

**A.S.H. (c) M. Pacchiarotti, Jimjams 1997yesyesyesyesAdvanced
Space HunterTRUEashyesyes28/03/97**

A.S.H. - Advanced Space Hunter



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Help file produced by **HELLLP!** v2.7 , a product of Guy Software, on 28/03/97 for Mario Pacchiarotti.

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HINT: If you do not wish some of your topics to appear in the table of contents as displayed to your users (you may want them ONLY as PopUps), move the lines with their titles and contexts to below this point. If you do this remember to move the whole line, not part. As an alternative, you may wish to set up your own table of contents, see Help under The Structure of a Help File.

Do not delete any codes in the area above the Table of Contents title, they are used internally by HELLLP!

Temporary Files

Same Name Files

Zero Size Files

Unused Files

Broken Links

Introduction

I made **A.S.H.** to allow you to control your disk space usage by discovering files that are duplicated and, should you so wish, deleting or archiving one or more of these duplicates.

A.S.H. offer also a visual directory explorer, that is a set of charts representation of your drives and directories with many interesting information about space wasted, huge directories, file size statistics, creation, update and access date.

Now **A.S.H.** is more than a duplicated file searcher. It offers many information about your disks usage and it costs a little fee so you can use it as a disk cleaner, but also as a nice tool to understand how you disk space is used.

There are many ways in which duplicate files can be deposited on your hard disk, for example programs which don't check to see if you have a particular DLL installed and install their own private copy in any case, or other programs that install a DLL in your \Windows directory when it is already in \Windows\System.

Internet is another great duplicates producer, because of the cache directories and also because all of us collect graphical, text and zip files around.

A.S.H. scans your drives to find duplicate files. First it scans all the directories and collects information about all the files it finds, than it sorts the file list into size order and checks for duplicate.

To ensure files are really duplicate **A.S.H.** can use a CRC32 algorithm over the whole file.

A.S.H. makes also a file name comparison and creates a list of same name files, so you can check if there are different version of the same DLL or file.

A.S.H. provides also other usefull information and hints, as:

- ◆ list of directories where you have many little files over big drives (wasting space);
- ◆ list of totally duplicated directories (so you can eliminate the whole directory);
- ◆ list of zero size files;
- ◆ list of temporary files;
- ◆ list of unused files and directory;

You have the possibility to delete files from **A.S.H.** itself (move to Recycle bin), but be warned, you take sole responsibility if you choose to delete a file because **A.S.H.** makes no attempt to check if the file is in use or key to the functioning of your computer.

Generally:

- ◆ if you aren't sure, then never delete a file; leave it alone.
- ◆ if you are positive you know it's all right to delete it, then still don't, just archive it for a short period.

So you have also the option to **archive** the files in a special Ash Tray directory.

A.S.H. is a very powerfull and easy to use utility, but like most powerfull utility, it allows you to make lots of damage, so use it carefully.

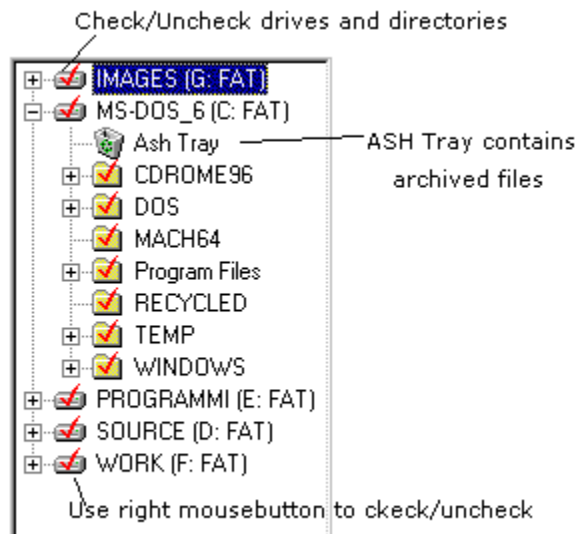
Even if you don't use **A.S.H.** to delete duplicate files, you can take advantage from it using the visual space explorer or the other features (i.e. you can use **A.S.H.** to plan your partition size before to migrate on a new hard disk and more....).

