# Tech Info Library

## MacX 1.2: Features, Benefits, and Product Details (8/95)

```
Revised:        8/7/95
Security:       Everyone
```

MacX 1.2: Features, Benefits, and Product Details (8/95)

========================================================================

Article Created: 2 February 1995
Article Reviewed/Updated: 7 August 1995

TOPIC -----------------------------------------------------------

This article describes the MacX 1.2 product's features, benefits, system
requirements, product details, and ordering and licensing information.

DISCUSSION ------------------------------------------------------

MacX is an X window System display server for the Apple Macintosh and A/UX
operating systems. The server lets users in multivendor environments run
network-based X client applications on the same Macintosh desktop.

Macintosh users can access X applications by choosing commands from a pull-down
menu that displays the X applications in easy-to-use Macintosh windows, and the
menu is easily customized. With MacX, users can cut and paste text and color
graphics between Macintosh and X client applications.

The X Window System was developed by researchers from the Massachusetts
Institute of Technology (MIT) and others from the computer industry.

MacX demonstrates Apple Computer's commitment to industry standards. It complies
with Version 11, Release 4 standards and conventions set by the MIT X
Consortium. This means that MacX is compatible with all X client applications
that follow the X Window System standards.

MacX provides complete X Window system functionality combined with Macintosh
ease-of-use for both new and experienced X Window System users. It allows MIS
managers to integrate Macintosh computers into an organization that operates in
a standardized multivendor setting.


Features and Benefits
=====================

- An X Window System display server for Macintosh computers that complies with X Window System standards.
- Access to all Macintosh applications.
- Text and color graphics copy-and-paste capability.
- Ease-of-use including Macintosh windows.
- Support for Macintosh system software version 7 and later.
- Support for color and grayscale applications.
- Support for multiple monitors.
- Support for multiple networking protocols.
- Industry standard Backing Store/Save Under capabilities.
- Provides industry-standard X applications in a multivendor, networked environment.
- Allows users to choose form many easy-to-use Macintosh applications that run alongside X client applications.
- Allows users to move text and image data between Macintosh and X client applications, using familiar copy-and-paste commands and the Macintosh clipboard.
- Allows users to customize frequently accessed X client applications by using pull-down menus. Displays X applications in familiar Macintosh windows for easy moving and resizing.
- Allows MacX users to take advantage of System 7 features and its intuitive interface.
- Displays 256 colors or shades of gray from a palette of 16 million colors.
- Allows client applications to display on multiple screens.
- Permits full use of all major networking protocols including TCP/IP, DECnet, and AppleTalk.
- Allow users to regulate the frequency of window updates for improved performance.


System Requirements and Product Details
=======================================

Required Equipment
------------------
To use MacX you need:
- Any Macintosh computer
- At lease 2 MB of memory (5 MB or more recommended)
- System software version 6.0.5 or later
- At least two floppy disk drives, one of which should be an Apple FDHD (for version 6.0.5 or later software)
- A hard disk (for version 7.0 or later software)
- A network connection, using the LocalTalk port or an Ethernet connection

Optional Equipment
------------------
You may also want to add:
- An Apple Ethernet NB Card or the equivalent
- A Macintosh 8•24 Graphics card
- An AppleColor High-Resolution RGB Monitor or the equivalent (multiscreen configurations are supported)
- An Apple 16 inch or 21 inch Color Monitor

- A three-button mouse (available from third-party companies)


Standard Conformance
--------------------
MacX complies with the following standards:
- X Window System, Version 11, Release 4 (includes support for Version 11, Release 4 shape extension)
- X11 protocols
- X logical font description (XLFD) protocol
- ICCCM window management


Network Configurations
----------------------
MacX takes advantage of the Macintosh Communications Toolbox, allowing many simultaneous connections over different transport protocols. MacX includes:
- MacTCP (Apple's implementation of the TCP/IP protocols)
- AppleTalk ADSP
- DECnet (offered by third-party companies)


MacX Window Manager
-------------------
MacX includes a built-in window manager that complies with the ICCCM standard. Users can control client applications in windows on their desktops using Macintosh user interface capabilities. The window manager provides:

- Title bars
- Close boxes
- Other Macintosh window controls


Font Manager
------------
MacX includes a font compiler that converts font files from bitmap distribution format (BDF) to the MacX server's internal format. In addition, MacX can access Macintosh TrueType and screen bitmap fonts resident in the Macintosh system. MacX includes the following font families:

- Charter
- Clean
- Courier
- Helvetica
- Lucida (Lucida Bright and Lucida Tupewriter)
- New Century Schoolbook
- Symbol
- Times


Foreign Window Manager Support
------------------------------
MacX includes the capability for use of foreign window managers such as mwm (by OSF/Motif) and twm. A special Macintosh window is dedicated to displaying client applications controlled by a foreign window manager. This window can share the desktop with other client applications controlled by the built-in MacX Window Manager.

Three-button Mouse Support
--------------------------
MacX emulates second and third mouse buttons through the keyboard. Three-button
mouse devices are available from third-party companies.

DECWindows Support
------------------
MacX is fully compatible with DECWindows conventions for remote startup of
applications and for copying and pasting between Macintosh and DECWindows
applications. (See a Digital Equipment Corporation representative for more
information on PATHWORKS, Digital's network communications package for Macintosh
computers, which includes MacX.)

Color Support
-------------
MacX supports 8-bit color and grayscale video cards. Users have access to 256
distinct colors or shades of gray from a palette of 16 million colors. MacX
supports the following Apple video cards:
• 8•24 Card
• The built-in video card on Macintosh computers (like the Macintosh IIci)


Ordering and Licensing Information
==================================

MacX 1.2
--------
Order Number M0108LL/D, you will receive:
• MacX software and fonts
• MacX Communications software
• MacX Installation Guide
• MacX User's Guide
• MacTCP Connection Tool Module
• MacTCP Administrator's Guide
• MacX Release Notes

MacX Right-to-Copy License
--------------------------
Order Number M8102LL/A
This license grants the right to copy MacX to one additional system.

MacX 1.2 Update Product
-----------------------
Order Number M01197LL/B
With your order you receive software and manuals to update any version of MacX
to version 1.2

MacX Manual Set
---------------
Order Number M0602LL/C
With your order you receive additional manuals for licensed systems.
• MacX Installation Guide
• MacX User's Guide

- MacTCP Administrator's Guide

MacX Right-to-Update License
----------------------------
Order Number M8103LL/A
This license grants the right to update any version of MacX to one additional
system.

For information about licensing, contact:
ABS Licensing Department
Apple Computer, Inc.
1 Infinite Loop, M/S: 35-AE
Cupertino, CA  95014
408-974-2320


Article Change History:
07 Aug 1995 - Made minor corrections; reformatted.

Support Information Services

Copyright 1995, Apple Computer, Inc.

Tech Info Library Article Number:17117