Spring-Clean Your Machine

How and Why to Remove Unwanted Files and Programs

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Introductory Notes

- Slides have rather a lot of text -
  - -so that your can refer to them as your notes
- Tasks are graded - we look at easy tasks first, tricky ones later

Reasons To Remove Stuff

- You have run out of disk space
- Your machine takes forever to boot up
- Your machine runs slowly

Things You Can Do - 1

Assuming that your machine is NOT infected

- Remove "Dust Bunnies" using CCleaner
- Remove redundant registry entries using CCleaner
- Remove programs you don't use
- Remove surplus Restore Points using Disk Cleanup
- Remove redundant Windows Uninstal files
- Remove browser "barnicles"

Things You Can Do - 2

Assuming that your machine is NOT infected

- Turn off Start-up programs
- Clean and de-fragment the hard disk drive using Disk Cleanup
- Clean and de-fragment the registry
- Format the hard disk drive and re-install Windows
  (This takes a very long time and has a few pit-falls. It is usually necessary to backup all your data FIRST)

If Your Machine is Infected - 1

Disinfecting your computer is not within the scope of this presentation

- *Try* to update your security programs
  - virus definitions (fingerprints)
  - the whole program
- Clean with CCleaner
- Scan with your primary security programs (antivirus first - antispyware next)
- Scan with a second and third antispyware program

If Your Machine is Infected - 2

Disinfecting your computer is not within the scope of this presentation

- *Note: Malware infection may have:
  - blocked access to your protection program updates
  - disabled your protection program
  - disabled task manager
  - disabled Windows Update

- Try using:
  - HijackThis
  - Autoruns

- Install ONLY ONE antivirus program
- Consider using an online scanning service (eg Panda or Trend Micro)

Using CCleaner to Remove "Dust Bunnies"

CCleaner is a FREE program that is easy to install and use

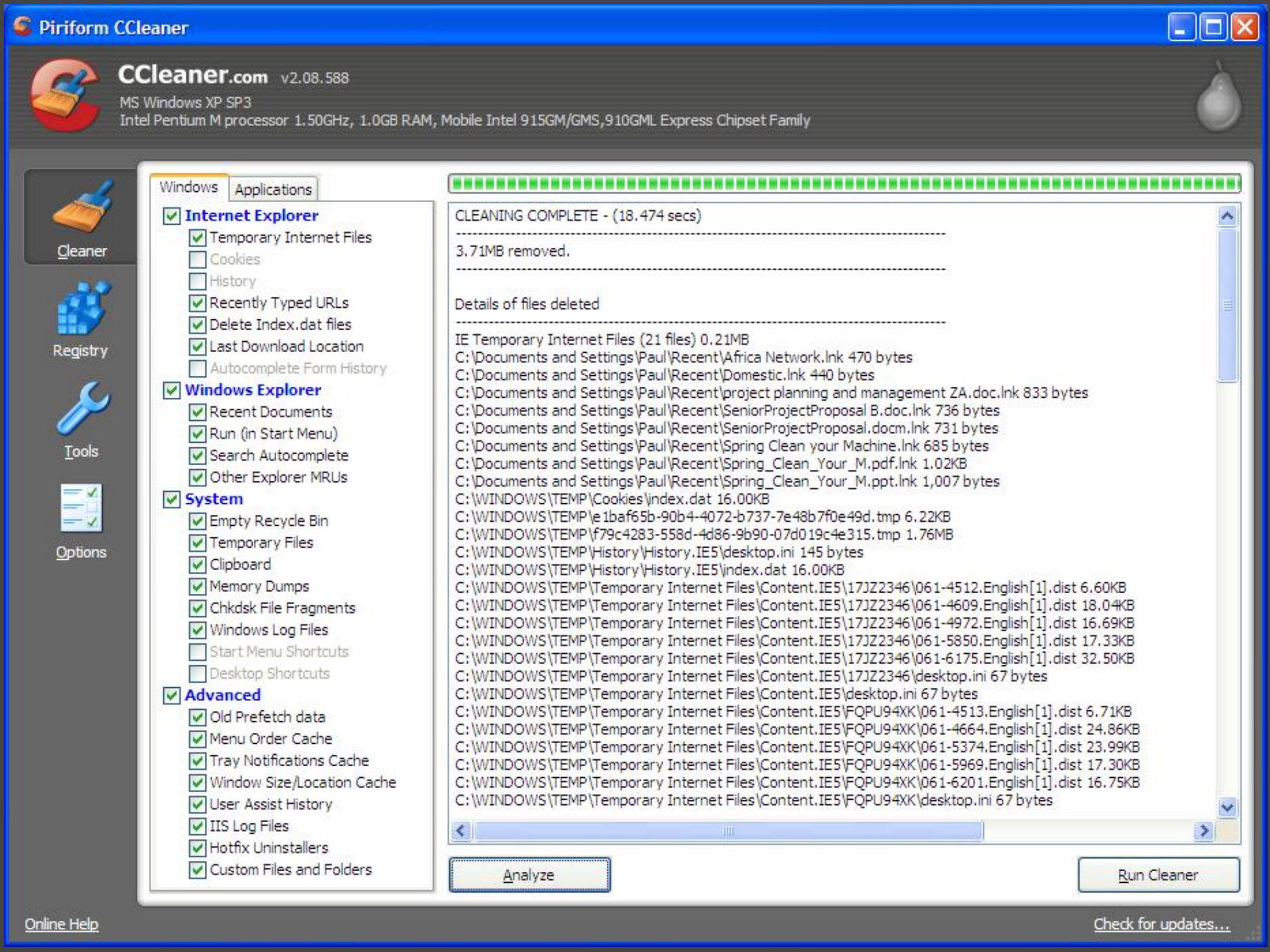
Download from: http://www.ccleaner.com

The site provides plenty of help in using the program

Suggestions:
Beginners - Use only the Cleaner tab (top tab) use both

- Windows and
- Applications sections
- These two are very safe (little risk)

Advanced Users - Use the registry cleaner and be sure to use the built-in backup feature. Then go round this "loop" again until there are no further issues.

