Developers of Geographic Information Systems integrated with image processing, desktop cartography,

and surface modeling for Windows, Mac and

UNIX platforms including LINUX

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## The MI/X for Macintosh FAQ

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- 56. MI/X was working before and I have upgraded to System 8.5. Now MI/X hangs.
  - Q: Is MI/X for Macintosh really free?

A: Yes. No strings attached. Microlmages does retain a copyright on it, however.

## • Q: Why is it really free?

**A:** MicroImages gains name recognition and good will. MicroImages maintains MI/X as the X Server for its professional TNT image processing, geospatial data management, and desktop cartography products. In order to make the TNT products work exactly the same on all Windows, Macintosh and UNIX computers, MicroImages needed a robust and stable X Server whose future was not in the hands of some other company. (MicroImages also enjoys the irony that some ARC/INFO users will run our competitor's product on our free X Server.)

• Q: What good is an x-server? What can I use it for?

**A:** Using MI/X, you can run a UNIX program remotely on the UNIX machine itself, sending the display output to MI/X on your local PC or Mac.

• Q: How can I get a copy of MI/X?

**A:** You can download it from MicroImages' FTP site, or from mirror sites. The URL to download MI/X from MicroImages' is http://www.microimages.com/ in the "Free Downloads" section.

• Q: Can I mirror MI/X on my FTP site?

A: Yes. We do ask that you agree to the following few conditions:

- o The files you distribute must be unaltered copies of the package as distributed by MicroImages, Inc.: this is to include the binary executables as well as any configuration files and text files contained with it
- Please register your mirror site with MicroImages, so that we know about the mirror and can point others to it, and can keep you informed on changes in the software. You can register online at this URL: http://www.microimages.com/freestuf/mix/register.htm
- o You may not reverse engineer, or convert into any human conceivable form, the binary executable files that make up MI/X.
- o You may not charge money for MI/X itself, excepting the costs of redistribution media or shipping.
- o Keep up with the latest version. Please check back with us as we update our products quarterly, there are likely to be some improvements made in MI/X that you will want to make available as well.
- Q: When I click on the links on your download page, I get an error message saying that the file doesn't exist or that the link is no good. What is wrong?

**A:** The links aren't bad. Some browsers will return an error message indicating that the link is bad or that the file wasn't found, when in fact, the browser times out because the site is so busy.

• Q: I'm having trouble downloading MI/X. Can you e-mail it to me?

A: No. If you are having trouble downloading, try again at a different time, or try a mirror site. MI/X is popular and traffic is heavy, which can cause download problems during peak periods. Attempting to email it would only consume our valuable staff time and would not evade such problems as network traffic or slow connections. If you don't have a good enough network connection, then we encourage you to order TNTlite on CD-ROM from MicroImages, which includes MI/X, and which you can obtain for costs of shipping and handling. Ordering the TNTlite on CD gives you access to our award-winning geospatial data analysis software, and many *Getting Started* tutorial booklets with sample data, as well as Adobe Acrobat Reader for various platforms. It is well worth the investment!

Q: Are there any manuals or documentation available for MI/X?

A: The FAQ is the only documentation available for MI/X.

• Q: Is MI/X implementing X11R5 or X11R6?

A: The Macintosh version uses X11R6.

• Q: Is it possible to submit reports of possible errors or ask for new features for MI/X?

**A:** Yes. Please keep in mind that MI/X was designed to provide a cross platform interface for our professional GIS software, TNTmips. We have provided it free to those who may also find it useful. Development of MI/X will be driven by the needs of TNTmips and our clients who use TNTmips. Any errors or features that don't affect or aren't required by TNTmips or our clients will be given a very low priority.

• Q: I've downloaded MI/X for MacOS, how do I unpack it?

**A:** You will need a decompression utility. One of the most popular utilities is called Stufflt Expander. Drag the file you've downloaded on to the Stufflt Expander icon, and that is all you need to do. Please make sure that your Expander preferences are **not** set to automatically convert text files to Mac format before unpacking the file. This setting is on by default for some versions of Stuffit and will cause errors in the program if you use it. You may change this setting back after you have expanded the MI/X file.

• Q: How do I uninstall MI/X?

A: Delete the directory that MI/X is installed to.

