

The Complete Handbook of  
**jv16 PowerTools 2005**

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The product versions used with the writing of this book are pre-release versions, therefore the user interface and the names of the features might be slightly different with the version of the `ju16` PowerTools you are using.

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## Introduction

The jv16 PowerTools 2005 is an amazing set of tools to help you fix, repair, optimize and tune up your computer easier than ever. Does your computer seem to get slower day by day? Are you experiencing any computer problems such as crashes? The jv16 PowerTools 2005 is the solution.

With jv16 PowerTools 2005, you can diagnose, monitor and tune up your computer, and it's easier than you would ever believe. The program offers a range of advanced tools that provide a safe yet powerful way of getting "under the hood" of your computer.

### Minimum system requirements

- \* Any computer running Windows 95, 98, 98 SE, ME, NT, 2000 or XP
- \* Mouse or keyboard

### Recommended system

- \* Any computer running Windows NT, 2000 or XP
- \* Mouse and keyboard
- \* Internet connection (to download the safety updates)

(Support for Windows 95, 98, 98 SE and ME is slightly limited and not all features are present if the product is used under any of these operating systems.)

### No-nonsense

jv16 PowerTools 2005 isn't bloated with graphics, sound effects or any bells and whistles. If you are used to these you might consider the product's user interface as dull or boring, at first. However, after you have got used to it, you wouldn't change it for anything.

Macecraft Software's goal has always been to create software that does what it is meant to do and what's most important - the way you want.

The basic operation requires only a normal home computer running any Windows operating system. Some features demand a lot of processing power, such as the duplicate file finder and the registry monitor, but even they have been optimized to work as fast as possible even on a slower computer.

### User friendliness

jv16 PowerTools 2005 is a true example of a very user friendly computer application. It allows you to use the program in your own language and not just English, you can control the product with only your mouse and/or with your keyboard, it's up to you. It also contains a full, printable documentation.

The user friendliness isn't something that only affects the user interface. The product doesn't integrate itself to your system without your permission, it doesn't connect to the Internet without asking you. It doesn't modify your system's configuration or your files in any ways.

That's something I would truly call user friendliness!

## General usage

On the right hands, jv16 PowerTools 2005 is a very safe yet powerful tool. Still, even the most novice users can take benefit from its power if they just remember a few general rules.

The most important thing to bear in mind is that you are the one who always makes the final decision, that's why it's very important that you don't do anything with things you are not familiar with. Like in jv16 PowerTools 2005, if there's some items in the registry manager or in the registry cleaner that you don't know, it's always the safest and the best option to leave those items alone.

The jv16 PowerTools only give you its opinion based on its analysis, you always make the final call, you will always have to know what you are doing.

If you are using a Windows NT based operating system, such as Windows 2000, XP or NT4, you should be logged in as the computer's administrator when using jv16 PowerTools 2005. The product will not operate well without full system rights, without them the Registry Cleaner for example cannot analyze all parts of the registry, the File Finder cannot search from all the directories and so on.

The *Open in RegEdit* features will not work if the product doesn't have full user rights to the following registry key:

HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Applets\Regedit

Also, the feature doesn't work in any Windows 9x systems, including Windows ME.

## Important notes about the user interface

The jv16 PowerTools 2005 doesn't list all of its features as toolbar buttons, only the most common features are listed that way. This is simply because the number of the features is too vast to display as buttons on the screen. Instead, right click the items on the product's lists to see the additional features relating to the item or the items selected.

Also, not all features are available at the same time. Normal buttons are disabled when they cannot be used, but right-click menu items are not shown at all. Most of the right-click menu features require at least one item to be selected from the list, some require exactly one item, some work only if two or more items are selected, and so on.

If you only spend 5 minutes to browse through all the product's windows you will only see a fraction of all the feature available.

Another point to remember is that the operational buttons, such as the *Start* button which is found on many tools, will be disabled as long as you haven't entered all the required information. For example, you can click the *Start* button of the Registry Finder only after you have written one or more search words, and so on.

## Introduction to the registry

This chapter gives some basic information about the Windows' registry, if you are already familiar with the subject you may skip this chapter.

Every Windows based system has a so called registry. It's a place where the Windows operating system and third party software applications can store information. Usually software, including the operating system, store their settings to the registry, this makes the registry a very vital part of your system. Basically, the registry is a database containing any data the programs you use want to store there.

### Structure of the registry

The registry is organized in a hierarchical tree structure (see image 1), and is comprised of subtrees and their keys, hives, and value entries. Here's an example of what a single registry key looks like: `HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion`

The first part of it ("HKEY\_LOCAL\_MACHINE") is the root key, also known as a (root) hive. It's just like the drive letter in file system. Then comes the registry key "Software\Microsoft\Windows\CurrentVersion", it's like the directory path in a file system. Then there's also registry entries which contain all the actual data. These are a like files in file system, each registry entry has a name (known as the "entry" or "value name") and contents ("value" or "data").

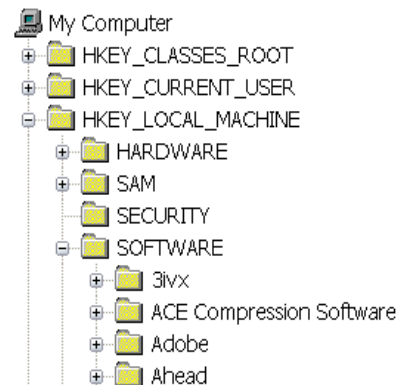


Image 1. The structure of the registry

### Accessing the registry

The Windows registry cannot be accessed directly but only through two application layers. First, you will need an application which is designed to access the registry, for example the jv16 PowerTools 2005 or the Windows RegEdit. They can't access the registry directly either, but they use Windows core functions to access the registry, in one way, they are saying to the Windows "Could you pass me that information, please" and then system replies if it can be passed or not.

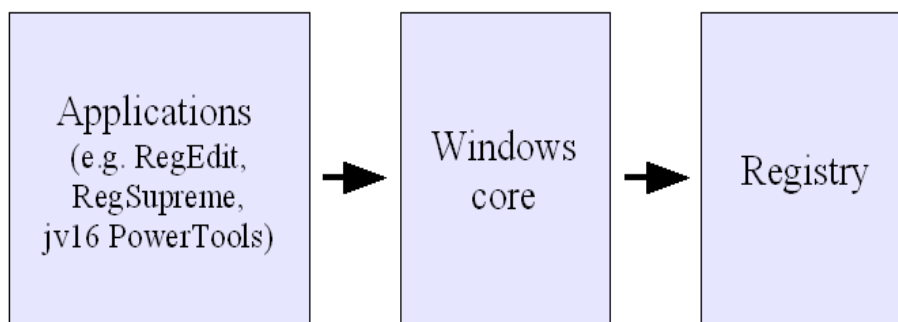


Image 2. The layered structure of accessing the registry

**Warning:** The registry is a very vital part of your system, always let the jv16 PowerTools 2005 to backup the items before you remove or modify them.

## Setting up the jv16 PowerTools 2005

If you don't consider yourself as an advanced user, you may skip this entire chapter since the product's default settings are designed for you.

To access the product's settings start the jv16 PowerTools and click File > *Program Settings* or hit Ctrl+S in the main window or right click the white area of the main window and select *Program settings*.

## Interface

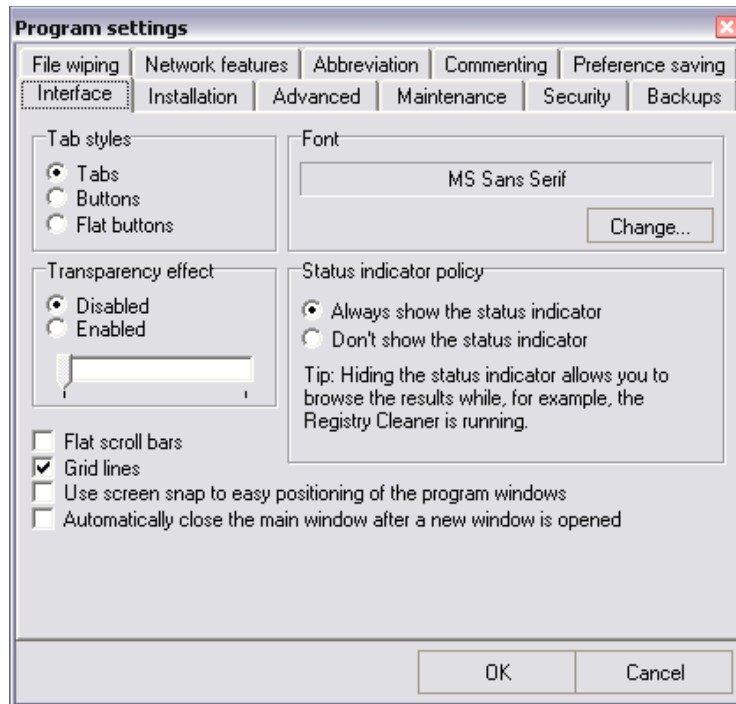
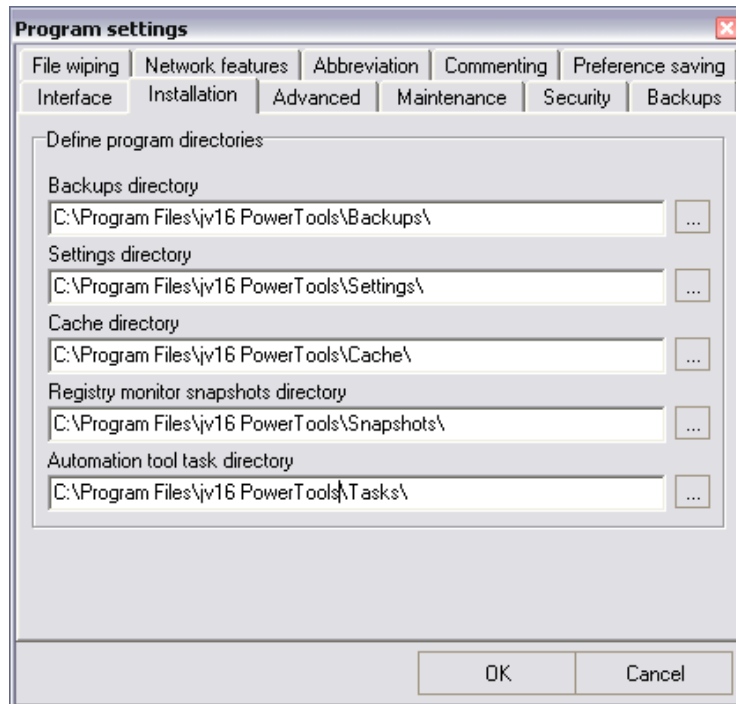


Image 3. The Interface section defines how the jv16 PowerTools looks like

The interface section allows you to edit the way jv16 PowerTools 2005 looks like.

- *Tab Styles* define the way the tabs should look like. The “Interface”, “Installation”, “Advanced” etc are called tabs, please see the image above.
- *Transparency effect* setting determines whether all the jv16 PowerTools' windows should be transparent. This feature is only available with Windows 2000 and XP. Note that the actual performance of this feature is based on the performance of your video card and its driver.
- *Font* section allows you to change the font used in the jv16 PowerTools. Changing the font is not recommended unless your system character set doesn't work with the default font.
- *Status indicator policy* determines whether you wish to see those “Please wait, working...” information boxes. Enabling them makes it easier to see when the program is working but disabling the status indicators allows you to browse the lists even while the program is working.
- *Flat scroll bars* option makes all the scroll bars of the jv16 PowerTools flat (a bit like in Office2000 or XP).
- *Grid lines* option adds small lines between all the items in a list, this makes reading the lists easier.
- *Use screen snap to allow easy positioning of the program windows* setting makes it easier to move the program windows close to the edges of your screen.
- *Automatically close the main window after a new window is opened* determines whether the main window should be closed after you have started a tool, for example the Registry Cleaner.

## Installation



*Image 4. Installation section allows you to redefine the program directories*

The Installation section contains information on what directories the jv16 PowerTools should use. Please make sure there are sufficient user rights to these directories if the directories are located on a NTFS partition.

Note that if you modify the directory paths you must manually copy the directories' contents to the new location, if you wish to keep the directories' contents intact.

You cannot configure where the jv16 PowerTools should place its temporary data, the default system temp directory is always used. By default it's C:\Temp\jv16PT\_2005\. If it's not possible to create the jv16PT\_2005 subdirectory, the temp directory's root is used (i.e. C:\Temp by default).

## Advanced Section

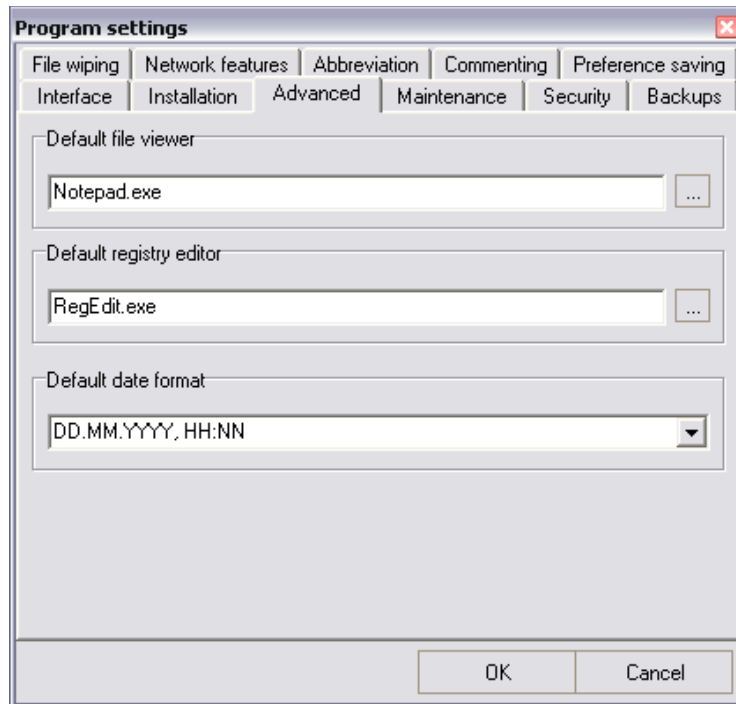


Image 5. Advanced section allows you to define what date format you wish to use, for example

The Advanced Section contains the following settings.

- *Default file viewer* is used to open the backups and in the File Tool's *More Functions > View* function. You may change the default file viewer but note that not all file editors can be used. The editor must support opening files with the following command line: `application.exe "file_to_be_opened.txt"`, for example `notepad.exe "c:\readme.txt"`.
- *Default registry editor* is used in many features of the jv16 PowerTools, such as in the Registry Cleaner's right click menu (*Open in RegEdit*). Note that not all registry editors can be used as the default registry editor. The registry editor must use the same way to open the desired registry key as the Windows Registry Editor. This can be tested very easily, simply change the default registry editor setting to the desired third party registry editor and test if e.g. the Registry Cleaner's *Open in RegEdit* works.
- *Default date format* determines how you wish the dates used in the jv16 PowerTools to be formatted. The default date format is "DD.MM.YYYY, HH:NN". Note that the MM means months, and NN minutes. The list contains some most common date formats but you can also write in your own date format.