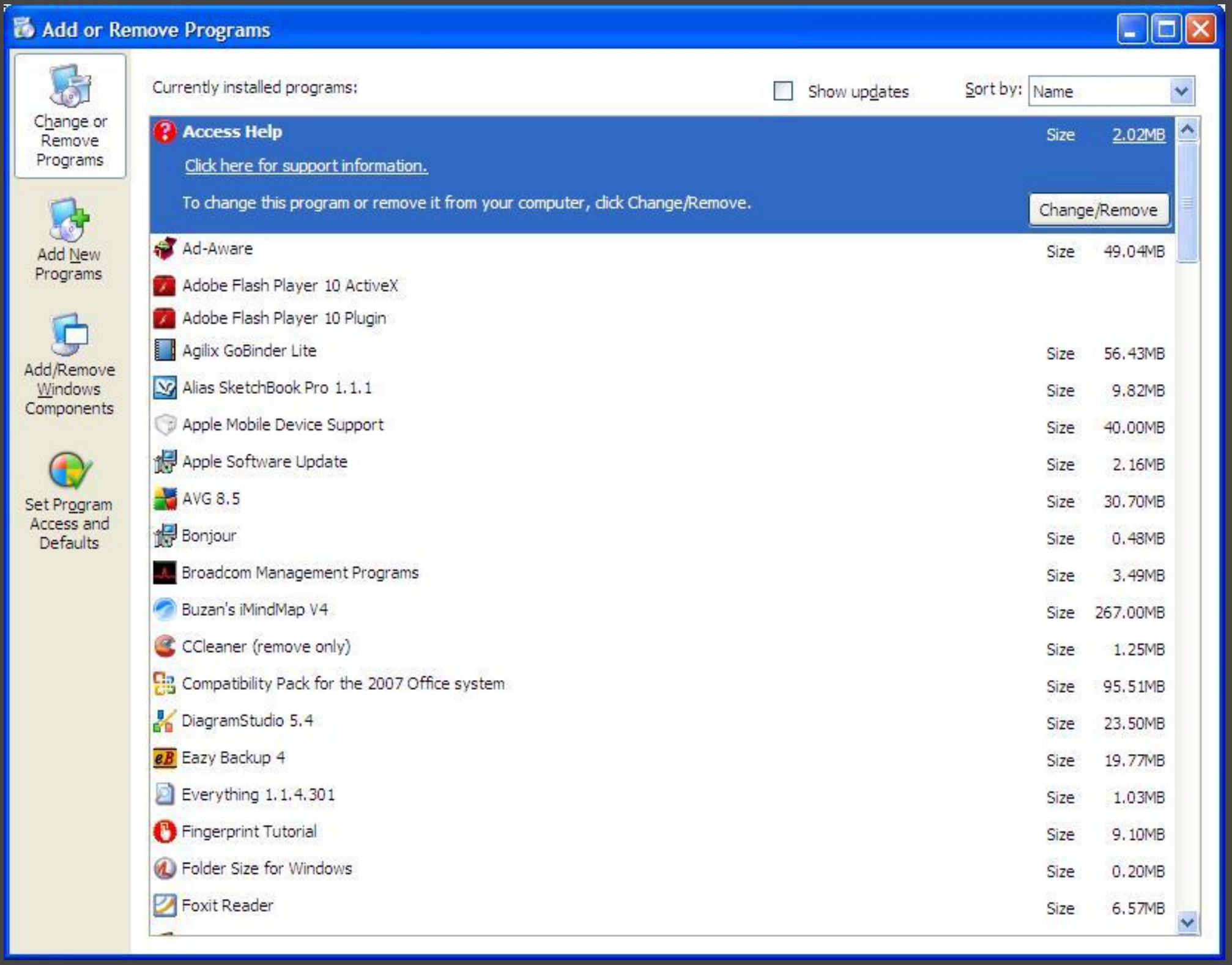

Piriform CCleaner
CCleaner.com v2.08.588
MS Windows XP SP3
Intel Pentium M processor 1.50GHz, 1.0GB RAM, Mobile Intel 915GM/GMS,910GML Express Chipset Family
Cleaner
Registry
Tools
Options
Windows
Applications
Internet Explorer
Temporary Internet Files
Cookies
History
Recently Typed URLs
Delete Index.dat files
Last Download Location
Autocomplete Form History
Windows Explorer
Recent Documents
Run (in Start Menu)
Search Autocomplete
Other Explorer MRUs
System
Empty Recycle Bin
Temporary Files
Clipboard
Memory Dumps
Chkdsk File Fragments
Windows Log Files
Start Menu Shortcuts
Desktop Shortcuts
Advanced
Old Prefetch data
Menu Order Cache
Tray Notifications Cache
Window Size/Location Cache
User Assist History
IIS Log Files
Hotfix Uninstallers
Custom Files and Folders
CLEANING COMPLETE - (18.474 secs)
3.71MB removed.
Details of files deleted
IE Temporary Internet Files (21 files) 0.21MB
C:\Documents and Settings\Paul\Recent\Africa Network.lnk 470 bytes
C:\Documents and Settings\Paul\Recent\Domestic.lnk 440 bytes
C:\Documents and Settings\Paul\Recent\project planning and management ZA.doc.lnk 833 bytes
C:\Documents and Settings\Paul\Recent\SeniorProjectProposal B.doc.lnk 736 bytes
C:\Documents and Settings\Paul\Recent\SeniorProjectProposal.docm.lnk 731 bytes
C:\Documents and Settings\Paul\Recent\Spring Clean your Machine.lnk 685 bytes
C:\Documents and Settings\Paul\Recent\Spring_Clean_Your_M.pdf.lnk 1.02KB
C:\Documents and Settings\Paul\Recent\Spring_Clean_Your_M.ppt.lnk 1,007 bytes
C:\WINDOWS\TEMP\Cookies\index.dat 16.00KB
C:\WINDOWS\TEMP\e1baf65b-90b4-4072-b737-7e48b7f0e49d.tmp 6.22KB
C:\WINDOWS\TEMP\f79c4283-558d-4d86-9b90-07d019c4e315.tmp 1.76MB
C:\WINDOWS\TEMP\History\History.IE5\desktop.ini 145 bytes
C:\WINDOWS\TEMP\History\History.IE5\index.dat 16.00KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\061-4512.English[1].dist 6.60KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\061-4609.English[1].dist 18.04KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\061-4972.English[1].dist 16.69KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\061-5850.English[1].dist 17.33KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\061-6175.English[1].dist 32.50KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\17JZ2346\desktop.ini 67 bytes
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\desktop.ini 67 bytes
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\061-4513.English[1].dist 6.71KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\061-4664.English[1].dist 24.86KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\061-5374.English[1].dist 23.99KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\061-5969.English[1].dist 17.30KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\061-6201.English[1].dist 16.75KB
C:\WINDOWS\TEMP\Temporary Internet Files\Content.IE5\FQPU94XK\desktop.ini 67 bytes
Analyze
Run Cleaner
Online Help
Check for updates...

Removing Programs You Don't Use

This means removing legitimate (not malware) programs

Go to the Control Panel
(If Vista switch to Classic view)

- In XP select Add and Remove Programs
- In Vista select Programs and Features
  - Select Detail View and add columns - used and last used + +
  - Click selected program then click Uninstall
  - Repete as necessary


Add or Remove Programs
Change or Remove Programs
Add New Programs
Add/Remove Windows Components
Set Program Access and Defaults
Currently installed programs:
Show updates
Sort by: Name
Access Help
Size 2.02MB
Click here for support information.
To change this program or remove it from your computer, click Change/Remove.
Change/Remove
Ad-Aware Size 49.04MB
Adobe Flash Player 10 ActiveX
Adobe Flash Player 10 Plugin
Agilix GoBinder Lite Size 56.43MB
Alias SketchBook Pro 1.1.1 Size 9.82MB
Apple Mobile Device Support Size 40.00MB
Apple Software Update Size 2.16MB
AVG 8.5 Size 30.70MB
Bonjour Size 0.48MB
Broadcom Management Programs Size 3.49MB
Buzan's iMindMap V4 Size 267.00MB
CCleaner (remove only) Size 1.25MB
Compatibility Pack for the 2007 Office system Size 95.51MB
DiagramStudio 5.4 Size 23.50MB
Eazy Backup 4 Size 19.77MB
Everything 1.1.4.301 Size 1.03MB
Fingerprint Tutorial Size 9.10MB
Folder Size for Windows Size 0.20MB
Foxit Reader Size 6.57MB

Remove Surplus Restore Points (preview)

Restore Points (registry backups) Can consume up to 12% (XP) 15% (Vista) of your hard disk drive space (Min 300MB Vista) To change settings:

XP - Go to Start -> Help and Support -> System Restore -> System Restore Settings

Vista - Go to Start -. Help and Support ->
Security and Maintenance ->
Backup and Restore (Backup your files ->
"Click to open Backup and Restore Center"

To Clean-up see next slide

Remove Surplus Restore Points (How-To)

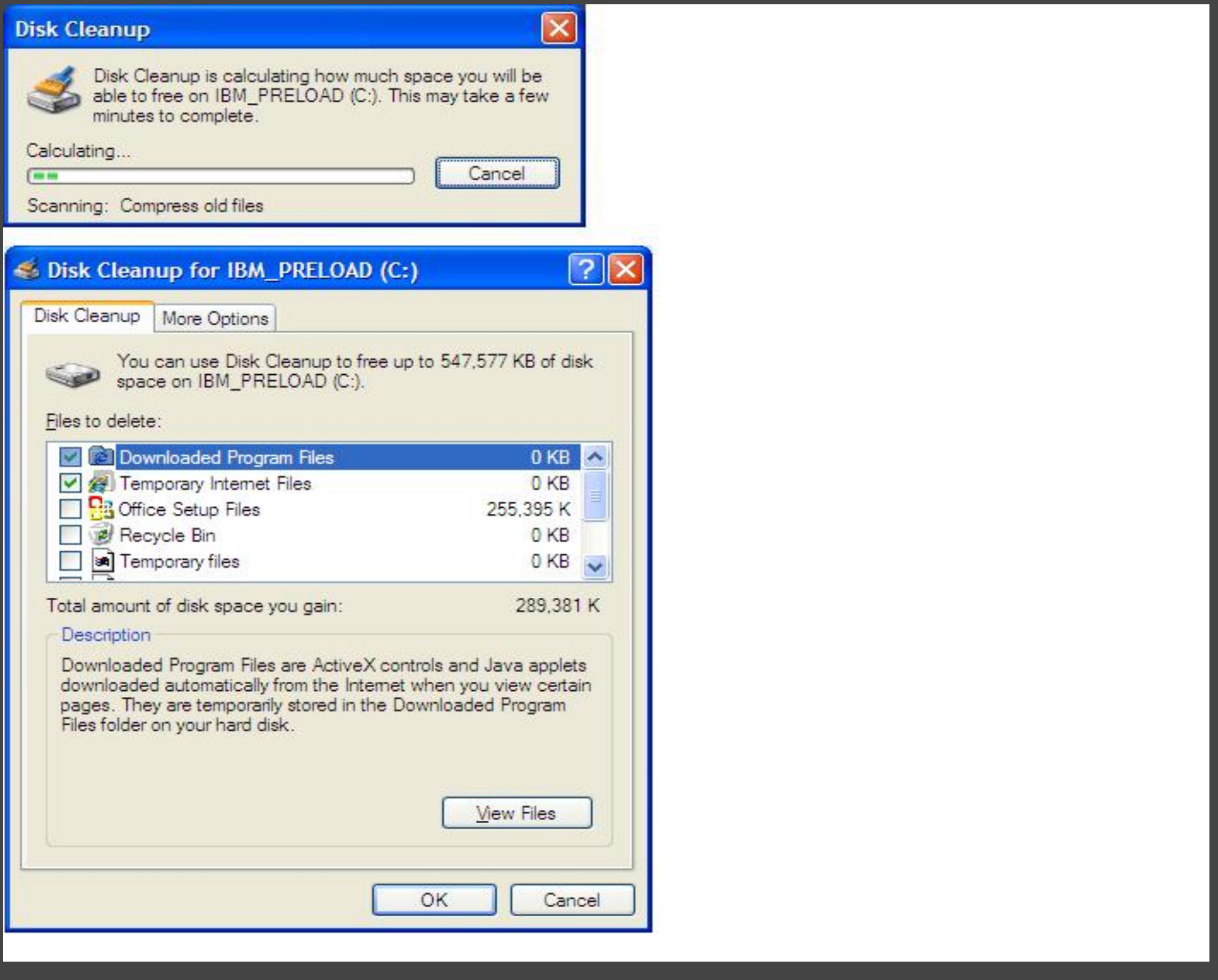
XP - Go Start -> Run -> Type into the box "cleanmgr" (no quotation marks) box and wait..

