# **Lubuntu Manual Documentation**Release 22.10

**Lubuntu Team** 

# **Contents**

1	What is Lubuntu?	3
2	Contents	5
	2.1 Chapter 1 Installing Lubuntu	5
	2.2 Chapter 2 Applications	
	2.3 Chapter 3 System Tools and Preferences	218
	2.4 Chapter 4 Installing, Updating, and Removing Software	321
	2.5 Chapter 5 Panel, Desktop, and Runner	339
	2.6 Appendix A Tips and Tricks	365
	2.7 Appendix B Contributing	366
	2.8 Appendix C Command Line	
	2.9 Appendix D Upgrading from Previous Releases	
	2.10 Appendix E Live Session	372
	2.11 Appendix F Hotkeys Shortcuts	373
	2.12 Appendix G Advanced Networking	376
3	Contact Us	377
4	Thank you!	379

Welcome to the Lubuntu Manual! This is the official reference book for using Lubuntu. This manual covers many topics, such as installation instructions, applications Lubuntu provides, and much more!

## What is Lubuntu?

The project's goal is to provide a lightweight yet functional Linux distribution based on a rock-solid Ubuntu base. Lubuntu provides a simple but modern and powerful graphical user interface, and comes with a wide variety of applications so you can browse, email, chat, play, and be productive. Lubuntu was formerly a distribution for low-end hardware, but we have refocused<sup>1</sup>.

Members of the team take care of LXQt and other packages that are part of Lubuntu in the Ubuntu archive.

Lubuntu received official recognition as a formal member of the Ubuntu family beginning with Lubuntu 11.10.

<sup>&</sup>lt;sup>1</sup> https://Lubuntu.me/taking-a-new-direction/

## **Contents**

## 2.1 Chapter 1 Installing Lubuntu

This chapter shows you how to download and install Lubuntu on your computer.

## 2.1.1 Chapter 1.1 Retrieving the image

Before you install Lubuntu, you need to retrieve the correct image. Lubuntu supports AMD64 CPU types also known as 64-bit with a new version every six months (supported for nine months), and every two years being a long term support release (supported for three years). Lubuntu 20.04 is a Long Term Support release supported until 2023. Lubuntu 21.04 is supported until January 2022.

#### LTS vs. Regular Releases

Lubuntu offers two types of releases. The **Long Term Support** release, or the **LTS**, is the release recommended for most users. It is supported for three years after the release date and does not contain new features. Throughout the course of the cycle, the Ubuntu Kernel Team will deliver **Hardware Enablement** updates, or **HWE** updates, to Lubuntu via Linux kernel updates. Previously, Lubuntu used **LXDE** but since 18.10 it has used **LXQt**. Lubuntu 20.04 is the First **Long Term Support** release which uses the more modern **LXQt** desktop environment.

For users looking to try new features every six months at the expense of the support cycle length, Lubuntu offers **interim releases**, or **regular releases**. These releases, while they are considered stable, are testing grounds for major, new features which will be rolled into the LTS release. Users of the regular releases are typically enthusiasts and somewhat more experienced users looking for a fresher experience.

It is extremely important that if you choose this path, you upgrade to each successive regular release shortly after it comes out. If you are not comfortable doing this, you should consider using the LTS release instead.

#### Ways to download the image

Now that the decision of which architecture and release type you need is made, you will need to download the image.

#### There are several ways to download the Lubuntu image:

- HTTP download (from your web browser or terminal).
- BitTorrent (from a BitTorrent client such as Transmission, recommended for Windows and macOS users).
- zsync (from the terminal, recommended for Linux users).

You can also download the image via Jigdo but we will not cover that in this manual.

An easy download page which lists the HTTP and BitTorrent downloads is available on the Lubuntu website's Downloads page<sup>2</sup>, however for zsync downloads, you need to visit cdimage.ubuntu.com<sup>3</sup>, which has the files listed.

Below you can find more detailed notes on each download method.

#### **Downloading the image via HTTP**

We don't recommend using this method as it's often slower, more error prone, and less efficient than the other methods.

After you download the image, you **must** verify it, as this is the most common reason there are problems with a Lubuntu install. There is a helpful page on the Ubuntu Community Help wiki<sup>4</sup> that can guide you in the right direction.

**Warning:** Downloading via HTTP and not verifying the image can lead to hours of frustration with even the developers quite confused what is happening with your system. With just one bit of the image flipped will cause massive frustration and a failed install.

To verify the image, run this from the command line:

sha256sum lubuntu-22.10-desktop-amd64.iso

and then carefully check that the output matches

<sup>&</sup>lt;sup>2</sup> https://Lubuntu.me/downloads/

<sup>&</sup>lt;sup>3</sup> http://cdimage.ubuntu.com/lubuntu/

<sup>&</sup>lt;sup>4</sup> https://ubuntu.com/tutorials/how-to-verify-ubuntu#1-overview

#### Downloading the image via BitTorrent

Instead of downloading the image from one server, you can "torrent" the image, or download it from multiple sources instead of just one. This is often faster and saves the bandwidth of the Ubuntu cdimage servers. If you would like to learn more about BitTorrent, take a look at the Wikipedia page on the subject<sup>5</sup>.

In order to torrent the file, you need a BitTorrent client. We recommend Transmission<sup>6</sup>, an Open Source BitTorrent client. Since Transmission only provides clients for Linux and macOS, we recommend qbittorrent<sup>7</sup> for Windows users.

The BitTorrent links can be found on our Downloads page or cdimage.ubuntu.com<sup>8</sup>, both linked above.

After you have downloaded the link you need, open it in your BitTorrent client. This will download the image. After this is done, we recommend that you leave your BitTorrent client open so you can seed this image for other people, which helps reduce bandwidth costs even further by decentralizing the download location for other users.

#### Downloading the image via zsync

zsync is a convenient application that will automatically verify the checksum of the image once downloaded. The Lubuntu team uses this to download daily images as it will seamlessly download the delta or difference since the last image was spun.

In order to use zsync, you need to install it. Since this is a Linux-only client, you can get it from your distribution's package repository.

If you are running Debian, Ubuntu, or a distribution based off of either, run the following command in a terminal:

```
sudo apt install zsync
```

Otherwise, there is a snap application you can download of zsync which should function mostly the same and should work on all Linux distributions:

```
sudo snap install zsync
```

To download the image using zsync run

zsync http://cdimage.ubuntu.com/lubuntu/releases/22.10/release/lubuntu-22.10-desktop-amd64.iso.zsync

#### You have now downloaded the image successfully. Please continue to Chapter 1.2.

<sup>&</sup>lt;sup>5</sup> https://en.wikipedia.org/wiki/BitTorrent

<sup>6</sup> https://transmissionbt.com/

<sup>7</sup> https://www.qbittorrent.org/download.php

<sup>8</sup> http://cdimage.ubuntu.com/lubuntu/

## 2.1.2 Chapter 1.2 Booting the Image

Now that you have the ISO file, you need to put the image on a media device and boot the image for installation.

This requires additional research on your own, as this varies depending on your hardware.

#### Choosing the media

In order to boot the image, you need to put it somewhere. You have two choices either

- a DVD
- a USB drive (4 GB or greater)

#### Writing/burning the Image

## Here are some common tools to burn images onto DVDs:

- Brasero<sup>9</sup>
- K3b
- Windows Disc Image Burner
- InfraRecorder

Unfortunately, burning images to USB or DVDs on macOS or Windows is beyond the scope of this manual. The Ubuntu website has several guides on this topic, and we recommend you read them if you plan on doing this.

#### **Guides from the Ubuntu website:**

- How to burn a DVD on Ubuntu<sup>10</sup>
- How to burn a DVD on Windows<sup>11</sup>
- How to burn a DVD on macOS<sup>12</sup>

For writing images to USB drives on Linux, we recommend mkusb<sup>13</sup> a tool developed by a Lubuntu team member, or the USB creator shipped with Lubuntu Startup Disk Creator<sup>14</sup>.

Writing images to USB drives from macOS or Windows is beyond the scope of this book, but the Ubuntu website also has several guides on this:

- How to create a bootable USB stick on Windows<sup>15</sup>
- How to create a bootable USB stick on macOS<sup>16</sup>

<sup>&</sup>lt;sup>9</sup> https://wiki.gnome.org/Apps/Brasero/

<sup>10</sup> https://tutorials.ubuntu.com/tutorial/tutorial-burn-a-dvd-on-ubuntu

<sup>11</sup> https://tutorials.ubuntu.com/tutorial/tutorial-burn-a-dvd-on-windows

<sup>12</sup> https://tutorials.ubuntu.com/tutorial/tutorial-burn-a-dvd-on-macos

<sup>13</sup> https://help.ubuntu.com/community/mkusb

<sup>14</sup> https://manual.lubuntu.me/3/3.1/3.1.4/startup-disk-creator.html

<sup>15</sup> https://tutorials.ubuntu.com/tutorial/tutorial-create-a-usb-stick-on-windows

<sup>&</sup>lt;sup>16</sup> https://tutorials.ubuntu.com/tutorial/tutorial-create-a-usb-stick-on-macos

#### **Booting the Image**

With your media inserted, reboot your computer. Depending on your hardware configuration, it may boot into the image right away, or you might need to press a key at startup for boot options. This varies but looking for documentation for your hardware will likely provide the answer.

You have now booted the image. Please continue to Chapter 1.3.

## 2.1.3 Chapter 1.3 Installation

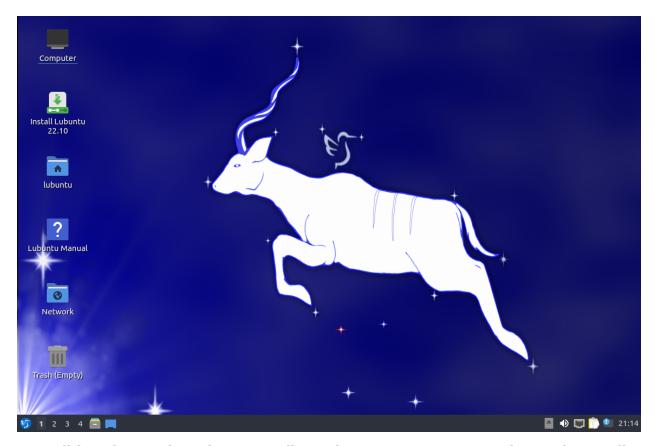
This is a guide through the installation process of Lubuntu.

#### Starting the installer

At the start of the boot process a grub splash screen will be shown. To install select Try or Install Lubuntu. If Lubuntu has a problem with your graphics card like newer nvidia cards select Lubuntu (safe graphics). To test your ram select Test memory.



Once you have booted into the live session, feel free to explore Lubuntu and make sure all your hardware works. Once you are ready to install Lubuntu, double click the icon in the top-left corner of the desktop Install Lubuntu 22.10 or :menuselection:` System Tools -> Install Lubuntu 22.10`.

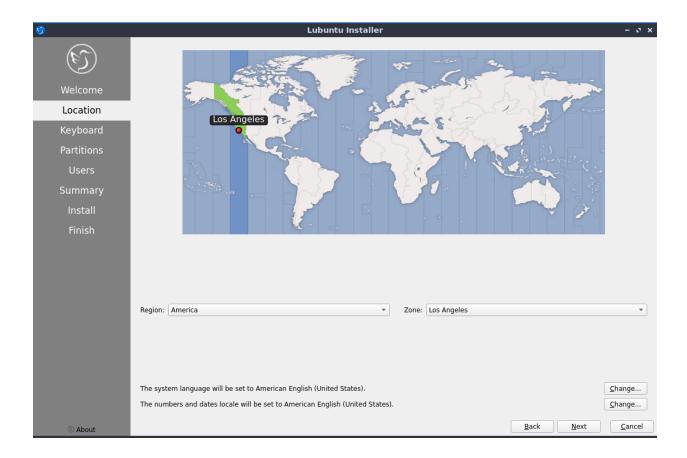


You will be taken to the Lubuntu installer Welcome screen. You can change the installer language in the Language drop down box. After selecting the language the Next button will move you on to the next task. To cancel an installation press the Cancel button.



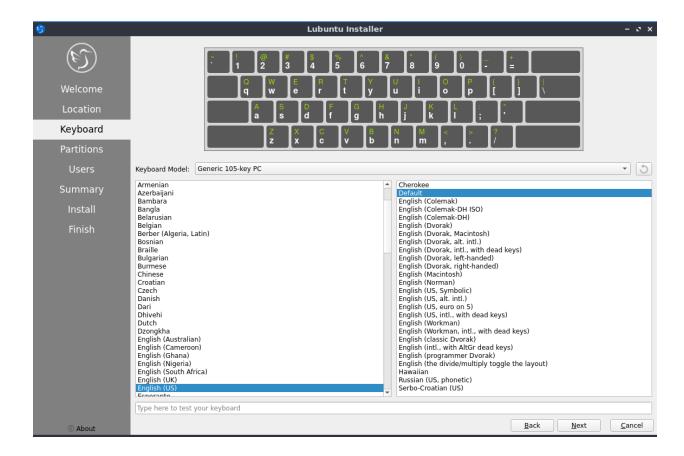
#### **Selecting Your location**

The next screen will show you a map of the world where you can choose your location. Your location will be used to set your time zone and download server. To see what region you have chosen use the Region drop down menu. The Zone field should have a major city with the same time as you. If you want to get to the your time zone manually faster you can type in the name of a big city in the same time zone. Towards the bottom you can to change your system language by pressing the upper Change button. To change the how numbers and dates appear on your system press the lower Change button. To move to the next step once again press the Next button. To move back to selecting your language to change your language press the Back button.



#### **Selecting Keyboard Layout**

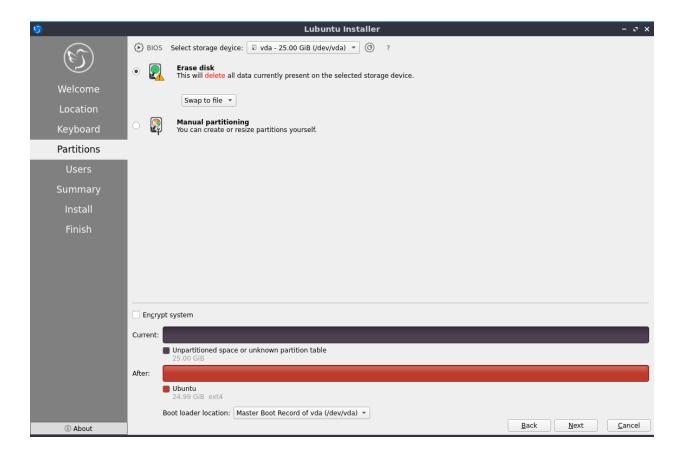
Next select your keyboard layout, you can check your keyboard matches the keyboard shown picture shown. The Keyboard Model menu lets you choose different variants, the left column lets you change language, and the right column gets different variants. At the bottom you can type to make sure your layout is correct. When you have selected your keyboard layout press the Next button to move on.



#### **Setting up partitions**

If all you want is Lubuntu on your machine, you can select the Erase disk button. This will format the disk and **delete all data on the disk**, which is why having your data backed up before this point is extremely important. If you choose to do this you can continue on to user setup. To change the storage device to install Lubuntu on use the Select Storage device drop down menu. To choose to use a swap file under Erase disk keep Swap to file or to not use swap choose No Swap. If you want to encrypt your drive press the Encrypt system checkbox and then you will need to enter the encryption passphrase twice make sure you have it typed in correctly. It is strongly advised to write down this passphrase and keep it somewhere safe.

**Warning:** Erasing your entire disk or partition may cause you to lose data so please backup beforehand.



**Note:** If you had a previous Linux install with swap you will need to unmount the swap. To do this run

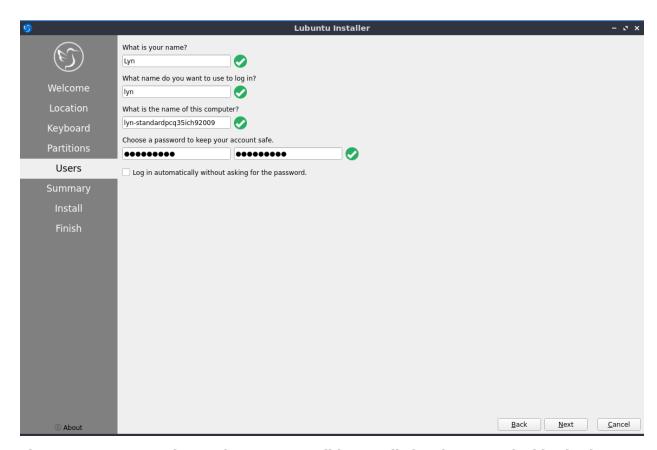
sudo swapoff -a

which will unmount them and any swap partitions. This will not work if you have data partition mounted open PCManFM-Qt and press the upward pointed arrow on each partition in the Places sidebar to unmount all data partitions.

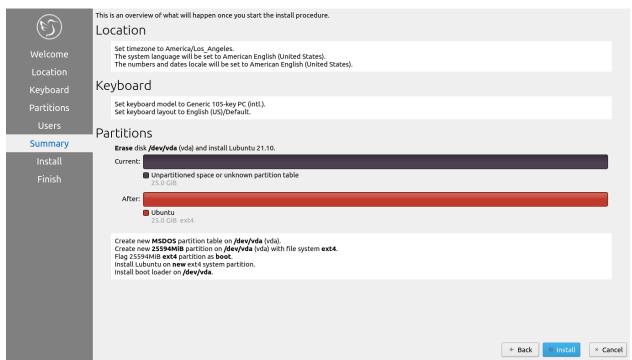
To move back to Selecting your keyboard layout press the Back button. To advance to the setting up users press the Next button.

#### **User Setup**

The user setup section creates a user profile, consisting of typing your name into the What is your name? field. Next type your username in the What name do you want to use to log in?. Put what you want your hostname of your computer to be in the what is the name of this computer? field. The last thing you need to enter is your password in the Choose a password to keep your account safe. Enter your password twice to make sure you have not mistyped it. If a name can actually be used as a username or hostname a green checkmark will appear to the right of it if you cannot a red x will appear. Pressing the Next button will give you a summary screen, showing you the settings before the install begins. Once you have checked the summary click the Install button to begin the installation.

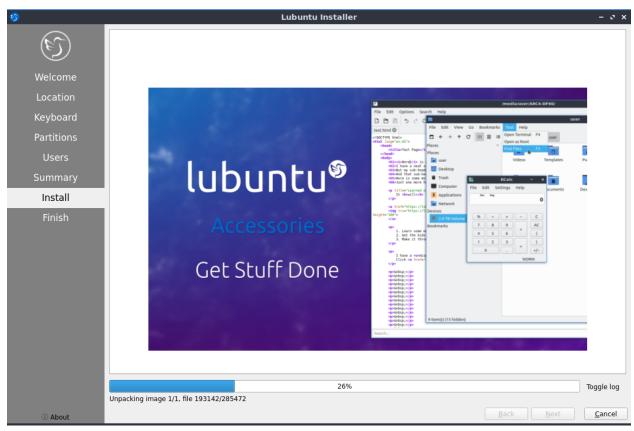


The summary screen shows what settings will be installed and you can double check everything is how you want it. After pressing the Install button a dialog will pop up to confirm installation. To actually install press the Install now button. To not start installing and go back press the Go back button.



#### The Install

The Lubuntu installer provides some useful information while the installer is running. On the bottom of the window is a progress bar. On the right end of the progress bar is the percentage of the installation complete. To see command line output of the install press the Toggle log button. Once Lubuntu is installed you have a checkbox Reboot now after your Lubuntu is installed and is now finished. There is a slideshow while you install and to move to the next slide left click and to move to the previous slide right click.



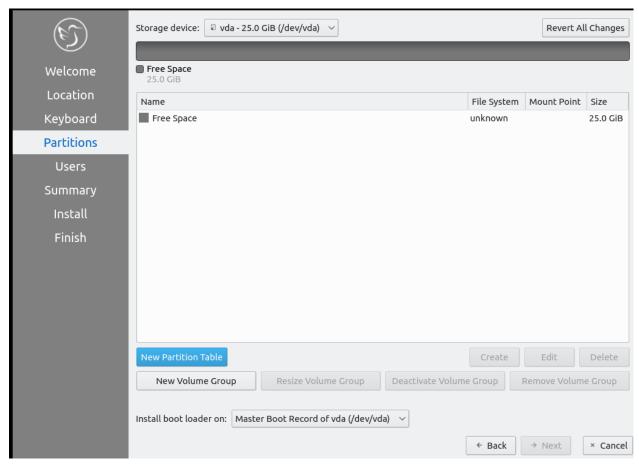
#### Rebooting into the finished install

After the install is finished you will need to reboot your system into your new install. If you want to continue using the live system but end the installer uncheck the Reboot now checkbox. To close the installer press the Done button. After this your computer will reboot and you should remove your install media.

#### **Manual partitioning**

**Warning:** Trying to use nonlinux filesystems such as NTFS or FAT as your root filesystem will result in a broken system.

If you wish to manual set up partitions, as an advanced option you will have to choose which file-system you want. A file-system controls how your files are accessed at lower levels on the disk. If you are booting your computer in UEFI mode a more modern firmware compared to BIOS you will need to create an EFI system partition (see efi system partition Wikipedia<sup>17</sup> for more detail). To create this partition you will need a FAT32 file-system with the ESP flag to be mounted at /boot/efi/ under the mount point. You will also need a root (/) file-system, several file-systems included for Lubuntu are Ext4, XFS, and Btrfs. Lubuntu 22.04 has bug with installing BTRFS and This guide on Lubuntu discourse<sup>18</sup>



**Warning:** Creating a new partition table will erase all data on the drive and deleting a partition will delete all data on the partition.

If you have a new hard disc or solid state drive press the New Partition table button but this will delete the whole disc if you have any data on it. After pressing this button you will get a

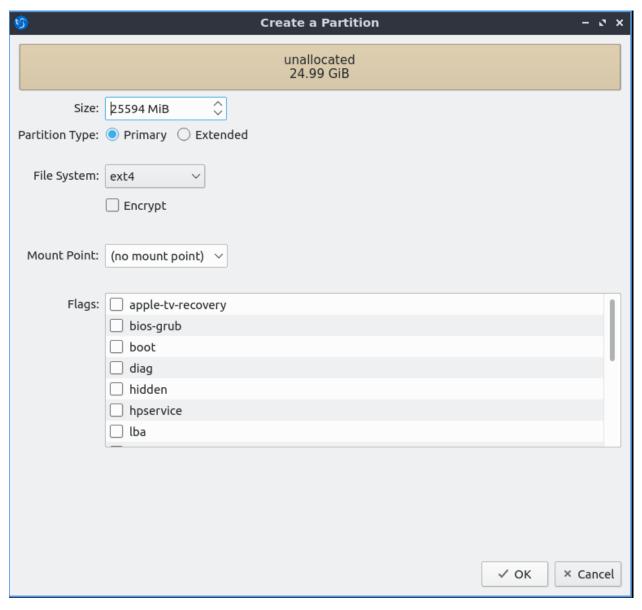
<sup>17</sup> https://en.wikipedia.org/wiki/EFI System partition

<sup>&</sup>lt;sup>18</sup> https://discourse.lubuntu.me/t/getting-lubuntu-22-04-to-install-with-btrfs/3273/

dialog saying what kind of partition table to use. The Master Boot Record button will create an old partition table but will only allow 4 primary partitions and partitions up to 2 Terabytes. The GUID Partition Table button works for large discs but may not be recognized by legacy operating systems. To get back to your main partitioning window press the OK button.

To change what disc you are partitioning use the Storage device drop down menu.

You can create partition by clicking the Create button which will bring up a dialog. The file system field is a drop down menu, select which file-system you want. You also need to select where you want to mount the partition in the Mount Point drop down menu. To change how big to make the partition change the Size field. To change the size or type of a partition after initially creating it press the Edit button. To delete a partition press the Delete button. You will need at least one root (/) partition and if you are booting an EFI system you will also need a /boot/efi mounted partition. Another common option is to have all your data on its own partition, which can even be on its own separate physical disk this can be mounted at /home. If you want to encrypt your your filesystem check the Encrypt checkbox. Then two fields will appear to get write type your encryption passphrase twice to confirm it. To add a label for this partition enter it into the FS Label field.



To go back on all your changes to the previous state press the Revert All Changes button. To change what device your computer will boot off of you will need to use the Install boot loader on drop down menu to select which disc to boot off of.

In the center of the manual partitioning window shows you what name of the partition is. What type of filesystem is displayed in the File System column. To see where your partition is mounted are shown in the Mount Point column. The size of the system is shown in the Size Column.

The top of the manual partitioning window shows a visual bar showing size of your partitions on top. Below it shows each partition on your drive with the color it is in the bar graph and the size of the partition.

# 2.2 Chapter 2 Applications

This chapter documents the applications in Lubuntu.

## 2.2.1 Chapter 2.1 Internet Applications

This chapter documents how to use webbrowsers, IRC, bluetooth, and torrent clients.

#### Chapter 2.1.1: Firefox

## **Description**

Firefox is a highly-rated, and secure web browser that is installed by default in Ubuntu. It is a decent choice if one wants a secure, fast, yet relatively less resource-heavy browser.

#### Firefox has features of other web browsers and its own ones, such as:

- Tabbed browsing
- Scroll through tabs
- · Great plugins and add-ons
- · Favorites, bookmarks, pocket
- Firefox account sync
- · Master password
- · UI customization with themes and toolbars
- · Advanced customization with about:config
- · Open source

#### **Screenshot**



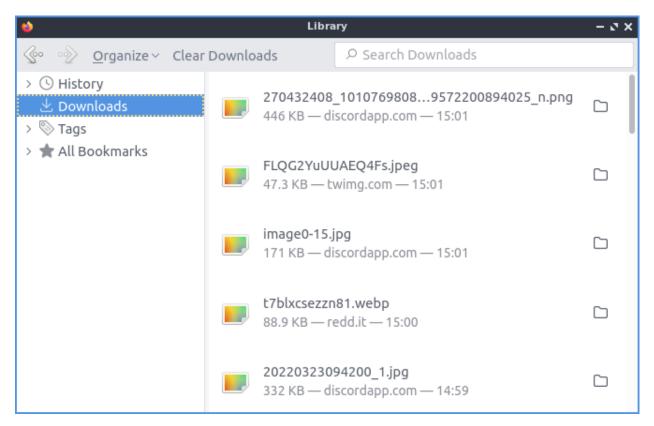
#### **Usage**

To open a new tab in Firefox press the plus button on the right of the tab bar, right click the tab bar New tab, or press Control + t. To close a tab press the button with an x on the right side of the tab or press Control +W. To Open a new window in browsing press Control +N. To view your browsing history press the hamburger menu Library • History or press Control +H. When you have the history sidebar you can search through your history where it says Search History. To change how to sort your history click the View label and select how you want to search your history. To view your downloaded files press the button that looks like three stacked books with a fourth leaning over • Downloads.

To go back to a previous page in Firefox press the button pointing to the left or press Alt + Left arrow. To open the page you were previously browsing in a new tab middle click the back button. To go forward to a page you have visited before but have now gone back from press the button with the arrow pointing to the right or Alt + Right arrow. Middle click on the forward button to open the page you went back from in a new tab. To download a file directly to your local disk right click Save Link As file as and then you will get a dialog box to show where to save it. To save an image to your computer right click the image and select Save Image As.

To open a window with all of your downloads on it press Control+Shift+Y. To open PCManFM-Qt in the folder where you downloaded things right click and select on the download and select Open Containing Folder. To share a link with someone else for something you downloaded right click on the downloaded content right click and select Copy Download Link.

To open a window with all of your downloads press <code>Control+Shift+Y</code>. To open PCManFM-Qt in the folder where you downloaded things right click and select on the download and select Open Containing Folder. To get a link for someone else to download something right click on the downloaded content right click and select Copy Download Link. To open a downloaded file double click on it. To not have a download show in your history right click on it and select Remove from History. To clear all your download history right click and select Clear Downloads or press the Clear Downloads button at the top.



To have a list of all of your tabs press the downward pointing arrowhead button however this only appears if you have more tabs than fit on your screen normally. To switch the view of your tabs if you have more than on the screen press the right ward pointed arrowhead to move the visible part of the tab bar to the right. To move the visible part of the tab bar to the left press the leftward pointed arrowhead. To move a tab to where you want it left click the tab and drag it to the position you want the tab.

To open a new tab press the + button. To search through all your tabs you can click on the downward pointed arrow and select Search Tabs. To scroll down using the keyboard press Page Down. To scroll up the page with the keyboard press Page Up. To scroll all the way back up to the top press the Home key. To move all the way to the bottom of the page press the End key.

To go to a specific URL in the address bar you can type it in the main bar in the middle. If you have a URL in your clipboard you can paste it here or into the address bar right click Paste & Go. Or if you right click into the clipboard and not immediately go to the page and type in a sub page right click Paste and then type to go a specific sub page of the same site and then press Enter to go to the page. If you press F6 the cursor will select the address bar. If you want to search through the tabs you have open type % and then what you want to type in the address bar.

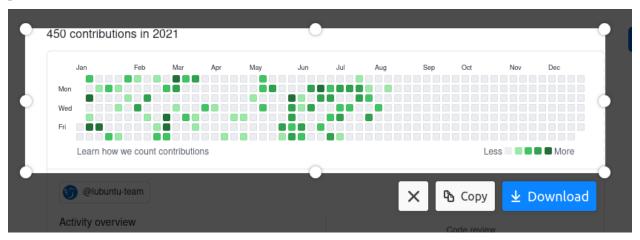
To bookmark a page press Control +D, right click on the tab and select Bookmark Tab, or Press the button with three horizontal lines and select Bookmarks > Bookmark Current tab or right click on the tab and select Bookmark Tab. To access the bookmark again press that looks like three vertical lines and a slanted one and Bookmarks > Your Bookmark. If you want a toolbar with your bookmarks on it right click on the address bar and select Bookmarks Toolbar or the three horizontal lines button Bookmarks > Show bookmark toolbar.

To manage your bookmarks press Control+Shift+0 or three horizontal bars Bookmarks • Manage Bookmarks. To switch to different categories of bookmarks on the left hand side to

switch categories. To search through your bookmarks type in Search Bookmarks box in the top right hand corner. To open a bookmark in this park double click on it or right click and select Open. To open a bookmark in a new tab right click on it and select Open in New Tab. To delete a bookmark right click on it and select Delete Bookmark. To rename your bookmark something you will remember use the Name field. To change where a bookmark points to change the URL field. To add tags to your bookmark type them in the Tags field.

To copy text in Firefox select it with the mouse and press Control +C or right click on it and select Copy. To paste text into Firefox press Control+ V or right click and select Paste. To cut text in Firefox select the text and press Control+X or right click and select Cut. To select all of the text on a page press Control+ A or right click and select Select All.

To view info on your webpage press Control+ I. To take a screenshot of a webpage right click and select Take Screenshot. Then select the part of the webpage you want by left clicking and dragging to select which part of the webpage to take a picture of. To save your screenshot press the Download button. To copy the screenshot to a clipboard press the Copy button. To cancel taking the screenshot press the Cancel button or press Escape. To take a screenshot of the whole webpage press the Save full page button. To save the visible portion of the page press the Save visible button.



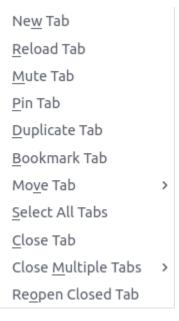
To zoom in if you find the text on a web page to small press control + +. If you want to zoom out on the text or pictures press control + -. To reset to the original zoom press control + 0. To make Firefox fullscreen press F11 and to leave fullscreen simply press F11 again or in the hamburger menu press the two button with two diagonal arrows. While in fullscreen the tab bar will be hidden to change tab while you have Firefox in fullscreen move your mouse to the top of the monitor and the tab bar will popup. You can also type your zoom into Firefox from the hamburger menu Zoom field and press the + and -. To see the current zoom on a webpage read the zoom from the right hand side of the address bar.

To search for text in your tab press Control +F or use the three horizontal lines and select Find in page. A search bar at the bottom of the window will appear. To move to the next result click the downward arrow on the screen or click the upward arrow on the screen to move to the previous result. To toggle highlighting every match check/uncheck the Highlight All checkbox. To make the search not necessarily need to match capitalization uncheck the Match Case checkbox. To check if diacritical marks are the same check the Match Diacritics checkbox. To only match entire words check the Whole Words checkbox. To close out searching press the X button.

To print a webpage such as directions you can click the button with horizontal bars and select Print from the menu. You can also print by pressing Control+P. To choose which printer to use use the Destination field. To change how many copies you are printing change the Copies field. To change the orientation of your webpage press either the Portrait or Landscape buttons. To

choose which pages to print use the Pages field. To change where to print in color or black and white change the Color mode menu. To cancel printing press the Cancel button. To start printing press the Print button.

If you want a menubar for Firefox right click the main toolbar and click the checkbox for Menu Bar. To toggle showing a sidebar press the book button to the right of the address bar. To reload a tab even one you are not on right click on the tab bar Reload Tab, press F5, or Control+R. To mute a tab even when you are not on it you can right clicking on the tab and then select Mute Tab or by pressing Control+m. To unmute a tab right click Unmute tab or press Control+m or press the speaker button with the line through it. To open a new copy of a tab right click on the tab bar and then select Duplicate Tab. To move a tab all the way to the left right click on the tab Move Tab • Move to start. To move a tab all the way to the right right click on tab Move Tab Move to end. To move a tab to a new window right click on the tab and Move Tab • Move to new Window. To pin a tab to have it open in Firefox every time you close and reopen Firefox right click on the tab and select Pin Tab. To have a tab not be pinned anymore right click on the pinned tab and select Unpin Tab. To open a new private window press Control+Shift+P or press the three horizontal lines and select New Private Window. If you want to bookmark a tab right click the tab and Bookmark Tab. To close tabs to the right of the current tab right click on the tab and Close Multiple Tabs • Close tabs to the right. To undo closing a tab right click on a tab and Reopen Closed Tab.



To search for a word in a webpage press Control+F and then type what you want to search for in the searchbar that pops up. At the right of this bar will show x of y matches to see how many matches are on your search. To jump to the next result press the Down arrow. To Move to the previous result press the Up arrow. To see everything that matches the search result check the Highlight All. To have Firefox match the capitalization of searches check the Match Case checkbox. To have Firefox search to only match the entire word check the Whole Words checkbox.

Firefox offers to save passwords of websites with a popup when you enter in a password and press Save. This will have Firefox remember the password so you do not have to remember it. Firefox however stores these in your browser and you can access them from the three bars Passwords. To search what sites you have saved logins for type in the Search Logins bar at the top. On the left hand side bar lists each saved login for each site and to get to one login left click on the site. Once on a login click the Copy button to copy the password to login to a site. To view a password of what you have saved click the eyeball button which will show your

saved passwords. To hide your password again press the crossed out eyeball. To stop storing a login in Firefox press the Remove button. To change a saved password you can press the Edit button.

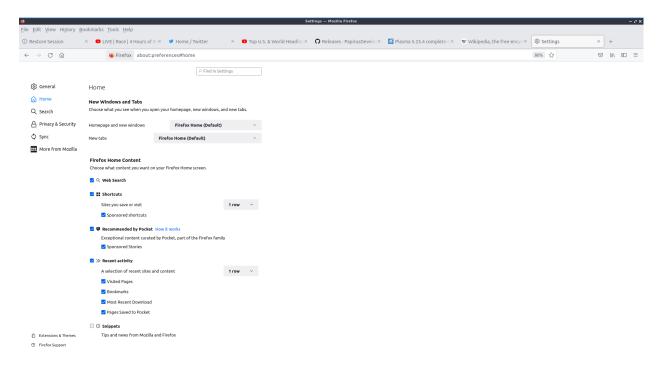
#### **Customizing**

If you want to view your Firefox preferences you can type about:preferences into the address bar or Hamburger menu • Settings. To find something in settings search in the Find in settings box. The General tab has settings for opening Firefox after closing and the appearance of Firefox. To have your session restored each time you restart Firefox is to check the Open previous windows and tabs checkbox. To switch between which tabs you were recently using by pressing control and tab at the same time check the Ctrl + Tab cycles through tabs in recently used order. The tabs section has a checkbox to Open links in new tabs instead of new windows which is checked by default. The checkbox for When you open a link, image or media in a new tab switch to it immediately switches to new tabs when you open them. To confirm closing multiple tabs check the Confirm before closing multiple tabs checkbox. To not confirm when quitting by control + q uncheck the Confirm before quitting with ctrl+Q.

To tell websites what theme to use use the themes under Website appearance. To use your system theme for Firefox check the System theme button. To switch to always using a light theme on Firefox press the Light button. To always use a dark theme for Firefox press the Dark button. To switch back to the default Firefox theme press the Firefox theme button. To change your default fonts and colors use the Fonts and Colors section. To change colors for Firefox press Manage Colors button. To select the default font choose Default font from the field. To select a different font size change the Size field. To change the default zoom change the Default zoom field. To only zoom the text check the Zoom text only checkbox. To choose where to download files change where to download in the Save files to field. To always ask to save files check the Always ask you where to save files checkbox. To toggle drm controlled content check/uncheck the Play DRM-controlled content checkbox.

To middle click and then scroll by moving the mouse check the Use autoscrolling checkbox. To turn off smooth scrolling in Firefox uncheck the Use smooth scrolling checkbox. To have Firefox always show scrollbars check the Always show scrollbars checkbox. To always use the cursor keys for navigation check the Always use the cursor keys to navigate within pages checkbox. If you want to turn off picture in picture mode for videos uncheck the Enable picture in picture video controls.

To tab on the left Home has settings for your home and opening of new tabs. The Homepage and new windows drop down lets you select the Firefox home or a blank page when you first open the browser. The New tabs menu lets you choose Firefox Home or Blank Page when you open a new tab. The checkbox Web Search lets you toggle whether to show a web search on the Firefox homepage. To show the sites you visit the most check the checkbox Top Sites. To change how many rows of top sites to show use the drop down menu to the right of Top Sites. The checkbox Recommend by Pocket toggles links recommend by pocket. Uncheck the Sponsored Stories checkbox to not have sponsored stories from pocket. The Highlights checkbox allows site that you have saved or visited recently. To change how many rows of highlights are shown use the drop down menu to the right of Highlights.

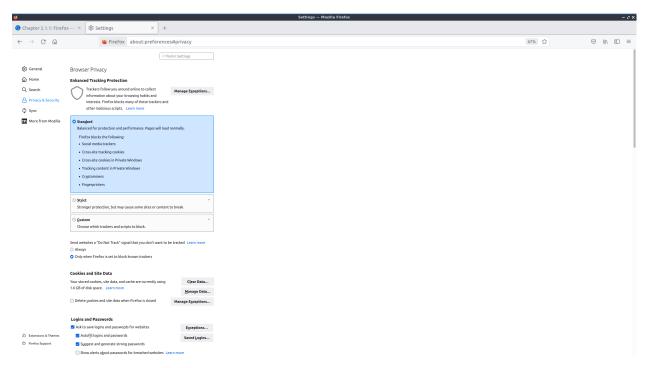


To enable Firefox showing recent activity on the page for new tabs check the Recent activity checkbox. To change how many rows of recent sites change the A selection of recent sites and content checkbox field. To not show recently visited pages uncheck the Visited Pages checkbox. To not show recently saved bookmarks uncheck the Bookmarks checkbox. To not show things you recently saved to your computer uncheck the Most Recent Download checkbox. To not show pages you recently saved to pocket uncheck the Pages Saved to Pocket checkbox.

To manage your search settings use the Search tab on preferences. The radio button for Add search bar in toolbar changes whether you want a separate search bar or and integrated search bar for search and navigation. The Default Search Engine lets you change your default search engine. To toggle whether to search suggestions check/uncheck the Provide search suggestions. To end up showing search suggestions in the address bar when searching check the Show search suggestions in address bar results checkbox. To try to autocomplete searches before browsing history check the Show search suggestions ahead of browsing history in address bar results checkbox. To get search suggestions in private windows check the Show search suggestions in Private Windows checkbox.

To change settings for How Firefox handles security and privacy settings use the Privacy & Security tab. To increase protection against trackers press the Strict button and to switch back press the Standard button. To send website you do not want to be track header always press the Always button. To choose which sites data to clear out you can press Manage Data. If asking to save passwords is something you wish to turn off uncheck the Ask to save logins and passwords for websites checkbox.

**Warning:** Deleting Firefox user data will log you out of online accounts and if you do not know your password you will need to recover your password or you may lose access to online accounts.



To see what websites store data on you locally press the Manage Data button. To clear all Firefox data you currently have press the Clear Data button. To have Firefox get rid of all cookies when Firefox is closed check the Delete cookies and site data when Firefox is closed checkbox. To have Firefox not autofill logins and passwords uncheck the Autofill logins and passwords checkbox. To see your saved logins press the Saved Logins button. To chose what sites not to save passwords for certain websites press the Exceptions button.

To set a password to access your logins on Firefox check the Use a Primary Password checkbox and then press the Change Primary Password button. To do this next you will need to enter the password twice to make sure you don't not accidentally make a typo and then press OK. To have Firefox not automatically save your address uncheck the Autofill addresses checkbox. To view which addresses are saved press the Saved Addresses. To have Firefox not save credit cards uncheck the Autofill credit cards checkbox. To view or delete saved credit cards press Saved Credit Cards button.

To change how Firefox saves history change the menu next to Firefox will. To clear your browsing history right now press the Clear History button.

To stop any of the following from showing up in search suggestion uncheck the checkbox for Browsing history, Bookmarks, Open tabs, Shortcuts, or Search engines. To not have search suggestion from the web make the Suggestions from the web button grayed out. To turn off Firefox sponsored search suggestions press the button to gray out the Suggestions from sponsors button.

To change how Firefox deals with websites wanting permissions for Location, Camera, Microphone, Notifications, Autoplay, or Virtual Reality use the Permissions section. For each of these settings there is a Settings button that you can press to get settings for each. To see in the settings window which sites have a permission read under Website column. To change if a website can use something change the Status column. To remove a website from having permissions for something press the Remove Website button. To remove all websites from this permission press the Remove All Websites button. To search for one website in the list type in Search Website bar. To block all new requests for this permission check the Block new requests checkbox. To save the changes that you have made press the Save Changes button. To cancel your changes press the Cancel button.

#### **Version**

Lubuntu currently ships with the latest version of Firefox, Firefox 103.

#### **How to Launch**

To open Firefox, click on the Firefox icon (red/orange fox covering a blue sphere) in Internet Firefox Menu. You can also type and run

firefox

from the terminal to run Firefox. You can also have Firefox directly open this manual from the command line with

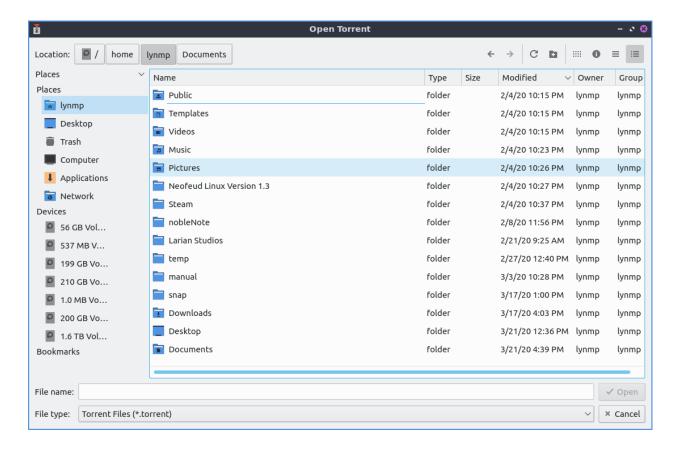
firefox https://manual.lubuntu.me

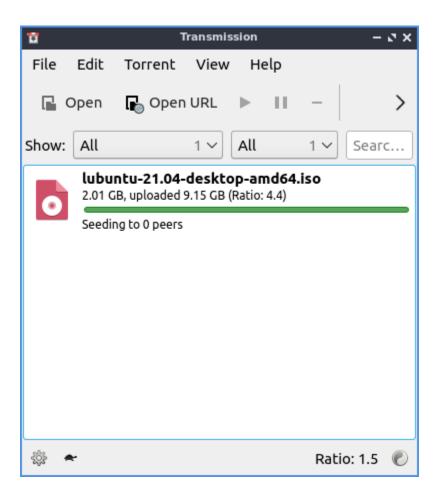
You can also launch Firefox from the quick launch by left clicking on the Firefox icon. The icon for Firefox looks like a globe with a red fox circling around it. Yet another way to launch Firefox is to press the browser button on your keyboard.

#### **Chapter 2.1.2 Transmission**

Transmission is Lubuntu's default bit-torrent client.

#### **Screenshots**





#### **Usage**

To open a torrent file press the open or simply double clicking the torrent file from a web browser after opening it will start Transmission. The torrent file will start download and using your connection to upload to others in a so called peer to peer network. At the bottom there is a downward pointing arrow to show how fast you are downloading. The up arrow shows how fast you are seeding or uploading the file to other people downloading that file. To open a torrent URL File • Open URL or press Control+U. Once you have this you will input the URL in the Source area. To choose where to save the torrent change Destination folder button. To actually start downloading press the Open button.

While you download your file a progress bar with will show your download for each file once you have it entirely you have see how many people you are seeding to each person and how fast you are uploading to that person.

The button with two || circled is a pause button that can pause all downloads and uploads or File • Pause All. To start downloading and uploading again to press a button with a triangle to start uploading and downloading again or File • Start All.

To remove a torrent from the list of torrent files right click on it or Delete and click remove. To delete the files and remove the torrent from the list right click Delete files and Remove or press Shift +Delete.

To filter which torrents are shown on your list use the Show drop down menu. To only show active torrents from the Show drop down select Active. To only show torrents that are down-

loading from the Show menu select Downloading. To only show seeding torrents from the Show drop down select Seeding. To only show Paused torrents from the Show drop down select Paused. To show only Finished torrents from the Show menu select Finished. To only show torrents that are verifying from the Show drop down select Verifying. To only show torrents that are in an error state from the Show menu select Error. To go back to showing all torrents from the Show menu select All.

To pause a particular torrent left click on the torrent press Control +P or Torrent ▶ Pause. To start the torrent again press Control + S or Torrent ▶ Start. To move a torrent Torrent ▶ Set Location to move where your torrent is. To verify your local data press :kbd:` Control + V` or :menuselection:` Torrent -> Verify Local Data`.

If you want have a move compact view View > Compact View or press Alt + C. To switch back out from compact view press the same thing again.

To sort your torrents by activity View > Sort by Activity. To sort your torrents by age View > Sort by Age. To sort your torrents by name View > Sort by Name. To sort your torrents by Progress View > Sort by Progress. To sort your torrents by Queue View > Sort by Queue. To sort your torrents by ratio uploaded to downloaded View > Sort by ratio. To sort your torrents by size View > Sort by Size. To sort your torrents by State View > Sort by State. To sort your torrents by time to finish downloading View > Sort by time left. To reverse the sort order View > Reverse Sort Order.

To move a torrent down on where it appears on the screen and the queue Torrent ► Queue ► Move Down or Control+down. To move a torrent up in the queue Torrent ► Queue ► Move Up or press Control+ up arrow. To Move a torrent file to the top Torrent ► Queue ► Move to Top. To move a torrent file to the bottom Torrent ► Queue ► Move to Bottom.

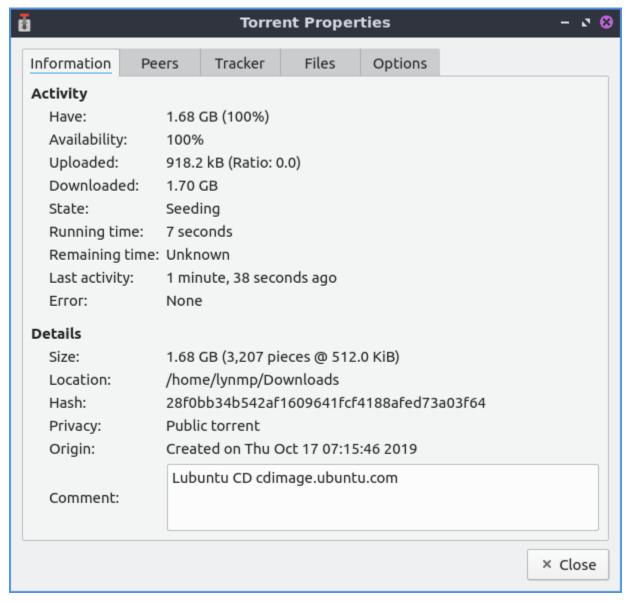
If you do not want to prioritize the speed of your torrents press the button on the bottom of transmission that looks like a turtle. To change the ratio view on the bottom to your total changes Globe button • Total Transfer. To view your upload/download ratio in the current session Globe button • Session Ratio. To view your transfer from the current session only Globe button • Session Transfer.

To open the file manager in the folder of your torrent press Control+E or Torrent ▶ Open Folder.

To view statistics on how much Transmission has downloaded Help ► Statistics.

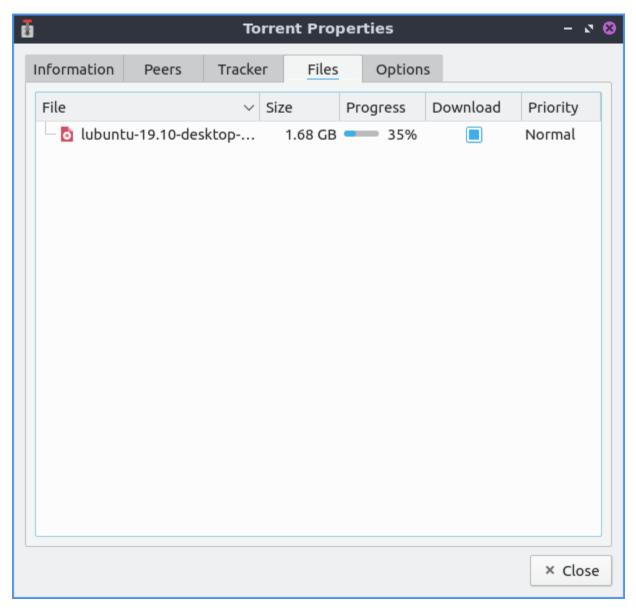
#### **Torrent Properties**

To bring a up a properties dialog window press Alt +Enter or Torrent > Properties. To show how much of the file you have on that torrent is under the Have row which shows how much of the file is on your disk and the percentage of the file. The Uploaded row shows how much of the torrent you have uploaded to other peers. The Downloaded row shows how much you have downloaded on your computer. The State row shows what the torrent is currently doing. The Remaining time row shows how long it will take for the torrent to finish downloading. The Size row shows how much space the torrent takes when downloaded. The Location row shows you where the file is saved on your system. The Origin row shows when you first downloaded this torrent.



The Peers tab shows you what other peers that also have the torrent open. To see how much data you are getting from a particular peer see the Up column. To add your column showing how much data you are downloading from a peer read the Down column. To see the address of your peers and read the Address column. To see what client other peers are using the Client column. The Tracker tab shows information of where the torrent is being tracked.

The Files tab shows what files this torrent has downloaded. To see the name of the file is in the File column. To see the size of the file look in the Size column. To toggle downloading a file check/uncheck the checkbox for that file in the Download column. To see how much of your file is downloaded as a percentage in the Progress column. To see the priority of the torrent see the Priority column.



To change options for a torrent file use the Options tab. To have the torrent not effected by global torrent speed uncheck the Honor global limits checkbox. To limit how much of your internet a torrent will use of your download on the internet check the Limit Download speed checkbox and set the cop for how much it downloads. To limit how much upload your torrent uses check the Limit upload speed and set the limit. To change how much of a priority the torrent is change the Torrent priority menu. To set limits on how much the torrent seeds use Ratio and Idle menus. To change the maximum number of other people this torrent will peer with change the Maximum peers field.

# **Version**

Lubuntu ships with version 3.00 of Transmission.

#### **How to Launch**

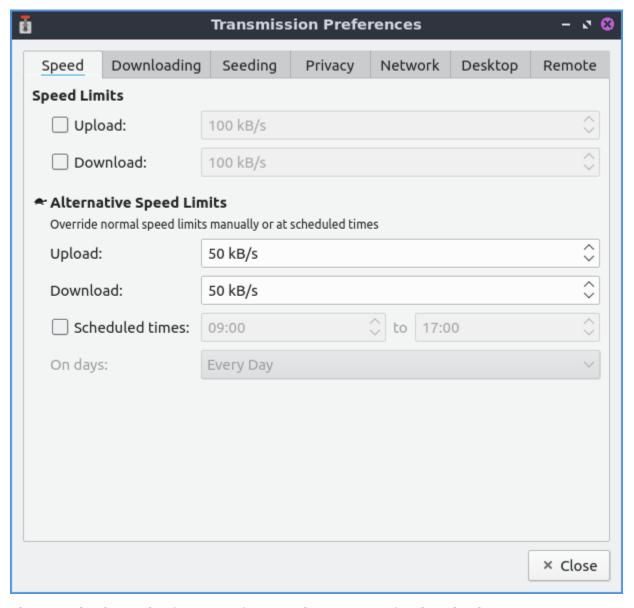
To launch Transmission go to menu Internet ► Qtransmission Bittorent Client or run

transmission-qt

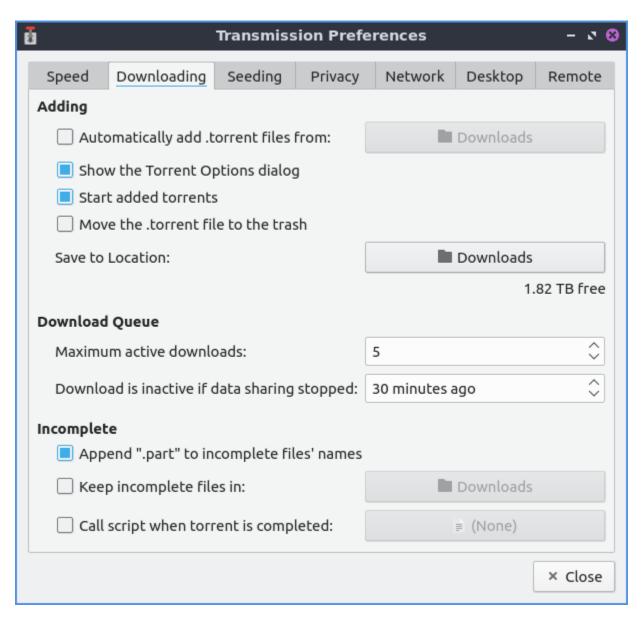
from the terminal. The icon looks like a silver colored gear selection lever in a car.

## **Customizing**

To open your preferences for Transmission Edit ► Preferences. To manage how fast things download or upload use the Speed tab. To limit upload speed check the Upload checkbox and select the limit of upload speed you want. To limit download speed check the Download checkbox and select the limit of download speed you want. To change the slower speed limits with the turtle button for uploading change the Upload field. To change the slower download speed change the Download field. To schedule a time to throttle your torrents check the Scheduled times: checkbox and to the right choose the time to start throttling your torrents and the time to stop throttling your torrents. The On days: drop down is where you select which days of the week to throttle torrenting.



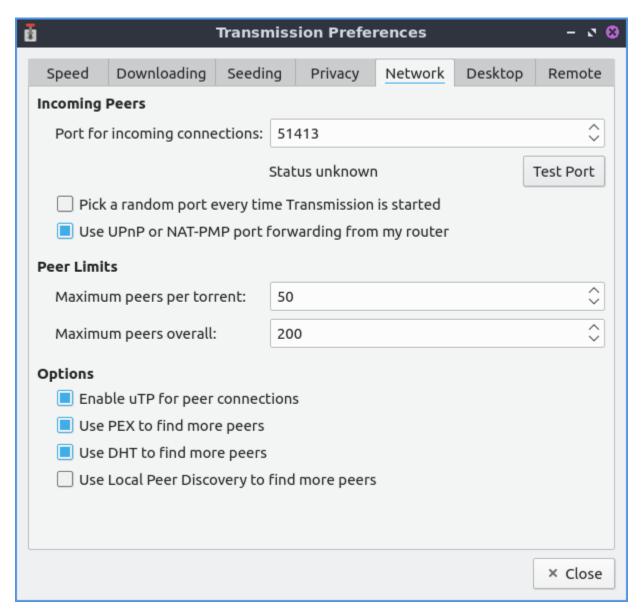
The Downloading tab of your preferences has settings for downloading torrents. To automatically have transmission open the torrent files in a directory check the Automatically add .torrent files from checkbox and chose a path to have automatically added. To start the added torrents automatically check the Start added torrents checkbox. To choose where to save torrents is in the Save to Location: button to bring up a dialog to show where to save the torrent. To set a maximum number of torrents downloading at the same time change the Maximum active downloads field. To stop trying to download a file after no more file to download change the Download is inactive if data sharing stopped and choose how many minutes to choose if it is inactive. To add .part to the end of incomplete downloaded files check the Append ".part" to incomplete files' names checkbox. To choose if you want a different file to choose the incomplete files check the Keep incomplete files in checkbox and bring a dialog to choose where to store the inocomplete files on the right.



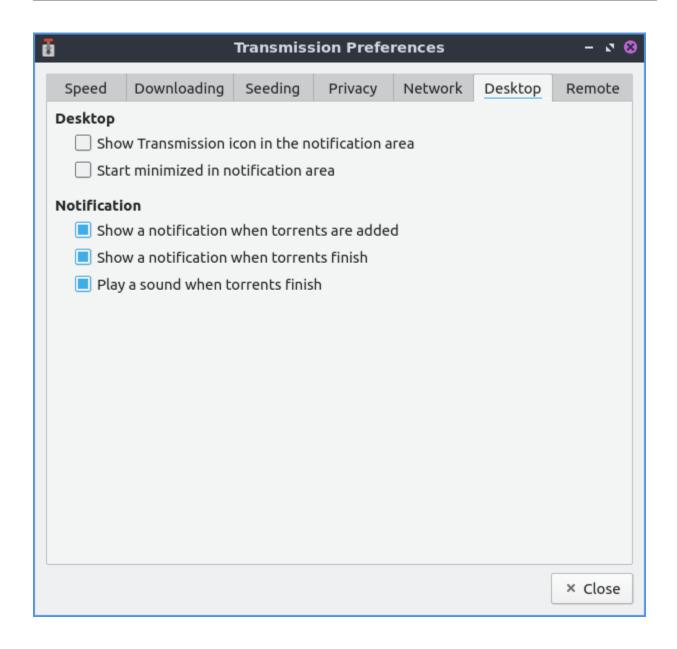
To have the settings for uploading torrents or seeding them use the Seeding tab. To stop seeding after you have uploaded a certain size of the file check the Stop seeding at ratio: checkbox and then select the ratio to stop seeding. To stop seeding if the torrent has not been seeded recently check the Stop seeding if idle for: checkbox and then choose how long to select if the torrent is idle.

To have settings with privacy and encryption use the Privacy tab. To change whether to prefer encryption mode, allow encryption, or to require encryption use the Encryption mode drop down menu.

To change your settings on how Transmission interacts with the network use the Network tab. To choose the port for incoming connections to Transmission use the Port for incoming connections:. To see if that port is open press the Test Port button. To open a random port each time you open Transmission check the Pick a random port every time Transmission is started checkbox. To change the greatest number of peers you can have for each individual torrent change the Maximum peers per torrent field. To change the greatest number of peers you can have across all of you different torrents in the Maximum peers overall field.



To change things about your desktop interface use the Desktop tab of Transmission. To show an icon for Transmission in the system tray check the Show Transmission icon in the notification area checkbox. To start Transmission started in the notification area Start minimized in notification area checkbox. To toggle showing a notification when new torrents are added check/uncheck the Show a notification when torrents finish check/uncheck the Show a notification when torrents finish checkbox. To toggle playing a sound when a torrent finishes check/uncheck the Play a sound when torrents finish checkbox.



## Chapter 2.1.3 Quassel IRC

Quassel IRC is Lubuntu's default modern, cross-platform, distributed chat client. Quassel aims to bring a pleasurable, comfortable chatting experience to all major platforms (including Linux®, Windows®, and MacOS® as well as Android smartphones), making communication with your peers not only convenient, but also ubiquitously available.

#### **Features:**

- Remember Channels, Servers, and queries
- SASL authentication
- Notifications, including sounds
- Aliases
- Ignore lists

## **Usage**

To chat on IRC you need to connect to a server and join a channel. This can be done with the join button or by typing "/join [channel]". To send a query or private message directly to someone type "/query" username or right click on the user list and select Start Query. After starting a query you can get back to this conversation by viewing the user with a human shaped icon on the left side pane to continue the conversation later. If you wish to view older messages just scroll up with the mousewheel or the scrollbar to the right. Scroll down to view newer messages.

To see all the nicknames of someone in a channel are located in a sidebar labeled Nicks. The lists of all channels you are in is labeled All chats. To switch between different channels left click on the channel name.

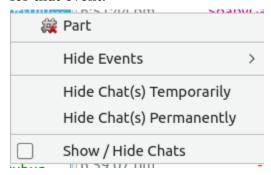


To add the Lubuntu IRC chat network click File • Networks • Configure\_Networks. To add a new network click the +Add button. To connect to a common public network Use preset dropdown, select Lubuntu IRC or any other server you want to join and then press OK. To change a name of an IRC network press the Rename button type the new name in and press OK.

To join a channel simple type /join 1 (where 1 is the channel name), right click the network and select Join Channel or use the Join button. To leave a channel right click on the channel

name on the right hand side and select Part from the context menu or type /part channel-name. If you want to join the channel again after leaving it right click on the channel and select Join. To have your chat be hidden until you rejoin it again right click on the channel and select Hide Chats(s) Temporarily. To hide the chat forever right click on the channel and select Hide Chats(s) Permanently.

To hide all people joining or leaving a chat right click on the channel list Hide Events Joins/Parts/Quits. To only hide people joining right click on the list of channel list Hide Events Joins. To hide people parting the channel right click on the channel list Hide Events Parts. To hide people quitting the channel right click on the channel list Hide Events Quits. To hide people changing their nickname Hide Events Name Changes. To hide when someone changes the topic of a channel Hide Events Topic Changes. To hide people changing the mode of a channel right click on the list of channels Hide Events Mode Changes. To hide when Quassel tells you it is tomorrow right click on the list of channels Events Day Changes. However while hiding events may result in less busy traffic it can leave you trying to communicate with people no longer on IRC. To view these events again simply uncheck the checkbox for that event.



If you want to disconnect from a particular server if you have connected to it right click on the server name and select Disconnect. If you are disconnected from a server and want to connect to it right click on it and select Connect. To collapse a servers list of channels you can left click on the arrow next to the server name and click it again to uncollapse the list of channels. To change your settings for a server right click on a server name and select Configure.

To toggle showing checkboxes in front of each chat right click on a server or channel and check the checkbox for Show/Hide Chats to bring a giant list of checkboxes. To hide a chat this way uncheck the checkbox in front of that channel or query. To go back and actually hide some chats right click on the channel or server and uncheck Show/Hide Chats.

To state you are taking an action in IRC you can type /me at the start of you typing to have say \*nick does something. To change your nickname on IRC type /nick newname to change you name to newname.

To leave all servers and disconnect press the Disconnect button in the top toolbar. If you have multiple servers configured to disconnect from one press the downward pointed arrow and select the server you want to disconnect from. To connect to the servers again press the Connect button. To connect to a specific server press the downward pointing arrow and select the server you want to connect to.

To switch between multiple channels left click on the channels on the left hand side. If a different channel has has new text in it the channel name will appear in blue. If a channel has a green name a user has joined of left. You also can switch between multiple channels with Alt + up arrow to move up or Alt + Down arrow to move down. To go to the next active chat press Alt + Right or to go to the previous active chat Alt + Left. To jump to a hot chat press Meta +A.

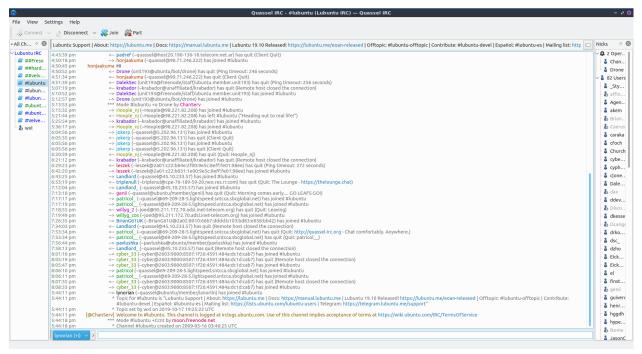
In Quassel if someone says your name you are said to be highlighted which in Quassel will make a sound and in a goldenrod color over the line of text with your name on it. The notification will also be shown on your desktop if you are in another window. Also at midnight Quassel will tell you when midnight and the date of the new day.

