Tech Info Library

MAE 2.0: Release Notes and Read Me, Part 2 of 2 (3/95)

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TOPIC ---

This article is part 2 of 2 of the README.TXT file for Macintosh Application
Environment (MAE) version 2.0. This Read Me document should be read before
installing or using MAE 2.0.

DISCUSSION --

III. Running MAE For The First Time After Installation

• Before you can run MAE successfully, you must run the LICENSE BINDER utility,
"license_binder". When you run the license binder, it will ask you to input a
serial number. Your MAE 2.0 serial number is printed in two places: on the
inside of the CD-ROM package, and on the plastic CD-ROM sleeve.

• The first time you launch MAE, it creates several files in your home
directory:

These two directories are required to run MAE:

"System Folder"
".mac"

These are Macintosh aliases to the corresponding files inside the apple
directory. Which aliases are created depends on which packages are installed;
for example, if no demo packages were installed, there will not be a "demos"
alias. These aliases are there for convenience to the MAE user, and may be
removed at any time. To control which aliases are created, you can modify the
AliasList file found in apple/lib and described in the MAE System
Administrator's Guide.

"docs"
"demos"
"Tools"

```
"lib"
"man1"
```

• When MAE 2.0 is launched for the first time in a new installation, and
encounters a System Folder from MAE 1.0 or from a beta version of MAE 2.0, it
automatically converts the System Folder to the format correct for MAE 2.0. If
you have installed a previous version of MAE 2.0, MAE will not create backup
versions of the files it replaces in this process. (Upgrading from MAE 1.0, the
updater will back up your original files.) In the unlikely event that you have
trouble running MAE after the System Folder update occurs, follow this
procedure:

Step 1
Quit MAE.

Step 2
Rename your System Folder; for example, 'mv System\ Folder old.system.folder

Step 3
Relaunch MAE to create a new System Folder.

Step 4
If you need Extensions or other files from the renamed System Folder, copy them
to the new System Folder one at a time, restarting MAE after each new file is
added to verify correct operation.

IV. Starting and Exiting MAE

• Do NOT delete or move any of the MAE files or folders located in the "apple"
directory.

• Shift-Control-E forces MAE to quit

If you cannot quit MAE by using the Shut Down command in the Special menu (on
the MAE desktop) or by using the capabilities provided by your X window manager,
force MAE to terminate by pressing Shift-Control-E.

• If the Message "Can't open X display" Appears on Startup

If you are running MAE on the same workstation that you are running the X
Server, set the DISPLAY environment variable to be "local:0" before running MAE.
If you are running MAE on a machine other than the X Server, set the DISPLAY
environment variable to the string "X_server_hostname:0" where X_server_hostname
is the network hostname of the X server.

If MAE still will not open the display, run the program "xhost" on the X Server
machine to ensure that you have access to the server; see the man page for
xhost. If MAE is running on a workstation named WORKSTATION and the X-Server is
on a machine named TERMINAL, then on TERMINAL run the command "xhost
+WORKSTATION". This allows MAE on WORKSTATION to open a display on TERMINAL.

• If a message appears on startup similar to "Unable to locate <directory>;

please use the -appledir option to give the path to the apple directory."

When you start MAE, it expects the directory containing the MAE files to be in a
directory specified at installation (by default, the directory is named
"apple"). You can also specify the location of the "apple" directory to MAE by
using the -appledir command option when you start MAE (see Chapter 2 of the MAE
USER'S GUIDE). Alternatively, you can specify an alternate location of the
"apple" directory in your X Resources file. To edit your X Resources file, open
your .Xdefaults file and edit the line that begins with "Apple.appleDirectory."
Replace the name of the directory that appears in the line with the name of the
directory that contains the MAE files. For example, if the MAE files are located
in /usr/local/apple, the line would look like this:

Mae.appleDirectory: /usr/local/apple

V. Issues Related To AppleTalk and Networking

• MAE is not compatible with third-party AppleTalk stacks. If you run on a
machine with one of these stacks, you cannot use AppleTalk with MAE. If you want
to run AppleTalk on MAE, you must first remove any third-party stacks.

• (HP only): MAE AppleTalk requires streams. To determine whether streams is
installed on your system, run the command 'strvf' (normally in /usr/bin). To see
which version of streams is installed, inspect the file
/system/STREAMS-DLPI/index and look for the version in the 'fv:' field.

• (Sun only): If you have a single network interface configured, and this
interface is not le0, you will see the following message if you open the Network
Control panel:

The AppleTalk connection is unknown. Please select a different AppleTalk
connection, or built-in LocalTalk will be the AppleTalk connection when you
restart.

