

# New Technical Notes

Macintosh



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Developer Support

## Miscellaneous Tool Q&As

### Platforms & Tools

Revised by: Developer Support Center

May 1993

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 this month:

PowerBook 140 ROM writes to \$0000

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### PowerBook 140 ROM writes to \$0000

Date Written: 11/16/92

Last Reviewed: 3/1/93

I just put EvenBetterBusError on my PowerBook, and it seems the PowerBook ROM writes to location \$0. Why? This hampers bug testing on the PowerBook.

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The current version of EvenBetterBusError (creation date April 8, 1991) isn't compatible with the PowerBook 140, 145, 160, 170, 180 and Duos because of the way the Power Manager implements "power cycling." When a power cycle ends, the Power Manager uses location 0 to restore the processor state.

EvenBetterBusError's author said he'll update his program so it doesn't check for writes to location 0 on PowerBooks that power cycle. Until EvenBetterBusError is updated, turn off Rest Mode when using EvenBetterBusError on PowerBooks that have power cycling. When Rest Mode is turned off, the unit will not power cycle the processor.

## **Using Discipline with MacsBug**

Written: 8/12/91

Last reviewed: 9/17/91

At the 1991 WWDC debugging session, mention was made of using Discipline with MacsBug. How this is done? Copies of Discipline on AppleLink and on the *Developer CD Series* discs never include documentation. When I install Discipline and reboot, I get the “MacsBug Installed” line in the original dialog, but then I always get a “No debugger installed” dialog from Discipline.

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Discipline’s “No debugger installed” dialog is not a common message, but it can happen if you use try to use old versions of Discipline or MacsBug, or a third-party debugger that isn’t compatible with Discipline. Discipline also displays this message if you have Macintosh IIci ROMs in your IIX, and thus it can’t tell whether you have a 24-bit or 32-bit machine.

If you’re running System 7, you should use MacsBug 6.2.1 or later and Discipline 2.0.1 or later. You might even want to upgrade to Discipline 2.1d1, available on the Essentials•Tools•Objects (ETO) #5 CD.

To use Discipline with MacsBug, put the Discipline system extension into the Extensions folder (in your System Folder), and put the strict or lenient Discipline Startup document into your System Folder. For help on the Discipline commands, simply break into MacsBug and type DSC ? <return>. Pressing return additional times scrolls through the various pages of help.

Our lack of documentation on this tool does make it a little difficult to use. Hopefully we will be addressing that in the near future.

### **Third-party database engines**

Written: 1/1/90

Last reviewed: 2/12/91

I’m looking for a database engine that I can use in my own Macintosh application. Currently, development is in Pascal, so a Pascal program must be able to call the database engine.

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SyBase has a database library that you can link into with MPW. I think the libraries are in C, but you can always call them from Pascal. Oracle also allows embedded SQL using SQLNet. This might be worth checking into as well. Finally, you might try calling Informix, Ingress, or DEC (Dec has a product called RDB). You will want to contact the individual companies for more information about their libraries.

### **Where to find Discipline module (DSC command)**

Written: 3/5/91

Last reviewed: 6/20/91

Where can I get the trap Discipline module (DSC command) mentioned in the MacsBug documentation?

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Discipline is included with the Essentials•Tools•Objects (E.T.O.) CD starting with #3, and is available on AppleLink.

### **Where to get third-party XTND translators**

Written: 9/17/91

Last reviewed: 10/15/91

Where can I find XTND translators for third-party products?

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The only XTND translators available from Apple ship with the XTND 1.3 package. You get MacWrite II, MacWrite 5.0, MacPaint, and PICT. To obtain more translators, you can purchase them from one of the companies that sell XTND translators (DataViz is one such company). You can also write your own translators. You might want to write translators for your own products and make them available to other third parties.

The translators that Claris ships with their products were written by Claris and are not currently available for distribution with your products. (However, any of your users who have these Claris translators will be able to use any XTND-aware product you have created with their translators.)

### **RAMDump and ReAnimator modem & printer nub extensions**

Written: 10/2/91

Last reviewed: 10/15/91

On the “Desperately Seeking Seven” Developer CD, I found RamDump/ReAnimator, with a thing called ModemNub. The release notes claim documentation is included with it, but there isn’t any. Could you possibly round up some documentation?

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You can obtain documentation on these utilities from APDA when you purchase RAMDump & ReAnimator v.1.0 (#M7045, \$20.00). The trick, however, is that these utilities haven’t been updated since October, 1988, so RAMDump 1.0 won’t work on the Macintosh IIfx or IIfx (RAMDump isn’t aware of the floppy controller, thus it can’t write to the disk). The revised version of RAMDump that you found on the Desperately Seeking Seven CD should address this problem.

To debug a running program using ReAnimator via two Macintosh systems, you need to have the following setup: Have a host Macintosh running ReAnimator, and the target Mac running the Nub init (modem nub or printer nub, depending on the port you use). This allows the host Mac to stop the target Mac, start it, and read its memory over the serial line. You run the program to be debugged on the target machine. Since ReAnimator is not running on the machine that is being debugged, ReAnimator can use windows and menus without

interfering in the debugging process. When debugging a live Macintosh over a serial link, ReAnimator can step, trace, and perform other flow control instructions.

**Status of new development tools mentioned at '88 WWDC**

Written: 5/3/89

Last reviewed: 12/17/90

Some development tools from Apple were mentioned at the 1988 Developer's Conference, and again in a short article in MacWorld. How and when can I get these tools?

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Some of the tools mentioned are RamDump/ReAnimator, Player Piano, Spot and Extended Discipline. The only one of these that is currently available is RamDump/ReAnimator. RamDump produces a memory dump, and ReAnimator reads it. These are available from APDA.

The other tools have not been completed. If and when they are completed and released, they will also be available from APDA. Note: It is possible that some of these tools will never be released.