

SMARTCAT PLUS

RELEASE 1.50

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Table of Contents

This manual is divided into three sections, a Preface, a User Guide and a Reference section.

The Preface contains information all users should be sure to read. Installation details and a general introduction appear here, as well as hints and tips for organizing your disks to work well with SmartCat's approach.

The User Guide presents a guided tour of SmartCat's features and facilities and covers most of the things a new user will need to know to be comfortable with SmartCat for day-to-day use. The user guide is designed in the form of an exercise you can follow at your PC while actually using SmartCat. Have a blank pre-formatted floppy disk ready (any density will do).

The reference section provides more in-depth explanations of each of SmartCat's menu items and commands, a list of Keyboard shortcuts, and instructions for customizing SmartCat and performing problem determination. Every user should read this section once they are comfortable with the concepts presented in the User Guide.

This is the Shareware version of the manual.

The printed version that you receive on registration includes screen shots during each step of the guided tour, and is fully indexed for ease of use.

Disclaimer

Welcome to SmartCat Plus (hereafter referred to simply as "SmartCat" for sake of brevity). SmartCat is a sophisticated floppy disk/CD-ROM/Hard disk/Network cataloging system for Microsoft Windows. It requires Windows version 3.1 or later.

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Installation

If you received this product on disk or from a bulletin board/online service there should have been an INSTALL.EXE program included. If you execute that program from either the File Manager or Program Manager it will lead you through the installation process, including decompressing and copying the required files and creating a Program Manager group for SmartCat. You cannot simply use the files as received, because they are compressed and require decompressing, which is performed by the INSTALL.EXE program.

If you intend to re-distribute this package, please make sure you distribute all the files. If using network, BBS or similar distribution methods it is probably best to Zip them so none can go astray. If using disk (i.e. to include on a magazine cover disk, or in a book) then there is little size advantage to Zipping, and it may be simpler simply allocate them a directory of their own from where the user can immediately use the INSTALL.EXE program.

Please be sure to take the time to read the .TXT files that came on the disk. They contain information that is not always repeated elsewhere. You can use the Notepad program from the Windows Accessories group to view the files.

Introduction

Categorising your disks

Getting the best from SmartCat needs some thought about the best way to organize your collection of floppy disks or CD-ROMS. Even if you only have a few disks or ROMs now, it won't be long before your collection grows substantially.

Whilst SmartCat doesn't have any particular limit to the number of disks it will catalog in a single catalog (apart from the amount of memory you have, and the amount of disk space available to store the catalog) it probably isn't sensible to keep all your disks cataloged in one catalog. We would suggest you catalog your disks based on their "category". Some of your disks will have come from Software Manufacturers, such as your DOS and Windows distribution disks, and you are never likely to write new or amended files to them. Others will be disks that have come from Shareware libraries, and again writing to them would be unlikely. Others may have come from magazine cover disks, and would form a logical third category. Then there will be those that you use as working disks, and perhaps others you keep customer data/work on.

We would suggest that you divide your catalogs based on the categories you consider most sensible for your particular way of working. SmartCat supports the merging of catalogs for searching and reporting purposes, so you can always simulate a single catalog if you need to.

Even more thought might be required when it comes to CD-ROMs, because of the vast amounts of data they can contain. The best course of action really depends on the sort of CD-ROMs you are dealing with. If a CD-ROM contains a vast number of "smallish" files, like a collection of Clip-Art, then the best approach might be to put it in a catalog of its own. Similarly large collections of shareware can simply overwhelm and individual catalogs might be the approach to avoid extended processing times. You can always merge multiple CD-ROM catalogs if you need to for searching purposes.

Also consider the time it might take to catalog a CD-ROM, depending on what you are asking SmartCat Plus to do. If every file on the CD-ROM is zipped then SmartCat Plus is going to have to read pretty much ALL the data on the CD-ROM to catalog it if you want it to analyze .ZIPs, and that can take many minutes because CD-ROMs are not the fastest of devices. Likewise if you install a lot of extension DLLs then the catalog time may extend if they have significant processing to do. If SmartCat does need to read **all** of a 650Mb CD-ROM, and it has the usual transfer rate of around 150K/sec it will take SmartCat at least 72 Minutes, and probably longer, to get through it. You can of course switch away from SmartCat while it is doing it, and there is the advantage that data on a CD-ROM doesn't change, so you will probably only need to do it once!

Labeling your Disks

SmartCat can print disk labels for you, using any label stock you have to hand. For further information see the Label Menu instructions. However, for a large number of your disks you probably want to be able to see the original label, and wouldn't want to stick another label on top. In these cases we suggest you simply write the volume number that SmartCat allocates the disk when you catalog it onto the original label with a felt tip pen or similar. If you then store your floppies in numerical order within category it will be a simple task to find any one of them. Alternatively, most stationers sell small, nicely printed stick-on labels in ascending numerical sequence which you can stick discretely over a corner of the original label.

First Steps

Be Prepared

If you intend to follow this guide through on your PC, have a blank pre-formatted floppy disk ready (any size will do). We will perform most of SmartCat's functions using your hard disk. Although your major use of SmartCat will probably be to keep track of your collection of floppies, because you are running Windows there are files that are bound to be on your hard disk that will ensure the guided tour is appropriate to you.

Starting SmartCat

The first thing to do is to start SmartCat, so double-click on the SmartCat Icon, and after any introductory screens SmartCat's main window will appear.

The outer window is known as the "frame window", and inside it (with the caption "New Catalog") is a "child window". SmartCat uses three different sorts of child windows, a *catalog window*, a *disk window* and a *search window*, and we will meet them all as we explore SmartCat's facilities. There can only be one *catalog window*, but there can be many *disk windows* and *search windows*.

As well as being able to minimize the whole SmartCat Application by pressing the down arrow in the top right corner of the *frame window*, because SmartCat is an MDI compliant application, you can also minimize the individual child windows. Try it now by pressing the down arrow at the top right of the *catalog window*. Then return the Icon to a normal window by either double-clicking on it or single clicking and selecting the *Restore* option from the resultant floating Menu.

It is worth making sure you understand how to manage windows in an MDI application, so if you are unsure please read the "Two Kinds of Windows" section of the "Basic Skills" chapter of your Windows Documentation.

