Overview

Dustman is designed to keep your computer system clean of the unwanted files that can clutter it. Examples of such files include temporary files created by applications that do not remove them properly and old backup files from word processing and other applications.

Dustman removes such files for you automatically, based on directories, file specifications, and ages that you specify. For example, you can configure Dustman to delete all files from the \temp directory (where applications typically place their temporary files) at the end of each day, and to recycle all files anywhere on your system with a .bak extension 7 days after they are last accessed.

Dustman also allows you to use expiration dates and retention periods as part of your directory and file names.

Dustman can remove files based on any combination of directory and file specifications, and supports basic DOS-style <u>wildcards</u> (* and ?) as well as GREP-like <u>regular expressions</u>. Each <u>entry</u> in a Dustman <u>job</u> is configured separately: for each entry, you specify the directory and file specification, the age after which files matching the specification should be removed, the action (delete or recycle) to take on each, and the file date (creation, last modification, or last access) to base the determination on.

If you have used similar programs before, read about what makes Dustman different.

Getting Started

Dustman stores configuration information in files called *jobs*. Each job contains a few options that apply to the job as a whole, and a collection of *entries*. Each entry contains the specification for a file that you want Dustman to remove. This information includes the path and filespec and options that determine when and how the file should be removed.

Once you have saved your job, you can easily run Dustman using the saved configuration information.

- The basic steps required for using Dustman are:
- 1. <u>Create a job.</u>
- 2. <u>Add entries to the job.</u>
- 3. <u>Run the job.</u>

These steps correspond to the three tabbed pages of the Dustman interface. Each of these is discussed in the topics that follow.

Once you have learned to create and run a job, you should read about <u>how to get the most out of Dustman</u>.

The Job Page

🐪 Dustman - Sample Job	×
<u>File E</u> dit <u>J</u> ob <u>H</u> elp	
<u> Neb Xet S</u>	
Job Name: Sample Job	
Job Files Run/Preview	
Logging Log to c:\program files\dustman\sample.log Overwrite Log	Expiration Dates/Retention Periods Use Expiration Dates/Retention Periods Action Default Date Creation Recycle Last Update Last Access
	CAPS NUM SCRL

(For more information on a control, you can click the control in the picture above.)

Jobs

A Dustman *job* contains all of the configuration information Dustman needs in order to run. This includes a few settings that apply to the entire job, and a collection of <u>entries</u>, which specify the kinds of files that Dustman should delete.

Before you can run Dustman, you must create a job. You can use the <u>sample job</u> included with Dustman as the basis for your own job, and then <u>save</u> your job with a different name.

Most people will use only a single job. If you will only (or mostly) use a single job, you might want to save it as default.dmj: when you start Dustman without specifying a job name on the <u>command line</u>, Dustman looks for default.dmj in the Dustman directory. If this job exists, Dustman loads it automatically. This saves you from having to specify your job name on the command line or open it manually.

The Job Page

The **Job** page contains information that applies to the job as a whole. The following topics provide more information about the Job page:

<u>Creating, saving, and opening jobs</u> <u>Naming the job</u> <u>Logging job runs</u> <u>Expiration dates and retention periods</u>

Creating, Saving, and Opening Jobs

Creating a New Job

To create a new job, select the **New Job** command from the **File** menu, then enter <u>job</u> information and add <u>entries</u>.

Saving a Job

Once you have created a job, you will want to save it for later use. To save a job, select the **Save Job** or **Save Job As** command from the **File** menu and select the path and name for the job. By default, Dustman saves jobs in the directory in which Dustman is installed, and gives them the extension . dmj.

Opening a Job

There are several ways to open a Dustman job:

- From within Dustman, select the **Open Job** command from the **File** menu and specify the job you want to open.
- Create a shortcut to Dustman that automatically opens a particular job (this is done by specifying the job name on the Dustman <u>command line</u>).
- From the Windows Explorer, you can also open a job by double-clicking on it. This will start Dustman and load the job.
- If you save your job as default.dmj in the Dustman program directory, Dustman will open the job automatically each time it starts.

When Dustman runs, it displays a list of all of the files it has cataloged or removed. You can also have Dustman write this information to a log file so that you have a permanent record of the files Dustman removed.

To turn on logging for a job, check the **Log** option on the <u>Job</u> page and specify the name of the log file. By default, Dustman will append information for each run to the end of the file. If you check the **Overwrite Log** option, Dustman will instead replace the log file each run.

Expiration Dates and Retention Periods

Dustman allows you to use expiration dates and retention periods as part of file and directory names. Expiration dates and retention periods provide an easy means of identifying files and directories for removal without having to modify your Dustman job to include them.

For example, if you are saving a web page from your browser so that you can refer to it later, but will only need it for a day or so, you can specify a seven-day retention period as part of the name when you save it. The file will then be automatically removed after a week.

If you want to use expiration dates and retention periods, you must check the **Use Expiration Dates/Retention Periods** option on the <u>Job</u> page. You also specify the action (delete or recycle) that Dustman should take once files or directories become eligible, and the default date Dustman should use for retention period comparisons.

