

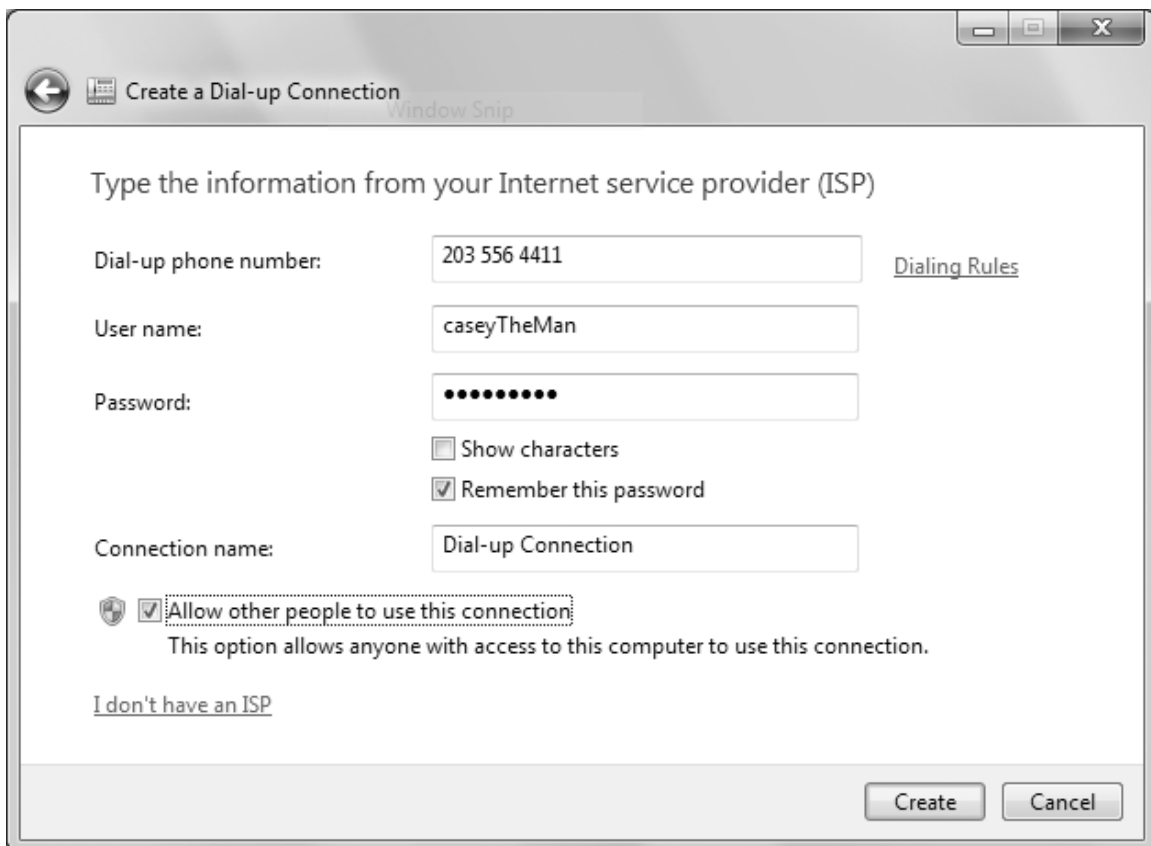
Details on Dial-Up

*A free bonus appendix to Chapter 9 of
“Windows 7: The Missing Manual” by David Pogue*

Setting Up Your Dial-Up Modem

If your PC has a modem, you can't get online until you tell it the details of your Internet service. Open the Start menu; in the Search box, type *dial*; click “Set up a dial-up connection.”

Fill out the resulting dialog box, as shown in Figure 1.



The screenshot shows a Windows 7 dialog box titled "Create a Dial-up Connection". The window has a standard Windows 7 title bar with minimize, maximize, and close buttons. The main content area is titled "Type the information from your Internet service provider (ISP)". It contains several input fields and checkboxes:


- Dial-up phone number:** A text box containing "203 556 4411". To its right is a link labeled "Dialing Rules".
- User name:** A text box containing "caseyTheMan".
- Password:** A text box filled with dots. Below it are two checkboxes: "Show characters" (unchecked) and "Remember this password" (checked).
- Connection name:** A text box containing "Dial-up Connection".
- Allow other people to use this connection:** A checkbox that is checked. Below it is a small shield icon and the text: "This option allows anyone with access to this computer to use this connection."