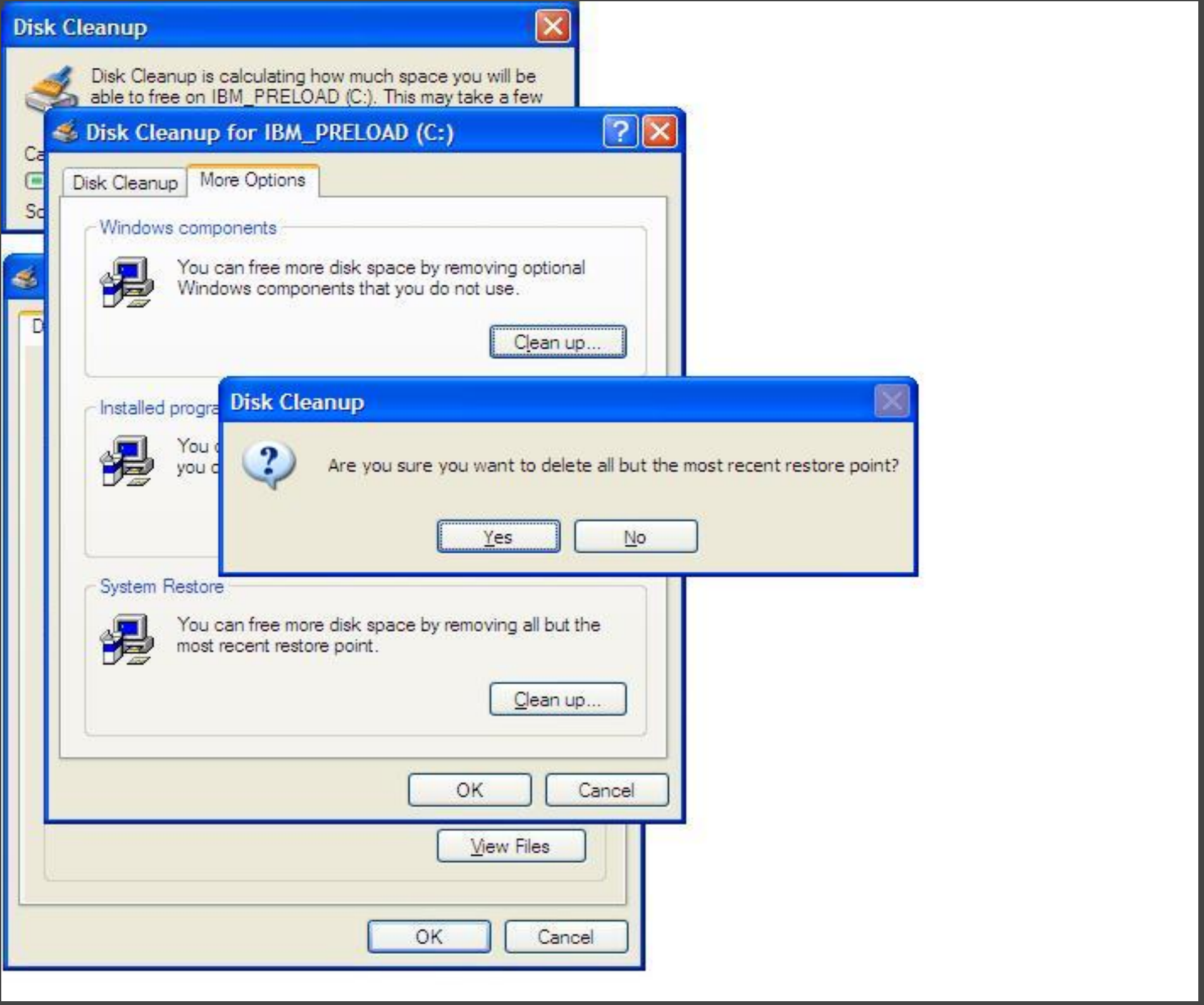
Vista - Go Start and Type into the box "cleanmgr" (no quotation marks) and wait ...

In the window that appears,

- select More Options ->
- in System Restore click Cleanup...
- then answer Yes

Note: This windows also gives access to two other cleanup areas: Installed programs and Windows Components (Also see defragment)


Disk Cleanup
Disk Cleanup is calculating how much space you will be able to free on IBM_PRELOAD (C:). This may take a few minutes to complete.
Calculating...
Cancel
Scanning: Compress old files
Disk Cleanup for IBM_PRELOAD (C:)
Disk Cleanup
More Options
You can use Disk Cleanup to free up to 547,577 KB of disk space on IBM_PRELOAD (C:).
Files to delete:
Downloaded Program Files 0 KB
Temporary Internet Files 0 KB
Office Setup Files 255,395 K
Recycle Bin 0 KB
Temporary files 0 KB
Total amount of disk space you gain: 289,381 K
Description
Downloaded Program Files are ActiveX controls and Java applets downloaded automatically from the Internet when you view certain pages. They are temporarily stored in the Downloaded Program Files folder on your hard disk.
View Files
OK
Cancel


Disk Cleanup
Disk Cleanup is calculating how much space you will be able to free on IBM_PRELOAD (C:). This may take a few
Disk Cleanup for IBM_PRELOAD (C:)
Disk Cleanup
More Options
Windows components
You can free more disk space by removing optional Windows components that you do not use.
Clean up...
Installed progra
You
you
Disk Cleanup
Are you sure you want to delete all but the most recent restore point?
Yes
No
System Restore
You can free more disk space by removing all but the most recent restore point.
Clean up...
OK
Cancel
View Files
OK
Cancel

