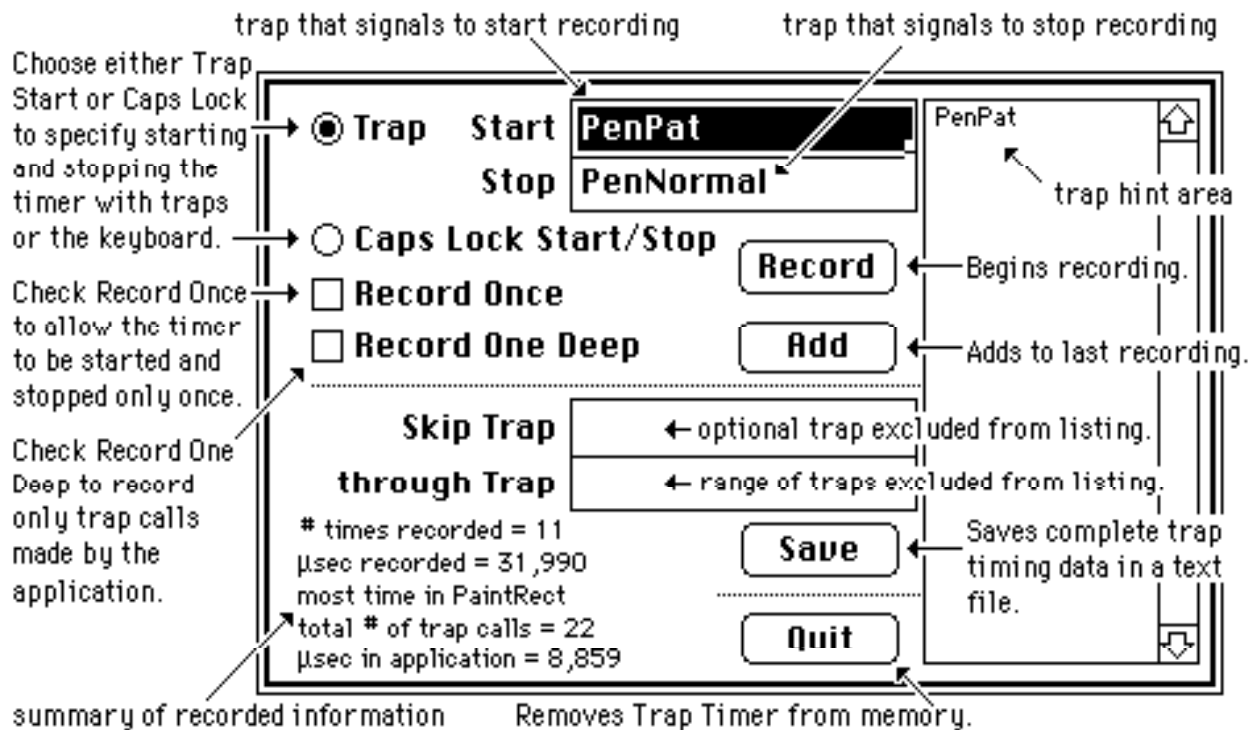


# Trap Timer Desk-Accessory Documentation

Here's a quick summary of what Trap Timer can do.



Trap Timer accumulates the time spent in each Macintosh ROM trap, and produces a report of the percentage of time spent in each trap, the number of calls made to that trap, and the culmulative time in microseconds needed to execute the trap. It also attempts to determine the amount of time spent in the application by subtracting the time in each trap from the total time recorded. **Note:** Trap Timer requires System 3.2 or newer due to its use of the List Manager.

The timer can be started and stopped by specific traps or by the Caps Lock key on the keyboard. The starting and stopping trap can be any 64K ROM or 128K ROM trap, or any HFS call. If the keyboard is used to start and stop the timer, then moving the Caps Lock key to the down position starts the timer, and moving the Caps Lock key to the up position stops the timer.

Trap names can be specified by typing part or all of the name, by typing the number in hex (default) or decimal (preceeding '&'), or by clicking on a trap name in the list on the right. The trap hint list shows one or more traps that match the letters and numbers typed at that point. The trap hint list is recalculated when the selected field is changed, or when the Return key is pressed.

Launch and MenuSelect are the default starting and stopping traps, although the trap defaults can be changed with ResEdit. If some timing information has been recorded but not saved, the recording fields and options display the last setting.

The Record Once option (normally checked) causes the timer to start and stop only the first time that the starting and stopping conditions are met. The Record One Deep option (normally unchecked) causes only the top level calls to be recorded (those made by the application). When Record One Deep is unchecked, the time recorded in each trap does not include time spent in subsequent traps called.

Record sets up the timer to begin as soon as the starting condtion is met, and zeros the trap timing data. Add allows adding to trap timing data already gathered, with the same or a different set of recording conditions.

Save creates a text file containing all of the timing data. You can use Microsoft Word or MacWrite to view or print List with the columns lined up. If you are using MacWrite, paste the ruler in the Scrapbook File on the Trap Timer disk into the List document. Select all of the text, and make it Helvetica 9. If you are using Microsoft Word, use the glossary entry tt on on the Trap Timer disk to paste in a column title in front of the first trap. Select all of the text, then use Command-Option Click inside and to the left of the column title to format the entire document like the glossary entry.

One or more traps can be removed from the listing file created while Saving by specifying which traps to skip. This can be used to remove calls which are not of interest, to see the relative times required by the remaining calls.

For now, time in application is only moderately accurate. The total time is the estimated time in real code, outside of the timer code.

Trap Timer is compatible with MacsBug and TMon, but a debugger is not required. Trap Timer uses location \$AE8 for a global pointer, which hopefully is unused. Trap Timer requires about 7K of system heap and 17K of application heap to run.