New Technical Notes

Macintosh

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Developer Support

Memory Manager Q&As
Memory M.ME.MemMgr.Q&As

Revised by: Developer Support Center   October 1992
Written by: Developer Support Center   October 1990

This Technical Note contains a collection of Q&As relating to a specific topic—questions you've sent the Developer Support Center (DSC) along with answers from the DSC engineers. While DSC engineers have checked the Q&A content for accuracy, the Q&A Technical Notes don't have the editing and organization of other Technical Notes. The Q&A function is to get new technical information and updates to you quickly, saving the polish for when the information migrates into reference manuals.

Q&As are now included with Technical Notes to make access to technical updates easier for you. If you have comments or suggestions about Q&A content or distribution, please let us know by sending an AppleLink to DEVFEEDBACK. Apple Partners may send technical questions about Q&A content to DEVSUPPORT for resolution.

New Q&As and Q&As revised this month are marked with a bar in the side margin.

VBL tasks shouldn't call Macintosh Memory Manager
Written: 10/29/90
Last reviewed: 8/1/92

What's wrong with having VBL (vertical blanking) tasks make calls to the Macintosh Memory Manager, either directly or indirectly?

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The problem is that the Memory Manager could be moving memory around when an interrupt occurs. If the VBL task also moves memory, the heap could be destroyed.

Of course, not all Memory Manager calls move memory. But, that still does not make them safe to call at interrupt time. The Memory Manager is *not* reentrant, so even if the call you make does not move memory, it may happen while another Memory Manager call is taking place and could disturb the machine state the call that was interrupted is relying on.

VBL tasks are intended to provide a method of time-syncing to the video beam of the display. (On slotted Macintosh models you'd use SlotVInstall.) They're also used to get

periodic time for short tasks, although the Time Manager is better for this. VBL tasks should minimize execution time. The best use of a VBL task is to do a short condition check and set a flag for the main process to indicate that it's now a good time to do something.