Macintosh Communications Toolbox

Overview

The Macintosh® Communications Toolbox is system software that provides Apple® Macintosh applications with standard access to communications services, including data connection, terminal emulation, and file transfer protocols.

The Macintosh Communications Toolbox is Apple Computer's strategic communications development platform. It was designed to support multivendor connectivity for Macintosh computers in environments such as Digital, IBM, OSI, TCP/IP, and the AppleTalk® network system.

An extension of the Macintosh Toolbox system software, the Macintosh Communications Toolbox consists of four key managers: the Connection Manager, Terminal Manager, File

Transfer Manager, and Communications Resource Manager. These managers have been designed to work in concert with tools—such as a modem connection tool or color VT102™ terminal emulation tool—created by Apple and third-party developers to provide applications with standard communications functions.

The Macintosh Communications Toolbox also makes communication capabilities much easier for people to use, because all applications written according to the standard will provide the same, familiar Macintosh look and feel.

Developers will particularly benefit from the Macintosh Communications Toolbox. Standard applications programming interfaces (APIs) that are

provided by the Toolbox give developers access to ready-to-use tools for implementing communications services in any application. Hardware developers can use the Communications Toolbox to make their NuBus™ communications devices (such as serial or modem cards) easily accessible from both applications and tools. And specialists in communications software can more easily create customized communication tools that work with any application written to Communications Toolbox standards.

Features

Benefits

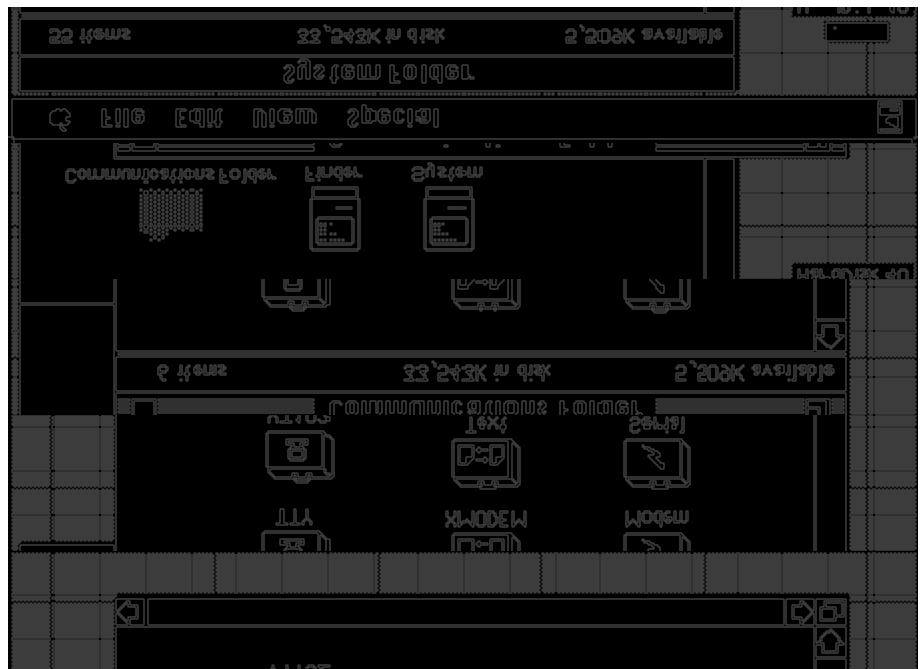| Features	Benefits
• Support for protocol-independent access to a byte-stream data connection	• Allows developers to create applications more easily. Applications can be developed independent of particular protocols.
• Support for any registered NuBus communications device	• Eliminates the need for driver remapping, providing applications with access to all hardware.
• Open, modular, extensible architecture	• Gives developers the flexibility to use only the managers they need. • Lets developers more easily create communication tools that support additional environments.
• Consistent network/service access and configuration interfaces	• Allows users to configure and select communications services easily across all applications.
• Execution-time binding of tools	• Lets users add tools to the System Folder and make them available to any Communications Toolbox application instantly, without restarting the system or application.