At the bottom left, there is a link that says "I don't have an ISP". At the bottom right, there are two buttons: "Create" and "Cancel".

Figure 1: Here, you're asked to enter the local access number for your Internet service provider, plus your account name and password. Click Create when you're finished. Thunder rolls, trumpets blare—and now there's an icon for your dial-up connection right in the Start menu (Figure 2).

Making the Connection

When you enjoy a full-time Internet connection like a cable modem, DSL, or some wireless variation thereof, you're constantly online. If you have a dial-up modem, however, connecting and disconnecting are manual operations.

When you're finally ready to get online, click the  icon on your system tray, and choose the name of your dialup connection (Figure 2).

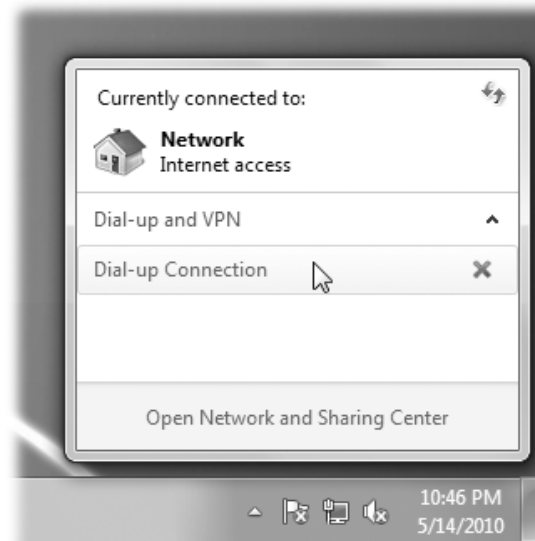


Figure 2: From this pop-up menu, choose the name you gave your dial-up connection. You'll hear your modem dial and squeal—and then, if the gods are smiling, you'll be online.

Automatic Dialing

It's important to understand that when your PC dials, it simply opens up a connection to the Internet. But aside from tying up the phone line, your PC doesn't actually *do* anything until you launch an Internet program, such as an email program or a Web browser. By itself, making your PC dial the Internet is no more useful than dialing a phone number and then not saying anything.

Therefore, using the Internet is generally a two-step procedure: First, open the connection; second, open a program.

Fortunately, Windows offers a method of combining these two steps. You can make the dialing/connecting process begin automatically whenever you launch an Internet program.

To turn on this option, just open your Web browser and try to Web surf. When the PC discovers that it's not, in fact, online, it displays the Dial-up Connection dialog box at top in Figure 3. Turn on the "Connect automatically" checkbox, and then click Connect.

