LXDE Foundation

Mario Behling, Berlin/Taipei
Christoph Wickert, Münster

LXDE

Lightweight X11 Desktop Environment

LXDE

Lightweight X11 **Desktop Environment**

My Documents
sayya_mysql
Clopidogrel Is Safe Early ...
Answer.aspx.html
NARCOTIC ANALGESIC...
Surgery for Cardiac Val...
46860-vista_glow....
CPR on 11-05
gutsy-20071025-1.png
Internet Explorer 6.0
18 Brazil (Around th...
DSCN0713.JPG
Adobe Reader 8
65146-Metacity-Z...
bookmarks.sh
cai_hong.gp3
41090-LiNsta-Pack...
lxde_screenshots
tuning.mid
LiNsta-Pack
Temp
LXDE
Lightweight X11 Desktop Environment
05:33

Start up Times

Tests on eeepc 900

Application	Ubuntu 8.04	Linpus Lite	WinXP	LXDE
OpenOffice Writer (1st start)	5.58s	6.02s	22.53s	2.48s
OpenOffice Writer (2nd start)	1.55s	1.73s	2.17s	1.07s
Media Player (1st start)	2.03s	2.55s	4.29	1.58s
Standard File Manager (1st start)	3.00s	4.21s	2.94s	0.98s
Standard File Manager (2nd start)	0.40s	0.63s	0.87s	0.37s
Standard Terminal	2.32s	1.35s	1.82s	0.57s
Firefox (1st start)	8.39s	7.41s	9.51s	3.35s
Firefox (2nd start)	3.28s	4.91s	2.10s	2.12s

Tests conducted Oct 5, 2008

LXDE

Lightweight X11 Desktop Environment

- less resource hungry, lighter, faster
- LX: also Linux
- especially designed for new generation devices like netbooks and MIDs.
- Written in C
- Started by PCMan from Taiwan in 2005

LXDE

Lightweight X11 Desktop Environment

- takes 4.6 M on a normal Fedora install with base and base-x. Xfce for example takes 22,8 M, Gnome 177 M.
- optimized for low memory usage.
- follows a modular approach, so you can easily add/remove/replace components. All applications support different configuration profiles to work in different desktop environments.

LXDE

Lightweight X11 Desktop Environment

- Due to it's modular approach there are no long dependency chains. Most packages only require gtk2.
- Supports input methods and accessibility because it uses gtk.
- has everything a desktop needs: Panel with plugins, desktop with icons, session manager, task manager, text editor, image viewer, archive manager.

LXDE Live Demo

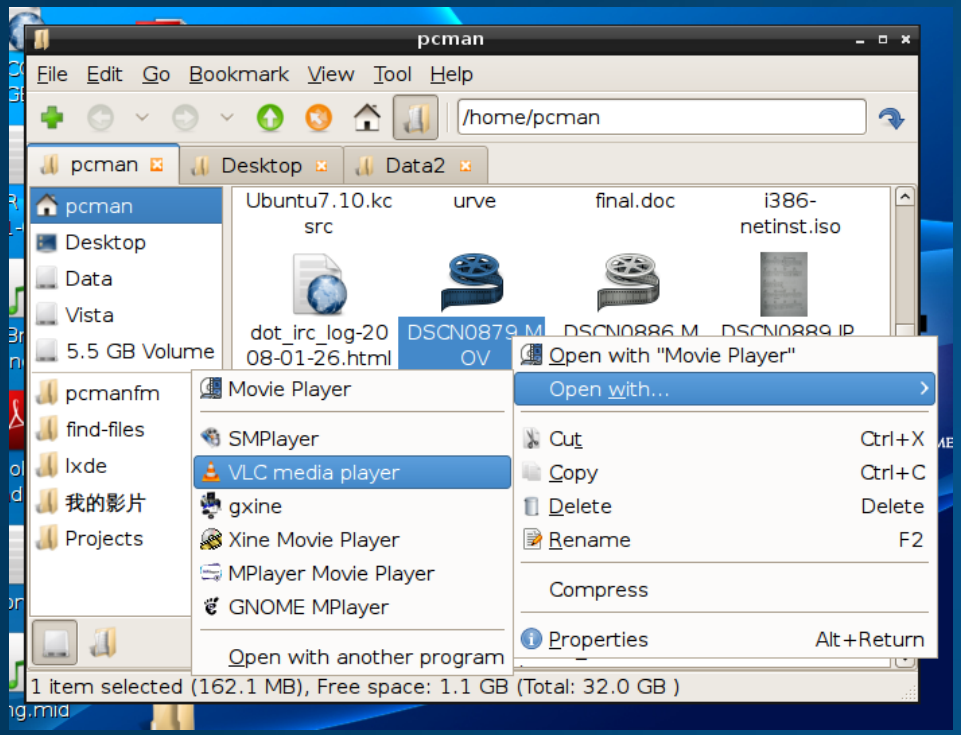
Each component of LXDE can run independently

Components

PCManFM, LXTask,
LXPanel,
LXLauncher
LXSession_Lite,
LXAppearance,
GPicView, Leafpad,
LXTerminal,
Xarchiver, LXNM,
Lxrandr
LXMusic
MenuCache
LXSessionEdit

LXDE Live Demo

Each component of LXDE can run independently

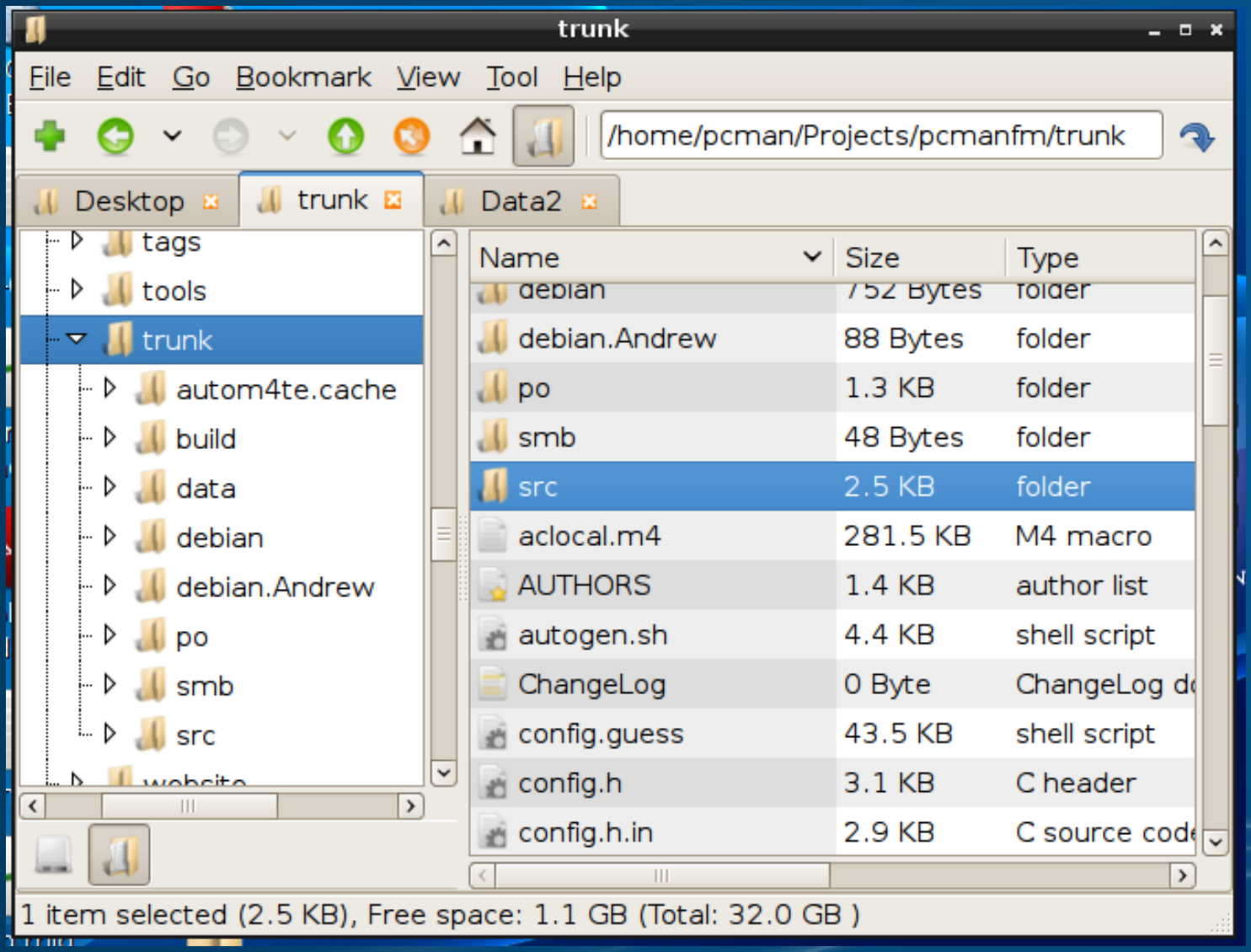


PCManFM

- fast and robust file manager
- tabbed-browsing
- desktop icons
- choice to MS Windows like tree view
- low system resource usage
- first version 2005
- More than 30 developers

LXDE Live Demo - PCMan File Manager

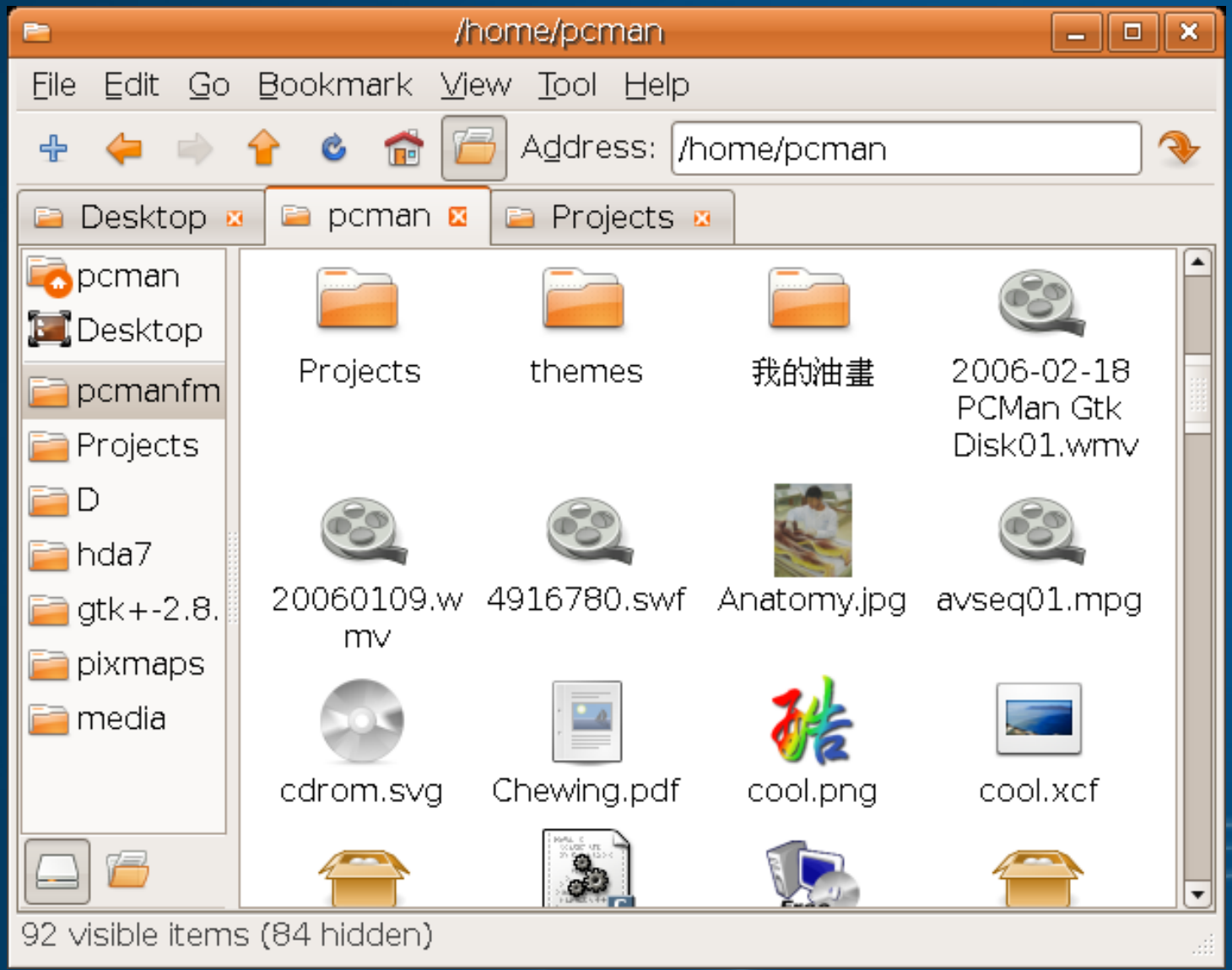
Each component of LXDE can run independently



File Manager can change appearance.

LXDE Live Demo - PCMan File Manager

Each component of LXDE can run independently



File Manager can change appearance.