If you want to enable automatically spell checking your input right click on the input bar and select Auto Spell Check. To change your language for spellcheck right click in the input bar and select Spell Checking language. If you make a mistake when typing in your input you can press Control+Z or right click on the input bar and select Undo. To redo typing and action press Control+Shift+Z or Redo. To clear the text you input right click the input bar and select Clear.

To zoom in to get to your chat more right click and select Zoom In. To zoom out in Quassel press Control+- or right click and select Zoom Out. To go back to your original size right click Quassel and select Actual Size.

To use SASL authentication to autologin to an account no matter which nickname you want to use File • Networks • Configure networks to bring up a network configuration dialog. Click on the autoidentify tab and press the checkbox for Use SASL Authentication. Enter your username on the IRC network in the Account text field. Input your password into the Password field so that you know how to auto identify. You can also autoidentify without using SASL by clicking the Top checkbox. Nickserv is a sensible default for what the services is but it may be different on different servers and put your password in where you autoidentify.

If you want to have settings for automatic reconnecting File • Network • Configure network and select the Connection tab. The checkbox Automatic Reconnect will automatically rejoin chats if you get disconnected. The Wait field shows how long to between the retries between each try. The checkbox for Rejoin all channels after reconnect lets you rejoin all of your channels without having to manual rejoin each. The Number of retries is how many times to retry to connect before stopping. To have an unlimited number of retries click the Unlimited number of checkboxes.



To ignore a really annoying user you can on the nicks bar on the right hand side right click on the user Ignore and then select how to ignore that user. If you realize you want to talk to

them again Right click the same username and uncheck the checkbox for the ignore rule you created.

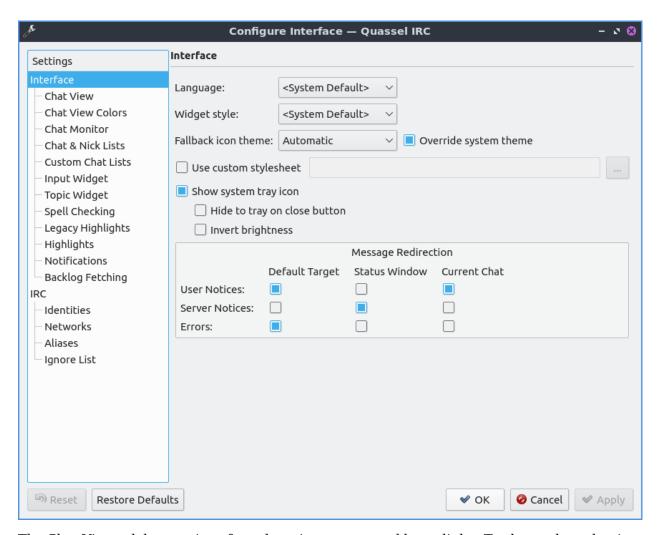
To type a message to an entire channel type into the bar at the bottom and press enter. To complete typing someone's nickname press the Tab key to complete their name. To paste text into the channel such as a link press Control + V or right click Paste. If you see a hyperlink in chat you can left click on the link to open in your webbrowser or you can copy the link by right clicking on it and Copy Link Address.

To close the list of nicknames or channels press the X button or View ▶ Nicks. To reopen the view of nicks View ▶ Nicks. To close the list of all chats press the X button to close a list of all channel and private messages you are in. To reopen it press the View ▶ Chat lists ▶ All chats.

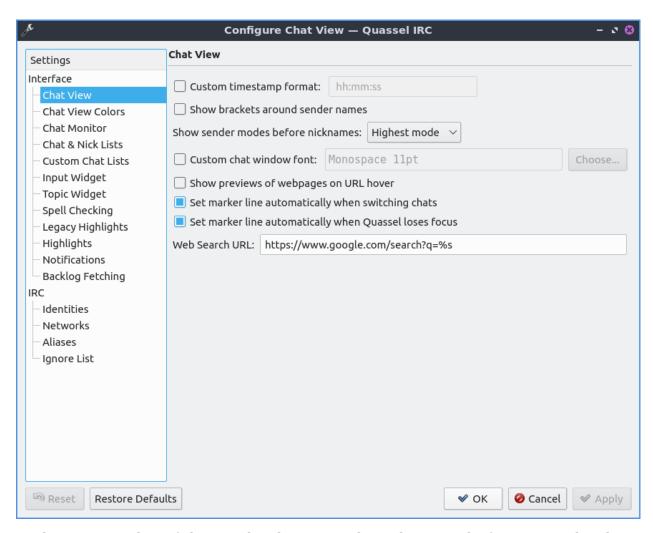
To make your chat full screen View • Full Screen Mode or Control + Shift +F. Press the keyboard shortcut or use the menu again to get out of fullscreen. If you want to quit Quassel press Control+Q or right click on the system tray and select Quit.

## **Customizing**

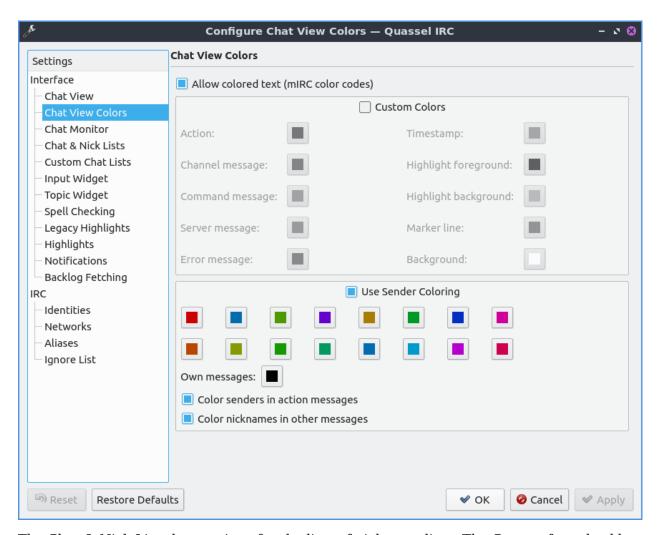
To change your preferences for Quassel press F7 or Settings > Configure Quassel. To change how Quassel appears use the Interface tab. To choose a language for your chat change the Language drop down menu. To change the client style for the widget of Quassel choose a widget style from the Widget style drop down menu. To change which icon theme you use for Quassel use the Fallback icon theme drop down menu and to have it replace your system icon theme press the Override system theme. To toggle showing tray icon check/uncheck the Show system tray icon checkbox. If you want to be able to close the Quassel window and still have Quassel running in the system tray to bring it back up check the Hide to tray on close button.



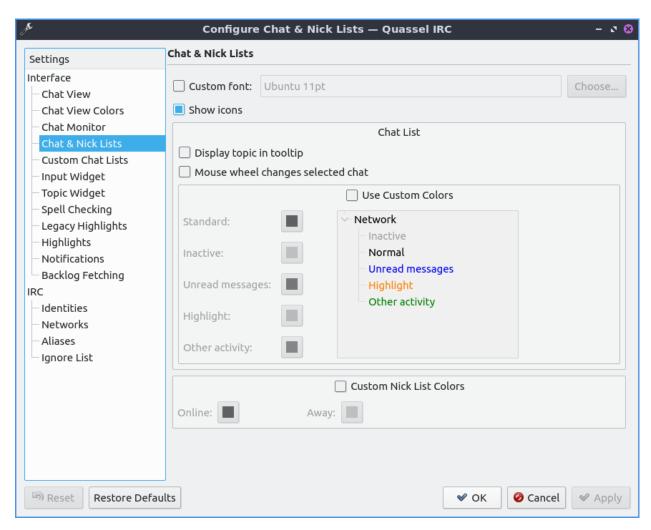
The Chat View tab has settings for colors timestamps and hyperlinks. To change how the time before each message appear check the Custom timestamp format checkbox and type hh for hours mm for both minutes or ss for seconds. To toggle showing brackets around everyone's nicknames check the Show brackets around sender names. To chose a custom chat window font press the Custom chat window font checkbox and then press the Choose button to choose a new font. To toggle previews of hyperlinks in chat check/uncheck the Show previews of webpages on URL hover. To toggle a red horizontal line when switch chats to show where you left off check/uncheck the Set marker line automatically when switching chats. To toggle a red horizontal line to show where left off when you switch windows check/uncheck the Set marker line automatically when Quassel loses focus checkbox.



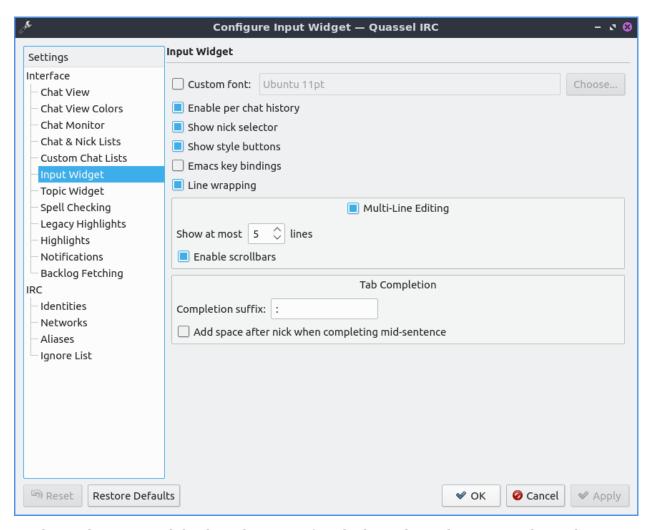
To change your colors of chat use the Chat View Colors tab. To toggle if you want colored text press/unpress the Allow colored text checkbox. To change the Colors of your user interface on Quassel check the Custom Colors checkbox. Then there are many buttons for each different kind of message which you can press the button that all bring up the specific color for that kind of message. To change the colors of nicknames for different people sending messages check the Use Sender Coloring checkbox.



The Chat & Nick Lists has settings for the lists of nickname lists. The Custom font checkbox lets you chose a custom font on the lists of nicks and the Choose button lets you choose the font you want. The Display topic in tooltip shows the channel topic in a tooltip if you move the mouse over it. If you want to be able to switch channels from the mouse wheel check the Mouse wheel changes selected chat checkbox. The checkbox Use Custom Colors enables the settings for different colors for the different channels. The buttons next to Standard, Inactive, Highlight, or Other activity all change what color the channel appears when you are in a list of channels. The Custom Nick List colors checkbox lets you change the color of nicks in the list. The Online button changes the color of nicks of online users. The Away button changes the color of nicks of Away users.

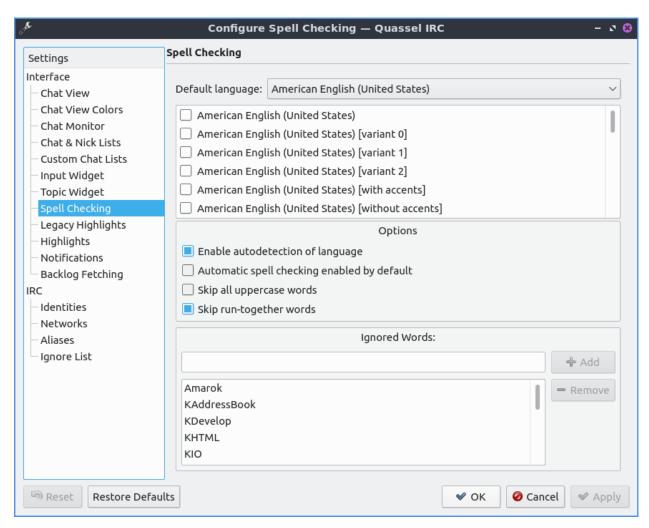


The Input widget has settings for what you tab to type into channels or private messages. The Custom Font checkbox has a thing to activate your own custom font for just input and press the Choose button to the font. To have per chat history check the Enable per chat History checkbox. The checkbox Show nick selector puts a widget in the lower left corner of the window to select different nicks. The checkbox Show style buttons shows buttons that style your text hidden in an arrow under an arrow. To enable line wrapping when you type a long line in the input box check the Line Wrapping checkbox. To enable multiple line editing if you have a really long thing you want to type into the IRC channel check the Multi-Line Editing checkbox. To edit the largest number of lines shown change the Show at most X lines field. To have a scrollbar on inputting text if long enough check the Enable scrollbars checkbox. After tab completing someone's nick if you want something after it in the Completion suffix field. To add a space after tab completing someone's nick automatically check the Add space after nick when completing mid-sentence checkbox.

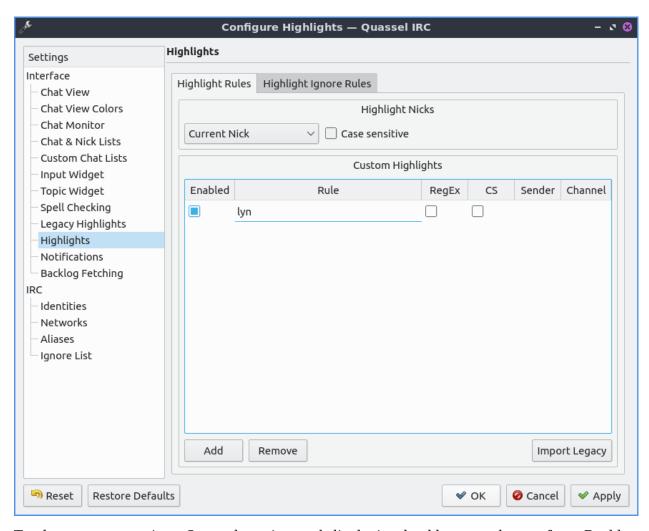


To change how Quassel displays the topic of each channel use the Topic Widget tab. To use a custom font for your topic check the Custom font checkbox and to choose a different font press the Choose button. To choose to resize to fit the topic check the Resize dynamically to fit contents. To only do this when you hove over the topic check the On hover only checkbox.

To view settings for spellcheck use the Spell Checking tab. To change the default language for you spell check use the Default language drop down menu. To toggle autodetecting language check the Enable autodetection of language checkbox. To have Automatic check spelling by default check the Automatic spell checking enabled by default checkbox. To have spell check not spellcheck on words starting with capital letters check the Skip all uppercase words checkbox. To not spellcheck two words right next to each other check the Skip run-together words checkbox. To add words to be the dictionary type in the Ignored Words field and then press the Add button. To remove a word from your dictionary left click on it and press the Remove button.

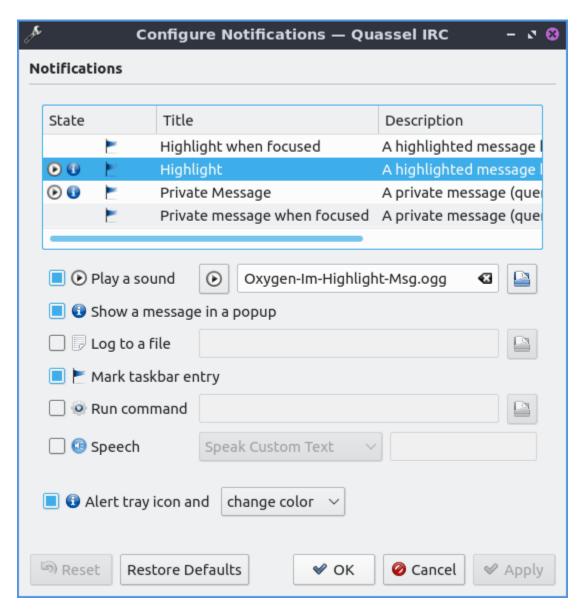


To have additional settings on highlights like when someone says your name in a channel and it appears in a different color use the Highlights tab. To add other words or names to highlight you can press the Add button. To change what you want a name or word to be highlighted double click on the Name column. To toggle enabling being highlighted by the name check or uncheck the checkbox in the Enabled column. To make being highlighted case sensitive check the checkbox in the checkbox in the CS column. To use a regular expression for the rule to highlight check the checkbox in the RegEx column. To remove this highlight rule press the Remove button.

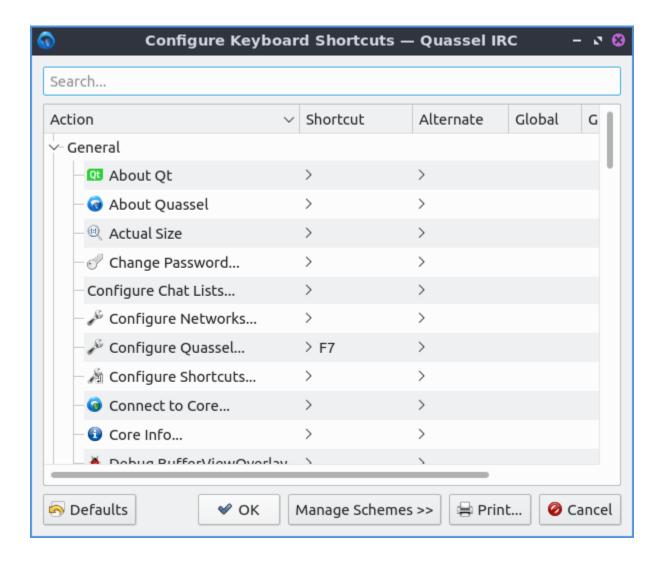


To change your settings Quassel getting and displaying backlogs can be set from Backlog Fetching tab. To change modes of backlog fetching to unread messages or a fixed number per chat use the Backlog request method drop down menu. If you choose a fixed amount you can change the Initial backlog amount to change how many lines you get. If you change the amount unread messages choose the Limit to get that many unread messages and then the Additional Messages will be shown for context.

To change your settings on your notifications Settings • Notifications. You can also get to this from the Notifications tab from the notifications tab. To select which event to change your settings left click on Private message when focused, Highlight, Highlight When Focused, or Private Message. If you do not know what highlight is it is when someone mentions your name in a channel. The checkbox Play a Sound allows you to to toggle playing a sound in the context. The checkbox Show message in a popup creates a popup notification when someone else mentions you. The Log to file puts the message in a file. The Mark taskbar entry makes the taskbar entry appear highlighted. To change what to do with the tray icon when you are highlighted by Quassel check the Alert tray icon and then select what you want to happen to the tray icon.



To change your shortcut Settings • Configure Shortcuts. To see what shortcut does look at the Action column in the table. To see what keyboard shortcut to press see the Shortcut column. To set a second keyboard shortcut to do something use the Alternate column. To switch to a custom keyboard shortcut left click on the action in the action column press the Custom and then press the button to the right and input your keyboard shortcut. To restore your keyboard shortcuts to the defaults press the Defaults bottom at the bottom. To not make your changes for keyboard shortcuts press the Cancel button. To apply your changes to keyboard shortcuts and close the window press the OK button.



## **Version**

Lubuntu ships with version 1:0.13.1 of Quassel IRC.

### **How to Launch**

To launch Quassel from the menu go to Internet • Quassel IRC or type

quassel

in the terminal. The icon for Quassel looks like a blue circle with a white crescent on it.

## **Chapter 2.1.4 Bluedevil and Bluetooth**

Bluedevil is the default application to manage Bluetooth devices for Lubuntu.

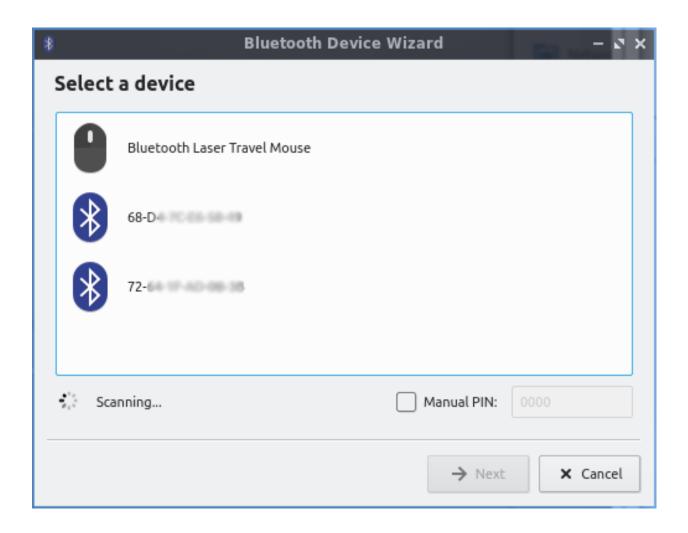
## **Pairing**

To launch Bluedevil to pair with a device from the menu Internet ► Bluedevil Wizard or from the command line run

bluedevil-wizard

. If Bluetooth is disabled you will be asked to enable it. In the main part of the window will show detected Bluetooth devices under the heading Select a device. To choose a device to pair with left click on it. Click on the device you wish to add and press Next.

Next you will be asked if your pin matches on your device to pair it. If the pin matches press the Matches button. If the the pin does not match press the Does not match button.

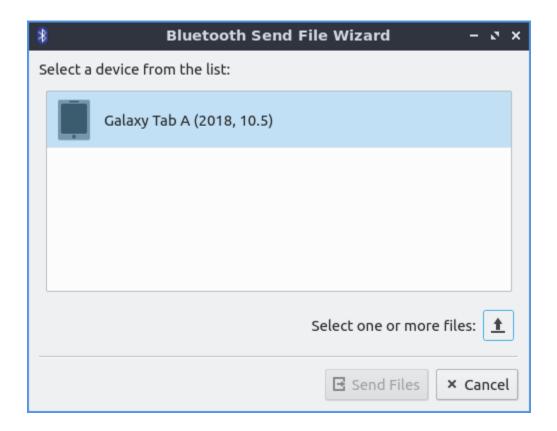


# **Sending files**

To send a file to another device after pairing with the device Internet ▶ Bluedevil Send File or from the command line run

```
bluedevil-sendfile
```

to open the file sending dialog. Then select the device you want to send a file to. Press the button with the upward pointing arrow to to bring a dialog of which files to transfer. To choose the file navigate to the path and select the Open button. To choose which device to sent a file select the device under Select a device from the list. Then to actually send the file press the Send files button. On a mobile device you may need to press a button to allow the file transfer.



# **Shortcomings**

While Bluedevil can handle most basic operations, some tasks need to be completed via the command line. Here are some common tasks:

## **Listing Paired Devices**

You can list the devices that are already paired by running the following:

```
$ bt-device -l
Added devices:
F00 BAR (00:11:22:33:44:55)
```

# **Connect to Paired Device Manually**

To connect to FOO BAR, you would run:

```
$ bluetoothctl connect 00:11:22:33:44:55
Attempting to connect to 00:11:22:33:44:55
[CHG] Device 00:11:22:33:44:55 Connected: yes
Connection successful
```

# **Disconnect From Paired Device Manually**

To disconnect from FOO BAR, you would run:

```
$ bluetoothctl disconnect 00:11:22:33:44:55
Attempting to disconnect from 00:11:22:33:44:55
[CHG] Device 00:11:22:33:44:55 ServicesResolved: no
Successful disconnected
```

#### **More Commands**

Running the following will give you many more options for configuration via the command line:

```
$ bluetoothctl -h
```

#### **Version**

Lubuntu ships with version 5.25.1 of Bluedevil.

# 2.2.2 Chapter 2.2 Office Applications

This chapter documents office applications including the LibreOffice office suite and qpdfview for viewing pdfs.

### **Chapter 2.2.1 LibreOffice**

LibreOffice is the default open source full office suite for Lubuntu. In the menu there are shortcuts to different LibreOffice applications and your recently used files.

# **Usage**

To open a recently used file in LibreOffice they are shown in the main part of the window by pressing the Recent Documents button or File • Recent Documents. To clear your recent documents left click the arrow next to Recent Documents and select Clear Recent Documents or File • Recent Documents • Clear List. If you do not want a particular recent document shown in the center press the x button in the top right corner of that file. To open a program or to create a file from a file dialog are along the left hand column under the Create header. To open a particular file press the Open File button, press Control+ 0, or File • Open. To start a new document from a template press the Templates button and left click on the template you want. To choose a subcategory of tmeplates click the downward pointing arrow next to Templates.

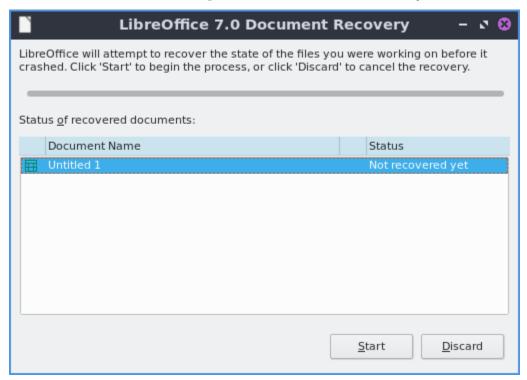
To close LibreOffice press Conntrol+ Q.

LibreOffice all of the different components have a window menu that lets you switch between a document in LibreOffice Writer and LibreOffice Calc. To do this go to Window and select the window that you want to switch to.

LibreOffice if you shutdown without saving your work LibreOffice will automatically recover the document. If you do not want to recover a document press the Discard button. If you want to automatically recover the document press the Start button. To finish recovery press the Finish button. If document recovery keeps on failing and won't launch run on the command line

libreoffice --norestore

from the command line to stop crashes at document recovery.

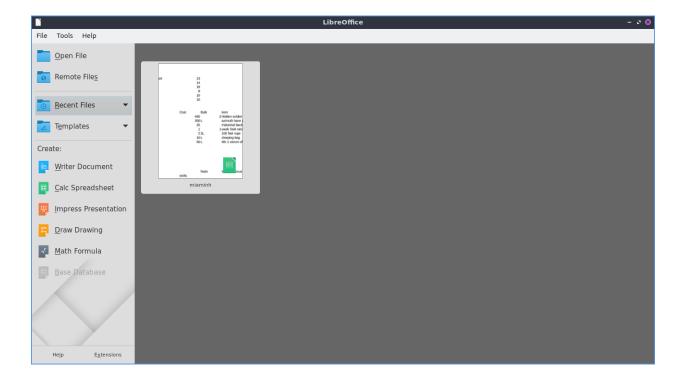


If you are about to close a document without saving it in LibreOffice a dialog will popup asking Save changes to document before closing?. If you do not want to save what you were working on press the Don't Save button. To not quit LibreOffice press the Cancel button. To Save the document to not lose your work press the Save button.

On non-English Lubuntu 22.04 installations there is a bug with Libreoffice not being localized see  $here^{19}$  for a workaround.

 $<sup>^{19}\</sup> https://discourse.lubuntu.me/t/using-a-language-other-than-english-heres-how-to-get-libreoffice-in-your-language/3269/$ 

# **Screenshot**



### **Version**

Lubuntu ships with version 7.4.2 of LibreOffice.

## **How to Launch**

From the menu Office > LibreOffice Start Center to launch LibreOffice or run

## libreoffice

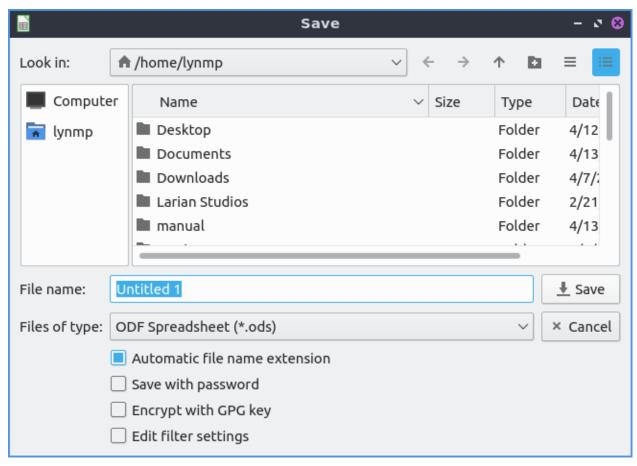
from the command line. The icon for LibreOffice is a white piece of paper with a folded right hand corner.

# **Chapter 2.2.2 LibreOffice Calc**

LibreOffice Calc is the default spreadsheet program for Lubuntu.

# **Usage**

To move between cells press the arrow keys in the direction you want to move. To enter data into cells type in the keyboard. To select cells left click and drag to select the cells you want. To sum data from cells in the cell where you want the sum is to press the button that looks like  $\Sigma$  character and then drag the mouse over the cells you want to add. To sort your cells in descending order press the button with bullet points and an arrow going down. To sort in ascending order press the button with bullet points and an arrow pointing upwards.



To save your spreadsheet you need to press the button that looks like a floppy disk, press the keyboard shortcut or go to File > Save. To save with a different file name File > Save as. To open a file press the button that looks like a brown folder and add select the file you want from the dialog or File > Open. To open a recent document File > Recent Documents.

To copy data you can right click Copy, press the button with two pieces of paper or press control + c. To paste data press control control +v, Edit • Paste, right click Paste, or press the button that is a clipboard with a piece of paper on it. To cut text press control+x, right click Cut, or press the scissors button to cut text. If you want to paste your text unformatted press Control+Shift + Alt+V or Edit • Paste Unformatted Text.

To change to showing currency for the number press Control+Shift+4 or Format ➤ Number Format ➤ Currency. To change to percentage press Control+Shift+5 or Format ➤ Number Format ➤ Percentage. To switch back to a normal number press Control+Shift+1 or Format ➤ Number.

To view values highlighted in another color to see them easier press Control+F8 or View Value Highlighting.

To view a long list of functions to use View  $\, \cdot \,$  Function List. To select different functions left click on the function name in the column. To insert a function press the fx button. To sort by different categories of functions use the drop down menu to the right of the fx button. To close this function sidebar press the x button.

To see a gallery of stock images for your spreadsheet View • Gallery. To get a list of different categories of images beneath Galleries and left click to select your image. To move an image in from the gallery to your spreadsheet left click on the image and drag the image to where you want.

To style part of your spreadsheet to bring lots of attention to a cell Styles • Accent 1. To bring slightly less attention to a cell Styles • Accent 2. To bring even less attention to a cell Styles • Accent 3. To style a cell like a heading Styles • Heading 1. To have a slightly smaller heading Styles • Heading 2. To switch back to your original style Styles • Default.

To insert an image press Insert • Image. To select an image to change how it appears in your spreadsheet left click on it. To resizing your image while keeping the same aspect ratio click on the box on a corner of your image. To stretch or shrink an image horizontally left click on the boxes on the left or right hand side and then release when in the giant position. To stretch on shrink your image vertically click on the box on the top or bottom and drag to your desired position. To change what image shows on the spreadsheet right click on the image and select Replace. To save an image in a spreadsheet right click on the image and select Save. To remove an image from your spreadsheet press the Delete key.

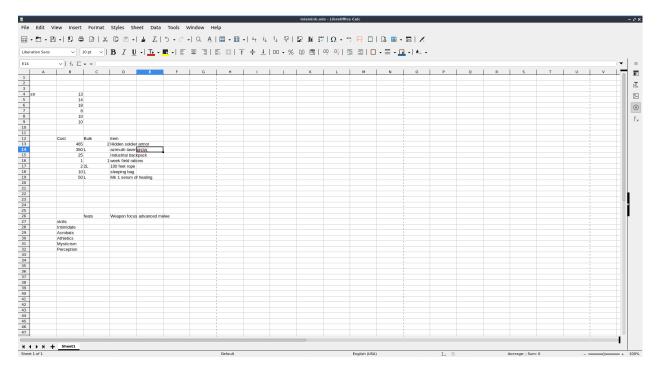
If you want to insert a new column to the left of a column right click on the letter for the column Insert Column Before. If you want the new column to the right is right click on the letter and Insert Column After. To insert a row above the current row right click on the number and Insert Row Above. To insert a row below the current row right click on the number and Insert Row Below. To delete a row or column right click the number and select Delete rows or Delete Column.

To change the size of a row or column of cells click in between the border of that particular row or column and drag with the mouse to give yourself room.

To sort your data like a bunch of names first select all the cells with the mouse Data ► Sort Ascending. If you want the reverse order to this you can have Data ► Sort Descending.

To undo a selection press control +z or press the button with the arrow looping around and pointing to the left. To redo an operation press Control +y or the number looping to the right and exiting to the left.

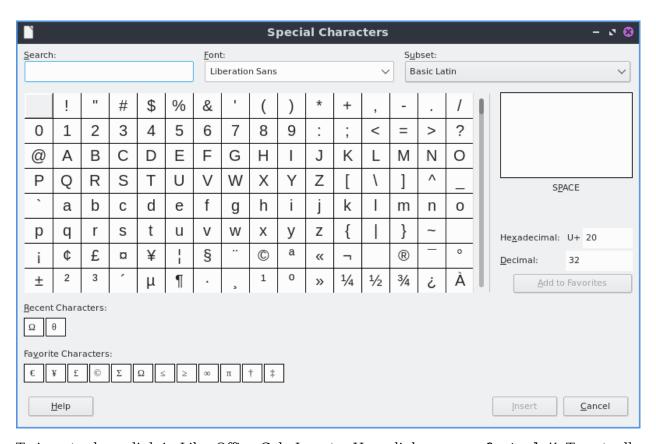
To zoom to view a full page on your spreadsheet in the menu View ▶ Zoom ▶ Entire Page. To view the whole width of your page on the menu View ▶ Zoom ▶ Page Width. To zoom to a particular percentage View ▶ Zoom and select the percentage you want. Another way to change your zoom is the slider in the bottom right hand corner. To zoom in move the slider to the right and to zoom out move the slider to the left.



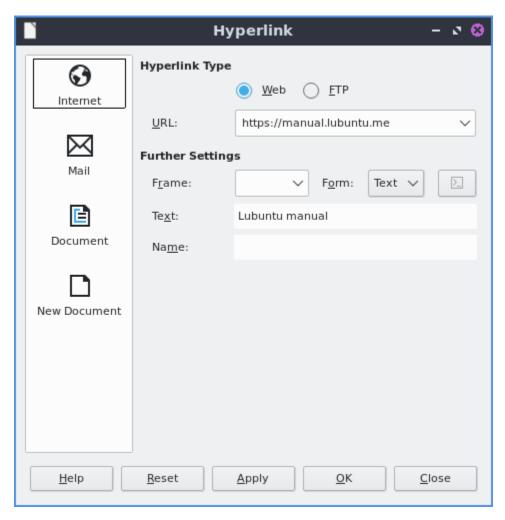
To select all cells in your spreadsheet press Control+A. To select an entire column press Control+Space or Edit > Select > Select Column. To select an entire row press Shift +Space or Edit > Select > Select Row.

To create a new spreadsheet in the same file press the button on the bottom that looks like a + or Sheet • Insert Sheet. To switch between each sheet press the button on each sheet at the bottom near the button to add a new sheet.

To insert a special character not on your keyboard Insert • Special Character. To select what character to insert left click in the center of the inserting character window. To search for a symbol type your search term into the Search field. To chose which group of symbols to choose from use the Subset drop down menu. To actually insert the symbol press the Insert button.



To insert a hyperlink in LibreOffice Calc Insert • Hyperlink or press Control+K. To actually type the address in the URL field. To switch to a button for the hyperlink use the Form button. To switch back to text use the Form drop down and select Text.



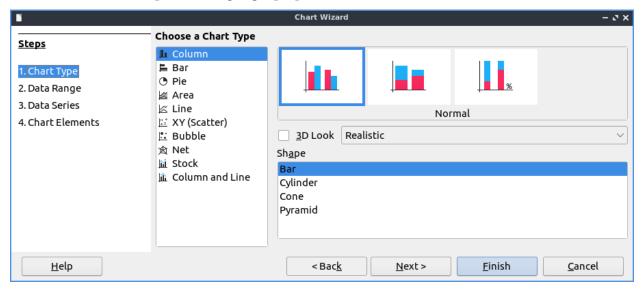
To make text bold in LibreOffice Calc press Control + B or Format ➤ Text ➤ Bold. To make text italic press Control + I or Format ➤ Text ➤ Italic. To have your text have a single underline Format ➤ Text ➤ Single Underline.

To align text in the center of the cells press Control +E or Format  $\,^{\star}$  Align Text  $\,^{\star}$  Centered. To align text in the cells to the right of the cell press Control +R or :menuselection: `Format -> Align Text -> Right`. To switch the text back to being on the left press Control +L or Format  $\,^{\star}$  Align Text  $\,^{\star}$  Left. To align text so that the edges of each cell all line up with being stretched in the center press Control + J or :menuselection: `Format -> Align Text -> Justified`. To align text to the top of the cell :menuselection: `Format -> Align Text -> Top`. To center thee text vertically in the cell Format  $\,^{\star}$  Align Text  $\,^{\star}$  Center. To align text to the bottom of a cell Format  $\,^{\star}$  Align Text  $\,^{\star}$  Bottom.

To quit LibreOffice Calc press Control+Q.

### **Charts**

To get to the dialog of how to insert a chart Insert • Chart. The first selection is to choose a Column, Bar, Pie, Area, Line, XY(Scatter), Bubble, Net, Stock, or Column and Line chart. To change the subtype of graph click the picture of a chart that looks like the type you want. To switch to the next step of making a graph press the Next button.



The Data Range tab controls what data will be in the chart and how present it. To switch to basing the bottom axis of your chart on rows of data press the Data series in rows button. To choose to switch your bottom axis of your chart on columns press the Data series in columns button. To use the first row as a label on each item on the chart check the First row as label checkbox. To input a custom title on the first column of your chart check the First column as Label checkbox.



The Chart Elements tab controls labels and displaying legends on your chart. To add a title to your chart type your title in the Title field. To add a subtitle to your chart type it in the Subtitle field. To add a label to your horizontal axis type your label in the X axis field. To label your vertical axis type your label in the Y axis field. To have a vertical grid lines on your chart

check the X axis checkbox. To have horizontal lines on your grid check the Y axis checkbox. To toggle displaying a legend on your graph check the Display legend checkbox. To move the legend to the left hand side press the Left button. To move the legend to the right hand side press the Right button. To move the legend to the top of the chart press the Top button. To move the legend to the bottom of the chart press the Bottom button.



### **Version**

Lubuntu ships with version 7.4.2 of LibreOffice Calc.

#### **How to Launch**

To launch LibreOffice Calc from the menu go to Office > LibreOffice Calc or run

localc

from the command line. The icon for LibreOffice Calc is a piece of paper with a green icon with a spreadsheet on it.

### **Chapter 2.2.3 LibreOffice Impress**

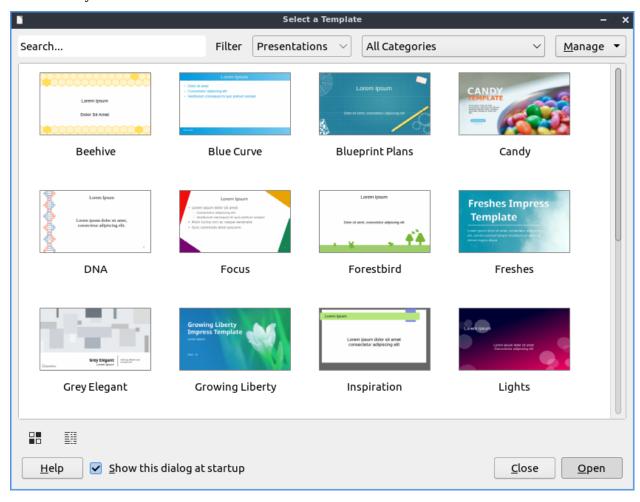
LibreOffice Impress is the program to present presentations on Lubuntu.

### Features include:

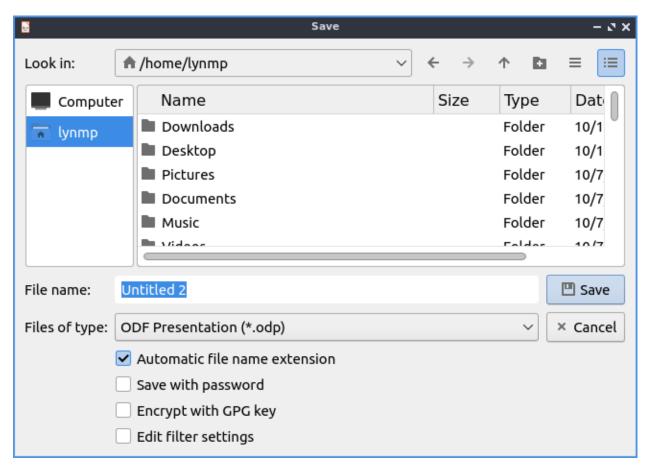
- · Built in themes
- · Spell check
- PDF export
- Images

# **Usage**

When you open LibreOffice impress you will get a dialog to select a template with a preview select which one you want to use by left clicking and then click Open. If you want to search for a theme type into the Search towards the upper left. To not show the presentation template at startup uncheck the Show this dialog at startup checkbox. To add a title to a slide click where it says click to add title.



To open a previous presentation you have been working on press the button that looks like a folder with a piece of paper in it and navigate to the file you want and open it or File ▶ Open. To view your recently opened files press File ▶ Recent Documents. To open a new presentation press Control + N or File ▶ New ▶ Presentation. To save your presentation press the button that looks like a floppy disk or File ▶ Save. To save a new copy under a custom file name File ▶ Save As. To save a file as a PDF File ▶ Export as PDF.



To type text into a presentation click in one of the boxes for your theme and type in the text with controls for the text on the right hand side. To insert a picture press the button with what looks like a photograph of a tree and select the file you want to insert or Insert • Image.... To insert audio or video to your presentation Insert • Audio or video and a file dialog will popup for you to pick a file. If you don't want a music symbol to show on your presentation when presenting drag it outside the margins of the slide.

To add a new slide to your presentation press Control+M, right click on the side pane New Slide, or Slide > New Slide. To delete a slide Slide > Delete Slide, or right click on the slide in the side pane Delete Slide. To change the layout of your slide Slide > Layout > Your preferred layout. To set an image as the background of your slide Slide > Set Background Image.

To move to the next slide press Page down, Slide > Navigate > To Next Slide, or right click on a slide in the side pane Navigate > To Next Slide. To move to your previous slide press Page up, Slide > Navigate > To Previous Slide, or right click on a slide in the side pane Navigate > To Previous Slide. To go to the first slide Slide > Navigate > To First Slide or right click on the slide in the side pane Navigate > To First Slide. To navigate to the last slide Slide > Navigate > To Last Slide.

To apply a bold effects on your fonts select the text with the mouse and then press Control+B or Format > Text > Bold. To make text italic with first select it and then press Control + I or Format > Text > Italic. To underline your text select it and then press Control+U or Format > Text > Underline.

To increase your font size press Control + ] or Format ▶ Text ▶ Increase Size. To decrease your font size press Control + [ or Format ▶ Text ▶ Decrease Size. To make text superscript select it and press Shift + Control +P or Format ▶ Text ▶ Superscript. To make text subscript

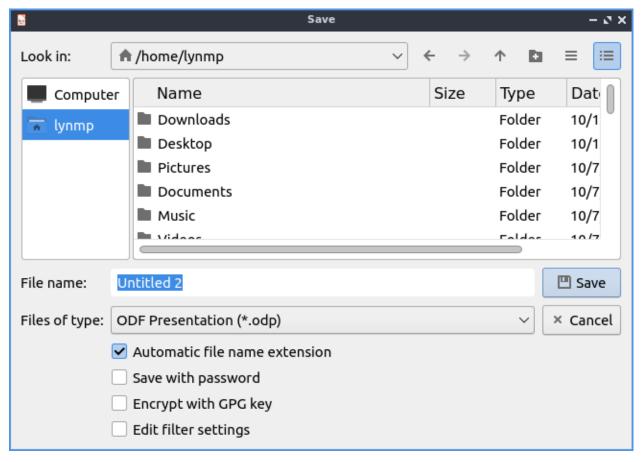
select it and press Shift + Control + B or Format ▶ Text ▶ Subscript.

To spell check your presentation press F7 or Tools • Spellcheck. If you want to print your slides you can press Control + p or File • Print. To open up your printer settings File • Printer Settings. A dialog will pop up with different settings for your printer. To chose which printer to print to use the Printer drop down menu. To change which slides use the Range and Copies button group. To change what paper size you are printing change the Paper size field. To change which way the paper is printed on change the Orientation field. To the left in a sidebar is a preview of what you will print. To view what page you are on and how many pages is in the bottom left of the sidebar.

If you want to paste text into a slideshow press Control + V or Edit ▶ Paste. To copy text select it first and then press Control + C or Edit ▶ Copy. To cut text select it first and the press Control +X or Edit ▶ Cut. To paste text without formatting pres Control +Shift + Alt +V or Edit ▶ Paste Unformatted Text. To select all text press Control+A or Edit ▶ Select All.

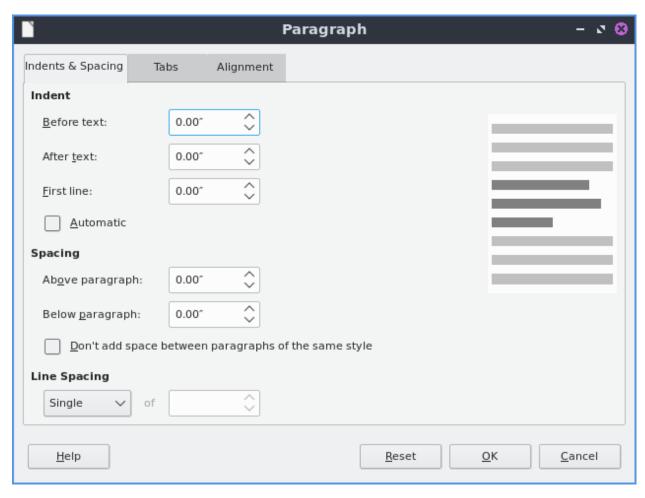
To insert a special character Insert ➤ Special Character. To center your text press Control + E or Format ➤ Align ➤ Center. To have your text aligned to the right press Control +R or Format ➤ Align ➤ Right. To align text to the left press Control + L or Format ➤ Align ➤ Left.

To bring up a dialog to customize the character or your text Format • Character or right click on a textbox and select Character from the context menu. The Family lets you choose the font family for your text. The Style is where you can select the of your font. The Size Lets you change the font size. The Font effects tab has even more effects for fonts. The drop down Font Label changes your font color. The Overlining menu lets you make a style for how to draw lines over the text. The Overline Color brings up a drop down menu to choose what color to draw a line over something.



The :guilabel:` Font Effects` tab has effects for your text. To have many different strikethrough effects to your text select the one you want from the dropdown Strikethrough menu. To change whether the font appears to be sunken or raised from the presentation use the menu for Relief. To choose how you want your text underlined choose an option from the Underlining menu. To change the color of your underline use the Underline color menu. To have effects with how your is vertically with the rest of the line select the Position tab. To make your text superscript press the Superscript button. To make your text subscript press the Subscript button. The menu for Scale width changes how much to scale the width of the font.

To format the paragraphs and spacing of text Format • Paragraph. The Indents & Spacing Tab has settings for indenting your text and the space between lines. To increase the indent right before the text starts increase the Before text field. To change the indentation after your text change the After text field. To have a different indent for your first line change the First Line filed. To change the amount of space above a paragraph change the Above paragraph field. To change the space below a paragraph change the Below paragraph field. To change the line spacing from this dialog window select the drop down menu Line Spacing. To reset your changes in this window press the Reset button. To not apply your changes press the Cancel button. To apply your changes and exit the window press the OK button.



To change settings on the alignment of text is on the Alignment tab. To choose which way you want your text aligned choose the Left, Right, Center, or Justified. To switch between left to right or right to left text switch the Text direction menu.

To toggle bulleted lists on your points Format ➤ Lists ➤ Bulleted List. To toggle a numbered list for your points Format ➤ Lists ➤ Numbered Lists. To move an item up in list Format ➤ Lists ➤ Move Up or press Shift + Alt + Up. To move an item down in a list Format ➤ Lists ➤ Move Down or press Shift + Alt + Down.

To change your line spacing on your presentation Format ▶ Spacing ▶ Line spacing and select the spacing you want. To increase your spacing between paragraphs Format ▶ Spacing ▶ Increase Paragraph Spacing. To decrease your spacing between paragraphs Format ▶ Spacing ▶ Decrease Paragraph Spacing.

To move settings with a box of text left click on the border of the box of text. To move the text box click and drag on the border. To resize both vertical and horizontal size together left click on the corner and resize the text box. To resize how tall the text box is click the box at the top or bottom and drag to the desired size. To resize the horizontal size only select the box on a vertical size of the box.

To search for text press Control + F or Edit • Find to search for text. To move to the next search press the downward pointing arrow and for the previous press the upward pointing arrow. To toggle matching case check/uncheck the Match Case checkbox. To close the find searchbar press the Red X button. To change which To find and replace text press Control + H or Edit • Find and Replace. To move to the next result press the downward pointing arrow. To move to the previous result press the upward pointing arrow.



To move a text box around you can left click on the text box and drag it to the desired position. To resize a text box click on the corner and drag to resize to the desired size.

To insert the number of your slide Insert • Slide Number.

To change the zoom of you presentation View ► Zoom ► Zoom to bring up a window to manage your zoom. If you just want to zoom to fit the page width View ► Zoom ► Page Width. To change your zoom to 100 percent View ► Zoom ► 100%. In the bottom right corner there is a slider for controlling zoom. To zoom in move the slider to the right and to zoom out move the slider to the left.

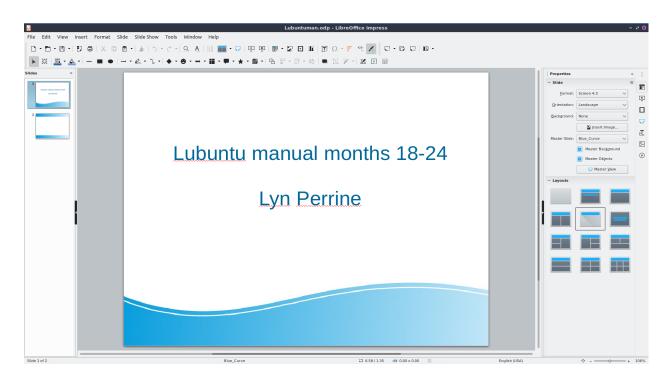
To move a slide down Slide ► Move ► Slide Down. To move a slide up Slide ► Move ► Slide Up. To move a slide to the start Slide ► Move ► Slide to start. To move a slide to the end Slide ► Move ► Slide to end.

To view your slides right next to each other View > Slide Sorter. To rearrange your slides click and hold a slide and drag the slide between the slides you want to move to. To have notes on each slide View > Notes. Type your notes for each slide below the slide. To switch to an outline view of just text View > Outline. To switch to an outline View > Outline. To switch back to your normal view View > Normal.

To change your view to grayscale View ► Color/Grayscale ► Grayscale. To view your presentation in black and white View ► Color/Grayscale ► Black and White. To switch back to color view View ► Color/Grayscale ► Color.

To quit LibreOffice impress press Control+Q.

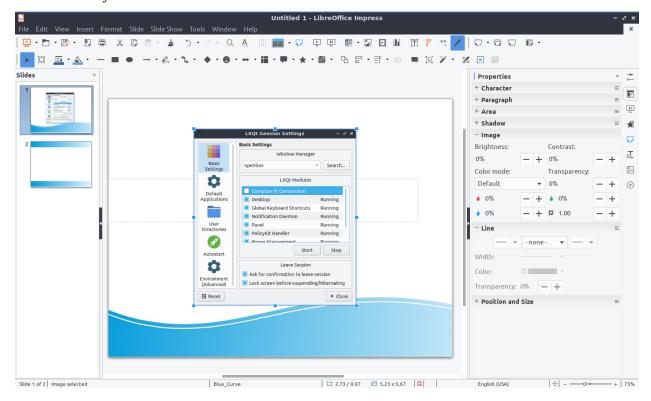
#### **Screenshot**



## **Images**

To insert an image click Insert • Image. To drag your image to where you want it left click and drag the mouse to where you want the image. To resize the image without distorting it click one of the boxes on the corner and resize to the size you wish. To move the image vertically which will distort it left click on the top or bottom boxes to resize the image vertically. To stretch your image horizontally to make it fit left click on the boxes on the left or right hand side to stretch your side. If you want to delete an image press Delete. To replace an image right click the image and Replace will bring a file picker up to pick a new image. To crop an image right click on the image and select Crop. To save an image out of a presentation right click on the image and select Save ....

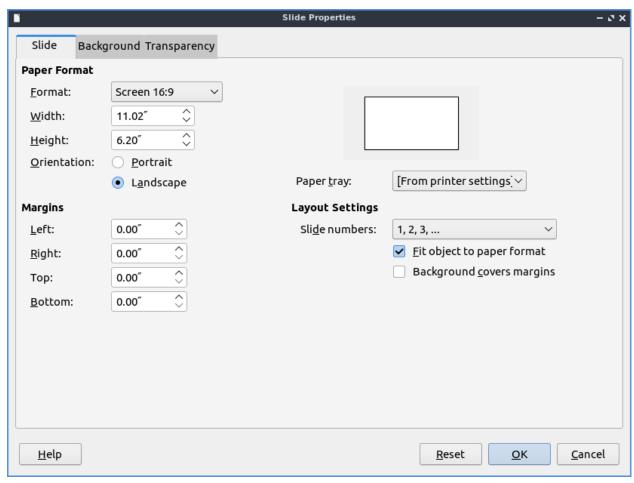
To rotate your image in LibreOffice impress right click on the picture Rotate or Flip • Rotate. To rotate the image on the screen horizontally left click on the corner and drag the image to orientation you want. To leave the corners on the opposite side in the same place and move left click on the orange circle on the opposite side and rotate the image that way dragging to the desired position. To change the center of where you rotate click and drag the orange dot in the center. To flip your image vertically right click on the image and select Rotate or Flip • Vertically. To flip your image horizontally right click on the image and select Rotate or Flip • Horizontally.



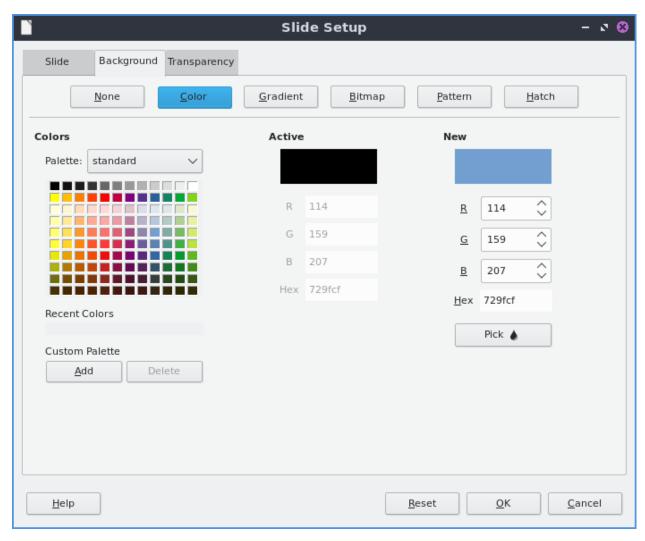
To send your picture to the back like if you want to put text in front of it Arrange ► Send to Back. To send your picture to the front right click on it and Arrange ► Bring to Front. To send an image behind one layer behind the other Arrange ► Send Backward. To bring an image forward one layer right click the image Arrange ► Bring Forward.

### **Slide Customization**

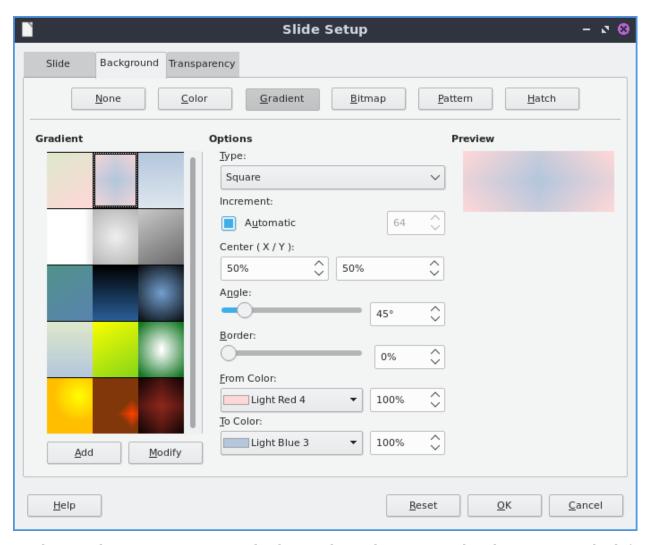
To bring up a dialog for the properties of your slides controlling background and shape with Slide ► Slide Properties. To change the format for a different aspect ratio of projector or print format change the Format drop down menu. To select a custom width and height change the Width or Height. To switch to a portrait orientation press the Portrait button to the right of Orientation. To add margins to slides enter a margin in the Left, Right, Top, and Bottom. To change how slides are numbered change the Slide numbers field.



To change and choose a custom background use the Background tab. To choose a solid color background for your slide press the Color button. To choose a different background color choose a color below the Color heading. To change to a different color pallet change the Palette drop down menu. To see what your current background color of the slide is shown under the Active label. To see what color you want to change is under New as a preview of the new background color. To the individual red, green, and blue of your colors change the R. G, and B fields respectively. To change the hexadecimal code for the color change the Hex field. To actually change the color press the OK button. To cancel your change of background use the Cancel button.

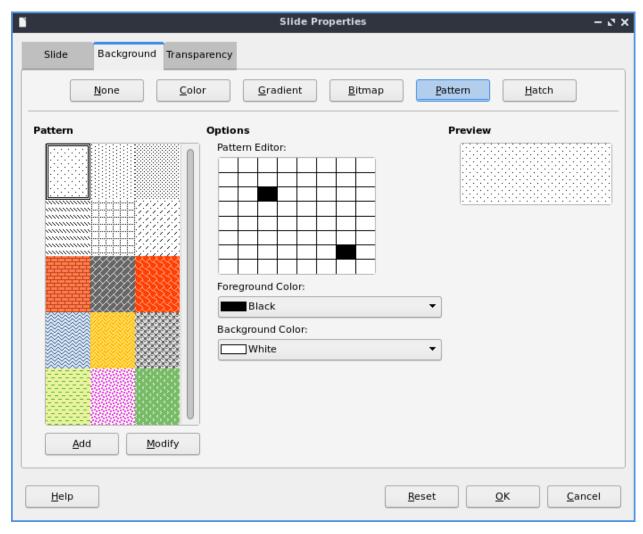


To choose a smooth transition use the Gradient button. To choose a preset gradient left click on the gradient on Gradient menu. To change the type of gradient use the Type and select it from the drop down menu. To see a picture of your background it is under the Preview text. To switch to manually changing the number of steps in the gradient uncheck Automatic checkbox and then change the Increment field. To change the center of the gradient change the two fields for Center(X/Y) to change the X and Y coordinates of the center. To rotate the gradient use the Angle field. To change your first color of your gradient change the From Color drop down menu. To change the second color of the gradient change the To Color drop down menu. To change the opacity of either color change the field that is a Percent for changing opacity. To change where the color starts change the Border field.



To choose a bitmap image as your background use the Bitmap tab. The Bitmap to the left shows you the bitmap pictures you can choose. The Preview shows you what your background will look like. To change what the bitmap does if it does not fit perfectly use Style drop menu. To scale as a percent of the image press the Scale checkbox. To change the where to start the bitmap change the Position drop down menu.

To change to a geometric pattern for the background of your slide press the Pattern button. To select a preset pattern left click on a pattern under the Pattern heading. To preview your pattern view in under the text Preview. To change the foreground color of your pattern change the Foreground Color drop down menu. To change the background color of your pattern change the Background Color drop down menu. To customize your pattern by a grid left click on the grid under Pattern Editor.



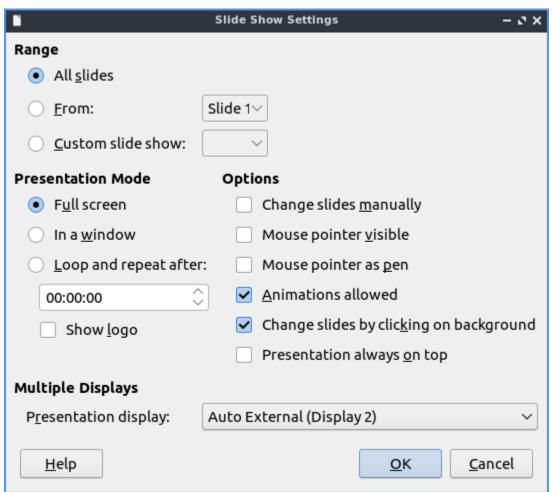
To choose a series of lines as your background press the Hatch button. To change how far between each line change the Spacing field. To view what your background will look like it is under the Preview window. To rotate the lines change the Angle field or move the slider. To change the type of lines use the Line type drop down menu. To change the color of lines use the Line Color drop down menu. To choose a particular background color of your background check the Background Color checkbox. Then use the Background Color drop down menu to choose your background color.

To have your slides be transparent use the Transparency tab. To change your slides to be transparent click the Transparency button and to the right to change how transparent to make it.

### Slideshows/Presentations

To start a slideshow press f5 or the button the looks like a TV with a triangle on it or Slide Show • Start from First Slide. To start a slideshow from the current slide press Shift + f5 or Slide Show • Start from current slide. To exit the slideshow press escape. To get to the next slide of the slideshow left click or press the right arrow key. to get to a previous slide in presentation mode press the left arrow key or right click previous. To move back to your first slide press the Home key. To move to your last slide press the End key.

To bring up custom settings for your settings Slide Show > Slide Show Settings. To change the presentation to in a window press the In a window button. To have the slideshow or presentation repeat afterwards press the Loop and repeat after:. To switch back to the default of having your presentation be fullscreen press the Full screen button. To change options on your presentation are under the Options heading. To toggle showing the mouse pointer check/uncheck the Mouse pointer visible checkbox. To toggle allowing animations check/uncheck the Animations allowed checkbox. To toggle changing slides by clicking with the mouse check/uncheck the Change slides by clicking on background checkbox. To toggle the presentation always on top check/uncheck the Presentation always on top checkbox.



# **Version**

Lubuntu ships with version 7.4.2 of LibreOffice Impress.

### **How To Launch**

To launch LibreOffice Impress go to the menu Office ► LibreOffice Impress or run

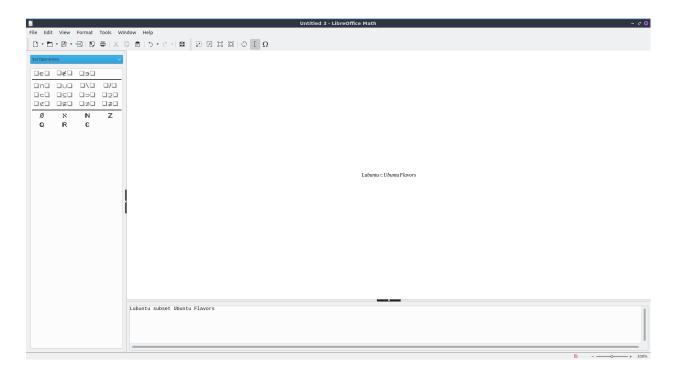
loimpress

from the command line. The icon for LibreOffice Impress looks like a piece of paper with a red icon and a chart with bullet points on it.

# **Chapter 2.2.4 LibreOffice Math**

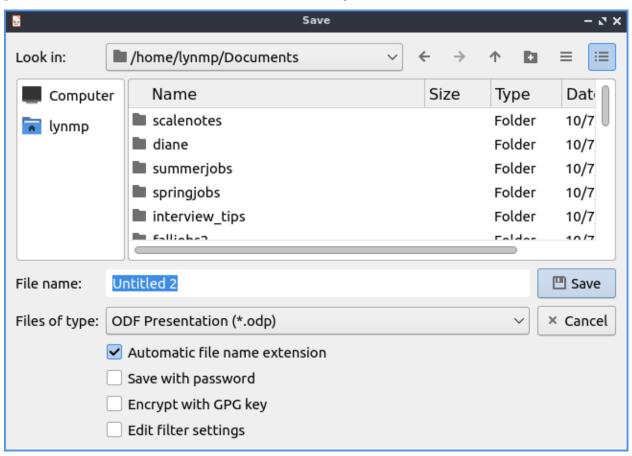
LibreOffice Math is the default application for typesetting equations on Lubuntu.

### **Screenshot**



## **Usage**

To save your formula you have written in LibreOffice math press Control +S or File > Save. To open a file press Control +O or File > Open. To print your formula press Control +P or File > Print. To view your printer settings File > Printer settings. To save a file as a different name press Control+Shift+S or File > Save As. To view your recent files File > Recent Documents.



To paste text into LibreOffice math press Control +V, right click Paste, or Edit > Paste. To copy text from LibreOffice math press Control+C, select text right click and select Copy, or Edit > Copy. To cut text from LibreOffice math press Control +X or Edit > Cut. To select all text press Control+A or Edit > Select All.

To undo changes in LibreOffice math press Control +Z or Edit ► Undo. To redo a change you have undone press Control +Y or Edit ► Redo.

