

# Does Your PC Have The Blahs?

USE ONE OF THESE PROGRAMS TO DIAGNOSE ITS ILLS. BY RUSSELL SHAW

Your PC needs periodic maintenance to stay healthy. If it starts behaving oddly—taking inordinate amounts of time to start programs or crashing randomly—and you're sure it hasn't been infected by a virus, adware, or other unwelcome software, a full system diagnostic could reveal the source of its ills.

This process only sounds intimidating. You'll find a number of free or very inexpensive software programs that can do most of this work for you. Windows XP has a few built-in tools, too.

These programs essentially run themselves, examining every nook and cranny of your PC for programs that hog computer memory, problems in your system registry that prevent software from running, invalid Windows shortcuts that take up extra disk space by pointing to non-existent programs, and a host of other problems.

Some will identify each of your PC's components. This can be incredibly useful, especially if a help-desk associate tells you the problem is related to your motherboard, and you don't know which brand of that all important board is inside your PC.



You'll find the trial versions of these programs on the disc accompanying this issue:

**EVEREST HOME EDITION**  
**EVEREST PROFESSIONAL EDITION**

Lavalys Consulting Group

**REGISTRY MECHANIC**  
WinGuides Software

**SPYBOT SEARCH & DESTROY**  
PepiMK Software

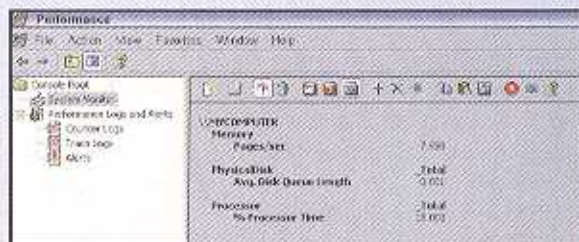
**SYSTEM MECHANIC 4**  
Iolo Technologies

## WINDOWS XP PERFORMANCE TOOL

Windows XP has some built-in system analysis and diagnostics capabilities. This is a good place to start, but this program's functionality is pretty much limited to raw statistics and measurements that are not fully explained.

To reach the Windows Performance tool, click Start, click Control Panel, and click Performance and Maintenance. Next, click Administrative Tools, and then double-click Performance.

The Windows Performance tool has two of two parts: System Monitor and Performance Logs and Alerts. System Monitor lets you collect and view real-time data about memory, disk, processor, network, and other activity in graphs or report form. Performance Logs and Alerts lets you prepare logs to record performance data at different intervals, as well as schedule system alerts when something



→ Windows XP has limited, but useful, built-in PC diagnostics tools.

is amiss, such as the amount of available memory becoming abnormally low, or your CPU's processing speed slowing inexplicably.

Some of the best third-party diagnostic utilities include SiSoftware's SANDRA (the acronym stands for System Analyzer/Diagnostic and Reporting Assistant); Lavalys' Everest Home Edition, WinGuides' Registry Mechanic, and Iolo's System Mechanic 4. We'll take a look at each of these.

OPTIMIZE YOUR PC The EasyWay

No matter how you strive to keep Windows XP—and your computer in general—in orderly operating condition, the system will inevitably accumulate dead files, orphan registry entries, Internet detritus, and plenty of other assorted junk.

Install the trial version of Iolo Technologies' System Mechanic 4 (you'll find it on the disc), run the System Maintenance Wizard, and we'll bet your PC runs faster when you're finished.



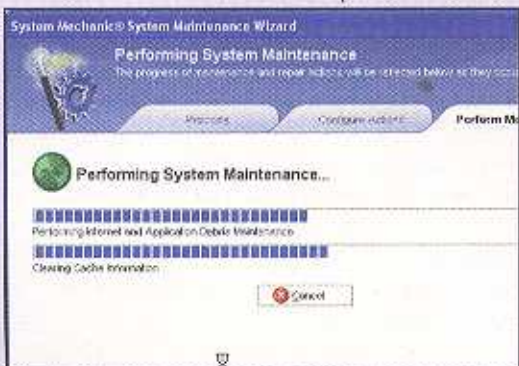
**1** Launch System Mechanic 4 and click on the Maintain tab.



**2** Read over these instructions and then click on the Next button.



**3** Choose which actions you'd like the software to take. Note: All the actions are selected by default. If you only want to get rid of Internet clutter, you'll need to remove the checkmarks from each of the other actions.



**4** System Mechanic will set about the tasks that you've assigned it.



**5** When the program has finished its work, it will present this after-action report detailing the changes it has made.