As it stands, SmartCat displaying an empty Catalog Window is not very interesting. What we need to do is catalog a disk.

Cataloging a Disk

Select the *Add Disk* menu item from the *Maintain* drop down menu, and a dialog box will appear.

In the "Drives" list box in the top left hand corner select the hard drive which contains your Windows Directory (probably "C"). Ensure "permit" is selected as the "Unlabelled disks" option, "Verbose" is checked for the "Reporting Mode", all the "Archive Analysis" boxes are checked, "Preliminary Virus Scan" is set to "no" and all the "Auto File Comments" boxes are checked. Also ensure that the "Stack Label" option is checked. Type into the "Disk Comment Field" an appropriate comment. Then press the "ADD" button and SmartCat will proceed to read your hard disk and catalog all the files on it. Whilst SmartCat is reading your hard disk you can if you wish use Windows multi-tasking capabilities to switch to another program. When SmartCat has finished reading your disk it will pop back to the front of the other display automatically. Each file will be listed in the window at the bottom of the Dialog Box as it is cataloged, as will the content of any archive files on your hard disk. The final message in the window will be "Disk 1 cataloged".

The Dialog Box will not go away however, and you need to press the "DONE" button. If you were cataloging floppy disks you could simply insert another floppy and click on "OK" to catalog a second disk, and keep repeating the process until you reached the end of the pile.

Your display will now be showing a single line in the *catalog window*. From left to right the fields displayed are; the disk number as assigned by SmartCat; the disk's label (or [Unlabelled] if it has no label); the size of the disk in bytes; the free space in bytes; the date and time of cataloging and the drive used for cataloging. There may be a horizontal scroll bar along the bottom of the *catalog window* to allow you to see anything off to the right (unless of course you are lucky enough to have a large monitor).

Listing the files on a disk

Now we have a cataloged disk we can start to use SmartCat to find various files and to process them. Let us start with a simple choice, listing all the files on a disk. There are two ways to list all the files on a disk. Either select the disk by clicking on it once in the *catalog window* (it will then highlight) and select the "Volume Contents" menu option from the "View" menu, or more simply double-click on the disk in the *catalog window*. As we only have one cataloged disk, double-click on it and a new *disk window* will appear after a few seconds. (On floppy disks the Window will normally appear instantly, but hard disk lists can take a few seconds).

From left to right the fields show; the filename; the file size in bytes; the file date and file time; the drive used to catalog it and the file's path from the root directory of the disk.

As before you can scroll right to see any information out of view, and up and down to see more files.

There is a limit to the number of entries that SmartCat will list (not maintain) of 6,500 in any child window, and it is possible that your hard disk may contain more files than that in which case you will have got a warning message and a partial list. It is unlikely that you would make sense of such a large list anyway, but this is ideal for experimentation. (**Note that 6,500 is the maximum number SmartCat will LIST, not maintain - SmartCat has recorded ALL the files on the disk - it just won't show more than 6,500 in a single window**).

Sorting the list

At this point it might be interesting to sort the list of files into different orders. Remember, this is a *Disk Window*, so we need to specify the order we want the *Disk Window* to display in.

Select the "Options Menu", and then the "Disk Sort Order" submenu, and you will be presented with several possible choices for the order you want the files listed. Experiment with the different choices, noting the way the display changes. Each sort may take a few seconds if the list is extremely large - on floppy disks such sorts are usually instantaneous.

Statistics

Now make sure the *Disk Window* "has the focus" (has a highlighted title bar, and is at the front - click somewhere on the *Disk Window* if necessary) and select the "Statistics" option from the "View" menu. A display giving statistics about the selected disk will appear.

The "Statistics" option is one that affects the window which has the focus. Try clicking on the *Catalog Window* to give it the focus (its title bar will highlight and it will move to the front) and select the statistics option again. This time a different display will appear, giving statistics about the whole catalog.

Searching the Catalog

Let's now try finding some files using SmartCat's sophisticated searching facilities. Select The "Search" menu item, and then select the "Simple Search.." option. A dialog box will appear.

Enter W*.EXE into the dialog and press the OK button. A status dialog with a moving percentage bar will appear and display the progress of the search, at the end of which a new child window, a *Search Window* will appear. The *Search Window* will display all those files that met the "search argument" (W*.EXE) that you entered. Note the * in the search argument. The * is known as a "Wildcard" and means "any sequence of characters from here to the end of this section of the filename". The other possible Wildcard is a ?, which means "any single character in this position". See your DOS documentation for more details about wildcards.

Again, you can sort the list of files in the *Search Window* by using the "Search Sort Order" suboption of the "Options" menu.

More Complex Searches

If the simple search option doesn't narrow the list down sufficiently, you can undertake a "complex" search which additionally allows you to specify ranges of dates and file sizes. Select the "Complex Search..." option from the "Search" menu, and a different Dialog Box will appear.

Enter *.* as the filename pattern, 200000 as the minimum size and 300000 as the maximum size, and press the OK button. A further search window will appear showing those files in the catalog with a size of between 200000 and 300000 bytes.

Adding/Changing Disk Comments

Let's now go back and change the comment for this disk we have cataloged. Click on the *Catalog Window* to give it the focus. Make sure the one cataloged disk is still selected (i.e. highlighted) and select the "Modify Comment" option from the "Maintain" menu. A dialog box will appear.

Enter a suitable comment (up to 240 characters - the Dialog Box will beep if you try to enter more) and click on the OK button. The comment will be added to the SmartCat database, but you won't be able to see it yet. What you now need to do is select the "Catalog Display Style" option from the "Options Menu" and select the "Switch Display Mode" choice. A further Submenu will appear that allows you specify the sort of display you want to see from where you can experiment with the four possible choices.

Adding a File Comment

Just as individual disks can have comments associated with them, so can files. This can be extremely useful, as it is not always obvious simply from the filename what the actual content of the file is. If for example you do work for a variety of different people you may like to add the client's name and address to the files you create for them. To experiment with File Comments we need a file selected in either a Disk Window or a Search Window. Click on the Search Window to bring it to the front and see if you can locate and select the file WINFILE.EXE by scrolling down the list. It should be there as it is the Windows File Manager program. Then select the "Modify Comment" option from the "Maintain" menu and a simple dialog box will appear and you can fill in an appropriate comment. Note also the availability of a "Paste" button, which enables you to add comments that have been placed on the Clipboard by copying or cutting from another program. If you press the OK button your comment will now be attached to the file and added to the database.

