your modem does not ring enough times to allow the remote computer or device to answer.

{button ,JI('`,`Call_Waiting')}} You have a call waiting service on your phone line.

Possible problems on remote end:

{button ,JI('`,`T_Call_remote_site')}} The remote fax machine is turned off.

{button ,JI('`,`T_Call_remote_site')}} The remote fax machine is out of paper, is out of memory, or is jammed.

{button ,JI('`,`T_Call_remote_site')}} The remote server is down.

{button ,JI('`,`T_busy_signals')}} The phone line is busy.

{button ,JI('`,`T_Working_with_phone_numbers')}} You have dialed a wrong number.

{button ,JI('`,`T_Devices_types')}} The device answering on the remote end may not be the appropriate type of device.

While establishing a connection

A variety of problems can prevent you from successfully connecting to a remote device. These problems can occur either during the negotiation (“handshaking”), during the login, or at any time afterwards.

Possible problems on your end:

- {button ,JI('`,`T_User_ID_and_password')}} The user ID or login name is incorrect.
- {button ,JI('`,`T_User_ID_and_password')}} The password is incorrect.
- {button ,JI('`,`T_Connecting_to_the_wrong_server')}} You are connecting to the wrong server.
- {button ,JI('`,`T_Verifying_your_network_protocol')}} Your network protocol is incorrect.
- {button ,JI('`,`T_Modem_capabilities')}} Your modem does not have the appropriate capabilities.
- {button ,JI('`,`T_Modem_speed_adjusting')}} Your modem’s speed is too slow or too fast.
- {button ,JI('`,`T_Port_settings_adjusting')}} Your modem’s port settings are incorrect.
This may occur after you install new hardware or after you dock or undock your laptop.
- {button ,JI('`,`Call_Waiting')}} You have call waiting service on your phone line.

Possible problems on remote end:

- {button ,JI('`,`T_User_account_not_enabled')}} The user account is not enabled.
- {button ,JI('`,`T_Phone_line_noise')}} There is excessive noise on the phone line.

Verifying your modem's capabilities

Connection problems may occur when your modem does not support the features required by your communications program. For example, you cannot use telephony communications programs unless you have a supported voice modem.

To determine if your modem meets your communications program's system requirements:

- 1 Check your communications program's documentation for a list of system requirements.
- 2 Run the Connection Doctor Modem test. When the tests are completed, the results appear in the display area.
{button ,JI('NMU.HLP','P_Computer_testing_for_problems')} [How to ...](#)
- 3 Click the plus sign (+) next to your modem. The tree expands. Examine the test results to determine the modem capabilities.
- 4 Compare the Connection Doctor's results with the system requirements list for your communications program.
- 5 If your modem can support a feature but that feature does not appear to be enabled, you may be able to adjust the setting in your modem's .INF file. Click here
{button ,JI('','Enabling_options_in_an_.INF_file.')} for more information.

Installing modem software

What type of modem are you installing software for?

{button ,JI(`;`T_Installing_software_for_external_modems')}

External (a separate, box-like modem)

{button ,JI(`;`T_Installing_software_for_internal_modems')}
your computer)

Internal (a modem card installed inside

{button ,JI(`;`T_Installing_software_for_PC_card_modems')}
credit-card-sized modem designed for laptops)

PC card (PCMCIA) modem, (a thin,

Installing software for external modems

Modem manufacturers often update the drivers for the modems they manufacture and then post them on their Web sites. Because many connection problems are caused by modem driver problems, it is very important that you obtain and install the most up-to-date driver.

Do the following:

- 1 Obtain the latest modem drivers for your modem.

{button ,JI('','Using_the_flash_upgrade_feature_to_update_modem_software')}} Updating automatically using Flash Upgrade

{button ,JI('','Updating_modem_software_manually')}} Updating manually

- 2 Open the Modems control panel.

{button ,JI('','P_Open_modems_control_panel')}} How to ...

- 3 If the modem appears in the list and you are reinstalling the modem software, remove the modem (this uninstalls the modem software).

- In the modem list, click your modem.
- Click Remove.

- 4 Click the Add button. The Install Modem wizard starts.

- 5 Follow the instructions on your screen.

- 6 When you are prompted to select a driver from the list of drivers included with Windows you have the following three choices.

- Click Have Disk and select the latest driver you downloaded in step 1.
- Click Have Disk and select the driver which shipped with your modem. It is probably on a floppy disk packaged with your modem.
- Select the driver which matches your modem from the list presented. First select the Manufacturer's name from the list on the left, then select the Model from the list on the right. If your modem does not show up on the list, select the Manufacturer [*Standard Modem Types*] and the Model which matches the speed of your modem.

(If you did not download the driver, use either the driver that shipped with your modem or the driver in the Windows list, whichever is most recent. To determine the date of the driver that appears in the Windows list, search your computer for a file with the same name as the driver shipped with your modem and compare the dates.)

- 7 On the last panel, click Finish to install the modem software. The Modems control panel reappears, and the modem appears in the list of modems set up.

- 8 Ensure the modem is set up to use the appropriate COM port and that the port is working properly.

{button ,JI('','T_Port_settings_adjusting')}} How to ...

Installing software for internal modems

Modem manufacturers often update the drivers for the modems they manufacture and then post them on their Web sites. Because many connection problems are caused by modem driver problems, it is very important that you obtain and install the most up-to-date driver.

Do the following:

- 1 Obtain the latest modem drivers for your modem.

{button ,JI('','Using_the_flash_upgrade_feature_to_update_modem_software')}} Updating automatically using Flash Upgrade

{button ,JI('','Updating_modem_software_manually')}} Updating manually

- 2 Open the Modems control panel.

{button ,JI('','P_Open_modems_control_panel')}} How to ...

- 3 If the modem appears in the list and you are reinstalling the modem software, remove the modem (this uninstalls the modem software).

- In the modem list, click your modem.
- Click Remove.

- 4 Click the Add button. The Install Modem wizard starts.

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- Select the driver which matches your modem from the list presented. First select the Manufacturer's name from the list on the left, then select the Model from the list on the right. If your modem does not show up on the list, select the Manufacturer [*Standard Modem Types*] and the Model which matches the speed of your modem.

(If you did not download the driver, use either the driver that shipped with your modem or the driver in the Windows list, whichever is most recent. To determine the date of the driver that appears in the Windows list, search your computer for a file with the same name as the driver shipped with your modem and compare the dates.)

- 7 On the last panel, click Finish to install the modem software. The Modems control panel reappears, and the modem appears in the list of modems set up.

- 8 Ensure the modem is set up to use the appropriate COM port and that the port is working properly.

{button ,JI('','T_Port_settings_adjusting')}} How to ...

Installing software for PC card modems

PC card modems (also called “PCMCIA” modems) are thin, credit card sized modems designed for laptop computers. When you purchase a laptop, the modem usually is included with the computer, and the modem software (called a “modem driver” or “driver”) is already installed.

Modem manufacturers often update the drivers for the modems they manufacture and then post them on their Web sites. Because many connection problems are caused by modem driver problems, it is very important that you obtain and install the most up-to-date driver.

Do the following:

- 1 Obtain the latest modem drivers for your modem.

{button ,JI('','Using_the_flash_upgrade_feature_to_update_modem_software')}} [Updating automatically using Flash Upgrade](#)

{button ,JI('','Updating_modem_software_manually')}} [Updating manually](#)

- 2 Open the Modems control panel.

{button ,JI('','P_Open_modems_control_panel')}} [How to ...](#)

- 3 If the modem appears in the list and you are reinstalling the modem software, remove the modem (this uninstalls the modem software).

- In the modem list, click your modem.
- Click Remove.

- 4 Click the Add button. The Install Modem wizard starts.

- 5 Follow the instructions on your screen.

- 6 When you are prompted to select a driver from the list of drivers included with Windows you have the following three choices.

- Click Have Disk and select the latest driver you downloaded in step 1.
- Click Have Disk and select the driver which shipped with your modem. It is probably on a floppy disk packaged with your modem.
- Select the driver which matches your modem from the list presented. First select the Manufacturer's name from the list on the left, then select the Model from the list on the right. If your modem does not show up on the list, select the Manufacturer *[Standard Modem Types]* and the Model which matches the speed of your modem.

(If you did not download the driver, use either the driver that shipped with your modem or the driver in the Windows list, whichever is most recent. To determine the date of the driver that appears in the Windows list, search your computer for a file with the same name as the driver shipped with your modem and compare the dates.)

- 7 On the last panel, click Finish to install the modem software. The Modems control panel reappears, and the modem appears in the list of modems set up.

- 8 Ensure the modem is set up to use the appropriate COM port and that the port is working properly.

{button ,JI('','T_Port_settings_adjusting')}} [How to ...](#)

Connecting modems

What type of modem are you connecting?

