

STEP BY STEP

STAN MIASTKOWSKI

Optimize Your PC for Faster Start-Up Times

FOR GOOD OR ILL, we've come to expect instant gratification from our technology. Turn the key in your car ignition, hit the On button on your TV remote, or press Start on your microwave oven, and things

happen immediately. But that isn't the case with a Windows PC, where—depending on a number of factors—you have to wait between 30 seconds and several minutes before your PC is ready to run.

1 Tweak the PC Setup program: Your PC's hardware can keep you waiting for quite a while before Windows has a chance to start. You can reduce the delay by changing a few settings in your PC Setup program.

Advanced BIOS Features	
Virus Warning	Disabled
CPU Level 1 Cache	Enabled
CPU Level 2 Cache	Enabled
CPU L2 Cache ECC Checking	Enabled
Quick Power On Self Test	Enabled
First Boot Device	Floppy
Second Boot Device	HDD-0
Third Boot Device	LS120
Boot Up Floppy Seek	Disabled

Enter the Program: The right way to do this varies, but usually you hold down <Delete> or some other key while your system starts up. Watch for an on-screen message, or check your PC or motherboard manual.

The settings you're looking for are often located within subcategories, and the terms for each setting vary. Read the screens carefully for options and navigation commands.

Quick Power On Self-Test: Set this to *Fast* or *Enabled* to skip some time-consuming memory and hardware start-up tests. The downside is that you might miss a developing problem with RAM or the motherboard.

Floppy Seek: If your PC's floppy has been working fine, there's no reason to test it every time you boot. Set this to *Disabled*.

IDE Drives: Look for a list of your Primary and Secondary IDE channels. When these options are set to Auto, your PC pauses to identify each IDE device as it boots. Set this to *None* on IDE channels you aren't using.

2 Check for viruses, spyware, and adware: Hidden malicious or annoying programs often load at system start-up, slowing down the process. Get rid of them by scanning for viruses and pests regularly.

Don't have antivirus and spyware utilities? You're living dangerously! At housecall.trendmicro.com, you can find a free online virus check. Ad-aware (find.pcworld.com/37628) can help you remove spyware and adware from your system, or you can try the free online detector at www.pestscan.com.

For more tools to defeat the nasties, see "Pest Zappers" (find.pcworld.com/37916).

WinDoctor is now checking for Windows problems. Press 'Stop' to stop the diagnosis.	
Examining...	Status
✓ Windows Registry Scan: ActiveX/COM SubKey ...	Done
✓ Windows Registry Scan: Application Paths Secti...	Done
✓ Windows Registry Scan: Device Drivers Section	Done
✓ Windows Registry Scan: Fonts Section	Done
✓ Windows Registry Scan: Help Section	Done

4 Tune up the Registry: Programs like RegClean (find.pcworld.com/21382) can sweep out defunct hardware and software settings that can clog up your Registry. RegClean works for older versions of Windows. For XP, commercial programs, such as Symantec's Norton SystemWorks (pictured above; find.pcworld.com/34559) and V Communications' SystemSuite (find.pcworld.com/37922), and shareware like Registry First Aid (find.pcworld.com/37919) can do the job.

For more on the Registry, see my May 2002 column, "Care and Feeding of the Windows Registry" (find.pcworld.com/35789).

This isn't, of course, the worst problem you can run into with Windows. You could use the extended boot-up time to get another cup of java (liquid variety) or smell the roses. But if you're the impatient type, there are ways to speed up your PC's emergence out of the starting gate. And some of these procedures can also help Windows run more efficiently overall.

As usual, make sure you do a complete system backup before you start tweaking. For backup tips, see the "Ultimate Backup Guide" (find.pcworld.com/30719). ■

Stan Miastkowski is a PC World contributing editor. Contact him at stan_miastkowski@pcworld.com. Visit find.pcworld.com/31676 for past Step-By-Step columns.

3 Eliminate unneeded start-up programs: In Windows 98, Me, and XP, you can see what programs load at start-up by going to *Start•Run*, typing *msconfig*, and clicking *OK*. (Msconfig isn't in Windows 2000, but programs like Startup Control Panel can fill in for it; see find.pcworld.com/37319).

Click the *Startup* tab to see a list of programs that launch at start-up. You'll need to experiment to see what you can do without. Just uncheck the boxes on the left-hand side of the Msconfig window to keep them from loading. The name and location of each file can help you figure out what it does.

In Windows XP, Msconfig has a *Services* tab that shows other application and OS components. Some can be unchecked so they won't load at start-up; others are essential to Windows. For more on services in XP and 2000, see find.pcworld.com/37917.

Startup Item	Command
☒ Mixer	Mixer.exe /startup
☒ ccApp	"C:\Program Files\Common Files\Symantec Shared\ccApp"
☒ ccRegWfy	"C:\Program Files\Common Files\Symantec Shared\ccRegWfy"
☒ mm_tray	C:\Program Files\MUSICMATCH\MUSICMATCH Jukebox\mm_tray.exe

5 Defragment your hard drive: Your hard drive doesn't always save a file in one place. Instead, it tucks parts of the file wherever there's free space. Use Disk Defragmenter on each of your drives to make those files contiguous, improving both start-up and overall Windows performance. Select *Start•Programs•Accessories•System Tools•Disk Defragmenter*, select a drive, and click *Start*.