MacX™ 1.1

Menu bar: File Edit Remote Window

xfontsel
quit | select   1 font matches

-fndry-fmly-wght-slant-sWdth-adstyl-pxlsz-ptSz-resx-resy-spc-avd

-Adobe-Times-Bold-

ABCDEFGHIJKLM
abcdefghijklmnopq
0123456789

Wingz Graph

30.00
20.00
10.00
0.00

MacX Color Root

X xterm

springer.x 3% w
 10:36am up 7 days, 18:48, 6 users, load averag
User   tty   login@ idle   JCPU   PCPU wha
root   console   1:47pm 67:25 4295:07 1760:47 -
x   ttyp1   10:34am   3   2 w
x   ttyp0   3:13pm 1:27 668:21 657:30 xrn
root   ttyC1   3:13pm 1:27   18   18 rlo
root   ttyC2   5:31pm 1:23 179:21   1:25 cpi
root   ttyC3   6:15pm 1:24   2:09   /bi
springer.x 4% []

X oclock

□□ xload

Hard Disk

Trash

Overview

MacX™ 1.1 software provides an X Window System™ display server for the Apple® Macintosh® and A/UX® 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.

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 mwm of OSF/Motif or twm. 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 Type-writer, New Century School-book, 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 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 AppleColor™ High-Resolution RGB Monitor or the equivalent (multiscreen configurations are supported)
► Apple Two-Page Mono-chrome Monitor
► Apple Macintosh Portrait Display

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™ implementations, and the AppleTalk® 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

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 the all Apple keyboards and the Apple Desktop Bus™ (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® (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
X Window System 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 Computer, Inc.

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