# Metro-X 4.1 Enhanced Server Set
# Quick Installation and Release Notes
# for
# Linux

## Required Software

You must have *gzip*, *cpio*, and *tar* installed on your system to install Metro-X.

Column 1 shows the software required by this package. Column 2 shows the minimum version required. If you have a later version, that should be fine. If you need to install or upgrade your software, column 3 shows the Internet location from which you can get it.

**TABLE 1: FTP Sites and Files**

| ITEM | VERSION | URL |
|---|---|---|
| Linux Kernel | 1.1.92 | ftp://tsx-11.mit.edu/pub/linux/sources/system/ |
| Linux C Library | 5.3.12 | ftp://tsx-11.mit.edu/pub/linux/packages/GCC/ |
| Shared Dynamic Linker (ld.so) | 1.7.14 | ftp://tsx-11.mit.edu/pub/linux/packages/GCC/ |
| Linux binutils | 2.7 | ftp://tsx-11.mit.edu/pub/linux/packages/GCC/ |
| XFree86 | 3.3 | ftp://tsx-11.mit.edu/pub/linux/packages/X11/XFree86-3.3/ |
| GNU tar, zip, cpio | any | ftp://ftp.uu.net/systems/gnu/ |

## Quick Installation

1. Login to the system console as *root*.
2. You must have XFree86™ already installed on your system. If you need to install or upgrade your software, refer to the *Required Software* section above.
3. If you haven't already, please make these symbolic links, as suggested by the Linux Filesystem Standard. This assumes your filesystem setup is fsstnd-compliant. If not, complain to your Linux vendor, and ask him to comply with the standard in future releases. You will have to find your X binaries, library directories (app-defaults, config, etc.), and include files, and make the appropriate symbolic links yourself.

   ```
   ln -s /usr/X11R6/lib/X11 /usr/lib/X11
   ln -s /usr/X11R6/bin /usr/bin/X11
   ln -s /usr/X11R6/include/X11 /usr/include/X11
   ```

4. Insert the first Metro-X disk into drive A and execute the following command in a temporary directory:

   ```
   # cd /tmp
   # cpio --extract --verbose --block-size=36 -I /dev/fd0
   ```

   Cpio has now extracted a file called `MetroX.tar` into `/tmp`. This file contains all the files necessary to install and run Metro-X.

5. Use the following commands to install Metro-X:

```
# tar –xvf MetroX.tar
# ./install.metroess
```

6. When the installation is finished, type "y" at the prompt: *Run Metro-X 4.1 configX now? (y/n)*
7. Using the graphical configuration screen, select the **Mouse**, **Keyboard**, **Monitor**, **Graphics Card**, **Resolutions**. For details refer to the configuration chapter in the manual.
8. **Save and exit** from `configX`.
9. Remove the temporary files:

```
# rm MetroX.tar install.metroess metroess.tar.gz
```

10. Run the following command: `/usr/bin/X11/X 2>&1 |tee /tmp/errors`
11. This will test the server configuration. You should see a gray background with a small X cursor that tracks the mouse. If this is not what you see, consult the manual for trouble-shooting suggestions.
12. Type Ctrl-Alt-Backspace to exit the server. (If you need to make changes to your configuration, type the command: `/usr/bin/X11/configX`)
13. You are now ready to start `xdm` or use `xinit` to start your normal X session.

# Release Notes

## Graphics Cards

- The following chipsets are not supported:

| | |
|---|---|
| P9000 | MGA older than the Millennium |
| P9100 | Mach 8 |

- Only the following chipsets support DPMS:

| | | |
|---|---|---|
| S3 864 | S3 trio64 | STORM |
| S3 964 | S3 trio 64V | MACH64 |
| S3 trio32 | ARK | I128 |

- ISA-bus Mach64 cards which were supported in Metro-X 3.1 are not supported in Metro-X 4.1 on systems with more than 12 MB RAM.
- If line artifacts (chopped pixels or thin red and green lines) appear at the resolution you are using, tweak the mode using the Timing Editor in ConfigX.
- If the Xerrors file contains the message "no defined matching dot clock for 1152x864@70Hz", your card has a fixed frequency clock chip that does not support that setting. Another revision of the card might support it, however.
- Some ATI Mach64 cards have hardware limitations which prevent the use of certain modes you may have selected. The server probes the card and reports "This mode not valid." The server automatically deletes modes beyond the safe operating range. If you have questions, check the X errors file.

## Keyboards

- If the keyboard is a US English keyboard, then try the English 101 Key keyboard selection. If the arrow keys (and the ones just above them) don't work, then try the English 101 alternate selection. If the keyboard is still not fully functional, then it is a keyboard for which we don't have a keycode definition. Use the Default / Use Console Mapping selection, as it should disable the keyboard extensions altogether.

### Special Keys

- If you are using either the fvwm or fvwm95 window manager you may experience problems using special keys within ConfigX. Use of Ctrl or Ctrl-Shift will result in behavior appropriate to the window manager's mapping of those keys rather than what Metro-X expects. This is most apparent when using Ctrl-Shift plus arrow keys in the timing editor of ConfigX.

### Touch Screens

- If you require touch screen support, contact your dealer to arrange aquisition of a subsequent version of Metro-X.

## Questions/Comments?

**If you have problems with the product, first verify that you have ALL the required software installed.** If that doesn't fix the problem, you can reach Metro Link's technical support in the following ways:

E-Mail: tech@metrolink.com

Phone: +1 (954) 938-0283, ext. 2

Fax: +1 (954) 938-1982

Please be sure to include the error output from running the server and have the following information available:

1. Error output from the server in the file `/var/log/Xerrors`
2. Linux version (`uname -r`)
3. C library version (`ls -l /lib/libc.so.*`)
4. Metro-X version (`cat /usr/X11R6/lib/X11/Metro/.version`)
5. Description of the problem
6. How to reproduce the problem
7. Suggested fix (optional)