NOTE: This Technical Note has been <u>retired</u>. Please see the <u>Technical Notes</u> page for current documentation.

Technical Note PT22
MacinTalk - The Final Chapter

CONTENTS

This Technical Note discusses the MacinTalk software product.

[Feb 01 1990]

Introduction

For the introduction of the Macintosh computer, it was decided (by the powers formerly in charge) that such a computer would need something very special to make it a unique event. To aid in this concept, a third-party company was contracted to write a speech synthesizer which would allow the Macintosh computer to introduce itself. The contract was signed, and the work begun.

The outcome of this work was MacinTalk. MacinTalk is a file that can be placed into the System Folder of an ordinary Macintosh computer and allow text to be transformed into speech for the introduction in 1984. It was felt to be an interesting piece of software, so Apple made it available to developers. Interfaces to MacinTalk were published and Apple Software Licensing allowed it to be included with developers' products.

The original project was to get a speech driver for the Macintosh, but it did not include obtaining the source code to this driver. Apple only has exactly what it gives to developers: a file to be copied into the System Folder, and this file cannot be changed since Apple does not have the source code.

MacinTalk works by using a VBL task to write data directly to the sound hardware of the Macintosh Plus and SE logic boards--a method which Apple does not support. It has only been through the efforts of the Sound Manager that software that writes directly to this sound hardware continues to work. MacinTalk continues to write to the hardware addresses of the Macintosh 128K logic board, but the Sound Manager and the Apple Sound Chip work together to allow programs like MacinTalk to continue working on newer machines. The Sound Manager and the Apple Sound Chip were introduced with the Macintosh II.

The Sound Manager watches the hardware addresses that used to be present on the Macintosh. When the Sound Manager detects activity at one of these addresses, it goes into a "compatibility" mode. In this mode, it routes the data to the real sound hardware, but while this is happening, proper Sound Manager code cannot run--even the Sound Manager's `_SysBeep` does not work when MacinTalk is in use. Furthermore, the compatibility mode cannot be turned off until the application requiring it calls `_ExitToShell`. Even an application that uses sound properly, with correct code, does not work if another application opens the MacinTalk driver. There are **no** solutions to this incompatibility. MultiFinder and System 7.0 allow more than one application to run concurrently, so it is possible for an older application which uses MacinTalk to limit the features and abilities of a new and improved application.Around the time of the Macintosh II introduction, Apple made a single hack to MacinTalk to remove self-modifying code which caused a problem for 68020-based machines. This modified version, known as 1.31, was available from APDA with the warning that "Apple does not provide any support for MacinTalk. Not even to Apple Certified Developers." While this warning is still true and APDA continues to sell MacinTalk 1.31 as a "Class 3" product, the official Apple position about it is: "Apple Computer, Inc. does not recommend that you use Class 3 products for developing commercial software--they are intended for your personal enjoyment only."

In other words, if you find MacinTalk interesting and entertaining--go ahead and purchase it. Write some code and enjoy. However, be warned that MacinTalk should **not** be included as part of **any** commercial product. Apple Computer, Inc. provides no support for MacinTalk other than what is purchased with the package itself, and there will be no support in the future. Apple is committed to providing the developer community with an array of speech technologies integrated with the Sound Manager. In preparation for certain system software changes, such as System 7.0, Apple does not recommend the continued use of the existing MacinTalk package.

<u>Back to top</u>

The Surgeon General Warning

The development of MacinTalk ended with the introduction of the Macintosh in 1984. Nothing more will be done to this product. It is a compatibility risk to use MacinTalk. It causes the Sound Manager to fail. It will **not** work with the new Sound Manager planned for System 7.0. This system revision will also introduce the new feature of virtual memory; it is not expected that MacinTalk will work while the user has Virtual Memory running. It may not work at all with future versions of the Macintosh hardware. Continued use of MacinTalk is a major compatibility risk. Do not operate heavy machinery while under the influence of this product.

Back to top

References

Inside Macintosh, Volume V, Compatibility Guidelines

The Sound Manager, Interim Chapter (DTS)

M.TB.ClicklessSound

Back to top

Downloadables

          Acrobat version of this Note (K).   Download