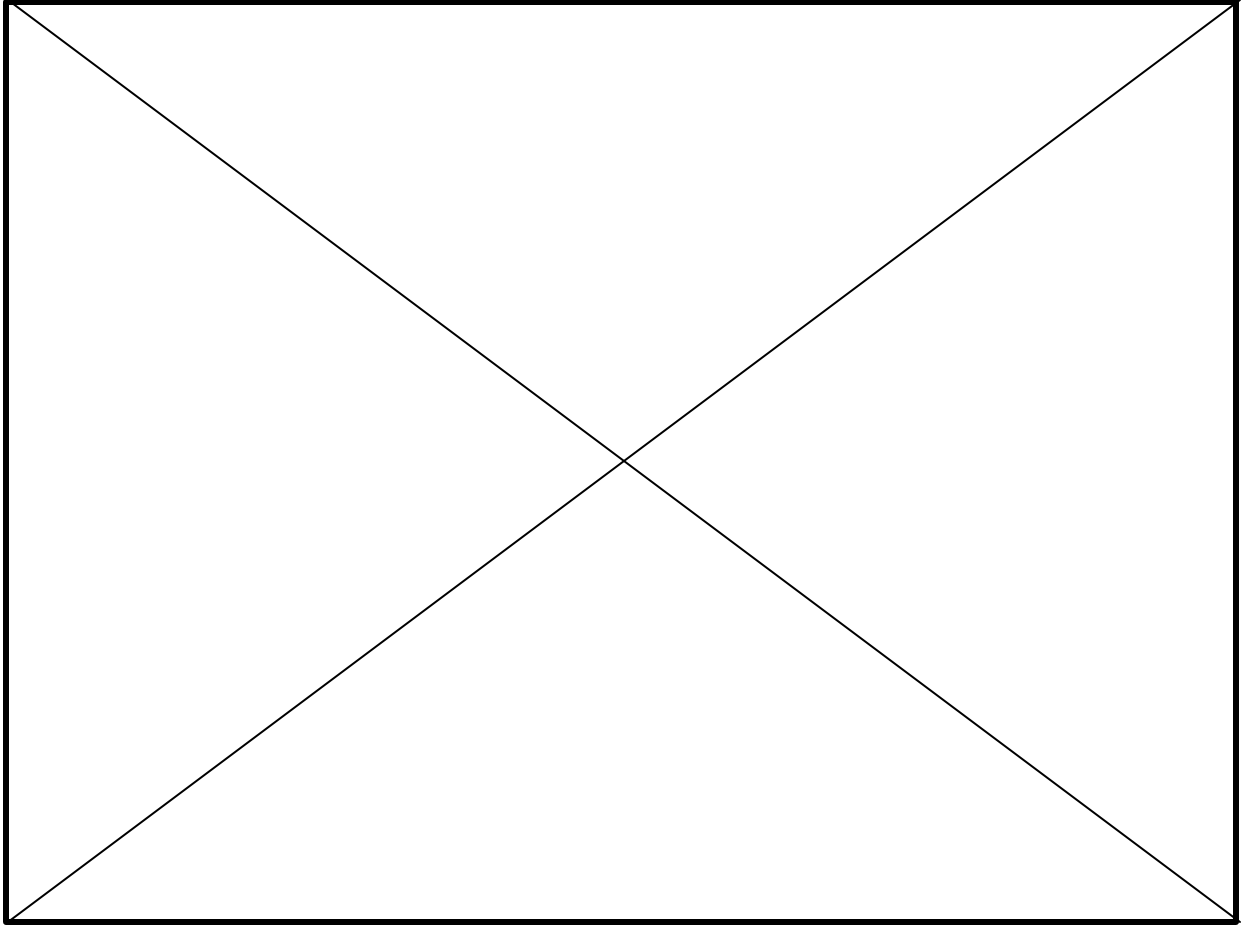


# **MacX 1.1**



## **Overview**

---

MacX<sup>s</sup> 1.1 software provides an X Window System<sup>s</sup> display server for the Apple<sup>®</sup> Macintosh<sup>®</sup> and A/UX<sup>®</sup> operating systems. MacX allows X client applications to share the desktop with Macintosh applications.

Macintosh users can transparently access X applications running on a variety of computers that support the X Window System. With MacX, users can display X applications in easy-to-use Macintosh windows by choosing commands from a customizable pull-down menu. MacX allows users to cut and paste graphics between X and Macintosh applications.

The X Window System is the result of years of development by researchers from the computer industry and from the Massachusetts Institute of Technology (MIT). MacX 1.1 complies with the Version 11, Release 4 standards and conventions set by the MIT X Consortium.

MacX demonstrates Apple Computer's commitment to multivendor connectivity and industry standards.

# *Features*

# *Benefits*

---

· Compliance with the MIT X Consortium specifications for the X Window System, Version 11, Release 4

· Provides a complete standard-conforming X Window System server implementation for Macintosh computers

· Integration with MultiFinder® software

· Allows users to switch between X client applications and Macintosh applications from the desktop

· Support for multiple networking protocols

· Permits MacX to take full advantage of popular networking protocols for the Macintosh, including TCP/IP, third-party DECnet<sup>®</sup> implementations, and the AppleTalk<sup>®</sup> network system

· Support for multiple monitors

· Enables users to take advantage of multiple monitor setups  
· Allows client applications to display on multiple screens

· Built-in window manager

· Gives users the familiar techniques of the Macintosh user interface when moving and resizing MacX windows

· Support for display of monochrome and color applications

· Allows simultaneous display of up to 256 colors or shades of gray from a palette of 16 million colors with the appropriate video card

· Easy X application startup using pull-down menus

· Allows users to open a client application by choosing a command from a pull-down menu  
· Includes capability to customize the pull-down menu; users can create, edit, and save commands to open frequently-used client applications quickly.

