Xubuntu Desktop Guide

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by Xubuntu Dev Team

Abstract

The Xubuntu Desktop Guide aims to explain to the reader how to configure and use the Xubuntu desktop.

Credits and License

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The following people have contributed to this document:

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Credits go to everyone involved in writing the Ubuntu Desktop Guide, the Kubuntu Desktop Guide and the Ubuntu Wiki, since many pieces of this guide have been adopted from one of these sources.

Disclaimer

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About This Guide

1. Conventions

The following notes will be used throughout the book:

A note presents interesting, sometimes technical, pieces of information related to the surrounding discussion.

A tip offers advice or an easier way of doing something.

A caution alerts the reader to potential problems and helps avoid them.

A warning advises the reader of a hazard that may arise in a given scenario.

Cross-reference conventions for print will be displayed as follows:

- Links to other documents or websites will look like *this* [http://www.ubuntu.com].

PDF, HTML, and XHTML versions of this document will use hyperlinks to handle cross-referencing.

Type conventions will be displayed as follows:

- File names or paths to directories will be shown in `monospace`.
- Commands that you type at a Terminal command prompt will be shown as:

  ```
  command to type
  ```

- Options that you click, select, or choose in a user interface will look like this.

Menu selections, mouse actions, and keyboard short-cuts:

- A sequence of menu selections will be displayed as follows: File → Open
- Mouse actions shall assume a right-handed mouse configuration. The terms “click” and “double-click” refer to using the left mouse button. The term “right-click” refers to using the right mouse button. The term “middle-click” refers to using the middle mouse button, pressing down on the scroll wheel, or pressing both the left and right buttons simultaneously, based on the design of your mouse.
- Keyboard shortcut combinations will be displayed as follows: **Ctrl**-**N** .Where the conventions for “Control”, “Shift,” and “Alternate” keys will be **Ctrl**, **Shift**, and **Alt**, respectively, and shall mean the first key is to be held down while pressing the second key.

2. Contributing and Feedback

This book is developed by the *Ubuntu Documentation Team* [https://wiki.ubuntu.com/DocumentationTeam]. *You* can contribute to this document by sending ideas or comments to the Ubuntu Documentation Team mailing list. Information about the team, its mailing lists, projects, etc. can be found on the *Ubuntu Documentation Team Website* [https://wiki.ubuntu.com/DocumentationTeam].

If you see a problem with this document, or would like to make a suggestion, you can simply file a bug report at the *Ubuntu Bugtracker* [https://launchpad.net/products/ubuntu-doc/+bugs]. Your help is vital to the success of our documentation!

Many thanks,

-Your Ubuntu Documentation Team

Chapter 1. Introduction

1. About Xubuntu

Welcome to Xubuntu 6.10.

Xubuntu is a flavor of the Ubuntu Linux Distribution centered around the Xfce Desktop. Xfce is a modern Desktop environment that is simple, fast, and elegant. You may want to think of Xfce as the *new BMW MINI* [http://en.wikipedia.org/wiki/MINI_%28BMW%29] of Linux Desktops. Combining it with Ubuntu gives you the full power and ease of use that Ubuntu is known for, while providing a snappy desktop even for those using older hardware.

The key advantages of Xubuntu are:

- Simplicity. Xubuntu will not give you all the bells and whistles of its siblings *Ubuntu* [http://www.ubuntu.com] (Gnome Desktop) and *Kubuntu* [http://www.kubuntu.org] (KDE Desktop), but will instead focus on basic functionality and a clean user interface.
- Speed. With Xubuntu you will instantly feel the speed of the Xfce Desktop Environment, which has been built with low system requirements in mind. Don't worry if your hardware is not the latest and greatest - your computer will most likely feel quite fast with Xubuntu.
- Elegance. Xubuntu comes with a modern, clean Look&Feel. Of course, the Desktop is completely customizable - you may choose from among many sets of icons, window borders, color sets, and so on.

Xubuntu shares the same package sources as Ubuntu and Kubuntu. This has the following advantages:

- All of the thousands of programs in the Ubuntu Software Archive are easily installable on Xubuntu.
- Turn an Ubuntu into a Xubuntu System - or vice versa - by simply installing some additional packages.

Technically, Xubuntu tries to avoid dependencies on Gnome and KDE libraries by using only *GTK+ 2* applications wherever possible.

1.1. About the name

The name Xubuntu indicates the combination of the Xfce Desktop Environment with Ubuntu. Xfce used to stand for "XForms Common Environment", but since it's not based on XForms anymore, does not mean anything today. Ubuntu means approximately "humanity towards others" in the languages of Zulu and Xhosa. Combined, it does not really mean anything.

1.2. About Ubuntu

Ubuntu is an entirely open source operating system built around the Linux kernel. You can read all about the *Ubuntu Philosophy* [http://www.ubuntu.com/ubuntu/philosophy] on the Ubuntu website.

The Ubuntu project is entirely committed to the principles of open source software development; people are encouraged to use open source software, improve it, and pass it on. This means that Ubuntu is and will always be free of charge.

2. Linux Basics

Linux is inspired by the Unix operating system which first appeared in 1969, and has been in continous use and development ever since. Many of the design conventions behind Unix also exist in Linux and are central to understanding the basics of the system.

Unix was primarily oriented towards the command line interface, and that legacy is carried on in Linux. Thus, the graphical user interface with its windows, icons and menus are built on top of a basic command line interface. Furthermore, this means that the Linux file system is structured to be easily manageable and accessible from the command line.

2.1. Directories and File Systems

Linux and Unix file systems are organised in a hierarchical, tree-like structure. The highest level of the file system is the `/` or *root directory*. In the Unix and Linux design philosophy, everything is considered a file - including hard disks, partitions and removable media. This means that all other files and directories (including other disks and partitions) exist under the root directory.

For example, `/home/jebediah/cheeses.odt` shows the correct full path to the `cheeses.odt` file that exists in the `jebediah` directory which is under the `home` directory, which in turn, is under the root (`/`) directory.

Underneath the root (`/`) directory, there is a set of important system directories that are common across most Linux distributions that are used. The following is a listing of common directories that are directly under the root (`/`) directory:

- `/bin` - important *bin*ary applications
- `/boot` - *boot* configuration files
- `/dev` - the *dev*ice files
- `/etc` - configuration files, startup scripts, *etc*...
- `/home` - local users' *home* directories
- `/lib` - system *lib*raries
- `/lost+found` - provides a *lost+found* system for files that exist under the root (`/`) directory
- `/media` - mounted (loaded) removable *media* such as CDs, digital cameras, etc...
- `/mnt` - *m*ou*nt*ed filesystems
- `/opt` - provides a location for *opt*ional applications to be installed
- `/proc` - special dynamic directory that maintains information about the state of the system, including currently running *proc*esses
- `/root` - *root* user home directory, pronounced 'slash-root'
- `/sbin` - important *s*ystem *bin*aries
- `/sys` - *sys*tem files

- `/tmp` - *tem*porary files
- `/usr` - applications and files that are mostly available for all *us*ers to access
- `/var` - *var*iable files such as logs and databases

2.2. Permissions

All of the files on a Linux system have permissions that allow or prevent others from viewing, modifying or executing. The super user "root" has the ability to access any file on the system. Each file has access restrictions, user restrictions and have an owner/group association.

Every file is secured by the following three sets of permissions, in order of importance:

- *user*

  applies to the user who is the owner of the file
- *group*

  applies to the group that is associated with the file
- *other*

  applies to all other users

Inside each of the three sets of permissions are the actual permissons. The permissions, along with the way they apply differently to files and directories, are outlined below:

- *read*

  files can be displayed/opened

  directory contents can be displayed
- *write*

  files can be edited or deleted

  directory contents can be modified
- *execute*

  executable files can be run as a program

  directories can be entered

To view and edit the permissions on files and directories, open the Applications → Accessories → Home Folder and right-click on a file or directory. Then select Properties. The permissions exist under the Permissions tab and allow for the editing of all permission levels, if you are the owner of the file.

To learn more about file permissions in Linux, read the *file permissions page* [https://help.ubuntu.com/community/FilePermissions] in the Ubuntu Wiki.

2.3. Terminals

Working at the command line is not as daunting a task as you would think. There is no special knowledge needed to know how to use the command line. It is a program like everything else. Most things in Linux can be done using the command line, although there are graphical tools for most programs. Sometimes they are just not enough. This is where the command line comes in handy.

The Terminal is located in Applications → Terminal . The terminal is often called the command prompt or the shell. In days gone by, this was the way the user interacted with the computer. However, Linux users have found that the use of the shell can be quicker than a graphical method and still holds some merit today. Here you will learn how to use the terminal.

The original use of the terminal was a file browser and indeed it is still used as a file browser, in the event of the graphical environment failing. You can use the terminal as a file browser to navigate your files and undo the changes that have been made.

2.3.1. Common Commands

View Directories: - ls
: The ls (LiSt) lists files in different colors with full formatted text

Create Directories: - mkdir (directory name)
: The mkdir (MaKeDIRectory) command will create a directory.

