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## Modern Memory Manager: Frequently Asked Questions (4/97)

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TOPIC -----

This article contains frequently asked questions (FAQ) on the Modern Memory Manager.

Questions in this FAQ:  
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- 1) What is the Modern Memory Manager?
- 2) What is the expected performance increase by turning on the Modern Memory Manager on a Power Macintosh?
- 3) Should Modern Memory Manager be turned OFF on Power Macintoshes that are not running lots of native applications?
- 4) Does Modern Memory Manager cause crashes if the system is not running native applications?

DISCUSSION -----

- 1) Question: What is the Modern Memory Manager?

Answer: The Modern Memory Manager is a completely rewritten native version of the previous Memory Management code found in operating systems previous to System 7.1.1. It offers better performance than the previous 680x0 assembly code because it runs in the native PowerPC environment. In addition, performance enhancements were made by significantly improving the heap management algorithms.

It is possible to disable this new Memory Manager and revert to the old Memory Manager in ROM. This is done through the Modern Memory Manager panel in the Memory control panel. The default setting is Modern Memory Manager On.

2) Question: What is the expected performance increase by turning on the Modern Memory Manager on a Power Macintosh?

Answer: When you turn off Modern Memory Manager, you are essentially running the Memory Manager in emulation mode, rather than in native PowerPC mode. Engineering has stated that activating Modern Memory Manager will yield a performance increase of about 20 to 30 percent, although with some applications, that number can be as high as 200 percent.

3) Question: Should Modern Memory Manager be turned OFF on Power Macintoshes that are not running lots of native applications?

Answer: All Power Macintosh systems ship from the factory with the Modern Memory manager turned ON. There are many benefits to leaving the Modern Memory Manager ON. The new Memory Manager uses native PowerPC code and better algorithms for faster performance. The Modern Memory Manager should only be turned OFF if a user's application or extension is experiencing compatibility issues.

4) Question: Does Modern Memory Manager cause crashes if the system is not running native applications?

Answer: The Modern Memory Manager does NOT cause crashes if the user is not running native or FAT applications. Non-native applications and other software written according to Inside Macintosh guidelines for the original Memory Manager should be compatible with the Modern Memory Manager. Non-native applications and other software that do not follow the Inside Macintosh guidelines could potentially crash while calling on the Modern Memory Manager's services. You can test compatibility by turning off the Modern Memory Manager in the Memory control panel.

Apple Developer Technical Support issued Technical Notes ME13 & ME14 back in 1993 to help developers write compatible software. These Technical Notes are publicly available via the internet via Apple's Web site.

These articles can help you locate the software update mentioned here:

- "Where To Find Apple Software Updates" -- Lists online services for free Apple software updates.
- "Obtaining Apple Product Support in the USA" -- Lists 800 numbers and online services for software updates, Apple support information, and a subset of the Apple Tech Info Library.

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Article Change History:

09 Apr 1997 - Removed out dated on line references.

02 Jul 1996 - Added Fax Doc word

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