{button ,JI('`,`T_Connecting_external_modems')}	<u>External modem (a separate, box-like modem)</u>
{button ,JI('`,`T_Connecting_internal_modems')}	<u>Internal modem (a modem card installed inside your computer)</u>
{button ,JI('`,`T_Connecting_PC_card_modems')}	<u>PC card (PCMCIA) modem, (a thin, credit-card-sized modem designed for laptops)</u>
{button ,JI('`,`T_Connect_cellular_modems')}	<u>Cellular modem (any modem you use with your cellular phone)</u>

Connecting external modems

- 1 Determine the type of phone line you are using.

{button ,JI('`,`T_analog_digital_phone_lines_and_modems')}

How to ...

- 2 Connect the modem to the computer using the modem cable.

- 3 Connect the modem to the phone line. Do one of the following:

- Analog phone line
- Unplug the phone cable from the wall jack. Using the modem's phone cable, connect the wall jack to the jack on the back of the modem labeled "line", "telco", or "wall". Connect the phone cable to the jack on the modem labeled "phone".
- Digital phone line
- Unplug the phone handset from the spiral cord that connects it to the phone. Connect the modem to its digital handset adapter (if your modem is digital, you will not connect to a phone line). Connect the adapter to the spiral cord.

- 4 Plug the modem's power adapter into an electrical outlet.

- 5 Ensure the power switch on the modem is in the "on" position.

Connecting internal modems

- 1 Determine the type of phone line you are using.

{button ,JI(`',`T_analog_digital_phone_lines_and_modems')} [How to ...](#)

- 2 Connect the modem to the phone line. Do one of the following:

- Analog phone line
- Unplug the phone cable from the wall jack. Using modem's phone cable, connect the wall jack to the modem jack on the back of your computer labeled "line", "telco", or "wall". If your modem also has a jack labeled "phone", connect the phone's cable to that jack.
- Digital phone line
- Unplug the phone handset from the spiral cord that connects it to the phone. Connect the modem jack on the back of your computer labeled "line", "telco", or "wall" to the modem's digital handset adapter (if your modem is digital, you will not connect to a phone line). Connect the adapter to the spiral cord.

- 3 Restart Windows in order to reset the modem.

Connecting PC card modems

- 1 Determine the type of phone line you are using.

{button ,JI('`,`T_analog_digital_phone_lines_and_modems')}} [How to...](#)

- 2 Connect the modem to the computer. With the PC card modem right-side up, completely insert the modem card into the computer's modem slot. You may hear a beep when the modem is properly connected. If you have two PC card slots and the one you are using does not work, try the other slot. The first slot may be damaged.
- 3 Connect the modem to the phone line. Do one of the following:
 - Analog phone line
 - Unplug the phone cable from the wall jack. Using the modem's phone cable, connect the wall jack to your PC card modem.
 - Digital phone line
 - Unplug the handset's spiral cord from the phone. Connect the modem to its digital handset adapter (if your modem is digital, you do not need to use an adapter). Connect the adapter to the spiral cord jack on the phone. (If your handset adapter has a jack for the spiral handset cord, plug the adapter into that jack, and connect the spiral cord to the phone.)
- 4 Restart Windows in order to reset the modem.

Connecting cellular modems

- 1 Determine the type of phone line you are using.

{button ,JI('`,`T_analog_digital_phone_lines_and_modems')}} [How to ...](#)

- 2 Connect the cellular modem to the computer. Be sure to use the proper modem cable.

- 3 Connect the modem to the phone line. Do one of the following:

- Analog cellular line
- Using the modem's phone cable, connect the phone to your modem.
- Digital cellular line
- Connect the modem to its digital handset adapter (if your modem is digital, you do not need to use an adapter). Using the modem's phone cable, connect the adapter to the phone.

Note: Be sure to use the proper phone-to-modem cable.

- 4 Turn on the cellular phone.

- 5 Ensure the phone is functioning properly.

- 6 Reset the modem.

{button ,JI('`,`T_modems_resetting')}} [How to ...](#)

Checking for modem damage

Modems can suffer damage under a variety of circumstances.

To identify modem damage, checking the following:

- Check the rows of connectors (small holes) on the ends of the modem adapter or at the back of the modem. Are any of the holes damaged, or are any pins sticking out of them? If you are using a PC card modem, is the casing bent, cracked, or dented?
- Is the modem excessively hot or overheated? If yes, disconnect the modem and reconnect it when it has completely cooled down.
- Check for any smoke or for a burning smell. Plugging an analog modem into a digital line can often result in permanent damage to the modem.
- Check the modem cables for damage. If you do not see any visible damage, was the cord recently stretched? This could cause damage inside the cable that is not visible.
- Did your modem ship with a modem diagnostic utility? These utilities are often installed when you install your modem. Check the Windows Control Panel for installed utilities, or see your modem documentation.
- Consult a qualified computer technician to determine the nature of the modem damage.

Setting up programs to use the correct modem

Many newer communications programs require you to activate the modem you want to use with the communications program even if you only have one modem set up. Where you activate the modem could be either in Windows or in the communications program.

If you do not activate a modem, the communications programs may not work properly, or the program may try to use the first modem available in the Modems control panel. If your program is set up to use a modem that is not currently connected, it will not find any other modem that you have connected. Instead, the program will return an error saying that it cannot find or detect a modem. If your program does not allow you to specify which modem to use, your program may try to use the first modem listed in the Modems control panel. If the first modem is not connected, the program will fail.

Depending on the program you are using, the procedure for specifying a modem may vary. For more information, see the documentation for the program.

To activate a modem:

- 1 Open the Modems control panel.
{button ,JI('','P_Open_modems_control_panel')} [How to ...](#)
- 2 In the modem list, identify your modem.
- 3 Compare the manufacturer, make, and model of the modem entry with the physical modem connected to your computer.
- 4 Do one of the following:
 - Modem matches
 - Proceed to step 5.
 - Modem does not match
 - Install correct modem software. [Click here](#) {button ,JI('','T_What_type_of_modem_are_you_installing')} for instructions. Proceed to step 5.
- 5 Set up your modem in your communications program, if required. Do the following:
 - a Start your communications program.
 - b Open the program's online help.
 - c Using the index, find, or search feature, look up "modem", "COM port", or "phone line".
 - d Follow the instructions in the online help to set up your modem.

Adjusting your modem's connection speed

If you experience connection problems, you may be able to connect by reducing the connection rate set up for your modem. Your modem connects at a variety of speeds, up to the maximum baud rate it supports. The connection speed of your modem varies depending on the following:

- The number of users trying to connect to the remote device and the current number of modem connections. The higher the traffic into the remote device, the slower your connection will be.
- The maximum connection speed supported by the remote device. For example, if you are using a 56K modem to connect to a remote device that uses a 28.8K device, then the maximum connection speed is 28.8K.
- The maximum and minimum connection speeds configured for the connecting device or the remote device. Setting a maximum and minimum connection speed allows you to control connection time and may reduce transmission time and chargeable transmission minutes.


To adjust the connection speed:

- 1 Open the Modems control panel.
{button ,JI('','P_Open_modems_control_panel')} [How to ...](#)
- 2 In the modems list, click the appropriate modem.
- 3 Click Properties. The Properties dialog for the modem appears.
- 4 In the Modem Speed drop-down list, click the appropriate speed.
- 5 If your modem supports the Only Connect At This Speed feature, enable that option if you do not want to connect at slower speeds.
- 6 Adjust connection speeds in your communications program, if possible. Do the following:
 - a Start your connection program.
 - b Open the online help.
 - c Using the index, find, or search feature, look up “transmission speed”, “connection speed”, “baud rate”, “speed”, and “modem”.
 - d Follow the instructions (if any) for adjusting the connection speed in your communications program.

Adjusting COM port settings

You can adjust the port, or COM port, that your modem is using as well as the port settings (for example, bits per second, parity, flow control, and so on) for each port. Changing which COM port your modem uses may be necessary if you use a docking station that has more ports on the station than on the laptop. If you use one COM port for your modem when your laptop is docked in the docking station and another when your laptop is undocked, you may need to change the COM port setting for your modem when you dock and undock.

To adjust COM port settings:

- 1 Check for COM port conflicts.
{button ,JI('`,`T_IRQ_or_COM_port_conflict')} [How to ...](#)
- 2 Check that your modem is using the appropriate COM port. Do the following:
 - a Open the Modems control panel.
{button ,JI('`,`P_Open_Modems_control_panel')} [How to ...](#)
 - b In the modems list, click the appropriate modem.
 - c Click Properties. The Properties dialog for your modem appears.
 - d In the Port drop-down list, click the appropriate COM port.
 - e If you made a change to the Port setting, restart Windows.
- 3 Adjust the COM port settings. Do the following:
 - a Open the System control panel.
{button ,JI('`,`T_System_control_panel')} [How to ...](#)
 - b Click the Device Manager tab.
 - c Next to the Ports item, click the plus sign.
 - d Double click the port. The Communications Port Properties dialog appears. On the General tab, the Device Status area displays a message indicating whether or not the device is working properly.
 - e Change the settings on the Port Settings tab as required. For information about a field, click the Help button  in the upper right corner of the dialog and then click the field that you want information about.