This message is incorrect. Click 'OK'; the Network Control panel lets you switch
between zones normally. AppleTalk and EtherTalk are unaffected, and will be
normal after restart.

• By default, when you enable FileShare, anyone connecting as "owner" can see
the entire "/" directory and its descendants. To allow access to only explicitly
shared items, open the "Users & Groups" control panel, and turn off the option
"Allow user to see entire disk" for the File Share owner.

• If multiple users invoke MAE and FileShare on the same workstation, some
coordination is required in exporting filesystems with FileShare. If two users
independently export a single directory or volume under two different names,
then a second workstation, unable to recognize that the two exported names refer
to the same volume, can mount them both independently, referring to them by
different names. This has potentially serious consequences, including loss of
files.

Sites that use multiple instances of MAE on a single workstation should provide

guidelines for exporting filesystems via FileShare. These guidelines should
follow one of two models:

Item a
Run a single FileShare on the workstation, and set up Users&Groups to allow
clients appropriate access to the File system.

Item b
Allow each user to run a FileShare server, but to export only parts of the file
system they "own" in the UNIX sense. Default sharing of the root volume should
be disabled.

• When using some MacTCP applications, erroneous login information may cause all
subsequent connection attempts to fail. Work around this problem by restarting
the application (it is not necessary to restart MAE).

• MacTCP and multiple network interface cards: MacTCP uses the first configured
network interface card and ignores any others.

• Wrong zone: if the Chooser displays no network-visible entities (NVEs)
(printers, servers, etc), the Chooser indicates that you are in an invalid zone,
restart MAE.

• AppleTalk installation/initialization errors

If you see problems with AppleTalk initialization (for example, "Lap Init:
..."), do the following in order to determine the source of the problem:

Step 1
Check the system console messages.

Step 2
Verify that the AppleTalk kernel modules are installed correctly. See
"Installing AppleTalk for MAE" in Chapter 5 of the MAE SYSTEM ADMINISTRATOR'S
GUIDE.

Step 3
Be sure you have write permission to the /tmp directory.

Step 4
Look for error messages in the window from which you launched MAE. If AppleTalk
is unable to open a file, an error message will appear here.

Step 5
Open the Network Control Panel; verify that you are running AppleTalk on the
correct network interface.

Step 6
The MAE installer may have informed you that a log file was written. Please
consult this file.

Step 7
For more information, see "Troubleshooting" and "UNIX AppleTalk commands" in

Chapter 5 of the MAE SYSTEM ADMINISTRATOR'S GUIDE.

• This release includes three UNIX-style commands for troubleshooting network problems. These commands are located in the apple/bin directory:

- appletalk
- appleping
- atlookup

Man pages for all three are included in the product release.

VI. Issues Related To Sound

• (HP only): MAE 2.0 will not support sound on HP-UX 9.01.

• (HP only): MAE 2.0 will not support sound on HP-UX workstations that are not connected to a network. If your HP workstation is not attached to a network, include the -nosound option on the MAE command line.

• MAE sound quality depends on the quality of the source sound, the processor speed, and the settings of the Sound control panel.

• MAE 2.0 does not support sound input.

• (HP only): Sound on HP workstations may include brief audio hesitations. This effect is most pronounced with higher sampling rates and slower machines.

• (Sun only): When changing sound rate on Sparc5s by using the Sound Out subpanel in the Sound control panel, there may be a slight delay during which your cursor stops moving. This is normal.

• (Sun only): The external mute and volume controls on the Sparc speaker box have no effect under MAE; sound is controlled only from the Sound Control panel.

• If multiple instances of MAE are run on the same workstation, only the first to be executed will play sounds normally. The other copies of MAE play no sounds until the first MAE terminates -- then they play all queued sounds at once. To avoid this, add the -nosound option to the MAE command line whenever another copy of MAE is already executing on the same workstation. This disables sound completely for all but the first copy of MAE to be executed.

• (HP only): UNIX applications that attempt to play sounds while MAE is running will have those sounds queued. These queued sounds will be played after the (first) MAE session quits.

This occurs because MAE takes exclusive control of the audio server in order to achieve acceptable sound performance. If you do not want this situation to occur and do not require sound support from MAE, start up MAE with the "-nosound" command line option.