Expiration Dates

When you include an expiration date in a file or directory name, Dustman will remove the file or directory on the date you specify. You specify an expiration date for a file or directory by including the date, enclosed in brackets, as part of the name. For example, the file Temporary Document [1-15-97].doc will expire on 15 January 1997. On this day, Dustman will delete or recycle the file or directory depending on the action you specify on the Job page.

Retention Periods

When you include a retention period, Dustman will remove the file or directory after the specified number of days have elapsed. You specify a retention period for a file or directory by including the number of days the file should be retained, enclosed in brackets, as part of the name. For example, the file Temporary Document [30].doc will be retained for 30 days past the Default Date (creation, last update, or last access) you specify on the Job page. After the period has elapsed, Dustman will delete or recycle the file or directory depending on the action you specify on the Job page.

You can override the Default Date by prefixing the retention period with a c (creation date), u (last update), or a (last access). For example, the file test [u10].txt will be removed 10 days after it is last updated.

The Files Page

National - Sa <u>F</u> ile <u>E</u> dit <u>J</u> ob	mple Job Help				
Job Name: Samp					
Drives	Files and Directories				
C D E	Filespec *.??\$ *.bak *.bk! *.tmp c:\download*.* recycled*.* recycled*.* temp*.* tmp.*	Action Recycle Recycle Delete Recycle Exclude Exclude Delete Recycle	Age 7 7 1 30 1 3	Access Access Access Update Access Update Update	Add Edit Copy Delete
					CAPS NUM SCRL

(For more information on a control, you can click the control in the picture above.)

The **Files** page lists the file and directory specifications that Dustman will use to remove files. In the <u>Drives</u> box, you specify the disk drives that Dustman will scan when looking for files to remove. The <u>Files</u> and <u>Directories</u> box lists all of the <u>entries</u> defined for the job. The Add, Edit, Copy, and Delete buttons allow you to add, edit, copy, and delete entries from the job.

Note: Entries are listed in alphabetical order, but this is not necessarily the order in which they are evaluated when Dustman is running the job. If a file matches more than one entry, it will be acted on based on the first matching entry Dustman encounters, but there is no way to determine which entry will be evaluated first. The exception to this rule is that files that match an exclusion entry will always be properly excluded.

The Entry Dialog

File Specif	ication	?×
Path:	download	
Filespec:	x x .	
	☑ Include Subdirectories	
	Action Date Age: 30 O Delete O Creation Image: 30 O Recycle O Last Update O Exclude Image: 30	
	OK Cancel Help	

(For more information on a control, you can click the control in the picture above.)

An *entry* contains the information needed by Dustman to find and delete one file or type of file. For example, if you wanted Dustman to delete all backup files from your computer, you would add an entry to your job for backup files.

The **Entry** dialog box (accessible from the <u>Files</u>) allows you to specify the parameters for an entry. The sections that follow describe the information contained in the Entry dialog.

Path

The **Path** box specifies the path (or folder) that the entry will match. For example, the entry shown above will match only files in the download directory. If you do not specify a path, Dustman will find files that match the **Filespec** regardless of the directory they are in.

When Dustman compares a file to an entry, it checks to see if the path you have specified in the entry occurs somewhere in the file's path. For example, the files c:\files\download and d:\online\ download will both match an entry that has a path of download. If you want to make sure that Dustman matches only a specific instance of the path you have specified, include the full path (including the drive letter). For example, if the entry's path is c:\download, then neither of the two previously-mentioned files would match it.

Filespec

The **Filespec** specifies the name or pattern for the files you want Dustman to remove. Although you can name a specific file (for example, temporary.doc) here, you will usually use <u>pattern matching</u> to specify a kind of file to delete rather than a specific file. For example, if you wanted to delete all backup files (files with an extension of .bak), you would use a filespec of *.bak.

If you do not specify a filespec, it will default to *.* (matching all files in the specified directory).

Include Subdirectories

When the **Include Subdirectories** option is checked, the entry applies to all subdirectories of the directory you specify in the **Path** box. Otherwise, the entry applies only to the directory you specify. This option is ignored if you do not specify a path.

When the **Include Subdirectories** option is checked, Dustman will also remove any empty subdirectories whose names match the filespec. For example, if your entry has a path of temp and a filespec of *.* and have checked the **Include Subdirectories** option, Dustman would remove all files from a directory called temp\subdir. Further, since the subdirectory's name also matches the filespec, the directory would be removed once it was empty.

Regular Expressions

Your filespec can include DOS-style <u>wildcards</u> or GREP-style <u>regular expressions</u>. When the **Regular Expression** option is checked, Dustman will treat the **Filespec** you enter as a regular expression. Otherwise, it will treat the filespec as a DOS-style filespec, and the only permissible pattern-matching characters are the DOS-style wildcards.

Action

The **Action** group determines what Dustman should do with files that match the entry. Three options are available:

- **Delete:** Dustman deletes the file, removing it permanently from your system.
- **Recycle:** Dustman recycles the file, moving it to your computer's Recycle Bin so that it can be recovered later if necessary.
- **Exclude:** Dustman does not do anything with the file, even if it matches other entries. For example, you should exclude the path for your computer's Recycle Bin so that Dustman does not delete files from the Recycle Bin (see the <u>sample job</u> for more information).