Investigating IRQ or COM port conflicts

► Run the Connection Doctor, which tests your computer and modem setup and detects any problems automatically. If the Connection Doctor does not detect a problem, contact your company's help desk or contact a computer technician.

{button ,JI('NMU.HLP','P_Computer_testing_for_problems')} How to ...

Removing modems

- 1 Open the Modems control panel.
{button ,JI(`','P_Open_modems_control_panel')} [How to ...](#)
- 2 In the modem list, click your modem.
- 3 Click Remove.

Working around phone line noise

Phone line noise can prevent your call from dialing or can cause your call to be dropped. To work around this problem, do the following:

- Redial so that you access a different phone connection.
- Try dialing from another line.

Testing phone lines

Some connection problems may occur because of any of the following phone line problems:

- poor, damaged, or older wiring on phone systems and phone lines
- incorrect phone line and phone jack voltage
- digital phone lines (most modems require analog phone lines)

In some cases, these problems may also cause damage to your modem.

Before plugging your modem into a wall jack, you should test the jack for these problems. You can purchase phone line testing kits at most telephone supply stores. These kits are relatively inexpensive and include portable line testers that perform a variety of functions including detecting digital lines, reading line voltage, and assessing the integrity of the phone line.

Accessing long distance carrier networks

Long distance carriers often require that you first dial into their network, wait for a second dial tone, and then enter the number you want to call. If your dial sequence does not include enough time to wait for the second tone to occur, your call will not dial properly and you will likely hear a signal that sounds like a fast busy signal.

To compose a dial sequence for using your long distance carrier, [click here](#)
{button ,JI('nme_trb.HLP','T_Sample_calling_card_sequences')} and follow the instructions for using calling cards.

Handling weak or unusual dial tones

If you are traveling in another region or in another country, the dial tone may be delayed, weak, or unusual. In this case, your modem may not be able to recognize the dial tone and may not dial properly. To solve this problem, disable the "wait for dial tone" feature in your modem setup.

To handle weak or unusual dial tones:

- 1 If you have a Call Answer service on your line, the unusual dial tone may indicate that you have unheard messages in your mailbox. Listen to your new messages and then try to connect again.

- 2 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('','T_TAPI_and_non-TAPI_programs')}} How to ...

- 3 To disable dial tone detection, click the type of communications program you are using:

{button ,JI('','T_Disabl_dial_tone_detection_in_Windows')}} TAPI programs

{button ,JI('','T_Disabling_dial_tone_detection_in_your_communications_program')}} Non-TAPI programs

{button ,JI('','T_Dont_know_if_program_is_TAPI_compliant')}} Don't know whether or not program uses TAPI

Activating a phone line

Some phone systems allow administrators to easily activate and deactivate phone line extensions. The line you are trying to use may be deactivated at this time.

To determine if the phone line is active:

- 1** Plug a regular phone set into the phone jack and listen for a dial tone.
- 2** Call the telephone administrator or the hotel front desk and ask the following questions:
 - Is the phone line active?
 - Can the phone line be activated for you?
 - Does long distance access need to be activated by a special code or number?

Working with prefixes

Many phone systems require you to use a prefix to obtain an outside line. If you are unsure about what prefix to use, call the switchboard, the hotel front desk, or the telephone administrator for your current location. Common prefixes include "8" and "9". Typically, prefixes should be followed by a comma. A comma specifies a two-second wait period, which is normally enough time to access the outside line dial tone.

Some phone systems use a variety of prefixes for billing purposes. For example, different prefixes might be required for local calls, for long distance calls, and for toll free calls.

To specify prefixes:

- 1 Determine the prefix you need.
- 2 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).
{button ,JI('`,`T_TAPI_and_non-TAPI_programs')}} How to ...
- 3 To specify prefixes, click the type of communications program you are using:
{button ,JI('`,`P_Location_prefix')}} TAPI programs
{button ,JI('`,`T_Specifying_prefixes_in_your_communications_program')}} Non-TAPI programs
{button ,JI('`,`T_Dont_know_if_program_is_TAPI_compliant')}} Don't know whether or not program uses TAPI

Specifying prefixes in Windows

- 1 Determine the type of prefix or prefixes you need to use in your dial sequence.

{button ,JI('','O_About_dial_sequences')} [How to ...](#)

- 2 Open the Modems control panel.

{button ,JI('','P_Open_modems_control_panel')} [How to ...](#)

- 3 Click Dialing Properties. The Dialing Properties dialog appears.

- 4 In the For Local and For Long Distance fields, specify the appropriate prefixes.

Note: Remember to include at least one comma (,) after each prefix. Each comma specifies a two second pause in the dial sequence. A pause may be required to wait for a second dial tone before dialing the rest of the number.

- 5 Try to connect again.

- 6 Click here {button ,JI('','T_Specifying_prefixes_in_your_communications_program')} if this does not solve your problem.

Specifying prefixes in your communications program

Some communications programs do not utilize the Windows dialing standard (TAPI), and the Windows location dialing features do not work in those cases. To work with a non-TAPI communications program, specify the dialing information you need to use in that program.

To specify prefixes in your communications program:

- Insert the appropriate prefix and at least one comma (for example, “9,”) at the beginning of telephone number.

Note: Remember to include at least one comma (,) after each prefix. Each comma specifies a two second pause in the dial sequence. A pause may be required to wait for a second dial tone before dialing the rest of the number.

- Set up prefixes in your communications program (if supported). Do the following:
 - a Start your communications program.
 - b Open the online help.
 - c Using the index, find, or search feature, look up “prefix” and “dial prefix”.
 - d Follow the instructions (if any) to set up prefixes.

Placing toll-free calls

Many phone systems require you to use a prefix for toll free calls (for example, 1-800 or 1-888 numbers). In addition, some phone systems also use a variety of prefixes for billing purposes. For example, different prefixes might be required for local calls, for long distance calls, and for toll free calls.

If you require a special prefix for toll free calls, this prefix should be entered in the long distance prefix field, as the number is dialed as a long distance number but is not charged to your room through the hotel phone system. Including the prefix ensures you are not charged for the call, and including it in the long distance prefix field ensures the call is dialed with the long distance access code (in North America, it is “1”).

If you are unsure about which prefix to use, call the switchboard, the hotel front desk, or the telephone administrator for your current location.

To specify a prefix for a toll free call:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('`,`T_TAPI_and_non-TAPI_programs')}} How to ...

- 2 To specify prefixes, click the type of communications program you are using:

{button ,JI('`,`P_Location_prefix')}} TAPI programs

{button ,JI('`,`T_Specifying_prefixes_in_your_communications_program')}} Non-TAPI programs

{button ,JI('`,`T_Dont_know_if_program_is_TAPI_compliant')}} Don't know whether or not program uses TAPI

Working with commas after prefixes

When you specify a prefix, add a comma after it. A comma adds a two-second wait time, which is necessary to obtain the dial tone for the outside line. If you require a longer wait time, try using two or three commas.

The procedure for adding commas is different for Windows 98 and Windows 95.

If you use Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,JI('nme_trb.hlp','P_Open_Telephony_control_panel')} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Insert the comma(s) after the prefix number in the For Local Calls, Dial text box.
- 4 Insert the comma(s) after the prefix number in the For Long distance Calls, Dial text box.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

If you use Windows 95 do this:

- 1 Open the Modems control panel.
{button ,JI('','P_Open_modems_control_panel')} [How to...](#)
- 2 In the modem list, click the appropriate modem.
- 3 Click Dialing Properties. The Dialing Properties dialog for your location
- 4 Insert the comma(s) after the prefix number in the text box just before the words For Local.
- 5 Insert the comma(s) after the prefix number in the text box just before the words For Long Distance..

Entering phone numbers and other dialing information

When entering phone numbers, do the following:

- Verify the dial sequence
- Ensure that you have specified the correct phone number, including any long distance access codes (1 for domestic long distance, 011 for international long distance) and area codes. Ensure the number is being dialed exactly as it would if you were dialing a voice call. If you are unsure, try dialing the number on the phone and write down the sequence you use. Click here {button ,JI('nme_trb.hlp','O_About_dial_sequences')} for information about dial sequences.
If you are using a 32-bit TAPI compliant program, you may be able to verify the entire dial string in that program (try checking where outgoing calls are logged).
- Verify that all dialing instructions are specified in the correct places
- The table below describes how to use Windows My Location feature with your communications program, depending on whether your program is TAPI or non-TAPI compatible. Click here {button ,JI('T_TAPI_and_non-TAPI_programs')} for information on determining whether your program is TAPI or non-TAPI.

Note: To get to the My Location tab in Windows 98 open the Telephony control panel . To get to the My Location tab in Windows 95 open the Modems control panel and click Dialing Properties.

