Introduction to FileClip

FileClip is a simple utility that can be used to augment or replace the Window's 3.0 File Manager. It is suitable for both the Window's "Power User" and the Window's novice. In addition to a powerful File Manager, FileClip also greatly augments the Window's Clipboard system.

FileClip enables the user to create a clipboard <u>stack</u> that can be used to implement multiple undo capability and enhanced paste functionality between applications.

FileClip uses three main display windows:

- 1. On invocation, FileClip comes up in the default <u>browser</u> window. This window can be used to select files and/or directories for manipulation. File or Directory <u>pathnames</u> can also be chosen from the file browser and are entered into the clipboard when the pathname is double clicked with the mouse, or the OK button is depressed.
- 2. Depressing the <u>DETAIL</u> opens up the File Detail Window.

The File Detail Window shows a complete directory listing, with full details on all of the directory contents. The Detail Window Menu can be used to select several <u>Hilight</u> or <u>Sort</u> options.

Any file in the detail window can be selected, and the corresponding item in the <u>browser</u> window will be selected. Double clicking on a directory within the Detail Window will cause the current directory to be changed and the display will be updated.

3. Clipboard operations, other than entering of pathnames is done through the Clipboard Menu within the main browser window. Choosing <u>History</u> displays the history stack.

Any entry can be moved to the top of the Clipboard stack by selecting it. The application (if known) that provided the source of the data is displayed next to the Clipboard data within the stack.

Whenever FileClip is running, the clipboard is constantly monitored, and any COPY or CUT operations from within any application are saved on FileClip's History Stack. Currently, only TEXT data is captured.

List of Commands

Listed below are the commands available from the main browser.

Menu Commands

<u>File Menu</u>
<u>Directories Menu</u>
<u>Clipboard Menu</u>
<u>Option Menu</u>

Buttons

OK Button
CANCEL Button
DETAIL Button
DELETE Button
COPY >> Button
MOVE >> Button
RUN Button
VIEW Button

Other Controls

FILE NAME Edit Box
DIRECTORY Field
FILES List Box
DIRECTORIES List Box
TARGET FILES Combo Box
INCLUDE DIRS Check Box

Clipboard

A temporary storage area for cut or copied text. FileClip, currently dows not support graphics. The user generally CUTs or COPYs data to the clipboard within in an application and then PASTEs data from the clipboard into the application. FileClip allows the user to keep a history of all clipboard activity.

Stack

A stack, is a data structure used for storing data. Conceptually, a stack operates on a last in, last out basis. FileClip intercepts all Clipboard data and stores it in its stack.

When the user wants to access data, it can be taken from anywhere within the stack and moved to the top.

When the stack fills up, see <u>Stack Entry Depth</u>, the least recently used or the bottom item on the stack is removed.

Browser

The browser consists of a pair of list selection boxes. The $\underline{\underline{Files\ Listbox}}$ and the $\underline{\underline{Directories}}$ Listbox.

Normally the Files Listbox displays file names and the Directories Listbox displays directories and disk names. Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be included in the Files Listbox by checking the Include Directories can be supported in the Files Listbox by checking the Include Directories can be supported in the Files Listbox by checking the Include Directories can be supported in the <

One can *browse* through the file system by selecting directories and pushing the \underline{OK} button or double clicking on the directory name. When OK is pressed, or the double clicking occurs, the current directory is changed.

Path names, and wildcard filters can also be entered in the <u>File Name Editbox</u> included at the top of the browser. e.g. to limit the browser to displaying only .EXE type file, type "*.exe", in the Edit box, and push the OK button.

PathName

PathName refers to a full file system path name. e.g. c:\windows\windows.ini.

FileClip provides the very useful capability of allowing, the path name to be copied into the clipboard. Once in the clipboard it can be pasted into any application by pressing the SHIFT INS key combination.

This can be a great time save when entering filenames into an application that does not provide a browser, or even within one that does, because, the browse operation does not need to be repeated.

OK

The OK button is used to signify the end of an operation. It will copy a <u>pathname</u> into the clipboard, change to a new directory, or accept text typed in the Edit box.

NOTE: When the Clipboard Option <u>Minimize on Use</u> is enabled, pressing the OK button will copy the pathname to the clipboard and then minimize the FileClip Window so that the pathname can be more easily applied into the application by pressing the SHIFT INS key.

File Menu Commands

Copy Move Delete Run View Hide Exit

Hide

The Hide, File-Menu Item, simply minimize the FileClip main window as well as the FileClip child windows such as the Detail Window and the View Window.