• Q: When starting MI/X, I see the MI/X screen come up briefly and then goes away and then I get an error message. What is happening?

A: Connect to the machine that you want to run MI/X against before you start MI/X.

• Q: When I start MI/X, a warning message comes up saying I need 256 colors, what do I do?

**A:** If you are running your computer/monitor in a color mode with less than 256 colors, MI/X will not work. If you want to run MI/X, you will have to change the color mode to 256 or more colors.

• Q: When I start MI/X, all I get is a big blue screen. How do I make my remote connection?

**A:** You have to establish your remote connection outside of MI/X. Windows comes with a telnet utility and they are also available for the Mac.

• Q: I login to my remote UNIX host. Then I start MI/X and it comes up okay. Then when I try to start an X session, or send a remote X client to the machine running MI/X, MI/X quits. It does this every time. What am I doing wrong?

**A:** Try changing your preferences. Open File / Preferences, select the "Preferences" icon on the left, and make sure that the "Auto exit when last client dies" checkbox is **not** checked.

• Q: When I try to start MI/X I get a message saying "unable to open :0.0". What is going on?

A: Make sure that under the "Sharing Setup" control panel the Macintosh has been given a name.

Q: The x-term windows that open in MI/X go to the top left hand corner of the MI/X window and I am unable to move them.
 What can I do?

**A:** This happens when you launch MI/X without launching twm. Check your preferences and ensure that Use Local Window Manager (twm) is checked.

• Q: Can I use a window manager other than twm with MI/X?

**A:** Yes, however twm is the window manager we support. We can't tell you how to configure other window managers, or even guarantee that they'll work.

• Q: How do I configure twm?

**A:** If you put a file named "system.twmrc" in the same folder as the twm program on your computer, the twm program will read configuration settings from it. Consult the documentation, man page, etc. for twm to learn what to put in system.twmrc to configure twm. Note that the current version of MI/X for MacOS does not support the launching of X clients from a twm menu. This may be forthcoming in later versions.

• Q: I've made an unfortunate configuration change that causes MI/X to hang, now each time I try to start MI/X, it crashes without even letting me get to the Preferences dialog to fix the configuration. What do I do?

**A:** If you hold the <COMMAND> key while double-clicking the MI/X application icon, MI/X will open the Preferences dialog for you without launching the X server. You can then undo any unfortunate configurations.

• Q: How do I use MI/X to start an X session with a remote host?

**A:** Start MI/X. Telnet to the remote host. Set the DISPLAY environment variable on the remote host to the machine you are running MI/X on. For example on Solaris (running csh):

setenv DISPLAY mymachine:0.0

or failing that:

setenv DISPLAY my.machine's.ip.number:0.0

(running BASH):

export DISPLAY=mymachine:0.0

```
or failing that:
```

export DISPLAY=my.machine's.ip.number:0.0

replacing "my.machines's.ip.number" with the actual IP number of the local machine running MI/X.

After this, you can launch whatever X applications you wish on your remote host and they will display on the machine running MI/X. To invoke a command shell try:

xterm &

When the xterm comes up you can close the telnet session. The commands may differ on various flavors of LINIX

 Q: I've set my display correctly and I know I'm using the correct IP number, but I am still getting a "can't open display" error message. What now?

**A:** If you are following the procedure outlined in this FAQ and you are still getting this error, contact the sysadmin of the remote host, the sysadmin of the system you are using or tech support for your ISP and ask if the systems that you are going through allow x-traffic to pass through. Some of them don't.

Q: What fonts can I use with MI/X?

A: BDF and PCF fonts.

• Q: There are a lot of fonts included in the distribution that I won't use and are taking up space on my hard drive (such as Chinese and Japanese character fonts.) Can I get rid of some of these fonts and still use MI/X?

**A:** Yes, you can get rid of some of the extra fonts. Of course, you will still need to keep some of them. Here are some examples of fonts to keep:

```
7x13b.bdf -misc-fixed-bold-r-normal--13-120-75-75-c-70-iso8859-1
ascii.bdf -mi-fixed-medium-r-normal--16-160-72-72-c-160-ascii-1
olcursor.bdf -sun-open look cursor-----12-120-75-75-p-160-sunolcursor-1
olgl10.bdf -sun-open look glyph-----10-100-75-75-p-101-sunolglyph-1
cursor.bdf cursor
deccurs.bdf decw$cursor
decsess.bdf decw$session
```

The last part of the font is the language encoding. Chances are that if it isn't "iso8859-1", then you don't need it. Exceptions are the other files above. "cursor.bdf" is especially important as it contains the cursors used by the X Window System.