LXDE Live Demo - PCMan File Manager

Features Overview

- Thumbnails for pictures
- Desktop - Icons
- Internet bookmarks
- multilingual
- Inotify support (experimental)
- Multithreading to load large directories quickly
- Can be started in one second on normal machine
- Tabbed browsing (Similiar to Firefox)
- Built-in volume management (mount/umount/eject through HAL)
- Built-in file searching utility (GUI frontend for the UNIX find + grep command)
- Drag & Drop support
- Files can be dragged among tabs
- Load large directories in reasonable time
- File association support (Default application)
- Thumbnail for image files
- Bookmarks support
- Handles non-UTF-8 encoded filenames correctly
- Provides icon view, compact view, and detailed list view
- Standard compliant (Follows FreeDesktop.org)
- Clean and user-friendly interface (GTK+ 2)

LXDE Live Demo - PCMan File Manager

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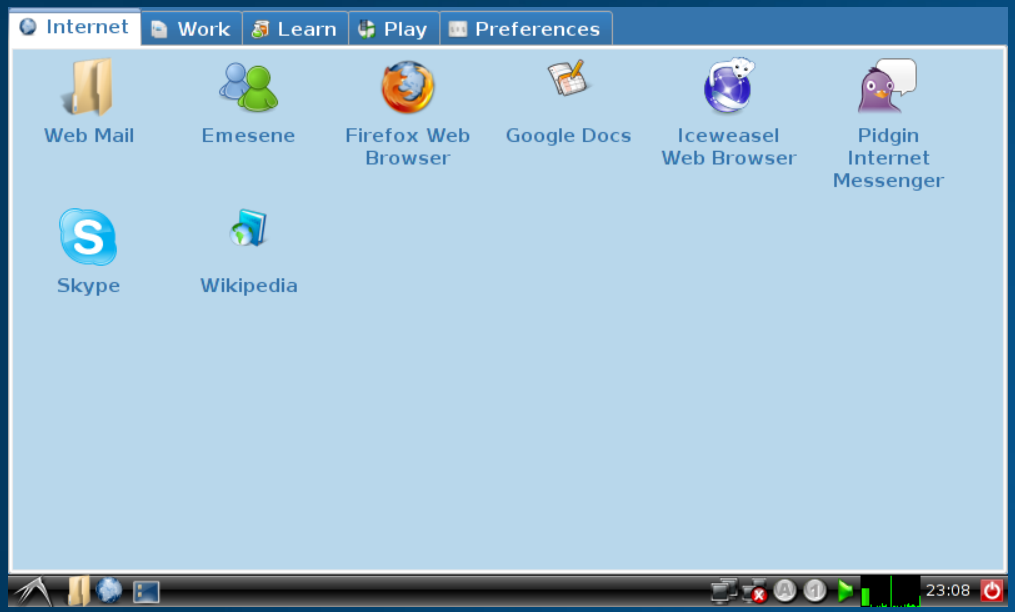
LXDE Live Demo – LXLauncher

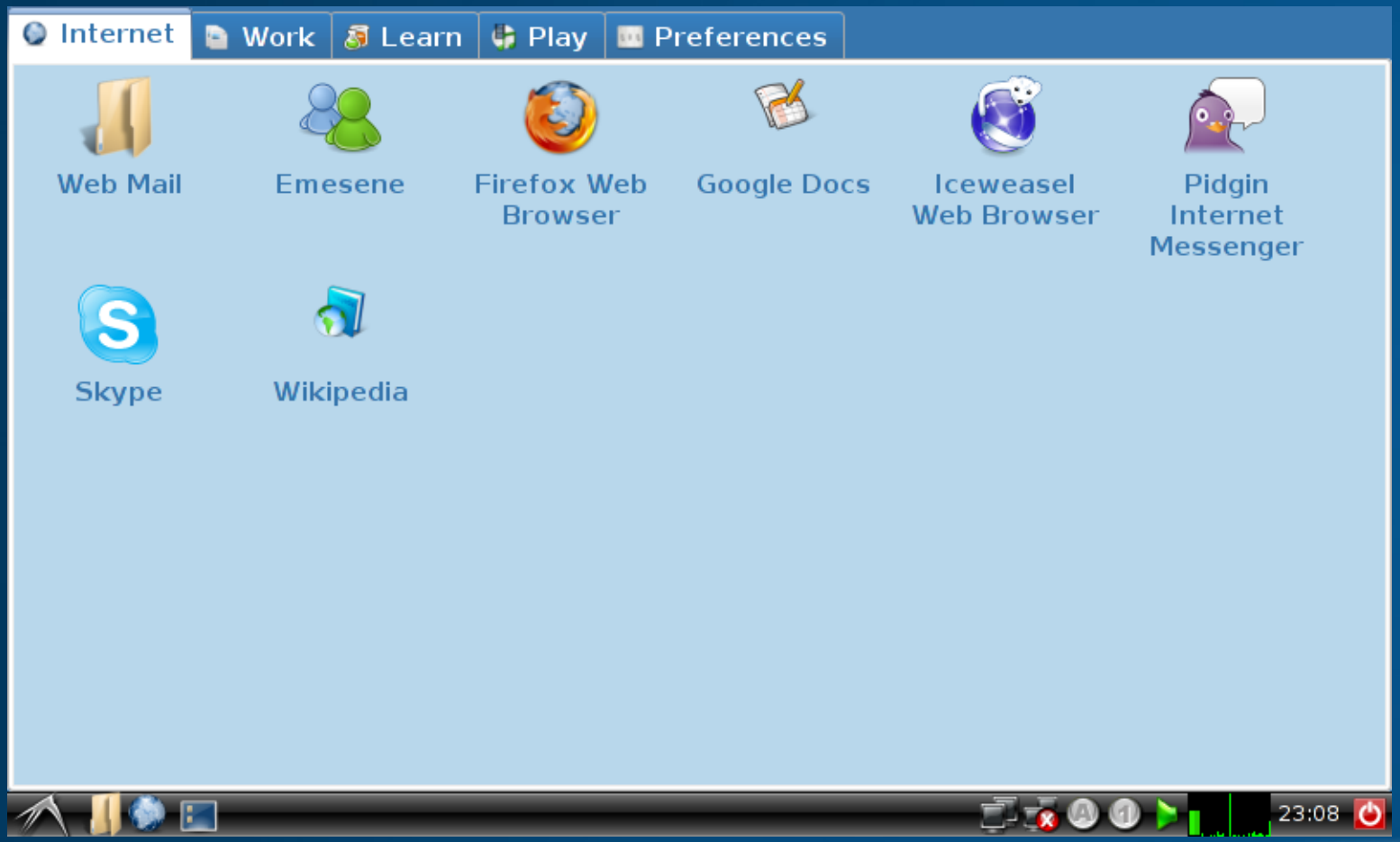
Each component of LXDE can run independently



- fast easy-mode application launcher
- offering topic desktops
- new applications show up on desktop
- Instantly click and see
- configurable for advanced users via config file

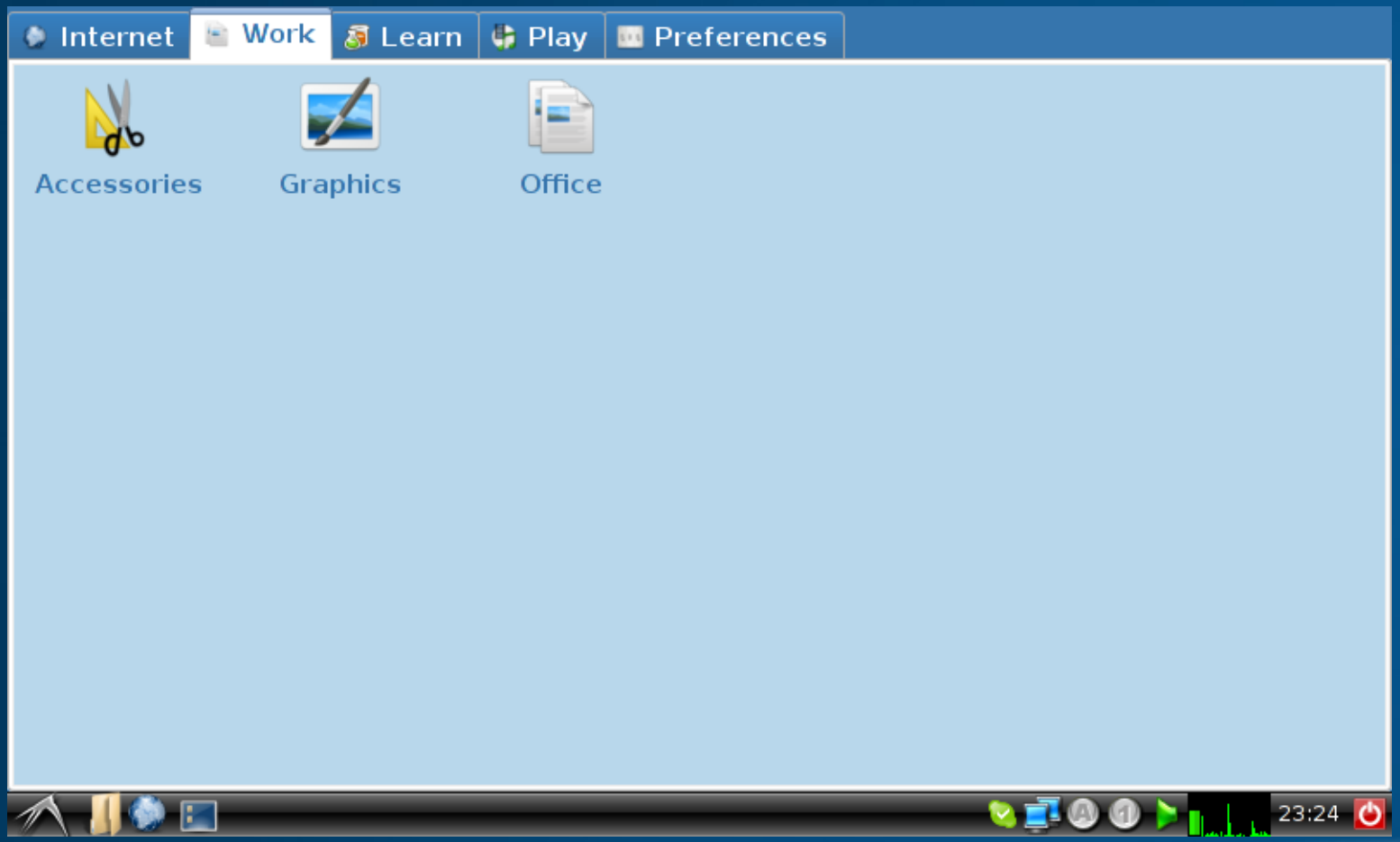
LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



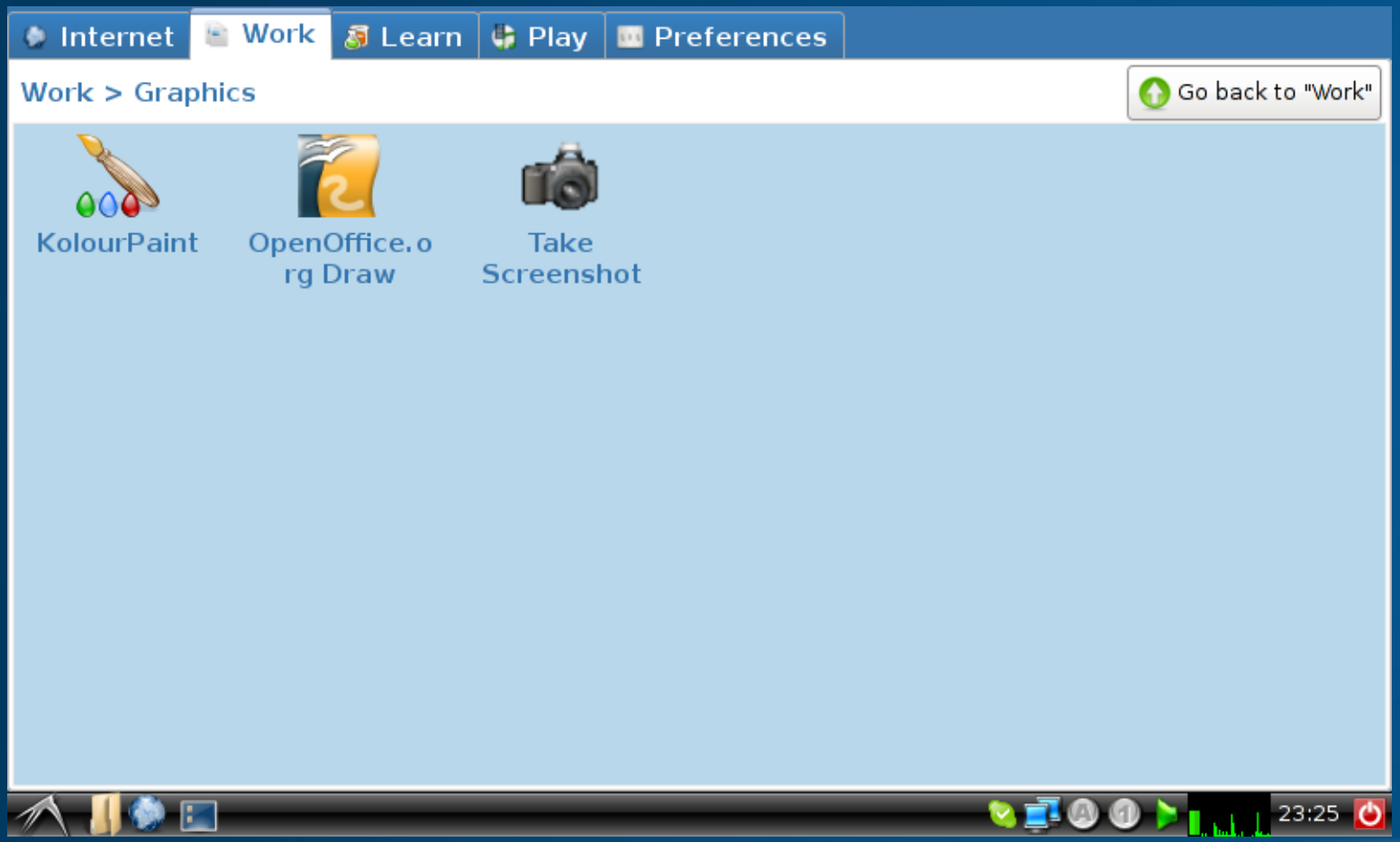
LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