If you now click the right mouse button whilst it is over the Search Window you will be able to see the format of the display changing and your comment should be visible. Clicking with the right mouse button over the active window is a short-cut way of changing the style of the display, as we did earlier with the Options|Switch Display Mode menu selections.

There may also be a few other comments displayed, as SmartCat is able to detect and use comments embedded in .ZIP and .ARJ files, and can use comments maintained by the 4DOS product. Custom Extension DLLs can also supply SmartCat with comments to use for particular files, such as the true Font Names for .TTF True-Type font files. (See later for further information regarding Custom Extension DLLs).

Managing Windows

At this point the display might be starting to get a bit messy. To clear it up, and allow for a little experimentation, select the "Window" menu, then the "Tile" option, and see how the arrangement of the child windows changes. Then try the "Cascade" option, and finally choose the "Minimize all windows" option. Next we are going to experiment with SmartCat's File processing capabilities and we will need a list of files, so double click on the *Simple: W*.EXE* icon to restore just that child window and use the "cascade" option of the "Window" menu to have it assume a reasonable size.

Processing Files

You should be able to find the "WINHELP.EXE" file somewhere in the list in the *search window* (it is the program that drives the Windows Help facility), so scroll up and down using the scroll bars to the right of the window until it comes into view.

There are two ways to indicate that you wish to process the file. Either single click on it and select "Process File..." from the "Maintain" menu, or double-click on the file. Whichever way you choose a dialog box will appear.

Put the blank floppy (make sure it is not write protected) you prepared earlier into a floppy drive (probably "A"), and using the list box at the top left, select that drive so that it appears in the "Target Path Specification:-". Then press the "Copy" button and the file will be copied to the floppy, with a progress indicator showing percentage complete.

Double-click again on the WINHELP.EXE file in the *Search Window*, but this time when the Dialog Box appears press the "Run" button, and the Windows Help Program will start.

Of course you would be more likely to use these facilities to copy files **from** floppies to your hard disk. We don't know what is on your floppies, but if you use SmartCat at least **you** will!

For a discussion of what the other buttons do please refer to the reference section. Even if you think they are obvious it is worth reading the reference section, because their actions may change if the file they are dealing with is in an archive, or is itself an archive.

Saving the Catalog Data

Having gone to all this effort you should now save the catalog data, ready for recall whenever required. Apart from anything else, you will need to save it now to enable you to proceed with the tour because our next step will be to merge the example catalog with the catalog you have just created, and SmartCat will not allow you to merge a catalog into one which has been modified and not saved. Select the "Save Catalog As..." option from the "File" menu and the file saving dialog box will appear.

Locate a suitable directory and enter a suitable name for the catalog (TEST.CAT is probably as good as any) and press the OK button and the catalog data will be saved. Then select the "New Catalog" option from the "File" menu, and all the catalog data will be cleared (although you of course have a copy on disk in the "TEST.CAT" file).

Now select the "Open Catalog..." option from the File menu, and using the displayed Dialog Box locate the file you saved and click on O.K. The catalog will then be reloaded.

Merging Catalogs

SmartCat allows you to maintain separate catalogs for different categories of disks, and merge them together for searching or reporting purposes, and that is what we will do now. Whilst you have only created one catalog, an example catalog was supplied with the product, and we will merge that with your catalog.

Select the "Merge Catalog..." option from the "File" menu and using the resultant dialog box locate the supplied example catalog (it has the name EXAMPLE.CAT and would have been installed in the same directory as the SmartCat program). Then press the OK button and the example catalog will be merged with yours.

The additional disks displayed are in fact a selection of disks supplied on the covers of UK computer magazines. Notice that the display in the catalog window has changed, and now includes the name of the owning catalog.

It is possible to merge up to 255 catalogs in this manner, which would soon leave you confused as to which catalog was which, so there is an option to display a correlation dialog to jog your memory. Select the "Merge File Correlation" option from the "View" Menu and a Dialog Box will appear to correlate catalogs to full file-names.

Note also that if you have multiple catalogs, you can load the first and merge subsequent ones automatically from the "Load Catalog" option, because the list box allows multiple selections. If you are unsure how to use a multi-select list box refer to your Windows documentation.

Exporting and Printing Data

All that is left now on our tour is to try exporting data to the Windows Clipboard, and to produce some reports.

With the duplicate listing still with the focus, select the "Copy" option from the "Edit" menu. The cursor will turn to an hourglass, and quickly back to an arrow. If you now start the Windows Clipboard Viewer program (usually in the Main Group in Program Manager), you should see the listing on the Clipboard

Because the Clipboard Viewer uses a proportional font by default, the listing may appear "wiggly". If you need to you can select the "OEM Text" option from the "Display" menu **of the Clipboard Viewer** to force it to use a non-proportional font.

You might also like to try pasting this information into another program like Microsoft Write. Start the Write program (usually in the Accessories group in Program Manager) and select the "Paste" option from the "Edit" menu **of the Write program**. The listing will appear in the Write document.

Back at SmartCat, with the duplicates list still with the focus, select the "Print" option from the "File" menu, and a report of the list in the *Search Window* will be sent to the printer.

There is also the option to call the printer's "Setup" dialog by selecting the "Setup Printer..." option of the "File" menu. Owners of Laser printers such as the HP Laserjet Series might like to try printing in landscape mode.

Now click on the *Catalog Window* (which now has the caption "Merged Catalog") to bring it to the front with the focus, and try printing again. Notice the difference in the report. This time it is a listing of the Disks in the catalog. Both the Copying to Clipboard and Printing functions use the details from the window which has the focus. They also determine the order they will print/copy the listing from the sort order of the Window with the focus. Try sorting the duplicate list (*a Search Window*) by filesize and then printing it for an example.

Other Facilities

We haven't explored all of SmartCat's facilities in this short tour, but we hope we have given you enough of a feel for the program to be able to use it effectively for your day to day needs. The reference section contains full details of all SmartCat's commands and facilities, together

with further technical details and a more in-depth discussion of some points. The printed manual that comes with registration has screen-shots and further amplification of some points to more fully explain all the options.