## SANDRA

SiSoftware's SANDRA consists of several diagnostic tools that can analyze your system's performance. Based on what it finds, it will make recommendations for improvements. After installing program, you'll be presented with a screen with icons for numerous Wizard, Information, and Benchmarking Modules. Click on any of these Modules and SANDRA will conduct a performance check for the feature or device (your mouse or sound card, for example) that you've interested in.

This program offers a broad range of specific functions, but we recommend performing a full system check before diving into these other areas. Think of this as a check-up with your family doctor before going to see a specialist.

Click the Performance Tune-Up Wizard icon. After just a few seconds, a Performance Tune-Up Wizard box will open with a running account of what SANDRA is finding. After the report is complete, you can review the findings by scrolling down the screen. The results are shown in two columns: "Item," for the type of issue being analyzed, and "Value," for either the status of testing or for the specific findings.

This is where SANDRA is particularly useful: Rolling your mouse over some of the "Value" listings will identify specific

➔ SANDRA can tell you which programs take up a large amount of memory, and may slow your computer down.



obstacles to efficient PC performance. When SANDRA finds a program on your hard drive that takes up a large amount of memory, for example, it will note that state of affairs in the Value listing for that feature or function. Point your mouse over the Value listing and you'll see it. The next step, of course, is for you to decide what you're going to do about this information: Close the program? Take it for what it is? Or, if you don't use the program very often, maybe you should just uninstall it.

## EVEREST

Lavalys' Everest Home Edition takes the "memory hog" analysis mandate even further by listing the amount of computer memory every single program, process, and many types of files consumes.

Install and run Everest Home Edition, and you'll see a series of icons referring to different computer functions, as well as the components that make your PC function. Clicking on any of these icons gives you details about the function's capabilities, as well as the model number and capabilities for the part you're curious about.

Click on the Motherboard icon, for instance, and then on the Chipset icon in the Motherboard menu screen: You'll discover statistics for such seemingly arcane features as your motherboard's voltage. Although this information might bore you to distraction, a technician—or even your techno-wizard daughter-in-law, whom you've roped into helping you solve your PC's ills—could find this data invaluable.

Everest Home Edition's real value is in computer memory analysis. Information from this type of analysis can help you identify which programs are slowing your computer down, and that you might want to remove. To activate this feature, go to the left frame in Everest and scroll down until you see Operating Systems. Under Operating Systems, click Processes. In less than two minutes, Everest will produce a report that tells you how much computer memory each of the