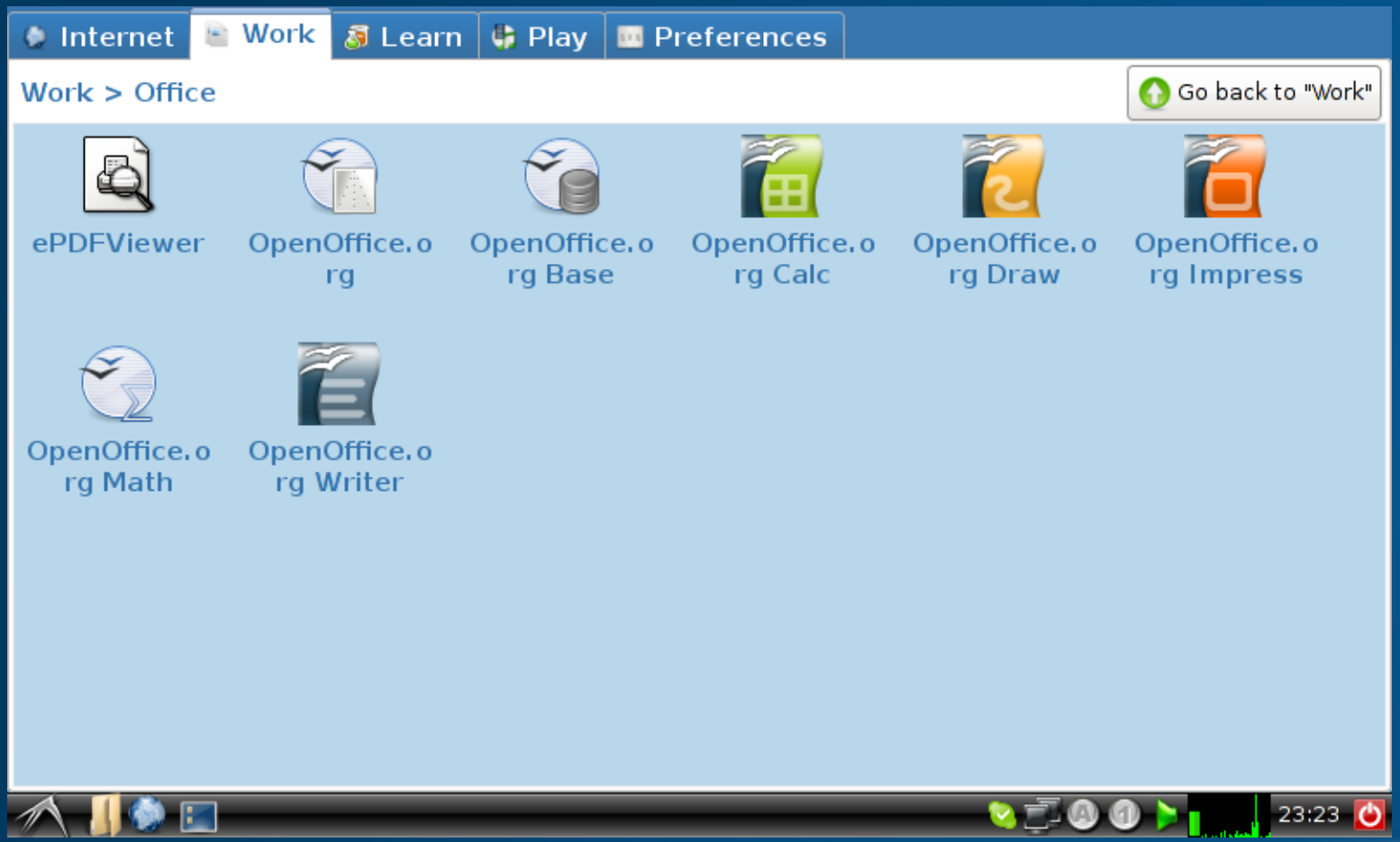
LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



LXDE Live Demo – LXLauncher

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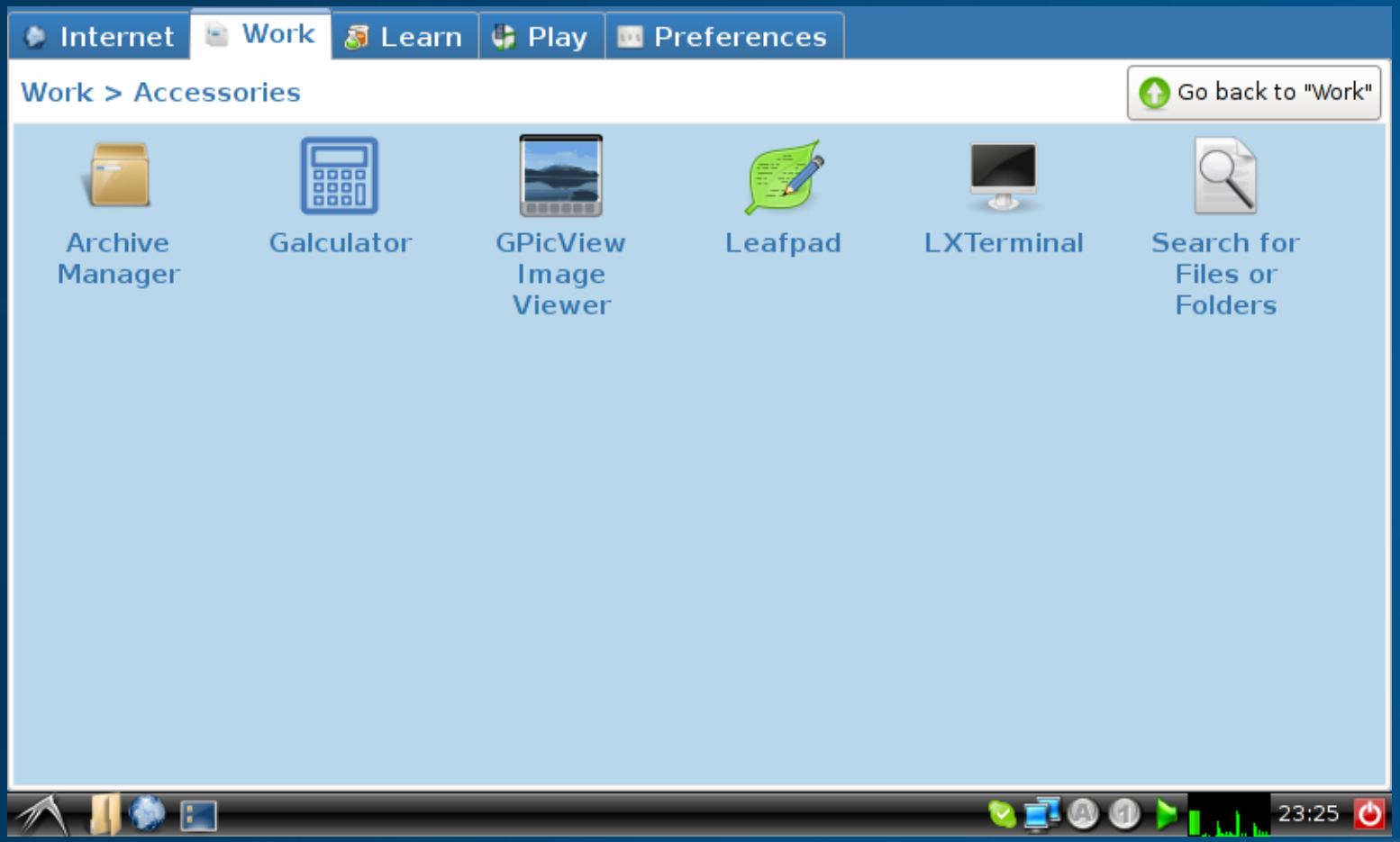
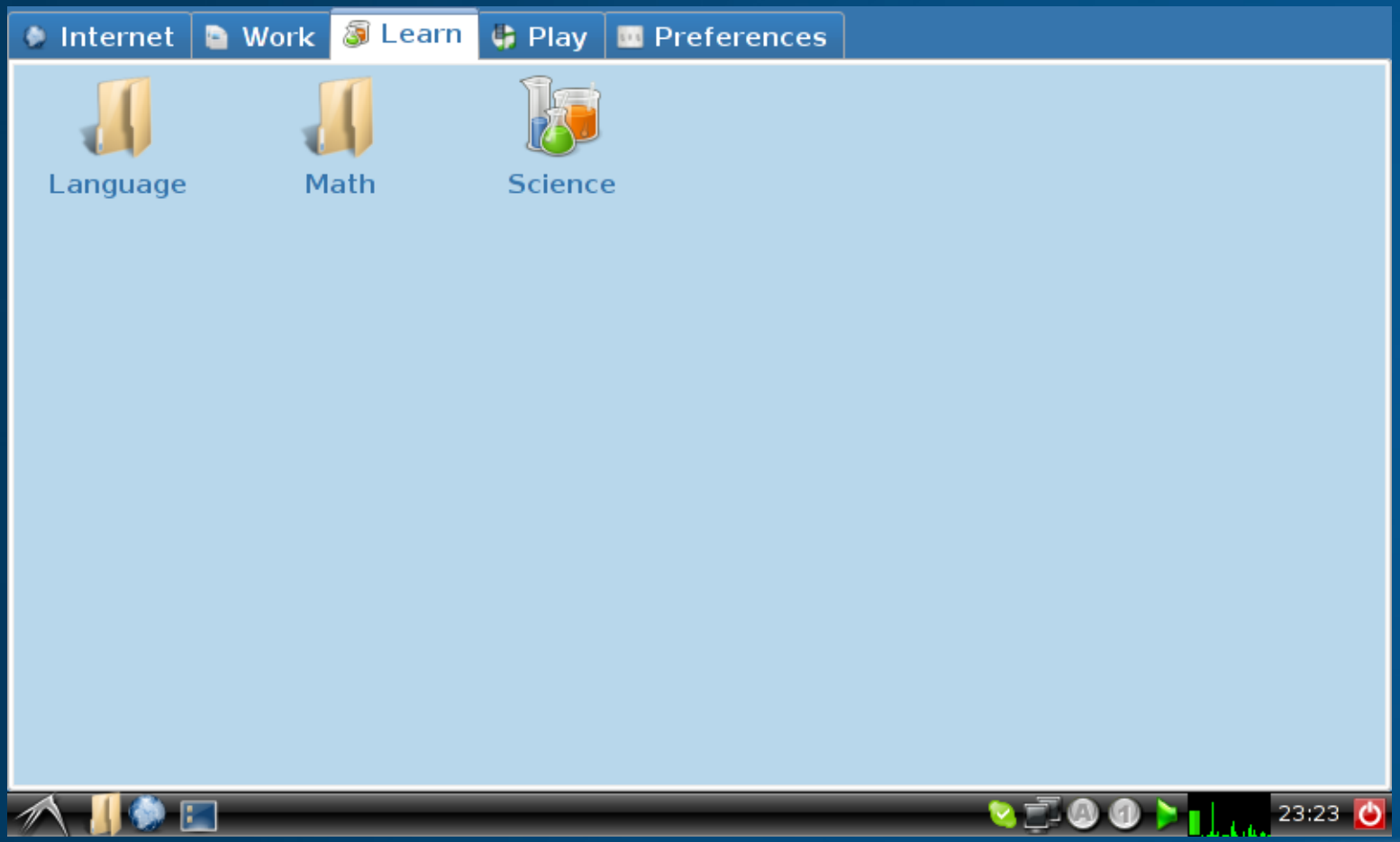