Date

The **Date** group determines which of the file's three dates Dustman should use when it calculates the file's age: the date the file was created, the date it was last modified, or the date it was last accessed (read or written). This setting is ignored if the Action is set to Exclude.

Age

The **Age** box specifies the age (in days) after which the file will be removed. For example, if you want backup files to be deleted one week after they are created, you would set the Date to Creation and set the Age to 7. On the eighth day after its creation, the file will be deleted.

Setting the Age to 0 causes Dustman to delete the file every time Dustman is run, regardless of the Date selection.

The Age setting is ignored if the Action is set to Exclude.

The Run/Preview Page

😫 Dustman - Sample Job	- 🗆 ×
Job Name: Sample Job	
Job Files Run/Preview	
Current File:	-
L Cataloged CNTEMP\^W/RD0000 doc	.
Cataloged C:\TEMP\~WRF3410.tmp	
Cataloged C:\TEMP\"WRSUUU2.tmp Cataloged C:\WINNT\SYSTEM.BAK	
Cataloged C:\WINNT\system32\CONFIG.TMP Cataloged C:\WINNT\system32\perfC009.BAK	
Cataloged C:\WINNT\system32\perfH009.BAK Cataloged C:\WINNT\system32\ras\SEBIAL_BAK	1
Cataloged C:\WINNT\WIN.BAK	
Finished job Sample Job at 11/25/1996 21:54:35.395	
	3
Preview Delete Run Stop]
	I SCBL

(For more information on a control, you can click the control in the picture above.)

The **Run** page allows you to preview or run your job and see the results. While the job is running, the **Current Directory** box will display the name of the directory that Dustman is currently evaluating. The Log window will show a list of the files Dustman has cataloged or removed.

While a job is running, you can make changes to the job. These changes, however, will not affect the current run of the job. You cannot open another job or create a new job while a job is running.

Dustman will remove files marked as read-only or hidden. Dustman skips any directory or file for which the user running the job does not have permission. If Dustman cannot delete a file (e.g., because it is in use), it writes an error message to the log window and to the log file.

Previewing a Job

If you want to see a list of the files that Dustman is going to delete before they are actually deleted, you can preview the job. In preview mode, Dustman finds all of the files that are eligible for removal based on your job, but does not remove them. The files are cataloged and listed in the log window (and in the log file, if <u>logging</u> is turned on). Once Dustman has finished previewing the job, you can review the list of files and have Dustman delete the files it has cataloged, or you can go and make adjustments to your job if you find that it has cataloged files you do not want removed.

Deleting Cataloged Files

The **Delete** command is available only after you have previewed your job. In delete mode, Dustman removes all of the files it cataloged during the most recent preview operation.

Running a Job

Once you are sure that your job is configured properly, you can have Dustman identify files eligible for

removal and remove them all in one step. The **Run** command instructs Dustman to find all files that match the criteria specified in your job and remove them. When you run a job, Dustman lists the files it removes in the log window, but you do not have the opportunity to review its choices before it deletes them.

Stopping a Job

The **Stop** command aborts any preview, delete, or run operation in progress. Note that stopping a job that is in run or delete mode does not undo the deletions Dustman has already made.

Getting the Most Out of Dustman (Or: Why Dustman is Different)

Several commercially-available "uninstaller" programs also perform cleanup functions similar to those performed by Dustman. The main job of these programs, however, is to uninstall applications, and the disk cleanup functions are designed to be a part of this process—an occasional, large-scale cleanup of your hard disk, with a lot of interaction on your part.

Dustman, on the other hand, is a full-time garbage collector, meant to be run on a regular basis with little or no involvement from you. Instead of letting Dustman delete what *it* thinks is garbage (although we do provide some suggestions in the <u>sample job</u>), we ask you to spend a few minutes up front telling Dustman what *you* call garbage.

As with a real dustman, once you've indicated where the garbage is, you don't need to be involved in the removal process: you create garbage; Dustman takes it away. Automatically.

To use Dustman to its fullest potential, we recommend the following implementation strategy:

- 1. Create your job. You might want to begin with the <u>sample job</u> and adapt it to suit your needs.
- 2. Run your job interactively for a few days (i.e., by previewing the job, reviewing the list of files it comes up with, then letting Dustman delete the files after you have confirmed that you want them deleted). This will help you to understand how Dustman works, and will also allow you to confirm that you have Dustman configured exactly the way you want it.
- 3. Once you're comfortable with Dustman, you can start letting Dustman do its job without oversight from you. We recommend running Dustman on a daily or weekly basis to keep your hard disk free of garbage.

If you're still interested in watching Dustman run, you can do this with the Run command, which tells Dustman to go find the files you've specified and remove them without letting you review the list first. You can <u>create a shortcut</u> that automatically opens and starts your job.

For completely unattended operation, you can use a <u>scheduling program</u> to run Dustman automatically at some predetermined time (for example, every day at a time when you are not using the computer).

To keep tabs on what Dustman is doing, be sure to turn on <u>logging</u> for your job, and review the log periodically to see what Dustman has been up to.