In particular, most users will find a need to understand SmartCat's optional Virus Scanning feature (we strongly recommend that you check "foreign" disks for viruses).

Printing disk labels is also pretty straight-forward and is explained in the on-line help and later in the reference section of this document.

It wasn't possible for us to show how SmartCat lists files in and extracts files from archives, because we couldn't guarantee you would have an archive file. You might like to try searching the catalog you have created for files using search arguments of *.ZIP, *.LZH, *.PAK, *.ARJ or *.ARC, and then selecting one and choosing the "Archive Internals" option of the "View" menu. When you get the list of files in an archive try processing the file and pressing the "extract" button. Note that files which are in archives display using a different, usually light-grey color. SmartCat uses the "disabled text" setting from the color option of the Windows Control Panel utility for files in archives.

As you become more confident with SmartCat you will probably want to know how to customise it. Most people wish they could automatically do some process with a file on a floppy disk, like pass it to a particular program for printing in some fancy way, or spellchecking or whatever, and with SmartCat's customisation facilities, now you probably can! Full details of how to customise and enhance SmartCat are in the reference section that follows.

Keyboard Usage

The following keyboard shortcuts are supported:-

File	-	Open	-	Alt+O
Edit	-	Copy to Clipboard	-	SHIFT + INS
Maintain	-	Add Disk	-	CTRL+A
Maintain	-	Delete Disk	-	CTRL+D
Maintain	-	Update Disk	-	CTRL+U
Maintain	-	Renumber Disk -	CTRL+R	
Maintain	-	Relabel Disk	-	CTRL+L
Maintain	-	Modify Comment	-	CTRL+C
Maintain	-	Process File	-	Enter
Maintain	-	Default Action	-	Ctrl+Enter
View	-	Volume Contents	-	CTRL+V
View	-	Internal Files	-	CTRL+I
View	-	Statistics	-	CTRL+S
View	-	Merge File Correlation	-	CTRL+M
Search	-	Simple Search	-	ALT+S
Search	-	Complex Search	-	ALT+C
Search	-	File Comment Search	-	ALT+F
Help	-	Index	-	F1

File Menu Commands

New Catalog

Selecting New Catalog clears the current Catalog. If there are any unsaved changes a prompt is issued to allow the catalog to be saved if required.

Open Catalog(s)

Selecting Open Catalog(s) presents a dialog box from which one or more catalogs stored on disk can be loaded. If a catalog is currently open and there are any unsaved changes a prompt is issued to allow the current catalog to be saved if required. Then the standard Windows File Open Dialog box is presented, but note that **you can select one or more files** as the list-box is multi-select. If you select more than one file then the first selected file is loaded, and all the other selected files are merged with it.

Save Catalog

Selecting Save Catalog saves the current catalog to disk. The catalog remains open and you can continue to work on it. Note that you cannot save a merged catalog.

Save Catalog As

Selecting Save Catalog As presents a dialog box in which specifications of where the current catalog should be saved can be entered.

Merge Catalog

Selecting Merge Catalog presents a dialog box from which one or more catalogs stored on disk can be specified. That catalog is then merged with the current catalog. There are certain restrictions when the current catalog is the result of one or more merge operations. For a more detailed description of these restrictions refer to the section Merged Catalogs. Note that there is a limit of 255 on the number of consecutive merge operations

Printer Font

Selecting Printer Font allows you to specify the font (and color if your printer is color capable) that SmartCat will use to print any reports you request. Note that if you choose a large font not all the data will necessarily fit on the page!

Printer Setup

Selecting Printer Setup presents the usual Printer Setup dialog box for the currently selected printer. To change the currently selected printer use the Printers option of the Windows Control Panel.

Print

Selecting Print will cause the details in the currently active window to be sent to the printer. If for example a Disk Window, containing details of the contents of a cataloged disk, was currently the front window then those details would be sent to the printer. The print will be in

the same sort order as the data displayed in the window. For details of how to modify the sorting order refer to the options menu command.

Exit

Selecting Exit will terminate the program. If there is any unsaved data a warning will be presented and the option to save the data given.

Edit Menu Commands

Copy

Selecting the Copy command will copy the contents of the current front window to the Windows Clipboard . If, for example, a Disk Window containing details of the contents of a cataloged disk, was currently the front window then those details would be sent to the Clipboard. The data will be placed on the Clipboard in the same sort order as the data displayed in the window. For details of how to modify the sorting order refer to the options menu command.

Maintain Menu Commands

Add Disk

Selecting the Add Disk command causes the Add Disk Dialog Box to appear. The dialog box has options for specifying :-

Whether to analyse the internal contents of ZIP,ARC,ARJ,LZH and PAK format archive files. Each archive type is presented as an on-off toggle option, and clicking on it with the mouse will switch its state. We would expect you would usually want to select these options, but there may be times when a corrupt archive may cause problems and it will be necessary to prevent SmartCat from attempting to read it (although if it is defective it may be more sensible to delete it or fix it!).

Whether to permit or query unlabelled disks. If you select query then an attempt to catalog a disk which is unlabelled produces a further dialog box, from which you can select to label the disk, allow it to be cataloged without a label, or cancel the cataloging operation. Choosing to permit unlabelled disks causes the disk to be cataloged as [unlabelled]. Allowing the cataloging of multiple unlabelled disks slightly increases the risk of processing an incorrect file.

The Reporting Mode required. If set to "verbose" each file encountered is reported in the message areas at the bottom of the dialog box. If set to "quiet" no files are reported. If set to "auto" files are reported when cataloging disks on drives "a" and "b", but not otherwise. Updating the message areas for each file can slow down cataloging a large hard drive or a large CD-ROM quite considerably, but can be very useful for problem determination purposes.

If a preliminary Virus Scan is required. If set to "yes" a Virus Scanning program will be called before the disk is cataloged. The choice of virus scanning program is user configurable, and further details can be found in the customization options section.

Whether to "stack" a label for the disk about to be cataloged, so that a label can be printed later. Having this option checked does not commit you to actually print a label - if you terminate SmartCat while there are still labels "stacked" then they are simply lost. Similarly you can always stack a label for an already cataloged disk at a later time from an option in the "Label" menu.