Change Directories: - cd (/directory/location)
: The cd (ChangeDirectory) command will change from your current directory to any directory you specify.

Copy Files/Directories: - cp (file or directory name) (to directory or filename)
: The cp (CoPy) command will copy any files you specify. The cp -r command will copy any directories you specify.

Remove Files/Directories: - rm (file or directory name)
: The rm (ReMove) command will delete any filename you specify. The rm -rf command will remove any directory you specify.

Rename Files/Directories: - mv (file or directory name)
: The mv (MoVe) command will rename/move any file or directory you specify.

Find Files/Directories: - locate (file or directory name)
: The locate command will search your computer for any filename you specify. It uses an index of the files on your system to work quickly: to update this index run the command updatedb. This command is run automatically each day, if you leave your computer on. It needs to be run with administrative privileges (see *Section 2.5, “Root And Sudo” [p. 13]*).

You can also use wildcards to match one or more files, such as "*" (for all files) or "?" (to match one character).

For a more thorough introduction to the Linux command line, please read the *command line introduction* [https://help.ubuntu.com/community/BasicCommands] on the Ubuntu wiki.

2.4. Text Editing

All of the configurations and settings in Linux are saved in text files. Even though you most often can edit configurations through the graphical interface, you may occasionally have to edit them by hand. Mousepad is the default Xubuntu text editor, which you can launch by clicking Applications → Accessories → Mousepad on the desktop menu system.

At times in this guide, Mousepad is run from the command line using gksudo, which runs Mousepad with administrative privileges, in order to modify configuration files.

If you need to use a text editor from the command line, you can use nano, which is a simple to use text editor. When running it from the command line, always use the following command, which ensures that the editor will not introduce line breaks:

```
nano -w
```

For more information about how to use nano, refer to the *guide on the wiki* [https://help.ubuntu.com/community/NanoHowto].

There are also quite a few other terminal-based editors available in Ubuntu. Popular ones include VIM and Emacs (the pros and cons of each are cause for much friendly debate within the Linux community). These are often more complex to use than nano, but are also more powerful.

2.5. Root And Sudo

The root user in GNU/Linux is the user which has administrative access to your system. Normal users do not have this access for security reasons. However, Ubuntu does not enable the root user. Instead, administrative access is given to individual users, who may use the "sudo" application to perform administrative tasks. The first user account you created on your system during installation will, by default, have access to sudo. You can restrict and enable sudo access to users with the Users and Groups application (see *Section 5, “Managing Users and Groups” [p. 47]* for more information).

When you run an application that requires root privileges, sudo will ask you to input your normal user password. This ensures that rogue applications cannot damage your system, and serves as a reminder that you are about to perform administrative actions which require you to be careful!

To use sudo when using the command line, simply type "sudo" before the command you wish to run. Sudo will then prompt you for your password.

Sudo will remember your password for 15 minutes (by default). This feature was designed to allow users to perform multiple administrative tasks without being asked for a password each time.

Be careful when doing administrative tasks - you might damage your system!

Some other tips for using sudo include:

- To use a "root" terminal, type "sudo -i" at the command line.
- The entire suite of default graphical configuration tools in Ubuntu already use sudo, so they will prompt you for your password if needed.
- When starting graphical tools with "sudo", run it with "gksudo" instead. This will open a small graphical window that prompts the user for his password. "gksudo" is convenient if you want to set up a launcher for Synaptic on your panel, or something similar, where you would normaly not have the possiblity to enter your password.
- For more information on the sudo program and the absence of a root user in Ubuntu, read the *sudo page* [https://help.ubuntu.com/community/RootSudo] on the Ubuntu wiki.

2.6. More Help

An incredible amount of information about Linux is available on the Internet. To get started, see the excellent and comprehensive tutorial *Getting Started with Linux* [http://www.linux.org/lessons/beginner/index.html].

For people who already know the basics, the tutorial *Intermediate Level User Linux Course* [http://www.linux.org/lessons/interm/index.html] is a good read.

Chapter 2. Guided Tour

Welcome to the Guided Tour around the Xubuntu Desktop. This guide will take you on a trip around your new desktop, show you the most important places, introduce you to some of the included programs, and explain how to accomplish basic tasks. It is recommended to have an actual Xubuntu system ready and to try out the stuff described while reading this document.

The readers are generally assumed to have access to the Internet, since this guide will often just provide links to wiki pages and to other documentation on the Web.

1. Desktop

When your computer has finished booting up, and after entering your login data, you will arrive at the Xubuntu desktop. It comes with many features that make your life easy, and it is well worth the time to get to know your way around it.

As you can see, your desktop has two panels: one on top, and one on the bottom of the screen.

1.1. Top Panel

The top panel is mainly used for starting applications and navigating to different places on your computer. It also comes with a logout button, system tray and a clock.

Clicking on Applications will open the system menu, offering you many choices of applications to start. Note that you can also access your Settings, Help, and a logout dialog from the Applications menu.

Clicking on the *logout button* (looks like a door with a red arrow) will bring up a menu with choices for logging out, shutting down, rebooting, and, depending on your hardware, suspending or hibernating your computer.

Use the checkbox `Save session for future logins` to have all the currently running programs auto-started the next time you log in.

Next to the clock is a small area called the *system tray*. Some programs will show up as a small icon in the system tray while they are running in the background. The system tray is also used for informing you about updates to your system. If such an update becomes available, you will see a small speech bubble pop up giving you the necessary information to keep your system up to date and secure.

Besides that, the top panel is quite empty. It has lots of additional room to add items besides the browser launcher. You may want to go ahead and *add some custom items* to it. Right-click on the panel, and choose `Add New Item`. Choose one of the many panel plugins available, or create a custom program launcher. The item will be permanently attached to your panel. Anything you add here will be reachable with just a single click, directly from your panel.

1.2. Bottom Panel

This panel contains a show-desktop button, a tasklist, and a pager.

The *show-desktop button* will minimize all applications to clear your view onto the desktop. This is very helpful in case you are trying to access icons on the desktop and need to get all the windows out of the way.

The *taskbar* will have an entry for every window that is currently open. Use it to quickly change between running applications.

The *pager* allows you to navigate between the different desks you use. Note that small icons on the pager give an indication about the current windows on the different desks.

1.3. Desktop

At first, the desktop will show you icons for your home directory, the filesystem, and the trash bin.

You may also configure the desktop to show minimized application icons instead of folders/file launchers. Refer to *Section 1.2, “Application icons on the Desktop (CDE style)” [p. 4**0**]* .

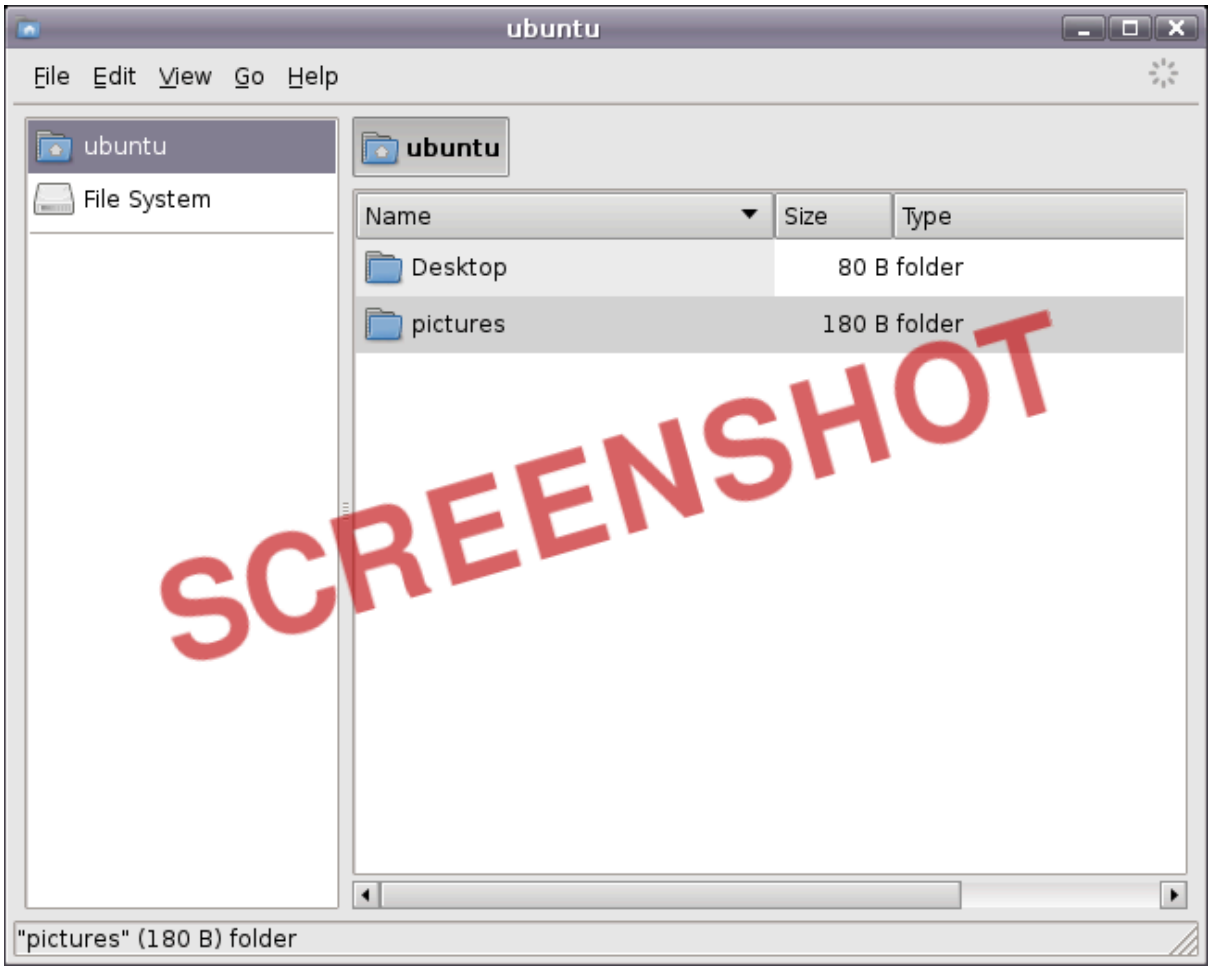
To change the desktop background image, launch Applications → Settings → Settings Manager, and choose `Desktop`. In the lower part, where it says `Image`, click on the `Browse` icon and choose a different picture.

