# README for XFree86™ 4.2.0

The XFree86 Project, Inc

16 January 2002

**Abstract**

XFree86 is the Open Source port of X.Org's X11R6.6 release that supports several UNIX(R) and UNIX-like (such as Linux, the BSDs and Solaris x86) operating systems on Intel and other platforms.

## 1. What is XFree86 4.2.0?

XFree86 4.2.0 is the fifth full release in the XFree86 4 series.

XFree86 release 4 is a major re-design of the basic architectural underpinnings of XFree86's implementation of the original X Consortium's X Server. This re-design allows for a modular interaction between the hardware drivers and the XFree86 core X server. With 4.x, upgrades to the X server with new and unsupported hardware can be easily done and installed without undergoing the previous process of rebuilding an X server. All that is required is installing the new driver module and updating the configuration file.

The road to XFree86 release 4 began as an architectural concept in mid 1997, with the serious framework being implemented in code the beginning of 1998. There were several snapshots on the road to 4.0 which are now part of the 4.0 base release. The 4.2.0 version is an upgrade to 4.1.0, which include more hardware ports, code enhancements and bug fixes.

Release 4 also included the long-awaited integration of the DRI (Direct Rendering Infrastructure). This upgrade into the code base gives XFree86 the abilities of accelerated direct 3-D graphics rendering, used widely in games and other visualization programs.

While some driver available in the old 3.3.x release series have not been converted over to the 4.x series, those required for most modern video hardware are available. Please check the Driver Status document first to see whether your hardware is supported before upgrading to the 4.x series.

Specific release enhancements can be viewed in the Release Notes.

The XFree86 version numbering system has had some changes as of the 4.0.2 release. Information about this can be found in the Versions Document.

Information about binary distributions and the attendant installation instructions can be found in the Installation Document.

Copyright and Licensing information for this release and all XFree86 releases can be found in the License Document.

# 2. Joining The Team

## 2.1 Development

If you would like to work on the development of XFree86 4, either by helping with the conversion of our older drivers to the new 4.x design, or assisting in the addition of new drivers or platforms to the code base then send a request to join the XFree86 development team <URL:http://www.xfree86.org:/developer.html>. This will give you direct access to the latest XFree86 related development topics and discussions. Include in your note, your name, email address, reason for joining (what you will work on) and, level of expertise (coder, DRI, core, specific driver) and area of interest.

## 2.2 Documentation

If instead your interests are on the Documentation side of the Project, or you want to contribute and are not ready for plunging into the code, you can join the Documentation Team (those hardy souls responsible for the content you are reading :-). Amongst the Doc Team's activities are converting our SGML based documentation into an XML based one and updating and creating technical documentation used by staff and public. If this sounds interesting then please send a request to join the XFree86 documentation team <URL:mailto:signup@xfree86.org>. Include in your note, you name, email address, reason for joining (what you will work on) and level of expertise and whether you are interested in the tools or content side of the group.

# 3. The Public Mailing Lists

## 3.1 Newbie

For those who are new to XFree86 and want to learn more about our Project we recommend that you join our Newbie list, located at Public Mailing Lists <URL:http://www.xfree86.org/mailman/listinfo>, where this and other discussions occur with our senior all-volunteer staff. This is great forum to get introduced to XFree86 and ask for help on how to set up the XServer or whether your hardware is supported, and why not?, and make suggestions for future releases of XFree86. This list is supported by our volunteer staff who needs to know how you are using and interacting with XFree86 and what is wrong and could be better. Tell them, they want to know!

## 3.2 Announce

For those who just want to know the release schedule this is a good list to join.

## 3.3 CVS Commit

For those who want to see what has been committed recently to our CVS repository this is the list that will show you those updates. This list is updated dynamically every time the repository is updated after the the commit happens.

## 3.4 Xpert

If instead you are the lone developer who is improving XFree86 on an ad hoc basis for your particular environment (I want to get my mouse or video card to work), and need a specific question asked then you should go over to our Xpert list where such questions are raised and answered by our technical development staff. Remember you do not have to be a member to write fixes to our code base and if your changes are discrete and self-contained the volume of developer mail may just be too noisy.

Once your work is finished (coded, debugged and documented) please send your fix to <fixes@XFree86.org>. This will ensure that they are included in future releases. And thanks! You make this truly an Open group.

# 4. How to get XFree86 4.2.0

XFree86 4.2.0 can be found at the XFree86 ftp server `<URL:ftp://ftp.xfree86.org/pub/XFree86/4.2.0/>`, and at mirrors of this server. Information about obtaining and installing binary distributions of this release can be found in the Installation Document. Information about obtaining the release in source form is given below.

The source for version 4.2.0 is split into three tarballs: `X420src-1.tgz`, `X420src-2.tgz`, `X420src-3.tgz`. The first contains everything except the fonts and general X11 documentation. It is sufficient for building XFree86 if you already have a set of fonts. The second contains the fonts and the source for the general X11 documentation. The third contains the general X11 documentation in hardcopy format.

A source patch relative to version 4.1.0 is also available. Because of its size, it is split into four parts. The patch files are `4.1.0-4.2.0.diff1.gz`, `4.1.0-4.2.0.diff2.gz`, `4.1.0-4.2.0.diff3.gz` and `4.1.0-4.2.0.diff4.gz`. There is also a tarball that contains some files that have components that can't be included in a diff. It is `4.2.0.tgz`. These patches should be applied to a clean 4.1.0 source tree, working from the directory containing the `xc/` directory. The patches should be applied by running:

```
gzip -d < 4.1.0-4.2.0.diff1.gz | patch -p0 -E
gzip -d < 4.1.0-4.2.0.diff2.gz | patch -p0 -E
gzip -d < 4.1.0-4.2.0.diff3.gz | patch -p0 -E
gzip -d < 4.1.0-4.2.0.diff4.gz | patch -p0 -E


rm -f xc/extras/freetype2/builds/mac/ftlib.prj
rm -fr xc/extras/freetype2/docs/design
rm -fr xc/extras/freetype2/docs/glyphs
rm -fr xc/extras/freetype2/docs/image
rm -fr xc/extras/freetype2/docs/tutorial
rm -f xc/programs/Xserver/hw/darwin/bundle/English.lproj/MainMenu.nib/objects.nib
rm -f xc/programs/Xserver/hw/darwin/bundle/Japanese.lproj/Localizable.strings
rm -f xc/programs/Xserver/hw/darwin/bundle/Japanese.lproj/MainMenu.nib/objects.nib


gzip -d < 4.2.0.tgz | tar vxf -
```

The contrib part of the distribution was folded into the main source tree a while ago, so a separate contrib tarball is not required.

To format the XFree86 documentation use the latest version of our doctools package available as `doctools-1.3.tgz`.

The XFree86 source code can also be accessed via the XFree86 CVS repository. Information about accessing this can be found at the CVS page `<URL:http://www.xfree86.org/cvs/>` on our web site. It's also possible to browse the XFree86 CVS repository at our CVSWeb server `<URL:http://cvsweb.xfree86.org/>`.

# 5. Reporting Bugs

Bugs should be reported to <XFree86@XFree86.org>. Before reporting bugs, please check the X server log file, which can be found at `/var/log/XFree86.0.log` on most platforms. If you can't resolve the problem yourself, send the entire log file with your bug report but not the operating system core dump. Do not edit the log file as our developers use it to reproduce and debug your problem.

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$XFree86: xc/programs/Xserver/hw/xfree86/doc/sgml/README.sgml,v 3.119 2002/01/16 19:40:48 dawes Exp $