The left hand side has many symbols you can use for say set relations and other operators. To change which groups of symbols you are currently using change the menu to the top of the sidebar with symbols on the left. If the symbol usually has a variable or operand on on a side or something it will have a box to that side. To toggle hiding this sidebar check/uncheck View ightharpoonup Elements. To temporarily collapse a sidebar click the arrows pointing towards the edge of the window. To expand the windows again press the arrow to go back towards the outside. To insert even more symbols Tools ightharpoonup Symbols.

To type into a formula the bottom part of the window has what is inserted into the formula. You can also insert many operators or brackets by right clicking and then selecting the symbol.

To change the fonts of your formulas Format ► Fonts which brings up a window for fonts for different contexts. To change your font size Format ► Font sizes. To bring up a menu to

change your alignment Format ► Alignment. To align text to the left press the Left button. To center text press the Centered button. To change alignment to the right press the Right button.

To change zoom View • Zoom and select the zoom you want. In the bottom right hand corner there is a zoom slider. To zoom in move the slider to the right and to zoom out move the slider to the left.

To quit LibreOffice Math press Control+Q.

#### **Version**

Lubuntu ships with Version 7.4.2 of LibreOffice Math.

#### **How to Launch**

To launch LibreOffice Math in the menu Office > LibreOffice Math or run

lomath

from the command line. The icon for LibreOffice Math looks like a piece of paper with the math symbol for square root of x.

# **Chapter 2.2.5 LibreOffice Writer**

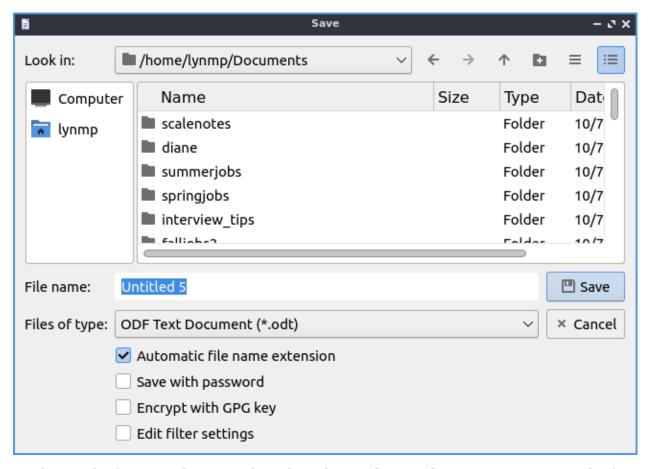
LibreOffice Writer is the default word processing application on Lubuntu.

#### **Features:**

- No ribbon
- One button PDF export
- Many file formats to output
- Spellcheck
- Wordcount

### **Usage**

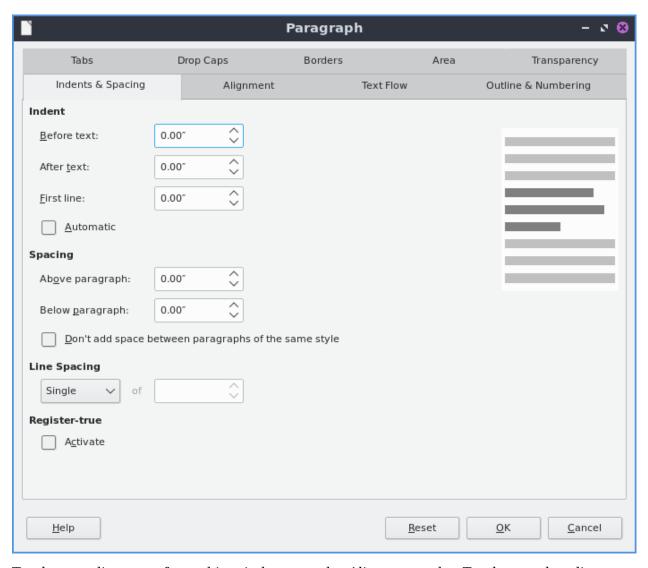
To use LibreOffice writer type what you wish to type into the main part of the window. If you wish to save your data press the icon that looks like a floppy disk or press control + s. To open a previously saved document press the button that looks like a folder or press control + o. To load or save a file from the menu File • Open to open a file or File • Save. To save your file as a new file name File • Save As. To view your recent documents File • Recent Documents. To have save your file as a PDF press the button that is a sheet of paper with curved red lines on it or go File • Export and select the file type as PDF. To export as a PDF file File • Export AS • Export as PDF. To export your document as ann epub File • Export AS • Export as EPUB. This same export menu will let you save in formats for other programs for compatibility with Microsoft word.



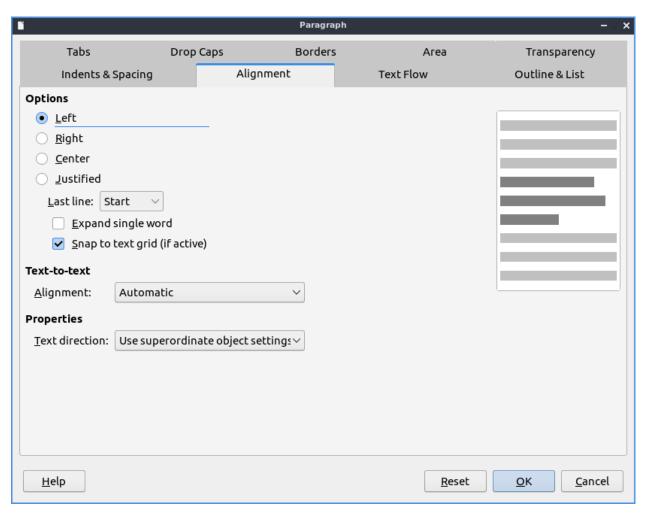
To change the font size there is a drop down box with a number in it you can type the font size you want in this box or select from the dropdown menu. You can change the font with the drop down box to the left of the font size which you can type and it autocompletes the fonts or select from the drop down menu. To make your text bold you can select the text with the mouse and press the button that looks like **B** or press control + B. To make the font italic press the button that looks like I or press control + I after selecting the text or keep typing with it to be italic. To have an underlined text select the text and press Control +U or press the underlined U button. To change the style of underline press the downard pointed arrow next the underlined U button. To make strikethrough press the button that is a s with a line through it. If you want a floating window on how to style your text Format • Character.

To copy text select it with the mouse or Shift + arrow key then press Control +C or Edit ► Copy. To cut text select it first and then press Control +X or Edit ► Cut. To paste text press Control +V or Edit ► Paste. To paste with no formatting press Control + Alt + Shift+ V or Edit ► Paste Unformatted Text.

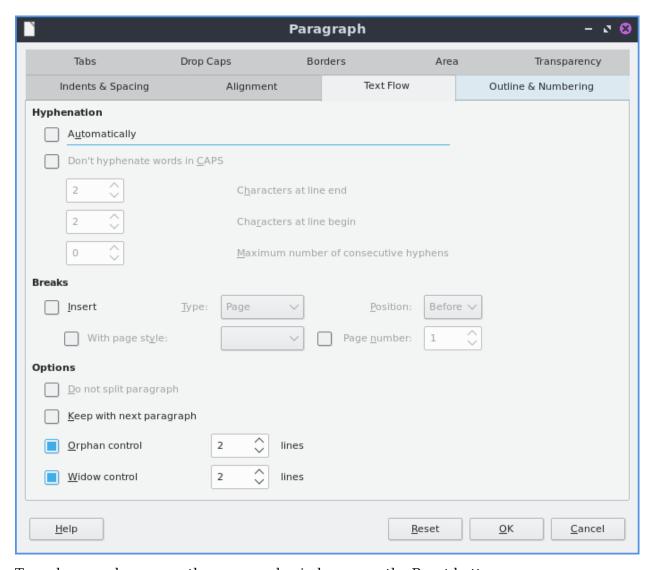
To change your spacing around your character Format > Paragraph. To manage your indentation and spacing between paragraphs and lines use the Indents & Spacing tab. The Before text field is how much indentation before each line of text. The After text is how much of an indent to put after the text. The First line field shows how you want the first line indented. To add a space above each paragraph increase the Above paragraph field. To add a space below a paragraph change the Below paragraph field. To change line spacing in this window change the Line Spacing field.



To change alignment from this window use the Alignment tab. To change the alignment choose the Left, Right, Center, or Justified radio button to align text that way. The Borders tab has settings for your border. The Style menu lets you change what kind of line is used for the border. To change the width of your border change the Width field. To choose a different presets of border type press the buttons under Presets and will be previewed in the box below. The buttons under Position change where the shadow is relative to the text. The field Distance is how far the shadow is offset from the border. To change the color of your shadow change the Color menu.



To change what how the text deals with page breaks and paragraphs use the Text Flow tab. To automatically use hyphens check the Automatically checkbox. To not hyphenate words with capital letters check the Don't hyphenate words in CAPS checkbox. To not hyphenate the last word check the Don't hyphenate the last word checkbox. To change how many characters to leave before the hyphen change the Characters at line end field. To change how many character after the hyphen on the next line change the Characters at line begin. To set a maximum number or hyphens change the Maximum number of consecutive hyphens field. To toggle not putting a short bit of text at the bottom of a page or column check the Orphan control checkbox. To change how many lines to not allow to be separated change the lines field to the right of Orphan control. To stop a few lines of text alone at the top check the Widow control checkbox. To change how many lines you of text to change the Lines field to the right of Widow control. If you do not want orphan or widow control check the Do not split paragraph checkbox.

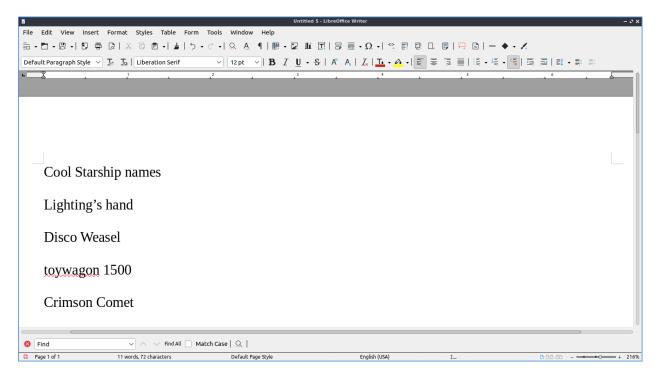


To undo your changes on the paragraph window press the Reset button.

To change font color press the button that has a T with a drop on it and a red underline this will bring down several different colors you can change your text to a color you want. You can also change your font color through the Format • Character window.

To make text superscript press the button with A  $^{\rm B}$ . To make text subscript press the button that is an A  $_{\rm B}$ .

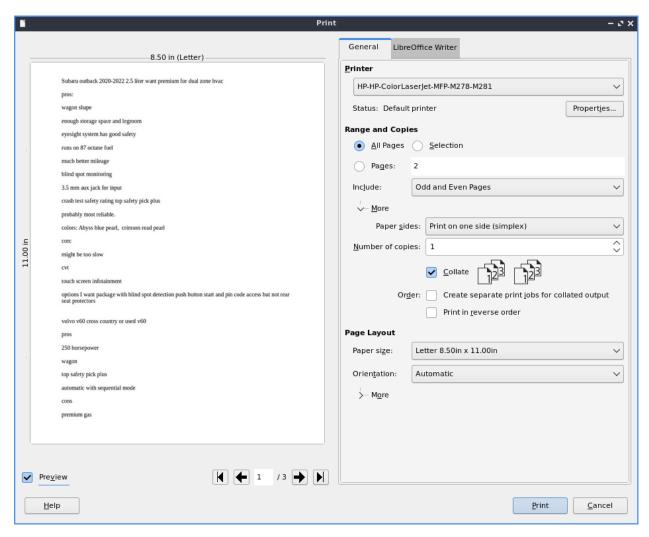
If you want text in a text box that can be moved with the mouse press the button that looks like a T with a box around it or Insert > Text box. To insert a hyperlink press Control + K or Insert > Hyperlink.



To check the spelling of your document press the ABC button with a checkmark, from the Tools • Spelling or press f7. When you have the spellcheck window open to change what language you are checking the spelling for change the Text language field. When you have what spell check thing is a typo it will be highlighted in red with context of where that appears in your document. If you think this is not an error just for this time press the Ignore Once button. To not change this at every time this occurs in the document press the Ignore All button. If what you wrote is correct and never want it marked wrong again press the Add to Dictionary button. Below what spellcheck thinks is an error will show Suggestions on what you it thinks it should correct. To select a different suggestions left click on it to select that suggestion. To replace what spellcheck thinks is an error with the suggestion press the Correct button. To replace the supposed error with the suggestion in the entire document press the Correct All button. To have this error be autocorrected press the Always Correct button.

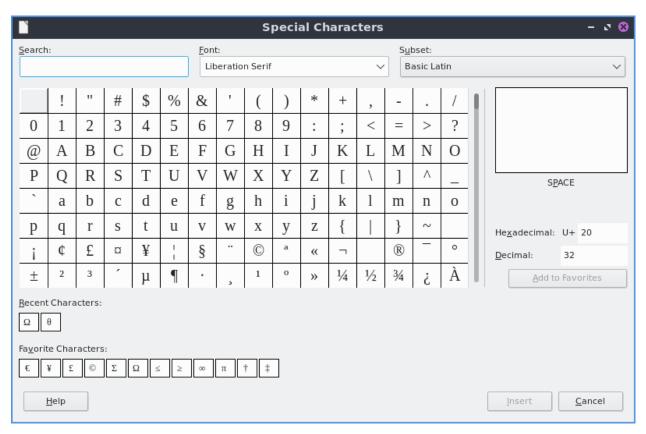


To view how your document looks before printing it File > Print preview or Control +Shift +0. To get back to editing your document press the same thing again or click the close preview button. After you are done writing your document you can press the button that looks like a printer to print, press control+ p or File ▶ Print. To toggle the preview on or off check/uncheck the Preview checkbox. To the left of the print dialog will have a preview on the left hand side. Below the preview there is a range of different pages showing which page you are previewing and how many pages the document you are printing is showing. To select which printer to use use the Printer drop down menu. To choose which pages to print there are buttons under Range and Copies heading. To change which side to print on change the Paper sides field. To change how many copies you are printing change the Number of copies field. To print in reverse order check the Print in reverse order checkbox. To change what paper size you are printing change the Paper size field. To change which direction the words are printed on the paper use the Orientation field. To change how many pages per sheet you print use the Pages per sheet field. To which order the pages are printed change the Order field. To preview which order the different pages are ordered to the right see the number of the page on the screen towards the bottom right of the print dialog. To draw a border around multiple pages check the Draw a border around each page checkbox.



To change view or change your printer settings File > Printer settings. To view your word count of how many words are currently in the document is with nothing selected at the bottom of the LibreOffice writer window. If you select text with the mouse you can also see the word count of selection from the same spot. The word count is also shown on the very bottom of the window. To bring up a popup window with your wordcount Tools > Word Count.

To insert special symbols or characters press the button with the  $\Omega$  symbol or from the menu Insert • Special character. If you use a symbol a lot you can quickly select it by pressing the downward pointing arrow next to the  $\Omega$  button. To insert a page break press control + enter or from the menu Insert • Page Break.



To undo a mistake you make press control + z or press the yellow arrow pointing to the left. If you accidentally undid code redo or press the green arrow pointing to the right or press control + y. Under the arrow buttons there is a drop down button that brings up a menu for which steps to undo and redo.

To center your text is press the button with the horizontal lines centered or Format > Align > Centered. To have your text justified to the right press the button with the lines on the right or Format > Align > Right. To have your text aligned to left press the lines on the left with or Format > Align > Left. To center justify your text which will add spaces in between words to make it appears at both orders press the button that has solid horizontal lines all of equal length to center justify the text or Format > Align > Justified.

If you want to change your line spacing of your document Format ▶ Spacing ▶ Line spacing: 2 for double spacing or Format ▶ Spacing ▶ Line spacing: 1.5 for one and a half line spacing. To change back to single line spacing of your document Format ▶ Spacing ▶ Line Spacing: 1.

To Insert a page number Insert ▶ Field ▶ Page number. To insert the current time into the document Insert ▶ Field ▶ Time. To insert the current date into the document Insert ▶ Field ▶ Date. To insert the number of pages in the document Insert ▶ Field ▶ Page count.

To have a header shown at the top of each page Insert > Header and footer > Default style. To have a footer at the bottom of each page Insert > Header and footer > Footer > Default style. To get back to writing the main part of the document left click on the body of the document.

To add a comment inline into the document press Control+Alt+C or right click and select Comment. Type your comment in the yellow box to the right to leave a note on that comment. To leave a reply to this comment press the downward pointing arrow Reply.

To insert a mathematical formula into your document you are process Insert ► Object ► Formula and a user interface similar to LibreOffice math will appear allowing you to insert the

### formula.

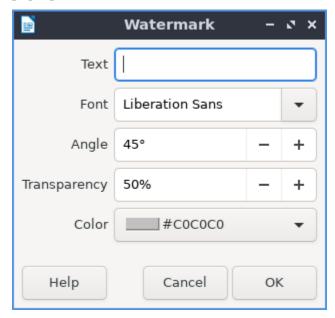
To select all text in the document press control + A or Edit > Select All. If you want to select text with a rectangle with how you draw the mouse press Alt + Shift +F8 or Edit > Selection Mode > Block Area. To switch back to normal selection Edit > Selection Mode > Standard. To jump to a specific page press Control + G or Edit > Go to Page and a dialog will pop up. To enter a page number in the Page field and click OK to go to that page.

To have a view of the document with no margins shown like on a webpage View ► Web or To get back to the original view View ► Menu. To toggle a vertical scrollbar View ► Scrollbars ► Vertical Scroll bar. To have a horizontal scrollbar View ► Scrollbars ► Horizontal Scroll bar.

To toggle your view of rulers press Control + Shift +R or View ▶ Rulers ▶ Rulers. To only toggle showing a vertical ruler View ▶ Rulers ▶ Vertical Rulers. To toggle seeing formatting marks press Control + F10 or :menuselection:` View -> Formatting Marks`. To toggle making LibreOffice Writer press Control + Shift + J or View ▶ Fullscreen.

To zoom for the entire page to be visible View > Zoom > Entire Page. To zoom so you can see the width of the page and everything is bigger View > Zoom > Page Width. To zoom in a bit more and not see the margins on the page View > Zoom > Optimal View. To zoom to 100 percent zoom View > Zoom > 100%. Another way to change zoom is there is a zoom slider in the bottom right hand corner to increase zoom in move the slider to the right and to zoom out move the slider to the left.

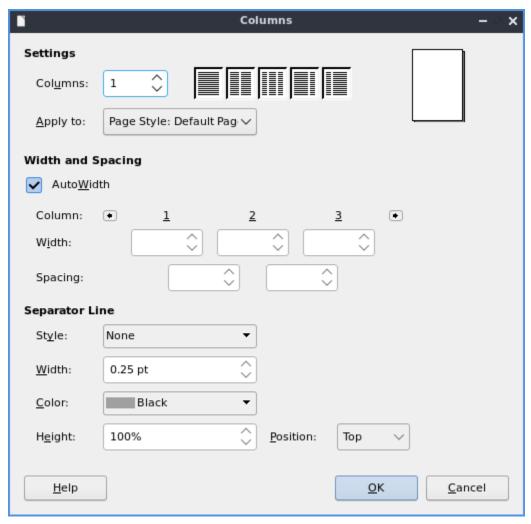
To insert a watermark on the background of the page Format • Watermark. To change what the watermark says input that into the Text field. To change the font of the watermark change the Font field. To change the angle from horizontal text use the Angle field in degrees. To change your how transparent the water mark is change the Transparency has 100 as entirely clear and 0 as entirely opaque. To change the color of the watermark use the Color drop down pop up menu.



To leave LibreOffice Writer press Control+Q.

## **Columns**

To add multiple columns to your document Format • Columns. To have multiple columns in the field that says Columns and set to the number of columns you want. To change the spacing between the two columns change the Spacing field. To have a line to separate your columns use the Style drop down menu to select the lines. To change the color of your lines change the Color drop down menu. When you are done with your settings press the OK button or if you decide you do not want to make changes to columns press the Cancel button.



To add a column break to the next column press Control+Shift+Enter or Insert ► More Breaks ► More Column Breaks.

#### **Comments**

To add a comment to a file with LibreOffice Writer press Control +Alt +C, right click Insert Comment, or Insert • Comment. To add text on the comment click in the yellow area and type in your comment. To delete a comment press the downward pointed arrow in the yellow comment and select Delete Comment. To get back in the body of the document click in the white part towards the left of the document. To read when a comment was made look at the bottom of the comment in yellow.



#### Lists

To add a list of bullet points press Shift +F12 or Format ► Lists ► Bulleted Lists. To start a numbered lists press F12 or Format ► Lists ► Numbered List. To move an item up in your list Format ► Lists ► Move Up. To move an item down in your list Format ► Lists ► Move Down. To demote a point to a subpoint Format ► Lists ► Demote One Level. To promote this point back up to its previous level Format ► Lists ► Promote One Level.

# **Find And Replace**

To search for text in your document press Control +F, View > Toolbars > Find, or Edit > Find which pops up a toolbar on the bottom. To enter the text to search enter into the searchbar on the bottom. To go to the next result press the downward pointed arrow button. To go to the previous result press the upward pointing arrow button. To close out of finding text click the red circle x button. To not match case uncheck the Match Case checkbox.



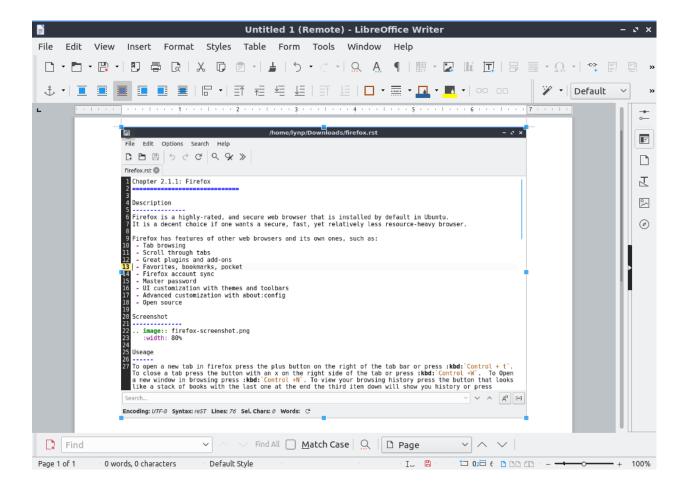
To find and replace text press Control+ H or Edit ► Find & Replace. To have what text you want to be find in the document to be replaced in the Find field. To have the end result of what you after replacing in the Replace field. To find and select all occurrences of the string in the Find field click the Find All button. To replace every occurrence of the word of find press the Replace All button to change everything.

# **Styles**

To quickly set a title for your your document Styles > Title. To choose a quick subtitle for your document Styles > Subtitle. To choose to style something as a heading press Control+1 or Styles > Heading 1. To choose a style of a subheading press Control+2 or Styles > Heading 2. To choose an even lower level heading press Control+F3 or Styles > Heading 3. To quickly switch to a bulleted list Styles > Bulleted List. To switch to a numbered list Styles > Numbered List. To have a list styled with uppercase letters Styles > Alphabet Uppercase List. To switch to a list with lowercase letters choose Styles > Alphabet Lowercase List. To get a list with uppercase roman numerals select Styles > Roman Uppercase List. To make a list with lowercase roman numerals select Styles > Roman Lowercase List. To get back to your original normal style press Control+0 or Styles > Text Body.

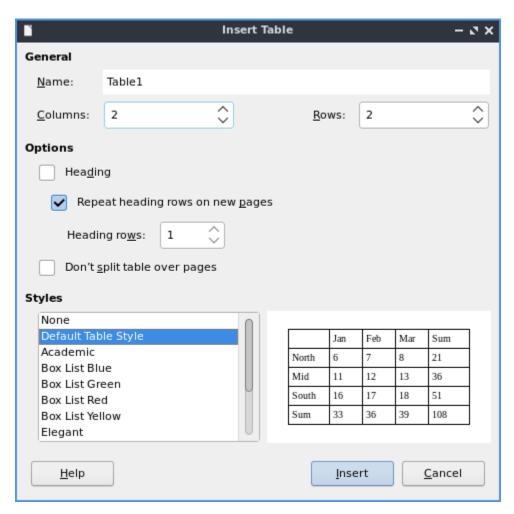
# **Images**

To insert an image into your go to Insert • Image to insert an image directly to your word processing document. To move your image around left click on it and drag the image around. To resize the image while keeping the same aspect ratio click on one of the blue boxes around the corner to resize the image. To remove an image you decide you do not want in your document press the Delete key. To rotate an image to the right left click on it to select it and right click on the image Rotate or Flip • Rotate 90° Right. To rotate an image to the left right click on the image Rotate or Flip • Rotate 90° Left. To rotate an image to fix it appearing upside-down left click the image and right click Rotate or Flip • Rotate 180°. To get an image back to its original position Rotate or Flip • Reset Rotation. To rotate an image freely by the mouse Rotate or Flip • Rotate and drag with the mouse to where you want the image rotated. To flip your image vertically right click on the image Rotate or Flip • Flip Vertically. To flip your picture horizontally Rotate or Flip • Flip Horizontally.



### **Tables**

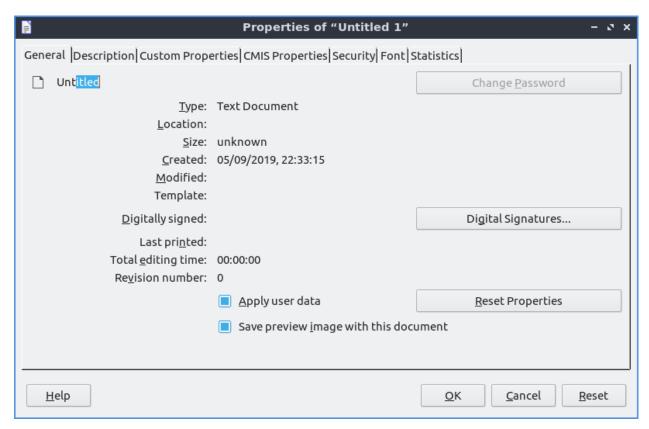
To insert a table Table • Insert Table and a table dialog window will popup. To change the number of columns change the Columns field. To change the number of rows change the Rows field. To view a different styles for your table are under the Style menu and you can see a preview to the right of the menu. To input text into a part of the table simply left click over that part of the table. To move to another part of the table with the arrow key with the direction you want to go.



To add a row above your current row Table • Insert • Rows Above. To add a row below the current row Table • Insert • Rows Below. To add a column before the current one Table • Insert • Columns Before. To add a column after the current one Table • Insert • Columns After. To add multiple rows or columns Table • Insert • Rows or Table • Insert • Column. To switch how many of multiple rows or columns change the Number field. To switch to adding rows or columns above or below press the Below Selection button. To actually add the rows or columns press the OK button. To delete a row Table • Delete • Rows. To delete a column Table • Delete • Columns. To delete the whole table Table • Delete • Table.

## **Document Properties**

To bring up a window with properties of your document File ▶ Properties. The General tab shows metadata about the file including creation or modification time.



The Description tab has fields to input title subject and keywords and lets you also put in comments. The Title is where you can optionally put the title on. The Subject is a field to input the subject of the document. The Keywords is to input keywords on the document. The Comments is where you can have comments about the document.

The Font tab has settings for embedded fonts to make sure they always display properly. To embed any fonts you check the Embed fonts in the document checkbox. To only embed the fonts needed to see the document check the Only embed fonts that are used in documents checkbox. To chose to embed fonts with a Latin script check the Latin fonts checkbox. To embed Asian fonts check the Asian fonts checkbox. To embed complex fonts check the Complex fonts checkbox.

To see statistics on your document use the Statistics tab. To see how many pages are in your document look at the Pages row. To see how many tables are in a document see the Tables row. To see how many images are in your document read the Images row.

## **Version**

Lubuntu ships with LibreOffice Writer version 7.4.2

#### **How to Launch**

To launch go to menu Office > LibreOffice Writer or run

lowriter

from the command line. The icon for LibreOffice Writer looks like a piece of paper with several lines of writing.

### Chapter 2.2.6 qpdfview

qpdfview is the default PDF viewer for Lubuntu.

#### **Features:**

- Tabs
- Presentation mode
- Zoom to entire page/ page width
- · Rotating pages
- Outline, properties, thumbnail, and bookmark docks
- Printing support
- Annotation and highlighting
- Bookmarks
- Customizable keyboard shortcuts
- Viewing postscript files

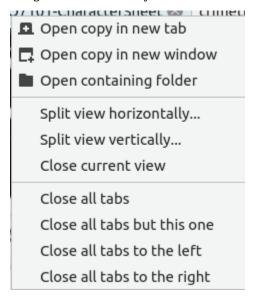
# **Usage**

To open a PDF file use File > Open or press Control + 0 on the keyboard. If you have a PDF open use File > Open in new tab from the menu, click the Open in new tab button or press Control + T. To refresh a PDF click the Refresh button, File > Refresh, or press F5 just like most web browsers. To switch between tabs on the keyboard you can press control control + tab or Tabs > Next Tab to go the next tab or control + shift + tab or Tabs > Previous Tab to cycle through your tabs in the opposite direction. At the bottom of the tab menu will be a list of all your tabs you have open with the title of each document. To close the tab press the red X button on the tab or press Control +W. To close all tabs on qpdfview press Control + Shift +W. To restore the most recently closed tabs press Alt+Shift+W or Restore most recently closed tab. To view a menu with your recently closed tab Tabs > Recently Closed and select the file you want. To see a list of all your tabs in a menu they are at the bottom of the Tabs menu.

If you want a second copy of a PDF file open right click on the tab and Open copy in new tab. If you want a copy of the current PDF on the tab and select Open copy in new window. To open

your file manager in the current directory right click on the tab and Open containing folder. To one pdf file on the left and another on the right click on the tab bar and select Split view horizontally. To have one pdf file on top of another right click and select Split view vertically. To switch between which pdf you are able to change pages of simply move the mouse over that pdf. To close go back to only one pdf file right click on the tab and select Close current view.

To close all tabs right click on the tab bar and Close all tabs. To Close all tabs but that one you right click on right click on a tab and Close all tabs but this one. To close all tabs to the right of the one you right click right click on a tab and Close all tabs to right. To close all tabs to the left right click on a tab and Close all tabs to left. To reorder your tabs left click and drag the tab where you want it in the order.



If you want to view a particular page select the box (e.g. page 1/3) in towards the top left corner and type the page number (e.g. page 3/3). To move to the previous and next page press the left arrow and right arrow buttons respectively. Scrolling with the mousewheel past the end or beginning of a page will also change the page. Another way to move to the next page is to press spacebar or Edit > Next page. Another way to go to the previous page is pressing Backspace or Edit > Previous page. Another way to jump to a particular page is to press control + j or Edit > Jump to page. To go back to page which you have just come from press control + enter or Edit > Jump backward. To jump forward a page press control + shift + enter or Edit > Jump forward. To move to the last page of the PDF press the End key or Edit > Last Page. To move to the first page of the PDF press the Home key or Edit > First page.

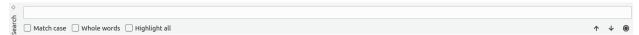
To select text or an image from qpdfview press control+c or Edit > Copy to clipboard. Then the cursor will turn into a crosshair and you will be able to expand a box to select either text or an image and a menu to select copying the text, selecting the text, copying the image, or saving the image to file. Another way to copy text is to press Shift + Left Click.

To save your PDF file is to File > Save or you can press Control + s. You can save the file with a different name with File > Save as. To save a copy of the document click File > Save a copy. If the next time you want to open a pdf to a specific page as first page right click Set first page. :menuselection: If you want to quit qpdfview press Control+Q.

To view two pages at once like if you want to see a two page spread of an illustration in a PDF of a book press Control + 6 or View ► Two pages. To get your view back to normal press Control +6 again or View ► Two pages again. To toggle the view of three pages at a time

press Control +4 or View ► Multiple pages. To view right to left languages on qpdfview press Control +Shift +R or View ► Right to left. To view the fonts embedded in the PDF View ► Fonts.

To search through your PDF file you can press control + f or from the menu Edit \* Search. You will get taken to the results and will appear highlighted in yellow to see through the results you can press the down arrow, right click Find next, or press F3 to see results farther in the document and press the upward pointed arrow button, right click Find previous, or press Shift +F3 to see results towards the start of the document. To exit the search dialog press Escape, right click Cancel search, or Edit \* Cancel search. If you want searches to match case check the Match case checkbox. To match entire words check the Whole words checkbox. To highlight all matches of words check the Highlight all checkbox. To exit the search press the button that looks like an octagon.



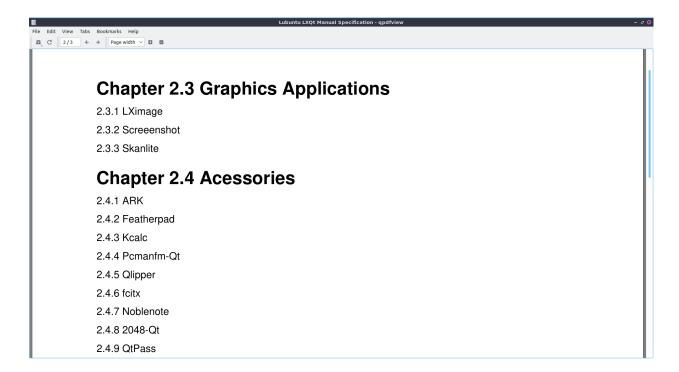
To make gpdfview fullscreen you can press f11 or View ▶ Fullscreen.

To make an annotation press Control +A or Edit • Add annotation. To view the annotation you have made or edit it again press click on what looks like a sticky note with a pin in it. To remove your annotation right click on the annotation and click Remove annotation. If you just want to highlight something right click on the text and select Add highlight text.

To select page width in zoom in qpdfview is a drop down menu with page width to show the width of the page on qpdfview, View > Fit to page width, or press Control +9. To view the whole page on qpdfview in this drop down menu select whole page, View > fit to page size, or press Control + 8. To return to the original zoom press Control + 0 or View > Original size. To zoom in is press the magnifying glass with a + in it or press Control + + or View > Zoom in. To zoom out press the magnifying glass button with a - in it or press Control + - or View > Zoom out. To rotate the file to the left is press Control + Left arrow or View > Rotate Left. To rotate the file to the right is press Control + Right arrow or View > Rotate Right. Another way to rotate is to hold Shift and then use the mousewheel. Another way to zoom with the scrollwheel is to hold Control and zoom with the mousewheel.

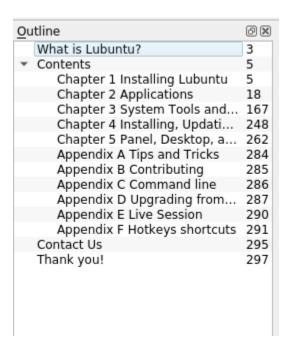
If you have a particularly long PDF file you might want to make a bookmark to find a specific thing easily. To create a bookmark press control +b or Bookmarks ► Add Bookmark and give the bookmark a memorable title and description so you can find it in this document again easily. If you later want to remove the bookmark go Bookmarks ► Remove bookmark or press control+ shift+ B.

## **Screenshot**



#### **Docks**

qpdfview also includes some very useful docks. To view the outline dock, in the menu select View ▶ Docks ▶ Outline (make sure the button is checked) or press F6 on the keyboard. It should appear on the left hand side of the PDF with collapsible sections and to expand or collapse each section left click on the ▶. To go to a particular part of the outline double click on that part of the outline. To see the entire outline right click on the outline and select Expand all. To have your outline back to the original state right click on it and select Collapse all. This is useful in navigating large PDFs.



To view properties of your PDF file press F7 or View > Docks > Properties. To see a thumbnail of each page View > Dock > Thumbnails or press F8 to view a thumbnail of each page of the PDF file. If you want to close one of these docks click the X button on the dock to close it. To detach a dock to its own floating window press the diamond button to detach it. To get the dock back to where it was press the diamond button again.

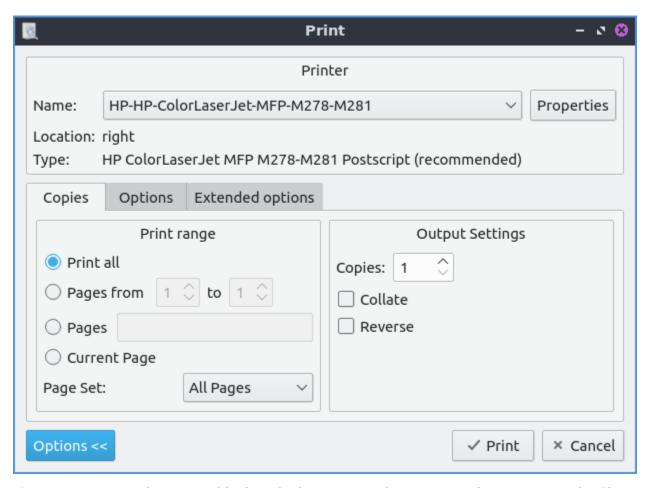
Properties	⋄ ⊗	
Creator	Writer	
Producer	LibreOffice 6.2	l
CreationDate	Sun May 5 22:22:22 2019 GMT	
PDF version	1.5	
Encrypted	No	
Linearized	No	
File path	/home/lynp/ Documents/ grandma.pdf	
File size	9 kB	
File created	Sun May 5 15:22:22 2019	
File last modified	Sun May 5 15:22:22 2019	
File owner	lynp	
File group	lynp	

### **Presentation**

To enter presentation mode you can press f12 or View > Presentation which makes the content of the PDF take up the fullscreen and gives you no menubars or toolbars. To exit presentation mode you can press f12 again. To advance to the next page in the presentation press the spacebar or the right arrow. To go back a page in presentation press the left arrow. To exit the presentation press escape. To go to the first page of the presentation press the Home key. To go to the last page of the presentation press the End key.

### **Printing**

To print your PDF press Control + P or File > Print. To change what printer you use use the Name drop down to select the name of the printer. To see more options press the Options >> button to see more options when you print. To select which pages to print use the Pages from button and then the fields for the first page to print and then the last page to print. To change what pages you print and type the page number in use the Pages field. To print your current page press the Current Page button. To change how many copies you print change the Copies field.

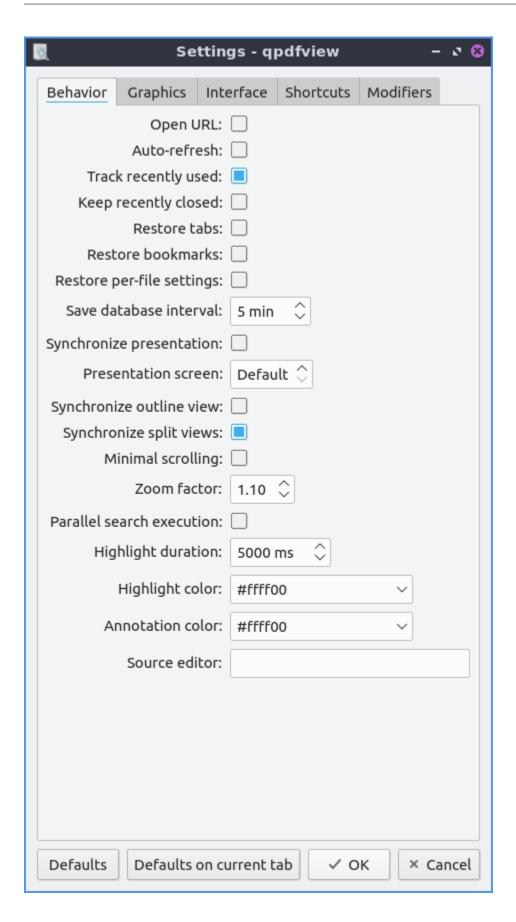


If you are printing the PDF in black and white you can however toggle previewing the file in black and white by pressing Control + U or View • Convert to grayscale. To invert the colors of your PDF press Control +I or View • Invert Colors. To trim the margins off your PDF file press control +Shift +U or View • Trim margins. If you want to turn off changed colors or trimmed margins off press or use the menu in the same thing again.

# **Customizing**

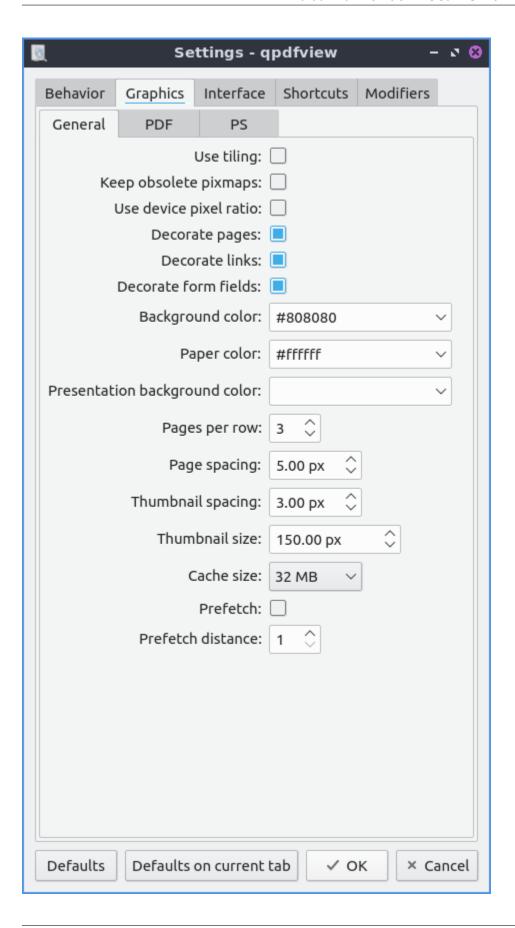
To add your own settings to qpdfview you can get to a settings window with Edit > Settings. To change how qpdfview uses links or manages tabs left click on the Behavior tab. The checkbox Open URL allows you to turn on or off Opening URLs or links within qpdfview. The Autorefresh checkbox reloads the PDF whenever the file changes which is useful for authoring PDF files. To have qpdfview keep track of recently check the Track recently used checkbox. To keep track of recently closed documents check the Keep recently closed checkbox. To open the tabs you had open last time with qpdfview the next time you open the program check the Restore tabs checkbox. To restore bookmarks after qpdfview is closed check the Restore bookmarks checkbox. To have per file settings restored each time you open qpdfview check the Restore per-file settings checkbox. To change the page in the main view in addition with the presentation check the Synchronize presentation checkbox. To change what screen you use for presentations change the Presentation Screen field to the number of the screen you want to use. To have your outline dock follow what section you are viewing check the Synchronize outline view checkbox. If you want to scroll once to change an entire page check the Minimal scrolling checkbox. To change the color of highlights type a hex number for a

color or select one from the Highlight Color drop down menu.

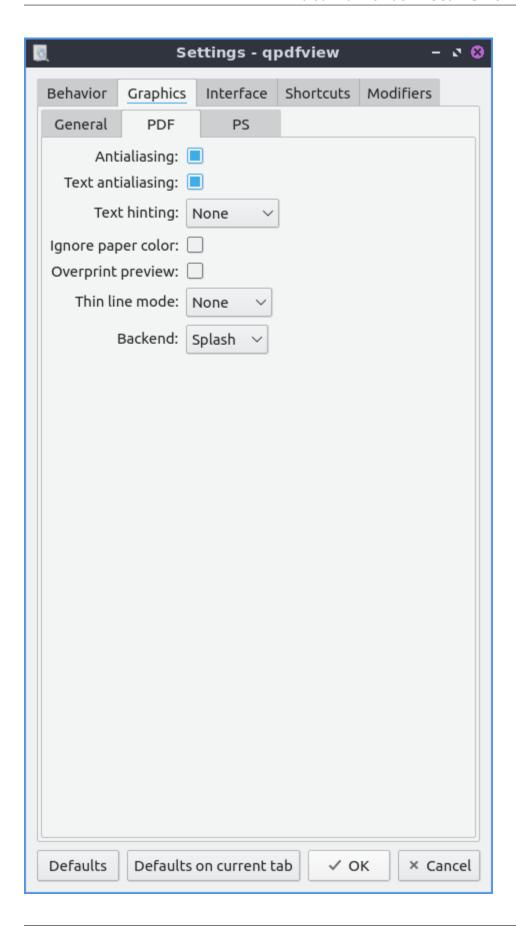


If you want to reset these settings to the defaults is to press the Defaults button. If you just want defaults on the current tab you can press the Defaults on current tab button. If you want to return to viewing your PDF with the same settings press the OK button. If you wish to discard your changes press the Cancel button.

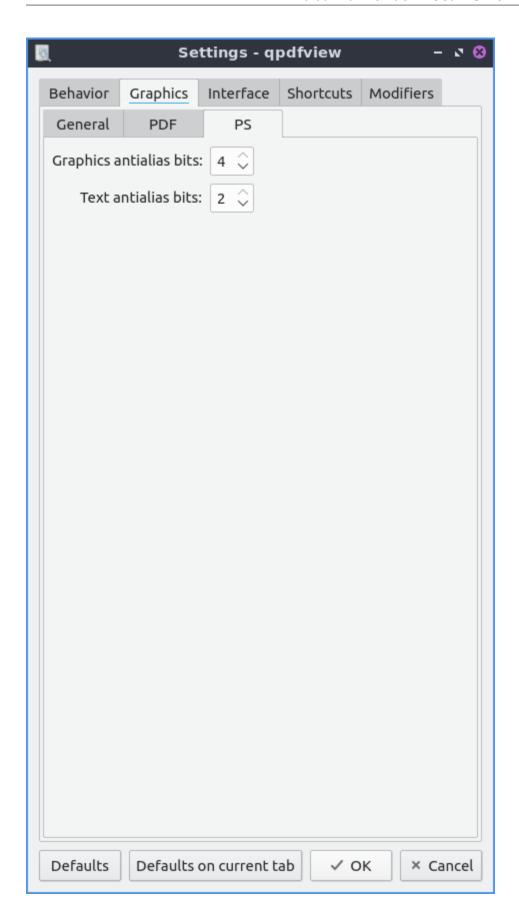
To deal with settings on graphics press press on the Graphics tab. To toggle having a small decoration showing where different pages are check the Decorate pages checkbox. To toggle having a red border around hyperlinks check the Decorate links checkbox. To toggle having a blue borders around fillable forms in a PDF check the Decorate form fields checkbox. The settings for paper color will has a drop down menu for previewing what it is like printing on colored paper. The checkbox Prefetch will preload pages not directly viewed by the PDF viewer not directly on the screen however this will use more resources. The drop down for Cache size will increase loading speed but will use more resources. The Prefetch checkbox loads pages before you view them. The Prefetch distance tells you how many pages away from where you are to load. The field for Presentation background color sets the color of the background for presentations. The Cache size menu increases the size of the cache which will apply more system resources to run heavy PDFs with hundreds of pages of full color artwork.



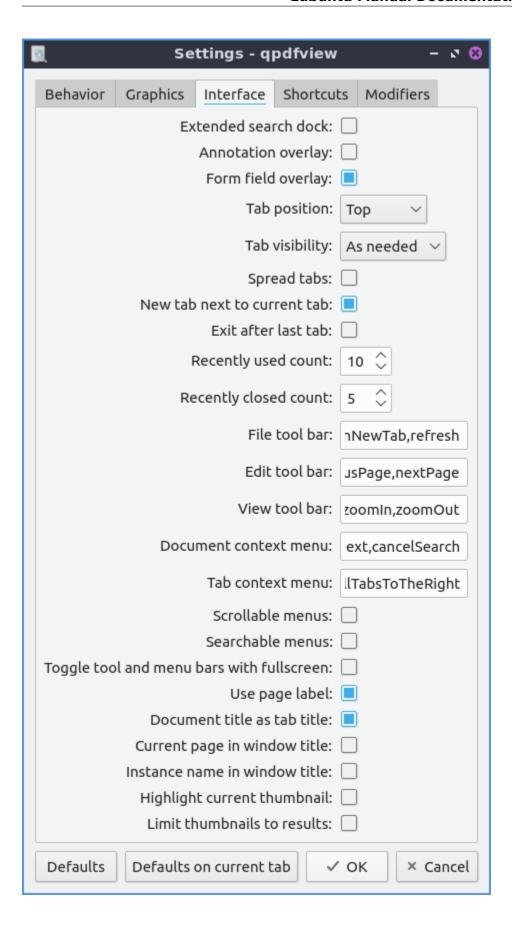
The PDF subtab of the graphics tab has settings for font and paper color for viewing PDF files. To antialias images check the Antialiasing checkbox. To antialias text check the Text antialiasing checkbox. To use font hinting to view text easier to view change the Text hinting menu to Reduced or full. To not change the background color with change the Ignore paper color checkbox. To change how qpdfview draws thin lines change the Thin line mode drop down menu.



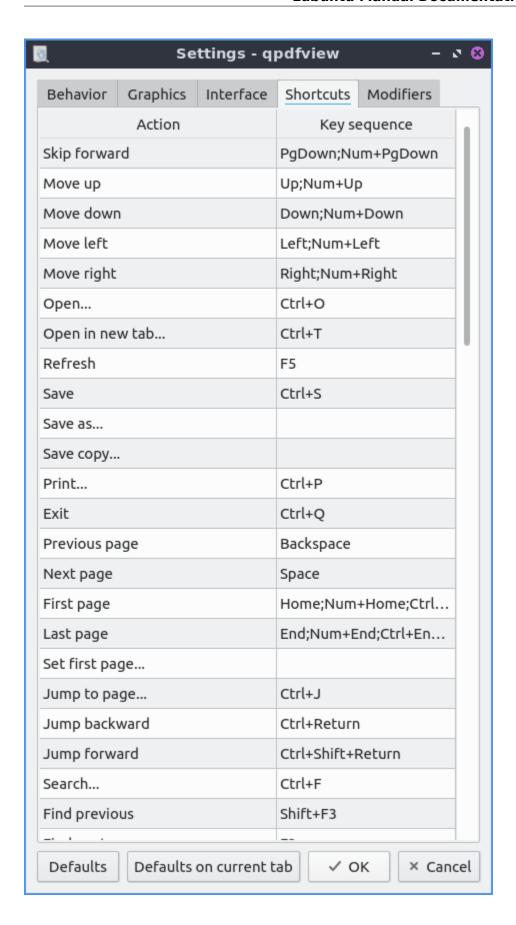
The PS subtab manages how Postscript files appear on the screen. To change how many bits are used for antialiasing graphics change the Graphics antialias bits field. To change the number of bits of text antialiasing change Text antialiasing bits field.



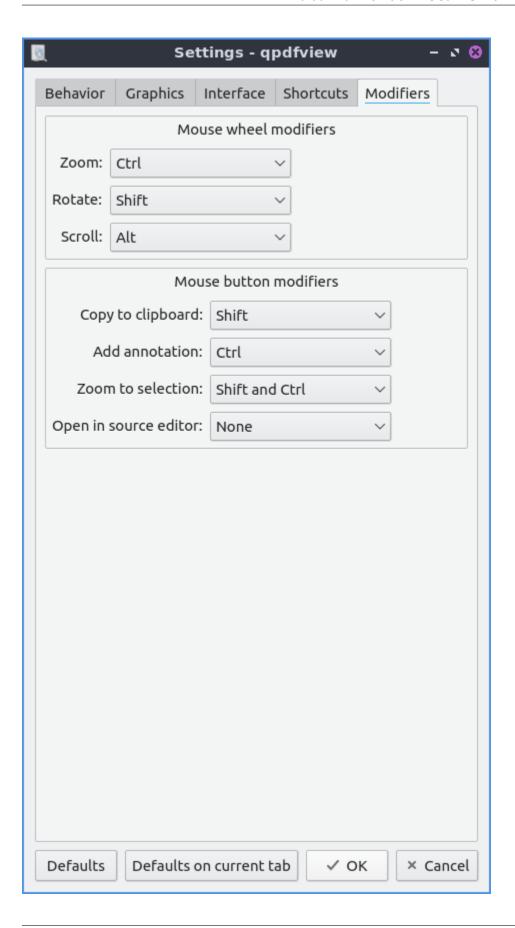
To change the interface settings click on the Interface tab. If you want the tabs to be spread out press the spread tabs checkbox. The Tab position changes where the tabbar on the window. The Tab visibility menu can be set to as needed, always or never which will show or hide the tabbar. The checkbox for New tab next to current tab opens new tabs next to the current one. The field Recently used count lets you set the maximum number of files to keep around in recently used. The Spread tabs checkbox spreads the tabs to take up the whole tab bar and they get smaller the more tabs you open. To have qpdfview close when the last tab in qpdfview is closed check the Exit after last tab checkbox. To change the number of recently used PDF files in the menu change the Recently used count field. To change how many recently closed tabs of PDFs are shown change the Recently closed count field. To toggle showing the current page in the window title check the Current page in window title.



The Shortcuts tab provides the ability to customize keyboard shortcuts. The Action column is what each keyboard shortcut does. The Key sequence column shows the keyboard shortcut. Double click in the key sequence column and type in your desired keyboard shortcut to change the keyboard shortcut.



The Modifiers tab allows you to change settings with the mouse and certain keyboard shortcuts in combination with the mouse. To change what keyboard shortcut to hold down while you hold down your mousewheel to zoom use the Zoom drop down menu. To change what keyboard key to hold down before using the mousewheel use the Rotate key. To change what key to press when you copy text to the clipboard when also pressing a mouse button use the Copy to Clipboard drop down menu. To switch which key you press when left clicking to add an annotation use the Add annotation drop down menu. To change what what you press to while left clicking to zoom to a selection change the Zoom to Selection drop down menu.



#### **Version**

Lubuntu ships with version 0.4.18-3 of apdfview.

#### **How to Launch**

To launch qpdfview go to the Menu Office • qpdfview or run

qpdfview

from the command line. The icon for qpdfview looks like an eye with a blue background.

## 2.2.3 Chapter 2.3 Graphics Applications

This chapter documents programs with viewing pictures, taking screenshots, and scanning pictures or documents.

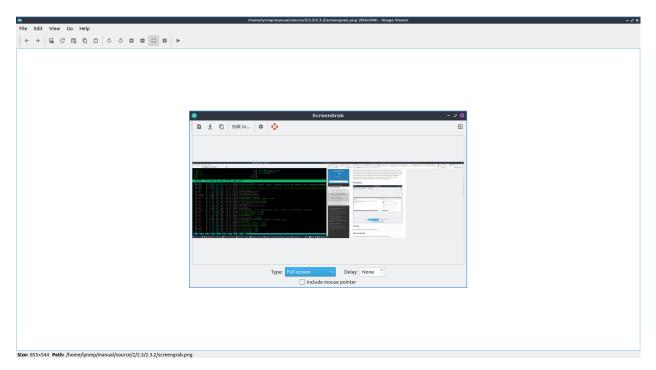
### Chapter 2.3.1 LXImage

LXImage is the default image viewer for Lubuntu.

### **Usage**

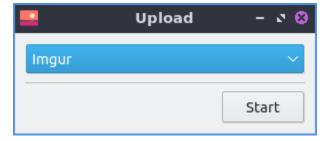
To open a picture press File > Open File, Control + 0, or press the button that looks like an upward pointing arrow. To open a directory full of images press Control+D or File > Open Directory. If you do not like the picture press Del or File > Delete. To open a new window of LXImage press Control +N or File > New Window. To view the properties of your image by File > File Properties. To view your recently viewed pictures File > Recently Opened Files. To clear your recently opened files Files > Recently Opened > Clear. To reload your file after you save it again press Control +R, press the circular arrow button, or File > Reload file.

To have LXImage open the next file in a folder press Right arrow and to view the previous image press the Left arrow. To open an entire directory File > Open Directory or press Control +D. To save the file as something press Control+Shift+S, the downward pointed arrow with an I on it, or File > Save As. To save the file with the same file name press Control+S or File > Save.



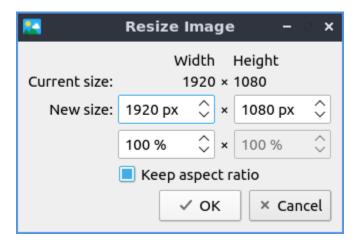
If you wish to print a picture after viewing it from the File ▶ Pint or press control+ p to bring up a print dialog. To exit the window with a keyboard shortcut press the Escape key.

If you want to upload a picture to share it online press Edit > Upload and a new window will pop up with a drop down menu to show where to upload the picture to. To actually upload the file press Start. The URL of the image will then show up from after it is finished uploading. You can then copy the URL by selecting the text and then pressing Control+C or pressing the Copy button.



To rotate an image to the right press the circular arrow that points to the right, press R, or go to Edit  $\blacktriangleright$  Rotate Clockwise. To rotate counterclockwise use the circular arrow pointing to the left, press L, or Edit  $\blacktriangleright$  Rotate Counterclockwise. To zoom in on a picture press the icon with a magnifying glass with a + symbol on it, View  $\blacktriangleright$  Zoom In, or press control + +. To zoom out press the button of a magnifying glass with a - symbol in it, View  $\blacktriangleright$  Zoom Out or press control + -.

To flip your image on the vertical axis press V or Edit • Flip Vertically. To flip your image on the horizontal axis press H or Edit • Flip Horizontally. To change the image to a different size Edit • Resize and a dialog box will show up. To see how large your image currently is in pixels view the Current size dialog. To change how wide the image is change Width column in the New size row. To change the height of the image under Height and change to the desired size. To change which size your image is in percentage change the field with % under Width. To allowing stretching the image while resizing it uncheck the Keep aspect ratio checkbox. To rename a file press F2 or Edit • Rename.

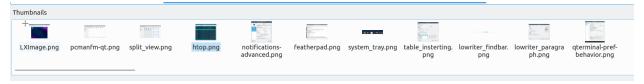


To see how big an image is on the bar at the bottom Size will tell you the size in pixels of an image. To see where the current image is saved read the path in the Path field.

To copy an image to the clipboard you can Edit ► Copy to Clipboard. To paste an image to the clipboard Edit ► Paste from Clipboard. To copy the path of an image to the clipboard Edit ► Copy Path.

To view the next picture on your image press the right arrow or page down and conversely to view the previous image press the left arrow or page up. You can also scroll between different pictures with the mousewheel or by pressing the right and left pointing arrow buttons on the toolbar. To jump to the first picture press home or Go • First File. To jump to the last picture press end or Go • Last File. You can also go to the next or previous files with Go • Previous File or Go • Next File.

To view thumbnails of the current directory you can toggle thumbnails by pressing T or View Show Thumbnails and thumbnails will show at the bottom with a scrollbar at the bottom of the window to view the whole folder. To open the thumbnail of a picture in a another program such as one to edit that picture right click Open With and select the program you want to edit with or you can do this by File > Open With. To rename an image after viewing it right click on the thumbnail select Rename and type the filename for the picture you want. To move a file to the trash can right click on it and select Move to Trash.



To view the picture entirely press View ► Fit or the button with a vertical and horizontal arrow and a folded over bottom right corner. To return your image to its original size View ► Original Size or press the 1 toolbar button. To show an outline around the image 0 or View ► Show Outline. To toggle showing information about the settings on the camera View ► Show EXIF Data.

To view the picture as fullscreen press f11, right click Fullscreen, double click on the image, or View ► Fullscreen. To exit fullscreen double click the image, press F11, or right click Fullscreen again. To have a slideshow of you pictures in your current folder View ► Slideshow or right click and select Slide Show. Once you start the slideshow on the toolbar a play pause button will appear on the toolbar or you can stop the slideshow by right clicking and selecting Slide Show.

To close LXImage press Control+w or File ► Close.

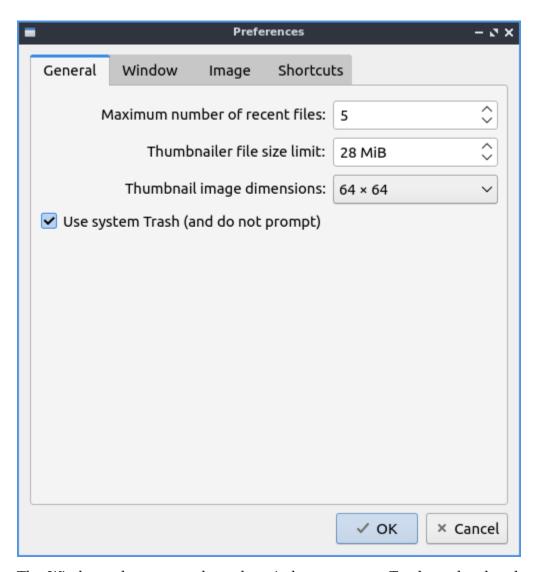
#### **Annotations**

To show annotations controls View • Annotations Toolbar or right click and select Annotations Toolbar. To edit your images with LXImage there are several buttons on the right hand side of the toolbar. To draw and arrow press the button that looks like an arrow click once where you want the arrow to start and then drag the direction you want the arrow to point and click it where you want the arrowhead to be. To draw a hollow rectangle left click on the button with a hollow rectangle and click and drag to the size of the rectangle you want. To draw a hollow circle annotation press the button that looks like a hollow circle. To draw numbers on your pictures press the 3 button. To stop drawing annotations press the button with a circle with a slash through it.

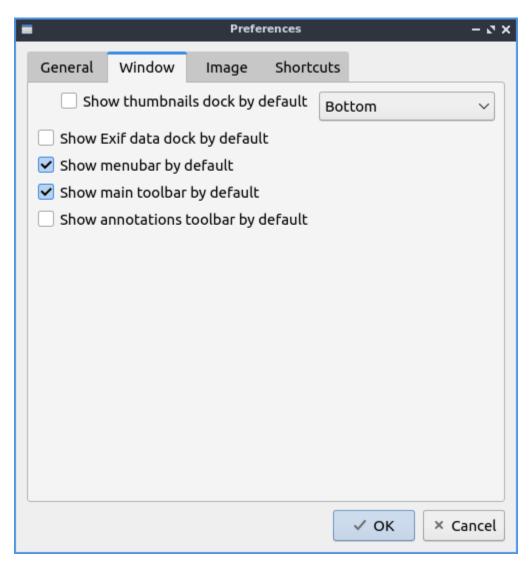
**Warning:** Annotations in LXImage cannot be undone with an undo functionality. Also you will not be prompted to save your unsaved annotations when closing LXImage.

### **Customizing**

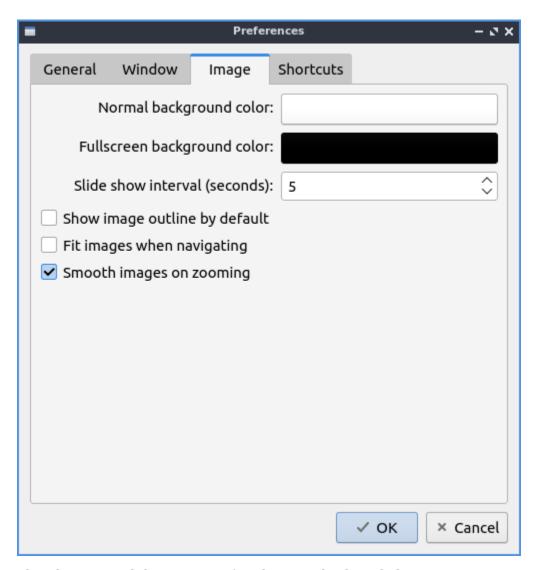
To change preferences in LXImage Edit ► Preferences. The General tab has settings for recent files, thumbnails, and trash. To cancel your changes press the Cancel button. To not generate thumbnails for really large images change the Thumbnailer size limit field. To change how big thumbnails to use change the Thumbnail image dimensions field. To apply your settings and exit the preference dialog by pressing the OK button.



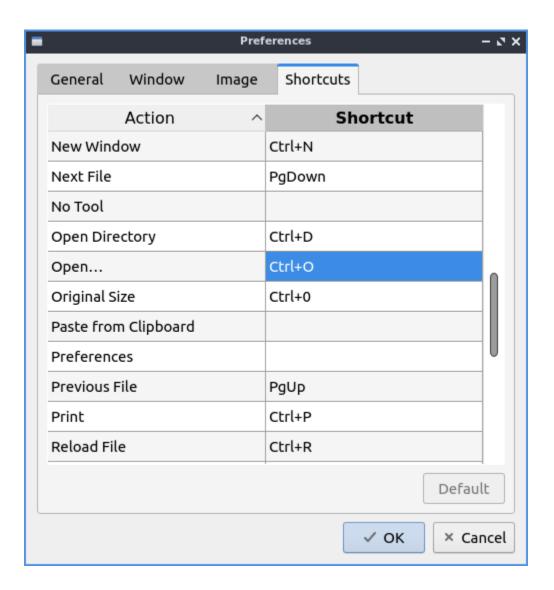
The Window tab manages how the window appears. To show the thumbnails dock by default check the Show thumbnails dock by default checkbox and choose where it is to the right. To show metadata about your pictures by default check the Show Exif data dock by default checkbox. To toggle showing the menubar check/uncheck the Show menubar by default checkbox. To toggle showing the main toolbar check/uncheck the Show main toolbar by default checkbox. To show the annotations toolbar by default check the Show annotations toolbar by default.