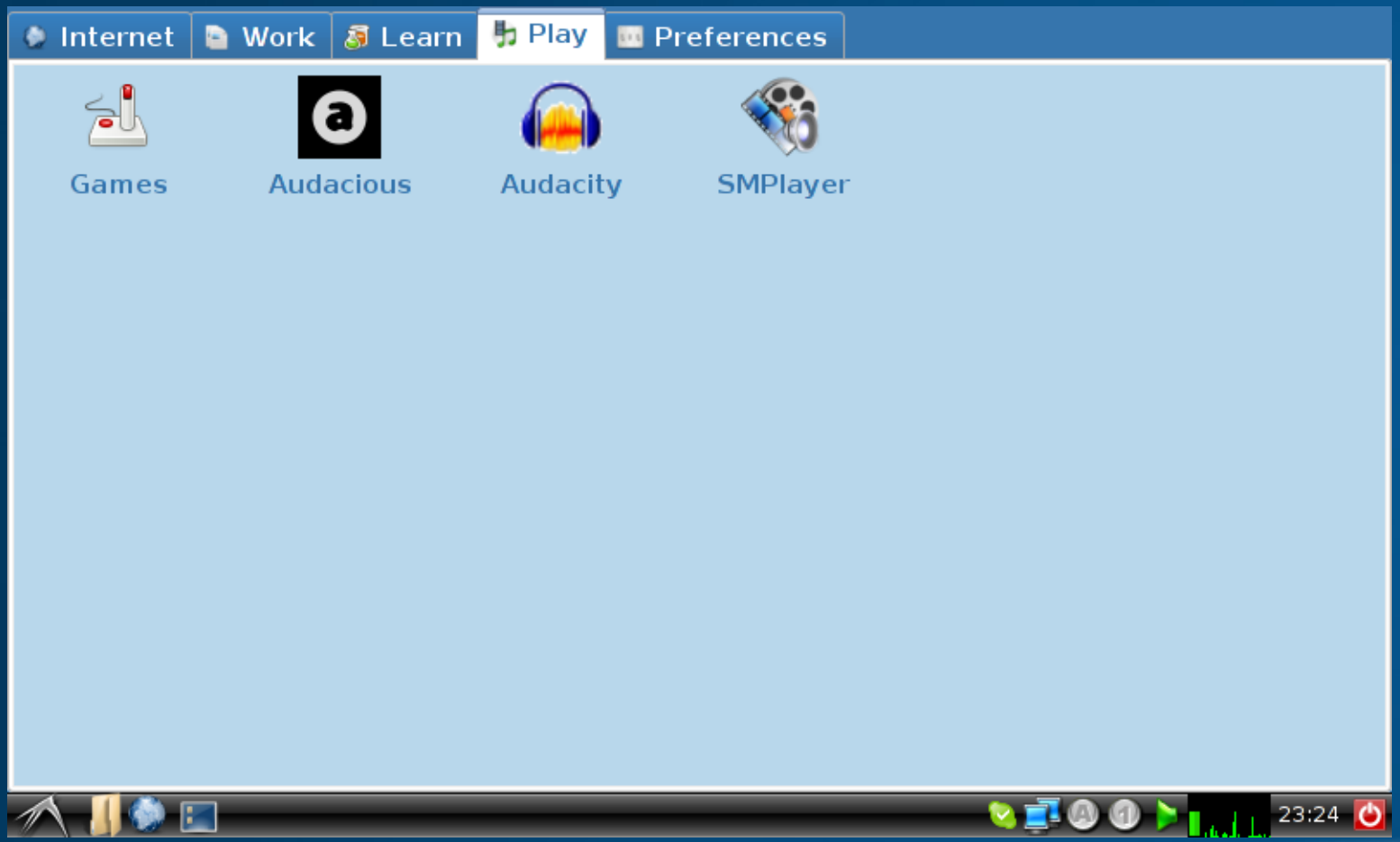
LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



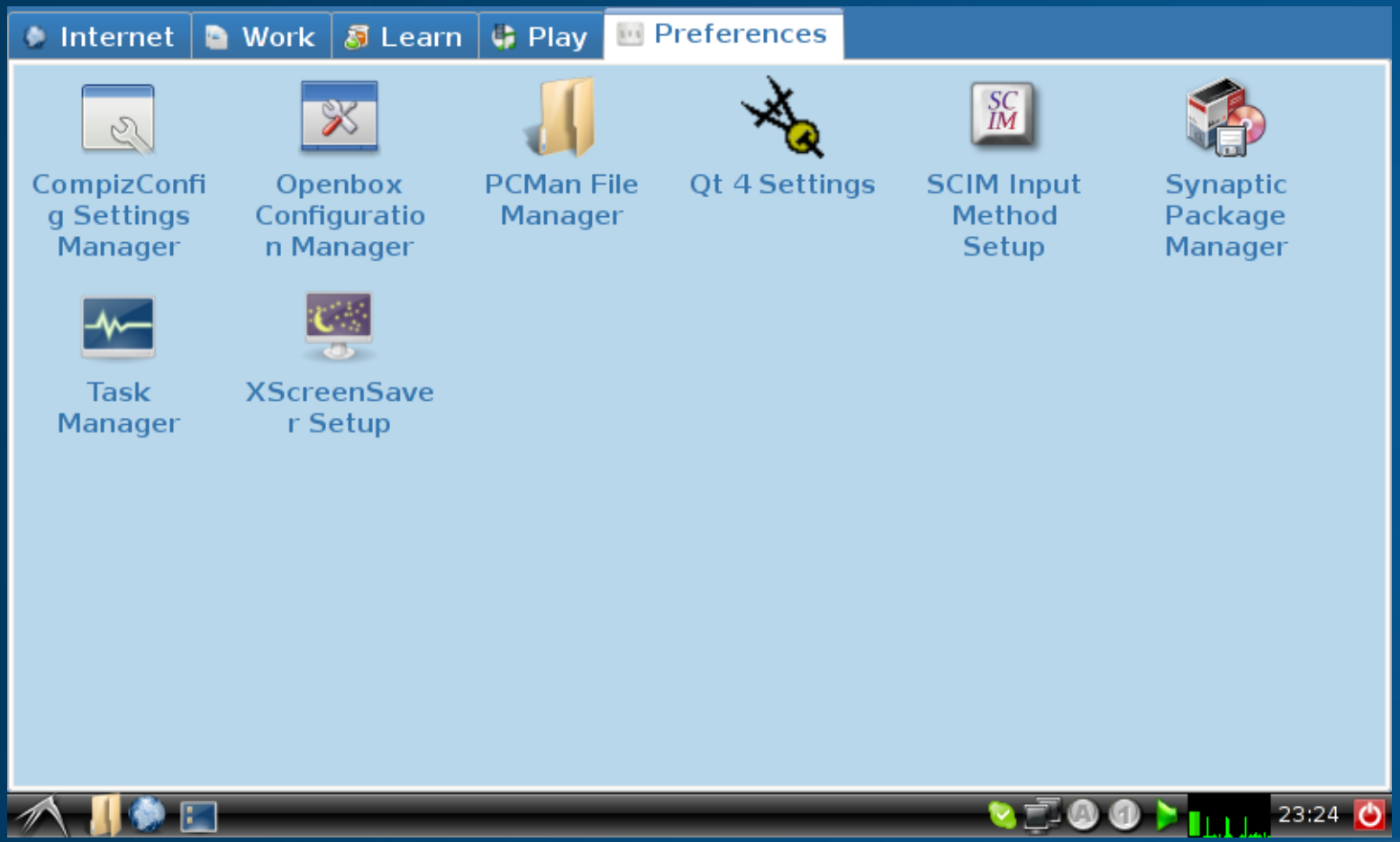
LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



LXDE Live Demo – LXLauncher

Each component of LXDE can run independently



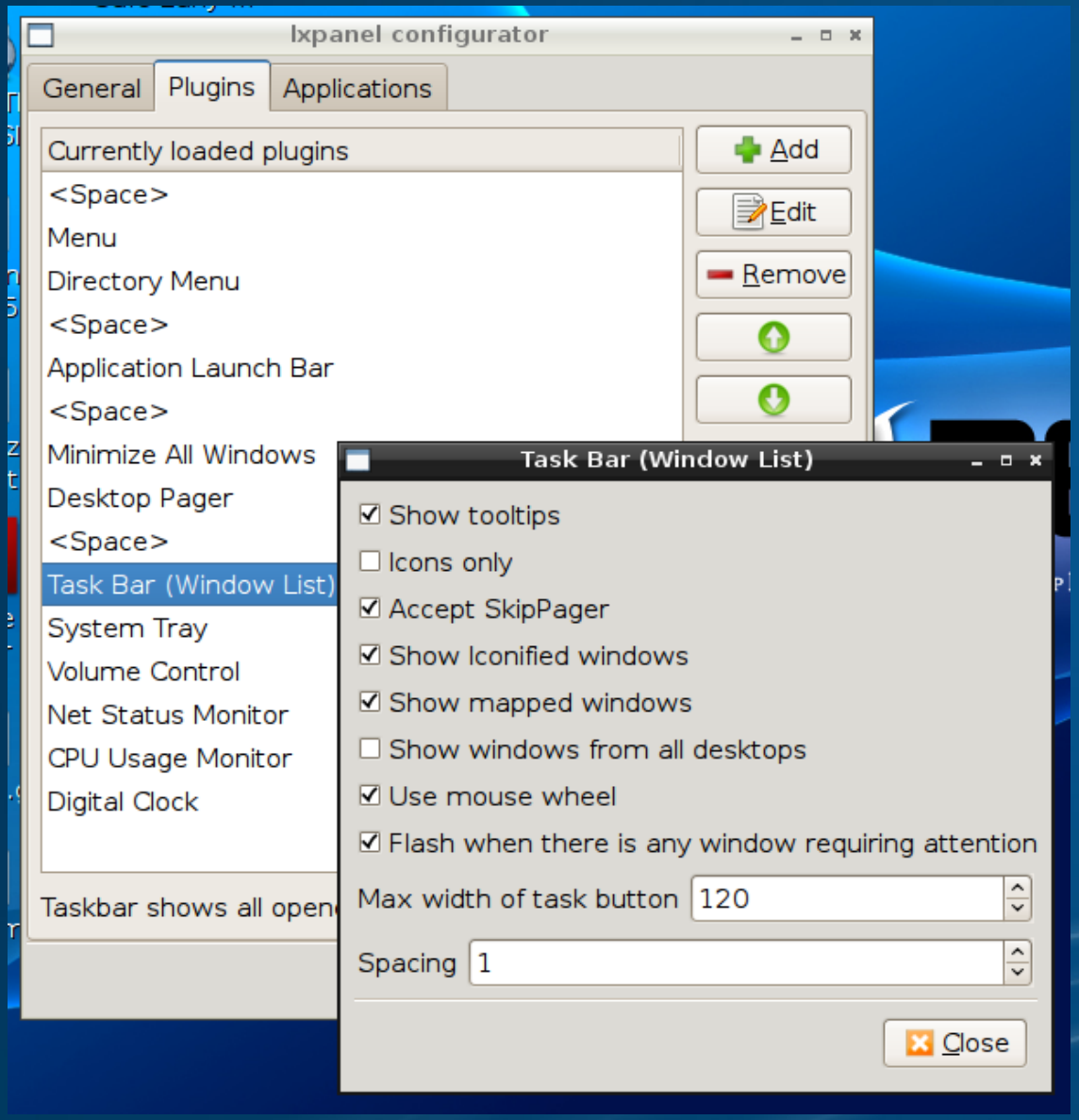
LXDE Live Demo – LXPanel

Each component of LXDE can run independently

- panel can generate menu for installed applications automatically from *.desktop files
- provides Run dialog
- configuration via GUI
- multiple panel layout support

LXDE Live Demo - LXPanel

Each component of LXDE can run independently

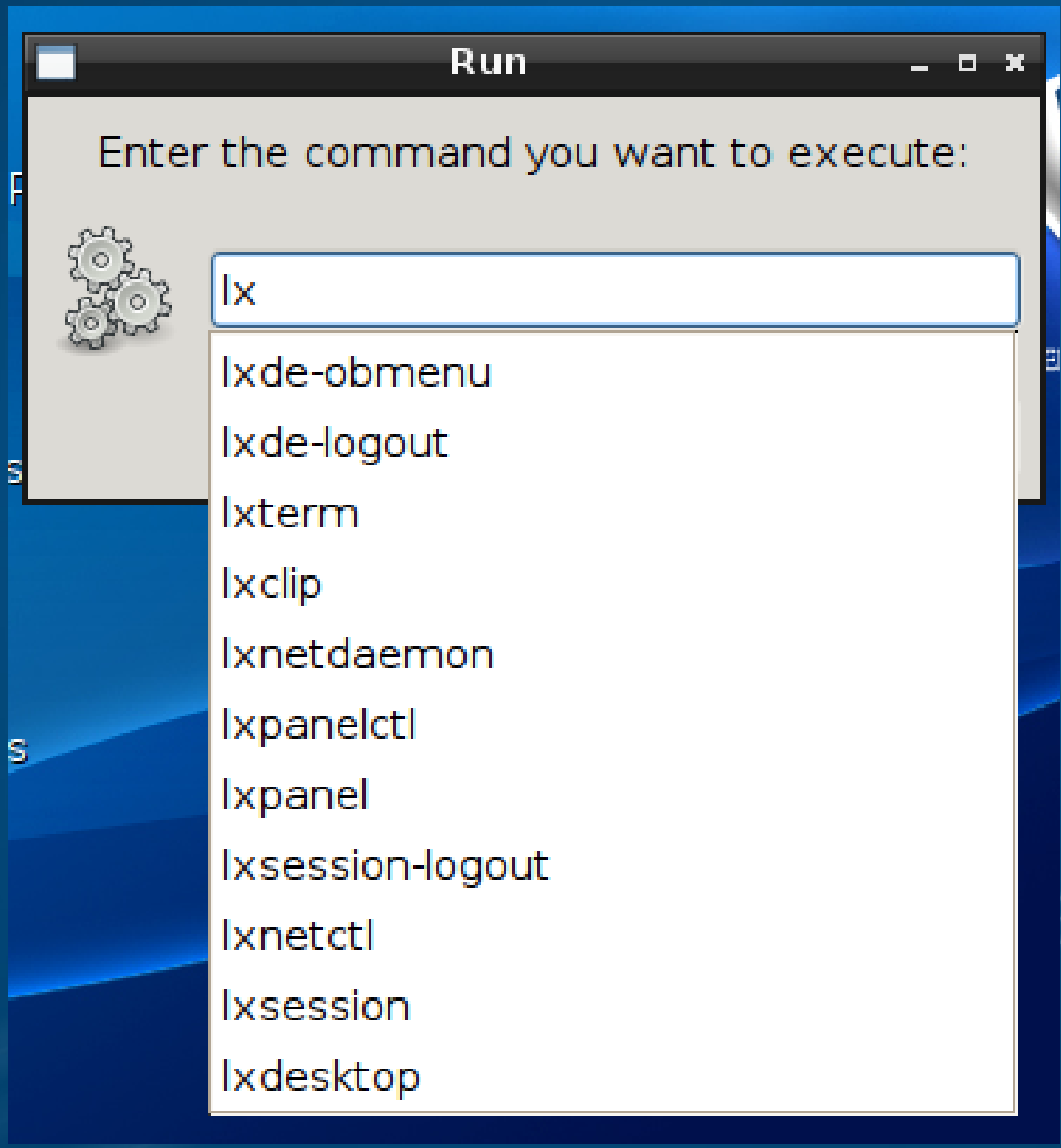


The panel can be configured from GUI preference dialog, and there is no need to edit config files