If you want to be absolutely safe about what Dustman removes, you can configure Dustman to recycle files instead of deleting them. This way you can always recover any files that you didn't want removed.

A scheduler is a program that automatically runs other programs at a set time. If you use Windows NT, you can use the **at** command to schedule programs. If you have Microsoft Plus! For Windows 95, you can use the System Agent to schedule programs. Several shareware scheduling programs are also available.

Dustman has a full set of <u>command-line options</u> that allow a scheduling program to load and run a Dustman job automatically.

Pattern Matching

Dustman supports two forms of pattern matching for filespecs: DOS-style wildcards and GREP-style regular expressions. Pattern matching allows you to match all files whose names match a specified pattern using only a single entry. By default, the filespec for an <u>entry</u> is assumed to use wildcards for pattern matching. If you want to use a regular expression for the entry instead, you must check the **Regular Expression** option for the entry.

Neither pattern-matching method is case sensitive. Also note that pattern matching is not supported for the path; only for the filespec.

Wildcards

Dustman supports the * and ? wildcards.

The * wildcard character matches zero, one, or many occurrences of any character. For example, the filespec *.bak would match any file that had an extension of .bak, regardless of the file's name. Similarly, the filespec tmp. * would match any file with a name of tmp, regardless of its extension. The filespec c*r.doc would match any file whose name began with *c* and ended with *r* and which had an extension of .doc (for example, cr.doc, car.doc, and creamer.doc would all match).

The ? wildcard matches exactly one occurrence of any character. For example, the filespec c?r.doc would match car.doc and cur.doc, but not cr.doc or clear.doc.

Regular Expressions

For more powerful pattern matching, Dustman supports regular expressions. The sections that follow explain the rules that Dustman uses to match regular expressions.

General Rules

Regular expressions use the following special characters:

. [] - ^ * ? + \$

Any characters other than these special characters match themselves. For example, "shakespeare" matches "shakespeare."

To match a special character, you must precede the special character with a backslash (\). For example, if you want to match a file called test.doc, you cannot use test.doc as your regular expression, because the period has a special meaning in regular expressions. Instead, you would have to use test\.doc.

Single-Character Pattern Matching

The . character matches any single character (it serves the same function as the ? wildcard character). For example, c.r would match car or cur.

The [and] characters are used to denote a list of valid characters. For example, d[ou]g would match dog or dug but not dig. Any character that is valid in a file name can appear within the brackets.

The - character is used within brackets to specify a range of valid values. For example, d[a-z]g would match any filespec that began with *d*, ended with *g*, and had any letter between *a* and *z* (inclusive) in between.

The $^{\circ}$ character is used within brackets to specify characters that should not be matched. For example, d[$^{\circ}$] g would match any three-character sequence beginning with *d* and ending with *g* except dog.

Multiple-Character Pattern Matching

The * character is used to match zero or more occurrences of the previous single-character pattern. For example, $[a-z]^*$ would match zero or more occurrences of any combination of letters (a, cat, car, dog, etc.). The expression dog\. $[a-z]^*$ would match any file with a name of dog and an extension that contained only alphabetic characters or that had no extension at all.

The + character is the same as *, but requires at least one occurrence of the pattern. For example, the expression $dog \ [a-z] + would$ match only files named dog with at least one alphabetic character for their extension.

The ? character indicates that the following single-character pattern is optional. For example ca?r would match ca or car but not cat.

Caveats

Regular expressions are powerful but they can be tricky and in some cases are more trouble than they are worth. For example, if you just want to match all files with a .bak extension, stick with wildcards, where all you need is a simple *.bak. To get the same effect with a regular expression, you would need something like $[A-Z 0-6 \setminus [\] \sim !@\# \$. $A-_+=;$, ." '()!@]+\.BAK to cover all of the possible characters that could appear in the file name.

When you do use regular expressions, you should always be sure to preview your job before you run it for the first time to make sure the regular expression is matching only the files you expect it to match.

Command-Line Options

Dustman supports several command-line options that allow you to run Dustman in batch mode (e.g., using a scheduling program) or to create a shortcut that loads and runs a Dustman job.

The command-line syntax is

dustman [job[.dmj] [/autorun [/autoexit [/silent]]]]

If you specify a job name on the command line, Dustman will load it automatically. The .dmj extension is optional. If you do not provide the full path to the job, Dustman will look for it in the directory from which Dustman is running.

If you follow the job name with the /autorun parameter, Dustman will begin running the job as soon as it load.

If you include the /autoexit parameter, Dustman will exit automatically when the job is finished.

If you include the /silent parameter, Dustman will run completely silently, with no desktop interaction. This parameter can be used when you want to run Dustman using a scheduling service on Windows NT. Note that the only way to stop Dustman before it finishes when it is running in this mode is to terminate it using the Task Manager.

Note: If you plan to run Dustman on Windows NT as a scheduled program that does not allow desktop interaction, please read this <u>technical note</u> first.

