



Tech Info Library

System 7.x: Avoiding Memory Fragmentation (12/95)

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TOPIC -----

Although I have over 20 MB of RAM, I sometimes get messages stating that there is not enough memory. Also, when I quit applications, I notice that the Largest Unused Block in the About This Macintosh window does not increase. Why does this occur, and how can I prevent it?

DISCUSSION -----

Provided the applications and extensions you use are functioning correctly, you are most likely experiencing the effects of memory fragmentation. Memory fragmentation occurs if you don't quit applications and desk accessories in exactly the reverse order in which you launched them.

Memory fragmentation can occur regardless of how much memory you have, but the less memory you have, the sooner you will experience the effects. It is similar to hard disk fragmentation, but files stored on a disk can easily be broken up into fragments if there is not enough contiguous space on the drive. However, programs that are loaded in memory cannot be fragmented and thus need a contiguous area of memory. Your computer may have several unused blocks of memory mixed in with the used blocks of memory, but it can only make the largest unused block available to programs.

To defragment memory, you can do one of the following steps:

Step 1

Quit all open applications and desk accessories and then open them again.

Open applications appear in the Application menu. To quit an application, select it from the Application menu and then choose Quit from the File menu. The Largest Unused Block in About This Macintosh will increase as more contiguous memory is made available, but it won't necessarily increase with each program you quit.

OR

Step 2

Restart your computer.

To avoid fragmentation again, be careful in planning the order in which you open and quit programs:

Step 1

Open first the applications and desk accessories you're least likely to quit.

Step 2

Open last those applications and desk accessories you're most likely to quit during a work session.

By opening and closing applications and desk accessories this way, the memory you free up will be contiguous with the rest of the Largest Unused Block. When you quit programs in random order, you're likely to have fragmented memory.

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