

# Keep It Clean!

*A user's guide to routine computer and hard drive maintenance.*



## Illinois Education & Technology Conference

2006 IETC Conference  
Crown Plaza Hotel  
Springfield, IL  
November 16 and 17, 2006

11/16/06 - 1:20 pm  
11/17/06 - 10:35 am

Presenter: **Luke Allen**

IL-TCE 2007  
Pheasant Run  
St. Charles, Illinois  
February 27 - March 2, 2007

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"No, I'm not going hunting. But you can kiss our pathetically slow computer goodbye."

How often have we considered this solution?

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# Major Causes of Speed Loss

## Background programs

- Ego-centric programs
- TSRs



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## Solutions

### Background programs & TSRs

What is loading when Windows starts?

What does what? Do I really need it?



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## Solutions

### Background programs & TSRs

Startup managers

Startup Optimizers

Startup Monitors



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## Major Causes of Speed Loss

### Spyware/Adware

The term **spyware** refers to software that gathers personal information from your computer, sometimes without your knowledge. The information is often used for advertising purposes. Spyware may cause your computer to slow down or encounter errors. Spyware has also been known to cause unwanted pop-up advertisements, an inability to connect to the Internet, and problems printing.

Spyware applications can be bundled as a **hidden component of freeware or shareware** programs that can be downloaded from the Internet. Once installed, spyware can monitor your activity on the Internet and transmit that information to a third party. Some forms of spyware can gather information about e-mail addresses, passwords, and even credit card numbers.

A common way to get spyware is through installation of file-swapping programs that are used to download music and movies from the Internet.



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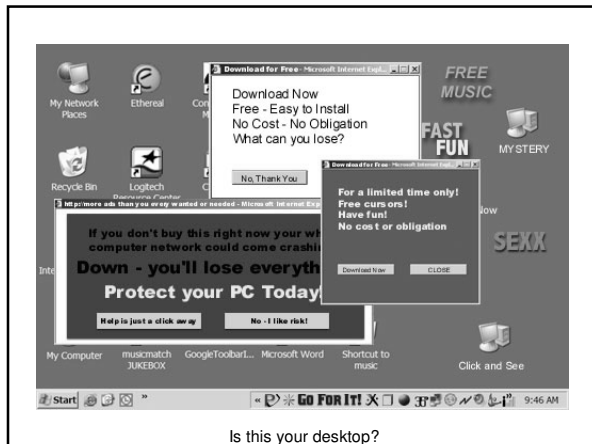
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Is this your desktop?

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## Symptoms of Adware/Spyware

- Pop-ups
- Advertisements on the desktop
- Increased number of items in the start menu
- Icons appearing on the desktop
- Slow computer
- General Protection Fault messages
- Sudden increase in SPAM e-mail
- Unable to launch programs
- Programs launch on their own
- Internet browser home page changed
- Internet browser redirect




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## Solutions

### Spyware Removers

- Ad-aware
- Spybot-Search & Destroy
- Windows Defender
- Others




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## Major Causes of Speed Loss

### Junk Files

- Cookies
- Temp files
- IE Cache
- Orphans



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## Solutions

### Junk Files

- Internet options
  - Clear the cache – set to minimum
  - Clear unnecessary cookies
- Disk cleaner
  - Get rid of "temp" files
- Un-install properly
  - Use Windows (or the program's) uninstall
- Orphans
  - Remove orphaned links & shortcuts



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## Major Causes of Speed Loss

### File Fragmentation

### Registry Issues

- Old installs
- System changes

### Memory

- Too little for the operating system and running processes.



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## Solutions

### File Fragmentation

Defragging the drive regularly helps to keep important files contiguous on the drive.

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## The Windows Registry

### Description of the registry

The *Microsoft Computer Dictionary*, Fifth Edition, defines the registry as: A central hierarchical database used in Microsoft Windows 9x, Windows CE, Windows NT, and Windows 2000 used to store information necessary to configure the system for one or more users, applications and hardware devices.

The Registry contains information that Windows continually references during operation, such as profiles for each user, the applications installed on the computer and the types of documents that each can create, property sheet settings for folders and application icons, what hardware exists on the system, and the ports that are being used.

The Registry replaces most of the text-based .ini files used in Windows 3.x and MS-DOS configuration files, such as the Autoexec.bat and Config.sys. Although the Registry is common to several Windows operating systems, there are some differences among them.  
Registry data is stored in binary files.

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## Solutions

### Registry Issues

Use a registry cleaner and compactor to avoid excess clutter in the system registry.



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## Solutions

### Memory

Having enough memory can make the difference. Eg., Windows XP runs very well with 512M, and ok with 256M, but your computer will be slow with less.

*"More memory: It's the quickest, easiest, cheapest upgrade."*

-PC MAGAZINE



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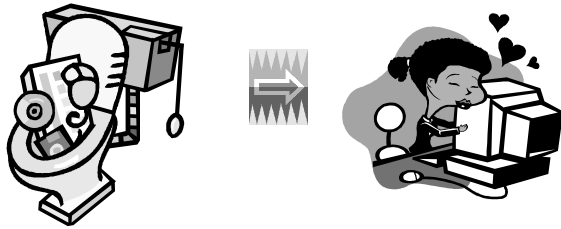
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## Resources

### Cyberion Startup Optimizer

<http://cyberion.info/index.htm>

### Mike Lin's Startup Monitor

<http://www.mlin.net/StartupMonitor.shtml>

### Spybot - Search & Destroy

[http://www.download.com/Spybot-Search-Destroy/3000-8022\\_4-10401314.html?tag=lst-0-1](http://www.download.com/Spybot-Search-Destroy/3000-8022_4-10401314.html?tag=lst-0-1)

### Ad-Aware

[http://www.lavasoft.de/products/ad-aware\\_sc\\_personal.php](http://www.lavasoft.de/products/ad-aware_sc_personal.php)

### Windows Defender

<http://www.microsoft.com/athome/security/spyware/software/default.aspx>

### Freeware downloads Security-Privacy

[http://www.spychecker.com/software/freeware\\_antispv.html](http://www.spychecker.com/software/freeware_antispv.html)

### Abexo Free Registry Cleaner

[http://www.download.com/Abexo-Free-Registry-Cleaner/3000-2094\\_4-10434887.html?tag=lst-0-2](http://www.download.com/Abexo-Free-Registry-Cleaner/3000-2094_4-10434887.html?tag=lst-0-2)

### TweakNow Reg Cleaner

<http://www.tweaknow.com/RegCleaner.html>

### Digiarch's Orphan Remover

<http://www.digiarch.org/orphanremover.html>

### G-lock Temp Cleaner

[http://www.elocksoft.com/temp\\_cleaner/index.htm](http://www.elocksoft.com/temp_cleaner/index.htm)

### Keep It Clean!

<http://tech.luke.snowpages.com>



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