



## Overview

MacAPPC™ software is one of a family of connectivity products that let the Apple® Macintosh® personal computer function in mainstream IBM Systems Network Architecture (SNA) environments. It provides programmers with the necessary software tools to support communications services between Macintosh and SNA networks.

MacAPPC provides a complete implementation of the SNA Logical Unit 6.2 (LU 6.2) peer-to-peer protocol. It is a modular

extension to Macintosh system software, ensuring its availability on all members of the Macintosh family, as well as its compatibility with other networks (such as AppleTalk®) and software that may already be installed.

MacAPPC makes it possible to develop commercial applications that provide access to other Macintosh and non-Macintosh environments using the services of the LU 6.2 protocol. It also allows for the development of applications that tightly integrate

Macintosh personal computers with established environments that support LU 6.2.

MacAPPC software provides the tools to create powerful, sophisticated distributed applications that provide transparent access to information—regardless of its location or the type of system on which it resides. And because it is a Macintosh tool, MacAPPC makes this remote information accessible through the familiar Macintosh user interface.

## Features

## Benefits

▶ Implementation of IBM SNA Logical Unit 6.2 (LU 6.2)/Physical Unit 2.1 (PU 2.1) protocols

▶ Facilitates development of Macintosh applications that are compatible with SNA and other networks that support advanced SNA protocols.

▶ Support for peer-to-peer communications between Macintosh and other SNA/LU 6.2-based systems via IBM's Advanced Program-to-Program Communications (APPC) facilities

▶ Enables Macintosh applications to dynamically exchange information with IBM-based applications.

▶ Macintosh Toolbox extension

▶ Makes it easier to develop consistent, easy-to-use Macintosh applications for end users.

▶ Hardware independence

▶ Supports present and future hardware operating environments.  
▶ Allows users to choose the means of connection that best meets their needs (for example, Token Ring, SDLC, or X.25).

▶ Chooser compatibility

▶ Features integration with the Macintosh user interface, for easy setup and access by the end user.

▶ AppleTalk communications server

▶ Provides transparent connectivity to SNA through existing AppleTalk networks.

▶ Standard programmatic interface

▶ Provides developers with a common application program interface. This toolbox, known as a protocol boundary in the IBM environment, provides the full set of LU 6.2 functionality.

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## Technical Notes

MacAPPC is implemented in a client-server configuration. The server code resides on a Macintosh Coprocessor Platform™ communications card plugged into one of the NuBus expansion slots of any member

of the Macintosh II family. The toolbox portion (the client) exists as a set of device drivers on the same Macintosh and/or on one or more Macintosh computers connected to the server via AppleTalk. Because

the Macintosh Coprocessor Platform is providing the services and using only the resources found on the card, MacAPPC offers LU 6.2 connectivity without requiring a dedicated Macintosh system.

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## LU 6.2 Device Driver Notes

**Protocol Boundary:** The LU 6.2 device driver conforms to the standard Macintosh device driver format and acts as the programmatic interface for the toolbox. The well-defined and documented programmatic interface defines the LU 6.2 protocol boundary for MacAPPC. The protocol boundary is designed to follow as closely as possible the verb definition, parameter names, and syntax used in the IBM protocol boundary, with which developers may already be familiar.

Support for the LU 6.2-defined basic conversation,

mapped conversation, and control operator verbs, a set of node operator verbs, and transaction program verbs is provided in the toolbox.

Interface files for the LU 6.2 device drivers are available for the following languages:

- ▶ MPW™ 68000 Assembler
- ▶ MPW C
- ▶ MPW Pascal

**Functions:** The LU 6.2 device drivers provide the following functions:

- ▶ Mapped conversation verbs
- ▶ Type-independent conversation verbs (except SyncPoint and Backout)

- ▶ Basic conversation verbs
- ▶ Control operator CNOS verbs
- ▶ Control operator session control verbs
- ▶ Control operator LU definition verbs
- ▶ Node operator control verbs
- ▶ Node operator definition verbs
- ▶ Transaction program connection verbs
- ▶ Transaction program utility verbs
- ▶ PU 2.1 support
- ▶ Parallel sessions



# MacAPPC

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**System Requirements**

**Server requirements:**  
Any member of the Macintosh II family and an intelligent

NuBus plug-in communications card that adheres to the Macintosh Coprocessor Platform architecture

**Client requirements:**  
Macintosh Plus, Macintosh SE, Macintosh SE/30, or any member of the Macintosh II family

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**Availability**

Apple Software Licensing  
20525 Mariani Avenue, M/S 28B  
Cupertino, CA 95014  
(408) 974-4667

**Additional Technical Documentation (documentation only)**  
Apple Programmers and Developers Association (APDA™)  
Apple Computer, Inc.  
20525 Mariani Avenue, M/S 33G  
Cupertino, CA 95014-6299  
U.S.A.

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**Ordering Information****MacAPPC**

Order No. M0698

With your order, you'll receive:  
▶ Four 800K disks with MacAPPC code and sample applications, including source code for sample applications, plus HyperCard® examples  
▶ Documentation on MacAPPC

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**MacAPPC Documentation**

Order No. M0701

With your order, you'll receive:  
▶ Documentation on MacAPPC

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**MacAPPC Single-User Evaluation Kit**

Order No. M0218LL/A

With your order, you'll receive:  
▶ Single-user evaluation copy of the complete MacAPPC software package, including documentation

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**Apple Computer, Inc.**

20525 Mariani Avenue  
Cupertino, CA 95014  
(408) 996-1010  
TLX: 171-576

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