Whether to try to extract comments automatically from .ZIP, and .ARJ archives, and whether to attempt to detect Norton/4DOS comments (If you don't know what they are you needn't worry about them).

The comment text you want associated with the disk.

Clicking on "ADD" then causes SmartCat to read the volume label of the disk. If an unlabelled disk is found and the Unlabelled disk query option was selected the option to continue, label the disk, or cancel the process is given. The current catalog is then searched for a disk with a duplicate label, and if one is found the options to continue or cancel are presented. Assuming continue, or no duplicates, the directories on the disk are read and each file found is cataloged. If requested, the contents of Archive files are also cataloged and internal comments retrieved.

When the disk has been cataloged the dialog box remains on screen, ready for another disk to be inserted and cataloged. When all disks have been cataloged the "DONE" button should

be selected to end the process.

Delete Disk

Selecting the Delete Disk command removes from the catalog the disk which is currently selected in the catalog window . A confirmation box is presented giving you a final chance to confirm the action.

Update Disk

Selecting the Update Disk command displays the same dialog box as in the "Add Disk" command. Having chosen the required options and pressed the "OK" button, the volume label of the disk in the drive is compared to the catalog record for the disk which is currently selected in the catalog window . Assuming the labels match the disk is then processed as for the "Add Disk" command, and the records for the disk replace those originally in the catalog.

Renumber Disk

Selecting the Renumber Disk allows you to change the catalog number of the disk which is currently selected in the catalog window . A dialog is presented which allows you to enter a new number. Providing the number you select does not already exist it will replace the current volume number. The volume number must lie in the range 1 - 9999.

Modify Comment

Selecting Modify Comment allows you to add, delete or change the disk comment associated with the disk which is currently selected in the *catalog window* or the file comment associated with the file in the *disk window* or *search window* that has the focus . A dialog is presented which allows you to enter a new comment. If you wish to delete an already existing comment simply delete all the characters by pressing the backspace key when the dialog first appears and then select "OK".

Process File

Selecting the Process File option displays a dialog box which allows you to specify actions to take against the file which is currently selected in the search window or a disk window . For further information see the section processing files . Note that selecting this menu command is equivalent to double-clicking on a file in a search or disk window.

Default Action

Selecting the Default Action option (or using it's Keyboard shortcut Ctrl+Enter) causes the default action DLL specified for the filetype which is currently selected in the *search window* or *disk window* to be called to process the file. For further information see the section "Enhancing SmartCat's Capabilities". As supplied, the default action for .WAV files is to play the sound (if your PC is capable of playing .WAV files using the sndPlaySound API call - you need a suitable sound driver). No other default actions are enabled. If there is no default action associated with the filetype selected then no action occurs.

View Menu Commands

Volume Contents

Selecting the Volume Contents command will create a new disk window which will display the contents of the currently selected volume in the catalog window.

Internal Files

Selecting the Internal Files command will create a new search window which will display the contents of the currently selected archive file in the disk window or search window which currently has the focus, or display those internal files whose names have been returned by a custom Extension DLL. If the currently selected file is not an archive or a file processed by a custom Extension DLL then the menu option will not be available.

Statistics

Selecting the Statistics command will display a dialog box which will give statistical details of the catalog window or disk window or search window which currently has the focus.

Merge File Correlation

Selecting the Merge File correlation command will display a dialog box which will give a cross-reference of the catalog names in the catalog window to the catalog files they are associated with. This option is only available after a catalog merge has been undertaken.

Search Menu Commands

Simple Search

Selecting the Simple Search command will display a Dialog Box in which you can enter one or more filename patterns to search the catalog for. The search arguments you enter can include the standard DOS wildcards * and ? and multiple search arguments should be separated by spaces. The results of the search will appear in a search window, from where you can process any of the resulting files.

Complex Search

Selecting the Complex Search command will display a Dialog Box in which you can enter a combination of arguments (one or more) on which to base the search of the catalog. The search arguments are combined on an AND basis, i.e. a file must meet all the specified arguments to be included. Possible arguments include:-

The filename patterns to search the catalog for. The search arguments you enter can include the standard DOS wildcards * and ? and should be separated by spaces.

The minimum file size (in bytes).

The maximum file size (in bytes).

The earliest filedate. The format of date required depends on the setting in the International section of the Windows Control Panel . If you are having trouble entering dates an incorrect setting in Windows is probably the reason. You can change date formats at any time.

The latest filedate.

The results of the search will appear in a search window , from where you can process any of the resulting files.

File Comment Search

Selecting the File Comment Search option presents a dialog box in which you can enter up to 3 text strings to search the recorded file comments for. The text strings are not case sensitive. They can be combined on an **and** or an **or** basis by use of the radio buttons in the bottom left corner of the dialog box. The dialog box "remembers" the last few search arguments entered during a SmartCat session, and they can be recalled by use of the drop down arrows at the right.

The results of the search will appear in a search window, from where you can process any of the resulting files.

Options Menu Commands

Catalog Sort Order

Selecting the Catalog Sort Order command presents a further sub-menu which allows the specification of the sort order required for the catalog window . If the catalog window currently has the focus then the new sort order will take effect immediately. If another window has the focus, then the new sort order will take effect when the catalog window gains the focus. The specified sort order also affects the order in which entries will be printed or copied to the Windows Clipboard .

Sorting is possible by volume number, volume name, volume freespace, by the date the volumes were cataloged, or by the comment text associated with the volume.

Disk Sort Order

Selecting the Disk Sort Order command presents a further sub-menu which allows the specification of the sort order required for the disk window(s) . If a disk window currently has the focus then the new sort order will take effect immediately. If another window has the focus, then the new sort order will take effect as disk window(s) gain the focus. The specified sort order also affects the order in which entries will be printed or copied to the Windows Clipboard .

Sorting is possible by file name, file extension, file size, file date, directory name or associated comment text.

Search Sort Order

Selecting the Search Sort Order command presents a further sub-menu which allows the specification of the sort order required for the search window(s) . If a search window currently has the focus then the new sort order will take effect immediately. If another window has the focus, then the new sort order will take effect as search window(s) gain the focus. The specified sort order also affects the order in which entries will be printed or copied to the Windows Clipboard .

