Sneak Your Mac onto a Windows Network

by Ian Sammis

TRICKY

WHAT YOU NEED
- Mac running Mac OS X (10.3 recommended)
- Access to a network
- PC running Windows
- NetWare Client for Mac OS X if connecting to Novell Netware servers ($149, www.prosofteng.com)

While a few lucky souls are fortunate enough to live in a Mac-centric world, most of us know that sometimes Macs are few and far between. Even if we manage to convince our employers that we really *need* a Mac to get our jobs done (to do graphic arts, for example—or to avoid mental anguish), many corporations simply won't support Macs. But there's hope: Using Mac OS X, you can put your Mac on a network that never had anything but Windows in mind. We take you through three stages of infiltration: Getting on the network, accessing files, and (for Panther users) printing.

ON THE DISC

NetWare Client OS X 1.1.2 demo
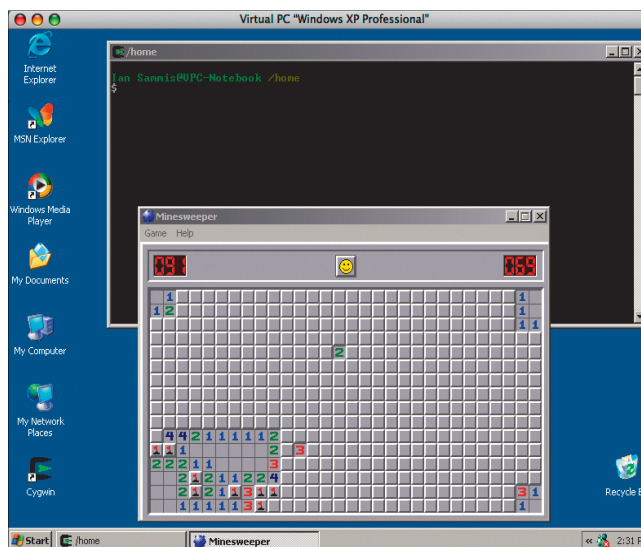
Even if your boss says no to your Mac requests, you can hitch your Mac to the office Windows network and run Windows (via Virtual PC).

1 **Scope the Settings** Let's assume you're at work and have your network-connected PC as well as a Mac that you would rather use. To connect the Mac to the network, set its network settings to match those of your PC so that you can simply unplug the PC's Ethernet cable and plug it into the Mac. From the Start menu on the PC, select Settings, then Network Connection. In the resulting window, double-click your PC's Ethernet card icon (upper-left corner) to open its Connection Status window, and click the Support tab to view the network settings.
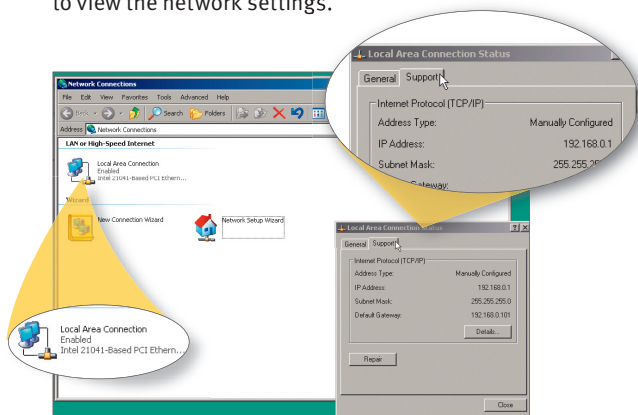

To change settings, double-click your PC's LAN (local area connection) icon to bring up its Connection Status dialog.

2 **Seek a New Location** If you are connecting an iBook or PowerBook, create a *new location*, a settings file that lets you easily switch between your work and home networks. (If not, skip ahead to step 3 unless you plan on lugging around your Power Mac.) To create a new location on the Mac, open System Preferences, and click Network to open its preference panel. Select New Location from the Location pop-up menu, type a name for your new configuration in the resulting dialog (we named ours AtWork), and click OK to create it.
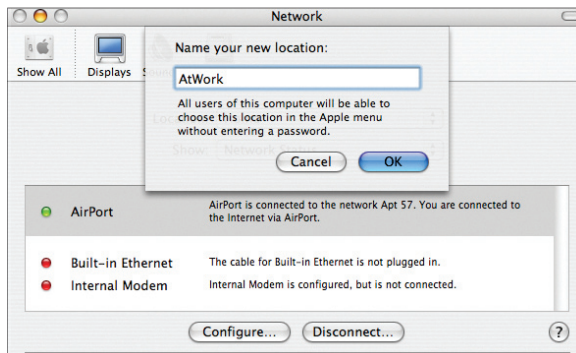

Don't overwrite your existing network settings. Instead, create a new location on the Mac so you can easily switch between your work and home networks.

