



Xfce 4.6 And Then?

FOSDEM 2009

Jannis Pohlmann – jannis@xfce.org

What is Xfce?

Xfce is a Desktop Environment

- ▶ Written in C with GTK+ and has a focus on
 - ▶ user-friendliness
 - ▶ modularity
 - ▶ lightwightness
 - ▶ configurability
 - ▶ standards compliance

Who is Xfce?

- ▶ About 6 active core developers
- ▶ Up to 40 goodie developers
- ▶ Translators for more than 40 languages
- ▶ Packagers for a number of distributions (Debian, Xubuntu, openSUSE, Gentoo, Lunar Linux, OpenBSD and more)



Last Stable Releases

Xfce 4.2 (2005)

- ▶ Features: new session manager, menu editor, multihead support, keyboard shortcuts, kiosk mode, composite manager

Xfce 4.4 (2007)

- ▶ Latest stable release
- ▶ Introduced libexo and the file manager Thunar
- ▶ New panel API with plugins running in their own processes
- ▶ Support for desktop icons
- ▶ Multiple panels
- ▶ Three bugfix releases so far (last one: 4.4.3, October 2008)



Xfce 4.6



The Upcoming Release: 4.6

Goals

- ▶ Replace the MCS manager with a solution based on D-Bus
- ▶ Migrate all settings dialogs and applications to the new configuration system
- ▶ Integrate the new fd.o compliant menu library
- ▶ Rewrite the mixer based on GStreamer
- ▶ Stabilize the other components

Release Schedule

- ▶ Perform a time-based release for the first time
- ▶ Current Status: 4.6 RC1 released 2009-01-26



New Features: Xfconf

Problem with the MCS manager

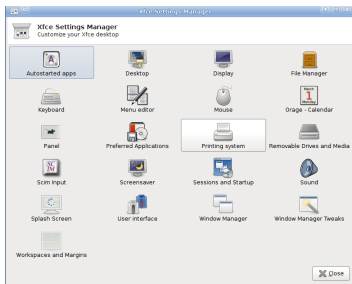
- ▶ Settings manager and dialogs running in the same process
- ▶ Settings dialogs were plugins
- ▶ Inter-process communication over X11

Solution: Xfconf

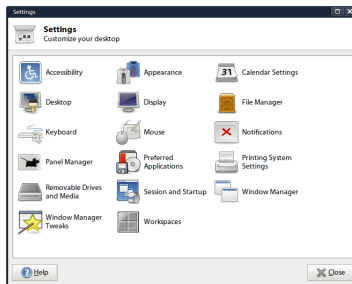
- ▶ Daemon implemented as a D-Bus service
- ▶ Design similar to GConf and DConf but without schemas
- ▶ Supports different storage backends (defaults to XML files)
- ▶ Has a nice API for binding GObject properties to settings
- ▶ Support for locking properties (kiosk mode)
- ▶ Settings dialogs are now independent of the settings manager



New Features: Settings Dialog (xfce4-settings-manager)



4.4



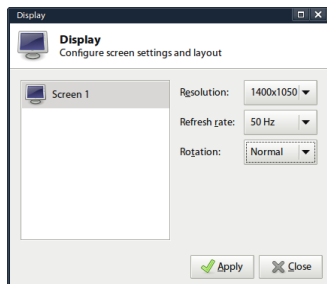
4.6

Features

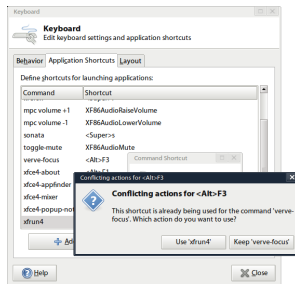
- ▶ GUI similar to the Thunar icon view
- ▶ Reads dialog information from desktop entries in `/usr/share/applications`
- ▶ Overview dialog size no longer forced by number of items