Sorting is possible by file name, file extension, file size, file date, disk name, disk number, directory name or associated comment text.

Catalog Display Style

Selecting the Catalog Display Style command presents a further sub-menu which allows the specification of the display style required for the catalog window . The available options are to display disk comments, or to display data about the disk such as freespace, time and date of cataloging etc. If the catalog window has the focus then the new sort order will take effect immediately. If another window has the focus, then the new sort order will take effect as search window(s) gain the focus.

Hide/Show Internal Files (Disk Windows)

Selecting the Hide Internal Files (Disk Windows) or Show Internal Files (Disk Windows) commands changes the display style of Disk Windows, by either displaying or not displaying those files which are internal components of another file (i.e. the internals of Archives such as .ZIPs or .ARJs, or any internal filenames provided by custom extension DLLs such as the

internal files in a DOS6 backup, or the internal content of BookManager™ bookshelves).

Separators

Selecting the Separators command allows the specification of the type of lines to use to separate each entry in Catalog, Disk and Search Windows in each of the different display modes. The choices presented are for no lines, dotted lines, dashed lines or solid lines.

Switch Display Mode

Selecting the Switch Display Mode option allows you to change the mode of display for the window that has the focus from data (showing name, sizes, dates and times etc.), to short data (just name, path and drive), to comment (just name and comment text (if any)), to data and comments (all data and comment text (if any)) spread over two lines. Note that you can also cycle through the display modes of the window that has the focus by ensuring the mouse pointer is over the window and **clicking** the right mouse button.

Play Sounds

Selecting the Play Sounds option enables or disables SmartCat's use of sounds for various events such as "Search Complete", "Disk Update Complete" etc.. If the use of sounds is enabled then there will be a tick by this menu item.

Note that you need a device driver capable of playing .WAV files to make use of this option. If you enable SmartCat sounds and do not have a suitable driver installed you will get a dialog box detailing the failure the first time SmartCat attempts to play a .WAV file, and the option will be automatically disabled.

If you do not have a suitable sound card you might like to consider obtaining the Microsoft Windows Speaker Driver which will play .WAV files through your PC's internal speaker. The Speaker Driver is available from most BBS's and good shareware sources.

You can select which .WAV files accompany which SmartCat events by use of the "Sounds" Control Panel Applet.

Label Menu Commands

The Label Menu Commands implement SmartCat's Label printing facilities.

Clear Label Stack

Selecting the Clear Label Stack option clears all the currently recorded label information. The option is only available if there are some disk labels currently in the "stack" awaiting printing.

View Label Stack

Selecting the View Label Stack option displays a dialog box giving a list of the disks currently having a label "stacked" for subsequent printing. You can delete the stacked label for any of the displayed disks.

Stack Selected Disk

Selecting the Stack Selected Disk option will add, to the label stack, label details for the disk which is currently selected in the Catalog Window.

Note that you can stack more than one label for a selected disk if that is useful to you, or go back and delete one using the View Label Stack option should you do so by accident.

Stack All Disks in Catalog

Selecting the Stack All Disks in Catalog option will add, to the label stack, label details for all the disks in the current catalog. Again you can do this multiple times if it is useful.

Stack Manual Label

Selecting the Stack Manual Label option presents a dialog box into which you can manually type details you want to appear on the label. The detail you type in the "Header" box prints in the "Header" font, the detail typed in the "Body" box prints in the "Comment" font, and the detail typed in the "Footer" boxes prints in the "Data" font.

Print Stacked Disk Labels.

Selecting the Print Stacked Disk Labels option presents a Dialog Box which has a number of fields used to describe to SmartCat the dimensions of the labels you have. Two of the popular Avery brand label dimensions are pre-configured, although there are always minor differences between different printer brands and you may have to make slight adjustments.

Note that it is up to you to define fonts of an appropriate size to ensure that all the information fits on the size of label you have defined. SmartCat will "wrap" the comment text to fit it between the header and data parts of the label, but makes no attempt to wrap the header or data themselves.

Selecting the "OK" button will then cause the labels to print.

Window Menu Commands

The Window menu subcommands implement the normal window management commands for MDI windows, with some extensions particularly relevant to SmartCat. For further information about general window management refer to your Windows documentation.

Cascade

Selecting Cascade re-arranges all non-minimized windows in an overlapping fashion.

Tile

Selecting Tile re-arranges all non-minimized windows in a tiled fashion, where all the space in the client window is used, but no windows overlap each other.

Tile on Top.

Selecting Tile on Top re-arranges all non-minimized windows in a tiled fashion, where all the space in the client window is used, but no windows overlap each other. Priority is given to a horizontal arrangement.

Arrange Icons

Selecting Arrange Icons causes any minimized (iconised) windows to re-arrange themselves neatly at the bottom of the client window.

Minimize all Windows

Selecting Minimize all Windows causes all open windows to assume the minimized (iconised) state.

Restore all Windows

Selecting Restore all Windows causes all minimized windows to assume the normal state.

Close all Search Windows

Selecting Close all Search Windows causes all search windows (minimized, maximized or normal) to close.

Close all Disk Windows

Selecting Close all Disk Windows causes all disk windows (minimized, maximized or normal) to close.

Close all Windows except Catalog

Selecting Close all Windows except Catalog causes all open windows (except the catalog window) to close. You cannot close the catalog window.

Processing Files

General Information

Once you have located the file(s) you are interested in, either in a disk window or a search window you can process the file in a number of ways. Having put the disk in question into the drive (unless the file is on a hard disk) double clicking on the file name will present a dialog box from where you can specify what action you wish to take.

The dialog box that is presented details at the top the name of the file, the number of the disk it is on, the volume label (if it has one), and the default drive in which it expects to find it.

To the right of the dialog box is a list box showing the available drives on your system, and you can select an alternative drive from which to process the file if desired.

To the left of the dialog box is another list box, and just above it the words "Target Path:-". The target path defines where any action which creates a further file or files will place those files. For example, the "Explode" option, which extracts all the files from an archive, will place the resultant files as specified by the "Target Path" specification. You can change the target path specification by use of the list box. The target path you specify is remembered from session to session.