• (HP only): If you don't get sound out of your machine even though it is sound

capable, check the following:

Step 1
Make sure the AUDIO environment variable is set to your local machine. That is,
AUDIO=hostname:0

Step 2
Install HP Patch "PHSS_4341" and reboot. This patch is necessary for correct
sound operation.

Step 3
Make sure the LLBD (local location broker daemon) is running. As root, edit the
/etc/netncsrc file and make sure the line START_LLBD=1 is there, and reboot.

Step 4
Make sure the audio server is running (ps -e | grep -i aserver). There should be
two Aserver processes running. Use the command "/usr/audio/bin/Aserver" to start
the audio server if necessary.

Step 5
Make sure you have access to the Aserver. "/usr/audio/bin/asecure -C" creates an
audio access file. Then "/usr/audio/bin/asecure -d" disables security (or read
the man page and enable for the users to whom you wish to grant access).

Step 6
To get audio out of the output jacks (rather than the internal speaker) set the
environment variable SPEAKER="external".

Step 7
If you're still having problems, try to get HP's audio tools to work following
their documentation. When HP's audio tools work, MAE sound should work.

• (Sun only): Sound problems related to running MAE as a user different from the
one who is logged in at the console:

Change the permissions of the /dev/audio and /dev/audioctl audio devices. To
change the permissions of /dev/audio, execute the command "ls -l /dev/audio" and
follow the symbolic links to the actual device (expect three or four levels of
indirection). Change the permissions on the audio device for read/write access.

VII. Installing and Working With Application Programs

• Using Temporary Installer Volumes (TIVs) to ease application installation:
Installation of some applications can be complicated by space and permissions
constraints on the UNIX root volume. The resulting problems are likely to
produce error messages such as

"Not enough free space on <directory>"

"Cannot create directory <directory>"

MAE 2.0 provides a workaround: a TIV, which is a virtual hard disk on the MAE

desktop. By creating, and installing to, a TIV, you can sidestep problems
associated with the root volume.

Detailed instructions for creating and using TIVs are in Chapter 3 of the MAE
USER'S GUIDE.

• Installation of certain software packages can be done only by using a TIV that
contains a copy of your System folder. Attempts to install on a TIV without a
System Folder result in various error messages, depending on the installer. See
Chapter 3 of the MAE USER'S GUIDE.

• TIV size: We recommend a TIV size greater than 10 Megabytes.

• If you get a message such as "ClarisDraw requires a hard disk" when installing
a Claris application

Some Claris applications require that the destination volume have more than 10
MB free space, even though the application does not require that much space. To
work around the problem, install to a TIV whose size is greater than 10
Megabytes.

• Resizing MAE while an application is running

Some applications may not correctly handle an MAE resize while the application
is running.

• Colors Are Not Displayed Accurately in Certain Applications

In certain applications that use color extensively (for example, Adobe
Photoshop), colors used in the document may not be displayed correctly. To fix
this problem, open the MAE General control panel; click the button "use standard
Mac colors" under "Color flash reduction" and restart MAE.

• Use only printer drivers that are shipped with MAE

Some Macintosh applications (for example, Aldus PageMaker 5.0) install their own
printer drivers (and related files) when installed. The only printer drivers
that have been tested for compatibility with MAE are shipped with the product:
LprWriter and LaserWriter 8. Other printer drivers have not been tested with MAE
and may not work.

For instructions for setting up and using the LprWriter and LaserWriter drivers,
see Chapter 4 of the MAE USER'S GUIDE, "Printing in MAE."

• PPD files for non-Apple printers

Apple supports only PPD files for Apple printers. It is a printer vendor's
responsibility to make PPD files for its printers available. If the PPD for your
non-Apple printer isn't shipped with MAE, contact the printer vendor or use the
ftp archive at ftp.adobe.com. See Chapter 4 of the User's Guide for more
information.

• Problems with Microsoft Office

The specialized Microsoft Office Control panel "Microsoft Office Manager" is not compatible with MAE. If you install Microsoft Office, remove this control panel from the System Folder before you restart MAE.

• Use the Option Key When Printing PageMaker 5.0 Documents with LprWriter

There is an incompatibility between the LprWriter driver and PageMaker. If you are printing using the LprWriter driver, you must hold down the Option key while you choose Print from the File menu in PageMaker. There is no incompatibility with the LaserWriter 8 driver.

VIII. Floppy Disks and CD-ROM Discs

• (Sun only): Volume manager patch

Solaris 2.4 users: Before using floppy or CD-ROM with MAE on Sun, you must install the Solaris Volume Manager Patch.

