

**A File/Volume Editor for the Macintosh**

Version 1.0b1 - September 3, 1986

(c) 1986 Art. A. Schumer  
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Harwood, ND 58042

**Introduction:**

MacSnoop™ was developed to fill the gap left when FEDIT was removed from the shareware market a number of months ago. I became frustrated by not having an editor capable of working with HFS and the new 128K ROMs and began to write my own.

While not yet up to the full capabilities of FEDIT in terms of file recovery tools, it does have many wished for enhancements not the least of which is full HFS and MFS support. In addition, the overall design allows multiple volume/directory and editing windows open on the desktop and a closer adherence to the Macintosh User Interface.

**Caution!:**

MacSnoop™ is a tool that, if misused, can be hazardous to the health of your files, micro disks and hard disk! MacSnoop™ will allow you to write to any block on a disk, including ones maintained by the Macintosh Operating System. If you do wish to modify some information, be sure you know what you are doing. Carefully check and recheck the changes to wish to make and when you feel confident that the changes are ok, check it again! Once MacSnoop™ has written a block out to a disk, there is no Undo to save you from mistakes!! If at all possible, you should work with a copy of your disk or file, not your original.

**Additional Information:**

Since this program is aimed at the sophisticated Macintosh user, I don't go into a detailed description of the Macintosh Operating System. The information you need to digest in order to understand disk and file formats is contained in Inside Macintosh™ Volume II and Volume IV (published by Addison-Wesley Publishing Company).

**Distribution:**

MacSnoop™ is being released to the shareware market in the hopes of capturing some of the good will that seems to exist out there. In addition, it is my way of saying "Thank-you" for all the goodies I've downloaded in recent months. The jury is still out on the profitability of shareware so let's see if we can avoid the hassles of copy protection, fancy packaging and higher prices by supporting this industry. If you like MacSnoop™ then please contribute \$25.00 to:

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In return for your contribution, I will send a disk to you containing the latest version of MacSnoop™ and it's documentation. As a special bonus, I will include MacSpool™, a TEXT file print program that allows you to 'queue' up to 50 files to be printed. MacSpool™ uses the low-level text streaming features of the ImageWriter™ or LaserWriter™ to provide extremely rapid output. I wrote it because I got tired of waiting for the high level Print Manager routines to print my source files in graphics mode when all I really wanted was a fast draft. Note, this program will print 40-50% faster than the 'draft mode' available from the high level Print Manager routines!

In addition, as a registered owner, you may elect to upgrade your MacSnoop™ at any time by sending in your original MacSnoop™ disk and \$10.00. I will return the latest version of MacSnoop™ and MacSpool™ to you as quickly as possible.

#### **Bug/Suggestion Reports:**

Bug/Suggestion Reports can be sent to me via my home address or the following networks:

CPS:	75116,432
DELPHI:	GPSART
GENIE:	GPSART

### Environment:

MacSnoop™ has been tested on a Mac Plus with an HD-20 as well as a 512K Enhanced with a Bernoulli Box. Also, it seems to perform properly running under Switcher with 256K of memory.

The block editing routines have been written to provide support for hard disks up to 512M in size (although I don't think there is anything quite that big out there yet). Be advised that the time to search a disk or file is proportional to its size! It could take *minutes* to complete a search of a 100M disk.

If you successfully test MacSnoop™ on any particular piece of hardware, I would appreciate knowing about it so that I may pass it along to others with similar configurations. I would like to make sure that MacSnoop™ works on all the combinations of hardware/software.

### MacSnoop™ Windows:



When MacSnoop™ first starts up, a small window, like you would find in ResEdit, is opened for each volume that is mounted (either hard disk or micro disk). Each window contains the names of all the files found on the volume in the root directory. A small icon is used to indicate whether the file is an application, a document, or a folder. A close box drawn in a volume window indicates that this is an ejectable volume (ie. micro disk). Clicking in the close box will remove all windows associated with this volume from the desktop and eject the disk.

HFS directory windows will also have a close box that, when clicked in, will remove just that window from the desktop.