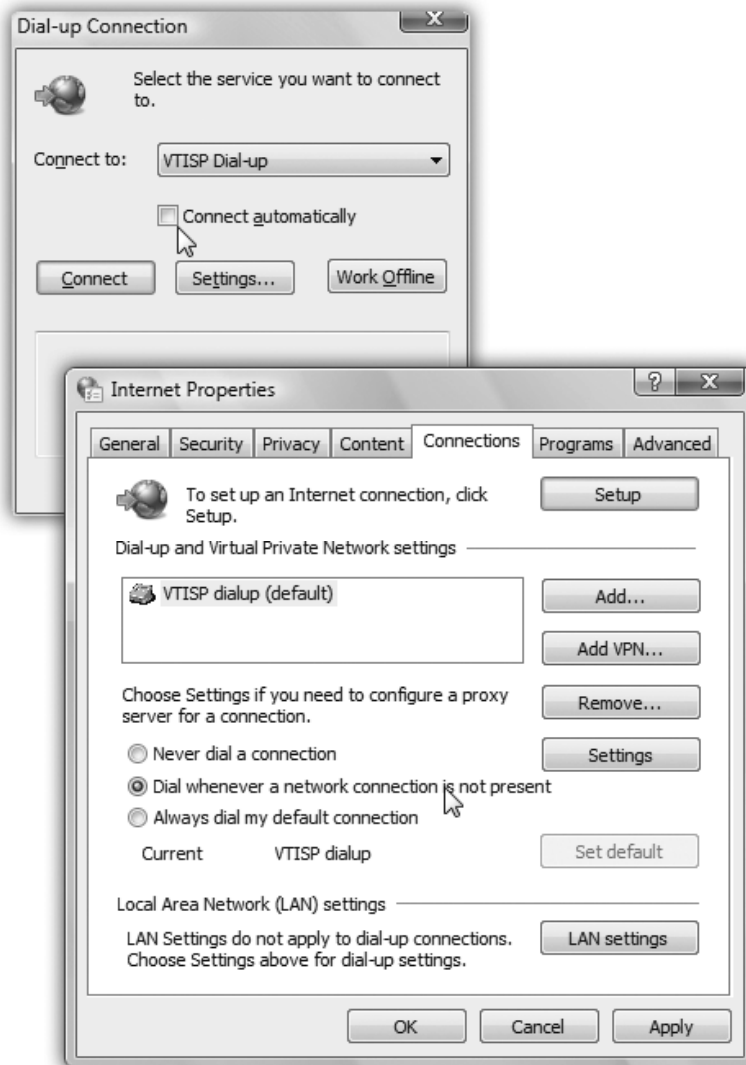


Figure 3: Top: "Connect automatically" makes your PC dial whenever any of your programs tries to go online.

Bottom: If you can't seem to get online despite taking this step, open the Internet Options program in the Control Panel (Classic view). Click the Connections tab. Make sure that "Never dial a connection" isn't selected; choose one of the other options. ("Never dial" is an option for people who like to establish the Internet connection manually before opening an Internet program like a Web browser.)


From now on, whenever you use a feature that requires an Internet connection, your PC dials automatically. (Examples: specifying a Web address in a window's Address bar, clicking the Send and Receive button in your email program, clicking a link in the Windows Help system, and so on.)

Disconnecting

Unless you intervene, a dial-up connection never hangs up (unless your ISP hangs up *for* it). It will continue to tie up your phone line until the other family members hunt it down, hours later, furious and brandishing wire cutters.

Therefore, it's worth taking a moment to configure your system so it won't stay

online forever.

- **Disconnect manually.** When you're finished using the Internet, the quickest way to end the phone call is by clicking the  icon on your taskbar. Click the dial-up connection's name; choose Disconnect from the shortcut menu.
- **Disconnect automatically.** You can also set up your PC to hang up the phone automatically several minutes after your last activity online.

To find the necessary controls, right-click your connection icon in the  pop-up menu. From the shortcut menu, choose Properties.

In the resulting dialog box, click the Options tab. Near the middle of the box, you'll see a drop-down list called "Idle time before hanging up." You can set it to 1 minute, 10 minutes, 24 hours, or whatever.

Advanced Modem Settings

Because so many people consider the Internet such an important PC feature, Windows lets you fine-tune its dialing, modem, and Internet settings to within an inch of their lives. You should consider the rest of this appendix optional—or power-user—reading.

To adjust the settings for your modem's dialing patterns, type *modem* into the Start menu's Search box. Click "Phone and Modem."

The very first time you open this box, you're asked to supply your local area code. When you click OK, you wind up in the dialog box shown in Figure 4. It has three major tabs, each serving important functions.



Figure 4: This dialog box has two priorities: to establish rules for dialing out, and to define as many different sets of rules for dialing as you need. If you're setting up dialing properties for a desktop computer, you won't need to change these settings after the first successful call.

Here, for example, you can set up *dialing rules* that automatically dial a 1 or a 9 for an outside line, depending on where you are in your travels. You can even

plug in calling-card numbers so that your Internet calls are billed to your boss. For a complete description of these fairly obscure controls, see “Dialing Rules,” below.

Modems Tab

The second tab in the Phone and Modem Options program, called Modems, is simply a list of the modems currently connected to your PC. (Most people not in Oprah’s tax bracket see only one modem listed here.)

Double-clicking a modem opens its Properties dialog box, which bursts with technical parameters for your modem. In general, you’ll need to visit these dialog boxes only when troubleshooting, following the instructions of some telecommunications geek from your modem company. Two of them, however, are more generally useful:

- **Change the speaker volume.** The modern modem may have revolutionized computer communications, but the squealing sounds it makes could wake the dead—or, worse, the spouse. To turn the speaker off so you no longer hear the shrieks every time you dial, click the Modem tab, and then drag the Speaker volume slider to Off.