The Image tab has settings for how LXImage displays images. To change the background color in a window press the button next to Normal background color and then a window will pop up showing your color choice. To change the background color when fullscreen press the button next to Fullscreen background color and the same color picker window will appear. To change how long it takes for a each slide to change change in a slideshow change the Slide show interval (seconds) field. To show the image outline by default check the Show image outline by default checkbox. To fit images when navigating check the Fit images when navigating checkbox. To smooth images when you zooming check the Smooth images on zooming checkbox.



The Shortcuts tab has settings for changing keyboard shortcuts in LXImage. To see what a shortcut will do read the General column. To change a shortcut double click on the Shortcut column and press what you want the shortcut to be. To reset keyboard shortcuts to default press the Default button.



#### Version

Lubuntu ships with version 1.1.0 or LXImage.

## **How to Launch**

To launch LXImage from the menu Graphics • LXImage or run

lximage-qt

from the command line. The icon for LXImage is an orange landscape scene of a sunset.

### **Chapter 2.3.2 ScreenGrab**

ScreenGrab is the default screenshot tool for Lubuntu after Lubuntu 19.10.

#### **Usage**

To take a new screenshot press the button with a piece of paper with a + on it or press Control+N. After doing this a preview will appear in the center of the window. If you want to save this screenshot press the save downward pointing arrow or press Control+S. To copy your screenshot to a clipboard press the button with two pieces of paper or press Control+C. To edit your screenshot in an image editor Edit in and select the program you want to use to edit or double click on the image to open it in an editor. To quit ScreenGrab press Escape or press the button to the right with a door and a rightward pointed arrow.

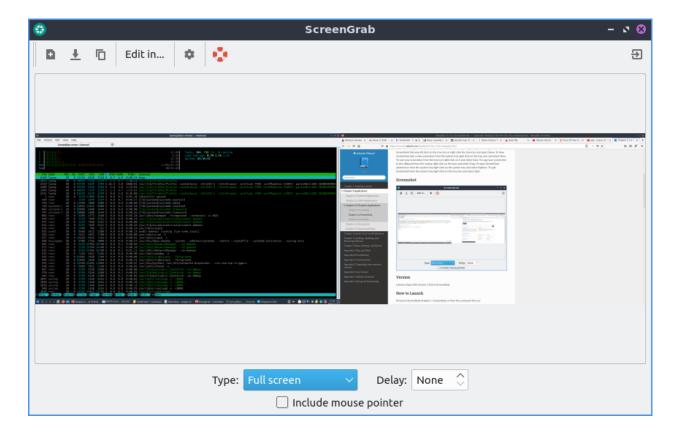
To change what mode to select what are of the screen to take a screenshot from change the Type drop down menu. The options in the Type menu are Full screen to take a picture of everything on all of your screens. From the Type menu select Window to select your last window. To change how long to delay before taking the screenshot change the Delay field. To include the mouse pointer in your screenshot check the Include mouse pointer checkbox. To more precisely select which exact pixel you want to select when selecting an area of the screen check the Zoom area around mouse checkbox.

To take a screenshot where you select the screen with the mouse double click to get a where you currently have selected. To select at where there is a change in the image right click after sizing screen area to have ScreenGrab autoselect where to take the edge of the screenshot. To see how many pixels your screenshot will be when selecting a screen area it will show in the lower right hand corner of the screen.

To guit ScreenGrab press Escape.

If you have the system tray enabled ScreenGrab can do many things by right clicking it. To show ScreenGrab this way left click on the tray icon or right click the tray icon and select Show. To have ScreenGrab take a new screenshot from the system tray right click on the tray icon and select New. To save your screenshot from the tray icon right click on it and select Save. To copy your screenshot to the clipboard from the systray right click on the icon and select Copy. To open ScreenGrab preferences from the system tray right click on the system tray and select Options. To quit ScreenGrab from the system tray right click on the tray icon and select Ouit.

#### **Screenshot**



#### Version

Lubuntu ships with version 2.0.1 of ScreenGrab.

### **How to Launch**

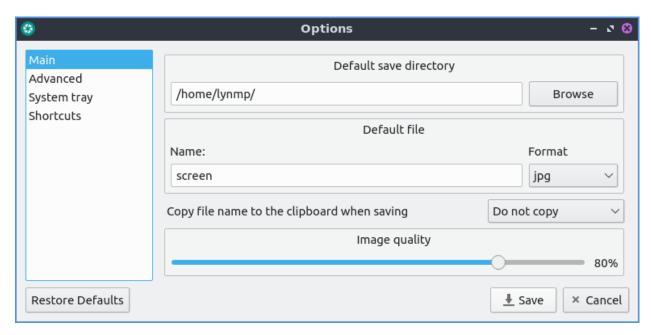
To launch ScreenGrab Graphics • ScreenGrab or from the command line run

screengrab

The icon for ScreenGrab looks like a teal camera shutter with a white layer on top.

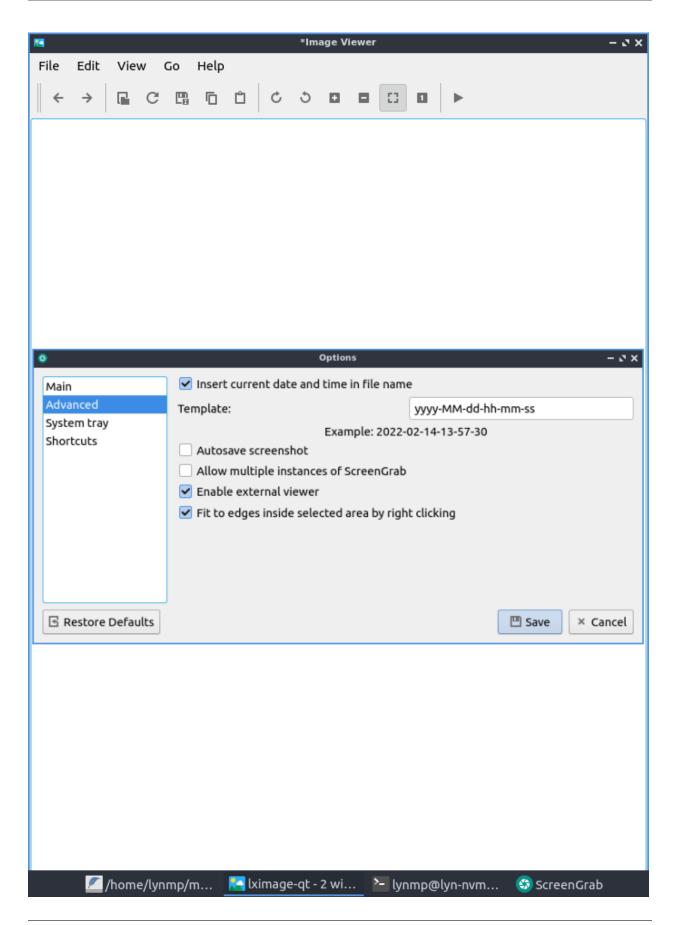
## **Customizing**

To change your settings on ScreenGrab press the gear button or press Control +P. The Main tab has settings for saving your screenshot and image quality. To change where ScreenGrab saves files by default change the Default save directory field or press Browse button to pop up a dialog to choose where to save. To change the default file name for your screenshots change the Name field. To change what format to save as by default change the Format drop down menu. To choose to copy the file name to the clipboard change the Copy file name to the clipboard when saving menu. If you are saving a JPEG image you can change the image quality with the Image quality slider.

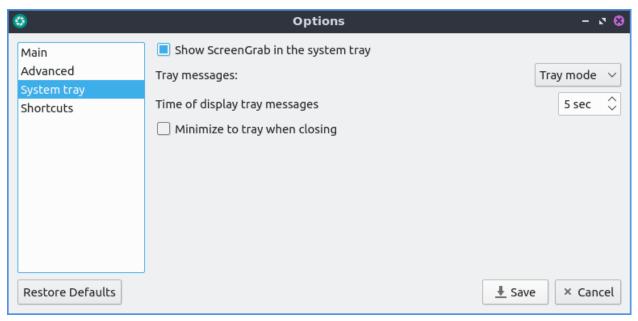


To restore your options to default press the Restore Defaults button. To cancel making changes press the Cancel button. To save your changes press the Save button.

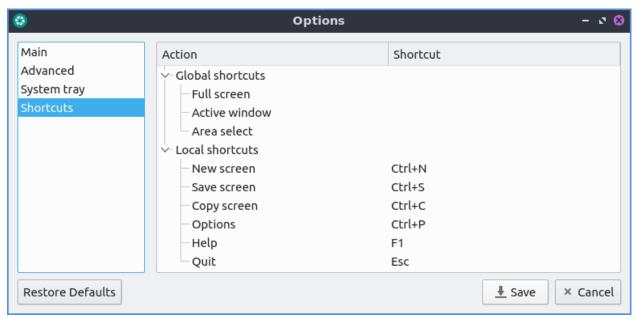
To change your settings on multiple windows and automatically saving use the Advanced tab. To automatically insert a time and date in the file name check the Insert current date and time in file name checkbox. To change how this date appears enter the date in the Template field that only shows if you insert the date and time. To automatically save each screenshot check the Autosave screenshot checkbox. To save the first screenshot check the Save first screenshot checkbox that only shows if you are saving the first screenshot. To allow more than one ScreenGrab window check the Allow multiple instances of ScreenGrab checkbox. To allow editing in a different image viewer check the Enable external viewer checkbox. To have selection autoselect an edge like of a window check the Fit to edges inside selected area by right clicking checkbox.



To changes with how ScreenGrab shows in the system tray use the System tray tab. To toggle showing ScreenGrab in the system tray check/uncheck the Show ScreenGrab in the system tray checkbox. To change when ScreenGrab shows notifications change the Tray messages field. To not close ScreenGrab when closing the window but keep it in the system tray check the Minimize to tray when closing checkbox.



To change what your keyboard shortcuts ScreenGrab uses select the Shortcuts tab. To see what each shortcut does is on the Action column. To see what key to press get have the action happen is listed in the Shortcut column. To change a keyboard shortcut and then press the button at the bottom of Selected shortcut and press the keyboard shortcut you want to use for that shortcut.



### **Chapter 2.3.3 Skanlite**

Skanlite is the default scanning application for Lubuntu.

#### **Usage**

To preview what you want to scan press the Preview button and you can make sure the scan is in a good position. With this done you can press the Scan button to scan the document after this a dialog will show up asking you were to save what you are scanning. If you want to cancel your scan midway through the scan or preview click on the red octagon with a white inside x button to cancel the scan while the scan is in progress. Then a file save dialog will pop up and type the file name you want in the File name field and then press the Save button.

If your scanner is not detected a you will get a device saying "Sorry no devices detected" while having a button for Reload devices list to try and find your scanner again. If you want to cancel press the Cancel button.

To change the dpi or dots per inch is the dpi drop down menu for Scan resolution but keep in mind the higher the number of dpi the better the picture quality but the longer it will take to scan. Changing the Scan mode allows you to select color to select color scanning or gray to only show your scan in gray and not use color ink if you would want to print it out again.

To zoom in press the magnifying glass button with a plus sign conversely to move out press the magnifying glass button with a minus sign. To change your resolution change the scan resolution drop down and select the dots per inch you want to use.

To change the brightness of a scan slide the Brightness slider or input a positive or negative number into the numeric field. To change contrast slide the Contrast slider or input a positive or negative number in the numeric field. To toggle inverting your colors on the scan check/uncheck the Invert colors Checkbox.

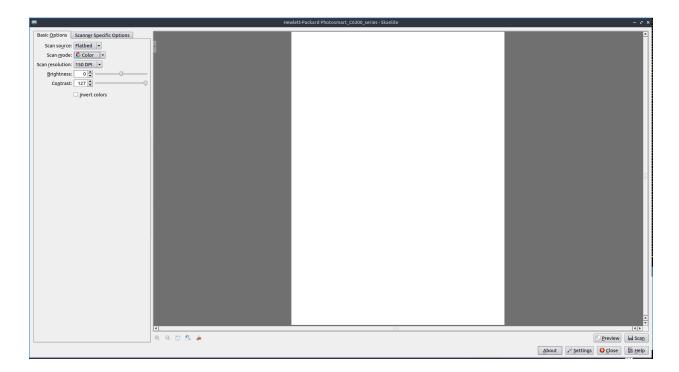
To select part of a scan you particularly want to save is to click over a preview of a scan and you will drag the selection with the mouse. To clear selections that can be automatically selected but canceled with a brown smudge with an x on it. If you want to zoom to your selection right click Zoom to selection. If you want to zoom to fit the whole entire page right click Zoom to fit.

To change to your specific options for your scanner use the Scanner Specific Options tab.

#### **Version**

Lubuntu ships with version 22.04.3 of Skanlite.

#### **Screenshot**



#### **How to Launch**

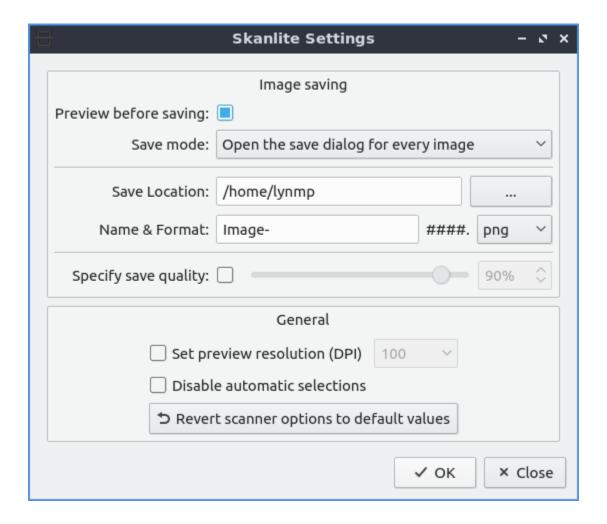
To launch Skanlite turn on your scanner and that it is connected to your computer. To launch the application go to the menu Graphics ► Skanlite or run

skanlite

from the command line. The icon for Skanlite looks like a scanner bed with a bar of light coming across as if doing a scan.

## **Customizing**

To customize your settings for Skanlite press the Settings button. To choose where to save your scans enter the path in the Save Location field or press the button to the right. To ask what to save what you are scanning change the Save mode menu Open the save dialog for every image. To ask for each scan in the Save Mode menu select Open the save dialog for first image only selection. To choose the default save name and format enter in the Name & Format filed with a drop down menu for scan format. To choose what quality to save your quality check the Specify save quality checkbox. Then drag the slider or percentage to change the quality. To change the Dots per inch resolution when previewing check the Set preview resolution checkbox and then change field to the right side. To not automatically crop the selection check the Disable automatic selections checkbox. To get the scanner back to its default values press the Revert scanner options to default values.



# 2.2.4 Chapter 2.4 Accessories

This chapter documents accessories on your system.

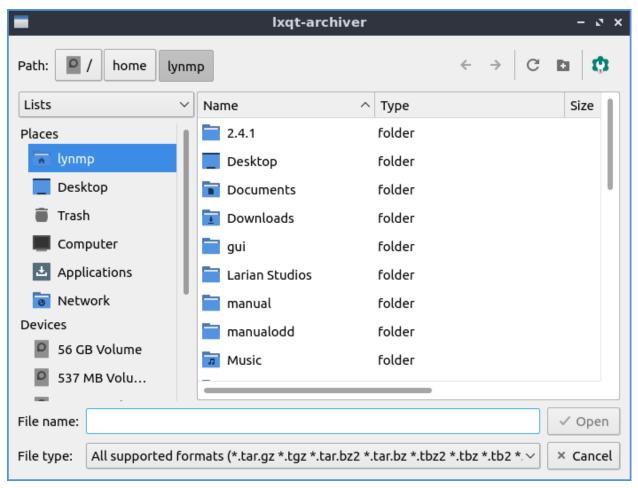
#### **Chapter 2.4.1 LXQt File Archiver**

LXQt File Archiver is the default program for dealing with archives like tar or zip files in Lubuntu.

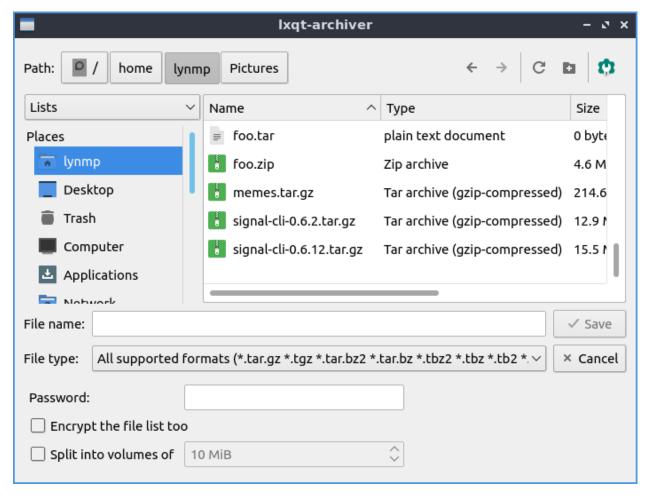
### **Usage**

To open an archive file File > Open or press Control+0. Once you have an archive opened you should see many lists of files under File name. To open a file double click on that file to open it or right click View Selected Items. To switch to a different folder in an archive double click the on the folder under the File name. To extract all of the file to copy them into a folder on your filesystem File > Extract or press the Extract button which looks like a box with a with an upward pointing arrow. Then a dialog will open to show you where to save the extracted files navigate to thee desired path and press Open. To extract just one file right click on the file and select Extract. To Delete an unwanted file from an archive right click on it and select

Delete or select it and press Delete. To view properties of an archive press Alt+ Enter or File Properties. To stop lxqt-archiver from doing something press Escape, press the octagonal or stop sign shaped button, or View > Stop.

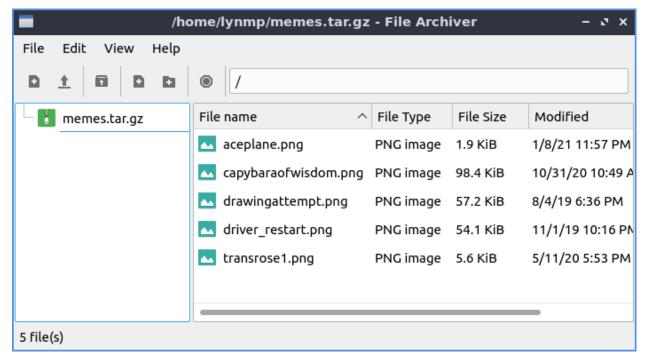


To create a new archive press File > New or press Control+N and a dialog to create a file will be created. To choose what to name the file type the name in the File name field. To choose a password for your archive type in the Password field. Then to make the archive press Save. To add a file to the archive Edit > Add Files or press the piece of paper button with a + on it. To select multiple files hold Control and left click to select multiple files. To select which file to add navigate to it and press the Open button. To add an entire folder of files Edit > Add Folder or press the Folder button with + and select the folder you want and then press Open. To add a password to an existing archive Edit > Password. To show what password you currently have typed check the Show password checkbox. To also have the file list encrypted check the Encrypt the file list too checkbox. To split the archive into multiple different volumes check the Split into volumes of and select the size of volumes in the filed to the right.



To navigate to a folder inside of an archive double click on it in the center of the window or double click on the left side pane. To move back up in a directory double click on the folder ...

To reload the view of the archive press F5 or View > Reload. To view the whole directory tree press Control + Shift +Down arrow or View > Expand. To view just the top level of directory tree press Control + Shift + Up arrow or View > Collapse. To search for files press Control +F or View > Filter. Type what you want to search for in the textbox at the bottom. To hide searching press Control+F or View > Filter again.



To toggle showing the toolbar in LXQt File Archiver View ► Toolbar. To Toggle showing the Statusbar at the bottom View ► Statusbar. To toggle showing the directory tree on the left View ► Directory Tree.

To close LXQt File Archiver press Control+Q.

#### **Version**

Lubuntu ships with version 0.6.0 of LXQt File Archiver.

#### **How To Launch**

To launch LXQt File Archiver Accessories • LXQt File Archiver or run

lxqt-archiver

from the command line.

## **Chapter 2.4.2 Featherpad**

Featherpad is Lubuntu's default lightweight text editor.

#### It supports:

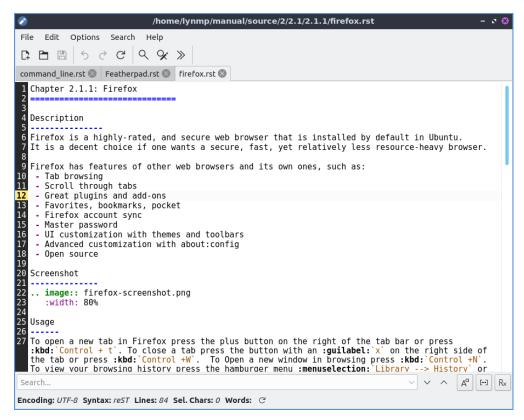
- Tabs
- Syntax highlighting
- Autoindent
- Autobracket

- Line numbers
- Search with find/replace
- · Undo and redo
- Spellcheck

#### **Usage**

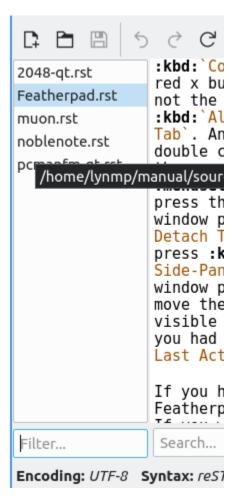
To open a new file press the button that looks like a piece of paper with a plus sign, press Control+N, or File > New. If you wish to open a text file press the button that looks like a folder, File > Open, or press control + o. To open your recently modified files File > Recently modified. To save your file after typing in the main part of the window press the button that looks like a floppy disk, File > Save, or press control +s. To save a file with a different file name press Control+Shift+S or File > Save As. To show your To reload a file if something else has changed that file in Featherpad press the arrow that loops back on itself to reload the page, Control +Shift + R, the button that looks like a browser refresh button, or File > Reload. If you have unsaved changes to a file an \* will show in the tab bar if you have unsaved changes.

To type things into your text file the main part of the window similar to a word processor. If you are programming with Featherpad the file extension will probably automatically select the correct syntax highlighting. To toggle syntax highlighting press Control+Shift+H or Options • Syntax Highlighting. To view line numbers of the file press control +l or Options • Line Numbers and do the same thing to turn it off. The line numbers will show the current line number in yellow. To enable word wrap press Control +W or Options • Wrap Lines and then press the same thing again to turn word wrapping off. To automatically indent lines press Control +I or Options • Auto-Indentation. To toggle document properties press Control + Shift +D or File • Document Properties.



To delete the text to the start of a word press Control+ Backspace. To delete to the end of a word press Control + Delete. To delete to the end of the line press Control+ K. To move a line up press Control+ Shift + Up. To move a line down press Control Shift + Down. To select one word double click the left mouse button. To select a whole line tripple click the left mouse button.

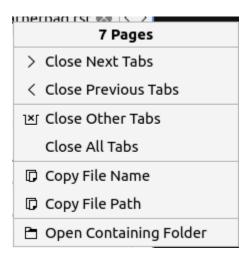
To open a new tab and empty text file press the button with a piece of paper with a plus symbol on it, or press Control + N. If you wish to close a tab press the red x button. To switch between tabs click on the tab is not the close button. To switch to the next tab press Alt + Right arrow or File • Next Tab. Another way to open a new document in a new tab double click to the right of all open tabs. To switch to the previous tab press Alt + Left arrow or File • Previous Tab. To close a tab press the X button. To move a tab into a new window press Control + T or File • Detach Tab. To open a side pane that replaces the tab bar press Control +Alt +P or File • Side-Pane. If have so many tabs they don't all fit in the window press the right and left arrows on the tab bar to move the tab bar that way or use the mousewheel to move the visible tabs in the tab bar. To move to the last text file you had visited press F1 or File • Last Active Tab. To change to your last tab press Alt+ Up arrow or File • Last Tab. To change to your first tab press Alt+ Down arrow or File • First Tab.



If you have multiple copies of the same file open in Featherpad it will be open read only and shown in yellow. If you want to edit the file even though you have it open you will need to press Control+Shift+E, Edit • Edit, or press the button that looks like a pencil to actually edit the file. You should be careful as the file may not have the contents you expect when editing it in two tabs or editors.

To make text in Featherpad bigger press Control+ + or hold Control and move the mousewheel up. To make text in Featherpad smaller press Control+ - or hold Control and move the mousewheel down. To reset the zoom press Control+ 0.

If you want to close all tabs to the left right click on the tab bar Close Previous Tabs. To close all tabs to the right right click on the tab bar Close Next Tabs. To only leave open the tab you right clicked on right click and select Close Other Tabs. To copy the file name right click on the tab bar and select Copy File Name. To copy the path to the file you have open right click on the tab bar and select Copy File Path. To reorder your tabs left click and drag the tab to where you want it. To open the folder the file is in a fire manager right click and select Open Containing Folder.



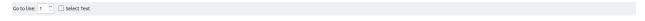
If you make a mistake and want to undo it press control + z, right click Undo, Edit > Undo, or press the button that looks like a curved arrow pointing towards the left. To redo a change you have undone press the button with a curved arrow pointing towards the right, right click Redo, Edit > Redo, or press Control +Shift +Z. To input a number of spaces equal to a tab press Control +Tab.

To select all text in the text file press Control +A, right click Select All, or Edit > Select All. To copy text from Featherpad press Control +C, right click Copy, or Edit > Copy. To paste text press Control+ V, right click Paste or Edit > Paste. To Cut text press Control+X, right click Cut, or Edit > Cut. If you have text selected you can delete it by pressing Delete or Edit > Delete. To paste in the date and time press Control + Shift +V or Edit > Paste Date and Time. To go to the end of the current line in the editor press the End key. To move to the start of the current line press the Home key. To convert tabs to spaces Edit > Tabs to spaces or right click and select Tabs to spaces.

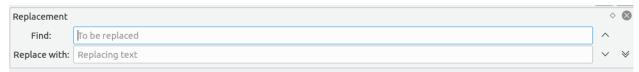
To search your text file press Control + f, the magnifying glass button, or Search ▶ Find from the menu. Then in the bar on the bottom search for the text you want. Press the down arrow to move to the next result and the up arrow to move for the previous result in the text file. To not make the search case sensitive press the Aa button or press F5. To only match whole words press the ... button or press F6. To use a regular express press the Rx button or press F7. To make the search not case sensitive, whole word, or use a regular expression press the same button to turn that off.



To jump to a particular line in a file press control +j or Search ▶ Jump to or the button that looks like >>. To select the text you jump to press the Select Text button. To jump to a particular line type the line number in the Go to line field.

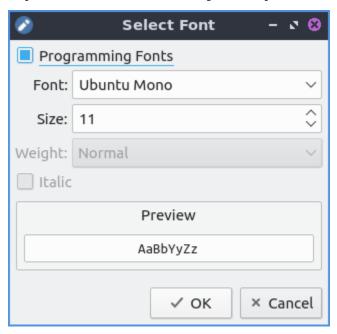


To find and replace text press control +r, the button with a magnifying glass and a pencil, or Search • Replace. Type the text you want to Find in the find field and type what you want to put in with the Replace with field and then press enter to finish the finding and replacing through the whole file.



To change what font you want select Options • Font to change your font sizes. To choose a

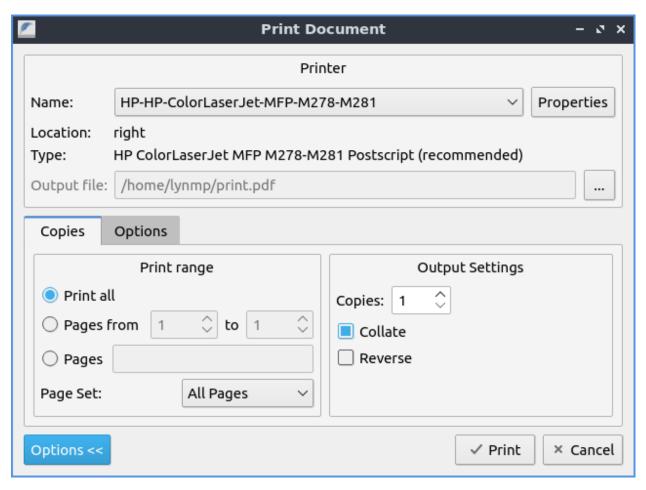
font that is not fixed width uncheck the Programming Fonts checkbox. To change the font use the Font field. To change font size change the Size field. To change the font weight use the Weight drop down menu. To make the font italic check the Italic checkbox. To view a sample of your font Preview and will preview your text.



To save a file with a different encoding use the Options ► Encoding submenu. To save with the current encoding File ► Save with Encoding.

To make the text all lowercase first select it with the mouse press then Control + Shift +L, To Lower Case, or Edit > To Lowercase. To make the text all uppercase select it first then press Control + Shift +U, right click To Uppercase, or Edit > To Uppercase. To capitlize the first letter of each word select the text and Edit > To Start Case or right click :menuselection:` To Start Case`. To alphabetize your lines first select it then Edit > Sort Lines. To sort the opposite way first select the lines then Edit > Sort Lines Reversely.

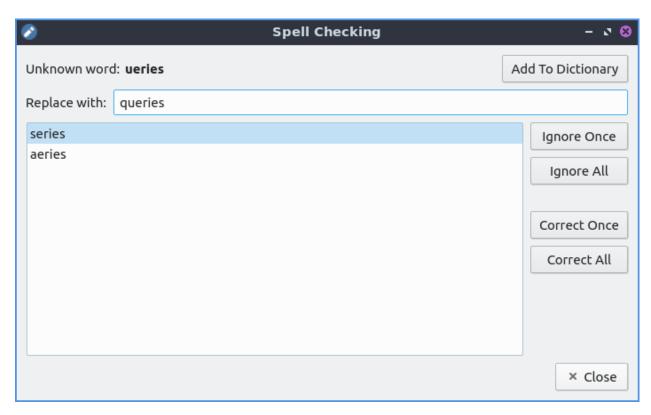
To print a text File ▶ Print or press control + p. To change which printer you use have use the Name field. To get more options for printing press the Options button. To change how many copies to print change the number in the Copies field. To print on a certain range of pages use the Pages From field to choose a range of pages. To get to even more printer options press the Properties button.



To run an executable script press Control+E. To stop running the executable you ran press press Control + Alt +E. To quit Featherpad press Control+Q.

#### **Spellcheck**

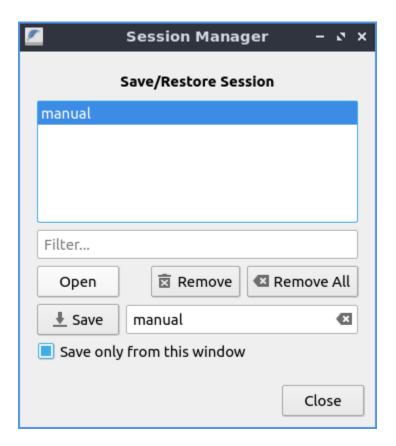
To open a spell check window press F2 or Edit • Check Spelling. If the spell check does not find a what you typed that spellcheck does not recognize will be shown from Unknown word followed by what is typed. If this is correct press the Add To Dictionary button to never have to deal with spellcheck marking this wrong again. To see what is wanted as a replacement for a typo see Replace with for the first suggestion and beneath this is a list of things to replace with. To choose a different suggestion left click on the suggestion to switch to it. To correct this typo just once press the Correct Once button. To correct this spell check every single time in your file press the Correct All button. To not change what you have typed in just this case press the Ignore Once button. To ignore what you have typed press in the entire file press the Ignore All button. If you do not have a spelling error on the bottom will appear a red bar saying No misspelling from text cursor.



To view what words you have added to your dictionary Edit • User Dictionary.

# **Saving Sessions**

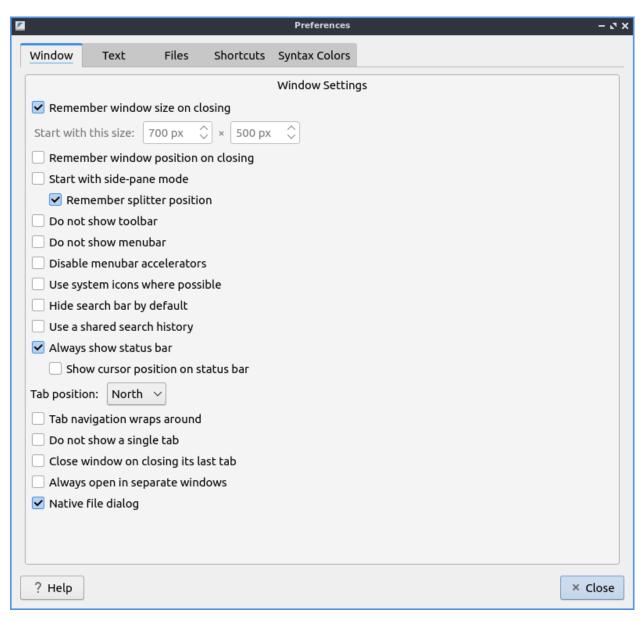
To open all the files if you work on several together in a session press Control+M or File Save/Restore Session and a dialog will appear. To save your first session type a name to remember this and then press the Save button. To open your saved session click the name of the session on the top of the dialog and then press Open. To remove a saved session press the Remove button. To remove all saved session press the Remove All button. To search for a particular session type in the Filter section. To include saving tabs from other windows in your session uncheck the Save only in this window checkbox.



## Customizing

To view the preferences for Featherpad press control +Shift +P or Options > Preferences. To change settings on how Featherpad handles the window use the Window tab. To have Featherpad be the same size as when you last closed it check the Remember window size on Closing checkbox. If you choose for Featherpad not to remember size you can change Start with this size field for height and width to start Featherpad. To have Featherpad appear on the same position it was when Featherpad was closed check the Remember window position on closing checkbox. To start with the side-pane on Featherpad check the Start with side-pane mode. To hide the toolbar you can press the Do not show toolbar checkbox. To not show the menubar by default check the Do not show menubar checkbox. To turn of keyboard shortcuts with the Alt keys for navigating menus check the Disable menubar accelarators checkbox. To use your system icons when possible check the Use system icons when possible checkbox. To have the searchbar hidden by default check the Hide search bar by default checkbox. To have the same search history across all tabs use the Use a shared search history checkbox. To show where your cursor is on the statusbar at the bottom check the Show cursor position on status bar.

The Tab position menu moves where the tab around on the screen. To hide the tabbar with only one tab check the Do not show a single tab checkbox. To have the window close after closing the last tab check the Close window on closing its last tab. To have Featherpad open a new window when you are on a different virtual desktop check the Always open in separate windows checkbox. The checkbox Native file dialog uses the systems file dialog to integrate with the system.

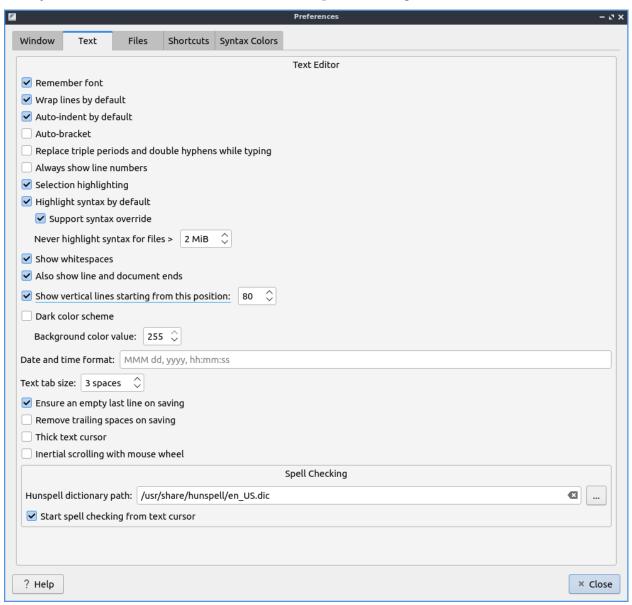


To change preferences on how text is displayed choose the Text Tab. To have Featherpad remember what font you want press the Remember Font checkbox. To have your Featherpad wrap lines if your line is too long by default check the Wrap lines by default checkbox. To have Featherpad automatically indent new lines by default check the Auto-indent by default checkbox. To have Featherpad automatically insert closing brackets check the Auto-bracket checkbox. To have Featherpad replace triple periods and double hyphens with other characters representing the same thing check the Replace triple periods and double hyphens while typing checkbox. The checkbox for Always show line numbers always shows line numbers.

When you select text if you want it to be highlighted check the Selection highlighting checkbox. If you do not want Featherpad to highlight syntax by default uncheck the Highlight syntax by default checkbox. If you want to change the be able to change the syntax highlight check the checkbox for Support Syntax override. To have Featherpad not highlight overly large text files change the Never highlight syntax for files > field. To have Featherpad show a dot for whitespace check the Show whitespaces checkbox. To show formatting marks when there is a line and paragraph ends check the Also who line and document ends checkbox. To show To have a dark color scheme for Featherpad check the Dark Color Scheme checkbox.

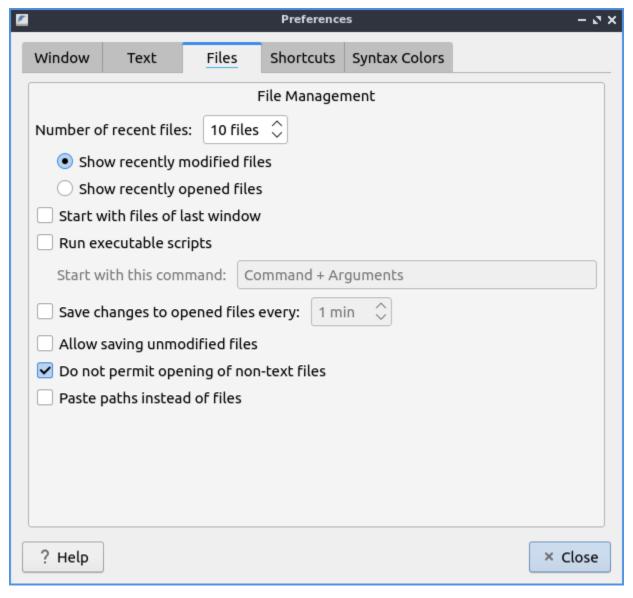
To change exactly how dark the value of this color is change the Background color value field. After changing the dark theme settings you will need to restart Featherpad.

To change how Featherpad will show dates type how you want the date in the Date and time format field. The field for Text tab size is how wide to make the tab character. The checkbox for Ensure an empty last line on saving leaves a blank line whenever you save your document. The checkbox for Remove trailing spaces on Saving removes whitespace at the end of lines that is not needed. The checkbox for Thick text Cursor makes the text cursor wider so it much easier to see. To have your scrolling have inertia to keep scrolling the faster you scroll check the Inertial scrolling with mouse wheel checkbox. To change where Featherpad looks for a dictionary for spell checking change the Hunspell dictionary path field. To start spell checking from your current text cursor check the Start spell checking from text cursor checkbox.

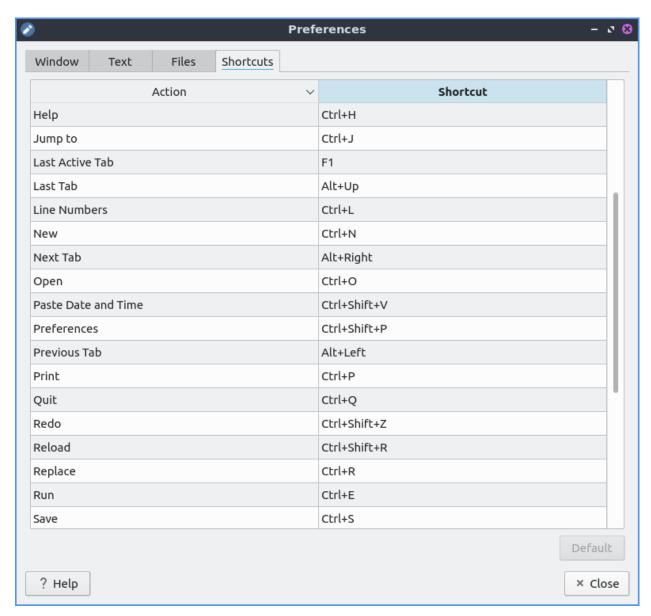


To modify changes to your files from the preferences dialog on Files tab. The Number of recent files field lets you change how many files show in recent files. The set of radio buttons for either Show recently modified files or Show recently opened files for recent files in the menu. To clear your list of recent files File • Recently Modified • Clear. If you want to reopen

the files you had last time the next time you open Featherpad check the Start with files of last window. To have Featherpad open with the files you had open last time check the Start with files of last window. If you want Featherpad to run executable scripts check the Run executable scripts checkbox. If you want your executable commands to start with something such as an interpreter type the command in the Start with this command field. If you want to autosave files check the Save changes to files every checkbox and then enter how often you want your files to be automatically saved. If you do not want to be able to open non text files in Featherpad check the Do not permit opening of non-text files checkbox. To paste the path of the copied files into Featherpad instead of the file themselves check the Paste Paths instead of files checkbox.



To view all keyboard shortcuts of Featherpad switch to the Shortcuts tab. The Action column is what the shortcut does and the Shortcut column is the keyboard shortcut to change that shortcut. To change a shortcut double click on the shortcut column and press what you want the shortcut to become. If you changed a shortcut you can change it back to the default by pressing the Default button.



To change what colors you use in syntax highlighting use the Syntax Colors tab. To change the color of built in functions click the color to the right of Built-in Functions and a window to pick your color will show up. To change the color of comments in syntax press the button next to Comments and a color picker window will pop up. To change how documents HTML or XML elements appear change the press the button next to Document Blocks, XML/HTML Elements button to have a color selection window appear. To change how extra elements are colors press the button next to Extra Elements. To change the color of functions and URLs in highlighting press the button next to Functions, URLs. To change how keywords of a programming language appear press the button next to Keywords. To change the color of markdown headings and CSS values press the button next to Markdown Headings, CSS Values. To change how numbers are highlighted press the button next to Numbers. To change how quotations are highlighted press the button next to Quotations. To change how you highlight regular expressions and code blocks press the button next to Code Blocks. To change how datatypes are highlighted press the button next to Types. To change how dark the whitespace appears in highlighting change Whitespace color value. To change how dark the currently highlighted line is change Current line highlight value. To restore syntax highlighting to default values

press the Default button.

#### **Version**

Lubuntu ships with version 1.3.0 of Featherpad.

### **How to Launch**

To launch Featherpad from the menu go to Accessories • Featherpad or run

featherpad

from the command line. The icon for Featherpad looks like a blue circle for with a pencil on it.

# **Chapter 2.4.3 KCalc**

KCalc is the default scientific calculator application for Lubuntu.

### Features:

- Trigonometric functions
- Factorials
- Built in mathematical and scientific constants.
- Memory
- · Copy and paste

## **Usage**

To do simple arithmetic click the numbers or type them on your keyboard and then press the sign for addition, multiplication, subtraction, or division. You can also type in the numbers and press + for addition, - for subtraction, x for multiplication and the division symbol for division. To view the answer press the button that is an -. To view a summary of each button you can mouse over to get a verbal description of the button. If you make a mistake entering in a number you can press the Backspace key.

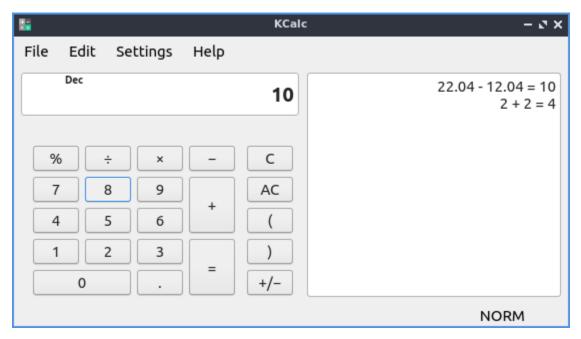


To make a number negative press the button that looks like a +/-. To insert decimals press the decimal point button which looks like a . when you get to the part which is less than a whole number. To clear input from KCalc before the last operator press the button with a C on it. To clear all input from KCalc press the AC button. To group operations so they happen together use the parenthesis to make things grouped together for example 2\*(2+3) would give the result of 10 because it would add 2 and 3 and then multiply by two. You can also press the ( or ) buttons to make parenthesis to change the order of operations.

To undo an operation press Control+Z or Edit ► Undo. To redo an operation press Control+Shift+Z or Edit ► Redo.

To copy and answer out of KCalc press control + c or Edit > Copy from the menu. To paste a number into KCalc you can press control + v or Edit > Paste from the menu. To cut the text from KCalc press control +x or Edit > Cut from the menu.

To view your history what you have calculated in KCalc press Control+h or Settings > Show History. To hide your history do the same thing again. You can select text with the mouse in KCalc and then right click select Copy or press Control+C to copy what you have previously calculated. To select all of the history press Control+A or right click Select All.



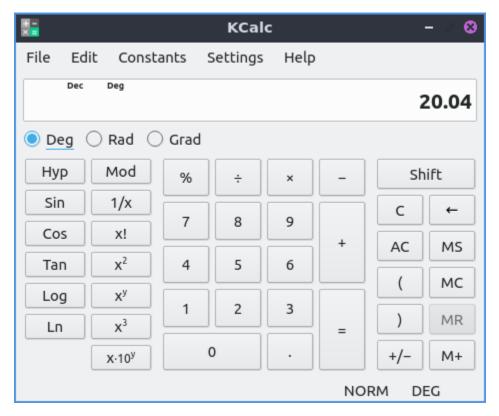
To get a main toolbar right click on the main menus and select Main Toolbar. To guit KCalc press Control+Q.

# Scientific calculator mode advanced functionality

If you want even more functionality of KCalc there is also scientific mode which is accessed from Settings ► Science Mode radio button. The button 1/x takes takes 1 and divides it by the number currently on the calculator also known as taking the reciprocal. The x! button read x factorial will take the number X you entered and multiple each number going down to 1 for example 5! would multiply 5\*4\*3\*2\*1.

The x  $^2$  button will multiply x by itself or square x. The button with x  $^y$  will take x the number you have in will exponentiate x to the power of y. The x  $^3$  button will cube the result or raise it to the third power. The x  $^3$  will end up multiplying x by  $^3$  to the power of y so for example to multiply 5 by  $^3$  by  $^3$  to the power of 3 entering in will give the answer of 5,000.

To change the unit that angles are measured in for trigonometric units in KCalc. Degrees take 360 to form a full circle while,  $2\Pi$  radians form a full circle and 400 gradians form a full circle. The radio button Deg is to select Degrees as the unit for angles, Rad selects radian as the unit of measurement of angles and Grad selects Gradians as the unit of measurement for angles. The Sin button takes what you have as the input and takes the trigonometric sine function of that value measured in the unit for angles you have selected. The Cos button takes the cosine of the value in the unit of angle you have selected. The Tan button takes the tangent of the angle in the current units.



If you make a mistake entering a long input into KCalc press the button that looks like a leftward pointing arrow button to correct your mistake just like pressing Backspace.

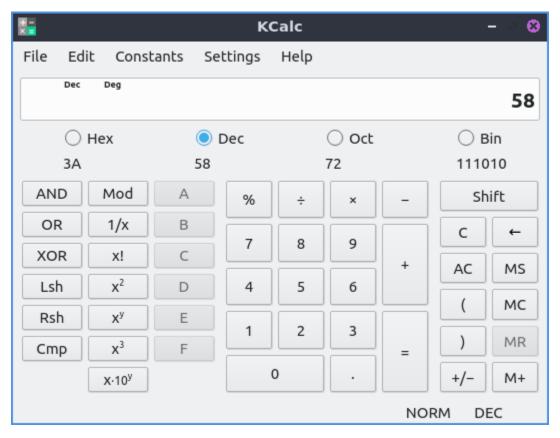
To have a log with the base of 10 type the number you want to take the log of then press the Log button. To take a log based off e, the natural logarithm, type the number you want to take the logarithm of then press the Ln button.

The Scientific mode also brings in a menu for many different predetermined constants under the Constants. If you want a button for constants check the Settings ► Constants Buttons checkbox. To input the first constant press the C1 button for the first constant and so on for the other constants.

To store a value in memory press the M+ Button. To retrieve a value from memory press the MR button. To clear a value from memory press the MC button.

### **Numerical System mode**

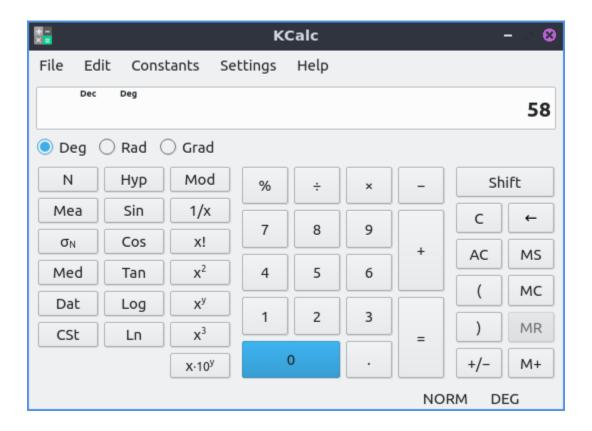
To switch the calculator into number system mode Settings • Numeral System Mode. The numerical system mode lets you change your numerical base instead of say the default base 10. To switch to a binary calculations click the Bin radio button. To switch the Octal or base 8 format click the Oct radio button. To switch to a hexadecimal format or base 16 format click the Hexadecimal radio button. For numbers greater than 10 for hexadecimal press the A-F buttons standing in for numbers 10-15 in base 10. When you are in number that are not part of a numerical base the button will get grayed out. To switch back to decimal or base 10 press the Dec radio button.



If you type a number into in your numerical base you will see the underneath the buttons will show what that number is in that numerical base.

### **Statistic Mode**

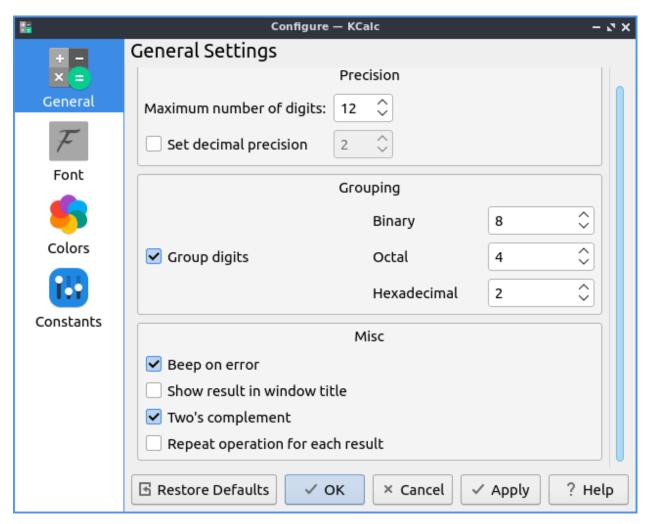
To enter Statistic mode Settings • Statistic Mode. To enter multiple entries of data press the Dat button to enter data. To show how many pieces of data you have entered press the N. To view the mean or average of all the data press the Mea button. To view the median of the data press the Med button. To clear the statistical memory press the CSt button.



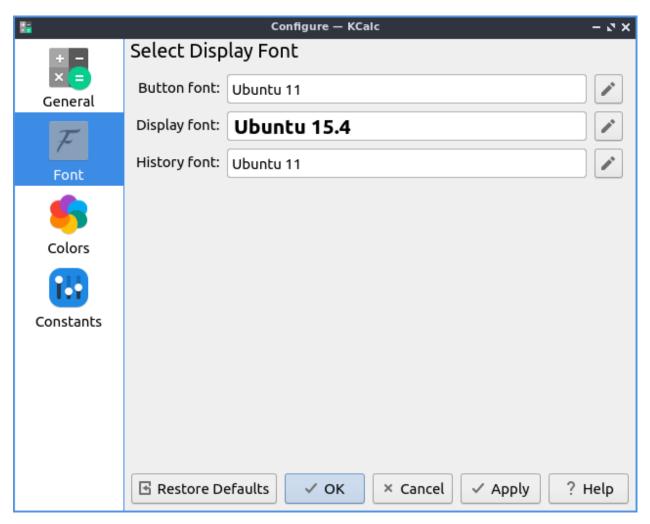
# **Customizing**

To open configuration for KCalc press Control+Shift+, or Settings > Configure KCalc. To view your settings for precision or digit grouping use the General tab. To change the maximum number of digits change the Maximum number of digits field. To have KCalc set decimal precision to only a certain number of places after the decimal place check the Set decimal precision checkbox and select the number of digits after the decimal place. If you ant to show the result in the window title check the Show result in window title checkbox. To have KCalc group digits together check the Group digits checkbox.

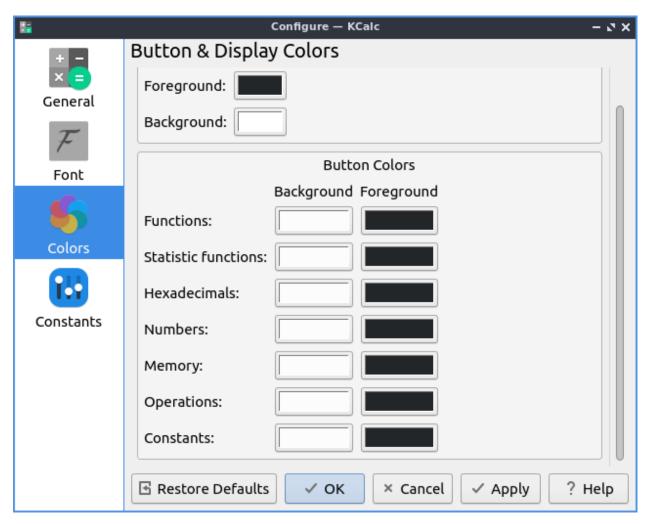
To cancel and not apply your changes press the Cancel button along the bottom. To apply your changes and not exit from this window press the Apply button. To restore the settings to your defaults press the Restore Defaults button. To apply your changes if any and close this window press the OK button.



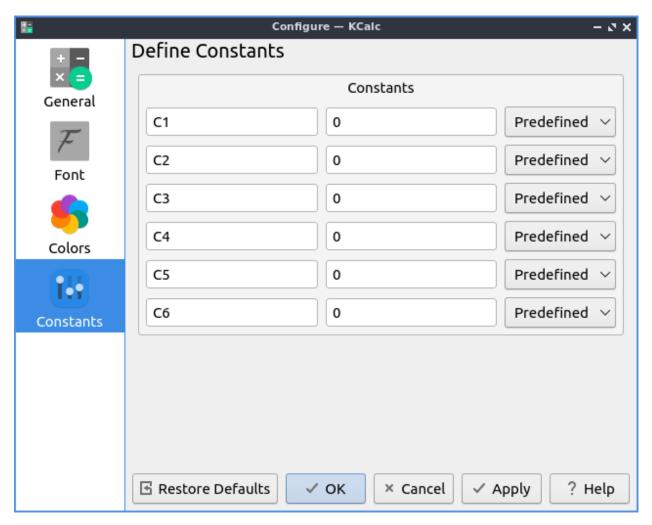
The Font tab has settings to change settings with your fonts. To choose the font for your buttons on your calculator Button font and press the Pencil button to the font for the buttons on your calculator. To change the font for the display of the calculator. Display font will change how the and the Pencil button. To change what font will be used for displaying KCalc history change the History font field.



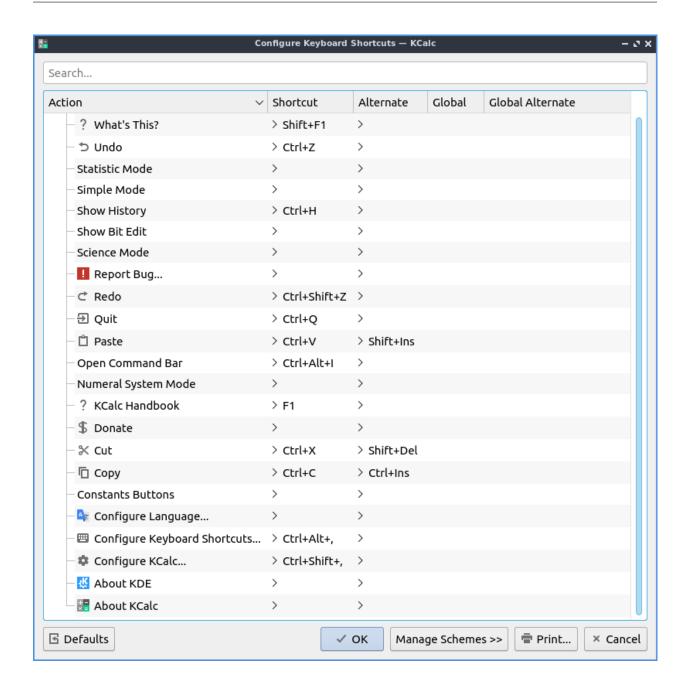
The Colors tab has the colors of your user interface. To change your foreground color will change how the display or the number in the interface is the color next to Foreground color area to select. To change the background color of your display choose a different color on the Background button. To change the background color of the function buttons press the button next to Functions. To a change the color of the function button press button next to Statistical functions. To change the background color for hexidecimal functions Hexadecimals. To change the backgrounds of the numbers buttons press the button next to Numbers. To change the background of the memory keys press the button next to Memory. To change the background of operations press the button next to Operations.



To change your settings for Constants use the constants tab. To input a constant you have in the field to the left is the name of the constant on the field to the left. The filed in the center is where you put the value of the constant. To select from predefined constants press on the Predefined to bring up a menu of predefined constants.



To customize your shortcuts for KCalc Settings ➤ Keyboard Shortcuts or press Control + Alt + ,. To see what your shortcut does read the Action column. To see what keys to press the shortcut is in the Shortcut column. To see or set a second shortcut to see what activates this is in the Alternate column. To change your shortcuts press the Custom button and then left click on it and input the shortcut you want. To reset your shortcuts to default press the Restore Defaults button. To not make your changes to the shortcuts you made press the Cancel button. To use your new shortcuts as a calculator press the OK button.



# **Version**

Lubuntu ships with version 22.08.1 of KCalc.

### **How to Launch**

To launch KCalc go to Accessories ► KCalc or run

kcalc

from the command line. The icon for KCalc looks like a box with a + sign a - sign a multiplication sign and an equals sign. If your computer has a calculator key you can press Calculator.

## Chapter 2.4.4 PCManFM-Qt

## **Description**

PCManFM-Qt (PCMan File Manager) is the default file manager for Lubuntu ported to Qt after the original developed by Hong Jen Yee from Taiwan which is meant to be a replacement for Nautilus, Konqueror and Thunar.

#### **Features:**

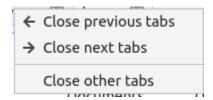
- Tabs
- · Bookmarks
- Places sidebar with removable media or directory tree
- Ability to eject removable media
- Ability to mount other filesystesms internally.

## **Usage**

Along the top to create a new tab in PCManFM-Qt you can use the button with a file and a plus on it to open a new tab or press control +t. You also can double click on the tab bar to open a new tab. The left pointing arrow button is a back button while the right pointing arrow button moves you forward in the directories that you have moved in the file manager. Another way to go back and forward is Alt + Left arrow or Go > Go Back and another way to go forward is Alt + Right Arrow or Go > Go Forward. The button for the arrow pointing upward is to go up one level in the directory tree to the so called parent directory or press Alt+Up arrow, press Backspace, or Go > Go Up. To rename your files right click on the file and click Rename or press f2.

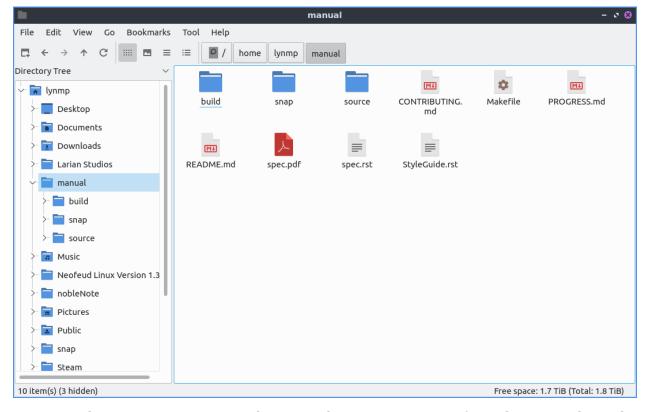
If you double click on a folder you open that folder in PCManFM-Qt and it shows what files are in the folder you opened. If you want to open a folder in a new tab right click on that tab and select Open in New Tab. To open a folder in a new window right click it and select Open in New Window. To open a folder in your terminal right click it and select Open in terminal.

To close a tab click on the x button on the tab bar, press Control +W, or from the menu File Close Tab. To close tabs to the left right click on the tab bar and select Close previous tabs. To close all tabs to the right of this tab Close next tabs. To close all tabs but the current one right click on the tab bar and Close other tabs.

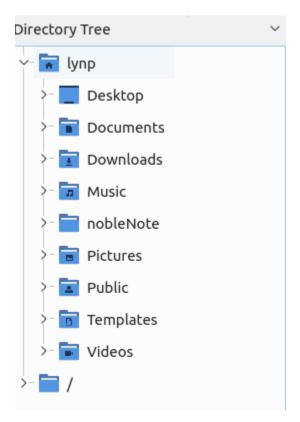


If you have installed multiple programs that can open a file right click and select Open With Program you want to launch.

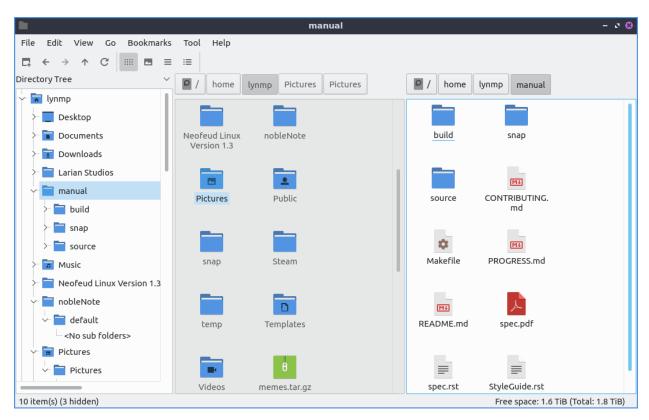
To create a new empty text file press Control + Alt +N or right click Create New ► Blank File, or File ► Create New ► Blank File and type in the name of the file you want. To create a new folder or directory press File ► Create New ► Folder, right click Create New ► Folder, or press Control+ Shift +N and input the new folder name. To delete your files from PCManFM-Qt will first put them in the trash so they are not gone forever. To move a file into the trash right click that file Move to Trash or select the file and press Delete. To get a file out of the trash in places trash to get to your trash or Go ► Trash. To bring a file back from the trash right click Restore. To permanently delete all files from the trash can right click on Trash in the places sidebar and select Empty Trash. To go back to your home folder press Alt +Home or Go ► Home.



To view a directory tree on your side pane select Directory Tree from the menu above the side pane. To expand into a folder press the > to expand the files and the 'button to collapse the folder. To switch to a folder left click on the folder name. To have open a directory in a new tab right click on it and select Open in new tab. To open a folder from the directory tree in a terminal right click Open in terminal. To switch to back to places from the menu above the side pane select Lists at the top of the side pane. To resize the side pane left click on the border between the side pane and main part of the window. To toggle hiding the side pane press F9 or View > Side Pane.

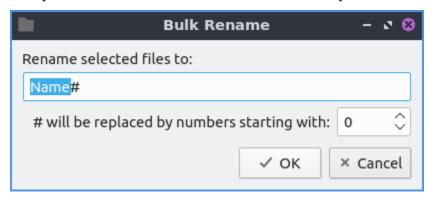


To toggle having a split view to be able to view two folders in press F6 or View > Split View. This split view allows you to have two folders open which is quite useful for copying files. To switch between the two different folders left click on the half of the screen to move to the left hand side to manage files and click on the right hand side to manage files on the right on side. The side of split view you are on will appear lighter and the side inactive will be shaded. To switch which side you are using simply left click on that side. To navigate each side has its own set of buttons on top to navigate for that side. To switch back to your normal view press F6 again or View > Split View again.