### Keyboard Shortcuts:

The arrow keys (on the Mac Plus keyboard and the numeric keypad) are fully supported for directory/volume windows. Their use is as outlined below:

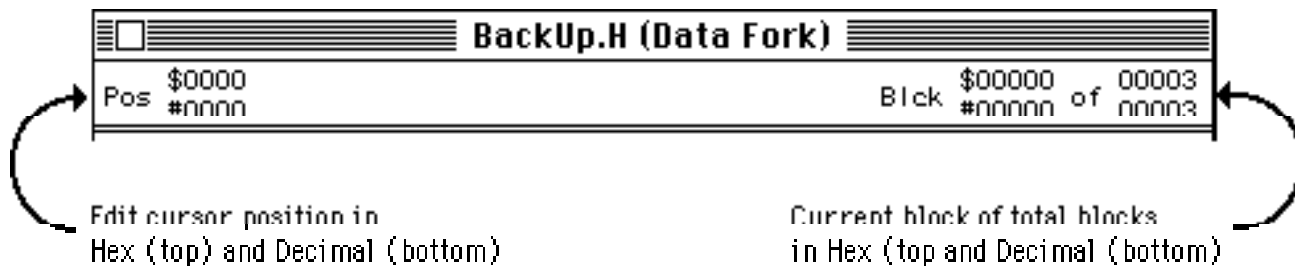
up & down arrow:	move selection up or down one file.
(with cmd key):	moves to first or last file.

In addition, by typing an alphanumeric key, the directory window will scroll to show the first file that starts with that key (I will be expanding this capability later to provide full type-ahead).

## Edit Window

BackUp.H (Data Fork)																	
Pos	\$0000 #nnnn										Block \$00000 #nnnnn of 00003 nnnn3						
Tag:	0000 0004 0000 008C 0000 0000																
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII
0000:	2	2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	/+++++
0010:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	*****
0020:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	*****
0030:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	*****
0040:	2A2A	2A2A	2A2A	2A0D	202A	2042	6163	6B55	702E								*****. * BackUp.
0050:	4809	0909	0909	0909	0909	0909	2863	2920	3139								H.....(c) 19
0060:	3836	2041	7274	2041	2E20	5363	6875	6D65									86 Art A. Schume
0070:	7220	2A0D	202A	0909	0909	0909	0909	0909	0909								r *. *. ....
0080:	0909	0909	0909	092A	0D20	2A2A	2A2A	2A2A									.....*. *****
0090:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A								*****
00n0:	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n	2n2n								+++++
00B0:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A								*****
00C0:	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	2A2A	0D20							*****.
00D0:	2A09	0909	0909	0909	2020	2048	4541	4445									*..... HEAD
00E0:	5209	0909	0909	0909	092A	0D20	2A20	4465									R.....*. * De
00F0:	7363	7269	7074	696F	6E3A	0909	0909	0909									scription:.....

An editing window appears when you elect to open a file or volume for editing. The window displays the contents of the first block in both hexadecimal and ascii. Only 256 bytes of the block are available for editing at any one time, however you may scroll the display to view all parts of the block.



The top half of the window gives you information relevant to the current cursor position as well as the absolute block position within the file or volume.

### Keyboard Shortcuts:

The arrow keys (on the Mac Plus keyboard and the numeric keypad) are fully supported for editing as well. Their use is as outlined below:

up & down arrow:	move selection up or down one line.
(with cmd key):	move to first or last byte in block.
right & left arrow:	move selection forward or back one byte.
(with cmd key):	move to first or last byte on line.

### MacSnoop™ Menus:



The Apple menu contains 'About MacSnoop™' and all the desk accessories contained in your System file.

### About MacSnoop™ - /

This command displays a dialog containing a little blurb about MacSnoop™ and my plea for shareware contributions. It will also (next release or so...) give statistics on memory usage, number of windows open, etc.

### Desk Accessories

MacSnoop™ fully supports all of the desk accessories available from your system file. Be careful of 'flaky' desk accessories as you certainly don't want to take the chance of leaving your volume in an inconsistent state should the desk accessory bomb for some reason!