Type of program	Enter in My Location tab	Enter in program for each call
TAPI	prefixes	area code for call
	your country code	phone number for call
	your area code	
	calling card information	
	prefix to disable call waiting	
	pulse/tone phone line setting	
Non-TAPI		long distance or international access code (in North America, “1” or “011”)
		prefixes
		area code for call
		phone number for call
		calling card information
		prefix to disable call waiting

Handling split area codes

Because of increased demand for telephone numbers, many cities in North America now provide more than one area code within a local calling area. In the past, area codes were set up so that all calls within an area code were local calls, and all calls to other area codes were long distance. However, with split area codes, this rule no longer holds. To add to the confusion, in some areas local calls to different area codes are dialed as long distance calls (using the 1 prefix) and in other areas local calls to different area codes are dialed without the long distance prefix.

Split area codes can cause problems when your communications program uses the area code to determine whether a call is long distance or local. Many communications programs compare the area code of the number to be dialed with the area code you defined for your current location. If the area codes are different, the communications program assumes the call is long distance and adds the long distance prefix to the beginning of the dial sequence. If you are dialing a number in a split area code where the long distance prefix is not used, this may cause your number to be dialed incorrectly.

To dial calls within split area codes:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('','T_TAPI_and_non-TAPI_programs')} [How to...](#)

- 2 To dial a phone number in a split area code, click the type of communications program you are using:

{button ,JI('','P_Location_creating_without_viewing_adapters')} [TAPI programs](#)

{button ,JI('','T_split_area_codes_in_non-TAPI_programs')} [Non-TAPI programs](#)

{button ,JI('','T_Dont_know_if_program_is_TAPI_compliant')} [Don't know whether or not program uses TAPI](#)

Working with calling cards

Calling card dialing presents special challenges for communications programs. To bill calls to your calling card, you must instruct your communications program how to dial each component in the calling card dial sequence. Before you set up your calling card information for your location or in your communications program, ensure you know all of the components in your calling card dial sequence. If you are unsure, use these sample dial sequences or bill a regular voice call to your calling card and write down the dial sequence as you go.

To set up calling card numbers:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('','T_TAPI_and_non-TAPI_programs')} How to...

- 2 To dial a phone number in a split area code, click the type of communications program you are using:

{button ,JI('nme_trb.hlp','T_Enter calling_card_information_for_your_location')} TAPI programs

{button ,JI('nme_trb.hlp','T_Enter calling_card_numbers_in_non_TAPI_programs')} Non-TAPI programs

{button ,JI('','T_Dont_know_if_program_is_TAPI_compliant')} Don't know whether or not program uses TAPI

Activating long distance access

Some phone systems allow administrators to easily activate and deactivate features from phone line extensions. The line you are trying to use may not permit long distance dialing at this time.

Call the hotel front desk or your telephone administrator and ask the following questions:

- Is long distance dialing active?
- Can it be activated for you?
- Does long distance need to be activated with a special access number?

Running Norton Speed Disk

If you have installed Norton Utilities on your computer, you have Norton Speed Disk as part of that suite of utilities. Speed Disk can help you improve the performance of your computer by optimizing your hard drive. For best results, run Speed Disk on a regular basis.

To run Speed Disk:

- 1** Click the Windows Start button, point to Programs, point to Norton Utilities, and click Speed Disk.
- 2** Follow the instructions on your screen. For more information, see your Norton Utilities documentation.

Troubleshooting installed hardware or software

1 Check the following hardware issues:

{button ,JI('','T_Removing_hardware')} Remove any new hardware you installed recently.

{button ,JI('','T_What_type_of_modem_are_you_connecting')} Ensure your modem is connected properly.

{button ,JI('','T_Setting_up_programs_to_use_the_correct_modem')} Verify that your program is using the correct modem.

{button ,JI('','T_Investigating_program_incompatibilities')} Investigate possible program incompatibilities.

{button ,JI('','T_IRQ_or_COM_port_conflict')} Check to see if there is an IRQ or COM port conflict on your system.

2 Use the Connection Doctor to compare your current configuration to your benchmark file (if you created a benchmark file when your system was working properly).

{button ,JI('N.MU.HLP','P_test_results_comparing')} How to ...

3 Try to connect again.

If these solutions do not solve your problem, contact technical support for your communications program and modem.

Investigating program incompatibilities

When two communications programs are running at the same time, they may conflict with one another. For example, if two programs that want to control or “hold onto” the modem are running at the same time, the program that started first will control the modem and will not allow the second program access to it. This can cause problems. Typically, this is only a problem with non-TAPI programs (programs that do not utilize the Windows TAPI standard of allowing multiple programs to have access to the modem).

Many 32-bit communications programs developed for Windows 95/98 and Windows NT are TAPI compliant and have the ability to run multiple programs at the same time, such as your Internet dial-up utility and WinFax.

{button ,JI(`nme_trb.hlp','T_TAPI_and_non-TAPI_programs')}} [Working with TAPI and non-TAPI programs](#)

Note: Each time you start Windows, Windows starts all of the programs in your StartUp group. Some of these programs start and run in the background invisible to you, while others run as icons on the Windows taskbar. Because of the ways these programs start, you may not be aware that they are running. These programs could cause connection problems. For example, if a background program is “holding onto” the modem, it may prevent other communications programs from accessing the COM port to use the modem. To avoid problems with background programs, start Windows without starting the programs in the StartUp group.

{button ,JI(`nme_trb.HLP','T_Restarting_Windows_before_troubleshooting')}} [How to ...](#)

Increasing the number of rings

1 Open the Modems control panel.

{button ,Jl('','P_Open_modems_control_panel')} [How to ...](#)

2 In the modem list, click the appropriate modem.

3 Click Properties. The Properties dialog for your modem appears.

4 Click the Connection tab.

5 Do one of the following:

- Increase the number of rings
- Enable Cancel The Call If Not Connected Within x Secs, and then set the time to the appropriate number of seconds (the default is 60 seconds).
- Set the modem to continue dialing until you cancel
- Disable Cancel The Call If Not Connected Within x Secs.

6 Click OK. The Modem Properties dialog reappears.

7 Try to connect again. If this does not resolve your problem, try setting the number of rings in your communications program.

Disabling dial tone detection in your communications program

- 1** Start your communications program.
- 2** Open the program's online help.
- 3** Use the index, find, or search feature to look up "dial tone" or "tone detection".
- 4** Follow the instructions (if any) in the online help for disabling dial tone detection.

Handling busy signals

There are two types of tones that sound like a busy signal—a fast busy signal and a normal, slower busy signal. The type of signal you hear depends on where you are in the world, as different tones are used internationally than those used within North America. The conditions that produce each of these signals is described below, as well as the solutions you might try for each.

Normal busy signal ▪ This type of tone occurs when the phone or device on the other end is using the line. If you hear this type of tone, call back at another time. The line may be busy in the following situations:

- The line is busy taking another call or it has just finished disconnecting and the device needs time to reset.
- You called recently and the call was dropped. The device on the remote end may require more time to reset itself or it may need to be reset manually.

Rapid busy signal ▪ This type of tone occurs in the following cases:

{button ,JI('`,`O_About_dial_sequences')}	<u>The call could not be dialed properly because the dial sequence was entered incorrectly.</u>
---	---

{button ,JI('`,`T_phone_lines_unavailable')}	<u>There are no available phone lines to the area you are calling.</u>
--	--

Accommodating time zone differences

If the phone number you are calling is in another time zone, a number of situations may prevent the call from going through or may prevent the device on the other end from answering:

- The server may be down for normal system maintenance. This is usually done during off-peak business hours, when most users are not connected to the network.
- The device has been turned off until normal business hours resume.

Verifying the phone number dialed

You can use Phone Dialer (a Windows tool) to verify that your computer is dialing a phone number correctly, including whether you are using the appropriate location.

To verify the phone number dialed:

- 1** Click the Windows Start button, point to Programs, point to Accessories, and then click Phone Dialer. Phone Dialer starts.
- 2** On the Tools menu, click Show Log. The Call Log window appears. You can use the log to show how your number was dialed.
- 3** On the Log menu, click Options. The Call Log Options dialog appears.
- 4** Enable Outgoing Calls.
- 5** In the Number To Dial field, type the phone number. If the number is long distance, also include the area code. Do not include any prefixes, as those are added by the location you selected in your Windows location.
- 6** Click Dial. Phone Dialer dials the number.
- 7** After the call is dialed and disconnected, the number dialed appears in the Call Log window.
- 8** Examine the number to see if it was dialed correctly.
- 9** Troubleshoot how the number you dialed is interacting with your Windows location and make the necessary adjustments to the number you enter or to the current location. For example, you may notice that the prefix to obtain an outside line was dialed twice because it was set up in your location and you entered it in the dial sequence as well. Using Phone Dialer verifies that you do not need to include the prefix in your dial sequence if you have set up the appropriate prefix in your location.

Receiving messages from telephone operator

Telephone companies often play explanatory messages on the phone line when numbers are dialed incorrectly (for example, when a call requires a long distance access code). When dialing from your laptop, you may not be able to hear these messages. To check for these types of messages, dial the number from a regular phone.