## Maintenance

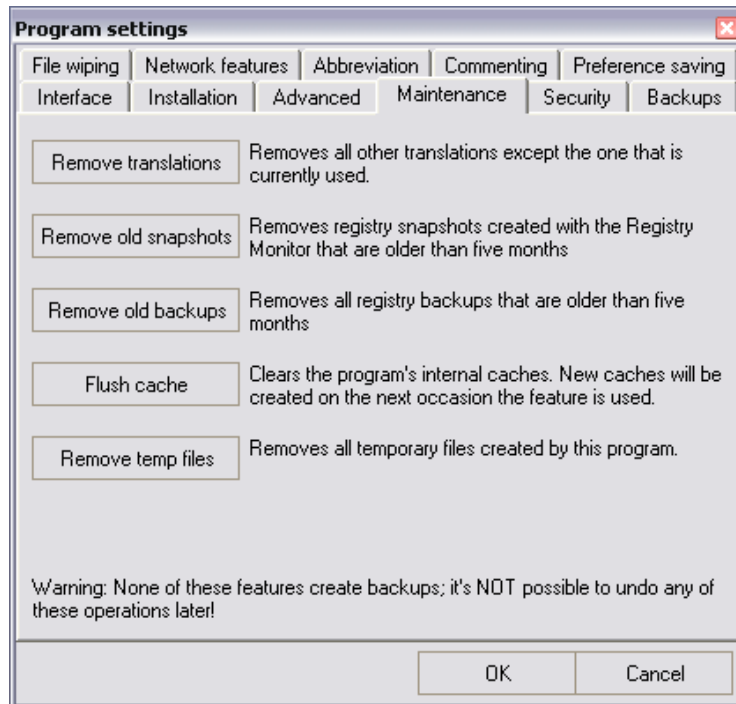


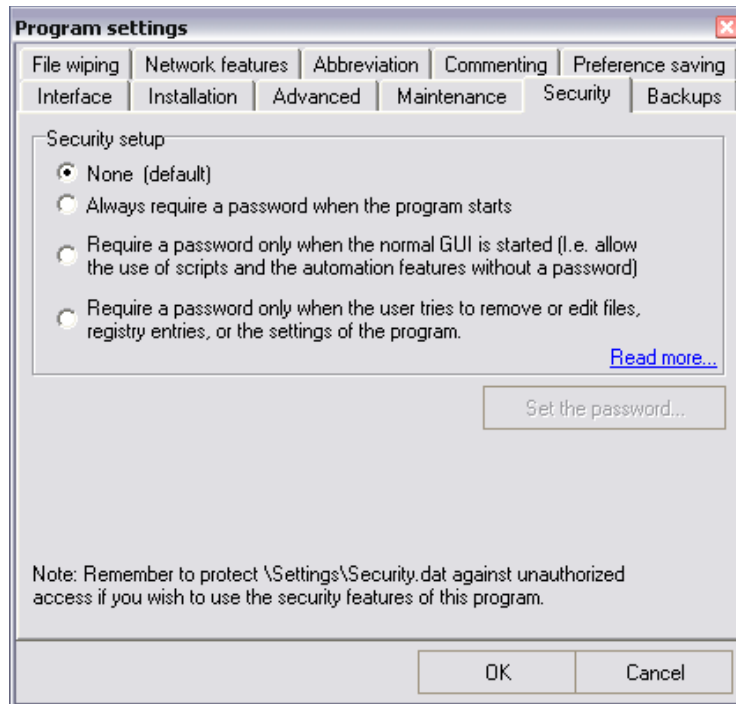
Image 6. Maintenance section contains tools which helps you to maintain the jv16 PowerTools itself

The Maintenance section allows you to perform the following maintenance tasks.

- *Remove translations* removes all other jv16 PowerTools' translation files than except the one that is currently being used. The translation files are stored at \jv16 PowerTools\Languages\.
- *Remove old snapshots* removes all Registry Monitor snapshots which are older than 5 months.
- *Remove old backups* removes all backups that are older than 5 months.
- *Flush cache* allows you to manually clear all of jv16 PowerTools' internal caches, such as the filename cache. You must restart the product after this procedure.
- *Remove temp files* removes all temporary files created by jv16 PowerTools 2005.

Warning: None of the maintenance features take backups beforehand, therefore you cannot undo the changes in the future. Don't use these features unless you know what you are doing.

## Security



*Image 7. Security section helps you to control who has access to the product's powerful features*

The Security section allows you to password protect and restrict the usage of the product. The following security options are available.

- *None* - all users have unlimited access to the product.
- *Always demand a password when the program starts.*
- *Demand a password only when the normal GUI is started.* This option allows the use of automation tasks and the privacy protector without the password.
- *Demand a password only when the user tries to remove or edit files, registry entries or the settings of the program.*

Please see the Security Notes chapter if you use these features.

## Backups

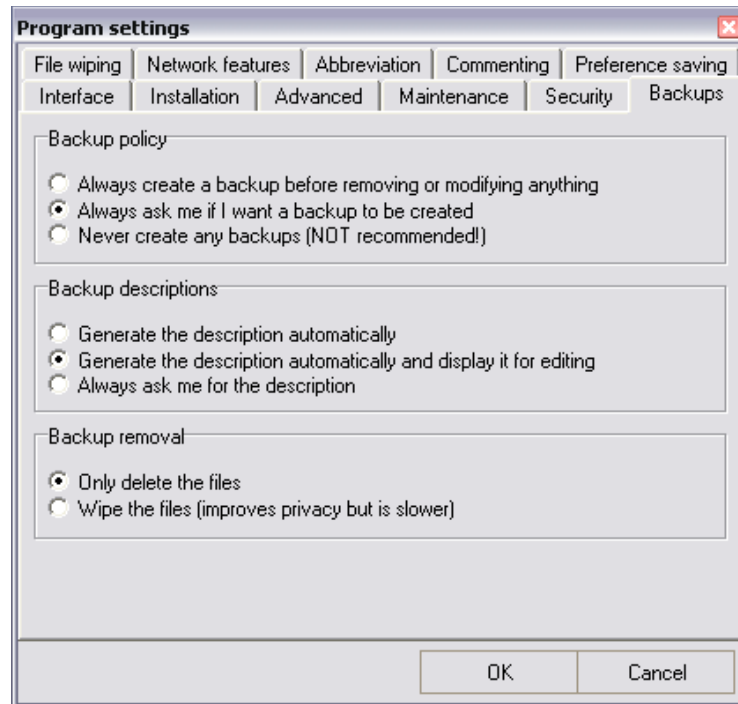


Image 8. Backups section allows you to define the product's backup policy with ease

The Backups section defines the policy how the backup creation should be handled.

The *backup policy* section defines the backup creation policy. The following options are available.

- *Always create a backup before removing or modifying anything* tells the program to always and without any confirmation to create a backup of everything you remove or modify.
- *Always ask me whether I want a backup to be created.*
- *Never create any backups.* Using this option is not recommended.

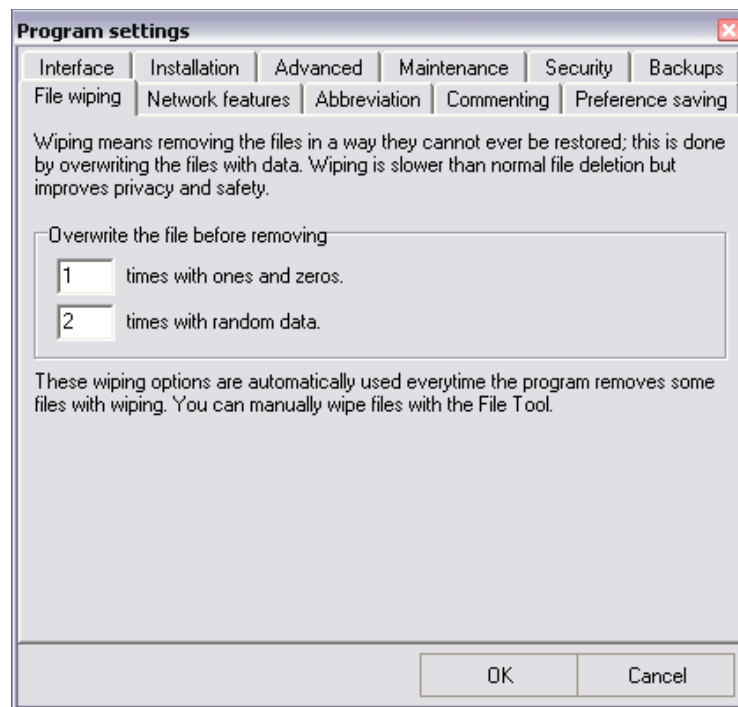
The *backup descriptions* section defines how the description of the backup should be created. The following options are available.

- *Generate the description automatically.* The way the description is generated varies between different tools but usually the description is generated from the data of the first selected items.
- *Generate the description automatically and display for editing* option allows you to verify the automatically generated description since they are not always very clear and informative.
- *Always ask me for the description* allows you to write the description for the backup from scratch.

The *backup removal* option defines whether you want the backups to be removed by normal file deletion or by safe file wiping procedure.

Wiping a file means that the file's contents cannot be reconstructed or recovered in any ways, this is achieved by writing the file over many times with different data. The exact way how the data is removed is defined in the File Wiping section of the Settings tool.

## File Wiping



*Image 9. You can adjust the strength of the file wiping to meet your requirements*

The File wiping section allows you to define how many times the data should be written over. The more overwrites the safer. However, the downside is that each overwrite takes some time, a lot of time with large files.

## Network Features

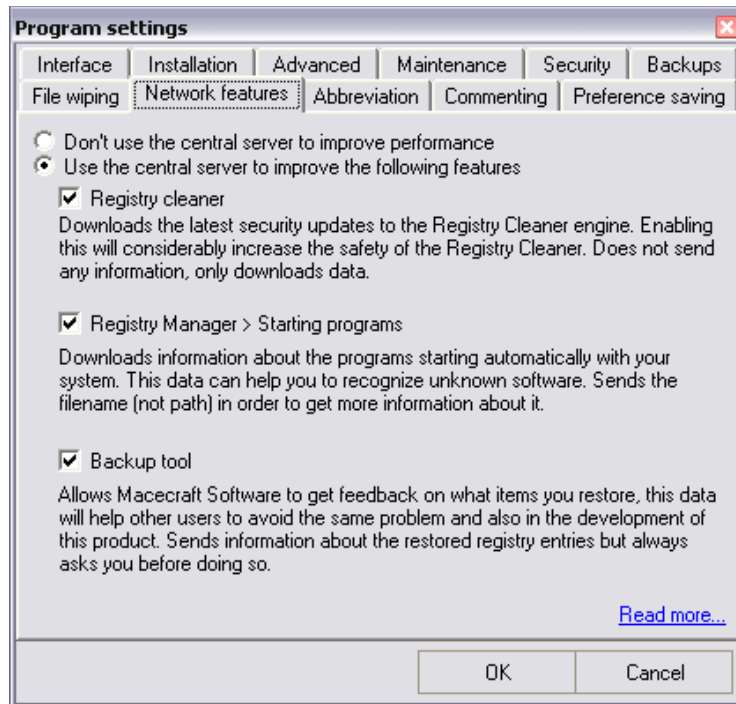


Image 10. The way the product access the Internet is defined in the Network features section

The Network features section is used to define jv16 PowerTools' Internet usage policy. The product supports the following network dependent features.

- *Registry cleaner* feature downloads the latest security updates to the Registry Cleaner. This is done without sending any information to Macecraft Software. The feature always downloads the latest update and applies it if it's not already in use. The procedure is very similar to the automatic updates of the anti virus software.
- *Registry Manager > Starting programs* downloads information about the applications automatically starting with your system. The feature must send the filename in order to get its information, the file path is not sent.
- *Backup Tool* feature allows you to make the jv16 PowerTools even better. This works by sending information about the registry backups you decide to restore. Notice that even if you enable this feature, it will always ask for your permission before sending any data. The feature will not send any files, only certain information about the registry entries you have chose to undelete. This information is used to generate safety updates to the Registry Cleaner. If you have any privacy concerns, there is no need to enable this feature.

The interactive features, if you wish to use them, send out the following information to Macecraft Software.

<b>Data</b>	<b>Usage</b>
Operating system version number. Example: "5.1.0.2600"	<p>The sent data can affect only a certain operating system, for example not all safety updates are necessary the same for all operating system version.</p> <p>The information is also used for statistical purposes, for example, should the support of Windows 95 be dropped or is the product still widely used with it?</p>
Is the user using the trial version or has he or she bought a license. Example: "0", meaning that the user is using the free trial version.	<p>If there are too many update requests at the same time, our servers can ignore the requests from users who are using the trial version and only serve our customers who are purchased a license.</p> <p>The information is also used for statistical purposes.</p>
Name of the product and its version. Example: "jv16pt2005, 1.5.0.264".	To ensure the proper response format and data.

Due to the used http protocol, also the IP address is received by our servers. In theory, IP addresses could be used to identify users, at least in some cases. However, we do not store or even analyze the IP addresses in any ways. Therefore, all the data that is sent to Macecraft Software is 100% anonymous.

The data is sent without encryption, just like regular e-mail is, but the data is digitally signed to ensure the coherence of the data when it reaches our end.

If you have any concerns about your privacy, simply, don't use the Internet features, the product is fully functional without them. If the *Don't use the central server to improve performance* option is checked, the jv16 PowerTools does not send any information whatsoever to Macecraft Software. You can even verify this by using a firewall.

Notice that you can still use the main window's *Check for updates* feature (under the File menu) even if you have disabled the network features, in that case it will first ask for your permission to connect the Internet. The *Check for updates* feature downloads the latest security updates to the Registry Cleaner.

## Abbreviation

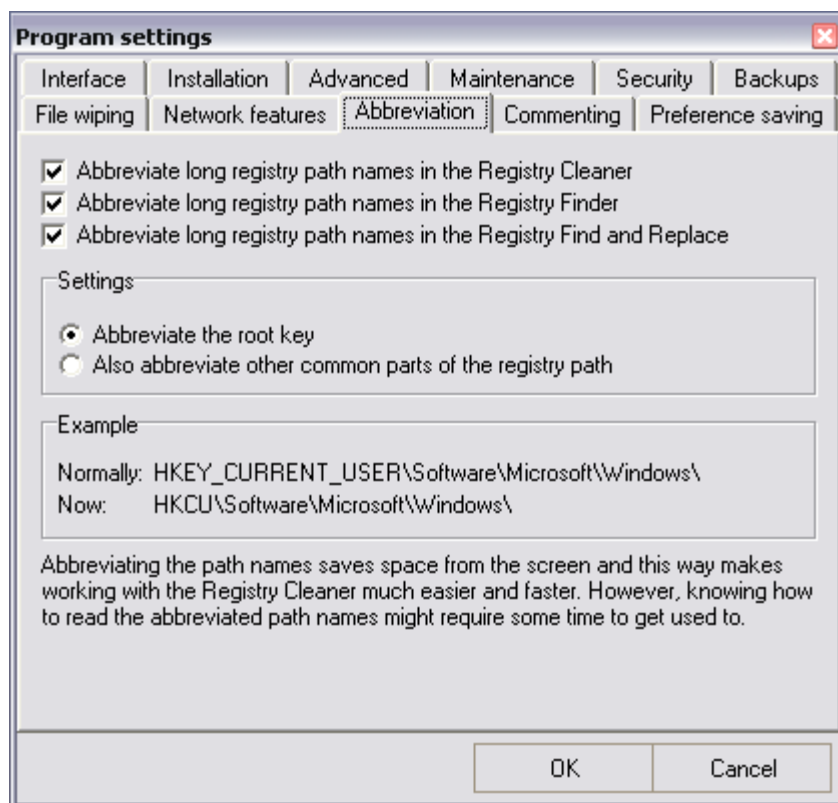


Image 11. Registry path abbreviation settings.

To abbreviate means to make shorter. Registry paths, such as “HKEY\_CURRENT\_USERS\Software\Microsoft\Windows\”, can be quite long, as you can see. This is why jv16 PowerTools 2005 can abbreviate them for you.

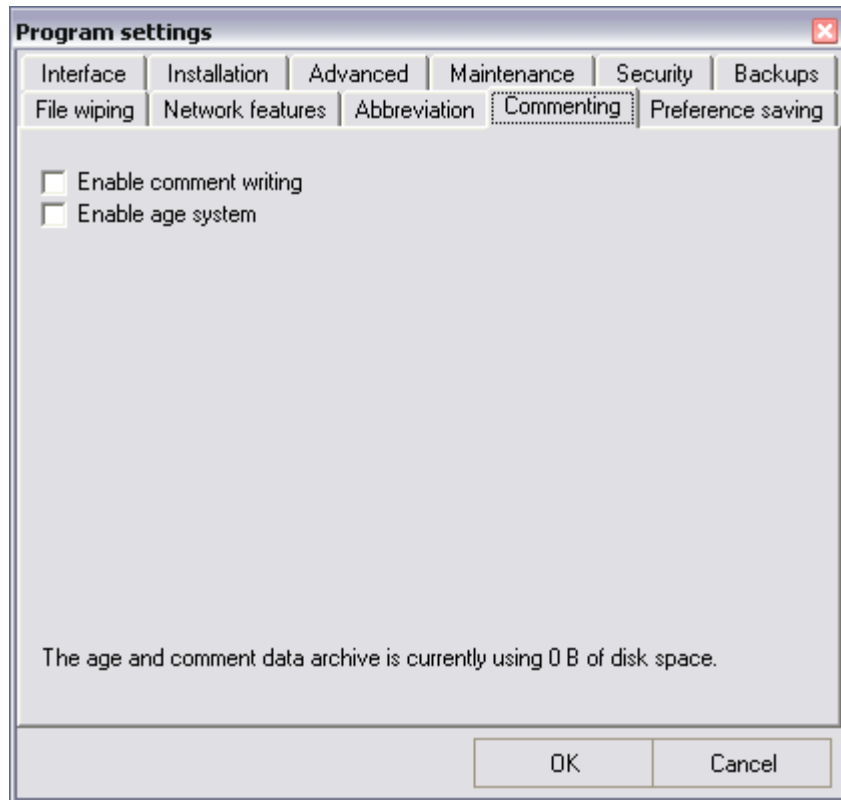
The following options are available.

- *Abbreviate long registry path names in the Registry Cleaner*
- *Abbreviate long registry path names in the Registry Finder*
- *Abbreviate long registry path names in the Registry Find and Replace*

The product supports two methods of abbreviation.

