

## Installing and exploring Xfce 4.2

# A NEW STAR

If you're ready for life without KDE or Gnome, maybe it is time to try Xfce, a lean, fast, and eye-catching desktop with a large collections of tools.

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In January of this year, the Xfce project released version 4.2 of the Xfce desktop (see Figure 1). Like most alternative desktops, the Xfce desktop is faster and easier on resources than sprawling systems like Gnome and KDE. But Xfce is far more advanced than many of the alternatives.

The Xfce 4.2 desktop, which is compliant with freedesktop specifications, provides several useful management utilities, a development framework for building applications, and support for more than 40 languages. Xfce 4.2 offers a unique blend of features and performance that make it an ideal alternative for many users who want to scale down from Gnome or KDE.

## Installing Xfce 4

Just like Gnome, Xfce is based on the GIMP Multi Platform Toolkit. GTK+ is obviously one of the packages you will need in order to install Xfce 4. Besides GTK+, you will additionally need *pkg-*



*config*, *libxml2*, *libdbb*, and matching *devel* packages, *dbh* [1] and *a2ps* [2]. The Xfce homepage [3] has detailed information on what these required packages do.

Some distributions, including Suse Linux and Fedora Core 3, have their own Xfce packages that fulfill all dependencies. Users with Suse can run YaST to install Xfce. Users with Fedora Core 3 can run the package management tool by selecting *System settings | Add/Remove applications* in the main menu. This command gives you an Xfce 4 package for a point & click install.

Alternatively, change to the directory with the Fedora packages at the command line (for example, */media/cdrom/Fedora/RPMS/*) and then enter *system-install-packages xfce4\**. If you opt for this approach, you will need to install the Xifm file manager manually as your next step.

For all other distributions – or if you want to try out the very latest version of

Xfce – first install the Xfce binary or source code packages. Users with Ubuntu Linux can then launch the GUI-based package management tool, Synaptic, or give the following command *apt-get install xfce4* to perform the installation. You will need an Internet connection in both cases; also make sure you have selected *Universe* as the package source. When you are finished installing, you can enter *startxfce4* to launch Xfce. Mandrake Linux also has ready-to-run packages at [4]. Type the following commands

```
urpmi.addmedia eslrahc 
http://www.eslrahc.com/10.1/ 
with hdlist.cz
```

to add the URL to your existing installation sources. Now launch Rpm Drake, search for Xfce, and select the *xfce-4.2.1* package. Rpm Drake automatically resolves any dependencies. Note that, by default, Rpm Drake does not install the



Figure 1: Xfce offers an attractive user interface with many advanced features.



Figure 2: The installation wizard by Os-Cillation.com serves as Xfce's GUI-based installer.

huge collection of tools available for Xfce 4.2.1.

## Wizard-driven Installation

One of Xfce's special features is that the desktop environment has its own GUI-based installer (see Figure 2). If you want to use the installer, download the 15MByte `xfce4-4.2.1.1-installer.bin` file from [5] and make it executable by typing `chmod +x xfce4-4.2.1.1-installer.bin`.

Then pop up a terminal window while the window manager is running and enter `xhost +localhost`. Make sure you run this command as a normal user and not as `root`. You can then `su` to `root` and launch the installation by typing `./xfce4-4.2.1.1-installer.bin`.

The Xfce Installer checks your existing software components, downloads any required programs off the Internet, and installs a complete Xfce environment. The program lets you know before it starts if it can't resolve the required dependencies.

## Debugging Support Buggy

The next step is to select the components you would like to install. Avoid the *Debugging Support* option here. If you enable this option, an error message is displayed at the end of the install. According to an Xfce developer, this issue is caused by a bug in the `xf-calendar` program that prevents users installing with debugging support.

Even though we disabled debugging support, an error message displayed at the end of our installation attempt: *Software Uninstaller: Registering failed.*

Again, this is caused by a bug, but thankfully, the bug does not affect Xfce itself. The environment as set up by the GUI installer worked fine.

## Installing from the Sources

The full set of Xfce modules is available as a tar archive directly from SourceForge [6]. In order to install the Xfce modules, you need to download the `xfce-4.2.1.1-src.tar.bz2` and `a2ps.tar.gz` files, although most distributions will

already have the latter installed. If *which a2ps* returns the path to the program, you only need to download the Xfce package.

