Dupe

The Windows File Deduplicator from Babbacombe Computers Ltd.

Setting up the search Running a Search The Search Results Saving and Loading Search Results The Configuration Window 3D dialogs The Virus Detector About Dupe V1.4a

Setting up the search

Selecting the files to search Search Types

Search Types

There are 4 types of search which can be carried out.

A search by **Full Name** will consider all files with the same full name to be possible duplicates, and will group them together by full name.

A search by **Name** will consider all files with the same leading part of the name, (ie up to the stop, ignoring the extension), to be possible duplicates, and will group them together by this part of the name.

A search by **Size** will consider all files of the same size to be possible duplicates, and will group them by Size.

A search by **Contents** will compare all files of the same size with each other and will include only those which are duplicates in the final results, grouped by identical files. This type of search can take considerably longer than the other types.

If a search by **Contents** takes an unacceptably long time to run then it may be worth setting the <u>Checksum</u> box on.

Running a Search

Once one or more entries have been made in the Search List, the **Search** button will be available.

Pressing this will begin the search.

While the search is continuing, a box will be displayed showing the current phase of the search, and containing a **Cancel** button. Pressing this button will terminate the search and return to the main window.

During a search you may decide whether to allow other applications to operate normally by using the Multitask switch.

While searching Dupe checks the Windows message queue as often as possible to see whether other applications are attempting to run. As a result, it is possible to run other applications during a search, without them showing a significant loss in performance.

However, during a long search the machine may not otherwise be in use, in which case the search can be speeded up slightly by switching this facility off. This is done by removing the checkmark against the **Multitask** switch.

This greatly reduces the frequency with which Dupe checks the message queue. However, it still checks occasionally in order to allow you to switch Multitasking back on or to cancel the search.

The <u>Configuration</u> window allows Multitasking to be set on or off by default.

The Search Results

Browsing the results Displaying file details Viewing a file Browsing File Lists Comparing the contents of files Producing reports Deleting files

Browsing the results

The Search Results window displays a list of the files which the search has identified, as possible duplicates, or as definite duplicates for a search by Content.

This list will show one group of possible duplicates at a time. If there is more than one group then a horizontal scroll bar will be displayed between the rows of buttons, and this can be used to display the other groups.

The number of the current "page" of possible duplicates and the total number of pages are displayed in the top right hand corner of the window.

Displaying file details

The **Display** item in the File Menu can be used to show the details of selected files within a group. Note that it is necessary to select one or more files before selecting this item.

The details displayed are: The File's Last Modification Date The File's Last Modification Time The File's Size in bytes The File's Attributes

If more than 5 files are selected then details will only be displayed for the first 5. The boxes may be removed by pressing their **Ok** buttons.

Comparing the contents of files

The contents of files identified as possible duplicates may be compared by using the **Compare All** and **Compare Selected** buttons.

If the search was by **Content** then these buttons are not available, as the contents of files have already been compared during the search.

Compare All will compare the contents of the files in a group to determine whether they are all identical.

Compare Selected will compare the contents of files selected in the list box. Note that 2 or more files must be selected before pressing the button.

These comparisons report only whether all of the files checked are identical or not. If 3 files are checked and 2 are identical but the third is not, then the program will report that they are **not** identical.

Producing reports

The **Print** item in the File Menu of the Search Results window can be used to generate a report of the files selected by the search.

Selecting this item will produce a dialog which requests whether to send the report to a file or to the current printer, and whether to print a summary or full report.

If the File option is selected then a dialog will appear asking for the file to save the report in.

A summary report lists the names of the files detected in the search, with each group separated by a dashed line. The name will have an * after it if the file is marked for deletion.

A full report includes a heading showing the search criteria used, and displays a list of the files as in a summary report, but with the file details for each file also included. The file details line will start with an * if the file is marked for deletion.

The **Print Deleted** item will print a list of the files which are marked for deletion.

A report sent to the printer will be paginated and have a heading with the page number included on each page. A report saved in a file is not paginated.

The **Printer Setup** item in the File Menu can be used to set up the current printer before producing a report. Note that any changes made using this are temporary. To make permanent changes, or to select another printer, the Control Panel should be used.

Deleting files

Selecting files for deletion Undeleting files Exiting and deleting files

Selecting files for deletion

The **Delete Selected** button can be used to flag files for deletion by the program. One or more files should be selected in the list box before pressing the button.

The program does not immediately delete the files, but removes them from the list of files displayed and stores them in a list of files which are to be deleted.

Files can also be flagged for deletion from the <u>File Browse Lists</u>.

Files can be automatically selected for deletion by pressing the **Select Old** or **Select New** button. This defaults to **Select Old** if the <u>search type</u> was by Full Name or Name, and **Select New** if it was by Size or Content. This default may be modified by selecting an item from the **Auto** menu. The button will select all the files except the newest or oldest.