## **File**

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Most of the File menu items are only used when a directory/volume window is active. Common tasks you would perform in the Finder are located here for convenience sake.

### **New - /N**

This command presents a dialog to allow you to specify a name to be used for creating a new file or directory. It will create a zero length file with no file type or creator. You should fill in the rest of the attributes with the Attributes command.

Under HFS, a new directory can be created instead by clicking in the folder checkbox.

### **Open - /O**

This command opens an editing window for this file according to the current setting of the fork flag in the Options menu. If the resource flag is checked, then the resource fork will be opened, otherwise the data fork will be opened. If there is no information in the selected fork, MacSnoop™ will inform you of this fact so you may select the other fork.

Under HFS, opening a folder will produce another directory window containing all the files/directories within.

Shortcuts: A double-click on a file/directory or pressing the return key on a selection will perform the same as above.

### **Klose - /K**

Performs the same as clicking in the close box of a window. Choosing this command will close any type of window on the desktop (desk accessories, directories, removable volumes, or edit ). Note that a non-removable hard disk will not have a close box, therefore it cannot be closed.

### **Rename - /R**

This command presents a dialog to allow you to change the name of the currently selected file or directory.

### **Information - /I**

This command presents a dialog to display detailed information on the selected file/directory. If there is more information than can be displayed, scroll bars will become active and allow you to move around the window.

### **Delete - /D**

This command presents a dialog to ask you if you really want to delete this file/directory from the volume. If deleting a directory, the file system will only allow the deletion if the directory is empty.

NOTE: This is a **REAL** delete, not like in the Finder where you can put something in the trash and later pull it out again. Make sure you really want to perform this function before you click Ok!

### **Lock - /L**

Performs a file lock on the currently selected files/directories. The lock flag is displayed for each file that has successfully been locked.

### **Unlock - /U**

Performs a file unlock on the currently selected files/directories. The lock flag is not displayed when a file is unlocked.

## **Attributes**

Presents a dialog with the attributes of the currently selected file/directory and allows you to change them.

Directory attributes are not yet supported.

## **Page setup...**

Presents the standard Page Setup dialog box to allow you to select the special effects you want to use for printing.

## **Print...**

Presents the standard Print Job dialog box to allow you to select the page range, number of copies, etc. Pressing the OK button will commence the printing of the current editing window.

## **Application launch**

Closes all the windows on the desktop and launches the selected application.

## **Quit - /Q**

Closes all the windows on the desktop and returns to the Finder.

## **Volume**

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All of the Volume menu items are only used when a volume window is active.

### **Open volume**

Open an editing window for the active volume.

### **Rename volume**

Presents a dialog to allow you to change the name of the active volume.



## **Volume information**

Presents a dialog to display detailed information on the active volume. If there is more information than can be displayed, scroll bars will become active and allow you to move around the window.

## **Eject**

Removes all windows on the desktop associated with this volume and eject/unmount the volume.

## **Edit**

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Contains the standard editing functions common to all Macintosh applications as well as a few particular to MacSnoop™.

### **Undo - /Z**

Only available when a desk accessory or editing window is active.

If an editing window is active, Undo will allow you to reverse all the changes made to the current block you are editing since the last time it was written to disk.

### **Cut - /X**

Only available when a desk accessory window is active.

### **Copy - /C**

Only available when a desk accessory window is active.

### **Paste - /V**

Only available when a desk accessory window is active.

### **Clear**

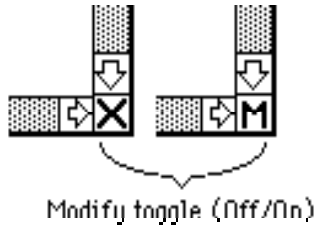
Only available when a desk accessory window is active.

### To ASCII edit - /T

Allows you to toggle between editing the ASCII or hexadecimal representation of the current block in the active editing window.

### Modify block - /M

Allows you to specify whether it is OK to modify the contents of the active editing window or not.