• Q: The fonts that I need to run my program aren't included in with MI/X. Where can I get more fonts?

A: Check with your sysadmin, or take a look on the web. Here is a site that I found:

http://sunsite.sut.ac.jp/pub/archives/X11/R6.4/xc/fonts/bdf/100dpi/

http://sunsite.sut.ac.jp/pub/archives/X11/R6.4/xc/fonts/bdf/75dpi/

http://sunsite.sut.ac.jp/pub/archives/X11/R6.4/xc/fonts/bdf/misc/

• Q: I've got all the standard X fonts here in the PCF format. Are these compatible with MI/X, or do they need to be in the BDF format? How do I tell MI/X to add them?

**A:** Yes, you can use the PCF format. Find the BDF/MISC directory (it should be in the directory into which you install MI/X), there should be a file called "fonts.dir" which contains examples of how to add BDF and PCF fonts. The "fonts.dir" file for MI/X corresponds to the file with the same name on a UNIX X server.

 Q: Okay, I understand that to add a font, it has to be in a \*.bdf or \*.pcf format and that they have to be added to the fonts.dir, but how do I do that?

A: First, open the font in a text editor. The first few lines will look like this:

STARTFONT 2.1

FONT -Misc-Fixed-Medium-R-Normal--10-100-75-75-C-60-ISO8859-1

SIZE 10 75 75

Copy the line that appears after FONT. Next, open the fonts.dir file with a text editor. It will look like this:

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gb16.pcf -cclib-fixed-medium-r-normal--16-150-78-78-c-160-gb2312.1980-0

ascii.bdf -mi-fixed-medium-r-normal--16-160-72-72-c-160-ascii-1
7x13b.bdf -misc-fixed-bold-r-normal--13-120-75-75-c-70-iso8859-1

Note that there is a number at the top of the file. This has to match the number of fonts in the file. (I've only included the first three in this example. The actual file would have 84 more entries.) Once the fonts.dir is open, go to the bottom of the file and add the name of the font you are adding and paste in the information you copied from the font. Then change the number at the top of the file to reflect the new number of fonts in the file. In my example, I would change 87 to 88.

• Q: How can I delete fonts?

**A:** Follow the steps mentioned above for opening the fonts.dir file, delete the entry for the font you are deleting, change the number at the top of the fonts.dir file to reflect the correct number of fonts listed in the file. Save the fonts.dir file and delete the \*.bdf or \*.pcf file.

• Q: Can I use a fontserver for MI/X?

A: No. Fonts have to copied to the machine running MI/X.

• Q: When I launch MI/X I get the following sequence of dialogs, what's wrong?

Warning: STARTFONT 2.1 Comment \$XConsortium: 6x13bdf, v1.13

92/04/02

14:24:50 gildea ....

Warning

Warning: file bdfread.c;line 529# bad startfont

Error:fatal: Could not open default font 'fixed'

A: It could be a couple different things:

- 1. Don't move the fonts to your system folder. Leave the fonts in the location that the install process puts them
- Some versions of Expanders for Stufflt archives by default will convert the linefeeds in text files to Mac
  format. This will cause MI/X to report an error when reading the fonts.dir or fonts.alias file. To get around
  this, you will have to temporarily change the Expander program preferences to not convert text files to
  Mac format.
- Q: I get a Bad Length error message when I'm trying to run a program through MI/X. What can I do to correct this?

A: This error occurs when the UNIX box that MI/X is running against attempts to pass an image that is at a greater bit depth than the display of the local machine is set to. For example, if you are running MI/X on a Windows machine set to display 256 colors (8-bit) and the program you are running tries to pass a 16 bit image, you'll get this error. To correct this, set the parameters of the program you are running to match the resolution of the local machine, or change the resolution of the local machine to match the bit depth of the images that the UNIX box is trying to pass.

• Q: When I use a pop-up menu in xterm, scrolling through the menu text causes it to disappear. Is there a fix for this?

A: This is a known error, but there is no fix for it.