The desktop offers a bunch of features that are real time-savers in everyday tasks:

- Right-clicking it will open the system menu just as clicking on Applications does.
- Using the scroll wheel on your mouse (if it has one) will allow you to switch between the different desks. This does the same thing as clicking on the pager in the lower panel, but is usually quicker, since you (probably) do not have to move the mouse.
- Pressing **Alt**-**Tab** will allow you to rotate between the currently open windows. This allows for lightning-fast switching between applications without taking your hands off the keyboard.

2. Browse the Files on your Computer

Xubuntu comes with Xfce's brand new file manager called Thunar. For simplicity's sake, we will just refer to it as the File Manager. Load it by clicking Applications → File Manager (thunar).



2.1. Navigation

The File Manager's default view consists of a shortcut pane on the left side, the main area on the right, and a pathbar above the main area.

The *shortcut pane* provides shortcuts to different folders on your system. The first shortcut will lead to your home directory, the directory where you store all your personal data, and will therefore have the name of the current user. That directory will probably appear empty. The second shortcut will take you to the root of your filesystem - you may want to explore it a bit, even though it will be confusing to you if you are new to Linux. Just click on the different folders and see what's inside. When you're done, return to your home directory by clicking on the top shortcut.

Add your own shortcuts by simply dragging folders to the shortcut pane. This will allow you to access important folders instantly!

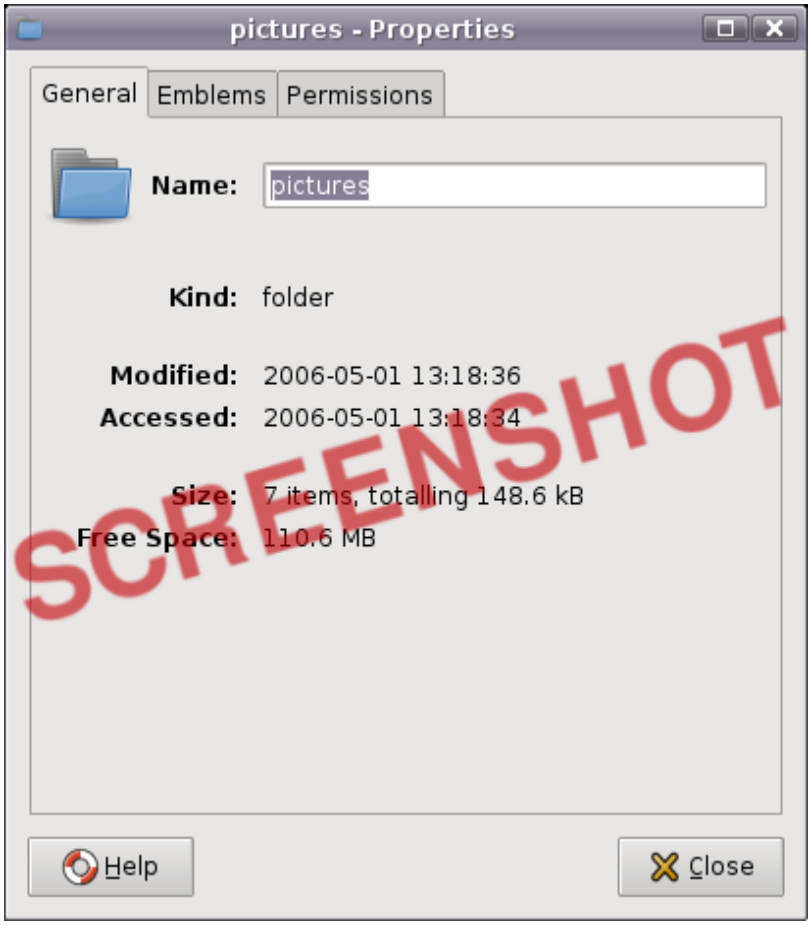
The *main area* will always display the contents of the current folder. Double-click on folders to enter them, and right-click on files/folders to get a pop-up window offering you some choices of what to do with it. Select multiple files by dragging a rectangle over them with the mouse. Alternatively, select one file, hold down the *Shift* key, and increase/decrease the selection using the arrows.

The *pathbar* will always show you the path you took to get to the place you are currently at. You can click on any pathbar icon to change to the directory it represents. Note that right-clicking on pathbar icons will also bring up a pop-up window with some options.

2.2. Creating and Deleting Files

To create a new document, right-click on some empty space in your home directory and select Create New Document → Empty File from the pop-up menu. The File Manager will prompt you for a name - just go with the suggested name for now. After this, you will see the new file in your home directory.

Right-click on it to have a menu pop up - choose `Properties`. This will show you some details about the file:



Right-click on the file once more, and choose `Delete` to remove it. The file will be put into the trash bin.

If you ever want to undo the deleting of a file, open the trash bin, and drag or copy/paste the file out of it.

To create a new folder, right-click on the empty space, and choose `Create Folder...`. You will be asked for a name. Type something and hit Enter. You will see this new folder in your home directory. Double click on it to enter it.

To rename or remove the folder, right-click on it and choose the appropriate option from the pop-up menu.

2.3. Copying and Moving Files

To copy and move files on your computer, just click and drag files and folders to other folders. As a default, the files will always be copied. If you want them to be moved instead, right-click and drag files to folder: This will offer you some options instead of just copying.

2.4. Removable Devices

When inserting CDs, floppys, USB sticks or other removable media into your computer, or hooking up removable devices like a musicplayer, it will be set up automatically by your system. After inserting a CD into your CD Drive, you will see a new shortcut in the left pane of the File Manager, representing the CD. Clicking on it will open the CD in the main area, just like clicking on a regular folder. To remove the CD, right-click on the shortcut, and choose `eject`. The same applies for any other removable media.

Please note that pressing the `eject` button on your CD drive may not work. This may be surprising to some users, but it is in fact the expected behaviour. Before the CD can be ejected, it needs to be properly "released" (unmounted) by the system. To remove a CD, always right-click on its shortcut and choose `Eject Volume`.

2.5. Customizing the File Manager

There are many ways to customize the File Manager. In case you do not like the way the icons are displayed, choose View → View as Detailed List to have the contents of the current directory displayed as a list.