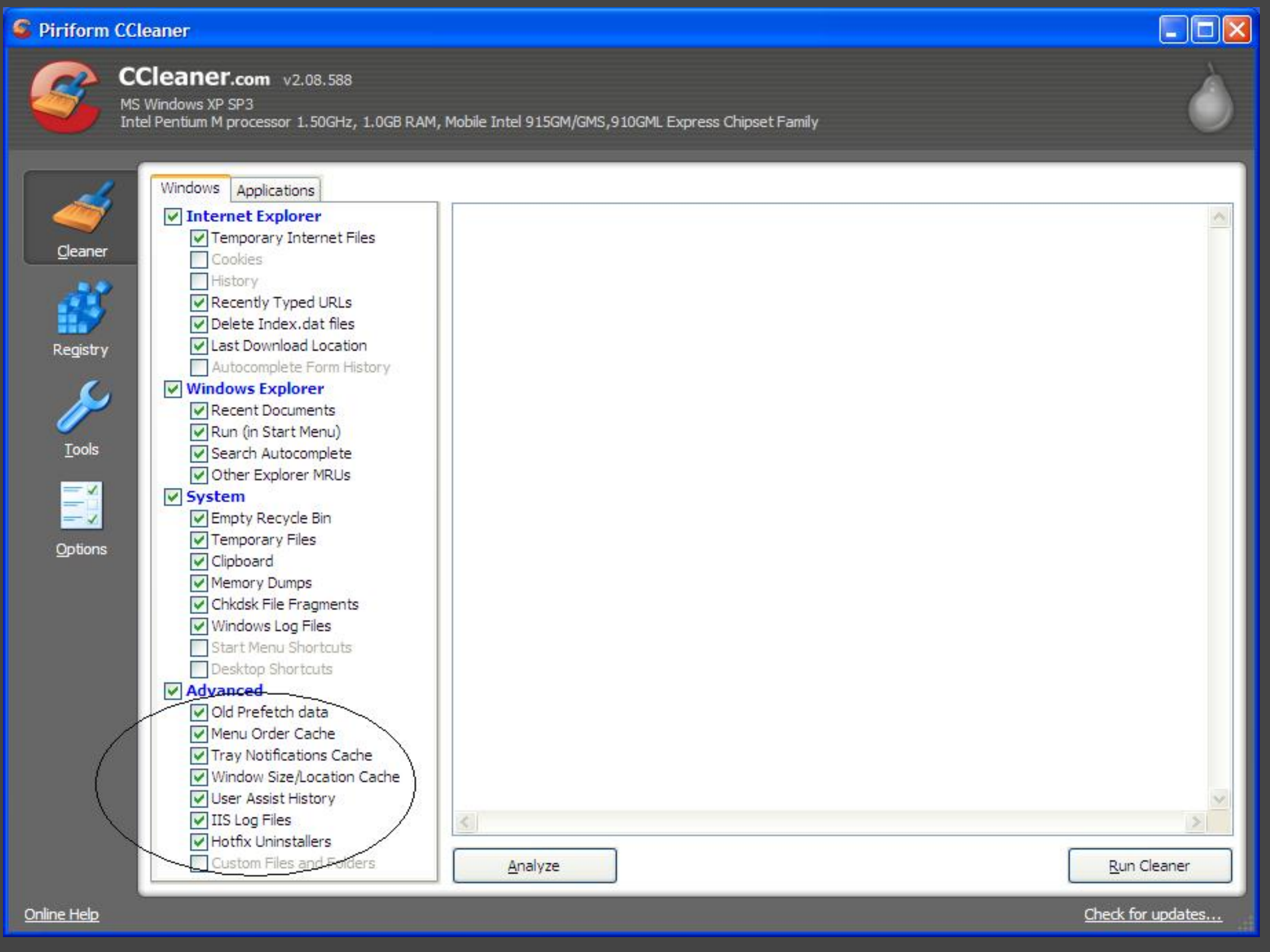
Remove Windows ntUninstall files

If you know that you will not need to uninstall any of the (many) Windows Updates that you have made, you can remove the uninstall files and potentially free-up several GB of disk space.

Doug Knox Utilities can do this but:

The best option is to run CCleaner, which can remove all sorts of unwanted files. Versions after v1.27.260, released on February 14, now include Windows HotFix Uninstaller cleaning.

If you want to do this, you will need to check boxes in the Advanced options and in doing so, answer a few pop-up questions - (Use Google to find answers)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History
Recently Typed URLs
Delete Index.dat files
Last Download Location
Autocomplete Form History
Windows Explorer
Recent Documents
Run (in Start Menu)
Search Autocomplete
Other Explorer MRUs
System
Empty Recycle Bin
Temporary Files
Clipboard
Memory Dumps
Chkdsk File Fragments
Windows Log Files
Start Menu Shortcuts
Desktop Shortcuts
Advanced
Old Prefetch data
Menu Order Cache
Tray Notifications Cache
Window Size/Location Cache
User Assist History
IIS Log Files
Hotfix Uninstallers
Custom Files and Folders
Analyze
Run Cleaner
Online Help
Check for updates...

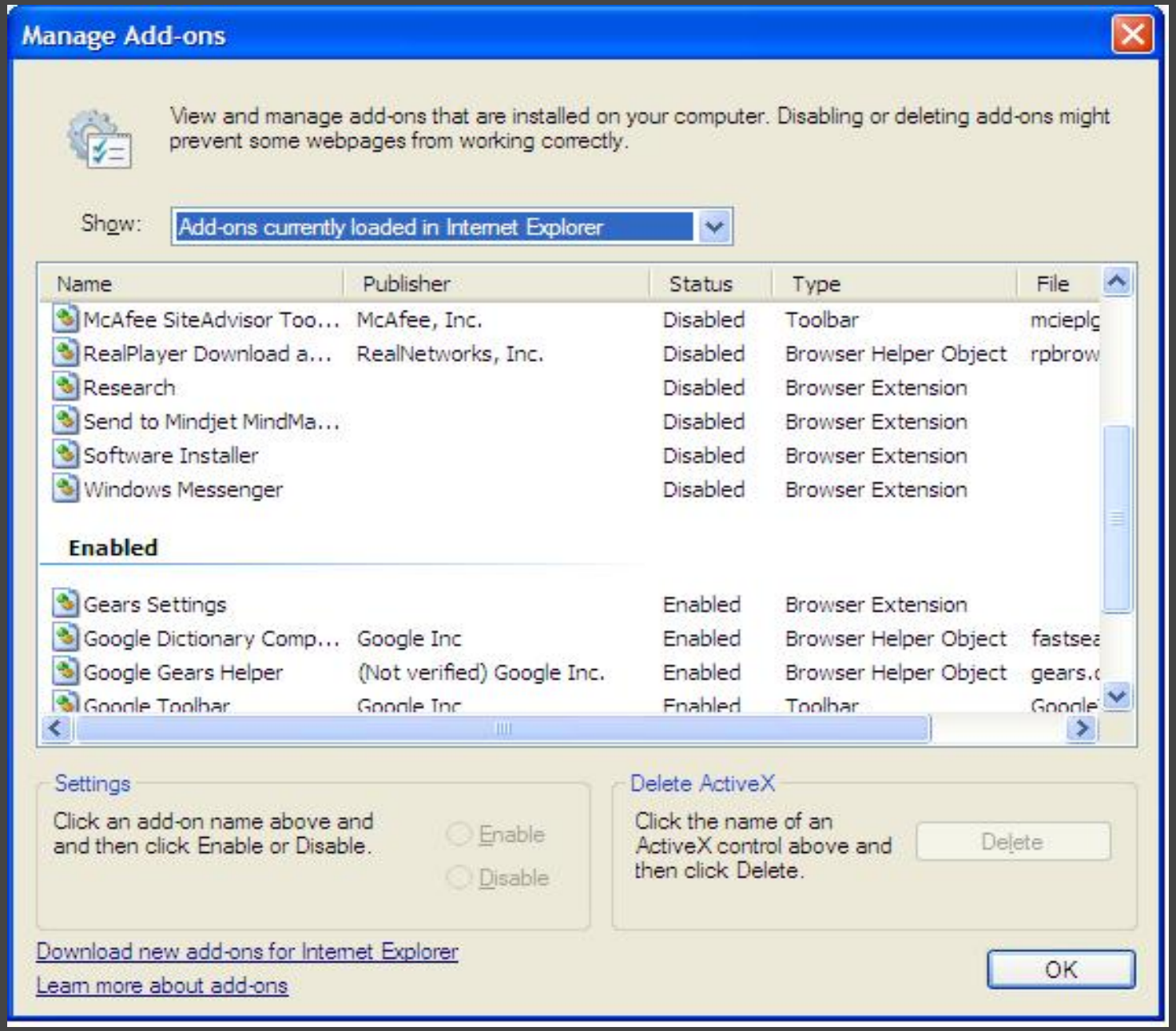
Remove Browser "Barnicles"

Barnicles (my term) for extra programs that get added to browers to make them "better" such as Tool bars.

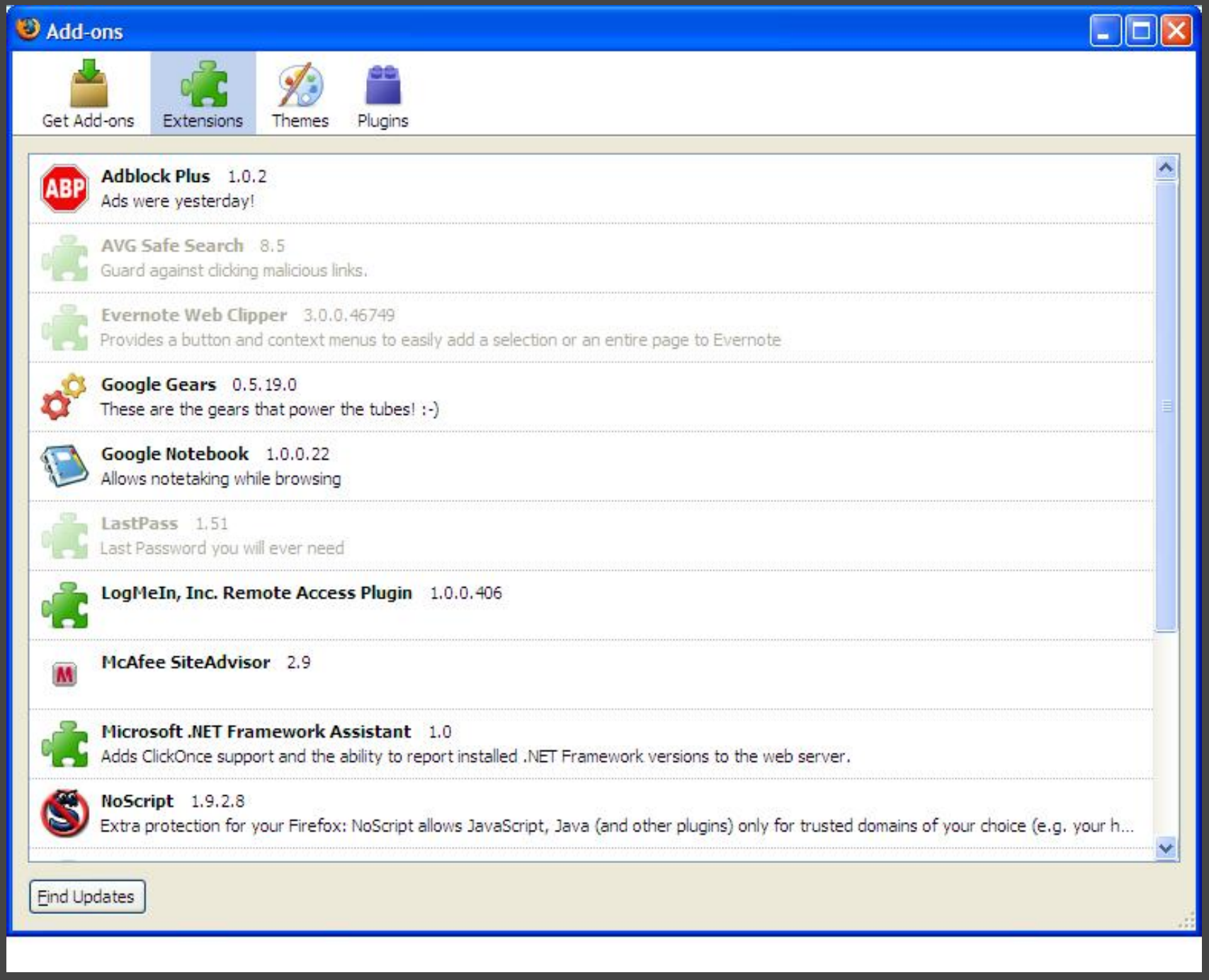
- Internet Explorer calls them: Add-Ons
  - Go to Tools -> Manage Add-ons
  - This opens a window where you can
  - Enable, Disable, or Delete