Undeleting files

Once one or more files have been selected for deletion the **Undelete All** button will become available. Pressing it will clear the list of files to be deleted and will reinstate them in the display.

Individual files marked for deletion may be undeleted by pressing the **Exit and Delete** Button and using the Undelete facility available from <u>the resulting window</u>. Pressing the **No** button in that window after undeleting will return to the Results window.

Exiting and deleting files

The **Exit and Delete** button is unavailable until files have been selected for deletion.

Once available, pressing it will bring up a window listing the files selected for deletion, asking whether to delete them and giving 4 options: **Yes, Maybe, No** and **Undelete.**

Pressing **Yes** will immediately delete the files, and return to the main window of Dupe.

Pressing **Maybe** will cause the program to display each file name in the list to be deleted in turn and give the option to delete or retain each file individually.

Pressing No will return to the Search Results window.

Pressing **Undelete** will remove any selected files from the list of files to be deleted. If all files are undeleted then Dupe will return to the Search Results window.

Dupe will always ask for confirmation before deleting a read-only file.

3D dialogs

Dupe contains code which allows it to use a dynamic link library (called three_d.dll). This library provides facilities which allow Dupe to display its windows with a 3D style, quite different to the normal Windows style.

Unlike most other programs which have facilities like this Dupe does not insist on its use and will even run without the library being present. (If you obtained Dupe from a Bulletin Board then the library may not have been included).

To use the 3D facility three_d.dll must be present in a directory specified in the PATH environment variable of DOS. Your Windows directory is probably the best place to put it.

If the library is available the 3D style can be switched on or off from the <u>Configuration</u> window.

Registration

How, and why, to register Dupe

Dupe is shareware, which means that you may use it for evaluation purposes without registering it for up to 21 days. If at the end of this period you decide that you want to continue to use the program you must register it.

To register, send cash, cheque or money order for £15 or \$25 US to <u>Babbacombe Computers</u> <u>Ltd</u>, using the Order Form in the documentation.

In return, we will send you a registration number, which you can enter by pressing the Register button in the About box. This will disable the nag window which appears when the program is run. If the program is not registered then the nag windows get more annoying after a while, but the program will continue to operate.

Why register, given that the program will work anyway? You will receive notification of further releases of Dupe and, if you wish, a disk with each new release (of Version 1) will be sent to you free of further charges. But, more importantly, shareware authors can only afford to spend the time to write these programs if the users register them.

Selecting the files to search

<u>The Directory and File Mask</u> <u>Including hidden files/directories and subdirectories</u> <u>Adding selections to the Search List</u> <u>The Files to Search List</u> <u>File Sizes</u>

The Directory and File Mask

The current directory is displayed below the file mask in the top left hand side of the main window.

To select a different directory, double click on a directory name in the list box below it. The entry [..] refers to the parent directory of the one displayed. Entries at the bottom of the list like [-c-] refer to the top directory of that device.

The File Mask is displayed in the top left hand corner of the main window.

It specifies the files in the selected directories which will be included in a search.

Including hidden files/directories and subdirectories

If the **Hidden Files/Subdirectories** box is checked when a selection is added to the Search List then hidden files and directories will be included in that part of the search.

This is shown by the addition of [H] to the selection in the Search List.

If the **Subdirectories** box is checked when a selection is added to the search list then subdirectories of the selected directory will be included in the search.

This is shown by the inclusion of ... between the directory and the file mask in the Search List entry.

Adding selections to the Search List

Once the required file mask has been entered, the current directory selected, and hidden and subdirectory flags set, the selection can be added to the Search List by pressing the **Add** key.

If no subdirectories of the current directory are selected within the directory list box then the current directory will be added to the Search List (implicitly including all of its subdirectories if the subdirectory flag is set).

If one or more subdirectories are selected then they will all be added to the Search List instead.

The Files to Search List

This box is at the bottom of the main window, and displays the criteria which are to be used to select files to be included in the search.

Entries are added by using the **Add** button. To remove entries from the list select them, and press the **Remove** button.

Entries which have [H] after them will include hidden files and directories. Entries which include ... between the directory name and the file mask will include subdirectories of the selected directory.

The Virus Detector

Dupe contains a simple virus detector which is capable of warning that its executable image (dupe.exe) has had a virus attached to it. This virus detector should not be used in place of a comprehensive virus protection system, but is supplied because it may give an earlier warning of the presence of a virus than might otherwise be the case.

By default, the virus detector is switched off. This is because it takes several seconds to run, and slows down loading of the program.

The program can be set to use it by selecting its VirusCheck setting in the $\underline{Configuration}$ window.

File Sizes

The File Size box in the top right hand corner of the main window may be used to restrict the sizes of files which will be included in the search.