- *Abbreviate the root key* modifies only the root key, such as “HKEY\_CURRENT\_USER”, which in short form is “HKCU”.
- *Also abbreviate other common parts of the registry path* can modify all parts of the registry path. It can dramatically reduce the space needed to show the registry path information but inexperienced users might find the abbreviated registry paths difficult to read.

## Commenting



*Image 12. Age and Comment system settings*

The comment system allows you to write comments on the items listed in the Software Manager and the Registry Manager.

The age system allows you to mark items as “old” or “new”, this feature helps you to quickly detect which items were added since you last used the tool.

Both the comment writing and age system works with the right-click menu.

## Preference Saving

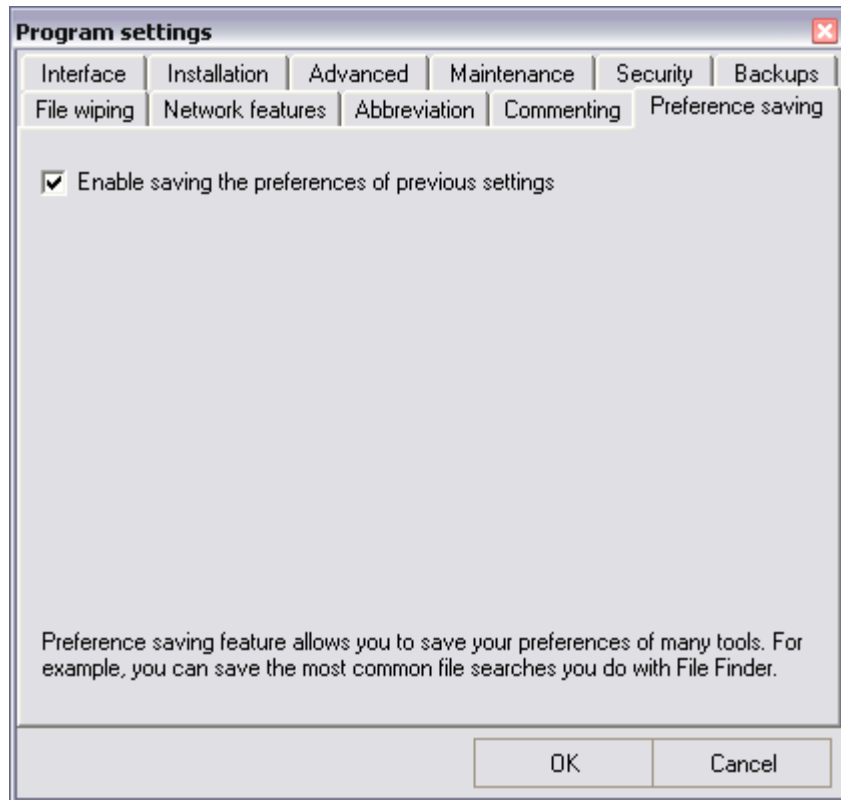


Image 13. Settings of Preference Saving.

Preference saving means you can save for example the search settings of File Finder for later use. This enables you to perform multiple similar searches without the need to configure the tool each and every time from scratch.

If enabled, the Preference saving feature adds a small tool bar to some of jv16 PowerTools' windows. The Registry Finder with the option enabled looks the following.

The *Saved preferences* contains a list of previously saved preferences, you can load any of them by simply clicking the one you wish to load. Click the tiny brown disk image on the left to save the current configuration of the tool for later use. You can delete previously saved settings by first selecting it from the list and then clicking the small red image on the left.

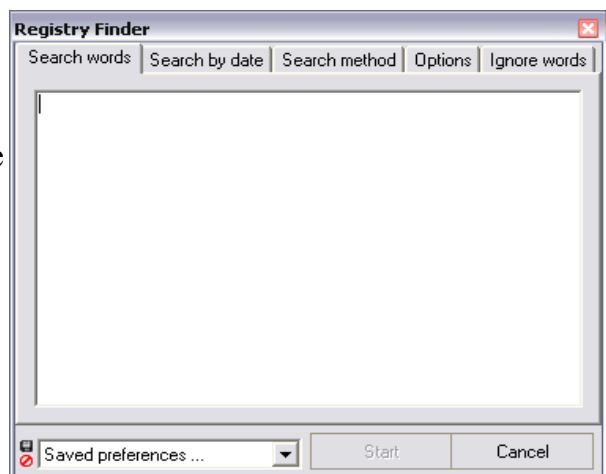
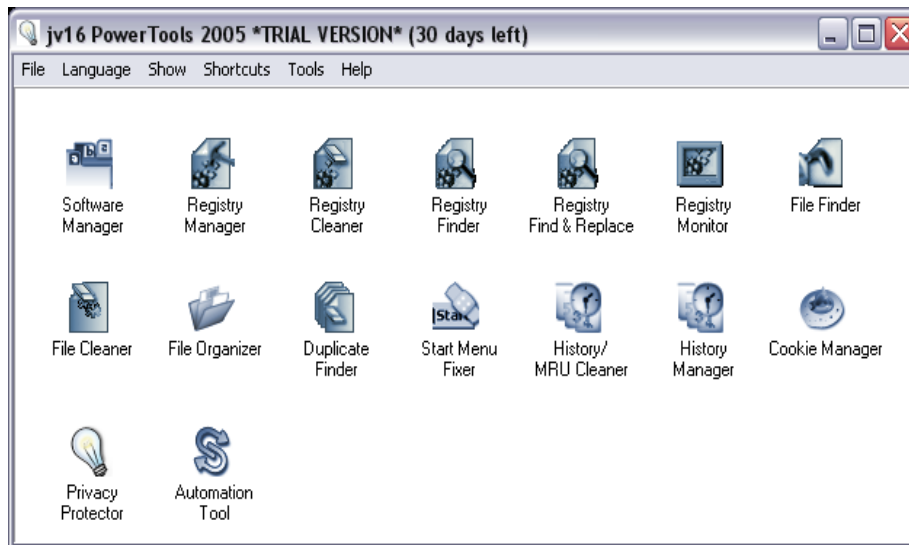


Image 14. Registry Finder with Preference saving feature enabled.

## Main Tools



*Image 15. The main window which contains the main tools as icons*

All the jv16 PowerTools' main features can be accessed from its main window. If you don't wish to use all the tools available you can use the Show menu to hide certain tools from the main list. Please see the Other Tools chapter for information about the tools not directly accessible from the main window.

**Tip:** The fastest way to access the Settings or the Backups from the main window is to right click the white background area of the window. The right-click menu contains also other shortcuts.

## The Software Manager

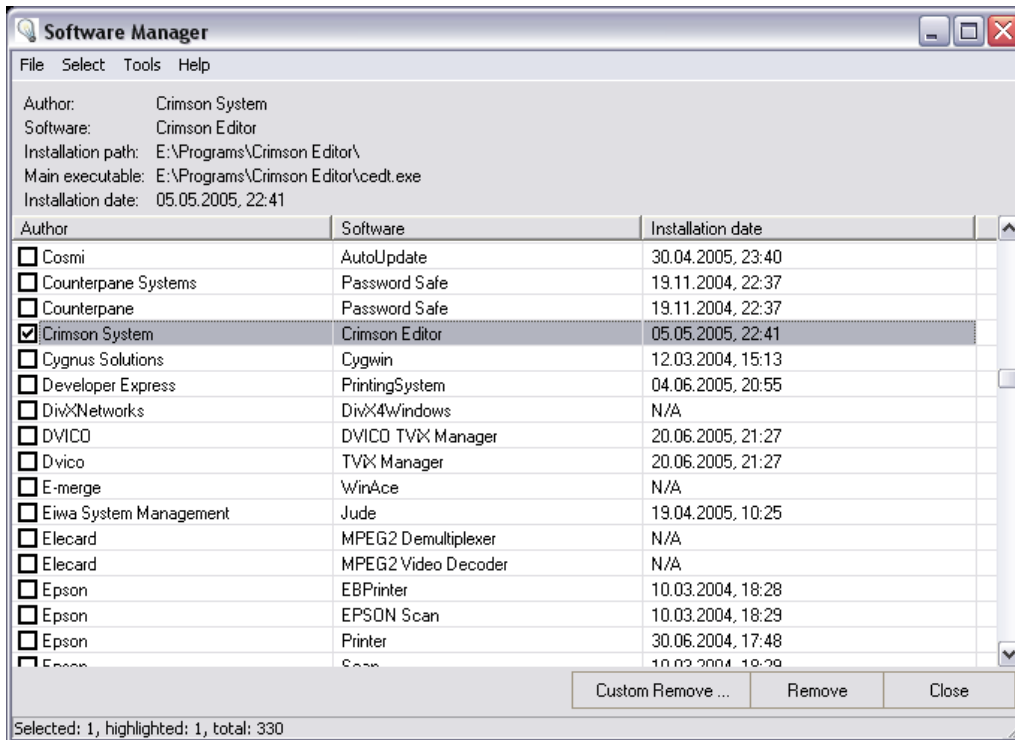


Image 16. The Software Manager allows you to control the number of installed software.

The Software Manager is basically a highly improved version of Windows' Add/Remove Software feature.

The Add/Remove Software works by an internal software list to which software can register itself to upon installation. Of course, this registration is not required and not all software does this. This is why the Add/Remove Software list doesn't usually ever contain all the software installed to the computer.

The Software Manager uses two approaches at the same time. It reads the same internal software list used by the Add/Remove Software feature, but it also quickly analyzes the registry and hard drives to detect other installed software. This is why it shows much more items than the Add/Remove Software, or some other similar 3rd party applications.

Please note that the Software Manager works based on approximations, this means the list can contain some number of errors, for example the software's Main Executable information or the Installation Date might not show the correct data. This is normal.

Because of this, the Remove button doesn't use the extracted information (such as the Installation Path) at all. If you wish to remove all traces of the software you must use the Custom Remove feature.

## Custom Remove Software

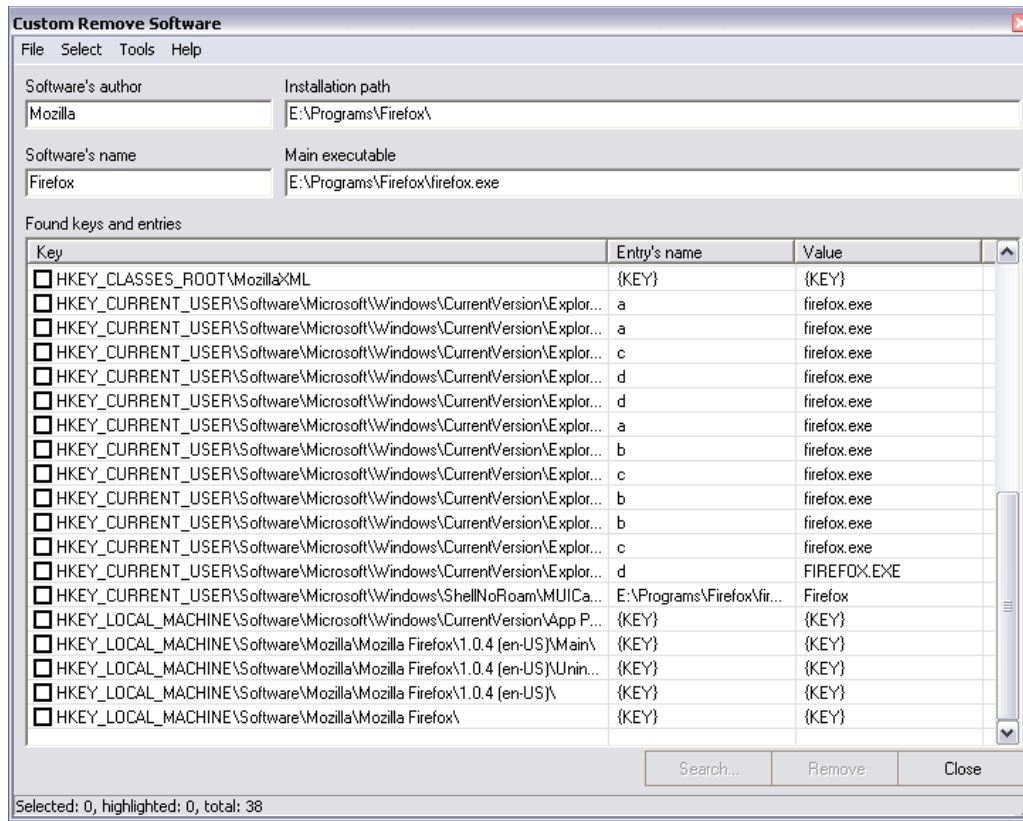


Image 17. Custom Remove Software allows you to detect and remove even the most hidden traces of installed software.

The Custom Remove Software feature helps you to find and remove hidden traces of installed software.

Simply check that the information on the top (e.g. name of the software, installation path etc.) is correct and click *Search*. After the search is done you should always browse the list through before doing anything

**Warnings:** Always remember to validate the given information about the software, that is: the author of the software, the name of the software, its installation path and the location of its main executable. If any of these information is wrong the tool might list entries not related to the software in question, removing these entries could be dangerous. If you are unsure about e.g. the software's installation path, just leave the box empty. Also, using this tool to detect entries of software with a very generic name (e.g. "System", "Browser", "Icon" etc) can be dangerous.

## The Registry Manager

The Registry Manager contains all the necessary tools for manual registry repair and maintenance. You can uninstall software, remove leftover registry entries from software you thought you had removed ages ago, edit or remove shell extensions and so on. The Registry Manager is your easy-to-use interface to the Windows' registry and you really don't have to have an extensive knowledge of the registry to be able to use the Registry Manager.

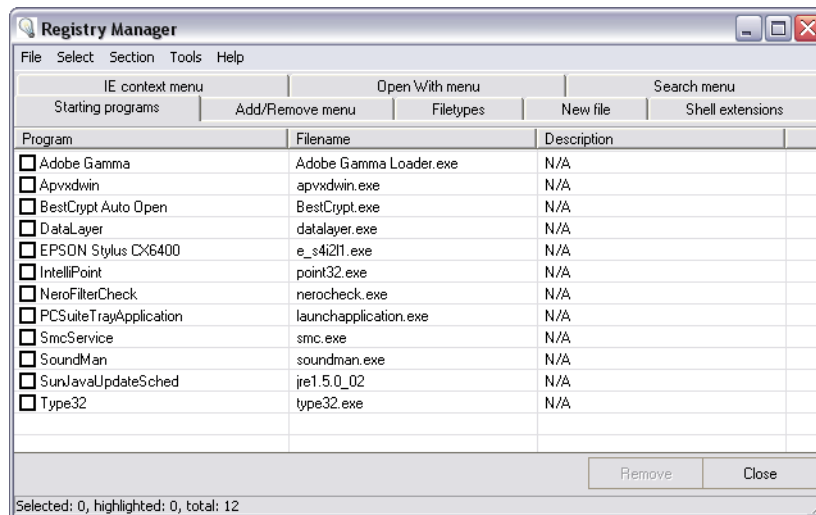


Image 18. The user interface of the registry manager

## Features

- *Starting Programs* shows you the list of all the programs that are automatically started from the registry when your computer starts.
- *Add/Remove menu* feature shows you items from the Control Panel > Add/Remove programs. The feature lists also the hidden items not normally visible in the Add/Remove programs. Notice that the *Remove* button just removes the software from this list and the *Uninstall* button actually uninstalls it. For your own safety, you can uninstall only one software at the time.
- *File Types* shows you all the registered file types. For example that .txt files are text files and so on. It's very common that programs you remove from your computer leave their file type registrations behind.
- *New File* feature shows you a list of file types you can create using the right click > New menu (if you can see this menu for example by right clicking the Windows desktop). Note that if you still use the program whose shell extension you wish to remove from the right click menu the program will most likely automatically recreate it the next time you use the program.
- *Shell Extensions* list contains all the registered shell extensions. Shell extensions are operations you can perform on certain types of files. For example, you can view a text file (.txt) with Notepad by double clicking it but you can also print its contents by right clicking it and selecting print from the right-click menu. You can remove all the shell extensions you think you won't need.
- *IE Context Menu* list contains all the context menu tools of Internet Explorer. Context menu extensions are those additional tools which are shown in the right click menu when you right click anything on a web page. Some programs, such as FlashGet, create this kind of new entries.

- *Open With... Menu* feature shows you the list of programs Windows can show in the list it shows when you try to execute a file of unknown file type. This feature is only for NT-based operating systems, such as Windows NT, 2000 and XP.
- *Search with Menu* feature shows you the list of items in Start Button > Search. You can remove all the items you don't need. This feature is only for NT4 and Win2000 operating systems.

## The Registry Cleaner

While the Registry Manager and the Registry Finder represent manual and semi-automatic registry cleansing tools the Registry Cleaner is fully automatic. It analyzes the entire system registry in a snap and shows you the items that are erroneous.

