

HARDWARE TIPS

KIRK STEERS

Prepare Your Hardware for a Windows Reinstall

SOMETIMES THE ONLY way to rid your PC of rogue software and other maladies is to revamp your Windows installation. Follow these four tips to keep your hardware on good terms with your reinvigorated Windows setup.

Get your discs in a row: Before you begin, gather the CDs containing the device drivers Windows will require to run your computer, printer, and other hardware. Almost every component in or connected to your PC needs to have its own device-driver program installed in Windows. This includes printers, graphics cards, network adapters, and even individual chips on your system's motherboard.

All of the drivers your PC needs may or may not be included on the Windows CD (or on the restoration disc) that came with your system. After recently reinstalling Windows XP on my Dell Dimension, I found that the machine's OS CD failed to install my network drivers and other key

hardware drivers, which meant that initially I had no Internet access. Since I had lost the disc holding my network card's driver, I had to use another PC to connect to the Web and download the necessary program from the maker's site. Many drivers—such as those for equipment you bought separately—may have to be installed from their own discs, so keep *all* of your software CDs handy.

If you're reinstalling Windows from a standard Microsoft Windows CD rather than from the disc that shipped with your PC, don't assume that the generic Windows CD will have all of your system's current drivers. Visit the support sections at the Web sites of your PC and peripheral manufacturers, download up-to-date drivers, and save them on removable media (the reinstallation will likely wipe these updates off your hard drive).

Check out an overview: Stan Miastkowski's December 2002 *Step-By-Step* column (find.pcworld.com/48538) provides a start-to-

finish look at the Windows-reinstallation process. To transfer all of your current Windows settings to the new configuration, browse to find.pcworld.com/48540 for Lincoln Spector's *Answer Line* column from the September 2003 issue.

Avoid hardware activation: Every time you reinstall Windows XP, you have to phone home to Microsoft to reactivate the OS. Avoid this annoyance by copying the existing hardware signature file that Windows creates from your computer's configuration and pasting it back into the freshly installed version of Windows XP.

Open the C:\Windows\System32 folder in Explorer and copy the files 'wpa.dbl' and 'wpa.bak' to a floppy disk, CD, or other removable medium. At the end of the XP reinstallation, choose not to reactivate Windows. When the reinstallation finishes, reboot your PC in Safe Mode by pressing <F8> before Windows launches. Once Windows has opened in Safe Mode, copy the two files over the new versions in the C:\Windows\System32 folder.

Note: This works only on the PC where the 'wpa.dbl' file was originally created; it won't bypass Windows XP activation on other computers. And if you made significant hardware changes to your PC before reinstalling Windows XP, you'll probably have to reactivate the OS anyway.

Do a driver check: Finally, check Device Manager to confirm that all of your drivers were installed. In XP and 2000, right-click *My Computer*, click *Manage*, and select *Device Manager* on the left of the screen. In 98 and Me, right-click *My Computer*, select *Properties*, and click *Device Manager*. Any entry marked with an exclamation point (!) in a yellow circle (or a white question mark in a green circle in Windows Me) has a problem; if you're lucky, a new driver will fix it. ■

Go to find.pcworld.com/31511 for past Hardware Tips columns. Send tips and questions to kirk_steers@pcworld.com. Contributing Editor Kirk Steers is author of *PC Upgrading and Troubleshooting QuickSteps*, published by Osborne Press.

USB MUG WARMER

WITH THE COOL FALL temperatures fast approaching, there's nothing like having a hot cup of tea or coffee at your desk to refresh you during your workday. Keep your hot beverage hot—or at least pleasantly warm—with the \$19 USB Cup Warmer from USB007.com (find.pcworld.com/48544). The device connects to any USB port and comes in six colors. As shown in the photo, it consists of a small, round hot plate only slightly larger than the bottom of a typical coffee mug. The hot plate more than doubles the drinkable life of the ever-present cup of Yin Hao jasmine green tea on my desk.



PHOTOGRAPH: MARC SIMON