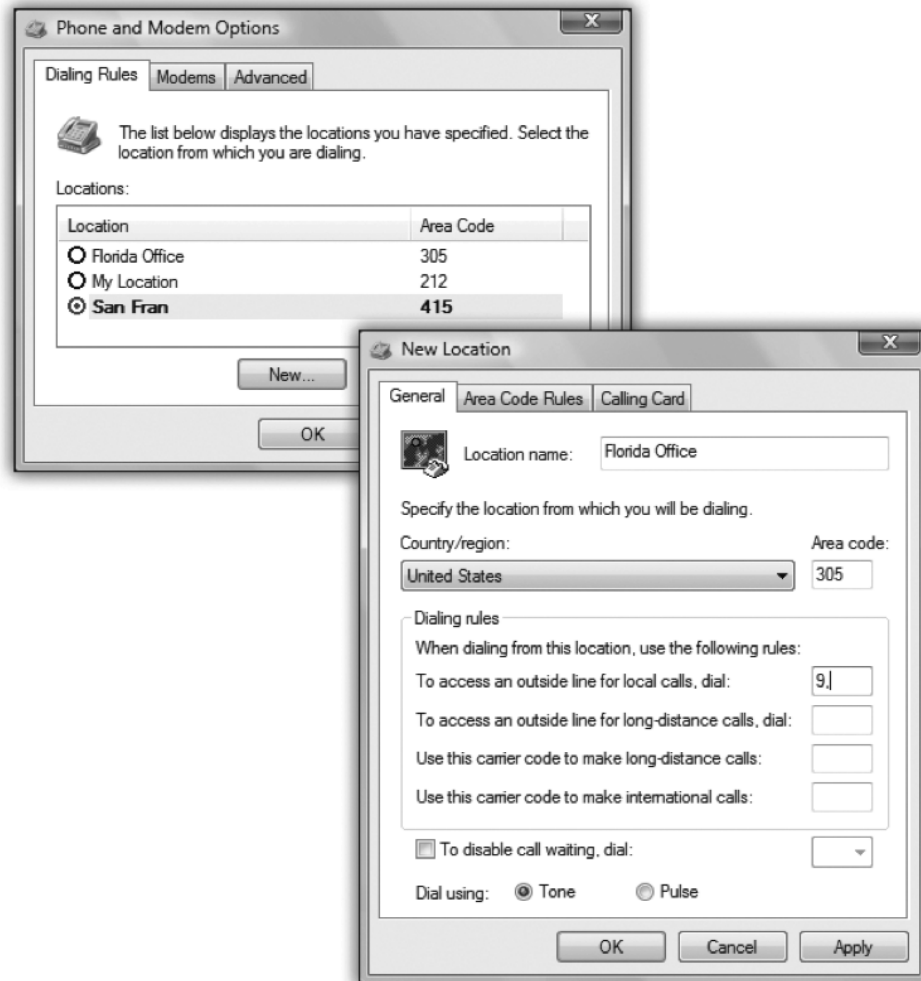
Tip: The slider affects the speaker volume only while it’s dialing and making a connection to another computer. After the connection is established, the speaker *always* goes silent, so you don’t have to listen to all the squawking noises that indicate data transmission.

- **Wait for the dial tone before dialing.** This checkbox (also on the Modem tab) is normally turned on. If you travel abroad with your laptop, however, you may experience trouble connecting if the foreign country’s dial tone doesn’t sound the same as it does back home. Turning off this checkbox often solves the problem.

Dialing Rules

The Dialing Rules tab (Figure 5, left) is made for travelers. As you move from place to place, you may wind up in locations that have very different dialing requirements. The area code may change, not to mention the requirement to dial 9 for an outside line, the availability of touch-tone dialing, and so on.

To set up the dialing rules for your current location, click its name and then click the Edit button. The New Location box appears (Figure 5, right), bristling with enough controls to make your modem sing, dance, and stand on its head.



Left: This dialog box has two priorities: to establish rules for dialing out, and to define as many different sets of rules for dialing as you need. If you're setting up dialing properties for a desktop computer, you won't need to change these settings after the first successful call.

Right: Setting up a new dialing rule.

General tab

Here are the guidelines for filling out the New Location dialog box:

- **Location name, Country, Area code.** These boxes inform Windows where you're presently located. When your modem dials another city or country, Windows Vista will know when to dial a 1 (and a country or area code, when necessary) before dialing.
- **To access an outside line for local/long distance calls.** In many offices and hotels, you must dial a number (usually 8 or 9) to get an outside line. If you enter numbers into these text boxes, Windows will dial them before the regularly scheduled Internet number.
- **Use this carrier code to make long distance/international calls.** These options specify the codes that you have to dial, even before the area code, when dialing internationally. For example, in the United States, the long distance carrier code is 1.