Slightly to the right of the centre of the dialog box are two on/off toggle options. Minimize on Use, if checked, causes SmartCat to shrink to an icon if another program is launched by use of the Run or Process buttons. Confirm Deletes, if checked, issues a warning before any destructive operation is undertaken on any file.

Towards the bottom of the Dialog Box are a group of process-option buttons. The first 9 provide different options, and are enabled and disabled as appropriate for the type of file selected. If the selected file is part of an archive, the text of some of the buttons will change to be preceded by an "X" signifying that the file will first be extracted from its archive to the target path before the action is undertaken.

Delete will attempt to delete the file.

Rename will attempt to rename the file.

Copy will attempt to copy the file to the specified target path.

Move will attempt to copy the file to the specified target path, and then delete the original.

Run (which is only enabled if the file is executable), will attempt to execute the file.

Process (which is only enabled if the file is associated with a particular program (use the File Manager File|Associate option to associate files to programs) - see your Windows documentation) attempts to launch the associated program with this file as its input.

Extract attempts to extract this file from the archive it is in to the target path. This option is only enabled if the file is in an archive.

Explode attempts to extract all the files from this archive to the target path. This option is only enabled if the file is itself an archive.

Print attempts to print the file to the current Windows printer. The font used is the one selected from the File|Printer Font option

The remaining buttons are user-definable. For more information see the customization details section.

Customisation Details

SmartCat can be customised to suit your needs, and the way you like your system to work. The main areas where you can customise SmartCat are in the way it performs pre-catalog virus scanning, the way it performs extraction from archives, and what effect pressing any of the "User" buttons in the Process File dialog box has. All are customised by modifying the SMARTCAT.INI file which is distributed with the product.

Pre-Catalog Virus Scanning

In your SMARTCAT.INI file you will find the following line:-

```
ExSCAN=SMCATDOS.BAT SCAN %d /NOMEM
```

The detail after the = sign is the command SmartCat will issue to cause a virus scan of the disk. The %d parameter will be replaced with the drive designation (e.g. a:) for the drive to be used for cataloging. As delivered SmartCat will call the supplied SMCATDOS.BAT file which in turn will call the McAfee Scan program with the memory checking option disabled. Note that the SCAN program is not supplied as part of SmartCat, but is available from all good shareware sources. If required you can modify this command to suit your needs, perhaps by calling an alternative virus scanner.

Archive Processing

In your SMARTCAT.INI file you will find the following 5 lines:-

```
ExZIP=SMCATDOS.BAT PKUNZIP -O  
ExLZH=SMCATDOS.BAT LHA E /C  
ExARC=SMCATDOS.BAT ARC-E  
ExPAK=SMCATDOS.BAT PAK E  
ExARJ=SMCATDOS.BAT ARJ E
```

Each of these lines represents the beginning of the command that SmartCat will issue to invoke the relevant archive extraction program. SmartCat appends the archive file name and target path name as required. If you wish you can modify these commands to more suit your way of working. For example you may wish to use the "ARC" program to extract "ARC" files rather than the "ARC-E" program which is the default. If so modify the ExARC line to read "ExARC=SMCATDOS.BAT ARC E ". Similarly, the commands above assume the extraction programs can be found somewhere in a directory in your PATH . If this is not the case you may wish to add drive/directory information to these commands. Note that the archive extraction programs are not supplied as part of SmartCat, but all are freely available as shareware from good shareware sources.

Defining "User Buttons"

In your SMARTCAT.INI file you will find pairs of the following type of lines:-

```
User1Btn=&View  
User1Cmd=Notepad.exe %f
```

The UsernBtn= line defines, for each user button, what will appear on the button face. The ampersand (&) immediately precedes the character which will become the button's "hot-key" (although there aren't many left to choose from, and if you duplicate one that already exists in the dialog box the original will take precedence). If the file is actually in an archive, SmartCat will automatically add the character X to the start of the button text (and will extract the file first if you push the button!)

The User1Cmd line defines what command will be issued when the button is pressed. In the command the following characters can be used which will be replaced by SmartCat before the command is issued:-

- %f** SmartCat will insert the name of the file, including its full pathname.
- %t** SmartCat will insert the target pathname selected in the process file dialog box.
- %n** SmartCat will insert the filename, excluding its path.
- %p** SmartCat will insert just the path to the file, excluding the filename.

For example, assuming you had a super-wizzo editor called WINWIZZO, and you wanted to modify user button 3 to call it, you would need something along these lines:-

```
User3Btn=&WinWizzo  
User3Cmd=WINWIZZO %f
```

Note that as delivered the first user button has been set up as &View, and it calls the NOTEPAD program. The second user button has been set to call the McAfee virus scanning program SCAN via the SMCATDOS.BAT interface batch file. All the other user buttons are set up to call the WRITE program.

Enhancing SmartCat's Capabilities

General

SmartCat's capabilities can be extended by the addition of custom Extension DLL's (like "sub-programs" really), which can be used to enhance SmartCat's understanding of the internal formats of particular types of files by returning additional information about them.

SmartCat can then use that information to either record any additional internal files that the DLL has discovered exist inside files of that type, or to extract useful information to use as file comments.

SmartCat's abilities can also be enhanced by the addition of further "Default Action DLL's" to provide specialised processing for particular file-types.

For example, if a new archive format comes along and becomes popular it should be possible to add a DLL to SmartCat to enable it to determine the internal content of those types of files. Similarly it should be possible to construct DLL's to extract useful information such as Author Name, Document Title etc. from word processing document files.

At the time of writing several DLL's were under development or already complete. Any DLLs shipped with this product will be separately documented (look for other .WRI files - or the install program may have added Icons for DLL documentation during installation).

Some potential uses for these sorts of DLLs might include:-

Analysis of the internal content of DOS6 backups to determine and record the files in the backup, and as a comment the details of the backup set.

Analysis of BookManager™ Bookshelf files (.BKS, normally supplied on CD-ROM), determining the books (.BOO files) that constitute the bookshelf and returning as comments both the bookshelf title and the individual book titles and publication numbers and dates.

Analysis of TrueType font files to return as a comment the true name of the font.

Analysis of the size and resolution of graphics files (.PCX, .BMP, .GIF, .DIB etc..etc..).