Handling terminated calls

If your call was terminated before it was answered, you can try to resolve the problem by increasing the number of times your modem rings before disconnecting. Click here {button ,JI(`;`T_Increase_the_number_of_rings')} for more information.

Handling busy signals

There are two types of tones that sound like a busy signal—a fast busy signal and a normal, slower busy signal. The type of signal you hear depends on where you are in the world, as different tones are used internationally than those used within North America. The conditions that produce each of these signals is described below, as well as the solutions you might try for each.

Normal busy signal ▪ If you hear this type of tone, call back at another time. The line may be busy in the following situations:

- The line is busy taking another call. Or, there may not be enough lines on your ISP network or corporate network
- If you called recently and the call was dropped, the device on the remote end may require more time to reset itself or it may need to be reset manually.

In either case, you should resolve the problem by calling someone at the remote site who can troubleshoot this issue from that end.

Rapid busy signal ▪ This type of tone occurs in the following cases:

{button ,JI('`,`O_About_dial_sequences')} The call could not be dialed properly because the dial sequence was entered incorrectly.

{button ,JI('`,`T_phone_lines_unavailable')} There are no available phone lines to the area you are calling.

Resetting modems

External modems have power switches. Internal and PC card modems receive power directly from your computer and can only be reset by restarting your computer. Usually restarting your computer is sufficient even though it does not remove power from your internal modem.

What type of modem are you resetting?

- External modem (a separate, box-like modem)
To reset an external modem turn its power off, wait a moment, and turn the power on again.
- Internal modem (a modem card installed inside your computer)
To reset an internal modem you must restart your computer. If restarting does not solve the problem you should shutdown windows, turn off your computer's power, wait a moment, and then turn the power on again.
- PC card (PCMCIA) modem, (a thin, credit-card-sized modem designed for laptops)
To reset a PC card modem you must restart your computer. If restarting does not solve the problem you should shutdown windows, turn off your computer's power, wait a moment, and then turn the power on again.

Matching phone line type and modem type

Before you connect your modem to a phone line, find out what type of phone line you are using—either analog or digital. Most residential phone lines are analog, while many corporate and hotel phone systems are digital. Ask the hotel front desk or telephone administrator whether the phone line is analog or digital. Or, purchase a phone line tester.

Using an analog modem on a digital line will most likely seriously damage your modem. Because most modems are analog, it is imperative that you find out what type of phone line you are about to use. Simply plugging your modem into a phone line can cause damage—even before your computer uses the modem.

Note: To determine whether your modem is analog or digital, contact your modem manufacturer or refer to your modem documentation.

To prevent damage to your analog modem, use a digital handset adapter. If your modem was not shipped with a digital handset adapter, you can purchase one separately, either from the TeleAdapt Web site or from a computer supplier of your choice.

Resolving problems at the remote end

To resolve this problem, call someone at the remote site who can troubleshoot this issue from that end.

Identifying incorrect remote devices

A computer communication device is any device that allows you to communicate, in some way, with others. Examples include fax machines, fax software (for example, WinFax), answering machines, voice answering software (for example, TalkWorks), phone dialing software (for example, your AOL dial-up program), data communications software (for example, pcANYWHERE), and so on.

Communications problems may occur when a device other than the expected device answers your call. For example, if a person answers a fax call, the fax fails. To determine if this is the cause of your connection problems, dial the phone number using a regular phone and listen for any unexpected answer characteristics. For example, a person answers, an answering machine answers, a fax device answers, and so on.

No available phone lines

Telephone companies and national telephone networks have a large and extensive network of phone lines available for use. Even so, there may be times when all available lines are in use. For example, on holidays or during discount rate periods (for example, starting at 11 p.m. in North America), many people are trying to place calls at the same time. When all available lines are busy, you will hear a fast busy tone shortly after dialing. This indicates that the call cannot be dialed until a line becomes available. If this happens, continue trying to place your call.

Important: The fast busy signal you hear when all lines are busy is also the same signal you hear when you have incorrectly entered your dial sequence. Before you assume that all lines are busy, ensure that you have correctly specified your dial sequence, including any prefixes, pauses, or calling card components required.

{button ,JI(`nme_trb.HLP','O_About_dial_sequences')} [How to ...](#)

Checking for the appropriate modem software

All modems require modem software (sometimes called “drivers” or “firmware”) to allow them to communicate with your computer. When you purchase a modem, the manufacturer ships the most current version of the modem drivers with the modem, usually on a diskette. From time to time, modem manufacturers update modem drivers to work with new software and new operating systems. Before installing your modem, make sure that you have the latest modem drivers available from your modem manufacturer.

Some newer models of modems have a “flash upgrade” feature that allows the modem to automatically update modem software when it becomes available.

Click the option that best describes your modem:

{button ,JI('`,`Using_the_flash_upgrade_feature_to_update_modem_software')}\} My modem is flash upgradable.

{button ,JI('`,`Updating_modem_software_manually')}\} My modem is not flash-upgradable. I can find nothing in my modem documentation that suggests that the software can be upgraded automatically.

Updating modem software using Flash Upgrade

Some newer models of modems have a “flash upgrade” feature. Using this feature, your modem can automatically dial the modem manufacturer, check for updated software, and download the appropriate files. This feature simplifies the upgrade process by helping you identify the software you need and automatically installing it for you.

To use the “flash upgrade” feature on your modem, follow the instructions in your modem documentation.

Updating modem software manually

To determine if you have the latest modem drivers, you need to understand your modem requirements and then check with the manufacturer.

Do the following:

- 1** Gather the following information about your modem:
 - manufacturer's name
 - model name
- 2** Identify the version of the modem software included with your modem. Do the following:
 - a Check the diskette labels for version numbers and release dates.
 - b Check the actual file stamp dates on the .INF file included on the diskette.
- 3** Identify your Windows operating system and any programs you want to use the modem with.
- 4** Check for updated modem software or software designed for specific operating systems or programs in the following locations:
 - a additional diskettes included in your modem package
 - b additional software included with any communications software you purchased to work with the modem
 - c the manufacturer's Web site for downloads.

Interpreting modem error messages

Often you can troubleshoot a modem-related problem using the error messages generated when you try to use it.

To respond to an error message, do the following:

- 1** If there is a Help button in the error dialog, click it and follow the instructions on your screen.
- 2** Write down the exact error message and any associated number.
- 3** Identify which program generated the error message. Usually the name of the program issuing the error appears in the title bar of the error message box.
- 4** Check the program's online help for information about the error message. Do the following:
 - a** Start the program that generated the error message.
 - b** Open the program's online help.
 - c** Using the index, find, or search feature, look up the error message, error number, or key descriptive words in the error message.
 - d** Follow the instructions in the online help.
- 5** Check the program's printed documentation for information about the error message.
- 6** Visit the modem manufacturer's Web site and check for information about the error message.

Checking for visible cable damage

Damaged modem cables may cause connection and communication problems. Whenever re-connecting your modem, do a visual check of all cables for the following:

- frayed or visible wires
- breaks in the protective covering
- loose jacks or attachments

If you find any problems, replace the cables as soon as possible. We strongly recommend that you do not try to repair damaged cables yourself. Using damaged cables may result in damaging your modem or physical harm to the user.

Check for conflicts with phone company services

Most telephone companies now offer a variety of special telephone services. These services may cause communications and connection problems. If you subscribe to a telephone service, click it below.

{button ,JI(``,`Call_Waiting`)} [Call waiting](#)

{button ,JI(``,`T_Call_Answer`)} [Call answer](#)

{button ,JI(``,`Caller_ID`)} [Caller ID](#)

{button ,JI(``,`Call_Disturb`)} [Call disturb](#)

Resolving issues with call waiting

If you have call waiting on your line, your connection could be interrupted when a call is detected while you are connecting and the call waiting “beep” sounds.

To work around this problem, you can add a prefix that disables the call waiting beep for that call only. If you are using a 32-bit program that uses the Windows dialing standards (TAPI) you can set up your location to use this prefix. If you are using a program that is not TAPI compliant (most 16-bit programs that were developed for Windows 3.x or earlier), you must add the prefix to each dial sequence, every time you make a call.

To disable call waiting for a call:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('`,`T_TAPI_and_non-TAPI_programs')}} How to...

- 2 To disable call waiting, click the type of communications program you are using:

{button ,JI('`,`P_Location_call_waiting')}} TAPI programs

{button ,JI('`,`Manually_disabling_call_waiting')}} Non-TAPI programs

{button ,JI('`,`T_Dont_know_if_program_is_TAPI_compliant')}} Don't know whether or not program uses TAPI

Resolving issues with call answer

If you subscribe to a call answering service from your telephone company, you likely have a phone with a light on it. When a new message is left in your voice mailbox, the light flashes and a fast, rapid dial tone sounds on the line until the message has been listened to. This fast tone can prevent your communications program from dialing properly because it does not sound like a normal dial tone.