For international calls, the carrier code consists of the digits you dial before the country code—to make international calls from the United States, for example, the carrier code is 011.

- **To disable call-waiting.** If you have call-waiting service, that little beep that announces another incoming call can scramble your Internet connection. Fortunately, Windows Vista will be delighted to automatically disable call-waiting whenever you use the modem. Turn on this checkbox; from the drop-down list to its right, choose from the list of the common call-waiting disabling key sequences (*70, 70#, and 1170). (If you don't know which sequence works for your local phone company, check the front of your phone book.)

When the modem disconnects from the Internet after your online session, call-waiting automatically returns to the phone line.

- **Tone or pulse dialing.** Specify whether your telephone service is touch-tone (push-button) or pulse (as on old-fashioned rotary-dial phones).

Area Code Rules tab

It used to be easy to dial the telephone in America. For local calls, you dialed a seven-digit number. Calls to other area codes started with 1 and then the area code.

Not any more. Many metropolitan areas now require *ten-digit dialing*—an insidious system that requires you to dial the full area code even for your next-door neighbor. Worse, some cities have several *different* area codes—not all of which require a 1+ area code dialing pattern. To confuse things further, in some cases, you dial *only* the area code plus the seven-digit number.

To clue your modem in on the vagaries of your own area's area code practices, click the Area Code Rules tab. From there, set up the dialing sequences for certain locations by clicking the New button to open the New Area Code Rule dialog box. The resulting options (Figure 6) let you specify the area code and three-digit prefixes. Click OK to return to the New Location dialog box.