Install `a2ps` first, if needed. Then unpack the `xfce-4.2.1.1-src.tar.bz2` file by giving the `tar xvjf xfce-4.2.1.1-src.tar.bz2` command. The folder this step creates, `xfce-4.2.1.1`, contains a number of tar.gz archives that contain the program code. You can enter `tar xfuz filename.tar.gz` to unpack these archives.

Table 1: Major Xfce 4.2 Components

Component	Function
<code>xfwm4</code>	The Window Manager at the core of the Xfce 4 desktop environment.
<code>xfce4-panel</code>	An intuitive panel that allows you to easily add menus and launcher buttons.
<code>xfce4-session</code>	The session manager ensures that you will find the desktop as you left it the last time you logged off.
<code>xfce-mcs-manager</code>	The settings manager, a neat configuration tool.
<code>xfce-mcs-plugins</code>	Plug-ins for the settings manager which are not strictly necessary, but make life with mouse, keyboard, and screen far easier.
<code>xffm</code>	Xffm is a fast file manager. The fact that it integrates a Samba network browser is a useful feature for networked users and similar to, say, LinNeighborhood.
<code>xfce4-appfinder</code>	The Xfce Application Finder finds installed programs by parsing the <code>.desktop</code> files, just like KDE and GNOME.
<code>xfce4-icon-theme</code>	The Xfce 4 standard icon theme. It supports PNG and SVG icons at present.
<code>xfce-utils</code>	The accessories package includes a number of management tools, scripts, and user documentation for browser viewing.
<code>xfdesktop</code>	The <code>xfdesktop</code> wallpaper manager handles desktop background settings and gives users a root menu on right clicking. The root menu editor deserves a special mention. You can use it to set up the root or desktop menu to suit your needs. The menu editor is also the interface used for editing the <code>~/.config/xfce4/desktop/menu.xml</code> file.
<code>xfprint</code>	Xfprint is an independent print manager that supports CUPS, BSD-LPR or printing to a file.
<code>xfwm4-themes</code>	Decorative themes for the <code>xfwm4</code> window manager.
<code>gtk-xfce-engine-2</code>	The <code>gtk-xfce-engine-2</code> allows more window dressing for GTK2. It is not strictly necessary but gives users a lot of eye candy for the desktop.
<code>xf-calendar</code>	Xf-calendar is a simple calendar with a reminder feature.



Figure 3: The Xfce panel gives users a small menu and a number of quick launchers.

Now change directory in turn to *dbh-1.0.22*, *gtk-xfce-engine-2.2.6* and *libxfce4util-4.2.1*. While you are in each of the three directories, enter *./configure*, *make*, and *make install*. You need to be *root* for the *make install* step. After completing the installation of *libxfce4util*, become *root* and launch the *ldconfig* program to set the path to *Pkgconfig*:

```
export PKG_CONFIG_PATH=/usr/
local/lib/pkgconfig
```

Now continue the installation with the *libxfcegui4*, *libxfce4mcs*, and *xfce-mcs-manager* directories. You can then add more modules in any order you like. When you have finished adding modules, type *ldconfig* to ensure that Xfce will find its system libraries when it is launched.

If you install Xfce without setting any parameters, the desktop environment will be placed below */usr/local/*. If you would prefer to install Xfce in */usr*, you need to stipulate *--prefix=/usr* when calling *./configure*. You will not need to *export PKG\_CONFIG\_PATH=* if you do this.

**Xfce 4 Components**

Xfce 4.2 includes a number of applications (see Table 1), a collection of scripts (see Table 2) and system libraries. The latter provide basic functionality to Xfce and are comparable with the DLL files used by Windows.

For example, the *libxfce4mcs* library allows you to manage various settings, although most Xfce4 applications do not use it. *Libxfce4util* contains a non-GUI help system. *Libxfcegui4* handles interaction with the X Window system.

**The Panel**

The intuitive Xfce 4 panel has icons for the terminal, file manager, web browser, email, media player, desktops, settings manager, printers (with drag-and-drop), help files, screen locker, logoff, and shut-

down functions (see Figure 3). You can configure an icon by right clicking on that icon.