LXDE Live Demo - LXPanel

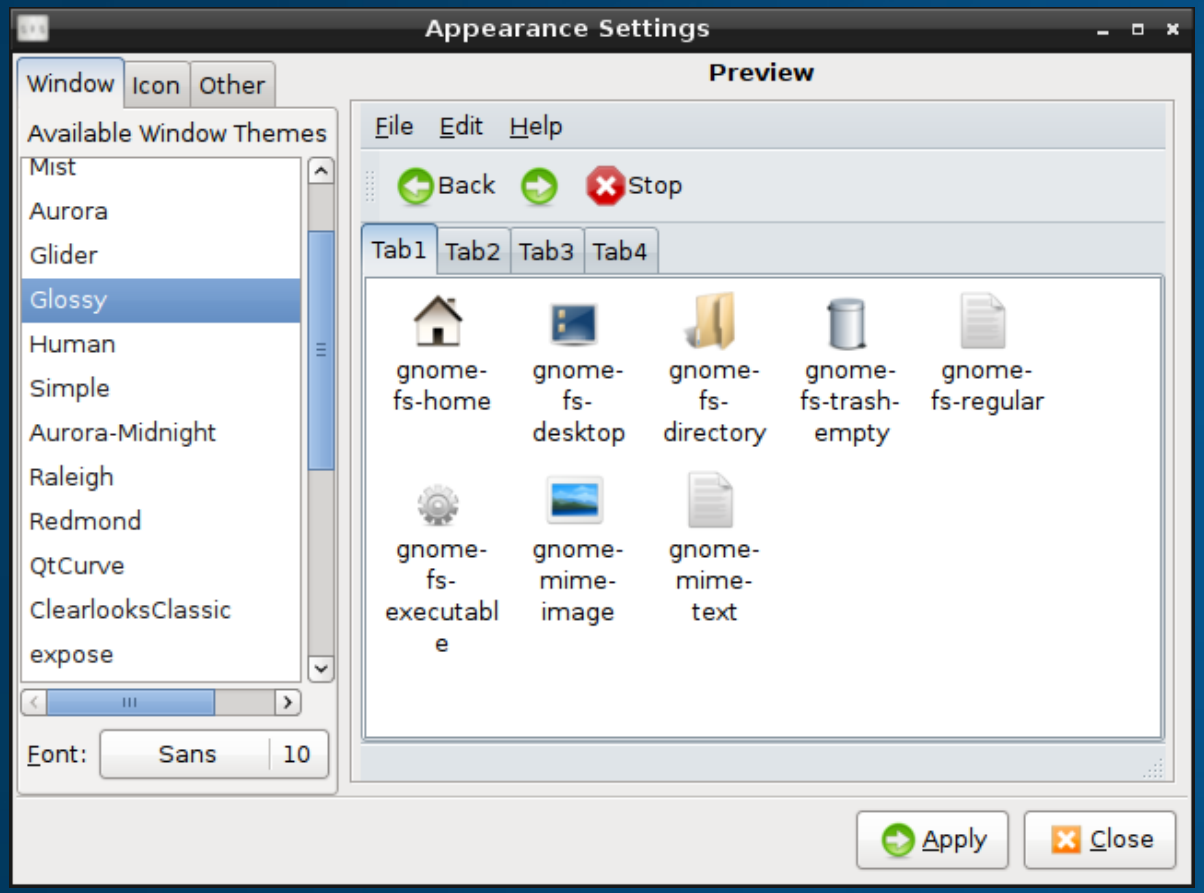
Each component of LXDE can run independently

It provides a "Run" dialog with autocompletion



LXDE Live Demo – LXAppearance

Each component of LXDE can run independently



- new feature-rich GTK+ theme switcher
- change GTK+ themes, icon themes, and fonts used by applications

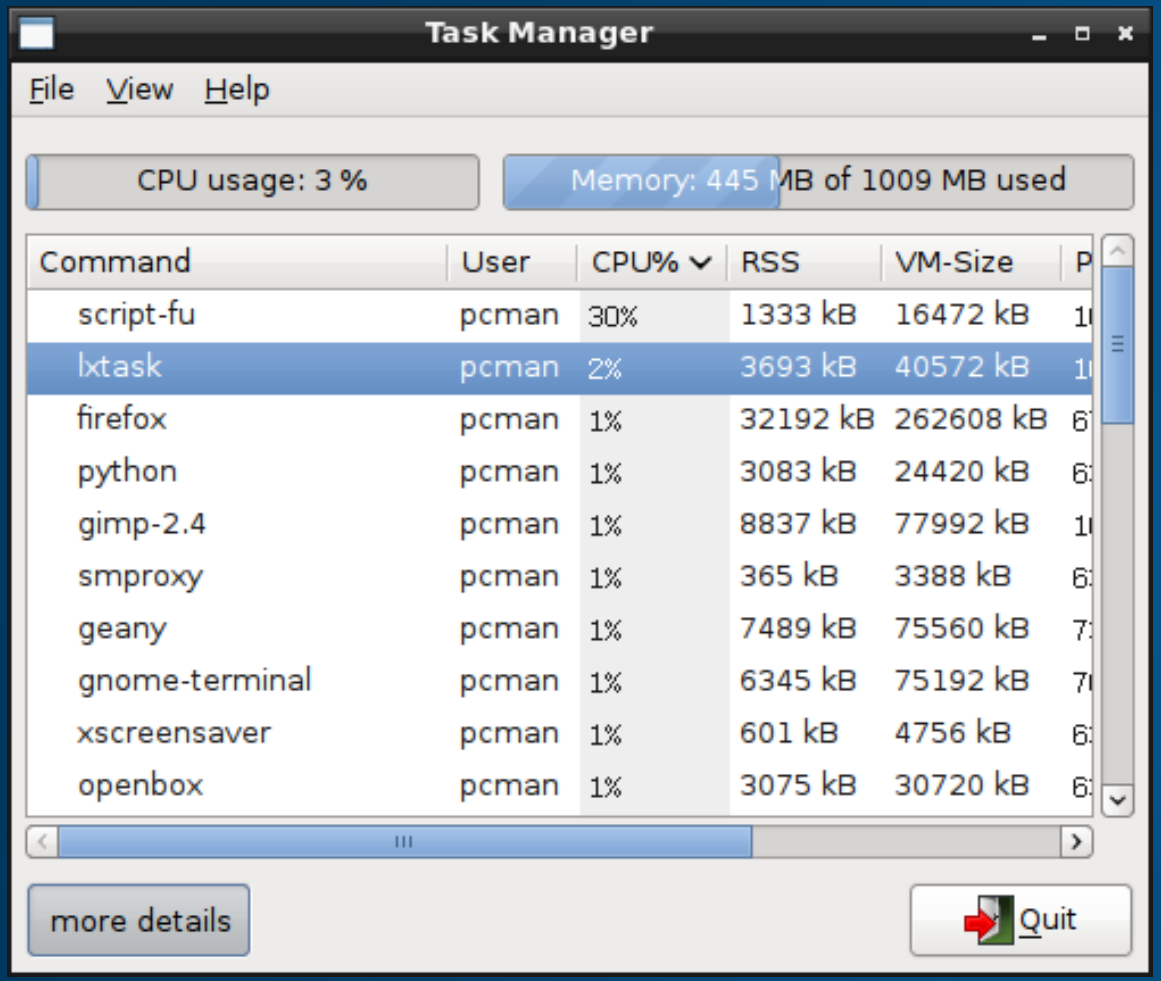
LXDE Live Demo – GPicView

Each component of LXDE can run independently

- simple, fast, and lightweight image viewer
- immediate startup
- intuitive interface
- similar to MS Windows picture viewer

LXDE Live Demo - LXTask

Each component of LXDE can run independently

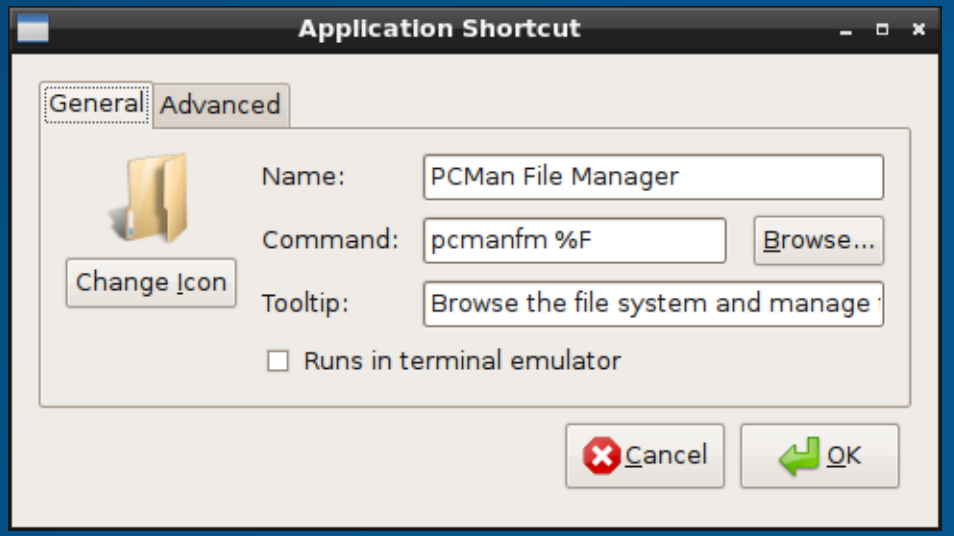


- LX task manager / system monitor
- live data
- start up with Ctr+Alt+Del
- seperate view of CPU and RAM usage

LXDE Live Demo – LXShortCut

Each component of LXDE can run independently

- edit application shortcuts



LXDE Live Demo - LXSession_Lite

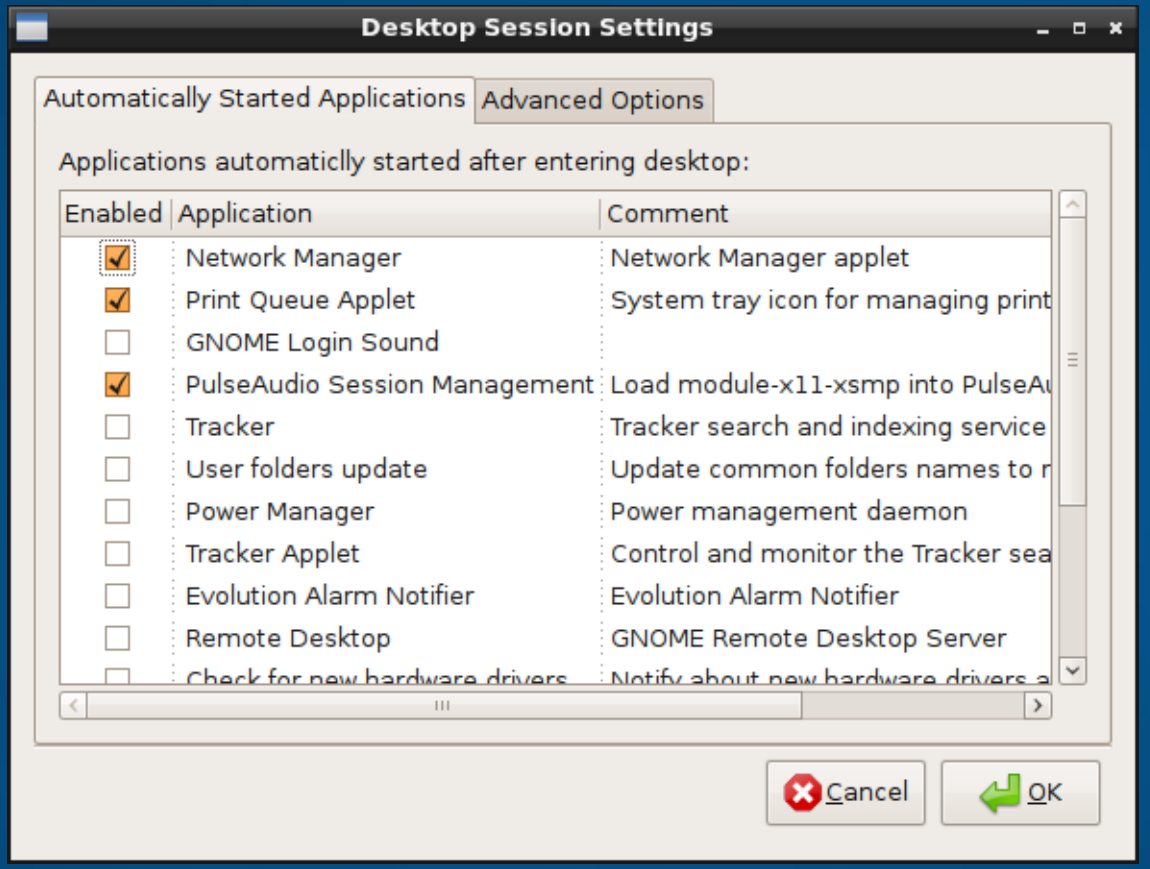
Each component of LXDE can run independently

- LXSession_Lite: Standard-compliant X11 session manager
- shutdown/reboot/suspend supports via HAL and gdm
- LXSession Lite is a stripped-down lightweight version without X11 session management support.