New Features: Settings Dialogs (xfce4-...-settings)



xfce4-display-settings



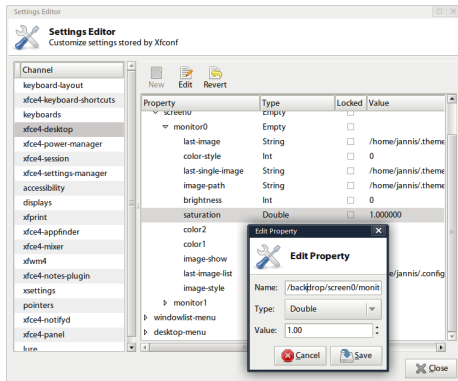
xfce4-keyboard-settings

Features

- ▶ Display settings with RandR
- ▶ Keyboard shortcuts with conflict help and without themes
- ▶ Most dialogs rewritten using Glade and Xconf



New Features: Settings Editor (xfce4-settings-editor)



Features

- ▶ Lists all channels and properties
- ▶ Allows properties to be edited



New Features: xfconf-query

Query Settings

```
jannis@orion ~$ xfconf-query -c xfce4-desktop \  
                        -p /backdrop/screen0/monitor0/image-path \  
/home/jannis/.themes/Wallpaper/nudibranchs1600x1200.jpg
```

Change Settings

```
jannis@orion ~$ xfconf-query -c xfce4-desktop \  
                        -p /backdrop/screen0/monitor0/image-path \  
                        -s .themes/Wallpaper/witchcult_today.png
```

Features

- ▶ Listing, creating and editing properties
- ▶ Monitoring channels
- ▶ Importing/exporting channels from/to files



New Features: Menu Library (libxfce4menu)

Usage

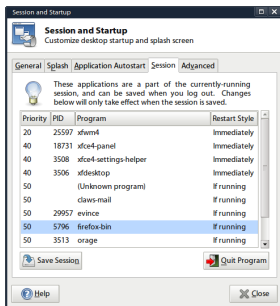
```
XfceMenu *menu;  
GError *error = NULL;  
  
xfce_menu_init ("XFCE");  
if (filename != NULL)  
    menu = xfce_menu_new (filename, &error);  
else  
    menu = xfce_menu_get_root (&error);  
...  
xfce_menu_shutdown ();
```

Features

- ▶ Supports the desktop entry specification
- ▶ Covers all of the menu specification, except
 - ▶ Menu merging (important)
 - ▶ Legacy directories



New Features: Improved Session Management



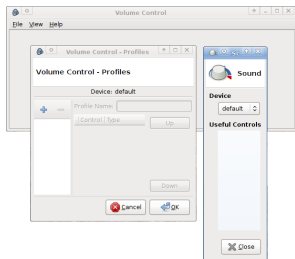
xfce4-session-settings

Features

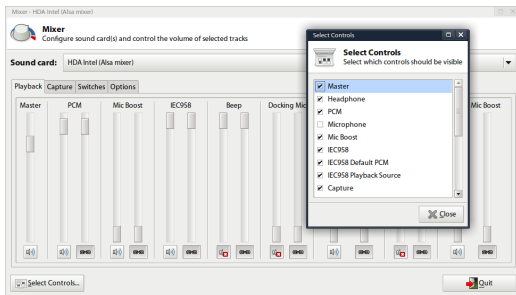
- ▶ Start clients in parallel
- ▶ Edit/save sessions in a more convenient way
- ▶ Improved XSMP specification compliance
- ▶ Support for suspend/hibernate



New Features: Volume Control (xfce4-mixer)



4.4



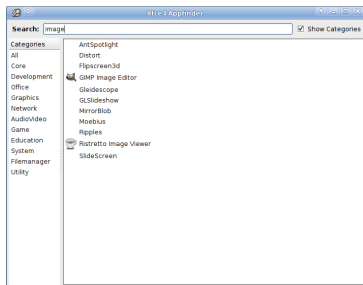
4.6

Features

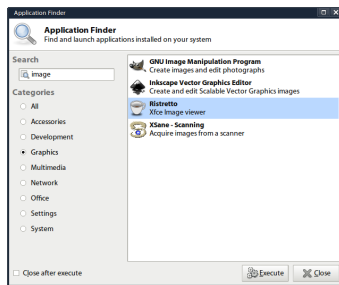
- ▶ GStreamer instead of individual sound system support
- ▶ Settings are managed using Xconf
- ▶ Clean user interface
- ▶ New panel plugin



New Features: Application Finder (xfce4-appfinder)