- Firefox calls them: Add-ons, Extensions, Plug-ins
  - Go to Tools -> Add-ons
  - This opens a window where you can select a tab for
  - Get Add-ons, Extensions, Themes or Plugins ->
  - Enable, Disable, or Delete

Manage Internet Explorer Addons



Manage Firefox Add-ons



Manage Startup Items (there are lost of them)

Upon installation, many applications configure themselves to start automatically when you log on. Applications do this so that they can:

- automatically check for updates
- use system tray icons to interact with users
- add functionality to Windows components such as Windows Explorer.

However, most such applications don't ask permission before inserting themselves in your logon process and almost never provide an interface to let you disable their autostart functionality

Startup Control Panel (free) allows you to disable and re-enable these startup items

Some Choices to Manage Startup Items

**Startup Control Panel (free)
Very popular and has been in use for many years

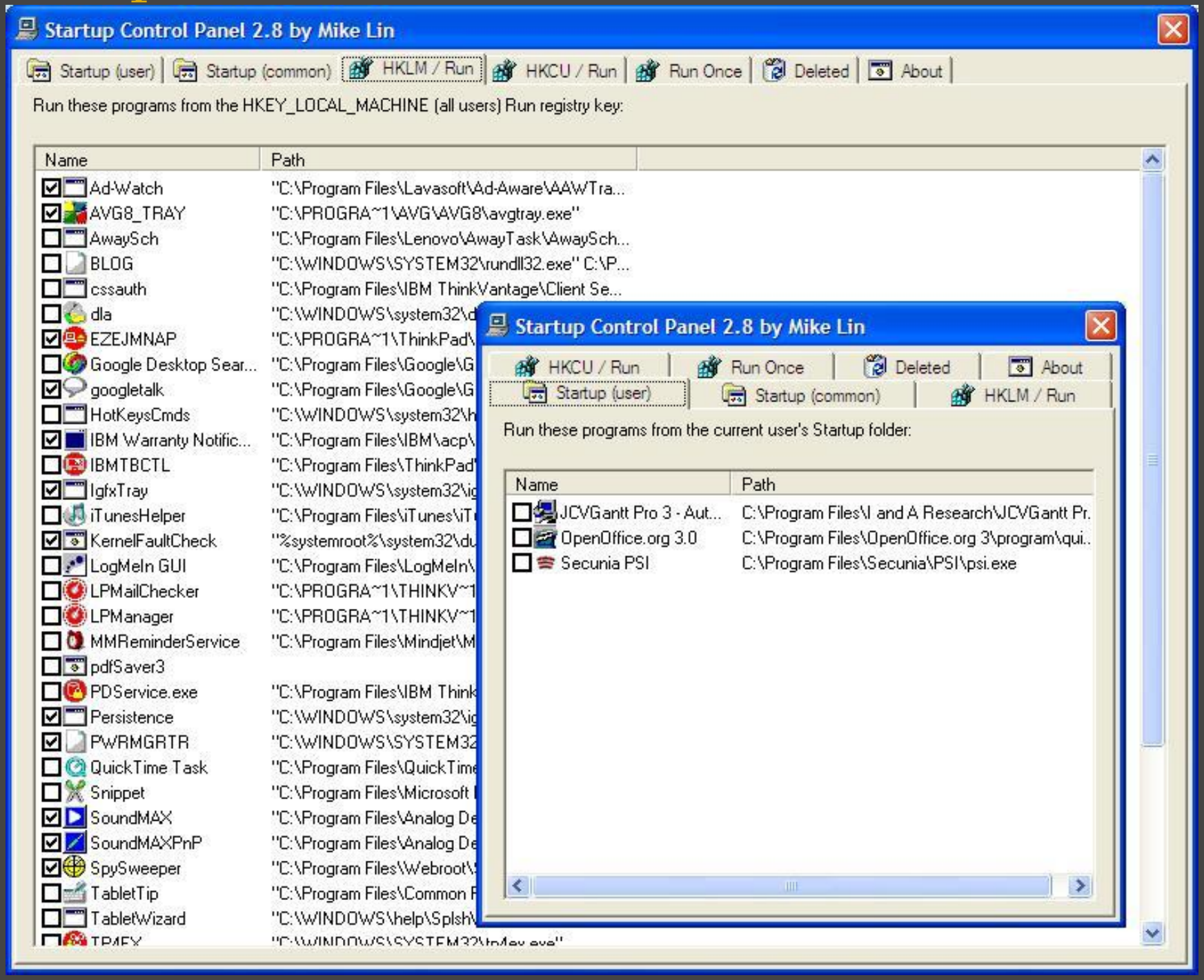
**WinPatrol (free and paid-for versions)
Has many other tools in addition to Startup control

Windows Defender (free download from MS)
This program is recommended by Microsoft
CCleaner (free)
This popular cleaning tool is not recommended for managing startup items (search the web for the complicated reasons)