Product Details	The Macintosh Communications Toolbox is designed around four "managers" that provide applications with standard access to three types of communications services: data connections, terminal emulators, and file transfer protocols. Communication tools such as an XMODEM file transfer tool or a modem connection tool—which are created by Apple or third-party developers—perform all functions associated with a given communications service. The Macintosh Communications Toolbox also contains a utility kit with a variety of routines and resources for applications and tool developers. The Connection Manager The Connection Manager is the application interface to data connection services provided by Apple and third-party developers. The Connection Manager allows applications to establish, configure, and maintain data connections through the use of a standard application programming interface. It also provides applications with easy access to multiple communi-	cations sessions, regardless of the underlying protocols. For example, a single Macintosh application might support an IBM connection in one window, a Digital connection in another, and an AppleTalk connection in a third window. The Terminal Manager The Terminal Manager provides applications with standard access to terminal emulation services that are implemented by terminal tools (such as the VT102 terminal emulation tool) created by Apple or third-party developers. These tools support a variety of terminals and perform all of the actions expected of a terminal emulator, including data-stream interpretation, keyboard mapping, and screen updating. The Terminal Manager also provides developers with consistent interfaces for configuring and using a wide range of terminal emulation services. The File Transfer Manager The File Transfer Manager gives applications developers standard access to different file transfer protocols that are implemented as file transfer tools. File transfer tools allow applications to support different file transfer protocols easily.	The Communications Resource Manager The Communications Resource Manager can be used by developers of communications cards (such as serial port or modem cards) to register their cards and make them available from applications and tools. Installation Installation of the Communications Toolbox is easily accomplished using the Installer and Communications Toolbox installation script. Tools can also be easily added to or removed from the system by dragging them into or out of the communications folder, in the same way files are added or removed. Development Platforms The Communications Toolbox is supported by MPW® 3.0 and later development platforms. Third-party platforms that can convert MPW interface files and object files can take advantage of the Macintosh Communications Toolbox as well.
System Requirements	To use the Macintosh Communications Toolbox, you'll need the following: • Macintosh Plus, Macintosh Portable, or any computer in the Macintosh SE or Macintosh II family	• Macintosh System Software Version 6.0.4 (or later) • A minimum of 1 megabyte of RAM (2 megabytes of RAM are recommended) • At least one floppy disk drive (a hard disk is recommended)	
Availability	The Macintosh Communications Toolbox is available through: APDA™ (Apple Programmers and Developers Association) Apple Computer, Inc. 20525 Mariani Avenue, M/S 33G Cupertino, CA 95014-6299 U.S.A. 1-800-282-2732 AppleLink®: APDA	A license agreement for redistribution may be obtained from: Apple Computer Software Licensing 20525 Mariani Avenue, M/S 38I Cupertino, CA 95014 (408) 974-4667 AppleLink: SW.LICENSE	

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Ordering Information	Macintosh Communications Toolbox	Order No. M0232LL/B	With your order, you'll receive: • Two 800K disks containing Macintosh Communications Toolbox managers, interfaces, and installation script • *Macintosh Communications Toolbox Reference Guide* • Single-use license
	Communications Tools: Basic Connectivity Set*	Order No. M0379LL/A	With your order, you'll receive: • One 800K disk with six basic tools, including: —File transfer tools: ASCII text, XMODEM —Connection tools: Serial, Hayes-compatible modem —Terminal tools: Teletype, VT102
	Macintosh Communications Toolbox: Source Code Examples	Order No. M0380LL/A	• Two 800K disks with source code examples of a sample communications application, a sample INIT for a communications card, and three dummy tools • Sample end-user tool documentation

*Other sets of tools will be available from Apple and third-party developers supporting multiple environments. Check the APDA catalog for the latest list of tools available from Apple.