You may also click on the modify icon to toggle its current state.

## Options

All of the Option menu items are only used when an editing window is active.

### Resource fork

A check mark by this command indicates that the next editing window opened for a file will contain the first block of the file's resource fork.

### Data fork

A check mark by this command indicates that the next editing window opened for a file will contain the first block of the file's data fork.

### Next block - /.

Performs the same as clicking in front of the scroll box in the horizontal scroll bar of the editing window (ie. moves you forward one block).

**Previous block - /,**

Performs the same as clicking in back of the scroll box in the horizontal scroll bar of the editing window (ie. moves you back one block).

**Beginning block - /B**

Performs the same as moving the scroll box in the horizontal scroll bar of the editing window to the extreme left side (ie. moves you to the first block).

**Ending block - /E**

Performs the same as moving the scroll box in the horizontal scroll bar of the editing window to the extreme right side (ie. moves you to the last block).

**Read block #...**

Presents a dialog to allow you to specify which absolute block within the file being edited you wish to edit.

You may enter the block number in decimal or hexadecimal notation.

**Set EOF...**

Will present a dialog to allow you to set the Logical End of File to the start of the file (effectively creating a zero length file), to the position of current editing cursor, or to the Physical End of File mark.

**Find - /F**

Presents a dialog to allow you to specify a search string (in ASCII or hexadecimal). When Ok is clicked, the search for this string starts at the current position in the editing window and continues until either a match is found, the Logical End of File is reached or cmd '.' is pressed.

### **Find again - /A**

This command starts a search for the previously entered search string at the current position in the editing window and continues until either a match is found, the Logical End of File is reached or cmd ':' is pressed.

### **Write block - /W**

This command allows you to write the current block back to disk after asking for verification.

CAUTION: Make sure you really want to write the modified block back out! Once written, you can not Undo the changes.

## **Special**

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While nothing is currently located in this menu, some file recovery tools eventually will find their place here.

### **Coming soon!**

In one of the next releases of MacSnoop™, I anticipate providing a full complement of file recovery tools here. With the complexity of HFS I want to give the implementation of these tools careful thought!

### **Next Release Priorities:**

#### **Bug fixes**

This is where you come in. Any problems you encounter in the functionality of MacSnoop™ should be reported to me for correction before the next release. If you do report a valid bug, I will send you a E-mail message when a corrected release is posted. As a registered owner, you will also be eligible for a free update (just send in your original MacSnoop™ disk and forget the \$10.00)!

## **Suggestions**

Again, this is where you come in. Any suggestions for enhancements to MacSnoop™ should be sent to me for consideration in the next release. If you do provide a suggestion, I will send you a E-mail message if a subsequent release containing your suggestion is posted.

## **My Proposed Enhancement List**

Add the rest of the attributes to the Attributes command.

Add support for attributes associated with directories.

Allow editing of the tag bytes.

Provide a way to view resource types, sizes, etc. Alternative view of ASCII only in the edit window. On-line help. Copy and Paste of blocks. Full type ahead search for directory window selection. File recovery tools. Differentiate between windows with unique WDEF's.

## **Changes in this release:**

Fixed a bug that wouldn't allow you to edit a volume larger than 16M. Now, you can edit a volume that is up to 512M in size.

Printing of the current editing window is now supported.

A search can now be halted by pressing cmd '.'

Horizontal page scrolling in editing windows now moves proportionally greater distances depending on the file/volume size. It used to only move one block (like the up and down arrow buttons).

The Resource Fork flag now comes up as the default in the Options menu.

A lot of internal restructuring of MacSnoop™ to allow faster access to subdirectories, correction of some 'transparent' bugs and better logic flow for ease of adding enhancements. All of the resources used by MacSnoop™ are now pre-loaded at the start to provide quicker response during program execution and less dependence on the actual MacSnoop™ application file.

NOTE: some system resources will still need to be accessed!

MacSnoop™ and this documentation are now separate for those that wish to just download the application. However, if you give MacSnoop™ to a friend, please include this document as he/she may need it even if you don't!