Now read the overview section, it should be enough to start working with **A.S.H.**

Jimjams

Overview

Fig. 1 - Directories Tree



A.S.H. is really easy to use. Simply select from the left list the drives you want to check (the best way is to check all your drives together) and press the Scan button. The scan operation will take some seconds, and you can watch the status bar to check what is happening.

To check / uncheck drives or directories use the right mousebutton. One click with your right mousebutton will select / deselect items in the list.

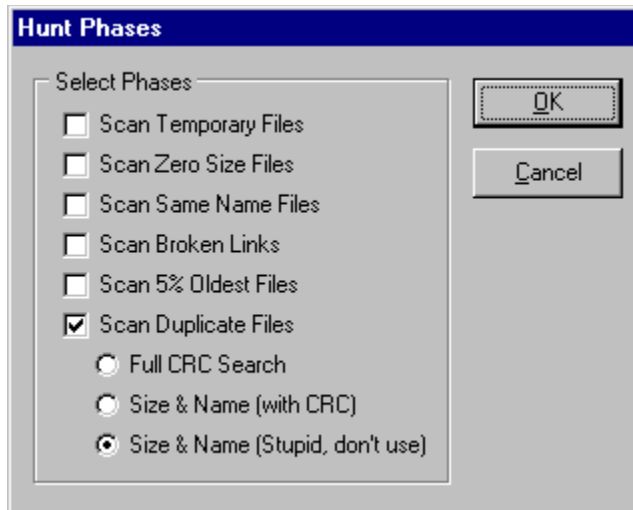
In the **Scan Operation A.S.H.** simply collects information about the files in the selected drives. After this short phase the statistical data are available. This version use less memory than the beta and it is quicker.

Fig. 2 - Tool Bar



After the **Scan Operation** you are able to start the **Hunt Operation**. Click on Hunt Button and you will prompted to chose which of the Hunt Phases you want to execute.

Fig. 3 - Hunt Phases Dialog



There are several phases available in the Hunt Operation:

- ◆ Temporary Files
- ◆ Zero Size Files
- ◆ Same Name Files
- ◆ Broken Links
- ◆ Oldest Files
- ◆ Duplicated Files

You can chose any of the phases and for Duplicate File Scan you can also chose which kind of check **A.S.H.** must execute.

Remember, the last option (Size & Name (Stupid, don't use) is not sure because it don't check for really dupes files with CRC32 but only compare size and name.

It is provided only to compare this kind of search with the really useful (first two), because some other package use this approach and I want to demonstrate how dangerous it is.

After your confirmation the search will start. Only the Duplicate Files Phase get a relevant amount of time, depending of the option you chose (**Full CRC Search** is about 5-10 times slower than **Size & Name with CRC**, and this is about 10 times slower than the **Stupid Size & Name** search). You can stop the duplicate search phase clicking the Stop Button.

During each of the hunt phases the status bar will provide you with relevant information about the phase itself.

After the hunt you can use the various lists in **A.S.H.** to check and delete (or archive) duplicate files, temporary files, unused files and zero-size files.

There are two different list style, one for Duplicate and Same Name list and one for all the other lists.