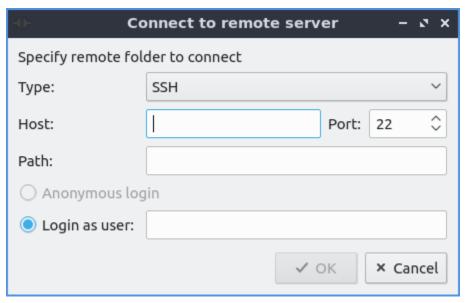
If you single left click on a file you will select it. If you double click on it you will open it in the default program to open that file. If you want to select multiple files you can hold down control+ Left click to select each file or press the Plus button to add that particular file. To remove a file if you select multiple files press the - button that appears when mousing over a file. To copy files select the file right click Copy, Edit > Copy, or press control +c. To cut files select them right click Cut, Edit > Cut, or press control + x. After copying or cutting a file you can paste them with right clicking Paste, Edit > Paste, or pressing control +v.

To select all files in a directory is to press Control+ A, Edit > Select All, or right click Select All for all of the files. To select what you don't have selected press Control + Shift+ A, Edit > Invert Selection, or right click and select Invert Selection. To bulk rename multiple files first select all the files you want to rename then Edit > Bulk Rename or press Control+F2 and a dialog window will show up. To choose what to rename the selected files choose Rename selected files to as what to rename your files. To choose what number to start numbering your files change the # will be replaced by numbers starting with field. To rename all these files press the OK button or to not rename them press the Cancel button.



To connect to a remote server such as a NAS go to the Go · Connect to server and authenticate

to your remote storage. If you want to plug in removable storage you can open the storage on the left sidebar with devices. To switch to the removable media left click on the device in the side pane. This also applies to other internal filesystems on your computer. To eject removable media press the button on the left with a circled up arrow to eject. On the side pane you can right click to open a place in a new tab by right clicking Open in New Tab on the side pane.



PCManFM-Qt also supports transferring files to mobile devices plugged in with a USB cable. On the left hand side under Devices the mobile device will appear. You may need to accept sending files on the device to allow it to transfer files. After you have done this You can see the files on mobile device and transfer files to them. To eject the mobile devices press the upward pointing arrow to unmount it. If you want a device not to show up right click on it under devices and check the Hide checkbox.

At the bottom of the window is a filter bar that lets you show files only matching a pattern in the window of the current folder. To show the filter bar press Control+I or View • Filtering • Show/Focus Filter Bar. To use it type what you want to search for in the bar that says Filter. How many result you match will show in the item(s) field. To empty out the filter press Escape. To return the filter back to seeing all files clear the text field and hide the filter bar by pressing Escape or View • Filtering • Clear All Filters. If you still want to see the filter bar but to see all files hold the backspace key to clear it out.

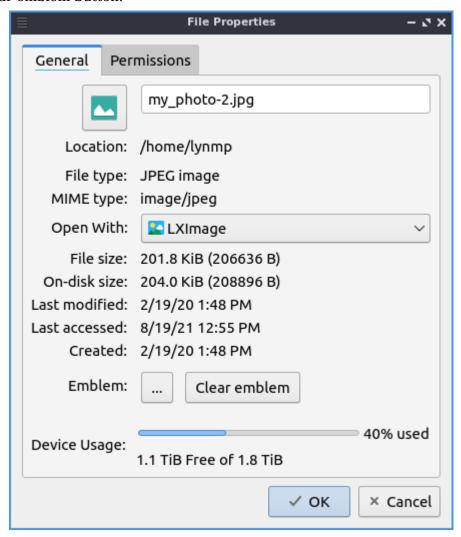
On the very bottom of the PCManFM-Qt window when you have nothing selected it shows x item(s) (y hidden) showing how many items are in the current folder. To the right of this shows Free space showing how much free space you have. The (Total) shows the full size of the storage medium this is on. When you select one file on this bottom bar it will show the file name, the file size, and the type of file it is. If you select multiple files the bottom bar to the left will show X item(s) selected where X is the number of files you have selected and how much disk space they take up.

To have PCManFM-Qt reload what folder you are viewing press F5, the circular pointing arrow button, or View > Reload. To see hidden files press control +h, right click Show Hidden, or go to View > Show Hidden. Do the same thing again to hide hidden files again. To toggle showing thumbnails check/uncheck the View > Show Thumbnails. To open a terminal in your current folder press f4, right click on a folder and select Open in Terminal, or Tools > Open Terminal from the menu. To copy the full path of a file or directory press Control+Shift+C or Tools > Copy Full Path after selecting a single file. To create a file that will launch an

application by clicking on it Tools • Create Launcher and fill in the fields to create a file to launch programs. To open the tab in as root select Tools • Open tab in root instance and a new window will appear that says it is root at the bottom of the window in red.

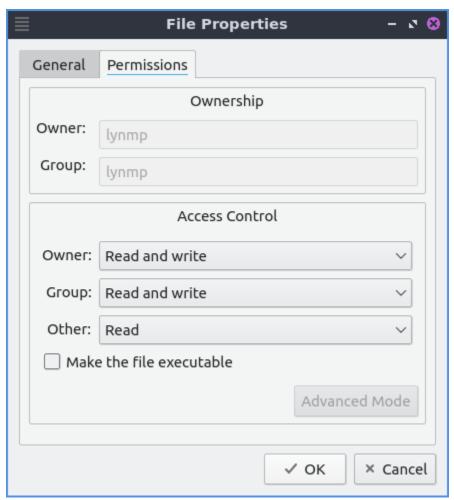
**Warning:** Modifying or deleting files as root may end up making your system unable to boot if you do not know what you are doing or make a mistake.

To view the properties of a file or folder right click on it and select Properties from the menu, File • File Properties or press Alt +Enter. To view a dialog that shows folder properties File • Folder Properties. To choose a The General tab will show you the size of the file, where the file is, and when it was last modified or accessed. To change what program a file opens with use the Open With drop down menu and select the program to open the file. To change the icon shown for a file use the ... button next to Emblem. To clear this from the file press the Clear emblem button.



The Permissions tab will show you who owns the file which if you can't change it will be grayed out and who has permission to read modify and execute the file. To change permission of files the Owner, Group, or Other drop down menu will allow you to choose whether you can read, read and write, or forbidden. To make something executable such as a script you wrote check the Make the file executable checkbox. At the bottom of the window is a bar graph showing

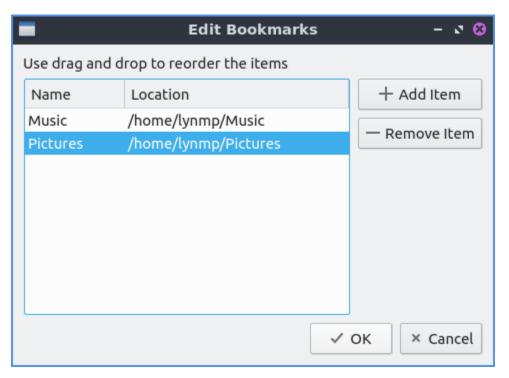
disk usage of the partition the file exists on. If you use folder properties on the top left hand corner click on the folder icon and a file dialog will open to choose the new icon with the path of the current icon theme. Left click on the icon you want and then press the Choose button.



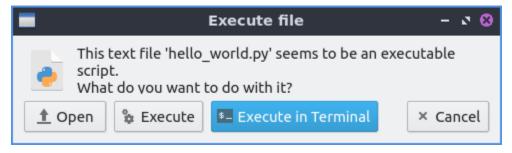
PCManFM-Qt can actually launch other applications in places Applications or Go ► Applications and then gets all the tasks in the main menu of lxqt-panel. To view what files are on your desktop Go ► Desktop or on the places sidebar press the desktop item on the left.

To add a bookmark Bookmarks • Add to Bookmarks and it will make a bookmark. To later access this bookmark it will be on the left hand side under Bookmarks and under the Bookmarks menu. To rename a bookmark you can right click on the bookmark on the left hand side Rename Bookmark and this does not have to match the filename nor will it change the filename on the filesystem. To remove a bookmark right click on the left hand side on the bookmark and select Remove Bookmark. To open a bookmark in the left hand side right click on the bookmark Open in New Tab. To open a bookmark in a new window on the left hand side right click on the bookmark Open in New Window. To move your bookmark up or down in the order right click on the bookmark Move Bookmark Up to move it up and Move Bookmark Down to move it down.

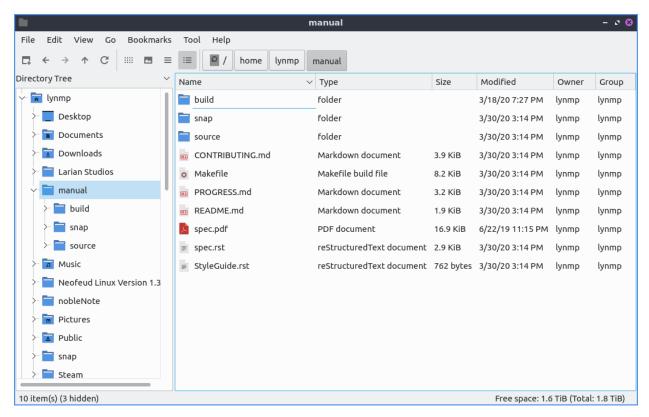
To bring up a dialog to edit bookmarks Bookmarks • Edit bookmarks. To Remove a bookmark from the edit bookmarks dialog press the Remove Item button. You can also add a bookmark from here with the Add Item button. To cancel your changes press the Cancel button. From the edit bookmarks you can reorder your bookmarks by left clicking and dragging to where you want the bookmark to go.



If you want to run an executable script from PCManFM-Qt double click and then click Execute on the execute file dialog window. If you wish to edit the script you can press the Open button. To cancel and not do anything press the Cancel button. If you plan on executing this file a lot you can right click on the file and then select Trust this executable to not have this dialog popup.



PCManFM-Qt has different view modes which can be changed in the view menu. To select a view that has bigger thumbnails to view pictures before deciding to open them View ▶ View ▶ Thumbnail View or press the button that looks like a picture of a landscape. If you want to view lists of move data about something like the file size the time it is modified select detailed list view by View ▶ Detailed List or press the toolbar button with bullet points in front of three horizontal lines. If you really want to have see as many files in a small area use the compact view or View ▶ Compact View or press the toolbar button with three horizontal lines. To return to the original view of PCManFM-Qt is to View ▶ View ▶ Icon View or press the toolbar button with 12 dots. To have a view always selected for the particular folder you are on now check the View ▶ Preserve Settings for This Folder checkbox.



To reverse the order that PCManFM-Qt sorts files View > Sorting > Descending or conversely to switch back View > Sorting > Ascending. To sort by file name View > Sorting > By file name. To sort by modification View > Sorting > By modification time. To sort by file size View > Sorting > By file size. To sort by file type View > Sorting > By file type. To sort by owner View > Sorting > By Owner. To separate all folders first in sorting check the checkbox in View > Sorting > Folder First. To show hidden files last check the View > Sorting > Hidden Last checkbox. To sort with case sensitive check the checkbox in View > Sorting > Case sensitive. You can also get to this sorting menu by right clicking :menuselection: `Sorting -> Your Sorting Option`.

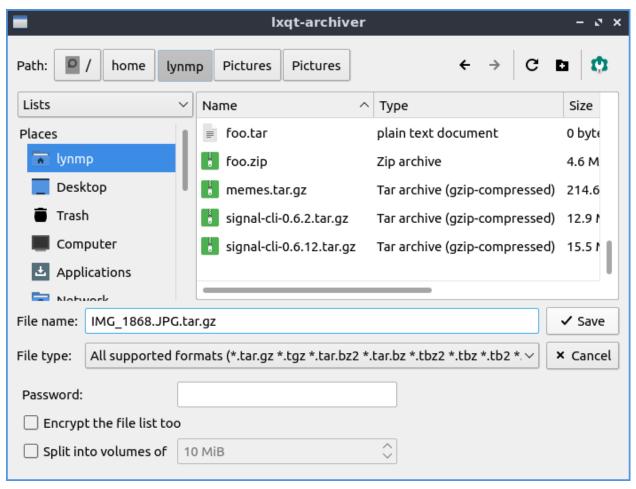
To change your path bar to buttons View > Pathbar > Location and to get back to a pathbar you can type into View > Pathbar > Path Buttons. To toggle showing the menubar Control +M or View > Toolbars > Menubar and uncheck the checkbox. To get the menubar back press Control +M again. To toggle showing or hiding the permanent filter bar press Control+B or View > Toolbars > Permanent filter bar.

/home/lynp

To quit PCManFM-Qt press Control+Q.

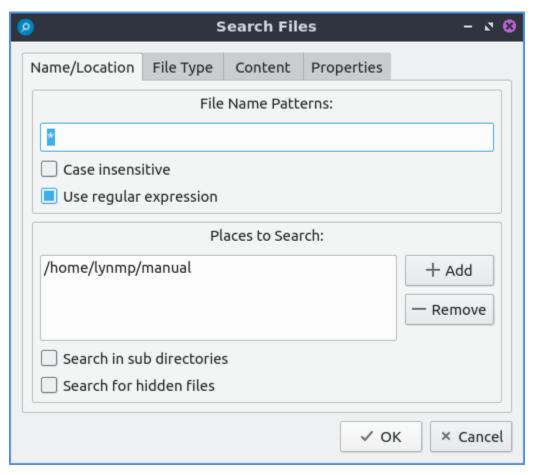
# **Extracting and Compressing Archives**

PCManFM-Qt has options when right clicking has special options for dealing with archives such as tar or zip files. To extract the files in the current directory right click and select Extract Here. You can also extract to another location with right clicking and selecting Extract to and a dialog will pop up showing to where to extract the file. To select a file and compress it right click and select Compress will open up a dialog. To chose a file name for your new compressed archive enter in the File name field. To choose what type of archive choose change the File Type drop down menu. To actually create the archive press the Save button. To add a password to the archive you are creating enter that in the Password field.

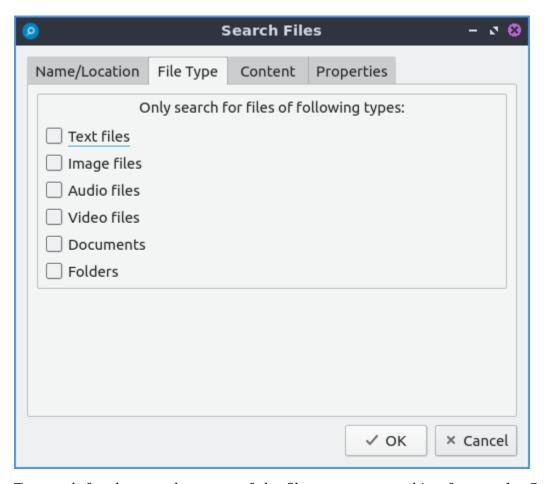


### **Searching for Files**

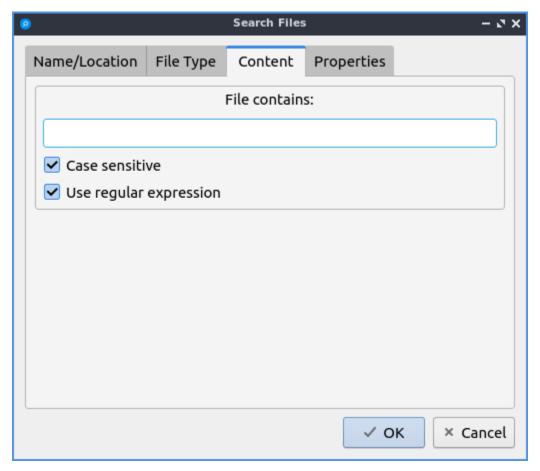
To search for files press f3 or Tools • Find Files. Type what you are searching for where it says File Name Patterns. To make your search case insensitive check the Case insensitive. To toggle searching with regular expressions check/uncheck the Use regular expression checkbox. To add locations and places to search press the Add button and select the additional places to search. To remove an additional place to search press the Remove button. To toggle searching in Subdirectories check/uncheck the Search in subdirectories checkbox. To toggle searching for hidden files check/uncheck the Search for hidden files. To close this window press Escape.



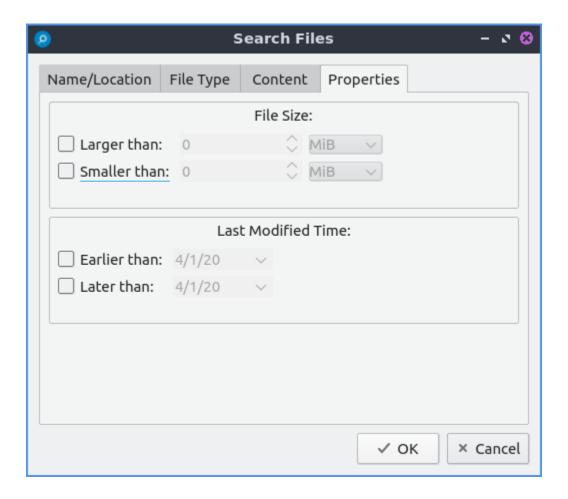
To change what types of files you use choose the File Type tab. To choose to search for only certain file check/uncheck the files under the heading Only search for files of following types:. The options for which type of file include: Text files, Image files, Audio files, Video files, Documents, or Folders.



To search for the actual content of the files you are searching for use the Content tab. To enter what you actually want to search for in your file in your File contains filed. To search caring whether it is uppercase or lowercase letters check the Case sensitive checkbox. To search with a regular expression check the Use regular expression checkbox.



The Properties tab has more settings based on information about the file also called metadata. To only show results on files larger than this file check the Larger than checkbox and then in the field to the right for size. To only show files smaller than this check the Smaller than checkbox and to the field to the right select the size smaller than that. To change the units for file size use the drop menu on the far right. To search for files modified before a date check the Earlier than checkbox and select the date to the right. To search for a file modified after a date check the Later than checkbox and input the date to the right.



### **Custom Actions**

To create custom actions you will need to create the folder that is not on your filesystem by default run this command

```
mkdir -p ~/.local/share/file-manager/actions
```

or create this path by creating new directories in this file manager. Then you will need to make a desktop file to make your action. To make for example an open in terminal desktop run

```
touch ~/.local/share/file-manager/actions/open_in_terminal.desktop
```

to create the file. To edit this file run

```
featherpad ~/.local/share/file-manager/actions/open_in_terminal.desktop
```

from the command line to edit the file and paste in the following contents

```
[Desktop Entry]
Type=Action
Name=Open in terminal
Icon=utilities-terminal
Profiles=profile-zero;
```

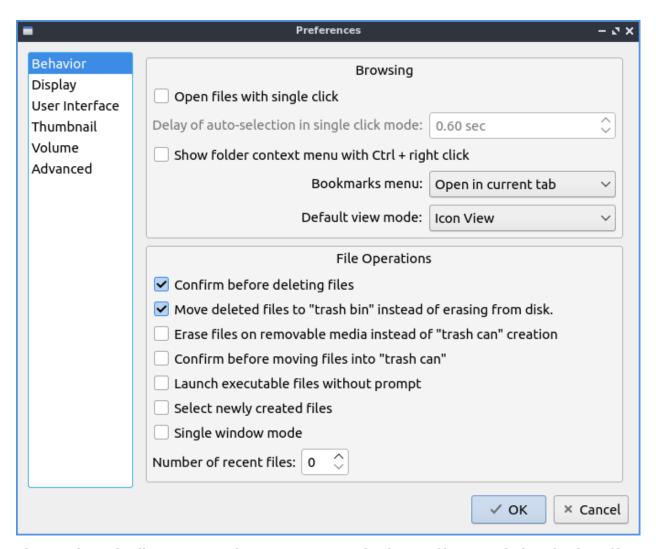
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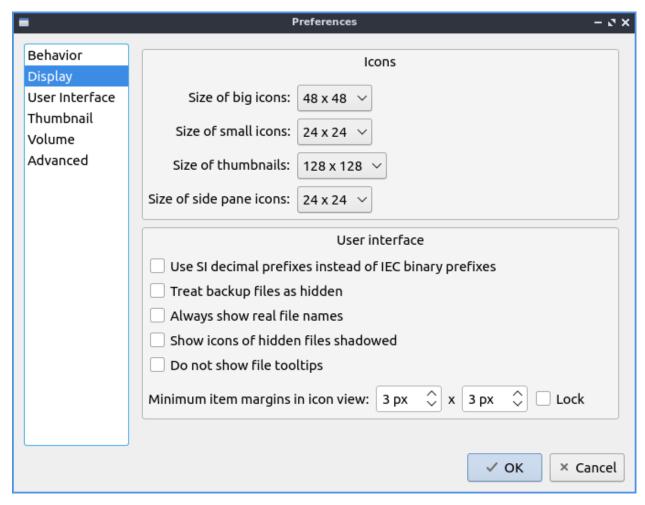
[X-Action-Profile profile-zero]
Exec=qterminal -w %f
Name=Default profile

# **Customizing**

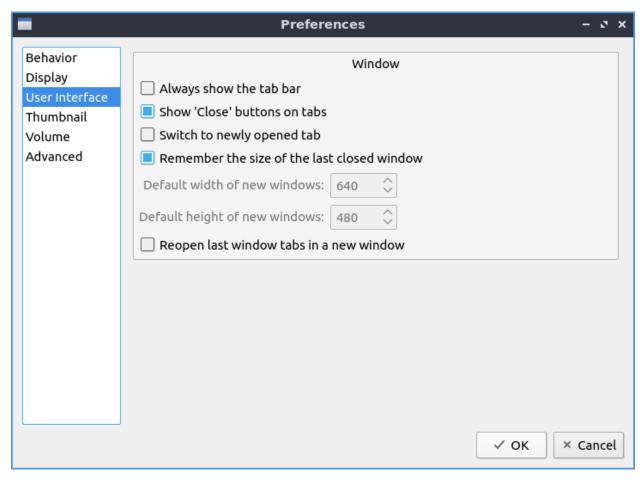
To open a dialog for preferences of PCManFM-Qt Edit > Preferences. The Behavior tab has settings for how PCManFM-Ot manages files. The checkbox Open files with single click opens files by clicking on them once and you select files by mousing over them. To make the auto selection slightly delayed and to adjust this change Delay of auto-selection in single click mode field. To show a folder context menu when you Control+ right click check the Show folder context menu with Ctrl+ right click checkbox. The Bookmarks menu drop down menu has options to either Open bookmarks in the current tab, Open bookmarks in a new tab, or Open bookmarks in a new window. To change what view mode PCManFM-Ot starts with change the Default view mode drop down menu. The Confirm before deleting files checkbox makes a confirmation dialog before deleting files. The checkbox Move deleted files to "trash bin" instead of erasing from disk puts files in the trash bin instead of always deleting them. The Erase files on removable media instead of "trash can" creation erases files on removable media instead of creating a trash can on the removable media. The checkbox Confirm before moving files into "trash can" brings a confirmation dialog before moving files to the trash can. The checkbox Launch executable files without prompt will run executable files without bringing up a prompt asking what to do with the file however you will need to restart PCManFM-Qt for this to take effect. To select new files automatically check the Select newly created files checkbox. To have PCManFM-Qt only open one window check the Single window mode checkbox. To change the number of recent files saved change Number of recent files field.



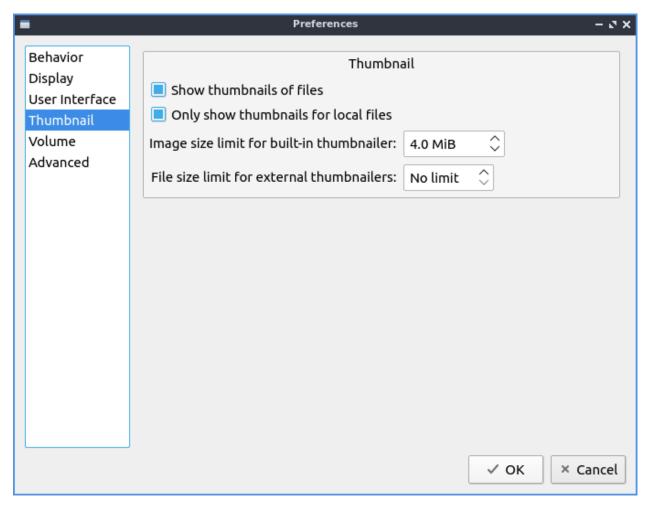
The Display tab allows you to change icon sizes, displaying file sizes, hiding backup files, and settings for margins. The Size of big icons drop down menu changes the size of big icons in PCManFM-Qt. The Size of small icons drop down changes the size of small icons for PCManFM-Qt. The Size of thumbnails drop down changes the size of thumbnails in PCManFM-Qt. The Size of side pane icons drop down changes the size of side pane icons. The checkbox Use SI decimal prefixes instead of IEC binary prefixes treats kilobytes, megabytes, and gigabytes as base 1000 instead of 1024. To toggle showing backup files as hidden check/uncheck the Treat backup files as hidden checkbox. To always show the entire file name check the Always show real file names checkbox. To show the icons of hidden files as shadowed to distinguish they are hidden files check the Show icons of hidden files shadowed checkbox. To disable tooltips check the Do not show file tooltips checkbox. To disable smooth scrolling in list and compact modes check the Disable smooth scrolling in list and compact modes check the minimum margins in icon view for number of pixels change the numbers in Minimum item margins in icon view. To toggle making the margin a square check the Lock checkbox.



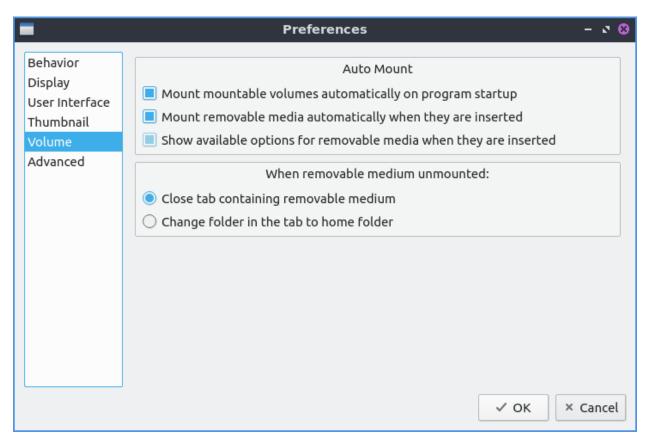
The User Interface tab changes how the PCManFM-Qt window appears. To toggle always showing the tabbar even when you have only one tab check/uncheck the Always show the tab bar checkbox. To toggle showing the x on each tab to close each tab check/uncheck the Show 'Close' buttons on tabs checkbox. To have PCManFM-Qt go to any new tab you open check the Switch to newly opened tab checkbox. To have PCManFM-Qt open the window in the same size as the last time you closed the window by checking/unchecking the Remember the size of the last closed window checkbox. If you have the Remember the size of the last closed window checkbox unchecked you can change the Default width of new Window or Default height of new windows fields. To use tabs from your last window in a new window check the Reopen last window tabs in a new window checkbox.



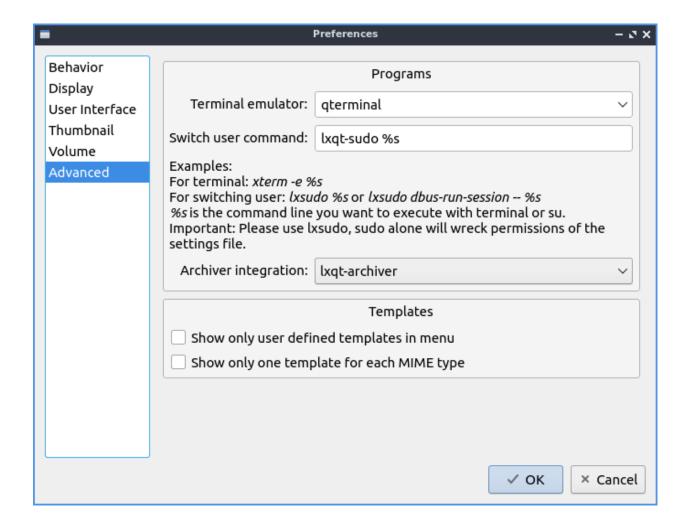
The tab Thumbnail tab has settings for thumbnails on files in PCManFM-Qt. To enable/disable thumbnails check/uncheck the Show thumbnails of files checkbox. If you want to only have thumbnails for local files not on another machine check Only show thumbnails for local files checkbox. Unchecking the previous checkbox will result in a slower performance to get the thumbnails for the files. To put an upper limit for built in thumbnails for PCManFM-Qt change the Image size limit for built in thumbnailer field. To have a limit for external thumbnails change the File size limit for external thumbnailers field.



The tab Volume tab manages flash drives, other partitions, external disks, and other external media. The Auto Mount section is settings for automatically mounting removable media. The Mount mountable volumes automatically on program startup mounts removable media when you start PCManFM-Qt. To automount removable media when you insert them into your computer check the Mount removable media automatically when they are inserted checkbox. To show a menu for removable media when inserted check/uncheck the Show available options for removable media when they are inserted checkbox. To choose when you unmount a removable volume you can choose to Close tab containing removable medium or Change folder in the tab to home folder.



The Advanced tab shows integration with other programs and advanced settings. To change your default terminal emulator from PCManFM-Qt preferences drop down change the Terminal emulator drop down menu. To change what PCManFM-Qt uses to change users to open things as root type that in the Switch user command field. To change your Archiver integration change the Archiver integration drop down.



#### **Version**

Lubuntu currently ships with 1.1.0 of PCManFM-Qt.

### **How to Launch**

To open PCManFM-Qt in your current directory (in terminal), execute in the command line

pcmanfm-qt

Feel free to append [lxqt-sudo] to run PCManFM-Qt as root.

You can also go to the Applications menu Accessories • PCManFM-Qt File Manager. The icon for PCManFM-Qt looks like a file cabinet drawer with files in it at the top. PCManFM-Qt is also in the quick launch and can be launched by left clicking on the file cabinet icon in the quick launch.

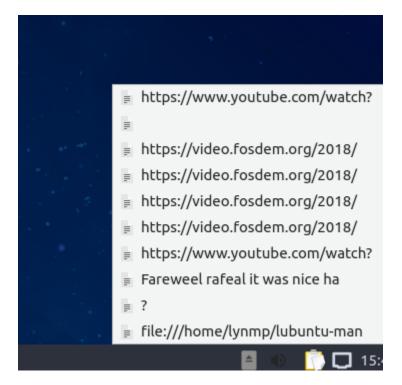
# Chapter 2.4.5 Qlipper

Qlipper is the default clipboard manager for Lubuntu.

# **Usage**

Qlipper is a clipboard manager automatically started in the system tray. The tray icon for Qlipper looks like a clipboard. To view your clipboard history left click on the tray icon that looks like a clipboard or press Control+Alt+V. To make your item from your history the selected one left click on the item of your history in the menu. To clear your clipboard history like if you copied a password you can right click on the clipboard tray icon and select Clear clipboard history. If you temporarily want your clipboard history not to be saved or shown you can close Qlipper by right clicking on the clipboard icon and selecting Quit.

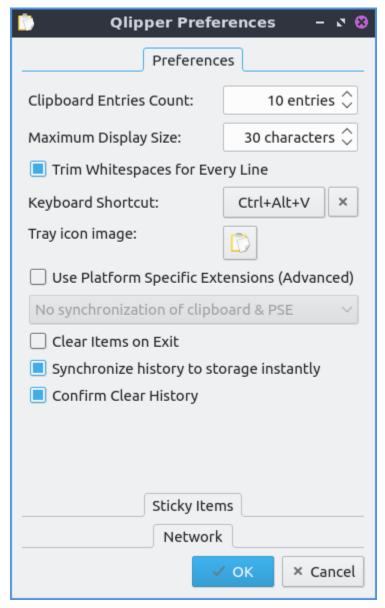
#### **Screenshot**



# **Customizing**

To change preferences of Qlipper right click on the tray icon and select Configure. To change how many items get displayed in Qlipper in total right click on Qlipper and configure with the gear icon and change Clipboard Entries Count to your desired number of entries. To change how many characters Qlipper shows from the configuration screen change Maximum Display Size. To not have whitespace after pasting each line check the Trim Whitespaces for Every Line checkbox. To change your keyboard shortcut to bring up the menu from Qlipper use the Keyboard Shortcut button. To clear this keyboard shortcut press the x button to the right. To change the tray icon image to something custom press the button next to Tray

icon image which has an option to load a custom tray icon. To synchronize your clipboard and selection clipboards check the Use Platform Specific Extensions(Advanced) checkbox first. To toggle having your clipboard saved to storage as soon as possible check/uncheck the Synchronize history to storage instantly checkbox. To have Qlipper lose its stored history when you close Qlipper check the Clear Items on Exit checkbox. Next to have two separate clipboard synchronized select the No synchronization of clipboard & PSE menu item. To select an item and have uniform clipboard select Synchronize clipboard & PSE instantly. To have Qlipper save the history instantly check the Synchronize history to storage instantly checkbox. To need to confirm before deleting all of your clipboard history check the Confirm Clear History checkbox.



The Sticky Items divider stores things you want to always have in Qlipper to quickly paste. This icon will bring up a dialog where you navigate to where your new icon will be. To add a new stick item press the Add button and type or paste what you want always available. To remove a sticky item press the Remove button. To move a sticky item up in the list press the Up button. To move a sticky item down in the list press the Down button.

### **Version**

Lubuntu ships with version 5.1.2 of Olipper.

#### **How to Launch**

By default Qlipper should autostart and should be on the bottom right of your panel. If you need to get it running and it is not go to the menu Accessories • Qlipper. To launch it from the command line run

qlipper

The icon for Qlipper looks like a white piece of paper with a few lines of writing in different columns.

# **Chapter 2.4.6 nobleNote**

nobleNote is the default application to take a notes on Lubuntu. nobleNote also automatically saves whatever you enter into a note.

### **Usage**

To start a new note right click on the right hand column and select New note, press the white piece of paper with a green plus button, or Edit • New note. Then enter a title for this note by typing it. To open a note double click on that note from the right hand column which will open a new window with your note in it. To input text in the note type in the main body of this window after clicking on it. To rename your note to something, right click on the name of the note Rename note, press Control+Shift+R, or Edit • Rename note.

To select a different notebook to keep your notes organized click on it on the left hand column. If you wish to delete a notebook right click on a notebook and Delete notebook, with the notebook highlighted press Control + D, or Edit > Delete notebook. To add a new notebook press Control+N or Edit > New notebook.

To delete a note click on the note and press the yellow paper button with a red X on it, press Control + Shift + D, or edit Edit > Delete note.

To get back a note you deleted press Control+T or File • Trash. You can then see your deleted notes and select from deleted notes on the left hand column and then the content of the note on the right hand column. To restore a note press the Restore button. To permanently delete a note press the Delete button and then press Yes at the confirmation dialog.

To import notes from a file File ▶ Import.

To search through your notes for a particular string enter what you want to search for in the search bar which says Type to search for notes.

If you make a mistake typing and want to undo your changes press Control + z or Edit > Undo. If you wish to paste text into nobleNote press Control + v or Edit > Paste. To copy text from your note press Control+C or right click and select Copy. To select all text in a note press Control +A.

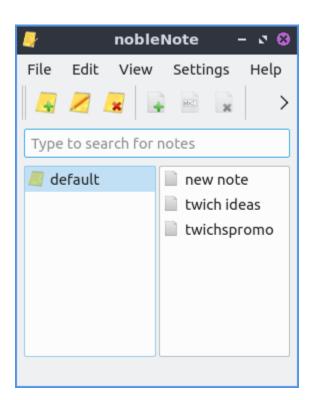
To toggle showing the toolbar press Control +Shift +T or View ► Show toolbar.

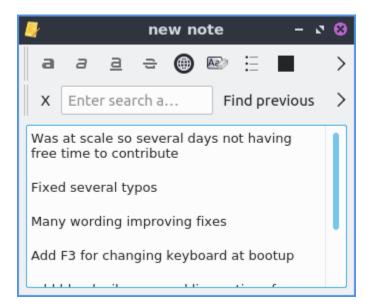
To bring back up your note nobleNote will leave a notebook icon in the system tray on the lower right hand corner of the panel. To bring the notes backup after closing them left click on the tray icon. To hide the main window right click on the tray icon and select Minimize. To bring back the main menu right click and select Restore. To fully close nobleNote right click on the tray icon Quit or press Control+Q.

To search a note for something type into the bar to find something in your note. To go to your next result press the Find next button. To find the previous result press the Find previous button. To change your font first press the > button and then select your font from the drop down on the left. To change your font size of your notes first press the >> button and then select your font size from the drop down to the right. To hide searching for something press the X button to the far left. To make a case sensitive search press the > and check the Case sensitive checkbox.

To make the text on your note bold press <code>Control+B</code> or the <code>a</code> button. To make your text on your note italic press <code>Control+I</code> or the a button. To underline your text press my underlined a button. To clear all formatting press the <code>Aa</code> button. To add a bullet point list press the button that looks like a bullet point list. To insert a hyperlink press <code>Control+K</code> or press the button looking like a globe. Then type or paste your link in the <code>Address</code> field and press the <code>OK</code> button. To change your font color for your notes press left click the color square to the left. To highlight your text first select the text and then press the square to the right and choose the color you want. To strike things out press the button with the line through it. To make bullet points in a list press the button with bullet points and a horizontal line.

### **Screenshots**





#### **Version**

Lubuntu ships with version 1.2.0 of nobleNote.

#### **How to Launch**

To launch nobleNote go to the menu Accessories ▶ nobleNote or run

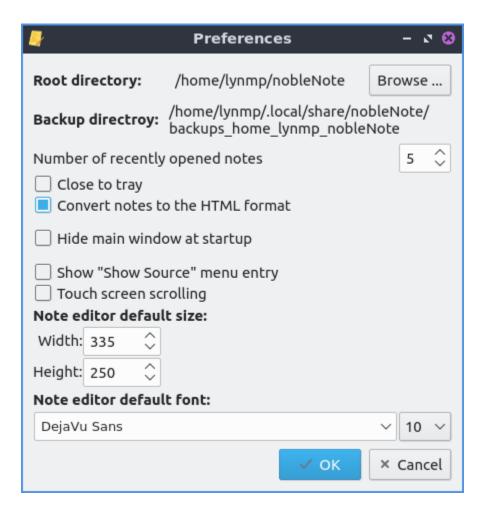
noblenote

on the commandline. The icon for nobleNote looks like a yellow pad of paper with a black lines.

# **Customizing**

To change preferences of nobleNote press Control +P or Settings > Configure. To keep nobleNote in your system tray after you close the nobleNote window check/uncheck the Close to tray checkbox. If you want to toggle showing notes in HTML format check/uncheck the Convert notes to the HTML format. To hide the main window when you open nobleNote check the Hide main window at startup. If you want to toggle the menu entry to show source check/uncheck the Show "Show source" menu entry. To reverse the direction of scrolling in nobleNote check the touch screen scrolling checkbox.

To change how wide to make the default for the new note editor Width field to how big to make the editor for the note. To change how high to make the editor size change the Height field. To change what the default font would be for editing is the large bar to the left under Note editor default font. To change the default font size change in the small to the right with a number.

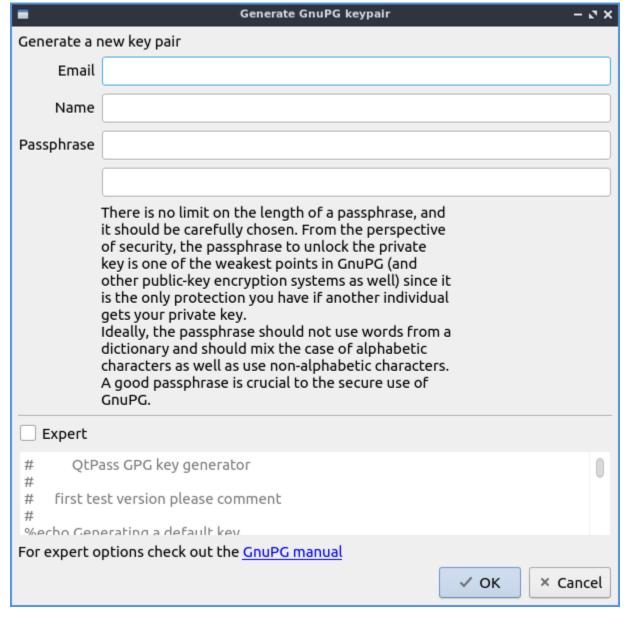


### **Chapter 2.4.7 QtPass**

QtPass is the default password manager for Lubuntu.

# **Usage**

On first launch you will be asked to generate a key to encrypt your passwords. The first field to generate the encryption key is to enter your email in the Email field. Next enter your name in the Name field. The next field is you need is the password twice in the Passphrase field twice to make sure you do not make a typo. To create the encryption key press the OK button.



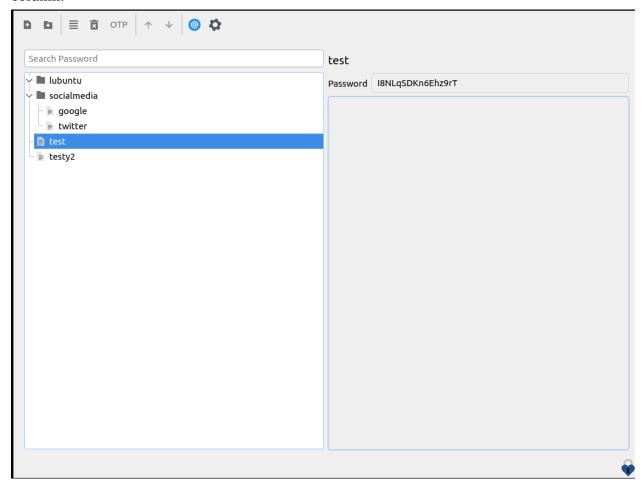
To actually store a password press the button that looks like a piece of paper with a + button. Enter the name of the file to store your password in New password file and press the OK button. To type in your password for an already existing password type it in the Password field. To show your password that you have check the Show password checkbox. To randomly generate a password press the Generate button. To change the length of the generated password change the Length field.

To get the password out of a the password manager you will need to enter your encryption key passphrase in the Password field.

To add a folder to put passwords in press the folder button with a + on it. To get an existing password into a folder left click and drag that password into the folder on the main list. To add a password to a folder right click on the folder and select Add password.

To search for a particular password type the password you are searching for in the Search Password text box at the top. To end up looking at your password simply left click on it in the list of passwords on the left column of the window and read it in Password on the right

column.



To Edit a password left click on 4 horizontal lines button. To make a new random password press the Generate button. To change the length of a randomly generated password change the Length field. To enter a new password with the keyboard type in the top left of the window. To type a description of your password type in the bottom field. To save changes to your password press the OK button and then enter your encryption passphrase to encrypt the passwords.

To delete a password you do not use anymore right click on it and select Delete or press the trash can button with an X button.

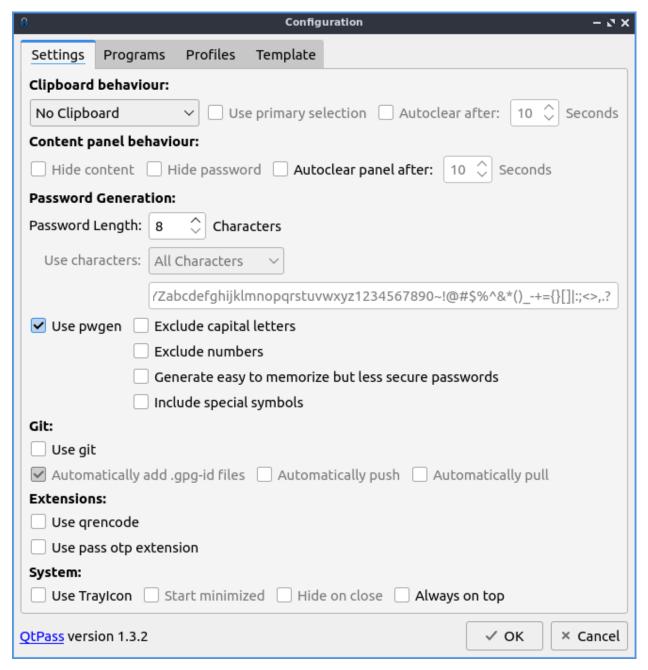
To manage what users can read these passwords press the @ button.

To rename a password right click on it and select Rename password.

# **Customizing**

To change your settings for QtPass press the Gear Button. To change if QtPass will copy passwords change the drop down under the Clipboard behavior drop down. To copy the password into primary selection check the Use primary selection checkbox. To have your password cleared from your clipboard after a while to not accidentally paste it anywhere check the Autoclear after checkbox and select how long in the field in the right. To hide everything on the right when you click on your password press the Hide content checkbox. To have the password hidden when you click on a password check the Hide password checkbox. To have the panel automatically clear itself check the Autoclear panel after checkbox and change how long on the right.

To change how long to make generated passwords change the Password Length field. To change what characters to use use the Use characters drop down message. To use a custom set of characters type in what characters in the Use characters and type in what characters you want to use. To toggle using the pwgen command line program check/uncheck the Use pwgen checkbox. To have autogenerated passwords not have capital letters check the Exclude capital letters checkbox. To have your generated passwords not have numbers check the Exclude numbers checkbox. To generate easier to memorize passwords check the Generate easy to memorize but less secure passwords checkbox. To have generated passwords include special symbols check the Include special symbols checkbox.



To use a tray icon for QtPass check the Use Trayicon checkbox. To start QtPass minimized check the Start minimized checkbox. To have the tray icon hidden when you close QtPass check the Hide on Close checkbox. To have QtPass be always on top check the Always on top checkbox.

To change profile settings on QtPass use the Profile tab. To create a new profile press the Add button.

# **Version**

Lubuntu ships with version 1.2.3 of QtPass.

#### **How to Launch**

To launch QtPass from the menu run Accessories > QtPass or from the command line run

qtpass

# 2.2.5 Chapter 2.5 Sound and Video

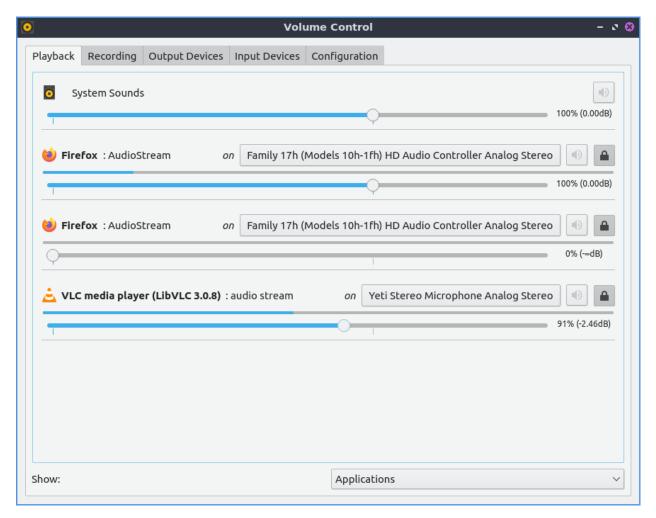
This chapter documents playing media and controlling volume and devices.

# **Chapter 2.5.1 PulseAudio Volume Control**

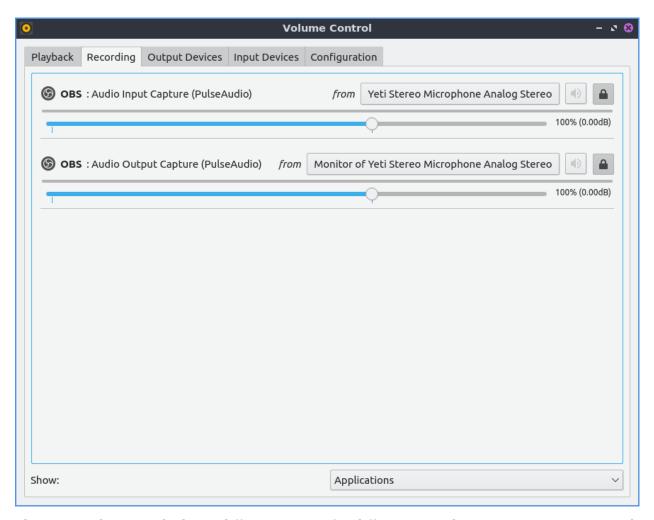
PulseAudio Volume Control is the default volume mixer for Lubuntu. It also manages multiple input and output devices for all programs on your system.

# **Usage**

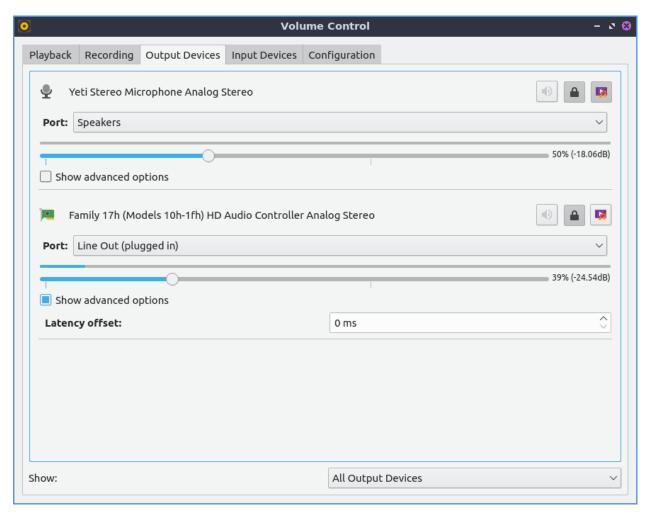
The Playback tab of PulseAudio Volume Control gives you the ability to the control the output device, mute, or change the volume of each application. To change the Volume of each application on the playback slide the slider to the right for more volume or to the left for less volume. Above your volume slider the is a bar that shows how much volume is currently emitted by that particular application. The button with an X over the speaker is a mute button and if it is a darker gray that application is currently muted and can't make any sound. The drop down Show drop down menu lets you see your virtual streams and applications. In the bottom right hand corner is the current volume level viewed as a percentage. This program also in software allows you to go over 100 percent volume if it is too quiet. If you have multiple sound outputs enabled you can change what output of an application by using the on menu.



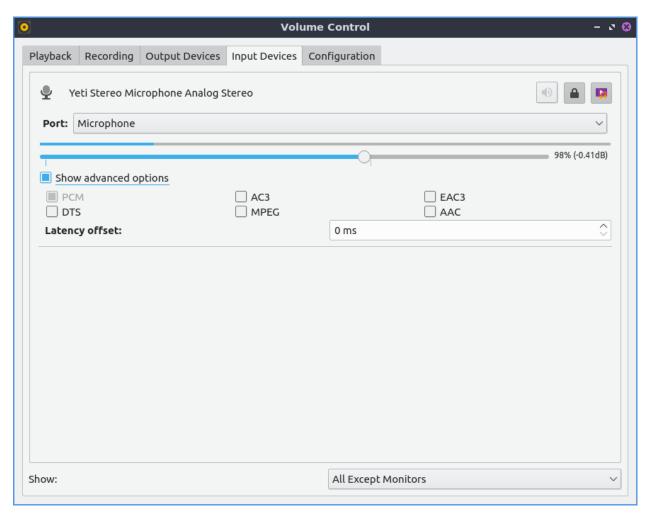
To view settings for applications recording audio use the Recording tab. If you have no applications recording the tab will say No application is currently recording audio. To mute your recording press the button that looks like a speaker with an x over it. To increase the volume of recording move the slider to the right. To decrease the volume of recording move the slider to the left. To change what source an application is recording use the drop down with the word From to the left. To adjust the difference of each left and right press the lock button or press it again to go back to one slider. To change the left audio channel change the use the Front Left slider. To change the right channel or audio use the Front Right slider.



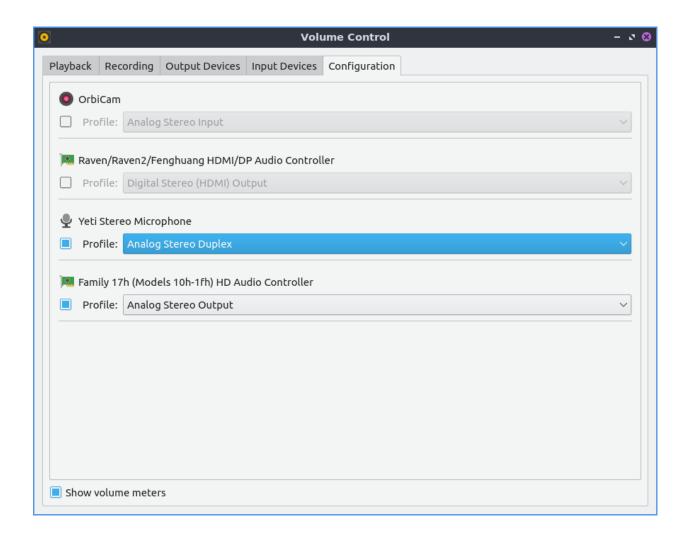
The Output devices tab shows different output for different sounds. To mute one output such as a set of speakers press the button that looks like a speaker with an X on it. To increase the volume of an output slide the slider for that output to the right. To decrease the volume for each output slide the slider to the left. To see the sound output of each output device see the bar over the volume slider. To view more advanced options check the Show advanced options will show advanced options. The advanced option for Latency offset will be shown for for how long to shift offset for latency for say a badly synced video. To the right of the mute button there is a lock button where you can change the balance between the left and right speakers by sliding the sliders just like for volume. For stereo setup with a subwoofer for example will have channels Front Left, Front Right, and Subwoofer each having there own channels to adjust volume. To change back to a single slider for each channel press the lock button. To select another source to output audio use the Port drop down menu.



The Input devices tab manager your sound inputs. To mute your microphone in pulseaudio toggle the button that looks like a speaker. To adjust input volume slide the slider to the right to increase volume or to the left to decrease volume. To select which audio input such as line in or microphone for your device is in the Port drop down but this menu is hidden if you do not have inputs. Right below Port will show how much volume is being picked up by the input device. To change left and right channels separately press the lock button. To change your volume on each channel drag to the left for more volume or to the right for less volume. To get back to one volume slider press the lock button again. To mute your input press the button to the left on the right hand side. To toggle seeing more options press the Show advanced options checkbox. With this shown the Latency offset field will allow you to change the latency offset.



The Configuration tab has different sound profiles for each different output device. To change how sound comes out of your speakers or headphones varying for example the number of speakers for each device change the Profile drop down menu. Choosing for example an Analog Surround 2.1 Output will let you not just change stereo but also control the volume of the subwoofer. To enable or disable an audio output press the checkbox to the left of Profile. To toggle PulseAudio volume control showing a how much sound a speaker, headphone or microphone is making check/uncheck the Show volume meters checkbox.



### **Version**

Lubuntu ships with version 1.1.0 PulseAudio Volume Control.

# **How to Launch**

To launch PulseAudio Volume Control from the menu Sound & Video ▶ PulseAudio Volume Control or run

pavucontrol-qt

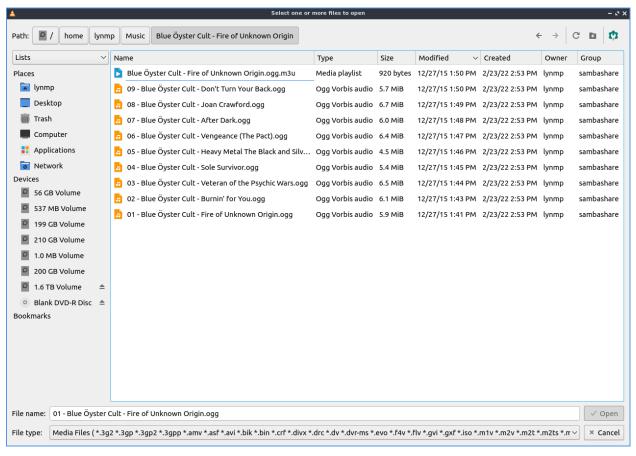
from the command line. Another way to launch PulseAudio Volume Control is to left click on the volume applet in the panel and click the Mixer button. The icon for PulseAudio Volume Control looks like a black and yellow speaker.

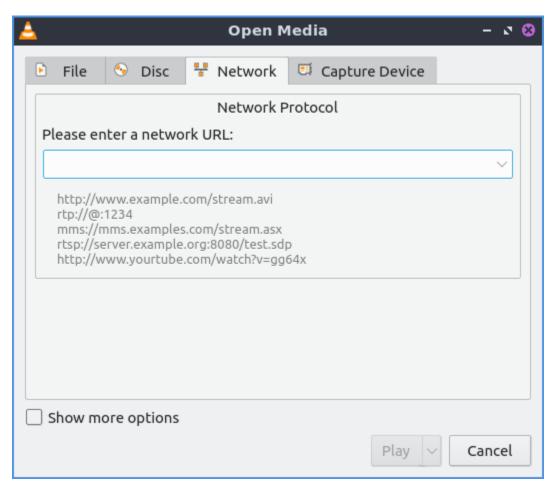
# Chapter 2.5.2 VLC

VLC is the default media player for Lubuntu that can open both audio and video files.

### **Usage**

To open media stored locally on your system click media open Media > Open File and navigate your local files or press control +0 on the keyboard to open files stored locally on your machine. If you have music on a USB device, optical disk, or another partition the Devices segment will let you navigate to those files from here. If you want to say listen to two videos or songs from an album you hold Control +left click to open multiple files at once or press Control+A to select all files in a folder. If you wish to open media from somewhere on the internet on Media > Open Network Stream or press Control + N. To open a whole directory use Media > Open Directory or press control +F. VLC also keeps track of recently opened media in case you want to view media again in Media > Open Recent Media > file name. If you have copied a path in your clipboard you can press Control +V or Media > Open Location from clipboard to quickly open a location in your clipboard.





To pause playback of a file press the button that look like two vertical lines or Playback Pause. To resume playback press the play button which looks like a triangle or Playback Play. To stop playing a file completely press the square stop button or Playback Stop. To toggle fullscreen press the button which has the four corners of the screen or Video Fullscreen to make it fullscreen and the four corners to have it back into windowed mode. To have VLC always on top View Always on top and check the checkbox in the menu and use the menu the same way again to make it back to how it was before.

On the bottom right of VLC there is a bar that gets wider for volume. Click farther to the right to increase volume within VLC or press Up arrow to increase volume or Down arrow to decrease volume. Or hover the cursor over this bar and use the mousewheel to control volume. The button that looks like a speaker next to this toggles mute in VLC. Another way to mute the volume is to Audio • Mute. To unmute press use any of the things you used to mute the volume again.

To see how long you have been watching the current piece of media counts up above the play pause button in a time. At the other side a number will show the length of the media you are playing and in-between is a slider with the current time. Moving the slider to the left will rewind playback while moving it to the left will fast forward playback. When you mouseover the progress for playback it will show the time at that point and that will jump to that time when you left click. Another way to jump to a specific time is to press control +T or Playback • Jump to Specific Time. To move back 10 seconds in playback press Left arrow. To jump forward 10 seconds in playback press Right arrow.

To move to the next item in a playlist press the button that has two arrows pointing to the right and a vertical line or Playback ► Next. To move to the previous item in a playlist press

the button with two leftward pointing arrows and a vertical line or Playback > Previous.

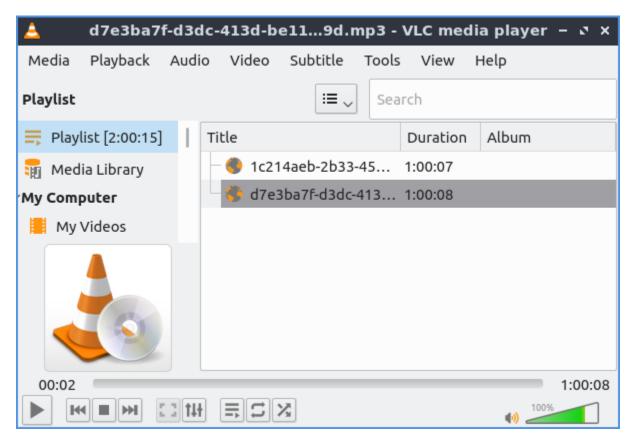
To make the same sound come out of both speakers go to Audio > Stereo mode > Mono. The sound to make a different left and right channel on each speaker will be Audio > Stereo Mode > Stereo. To make all sound come from the left channel Audio > Stereo Mode > Left and likewise for Right. To change what device audio from VLC come out Audio > Audio Device > output device you want. You can also change the stereo mode by right clicking on the video and selecting Audio > Stereo Mode and selecting the audio mode you want.

To view a playlist of music or videos you can view press the button that is several horizontal lines and then a triangular play button on it or press Control + 1. This will bring up a whole view of your playlist. To return to your original view press Control + 1. To add more files to your playlist right click on the bottom of the playlist window and click add file to add an additional file. To play a particular file from a playlist double click on the file. To remove a file from a playlist right click on it and select Remove Selected. To remove all files from a playlist right click and select Clear the playlist or press Control+W. To save a playlist to a file press Control + Y, Media • Save Playlist to File, or right click and select Save Playlist to File.

To see the name of each file is listed in the Title column. To see how long each file will take to play view the Duration column. To see what Album an Audio track comes from view the Album column. To change the width of each column press left click on the border between columns and drag until the desired size. If you want to see other metadata on your playlist you can right click above the songs in the playlist and check the checkbox before each checkbox or uncheck it to hide that column from showing. You can choose to show or hide the Duration, Artist, Genre, Album, Track number, Description, URI, ID, Rating, Cover, Disc number, or Date. To view the playlist in its own window uncheck View > Docked Playlist and check it again to dock to have playlist return to the same window.

To change the view of the playlist right click playlist view mode to the version of the playlist you like the look of the best. To switch to where to find your music left click the My Music on the left side pane. To switch to where you find your videos on the left side pane click the My Videos side pane. If you wish to save a current playlist to a file Media > Save Playlist to File or press Control +Y. To change how to sort your playlist right click on the playlist and select Sort by and select how you want to sort your checklist. To increase the size of the text on your playlist right click on the playlist and select Display size > Increase and conversely to lower playlist text size select Display size > Decrease.

To change the view mode of the playlist to icons for each file View Playlist View Mode Icons. To have a detailed list showing your your playlist View Playlist View Mode Detailed List. To have a simple list for your playlist view View Playlist View Mode List. To have your playlist viewed in a 3d picture with thumbnails View Playlist View Mode PictureFlow.

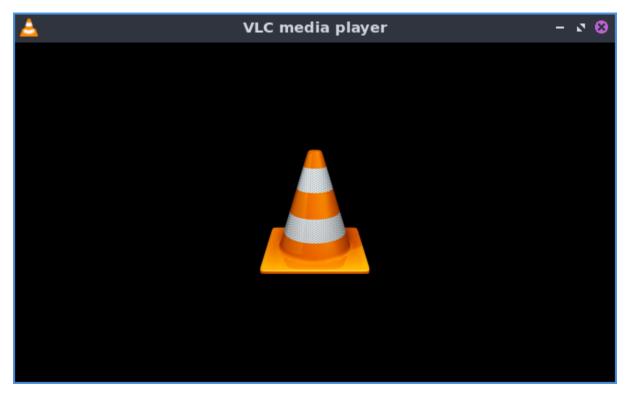


To loop the current playlist over and over press the button with an arrow pointing to the right and then another arrow below it pointing to the left. To randomize your playlist press the button with two crossing arrows on it.

To speed up playback faster than normal press the + key or use Playback > Speed > Faster. To slow down playback slower than normal press the - key Playback > Speed > Slower. If you want to reset your speed to normal Playback > Speed > Normal speed. If you want to have VLC end at the end of the playlist click the checkbox Media > Quit at end of playlist. If you want to guit VLC press Control+0.

To view info on your media press Control + I or click Tools ► Media info.

If you want a minimal interface that hides menubar and toolbars press Control +H or View Minimal View. To access the functionality of the menubar you can right click on where the video will play. To get back to the default view press Control+H again or right click and then View Minimal View.



To view more advanced controls View ► Advanced Controls. To record part of something in VLC press the red circle button to start recording and once it turns gray to stop recording.

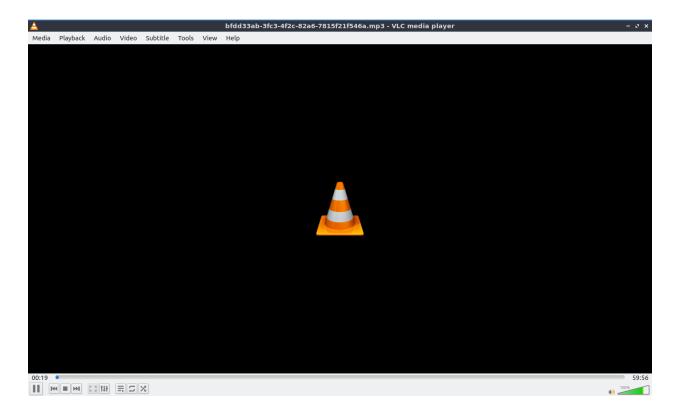
To view to a status bar with what is playing and the speed with View > Status bar. On the status bar the title of the currently playing file is on the left hand side. To view your current playback speed is towards the right hand side and to change it left click on the playback speed and drag to the desired speed. Finally, on the far right is the duration of the file.