LXDE Live Demo – LXSessionEdit

Each component of LXDE can run independently

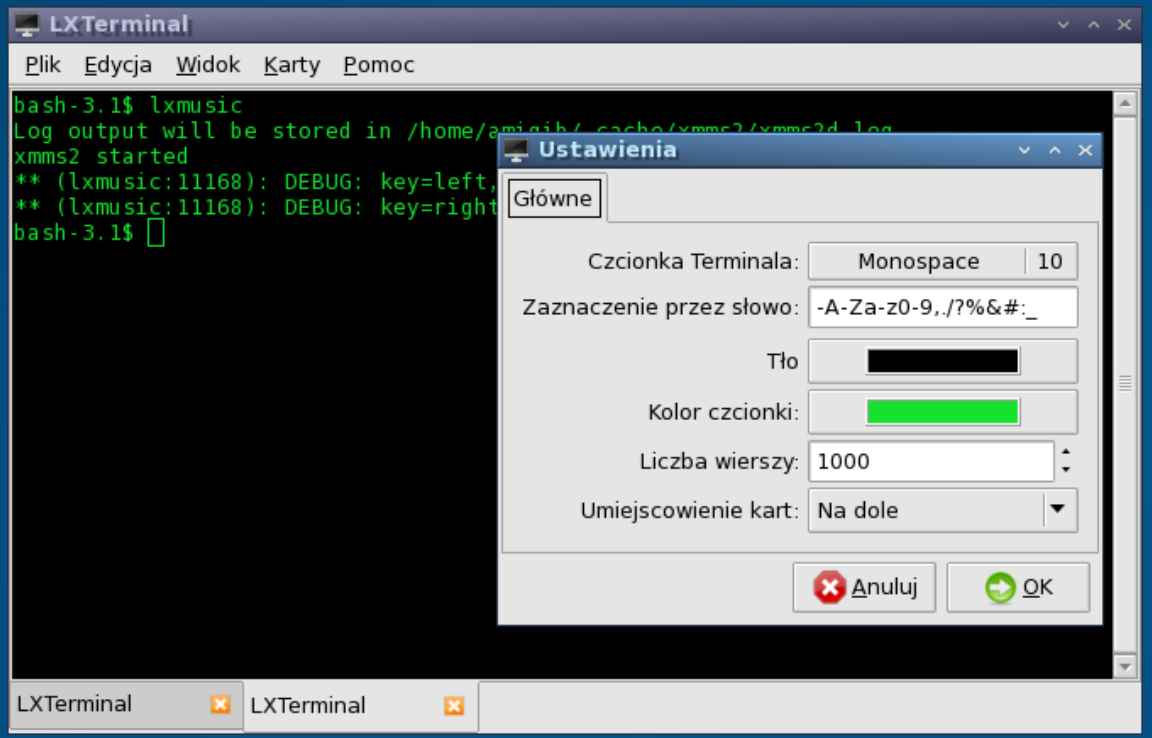
- suppports the autostart freedesktop.org specs
- provides a way to automatically start applications after login
- can (partially) be configured through a simple GUI
- also, window manager can be changed



LXDE Live Demo – LXTerminal

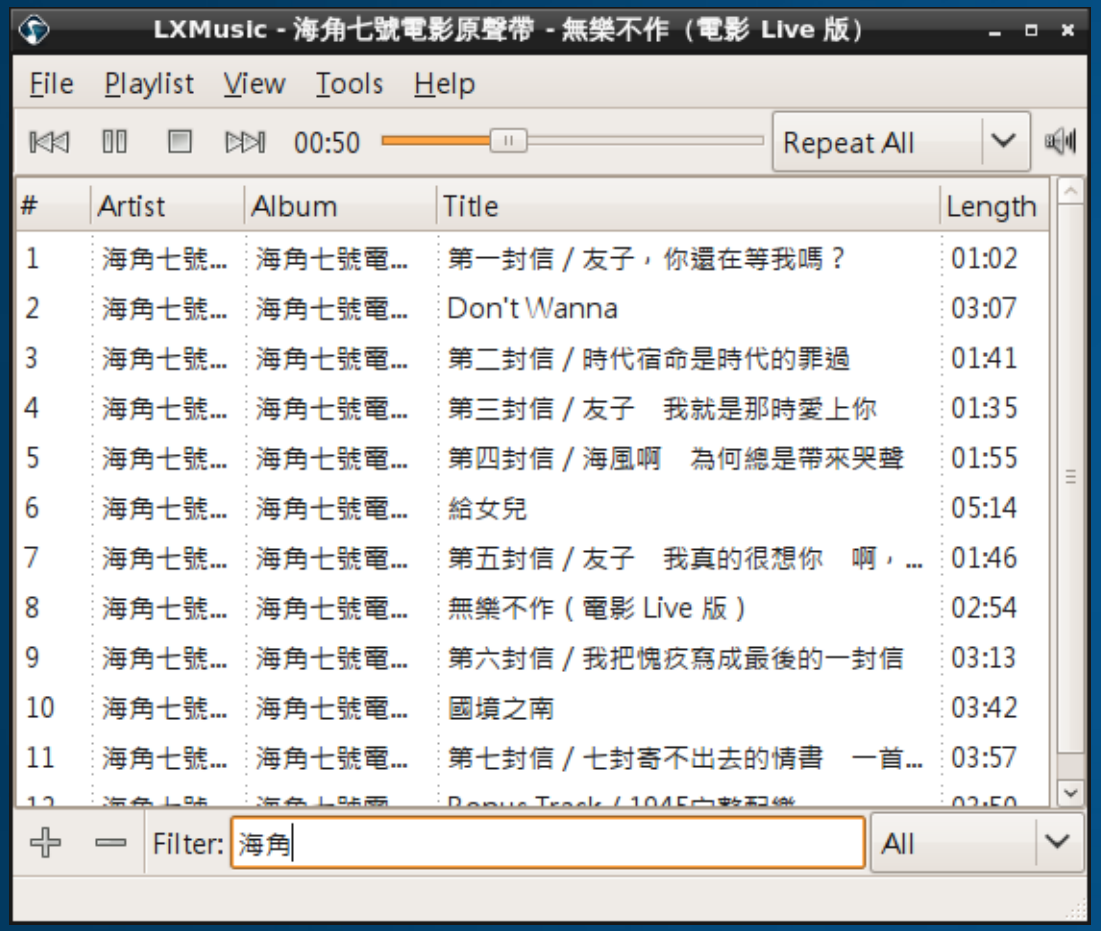
Each component of LXDE can run independently

- Desktop-independent
- VTE-based terminal emulator
- All instances share the same process to reduce memory usage.)



LXDE Live Demo - LXMusic

Each component of LXDE can run independently

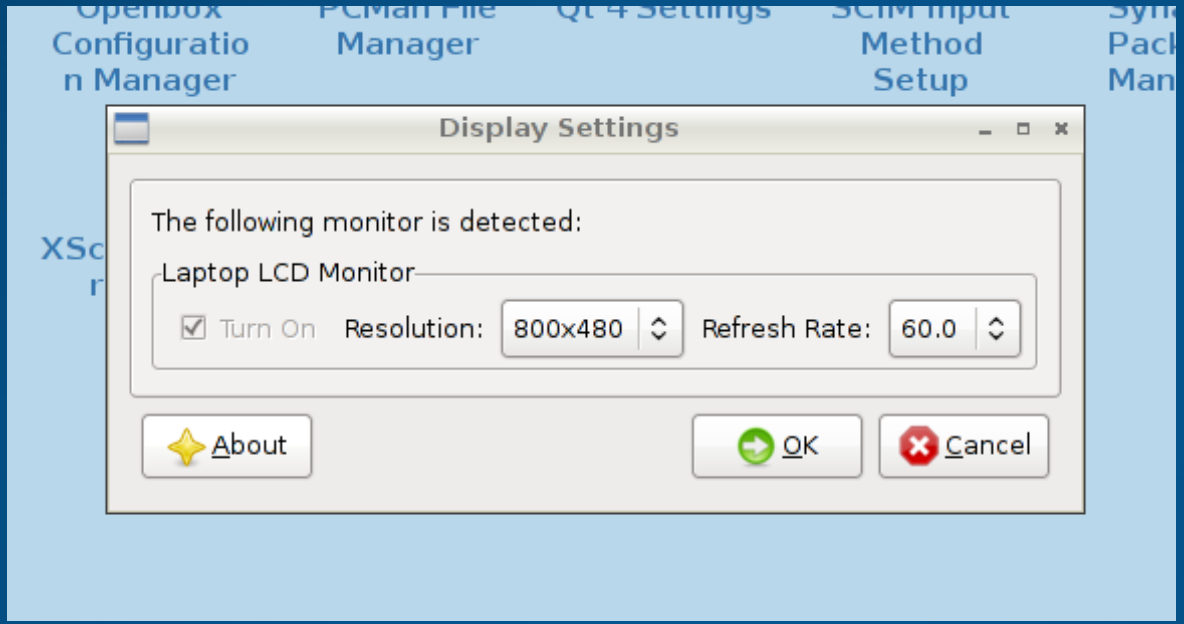


- minimalist music player
- based on xmms2
- lightweight and has server/client design
- user interface is simple, clean, and intuitive
- At first glance, it looks similar to one of the famous players on Windows - foobar 2000

LXDE Live Demo – LXRandr

Each component of LXDE can run independently

- Screen manager
- manages screen resolution and external monitors
- offers changing of resolutions for internal and external monitor



LXDE Live Demo - Components

Each component of LXDE can run independently

- **LXNM** (still under development): Lightweight network connection helper daemon for LXDE supporting wireless connections (Linux-only)
- **LXDE Common**, the default settings configuration file for integrating the different components of LXDE. LXDE Common manages the system behavior and functions to integrate icons and artwork.
- **GtkNetCat**, Graphic User Interface for netcat. Netcat provides system functions as a computer networking utility for reading from and writing to network connections on either TCP or UDP.

LXDE is compatible

GTK based.

- we use GTK.
- thus applications running on Gnome distributions e.g. of Debian or Ubuntu, can be installed with LXDE.
- the team also submits patches to GTK.

LXDE is standard conform

Following Open Industry Standards

- we apply official ISO standards (ISO/IEC 26300:2006).
- follow the standards of freedesktop.org.
- Follows the official LSB file hierarchy standards
- provide open APIs.

LXDE is more efficient

I/O improvements

- we optimise for flash storage.
- decrease the number of input and output operations.
- thus extending the life of solid disks.

LXDE is Green

Green IT

- works well with old hardware – no need to recycle
- lowering the CPU and RAM load, decreases use of resources and thus reduces power consumption.
- prolongs the recharge cycles of batteries.

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Green IT

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LXDE is easily extendible

Adding new features is easy.

- LXDE is a system of components with low dependencies.
- new components are steadily added.
- Project proposals include developing components for wireless usage including Wifi, bluetooth, G3, G4, touchscreen and 3D support and a faster browser.