• Problems mounting CD-ROM discs and floppy disks

Read "Mounting CD-ROM Discs and Floppy Disks" in Chapter 6 of the User's Guide. If your problem is not covered, read on (this material assumes that you know the concepts covered in the User's Guide).

You need to know the exact path name of the device file that references the CD-ROM or floppy (ask your system administrator). On HP, the command:

ioscan -f

Lists the available devices on your workstation. On Solaris, you should be able to determine the path name(s) by looking in the /etc/vold.conf file for the lines that start with "use floppy" or "use cdrom".

The driver for the device in question may not be configured in your kernel. Ask your administrator for help if this is the case.

Once you know the path name of the device file, try to access the floppy drive from UNIX. Once you have determined that the floppy drive works, enter full path name for the floppy in the macdisks.OS file (where OS is 'hpux' or 'solaris').

Example SCSI entry for a CD-ROM drive:
scsi6:removable:ro:<PUT PATH NAME HERE>

Example line for a floppy drive:
floppy0:rw:<PUT PATH NAME HERE>

Common path names for devices:
On HP, CD-ROM drives are often at SCSI address 2. The following example line should work if your CD-ROM drive is at SCSI address 2:

```
scsi2:removable:ro:/dev/dsk/c201d2s0
```

On HP, Floppy drives are often one of the following:
```
floppy0:rw:/dev/rfloppy/c201d0s0
floppy0:rw:/dev/rfloppy/c20Ad1s0
```

In some cases, you may need to restart MAE before the modifications to the
macdisks.OS file will be taken into account, especially if you specify "default"
for one of the devices.

• Do not eject a diskette and physically remove it from the drive until MAE is
finished with it (that is, until MAE shuts down, requests another disk with a
dialog, or deletes the floppy disk icon from the desktop). Disregarding this
caution risks physical diskette damage.

• (HP only): If you manually eject a floppy without dismounting it first
(dismount it by dragging its icon to the trash, or selecting Put Away from the
File menu), and then insert another floppy, the second floppy may be corrupted.

IX. Other Issues

• Find File and UNIX file systems

The "Find File" facility included with MAE 2.0 is optimized for searching
Macintosh HFS volumes and is not well suited to large UNIX filesystems. Avoid
using this facility to search UNIX volumes as it will traverse the entire volume
and any mounted filesystems within it. This behavior is especially noticeable
when "Find File" is invoked by a remote client to search a UNIX volume exported
from MAE via File Sharing. Using "Find File" on HFS volumes (such as TIV files
or remote HFS volumes) should present no difficulties.

• File System anomalies

If MAE fails to show items in a UNIX directory (possibly even after the window
is closed and re-opened), use the touch command to update the time on some item
in the directory. (This anomaly is the result of a difference in basic
assumptions between UNIX and the Macintosh: Using UNIX, it is possible to
replace an entire directory, with entirely new contents, without updating its
modification date or time.)

• Using -memory Option When Starting MAE

When you start MAE with the -memory command option, memory size is set to the
specified value. (See "Adjusting the Memory Size of MAE" in the MAE USER'S
GUIDE, Chapter 10.) If MAE is restarted, this stipulation will remain in effect
unless it has been subsequently changed by using the Memory Control panel.

• OPTION and SHIFT keys after MAE restart

After an MAE restart (not a startup), MAE may appear not to respond fully to the
Option and Shift keys. A simple workaround technique is effective: click

anywhere OUTSIDE THE MAE WINDOW on your X screen, then click inside the MAE window. Thereafter the problem disappears.

• Scrapbook conversion: The Scrapbook file format of MAE 2.0 is not compatible with that of MAE 1.0. If you update from MAE 1.0, your Scrapbook file will be unusable. To work around this, copy the new Scrapbook file from apple/sys into your System Folder, replacing the one there. To recover the contents of your MAE 1.0 Scrapbook:

- run MAE 1.0, using your old MAE 1.0 appledir and System Folder; the old system folder is saved in "MAE 1.0 System Files", within your MAE 2.0 System Folder.

- Paste the Scrapbook contents into an application document and save it.

- Terminate MAE 1.0, run MAE 2.0, open the application, and paste the contents into the Scrapbook.

• MEMORY CONTROL PANEL: Allocating the maximum memory allowed in the Memory control panel may result in an MAE crash with "mmap failed" or other error messages.

• ALIASES: installing this release invalidates Macintosh aliases from the previous installation. Discard these aliases and re-create them.

• WARNING: Some versions of AFS support only 7 bit characters in filenames, while MAE supports 8 bit characters. This may cause problems in some situations: BEWARE!