The minimum and maximum sizes of files in KBytes may be set. Note that a maximum size of 0 KBytes means that there is to be no maximum size set.

These parameters refer to all of the files in the Search List.

About Dupe V1.4a

<u>Registration</u> <u>Contact</u> <u>Acknowledgements</u>

Contact

How to contact Babbacombe Computers Ltd

The postal address is

Babbacombe Computers Ltd 397 Meanwood Road Leeds West Yorkshire UK LS7 2LL

The telephone number is 44 532 459673 Within the UK this is 0532 459673

We can be reached by email as tprinn@cix.compulink.co.uk or on CompuServe as 100016,2726

Acknowledgements

Dupe was written by Trevor Prinn of Babbacombe Computers Ltd using Turbo Pascal for Windows.

The Printer access routines are used by permission of OptiCom Inc.

The virus detection code is based on a program written by Nick Wallbridge and published in Personal Computer World (Aug 1991).

Three_d.dll is used by permission of Ray Donahue.

These Help screens were generated using Xantippe, from IRIS Media Systems.

Checksum Box

When carrying out a <u>search by Contents</u> Dupe will compare the contents of files which are the same size. Although each comparison is terminated as soon as it is clear that the files are not identical it is still possible for the search times to increase exponentially with the number of files of a given size.

To reduce the search times Dupe will normally compute a checksum for the first section of each file when it is first compared with another. It uses this subsequently to allow it to eliminate files which have differing checksums without actually comparing their contents directly.

If, however, there are a large number of files of a given size which are not identical but which do not differ until some way into the file this mechanism will confer no advantage. In such cases, it will almost certainly be worthwhile to compute a full checksum for all the files before beginning the comparisons. This can be enabled by switching the **Checksums** option on.

By default, this option is off, as it is probably more common for the partial (on the fly) checksum method to be quicker.

Saving and Loading Search Results

The Search Results can be saved to disk by selecting the **Save As** option on the File menu in the Search Results window. This will prompt for a file to save the results in.

A saved Search Results file may be reloaded into the program by pressing the **Load** button on the Main Window. This button is only available when the File to Search box is empty.

The default name of a Search Results file is *.dpe. Use the <u>Configuration</u> window to change this default.

When Search Results are saved the information stored includes the (possible) duplicates found, the search criteria used, the list of files which have been flagged for deletion and the current page. Loading the file therefore places the program back into the state it was in when the results were saved, without requiring another search to be carried out.

Viewing a file

The **View** item on the Info menu will start the file viewer specified in the Configuration window and pass the name of the first file currently selected in the Duplicate list as the first parameter to this program.

Unless the viewer is changed in the <u>Configuration</u> window Dupe will use the Notepad accessory as the viewer.

The **View by Association** item will use the program defined by the File Manager Associate option for the file's extension. If there is no association for the file then the default viewer is used.

The Configuration Window

The Configuration window is accessed by pressing the **Configure** button in the Main window. It allows default settings for searches and various other options to be defined.

The **Style** box allows the styling to be switched between the <u>3D style</u> provided by three_d.dll and the normal Windows style. If the DLL is not available then the normal Windows style will be used regardless. This option does not take effect until the next time Dupe is run.

The **Virus Checker** switch determines whether Dupe will run its <u>Virus Check</u> when it is started up. This option does not take effect until the next time Dupe is run.

The **Multitask** switch determines whether the program will permit <u>Multitasking during</u> <u>searches</u>. The setting may be overridden during a search. This option takes effect immediately.

The **Fail Messages** switch determines whether failures to access files, often due to Share Violations, during a search will be reported via message boxes. If you are running on a single machine you may wish to switch this on (the default), but if you are running Dupe across a network you will almost certainly want to switch this off and log failures instead.

The **Viewer** entry specifies the name of the program which will be used when <u>viewing files</u>. The PATH environment variable is used to find the program. This setting takes effect immediately.

The **Save** entry specifies the default filename mask used to save and load <u>results files</u>. This may include a full directory specification. This setting takes effect immediately.

The **Failures** entry specifies the name of a file which will be used to log Failure messages. If it is blank (the default) then no log will be kept.

The remaining options set the default values of the corresponding settings on the Main window. These settings do not take effect until the next time the program is run.

Browsing File Lists

The **Browse by Name** and **Browse by Path** items in the **Info** menu will display a list of all the (possible) duplicates sorted by the filename or the full pathname respectively.

The program may take some time to construct this list, particularly if a large number of (possible) duplicates have been identified.

Double clicking on an entry in this list, or selecting an entry and pressing the **Go to page** button will display the page of results which include the selected file.

You can delete files via this Browse List by selecting the files you want to delete and pressing the **Delete** button. Note that pressing **Cancel** does not <u>undelete</u> these files.