To resolve call answering issues:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).
{button ,JI('','T_TAPI_and_non-TAPI_programs')}} [How to...](#)
- 2 Access your voice mailbox and listen to new messages.
- 3 To disable the dial tone detection feature, click the type of communications program you are using:
{button ,JI('','T_Disabl_dial_tone_detection_in_Windows')}} [TAPI programs.](#)
{button ,JI('','T_Disabling_dial_tone_detection_in_your_communications_program')}} [Non-TAPI programs.](#)
{button ,JI('','T_Dont_know_if_program_is_TAPI_compliant')}} [Don't know whether or not program uses TAPI](#)

Resolving issues with call disturb

Many phone companies offer a call disturb service, sometimes called “busy notification” or “call messenger”. Whenever you encounter a busy signal, this service monitors the busy line and notifies you when the line is available.

When this service is active, your communications program may not be able to detect busy signals correctly. To avoid this problem, disable the call disturb feature before dialing using your communications program. For more information, contact your telephone company.

Resolving issues with caller ID

Caller ID is a service available from your phone company. Caller ID identifies who is calling before you answer the phone. Depending on your service, the phone number and/or name may be visible from your communications program.

To resolve caller ID issues, do one of the following:

- Does your modem support Caller ID? You must have a modem that supports caller ID. In addition, your phone system must encode caller ID information in a format that your modem can decode.
- Do you have the proper .INF configuration file for your modem? You must have the proper .INF file for your modem and the caller ID feature must be enabled in that .INF file. Contact your modem manufacturer for updated .INF files.

Alerting or activating a modem

If your modem is inactive for an extended period of time, it may automatically go into “deep sleep” mode to conserve energy and the battery.

To re-activate your modem, do one of the following:

- 1 Restart Windows.

{button ,JI('`,`T_Restarting_Windows')}`} [How to ...](#)

- 2 Reset your modem.

{button ,JI('nme_trb.hlp`,`T_modems_resetting')}`} [How to ...](#)

- 3 Start HyperTerminal and send any modem command to it.

{button ,JI('`,`Using_HyperTerminal_to_activate_a_modem')}`} [How to ...](#)

Using HyperTerminal

- 1 Click the Windows Start button, point to Programs, point to Accessories, and then click HyperTerminal. The HyperTerminal folder opens.
- 2 Double click HyperTerm. HyperTerminal starts and displays the Connection Description dialog.
- 3 In the Description field, type "Test Connection" and then click OK. The Phone Number dialog appears.
- 4 Specify the phone number you want to dial. Do the following:
 - a In the Country Code drop-down list, click the name of the country you want to call.
 - b In the Area Code field, type the area code you are calling.
 - c In the Phone Number field, type the phone number you are calling.
 - d In the Connect Using drop-down list, click the modem you want to use.
 - e Click OK. The Connect dialog appears.
- 5 HyperTerminal displays the complete dial sequence that it will dial at the top of this dialog. Check this entry to ensure that it includes all the necessary components. If you are not sure, try dialing this number from a regular telephone and write down each action you perform when dialing. Then compare your list of actions with the sequence shown in this dialog.
`{button ,Jl('','O_About_dial_sequences')}` [Click here for more info about dialing sequences.](#)
If you need to make changes, click Change or Dialing Properties and adjust the appropriate settings.
- 6 When the phone number is correct, click Dial.

Dials the wrong number

- 1 Check that you entered the number correctly and try the call again.
- 2 Check that you have included all components of the dial sequence.
{button ,Jl('','O_About_dial_sequences')} [How to ...](#)
- 3 Verify that your communications program is dialing the number as you intended it to.
{button ,Jl('','Using_HyperTerminal_to_activate_a_modem')} [How to ...](#)

Enabling options in an .INF file

Modems support a variety of features. However, depending on how you installed your modem and the modem configuration files (.INF files) that came with your modem, some of these features may be disabled. If you are having problems with a specific modem feature, check that that feature is enabled in the modem's .INF file. To do this, contact your modem manufacturer and ask for instructions on how to modify the file settings.

Setting up programs to use touch tone or pulse dialing

If you are using a TAPI compliant communications program, you can set a Windows location to use touch tone or pulse dialing. This saves you the trouble of specifying the appropriate dialing settings in all your 32-bit communications programs.

If you are using a non-TAPI program, you must either specify touch tone or pulse dialing in that program (if the program supports that feature) and use a special command to switch between touch tone and pulse dialing within the same dial sequence.

To specify touch tone or pulse dialing:

- 1 Determine whether your communications program uses the TAPI components in Windows (the dialing standard in Windows).

{button ,JI('','T_TAPI_and_non-TAPI_programs')} How to...

- 2 To specify touch tone or pulse dialing, click the type of communications program you are using:

{button ,JI('','P_Location_tone_pulse_dialing')} TAPI programs

{button ,JI('','T_touch_tones_and_pulse_tones_combined')} Non-TAPI programs

{button ,JI('','T_Dont_know_if_program_is_TAPI_compliant')} Don't know whether or not program uses TAPI

Combining touch tones and pulse tones

If a touch tone line is unavailable, you can use a pulse line to connect by combining touch tones and pulse tones in your dial sequence.

Do the following:

- 1** Start your communications program.
- 2** Enable the Pulse Dial feature.
- 3** Enter the appropriate dial sequence. After the phone number component (that is, the number you call first), insert a “T” into the dial sequence.
- 4** Try to connect. Your communications program will dial the first phone number in the sequence as a pulse call and then will switch to touch tone dialing and enter the remaining components of the dial sequence.

Manually disabling call waiting

- 1 Obtain the prefix for disabling call waiting in your dialing area. To find this information, see your local telephone directory or call a telephone operator. In most areas of North America, this prefix is:

*70,

<star key> 70 <comma>

Note: The comma specifies a two second pause to wait for a second dial tone. Add additional commas, as required.

- 2 In your communications program, disable call waiting if this feature is offered, or add the prefix for disabling call waiting at the beginning of the call. If you need to use a call to obtain an outside line, add the prefix after you have obtained the outside line and before you enter the rest of the number.

Disabling dial tone detection in Windows

- 1 Open the Modems control panel.
{button ,JI(`',`P_Open_Modems_control_panel')} [How to ...](#)
- 2 In the modem list, click the appropriate modem.
- 3 Click Properties. The Properties dialog for your modem appears.
- 4 Click the Connection tab.
- 5 Disable Wait For Dial Tone Before Dialing.

Uninstalling programs manually

- 1** In Windows Explorer, delete the program folder.
- 2** To delete the Start menu group, do the following:
 - a Click the Windows Start button, point to Settings, and then click Taskbar. The Taskbar Properties dialog appears.
 - b Click the Start Menu Programs tab.
 - c Click Advanced. The Start Menu appears in Explorer.
 - d On the left side, click the plus sign (+) next to Programs.
 - e In the tree, click the program group for the program you are uninstalling.
 - f On the Edit menu, click Cut.

Verifying your network protocol

In order to connect and communicate (over a network, a phone line, or the Internet), two computers must use the same protocol, or “language” of communication. Your network protocol is the communication device or language used to communicate with your network. The Internet protocol is called TCP/IP.

To ensure you are using the correct network protocol:

- 1 Consult your network administrator, computer technician or the vendor who set up your computer to ensure you have the correct network protocol. Be sure to distinguish between network protocols and other types of protocols.

- 2 Open the Network control panel.

{button ,JI('`,`P_Open_Network_control_panel')}\ [How to ...](#)

The Network Components list displays the clients, adapters, protocols, and servers installed on your computer.

- 3 Check that the desired protocol is in the list of network components installed on your computer.

Note: If you need to add a new protocol, click Add. Follow the instructions on your screen. You may want to ask your network administrator for assistance.

To check the properties of the network protocol:

- 1 Click the protocol you want to verify.
- 2 Click Properties. The Properties dialog appears.
- 3 Check that the properties are correct.

Connecting to the wrong server

Do any of the following:

{button ,JI('`T_User_ID_and_password')}

login information for your server.

Ensure you are using the correct phone number and

{button ,JI('`O_About_dial_sequences')}

Ensure you entered the dial sequence correctly.

Setting up and activating user accounts

Many remote devices are secure. To connect to secure devices, you need an active user account.

To access the remote device, check the following:

- Has a user account been set up for you on the server?
- Is the account active?
- Does the account include any restrictions on access (for example, programs, directory access, certain time periods, and so on)?
- Do you need a special login script to connect to the remote device?

Entering User IDs and passwords

When specifying your user ID or password, make sure you enter it correctly, and that you use the same cases you used when specifying your password. For example, a case-sensitive login program differentiates an uppercase “R” from a lowercase “r”. In addition, use spaces if your ID or password contains that character, as spaces are interpreted as a character in the same way that a letter or numeral is interpreted.

Important: Ensure you have the correct set of IDs and passwords for your network or service. Some networks require you to use one set of security IDs and passwords to access the network, and another set to access commonly used programs, such as your email account.