Q: Does MI/X support xauth, or is there some other means of limiting what users can use it or what applications they can
open?

A: No.

• Q: It seems that MI/X always takes up the full screen when it is launched. Is there a way I can set the screen size for MI/X?

A: No.

• Q: Is it possible to run MI/X in rootless mode?

**A:** No. You can access your desktop when MI/X is running by going to your application menu and selecting Hide TNTx or bring Finder to the front and Hide Others.

• Q: Can I cut and paste with MI/X?

A: MI/X will support cut and paste of text to other X applications, but not graphics.

• Q: Can I cut and paste between MI/X and a Mac application?

A: No.

• Q: Can I use MI/X to run UNIX programs locally on my Mac computer?

**A:** No. Using MI/X, you can run a UNIX program remotely on the UNIX machine itself, sending the display output to MI/X on your local Mac. You cannot however download a program compiled for UNIX and attempt to run it on your Mac using MI/X (or anything else for that matter). If you have X programs compiled for your Mac, then yes, you can use MI/X as the graphical X environment for these programs. That is why we created MI/X in the first place!

• Q: Can I use MI/X to run programs remotely on my Mac and display the output on a UNIX machine?

A: No.

• Q: Is there a way to use XS to do a rsh or rexec directly to the station I want to login to?

A: No. The MI/X distribution does not include an rsh or rexec client. You can obtain rsh or rexec clients from other sources.

• Q: Does MI/X support dual monitors?

A: Yes, as of the 21 Aug 1997 version. Previous versions do not.

• Q: Is MI/X capable of xdm queries?

**A:** No. Although there may be options and preferences to set regarding xdm, they have not yet been implemented.

• Q: Do you have a version of MI/X that will run on a Windows machine?

A: Yes MI/X 2.0 for windows is a semi-commercial offering available here

• Q: Do you make the source code for MI/X available?

A: No.

• Q: Are there any plans to support the LBX (low band width) extension?

A: No.

• Q: When running a graphics intensive application through MI/X, I get error messages or the graphics don't display correctly. Is there a way to correct this?

A: Try setting your local display to 256 colors (8 bit).

• Q: Does MI/X support psuedocolor?

A: Yes, if your local display is set to 256 colors (8 bit).

• Q: Does MI/X support DirectColor?

A: No.

• Q: Is there a way to start my x-term with a white font color and a black background?

A: Yes. Start the x-term as follows:

xterm -fg white -bg black

• Q: Can I change the bit depth that MI/X is running at to something other than what my local machine is running?

**A:** No. There is a work around, if you have Microsoft's Power Toys installed. You can use quickres to set your display to one bit depth, launch MI/X, minimize MI/X and then use quickres to change the bit depth of your display to something else. This isn't something we recommend, but some users have tried it with success.

• Q: Is MI/X available for the Windows NT running on a DEC Alpha?

A: No.

• Q: My key combination "control-\" doesn't seem to work correctly.

A: This is a known error. There is currently no work around.

• Q: Does MI/X support openGL?

A: No.

• Q: Java programs on SGI, Sun, and DEC machines crash when trying to use MI/X as their X server. Is there a way to correct this?

A: The problem occurs because the Motif AWT libraries use the Font "plain Dialog 12 point" as a fall-back default font. Unfortunately, when using a remote X server sometimes this font isn't available. The problem is common enough to be included in the Java Programmers's FAQ (http://www.best.com/~pvdl/javafaq.txt):

4.2 Why do I get this when using JDK 1.1 under X Windows?

java.lang.NullPointerException

at sun.awt.motif.MFramePeer.<init>(MFramePeer.java:59)

at sun.awt.motif.MToolkit.createFrame(MToolkit.java:153)

at java.awt.Frame.addNotify(Frame.java)

at java.awt.Window.pack(Window.java)

A. There's a missing font on your system. Move font properties from the "lib" subdirectory aside to font properties bak Then it won't look for the font and fail to find it.

Once this fix is in place, MI/X works well with Java clients running on Sun and SGI.

• Q: MI/X was working before and I have upgraded to System 8.5. Now MI/X hangs.

**A:** Due to changes done by Apple for MacOS 8.5, it is necessary to download a newer version of MI/X for the Macintosh. The version date for MI/X to run correctly on MacOS must be later than October 20, 1998 .

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