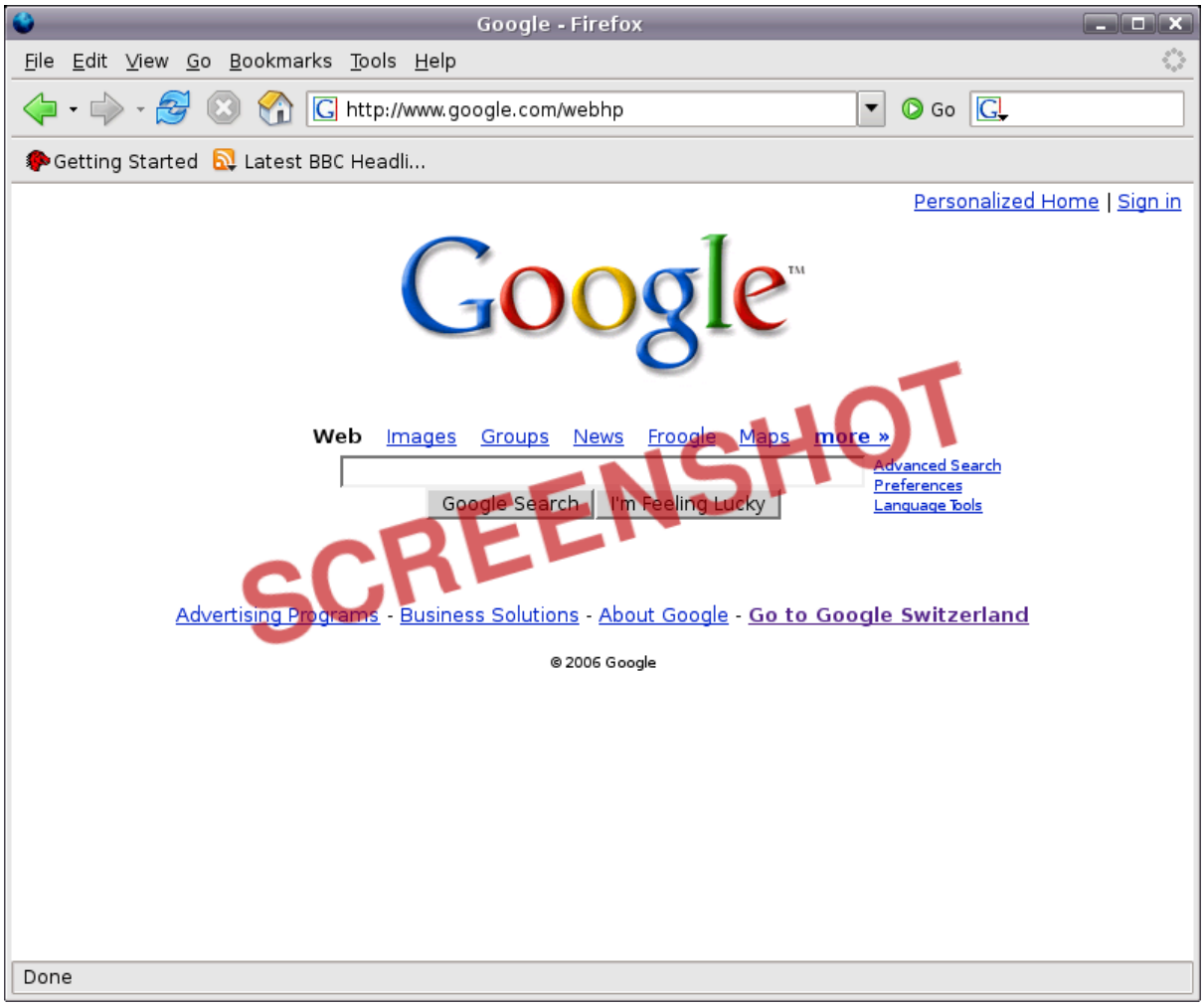
You can have the File Manager display a location bar instead of the pathbar by selecting View → Location Selector → Toolbar Style.

In case you prefer a tree view in the left pane, choose View → Side Pane → Tree.

3. Surfing the Internet

Before surfing the Internet, you need to make sure you have a working Internet connection. In case you are not connected yet, consult *Section 6.2, “Connect to the Internet” [p. 48]* .

Xubuntu comes with the popular Firefox Web browser preinstalled. Firefox is well known for its outstanding security, standards compliance, extensibility, usability, and speed. Launch it from Applications → Network → Firefox Web Browser .



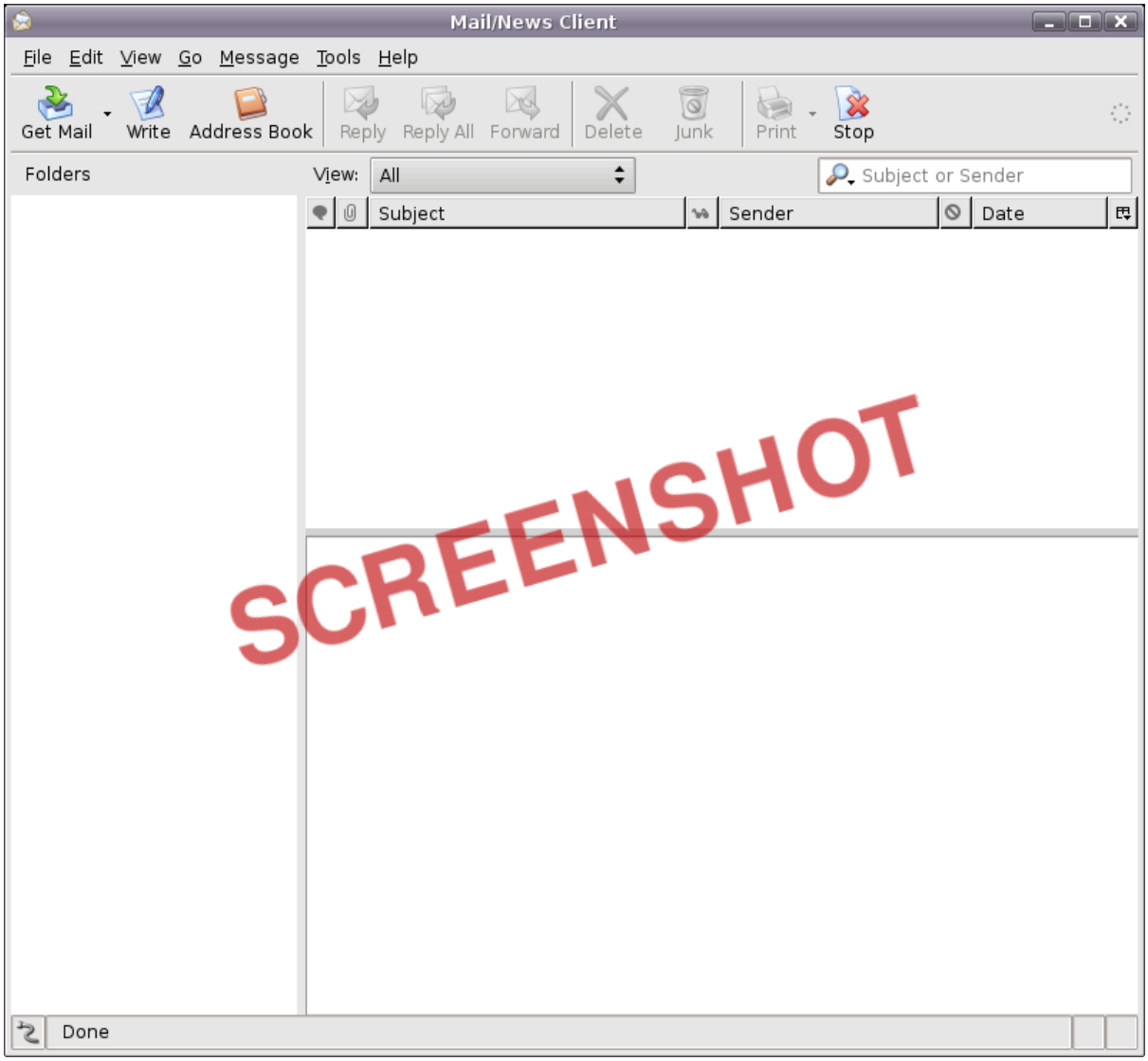
If you are new to Firefox, see *An introduction to Firefox* [http://opensourcearticles.com/articles/firefox_15/english/part_01]. More help is available from *http://www.mozilla.org/support/firefox/*.

4. Writing Emails

Thunderbird is the default mail client of Xubuntu. It comes with all desired features, including junk filtering, thread display, POP/IMAP support, security features, themes, an extension mechanism, and more. Before you start, make sure you have a working Internet connection (See *Section 6.2, "Connect to the Internet" [p. 48]*).

Launch Thunderbird from Applications → Network → Thunderbird Mail.

After this, the Thunderbird Account Wizard will guide you through the process of entering your account data.



If you are new to Thunderbird, see *An introduction to Thunderbird* [http://opensourcearticles.com/articles/thunderbird_15/english/part_01]. More help is available from *http://www.mozilla.org/support/thunderbird/*.