Autoruns (free)
Very full featured. Not for the feint hearted

** = Recommended

Startup Control Panel

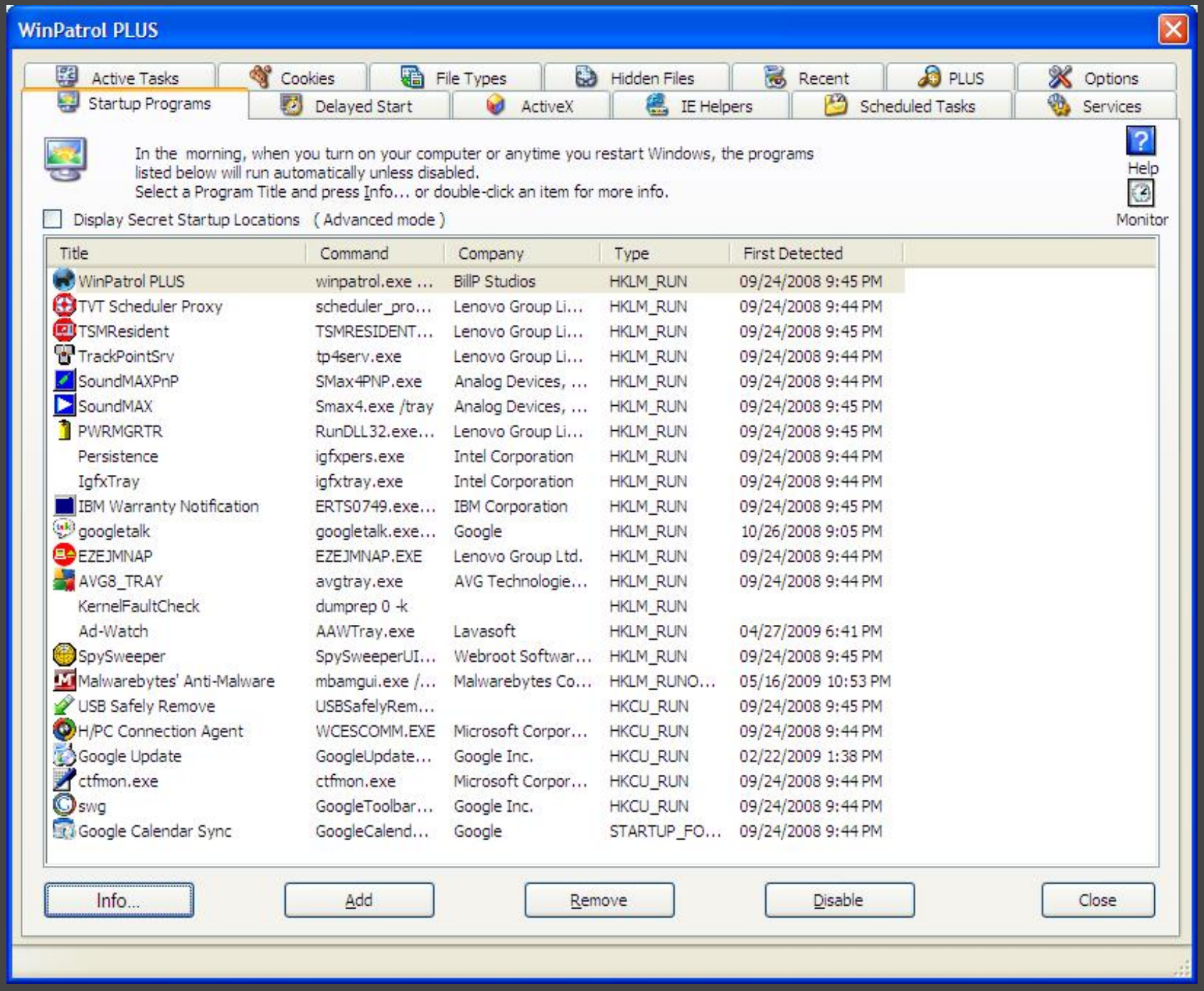


WinPatrol (Free version available)

A more comprehensive and user-friendly tool than Startup Control Panel is **WinPatrol**

- Winpatrol (free) gets very good reviews and provides several tools including the tool to manage startup programs
- WinPatrol PLUS ($29.99) also includes access to an **online database** that answers many of the questions like:
- "What does the file **IGFXSRVC.DLL** do? and do I need it?
- To compare free and PLUS see:
- http://www.winpatrol.com/compare.html?download

WinPatrol


WinPatrol PLUS
Active Tasks
Cookies
File Types
Hidden Files
Recent
PLUS
Options
Startup Programs
Delayed Start
ActiveX
IE Helpers
Scheduled Tasks
Services
In the morning, when you turn on your computer or anytime you restart Windows, the programs listed below will run automatically unless disabled.
Select a Program Title and press Info... or double-click an item for more info.
Help
Monitor
Display Secret Startup Locations (Advanced mode)
Title | Command | Company | Type | First Detected
WinPatrol PLUS | winpatrol.exe ... | BillP Studios | HKLM_RUN | 09/24/2008 9:45 PM
TVT Scheduler Proxy | scheduler_pro... | Lenovo Group Li... | HKLM_RUN | 09/24/2008 9:44 PM
TSMResident | TSMRESIDENT... | Lenovo Group Li... | HKLM_RUN | 09/24/2008 9:45 PM
TrackPointSrv | tp4serv.exe | Lenovo Group Li... | HKLM_RUN | 09/24/2008 9:44 PM
SoundMAXPnP | SMax4PNP.exe | Analog Devices, ... | HKLM_RUN | 09/24/2008 9:44 PM
SoundMAX | Smax4.exe /tray | Analog Devices, ... | HKLM_RUN | 09/24/2008 9:45 PM
PWRMGRTR | RunDLL32.exe... | Lenovo Group Li... | HKLM_RUN | 09/24/2008 9:45 PM
Persistence | igfxpers.exe | Intel Corporation | HKLM_RUN | 09/24/2008 9:44 PM
IgfxTray | igfxtray.exe | Intel Corporation | HKLM_RUN | 09/24/2008 9:44 PM
IBM Warranty Notification | ERTS0749.exe... | IBM Corporation | HKLM_RUN | 09/24/2008 9:45 PM
googletalk | googletalk.exe... | Google | HKLM_RUN | 10/26/2008 9:05 PM
EZEJMNAP | EZEJMNAP.EXE | Lenovo Group Ltd. | HKLM_RUN | 09/24/2008 9:44 PM
AVG8_TRAY | avgtray.exe | AVG Technologie... | HKLM_RUN | 09/24/2008 9:44 PM
KernelFaultCheck | dumprep 0 -k | | HKLM_RUN |
Ad-Watch | AAWTray.exe | Lavasoft | HKLM_RUN | 04/27/2009 6:41 PM
SpySweeper | SpySweeperUI... | Webroot Softwar... | HKLM_RUN | 09/24/2008 9:45 PM
Malwarebytes' Anti-Malware | mbamgui.exe /... | Malwarebytes Co... | HKLM_RUNO... | 05/16/2009 10:53 PM
USB Safely Remove | USBSafelyRem... | | HKCU_RUN | 09/24/2008 9:45 PM
H/PC Connection Agent | WCESCOMM.EXE | Microsoft Corpor... | HKCU_RUN | 09/24/2008 9:44 PM
Google Update | GoogleUpdate... | Google Inc. | HKCU_RUN | 02/22/2009 1:38 PM
ctfmon.exe | ctfmon.exe | Microsoft Corpor... | HKCU_RUN | 09/24/2008 9:44 PM
swg | GoogleToolbar... | Google Inc. | HKCU_RUN | 09/24/2008 9:44 PM
Google Calendar Sync | GoogleCalend... | Google | STARTUP_FO... | 09/24/2008 9:44 PM
Info...
Add
Remove
Disable
Close

Sources of Information on file purpose

Google.com

ProcessLibrary.com
dllinformation.com

LiUtilities.com

Greatis.com
BleepingComputer.com

Note of Caution

- If you disable a startup item using the previous tools, some programs will attempt to re-insert themselves into the startup list whenever you next decide to run the program by clicking its icon. (eg. AOL)

- There is a danger of "complications" if you uninstall a program that has had it entry in a startup location disabled or deleted.
  This opinion is Web "gossip" ie not exactly an authoritative source.

- If you find files with random /unverifiable file names, it's an *indication* that your machine is infected with malware

Clean and Defragment the Hard Disk Drive

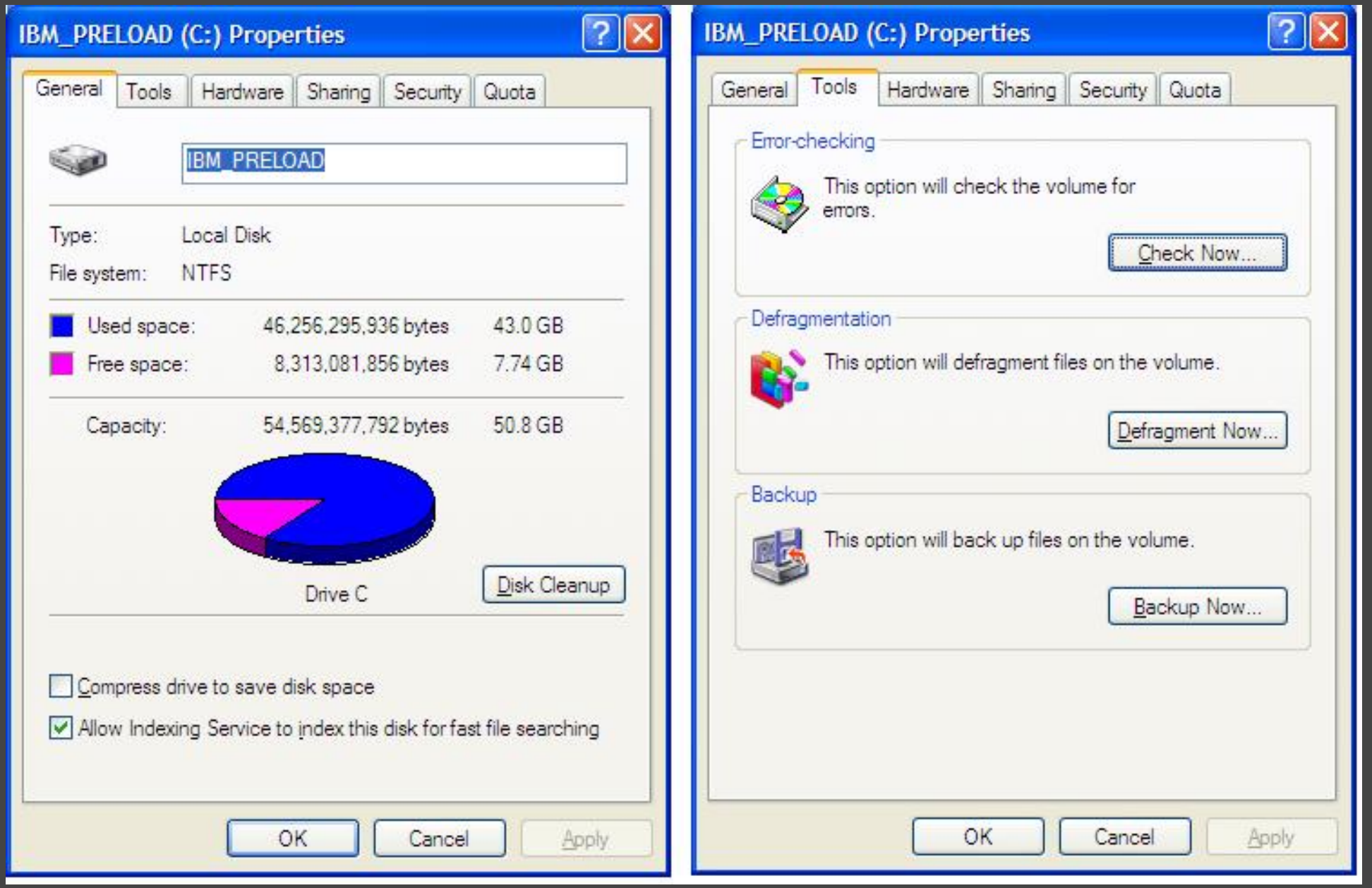
There is an on-going debate over the efficacy of "defragging" the hard drive. If you want to do this:

Open My Computer -> Right-click C: drive -> select Properties

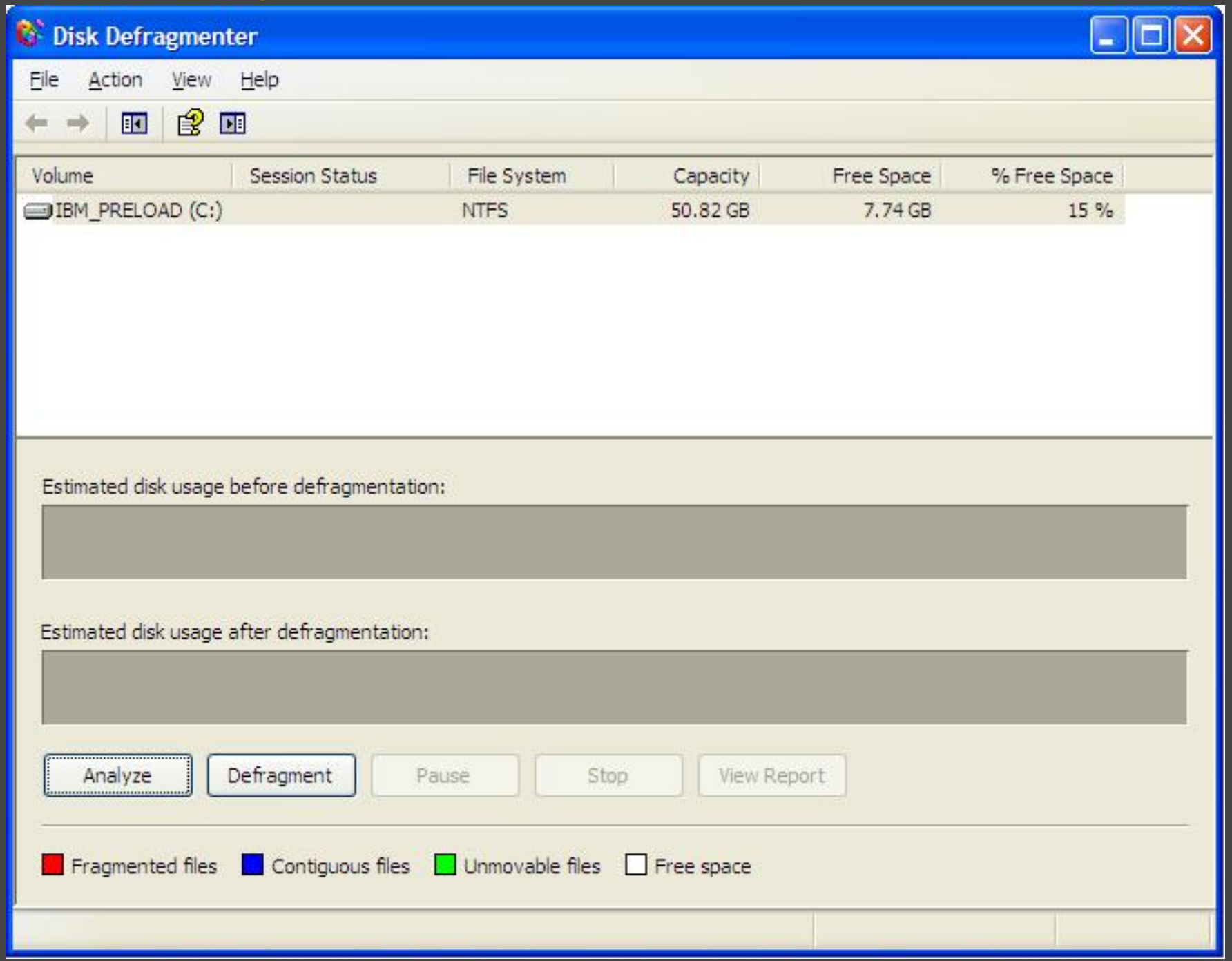
In the window that appears,

- select the Tools tab
- select Defragment now
- In the window that appears select the c: drive
- click Defragment
- retire for the evening
- in the morning, see if you notice any difference ;-)

