

GetToolTrapAddress Obtain address of toolbox function

#include <OSUtils.h>

Operating System Utilities

<u>long</u>	GetToolTrapAddress (<i>trapNum</i>);	
<u>short</u>	<i>trapNum</i> ;	trap number. See <u>TrapWords</u> .
	returns	address of the trap handling code

GetToolTrapAddress returns the address of a system routine - an element of the toolbox trap dispatch table. Starting with the 128K ROMs, the Toolbox routines have a trap dispatch table separate from the Operating System routines. You must use this function (and not **GetTrapAddress**) if you are running with 128K ROMs or later (see **About Compatibility**).

trapNum identifies the ROM routine whose address you want. See TrapWords for a list.

Returns: a 32-bit value; the address of the system routine that corresponds to *trapNum*.

Notes: **GetToolTrapAddress** is part of a new interface to the routine **NGetTrapAddress**. **GetToolTrapAddress** does not require the specification of the trap type as a parameter as **NGetTrapAddress** does. Instead, either **GetToolTrapAddress** or **GetOSTrapAddress** should be called, depending on which trap dispatch table you wish to modify. It is recommended that you use one of these routines in place of **NGetTrapAddress**. See **About Compatibility** for more information on tool traps and OS traps.

It is possible to intercept OS or Toolbox calls and perform pre- or post-processing, or even replace the function altogether. This sort of custom patching is normally written in assembly language.

There is a great deal of overhead involved in the Macintosh trap dispatch mechanism. In time-critical situations, you may save a significant amount of time by calling the system routine directly, rather than using the normal invocation of a trap.

The trap dispatcher changed between the 64K and 128K ROMs. See **About Compatibility** for more information.