3 **Play the Match Game** To set the Mac's network configuration, select Built-in Ethernet from the Show pop-up menu to display the settings. Look at the PC: If the PC's Address Type displays Assigned By DHCP, select Using DHCP from the Mac's Configure IPv4 pop-up menu. Ignore the other three fields and skip to step 4. If the PC's Address Type displays Manually Configured, choose Manually from the Mac's Configure IPv4 pop-up and enter the data from the PC's other three fields into the appropriate places on the Mac (Router on the Mac is equivalent to Default Gateway on the PC).
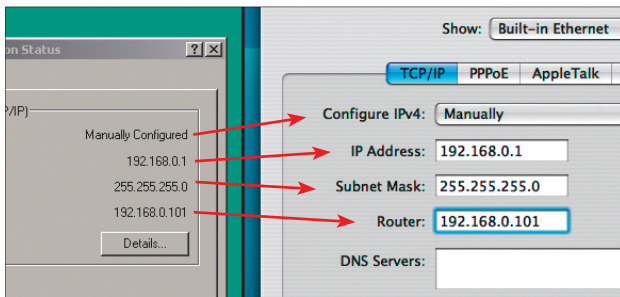
If your networking is configured manually, enter all three network numbers into your Mac.

4 **Get the Details** If your company assigns IP numbers manually and/or it uses a WINS server, you will need two more numbers: the DNS and WINS server addresses. To view them, click the Details button in the PC's Connection Status window. Make a note of both addresses (it may display one or none) in the resulting panel. If your IP number was manually assigned, enter the DNS Server number into the DNS Servers field on the Mac. (We'll get to the WINS address in step 5.) OK, let's connect! Disconnect the Ethernet cable from your PC, plug it into your Mac, and connect to a Web site. If you see a page, you're on the network (if your company is Internet-connected, of course).
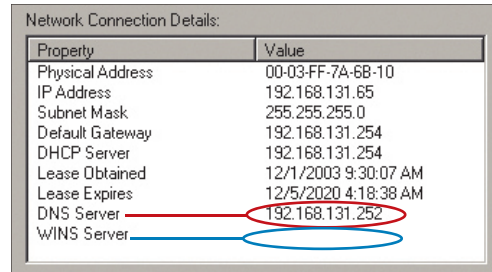
Scope out the PC's DNS and WINS server addresses, but don't panic if you see only one—or none. You won't need them if they're not listed.

5 **He Who Uses a Mac WINS** The WINS (Windows Internet Naming Service) server is akin to a DNS server but used for Windows network services in place of TCP/IP names. If the WINS server field was blank in the Details window, your company doesn't use a WINS server—skip to step 6. If you have a number, go to Applications › Utilities › Directory Access on the Mac. In the resulting window, click the lock icon, enter your password, and click OK. Select SMB (server message block), and click Configure. In the resulting dialog, enter the WINS server address in the WINS Server field, select your usual workgroup from the Workgroup pop-up, and click OK.
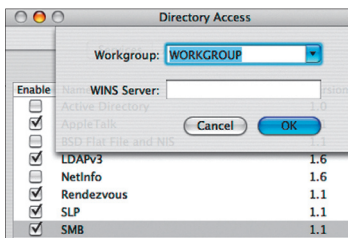
Entering the WINS server number and setting your workgroup is easy—once you figure out where to put it!

6 **Serve Up Files** PC networks commonly use Windows or Novell NetWare file servers. Windows file sharing is easy: To connect, click Panther's Network sidebar button or select Connect To Server from the Go menu in older versions of OS X to display a list of Windows server names. Then browse and connect. If your company uses Novell NetWare servers (you'll know right away if you see a big red *N*; Novell flaunts more branding than the average NASCAR driver), launch NetWare Client for Mac OS X, enter your network user name and password in the fields, and click Login. Your Mac will be indistinguishable from other PCs on the network.
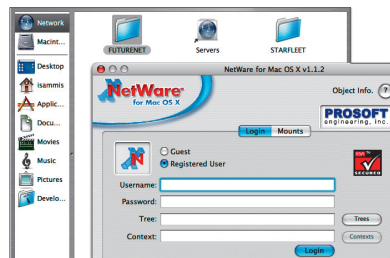
Windows file-server icons look just like Mac ones (left), so it's hard to tell servers apart; if you're trying to access a NetWare file server, use ProSoft's NetWare Client (right).

7 **Prints: The Revolution** If you're using pre-Panther OS X, printing to a Windows printer is tricky—try using Gimp-Print (free, http://gimp-print.sourceforge.net) or Virtual PC ($249, www.microsoft.com/mac). (The latest version of Virtual PC isn't G5 or fully Panther-compatible, but the next version will be, according to Microsoft; it will ship in the first half of 2004.) If you've got Panther, go to Applications › Utilities, and open the Printer Setup Utility. Click Add, and in the resulting dialog, select Windows Printing from the top pop-up menu. Then browse the network to find your usual company printer. Printers can be configured in many ways, so you may have to use IP printing if you hit a snag.
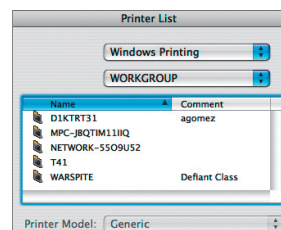
Finding printers is difficult if you don't know where they live on a Windows network—most machines don't have printers attached.

Ian Sammis has been hiding a Mac among Windows machines for the last two years.