Fig. 4 - Duplicate and Same Name List

<input type="checkbox"/>	2509518		G:\Programmi\Borland\Delphi 2.0 Trial Edition\HELP\VCL.HLP
<input type="checkbox"/>	2509518		F:\help\VCL.HLP
<input type="checkbox"/>	2086912		F:\Ebony\Help\OLE.FTS
<input type="checkbox"/>	2086912		E:\Program Files\Delphi2\HELP\OLE.FTS
<input type="checkbox"/>	1757319		G:\Programmi\Borland\Delphi 2.0 Trial Edition\BIN\DELPHI.HDX
<input type="checkbox"/>	1757319		F:\help\DELPHI.HDX
<input type="checkbox"/>	1050955		G:\Programmi\Borland\Delphi 2.0 Trial Edition\HELP\DELPHI.HLP
<input type="checkbox"/>	1050955		F:\help\DELPHI.HLP
<input type="checkbox"/>	1012736		G:\Program Files\RIMArts\Rebecca\Rebecca.EXE
<input type="checkbox"/>	1012736		D:\Programmi\Rebecca\Rebecca.EXE
<input type="checkbox"/>	965904		C:\WINDOWS\SYSTEM\msjt3032.dll
<input type="checkbox"/>	965904		G:\WINNT\SYSTEM32\MSJT3032.DLL
<input type="checkbox"/>	924432		C:\WINDOWS\SYSTEM\MFC40.DLL
<input type="checkbox"/>	924432		G:\WINNT\SYSTEM32\MFC40.DLL
<input type="checkbox"/>	850192		G:\WINNT\SYSTEM32\MSHTML.DLL
<input type="checkbox"/>	850192		C:\WINDOWS\SYSTEM\MSHTML.DLL
<input type="checkbox"/>	718088		G:\Programmi\Borland\Delphi 2.0 Trial Edition\HELP\OBPASCAL.HLP
<input type="checkbox"/>	718088		F:\help\OBPASCAL.HLP
<input type="checkbox"/>	681496		G:\Programmi\Borland\Delphi 2.0 Trial Edition\Source\RTL\WIN\WINDOWS.
<input type="checkbox"/>	681496		E:\Program Files\Delphi2\Source\RTL\WIN\WINDOWS.PAS
<input type="checkbox"/>	671744		G:\Programmi\Borland\Delphi 2.0 Trial Edition\HELP\VCL.KWF
<input type="checkbox"/>	671744		F:\help\VCL.KWF
<input type="checkbox"/>	659488		G:\Programmi\Borland\Delphi 2.0 Trial Edition\BIN\RW32CORE.DLL
<input type="checkbox"/>	659488		E:\Program Files\Delphi2\BIN\RW32CORE.DLL
<input type="checkbox"/>	647441		G:\Programmi\Borland\Delphi 2.0 Trial Edition\HELP\CWG.HLP
<input type="checkbox"/>	647441		F:\help\CWG.HLP
<input type="checkbox"/>	640512		D:\SRC\ASH\OC30.DLL
<input type="checkbox"/>	640512		C:\WINDOWS\SYSTEM\OC30.DLL

Same Name files and **Duplicate Files** are grouped and highlighted with different background color for each group.

In this view you can mark files using the Mark Button or clicking in the little check-box to the left.

The other view show more file information and you can also sort the files simply clicking the header of the field you want to use to sort.

Fig. 4b - Other list style

Broken Links		Oldest Access			Hints	
Files	Statistics	Duplicates	Same Name	Zero Size	Temporary	
Name	Dimension	Creation Date	Last Update	Last Access		
AUTOEXEC.000	1 KB		12/10/96 14.22	23/03/97		
AUTOEXEC.001	1 KB		11/11/96 18.47	23/03/97		
AUTOEXEC.BAT	1 KB	22/02/97 9.17	22/02/97 9.17	23/03/97		
AUTOEXEC.BIT	1 KB	20/01/97 23.21	20/01/97 23.21	23/03/97		
AUTOEXEC.DOS	1 KB	22/02/97 9.19	22/02/97 9.19	06/03/97		
BOOT.INI	1 KB	08/02/97 14.27	08/02/97 15.31	22/03/97		
BOOTLOG.PRV	23 KB		25/01/97 16.42	23/03/97		
BOOTLOG.TXT	23 KB	25/01/97 22.22	25/01/97 22.22	23/03/97		
BOOTSECT.DOS	1 KB	08/02/97 14.27	08/02/97 14.27	06/03/97		
COMMAND.COM	91 KB	22/01/97 0.41	11/07/95 9.50	13/03/97		
COMMAND.DOS	56 KB		31/05/94 6.22	22/03/97		
CONFIG.DOS	1 KB		11/10/96 21.34	06/03/97		
CONFIG.SYS	1 KB	22/01/97 0.46	22/01/97 0.46	23/03/97		
DETLOG.TXT	40 KB	22/01/97 0.31	22/01/97 0.33	23/03/97		
IO.DOS	40 KB		31/05/94 6.22	25/01/97		
IO.SYS	218 KB	22/01/97 0.41	11/07/95 9.50	23/03/97		
MSDOS.---	1 KB		19/09/96 19.33	23/03/97		
MSDOS.DOS	37 KB		31/05/94 6.22	25/01/97		
MSDOS.SYS	2 KB	22/01/97 0.41	22/01/97 0.41	23/03/97		
NETLOG.TXT	1 KB	22/01/97 0.37	22/01/97 0.37	06/03/97		
NTDETECT.COM	26 KB	02/09/96 12.00	02/09/96 12.00	22/03/97		
NTLDR	153 KB	02/09/96 12.00	02/09/96 12.00	08/02/97		
PDOXUSRS.NET	13 KB	05/10/96 0.33	07/02/97 0.02	23/03/97		
SCANDISK.LOG	1 KB	22/01/97 0.30	22/01/97 0.55	06/03/97		
SETUP.INF	1 KB	28/09/96 18.26	28/09/96 18.28	06/03/97		
SETUPLOG.OLD	46 KB		19/09/96 19.50	23/03/97		
SETUPLOG.TXT	52 KB	22/01/97 0.31	22/01/97 0.46	22/01/97		

