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## Memory Fragmentation Using Open Transport 1.1 & TCP/IP (5/96)

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### TOPIC -----

I'm using Netscape Navigator 2.01 and/or Eudora on my Macintosh running Open Transport 1.1. When I quit either application, the About This Macintosh window shows the Largest Unused Block of memory being the same as when the program was open. It looks like the RAM the application was using is lost. What's going on?

### DISCUSSION -----

Netscape 2.01, Eudora, and all other applications that use Open Transport 1.1 TCP/IP are affected by what you describe. The Open Transport 1.1 TCP/IP drivers allocate extra memory on top of the application heap for their use when one of these applications is opened. When you quit the application its RAM is released, but the TCP/IP blocks are left intact and locked by the system. This leaves these locked TCP/IP blocks somewhere in the middle of available RAM.

Consequently, the About This Macintosh window, which shows the Largest Available Block of RAM, reports a smaller "largest block" of RAM available than before the TCP/IP application was launched. This is because the locked TCP/IP memory blocks are now defining the end of the largest available block in RAM. Actually, most of the RAM is available but no longer as a single block. Subsequent launches of a TCP/IP application will use these same locked TCP/IP memory blocks.

Restarting your computer is the only way to recover these locked RAM blocks. There is no identified workaround. This issue does not occur when classic AppleTalk is enabled.

The size of these TCP/IP blocks vary depending on the selections in the TCP/IP Options window, which is found by clicking Options... while in advanced settings of the TCP/IP control panel. When you select the "Load when needed" checkbox (which is the default), the RAM blocks total 218K. When you deselect the "Load when needed" checkbox, the blocks total 13K.

This issue has been identified and should be fix in the Open Transport 1.5 release.

Article Change History:

07 May 1996 - Changed fix to OT 1.5.

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