5. Instant Messaging / Chatting

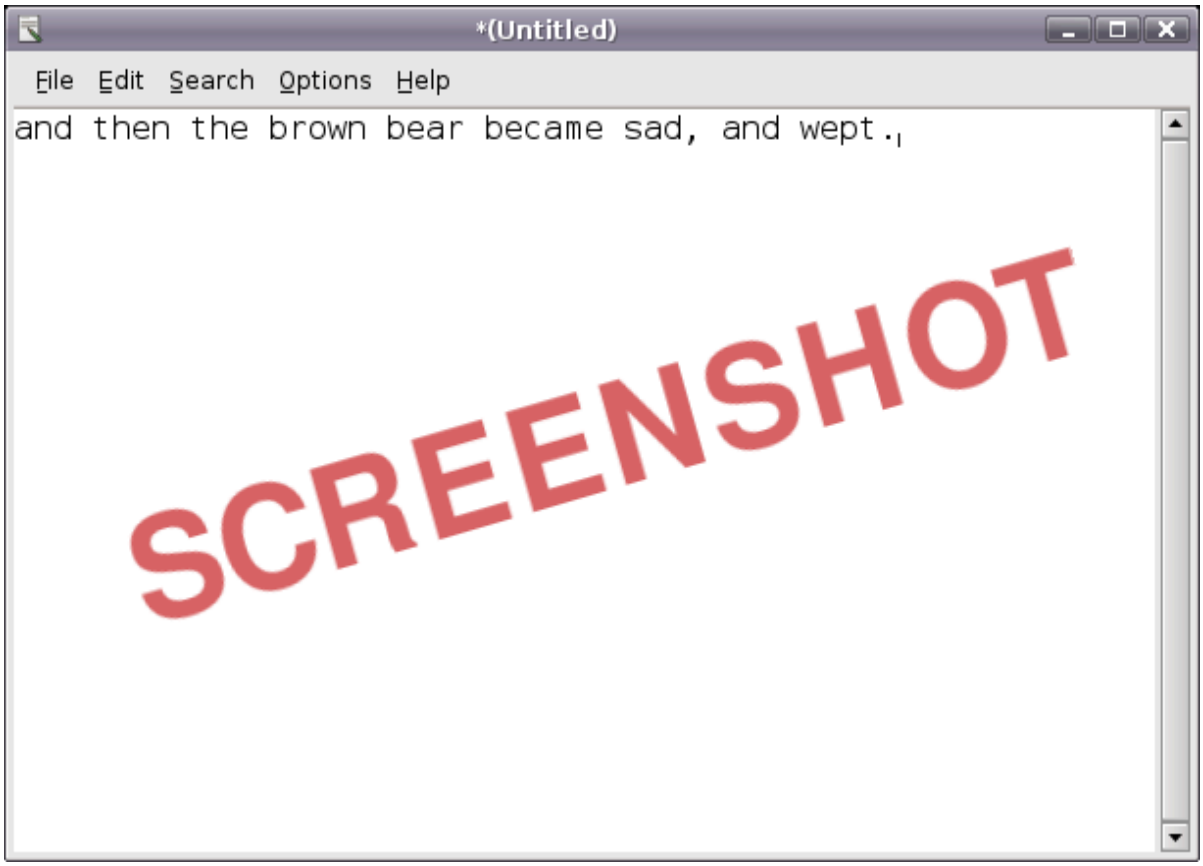
Use Gaim for chatting and instant messaging. Launch it from Applications → Network → Gaim Internet Messenger. Before you start, make sure you have a working Internet connection (See *Section 6.2, "Connect to the Internet" [p. 48]*).

Please consult the *Gaim Online Documentation* [http://gaim.sourceforge.net/documentation.php] Web page for further information.

6. Writing Text Documents

6.1. Editing Textfiles with Mousepad

Launch Applications → Accessories → Mousepad. This will open up Mousepad - a simple, fast text editor. This is what it looks like:



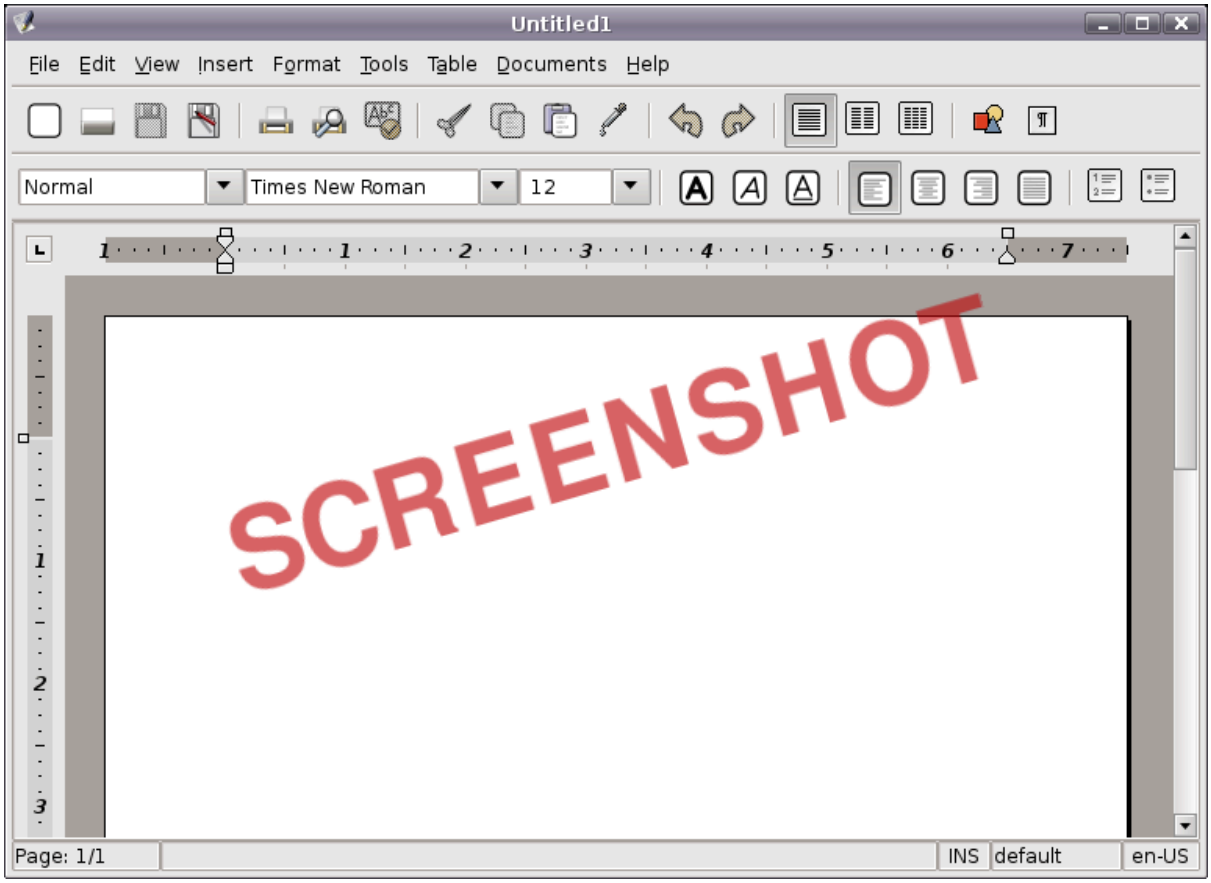
Use Mousepad for viewing and editing simple text files, such as configuration or log files. Mousepad is, however, not suited for creating formatted text files. For this, see the following section.

6.2. Word Processing with Abiword

For regular Word Processing, AbiWord is the program to use. AbiWord is a state of the art word processor that reads and writes both OpenDocument (OpenOffice) and Microsoft Word documents and is very fast. It features everything you need for standard word processing: tables, lists, images, footnotes, styles, spellchecking, and more. It also has good internationalization and is easy to use.

Start it with Applications → Office → AbiWord Word Processor

Please consult the *AbiWord Manual* [http://www.abisource.com/support/manual/] on the project's website for detailed information on how to use AbiWord.



In case you need more features or better Microsoft Word compatibility, you may want to install OpenOffice. It is readily available for installation from the Ubuntu software repositories (refer to *Section 8, "Adding, Removing and Updating Applications" [p. 27]*). Just be warned that it is a lot bigger and slower than AbiWord!

7. Spreadsheet calculations with Gnumeric

Gnumeric is the *Gnome Project* [http://www.gnome.org]'s Spreadsheet program, and it is the recommended application for working with spreadsheets on Xubuntu. It is - in its own words - "free, fast and accurate". Start it with Applications → Office → Gnumeric Spreadsheet.

A *Quick Guide* [http://www.gnome.org/projects/gnumeric/doc/chapter-quick-start.html] and the full *User Manual* [http://www.gnome.org/projects/gnumeric/doc/] are available from the project's website.

In case you need more features or better Microsoft Excel compatibility, you may want to install OpenOffice. It is readily available for installation from the Ubuntu software repositories (refer to *Section 8, “Adding, Removing and Updating Applications” [p. 27]*). Just be warned that it is a lot bigger and slower than Gnumeric!

8. Adding, Removing and Updating Applications

8.1. Synaptic Package Manager

Sooner or later, you will have the need to install additional programs on your computer. Ubuntu comes with a special tool called Synaptic that will help you with this task. Synaptic is an advanced package management application that can install and remove every package available to your system. It gives you complete control over the package management of your system.

To launch Synaptic, choose Applications → System → Synaptic Package Manager on the desktop menu system.

Running Synaptic requires administrative privileges (see *Section 2.5, “Root And Sudo” [p. 13]*).

The Synaptic screen is divided up into four sections, the two most important being the package categories on the left side, and the packages on the right.

If you know the name of the package, the quickest way to install it is to click on the Search toolbar button, enter the name in the search text field and click the Search button. Synaptic will now show you a short list from which to select your application for installation. This is usually much easier than having to look through the very long list of applications in the category section. Now right-click on it and choose "Mark this package for installation". Once you are satisfied with your selections click Apply on the top button bar. Synaptic will then download and install the required packages from the online repositories and/or from your Ubuntu installation CD.