Creating a Shortcut

To create a shortcut that will automatically load the job saved as myjob.dmj, run the job, and exit afterward, you would follow these steps:

- 1. Right-click on the desktop or in the folder where you want the shortcut.
- 2. From the pop-up menu, select New, then Shortcut.
- 3. For the command line, enter the Dustman path and program name (usually this will be "c:\ program files\dustman\dustman.exe" (be sure to put the whole thing in quotes if the path contains any spaces)), followed by myjob (which tells Dustman to load the job), /autorun (which tells Dustman to run the job), and /autoexit (which tells Dustman to exit when the job is finished). The full command line would look like this:

"c:\program files\dustman.exe" /autorun /autoexit

- 4. Click the Next button, then enter a name for the shortcut (for example, "Auto-run my Dustman job").
- 5. Click the **Finish** button.

Now whenever you double-click the shortcut, Dustman will start, run your job, and then exit.

The Windows API call used by Dustman to recycle files displays a pop-up dialog if the recycle operation fails. If desktop interaction is not allowed, this dialog box will not be seen, and will therefore effectively hang Dustman, requiring that it be shut down from the Task Manager. We are working to find an alternate method of recycling files. In the meantime, you can:

- Take the chance of running Dustman non-interactively (Errors during recycling are rare: the main cause would be a file that is in use by another process; this can be avoided by waiting at least 1 day after a file's last access to remove it).
- Run Dustman only in interactive mode.
- Use only the Delete action, for which no error dialogs are displayed.

Sample Job and Suggested Uses

Dustman includes a sample job called <code>sample.dmj</code> which can be found in the same directory as the Dustman program files. This sample job contains entries to remove many common backup and temporary files. This job will help you to understand what Dustman does (you can <u>preview</u> the job to see the files that Dustman selects without them actually being deleted) and can be used as a basis for your own jobs.

Please note that the sample job is meant only to provide suggestions of common uses—you should not run the sample job on your own computer until you have confirmed that the files it will delete should in fact be removed from your system.

The following sections describe the entries in the sample job.

Backup Files

Most file-based applications, from word processors to spreadsheets to graphic editors, create backup files. These backup files are nice to have when you need them, but unfortunately tend to clutter up your system. The sample job contains entries that delete backup files 7 days after they are last accessed. This ensures that they remain on your system during the time you are actively working on the original documents so that the backups are available if you need them. If the backup files have not been accessed in a week, however, it is unlikely that they will be needed. Just in case, the backup files are moved to the Recycle Bin, so they can be recovered if necessary.

Many applications use the .bak extension to denote backup files. Some use .bk!, and some graphics programs use extensions like .bm\$ (backup of a .bmp file) and .gi\$ (backup of a .gif file). The sample job therefore has entries for *.bak, *.bk!, and *.??\$.

Some programs (particularly installation programs) also use the .old extension to save a backup of the old version of a DLL or other application component. As with other backup files, these files are most often needed within a few days of the time they're created; after that they're just wasting space. The sample job therefore has an entry for these files similar to the entries for other backup files.

Temporary Files

Many applications create temporary files while they are working. For example, most word processors create temporary copies of the document you are working with. Programs are supposed to delete these files when they are finished with them, but sometimes (especially if the program crashes) fail to do so. The temporary files that get left behind not only waste disk space but can cause erratic behavior in some programs when the directory that stores them gets too full.

By convention, these temporary files are stored in a directory called $c:\temp$, although this might be different on your system (to find out, check the setting of the TEMP environment variable).

By definition, these files are only needed while the program that created them is running. The sample job contains an entry to delete files in the temp directory one day after they are last updated. Using the delay of one day ensures that files will not be deleted while an application is still using them.

Applications also may create temporary files in other directories, often using a file extension of .tmp. The sample job includes an entry to delete files with this extension wherever they are found.

Downloaded Files

If you download a lot of files from online services or the Internet, you may find your download directory full of files you no longer recognize. To solve this problem, I manually move anything that I have downloaded and want to keep to another directory for permanent storage and allow Dustman to clean out my download directory for me. The sample job contains an entry that deletes files in c:\download 30 days after they are last accessed. This allows a full month to evaluate the files after they have been downloaded and move them to a permanent location if you want to keep them. Anything you leave behind will be cleaned up for you.

Scratch Files

Often I find that I need to store information (a text document, scanned graphic image, Web page, etc.) briefly, but don't expect to need the information for long. In these cases, I often name the file tmp (with an extension appropriate to the type of file). I then allow Dustman to remove these files for me after I'm done with them. The sample job includes an entry that recycles all files with the name tmp three days after they are last updated.

An alternative method for dealing with such scratch files is to use expiration dates and retention periods

Files Recovered by CHKDSK

When you use CHKDSK to scan your hard disk for errors, CHKDSK gives you the option of converting any lost clusters it finds to files. When you allow it to do this, CHKDSK creates files named file0000.chk, file0001.chk, etc. Sometimes it is possible to view these files using a file viewer and recover their contents, but otherwise they just take up disk space. The sample job includes an entry to delete all such files (file*.chk) seven days after they are created. This gives you a week to review these files to see if you can recover them, then deletes them.

Crash Logs

Dr. Watson is a utility included with Windows that can be used to record the state of an application when it performs an illegal operation and is terminated. Dr. Watson writes this information to a log file (usually called drwtsn32.log) which can be examined to help determine what went wrong with the program. These logs, however, are quite large (roughly 9MB), and don't do any good once you have reviewed them. The sample job includes an entry that deletes the Dr. Watson log seven days after it is last accessed.