We intend to continue to produce useful DLLs, and will inform registered users of their availability.

We are also actively looking for any suggestions you have for types of files that would make suitable candidates for analysis by SmartCat DLL's. If you do have an idea for a useful DLL that we haven't yet produced (call us first to find out!) then it is far more likely that we can produce something if you can obtain the format of the file for us, and send us some examples of that type of file. Obviously we don't have access to every possible variation of Word Processor, Spreadsheet etc. etc., nor always an understanding of every type of package that produces files! Contacting the manufacturer of the package may bring you the layout of the files, or then again it may not. In our experience some manufacturers are very helpful, and some are not.

Please note that none of the foregoing is a commitment on our part to produce specific DLLs, or in fact any more at all, although it is currently our intention to do so provided we believe they are commercially viable. Also, extension DLLs will not necessarily always be released as Shareware.

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Adding Custom Extension DLLs

To add a DLL to SmartCat to analyse a particular type of file refer to the instructions that came with the DLL. There may be an Install procedure that came with the DLL that will effect the complete installation for you. If you have to install a DLL manually all that is usually required is to edit the SMARTCAT.INI file (held in your Windows Directory), and add to the [Extensions] section a line of the format:-

```
.xxx=DLLNAME1,DLLNAME2,DLLNAME3
```

where .xxx is a file extension (leading dot required), and

```
DLLNAME1,DLLNAME2,DLLNAME3
```

are the names of custom DLLs to be called to process this type of file.

if the [Extensions] section does not exist in your SMARTCAT.INI file you can simply create it.

Note that more than one DLL can be associated with a particular filetype. The DLL's will be called in sequence until one responds that it understands the format of file presented to it. No further DLLs will then be called for that particular file.

Also note that the Shareware version of SmartCat only recognises the first Custom DLL specified in the [Extensions] section. The registered version is capable of recognising multiple DLLs. You may wish to change the coding order in your SMARTCAT.INI file in order to experiment.

It is also possible to associate a DLL with one particular file, by coding a line of the format:-

```
complete.fil=DLLNAME1,DLLNAME2
```

The DLL is not actually restricted to recording anything specifically related to the file, and could be used to record almost anything as a comment for a particular file, for example the temperature at the time the catalog was run (with suitable hardware!). This technique can be used to good effect particularly in networked environments or where Notebooks are used away from the office, where for example it could be used to determine the amount of Ram installed on Workstations for analysis by a Network Administrator. Further information is available in the manual that accompanies the separate SmartCat Auditing Extensions product.

Adding Additional Default Action DLLs

Additional Default Action DLLs can enhance SmartCat's ability to process certain types of file. An example of this process at work is with the SCWAVPLA DLL supplied with SmartCat, which can play .WAV files directly without the need to start the Sound Recorder applet, press the play button, and then close sound recorder down again. If you have any ideas for useful Default Action DLL's please let us know. (E-Mail of some sort is easiest for us, or a message in the WINSHARE forum on CompuServe which we check regularly, but we are also happy to take phone calls!).

To add a DLL to SmartCat to provide a new default action for a particular type of file refer to the instructions that came with the DLL. There may be an Install procedure that came with the DLL that will effect the complete installation for you. If you have to install a DLL manually all that is usually required is to edit the SMARTCAT.INI file (held in your Windows Directory), and add to the [Actions] section a line of the format:-

.xxx=DLLNAME

where .xxx is a file extension (leading dot required), and

DLLNAME

is the name of the custom DLL to be called to process this type of file.

if the [Actions] section does not exist in your SMARTCAT.INI file you can simply create it.

The Shareware version of SmartCat only recognises the first Default Action DLL specified in the [Extensions] section. The registered version is capable of recognising multiple DLLs. You may wish to change the coding order in your SMARTCAT.INI file in order to experiment.

Problem Determination

SmartCat has gone through a thorough testing process, but like any complex piece of software there may be the odd bug still lurking. SmartCat also depends to some extent on the integrity of the data (i.e the disks, and the files thereon) that are presented to it to catalog.

If you discover a problem there are some things you can do to help narrow down the cause:-

If the problem occurs while cataloging a disk first determine if the disk is actually readable by the DOS DIR command (or the Windows File Manager). If they can't read it, it is almost certain the Directory Structure is corrupt. If there is no obvious problem try running the CHKDSK command against the disk in question (refer to your DOS documentation - the usual command is CHKDSK a: to check the disk in drive "a") to see if there are any structural problems.

If the disk can be read OK by a DIR command and the Windows File Manager, and CHKDSK suggests no problems, try cataloging the disk again with SmartCat but having turned **OFF** all the archive analysis and auto-comment checkboxes. If SmartCat can now cope with the disk it is almost certain that one of the archive files on the disk is corrupt. A process of elimination, together with careful observation of the message box in the Add Disk Dialog box should enable you to narrow the problem down to a specific file. Once you have determined which file causes the problem try to process it with its native utility and produce a list of the files the archive contains. If this also fails you don't have many choices, either attempt to repair the archive (some archives, like ZIP files, have a matching repair utility (PKZIPFIX)) or try and extract what you can before you scrap it.

If DIR and the Windows File Manager can cope with the disk, and there do not appear to be any corrupt archives, please contact us for advice. We may already have a fix, or we may ask you to send us the offending disk/file for further investigation.

If you have any other problem with SmartCat not related to cataloging disks please let us know and we will do our best to resolve them. Of course the problem may already be fixed in the registered version.

Before you contact us **please** have available all the facts surrounding the problem. It is much easier for us to help you if you let us know:-

If you can reproduce the problem, and can let us know the exact steps that cause it.

If any error messages are issued, and you tell us the exact content of them. Just saying "I get an error message" will delay any response, because we will have to ask you what it said. If you get "Someprog caused a General Protection Fault at ssss:0000" then please note down the address given (ssss:0000).

Details of the configuration of your machine:- What chip (286,386,486,Pentium!). How much memory, what Operating System, what version of Windows? What video cards/technology (VGA, SVGA, S3, Wietek P9000)? Do you use compression software? Any TSR's? Are you using Program Manager as the shell or something else? If you are using something else then does the problem go away if you go back to Program Manager?

If the problem has only just started happening, and if you have changed any hardware recently, or introduced any new software?