Process Name	Process File Name	Used Memory
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	7,040 K
svchost.exe	C:\Windows\System32\svchost.exe	11,512 K
csrss.exe	C:\Windows\System32\csrss.exe	10,000 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,992 K
svchost.exe	C:\Windows\System32\svchost.exe	9,984 K
csrss.exe	C:\Windows\System32\csrss.exe	9,976 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,968 K
svchost.exe	C:\Windows\System32\svchost.exe	9,960 K
csrss.exe	C:\Windows\System32\csrss.exe	9,952 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,944 K
svchost.exe	C:\Windows\System32\svchost.exe	9,936 K
csrss.exe	C:\Windows\System32\csrss.exe	9,928 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,920 K
svchost.exe	C:\Windows\System32\svchost.exe	9,912 K
csrss.exe	C:\Windows\System32\csrss.exe	9,904 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,896 K
svchost.exe	C:\Windows\System32\svchost.exe	9,888 K
csrss.exe	C:\Windows\System32\csrss.exe	9,880 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,872 K
svchost.exe	C:\Windows\System32\svchost.exe	9,864 K
csrss.exe	C:\Windows\System32\csrss.exe	9,856 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,848 K
svchost.exe	C:\Windows\System32\svchost.exe	9,840 K
csrss.exe	C:\Windows\System32\csrss.exe	9,832 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,824 K
svchost.exe	C:\Windows\System32\svchost.exe	9,816 K
csrss.exe	C:\Windows\System32\csrss.exe	9,808 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,800 K
svchost.exe	C:\Windows\System32\svchost.exe	9,792 K
csrss.exe	C:\Windows\System32\csrss.exe	9,784 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,776 K
svchost.exe	C:\Windows\System32\svchost.exe	9,768 K
csrss.exe	C:\Windows\System32\csrss.exe	9,760 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,752 K
svchost.exe	C:\Windows\System32\svchost.exe	9,744 K
csrss.exe	C:\Windows\System32\csrss.exe	9,736 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,728 K
svchost.exe	C:\Windows\System32\svchost.exe	9,720 K
csrss.exe	C:\Windows\System32\csrss.exe	9,712 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,704 K
svchost.exe	C:\Windows\System32\svchost.exe	9,696 K
csrss.exe	C:\Windows\System32\csrss.exe	9,688 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,680 K
svchost.exe	C:\Windows\System32\svchost.exe	9,672 K
csrss.exe	C:\Windows\System32\csrss.exe	9,664 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,656 K
svchost.exe	C:\Windows\System32\svchost.exe	9,648 K
csrss.exe	C:\Windows\System32\csrss.exe	9,640 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,632 K
svchost.exe	C:\Windows\System32\svchost.exe	9,624 K
csrss.exe	C:\Windows\System32\csrss.exe	9,616 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,608 K
svchost.exe	C:\Windows\System32\svchost.exe	9,600 K
csrss.exe	C:\Windows\System32\csrss.exe	9,592 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,584 K
svchost.exe	C:\Windows\System32\svchost.exe	9,576 K
csrss.exe	C:\Windows\System32\csrss.exe	9,568 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,560 K
svchost.exe	C:\Windows\System32\svchost.exe	9,552 K
csrss.exe	C:\Windows\System32\csrss.exe	9,544 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,536 K
svchost.exe	C:\Windows\System32\svchost.exe	9,528 K
csrss.exe	C:\Windows\System32\csrss.exe	9,520 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,512 K
svchost.exe	C:\Windows\System32\svchost.exe	9,504 K
csrss.exe	C:\Windows\System32\csrss.exe	9,496 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,488 K
svchost.exe	C:\Windows\System32\svchost.exe	9,480 K
csrss.exe	C:\Windows\System32\csrss.exe	9,472 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,464 K
svchost.exe	C:\Windows\System32\svchost.exe	9,456 K
csrss.exe	C:\Windows\System32\csrss.exe	9,448 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,440 K
svchost.exe	C:\Windows\System32\svchost.exe	9,432 K
csrss.exe	C:\Windows\System32\csrss.exe	9,424 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,416 K
svchost.exe	C:\Windows\System32\svchost.exe	9,408 K
csrss.exe	C:\Windows\System32\csrss.exe	9,400 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,392 K
svchost.exe	C:\Windows\System32\svchost.exe	9,384 K
csrss.exe	C:\Windows\System32\csrss.exe	9,376 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,368 K
svchost.exe	C:\Windows\System32\svchost.exe	9,360 K
csrss.exe	C:\Windows\System32\csrss.exe	9,352 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,344 K
svchost.exe	C:\Windows\System32\svchost.exe	9,336 K
csrss.exe	C:\Windows\System32\csrss.exe	9,328 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,320 K
svchost.exe	C:\Windows\System32\svchost.exe	9,312 K
csrss.exe	C:\Windows\System32\csrss.exe	9,304 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,296 K
svchost.exe	C:\Windows\System32\svchost.exe	9,288 K
csrss.exe	C:\Windows\System32\csrss.exe	9,280 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,272 K
svchost.exe	C:\Windows\System32\svchost.exe	9,264 K
csrss.exe	C:\Windows\System32\csrss.exe	9,256 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,248 K
svchost.exe	C:\Windows\System32\svchost.exe	9,240 K
csrss.exe	C:\Windows\System32\csrss.exe	9,232 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,224 K
svchost.exe	C:\Windows\System32\svchost.exe	9,216 K
csrss.exe	C:\Windows\System32\csrss.exe	9,208 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,200 K
svchost.exe	C:\Windows\System32\svchost.exe	9,192 K
csrss.exe	C:\Windows\System32\csrss.exe	9,184 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,176 K
svchost.exe	C:\Windows\System32\svchost.exe	9,168 K
csrss.exe	C:\Windows\System32\csrss.exe	9,160 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,152 K
svchost.exe	C:\Windows\System32\svchost.exe	9,144 K
csrss.exe	C:\Windows\System32\csrss.exe	9,136 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,128 K
svchost.exe	C:\Windows\System32\svchost.exe	9,120 K
csrss.exe	C:\Windows\System32\csrss.exe	9,112 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,104 K
svchost.exe	C:\Windows\System32\svchost.exe	9,096 K
csrss.exe	C:\Windows\System32\csrss.exe	9,088 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,080 K
svchost.exe	C:\Windows\System32\svchost.exe	9,072 K
csrss.exe	C:\Windows\System32\csrss.exe	9,064 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,056 K
svchost.exe	C:\Windows\System32\svchost.exe	9,048 K
csrss.exe	C:\Windows\System32\csrss.exe	9,040 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,032 K
svchost.exe	C:\Windows\System32\svchost.exe	9,024 K
csrss.exe	C:\Windows\System32\csrss.exe	9,016 K
smss.exe	C:\Program Files\Microsoft Office\Office12\smss.exe	9,008 K
svchost.exe	C:\Windows\System32\svchost.exe	9,000 K