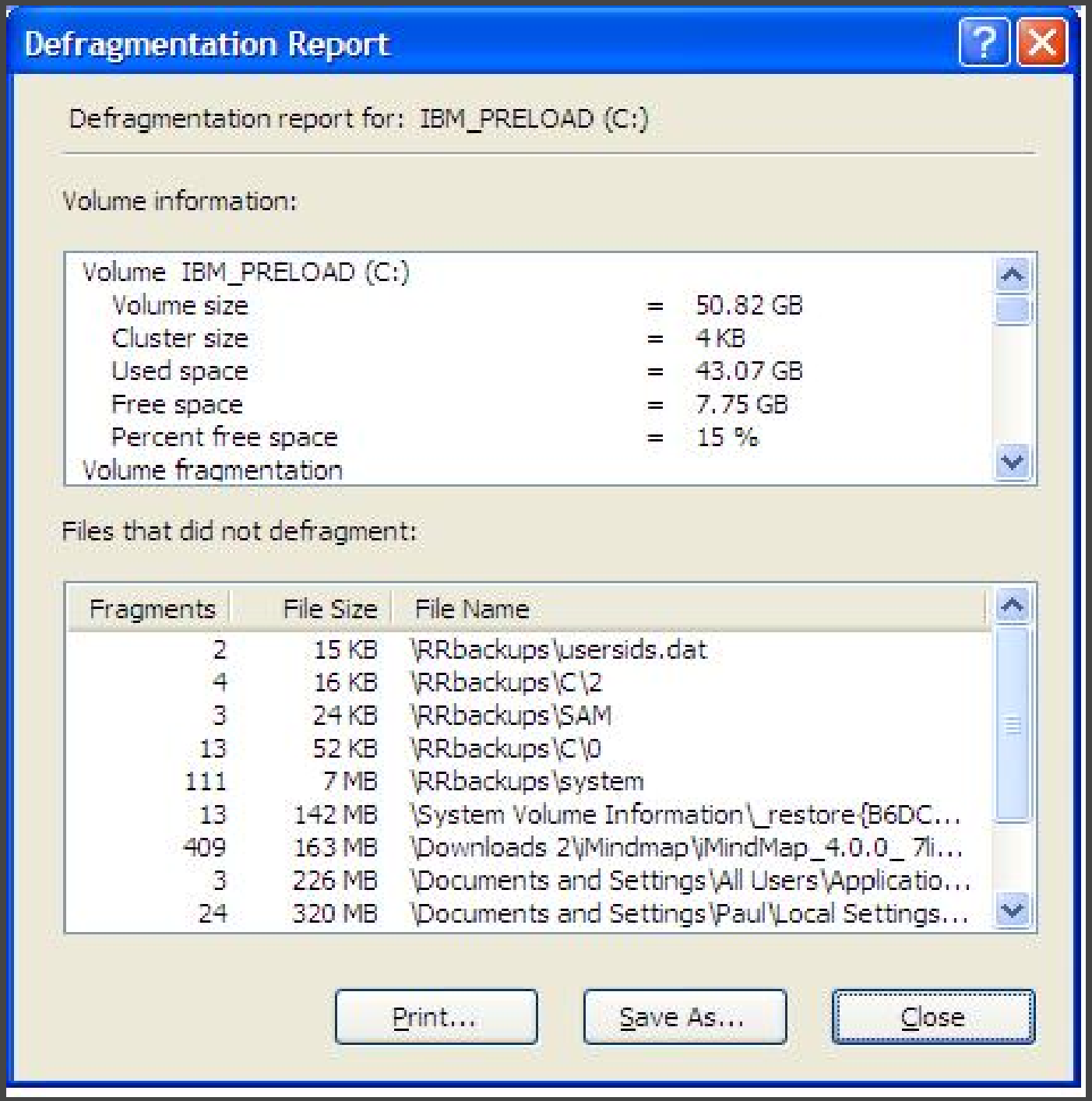
Defragment the C: drive



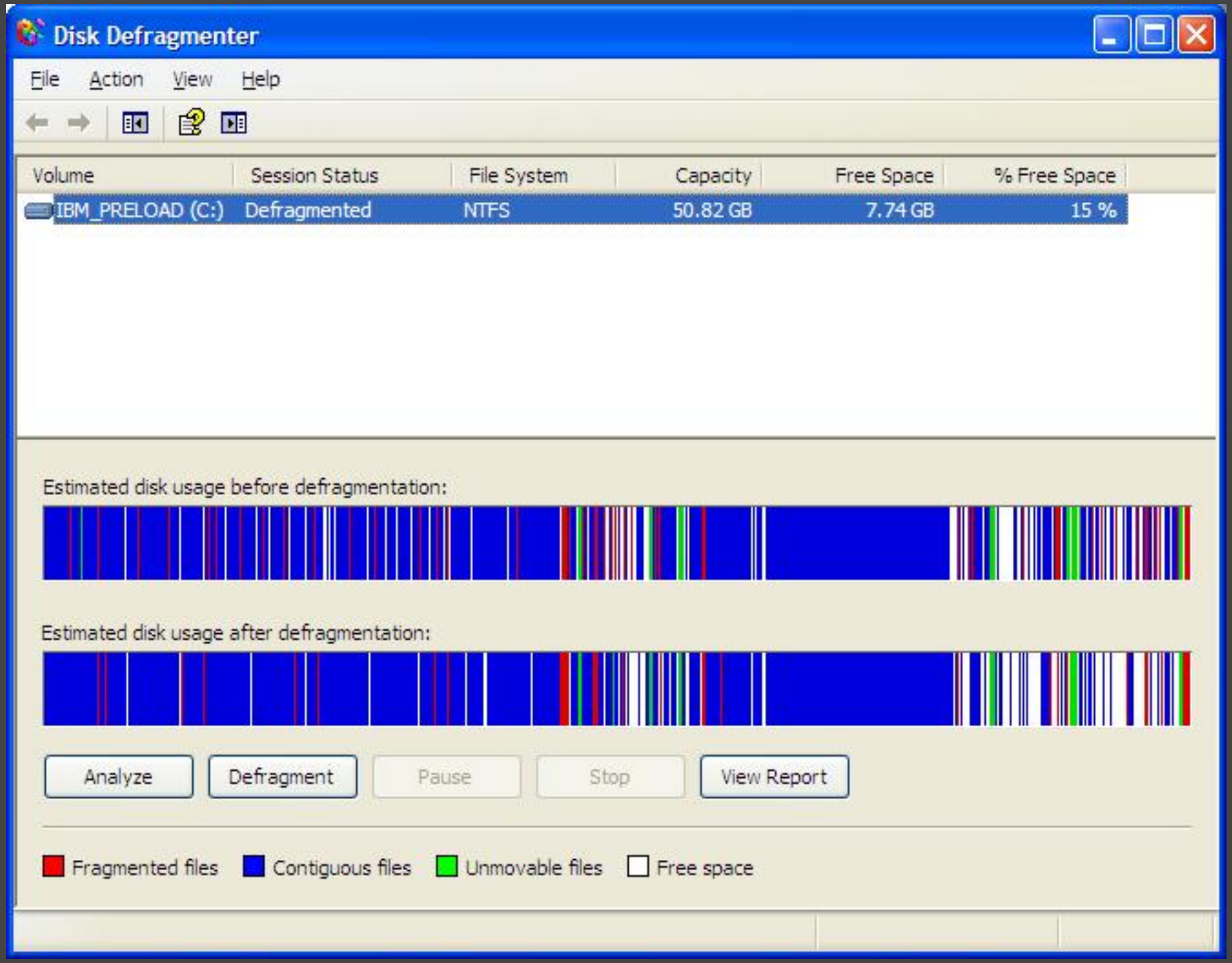
Disk Defragmenter



Defragmentation Report



Disk Defragmenter - after defrag operation

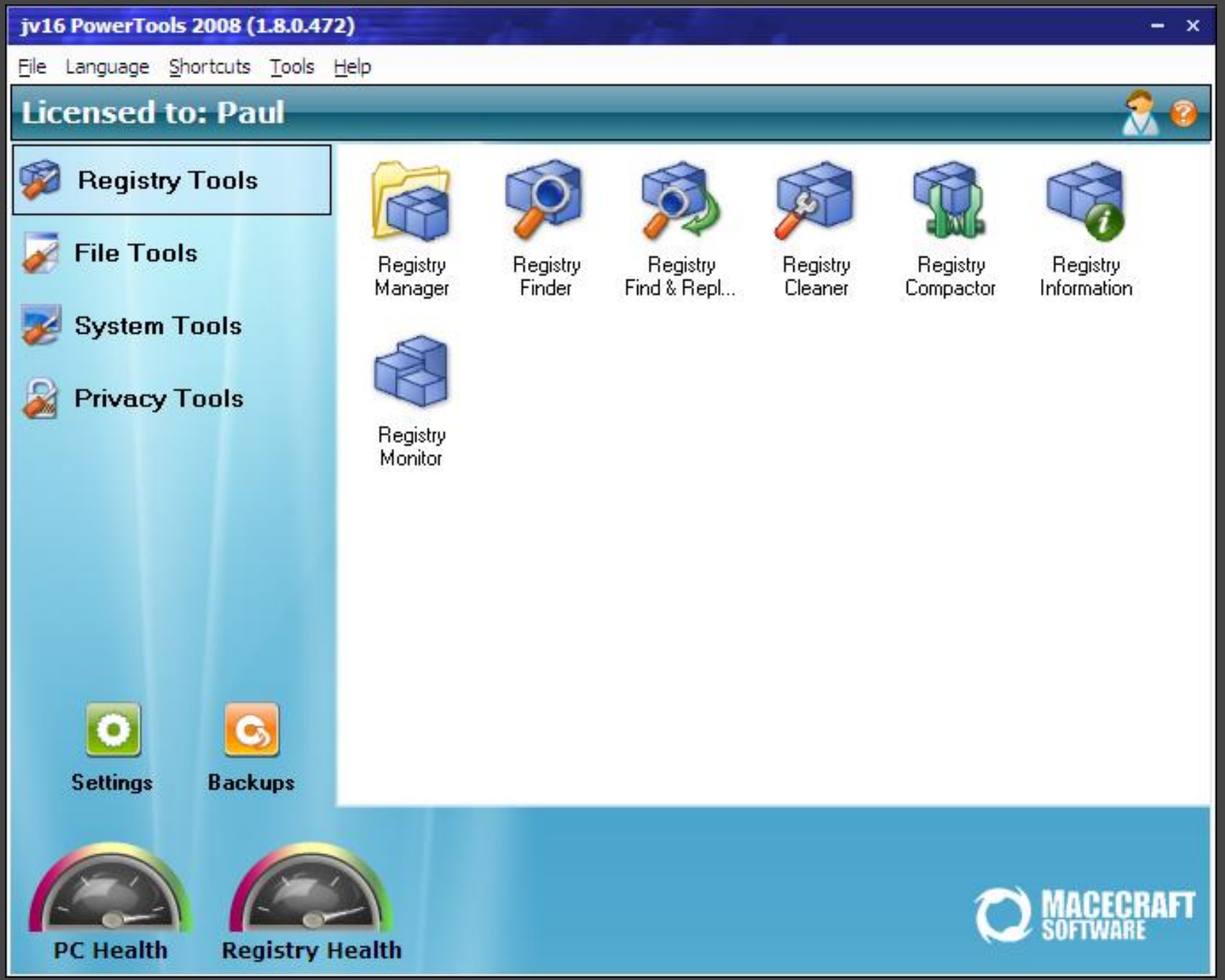


Meddling with the Registry

The usual advice is "Meddle with the registry at you own risk"
If you want to do this:

- Use the registry section of CCleaner and be sure to use the backup facility built into CCleaner
- Numerous programs are available to clean and optimise the registry. Seek advice elswhere ;-)
- Try jv16 Power Tools. This is a full-featured application.

j16 Power Tools by Macecraft



References

Microsoft References

For more information about how to modify the startup programs for Windows XP Professional, click the following article number to view the article in the Microsoft Knowledge Base:

314488 (http://support.microsoft.com/kb/314488/) How to modify the Group Policy for programs that run at user logon on a computer that is running Windows XP

For more information about other startup issues with Windows XP, click the following article numbers to view the articles in the Microsoft Knowledge Base:

147381 (http://support.microsoft.com/kb/147381/) How to use system policies on a stand-alone computer

179365 (http://support.microsoft.com/kb/179365/) Run, RunOnce, RunServices, RunServicesOnce and Startup