This cleans up the desk top for working with other applications, but keeps FileClip actively recording Clipboard activities.

Exit

FileMenu-> Exit, will close the FileClip Application.

The current Clipboard History Stack will be saved, and any user options retained and stored in the <u>FILECLIP.INI</u> but clipboard activity will no longer be recorded on the Clipboard History Stack.

Directories Menu

<u>Create Dir</u> <u>Delete Dir</u> <u>File Details</u>

NOTE: An alternative method to operating on Directories is to choose the <u>INCLUDE DIRS</u> <u>Check Box</u>. This will display directory items in the Main File Browser list box, and allow the <u>Delete</u>, <u>Move</u> and <u>Copy</u> to operate on directories as well as files.

Create Directory

Creates a new directory within the current directory.

A dialog box will prompt user for the new directory name.

Delete Current Directory

Deletes current directory. User will be prompted, depending on options set.

If the Dir Delete Prompt is checked, the user is prompted to confirm deletion of the directory, and then if the directory is not empty, and the Delete Prompt is checked, the user will be prompted on deletion of each file within the directory or subdirectories.

Clipboard Functions

The operation of FileClip's powerful Window's clipboard, function is controlled from this menu. There are two major clipboard functions:

The ability to copy pathnames into the clipboard, and

The ability to retrieve, previous contents of the clipboard and copy it back into the clipboard via the clipboard <u>history</u> command.

CLIPBOARD MENU ITEMS:

Copy to Clipboard:

Copies full <u>pathname</u> to clipboard, based on Clipboard options settings.

<u>History</u>:

Invokes clipboard history window. Allows copying of previous contents of clipboard back into clipboard.

View Clipboard:

Invokes clipboard application, to display current clipboard contents.

Options==>

Minimize on Use Convert \ to / Dir Path Only Entry Stack Depth

Options

This menu controls prompting and behavior during file operations.

Delete Prompt:

Controls whether or not user is prompted on deletion of each file.

Dir Delete Prompt:

Controls whether or not user is prompted on deletion of a directory.

Overwrite Prompt:

Controls whether or not user is prompted on the overwrite of a file during a Move or Copy Operation.

Show Selected Only:

When Operating on files, (Move, Copy or Delete Operations), the operation is started by pressing the appropriate button once and than confirmed, after the target directory is selected by pressing the button a second time.

If the Show Selected Only Menu Item is checked, the File listbox, will only display the items selected. The selection list can be further refined by deselecting selected items. If Show Selected Only is unchecked, all directories are shown, with the selected entries being highlighted.

HINT: When selecting a large number of files from a directory, it is hard to see them all in the listbox window, choosing Show Selected Only, filters out all of the unselected files and gives you the opportunity to confirm your selection.

Preserve Date/Time:

When checked, the original date and time of last file modification is preserved on a file copy or move operation. If unchecked, the file date and time is changed to the current system date and time.

Registration

FileClip is "Shareware" and is © 1991 by Ben Sprachman, Hopkinton MA 01748.

This program may be used on a "Trial" basis, but if a decision is made to routinely use this program, it should be registered, by filling out the included registration form, or by mailing a check or money order for \$20 US, payable to:

Ben Sprachman 8 Coburn Road Hopkinton, MA 01748

On receipt of the registration fee, your Registration number will be mailed out either via First Class Mail or Compuserve Mail.

Once your Registration Number is entered the annoying shareware message will no longer be displayed when the program is first started up.

For an extra \$7.50 shipping and handling, the latest copy of FileClip will be mailed out, along with your Registration number.

Support for the program, as well as updates will be available on Compuserve. Direct inquiries to 72550,3025.

Registration covers all bug fix releases, as well as minor enhancements. Future major enhancement upgrades will be made available to registered users at a reduced cost.

I am also soliciting ideas for improvements, new features and enhancements to the program. I will only be able to continue development on the program if people register their copies of the program, otherwise I can justify the time and cost of continued development of the application.

Cancel Button

Pressing Cancel, terminates any pending <u>Move</u>, <u>Delete</u> or <u>Copy</u> operations.

To use the MOVE, DELETE or COPY functions, files must be first selected from the Files listbox, the operation started by pressing the appropriate operational button, and then confirmed by pressing the same button again.

Cancel removes the highlight from the selected files, and stops the pending operation.

File Detail Window

The File Detail Window is used to display detailed (long) information about each file and subdirectory within the current directory. The detailed information, includes, File Attributes, File Date/Time and File size in bytes or number of entries in a sub directory.