In case you do not know the name of the package, choose section in the lower left part of the window, choose the appropriate category, and find the package name in the list.

When the installation process has finished, you should have a new option for the program you installed available in the menu.

8.2. Extra Repositories

Many software packages you might need are not in the *Main* repository, so let us learn how to add extra repositories.

8.2.1. What are Repositories?

There are thousands of programs available to install on Ubuntu. These programs are stored in software archives (*repositories*) and are made freely available for installation over the Internet. This makes it very easy to install new programs in Linux, and it is also very secure, because each program you install is built specially for Ubuntu and checked before it is installed. To organize the software, Ubuntu repositories are categorized into four groups: *Main*, *Restricted*, *Universe*, and *Multiverse*.

The rationale used to determine which software goes into which category is based on two factors:

- The level of support software development teams provide for a program.
- The level of compliance the program has to the *Free Software Philosophy* [http://www.ubuntu.com/ubuntu/philosophy].

You can find more information about the Repositories available *on the website* [http://www.ubuntu.com/ubuntu/components].

The standard Ubuntu Install CD contains some software from the *Main* and *Restricted* categories. Once your system is made aware of the Internet-based locations for these repositories, many more software programs are made available for installation. Using the software package management tools already installed on your system, you can search for, install and update any piece of software directly over the Internet, without the need for the CD.

8.2.2. Adding Extra Repositories

To enable the extra repositories:

1. Open Applications → System → Software Sources .
2. To enable the *Universe* repository, check the Community maintained Open Source software (Universe) checkbox.

   Adding this repository will mean that the majority of the Free Software universe will be available to install on your system. This software is supported by a carefully selected group of volunteers within the Ubuntu Community, but is not supported by the core Ubuntu development team and may not include security updates.
3. To enable the *Multiverse* repository, check the By copyright or legal issues restricted software (Multiverse) button.

   Adding this repository will mean that software which has been classified as *non-free* will be available to install on your system. This software may not be permitted in some jurisdictions. When installing each package from this repository, you should verify that the laws of your country permit you to use it. Again, this software may not include security updates.
4. Click Close to save your changes and exit.

8.3. Updates

Sometimes the Ubuntu developers release feature and security updates for applications and packages within the Ubuntu system.

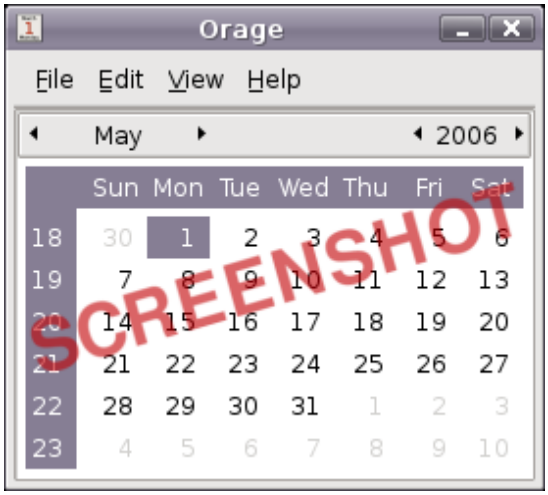
The Update Manager program will list the available updates. You will find it at Applications → System → Update Manager. To download and install available updates click Install Updates. Ubuntu will then download and install the available updates from the Internet.

When Update Manager has finished updating your system, close Update Manager to finish updating your system.

After installing some important updates, it may be necessary to restart your computer.

9. Calendar

Orage is Xfce's calendar application. You will find it at Applications → Office → Orage. Use it to manage your appointments, set weekly reminders, schedule alarms, and more.



10. Play Music

Launch Applications → Multimedia → gxine for playing audio files. Gxine is a simple, easy-to-use media player based on the xine engine.

Please note that Xubuntu comes with very limited multimedia support out of the box. Please read *Section 2, “Get Multimedia support” [p. 43]* for an explanation, and what you can do about it.

11. Watch a Movie

Gxine is the default program to watch movies. Launch it from Applications → Multimedia → gxine .

Please note that Xubuntu comes with very limited multimedia support out of the box. Playback of DVDs, for example, is not supported by default. Please read *Section 2, "Get Multimedia support" [p. 43]* for an explanation, and what you can do about it.

12. Manipulate a Picture

Xubuntu ships with the GIMP - the GNU Image Manipulation Program. It can be used for things like photo retouching, image composition and image authoring. Start it from Applications → Graphics → GIMP Image Editor.

Extensive documentation on using the GIMP may be found here: *http://www.gimp.org/docs/*.

13. Browse Pictures

For browsing picture image collections, you will find the application GQview convenient. To launch it, click Applications → Graphics → GQView.

You will find a file browsing area on the left side that lets you navigate to the pictures on your hard drive. The pictures will subsequently be shown in the main area of GQview.

Please refer to the online manual: *http://gqview.sourceforge.net/docs/index.html*.

14. Burn a CD

For burning CDs, use Xfburn. To launch it, click Applications → Accessories → Xfburn.

The tool has the usual options of erasing CDRW disks, burning ISO images, copying CDs, or making Data CDs from files on your PC.

15. The Settings Manager

The Settings Manager is located at Applications → Settings → Settings Manager. This is the central place for customizing your desktop. Among the things you can do with the Settings Manager are:

- Change the desktop background image in the section *Desktop*.
- Change the GTK theme and the icon theme in *User Interface*.
- Choose a different screensaver in *Screensaver*.
- Choose a different audio device in *Sound*.
- Add new keyboard shortcuts in *Keyboard*, tab *Shortcuts*.
- Lots more...

Please note that these settings control the look and behaviour of your *desktop* only. It is important to know that it is not a settings manager for your *system*, and therefore does not let you configure printers, set up your networking configuration, switch keyboard layouts, or similar. To accomplish these tasks, read *Section 4, “Printer configuration” [p. 45]*, *Section 6, “Networking” [p. 48]* and *Section 3, “Switching the keyboard layout” [p. 44]*.

16. Finding the Right Program

The wealth of software offered on an Ubuntu system is enormous, so finding the right tool for the right job can be difficult at times. The following table may help you with this. It shows programs which are installed on Xubuntu by default, some which are recommended to be added by you, and other programs available in the software archives, grouped by tasks. Please note that you may have to *enable restricted repositories* to install some of the listed programs.

Task	**Installed Program**	**Also available**
Webbrowser	*Firefox*	Epiphany (Gnome), Konqueror (KDE), Dillo
Email Client	*Thunderbird*	Sylpheed-Claws
File Manager	*Thunar*	Nautilus (Gnome), Konqueror (KDE), Xffm (old Xfce Filemanager), ROX-Filer
Text Editor	*Mousepad*	Gedit (Gnome), Kate (KDE), Gvim, XEmacs, Nedit, Nano
Word Processing	*Abiword*	OpenOffice, KOffice (KDE), LaTeX
Spreadsheet Calculation	*Gnumeric-gtk*	OpenOffice, KOffice (KDE)
Multimedia Playback (Audio/Video)	*Xfmedia*	XMMS, Beep Media Player, Xine, Mplayer, Totem (Gnome), Rhythmbox (Gnome)
Image Manipulation	*Gimp*	Krita (KDE, part of KOffice)
Picture Browsing	*GQview*	gThumbview (Gnome), KView (KDE)
Chat / Instant Messanger	Gaim	XChat
PDF Viewer	Evince-gtk	Acroread
Calendar	Orage	
Package Management	*Synaptic*	
Software Telephone		Ekiga (Gnome)
Archiving Tool	Xarchiver, Thunar Archive Plugin	
CD/DVD Burning	Xfburn	GnomeBaker (Gnome), K3b (KDE)
FTP Client		Nautilus (Gnome), Konqueror (KDE)

Task	**Installed Program**	**Also available**
Printer Administration	*CUPS Web Administration*	Gnome Cups Manager (Gnome)
P2P		aMule
Vector Graphics		Inkscape
Desktop Publishing (DTP)		Scribus

Chapter 3. Common Tasks

1. Desktop

1.1. Change the desktop background image

If you want to set up a different background image, do:

1. Launch Applications → Settings → Settings Manager.
2. Choose `Desktop`.
3. In the section `Image`, click on the file icon. This will bring up up an *open file* dialog, where you can choose an alternative image.

1.2. Application icons on the Desktop (CDE style)

To have minimized application icons instead of file/launcher icons displayed on your desktop, do this:

1. Launch Applications → Settings → Settings Manager.
2. Choose `Desktop`, and then the `Behaviour` tab.
3. Change the `Desktop Icons` entry from `File/launcher Icons` to `Minimized Application Icons`.

1.3. Add Panel Plugins

Here is a list of available Plugins for your Xfce Panel:

You will need super-user privileges to install the non-default plugins. See *Section 2.5, “Root And Sudo” [p. 13]*.