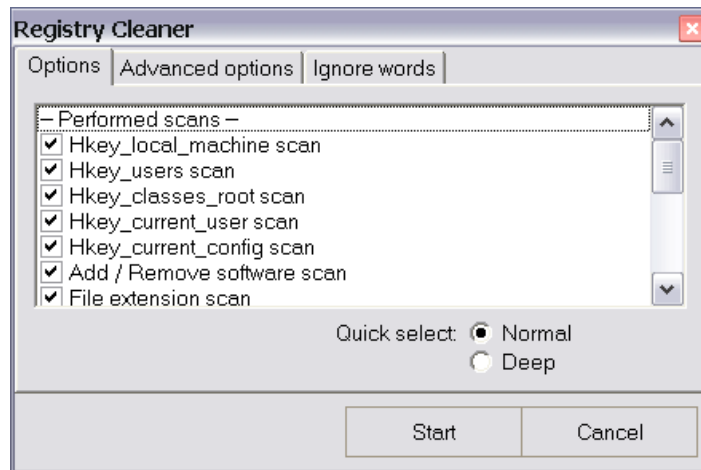


Image 19. The initial options dialog of the Registry Cleaner

When you start the Registry Cleaner it will first ask you a few questions what you wish it to do. If you are unsure what the different scan options mean (see the image), simply click the *Normal* radio button and then click *Start*. The scan will usually take under a minute on a modern computer.

Advanced users can also use the *Deep* option which means that the Registry Cleaner also analyzes the system's ActiveX, COM, DCOM, OLE and DDE items.

The Advanced Options section contains the following settings.

- *Fully automatic mode (NOT RECOMMENDED)* means that the program automatically removes all the found items without asking you. Using this method is not recommended.
- *Use as little CPU power as possible* option tells the program that you are currently doing something with your computer and the Registry Cleaner should only use free computer processing time.
- *Don't show items that would be automatically re-created.* There are a certain amount of types of registry data that will be always re-created, either upon system startup or when you use certain applications. This option allows you to ignore all the registry entries which would be most likely be re-created either immediately or almost immediately after removal or modification.
- *Don't pop up the window after finished* option is only effective if you minimize the window during the scan. If you minimize it, the window will by default pop back up when the job is done, you can disable that behavior with this option.

The *Ignore Words* section allows you to define so called ignore words. Simply put, if the program finds an item which matches any words on the ignore words list, the item will be automatically ignored. For example, if you have a Canon digital camera and you want to make sure nothing during the Registry Cleaner scan even touches its registry entries, you can add the word "Canon" (without the quotes) to the ignore words list.

## The Scan Report

You will see a detailed Scan Report after the Registry Cleaner's scan is finished. The Scan Report shows you some statistics about the scan, such as how long it took, how many items were analyzed and so on.

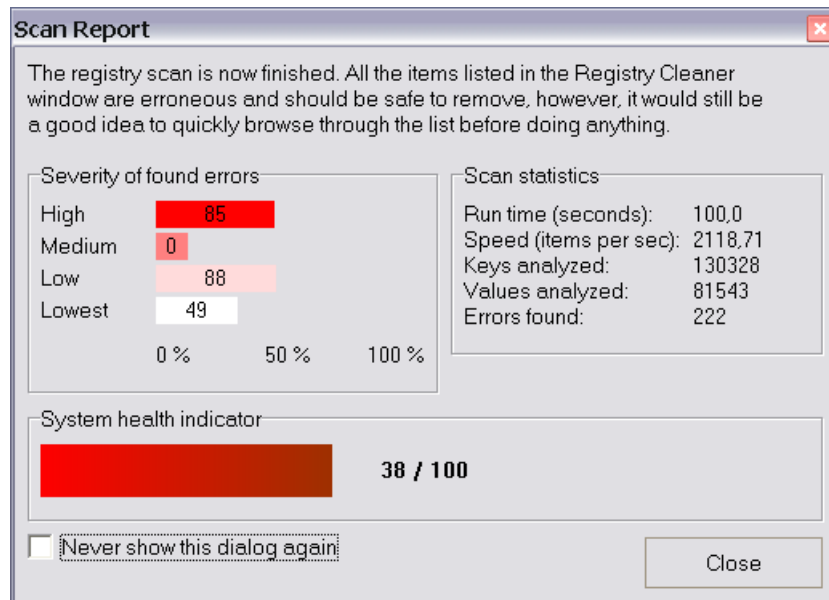


Image 20. The Registry Cleaner's Scan Report

The beauty of the Scan Report feature is the *Severity of the found errors* and the *System health indicator* features. The *Severity of found features* shows four bars representing how many errors of different severity levels were found. For example, in the image above there were 85 errors of high severity, 0 of medium severity, 88 of low severity and 49 of the lowest severity.

The error severity means how probable the error is to cause problems in your system. The error severities should be interpreted as follows.

Severity	Meaning
High	The error is quite likely to cause some system or user level problems. Typical such system level problems are error messages upon system startup or system crashes. User level problems include applications to stop working or start to show error messages of missing files or components when used.
Medium	The error could cause some problems but that is not very likely.
Low	In theory, the error could cause some minor user level problems but it's quite unlikely.
Lowest	The error is very unlikely to cause any problems whatsoever.

The *System health indicator* shows an overall system health score based on the scan results. The system health score is a number from 0 to 100, 100 would be the best score and 0 the worst. A graph of the system health is also shown. The one on the image shows that the system has a lot of errors in the registry, this is normal since the image is from my test computer.

You can close the Scan Report window by clicking the *Close* button. If you don't wish to see the Scan Report again, check the *Never show this dialog again* box.

## The Results Window

The results of the Registry Cleaner are listed in the Registry Cleaner window after the scan is completed. All the items listed are erroneous and should be safe to remove.

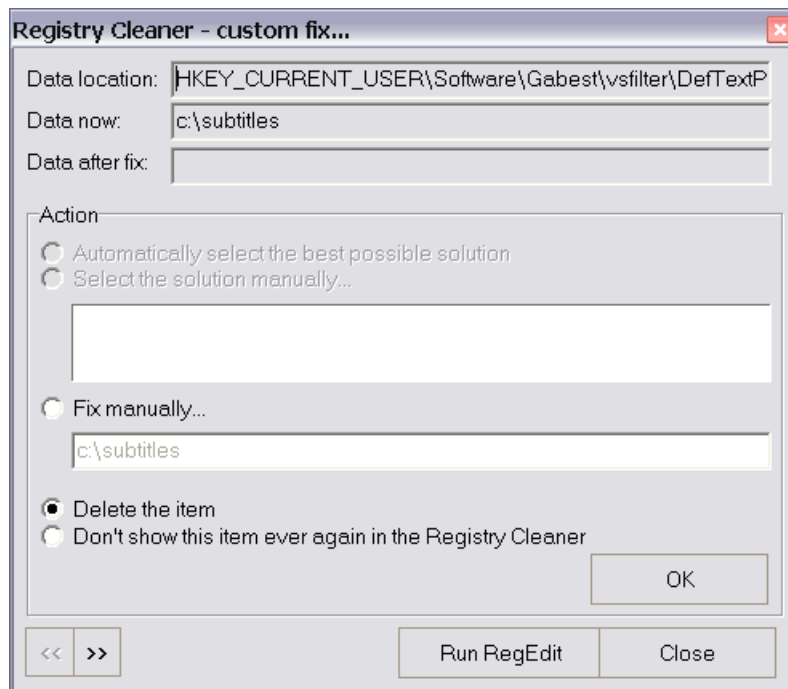


Image 21. Fixing the found registry errors is easy

The recommended action would be to try to fix the errors in the registry. To do so, simply select all items with *Select > All* or by pressing Ctrl+A, and click the *Custom Fix* button on the bottom of the window. After a few seconds, a fixing tool opens. It allows you to select how would you like to fix the problem. The *Fix* button will automatically first try to fix the selected problems, if no fix is available the erroneous items are removed. Using the *Fix* button is recommended for novice users and the *Custom Fix* for advanced users.

A simple rule of a thumb how to use the fixing tool (see the image): Select *Automatically select the best possible solution* if you can, if you can't, select the *Delete the item* and click OK.

The fixing tool also contains other fixing method for advanced users, such as the *Fix manually* feature which allows you to modify the erroneous data by hand and then insert it directly to the registry. One should be very careful with this feature.

If you think that the item listed is not erroneous and shouldn't be listed at all, you can select *Don't show this item ever again* and the item won't be shown again.

## The Registry Finder

Searching data from the registry is very easy and fast with the Registry Finder.

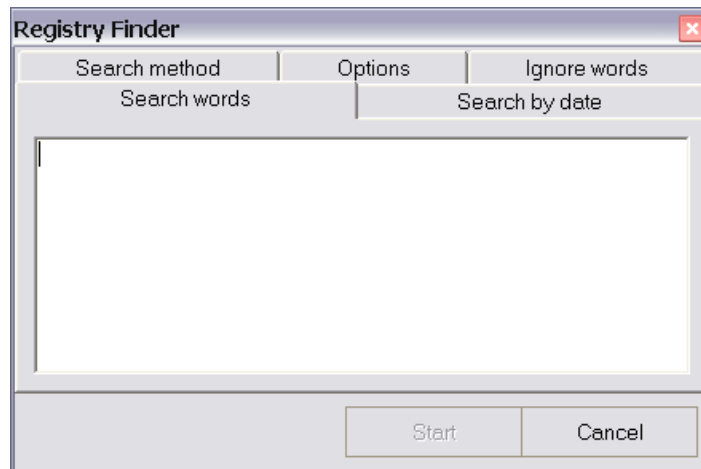


Image 22. The Registry Finder

To start searching, simply write your search word or words and click *Start*. Other sections of the Registry Finder offer more advanced settings how you wish to run your search.

Search by date allows you to narrow you search to items which have been modified within n days, modified in a certain day or before or after some date.

**Note:** You must enter at least on search word before the Start button becomes enabled. Also, check the Options to make sure the tool is set up the way you want.

Search method defines the exact method how the search is to be made. The available search methods are the following.

- Normal, case insensitive, loose match searched
- Case insensitive wildcard search
- Perl regular expression search
- Artificial Intelligence search

More details on how the different search methods work can be found from the next page.

## The search methods

The following tables contains examples how the different search methods work in practice. The data from which the search word is searched in these examples is the following.

Then arose old Wainamoinen, With his feet upon the island, On the island washed by ocean, Broad expanse devoid of verdure; There remained he many summers, There he lived as many winters, On the island vast and vacant, Well considered, long reflected, Who for him should sow the island, Who for him the seeds should scatter;

Method	Search word	Found first from
Normal	The	“ <u>Then</u> arose old...”
Normal	wain	“ <u>Wainamoinen</u> , With his...”
Wildcard search	the	“ <u>Then</u> arose old...”
Wildcard search	?rose	“Then <u>arose</u> old...”
Wildcard search	*it*	“ <u>With</u> his feet...”
Wildcard search	???nam*	“ <u>Wainamoinen</u> , With his...”
Wildcard search	up??	“ <u>upon</u> the island...”
Perl RegEx	Then arose	“ <u>Then arose</u> old Wainamoinen...”
Perl RegEx	sum+ers	“ many <u>summers</u> , There...”
Perl RegEx	moinen\$	“Then arose old <u>Wainamoinen</u> ...”
Perl RegEx	f[ea]et	“With his <u>feet</u> upon the island...”
Artificial Intelligence search	arise	“Then <i>arose</i> old Wainamoinen...”
Artificial Intelligence search	oceans	“ the island washed by <i>ocean</i> , Broad...”
Artificial Intelligence search	reminds	“There <i>remained</i> he many summers, ...”
Artificial Intelligence search	seed	“Who for him the <i>seeds</i> should scatter...”

### Some notes

- If you don't enter any wildcards (the “\*” and “?” characters) when using the wildcard search the system automatically adds \*'s at the beginning and at the end of your search word(s). For example, “the” would be interpreted as “\*the\*” and so on.
- The Perl regular expression search is case sensitive.
- The Artificial Intelligence search is not language dependent, it works the same way with all languages.

The jv16 PowerTools 2005 uses TPerlRe component by Luu Tran for the Perl RegExp implementation. The TPerlRe is a Delphi wrapper for perlre.dll, the win32 port of Philip Hazel's PCRE (Perl Compatible Regular Expression) package.

## Quick Perl regular expressions guide

Symbol	Example of usage	Definition
+	sum+ers	Match one or more of the preceding character, therefore the example would match “summers”, “summmers”, “summmmmmers” etc.
.+	sum.+ers	Matches “summers”, “sumXers” but not “sumers”
.*	sum.+ers	Matches “summers”, “sumXers” and “sumers”
[]	jo[ha]n	Matches one of the letters inside the brackets, both “john” and “joan” in the example.
^	^ne	Matches any string which starts with the given string, the example matches “need”, “needle” and “necessary” etc.
\$	ing\$	Matches any string that ends with the given string, the example matches “interesting”, “using”, “patterning” etc.
?	to?l	Matches zero or one of the preceding character, the example matches “tool” and “tol”.

Further reading about the Perl regular expressions can be found online.

- <http://www.perldoc.com/perl5.8.0/pod/perlre.html>
- <http://www.anaesthetist.com/mnm/perl/regex.htm>
- <http://www.weitz.de/regex-coach/>
- <http://etext.lib.virginia.edu/services/helpsheets/unix/regex.html>
- <http://www.regularexpression.info/>

## The Registry Find & Replace

The Registry Find and Replace is a very convenient way to replace data from the registry.

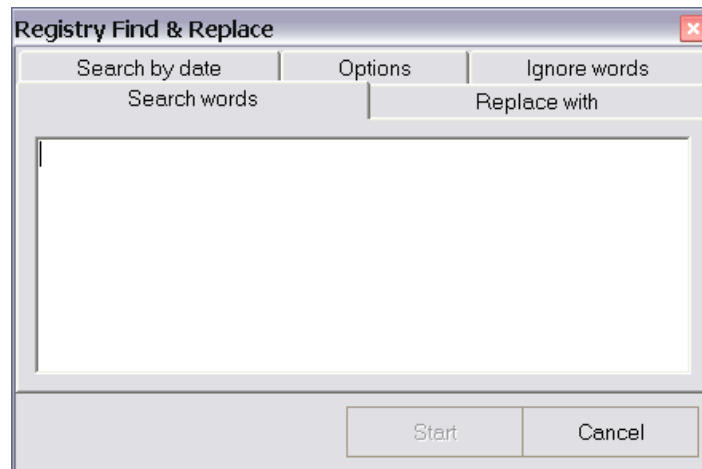


Image 23. The Registry Find & Replace tool

One and perhaps the best example where to use this feature is manually fixing drive letters or paths. For example, you have just added a new hard disk drive to your system and all the drive letters were changed by Windows. Previously installed programs don't work since the registry shows they should be on D:\ drive but they are on a drive now known as the E:\ drive.

To fix the problem, simply write “D:\” as the search word and “E:\” as the *Replace with* and hit *Start*. Remember, the tool doesn't change anything from the registry automatically, all changes are first confirmed with you.

Notice: The Start button will only become enabled after you have entered all the necessary data, in this case, at least one search word and the replace with word. This policy applies to all the tools of the jv16 PowerTools 2005.

The Search by date feature allows you to skip the old entries or only search for items from a certain era or date. This can be very useful on some occasions.

The Options section contains some options to the advanced users. Firstly, you can select what parts of the registry, i.e. what root keys, you wish to be analyzed.

The Advanced Options section contains the following options

- *Use as little CPU power as possible* option tells the program that you are currently doing something with your computer and the Registry Find & Replace should only use free computer processing time.
- *Analyze value names*. As you know from reading the Introduction, the data inside the system registry is stored as key/value pairs, just like with files you have the filename and the file's contents. This option tells the Registry Find & Replace to analyze not only the data, but also the name of the data.
- *Analyze value data*. See above. Tells the Registry Find & Replace to analyze the value's data.

- *Don't pop up the window after finished* option is only effective if you minimize the window during the scan. If you minimize it, the window will by default pop back up when the job is done, you can disable that behavior with this option.

Ignore words section allows you to define ignore words. If any of these words are found from the analyzed material the registry key or entry will be ignored.

## The Results Window

The results of the Registry Find and Replace search are shown in a different window (see the image).