· Full copy and paste capabilities for text and color graphics

· Lets users copy images of X client applications and paste them into Macintosh applications through the Macintosh Clipboard  
· Allows Macintosh applications to provide graphic selections for pasting into X client applications

· Complete set of user manuals

· Provides the information necessary to install, configure, and use MacX

---

## Product Details

### MultiFinder compatibility

Client applications can share the desktop with Macintosh applications. Users can move easily back and forth between MacX, the desktop, and other Macintosh applications.

### Standards conformance

MacX 1.1 implements X Window System, Version 11, Release 4 standards, including X11 protocols, ICCCM window management, and the XLFD (X logical font description) protocol. MacX includes support for the Version 11, Release 4 shape extension.

### MacX window manager

MacX includes a built-in window manager that complies with the ICCCM standard. The MacX window manager provides title bars, close boxes, and other Macintosh window controls. Users can control client applications in windows on their desktop using Macintosh user interface capabilities.

### Foreign window manager support

MacX includes a special capability for those users who want to use a foreign window manager, such as *twm* or OSF/Motif's *mwn*. MacX offers a special Macintosh window devoted to displaying client applications controlled by a foreign window manager. This window can share the desktop with other client applications, which are controlled by the built-in MacX window manager.

### Font Manager

MacX includes a rich library of font families: Charter, Clean, Courier, Helvetica®, Lucida, Lucida Bright, Lucida Typewriter, New Century Schoolbook, Symbol, and Times®. In addition, MacX can access the Macintosh screen fonts located in the System file. MacX comes with sophisticated tools for font manipulation, such as a font compiler that compiles font files from bitmap distribution format (BDF) to the server's internal format.

### DECwindows<sup>s</sup> Support

MacX offers support for the use of DECwindows. With the appropriate network software from Apple, MacX is compatible with DECwindows conventions for remote startup of applications and for cutting and pasting between Macintosh and DECwindows applications.

### Color Support

MacX supports 8-bit color and gray-scale video cards. Users have access to 256 distinct colors or shades of gray from a palette of 16 million colors. MacX supports Apple video cards, including the 8-24 Card and 8-24 GC Card; third-party video cards; and built-in video on Macintosh computers, such as the Macintosh IIci.

### Network configurations

MacX takes advantage of the Macintosh Communications Toolbox, allowing multiple simultaneous connections over different transport protocols. A communications tool that supports TCP/IP is provided. DECnet connection tools are available from third-party sources.

---

### Required Equipment

To use MacX, you'll need the following:

- Any Macintosh computer
- At least 2 megabytes of memory
- At least two floppy disk drives (a hard disk is highly recommended)

- Macintosh system software version 6.0.4 (or later)
- A network connection (using the built-in LocalTalk® port in the Macintosh or an Ethernet connection)

### Optional Equipment

- Apple EtherTalk® NB Card or the equivalent
- Macintosh II Extended High-Resolution Display Video Card and Apple-Color® High-Resolution RGB Monitor or the equivalent (multiscreen configurations are supported)
- Apple Two-Page Monochrome Monitor
- Apple Macintosh Portrait Display



# MacX 1.1

## Technical Specifications

### MacX display server

- Network transparency
- X11 Release 4 compliance
- Support for multiple monitors
- Copy and paste capabilities for text and graphics between X and Macintosh applications
- Color support
- Support for the full international character set, including the ability to

- translate automatically between the Macintosh and X representations of 8-bit characters
- Support for all Apple keyboards and the Apple Desktop Bus<sup>®</sup> (ADB) mouse (for applications that make use of them, the second and third mouse buttons are emulated through the keyboard)
- Support for the “backing

- store” and “save under” features, which dramatically improve X Window System performance
- ### Network connections
- Support for LocalTalk and EtherTalk connections
  - Transport protocols support includes MacTCP<sup>®</sup> (Apple Computer’s implementation of the TCP/IP protocols), AppleTalk ADSP, and DECnet

## Ordering Information

### MacX

Order No. M0108LL/B

With your order, you’ll receive:

- MacX software
- Macintosh Communications Toolbox software
- MacTCP software
- MacX Font Library software
- *MacX User’s Guide*
- *MacX Installation Guide*
- *MacTCP Administrator’s Guide*

For information about site licenses, contact:

Apple Software Licensing  
 Apple Computer, Inc.  
 20525 Mariani Avenue,  
 M/S 38-I  
 Cupertino, CA 95014  
 (408) 974-4667

## Related Products

### MacX Manual Set

Order No. M0602LL/A

### MacX Site License

Order No. M0747LL/A

### X Window System 2.1 for A/UX

Order No. M0411LL/B

### X Window System for A/UX Manual Set

Order No. M0748LL/B

### Apple EtherTalk NB Card

Order No. M0410LL/A

### AppleColor High-Resolution RGB Monitor

Order No. M0401

### Apple Macintosh Portrait Display

Order No. M0404

### Apple Two-Page Monochrome Monitor

Order No. M0402

## Apple Computer, Inc.

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

© 1990 Apple Computer, Inc. Apple, the Apple logo, AppleTalk, A/UX, EtherTalk, LocalTalk, Macintosh, MacTCP, and MultiFinder are registered trademarks of Apple Computer, Inc. Apple Desktop Bus is a trademark of Apple Computer, Inc. Charter is a trademark of Bitstream. DECnet and DECwindows are trademarks of Digital Equipment Corporation. Helvetica and Times are registered trademarks of Linotype Company. Lucida is a registered trademark of Bigelow & Holmes. UNIX is a registered trademark of AT&T Information Systems. X Window System is a trademark of MIT.  
 April 1990. Product specifications are subject to change without notice.  
 Printed in U.S.A. M0246LL/B