To delete marked files click the Delete Button. To archive marked files in the ASH Tray use the Archive button.

You can also export or print the file lists clicking on the Save List and Print button.

Beware:

- ♦ if you aren't sure, then never delete a file; leave it alone.
- ♦ if you are positive you know it's all right to delete it, then still don't, just archive it for a short period.

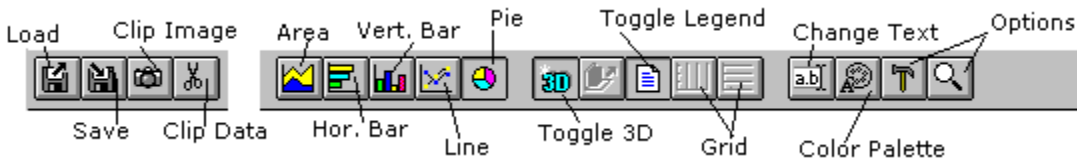
A.S.H. is a very powerfull and easy to use utility, but like most powerfull utility, it allows you to make lots of damage, so use it carefully.

If you don't want scan for duplicate, but simply want to use the space tree (or the associated pie graph) then you can miss the Hunt Operation and start to enjoy **A.S.H.** immediately after the Scan Operation.

You can explore the space pie and space bar chart. Double click over a slice or bar to enter that directory. Double click out of the pie to go back in the parent directory and click and hold right mouse button over a slice/bar to see directory information.

You can heavily change each of the available chart. The following tool bar is on the top of the chart.

Fig. 5 - Chart Tool Bar



Load	you can load previously saved chart;
Save	you can save charts;
Clip Image	you can copy the chart image (bitmap) to the clipboard;
Clip Data	you can copy the data beside the chart to the clipboard, and then paste it in your favorite spreadsheet;
Area	change the chart type to an Area Chart;
Horz. Bar	change the chart type to Horizontal Bar Chart;
Vert. Bar	change the chart type to Vertical Bar Chart;
Line	change the chart type to Line Chart;
Pie	change the chart type to Pie Chart (only available in the Space Pie Chart);
Toggle Legend	toggle legend on and off;
Grid	toggle vertical and horizontal grid;
Change Text	change title and other text;
Color Palette	activate the color palette, then you can drag and drop any color to any chart element;
Options	lots of options to customize your chart;

Beware: the changes to your chart are lost if you move to another tab in the notebook, or if you change the selection in the tree view on the left of **A.S.H.** window, so save or print it before moving around.

Obviously with the Print Button you can print your chart.

Other charts give you statistics about the size of your files and creation, update and access date. Size and date charts refer to the checked directories in the Directory Tree, space pie and space bar charts refer to the selected directory in the Directory Tree.

A.S.H. give you also a report about directory with many little files and an estimate of the space wasted by these directories. Space is wasted because the bigger your partition is, the bigger the cluster size is. A file ever get space as a number of whole cluster, so if you have a cluster of 16K and your file is one byte, that file get 16K (wasting 1 byte less the 16K).

The estimate is not correct when the partition is a compressed one, so **A.S.H.** will report zero space wasted for compressed drives.