Removing software

- 1 Open the Add/Remove Programs control panel.
{button ,JI('','Open_Add/Remove_Programs_control_panel')} [How to ...](#)
The Add/Remove Programs Properties dialog appears.
- 2 In the programs list, click the program you want to uninstall.
- 3 Click Add/Remove. The Uninstall dialog appears.
- 4 Click OK. The Uninstall program starts. Follow the instructions on your screen.

Notes: If the program you want to uninstall does not appear in the list, it may not include the uninstall feature. In this case, uninstall the program manually. Click here {button ,JI('','T_Uninstalling_programs_manually')} for instructions.

Removing hardware

- 1 Physically unplug or disconnect the device from your computer.
- 2 Uninstall any associated software that was installed to work with the device. For example, all printers use a “printer driver” so that the computer can communicate with the printer.

{button ,JI('`,`T_Removing_software')}} [How to ...](#)

TAPI and non-TAPI programs

Working with TAPI compliant programs • Programs developed for Windows 95/98 and Windows NT are written in a 32-bit format. What is significant to note about these programs is that they often utilize the 32-bit dialing standards in Windows, called TAPI (Telephony Application Programming Interface). If your program is TAPI compliant, it can make use of the locations you create with the Telephony control panel. When your TAPI program dials a number, it compares the number you enter with the information you have specified for your current location. If the call is long distance (that is, if the area codes do not match), Windows handles the call appropriately, adding any necessary long distance access codes.

To determine whether or not your communications program is TAPI compliant, see the program documentation or contact the company that developed the program. If your program is TAPI compliant, follow the solutions for TAPI programs.

Working with non-TAPI compliant programs • Programs developed for Windows 3.x were written in a 16-bit format. Because most 16-bit programs cannot “share” a modem with other programs, it cannot utilize the Windows TAPI dialing interface. You can use this Interactive Troubleshooter to find solutions that you can use with non-TAPI programs.

Special cases: working with programs capable of both TAPI and non-TAPI • Programs such as WinFax 7.x/8.x can switch between TAPI and non-TAPI modes, giving you the flexibility of using the method that best suits your needs. WinFax calls the TAPI mode of dialing “Windows dialing”, and the non-TAPI mode “WinFax dialing” (older versions call this “Delrina dialing”). WinFax dialing provides advanced features not available with TAPI dialing, such as advanced calling card settings.

If you are using WinFax and you do not need to use the advanced features in WinFax dialing, switch your dialing method to “Windows” dialing, then follow the procedures for TAPI compliant programs. Other programs may also work in a similar fashion.

Don't know if program is TAPI compliant

If you cannot determine whether or not a program is TAPI compliant, follow the TAPI procedure to modify the appropriate location or modem settings in Windows. Next, try to connect again. If this does not solve your connection problem, follow the solution for non-TAPI programs and retain any changes you made to your location.

If you use the non-TAPI solutions, you do not need to “undo” the location changes or modem settings changes you made when following the TAPI solution, as modifying a location to suit your needs will be beneficial if you use any TAPI programs in the future.

Opening the Network control panel

- 1** Click the Windows Start button, point to Settings, and then click Control Panel. The Control Panel folder opens.
- 2** Double click the Network icon. The Network control panel appears.

Opening the Telephony control panel

- 1** Click the Windows Start button, point to Settings, and then click Control Panel. The Control Panel folder opens.
- 2** Double click the Telephony icon. The Telephony dialog appears.

Opening the System control panel

- 1** Click the Windows Start button, point to Settings, and then click Control Panel. The Control Panel folder opens.
- 2** Double click the System icon. The System Properties dialog appears.

Opening the Add/Remove Programs control panel

- 1** Click the Windows Start button, point to Settings, and then click Control Panel. The Control Panel folder opens.
- 2** Double click the Add/Remove Programs icon. The Add/Remove Programs dialog appears.

Program used to work

A variety of things can cause programs to stop working after functioning successfully. This can be mysterious, but if you take the time to determine when the program last worked properly, you may be able to narrow down the possible causes and solutions.

When was the last time the program worked?

{button ,JI('`,`T_Recently_installed_hardware_or_software')}\t Recently, but I've installed something new since then.

{button ,JI('`,`T_Port_settings_adjusting')}\t I've just undocked and re-docked.

{button ,JI('`,`T_No_I_have_not_changed_anything')}\t Recently, but I have not changed anything or installed anything new since then.

{button ,JI('`,`T_Program_never_worked')}\t Never. The program has not worked properly since I installed it.

Program never worked

If the program has never worked, uninstall the program and then reinstall it. Your installation may not have been successful.

No, I have not changed anything

Do the following:

- 1 Follow some basic troubleshooting procedures.
{button ,JI('','T_TRB_BASICS')} [How to ...](#)
- 2 Run the Connection Doctor tests to verify that your modem supports the appropriate features.
When you run these tests, also look for any other problems Connection Doctor might diagnose, and use the Compare feature to compare your current setup with your benchmark file.
{button ,JI('','T_Modem_capabilities')} [How to ...](#)
- 3 Run Norton Speed Disk or another utility that analyzes your files.
{button ,JI('','T_Running_Norton_Speed_Disk')} [How to ...](#)
- 4 Check to ensure you do not have an IRQ or COM port conflict.
{button ,JI('','T_IRQ_or_COM_port_conflict')} [How to ...](#)

Handling split area codes in non-TAPI programs

To dial split area codes, you must ensure that your program is set up properly. There are two types of calls you can make with split area codes:

- **Long distance calls within the same area code**
 - In some regions (less densely populated areas, for example), calls within the same area code that are long distance require the long distance access code and the number (no area code used). Ensure your program is not interpreting same-area-code long distance calls as local calls, and not adding the long distance access code as a result. You may have to change your program's settings on a case by case basis.
- **Local calls to another area code**
 - In some regions (larger cities, for example) and local calls to another area code require the area code and the local number (no long distance access code used). Ensure your program is not interpreting local calls to other area codes as long distance and adding the long distance access code as a result. You may have to change your program's settings on a case by case basis.

About dial sequences

When you use a communication program, your computer dials using a dial sequence. The components of dial sequences vary, depending on the type of call you are making. The following example illustrates typical dial sequences for calls placed from a North American city.

Call Type	Dial Sequence Format/Example
Local	<dial prefix> + <area code> + <local number> <dial prefix> + <416> + <555-5555>
Domestic Long Distance	<dial prefix> + <long distance access code> + <area code> + <local number> <dial prefix> + <1> + <416> + <555-5555>
Overseas Long Distance	<dial prefix> + <international access code> + <country code> + <routing code or city code> + <local number> <dial prefix> + <011> + <30> + <1> <555-5555>

If you need assistance in determining the components you need to include in a dial sequence, see your local phonebook or contact a telephone operator.

Disabling call waiting in Windows

If your communications software is TAPI compliant, you may disable call waiting using Windows locations. This will disable call waiting for all calls you make with your modem.

The procedure for disabling call waiting is different for Windows 98 and Windows 95.

In either case you need to determine the disabling calling prefix for your dialing area. To find this information, see your local telephone directory or call a telephone operator. In most areas of North America, this prefix is:

*70,
<star key> 70 <comma>

Note: The comma specifies a two second pause to wait for a second dial tone. Add additional commas, as required.

If you use Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,JI('nme_trb.hlp','P_Open_Telephony_control_panel')} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Select To Disable Call Waiting, Dial.
- 4 Select the appropriate calling prefix from the drop-down list, or type the prefix in the text box.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

If you use Windows 95 do this:

- 1 Open the Modems control panel.
{button ,JI('','P_Open_modems_control_panel')} [How to...](#)
- 2 Click Dialing Properties. The Dialing Properties dialog for your location
- 3 Select This Location Has Call Waiting.
- 4 Select the appropriate calling prefix from the drop-down list, or type the prefix in the To Disable It, Dial text box.

Opening the Modems control panel

- 1** Click the Windows Start button, point to Settings, and then click Control Panel. The Control Panel folder opens.
- 2** Double click the Telephony icon. The Dialing Properties dialog appears.

Specifying prefixes for your location

If your communications software is TAPI compliant, you may specify prefixes for making local and long distance outside calls, using Windows locations. This will set prefixes for all calls you make with your modem.

The procedure for specifying prefixes is different for Windows 98 and Windows 95.

If you use Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,Jl('nme_trb.hlp','P_Open_Telephony_control_panel')} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Insert the appropriate prefix and at least one comma (for example, "9,") in the For Local Calls, Dial text box.
- 4 Insert the appropriate prefix and at least one comma (for example, "8,") in the For Long distance Calls, Dial text box.

Note: Remember to include at least one comma (,) after each prefix. Each comma specifies a two second pause in the dial sequence. A pause may be required to wait for a second dial tone before dialing the rest of the number.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

If you use Windows 95 do this:

- 1 Open the Modems control panel.
{button ,Jl('','P_Open_modems_control_panel')} [How to...](#)
- 2 In the modem list, click the appropriate modem.
- 3 Click Dialing Properties. The Dialing Properties dialog for your location
- 4 Insert the appropriate prefix and at least one comma (for example, "9,") in the text box just before the words For Local.
- 5 Insert the appropriate prefix and at least one comma (for example, "8,") in the text box just before the words For Long Distance..