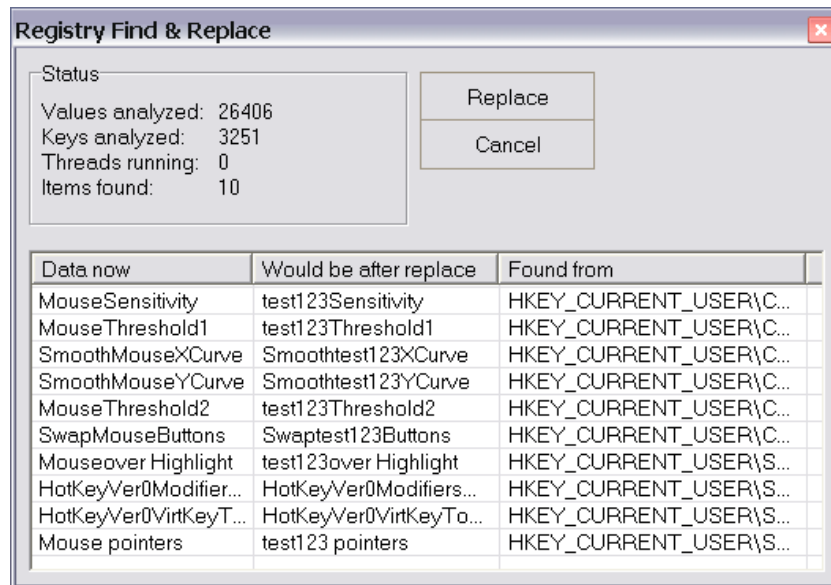


Image 24. The Registry Find & Replace confirms all changes with you before doing anything

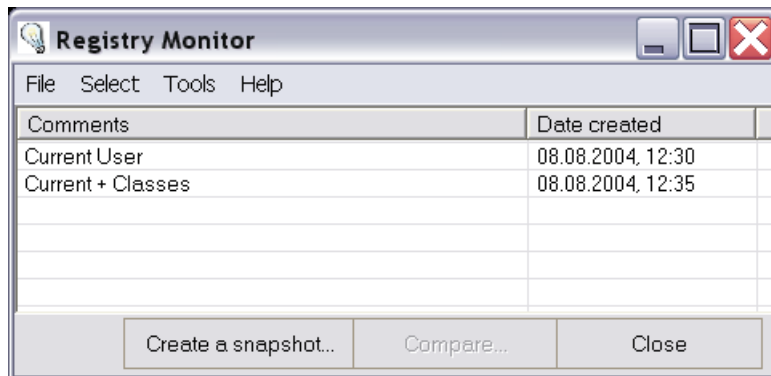
Notice that the Registry Find & Replace hasn't done any changes at this point, it only shows you what the data would be after the replace procedure.

At this stage, please go through the list and verify that all the items in it are items you wish to modify. If you wish to remove items from the list, i.e. not want them to be modified in any ways, simply right click the item and select *Remove* from the list. You can also open the item of your interest with the Windows Registry Editor (RegEdit for short) by right clicking the item and selecting *Open in RegEdit*.

If you feel that all the modification suggestions listed in the list are valid, click *Replace* and the tool will apply the changes.

## Registry Monitor

The jv16 PowerTools contains an easy way to control and monitor what goes on inside the system registry, this feature is called the Registry Monitor. It allows you to create a snapshot of the current state of the registry and then later on compare it with the current status.



*Image 25. The list of current registry snapshot created with the Registry Monitor*

The main window of the Registry Monitor lists all the current registry snapshots and allows you to manage them. Notice that the right click menu contains more features.

The Registry Monitor's compare feature can detect the following registry changes.

- Removal of a registry key
- Removal of a registry entry
- Modification of a registry entry's value
- Creation of a new registry key
- Creation of a new registry entry

## Creating a new snapshot

To create a new snapshot simply click the *Create a snapshot* button.

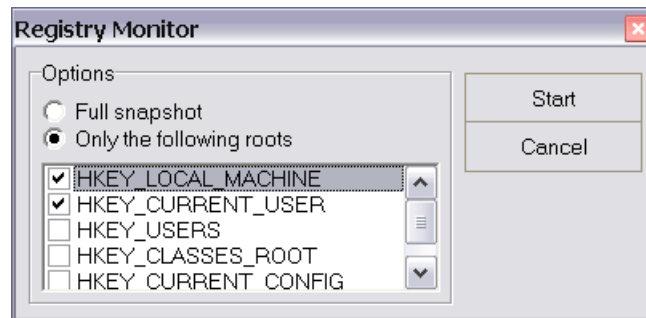


Image 26. Options for creating a new registry snapshot

The more root keys you wish to include the slower the compare procedure will be in the future, therefore you should only select the HKEY\_LOCAL\_MACHINE and HKEY\_CURRENT\_USER root keys.

After you are done selecting the root keys click *Start* and wait a few minutes for the tool to finish. After the tool is finished the window will close and you will see your new snapshot in the Registry Monitor's list.

## Comparing snapshots

To compare an old snapshot with the current status of the registry simply select the snapshot from the Registry Monitor's snapshot list and click *Compare*.

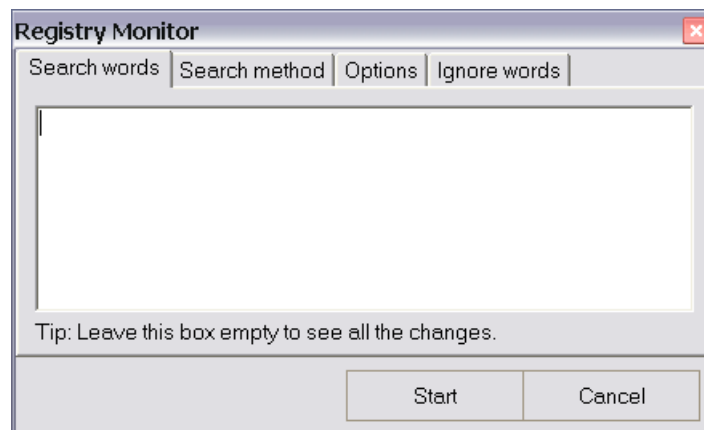


Image 27. Settings for registry snapshot comparison

If you are only interested to see certain types of changes, for example the keys of a newly installed application, you should use the Search words feature to show only those changes. This can dramatically increase the speed of the entire process.

The Search method contains the available search methods, please the chapter on Registry Finder for more information about the search methods supported by jv16 PowerTools 2005.

The options section contains the following options.

- *Ignore MRU entries* tells the feature to ignore all non-important registry entries that are very frequently changed.
- *Ignore system entries* tells the feature to ignore certain system's registry entries that are very modified very frequently. Disabling this feature will slow down the entire process and result in vast amount of non-relevant information to be shown in the result window.

Click the *Start* button to start the process. The comparison process has the following four steps.

1. Creation of a new, temporary snapshot which contains the most recent data from the system registry.
2. Comparison of the user selected snapshot with the just-created temporary snapshot.
3. Removal of the temporary snapshot.
4. Displaying of the detected changes.

## Results of the comparison

The Registry Monitor uses a new window for showing the results, in other words, the changes it detected.

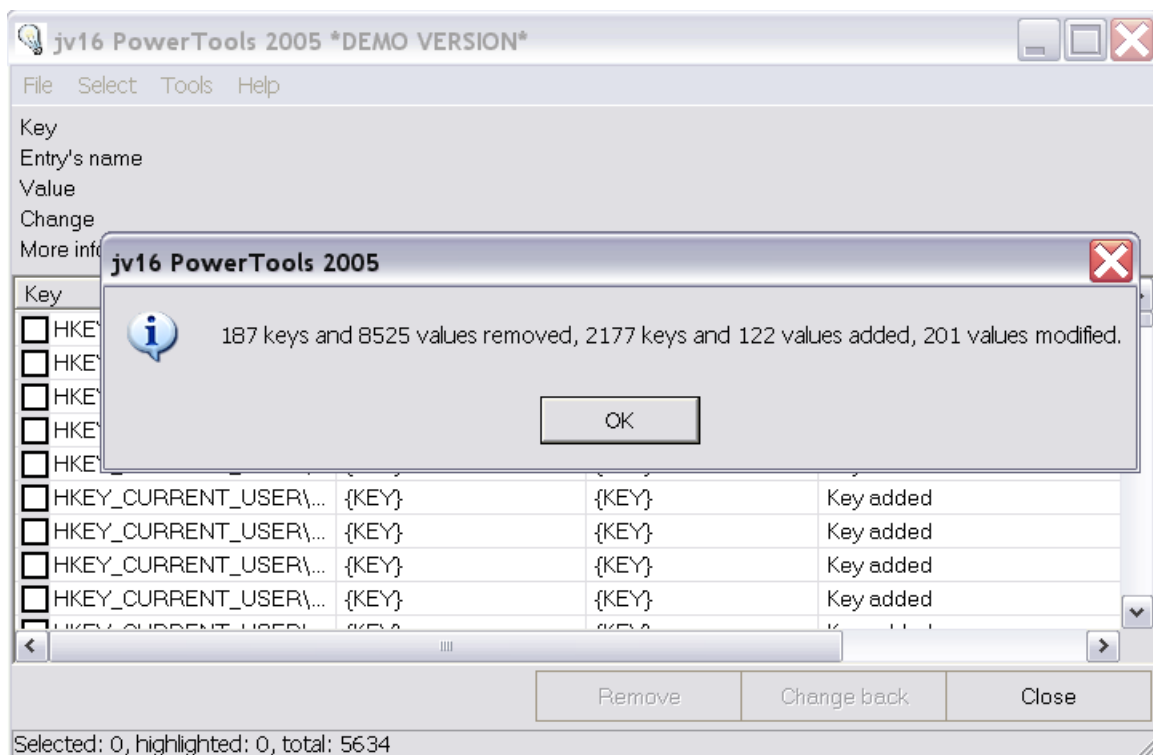


Image 28. The registry comparison is has just finished

You can use the result window to either remove the added items or change back the modified changes. Select all items and click *Change back* to undo all the changes between the two snapshots.

However, please use caution with the *Change back* feature since it can also change back required system changes and thus lead to system errors.

## The File Finder

If you wish locate certain files from you computer, the File Finder is the solution. It can search files by filename and extension, by the size of the files and by the creation, modification or last accessed date of the files.

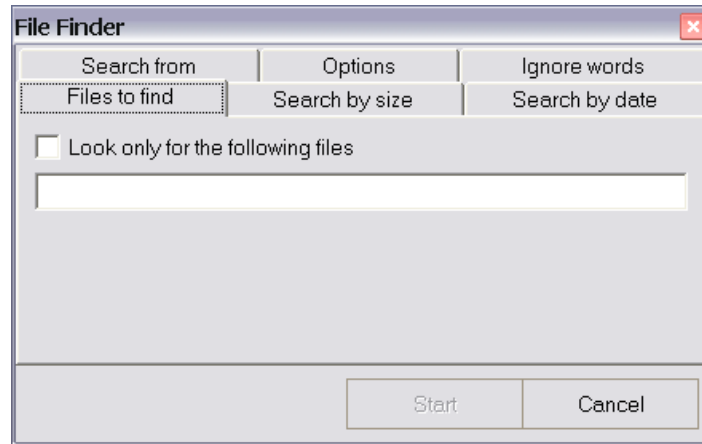


Image 29. The File Finder's user interface

Files to find section allows you to enter one or more wildcard patterns or filenames which to look for. For example, if you wish to find all text files (files with .txt extension) write: "\*.txt", to also find all .log files write "\*.txt; \*.log". The jv16 PowerTools 2005 also supports so called negation wildcards. For example, if you want to find all text files but not any files called Readme.txt, write "\*.txt; -readme.txt".

Search by size section allows you to define with great precision the size of the files you are looking for. For example, to find all files that are about 100 KB in size, select *Look only for files of specific size*, and select *Files that are*. Then select from the box below *About the same size as*, write 100 to the box next to it and select "KB" from the list.

The About the same size as is defined as follows: Files are "about the same size" if the difference of their sizes is no more than 5% of their sizes. For example, if you are looking for files of "about" 100 KB, the tools would list files whose size is between 95 KB and 105 KB.

Search by date allows to search files based on their creation, last access or last modification date.

The Options section contains the following options

- *Use as little CPU power as possible* option tells the program that you are currently doing something with your computer and the File Finder should only use free computer processing time.
- *Skip deep directory structures to improve speed*. Tells the tool to skip all directories which are further than four (or more) directories from the original path. For example, if you tell the tool to find files from C:\ and enable the Skip deep directory structures option the tool will search from C:\Windows\, C:\Windows\System32\ and C:\Windows\System32\etc\ but not any more from C:\Windows\System32\etc\drivers\ or any of its sub folders.
- *Skip system directories to improve safety*. Tells the tool not to list any files or subdirectories from the system directory (by default C:\Windows) nor from the system settings directory (only in NT systems, by default C:\Documents and Settings\), or from their subdirectories.

- *Don't pop up the window after finished* option is only effective if you minimize the window during the scan. If you minimize it, the window will by default pop back up when the job is done, you can disable that behavior with this option.

The Ignore words section allows you to define so called ignore words. If any of these words are found from the analyzed material (such as the file's name or directory), the file will not be listed.

Tip: You can also use the Ignore words to exclude directories you don't want to be searched. For example, if you want to search all directories from C:\ but not C:\Windows, simply add C:\ to the Select from section and add C:\Windows to the Ignore words section. This same trick works in many other tools of the jv16 PowerTools 2005 as well.

The jv16 PowerTools 2005 uses its File Tool feature to list all the files found by the File Finder and File Cleaner. The File Tool contains a vast range of features, please see the File Tool chapter of this handbook for more information about them.

## The File Cleaner

You can easily find obsolete and left-over temporary files with the File Cleaner. However, do notice that since task of identifying which files can be removed is very difficult and complex, therefore do not automatically remove all the files found by the File Cleaner. Always browse the list of found files through before doing anything.

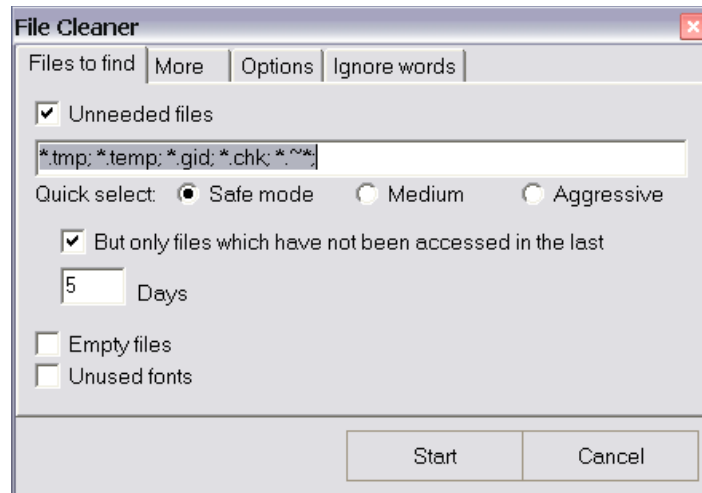


Image 30. The File Cleaner helps you to remove unwanted files

The File Cleaner can be used to find many different types of files. The main features are the following.

- Finding of *unneeded files* feature analyzes only the name of the files. The *quick select* feature contains pre-defined filename extensions which should be rather safe to remove. You can highly increase the safety of this feature by enabling the *But only files which have not been accessed in the last...* feature.
- Finding of *empty files*.
- Finding of *unused fonts*. This feature lists all fonts from the system font directory which have not been used in the last 30 days.
- *Listing of all files from the computer's temp directories* allows you to list the entire contents of the system temp directories. Enabling the *But only files which have not been accessed in the last...* feature will decrease the probability that the files are still being used.
- *Listing of all files that have not been used and/or modified in a while*. You should be very careful if you are about to remove these files.
- *Listing of unused shared DLL and OCX files* lists all unused system files. This feature is quite safe to use, the list of not used system files is extracted directly from the system, i.e. the feature doesn't use the last accessed date of the files or any other such technique.

The File Cleaner supports the following options.

- *Fully automatic mode* option makes the File Cleaner to automatically remove all the found files. Using this feature is highly not recommend.
- *Use as little CPU power as possible* option tells the program that you are currently doing something with your computer and the File Cleaner should only use free computer processing time.
- *Skip deep directory structures to improve speed*. Tells the tool to skip all directories which are further than four (or more) directories from the original path. For example, if you tell the tool to

find files from C:\ and enable the Skip deep directory structures option the tool will search from C:\Windows\, C:\Windows\System32\ and C:\Windows\System32\etc\ but not any more from C:\Windows\System32\etc\drivers\ or any of its sub folders.

- *Skip system directories to improve safety.* Tells the tool not to list any files or subdirectories from the system directory (by default C:\Windows) nor from the system settings directory (only in NT systems, by default C:\Documents and Settings\), or from their subdirectories.
- *Don't pop up the window after finished* option is only effective if you minimize the window during the scan. If you minimize it, the window will by default pop back up when the job is done, you can disable that behavior with this option.