To change the aspect ratio of a video Video • Aspect Ratio and select the one you wish. To crop a video to only part of your screen Video • Crop and select the aspect ratio you want to crop the video to. To take a screenshot of the currently playing media Video • Take Snapshot.

If you are playing audio and want a visualization while listening to an audio file Audio ► Visualizations and choose the one you want. To turn off the visualization Audio ► Visualizations ► Disable.

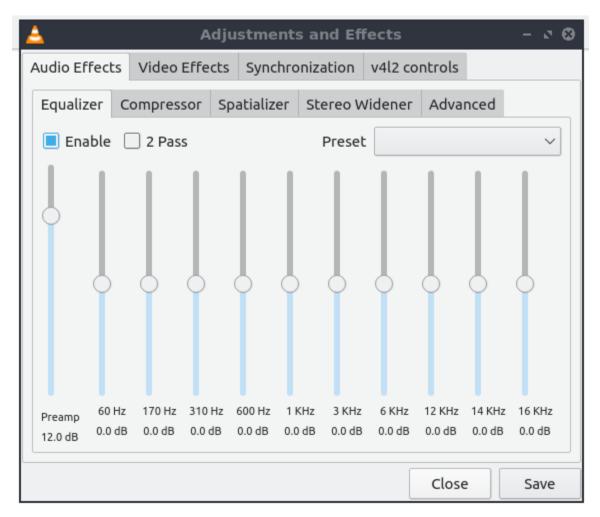
VLC will have an icon in the system tray when it is open and it looks like a traffic cone. If you right click on the tray icon you can select Pause to pause playback. To stop playback right click on the tray icon and select Stop. If you have paused or stopped playback and want to resume right click the tray icon and select Play. To go to the next thing in the playlist right click on the tray icon and select Next. To move to the previous item in the playlist right click on the tray icon and select Previous. To mute all VLC by the tray right click and select Mute. To turn up right click on the system tray and select Increase Volume. To turn down the volume right click on the system tray and select Decrease Volume. To open a dialog to open more files right click on the system tray and select Open Media. To quit VLC from the system tray right click on the tray icon and select Quit.

### **Screenshot**

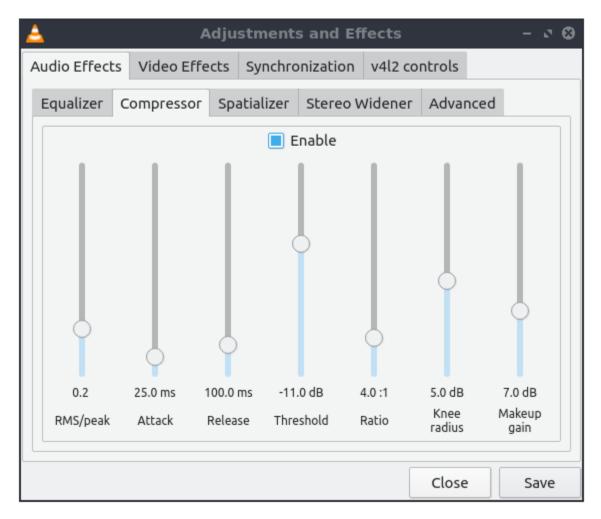


### **Effects and Filters**

To open an equalizer press the button that looks like several physical slider switches, press Control+E or Tools • Effects and Filters and use the Audio effects tab and Equalizer subtab. To enable the equalizer check the Enable checkbox. Then to increase or decrease the sound at each frequency up to increase the volume at that frequency. To select an equalizer preset use the Preset drop down menu. On the Advanced tab of audio effects there is a meter to adjust the pitch of the currently playing audio. To enable this effect check the Enable checkbox. To increase the pitch of the audio move the slider up. To decrease the pitch of the audio move the slider down. To open a dialog

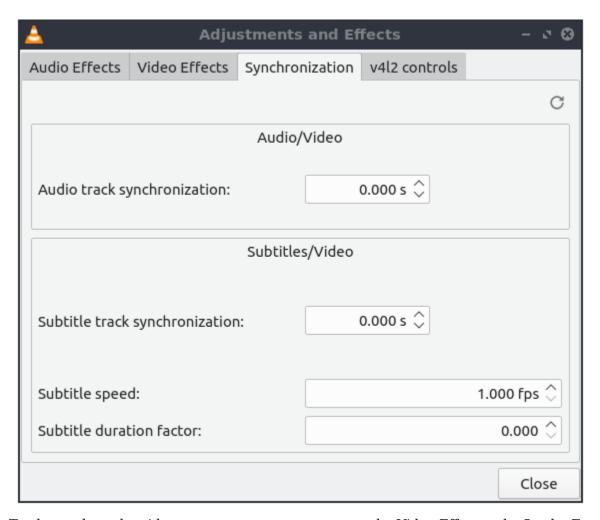


To change so that there is not as much difference between quiet and loud which makes everything seem louder use the Compressor tab. To actually enable the compression to make everything louder check the Enabled checkbox.



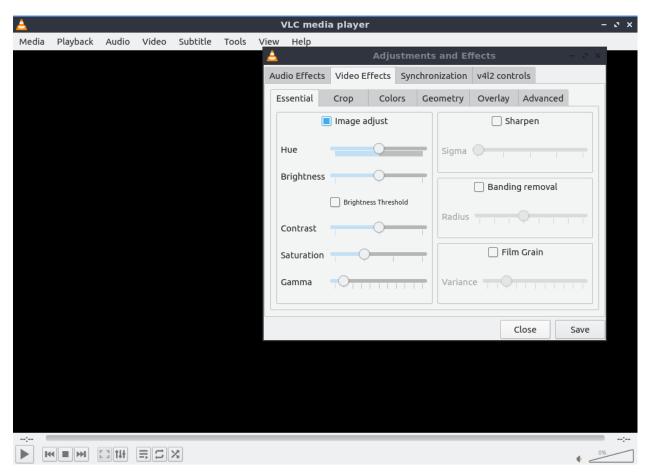
The setting for widening the width of a stereo are on the Stereo Widener tab. To toggle stereo widening check the Enable checkbox.

To change how the audio and video synchronize with the rest of the file use the Synchronization tab. To change the synchronization of your audio with the video change the Audio track synchronization field to get it to match with your video. To change the synchronization of subtitles use the Subtitle track synchronization field. To change how many frames per second your subtitles change at change the Subtitle speed field to change how many frames per second on your subtitle. To change how long the subtitle stays on the screen change the Subtitle duration factor.

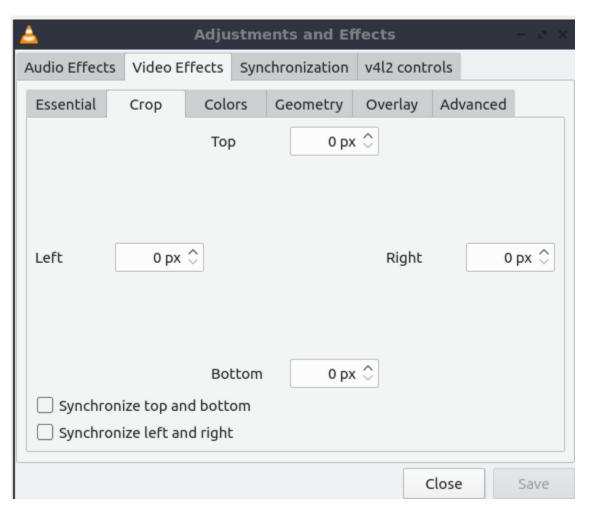


To change how the video appears on your screen use the Video Effects tab. On the Essential sub tab for how your brightness contrast and other things appear. To change your image press the Image adjust checkbox. To change the brightness use the Brightness slider with to the left being darker and to the right being lighter. However extreme values to the left or right are not that viewable. As such you may want to make small adjustments with the Left arrow and Right arrow keys. To change the color of the video use the Hue slider. To change the contrast use the Contrast slider with the left being lower contrast and the right being higher contrast. To change how saturated your colors are use the Saturation slider.

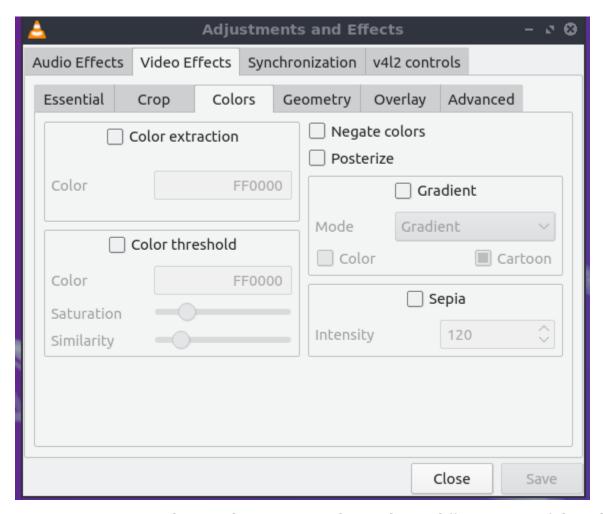
To removal horizontal lines from playing back a video check the Banding removal checkbox. To add a film grain effect check the Film Grain checkbox. To adjust how much the film grain varies slide the Variance slider.



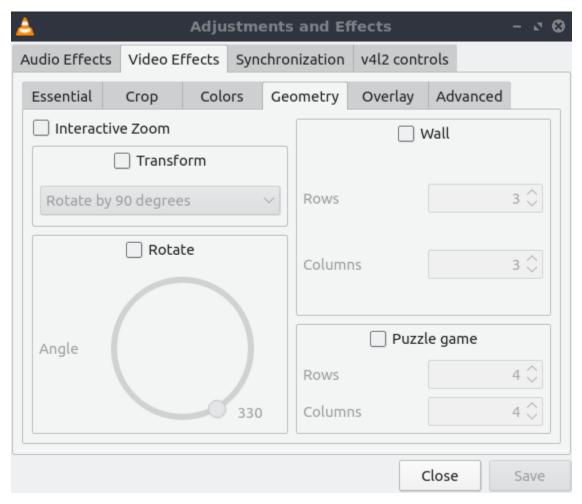
To crop pixels off the margins use the Crop subtab. To take a number of pixels off the top use the Top field. To take pixels off the left of the screen of the video use the Left field. To take pixels off the right side of the screen use the Right field. To take pixels off the bottom use the Bottom field. To have your top and bottom take the same number of pixels taken off the top and bottom check the Synchronize top and bottom checkbox. To take the same number of pixels off your left and right hand side check the Synchronize left and right checkbox.



To have settings to change the colors showing in VLC use the Colors subtab. To entirely invert colors check the Negative colors checkbox. To reduce the total number of colors on your video from slight transitions check the Posterize checkbox. To enable a sepia tone for the video check the Sepia checkbox. To have a close to black and white tone enter a low number in Intensity. To have a more sepia tone enter a higher number in Intensity.



To zoom or rotate a video use the Geometry tab. To choose different parts of the video to zoom in on as it plays check the Interactive Zoom checkbox. To do simple things like flip or rotate your video first check the Transform checkbox. To rotate your video 90 degrees to the right select Rotate by 90 degrees under Transform. To rotate your video 180 degrees to the right select Rotate by 180 degrees under Transform. To rotate the video 270 degrees to the right select Rotate by 270 degrees under Transform. To flip the image horizontally select Flip horizontally under Transform. To rotate your video by the number of degrees you want check the Rotate checkbox and then select which degree you want to have have the video rotated.



To add a logo to a video file check the Add logo checkbox. To choose which logo to add type the logo in the Logo field or press the ... button. Use the Opacity slider to change how transparent the logo appears. To change how far the logo is from the top in pixels change the top field. To change how far to put logo from the left of the video change the Left field.

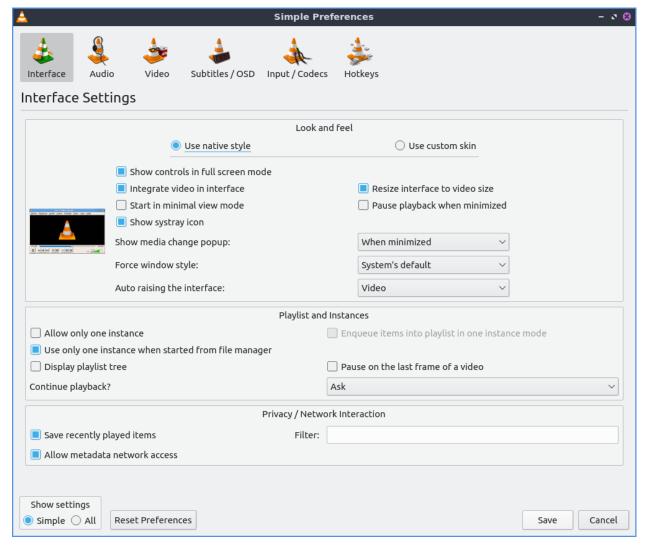
### Saving or Converting Files

To save or convert a file in VLC press Control+R or :menuselection: `Media -> Convert/Save` and a dialog will pop up. To add a local file to save or convert use the File tab and press the Add button. To Save or convert files off a disc press use the Disc tab. To save a network URL to use the Network tab and enter the URL in the Please enter a network URL field. To convert or save a the files press the Convert/Save button.

To change what file format to convert to use the Profile drop down menu. To choose what file name to save your file use the Browse button. To start converting the file press the Start button.

# **Customizing**

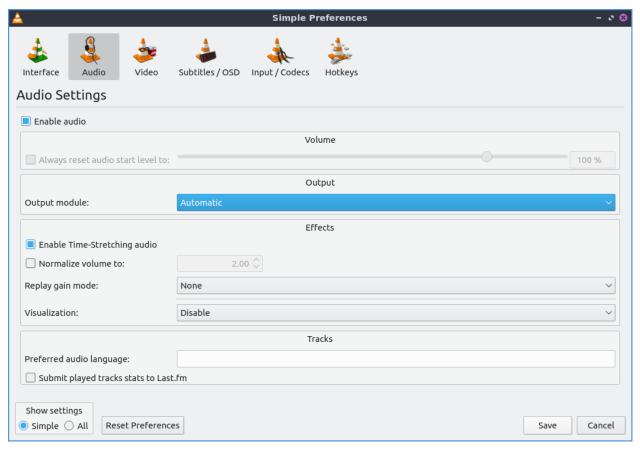
To view your preferences of VLC press control +P or Tools > Preferences. To change how VLC looks and what buttons it has use the Interface tab. To choose to use a custom skin for VLC press the Use custom skin radio button and then press Choose to find your custom skin. To toggle showing buttons for pausing, changing tracks and the volume control check/uncheck the Show controls in full screen mode checkbox. To have the video display in its own window uncheck the Integrate video in interface checkbox. To start VLC in a minimal view mode check the Start in minimal view mode checkbox. To have VLC pause playback when the VLC window is minimized check the Pause playback when minimized checkbox. To toggle showing an icon in the system tray check/uncheck the Show systray icon checkbox. To change VLC showing a popup when the media changes like when having multiple files in a playlist change the Show media change popup menu. The Force window style changes the way VLC windows are drawn if you want a custom layout for just VLC. To allow only one window of VLC check the Allow only one instance checkbox. If you have only one instance check the Engueue items into playlist in one instance mode checkbox to add new files to play at the end of the playlist. To have VLC continue playback of files changes change the Continue playback? menu and select Always to always playback or ask to ask for playback.



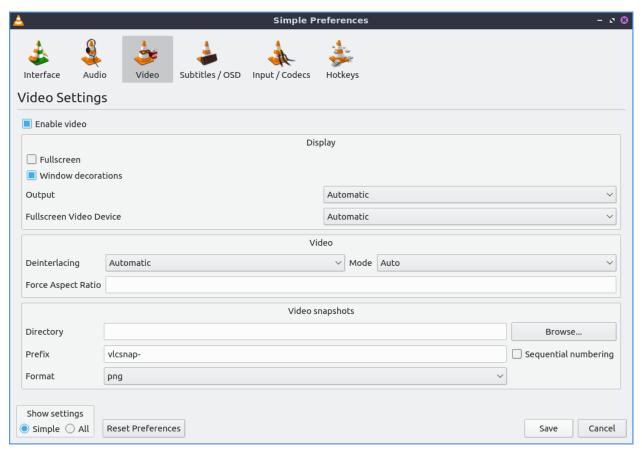
To cancel your changes in this window and close it press the Cancel button. To Reset your

preferences to press the Reset Preferences button. To Save your preferences and close the window press the Save button.

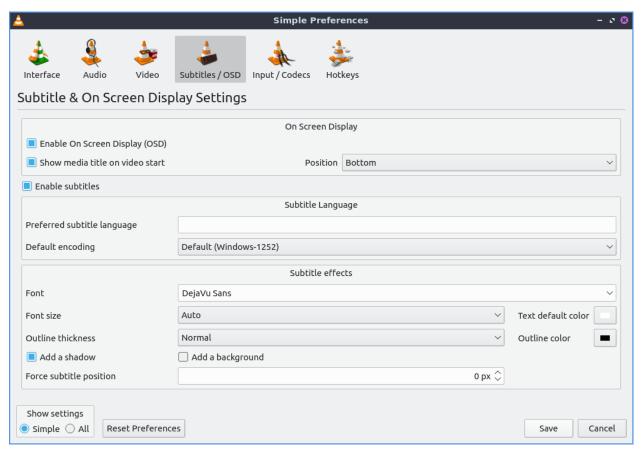
To manage your audio settings use the Audio tab. To disable audio entirely uncheck the Enable audio checkbox. To change the output of audio type change the Output module menu. To add a visualization of Audio change the Visualization menu. To change replay gain mode change the Replay gain mode menu. To allow playing audio at different speeds without changing the pitch is to check the Enable Time-stretching audio checkbox. To submit what tracks you play to Last.fm check the Submit played tracks stats to Last.fm checkbox and then put in your username in the Username field and your password in the Password field.



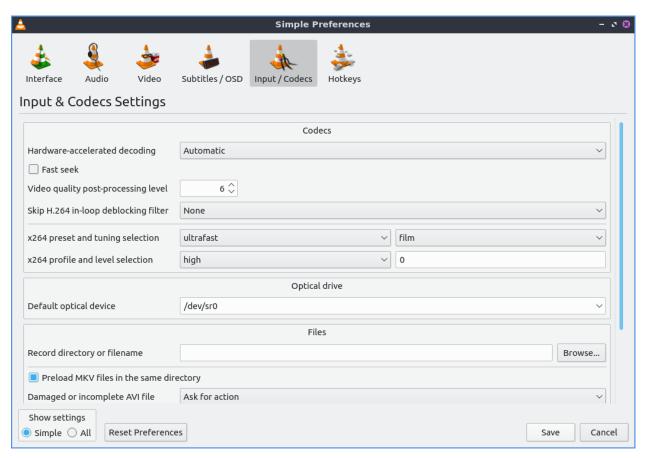
To change settings with how VLC deals with video use the Video tab. To disable video and thus save some processing power uncheck the Enable Video checkbox. To automatically have fullscreen video check the Fullscreen checkbox. To have window decorations on a separate video window check the Window decorations checkbox. The menu Fullscreen Video Device menu lets you select which monitor to play the full screen video on. To change the backend for VLC to play videos change the Output menu. To turn deinterlacing on or off change Deinterlacing menu. The mode Mode changes the mode to deinterlace the frames of video. The Video snapshots section shows settings for VLC snapshots. The Directory is what directory to save snapshots of videos in and to choose one in a pop up window press the Browse button. The Prefix field lets you have a preset to the snapshot file name. You can choose the format of the snapshot in the Format menu.



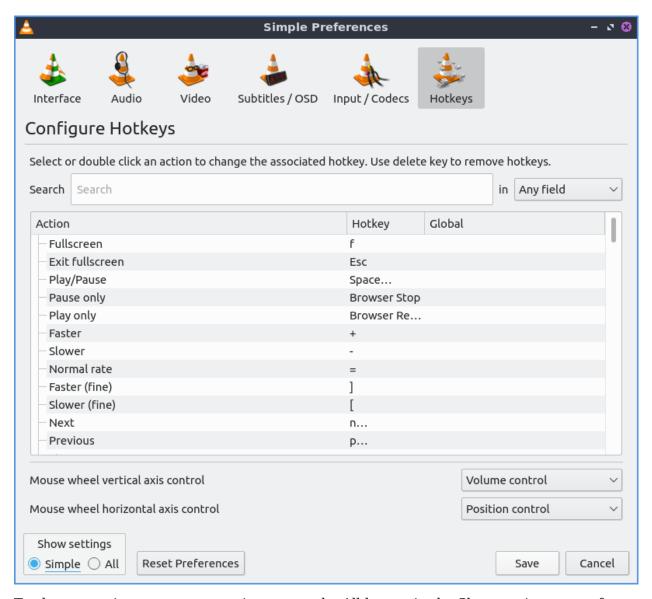
To view your settings for subtitles and on screen display choose the Subtitles/OSD tab. To disable the On screen display uncheck the Enable On Screen Display checkbox. The checkbox Show media title on video start shows the video title at the start of a video. The Position menu lets you choose where to show the media title. To toggle showing subtitles check/uncheck the Enable subtitles checkbox. The default encoding Lets you change how the subtitles are stored and resented as characters on this. To change the font of your subtitles type in the name of your font in the Font field. To change the font size of your subtitles change the Font size menu. The button Text default color lets you change your subtitles. To change the outline thickness of subtitles change the Outline thickness menu. To change the color of the outline press the Outline Color button to bring up a popup to select a color. To add a shadow to subtitles check the Add a shadow checkbox. To add a background check the Add a background checkbox.



To change settings with codecs choose the Input/codecs tab. To change your settings for hardware-accelerated decoding use the Hardware-accelerated decoding which you can choose a specific kind of decoding. To choose to seek faster than more precisely check the Fast seek option. To the quality of video VLC encodes change x264 preset and tuning selection which faster recording taking less resources but being less quality. To change your default optical device the drop down menu next to Default optical device to change your default optical device. To choose where save things you record with VLC change type where you want in Record directory or filename or press the Browse button. To change your caching policy depending on your network latency use the Default caching policy drop down menu.



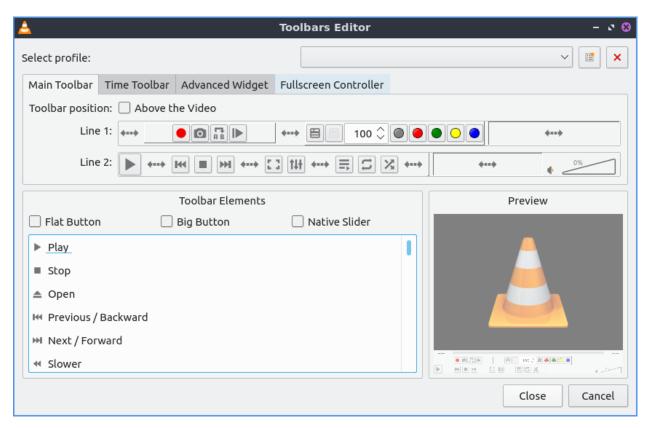
To view your hotkey settings use the Hotkeys tab. The column Action describes what your keyboard shortcut will do. The Column Hotkey is the keyboard shortcut to do what is said in the Action column. To change your keyboard shortcut double click on the shortcut in the Hotkey column and press the keyboard combination you want to set it to. To change what scrolling vertically does for use the Mouse wheel vertical axis control menu. To search for a hotkey for a particular option enter it in the Search field.



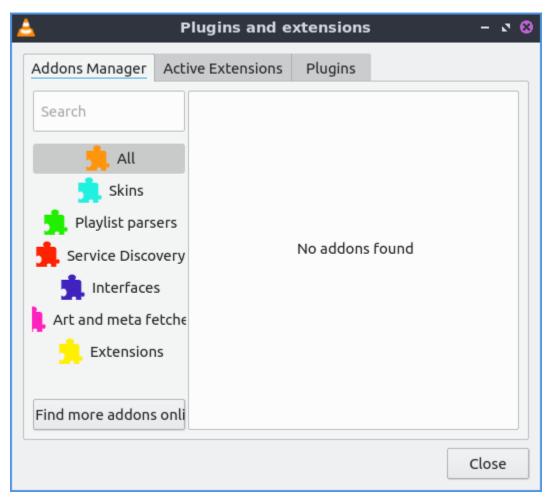
To change to view even more settings press the All button in the Show settings part of your prefrences. To switch back to simple settings press the Simple button. To search for a setting in the Advanced settings interface use the Search bar.

To change how the user interface of VLC appears Tools • Customize Interface. To select a profile that works as a default some ones for older versions of VLC choose the Select profile: drop down menu. To create a new profile press the button to the right press the paper with a sun on it. To move the main toolbar above the video check the Above the video checkbox. Below will be the lines of each toolbar for example Line 2 for each line of toolbar. To see a summary of what each button does hover the mouse over it and a description will pop up. To move a button to the left or right left click and drag to the left and right the button to the desired position. To see a preview of how this will effect the media player and see it press the Preview section of the window.

To change the elements for the time toolbar use the Time toolbar tab. To move elements on the time toolbar left click on the element and drag it into place. To change the location of advanced features use the Advanced Widget tab. To move the elements on the advanced toolbar left click on the element and drag it into place.



To view plugins and extensions dialog window Tools • Plugins and Extensions. To download more extensions press the Find More Online button. To view only plugins you have installed on your system check the Only installed checkbox. To view all addons click on the All tab of addons. To view only skins to view VLC differently press on the Skins tab. To view an extensions to add on click on the Extensions tab.



To show your Active extensions use the Active Extensions tab. To reload to see if there are any more press the Reload extensions button. To see more information on an extensions press the More information button. To change how many frames per second are on the subtitles change use the Subtitle speed field. To change how long the subtitles stay on the screen change the Subtitle duration factor field.

## **Version**

Lubuntu ships with version 3.0.17 of VLC.

#### **How to Launch**

to launch VLC in the menu go to Sound & Video > VLC media player or run

vlc

from the command line. The icon for VLC looks like a traffic cone.

# 2.2.6 Chapter 2.6 Games

This Chapter documents games included in Lubuntu.

## Chapter 2.6.1 2048-Qt

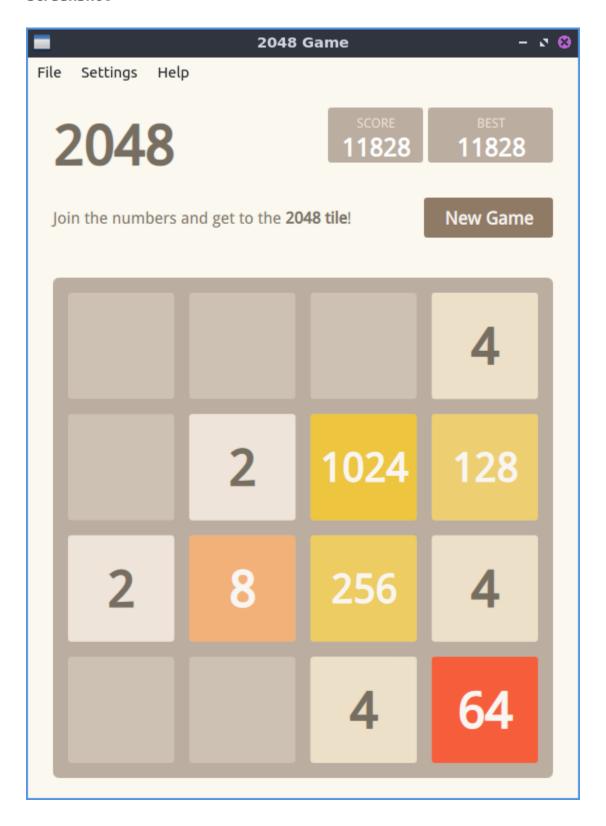
2048 is a fun simple lightweight game included in Lubuntu by default.

### **Usage**

To play 2048-qt you use the arrows keys to combine blocks with the same number on them without having no possible moves at which point the game is over. As you move the blocks all the blocks in the game move in the direction of the arrow key your press. As you combine numbers your score increases by the sum of the block(s) you combine and is shown towards the upper right hand corner of the window. After each move a new block appears. In the upper right hand corner is your BEST score in the game. To the left of you high score is your SCORE with the number of your current score. When your score increases you will see a +x where x is the number your score increases by.

If midway you want to restart to a new game press the New Game button on the right hand side or File > New Game or press Control+N. If you want to close 2048-Qt from the keyboard press Control+Q.

## **Screenshot**



### **Version**

Lubuntu ships with version 0.1.6 of 2048-Qt.

#### **How to Launch**

To launch 2048-Qt go to the menu Games -> 2048-Qt or run

2048-qt

from the command line. The icon for 2048-Qt looks like a green square with 2048 written in white text.

# 2.3 Chapter 3 System Tools and Preferences

This chapter documents tools to manage your system, change preferences, and themeing Lubuntu.

# 2.3.1 Chapter 3.1 System Tools

This chapter documents tools to administer your system.

#### Chapter 3.1.1 htop

htop is an neurses text interface task manager that can be controlled by the keyboard. htop also closes unresponsive programs by killing the process.

#### **Usage**

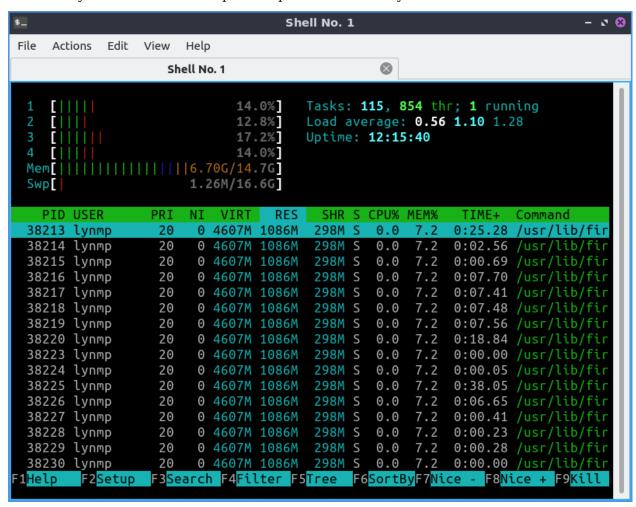
To view how much RAM is being used on your system is under Mem and then a [ number based on how many Gigabytes of memory. The Swp line lists how much swap is used. The numbers going down with a bar with a percentage next to them display CPU usage on each of your CPU cores.

To see how many process are running on your system see the Tasks row. Load average shows your system load over the past one five and fifteen minute is why there are three numbers see Wikipedia load (computing)<sup>20</sup> for more information. Uptime shows how long your computer has been booted.

After the bottom there is a green bar that says PID for the Process ID of a user, The user the process responds to, RES is how much RAM the process is currently using. CPU% shows how much as a percent of CPU time the process is using, MEM% is a percent of the RAM your process is using. Time shows how long the process has been running. Command shows the command line command of the process. To view any cut off part of the Command field press the Right Arrow to view the cut off area of the window. To move your window back to where it was press the Left Arrow key.

<sup>&</sup>lt;sup>20</sup> https://en.wikipedia.org/wiki/Load (computing)

To select the process below the currently selected one press Down Arrow to select the process below. To select the process above the currently selected one press Up Arrow to select the process above. To select the next group of processes on your screen press Page Down or move the scrollwheel on the mouse down. To select the previous group of process on your screen press Page up or move the mousewheel up. To choose the last process on your system press the End key. To choose the first process press the Home key.



You can press F1 or ? to bring up a help dialog on htop. Pressing F3 or / lets you search for a particular process. Pressing F4 makes it so you can only see processes matching a certain pattern. To get out of the view of your search for a pattern press the Escape key. To reverse sort order press Shift +I. Pressing F5 is what you press to view the processes in a tree. To get back to the default view press F5 again. Pressing F9 lets you kill a process with different signals to send to the process and 15 will terminate the process while 9 will Kill it. Lastly pressing F10 or q will quit htop and return you to a terminal.

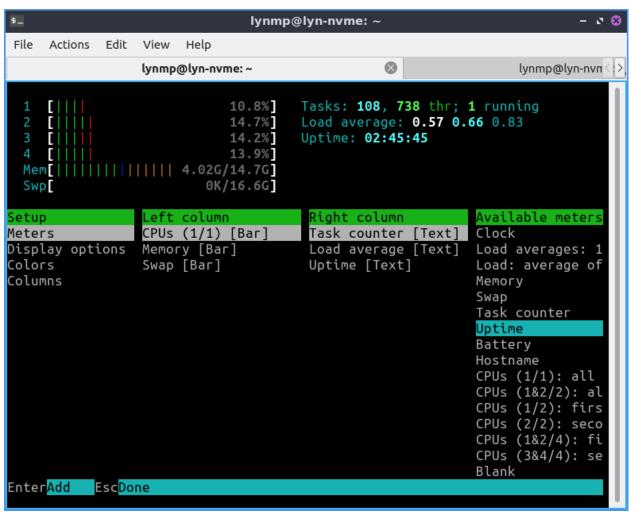
```
EnterDone EscClear Filter:
```

To change how your process are sorted press F6 which will bring up your own menu to sort by by PID, USER, Priority, NICE, M\_Size, M\_Resident, M\_Share, State, Percent\_CPU, Percent\_Mem, Time, or Command. To select a menu item press Enter.

#### Customizing

F2 brings about a customizable settings on htop. The Meters options brings up meters like CPU average. To see what kind of meter you have it will be shown in brackets. To move a meter press Enter and press the arrow keys to move in the direction of the meter you want to select. To save a meter in that place press Enter again. To delete a meter press Delete. To add new meter move all the way to the right by pressing the Right arrow under Available meters. To add a meter press Enter and to select which one press the arrow keys.

The Display Options has option for different ways to display in htop. To toggle an option on press Spacebar. The Colors tab brings up different color schemes for htop. To select a different color scheme press the Up arrow or Down arrow keys. To select a new color scheme press the Spacebar key.



To change what columns end up showing select Columns on the setup menu. The column Active Columns shows what columns you will have on htop with the top being the leftmost column in htop and the bottom being the rightmost. To select a different column press Up arrow or Down arrow. To move a column up in the list press F7. To move a column down press F8. To remove a column press F9. To see what other columns there is the column Available Columns. To add a column when having Available Columns and select the column you want and press F5.

### **Version**

Lubuntu ships with version 3.0.3 of htop.

#### How to launch

To launch htop from the menu System Tools ► Htop with the Icon that looks like the green H made out of text or run

htop

from the command line.

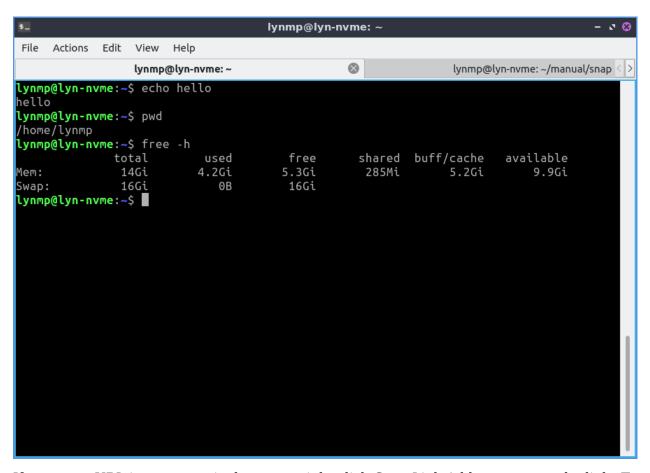
### **Chapter 3.1.2 QTerminal**

QTerminal is the default terminal of Lubuntu. It also has a drop down version. If you want to learn more about the actual commands you run in the terminal see Appendix  $\mathbb{C}^{21}$ 

#### **Usage**

To open a new tab go to the File \* New Tab or press control + shift + t. You can also open a new tab by double clicking empty space on the tab bar. To close a tab press the X button near the right hand side of the tab, File \* Close Tab, or press Control+Shift+W. You can change between tabs by left clicking on the tabbar on the tab you want to switch to. If you want to switch between tabs click on the different click on that tab or press the left and right arrows in the upper right corner to see different tabs if you can't see them all. Another way to switch between tabs is control + page up or control + page down. If you want to copy text from the terminal press control + shift + c or Edit \* Copy Selection to copy text. If you wish to paste text into the terminal you can control + shift + v, right click and select Paste Clipboard, or Edit \* Paste Clipboard however you should be really careful it is not a malicious command and shows the command you are pasting in. If you want to paste selected text in the terminal press Shift + Insert or Edit \* Paste Selection. If you want to open a new terminal window Control + Shift + N or go File \* New Window. To try to autocomplete the command you type in a command line press the Tab key. To see what else a command could be hit Tab twice.

<sup>&</sup>lt;sup>21</sup> https://manual.lubuntu.me/C/command line.html



If you get a URL in your terminal you can right click Copy Link Address to copy the link. To open your link directly press Control + left click or right click on the link and select Open Link. To zoom in on the terminal press Control + Shift + +, Edit  $\stackrel{\blacktriangleright}{}$  Zoom in, or right click and select Zoom in. To zoom out press Control + -, Edit  $\stackrel{\blacktriangleright}{}$  Zoom out, or right click Zoom out. To return to the original zoom press Control + 0, Edit  $\stackrel{\blacktriangleright}{}$  Zoom reset, or right click and select Zoom reset. If you want QTerminal to be fullscreen press F11 or View  $\stackrel{\blacktriangleright}{}$  Fullscreen to make it fullscreen then F11 or View  $\stackrel{\blacktriangleright}{}$  Fullscreen again to make it back to its original size.

To scroll upward in QTerminal scroll upwards with the mousewheel and you can see the results of previous commands you have run. To scroll downward scroll downward on the mousewheel. To go all the way back to the bottom start typing and it will focus on the bottom.

To split your terminal vertically into two terminals on top of each other Actions > Split Terminal Horizontal. To have one split terminal to the left and one to the right Actions > Split Terminal Vertically. To collapse back to how your terminal back to how they were before Actions > Collapse Subterminal. To switch between the two split terminals click on the terminal you want. To switch to the lower split terminal press Alt + Down arrow or Actions > Bottom Subterminal. To switch to the left subterminal press Alt + Left arrow or Actions > Left Subterminal. To switch to the right subterminal press Alt +Right arrow or Actions > Right Subterminal.

To change to the next tab using the keyboard press Control + Page Down or Actions > Next tab. To change to the previous tab using the keyboard press Control+ Page up or Actions > Previous Tab. To move to a tab to the right Actions > Move tab to the right or press Alt + Shift + Right Arrow. To move a tab to the left Actions > Move tab to the left or press Alt + Shift + Left arrow. To go to a particular tab Actions > Go to > tab x where x is the tab you want to go to. To move to the tab you had before Actions > Previous Tab in History or press

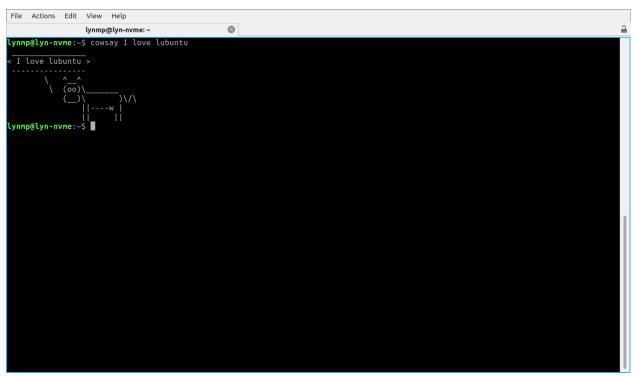
Control+ Tab. To move to the next tab before that Actions ▶ Next Tab in History or press Control+ Shift + Tab.

To bring a search for the text displayed on your terminal press Control +Shift +F or Actions • Find.... To close the search bar press Escape, the x button, or Control+Shift+F again. To find what you need to search for in the Find search bar. To move to the next result press the rightward pointing arrow button. To move to the previous result is to press the leftward pointing arrow. To change to not to match case press the gear button uncheck the Match Case checkbox. To toggle highlighting all matches check/uncheck the Highlight all matches checkbox. To use a regular expression click the downward pointing arrow button and check the Regular expression checkbox.



To clear you active terminal press Control + Shift +X, right click Clear Active Terminal, or Actions > Clear Active Terminal. To hide window borders check the View > Hide Window Borders or right click and select Hide Window Borders. To toggle showing the entire menubar press Control+Shift+M or right click on the Toggle Menu then do the same thing to get the menu back again. To toggle showing the tab bar View > Show Tab Bar. To change which side of the terminal the tab bar is View > Tabs Layout.

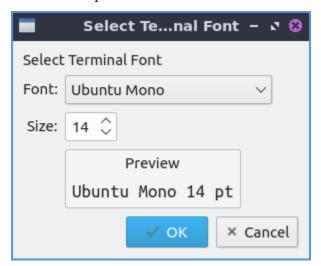
To use the drop down function of QTerminal once launched press F12 to have the terminal drop down or roll up. When you click outside the drop down terminal it will autohide. If you don't want QTerminal to autohide press the lock button on the upper right hand side. To have QTerminal drop down autohide again unclick the lock button.



To rename a tab press Alt+Shift+S or right click on the tab bar and select Rename session and then press the OK button in the popup. To change the color of the tab Change title color menuselection. You can also close a tab by right clicking on it and select Close session.

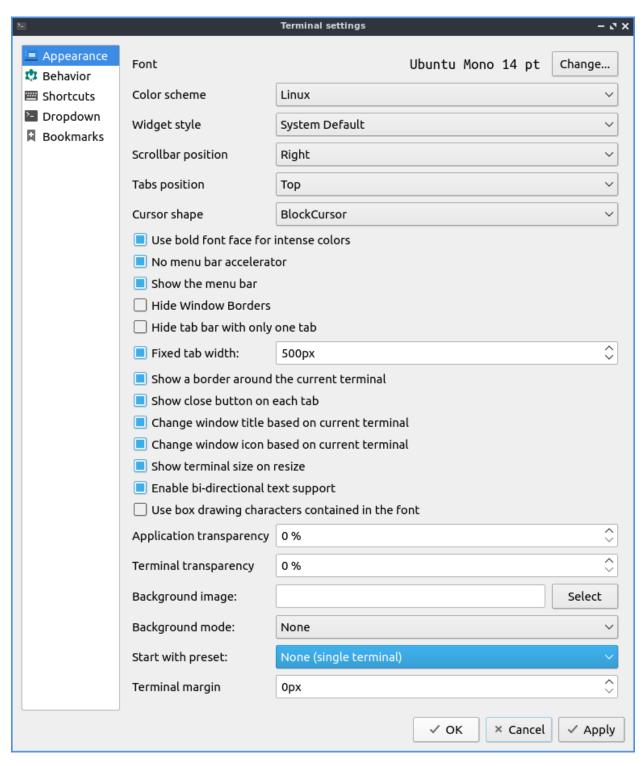
### **Customizing**

To change your preferences go to File • Preferences or right click the terminal and Preferences. To change your font press the Change button next to the Font label and a dialog will show up. To change the font size enter it in the Size field. The terminal works best with monospaced fonts which often have mono somewhere in their name. To change your font use the Font drop down.



The Color scheme field lets you say change how different colored things in the terminal colors appear. The Widget style lets you overwrite the system widget style with something other than system default. The Scrollbar position lets you move the scrollbar to the Left, Right, or No scrollbar. The Tabs position moves the tabbar to the direction of the side of the QTerminal window you select. The Cursor shape changes the shape of the cursor between block cursor a large block, underline cursor a small underline, or IBeamCursor which is quite small like a | character.

To use a bold font for bright colors with syntax highlighting check the Use bold font face for intense colors checkbox. To disable using the alt key in keyboard combos to activate the window for QTerminal check the No menu bar accelerator checkbox. To toggle showing the menubar check/uncheck the Show the menu bar checkbox. To hide window borders check the checkbox Hide Window Borders. The checkbox Hide tab bar with only one tab hides the tab bar when you only have one tab. The checkbox Fixed tab width limits how wide a tab can be in pixels. The Show a border around the current terminal shows a border around the terminal. To disable having the x button to close each tab uncheck the Close button on each tab checkbox. The checkbox Show terminal size on resize toggles showing the terminal size on resizing the window. To have support for languages with both right to left and left to right text check the Enable bi-directional text support. To use box drawing character from the font you use check the Use box drawing characters contained in the font checkbox.

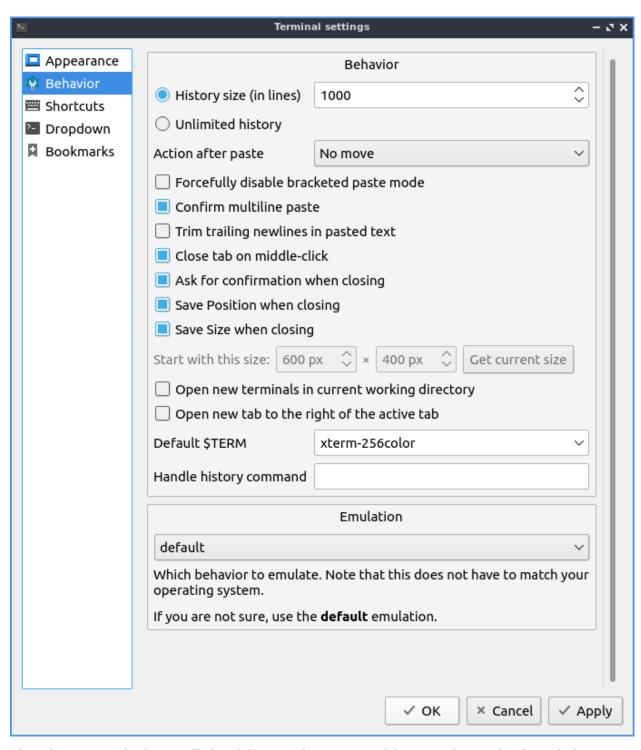


The field Application transparency gives you the percent transparent for the full application transparency. The field Terminal transparency is how transparent to make the terminal. Note you will need to enable the compton compositor for this function properly. To select a background image for your terminal press the Select button next to Background image. To change what QTerminal will do with the background image if the window doesn't exactly fit use the Background mode menu. The field Start with preset lets you choose how many terminal splits to have when you start up QTerminal. To have a margin on the left side of the terminal set

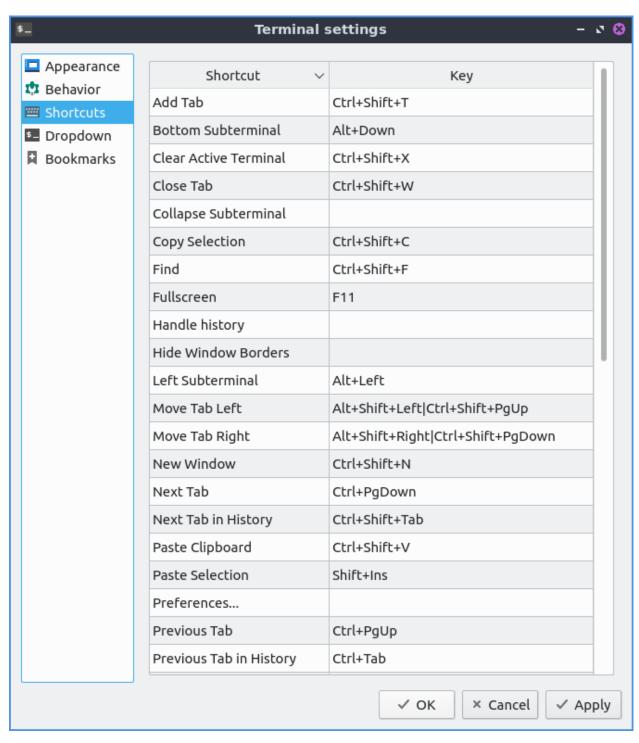
the Terminal margin will make a margin at the bottom of the terminal to not have the bottom text cut off.

To apply these changes to see how they appear on QTerminal press the Apply button. If you like your new customized terminal layout press the OK button or if you wish to cancel your changes press the Cancel button.

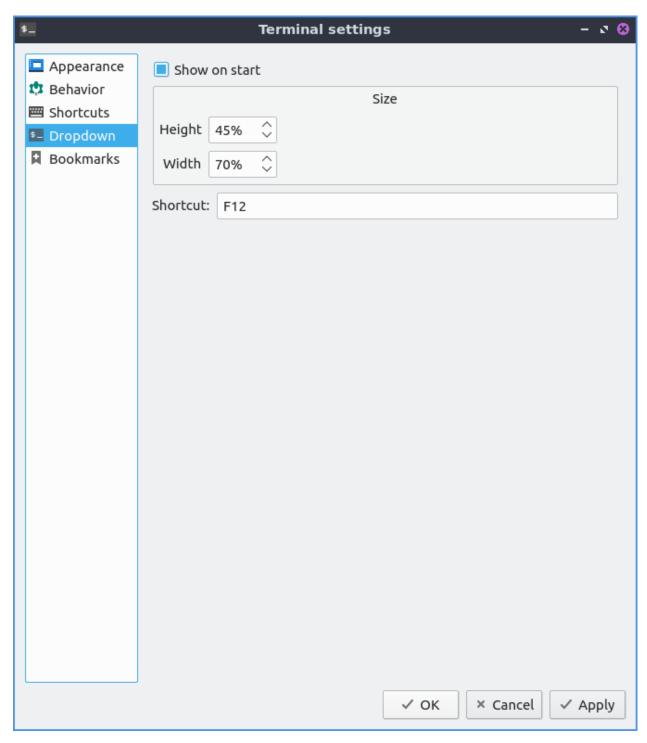
The Behavior tab changes history, pasting, and different kinds of emulation. The History size (in lines) lets you save only that many lines of history. The button for Unlimited history will save an unlimited amount of history. To change where you are viewing the terminal when you paste change the Action after paste menu. The checkbox for Confirm multiline paste brings up a confirmation for pasting multiple lines. The checkbox Trim trailing newlines in pasted text checkbox removes excess newlines in pasting text from the end of what you paste. To not close tabs by middle clicking uncheck the Close tab on middle-click checkbox. The Ask for confirmation when closing pops up a confirmation dialog when you close QTerminal. The checkbox Save position when closing saves the position when closing QTerminal. To save where QTerminal is on the screen check the Save Position when closing checkbox. To have QTerminal be the same size window check the Save Size when closing. The Open new terminals in current working directory checkbox open new terminals in the last working directory you were on. To Open new tabs to the right of the current tab check the Open new tab to the right of the active tab checkbox.



The Shortcuts tab shows all the different shortcuts and how to change keyboard shortcuts. The Shortcut column shows what the keyboard shortcut does. The Key column is the keyboard shortcut to launch the shortcut. To change or add a keyboard shortcut double click under the Key column and then press the keyboard shortcut you want. To change how you sort your keyboard shortcuts left click on the column to sort in a different order. To change your keyboard shortcut double click for that shortcut and then press the keyboard shortcut you want.



The Dropdown tab shows effects on the appearance for the drop down settings of QTerminal. The Show on start checkbox if checked shows the drop down menu when it is launched otherwise it is hidden. To have the terminal open if you go to a different window check the Keep window open when it loses focus checkbox. The Height field shows the height of the drop down terminal. The Width field shows how wide to make the dropdown terminal. The field Shortcut is the shortcut to bring down the drop down terminal and to change the shortcut type in a different key.



The Bookmark tab has settings for a sidebar to quickly change directories in the terminal. To enable this sidebar check the Enable bookmarks checkbox.

#### **Version**

Lubuntu ships with version 1.1.0 of QTerminal.

#### **How to Launch**

To launch QTerminal in a normal window go to the menu System Tools • QTerminal or run

qterminal

from the command line. To launch a drop down version of QTerminal from the menu System Tools ► QTerminal drop down or run

qterminal -d

from the command line. You can also launch QTerminal by pressing the keyboard shortcut Control+Alt+T. The icon for QTerminal looks like a black background with a white command line prompt on it.

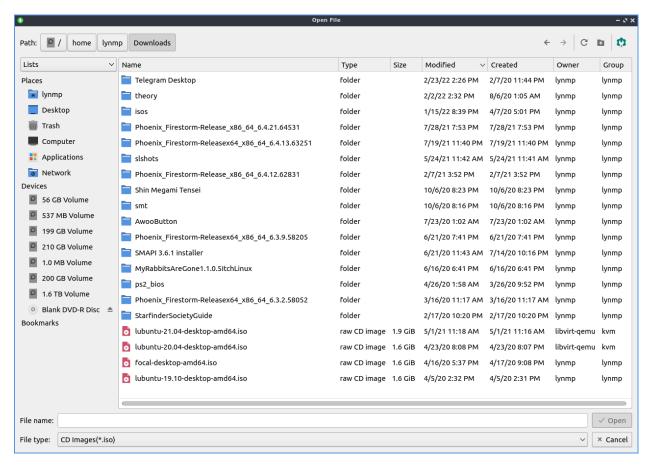
### **Chapter 3.1.3 Startup Disk Creator**

Startup Disk Creator is the default graphical utility for creating bootable USB media on Lubuntu.

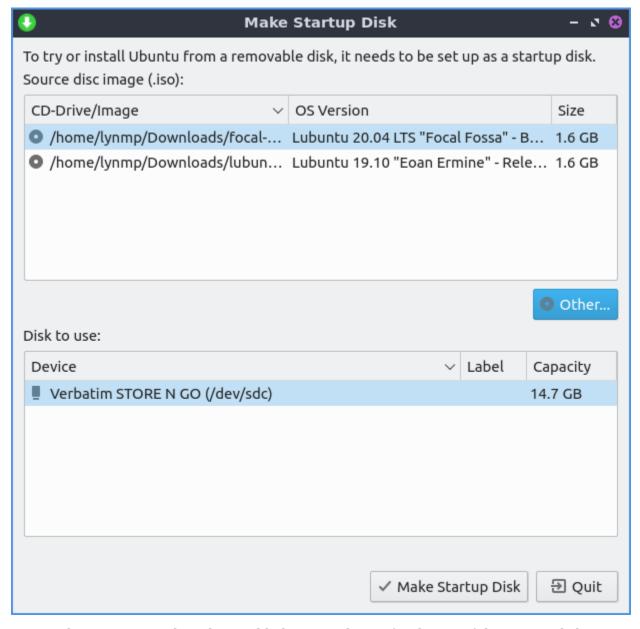
## **Usage**

To see what USB devices you can make into startup disks are listed under the Disk to use heading on the screen. To see what the device is named look under the Device column. To change what the device is labeled is under the Label column. To see the max size of the USB drive is under the Capacity column.

**Warning:** The process of creating a startup disk to boot off deletes all data on the disk but only shows USB devices if you hard USB hard drives or flash drives with data you want to keep it is recommended to unplug these devices so there is no way of accidentally deleting data you care about.



If you want to find an iso image if it is not shown press the Other button and a file dialog to open the location will show up. To open the iso left click on the iso and press the Open button.



To see what startup isos have been added are in columns for the top of the startup disk. To see the image or drive path to the file look at the CD-Drive/Image column. To see what version of an operating system view the OS Version column. To see how big your image size actually is view the Size column.

To actually create the disk press the Make Startup Disk button. A dialog will appear asking if you want to write the disk image and all data will be lost to make the disk press the Yes button. Another dialog box will show up asking for your to enter your password to make sure it is you making this disk and then the image will be written with a progress bar. Once done you will get a dialog saying The installation is complete and an OK button.

To quit Startup Disk Creator press the Escape key or press the Quit button.

### **Version**

Lubuntu ships version 0.3.13 of Startup Disk Creator.

#### **How to Launch**

To launch Startup Disc Creator System Tools • Startup Disk Creator or run

usb-creator-kde

from the command line. The icon for Startup Disk Creator is a green circle with a white downward pointed arrow.

#### Chapter 3.1.4 nm-tray

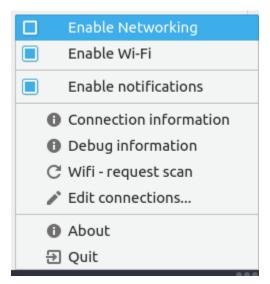
nm-tray is the default applet to manage network connections on Lubuntu.

# **Usage**

If you want to connect to a network on nm-tray left click the icon in the system tray. If you have a wired connection with DHCP it should connect automatically. If you want to disconnect your from a network under active connections left click to disconnect. To connect to wifi left click on the nm-tray applet and connect the wifi name applet and then enter the password for the wifi.

After connecting to a network it will be listed under connections which you can see by left clicking on nm-tray icons. To see the list of all known connections left click on the tray applet and look under Known Connection(s). To view the list of active connections left click on the tray icon and look under Active connection(s). To view the list of wifi networks is listed under Wi-Fi networks you are connected to.

To turn off all networking uncheck Enable Networking. To toggle notifications on connecting and disconnecting to networks right click on the nm-tray tray icon and check or uncheck the checkbox for Enable notifications. To disable wifi uncheck Enable Wi-Fi. To scan for wifi networks right click on the network icon and select Wifi - select scan. To bring up more options to edit your connection right click the nm-tray icon and select Edit connections.



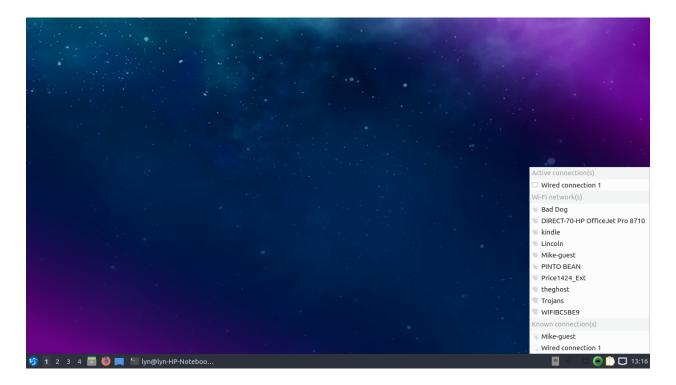
To view your own networking information right click the applet Connection Information which will pop up a window with information such as your IP address. On this window each interface will show the names of each network interface in a tab bar along the top. The field Interface Shows you the name of your network adapter to the system what type of connection it is. The Hardware Address shows your MAC address. The label for Driver shows you what driver is in use for this network interface. The field Speed shows the speed supported by the connection.



The section IPV4 shows you information on your settings for networking using IPV4. The section IP Address shows you your current IP address. The DNS fields show where your DNS looks up the domain names of websites and finds them.

The section IPV6 shows information on your settings for networking using IPV6. The section IP Address shows you current IPV6 address. To see the the root to your DNS servers for IPV6 see the DNS(1) field. To see your backup IPV6 DNS server see the DNS(2) field.

### **Screenshot**



### **Version**

Lubuntu ships with version 0.5.0 of nm-tray.

#### **How to Launch**

nm-tray should automatically launch in the system tray to and looks like either a plug with a cable plugged in if you have an Ethernet connection. If you do not have nm-tray running and want to start it just once from the command line run

nm-tray

### Chapter 3.1.5 qps

qps is the graphical task manager included with Lubuntu. It is useful to close non-responsive programs.

### **Usage**

To see your memory usage in qps look at the bar that says MEM. The bar for CPU usage shows CPU usage with a bar graph with usage with a bar graph for CPU usage. The third column SWAP shows how much swap is used or if you don't have a swap space view it will say NOSWAP. The Uptime in the top bar shows how long your computer has been running. A blue bar showing file input output shows graph in blue. Above this there is a green graph that shows your CPU usage as a graph. To find more info on your CPU usage Memory or Swap usage simply mouseover that display and more info will show. To show when a program was started with the START column. To have a view of process ID of each process use the PID column. The column Command Line shows what command line starts the process. To show which user the process is running on is in the USER column.

To sort your processes by memory click on the MEM tab. To have your processes sorted by CPU percentage press the button CPU% To have your processes sorted by CPU%. To sort by the command line of each process you can press the command line. To sort by how much memory is used by each process read the Mem tab. To only view your processes on the toolbar drop down to the right of Filter and select Your Processes. To view only processes not run by the root user form the drop menu on lower toolbar select Non-Root Processes. To view only running processes select on the drop down menu on the lower toolbar select Running Processes. To go back to viewing all processes select from the drop down menu on the toolbar select All Processes.

To change your process view to each process gets its own line or linear select the Linear radio button in the upper left hand corner. To organize each related process with a tree for parent and child processes press the Tree radio button. To search for a particular process enter a search term in the bar towards the center top of the user interface. To group processes based on what thread they are in check the Thread checkbox.

At the bottom of the window Process count shows how many processes are running on your system.

When you have qps open a tray icon will appear that shows a graph of CPU usage. If you right click Hide to make qps not show in the taskbar. To bring qps back to the front off all windows right click on the tray icon Show. To quit qps press Alt +Q or right click the tray icon and select Ouit.

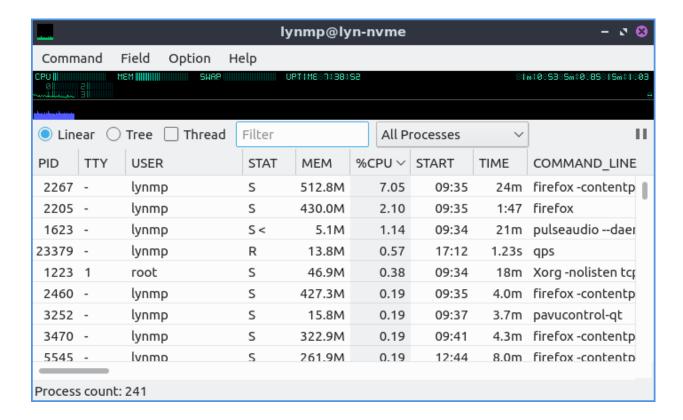
To search for a particular process you can type your type into the search bar right above a particular process right above it. To terminate a process right click on it and select Terminate or press delete. To kill a process move the mouse over it right click and select Kill or press Alt + K.

To view more details on this process right click on the process and select View details. To view what files the process has open use the Files tab. To view what environment variables the process select the Environment tab.

To toggle showing a graph with your overall system usage check/uncheck the Option > Show Graph checkbox in the menu. To toggle showing the bar with the option to search for processor or choose linear or tree view of processes check/uncheck Option > Show Control Bar checkbox in the menu. To change the update period is to Option > Update Period. Then input your update period in the New Update Period field.

To quit qps press Alt+Q.

#### **Screenshot**



#### **Version**

Lubuntu ships with version 2.3.0 of gps.

#### **How to Launch**

To launch qps go to the menu System Tools ▶ qps or run

qps

from the command line. The icon for qps looks like a green line graph with a black background.

#### Customizing

To change more preferences Options • Preferences and a preferences window will pop up. To have qps not exit when you close qps uncheck the Exit on closing checkbox. To change if qps has a remembers it position check/uncheck the Remember Position checkbox. To change the font use the drop down menu under Appearance and the drop down number is for the font size. To change how CPU usage is divided per your total number of CPU cores or a Single CPU press a radio button under %CPU divided by. To close the preferences press the OK button.



# **Chapter 3.1.6 KDE Partition Manager**

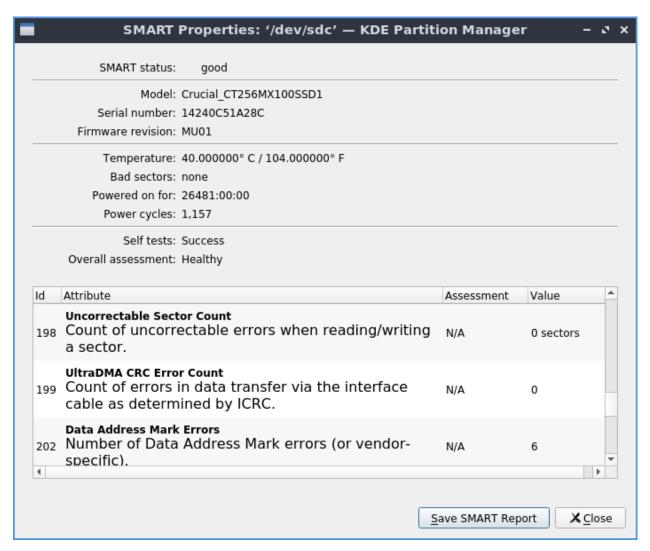
KDE partition manager creates partitions partitions, deletes partitions, and checks the health of your hard drives and solid state drives.

**Warning:** Deleting and creating new partitions can result in data loss so please back up your data before removing or creating partitions.

## **Usage**

To check the health of your hard drive or solid state drive on the Device > SMART Status or by right clicking on the device in the side pane Smart Status. The field SMART status shows the overall health of your drive or if it has detected any problems. The field Model shows the model number of your particular drive. The field Temperature shows the temperature of your drive but it is bad for it to be too hot. The field Bad sectors show how many sectors on your drive are no longer functioning. The field Powered on for shows how long your drive has been powered on. To see how many times your machine has rebooted with the drive look at the Power cycles field. The Self tests field is for if the drive has completed its self tests. The field Overall assessment shows your overall status of the drive.

