

Getting a Fixed, Public IP Address

A supplement to Chapter 27 of “Windows Vista: The Missing Manual”

Every computer connected to the Internet, even temporarily, has its own exclusive IP address (IP stands for Internet Protocol). It always consists of four numbers separated by periods.

Several of the remote-connection methods described in Chapter 27 of *Windows Vista: The Missing Manual* require that your home-base PC have a fixed IP address—one that’s been permanently assigned to your computer.

Furthermore, these remote-connection technologies require that you have a registered IP address (one that, behind the scenes, has been filed with a group called the Internet Assigned Numbers Authority).

A few PCs with high-speed Internet connections (cable modem, DSL) have this kind of permanent, unchanging address. But in most cases, your ISP assigns your computer a new address each time you connect—that is, a dynamic IP address. That’s always what you have, for example, when you connect using a dial-up modem.

Even if your cable modem or DSL connection has a fixed IP address (because you’re connected continuously), you don’t necessarily have a registered IP address.

(Want to find out? Connect to the Internet, and then choose Start→All Programs→Accessories→Command Prompt. In the Command Prompt window, you’ll see all kinds of network configuration information about your computer, including its IP address [or addresses, if you’re connected to a network]. Your IP address is not registered if it falls within any of these ranges: 10.0.0.0 through 10.255.255.255, 172.16.0.0 through 172.31.255.255, or 192.168.0.0. through 192.168.255.255. Or just ask your Internet service provider or network administrator.)

If it turns out that you don't have a fixed, registered IP address, you might get all depressed, assuming that you can't use the remote-connection technologies described in Chapter 27. After all, your Internet address changes every time you connect, making it impossible to provide a single, permanent address.

Fortunately, there are workarounds.

One solution is to contact your ISP and ask if it offers a fixed, registered IP address service. Some ISPs can be persuaded to assign you the same registered address every time you connect (for an additional fee, of course).

Another solution is to sign up for a dynamic DNS service that gives your PC a name, not a number. Whenever you're online, these free services automatically update the IP address associated with the name you've chosen (such as dyndns.com), so that you (and your colleagues) can memorize a single address for your machine.

To sign up for one of these services, just go to its Web site—www.dyndns.com, www.dhs.org, www.dtdns.com, www.hn.org, or www.no-ip.com, among others.

If you bought a router for your home or small-office network—a small box that shares your cable modem or DSL connection with several computers on the network—there may be a third solution. Some routers let you map the unregistered address of a computer on your local network to a registered address inside the router, making that computer visible to the Internet. To find out if your router can pull off this stunt, you'll have to dig out its manual, or contact its manufacturer.

In any case, once you obtain a fixed, registered IP address for your host system, don't forget to bring it with you. You'll need it when setting up the remote computer.