To take full advantage of the features within the File Detail Window, a color display is highly recommended. The File Detail Menu, has options for various type of sorts, and file highlighting features.

File Detail Menu Items:

File -->Close Closes the File Detail Window Sort Options
HiLights
Attributes

Files or directories can be selected or unselected within the Detail Window by clicking on the name with the left mouse button.

Any files selected within the Detail Window, are automatically selected with the main FileClip File listbox, and can then be operated on.

Delete Button

The delete button is used to delete files or directories. If a single file is selected from the File listbox, pressing DELETE will delete that file.

If multiple selections are present, the selected files are shown, and the user must confirm the delete operation by pressing DELETE a second time.

If operating on files, the user will be queried on deletion of each file if the $\underline{\text{Delete Prompt}}$ Options is set.

If the <u>Include Dirs Check Box</u> is set then the Files listbox will display directories, and the DELETE button will also cause whole directory trees to be deleted.

The <u>Dir Delete Prompt</u> Option controls whether not the user will be queried before deletion of a complete directory tree.

COPY

Copy performs a simple file or tree copy operation. Files can be selected from the main File listbox, then pressing the COPY button, enables the Directory listbox to be used to locate the <u>target</u> directory.

The actual COPY operation is started by pressing the COPY button a second time.

The user can control and further refine the selection list between pushes of the COPY button. The <u>Show Selected Only</u> option, can be used to emphasize the list of files to be copied.

To copy complete directory trees, the <u>Include Dirs Check Box</u> must be enabled, otherwise directories will not be displayed in the File listbox.

During a Copy operation, a "CANCEL" dialog box is displayed that when depressed will abort the current copy operation.

Upon pressing the CANCEL button, the state of the file system will be left intact, and any partially copied files will be deleted, but any files fully copied before the CANCEL button was pressed will remain.

If an attempt is made to copy a file on to itself, FileClip assumes that the file is to be renamed and the user will be prompted for a new filename.

If a file of the same name exists in the <u>target</u> directory, the file will either be overwritten, or the user will be queried on whether it is OK to overwrite the file depending on the state of the <u>Overwrite Prompt</u> option.

After a copy the value of the file date/time field will either be the current system date and time or the time and date of last modification of the source file depending on the Preserve_Date/Time option.

MOVE

Move performs a simple file or tree move operation. Files can be selected from the main File listbox, then pressing the MOVE button, enables the Directory listbox to be used to locate the <u>target</u> directory.

The actual MOVE operation is started by pressing the MOVE button a second time.

The user can control and further refine the selection list between pushes of the MOVE button. The <u>Show Selected Only</u> option, can be used to emphasize the list of files to be copied.

To move complete directory trees, the <u>Include Dirs Check Box</u> must be enabled, otherwise directories will not be displayed in the File listbox.

During a Move operation, a "CANCEL" dialog box is displayed that when depressed will abort the current move operation.

Upon pressing the CANCEL button, the state of the file system will be left intact, and any partially copied files will be deleted, but any files fully copied before the CANCEL button was pressed will remain.

If an attempt is made to move a file on to itself, FileClip assumes that the file is to be renamed and the user will be prompted for a new filename.

After a move the value of the file date/time field will either be the current system date and time or the time and date of last modification of the source file depending on the Preserve_pate/Time option.

RUN

FileClip allows applications to be launched by depressing the RUN button. RUN only works on a single file at a time and does not support wildcards.

The filename that is launched when the RUN button is depressed is the file displaced in the File Name Edit Box.

FileClip will launch applications based on the filename extensions and searches the [Extensions] section of the WIN.INI file for the association.

If the extension is not defined in the WIN.INI file, FIleClip will only launch files that have extensions of the following types:

.COM

.EXE

.BAT

.PIF

File Viewer

FileClip contains a simple file viewer. Only one file at a time can be viewed, and the file currently selected and displayed in the <u>File Name Edit Box</u> is the file that will be displayed.

FileClip has two viewing modes, Text and Hex. Initially, FileClip will determine the best mode for viewing. Once viewing the file, the viewing mode can be overwritten by choosing DISPLAY and TEXT or HEX from the Menu within the Viewer Window.

In Text mode, only Window's ANSI printable characters will be displayed, other characters will be displayed as a solid bar. It is assumed that lines are terminated by either CR or CRLF.

Hex Mode displays a combination of hexadecimal and ASCII, 16 bytes per line. All non printable ASCII characters are shown as a "." within the ASCII display.

The viewer can support only files up to 32K bytes in size. For larger files, only the first 32K bytes will be displayed.

The viewer can be closed by selecting FILE->Close from the Viewer Menu.