Fig. 6 - Hints: most wasting directories

Files	Statistics	Duplicates	Same Name	Zero Size	Temporary
Broken Links		Oldest Access			Hints
<p>The following directories are wasting big space. If you can move these directories on disk with smaller cluster size you can save space. If you have a directory wasting 2MB on a disk with 16K cluster and you move it on a disk with 8K cluster you will likely regain 1M. Beware: You have to check by yourself if you can move any of these directories. Sometime you will need to uninstall and reinstall the whole application to move application's directories sometime you can move them within your application (as for MSIE Temporary Internet directories).</p>					
Used	Wasted	Directory Name			
573396	1712172	G:\Programmi\Borland\Delphi 2.0 Trial Edition\IMAGES			
60836	1266268	G:\Programmi\Borland\Delphi 2.0 Trial Edition\IMAGES\BUTTONS			
359792	909968	G:\WINNT\Profiles			
5005055	2535681	C:\Program Files\Netscape			
5005055	2531585	C:\Program Files\Netscape\Users			
5005055	2527489	C:\Program Files\Netscape\Users\mc8872			
4933531	2492517	C:\Program Files\Netscape\Users\mc8872\cache			
9555	686765	C:\WINDOWS\Favorites			
63700	894764	C:\WINDOWS\Start Menu			
63700	890668	C:\WINDOWS\Start Menu\Programs			
3573927	5928793	E:\DELPHI\DEMOS			
627856	2337648	E:\DELPHI\DEMOS\DB			
113772	1475476	E:\DELPHI\DEMOS\DOC			
1486544	823600	E:\DELPHI\DOC			
340116	1068908	E:\DELPHI\IDAPI\LANGDRV			
198286	3471730	E:\DELPHI\IMAGES			
60836	2593372	E:\DELPHI\IMAGES\BUTTONS			
<p>Wasting Space Directory / Duplicated Directory / Low Use Directory</p>					

On the hints tab there is also a list of duplicate directories. That is the directories in the list contains only duplicate files. Each of the files in these directories has a duplicate one somewhere else. The “Low Use Directory” are directories with all the files unaccessed from a long time.

Fig. 7 - The shrinker



The little red spot in **A.S.H.** window is a shrinker. Click there to enlarge/shrink the notebook view. It is useful to get the maximum space for charts or file lists.

That's all folks. Remember, be careful if you decide to eliminate some files, the best way is to rename it appending some extension to file name, waiting to check if all of your applications still work.

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Registration

Registering **A.S.H.** you help the Shareware system to alive.

Registration fee for **A.S.H.** is only **15\$**, if you are interested in buying multiple copies or site license please contact me by email.

To register you can use the attached **register.exe** program, or use the on-line internet registration page:

<http://order.kagi.com/?JJ>

or the secure one:

<http://order.kagi.com/?JJ&S>

Kagi will manage the registration stuff and you will receive a key to unlock the program in a few days.

After you received the key you should activate the ABOUT windows of **A.S.H.** and click the "**Insert Key**" button. Type in your name and the key.

You can ever find the latest version of this software at our internet site:

<http://www.jimjams.com>

Author contact:

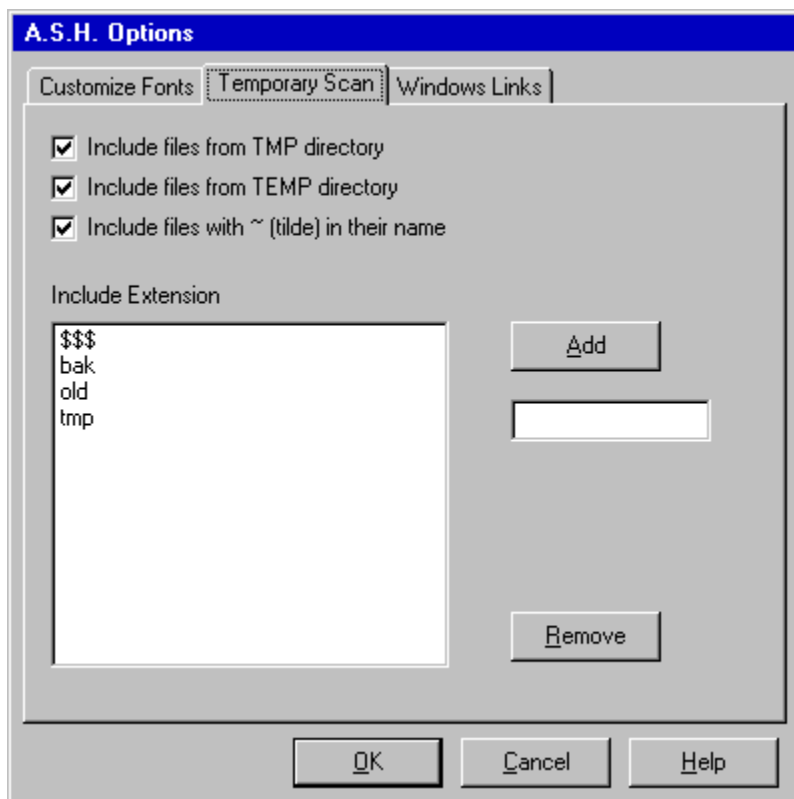
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Temporary Files

A.S.H. search your drives for temporary files. There are a lot of them normally around because some programs don't delete them or if there was an uncontrolled shutdown and so on.