Below is having a list of the raw values of smart on the drive some of which can be vendor specific or depend on each drive. One important one on spinning discs is to realize if the Reallocated Sectors Count which if nonzero likely means imminent drive failure.



You can see your disk usage for each partition graphically with the bars at the top with the shaded in part showing a bar graph as the percentage full of the partition and you can select each partition by left clicking on that section of the bar graph. The Type column lets you see which filesystem is on the partition. The Mount Point column shows where that partition is mounted. The Mount Point column shows where that partition is mounted. The Partition Label column shows the name of the partition. The Column Size shows the size of the entire system while the Used column shows the amount of space used on the drive. To see what flags a partition has use the Flags column. If you want to add or remove additional columns showing info about partitions right click on the labels of the columns.

On the side pane to the left you can switch between each different drive on the left with the name of each device. Another way to switch which device you are managing partitions on use Device > Select Current Device.

To delete a partition left click on a partition to select it press Delete, Partition ➤ Delete, or right click and select Delete. To add a new partition in unallocated space press Control+N or Partition ➤ New. To view statistical information on a partition select the partition Partition ➤ Properties or right click on that partition Properties. To resize or move a partition press Control+R, Partition ➤ Resize/Move, or right click on the partition and select Resize/Move. On the bottom of the window a list of Pending Operations to be applied to your drives. To undo an unwanted pending operation right click on the operation and select Undo or press

Control+z. If you want to delete a partition on a hard drive and overwrite the data on that partition Partition ▶ Shred or Shift+Delete. However shredding solid state drives is not recommended as it may not fully scrub the data and may marginally wear out your drive.

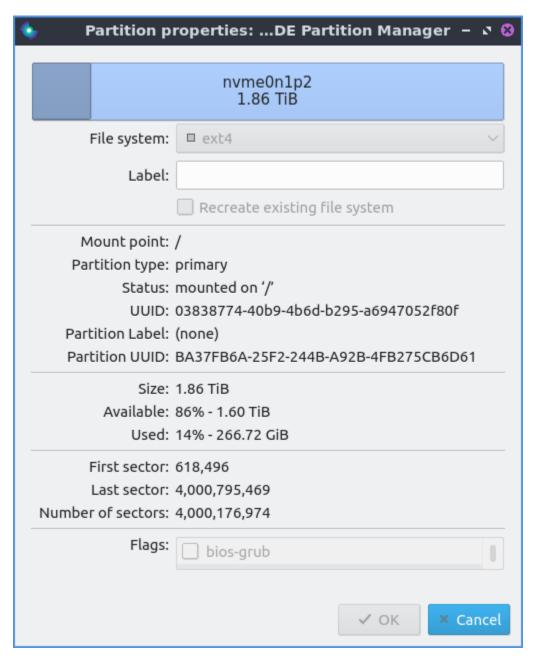
To change your partitions you will need to apply your changes later press the Apply button or Edit • Apply. After pressing Apply a dialog will come up asking you to confirm and check this is what you want to do and then press Apply Pending Operations to apply these changes. To go back from this point press the Cancel button. To undo your your changes to your partitions press Control+Z, the Undo button, or Edit • Undo. To clear your operations that have yet to been applied Edit • Clear or right click on pending operations Clear and then use the dialog to confirm.

If you have say a new solid state drive that is not formatted you first need to put a partition table on it. A new partition data will get rid of all partitions on the disk which means no data will be visible anymore. Then you will need to create a partition on to store data. On unallocated space you can right click on the unallocated space press the New button, Partition New, or press control+N. A window will popup saying with what type of settings to create the partition with. To change what filesystem you want to create will show in the File system: drop down menu. To change what size of partition you want to create change the Size: field. To create free space before the partition change the Free space before: field. To change free space after the partition change the Free space after field. To actually create the partition press the OK button while to cancel press the Cancel button.

**Warning:** Creating a new partition table on a disk with data on it will cause the loss of all data on the entire disk not just a partition.

To change a mount point of a drive internally for your machine to have it start mounted access to it always Partition • Edit Mount Point or Edit Mount Point. This will popup a new window to choose the path where to mount this partition enter it in the Path field. Below there are many Options for how to mount things. To actually cause this to be mounted press the OK button. To cancel mounting this partition press the Cancel button. Once this happens you will get a dialog asking if you really want to do this as it changes the file in etc/fstab. To really go through with changing this press the Save changes button. To not save these changes press the Cancel button. After you have done this you can right click on this drive and select Mount to mount it immediately. Once saved in /etc/fstab your drive will be saved and mounted at this point every time. However if you want to edit a mount point you will need to unmount the partition first and you can do this from right clicking and selecting Unmount.

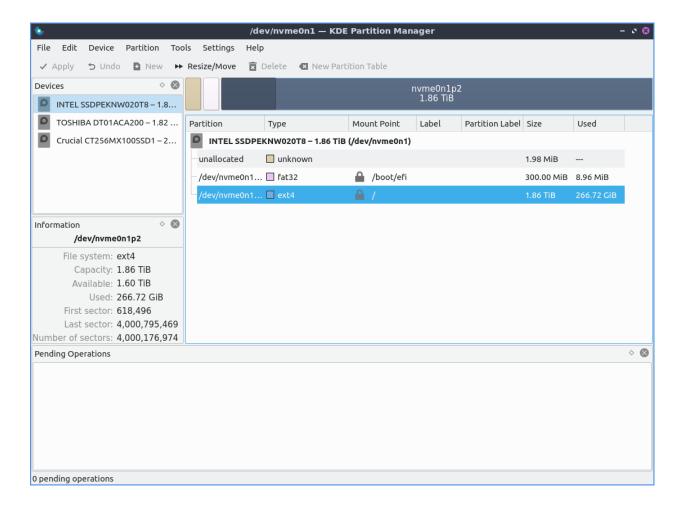
To view information of a partition on your drive double click on it. On the top a bar code on the top shows how full the partition is. To see what kind of file system it is in the File system field. To see a label on your filesystem look at the Label field. To see where that partition is mounted is in the Mount point field. To see what partition type you use in the Partition type field. To see the size of the partition is in the Size field. To see the available size read the Available field. To see how much is used of your partition see the Used label.



If you have multiple drives on your system Device • Select Current Device • Desired Disk. To view information on the current drive such as what type of partition table or Logical size and smart status Device • Properties. If you do not really see all your devices or current status press F5 or Tools • Refresh Devices. To show which filesystems and what operations can be done with KDE Partition Manager Tools • File System Support. The checkmark means the operation is supported and the red! shows that the function is not supported. To see what program is used for this file system operation see the Support Tools column.

If you want to guit KDE Partition Manager press Control+0.

### **Screenshot**



#### **Version**

Lubuntu ships with version 22.08.0 of KDE Partition Manager.

#### How to launch

To launch KDE Partition Manager from the System Tools • KDE Partition Manager or run

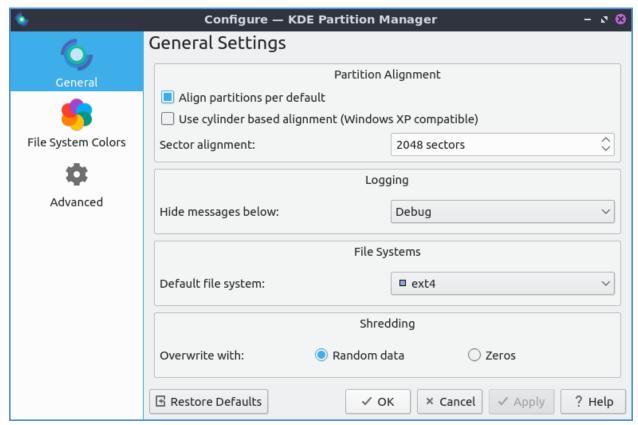
partitionmanager

from the command line. The icon for KDE Partition Manager is a series of blue and green rings that are partially complete with a white center.

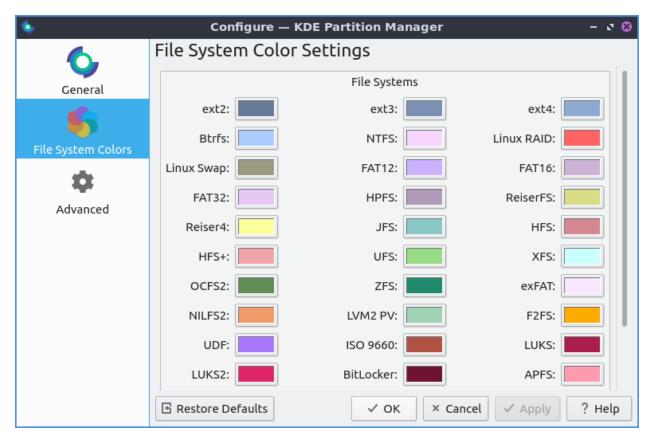
#### Customizing

To toggle showing a statusbar that shows pending operations check/uncheck the Settings Show Statusbar checkbox in the menu. To toggle showing your devices side pane check/uncheck the Settings Panels Shown Devices. To toggle showing information about the currently selected partition check/uncheck the Settings Panels Shown Information checkbox in the menu. To toggle showing pending operations check/uncheck the Settings Panel Shown Pending Operations checkbox. To toggle showing log output of check/uncheck the Settings Panels Show Log Output checkbox. To close a panel press the x button on that panel.

To customize settings for KDE Partition Manager press Control+Shift+, or Settings > Configure KDE Partition Manager. The General tab has settings for aligning partitions and defaults for partitions. To toggle aligning partitions with sectors on a disk check/uncheck the Align partitions by default checkbox. To change where your sectors on your disc align to use the Sector alignment field. To change which messages to log you can change with Hide messages below to hide lower level messages to be logged. To choose your default file system use the Default file system drop down menu. To change whether to overwrite shredded data with zeros or random data use the buttons to the right of Overwrite with group of buttons.



To change the different colors of filesystem as they appear use the File System Colors tab. To change the colors of each filesystem in the top bar and other things left click on the button next to the filesystem name.



The Advanced tab allows even more settings on KDE Partition Manager. To change what preferred unit to display space as by default change the Preferred unit drop down menu.

#### Chapter 3.1.7 LXQt sudo

LXQt-sudo is the default way to launch graphical applications with administrative privileges on Lubuntu.

### **Usage**

LXQt-sudo is used to open graphical programs as an administrator.

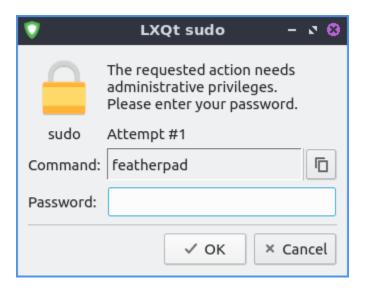
**Warning:** Modifying the wrong system configuration files with administrator privileges could make your system unable to boot or for you to be unable to login.

To use lxqt-sudo is important to not change your config files as if you did with sudo. You will need administrative privileges to edit config files but make sure you know what you are doing. To actually use LXQt sudo you will need to type your password into the Password field and then press the OK button. To see which attempt to authenticate you are on will be shown with Attempt #. To not run your command as root if you decide against it press the Cancel button. To copy the command you are running as root press the button with two sheets of paper.

### **Version**

Lubuntu ships with 1.1.0 of lXQt-sudo.

#### **Screenshot**



#### **How to Launch**

To launch LXQt-sudo from the command line to run Featherpad with administrative privileges use

lxqt-sudo featherpad

You can also run LXQt-sudo from the runner for example type in

lxqt-sudo pcmanfm-qt

into the runner to launch PCManFM-Qt with administrative privileges without opening a terminal.

## **Chapter 3.1.8 SDDM configuration**

SDDM is the default display manager that shows up when you first log in to Lubuntu or logout or choose to another session. There is no graphical application to do this currently.

### **Usage**

If you have autologin enabled and want to disable autologin open the file /etc/sddm.conf as root. To do this run

lxqt-sudo featherpad

and open /etc/sddm.conf. Then to disable autologin remove the entire line [Autologin].

To test your SDDM configuration and make sure it is a valid one so you can log in run

sddm-greeter --test-mode

To change the picture for your user when you login simply copy the file you want as your user picture to in your home folder with the name .face.icon .

If you want to install other themes for sddm in Muon or from the command line search for packages that start their name with sddm-theme. The theme will be stored in /usr/share/sddm/theme/. To test and see what this new theme looks like run

sddm-greeter --test-mode --theme /path/to/theme

from the command line. To set this new theme as your default theme for sddm see alternatives in chapter 3.2.17 and update the sddm-ubuntu-theme group of alternatives. From the command line to switch this setting you can run

sudo update-alternatives --config sddm-ubuntu-theme

from the command line. To add a new background for a particular theme copy that image into the /usr/share/sddm/theme/ folder as root. Then in your theme edit the file theme.conf as root and change the line background= with the path to your image. To edit theme.conf as root run

sudo nano /usr/share/sddm/themes/lubuntu/theme.conf

However to copy the image file since this is not in your home system copying and saving a background to this folder will require root permissions as well.

# 2.3.2 Chapter 3.2 Preferences

This chapter sets up the many preferences included within Lubuntu for themeing and customization. Be aware that this will make your system look different than the screenshots in this manual.

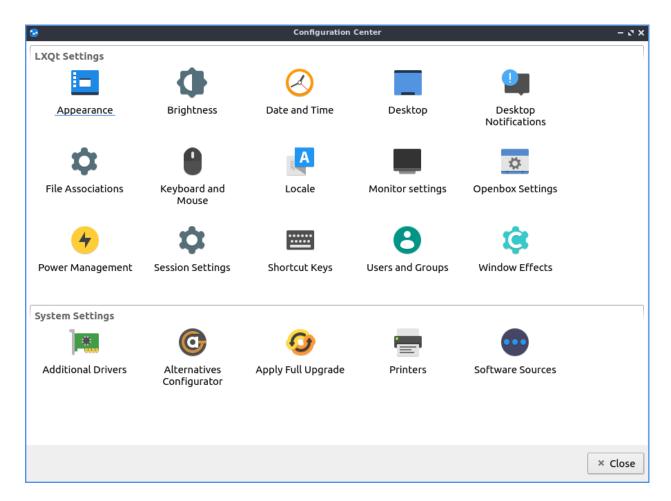
### **Chapter 3.2.1 LXQt Configuration Center**

LXQt Configuration Center is the default "control center" application with buttons that launches programs to configure LXQt the default desktop environment of Lubuntu.

### **Usage**

LXQt configuration center lets you launch many different applications in this chapter from a simple control center where you can double click on the icon for that program. To close one of the programs here you have launched you can close it by pressing Escape or press the Close button. Another way to select programs is move the currently selected item with the arrow keys on your keyboard and you can launch a program by pressing Enter.

#### **Screenshot**



### **Version**

Lubuntu ships with version 1.1.0 of LXQt Configuration Center.

#### **How to Launch**

To launch LXQt Configuration Center from the menu Preferences ► LXQt settings ► LXQt Configuration Center or run

lxqt-config

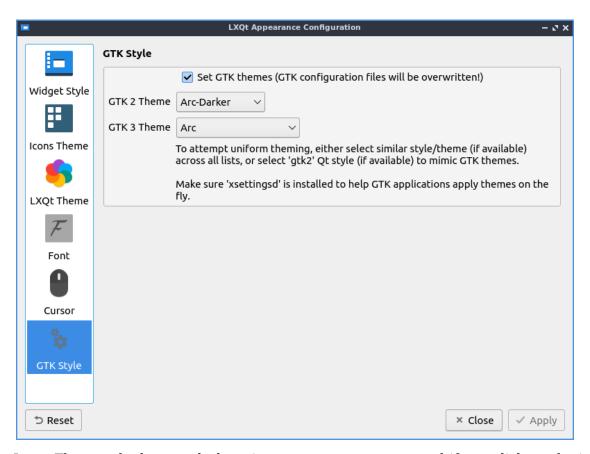
from the command line. The icon for LXQt Configuration Center is a lightbulb with a gear in the background.

### **Chapter 3.2.2 Appearance**

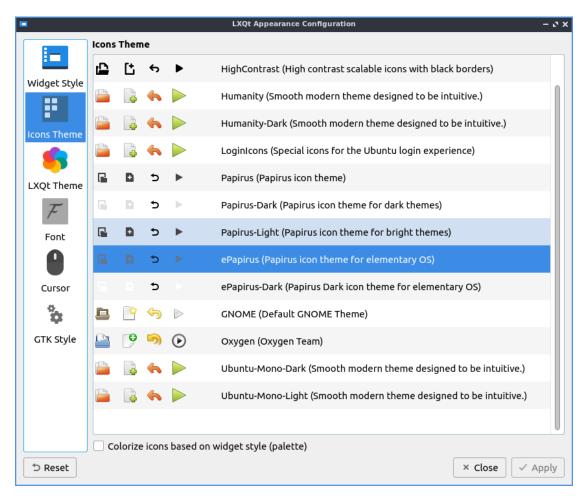
Appearance is the default program that changes the theming of LXQt for a different visual look.

# **Usage**

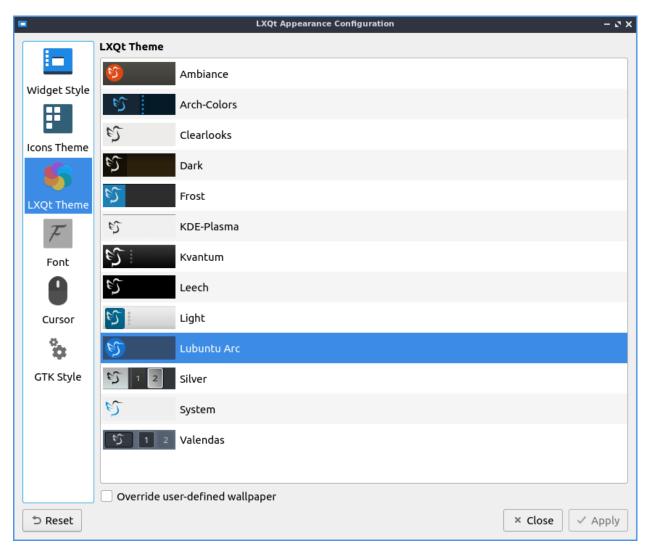
The tab Widget Style changes the way windows, buttons, and menus are drawn. To change how buttons and toolbars look on Lubuntu in Qt applications use the Qt Style menu. The section Qt Palate changes colors on Qt applications. To change the background color of windows use the Window button and then choose your color. To change foreground elements colors use the View menu. To change the color of selected buttons and text change the Selection button. To change the color of hyperlinks on windows change the Link button. To change how the text of windows appears change the Window Text field. To change the color of text on buttons change the View Text button. To change the color of text you have selected press the Selected Text button. to change the color of links you have visited press the Visited Link button. To change your colors back to default press the Default Palette button and then press Apply. To load another palette press the Load Palette button and then left click on the palette you want and press OK. To save your current custom pallette press the Save Palette button enter a name and press OK. The checkbox Activate on single click checkbox has makes things you normally need two clicks for one click.



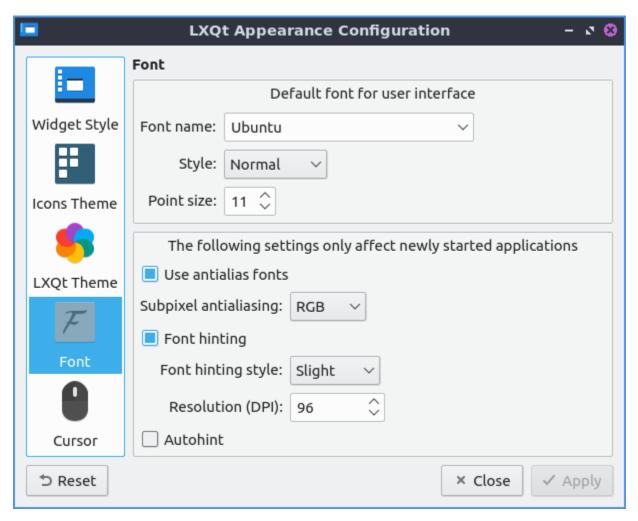
The Icons Theme tab changes desktop icons on your computer and if you click on the icon theme which is previewed on horizontal rows. The icon theme changes how all the icon look and how some button looks in other windows such as the reset button as well. The Colorize Icons based on widget style will slightly change the background icons with the color of the background. However changing an icon theme may not apply until the application is restarted or you log out and back in again.



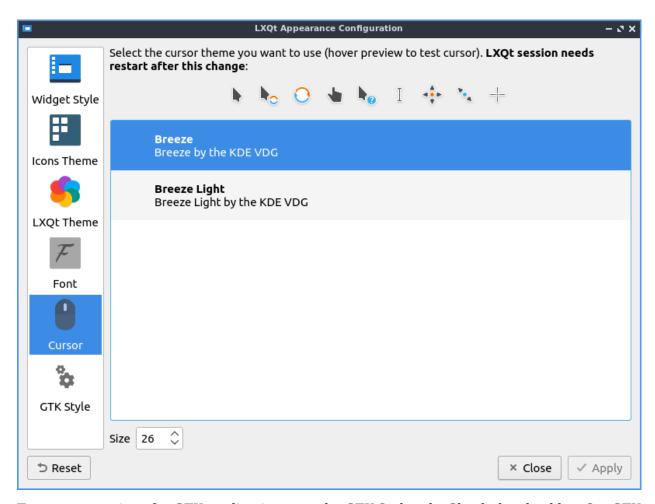
The tab for LXQt Theme lets you change how the panel and notifications appear. To change the theme left click on the theme name to change the theme. To the left of the theme name there is a small preview of the panel and the default button for the panel. The checkbox Override user-defined wallpaper changes your wallpaper to one that comes with the LXQt theme.



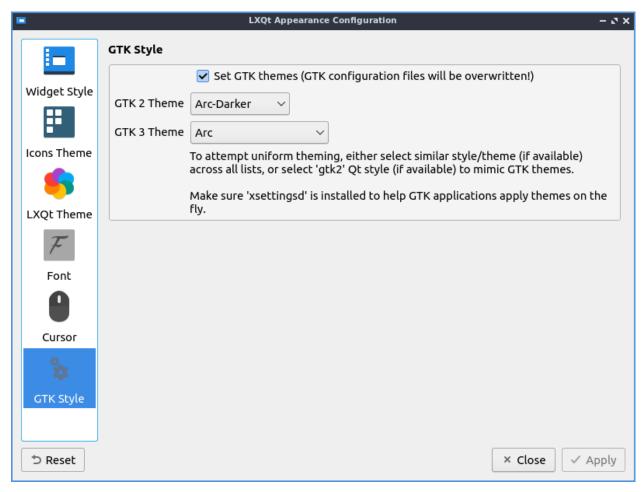
The Font tab has settings for fonts. To change the default font there is the Font name drop down that you can type the font name you or select from the drop down menu. To make the font bold or italic change the Style menu. To change the font size that desktop applications use choose the font tab and change the Point size and enter in the size you want or use the up and down arrows to increase or decrease font size respectively. The checkbox for Use antialias fonts and Font hinting for fonts lets you also set antialiased fonts which are enabled for easier screen viewing. To change how much the fonts are hinted change the Font hinting style drop down menu. The Resolution(DPI) sets the resolution or dots per inch of the screen.



The Cursor tab has one option to change cursor theme lets you change how the cursor looks with two themes installed by default but more available in the package repositories. To see a preview of the cursor theme it is above all the cursor theme on above the list of themes and moving the cursor turns it into that preview one of cursor to see things spin for example. To change how big the cursor is change the Size field.



To manage settings for GTK applications use the GTK Style tab. Check the checkbox Set GTK themes settings will apply native themes to GTK applications. The field for GTK 2 Theme will select a theme for GTK2 applications. The GTK 3 Theme field sets the theme for GTK3 applications.



If you want to reset your changes you will need to click the Reset button to revert your changes to how they were before. To actually quit by the keyboard press the Escape key or press the Close button.

#### **Version**

Lubuntu ships with version 1.1.0 of Appearance.

## **How to Launch**

To launch Appearance in the menu Preferences ► LXQt settings ► Appearance. Another way to launch Appearance is to press the Appearance button from LXQt configuration center or run

lxqt-config-appearance

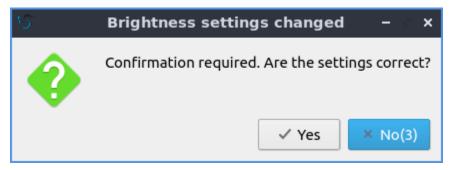
from the command line. The icon for Appearance looks like a screenshot of a monitor with a window on it.

# **Chapter 3.2.3 Brightness**

Brightness is the default tool to control your screen brightness. If you are using a laptop turning down your screen brightness can increase battery life by a large amount as well however too dim and the screen will be illegible.

## **Usage**

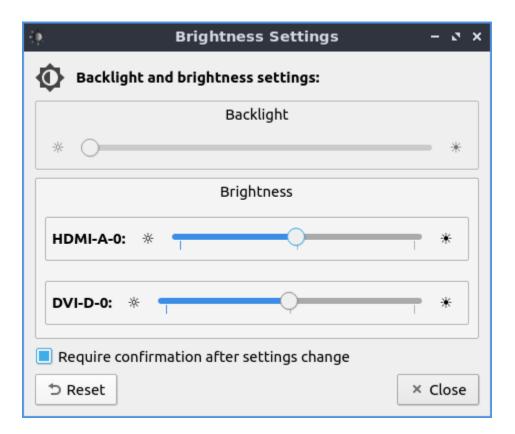
To use brightness click drag a set of sliders on thee for a particular monitor or backlight. To make the screen dimmer use the left arrow key or click on the slider and drag the dial towards the left. If you want to make the screen more bright press the right arrow key or drag the slider towards the right. The name of your display(s) will be on a slider on the center. After doing this you will be asked to confirm the current brightness is OK while needing to select Yes. If you do not respond it will revert the old brightness which is useful because if you made your screen illegible it will revert to the old settings. Using a less bright backlight will result in longer battery life.



If you have multiple displays and want to change the brightness of each monitor individually it will be shown with the name of the monitor will be shown on a slider for each monitor.

If you do not want to confirmation uncheck the Require confirmation after settings change checkbox. To close Brightness press the Escape key or press the Close button.

### **Screenshot**



#### **Version**

Lubuntu ships with 1.1.0 of Brightness.

#### **How to Launch**

To launch Brightness from the menu Preferences ► LXQt settings ► Brightness. Another way is to press the Brightness icon on LXQt Configuration Center or run

lxqt-config-brightness

from the commandline. The icon for Brightness looks like a half moon with a gear in the background.

# **Chapter 3.2.4 Date and Time**

Date and Time is a program that changes your timezone and toggle whether to use NTP or manually set the time.

### **Usage**

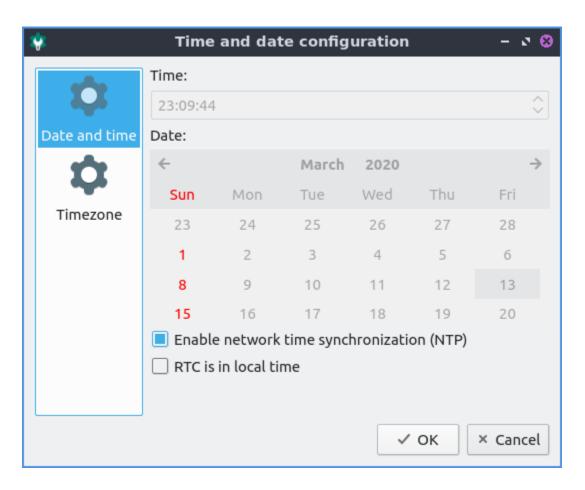
The tab for Date and time sets what time it is and settings for synchronize it via the network. If you want to toggle synchronizing the time of network check/uncheck the Enable network time synchronization(NTP) check. The checkbox for RTC is in local time is for the real time clock on your motherboard being in local time rather than UTC.

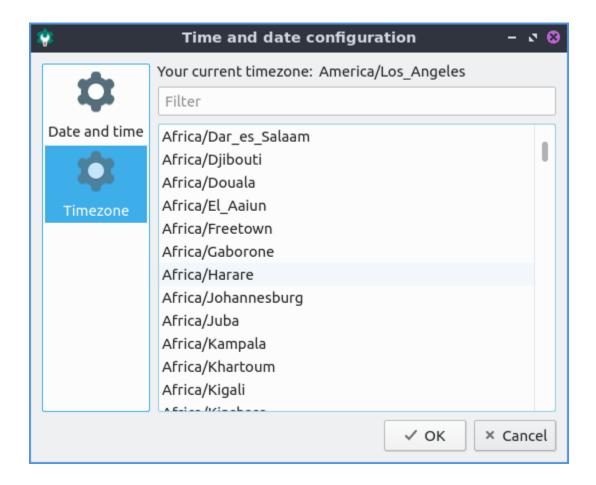
To change the timezone of your computer left click the Timezone tab and select your time zone from the long list. You also can search for your timezone in the search bar that says Filter when you type it in and is empty.

If you do not wish to synchronize your clock via network time protocol uncheck the Enable network time synchronization (NTP) checkbox. This can also be quite useful if you want to fix the time and Once NTP is disabled you want to be able to change your time locally you will be able to change your time by typing your time in the correct time in the Time field or using the up and down arrows. To change the date in your calendar left click on the day in the calendar. To change what month it is click the left or right arrows on the top bar over the calendar or change month from the month in the top of the calendar. To change the year left click the year and click on the year and type in the year.

To cancel your changes in Date and Time press the Cancel button. To close Date and Time press the Escape key.

# **Screenshots**





#### **Version**

Lubuntu ships with version 1.1.0 of Date and Time.

#### **How to Launch**

To launch Date and Time from the menu Preferences ► LXQt settings ► Date and Time. From LXQt Configuration Center under the system settings header at the bottom press the Date and Time button or from the command line run

lxqt-admin-time

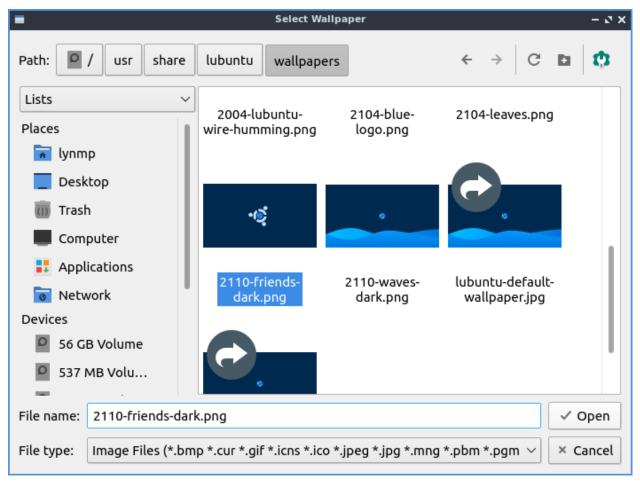
The icon for Date and Time looks like a watch face.

### **Chapter 3.2.5 Desktop**

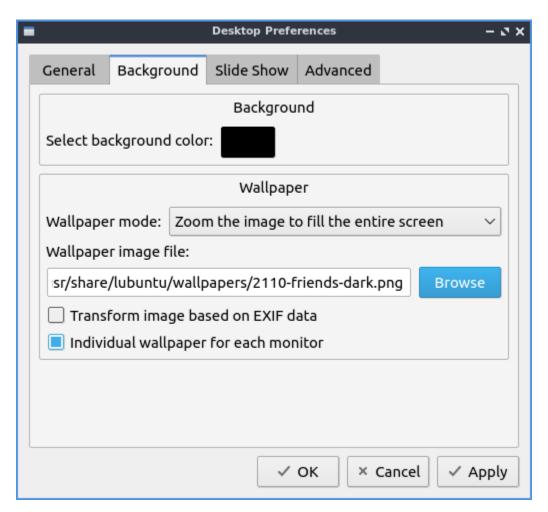
Desktop is an application to change the desktop background, the appearance of icons, and even desktop slideshows.

### **Usage**

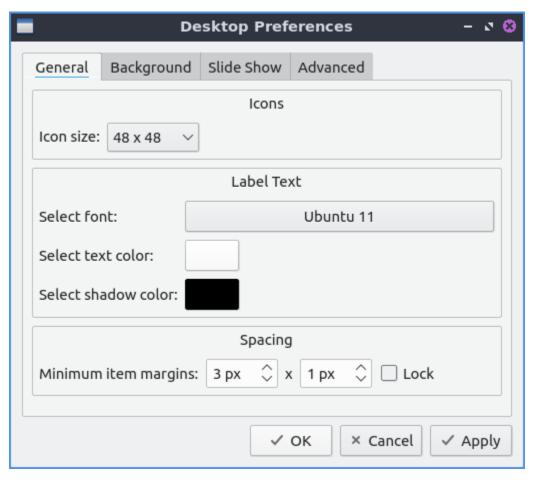
The Background tab has settings for desktop background. To change the desktop background you can either type the path of the file you can type in Wallpaper image file or use the Browse button to bring up a dialog to choose which the desktop.



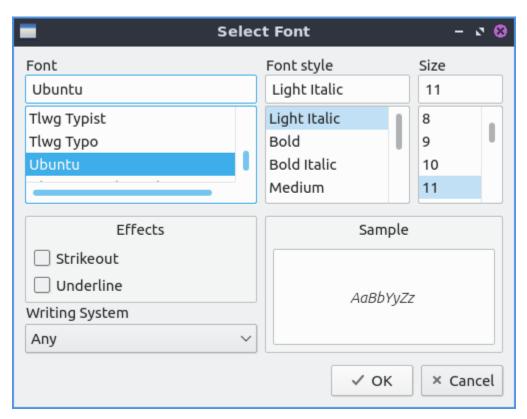
To change the background color if you select that press the button to the right of Select background color. The drop down menu Wallpaper mode lets you change how the image you select for a wallpaper is made to fit on the screen. If you want an image to have multiple copies of a smaller image select tile image from the drop down. If you do not want an image and just a solid color select fill with background color only. To have the image oriented based on metadata check the Transform image based on EXIF data checkbox. To use a different wallpaper on each monitor check the Individual wallpaper for each monitor. If your wallpaper looks stretched and you don't want it to you can select Center on the screen. This is also useful if your multimonitor setup has the wallpaper split across monitors awkwardly and you want the same wallpaper twice.



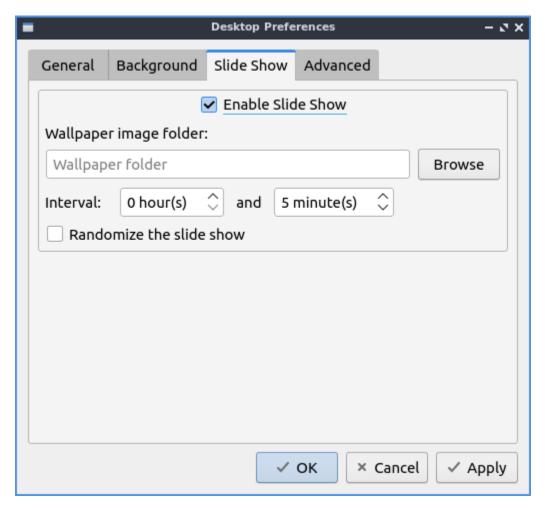
The General tab has settings for text on desktop icons and text colors and icon sizes. The drop down menu Icon size lets you choose a different size of desktop icons you can choose a size that looks good on your screen. The box Select text color brings up a widget to pick the color on desktop icons and files. The field Select shadow color changes the shadow on the shadow around the icon. To change the margins change the fields for Minimum item margins field for different coordinates. To change the margins of desktop icons to the edge of the screen in the Margins of work area field. To make the margins always the same number of pixels check the Lock checkbox. To open folders on the desktop in PCManFM-Qt check the Open desktop folders in default file manager by left clicking checkbox. To make an item stay in the same place check the Make all items stick to their positions checkbox.



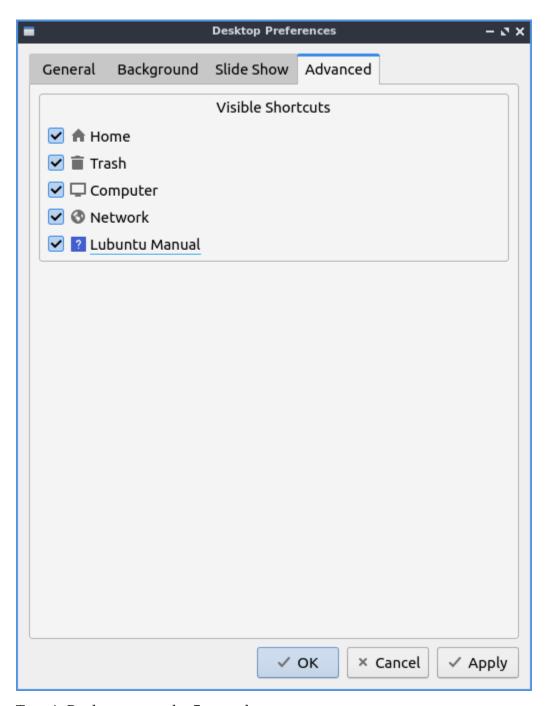
The box labeled Select font lets you choose which font and size information from a dialog box. On the left is the Font for which font to select on on the bottom or type the name on top. The middle lets you choose the Font style of the font on your desktop. On the far right is a choice for the Size of your font which you can select from the menu. To have your text of your font underlined check the Underline checkbox. To change what languages your fonts can support choose your language in the Writing System drop down menu. To preview how the text will appear look in the Sample box.



The Slide Show tab shows settings for slide show of changing your wallpaper automatically like a slide show. The checkbox Enable Slide Show enables the slide show that auto changes your wallpaper. The field Wallpaper image folder changes the path to find the different pictures for the slideshow or to find a folder press the Browse button. To change how long it takes for the slideshow of the desktop background to change change the fields in Interval fields for changing how fast the slideshow changes. To randomize the order of the slide show check the Randomize the slide show checkbox.



The Advanced tab has settings for default desktop icons or included. To show or hide any of the default desktop icons check/uncheck the checkboxes for: Home, Trash, Computer, Network, or Lubuntu Manual.



To quit Desktop press the Escape key.

### **Version**

Lubuntu ships with 1.1.0 of Desktop.

#### **How to Launch**

To launch Desktop from the menu Preferences ► LXQt settings ► Desktop, from LXQt Configuration Center press the desktop button to launch it, or run

```
pcmanfm-qt --desktop-pref=general
```

from the command line. Another way to launch this is to right click on the desktop and select Desktop Preferences. The desktop icon for Desktop Preferences is a gray rectangle with a small hole missing.

## **Chapter 3.2.6 Desktop Notifications**

Desktop Notifications is the program that changes desktop notification settings such as when someone mentions your name on internet relay chat or the first time you run to configure your power management settings.

### **Usage**

To quit the desktop notifications press the Escape key or press the Close button. To reset your changes press the Reset button.

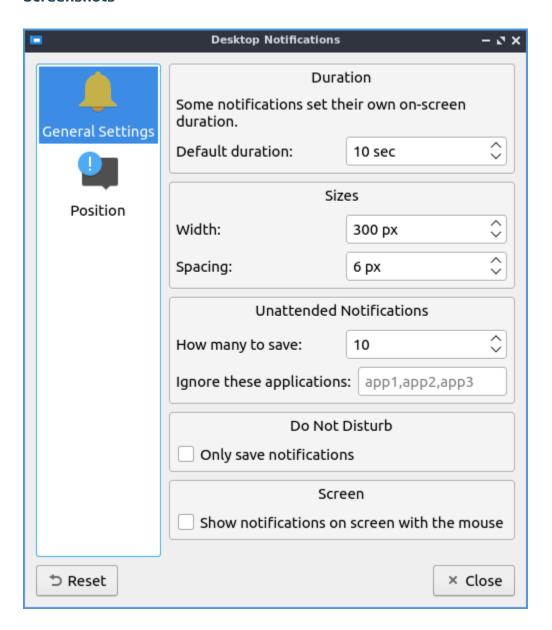
The General Settings tab lets you change the duration of desktop notifications and their spacing. The Default duration field sets how long to show a notification with a default of 10 seconds. The Width field lets you choose how wide to make notifications. The Spacing field changes how far to place the notifications from each other.

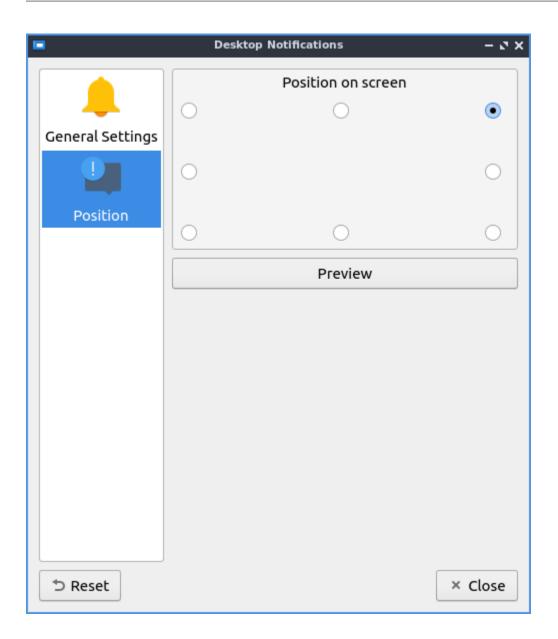
If you want to deal with notification when you are away from your computer use the settings under Unattended Notifications. To change the max number of notifications change the How many to save field. To ignore particular applications type the application name in the Ignore these applications field.

To not be disturbed by notifications check the Only save notifications checkbox. To show notifications on the monitor with the mouse check the Show notifications on screen with the mouse checkbox.

The Position tab lets you change where Desktop notifications appear on your screen. Click the button that appears under Position on screen on the portion of your screen where you want them with the outline being your window. To test where a notification will pop up press the Preview button.

# **Screenshots**





# Version

Lubuntu ships with version 1.1.0 of Desktop Notifications.

### **How to Launch**

To launch Desktop Notifications from the menu Preferences • LXQt settings • Desktop Notifications. The icon for Desktop Notifications looks like a! in a chat bubble. You can also launch Desktop Notifications from left clicking on the docked notifications tray icon and Options. To launch the Desktop Notifications from the command line run

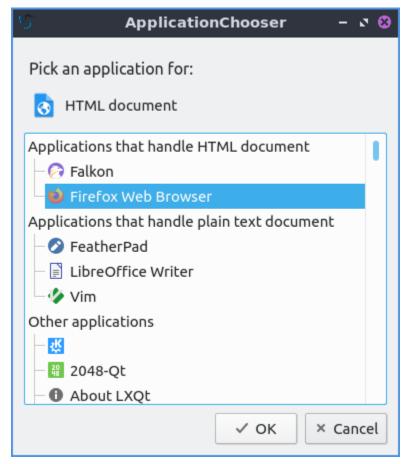
lxqt-config-configurationd

### **Chapter 3.2.7 File Associations**

File Associations changes the default application to open a file.

## **Usage**

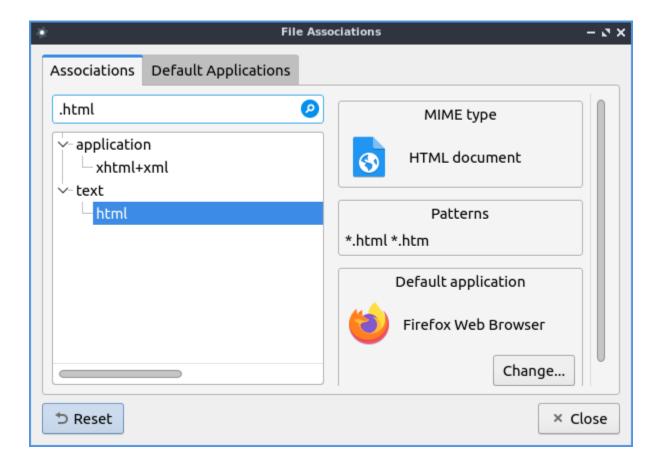
To change which filetype to use for applications use the Associations tab. To search for which file extension you want to change to open in another program you can search in the top box with a magnifying glass for that file format. On the left is really long collapsible list of all mimetypes that you can change look through but searching will be much faster. To expand a particular group of mimetypes from the group on the left press the + button. To collapse a group of mimetypes press the - button. Once you find the filetype you want to change on the top right it tells you what kind of file that mimetype is and shows the extensions. The current default is shown on the lower right with a Change button that brings up a menu for you to change it to something else. If you do not have a default application set you can press the Choose button to set a default button. To change a default press the Change button and it brings up a menu to choose the new default program for this kind of file.



To choose several common programs to end up using as default application use the Default Applications tab. For each application to change to a different default application press the Change button.

To reset your changes press the Reset button if you don't want to keep your buttons. Once you are happy with your choices press the Close button or press the Escape key.

# **Screenshot**



#### **Version**

Lubuntu ships with version 1.1.0 of File Associations

### **How to Launch**

From the menu Preferences ► LXQt settings ► File Associations or from the command line run

lxqt-config-file-associations

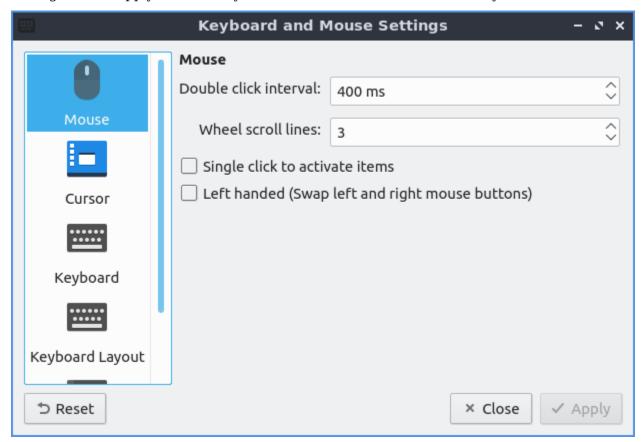
The icon for File Associations is a gear with a white circle on top.

# **Chapter 3.2.8 Keyboard and Mouse**

Keyboard and Mouse is the program to change the behavior of your keyboard, mouse, and touchpad.

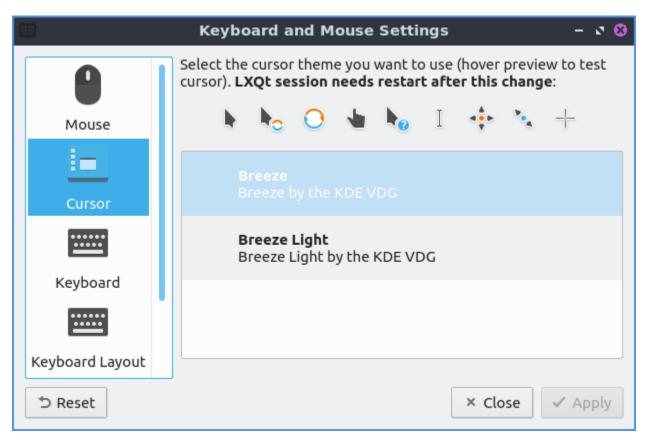
### **Usage**

The Mouse tab provides settings for how fast the mouse moves, scrolls, and double clicks. To change how much time you have to have a click a double click change the Double click interval. The Wheel scroll lines field changes how many lines of text you scroll when you use the scrollwheel. If you wish to only have to tap once to perform a left click check the Single click to activate items checkbox. If you wish to swap left and right buttons on your mouse check the Left handed checkbox. Note that this also swaps the buttons on a touchpad. The settings should apply immediately so make sure the mouse moves how you want it.

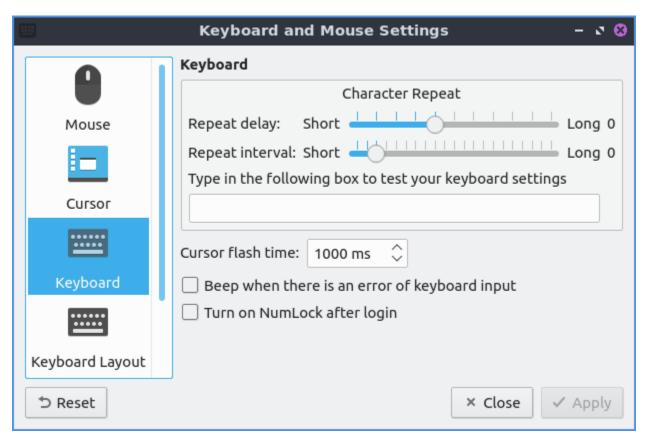


If you do not like the new settings press the Reset button to go back to your previous settings. If you want to close Keyboard and Mouse press the Escape key or press the Close button. To have your changes take place press the Apply button.

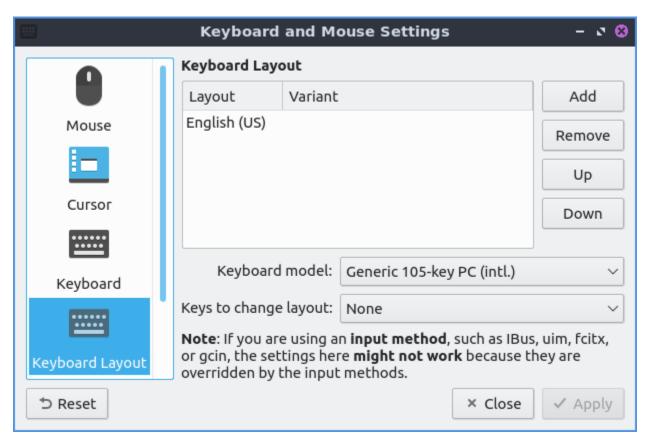
The Cursor tab on the left lets you change your cursor theme which is quite useful if you are say running virtual machines so the cursor does not look the same in the host and the guest. To change a theme scroll down to which theme you want under preview but you will have to logout and log back in again for this to fully take effect. To change the size of the cursor change the Size field.



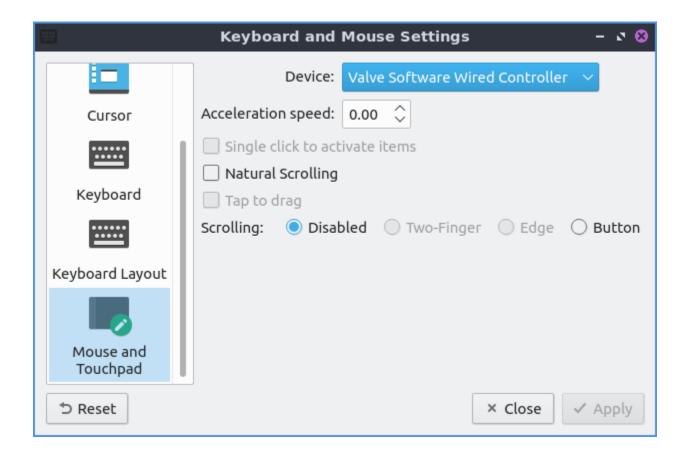
The Keyboard tab has settings for changing keyboard settings. If you want to change how quickly it takes to repeat a keyboard keypress move the slider to the right on the Repeat delay to take longer to repeat key presses or to the left to decrease the time it takes to repeat. The Repeat interval is how quickly after the repeat delay the held down key will repeat itself which moving to the right will make it take longer to increase while to the left will make it take a short time to repeat itself. To test your keyboard settings type in the Type in the following box to test your keyboard settings text box. To change how fast the keyboard flashes change the Cursor flash time field. The Turn on numlock after login checkbox will make numlock automatically be on after you login.



The Keyboard Layout tab has settings to add a new keyboard layout. In the top center of the window is a listing of your current keyboard layout and any variant applied to it. To add a keyboard layout press the Add button. To remove the keyboard layout left click on the keyboard and press the Remove button. To move a keyboard layout up or down press the Up or Down buttons. To change your keyboard model in choose your keyboard model in the Keyboard model drop down. To set the key to change between different keyboard layouts change the Keys to change layout menu.



The Mouse and Touchpad tab has settings for touchpads. To select which touchpad to change settings use the Device drop down menu. To change how fast your touchpad accelerates use the Acceleration speed field. To tap the touchpad once to register a left click check the Tap to Click checkbox. To reverse the scrolling direction check the Natural Scrolling checkbox this kind of scrolling is common on devices with touchscreens. To tap on the touchpad to drag items instead of having to click on the button and use the touchpad at the same time check the Tap and drag checkbox. To disable scrolling by the touchpad press the Disabled button to the right of Scrolling. To use two fingers to scroll on the touchpad press the Two-Finger button. To use the edge of the touchpad to scroll press the Edge button.



#### **Version**

Lubuntu ships with version 1.1.0 of Keyboard and Mouse.

#### **How to Launch**

To launch Keyboard and Mouse use menu Preferences ► LXQt settings ► Keyboard and Mouse. In LXQt Configuration Center press the Keyboard and Mouse button or from the command line run

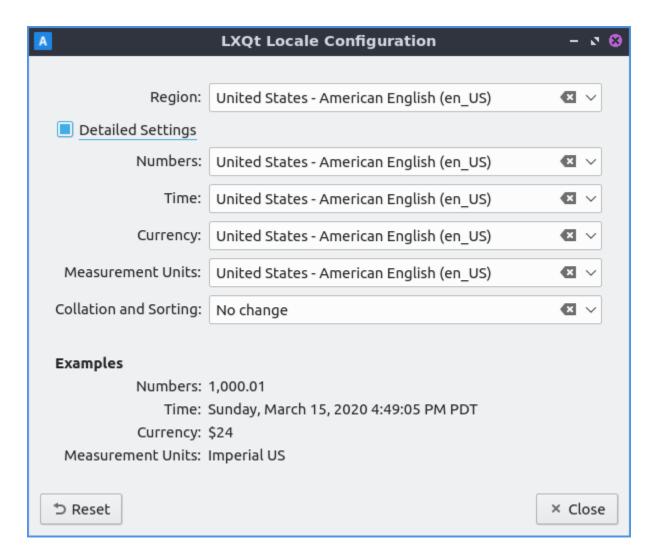
lxqt-config-input

The icon for Keyboard and Mouse is a black keyboard.

# **Chapter 3.2.9 Locale**

Locale changes your locale which changes your language and how things are translated on your desktop environment.

#### **Screenshot**



# **Usage**

To change your locale the Region shows the name of your local and in the drop down menu you can type the name of your locale to search through the locales or scroll through the long list. Under the Examples will show how numbers Time Currency and measurement units will be shown on your system. If you do not like the changes you can press the Reset button. To close Locale press the Escape key or push the Close button.

The checkbox for Detailed Settings allows for even more customization. To change how the thousands separator and decimal point appear in number change the Numbers drop down menu. To change the order of the time and date choose the Time drop down menu. To change

how currency appears on your system change the Currency drop down menu for currency. To change which measurement units change the Measurement Units drop down.

To see how the current locale will appear read it under the Examples heading.

#### **Version**

Lubuntu ships with version 1.1.0 of Locale.

#### **How to Launch**

To launch Locale from the menu Preferences • LXQt settings • Locale or run

lxqt-config-locale

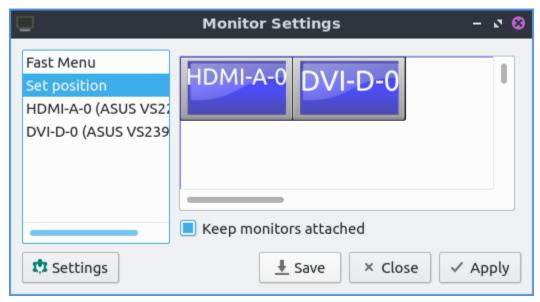
from the command line. The Locale icon looks like a blue flag with an A on it.

# **Chapter 3.2.10 Monitor Settings**

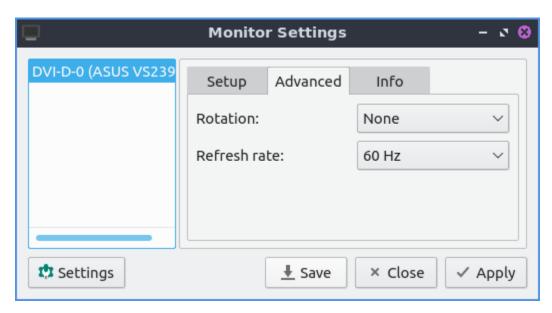
Monitor Settings controls your monitor(s) resolution, refresh rate, and saves monitor settings.

### **Usage**

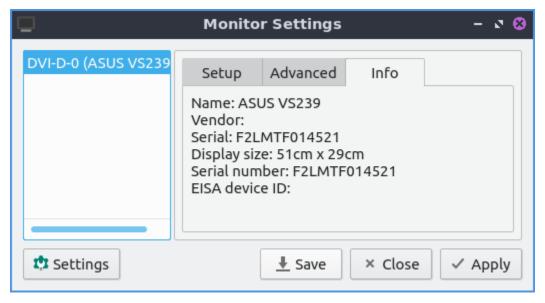
If you use a single monitor you can change your single monitor resolution on the right hand size and select your resolution. When you change your resolution you will be asked to confirm to make sure you don't make a choice that makes it harder to use your computer.



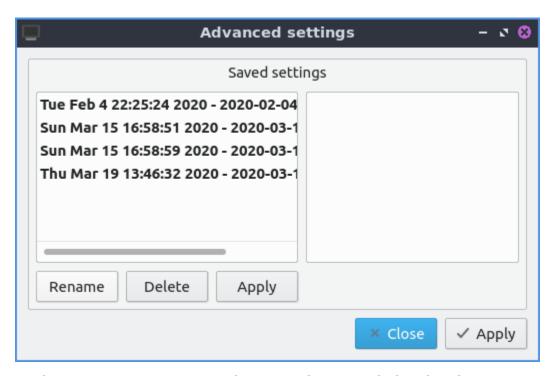
If you want to rotate a monitor on the Advanced tab from the menu labeled Rotation choose the way you want to rotate the monitor with inverted being upside down. Below you can also choose the refresh rate of monitor from the Refresh rate drop down menu to choose how fast your monitor refreshes.



To display info on your monitor click the Info tab and read that info. The fields explained will be the Name of the monitor the serial number the size of the display and the serial number.



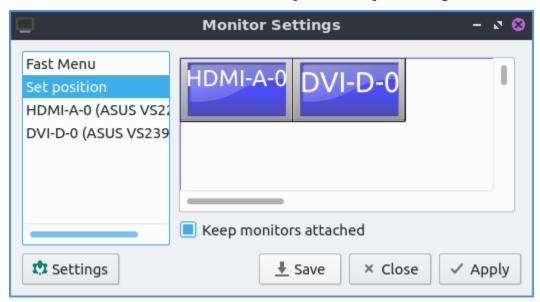
To save your monitor settings press the Save button and a pop up will show that your have your settings OK for you and press Yes. To view your saved settings press the Settings button. Your saved settings are by default saved with the time and date of when you saved the settings. If you want to apply your saved settings press the settings button with the gear around the light bulb. To see a summary of what your saved settings are left click on your settings and preview will show on the right hand column showing a summary. To choose your saved settings press the setting you want and the Apply button and your settings will be applied. To give your saved settings a meaningful name you can press the Rename button with a name for what you want and can remember what it is. If you want to delete these setting later press the Delete button.



To close monitor settings press the Escape key or push the Close button.

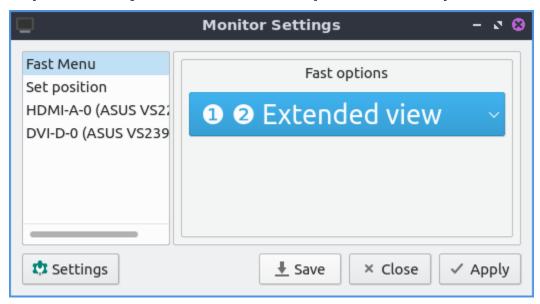
#### Multimonitor

With multiple monitors you can in the Set position tab you can drag the different screen around drag the two monitors around. The checkbox for Keep monitor attached pulls the monitors pixels adjacent to each other. To see which screen is which you will be labeled by their name which commonly is which port it is connected to your computer with. If you want to have no annoying overlap between two monitors you can move a monitor beyond the edge of the current monitor and then it will snap back into perfect alignment.

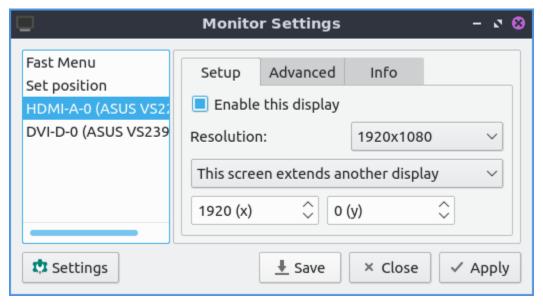


The Fast Menu tab has ways to quickly turn on or off different monitors. The Fast options

selection Extended view sets you to set extended showing different things on different monitors. Selecting a Unified view on the Fast Options shows the same thing on both screens. Only first shows up the first screen while Only second shows only the second.



The tabs towards the bottom are settings for each monitor. This also has the same settings for this monitor as you would have for a single monitor with a few additions. To turn each display on or off toggle the Enable this display checkbox. Towards the bottom there is a drop down menu that and select This is my primary Display to make this your main monitor. The primary display will also be the display that desktop icons appear on by default first. If you select This screen extends another display this monitor will be a secondary monitor that shows something different than what the primary display shows. After selecting to extending another display two boxes will show up for where to place the second monitor. The box that shows a number and says (x) is a box that lets you show how many pixels to move this display horizontally. The box that shows a number and says (y) is a box that shows how many pixels to move the display vertically.



### **Version**

Lubuntu ships with version 1.1.0 of Monitor Settings.

#### **How to Launch**

To launch Monitor Settings from the menu Preferences ► LXQt settings ► Monitor settings. From LXQt Configuration Center press the button for monitor settings that looks like a desktop monitor or run

lxqt-config-monitor

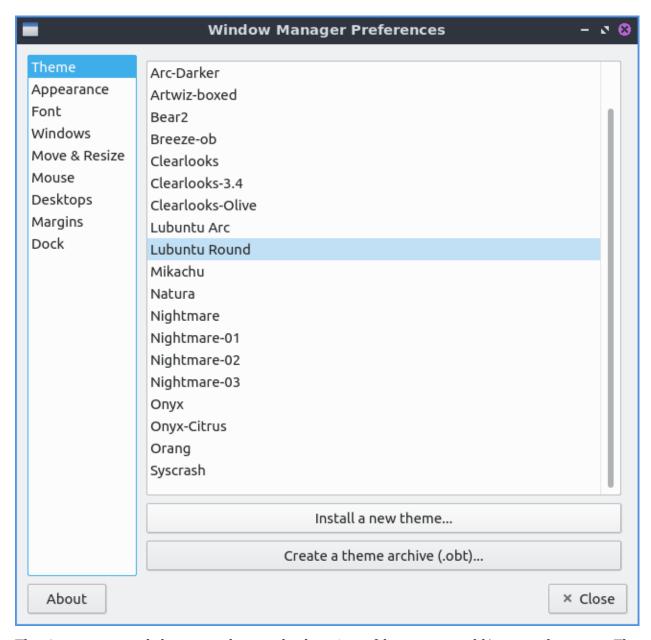
from the command line.

# **Chapter 3.2.11 Openbox Settings**

Openbox Settings changes configuration of openbox the default window manager of Lubuntu.

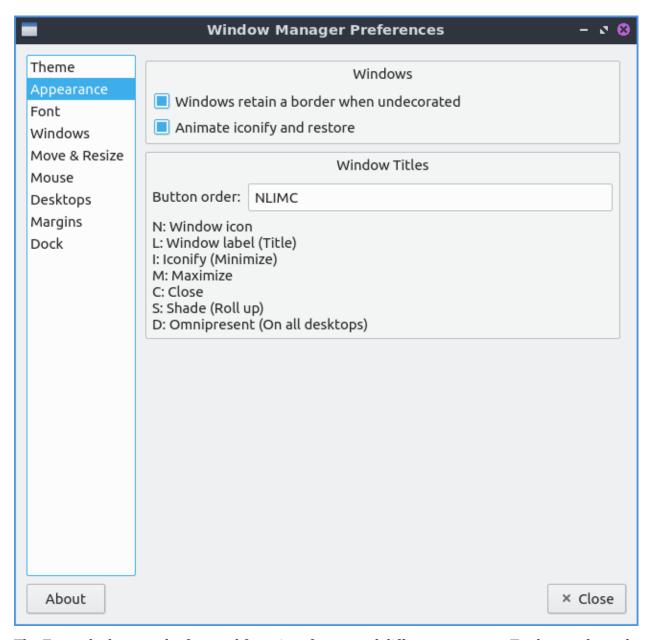
#### **Usage**

The Theme tab changes the titlebars and menus provided by the window manager. To change the theme of the titlebar left click on the theme name. The new titlebars will immediately appear and you will see it on that window. If you want to check what menus to manage windows will look like click on the icon on the left of the titlebar.