File Name Edit Box

The box at the top of the main FileClip window. It is used to display filenames, that can be used for the RUN and VIEW commands, as well it will be the pathname that is copied to the clipboard.

The field can be edited, to override the default "*.*" file specification that the file browser uses.

DIRECTORY FIELD

This field is displayed directly under the $\underline{\text{File Name Edit Box}}$ and is used to display the full pathname of the current directory, or the $\underline{\text{target}}$ directory.

FILES Listbox

The Main Listbox on the left hand side of the main FileClip Window. This displays all of the files in the current directory. If the <u>Include Dirs Check Box</u> is checked directories will also be displayed. Directories are indicated by square brackets e.g. [WINDOWS]. This listbox is used for most of FileClip's file and clipboard operations.

Selected files within the Listbox are shown in reverse video. The listbox is supports the standard Windows Extended listbox operations. In summary the following selections can be made:

Remove Current Selection and Select new Entry: LEFT MOUSE BUTTON

Toggle Selection State: CTRL LEFT MOUSE BUTTON

Select all entries from Current Selection: SHIFT LEFT MOUSE BUTTON

Doubleclicking an item within the listbox is the same as selecting it and pushing the \underline{OK} button.

If the item is a filename, its path is copied to the clipboard, if it is a directory, the current directory is changed to the selected directory, and the listbox is refilled from the new directory.

Directories Listbox

Normally this listbox displays the directories and disk names available within the current directory.

In <u>Copy</u> and <u>Move</u> operations, the directories listbox is used to display the directories and disk names available as targets for the Copy or Move operation.

The current directory is changed to a new directory by selecting an item with the Left Mouse button and then pressing the OK button, or by double clicking with the Left Mouse button on the desired item.

Target Files Combobox

This Combobox is only displayed in between <u>move</u> and <u>copy</u> operations.

It is shown above the File Name Listbox. Selecting the dropdown ICON next to the Combobox, will display a list of the files in the currently selected move or copy target directory.

It is used to help confirm that the appropriate target directory has been chosen, and allows the user a chance to double check before completing the MOVE or COPY operation.

Include Dirs Check Box

This is the small checkbox under the main File listbox. By default only filename are displayed in the main File listbox.

In order to \underline{move} , \underline{copy} or \underline{delete} directory trees, they must be displayed in the main File listbox.

Simply select the checkbox with the LEFT Mouse Button to enable this option.

Directories are shown enclosed in square brackets; e.g. [WINDOWS], and the parent directory is shown as [..].

Once directories are displayed, either the $\underline{\text{Files Listbox}}$ or the $\underline{\text{Directories Listbox}}$ can be used to change the current directory.

FILECLIP.INI File

FileClip creates a file called fileclip.ini in the main windows directory. This file stores the clipboard stack history between invocations of the program and also stores the state of all of the user selected options.

The file is an ASCII text, but it is not meant to be edited, instead use the menus within FileClip to set the various options.

Improper editing of the INI file, can cause unexpected results.

Minimize on Use

This option, causes the main FileClip window, and open View or Detail windows to be minimized, after copying a pathname to the clipboard.

This will happen only when the OK button is depressed, or if a filename is double clicked within the main File List listbox.

Convert \ to /

This option will change all DOS type back slashes to UNIX type forward slashes, before copying a pathname into the clipboard.

This is useful, if you are passing a DOS pathname to a UNIX program that is running within a Window on your PC.

Dir Path Only

This option will enable the copying of the full tree name of the directory that contains the selected file to the clipboard, rather than the full pathname.

This option is useful for programs, that take a directory rather than a pathname as input.

Entry Stack Depth

This sets the depth of the clipboard <u>history</u> stack.

The default depth is 20 entries, but it can be set anywhere from 1 to 99 entries in depth.

Copy to Clipboard

This menu item, is essentially the same as pushing the <u>OK</u> button.

It will copy the filename, depending on the clipboard options selected into the clipboard.

The difference between using this menu item and the OK button, is that the OK button will always complete pathnames, so wildcards cannot be copied into the clipboard.

Selecting Copy to Clipboard, will copy the contents of the $\underline{\text{File Name Edit Box}}$ into the clipboard, including wildcards, or other non-file type text.

Clipboard History Display

This window displays the clipboard stack.

The first 60 characters of the data are displayed, followed by the application name that sourced the data enclosed in square brackets ([]s).

Not all of the data is displayed, but the full contents of the clipboard is always kept within the program. Some clipboard data may contain non-printable characters, these are shown as bars (|s) in the display.