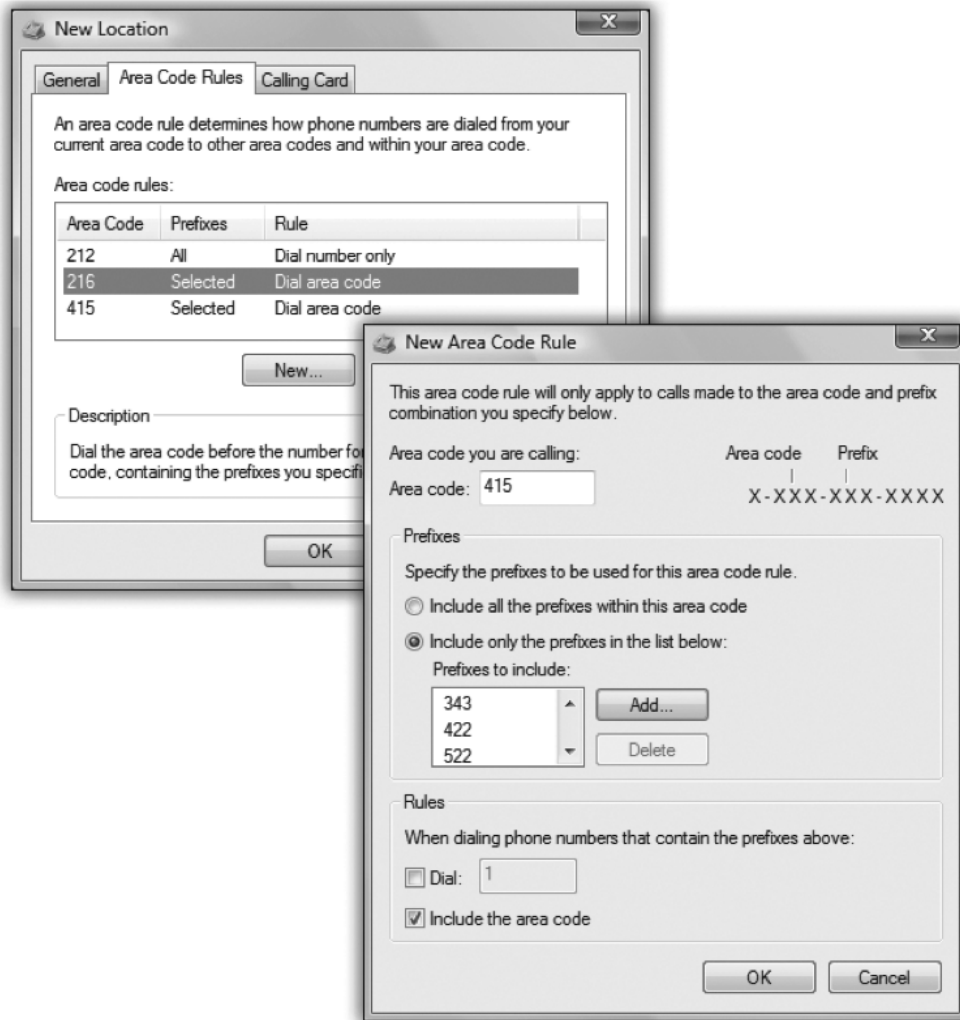


Figure 6: Left: Here's where the area-code adventure begins.

Right: This dialog box can handle any weird and convoluted area code rule in your town. (If there aren't special rules yet in your area, it's only a matter of time.) When your local phone company changes the rules, don't forget to open this dialog box and explain the changes to your modem.

Calling Card tab

If you, the shrewd traveler, feel that there's a better use for your money than paying most of it to your hotel's \$3-per-minute long distance scheme, this dialog box is for you. It lets you train your modem to bill its calls to a calling card (Figure 7).

Note: Creating a calling card profile doesn't mean you must use it every time you use your modem. In fact, you can choose whether or not to use the calling card each time you dial out.

If your calling card isn't listed, you can create a setup for it yourself, which Windows then adds to the list. Armed with the instructions from your calling card company, click the New button. In the resulting dialog box, specify the card

name, account number, PIN, and so on.

By clicking the Long Distance tab in the New Calling Card dialog box, you can specify the steps needed to use the card for long distance. For instance, you may need to dial a number and then wait for a tone that confirms that the number has been accepted. In this dialog box, you can specify the number of seconds you want Windows to wait. (You can set up the same kinds of rules for international and local calls by clicking the appropriate tabs.)

Once you've set up a calling card, it becomes part of one of these dialing rules. Now when you want to go online, you'll be able to bill your modem calls to your calling card on a case-by-case basis.

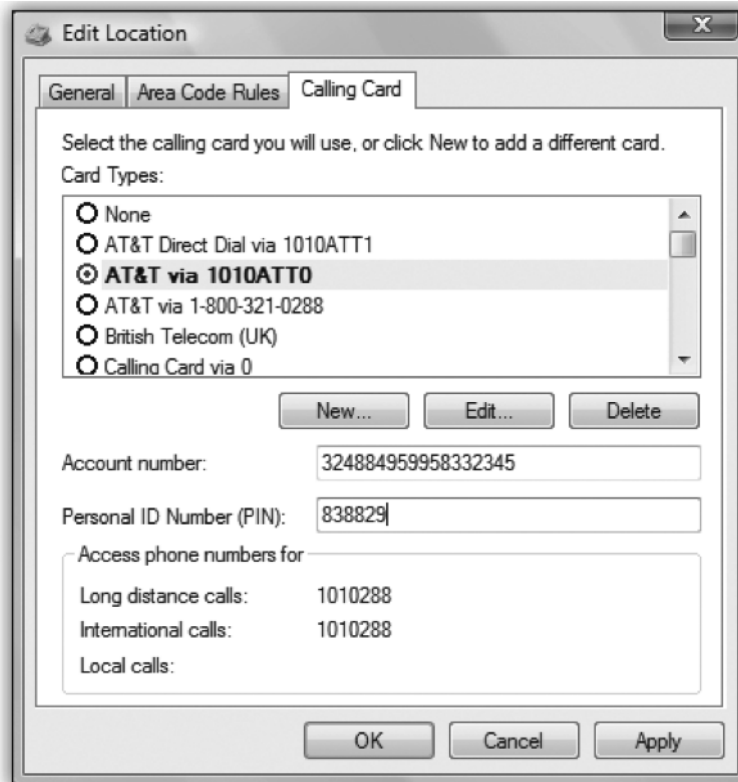



Figure 7: Windows already knows about the dialing requirements for most major calling cards. When you choose one from the Card Types list box at top, Windows Vista automatically fills in the fields at the bottom with the correct information. On the remote chance you can't find your own card, just type in the necessary dialing codes manually.

To do so, start by opening your connection icon (right-click it in the  menu and choose Properties). When the dialog box appears, use the "Dialing from" drop-down list to choose the name of the dialing-rule setup that contains your calling card configuration. Now click Dial to start your call.