Note: Remember to include at least one comma (,) after each prefix. Each comma specifies a two second pause in the dial sequence. A pause may be required to wait for a second dial tone before dialing the rest of the number.

Handling split area codes with TAPI compliant software

The Windows software which maintains information about the location from which you are calling assumes that if the number you are dialing has a different area code than the one you are calling from, then the long distance prefix should be added to the beginning of the phone number. If you are dialing a local number with a different area code and do not need to use the long distance prefix you need to let Windows know about this exception.

Unfortunately Windows 95 does not have a means to work around this problem with Locations. You may be able to suppress using the long distance prefix for certain area codes within your communications software.

To work around this problem with Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,JI('nme_trb.hlp','P_Open_Telephony_control_panel')}} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Click the Area Code Rules button. The Area Code Rules dialog box appears.
- 4 Click the New button at the bottom of the dialog near the text Do Not Dial 1 For Numbers With The Following Area Codes:
- 5 In the New Area Code dialog box, enter the area code in your area which does not require the long distance prefix. Click OK.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

Setting touch tone or pulse tone for your location

If your communications software is TAPI compliant, you may specify touch tone or pulse tone dialing using Windows locations.

The procedure for specifying dialing preferences is different for Windows 98 and Windows 95.

If you use Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,JI('nme_trb.hlp', 'P_Open_Telephony_control_panel')} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Select either Tone Dial or Pulse Dial.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

If you use Windows 95 do this:

- 1 Open the Modems control panel.
{button ,JI('', 'P_Open_modems_control_panel')} [How to...](#)
- 2 In the modem list, click the appropriate modem.
- 3 Click Dialing Properties. The Dialing Properties dialog for your location
- 4 Select either Tone Dialing or Pulse Dialing.

Entering calling card information for your location

If your communications software is TAPI compliant, you may enter your calling card information in your Windows locations.

The procedure for entering calling card information is different for Windows 98 and Windows 95.

If you use Windows 98 do this:

- 1 Open the Telephony control panel.
{button ,Jl('nme_trb.hlp', 'P_Open_Telephony_control_panel')} [How to...](#)
- 2 On the My Locations tab select the location you are using from the I Am Dialing From drop-down list. If you have not defined a location, use the default.
- 3 Select For Long Distance Calls, Use This Calling Card:.
- 4 Click Calling Card. The Calling Card dialog box appears.
- 5 From the top drop down list you may select one of the predefined calling cards or you may enter your information from scratch. This dialog box contains text boxes for your Personal ID Number (PIN), the long distance access number, and the international access number for your calling card. The PIN text box may be unavailable until you indicate a PIN is required in the next step.
- 6 Click Long Distance Calls. The Calling Card Sequence dialog box appears. Select the appropriate entries for each step according to the required dialing sequence for your calling card. (If you select a predefined calling card at the previous step, this dialog box will be completed. If you are creating your own definition and are unsure how to set up this dialog box, go back and select one of the predefined cards to see how it is set up.) Click OK
- 7 Click International Calls and fill in the Calling Card Sequence dialog box for international calls.
- 8 If you still need to fill in your PIN number you should do that now.

Note: In Windows 98 you can also get to the My Locations tab by opening the Modems control panel and clicking Dialing Properties.

If you use Windows 95 do this:

- 1 Open the Modems control panel.
{button ,Jl('', 'P_Open_modems_control_panel')} [How to ...](#)
- 2 In the modem list, click the appropriate modem.
- 3 Click Dialing Properties. The Dialing Properties dialog for your location
- 4 Select Dial Using Calling Card. The Change Calling Card dialog box appears.
- 5 Click New and give a name to your calling card. Click OK. Enter the calling card number.
- 6 Click Advanced. The Dialing Rules dialog box appears.
- 7 The Dialing Rules dialog box has three text boxes for you to enter dialing sequence codes for each call type (within the same area code, long distance, and international). Enter the appropriate codes. With the cursor in one of the text boxes, you may select Help for a list of codes. Click here {button ,Jl('nme_trb.hlp', 'T_Calling_card_code_example')} for an example code.

Sample calling card sequences

If you don't know the sequence for using your calling card you can try the examples below.

Long distance calling card call placed within North America

<0> <617> <555-5555> <,,,,,> <416-555-6666-8921>

0	Long distance calling card access code
617	Area code
555-5555	Phone number
,,,,,	5 commas for a 10 second pause
416-555-6666-8921	Calling card number

International calling card call placed within North America

<01> <30> <1> <555-5555> <,,,,,> <416-555-6666-8921>

01	International calling card access code
30	Country code (Greece)
1	Routing code, or city code (Athens)
555-5555	Phone number
,,,,,	5 commas for a 10 second pause
416-555-6666-8921	Calling card number

Notes: Most calling card companies require you to use “0” as the long distance access code instead of “1”, and “01” as the international access code instead of “011”. This difference in access codes will produce a prompt in the call so that you can enter your calling card number. To instruct your modem to “wait” for the calling card “bong” before dialing your card number, we recommend you use commas (,) instead of a “w” because many modems cannot detect bong tones. Using commas reduces the possibility of encountering an error. After you specify the calling card number, ensure you have enough commas in front of the number so that the calling card number is not dialed too quickly (that is, before the phone system is ready for the number). Each comma adds a two-second wait time, so experiment and see how many commas you need.

Entering calling card numbers in non-TAPI programs

Many communications programs do not utilize the Windows dialing standard (TAPI), and the Windows location dialing features do not work in those cases. To work around your non-TAPI communications program, specify the dialing information you need to use in that program.

To enter calling card numbers in your communications program:

- 1** Start your communications program.
- 2** Open the online help.
- 3** Using the index, find, or search feature, look up “calling card”.
- 4** Follow the instructions (if any) to enter your calling card number.

Calling card code example

Windows 95 requires that you enter calling card codes manually. The following code example might be used for using a calling card for long distance calls.

1FGWH,,8887776665555

This is how to interpret the parts of this code.

1	long distance prefix, dials this number
F	code for area code, supplied by your communications program
G	code for local number, supplied by your communications program
W	code to wait for a second dial tone,
H	code for calling card number, from step 5 above.
,,	code for waiting, each comma is a two second wait
8887776665555	your PIN for this card

Basic system maintenance

If you experience intermittent program failures or system lockups, do the following:

{button ,JI('`,`T_TRB_TEMP')} Delete unnecessary temporary files

{button ,JI('`,`T_TRB_DISK_SPACE')} Free up additional disk space


{button ,JI('`,`T_TRB_OPTIMIZE')} Optimize your hard drive

{button ,JI('`,`T_TRB_OPTIMIZE_SWAP')} Optimize your Windows swap file

{button ,JI('`,`T_Removing_software')} Remove unused programs installed on your computer

Deleting unnecessary temporary files

Use Space Wizard to scan your disk for files that may be unneeded. Space Wizard can compress, delete, or move the files to free up disk space.

- 1 Click [here](#) to open Space Wizard.
 - 2 Click Express and click Next.
 - 3 Choose the drive on which you want to make space and click Next.
Space Wizard scans the files on the drive.
 - 4 On the final results screen, review the list of files, and uncheck those that you do not want Space Wizard to compress, delete, or move, then click Compress, Delete, or Move.
 - 5 Click Finish to close Space Wizard.
-  Only remove or delete programs or files that you are certain are not necessary to run your system or software applications. If you are not sure, do not delete the file.

Freeing up additional disk space

- 1** Delete program and data files that are no longer required.
- 2** Use Space Wizard to empty the recycle bin and delete temporary files.
{button ,JI('`,`T_TRB_TEMP')} [How to ...](#)

Optimizing the hard drive

- 1 Click [here](#) to start Speed Disk.

Norton Speed Disk scans your hard disk drive for fragmentation, displays a report, and recommends corrective action if necessary.

- 2 Click Start to accept the recommendation.

Speed Disk optimizes your disk drive.



By default Speed Disk optimizes your primary hard disk drive, usually drive C. To optimize another drive click its associated checkbox and then click Start.

Optimizing the Windows swap file

- 1 Optimize your hard drive.

{button ,JI('`,`T_TRB_OPTIMIZE') } [How to ...](#)

- 2 Set up a permanent swap file. Do the following:

- a Click the Windows Start button, point to Settings and click Control Panel. The Control Panel folder opens.
- b Double click System. The System Properties dialog appears.
- c Click the Performance tab.
- d Click Virtual Memory.
- e Enable Let Me Specify My Own Virtual Memory Settings.
- f In the Hard Disk drop-down list, click the appropriate drive.
- g In the Minimum and Maximum fields, type 50 (you can use values other than 50, as long as the two are the same).
- h Close all open dialogs.