Our Community

jserv penk CWickert Captagon jcrt
danichao Akirabra Agent24 Funda Wang
monreal nycerine Andrew Lee penk SynrG
Aguai rmh3093 b52 tlaloc Frank thiefghost
PCMan michael-r poctob kurama infinity
Mbt28 yngwin viniosity Paul Liu ZuBB
Ziroday Palatis kensai Firmit Windsor Mwei
Rotwang Taziden Kermit briantm Tonino Mstibs
Arne Goetje nitrofurano nelsonchung Chihwei
Huang edward MarioB Lawwong yjuny1

LXDE Community

Better Together

Hong Yen Jee

- Known as PCMan
- Core developer of PCManFM
- Founder of LXDE
- Continuous development of core components
- submitted numerous patches to GTK
- Doctor degree

LXDE Community

Better Together

Andrew Lee

- Debian package maintainer
- active in open source community since 1998
- Chinese Linux localization project
- Conference apperances at Linux World Expo San Francisco, OpenTechSummit TW, Skoolelinux Norway

LXDE Community

Better Together

Pin-Shiun Chen

-

- Focus on easy-to-use tools: easy-to-use tools
- Project founder of wp-autopaste, mkliveusb, LXDE fast boot
- Translated several chapters of O'Reilly's Programming Perl 3 Edition into Chinese.
- Conducted a Linux LiveCD Project with Chinese enhancements
- Bachelor Computer Science

Joining up with with friends in Taiwan

At LinuxWorld in San Francisco

LXDE Hacking in Shenzhen, China

With Open Source Foundry, Taiwan

Engaging with Students in Beijing

Contributors Meet up at c-base, Berlin

Gentoo Package Maintainer at Yahoo, HK

Students at Tsinghua Univ., Beijing

Mandriva Package Maintainer, Beijing

Meet up in Shenzhen, China

With OpenSuse Developers

LinuxUserGroup Beijing

Join LXDE

Ideas for projects

- become a package maintainer for your favourite distribution
- Join the translation project to translate LXDE into your language
- implement support to save sessions in lxsession
- Implement trash in pcman file manager
- Implement central configuration like gnome-control-center or xfce-settings
- create a new theme for LXDE

Supporting our Community - Web

The right web tools for communities

lxde.org

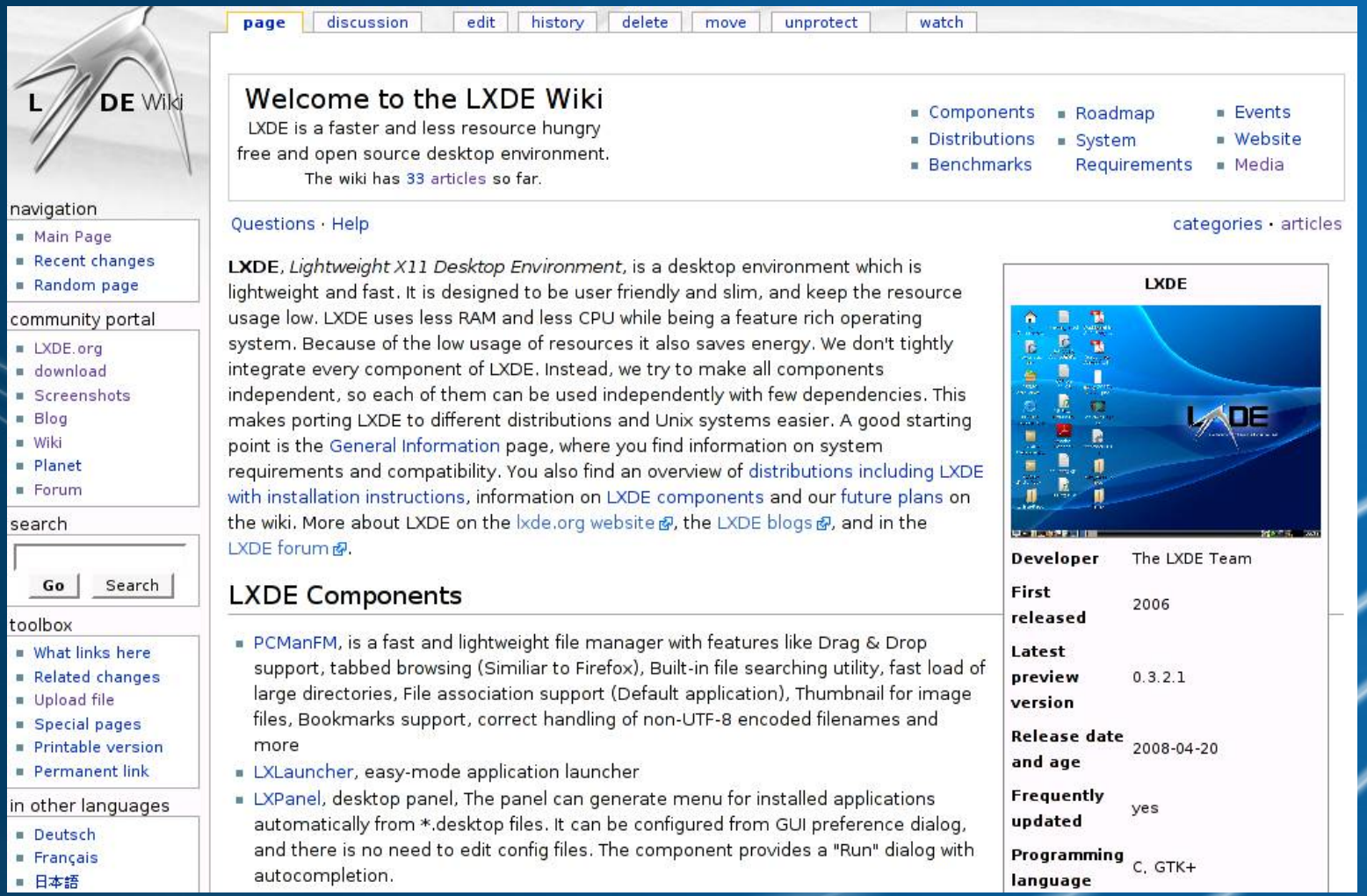
Supporting our Community - SF.net

Free Software Repositories at Sourceforge

sourceforge.net/projects/lxde/

Supporting our Community - Wiki

Wiki in 18 languages including Chinese and Arabic



wiki.lxde.org

Supporting our Community - Blog

Keeping you up to date

LXDE

blog.lxde.org

LUBUNTU? LXDE MEET UP WITH MARK SHUTTLEWORTH IN BERLIN

When will you release Lubuntu? Many people ask us this question recently. Actually, we do not have a distribution named Lubuntu... yet. So time to get in touch with the Ubuntu community and Mark Shuttleworth about an official cooperation. I finally met up with Mark today for breakfast here in Berlin and talked with him about LXDE.

As a first step Mark invited us to become a self-maintained project in the Ubuntu community. This means we will be able to manage LXDE inside Ubuntu, ultimately offering an Ubuntu derivate, ergo Lubuntu.

Congratulations to the whole LXDE team and community. I am looking forward to this milestone! Special thanks for supporting the growth of the community and being a link between Asia and Europe in the LXDE project to Arne Götje.

Links:

* http://lxde.org

BLOG SEARCH

Find

TAGS

Asia China Community desktop environment desktoplinux deviceguru Distributions Forum Fred Chien gnu/linux gtk+2 Hong icos2008 Ilan LXDE LXDE Community LXDE Components LXDE Development LXDE Video LXPanel Maces Mario Behling Medical Wei PCMan PCMan File Manager PCManFM penk phpbb presentation Rick Lehrbaum screencasts Shenzhen slideshow Taiwan testing translation translation project ubuntu ubuntulite video videoblog Videos Website wiki

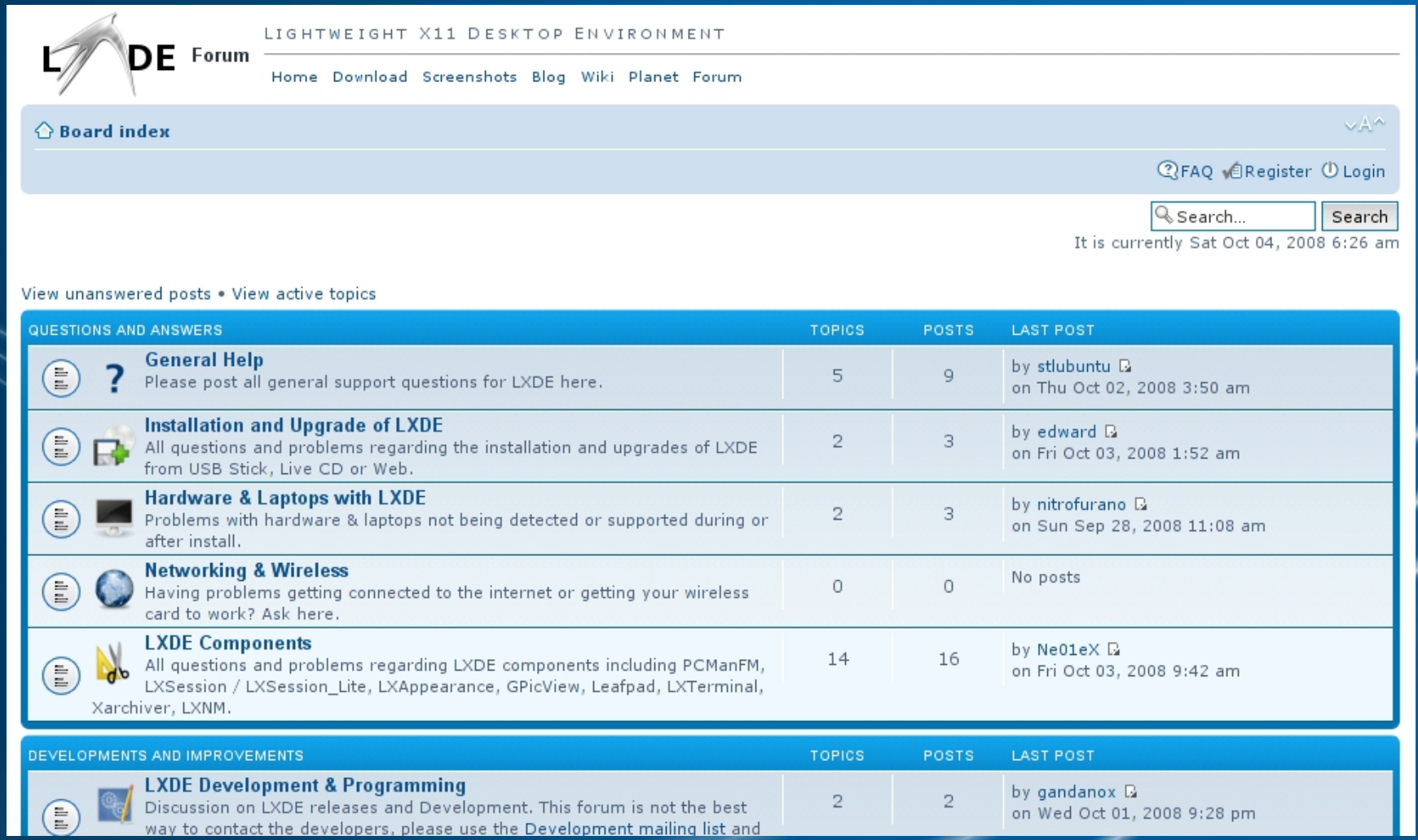
CATEGORIES

Benchmarks
Blogs
Community

blog.lxde.org

Supporting our Community - Forum

Supporting exchange between developers and users



forum.lxde.org

Supporting our Community - Planet

Latest news from the blogosphere

planet.lxde.org

Supporting our Community - Lists

Mailing Lists for translation and design projects

mailinglist.lxde.org Mailing Lists

Welcome!

Below is a listing of all the public mailing lists on mailinglist.lxde.org. Click on a list name to get more information about the list, or to subscribe, unsubscribe, and change the preferences on your subscription. To visit the general information page for an unadvertised list, open a URL similar to this one, but with a '/' and the list name appended.

List administrators, you can visit the list admin overview page to find the management interface for your list.

If you are having trouble using the lists, please contact mailman@mailinglist.lxde.org.