By default **A.S.H.** collect files from **TEMP** and **TMP** environment directories and files with some special extension (.old, .bak, .\$\$\$.~ and so on).

You can customize that search using the **A.S.H.** properties:



Sometimes TMP or TEMP directory don't contains only temporary files (sometimes TMP point to C:\DOS) so you can exclude it from the search unchecking the relate checkbox. You can also add as many extensions you want to the search list.

Same Name Files

It's normal to have many files with the same name, but looking this list you can find information you cannot find in the duplicated file list.

Sometimes you can have different version of the same software (DLL, EXE) over you drives and the "Same Name List" can help you.

Files with the same name are grouped in the list with the same background color so you can easily individuate them.

As usual you can archive or delete the files. First check the box on the left with your mouse or using the space bar on your keyboard then delete or archive it using the related button on the tool bar.

When you click a line in the list some related file informations are displayed on the status bar below.

Zero Size Files

This list contains void files. These files have a size of zero, but they still use space.

Be careful deleting such a files because some old style applications uses zero size files as signals (semaphores, switches and so on) for their internal goals.

Unused Files

This list collect the oldest files from your drives. Oldest means files you don't access from the longest time, not oldest created files. If you created a file two years ago, but you use it daily this file will be not in the Oldest Files (unused) list. If you created a file some month ago and you never used it then it will be in the list.

Try sorting the list by directory and you can understand easily if there is some particular directories you don't use from a long time. Maybe you installed a product and then you never used it. Do you really need it ?

In the Hints tab there is also a list of unused directories. These directories are totally unused from the highlighted number of days. You can analyze that list too.

Known Problems

- 1 ASH don't start and a message appears :**
Application error: Exception EOLEError in module ash.exe at 00036995. Class not registered.
I am not able to reproduce this problem and I have no solution for it at now.
- 2 FAT32 drives with size greater than 2GB report invalid (negative) size.**
This problem should be solved but I cannot test it (I will buy a disk greater than 2GB to test it if the problem is not solved)
- 3 In some configuration ASH changes the access date of scanned files.**
It should not occurs again. ASH don't touch the access date when scanning or hunting. If someone has this problem, please write to me an email.

F.A.Q.

1 There is a strange directory on my drive named “ASH TRAY” with unknown files in it, what is it ?

This is the ASH archive directory. ASH put there all the files you archived for that drive. You can explore the directory to check what files it contains from ASH itself after the “Scan” phase. Click on “Ash Tray” and chose the Files tab from the notebook on the right. From there you can delete the files or unarchive it.

Unarchive a file restore the file to the original path.

2 The date chart tell me about 70% of the files are accessed in the last week, but I think it is not possible because I use only a few of the installed software. There is something wrong ?!

If you used some **other** package to hunt for duplicated files or to get statistics about your drives, the very likely that package touched the access date of all the files it scanned.

3 The fonts in the Same Name List and in the Duplicate Files List are too little and the lists are not easy to read. Can I change the fonts ?

Yes. Click the tool bar **Options** button and change "Fixed Sized List Font" as for your need. You can change also other fonts (typeface and size).

4 I deleted many files but the free space on my drive is the same. Why ?

ASH don't phisically delete files, but it moves files to Recycle Bin. Empty Recycle Bin to claim your space.

Broken Links

Windows 95 provide a Control Panel feature to uninstall applications and is now usual distribute programs with uninstall feature.

But sometimes applications came without any uninstall feature and so the only way to remove them is deleting the program directory. Usually this works, but if the application added an entry to the start menu or to desktop the icon or the menu item is still alive.

A.S.H. search Windows links and checks if they are still valid. Any broken link will be added to this list and then you can delete it if you want.

You can decide if you want to check links to removable or network drives (usually you have not to do it because links to removable drive are ever broken if the removable media is not in the drive and links to network drive are reported as broken if the network connection is not active).