The application name is not always known, or if the clipboard is not owned by a particular application the application name will be labelled as "[unknown]".

To select previous data, select the item from the listbox with the LEFT MOUSE Button. Once selected it is displayed in the Edit Box at the top of the window.

To copy this data to the top of the clipboard stack and enter into the clipboard, press the OK button. The previous contents of the clipboard will be shifted down and the bottom entry (highest number) will be discarded.

Pressing the CANCEL button will exit the History Display, leaving the contents of the clipboard and the clipboard stack unchanged.

View Clipboard

This menu item, simply invokes the Window's 3 Clipboard Viewer application, or restores the application if it is minimized.

This is useful to look at the contents of the clipboard after you have copied old data from the clipboard history stack into the clipboard.

The clipboard viewer will show all of the data with proper formatting, while the view within the <u>History</u> window is limited to about 60 printable characters.

Detail Sort Options

The files displayed within the Detail Window can be sorted by different keys. Sorting the display can be very helpful when looking for particular filenames, or file type or file attributes.

The following sort options are available:

Alphabetic Date/Time File Size File Type Descending

Alphabetic Sort

Sorts detail window directory windows alphabetically by file name.

If the <u>Descending</u> mode is set the a reverse alphabetic sort is performed.

Date/Time Sort

Sorts files in Detail Window by date and time last modified, i.e. oldest to newest .

If the If the $\underline{\text{Descending}}$ mode is set then a reverse date/time sort, i.e. newest to oldest is performed.

File Size Sort

Sorts files in detail window by size in bytes (directories by number of entries) smallest to largest.

If the <u>Descending</u> mode is set then files are sorted largest to smallest.

File Type Sort

Sorts files in File Detail window alphabetically by file type e.g. exe, bat, ini, etc. Sort is keyed first on file type extension and then on file name.

If the <u>Descending</u> mode is set the a reverse alphabetic sort is performed by file type.

Descending Sort

This menu item, does not actually specify a sort type. It reverses the sort order when sorting by any of the four sort types:

Alphabetic Date/Time File Size File Type

File Detail Window Highlights

The options in the HiLight menu are used to set special color highlighting features when displaying files in the File Detail Window.

Color is strongly recommended to take advantage of this feature.

In some monochrome displays, certain highlight colors will not even be displayed, and to view files, the highlight filters must be set at their minimum or maximum values.

Filenames that are highlighted in color have special File Attributes set.

The following Highlight filters are available:

Old File Age: File Date/Time displayed in blue.

New File Age: File Date/Time displayed in green.

Large FileSize: File Size displayed in red.

Medium File Size: FileSize displayed in magenta.

Old File Age Filter

Specifies how many days old a file needs to be before it is considered old.

The date/time of last file modification is displayed in blue for files that meet the old age criteria.

To disable, this filter enter 9999 as the old age number of days.

New File Age Filter

Specifies how many days old a file needs to be before it is not considered new.

The date/time of last file modification is displayed in green for files that meet the new age criteria.

To disable, this filter enter 0 as the new age number of days.

Large File Size Filter

Specifies how many Kbytes in size a file needs to be before it is considered large.

The file size is displayed in red for files that meet the large file size criteria.

To disable, this filter enter 30000 Kbytes as the large file size criteria.

Medium File Size Filter

Specifies how many Kbytes in size a file needs to be before it is considered medium size.

The file size is displayed in magenta for files that meet the medium file size criteria.

To disable, this filter enter 30000 Kbytes as the medium file size criteria.

Setting File Attributes

MS DOS provides for tagging files with four different attributes.

FileClip enables these attributes to be easily changed and displayed with highlighted colors.

The DIR command in DOS does not normally display files with the Hidden or System Attributes set, FileClip however displays all files.

The file attributes are displayed after the filename in the File Detail Window and are highlighted in different colors. The attribute is indicated by the first letter of its name.

Hidden files are displayed in gray.

Read Only files are displayed in magenta.

System files are displayed in red.

Files with the Archive bit set are displayed in blue.

If multiple file attributes are set, the color is that of the highest precedence attribute as shown above with Hidden have the highest precedence and Archive the lowest.

To toggle the attribute select the attribute value that you want to change from the Attributes menu, the cursor will changes to the attribute letter attached to an arrow.

Select the file with by pointing with the tip of the arrow to the file name and pressing the LEFT MOUSE BUTTON, the file attribute is then changed, and the display updated to reflect the new attribute.

To end Attribute Change mode, either press the STOP button displayed in a dialog window, or select the End Attribute Mode menu item from the Attributes menu.