Xfce XKB Plugin
: Displays your current keyboard layout and allows to easily switch between multiple layouts. (For configuring layouts, see *Section 3, “Switching the keyboard layout” [p. 44]*). Installation: Installed by default.

Xfce Weather Plugin
: The weather plugin displays information about the current weather according your timezone and settings. It allows to search for weather location codes in the same plugin and displays weather status in little icons. Installation: Installed by default.

Xfce Wavelan Plugin
: The WaveLAN plugin displays information about a WaveLAN device. Installation:

```
sudo apt-get install xfce4-wavelan-plugin
```

Xfce Verve Plugin
: The plugin displays a mini-command line on the Xfce panel. Installation: Installed by default.

Xfce Systemload Plugin
: This plugin displays the current CPU load, the memory in use, and the swap space. Installation: Installed by default.

Xfce Screenshoter Plugin

Xfce4-screenshooter-plugin is a simple plugin to take screenshots of your desktop. Installation: Installed by default.

Xfce Quicklauncher Plugin

Application launcher plugin for the Xfce panel. It supports multline launchers, zoom effect, and more. Installation: Installed by Default.

Xfce Netload Plugin

This plugin displays the current load of the network interfaces of your choice. Installation: Installed by default.

Xfce Mount Plugin

This plugin for Xfce displays a list of the various devices available, giving the opportunity to mount/umount them. Note that most removable media are mounted automatically by the File Manager in Xubuntu. Installation: Installed by default.

Xfce Mailwatch Plugin

Mail checker panel plugin with support for local, POP3, IMAP, and Gmail accounts. Installation: Installed by default.

Xfce Generic Monitor Plugin

This plugin repeatedly spawns the indicated script/program, displaying its output as a string in the panel. It is useful for periodic status monitoring. Installation:

```
sudo apt-get install xfce4-genmon-plugin
```

Xfce Filesystem Guard Plugin

The fsguard plugin checks free space on a chosen mountpoint frequently and displays an alarm if free space is less than given alarm limit. Installation: Installed by default.

Xfce CPU Graph Plugin

The CPU graph plugin displays a graph of your current system load. Installation: Installed by default.

Xfce Clipman Plugin

Store and recall sequential X clipboard selections in Xfce4 with this plugin. Installation: Installed by default.

Xfce Battery Plugin

A battery monitor panel plugin for Xfce4 compatible with APM and ACPI. Installation: Installed by default.

Disk Performace Plugin

The DiskPerf plugin displays disk/partition performance statistics. Installation:

```
sudo apt-get install xfce4-diskperf-plugin
```

Dbus Messenger Plugin

Xfce4 Messenger Plugin for Xfce4 Panel is a plugin that listens for DBus messages and displays received messages in the panel and/or a popup window, and maintains a log of received messages. Installation:

```
sudo apt-get install xfce4-messenger-plugin
```

Mini Command Plugin

The plugin displays a mini-command line on the Xfce4 panel. Installation:

```
sudo apt-get install xfce4-minicmd-plugin
```

VLC Radio Plugin

This is an Xfce panel plugin which allows you to control your video4linux radio device. You can turn your radio on/off, tune it to some frequency, and manage station presets. Installation:

```
sudo apt-get install xfce4-radio-plugin
```

Sensors Plugin

The sensors plugin reads your hardware sensor values and displays then in your panel. Installation:

```
sudo apt-get install xfce4-sensors-plugin
```

XfApplet Plugin

XfApplet is a plugin for the Xfce 4 panel. The plugin itself has no special functionality. Its only purpose is to enable one to use Gnome applets inside the Xfce 4 panel just as they are used inside the Gnome panel. Installation:

```
sudo apt-get install xfce4-xfapplet-plugin
```

Xmms Plugin

The xmms plugin for the Xfce 4.4 panel is a simple tool which allows you to control xmms. Installation:

```
sudo apt-get install xfce4-xmms-plugin
```

1.4. Add new Window Manager Style

When you download new window manager styles, they usually come in a .tar or .zip archive. Extract the contents, and do:

```
sudo cp -r folder-with-new-theme /usr/share/themes/
```

You will need super-user privileges to do this. See *Section 2.5, “Root And Sudo” [p. 13]*.

2. Get Multimedia support

Please note that Xubuntu comes with very limited multimedia support. The reason for this is that many popular multimedia formats are not free; they are protected by patent or license restrictions. To prevent problems, Xubuntu ships without support for these formats. Please consider using and supporting open and free multimedia formats such as *Ogg Vorbis* [http://www.vorbis.com/] (Audio) and *Ogg Theora* [http://theora.org/] (Video).

If, however, you still want to use restricted multimedia formats, you will need to enable the *Universe* and *Multiverse* repositories (see *Section 8.2, "Extra Repositories" [p. 27]*). You will want to install at least the following packages:

```
libxine-extracodecs
ffmpeg
lame
faad
sox
mjpegtools
libxine-main1
gxineplugin
```

With these packages installed, you should be able to play many multimedia formats. Please refer to *https://wiki.ubuntu.com/RestrictedFormats* for detailed information on getting even more formats to play.

3. Switching the keyboard layout

There is currently no graphical tool to switch the keyboard layout in Xubuntu. To do this, you will need to edit the file */etc/X11/xorg.conf*.

Be warned that this is an important file for the system and you should be careful with it. You will need administrative privileges to edit it (Cf. *Section 2.5, “Root And Sudo” [p. 13]*). It is recommended to make a backup of this file before editing it:

```
sudo cp /etc/X11/xorg.conf /etc/X11/xorg.conf.BACKUP
```

Find the section that looks like this:

```
Section "InputDevice"
Identifier    "Generic Keyboard"
Driver        "keyboard"
Option        "CoreKeyboard"
Option        "XkbRules"    "xorg"
Option        "XkbModel"    "pc104"
Option        "XkbLayout"   "us"
EndSection
```

Change "us" to whatever language code you prefer. Next, type this from a terminal:

```
setxkbmap <language_code>
```

That's it.

If you enter more than one language code, e.g. "us,de" for US-American and German layout, you can easily switch between these two with the the *XKB Layout Switcher Plugin* panel plugin.

4. Printer configuration

Getting your printer to work on Xubuntu may require some work. Most likely, your printer will be auto-detected by Xubuntu. However, you will still need to configure it by hand. You can either do this in your browser, or in a terminal:

You will need super-user privileges to configure a printer. See *Section 2.5, "Root And Sudo" [p. 13]*.

4.1. Printer Configuration with the Browser

First, you will need to enable the web administration interface of CUPS (Common UNIX Printing System).

1. Launch Applications → System → Users and Groups and hit Manage Groups.
2. Click on *lpadmin* and then Properties.
3. Check your username.
4. Restart CUPS with this command:

```
$sudo /etc/init.d/cupsys restart
```

Next, visit the web interface by entering *http://localhost:631/admin* in your browser's location bar. Once there, you will be able to see, install, and configure the detected printers on your system.

4.2. Printer Configuration with the Terminal (Advanced Users)

To manage printers in the terminal, CUPS provides the commands *lpadmin*, *lpinfo*, *lpoptions*. Please refer to the CUPS online manual *Managing Printers from the Command-Line* [http://www.cups.org/doc-1.1/sam.html#4_3] for detailed information on how to use these commands.

To check if your printer has been detected correctly, do:

```
lpinfo -v
```

To add a printer, do something similar to:

```
lpadmin -p DeskJet -E -v parallel:/dev/lp1 -m deskjet.ppd
```

If you experience problems getting your printer to work, you may consider installing gnome-cups-manager. It is available by the usual manner described in *Section 8, "Adding, Removing and Updating Applications" [p. 27]* and will offer a nice graphical tool to set up your printer. WARNING: installing gnome-cups-manager will bring in many dependencies to the Gnome desktop, thus increasing the installed size of your system. It is therefore not

recommended to install gnome-cups-manager on Xubuntu. In some cases, however, it may be worth the trade-off to get your printer working.

5. Managing Users and Groups

To add users or groups to your system, you can use the Users And Groups application located in Applications → System → Users and Groups.

You will need super-user privileges to launch the Users and Groups tool. See *Section 2.5, “Root And Sudo” [p. 13]*.

To add a new user, click on Add user, fill-in the data fields, then click OK. To edit the properties of each user, click the Properties button located in the main window.

To add a new group, hit the Manage Groups button and click Add group. Choose a name for the new group and, if you want, change the value for the Group ID from the default. If you try to allocate a Group ID that is in use, the system will warn you.

You can add users to the newly created group by checking the user's name from the menu. Removing a user is as simple as adding one: select the group you want, hit Properties, and uncheck the user.

To remove a user or group from the system, select the user or group you want to delete and click Delete.

6. Networking

6.1. Configure Networking

Xubuntu comes with a graphical networking utility. Launch it with Applications → System → Networking.