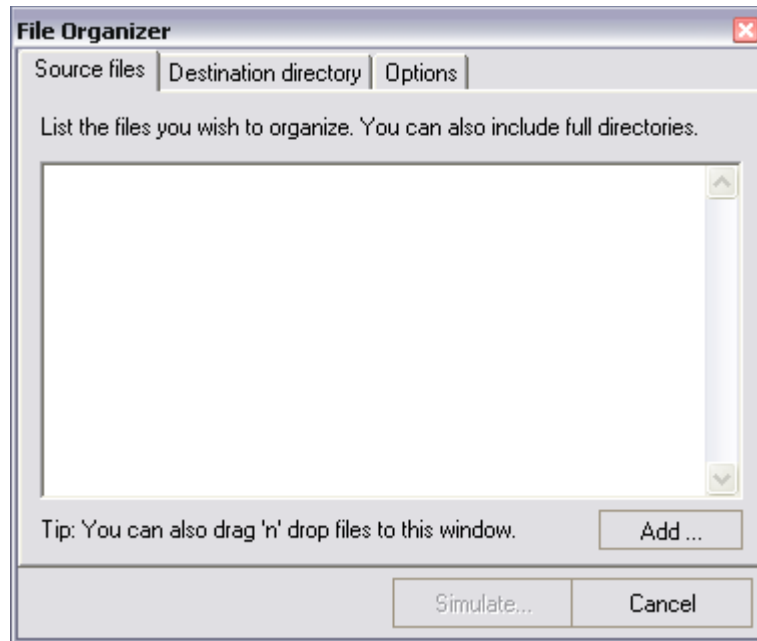
You may also define which drives you wish to the File Cleaner to analyze. Selecting all the drives gives you more results but makes the search slower.

The Ignore words section allows you to define so called ignore words. If any of these words are found from the analyzed material (such as the file's name or directory), the file will not be listed.

**Tip:** You can also use the Ignore words to exclude directories you don't want to be searched. For example, if you want to search all directories from C:\ but not C:\Windows, simply select C:\ from the Options and add C:\Windows to the Ignore words section. This same trick works in many other tools of the jv16 PowerTools 2005 as well.

The jv16 PowerTools 2005 uses its File Tool feature to list all the files found by the File Finder and File Cleaner. The File Tool contains a vast range of features, please see the File Tool chapter of this handbook for more information about them.

## The File Organizer



*Image 31. The File Organizer helps you to organize large sets of files to their own sub-directories.*

The File Organizer allows you to organize files to their own sub-directories very easily. This tool was designed to organize user's download directory, for example, if you use a download manager which always downloads its data to C:\Downloads the directory will look like a mess in no time.

The problem can be solved very easily with the File Organizer.

To start, simply define what files you wish to organize. You can either drag and drop the files from the Windows Explorer or from My Computer, or you can use the tool's *Add* feature. You may also enter full directory paths, like that C:\Downloads from the example.

You must also set the destination directory, in other words, to where you wish the files to be organized to. For example, if you have downloaded music samples you might want to save them to C:\mp3\.

Next, click *Simulate...* and wait for the tool to create the suggested directory structure. Do notice that nothing has been done yet, the files are moved (or copied, depending your settings) to the directory structure only when you click the *Apply* in the next step.

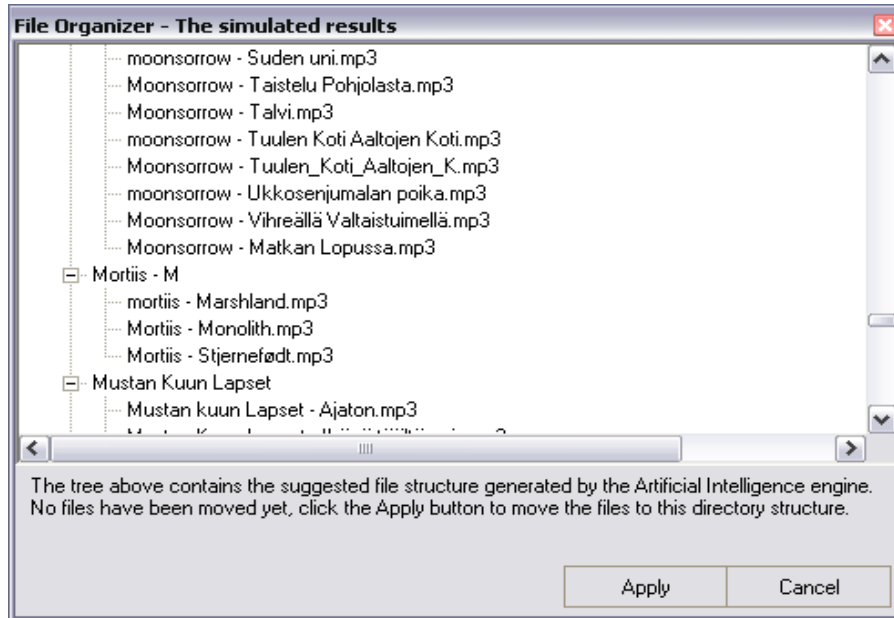


Image 32. The suggested directory tree structure created by the File Organizer

Usually the generated directory tree structure isn't perfect, therefore you can easily edit it by dragging files from one sub-directory to another or delete the files (i.e. prevent them from being copied or moved to the new structure) with the Del button of your keyboard.

When you are happy with the results, click *Apply* and the tool will create the directory structure to the specified destination directory.

## The Duplicate Finder

Finding duplicate files, i.e. files with exactly identical contents, is practically impossible without a good tool designed explicitly for that. The Duplicate Finder is a very easy and straightforward tool for finding those duplicate files.

The Duplicate Finder uses triple optimized, bit-by-bit analyzer, it means that it analyzes the contents of the files bit-by-bit to be 100% sure the files are in fact identical.

Do notice that not all duplicate files are safe to remove just like that, usually quite the opposite. Therefore the use of the Duplicate Finder is only recommended for finding duplicate files from file collections, such music or video collections.

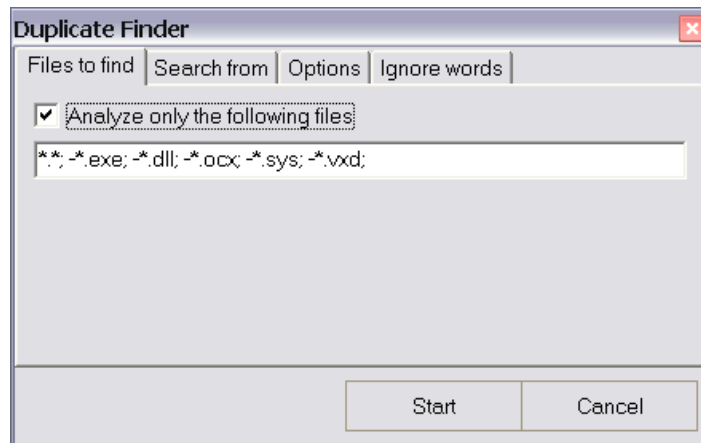


Image 33. The Duplicate Finder is an easy way to find all your system's duplicate files

The Files to find section defines what kind of files you wish to be analyzed. The default is “\*.\*. \*.exe; \*.dll; \*.ocx; \*.sys; \*.vxd;” and it simply means that the feature will analyze all files (\*.\*) except applications (\*.exe), system libraries (\*.dll) and other system files (\*.ocx, \*.sys, \*.vxd). This is to increase the safety of the feature.

The Search from section defines the directories which you wish to be analyzed. Notice that the procedure of analyzing whether files are duplicates needs quite a lot of system resources and processor time, therefore analyzing for example all the hard disks at one time will take quite a long time.

The Duplicate Finder supports the following options.

- *Use as little CPU power as possible* option tells the program that you are currently doing something with your computer and the Duplicate Finder should only use free computer processing time.
- *Skip deep directory structures to improve speed.* Tells the tool to skip all directories which are further than four (or more) directories from the original path. For example, if you tell the tool to find files from C:\ and enable the Skip deep directory structures option the tool will search from C:\Windows\, C:\Windows\System32\ and C:\Windows\System32\etc\ but not any more from C:\Windows\System32\etc\drivers\ or any of its sub folders.

- *Skip files larger than 100 MB to improve speed* option can dramatically increase the performance of the Duplicate Finder if you have a lot of large files on your system.
- *Disable cross-drive checking to improve speed*. For example, lets say you have configured the Duplicate Finder to look for duplicates from C:\My Music\ and C:\Mp3s\ directories. If you have enabled this setting, the the tool will not analyze the files found from C:\My Music\ against the files of C:\Mp3s\ directory, this will dramatically increase the speed of the scan but can cause the tool to miss some duplicates.
- *Skip system directories to improve safety*. Tells the tool not to list any files or subdirectories from the system directory (by default C:\Windows) nor from the system settings directory (only in NT systems, by default C:\Documents and Settings\), or from their subdirectories.
- *Don't pop up the window after finished* option is only effective if you minimize the window during the scan. If you minimize it, the window will by default pop back up when the job is done, you can disable that behavior with this option.

The Ignore words section allows you to define so called ignore words. If any of these words are found from the analyzed material (such as the file's name or directory), the file will not be listed.

Tip: You can also use the Ignore words to exclude directories you don't want to be searched. For example, if you want to search all directories from C:\My Music\ but not C:\My Music\Backups\, simply add C:\My Music\ to the Search from box and C:\My Music\Backups\ to the Ignore words section. This same trick works in many other tools of the jv16 PowerTools 2005 as well.

## The Start Menu Fixer

The Windows Start menu and the desktop can easily become filled with broken shortcuts, some applications forget to remove their shortcuts upon uninstallation, some shortcuts may break down after moving applications from one directory to another and so on. All this can be fixed with just a few mouse clicks using the Start Menu Fixer.

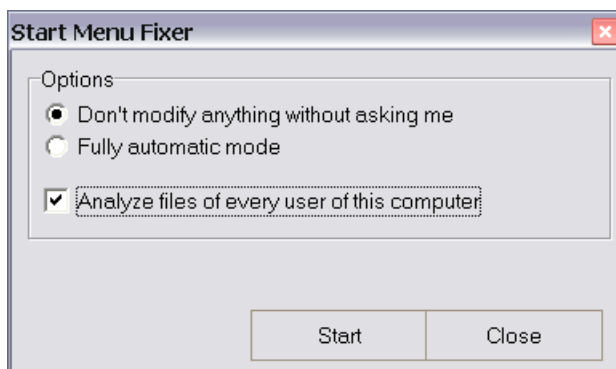


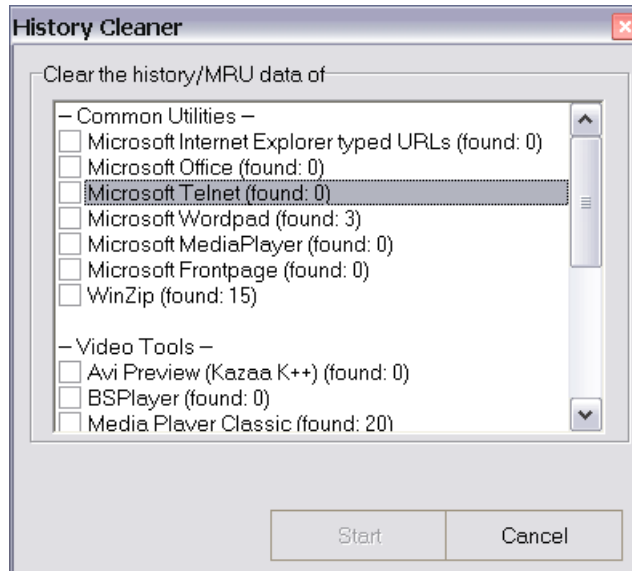
Image 34. The Start Menu Fixer can fix broken shortcuts in a snap

The Start Menu Fixer automatically analyzes all shortcuts from your Start menu and Desktop. It doesn't just remove the broken ones, it can actually repair them. For example, if it notices you have moved an application from one directory to another, it can automatically fix the shortcut to point to the new location. The shortcuts it cannot fix it can remove.

Using the *Don't modify anything without asking me* mode is recommended. This way you can decide what shortcuts you want to be fixed, removed and what left alone.

## The History/MRU Cleaner

Many applications remember the last files you opened, the last directories you worked or what movies you last watched. These features can be useful but they can also create a potential privacy problems.



*Image 35. Flushing the history and MRU data is fast and easy with the History/MRU Cleaner*

Clearing the history items and MRU (Most Recently Used) lists of third party applications is very time consuming without a good tool. The History/MRU Cleaner makes the task very easy and fast, simply select the applications whose history information you wish to clear and hit Start.

The History/MRU Cleaner also shows you how many history items of each item it finds from the registry. For example, in the picture above, the tool finds 3 stored history items of Wordpad, 15 by WinZip and 20 by Media Player Classic.

## The History Manager

Browser history can contain items you wish to remove easily. The jv16 PowerTools' History Manager is a simple, blacklist/whitelist solution for this problem.

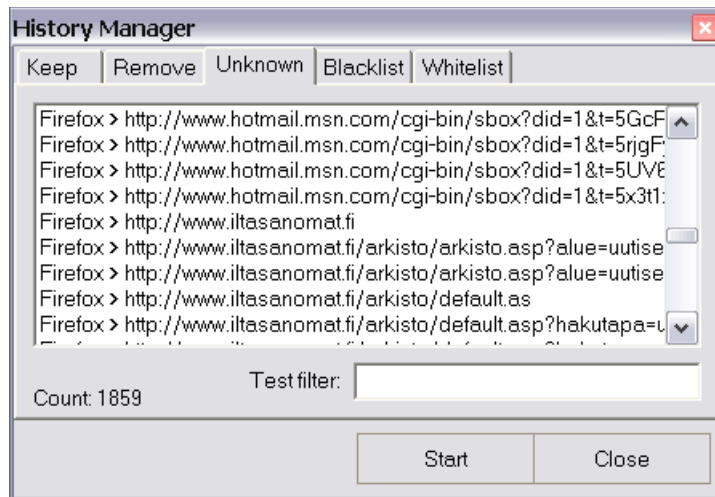


Image 36. The History Manager allows you to control what web browser history items you wish to store

The History Manager works with two lists, the whitelist and the blacklist. Add general search words of history items you wish to keep to the whitelist, and information about the ones you wish to be removed to the blacklist. You can easily test how different search words would work with the *Test Filter* feature in the Unknown section.

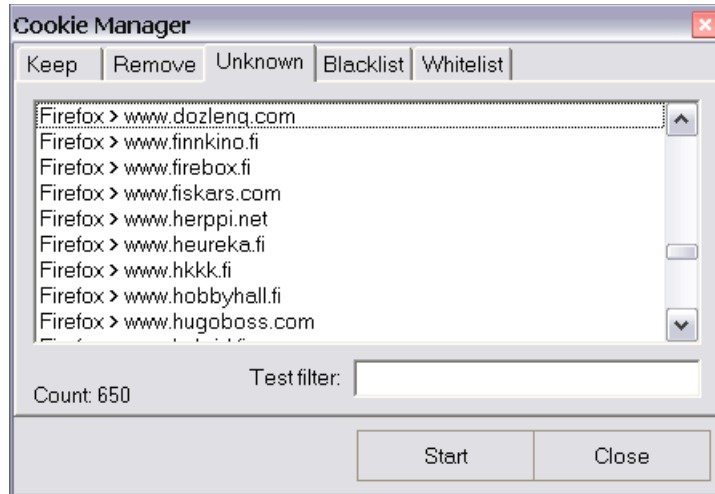
The tool contains three lists, the Keep, the Remove and the Unknown. All history items matching at least one search word of the whitelist are located in the Keep list, similarly all the items matching one or more search word of the blacklist are located in the Remove list. The Unknown list contains items that don't match neither the whitelist nor the blacklist.

The *Start* button removes all items from the Remove list, it doesn't remove items in the Keep nor Unknown lists. You can also directly remove history items, or move them to another list, with the right-click menu.

Note that you must close down your browser before you can use this feature. This is to make sure the jv16 PowerTools and the browser can't write to the browser's setting files at the same time.

## The Cookie Manager

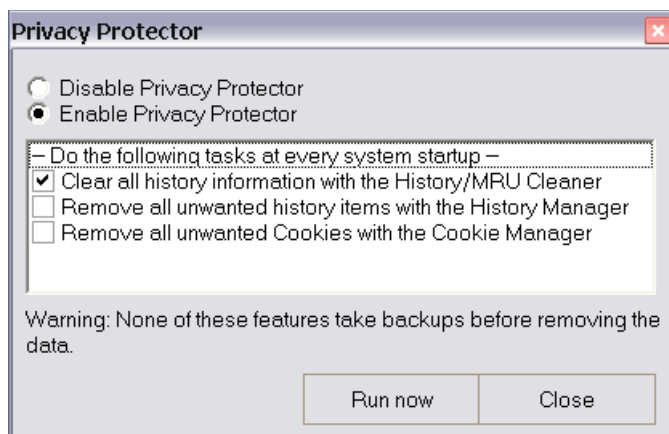
The jv16 PowerTools' Cookie Manager works exactly like the History Manager, please see the chapter on History Manager for the instructions.



*Image 37. The Cookie Manager allows you to take the cookies back to your control*

## The Privacy Protector

Users are becoming more and more interested about their personal privacy, that's why the jv16 PowerTools 2005 contains a brand new feature called the Privacy Protector. It helps you to protect your privacy by clearing the unwanted history items and cookies from you computer every time you startup your computer.



*Image 38. The Privacy Protector can easily help you to protect your privacy*

No bells and whistles, no hassle, just set up the blacklists of the History Manager and the Cookie Manager, enable the Privacy Protector and you're done.