➔ Need to know what's under your PC's hood? Click Everest's summary feature and you'll find out.

programs currently running on your PC is consuming. Here's the most important information you'll want to examine:

**Process Name:** The name of the program (such as Excel), followed by the .exe (executable) file extension that Windows XP uses to start the program.

**Process File Name:** The directory on your hard drive where the program's main .exe file is stored.

**Used Memory:** The memory each program is consuming.

## REGISTRY MECHANIC

The Windows XP Registry contains hundreds—thousands, in some cases—of very low-level settings for the hardware and software installed on your PC. You don't typically need to muck around with Registry settings; in fact, Microsoft discourages computer users from editing them directly, because making a mistake here can cripple your PC.

Changes to the Registry *should* happen automatically, any time you install or uninstall a program or hardware component or make preference-type changes to your PC's configuration. Over time, however, your Registry could become riddled with corrupt and "orphan" registry entries (from software or hardware that was improperly installed or incompletely uninstalled, for example). If this happens, your PC could slow to a crawl or even become unstable.

WinGuides' Registry Mechanic can help identify and eliminate bad Registry entries. Equally important, it can make a back-up copy of your Registry, just in case anything goes awry while you're tweaking it.

Install and launch the program and you'll be presented with a list of "Sections" (specific areas of your hard drive) that the program can scan. Place a checkmark next to those you're interested in working with (it can't hurt to check all



→ Corrupted and orphan entries in your Windows Registry can slow your PC's performance. Registry Mechanic can find and delete them.

of them (the retail version offers more tools than the trial version). Once you've made your selections, click the Scan button to begin the scanning process. Registry Mechanic will display a running count of any problems it detects; when it's finished, it will produce a Detected Problems list.

Double-clicking on these categories will reveal specific information, but this level of detail will be lost on most of us. We recommend instead that you simply click on the Repair button and let Registry Mechanic take care of the junk in your Registry. In the unlikely event the program goofed, you did make a back-up copy of your Registry, right?

## SYSTEM MECHANIC

Iolo Technologies' System Mechanic is the last diagnostic program we'll examine here. This powerful suite of tools is organized into five broad categories: Clean, Fix, Maintain, Optimize, and Protect. The Clean module helps identify and delete junk files left on your computer's hard drive after system crashes, botched installs and uninstalls, and unexpected restarts. As an added bonus, you'll find privacy-enhancing tools that will get rid of tracking cookies unscrupulous Websites might sneak onto your PC. The Fix module is similar to WinGuides' Registry Mechanic, in that it analyzes and repairs your Windows Registry and fixes broken shortcuts.

The Maintain module includes a handy Utility Bar tool that you can use to obtain useful information about your PC even when System Mechanic isn't actively running. You'll also find a scheduling tool so that you can perform time-consuming maintenance when you're not otherwise



→ System Mechanic is something of a jack-of-all trades. It can optimize your PC's overall performance, but it also offers anti-spyware and pop-up blocker utilities.

using your PC. As you've probably guessed, the tools in the Optimize module promise to speed up your PC with techniques such as disk and memory defragmentation. Iolo even claims it can boost your Internet speed by optimizing certain Windows-configuration settings that affect your network and Internet connections. ■

## CONTACT INFO

Here's where you can obtain additional information about the products discussed in this story:

**EVEREST HOME EDITION**, freeware  
Lavalys Consulting Group  
[www.lavalys.com](http://www.lavalys.com)

**REGISTRY MECHANIC**, \$29.95  
WinGuides Software  
[www.winguides.com](http://www.winguides.com)

**SANDRA STANDARD**, shareware  
**SANDRA PROFESSIONAL**, \$49.97  
SiSoftware  
[www.sisoftware.co.uk](http://www.sisoftware.co.uk)

**SYSTEM MECHANIC 4**, \$49.95  
Iolo Technologies  
[www.iolo.com](http://www.iolo.com)