• MAE does not support changing the date and time settings in the General Controls and Date & Time control panels.

• SCSI device compatibility problems

Workstations that support MAE 2.0 typically use the SCSI 2 interface Standard. Depending on how your workstation is configured, you may have problems using a SCSI or single-ended SCSI 2 peripheral. Before attempting to connect an Apple or other third-party peripheral to your HP or Sun workstation, see your system administrator or the documentation that came with your workstation for information.

• (HP only): Problems Using CD-ROM Discs on HP 712 Workstations

If you try to mount a CD-ROM disc on certain HP 712 workstations attached to some CD-ROM drives, MAE may display an alert message, asking if you want to initialize the disk. Click Cancel in the alert box. For information about possible solutions to this situation, see your HP dealer or contact technical support at Hewlett-Packard.

• If MAE "hangs" when an NFS server goes down:

MAE 2.0 no longer hangs on NFS mounts when an NFS server goes down, unless the server was mounted "hard/nointr." Hard/nointr mounts cannot be interrupted while hard/intr are interruptible. To prevent NFS-related hangups, verify that all NFS

mounts on your workstation are interruptible.

• If you need to refer to the wide-area part of a distributed AFS filesystem:

MAE does not permit the Finder or applications to see the wide-area part of the distributed AFS filesystem. To access a file contained in the wide-area part of an AFS system, use a UNIX shell to copy the file to a directory within the local cell, such as your home directory.

• If resizing the MAE window when CloseView is active causes MAE problems:

This is a known problem in the current version. Avoid resizing the MAE window when CloseView is active.

• (Sun only): If you are using OpenLook

If you are having trouble importing X data into the MAE environment (for example, text in an xterm window), make sure that you do not click on any olwm title bar after you have selected the X data. If you do so, the X Windows selection may become lost, and MAE will not be able to import it. To work around this problem, position the MAE window so the "Import from X" button (on the MAE toolbar) is visible, select the X data, then before clicking on any olwm titlebar, select the "Import from X" button.

• Displaying MAE on a Macintosh using MacX.

MAE may hang when its display appears on a Macintosh via MacX, when MAE is also mounting a fileshared volume from the same Macintosh.

• AfterDark 3.0

The files "Screen Posters" and "Bad Dog" in AfterDark version 3.0 are incompatible with MAE 2.0. After installing After Dark, remove these two files from your System Folder before restarting MAE.

• Shareware/freeware issues

MAE 2.0 includes three shareware/freeware programs, in the directory apple/Tools/Shareware. Observe these points when using these shareware programs:

- Third party software posted to this CD may be protected by federal copyright laws which prohibit copying unless authorized by the copyright owner. Before using any posted software, refer to the start up screen of the software, to the accompanying software license, or to the individual an/or company posting the software to determine if copying is authorized. Posted software is the sole responsibility of the individual and/or company posting it. Apple Computer, Inc. does not endorse, warrant, guarantee, or make any representations, express or implied, with respect to software posted to this CD, its quality, performance, merchantability, or fitness for a particular purpose. In no event will Apple be liable for direct, indirect, special, incidental, or consequential damages resulting from the use of posted software.

- Somre software in this folder is shareware; if you use a shareware utility, please honor its shareware fee.

- FETCH: Using Fetch to "get" and "put" non-text Macintosh files from or to UNIX filesystems requires special care to insure the files are transferred in a usable state by MAE (that is preserving their AppleSingle format).

When "get"ing a non-text Macintosh file, always select "binary" transfer mode. When "put"ing a non-text Macintosh file, always select "AppleSingle" as the file format when prompted by the dialog. Macintosh and UNIX text files should always be transferred by selecting "text" (ASCII) transfer mode.

For complete instructions about using Fetch, read the online "Fetch Help".

- SOFTWAREFPU - Floating Point Unit Extension

This extension simulates the FPU coprocessor chip found in some Macintoshes and integrated into certain 68K CPU's. It is only useful for (the very few) Macintosh applications that require this FPU.

Complete instructions about using SoftwareFPU are included with the utility.

- DISINFECTANT - Virus Utility

MAE is susceptible to the same viruses that plague the Macintosh. However, there is no need to scan your entire UNIX filesystem for Macintosh viruses. When scanning with Disinfectant, hold down the Option key and press the "Scan" button, this will display a dialog that will allow you to limit the scope of the search.

For complete instructions about using Disinfectant, please read the online "Disinfectant Help".

Support Information Services

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