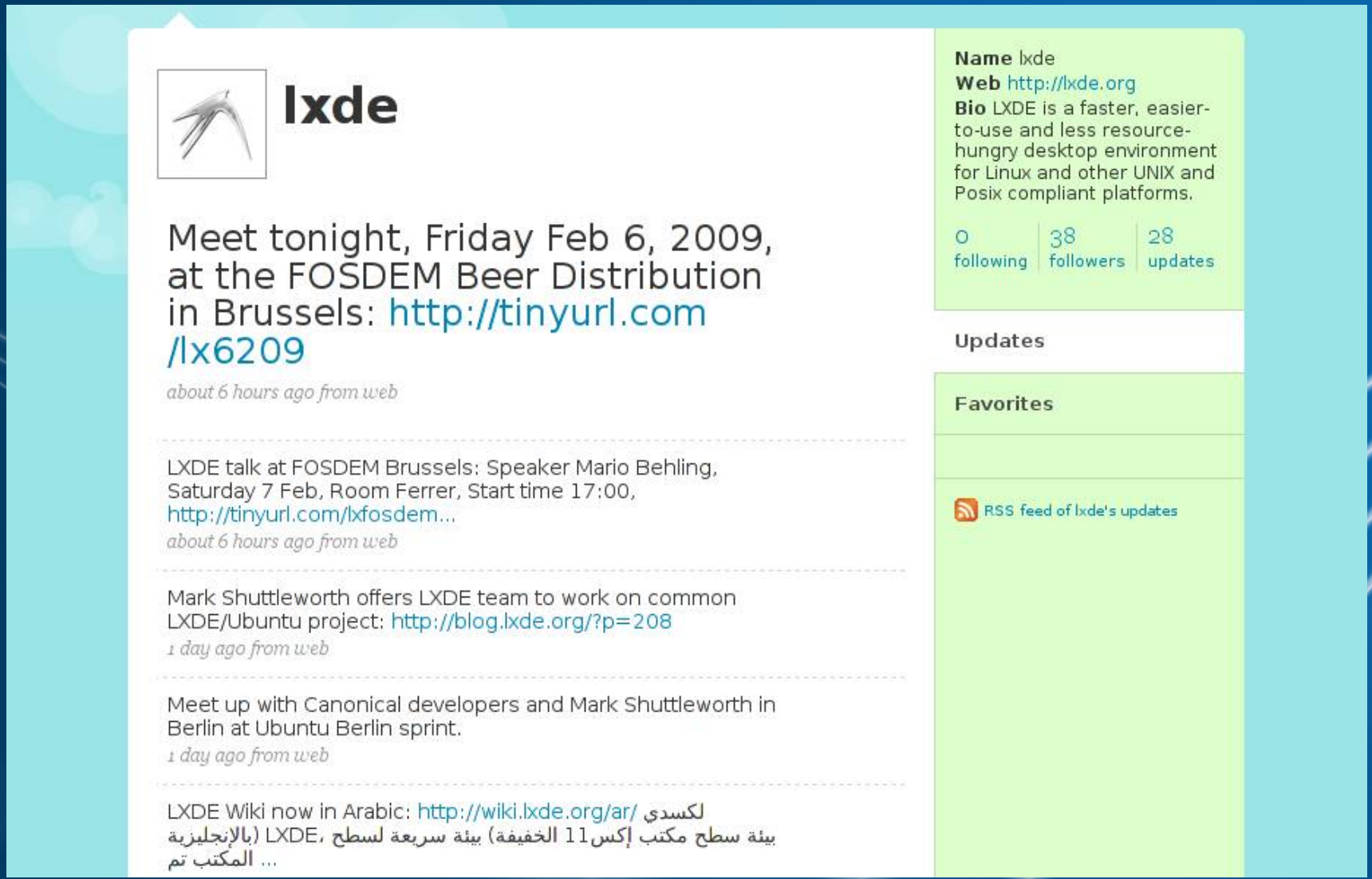
List	Description
Design	The mailing list for interface, fashion and all kinds of designers of LXDE.
Foundation	LXDE Foundation and Friends Mailing List.
News	LXDE News List for Updates and Announcements about the LXDE Development and Community
Translation	The mailing list for translators of LXDE and its components.

version 2.1.9

mailinglist.lxde.org

Supporting our Community - Twits

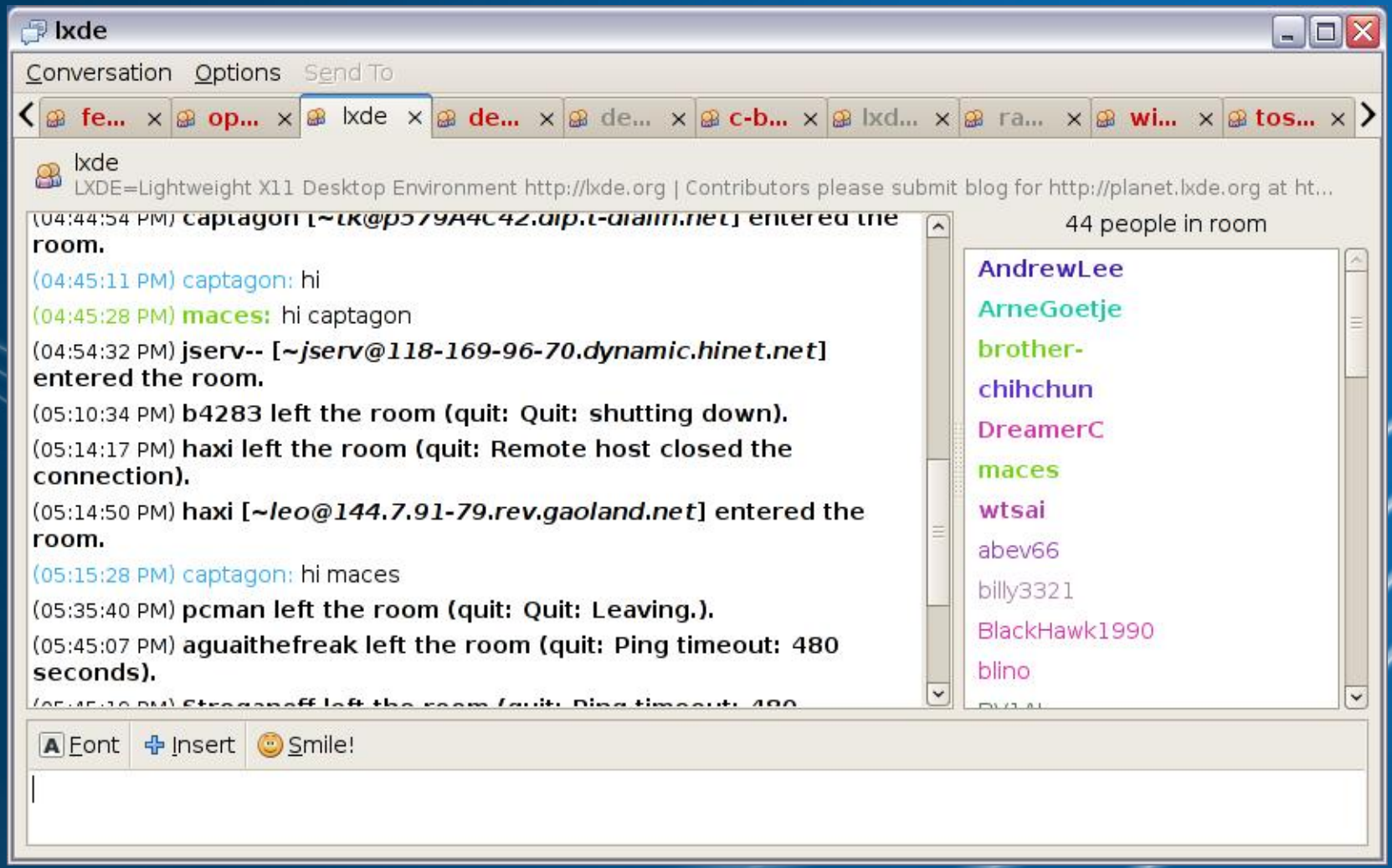
Speedy updates



twitter.com/lxde

Supporting our Community - Chat

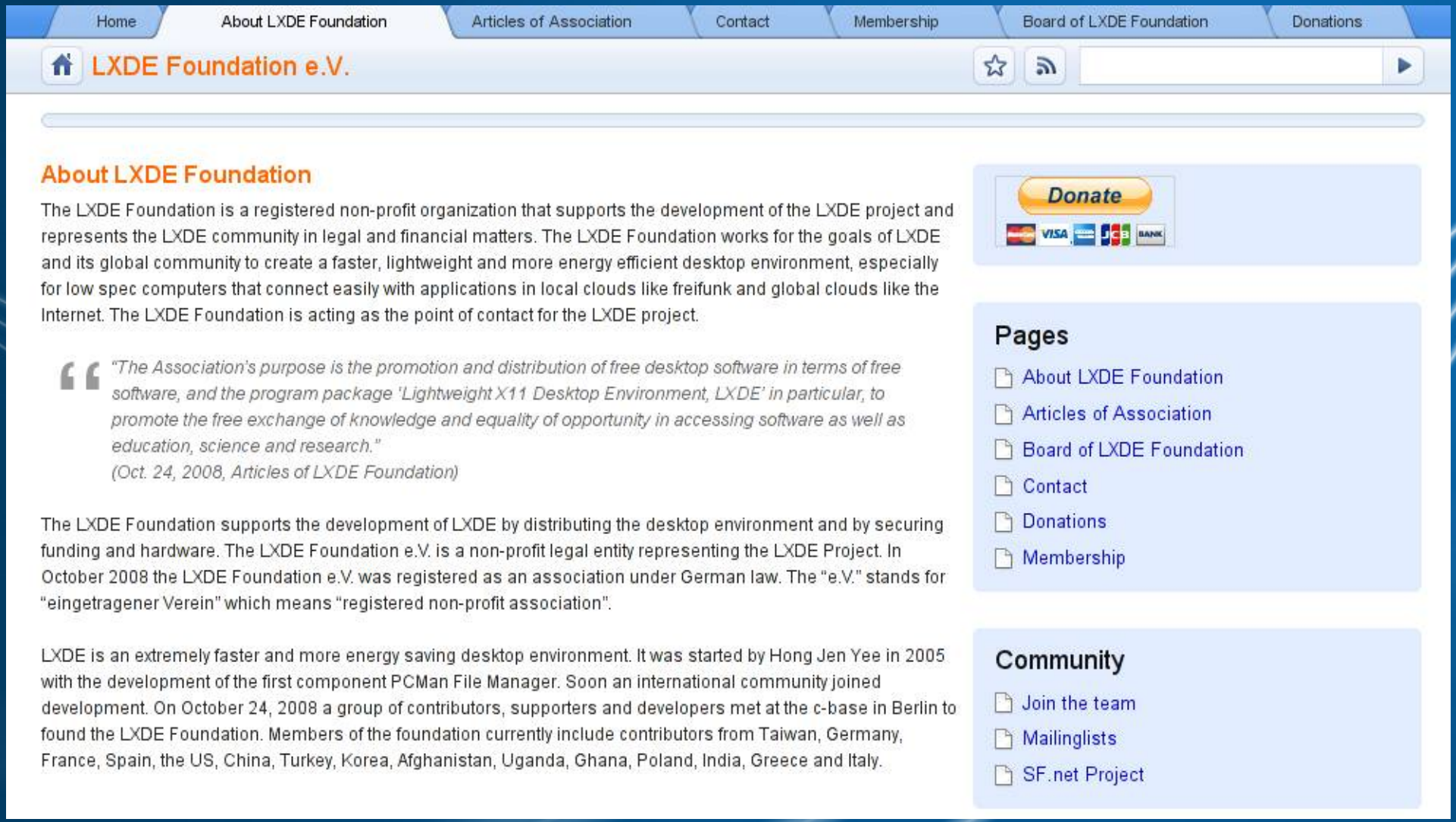
Getting in touch with developers



oftc.net #lxde (English) // #lxde-zh (Chinese)

LXDE Foundation

Registered non-profit association



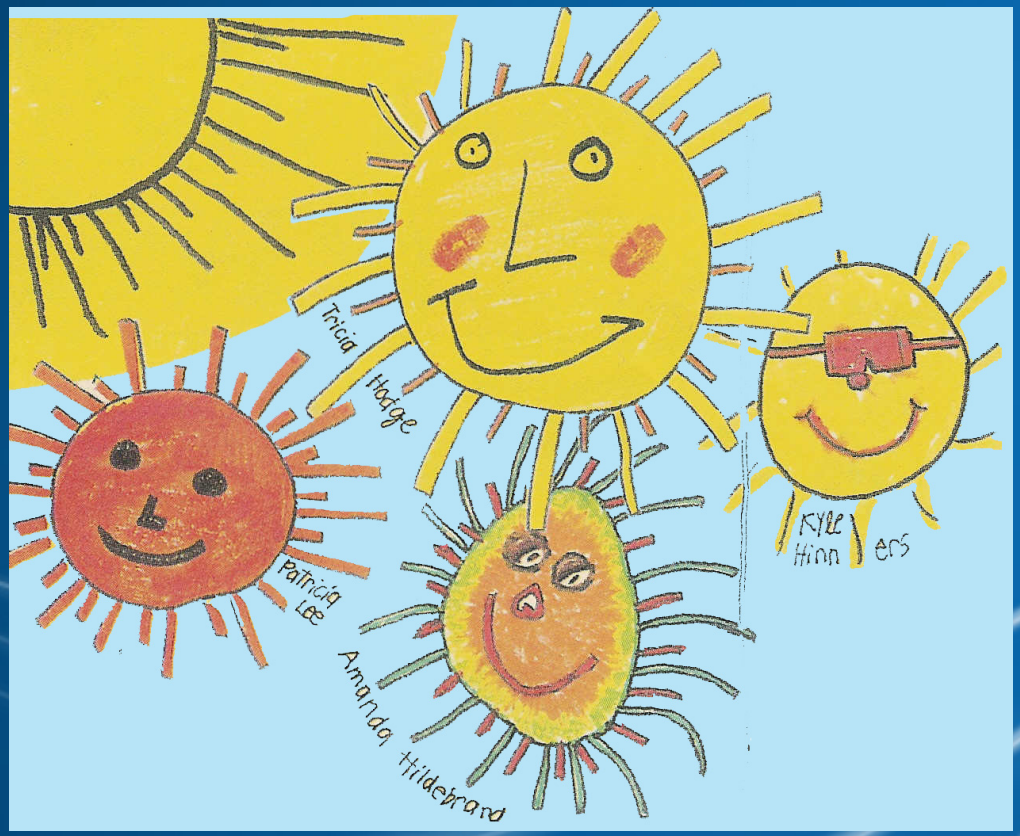
foundation.lxde.org

Remember

Lightweight X11 Desktop Environment

- **LXDE is a desktop environment**
- **lighter, faster, less resource hungry**
- **origin in Taiwan, since 2005**
- **fast growing truly international community**
- **cordially welcomes contributors and developers**

More and more people are joining the LXDE project to create a ligther, energy efficient and truly freedom inspiring operating system.



The future looks bright :-)

Thank you

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