This tool will allow you to configure all aspects of your network connection - setting up DHCP, static IP addresses, configuring modem dialup, and more. It will also allow you to set up different profiles for use with a laptop. This is very convenient if you need location-dependent networking setups.

You will need super-user privileges to run the Networking utility. See *Section 2.5, “Root And Sudo” [p. 13]*.

6.2. Connect to the Internet

This task is usually very simple. However, it requires a minimum of involvement on your part. Of course, you will need to have subscribed to an *Internet Service Provider*, and your Internet connection must be installed and functional.

There are several ways to connect to the Internet. Depending on what type of connection you have, you could have broadband (e.g. ADSL), dialup (e.g. a 56 kbit/s modem) or access to Internet directly, via your Local Area Network for instance.

Go to the following section corresponding to your type of connection.

6.2.1. Broadband

If you have an ADSL or cable modem, there are several possibilities, depending on the type of modem.

6.2.1.1. Ethernet Modem (pppoe)

If your modem connects to your PC with an ethernet network cable you probably want to set up a *pppoe connection*. However, nowadays many modems also integrate a router. In this case you should follow the instructions provided by the manufacturer. You may find extra help in the Local Area Network section below (if you configure the device via a web interface, it probably has an integrated router).

6.2.1.1.1. ADSLPPPoE

Prerequisites are:

- A DSL account with an Internet Service Provider (ISP).
- Username and password for that account.
- A DSL modem to which you connect using an Ethernet network card.

- Your Ubuntu machine with its Ethernet card configured for DHCP.
- Knowledge of installing packages with synaptic.

Make sure that your ADSL connection has been activated by your ISP before starting this procedure. Generally there is a "DSL" light on your modem that is lit, indicating whether your connection is activated.

Ubuntu by default installs the "pppoeconf" package. If you are not sure if you have it you can check by typing this in a terminal window:

```
dpkg -s pppoeconf
```

If it is not installed yet, do it yourself, following the hints in *Section 8, “Adding, Removing and Updating Applications” [p. 27]*.

Once you are sure that you have the package installed, it's time to configure your connection. Type in a terminal:

```
sudo pppoeconf
```

A text-based installer will take you through the setup. To manually connect using your configured setup, type:

```
pon dsl-provider
```

6.2.1.2. USB modem

This is probably the most demanding type of modem to set up. USB is far from the ideal method for network access. If you have a modem that can connect both via USB and ethernet it will be best to use the ethernet connection.

If you have a USB modem, you should refer to *https://wiki.ubuntu.com/UsbAdslModem*

More support for installing a USB modem can be found at:

- *http://ubuntuforums.org/showthread.php?p=189972#post189972*
- *http://forum.eagle-usb.org/*
- *http://eciadsl.flashtux.org/*

6.2.2. Dialup

If you have a dialup connection, a 56 kbit/s or slower modem, you should refer to *https://wiki.ubuntu.com/DialupModemHowto*.

6.2.3. Local Area Network

If you connect to the Internet via a Local Area Network (ethernet or wireless for example), the configuration depends entirely on your network.

Configuration information should be provided by your network administrator.

If you connect via a router on a home network, you should read the router's documentation.

You may have to configure the interface through which you connect to use DHCP (dynamic configuration, usually the default) or specify an IP address, default gateway and DNS server.

6.3. Change the Computer's Name

You will need super-user privileges for this task. See *Section 2.5, “Root And Sudo” [p. 13]*.

1. Applications → System → Networking
2. Select the General tab. Enter the name of the computer in the Hostname field.
3. Click OK, close all open applications and log out and back in for the changes to take effect.

7. System Tasks

7.1. List devices

1. To list mounted devices, run the following command in a terminal:

   ```
   mount
   ```

   The listing shows the device (such as a hard disk partition), the mount point (where you access the files), the filesystem type, and the mount options.

   This example shows the hda2 hard disk partition mounted as '/', with the filesystem type ext3. The partition is mounted with two options: one to allow the device to be read from and written to and the other to remount the device as read-only in the event of any errors.

   ```
   /dev/hda2 on / type ext3 (rw,errors=remount-ro)
   ```

2. To list PCI devices:

   ```
   lspci
   ```

3. To list USB devices:

   ```
   lsusb
   ```

7.2. Mount/unmount CD/DVD-ROMs manually

You will need super-user privileges for this task. See *Section 2.5, “Root And Sudo” [p. 13]*.

1. Assuming that `/media/cdrom0/` is the mount point of your CD/DVD-ROM device
2. To mount a CD/DVD-ROM:

   ```
   sudo mount /media/cdrom0/ -o unhide
   ```

3. To unmount CD/DVD-ROM:

   ```
   sudo umount /media/cdrom0/
   ```

8. Setting up Hardware

8.1. Set up Wireless Cards

Many wireless cards are automatically detected by Ubuntu during installation. A complete listing of wireless cards which are known to work with Ubuntu can be found on *the Ubuntu Wiki* [https://wiki.ubuntu.com/HardwareSupportComponentsWirelessNetworkCards]. Please add your wireless card to the list if it works with Ubuntu and is not already listed.

Some cards may not work automatically with Ubuntu. If this is the case, please look at the *Wireless Troubleshooting Guide* [https://wiki.ubuntu.com/WirelessTroubleshootingGuide], which is an excellent resource for troubleshooting wireless cards, on the Ubuntu Wiki.

All information regarding wireless networking on Ubuntu is collected at *Wireless Networking Central* [https://wiki.ubuntu.com/WifiDocs] on the Ubuntu Wiki.

8.2. Set up Modems

8.2.1. Winmodems

Most winmodems are not supported by Ubuntu, but drivers can be found that will enable the use of such modems. First you need to identify what chipset your winmodem is using:

```
wget -c http://linmodems.technion.ac.il/packages/scanModem.gz
gunzip -c scanModem.gz > scanModem
chmod +x scanModem
sudo ./scanModem
mousepad Modem/ModemData.txt
```

Read this file; it should list what modem chipset you have. Once you are aware of the chipset you have, see *http://www.linmodems.org/* and follow the directions for your modem. More infomation can be found at *SettingUpModems* [https://wiki.ubuntu.com/SettingUpModems] on the Ubuntu Wiki.

8.2.2. ADSL Modems

All PPPOE and router-style ADSL modems (that use ethernet for the connections) are supported by Ubuntu, and some USB ADSL modems are supported too. For router-style ADSL modems, just connect it, configure the modem per your ISP's instructions, and configure networking in Ubuntu. For information on PPPOE modems see *this guide* [https://wiki.ubuntu.com/ADSLPPPoE] on the Ubuntu Wiki.

Chapter 4. Questions and Answers

Q: Where is the trash bin?

A: It is represented by an icon on your desktop. You may want to add the trash bin applet to one of your panels for quicker access to it.

Q: How can I move my old panel configuration from Xfce 4.2 over to Xfce 4.4?

A: You can't. The panel has been rewritten and can not use the old configuration files anymore.

Q: How do I start a program manually?

A: Sometimes it can be useful to start a program manually, for example when the program does not have an entry in the menu. This is easy to do with the Run Program dialog.

1. Open the Run Program dialog by typing:#**Alt**-**F2**
2. Enter the name of the program you wish to run, and press **Enter**.

Q: What can I do if Xfmedia crashes when playing restricted formats?

A: Please make sure you have all the appropriate libraries for the restricted formats installed. Consult the Wiki Page on *Restricted Formats* [https://wiki.ubuntu.com/RestrictedFormats]. Some people have reported that installing *libxine-extracodecs* fixed this issue.

Q: Where can I get more Xfce-related Artwork?

A: Check *http://www.xfce-look.org*. There should be something there for every taste.

Q: Are there any other goodies available besides the ones in the Ubuntu archives?

A: Check *http://xfce-goodies.berlios.de/*, the official home of Xfce goodies.

Q: Something is going wrong on my system. Where can I obtain more information?

A: Check *https://wiki.ubuntu.com/LinuxLogFiles* for a list of log files on your system and how to read them.

Q: How do I connect to a remote machine from the File Manager (Thunar)?

A: The File Manager (Thunar) does not allow you to connect to remote machines yet. These features are planned for a future release of Thunar.

Chapter 5. Getting More Help

There are a number of places from which you can obtain help with your Ubuntu desktop system, these include:

- *The Ubuntu Documentation Website* [http://help.ubuntu.com] - this contains this guide, and other guides produced by the Ubuntu Documentation Team for Ubuntu and Kubuntu.
- *The Ubuntu Wiki* [https://help.ubuntu.com/community/UserDocumentation] - this contains many guides contributed by the community.
- *Web Forums* [http://www.ubuntu.com/community/forums] - here you can ask questions on a forum and receive answers from the forum community.
- *Mailing Lists* [http://lists.ubuntu.com] - here you can ask questions by email, and receive answers from the mailing list community.
- IRC chat: irc.ubuntu.com channel #xubuntu - chat in realtime with the irc community.

For more information, visit the *How to Get Help* [https://help.ubuntu.com/community/HowToGetHelp] wiki page.

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