4.4



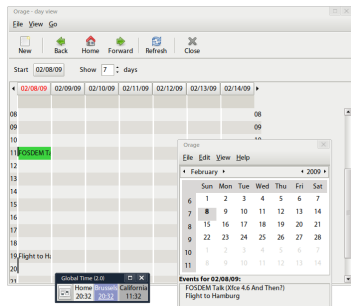
4.6

Features

- ▶ Improved user interface
- ▶ Uses libxfce4menu for the categories and tree view content
- ▶ Uses ThunarVFS to monitor the filesystem for changes



New Features: Calendar (orage)



Features

- ▶ Support for all basic appointment types of iCal
- ▶ New weekly view
- ▶ Global time tool



Other Features

Window Manager (xfwm4)

- ▶ Can now kill applications which are not responding
- ▶ Rewritten/improved resize/move operations using the keyboard
- ▶ Improved session and EWMH support
- ▶ Keyboard themes removed

Other Components

- ▶ xfdesktop: rubber band selection of items, monitor hotplug support, new menu system
- ▶ xfce4-panel: system tray rewritten, migrated to libwnck
- ▶ Thunar: new plugin for changing the wallpaper, many bugfixes



The Release Process



The 4.6 Release Process

Original Plan

- ▶ 1 alpha release in June 2008
- ▶ 3 beta releases in July and August
- ▶ 1-2 release candidates in September
- ▶ Final release at the end of September 2008



The 4.6 Release Process

Original Plan

- ▶ 1 alpha release in June 2008
- ▶ 3 beta releases in July and August
- ▶ 1-2 release candidates in September
- ▶ Final release at the end of September 2008

Current Status

- ▶ 1 alpha release in September 2008
- ▶ 3 beta releases in October, November and January
- ▶ 1 release candidate at the end of January 2009
- ▶ Another release candidate planned before 4.6.0



The 4.6 Release Process: Main Problems

Release Management

- ▶ Only 1 release manager. His tasks included:
 - ▶ Update NEWS, ChangeLogs etc.
 - ▶ Tag releases
 - ▶ Create, test and upload tarballs
 - ▶ Prepare release announcements

Challenges

- ▶ Migrate all applications from MCS to Xconf
- ▶ Implement way to deal with shortcut conflicts (launch applications, xfwm4 actions)

Real Life

- ▶ Work, studies, vacation, dying laptops ...



The 4.8 Release Process

Goal

- ▶ Shorter release cycle (less than a year)

Predictable Schedule

- ▶ Increase the bus factor
- ▶ Make individual maintainers responsible for preparing their components for releases
- ▶ Smaller infrastructure changes between releases
- ▶ Make extensive use of branching for big new features

Infrastructure Improvements

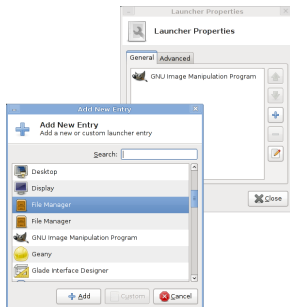
- ▶ Switch to a DVCS (git probably)
- ▶ Use Buildbot for build tests
- ▶ Make preparing releases easy for maintainers (tarball manager web application?)



The Future



Xfce 4.8: Planned Features



Panel

- ▶ D-Bus communication between panel and plugins
- ▶ Launch external plugins in a wrapper application
- ▶ Create launchers using DND, command line and desktop entries
- ▶ Add Xfconf API for plugins



Xfce 4.8: Planned Features

Thunar

- ▶ Replace ThunarVFS with GIO/GVfs (thesis)
- ▶ Make more parts accessible to extensions via Thunarx

xfwm4

- ▶ Improve application window cycling
- ▶ Clutter compositor backend (maybe)
- ▶ Multitouch support (maybe)

Other Than That ...

- ▶ Migrate missing pieces to Xfconf
- ▶ Improve the UI on smaller screens (netbooks)
- ▶ Improve documentation
- ▶ Many (hopefully not too many) more



We Need You!

How You Can Contribute

- ▶ Development
- ▶ Documentation
- ▶ Translations

Contact Us

- ▶ `#xfce` on `irc.freenode.net`
- ▶ `xfce4-dev@xfce.org` mailing list