When Windows NT encounters a fatal error that brings the operating system to a halt, it writes a dump files (generally called memory.dmp) that records the contents of your computer's memory at the time of the error. Since this file contains the entire contents of the system's RAM, it is at least as large as the amount of memory your computer has. Like the Dr. Watson log, this file is not useful once you have initially looked at it. The sample job includes an entry that deletes the any file with a .dmp extension log seven days after it is last accessed. Since some other applications create files with the same extension, however, the entry only looks for .dmp files in the c:\winnt directory and its subdirectories (if Windows NT is installed in a different directory, you'll need to change the path for this entry).

Excluding Files

It is sometimes necessary to exclude files from deletion. The most common case is the Recycle Bin. Under Windows 95, recycled files are stored in a special folder called recycled. Under Windows NT 4.0, the folder is called recycler. Because we do not want Dustman to be removing files that have already been recycled, the sample job contains entries that exclude these two directories. This prevents Dustman from removing files in these directories, even if they match other entries.

Read This Before You Use Dustman

Please read this page in its entirety before you continue. By using Dustman, you indicate that you have read and accept the terms specified here and in the <u>license agreement</u>.

Thank You for Trying Dustman

Dustman is distributed as shareware, and you are licensed to use it for evaluation purposes for a period of 30 days. In accordance with the terms of the <u>license agreement</u> (which you should read now), if you find Dustman useful and wish to continue using it after the 30-day evaluation period, you must <u>register</u> the software.

This is the only reminder you will see until your 30-day evaluation period has elapsed. For additional license and registration information you may consult the online help at any time.

What is Dustman?

See the overview. If you have used similar programs before, read about what makes Dustman different.

Dustman is Dangerous

Dustman's only purpose in life is deleting files from your computer system (which is, after all, the reason you want Dustman in the first place). Before you use Dustman, make sure that you understand what the program is going to do. Read this documentation carefully, and **use the Preview option**, which the Dustman god has given you that you might not accidentally delete everything on your computer. Until you are satisfied that Dustman is doing exactly what you want it to do, always use the Preview option to see what Dustman is going to do before it does it.

Getting Started

The Dustman distribution package includes a <u>sample job</u> (configuration file) to demonstrate Dustman features and settings. You might want to open this job first thing to get an idea for how things work.. To get started with Dustman, begin with the <u>Overview</u> and use the >> button to walk through the process of creating and running a job.

Differences from the Registered Version

This evaluation copy of Dustman is identical to the registered version. All of Dustman's features are available to you during the 30-day evaluation period. After the evaluation period has elapsed, Dustman will continue to work in Preview mode, but will not allow you to delete files.

When you <u>register</u> Dustman you will receive a registration code that will re-enable the deletion feature and allow you to continue using Dustman.

Legal Stuff

Dustman and this help file are copyright 1996 by <u>Arcana Development</u>. All rights reserved.

License Agreement

Your use of Dustman indicates your acceptance of this license agreement and disclaimer of warranty.

Unregistered Copies

Dustman is not free. It is distributed as shareware, and Arcana Development retains all rights to the software. You are licensed to use the software for evaluation purposes only for a period of 30 days. If you wish to use the software after the 30-day evaluation period, you must <u>register</u> the software.

Unregistered use of Dustman after the 30-day evaluation period is a violation of this license agreement and of U.S. and international copyright laws. This includes running Dustman using a registration number not given to you by Arcana Development.

Registered Copies

Once you have registered your copy of Dustman, you are licensed to use one copy of Dustman personally on one or more computers, or to install Dustman on a single workstation to be used non-simultaneously by multiple people, but not both.

Dustman may be run by multiple users on a network provided that you have obtained an individual license for each workstation that will have access to the software via the network. For example, if 5 different workstations will have access to Dustman, each of these workstations must have its own Dustman license, regardless of whether the workstations use Dustman at different times or concurrently.

Distribution

You are licensed (and encouraged) to make as many copies of Dustman as you like and give these copies to anyone you want, provided that you copy and distribute only the original self-extracting ZIP file (called dustmn20.exe). You are prohibited from distributing the software in any other form (you may not, for example, distribute only the executable file and help file).

Those to whom you distribute the software are subject to the same terms and conditions specified here, and may not operate the software using your or anyone else's registration number.

You are specifically prohibited from charging, or requesting donations, for any such copies, however made, and from distributing the software with other products (commercial or otherwise) without prior permission, except that disk vendors approved by the Association of Shareware Professionals are permitted to distribute Dustman, subject to the terms of this license, without specific permission.

Disclaimer of Warranty

This software and the accompanying files are provided "as is" and without warranties as to performance or merchantability or any other warranties whether express or implied. Because of the various hardware and software environments into which and uses to which Dustman may be put, no warranty of fitness for a particular purpose is offered.

Good data processing procedure dictates that any program be thoroughly tested with non-critical data before relying on it. The user must assume the entire risk of using Dustman. Any liability of Arcana Development will be limited exclusively to product replacement or refund of purchase price. In no event shall Arcana Development be liable for any special, incidental, indirect, or consequential damages arising out of the use, misuse, or inability to use Dustman.

