NGetTrapAddress Obtain address of system functions

#include <OSUtils.h> **Operating System Utilities**

```
long        NGetTrapAddress(trapNum, trapType );
short       trapNum ;       trap number.  See TrapWords.
short       trapType ;      0=OS trap, 1=Toolbox trap
            returns         address of the trap handling code
```

NGetTrapAddress returns the address of a system routine - an element of the 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.

trapType differentiates between traps by type, since the 128K ROMs uses two separate trap dispatch tables. This must be one of:

OSTrap	**(0)**	Operating System trap
ToolTrap	**(1)**	Toolbox trap

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

Notes: There is a new interface to this routine, consisting of the calls **GetToolTrapAddress** and **GetOSTrapAddress**. These calls do not require the specification of the trap type as a parameter.

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.