Since the idea of the Privacy Protector is to wipe out the items you don't want others to see, the Privacy Protector doesn't take any backups of the items it removes.

## The Automation Tool

Automating simple jv16 PowerTools tasks, such as the File Cleaner or the Registry Cleaner is a piece of cake with the Automation Tool.

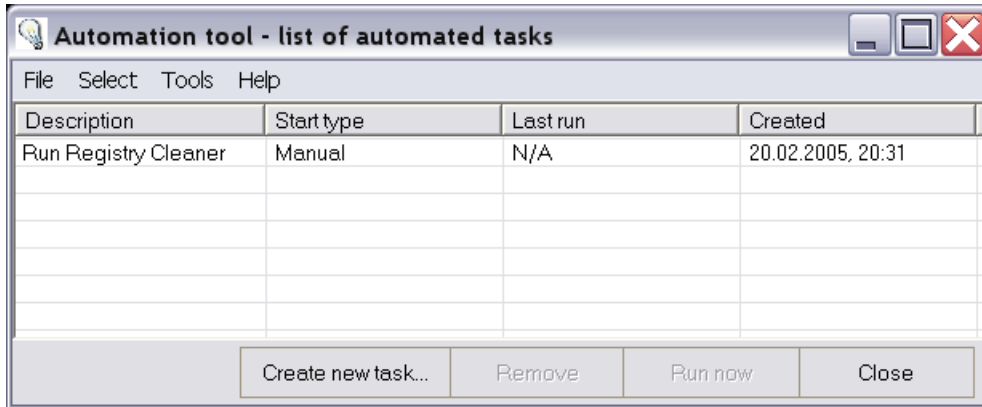


Image 39. The automation tool helps you to automate many tasks

You can use the Automation Tool to run automation tasks you have already created, or to create new ones.

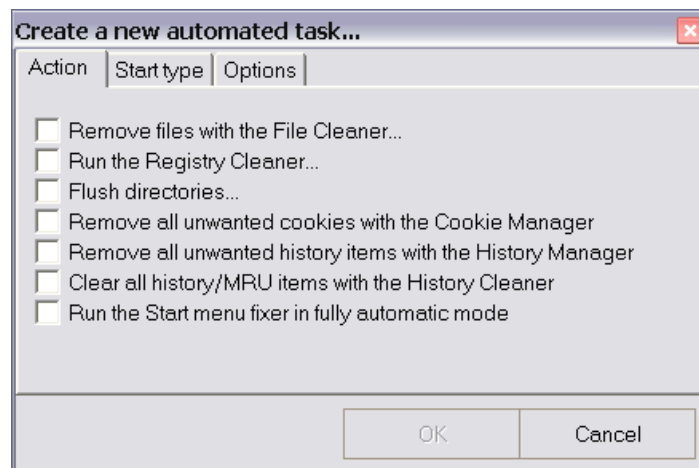


Image 40. Creation of automated tasks is easy with the Automation Tool

To create a new Automation Tool tasks, simply click *Create new task* button. The actual process of creating the automated task is quite easy, first you must just select the actions you wish to be done (see the image).

The Start type section defines the way you want to use the task. For example, you can ask the jv16 PowerTools to create an icon of the task to the Desktop so you can execute the task very easily, or you can make the task to be automatically executed when the system is started.

You must also give the task some description and a filename, this is done at the Options section. After you have filled the both fields, click *OK* and you're done.

## Other tools

The jv16 PowerTools 2005 also contains other tools, not directly available from the main window.

### The File Tool

The most powerful file handling tool included to the jv16 PowerTools 2005 is the File Tool. The File Tool is not by any means designed to replace the Windows Explorer, the File Tool is designed to do what the Windows Explorer can't.

To access the File Tool you must either use File Finder or the File Cleaner, or you can also drag and drop files to the jv16 PowerTools' main window and the product will automatically open the File Tool and show the files in there.

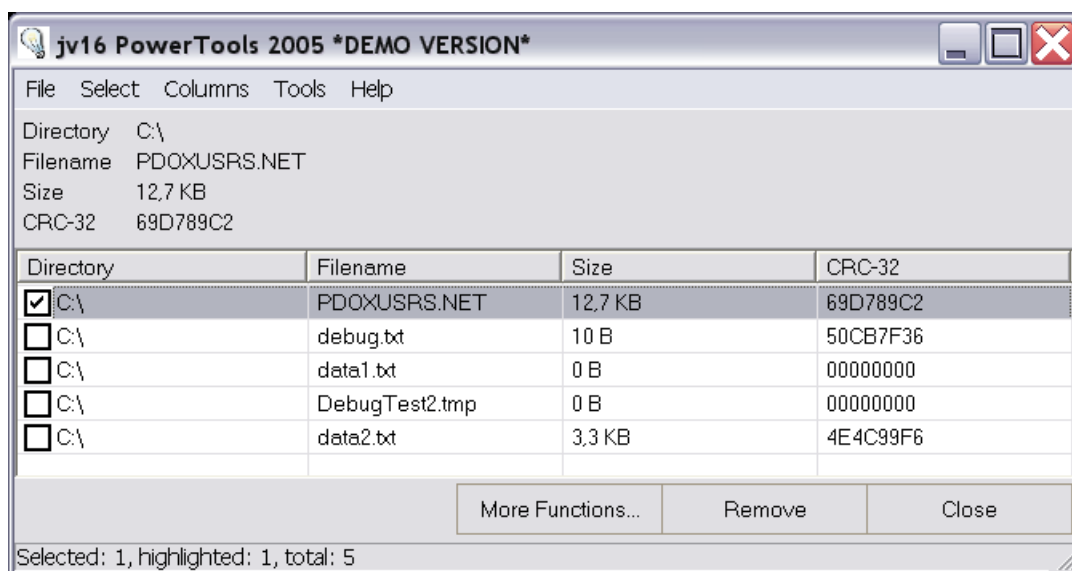


Image 41. The File Tool listing a few files with their sizes and a CRC checksum

The File Tool's user interface is basically a list where the files are listed. You can tell the tool to show you more information about the files with the Columns menu.

The File Tool can show many common information about the files such as their sizes, creation dates and attributes. But in addition, the File Tool can also extract information from executable files, from MP3s and it can also calculate the files' CRC, SHA1 or MD5 checksums on-the-fly.

The real power behind the File Tool lies under the *More Functions* button, you will need to select one or more files before it can be clicked, thought (see the image).

The *More Functions* button contains the following features.

- *Copy to* creates a copy of the selected files and sends them to the desired location.
- *Move to* moves the selected files to the desired location.
- *Rename* renames a single file. The new filename is asked from the user.
- *Mass Rename* allows you to rename many files in a very easy but powerful way. See the Mass File Renamer chapter for more information.
- *Change attributes* allows you to add attributes to the selected files or remove certain attributes

from them. See the File Attribute Tool chapter for more information.

- *Find and Replace* allows you to search data inside files and replace it with another data. The feature works in a similar way as the Registry Find & Replace. Please see the File Find and Replace chapter for more information.
- *Execute* opens the selected file with its default application as defined in your system's settings. For example, if you execute a program the program itself will start, if you execute a text file it will open in your default text editor.
- *Explore* opens the directory where the file is located at to the Windows Explorer.
- *Wipe* removes the files in a way they cannot be ever recovered again. Wiping files increases privacy but its downside is its slow performance. The exact way how the files are wiped can be configured in the Settings.
- *Move to recycle bin* removes the selected files and moves them to the Window' Recycle Bin.
- *Merge* combines two or more files together. Note that the original files are not modified but a new file with the contents of all the selected files is created. The name of the new file is asked from the user.
- *Encrypt* allows you to encrypt files with wide range of options. Please see the File Encrypter chapter for more information.
- *Decrypt* decrypts the selected files, i.e. you must decrypt the files you have encrypted before you can use the files again.
- *View* opens the selected file with jv16 PowerTools default file viewer (as defined in the Settings).
- *Analyze...* uses AI (Artificial Intelligence) and statistical methods in order to guess the use and the contents of the file. The feature doesn't take the file's extension in to account at all, nor does it try to detect some known file header information. If you have files you don't recognize, the analyze feature might help you. Please see the File Analyzer chapter for more information.

The different tools under the *More Functions* button have different requirements which must be met before you can use them. The requirements are defined in the following table.

<b>Feature</b>	<b>Number of files which need to be selected</b>
Copy To	One file or more
Move To	One file or more
Rename	Only one file
Mass rename	Two files or more
Change attributes	One file or more
Find and Replace	One file or more
Execute	Only one file
Explore	Only one file
Wipe	One file or more
Move to recycle bin	One file or more
Remove from list	One file or more
Merge	Two files or more
Encrypt	One file or more
Decrypt	One file or more
View	One file or more
Analyze...	Only one file

Tip: You can drag and drop files to the File Tool directly from the Windows Explorer or from My Computer. You can also drag and drop files to the jv16 PowerTools' main window and the product will automatically open the File Tool and show the files in there.

## The Mass File Renamer

Renaming many files at once is practically impossible without a mass file renamer tool. The *ju16* PowerTools' renamer isn't just any renamer tool, it's one of the most advanced on the market thanks to its unique and easy-to-use user interface.

You can access the Mass File Renamer from the File Tool. For example, just drag and drop some files to the *ju16* PowerTools and the File Tools opens, then select the files and click *More Functions > Mass Rename* and the files are on the Mass File Renamer.

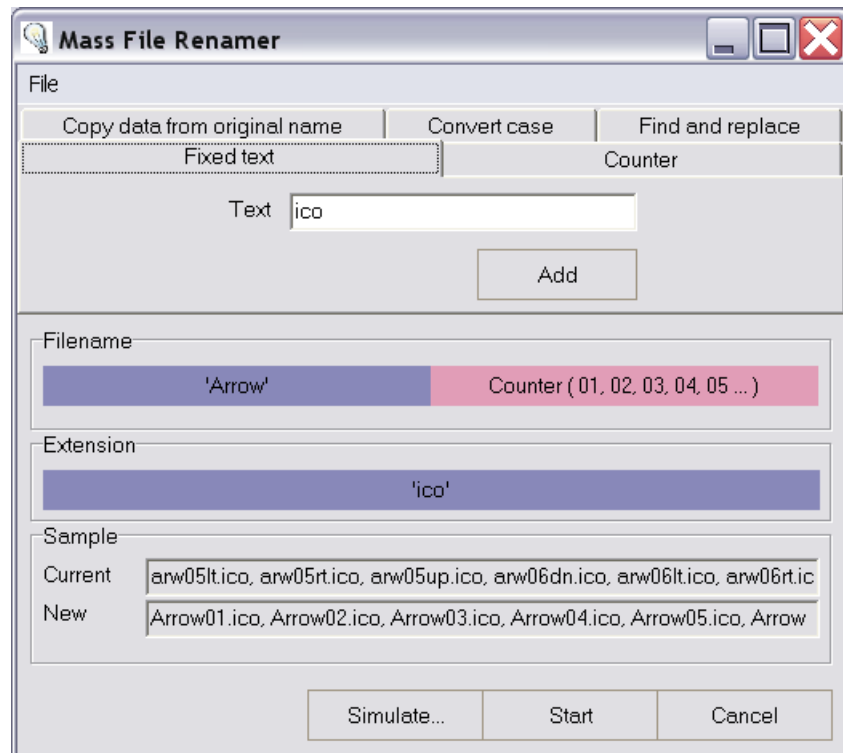


Image 42. Renaming dozens of files at once is easy with the Mass File Renamer

The Mass File Renamer works with blocks, just like building blocks or the ones you might have played with as a child.

In the example picture above, there are three blocks

1. A text block with a text “Arrow”,
2. A counter block and
3. A second text block with a text “ico”.

When these three blocks are put together, they create an unique renaming pattern. The first file is called “Arrow01.ico”, the second “Arrow02.ico” and so on.

You can move the blocks around any way you like with drag and drop, i.e. just grab the block with your mouse and drop it where you wish. You can remove a block by grabbing it and hitting the Delete on your keyboard while holding the mouse button down.

To make it all even easier, the Mass File Renamer also shows you a Before and After image, so to speak. The current names of the files are listed in the Sample box and below that are the new filenames. You can also simulate the rename procedure by clicking the Simulate button on the bottom, this allows you to see how every single selected files would be renamed.

**Warning:** The Mass File Renamer doesn't create any backups, there is no way to undo the renaming procedure after you have hit the Start button. Please don't use this feature unless you know what you are doing.

## File Attribute Tool

Removing old or adding new attributes to multiple files at once can be done with the File Attribute Tool.

You can access the File Attribute Tool from the File Tool. For example, just drag and drop some files to the jv16 PowerTools and the File Tools opens, then select the files and click *More Functions > Change attributes*.

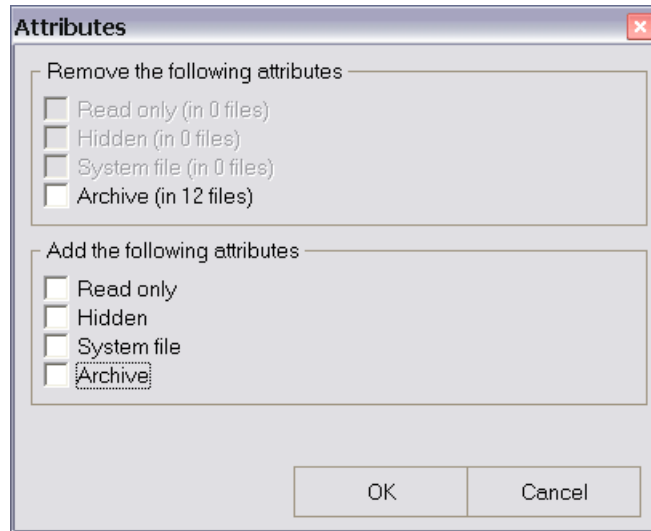


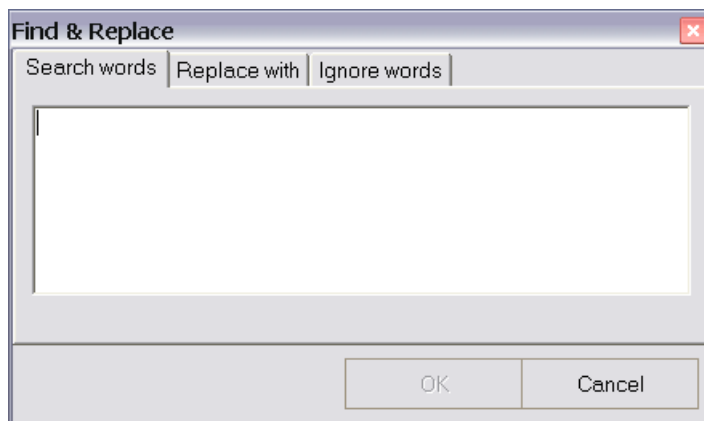
Image 43. Modifying file attributes of many files with the File Attribute Tool

**Warning:** File Attribute Tool doesn't create any backups, there is no way to undo the the procedure after you have hit the OK button. Please don't use this feature unless you know what you are doing.

## Find and Replace

Replacing data inside multiple files is easy with the Find and Replace tool. Of course, you should only use it with ascii text files, such as txt or html files.

You can access the Find and Replace feature from the File Tool. For example, just drag and drop some files to the jv16 PowerTools and the File Tools opens, then select the files and click *More Functions > Find and Replace*.



*Image 44. Finding and replacing data inside one or many files is an easy task with the Find and Replace feature*

Note: You must enter at least on search word and the replace word to the Replace with section before the Start button becomes enabled.

## The Results

The Find and Replace feature uses the same approach as the Registry Find and Replace tool discussed earlier in this book.

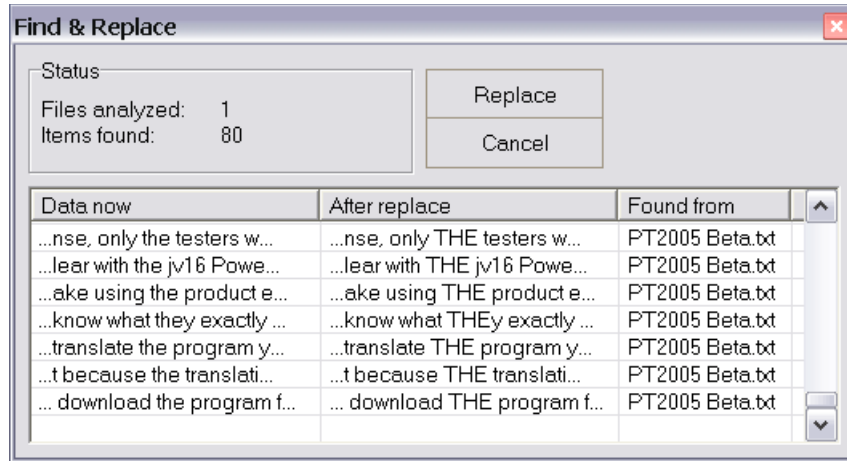


Image 45. Results of the Find and Replace procedure

The results of the search operation are listed in a new result window (see the image). You can remove the items you don't wish to be changed with the right click menu, you can also open the file in question or its directory with the right click menu.