Registration

Registration of Dustman entitles you to use the software after the end of the 30-day evaluation period. Registered users also receive free technical support and free upgrades to future versions of Dustman. The registration fee for Dustman is \$15. CompuServe members may <u>register online</u>. Otherwise, you may register using our <u>registration service</u>.

For more information (including information on site licenses), contact Arcana Development.

Registering Dustman on CompuServe

CompuServe members can register online using CompuServe's shareware registration service (SWREG). The \$15 registration fee is added on to your monthly CompuServe bill.

To register, GO SWREG on CompuServe and register using **registration ID 13879** (click here for detailed instructions).

Once we receive notification of your registration (usually within one business day), we will e-mail you your registration code, which will enable you to continue using Dustman after the end of the 30-day evaluation period.

After you GO SWREG, select **Register Software**. After you read the registration agreement, click **Proceed**, then select the appropriate geographic region. In the **Select Search Criteria** dialog box, select **Registration ID**. Enter Dustman's registration ID, which is **13879**, and press **OK**. Then select **Display Selected Titles**. Select **Dustman 2.0**, then press **Description** button. Then press **Register** to fill in registration information.

Registering Dustman Without Compuserve

We are unfortunately not equipped to accept your order directly. However, for your convenience we have contracted with NorthStar Solutions to process your registration using Visa, MasterCard, Discover, check, or money order.

When ordering, please include (when registering by fax, mail, or e-mail) or have available (when ordering by telephone) the following information:

- The name of the program you are registering (Dustman).
- Your name, mailing address, and e-mail address.
- Your credit card number and expiration date (if paying by credit card).

NorthStar Solutions will send you confirmation of your order by e-mail. Once we receive notification of your registration (usually within one business day), we will e-mail you your registration code, which will enable you to continue using Dustman after the end of the 30-day evaluation period.

Please note that NorthStar Solutions can only process your order; they cannot provide technical support or answer any questions about Dustman. For technical support or other information not related to registration, please contact Arcana Development directly.

Telephone Orders

Telephone orders are accepted 10 AM to 8 PM EST, Monday through Saturday: 800–699–6395 within the U.S. only 803–699–6395 outside the U.S.

Fax Orders

Fax orders (using Visa, MasterCard, or Discover) are accepted 24 hours a day: 803–699–5465

Online Orders

Online orders (using Visa, MasterCard, or Discover): http://ourworld.compuserve.com/homepages/starmail

E-Mail Orders

E-mail orders (using Visa, MasterCard, or Discover) may be placed by e-mailing NorthStar Solutions at one of the following addresses: CompuServe: 71561,2751

AOL: STARMAIL Internet: 71561.2751@compuserve.com

Mail Orders

To register by mail, send a check or money order payable to "NorthStar Solutions" in the amount of \$15 (U.S. currency) to: NorthStar Solutions PO Box 25262 Columbia, SC 29224

Technical Support/Getting In Touch

Your questions, comments, and suggestions are welcome. For registration information, technical support, or other information, contact Arcana Development, 71210.2524@compuserve.com. Please include the version number (available from the **Help|About** dialog box) in your correspondence.

Installing and Uninstalling Dustman

Installation

Dustman can only be installed from the original self-installing executable in which it is distributed (dustmn20.exe). You should therefore retain that file in case you need to re-install Dustman. If you received Dustman by itself (without the installation program), please <u>contact Arcana Development</u> to get the proper distribution package.

Dustman will not work properly unless it is installed using the original installation program.

Uninstallation

To uninstall Dustman, open the Add/Remove Programs applet from the Control Panel, select Dustman from the list, and click the **Add/Remove** button. Dustman will remove all of its registry entries and its Start menu shortcut. You will need to manually remove the Dustman executable file and any Dustman jobs you have created.

If you are a registered user, you should make sure you have your license name and number (available from the **Help|About** dialog) written down; you will need them if you decide to re-install Dustman.

Getting Help

Help with the Dustman User Interface

To get pop-up help on any control, press F1 while the control has the <u>focus</u>. More extensive help is also available:

- While you are on one of the three tabbed pages of the main window, select **This Page** from the **Help** menu to see the help topic for that page.
- While you are in the Entry dialog box, click the **Help** button.

Help Using Dustman

For step-by-step instructions on using Dustman, begin with the <u>Overview</u> and use the >> button to walk through the process of creating and running a job.

If you do not find the answers you need, please don't hesitate to contact <u>Arcana Development</u> for assistance.

A control gets the *focus* when you select it (by tabbing to or clicking the control). The control with focus is the active control, and processes all keystrokes from the user.

When the **Log** option is checked, Dustman writes a list of all the files it catalogs or deletes to the log file you specify. Enter a name for the log file or click the ... button to select an existing file. By default, Dustman appends to the log file. If you check the **Overwrite Log** option, Dustman will overwrite the log instead.

The log file is a plain text file, which you can view using Notepad or any other text editor.

When the **Use Expiration Dates** option is checked, Dustman will remove files based on expiration dates and retention periods.