You can use the arrow buttons to the right of the file manager and to

the right of the printer manager to add more entries to the kicker. For example, if you typically store your files below */data*, you might like to have *xfm* point at this directory when launched. To do so, add a new launcher and type the */data* URL as the *Command*:. Whenever you click on the entry in the panel, the *xfm* file manager launches and takes you directly to your */data* directory. To add a new launcher to the panel, right click the panel and select *Add new object | Starter*.

**The Settings Manager**

The Settings Manager is a configuration panel that allows you to configure the appearance and behavior of various applets in a convenient way (see Figure 4).

Besides a number of cosmetic options, the Settings Manager also has tools for sound settings, printer settings, and calendar access. Some of the settings controlled by the Settings Manager are fairly rudimentary (for example, the Settings Manager does not provide an option for

testing the sound when you set up the sound card), but the program is easy to use and intuitive.

**The Xffm File Manager**

The fast Xffm file manager uses a completely different design and looks a lot different from its competitors, Konqueror and Nautilus. This said, its functionality is easy to understand and should make life easier for users moving to Linux from Windows. Xffm comprises eight components, which you can launch individually via the *Main Menu*.

- **Xftree** – Xftree is the file manager itself. It displays local files and supports file browsing. The command for launching xffm to display local files is *xfree4*.
- **Xfsamba** – The Xfce SMB client. The network browser allows users to search for Windows computers on the network and to access remote directories. To launch this component as a stand-alone program, type *xfamba4*.
- **Xfbook** – allows users to define bookmarks for virtual folders and files. Xfbook not only handles local bookmarks but can also tag network folders. You can launch the component by typing *xfbook4*.
- **Xfglob** – displays the results of a file search. Users can open or launch files and programs directly from here. The *xfglob4* command launches the search dialog.



Figure 4: The Settings Manager gives you access to Xfce components and settings.

- **Xffrequent** – gives you a list of files and directories frequently visited in Xffm, defining 13 visits as frequent. You can change the threshold in the main menu as required. The `xfapps4` command launches the stand-alone tool.
- **Xfrecent** – shows you the files you last accessed via Xffm. `xfrecent4` launches this tool.
- **Xfstab** – The Fstab component, which you can launch by typing `xfstab4`, displays physical devices and mount points. Assuming they have the necessary privileges, users can also mount and unmount drives here.
- **Xftrash** – The Xfce trashcan, which is unlike anything in KDE or Gnome. If

you drag a file in a directory to the trashcan, Xfce automatically creates a hidden folder called `.wastebasket` in that folder and moves the file there. This allows you to investigate the content of the trashcan for each folder individually in `xfttrash4`.

## Conclusions and Roadmap

Xfce 4 is a stable and very fast desktop environment. It may not have as many features as the big guns, KDE and Gnome, however, it is excellent for older machines with restricted memory resources or for users who appreciate a fast desktop environment.

Working with Xfce is an intuitive process, which should make life easier for

newcomers or users with Windows-only experience. To make things even more simple, support for desktop icons is planned. There is a detailed todo list at [7]. While the Xfce developers are completing this work, you might like to install the Rox Filer [8] tool to give you desktop icons on Xfce. ■

## INFO

- [1] Disk based hash tables: <http://sourceforge.net/projects/dbh/>
- [2] PostScript Converter: <http://ftp.gnu.org/gnu/a2ps/>
- [3] Xfce homepage: <http://www.xfce.org/>
- [4] Mandrake packages: <http://www.eslrahc.com/>
- [5] Xfce installer: <http://www.os-cillation.com/article.php?sid=42>
- [6] Xfce source: <http://sourceforge.net/projects/xfce/>
- [7] New features: [http://www.myoo.de/xfce/index.php/4.4\\_TODO](http://www.myoo.de/xfce/index.php/4.4_TODO)
- [8] Rox Filer: <http://rox.sourceforge.net/phpwiki/index.php/ROX-Filer>

**Table 2: Major Scripts**

<code>startxfce4</code>	Xfce 4 window manager start script
<code>xfhelp4</code>	Opens the locally installed Xfce 4 documentation in your browser
<code>xflock4</code>	Locks the screen using the Xscreensaver to do so, if available.
<code>xfmountdev4</code>	Mounts a devices at the specified mount point and opens xffm at that point. When you close xffm, the device is unmounted.
<code>xfterm4</code>	Launches the terminal defined by the <code>\$TERMCMD</code> variable. If the variable is not set, the script calls <code>xterm</code> by default.

## Advertisement