Click the *Replace* button after you have verified the list contains only the changes you wish to be made. No changes have been made yet, therefore you can also hit the *Cancel* button to cancel the entire Find and Replace procedure.

## File Encrypter

The File Encrypter allows you to encrypt files. Encrypting means that the entire contents of the file is scrambled in a way you can only undo the changes, and thus restore the file's original contents, with a password.

You can access the File Encrypter from the File Tool. For example, just drag and drop some files to the *PowerTools* and the File Tools opens, then select the files and click *More Functions > Encrypt* and the files are on the File Encrypter.

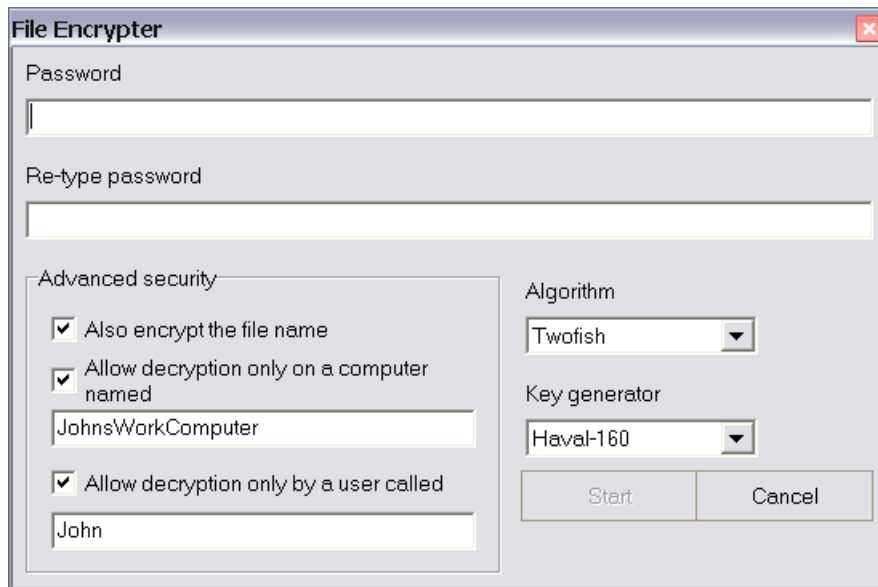


Image 46. Encrypting files is fast and easy with the File Encrypter

The *PowerTools*' File Encrypter supports most of the modern data encryption algorithms but it also contains three very advanced and unique ways to greatly improve your security: Encryption of the file's name and allowing decryption only on a computer with a specific name and/or by user with a specific name.

The following data encryption algorithms are supported: 3Way, 3DES, Blowfish, Diamond II, FROG, Gost, Q128, Rijndael, Safer-SK128, Sapphire II, SCOP, Shark, Skipjack, Square, Tea and Twofish.

The features of the File Encrypter are the following.

- *Also encrypt the filename* allows you to increase your privacy, when all of your encrypted secret files are called "A432AD321S12A3FA2D1A65BC" no one can even guess what's inside. After you decrypt the file, the original filename is of course restored.
- *Allow decryption only on a computer named* tells the feature to also use the name of the computer as a part of the password. This makes it possible to decrypt the file only with a computer you wish, this feature is a great improvement of security if you are only encrypting files for your own use and not for sending to someone else.
- *Allow decryption only by a user called* makes the feature to use also the name of the current Windows user as a part of the password.

- *Algorithm* box contains all the encryption algorithms available. If you don't know what they mean, there is no need to modify this setting.
- *Key generator* box contains all the supported key generators. If you don't know what they mean, there is no need to modify this setting.

To decrypt, i.e. to restore the original contents of the encrypted file, you must click the *Decrypt* button in the File Tool and enter the correct password.

## File Analyzer

The task of recognizing what the file might be is very difficult and there really aren't many tools designed for that. The jv16 PowerTools 2005 contains a very easy to use generic file analyzer, it can analyze a file's contents and tell you what it thinks the file is.

You can access the File Analyzer from the File Tool. For example, just drag and drop some files to the jv16 PowerTools and the File Tools opens, then select the files and click More Functions > Analyze.

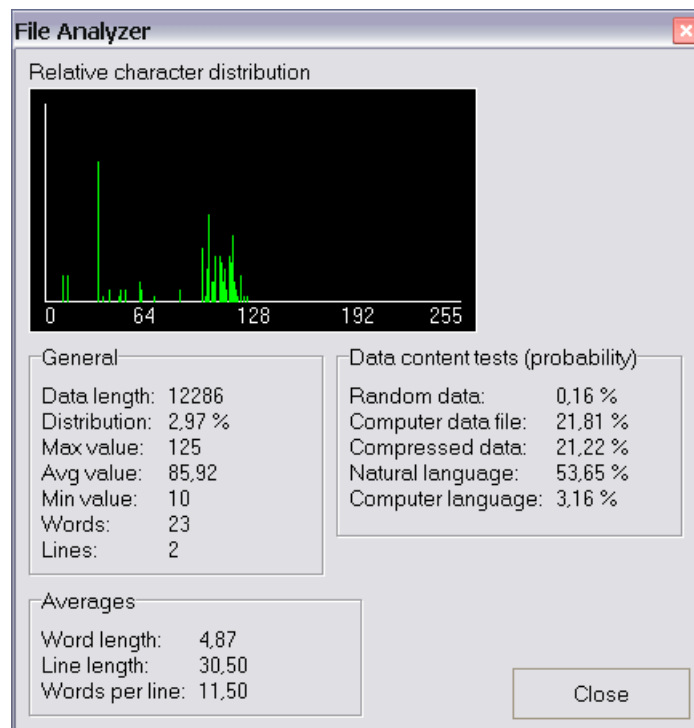


Image 47. Analyzing a file's contents is easy with the File Analyzer

The File Analyzer does not analyze the file's extension, i.e. it doesn't think that a file is an image file just because its extension is .jpg. It also doesn't look for certain header or footer information from the file, this data could have been corrupted or modified in purpose. Instead, the File Analyzer uses an unique method of combined statistical and Artificial Intelligence data recognition.

You can see the type of the file from the Data content tests box. It shows the probability of the file's contents, in other words, if it shows e.g. "Natural language 50%" it means that there is a 50 per cent probability that the file is a file containing natural language, such as writing in English.

The sections of the Data content tests box are the following.

- *Random data* means data that doesn't seem to have any recognizable patterns.
- *Computer data file* means all encoded computer data files, such as compressed images (jpeg, gif, png) and encoded document files (word document .doc, excel spreadsheets and so on).
- *Compressed data file* means all data formats with a very high compression level, such as zip files and rar, arj and lha compression format files.
- *Natural language* means the data isn't encoded and it looks like a natural language, such as English or any other language.

- *Computer language* means that the data isn't encoded and it looks like some form of computer readable language, such as programming language (C/C++, Java, Delphi, VB, PHP etc.) or other such languages, such as XML.

Of course, analyzing the data's content is a very difficult task and the File Analyzer can analyze it wrong but you can still use it to give you some idea what the data could be.

The General box contains the following statistical information about the file's contents.

- *Data length* is the length of the data in bytes.
- *Distribution* is the per cent how well the data is distributed, it's a numerical representation of the Relative character distribution image.
- *Max value* is the largest byte value. The data is analyzed in bytes, therefore the largest possible value is 255 and the smallest 0.
- *Avg value* is the average byte value found. See above.
- *Min value* is the smallest byte value found. See above.
- *Words* is an estimated number of words found from the file. This number isn't relative if the file isn't an uncompressed and unencoded text file, such as txt file.
- *Lines* is an estimated number of the word lines in the file. See above.

The Averages box contains the following statistical information.

- *Word length* is the average word length.
- *Line length* is the average length of a single line inside the data.
- *Words per line* is an estimation on how many words there are on average per one line in the data.

## Frequently Asked Questions

This chapter contains many common questions about the jv16 PowerTools and their answers. The questions are divided in to categories for easier navigation.

### Questions related to the installation of jv16 PowerTools

**Q:** What kind of registry entries jv16 PowerTools adds to the registry during the installation?

**A:** jv16 PowerTools itself doesn't add or modify any registry entries when installed. However, the product's trial system will place a tiny hidden data inside your system to prevent the abuse of the 30 day trial opportunity. The size of the hidden data is no more than 1 KB. In other words, if you have a small 2 GB hard disk the space reserved by the trial system is roughly 0,0000005% of your hard drive space.

**Q:** What system files jv16 PowerTools modifies during installation?

**A:** None, but please see the question above.

**Q:** What is the difference between the installation packages (One with installer, the .zip and the .rar archive) ?

**A:** Basically nothing, all the packages contain exactly the same files. The installer gives you more options how to install the files and therefore it's recommended for normal users.

### Questions before using the jv16 PowerTools

**Q:** Can jv16 PowerTools do any harm to my computer?

**A:** Yes. Basically, it only does what you tell it to do.

The product is like an axe, if you know how to use it you can use it as a powerful tool but if you don't really know how to use it you can someday hit your leg with it.

**Q:** What does the disclaimer in the license agreement really mean?

**A:** It basically means that what ever you do with jv16 PowerTools you are on your own. If you destroy something with it, it's not our fault. Just as like a manufacturer of knives isn't responsible if you cut your finger. For more information, please read the license agreement well through. If you don't agree with this policy, do not use jv16 PowerTools.

### Questions related to the Software Manager

**Q:** What are those [Unknown] items in the Software Manager?

**A:** They are items that jv16 PowerTools can't recognize, this doesn't mean, however, that they are safe to remove.

**Q:** Are items marked with "N/A" always safe to remove?

**A:** No. There really are no general rules on how to identify items that are safe to remove.

**Q:** I can't recognize any of these items. What can I do?

**A:** Don't do anything, if you don't know what those items are then it's always safe to leave them alone.

**Q:** Why I can just remove items and not modify them in?

**A:** Modifying, for example renaming, some items might cause trouble. For example, the software whose entries you modified might not work properly anymore.

**Q:** How can I know which items to remove?

**A:** You just have to know it. If you don't know what to remove, don't remove anything, that's always the safest option.

### **Questions related to the Registry Manager**

**Q:** Are items marked with "N/A" always safe to remove?

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**Q:** How can I know which items to remove?

**A:** You just have to know it. If you don't know what to remove, don't remove anything, that's always the safest option.

### **Questions related to the Registry Cleaner**

**Q:** What is the Registry Cleaner?

**A:** Registry Cleaner is a tool that automatically finds erroneous registry entries and lists them to you.

**Q:** What are threads?

**A:** The thread number represents the amount of registry analyzer units that are currently running. When all of them are finished, i.e. thread number is zero, the Registry Cleaner is finished.

**Q:** You have said the Registry Cleaner of the jv16 PowerTools 2005 uses artificial intelligence. Does that mean it will show different results each time as it learns what items are invalid and what are not?

**A:** No, the jv16 PowerTools 2005 uses artificial intelligence based on so called pre-trained neural networks. This means that the AI has been trained in our test environment, it doesn't learn anything while its on your computer.

**Q:** Why doesn't the artificial intelligence in jv16 PowerTools learn anything?

**A:** It is designed that way. This is because system maintenance, such as registry cleaning, is a very critical procedure. Learning AI's are very prone to errors and therefore learning AI's are usually only used in non-critical applications, such as in image recognition and so on.

**Q:** When I use the Registry Cleaner the threads value decreases while all the other values increase. Is this normal?

**A:** Yes. Threads are the Registry Cleaner components which check some part of your registry. When the component has finished its job it will terminate itself and then the threads value will decrease.

**Q:** The Registry Cleaner reports after the scan that Keys analyzed: 264,397 and Values analyzed: 231,376. However, when I use other parts of the product, for example the Registry Finder, the product reports it analyzes only about 100,000 keys and 363,000 values in my registry. What causes these differences?

**A:** Analyzing the registry for errors (i.e. what the Registry Cleaner does) means that each data item (key or a value) is analyzed many times. For example, a value is first analyzed to see its type. If it is a string it goes to a string analysis. When a string goes through the string analysis process it might be analyzed by many other sub-analyzers, which, again, increase the Values Analyzed number.

While e.g. the Registry Finder only analyzes each values and keys against the given search word or words, this is a very simple and straightforward process compared to the one in the Registry Cleaner, this is why other tools of the product might report smaller number of keys and values analyzed. However, the Registry Finder analyzes many forms of data the Registry Cleaner doesn't, for example numerical data (dword data type), this is why the number of values analyzed could also be larger in the Registry Finder.

Basically, the number of keys and values analyzed is shown only to let the user know there is something going on, they shouldn't be used as any kind of reference values nor used for comparison e.g. against other products.

## **Questions about the Duplicate Finder**

**Q:** I have done a duplicate file search. May I now remove all the duplicate files?

**A:** No you can't, if you still wish to be able to use your computer, that is. Duplicate files are not safe to remove just like that. The Duplicate Finder is designed to help you to find duplicate files from your file collections, such as music or video collections.

## **Questions about the History and Cookie manager**

**Q:** Which browsers does the History and Cookie manager support?

**A:** Internet Explorer and Mozilla Firefox. Support for other browsers might be added in the future. However, support for Opera is very unlikely because of the binary file format it uses.

## Questions about the File Tool

**Q:** I would like to just mass rename many files, not to search for them. Is there any easy way to add the files to the list without actually making the program to search for them?

**A:** Yes. The program supports drag and drop, you can just drag the files from your desktop or from explorer to the main window or to the file tool and the program knows how to add the files to the list.

## Questions about licensing

**Q:** If I buy a license how and how fast I will have the licensed version?

**A:** The license is delivered to you with e-mail usually within a few minutes after the payment has been verified.

**Q:** What payment options do you support?

**A:** At the moment of writing this, we support PayPal, Visa, Visa Electron, MasterCard, Maestro, Discovery and American Express. Please see [www.macecraft.com](http://www.macecraft.com) for the most update information.

## Other questions

**Q:** If something goes wrong, can I restore my backups from DOS?

**A:** Usually, yes. If you can access the backup directory (usually `\jv16 PowerTools\Backups`) you can restore the backups. You must manually restore all the .reg files by importing them back to the registry.

**Q:** Why some lists have those little boxes where one must put a tick to and some list don't ?

**A:** This is used for safety reasons. Every time you tick an item you know that you are about to do some procedure to it, such as to remove it.

**Q:** I could translate jv16 PowerTools to my language, would you be interested in adding it to the official distribution package?

**A:** Yes, of course. See the default language file (`\Languages\English.lng`) for more information.

**Q:** My question is not answered here, what can I do?

**A:** Please see our discussion forums at: [www.macecraft.com/forum/](http://www.macecraft.com/forum/)

They might already contain the answer to your question, if not, you can register to the forums (that is free, of course) and ask the question there. Using the discussion forum to ask your question rather than sending us e-mail is highly recommended and in most cases gives you a much faster response.

# Appendixes

## Supported command line parameters

The jv16 PowerTools 2005 supports the following command line parameters. Command line parameters can be used from Windows Command Prompt or by creating a shortcut and adding the command line parameter after the filename,

for example: “c:\program files\jv16 PowerTools 2005\jv16pt.exe” -FileTool

<b>Command line parameter</b>	<b>Description</b>
-AutomationTool	Opens the Automation Tool
-BackupTool	Opens the Backup Tool
-CookieManager	Opens the Cookie Manager
-DuplicateFinder	Opens the Duplicate Finder
-FileFinder	Opens the File Finder
-FileCleaner	Opens the File Cleaner
-FileTool	Opens the File Tool
-HistoryCleaner	Opens the History Cleaner
-HistoryManager	Opens the History Manager
-PrivacyProtector	Opens the Privacy Protector
-RegCleaner	Opens the Registry Cleaner
-RegFinder	Opens the Registry Finder
-RegFindReplace	Opens the Registry Find and Replace tool
-RegManager	Opens the Registry Manager
-RegMonitor	Opens the Registry Monitor
-StartMenuFixer	Opens the Start Menu Fixer
-Settings	Opens the Settings window
-ExecTask “c:\filename.jvb”	Executes an automated task created by the Automation Tool

## Security notes

If you wish to use the jv16 PowerTools' security features (the features under the Security tab in the Settings window) you should remember the following notes.

1. After you have set up the desired security mode from the Settings, write protect the \Settings\Security.dat file to prevent unauthorized modifications of this setting. Protecting the file is only possible if the jv16 PowerTools has been installed on a NTFS partition. If the file is not write protected, any user could change the security mode setting and thus bypass the security settings
2. Using the *Demand a password only when the normal GUI is started* security mode is not recommended to be used in a hazardous environment. The security mode can be bypassed with a specially formatted automation task which only starts the normal user interface, because the user interface was started from automation task no password is required.