The Action group specifies the action that Dustman should take for files that match the criteria:

•Delete: Dustman will delete the file, removing it permanently from your system.

•Recycle: Dustman will move the file to the Recycle bin, allowing you to recover it later if you need to.

•Exclude: Dustman will not do anything with this file, even if it matches the criteria of other entries.

The **Date** group specifies the date that Dustman will use when calculating the age of a file:

•Creation: Dustman will use the date on which the file was created.

•Last Update: Dustman will use the date on which the file was last modified.

•Last Access: Dustman will use the date on which the file was last accessed (read or modified).

The Job Name field is used to provide a descriptive title for the job.

The **Drives** box lists all of the available disk drives. Dustman will scan only the drives that you have selected. To select a drive, click on the drive letter in the box. To select more than one drive, press the CTRL key while you click.

The **Files and Directories** box shows a list of all of the entries associated with the current job. To add, edit, copy, or remove an entry, click the appropriate button to the right of the list box, or choose a command from the shortcut menu that appears when you right-click on the box. You can also double-click on an entry to edit it.

The Add... button opens the Entry dialog box, allowing you to define a new entry.

The Edit... button opens the Entry dialog box, allowing you to edit the selected entry.

The **Copy...** button creates a copy of the selected entry and opens the **Entry** dialog box so you can edit the copy..

The **Delete** button deletes the selected entry.

When Dustman is running or previewing a job, the **Current Directory** box show the name of the directory Dustman is currently examining.

The log window shows a history of the actions Dustman has performed (including files cataloged and deleted) during the current session.

The **Delete** button causes Dustman to delete the files it cataloged during the previous preview run.

The **Preview** button is used to preview the files that Dustman would remove if you ran the job. In preview mode, Dustman scans your drive(s) and builds a list of all the files that meet the criteria for removal. This list is displayed in the log window on the **Run/Preview** page and is written to the log file (if you have checked the **Log** option for the job). Once you have previewed the job, you can click the **Delete** button to delete all of the cataloged files.

The **Run** button causes Dustman to run the current job. Dustman scans your drive(s) and removes all files that match the criteria you have specified. A list of the files Dustman has deleted or recycled is shown in the log window and is written to the log file (if you have checked the Log option for the job). **Note:** Before you run a job for the first time, you should preview the job to make sure it will be removing the files that you expect it to.

The **Stop** button interrupts the job in progress. It can be used to stop preview, delete, and run operations.

The **Path** box is used to specify the path that this entry will match. Enter the path, or click the ... button to browse for an existing path.

If you specify a full path (including the drive letter), Dustman will match only files that have exactly the path you specify. If you specify a partial path (one that does not include a drive letter), Dustman will match any file whose path includes the path you have specified.

If you don't specify a path, Dustman will find all files that match the **Filespec** you provide, regardless of what directory they are in.

The **Filespec** box is used to specify the filespec that this entry will match. Enter a filespec or click the ... button to browse for an existing file.

You may enter a complete file name, or a partial file name using wildcards or regular expressions. If you do not specify a filespec, the filespec will default to * . * (the entry will match all files in the specified path).

The **Include Subdirectories** option determines whether this entry will match subdirectories of the specified directory. When this option is checked, the entry's matching criteria will be applied to files in all subdirectories of the specified directory. In addition, Dustman will remove any empty subdirectories of the specified directory name matches the filespec.

The **Regular Expression** option determines whether Dustman will use DOS-style wildcards (* and ?) or GREP-style regular expressions when matching filespecs. To use regular expressions, check the **Regular Expression** box. To use wildcards, leave it unchecked.

The **Age** box specifies the age (in days) after which files that match this entry will be removed. For example, if the Age is set to 2, Dustman will remove any file that matches the entry and whose date is more than 2 days prior to the current date.

If you set the Age to 0, Dustman will remove the file immediately.

The Age has no effect if the entry's action is set to **Exclude**.

The installation directory specifies the directory (folder) to which the Dustman program files will be copied. You can accept the default folder, type the name of a different folder, or click the ... button to browse for a folder.

The installation program will add the registry entries that Dustman requires to work properly. This includes the entries that allow you to start Dustman by double-clicking on a Dustman job from the Windows Explorer.

Check the **Add Dustman to the Start menu** to allow the installation program to put Dustman on the Start menu. By default, the installation program places a shortcut to Dustman in the Programs\ Accessories folder on the Start menu. If you want to put Dustman in a different folder, click the ... button to browse for an alternate folder Check the **Put on All Users Start menu** to have the installation program put the Dustman shortcut on the common Start menu (the set of programs that appears on the Start menu for all users). If this option is not checked, the shortcut is placed only on the current user's Start menu.

If this option is checked, clicking the ... button to browse for a Start menu folder will show only folders on the All Users Start menu. Otherwise, the browser will show only folders on the current user's Start menu.

Check the **Open Dustman with a sample configuration** to start Dustman automatically when installation is complete. Dustman will be opened with a sample configuration file that demonstrates how to set up Dustman (for an explanation of the sample configuration, see the online help once Dustman starts).

Dustman will not delete any files when you select this option—it will just show you the sample configuration.