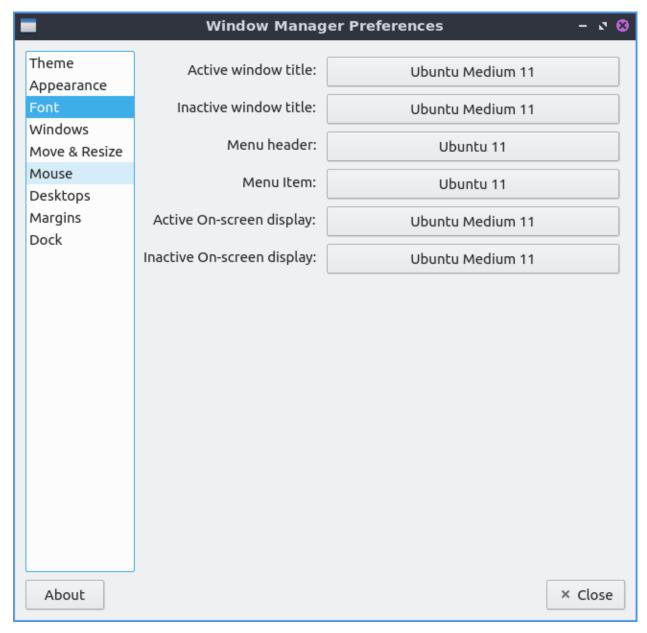


The Appearance tab lets you change the location of buttons or add/remove buttons. The Windows retain a border when undecorated checkbox has windows still have a border if you choose to decorate them. The Animate iconify and restore checkbox runs a simple animation when you iconify(minimize) a window or restore it.

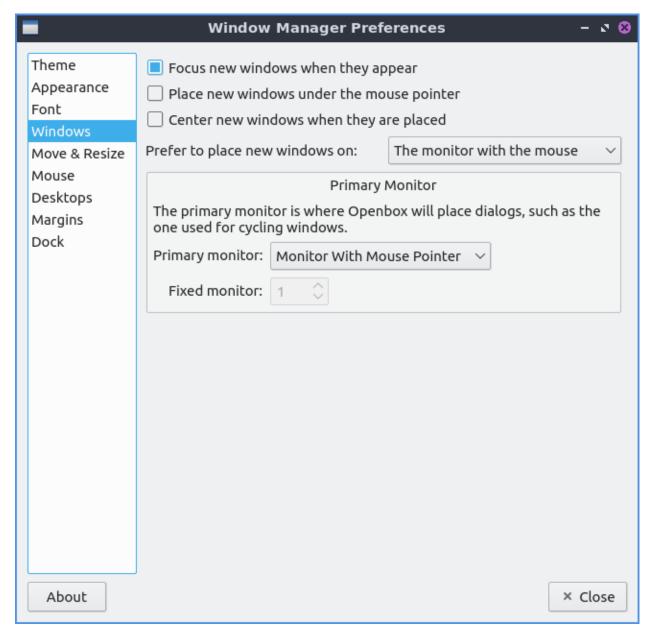
Lubuntu ships with the ability to have two additional buttons on the titlebar one for shading or rolling up with the window so you can put this in the left to right order of the letters where you want the button. To make a window show on all desktop you can add D button in box for the Button order. If you want to change the window titlebar button order to have the iconify (minimize), maximize, and close buttons on the left then move the letters IMC to the left of L for window label or the title of the window. If you want to have the close maximize and iconify buttons first the box labeled window titles should read CMI Then L for the window label which will always be in the center. If you wanted the buttons on the right with Close, Maximize, Iconify, the window title, then shade the window, and all desktops and the window icon in the far right it should read CMILSDN.



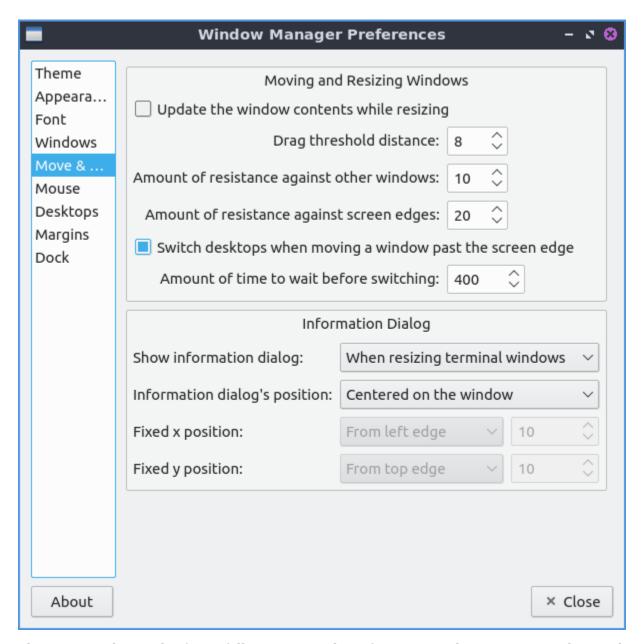
The Font tab changes the font and font sizes for several different contexts. To change the style of the font you can under the Inactive window title field. For example if you have trouble telling which window you are in you can make the font italic for the titlebars of inactive windows to make it even more obvious. Other fonts you can change are Active Window title, Menu header, Menu Item, Active On-screen display, or Inactive On-screen display. To chose which monitor if you want them on a specific monitor select the monitor with Fixed monitor.



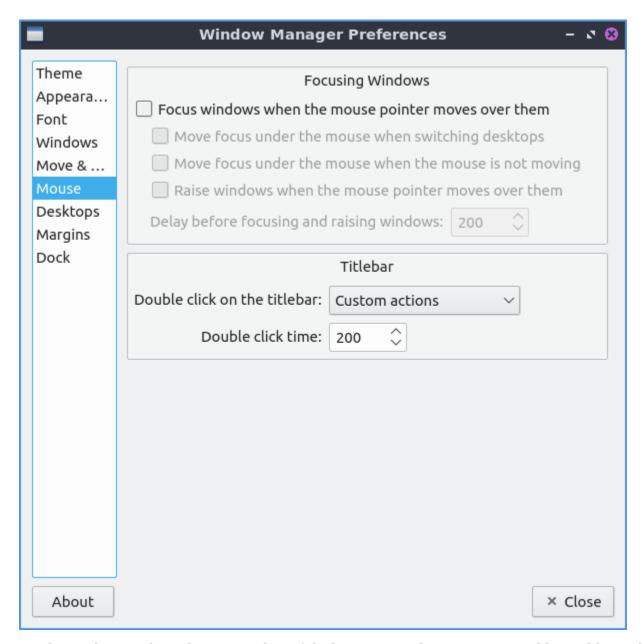
The Windows tab manages the behavior of newly opened windows. The Focus new windows when they appear checkbox gives new windows focus when they finish opening and then be the active window as if you clicked on the icon on the taskbar. The Place new Windows under the mouse pointer puts all your new windows you open under the mouse pointer. The Center new windows when they are placed puts the new windows in the center of the monitor. The drop down menu for Prefer to place new windows on shows you where to place new windows on multimonitor layouts. To change which desktop openbox uses for places when switching windows with alt tab change the Primary monitor drop down.



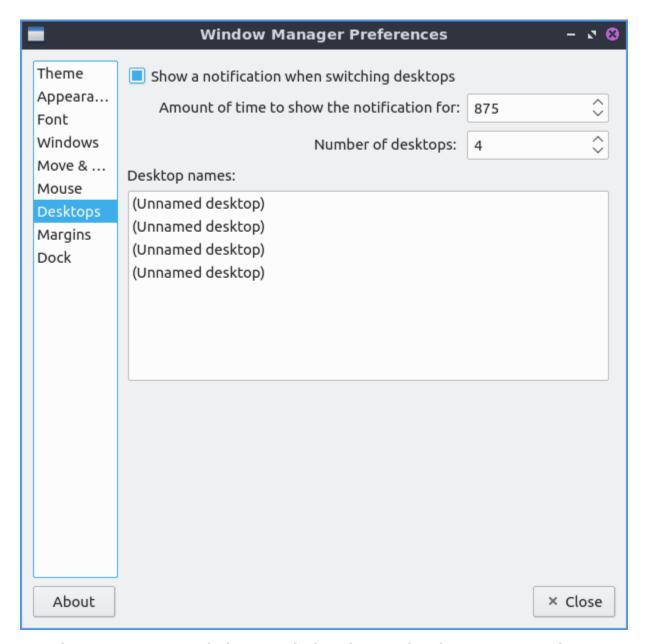
The Move & Resize tab changes settings for moving and resizing windows. The checkbox Update window contents while resizing redraws the whole window when resizing it. Having it unchecked will have a drawn solid color until you stop resizing it. The Drag threshold distance changes the minimum number of pixels to drag a window. To change how much you need to drag a window past another window change the Amount of resistance against other windows field. The Switch desktops when moving a window past the screen edge checkbox lets you drag a window past the edge to switch desktops. To change how hard it is to drag a window past a screen edge change the Amount of resistance against screen edges field. The field for Amount of time to wait before switching lets you change the amount of time to wait before moving beyond the edge of the desktop to another virtual desktop or physical monitor. The drop down menu for Show information dialog shows how you how many characters fit on the newly resized window for always, terminal windows only, or never. The field for Information dialog's position is where to show this information dialog.



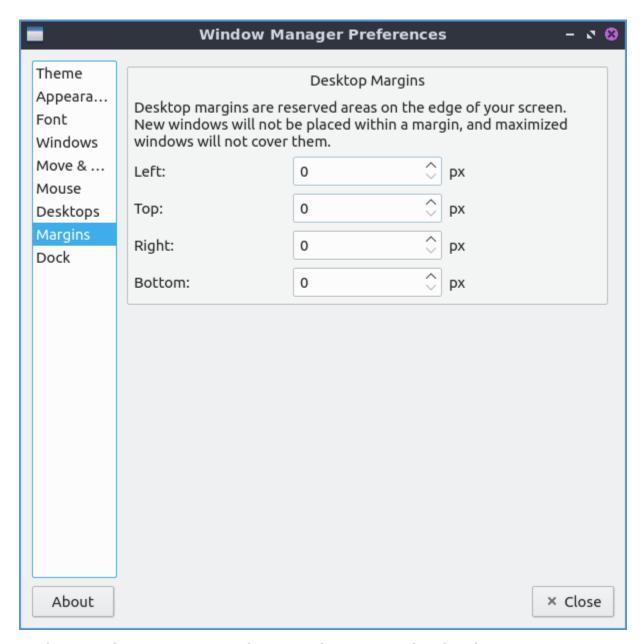
The Mouse tab use the focus follow mouse tab is if you move the mouse over the window it will automatically focus on that window. To automatically focus windows when the mouse cursor when the mouse pointer check the Focus windows when the mouse pointer moves over them. To change your focus to a new window check/uncheck the checkbox Move focus under the mouse when switching desktops. If you move a window with a keyboard shortcut and a different window is under it check the Move focus under the mouse when the mouse is not moving checkbox. The checkbox Raise windows when the mouse pointer moves over them moves the window up in the layers. The Double click on the titlebar drop down of double clicking on the titlebar what option of to shade or maximize the window or custom actions which Lubuntu has set to maximize. To change how long you have to double click change the Double click time field.



On the Desktops tab to change number of desktops press the up arrow to add an additional desktop or the down arrow to reduce the number of virtual desktops. When switching desktops there is a checkbox to Show a notification when switching desktops and a field for how many milliseconds to show that notification for. To change how many virtual desktops you have change the Number of desktops field. If you want to rename a desktop double click on the desktop name and type the name of the desktop you want.



To make a margin on your desktop on which nothing is placed you can set pixel margins on each side with the Margins tab. The fields Left, Top, Right, or Bottom each have a field for each number of pixels as a margin.



To close Openbox Settings press the Escape key or press the Close button.

#### Version

Lubuntu ships with version 0.16.2 of Openbox Settings.

#### **How to Launch**

To launch Openbox Settings from the menu Preferences ► Openbox Settings. From LXQt settings press the Openbox Settings button with two computer windows or run

obconf-qt

from the command line.

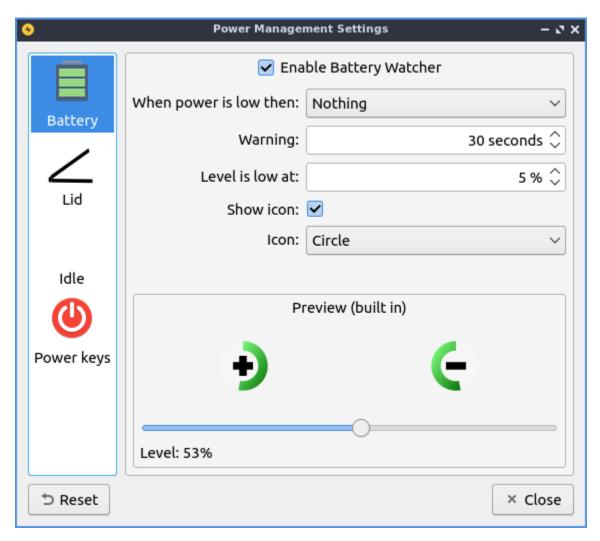
# **Chapter 3.2.12 Power Management**

Power Management manages low charge in your laptop battery, actions for laptop lid being closed, and what to do when your computer is idle for long periods.

### **Usage**

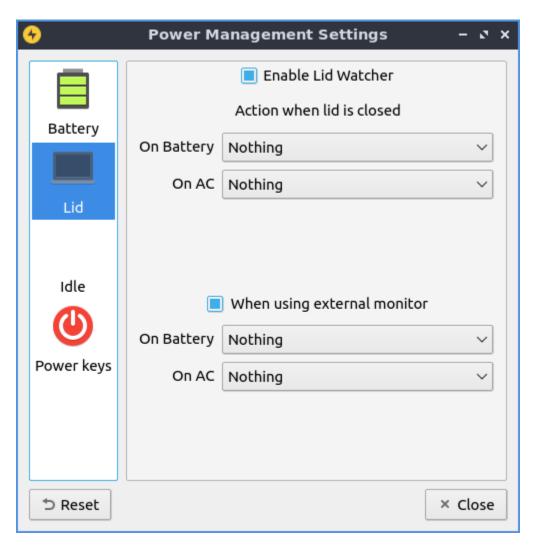
LXQt power management watches your battery, laptop lid, idleness, and what happens when you press power or sleep buttons. Each of the checkboxes for battery, laptop lid, or idleness watchers are checkboxes to enable or disable each.

The Battery tab has settings for monitoring your battery power level and some settings. On a laptop power management should show a + with a ring around it representing your current battery charge on your laptop when it is charging with a full green circle meaning you are fully charged in the system tray. If your battery is discharging you will see a - symbol at the center of the circle. If you hover the mouse cursor over this it will show the percent of charge as a percentage and whether the battery is charging or discharging. When your battery is fully charged it will turn into a black circle.



The field Enable Battery Watcher Watches the battery on your system. The field When Power is low then: lets you choose what to do when your batter is low. The Warning field provides a duration to show a warning for low power. To change the level for low level of battery change the Level is low at field. To toggle showing and icon check/uncheck the Show icon checkbox. To change the icon used for battery change the Icon drop down. If you are using a virtual machine or desktop without a battery and get annoyed that notification saying no battery at first login simply uncheck the Enable Battery Watcher checkbox. To see what your battery will look like it is under the text Preview text in the bottom of the screen. To show what the battery would look like at different charges change the Label slider.

The Lid tab manages settings for when you close your laptop lid. The lid watcher lets you choose to suspend or shut off your computer when the lid is closed on battery or on AC. The checkbox for Enable Lid Watcher enables actions to be taken when the laptop lid is closed and of course uncheck means it won't take any action. The On Battery field changes what action to take when your laptop is powered by the battery. The On AC is changes what action to take when your laptop lid is closed and it is plugged into power.



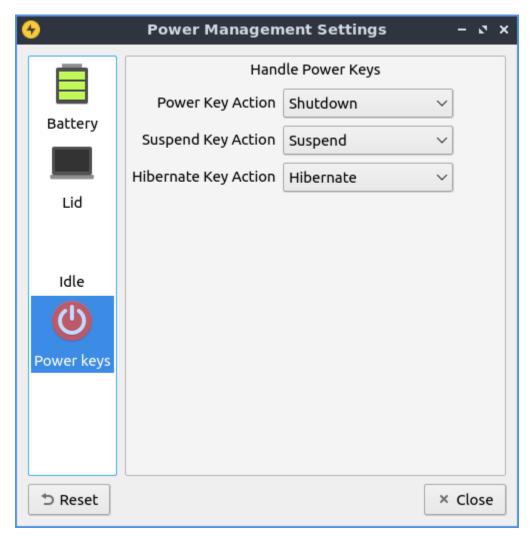
The Checkbox When using external monitor Allows you to have different settings when your laptop for closing the lid if you are plugged in to an external monitor. The fields On Battery and On AC function as above just different settings when plugged into an external monitor.

The Idle tab manages what happens when you walk away from your keyboard. The When idle on AC you select whether you want to do Nothing, Lock Screen, Suspend, hibernate, Shutdown, or Turn Off Monitor(s) when your computer is plugged in. The On Battery field tell you how long to wait when you are away before the idleness watcher takes the action you wish. To change when what happens when your computer is unplugged change the When idle on Battery field. To change how long to change what happens when the idle when your computer is unplugged change Battery idle time field.

To enable changing the backlight brightness when your computer is idle check the Enable Backlight Change checkbox. To change the bright the screen becomes when idle Backlight(%) slider as lowering the brightness will use less power. To change how long to reduce your brightness on your laptop change the Idle time field. To have the screen reduce brightness even when plugged in uncheck the On battery discharging checkbox. To disable changing the screen when you have a window fullscreen check the Disable idleness when fullscreen checkbox.



To change what buttons do in regards to power use the Power keys tab. To change what the power button does change Power Key Action to what you want to happen when you press the power button on your computer. To change what the suspend button does use the Suspend Key Action menu. To change what the hibernate button does use the Hibernate Key Action menu.



To reset your changes press the Reset button. To close Power Management press the Escape key or press the Close button.

#### **Version**

Lubuntu ships with version 1.1.0 of Power Management.

#### **How to Launch**

To launch Power Management from the menu Preferences ► LXQt settings ► Power Management. The Power Management icon looks like a yellow circle with a black lightning bolt. You can also run

lxqt-config-powermanagement

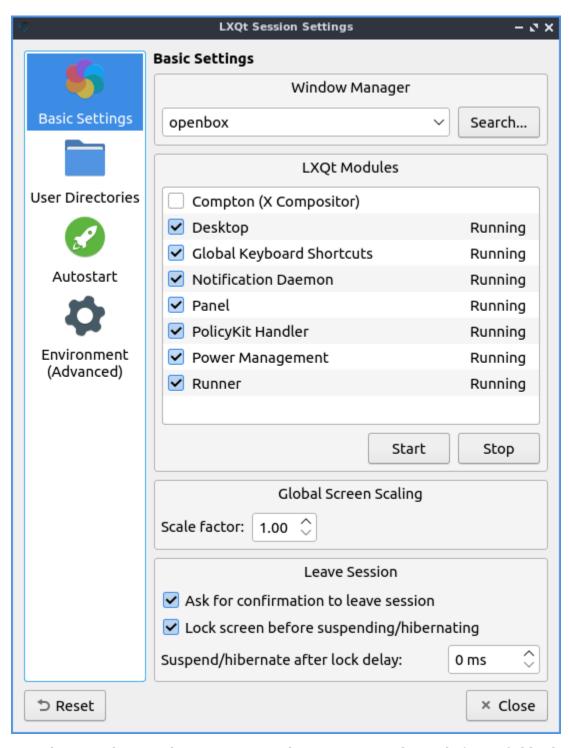
from the command line. You can launch Power Management from the panel by right clicking on the battery icon and select Configure.

# **Chapter 3.2.13 Session Settings**

Session Settings is the way to change what happens when log into Lubuntu. Here you manage default applications and services at startup.

# **Usage**

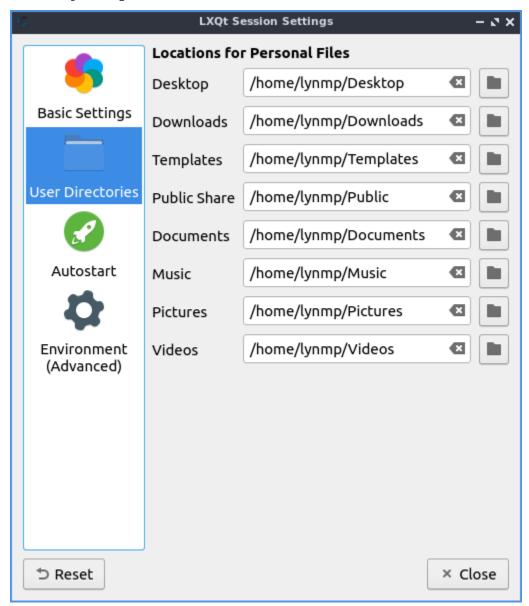
The Basic Settings tab lets you change with a window manager and LXQt modules. To change the window manager used by LXQt, on the basic settings tab use the Window Manager drop down menu. Choose from the drop down list or press Search if the drop down list does not contain your new window manager. The LXQt Modules heading lists the different part of LXQt if you find you do not want part of LXQt active you can enable or disable them here. If you wish to start the compton X11 compositor you can do so here, we have chosen to disable it at default to lower system resources by default. To stop an LXQt Module left click on the module name press the Stop button. To start a stopped LXQt Modules press the Start button. If you want to restart part of LXQt without using the command line first press the Stop button and then the Start button.



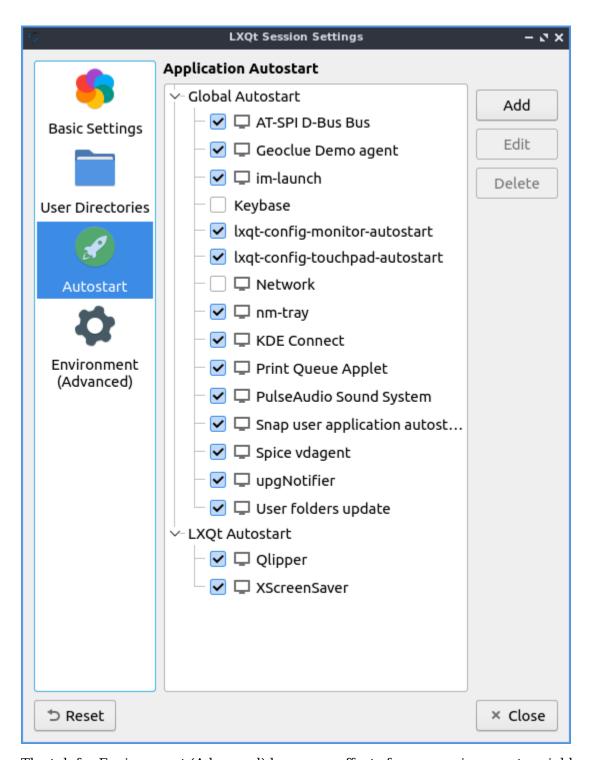
To make everything on the screen appear bigger increase the Scale factor field. The checkbox for Ask for confirmation to leave session gives you a simple yes no dialog to make sure you really want to leave so you do not lose your work uncheck it if you do not want this and find this dialog annoying. The Lock screen before suspending/hibernating checkbox locks your screen before suspending or hibernating. To change how long to wait after locking the screen to delay or suspend change the Suspend/hibernate after lock delay field.

To change where LXQt saves the default user directories left click on the User Directories tab. To view what folder to change the default location for use the Desktop, Downloads,

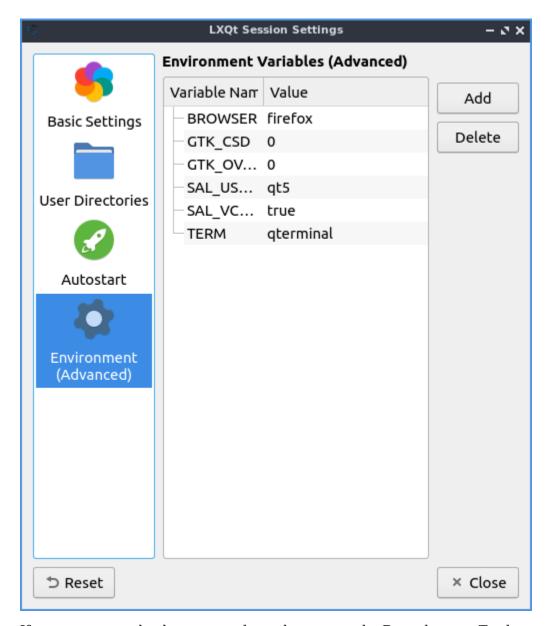
Templates, Public Share, Documents, Music, Pictures, or Videos field to change that default folder for that. To bring up a dialog to change your folder press the folder button. In the center shows the current path to your documents. To go back to the default folder press the leftward pointing arrow with an x in it.



The Autostart tab has settings for what to autostart. The autostart applications lets you choose which applications to autostart like managers for print queues. All of these are check-boxes to start various programs. You can start a program at startup by adding it here. Click the Add button, give the process a name e.g. "Terminal drop down" and type in the Name and type appropriate terminal command e.g. "qterminal -d" where it says Command. If you are say autostarting a clipboard manager or something else that needs to be in a system tray check the Wait for system tray checkbox so the application does not autostart before the system tray and does not end up running. To change a keyboard shortcut press the Edit button. To stop a program from running automatically but not to delete the entry uncheck the checkbox in front of that entry. To remove a setting for autostart first uncheck the checkbox to disable autostarting that program then left click on the autostart press the Delete button.



The tab for Environment (Advanced) has many effects for you environment variables for your session. The Variable Name provides the name of the environment variable. To change the value of a variable double click on the value under the Value column. To add a new environment variable press the Add button. Then at the bottom a dotted line will appear and double click to enter the Variable Name and the Value for the variable. To delete an environment variable press the Delete button. To change your cursor size change the XCURSOR\_SIZE variable.



If you want to undo changes you have done press the Reset button. To close session settings press the Escape key or press the Close button.

# **Version**

Lubuntu ships with version 1.1.0 of Session Settings.

#### **How to Launch**

To launch Session Settings from the menu Preferences ► LXQt settings ► Session Settings. The icon for Session Settings looks like two interlocked gears. To run Session Settings from the command line run

lxqt-config-session

# **Chapter 3.2.14 Shortcut Keys**

Shortcut Keys is the program that manages the global hotkeys or keyboard shortcuts for Lubuntu.

**Note:** The keyboard shortcuts are also managed by Openbox. Refer to Appendix F for more detail.

# **Usage**

You can **Modify** a current keyboard shortcut by selecting the shortcut from the keyboard table, clicking the Modify button, then clicking on the shortcut button. A countdown will begin during which you should push the **keyboard shortcut combination** you want.

You can **Remove** a keyboard shortcut by selecting the shortcut from the keyboard table, and clicking the Remove button. To swap to shortcut keys you can select two shortcuts with Control+ Left Click then left click on the Swap button.

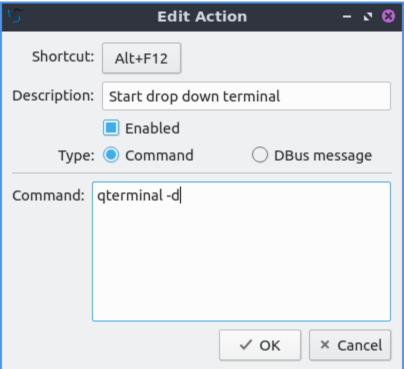
You can **Add** a new keyboard shortcut clicking the Add button. The shortcut field will be blank, click the Shortcut button to start the countdown, then press the **keyboard shortcut combination** you want to assign. Write a short description of what the keyboard shortcut does, for example "start drop down terminal", or "increases screen brightness" in the Description field so you know what this shortcut does in the future. To make this execute a terminal command select the Command radio button and enter the command. To restore keyboard shortcuts to default press the Default button.

To see what previous keyboard shortcuts use their are several columns to see what keyboard shortcuts do. To see what number of each keyboard shortcut look at the Id column. To see what keyboard to press look at the Shortcut column. To see what the shortcut does look at the Description column. To see what type of keyboard shortcut view the Type column. To see what command or what the shortcut will do view the Info column.

To close Shortcut Keys press the Escape key or press the Close button.

# **Screenshots**





# **Version**

Lubuntu ships with version 1.1.0 of Shortcut Keys.

#### **How to Launch**

To launch Shortcut Keys from the menu Preferences ► LXQt settings ► Shortcut Keys. The icon for Shortcut Keys button looks like a keyboard. To launch Shortcut Keys from the command line run

lxqt-config-globalkeyshortcuts

# **Chapter 3.2.15 Users and Groups**

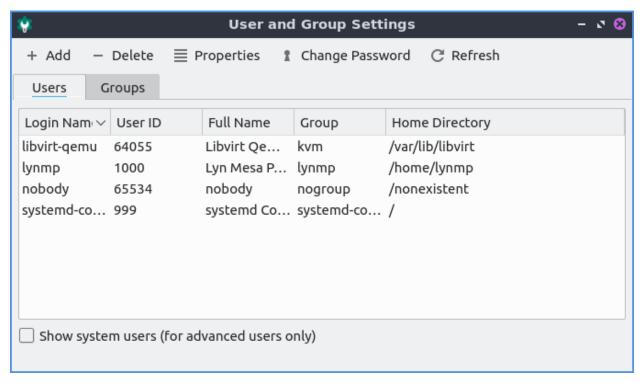
Users and Groups lets you manage user and group settings on your system.

# **Usage**

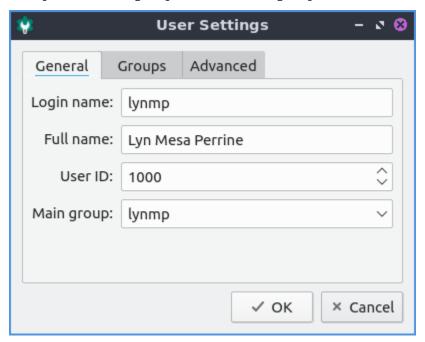
The Users tab lets you manage Users. To create a new user account press the Add button. You will need to select the groups you want the user to be in under the Groups tab. Once the user information and groups are set press the OK button. Then you will be prompted to enter an administrative password. Next you will be prompted to enter the new password for the user. To change the users permission click account type and enter your password and select desktop user to not give permission to change the system or admin to change system settings.

To change a user's password select the user in the list then press the Change Password button you will be prompted to enter the new password. Then you will be prompted to enter an administrative password to authenticate that you have permission to do this. To reload the info on users and groups press the Refresh button.

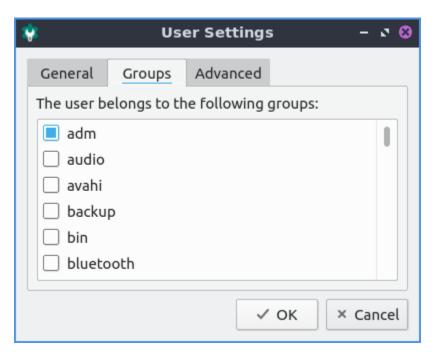
To see what name a user logs in with read the Login Name column. To see what each user id is read the USER ID column. To see the full name for a user read the Full Name column. To see what group the user primally belongs to read the Group column. To see the users home director read the Home Directory column. To show system users check the Show system users checkbox.



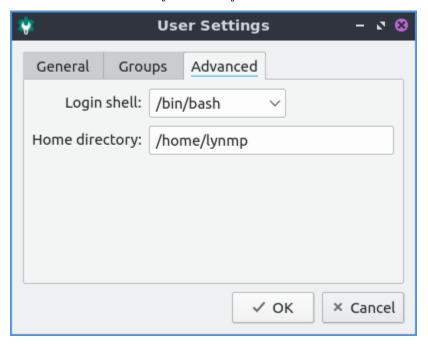
To view an info on a particular user press the Properties or double click on the users name to bring up a dialog box or the accomplish the same thing by double clicking on the username. You can view the Login Name will show you the login name for the user and can be edited if you type in the box. The field User ID is the numerical internal id of your user. The field Main Group is the main group that is default group for files access to.



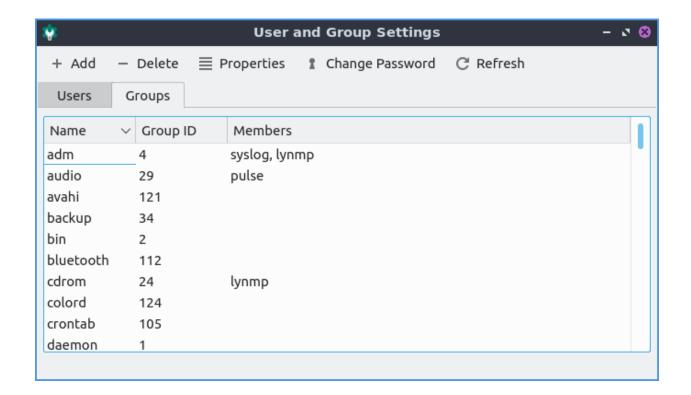
The tab Groups under properties has checkboxes for each group you are in or which checkbox or each group you are not in. To add or remove a user from a group check or uncheck the checkbox for the group you want to add or remove a user from. To view what numeric group id each group has is in the Group ID field.



The Advanced tab in the properties menu has settings with a login shells and where your home directory is. To change which shell you use when you login via ssh or directly to a console change the Login Shell drop down menu. To change where your home directory is use the Home directory field for your folder.



The Groups tabs lets you see info on groups and change properties. The Name field shows the name of the group. The Group ID shows the numeric group id of the group in the name field. The Members show the members of the current group.



**Warning:** Changing user and group permissions without knowing what you are doing could break your system.

#### **Version**

Lubuntu ships with version 1.1.0 of Users and Groups.

# **How to Launch**

To launch Users and Groups from the menu Preferences ► LXQt settings ► Users and Groups. The icon for Users and Groups is a teal circle with nondescript picture of a person in the foreground. Or you can run

lxqt-admin-user

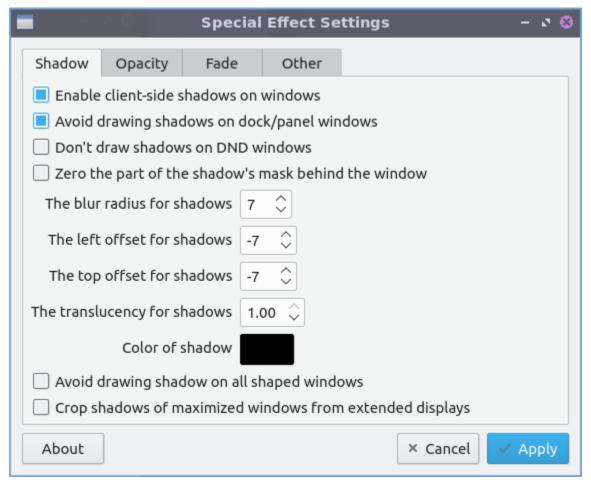
from the command line.

# **Chapter 3.2.16 Window Effects**

Window Effects is the default program in Lubuntu to manage effects of the Compton X11 compositor.

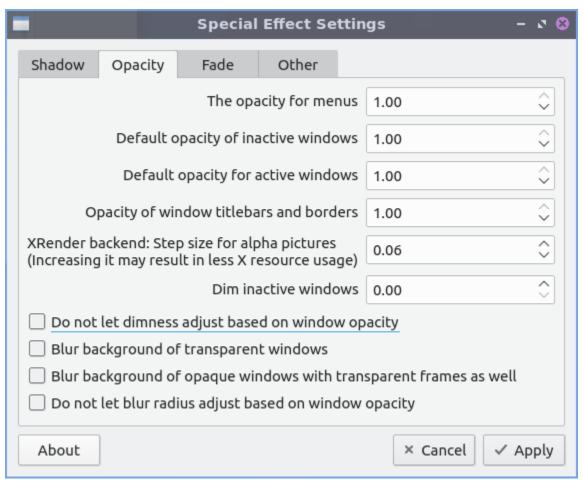
# **Usage**

The Shadow tab manages how compton draws shadows. To toggle enable client side shadows press the Enable client side shadows checkbox. The checkbox for Avoid drawing shadows on dock/panel windows will stop drawing shadows on the panel. The Color of shadow lets you change the color of shadows from windows. The field for The blur radius for shadows changes how big to blur the shadows. The left offset for shadows is how far to move the shadows to the left with a larger number makes the shadow appear farther to the right. The top offset for shadows the larger the number farther down the shadow appears below the window. The translucency for shadows is how opaque or clear to make the shadows 1 is opaque shadows and 0 is clear. The Crop shadows of maximized windows from extended displays checkbox does not have shadows across multimonitor layouts on other monitors from windows on another.

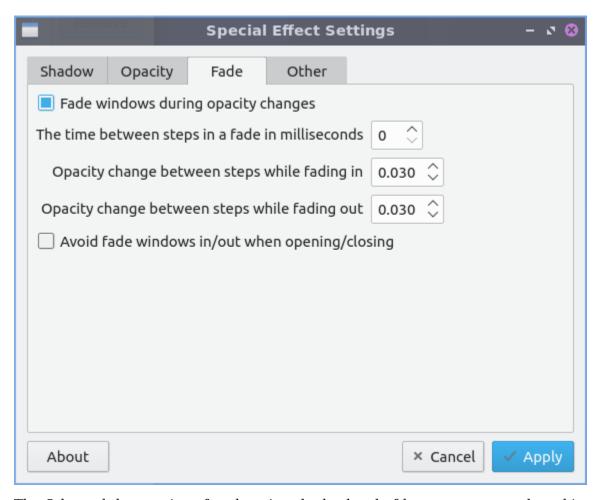


The Opacity tab is for transparency settings. Setting Opacity to 1.00 makes it opaque while 0 makes it entirely clear. Menus, inactive windows, active windows, and titlebars and borders all can have their opacity changed independently. To not change how bright or dim windows are with window opacity check the Do not let dimness adjust based on window opacity. The

Blur background of transparent windows blurs the background of transparent windows. To not change how far a window blurs on window transparency check the Do not let blur radius adjust based on window opacity.



The Fade tab manages fading windows opening or closing or opacity changes. There is a checkbox for Fade windows during opacity changes so if the opacity changes it will smoothly fade. To have a slower time between fade in milliseconds increase The time between steps in a fade in milliseconds. To change how much to change opacity while a window is fading in change Opacity change between steps while fading in field. To change steps when fading out change Opacity change between steps while fading out field. With this settings windows will fade in and out when opened and closed unless you don't them to which you can check the Avoid fade in out when windows opening/closing.



The Other tab has settings for changing the backend of how compton renders things. The Rendering backend changes what compton uses to render the window effects. To switch to hardware accelerated rendering of the compton backend press the GLX(OpenGL) button. To change back to the default rendering press the X Render button.

To have your settings applied you will need to press the Apply button. If you want to cancel your changes press the Cancel button. If you want to close Window Effects press the Escape key.

# **Version**

Lubuntu ships with version 0.16.0 of Window Effects.

#### **How to Launch**

To launch Window Effects from the menu Preferences ► LXQt Settings ► Window Effects or run

compton-conf

from the command line. The icon for Window Effects is a gear button with a c in it to launch Window Effects. Of course for this to have any effect the compton compositor needs to be running so see Chapter 3.2.13<sup>22</sup> for how to autostart applications. To start the compton compositor just once Accessories • compton from the menu.

# **Chapter 3.2.17 Alternatives Configurator**

Alternatives Configurator configures your alternative programs like your default web browser and more applications if you have multiple programs installed.

# **Usage**

To select the command to choose your alternatives for the default program for something such as your default text editor if you have multiple programs installed by left clicking what to be the alternative on the left sidebar under the column Groups. On the right side of the window has a radio button to choose which editor you want to use. Left click on the button to change to the new default program. When you change your alternative you will input your password to authenticate to change your default application.

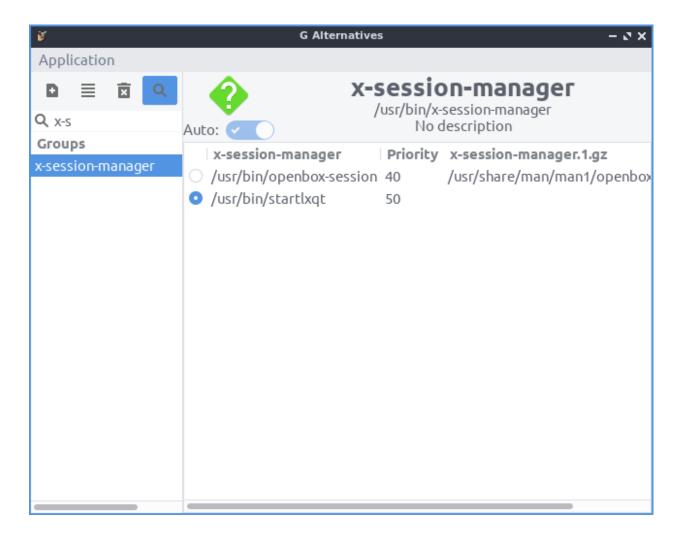
To show a search for the different application groups press the button that looks like a magnifying glass. Type the results in the field next to the magnifying glass and then see the results on the left and side column.

## **Version**

Lubuntu ships with version 1.0.8 of Alternatives Configurator.

<sup>&</sup>lt;sup>22</sup> https://manual.lubuntu.me/3/3.2/3.2.13/session settings.html

# **Screenshot**



# **How to Launch**

To launch Alternatives Configurator from the menu Preferences ► Alternatives Configurator or run

galternatives

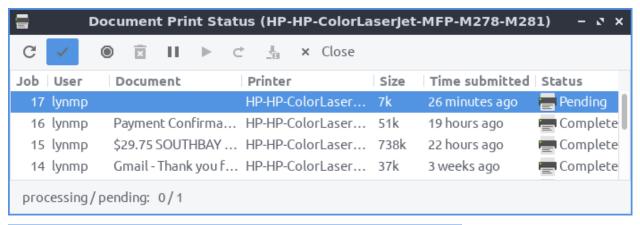
from the command line. The icon for Alternatives Configurator is a dark gray circle with an orange G with an a inside.

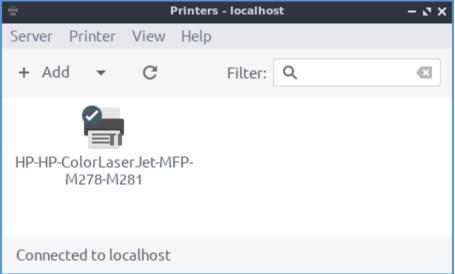
## **Chapter 3.2.18 Printers**

Printers allows you to configure your printer(s) and shows your print queue.

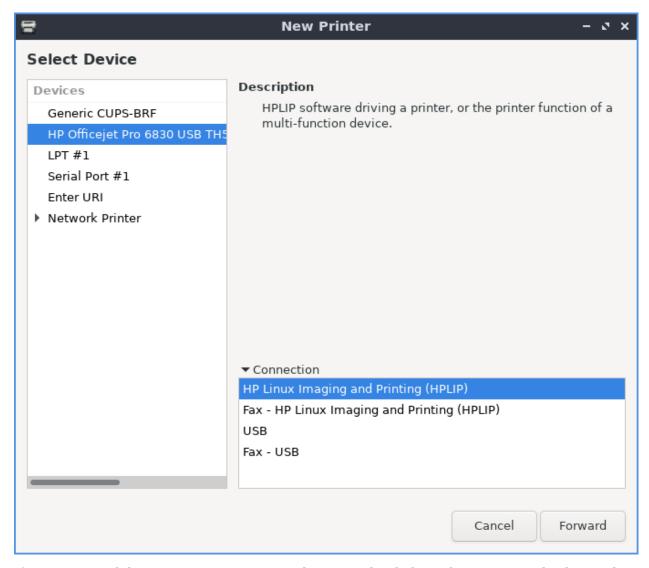
# **Usage**

To view your print queue right click on the printer and right click View Print Queue, with the printer selected press Control+F, or Printer • View Print Queue and if a job is held you can restart it. To see what status in your printer view the Status column to see if the job is pending, held or printed. To view what you have already printed press the Checkmark button. To reprint a job press the u shaped arrow button or right click and select Reprint. To cancel a job press the button with an octagon with a circle in it or right click on the job and select Cancel. To hold a printer job press the || button or right click and select Hold.



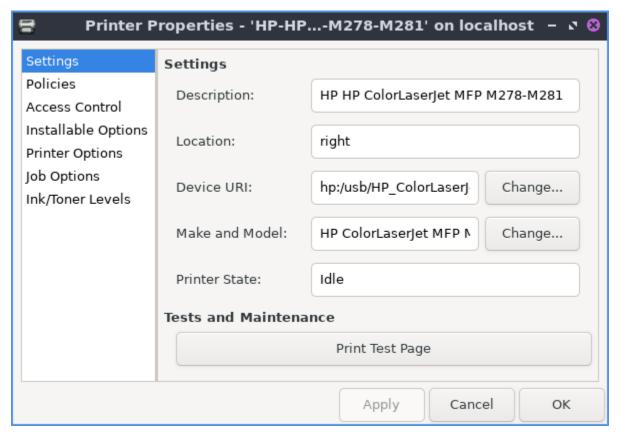


To add a new printer press the Add button or Server • New • Printer. A dialog will popup showing where you can connect the printer. Then look for your printer in the sidebar on the left hand side. Left click on the name of your printer and press the Forward button. To change the name of your printer type it in the Printer Name field. To change the description of your printer type in the Description field. To have a location for the printer type in the Location field. To move to the next step press the Forward button. After this a dialog will pop up asking if you want to print a test page.

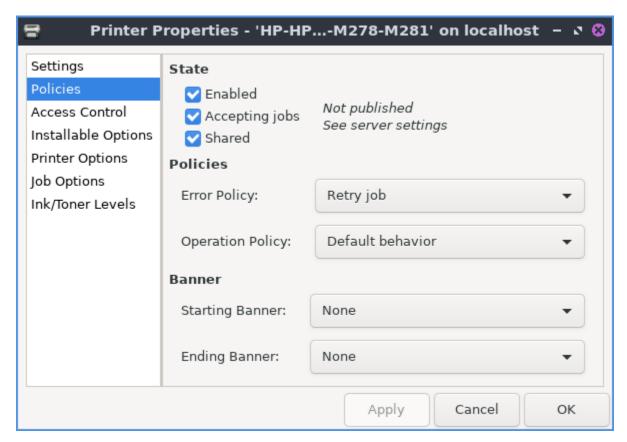


If you want to delete a printer Printer > Delete or right click on the printer and select Delete after left clicking on the printer will delete the printer after you left click on it and you will be asked to confirm so you do not accidentally delete your printer. If you have multiple printers and want to set one as default right click on the printer and select Set As Default. To change the name of your printer right click on the printer and select Rename or Printer > Rename. To make a copy of a printer settings press Control+D, right click Duplicate, or Printer > Duplicate. To set a printer as default right click Set As Default or Printer > Set As Default.

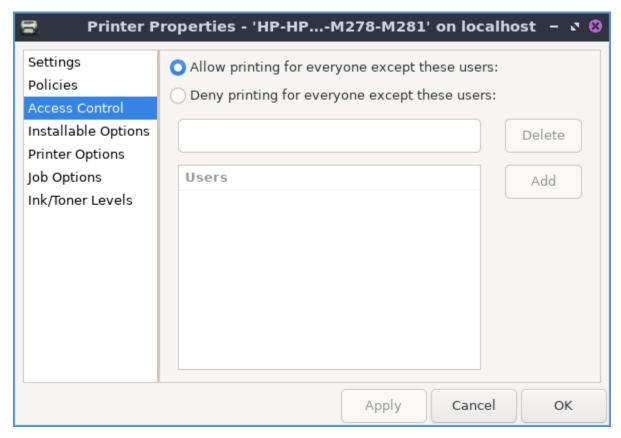
To view or change the properties of printer or make changes with Printer > Properties. To see settings on the printer has use the Settings tab. To change how to describe and name your Description field. To change where the location of this printer is change the Location field. To choose a different driver to use for your printer press the Change button to the right of Make and Model. To see the current state of the printer view the Printer State field. To see what To print a test page press the Print Test Page button.



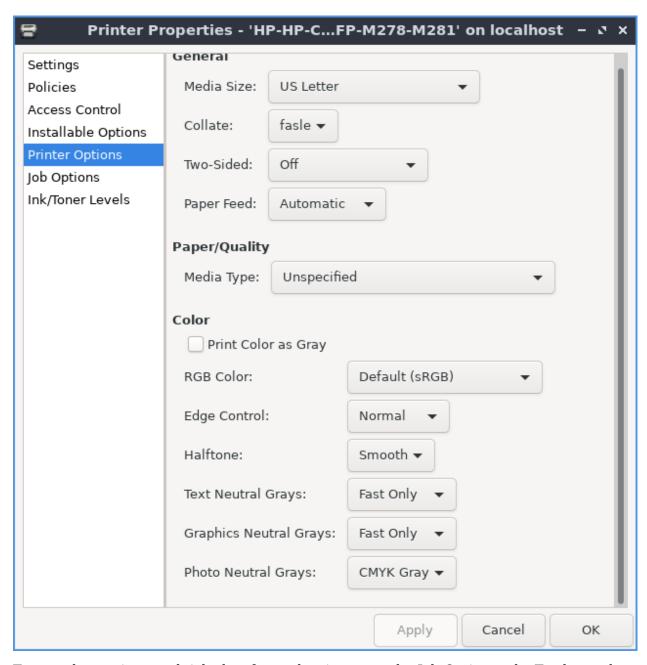
To change what your printer changes on errors or is enabled and banners use the Policies tab. To disable a printer uncheck the Enabled checkbox. To have the printer not accept jobs uncheck the Accepting jobs checkbox. To not share your printer uncheck the Shared checkbox. To change what to do when your printer encounters an error change the Error Policy drop down menu. To have a banner before you start printing use the Starting Banner drop down. To have a banner ending what you print use the Ending Banner drop down.



If you want to change which users can use this printer use the Access Control tab. To add a user to not be allowed to print type there name in the bar and press the Add button. To remove a user from this list left click on the username and click the Delete button. To switch to only allowing users on the list to print press the Deny printing for everyone except these users button. To switch back to banning users from printing press the Allow printing for everyone except these users checkbox.



To choose settings specific to your printer use the Printer Options tab. To choose your paper size use the Media Size drop down. To have your printer collate select On from the Collate drop down menu. To print color as gray check the Print Color as Gray checkbox.



To see what options each jobs has for each printer use the Job Options tab. To change how many copies to have by default Copies field. To change which direction to print with this printer by default change the Orientation field. To have the printer resize anything you print to fit to a page check the Scale to fit checkbox.

To close Printers press Control+Q.

# **Version**

Lubuntu ships with version 1.5.18 of Printers.

#### **How to Launch**

To launch Printers from the menu Preferences > Printers or run

system-config-printer

from the command line. The icon for Printers looks like a printer.

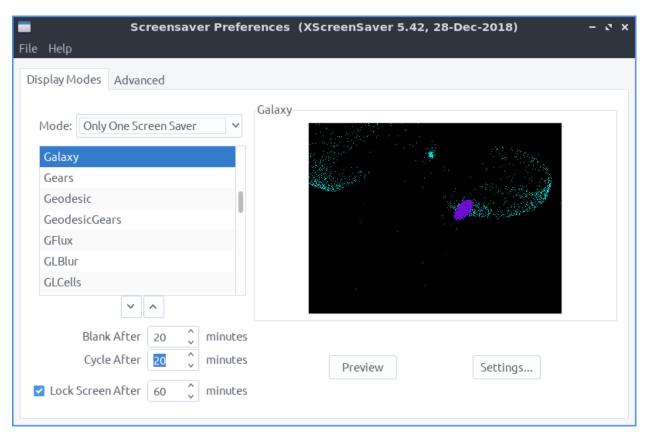
## **Chapter 3.2.19 Screensaver**

Screensaver is an application to control what screensavers are used on the system and how long it takes to activate the screensaver.

# **Usage**

The Mode drop down has 4 settings Disable Screen Saver turns off the screensaver, Blank Screen Only just turns the screen itself off, Only One Screen Saver sets one screensaver, and Random Screen Saver selects a random screensaver. If you selected to blank the screen change the Blank After field. If you have a random screensaver set you can change with the number of minutes it says with Cycle After for when the screensaver will change to another one. Check the checkbox for Lock Screen After takes the number of minutes to lock the screen and change minutes to change how soon to lock the screen.

To change your screensaver to a different screensaver left click on the name of the screensaver on the left hand side of the screen. You can see a small preview of the screensaver on the right hand side of the window.



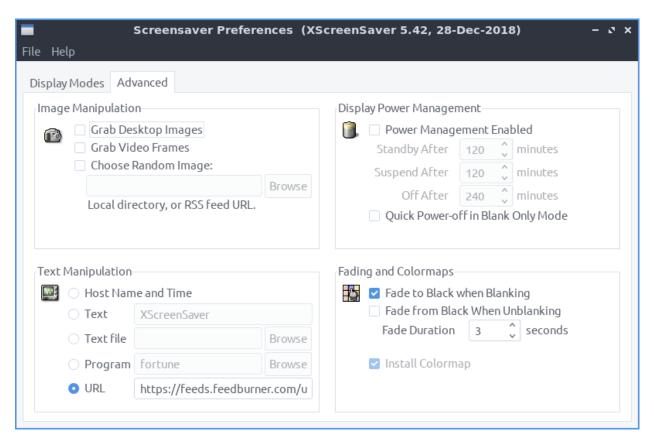
If you try to select a screensaver that is not installed it will not show on the right hand side of the window. To preview a screensaver as when it would be activated press the Preview button. To see more settings for each individual screensaver press the Settings button.

To make the screen blank File ► Blank Screen Now. To lock your Screen File ► Lock Screen Now. If you want to kill the daemon File ► Kill Daemon. To restart the screensaver daemon File ► Restart Daemon. To restart xscreensaver File ► Restart Daemon.

If you try to open the screensaver settings without having the screensaver daemon running you will bring up a dialog if you want to launch it.

To change to get even more settings on your screensaver use the Advanced tab. To change images in your screensaver change settings in Image Manipulation heading.

To change turrning the screen off and if to enter standby or suspend use the settings in Display Power Management. To enable xscreensaver to have power management check the Power Management Enabled checkbox. To change how fast to turn the computer into standby change the Stanby After field. To change how fast to suspend when idle change the Suspend After field. To turn the monitor off after an amount of time change the Off After field. To turn the screen off when blanking the screen check the Quick Power-off in Blank Only Mode chackbox.



To change the settings for how to make your screen blank change the Blanking settings. To have your screen fade to black when blanking check the Fade to Black when Blanking checkbox. To have your screen fade back in from screen blanking check the Fade from Black When Unblanking. To change how fast your screen fades change the Fade Duration field.

#### Version

Lubuntu ships with version 6.02 of Screensaver

# **How to Launch**

To launch Screensaver from the menu Preferences > Screensaver or run

xscreensaver-demo

from the command line. The icon for Screensaver looks like purple night picture of the sky at night.

# 2.4 Chapter 4 Installing, Updating, and Removing Software

This chapter will teach you how to use GUI tools to install, update, and remove software. It also manages where your system downloads packages.

# 2.4.1 Chapter 4.1 Discover Software Center

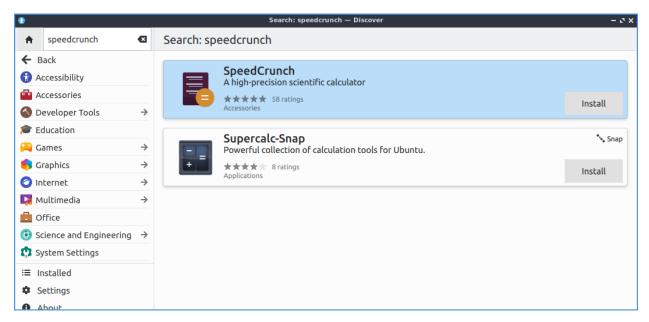
Discover allows you to install and remove programs and utilities. It has a simplistic interface making it easy to navigate and use. However, Discover only shows GUI applications so if you are looking for command line packages please use Muon Package Manager instead.

## **Usage**

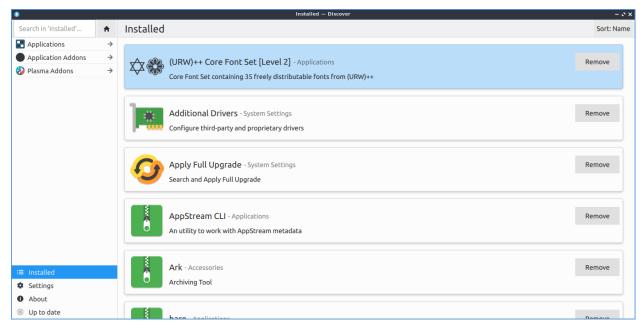
Discover allows you to search for applications by using the Search box or by pressing Control + F. To view featured applications press the Home button in the top of the bottom left hand corner. Left clicking on a program will give you a description of it. To install a program press the cloud with downward pointing arrow button that says Install when viewing a single package. When installing or removing software, you will be prompted for your password. You can also browse through different categories on the left clicking on the different categories. If a category has a • next to it you can click on it and then will have subcategories. To go back up a little press the Back button in the upper left. In the results after selecting your program you are looking at you can select a screenshot and get a bigger view of the screenshot click on the screenshot. To change which screenshot you are looking at press the left and right arrow buttons near the screenshot. To exit from the screenshot press Escape or click not on the screenshot. To navigate back to the start with press the button that looks like a house.

Press the leftward pointed arrow button to moves back in your history.

To view more information on a program you want to install left click on a program to see more details on it. Towards the right will show a description of the program. To view user reviews of a program click on the text Show All Reviews. To install the program press the Install button. To view more screenshots press the left and right arrows next to the screenshots. To exit the user reviews press Escape or click outside the areas of reviews. To view ratings of thee program is shown in stars with how many ratings of the number of reviews next to ratings. Below the reviews there is information on the package such as the Version and License.

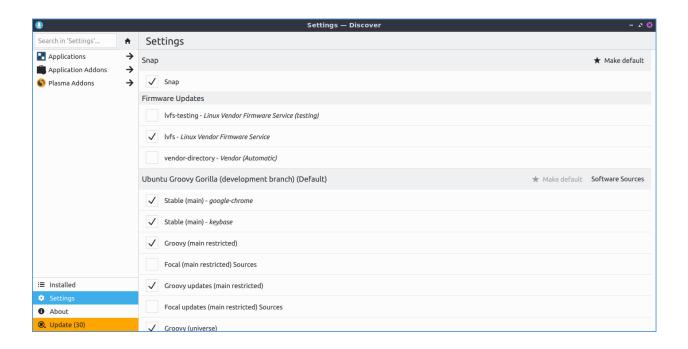


To remove software use the Installed tab or press Alt +I. You can browse your installed packages, search using the search bar (upper left corner), and the click the remove button to remove software by pressing the Remove button. To view more details on the program left click on it. If you want to launch an installed program press the Launch button in the upper right corner.



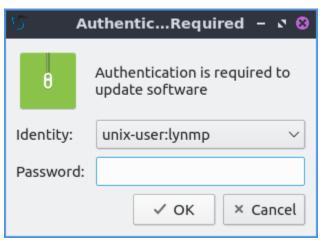
In the upper right corner of discover you can have a Sort category to sort your search results by Name, Rating, Size, or Release Date.

To get to your settings on what software to use install use the Settings tab. To remove a source such as a PPA click the hidden red X button on the right hand side of to remove it. To toggle enabling or disabling a software source check or uncheck the checkbox next to that software source.

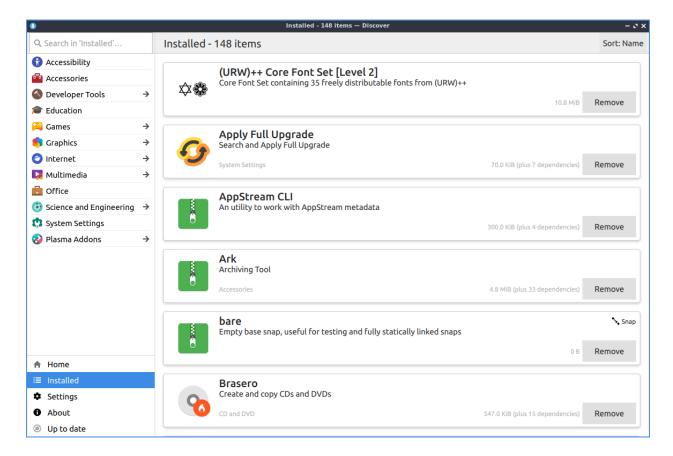


## **Updating**

Discover allows you to update software using the Updates tab located on the bottom of the left column. You can click the Check for Updates button to check for updates manually. If you have updates that need to be installed instead it will say in orange Update(x) where x is the number of the packages needing updating or press Alt+U. When you select updates to install and have updates towards the upper left shows you the number of packages to update and the size of the download in parenthesis. To see the what version will be upgraded on your system will show the old version • new version with how much the download size of the update to the right. To see what is changing in a package with the changelog left click on the package and then mouseover to see what has changed in the update. To view info about a package being updated left click on it and then left click :guilabel: More information `. To finally update press the Update All button to install all updates and then a dialog will pop up you will need to enter your password and press the OK button to make sure you are the one installing these updates. If you need to restart after updating on your updates you will see the text The system requires a restart to apply updates and press the Restart button to restart your machine.



## **Screenshot**



#### **Version**

Lubuntu ships with version 5.25.5 of Discover.

#### **How to Launch**

To launch Discover from the menu System Tools ▶ Discover or run

plasma-discover

from the command line. The icon for Discover looks like a blue circle with a white downward pointing arrow.

# 2.4.2 Chapter 4.2 Muon Package Manager

Muon Package Manager is an alternative GUI for installing and updating packages.

#### **Usage**

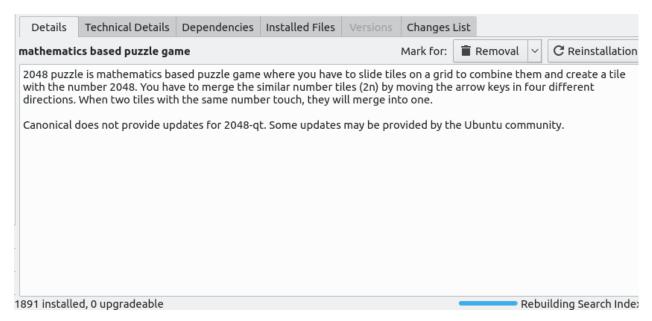
To update your packages press the gear button with a clockwise pointed arrow. If updates are available press the upward pointing arrow with a dot on top to install the updates.

To search for a program to install type into the bar at the top that says Search. If you find something you want to install you can right click and then Mark for installation or left click the Mark for Installation button. When the package you want to install has additional dependencies will show up if you think twice about wanting to install you can click the Cancel button to not pull in all those dependencies or press OK to continue looking for software to install. To apply your changes you can press the green checkbox button that says Apply Changes and you will end up entering your password to confirm you want to install and then the package will be installed. To go back to do other changes press the Back button. To preview your changes after hitting back press the Preview Changes button. If you want to undo the last operation you have done for installing packages press Control+z or Edit > Undo. To choose a package to not install you can right click on it and select Unmark. To get rid of all your marked packages for installation Edit > Unmark All.

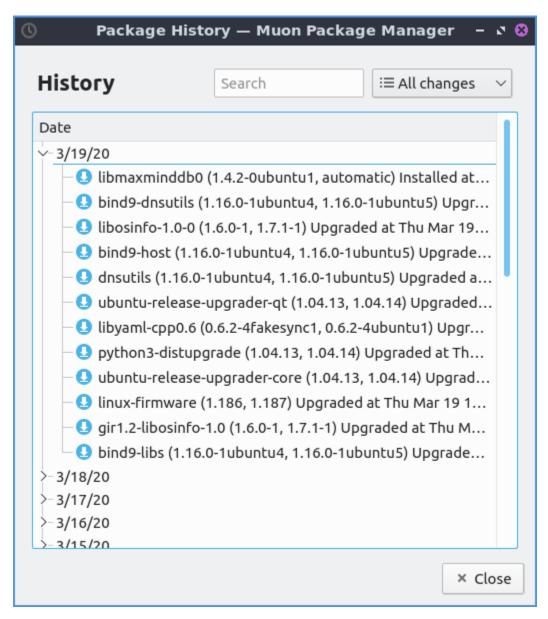
The Package column shows the package name and a short description of the package. The Status column shows what the current status of the package is. The Requested column shows what status you want for the package. To reverse the sort order of packages press the triangle button just to the left of the Status, Requested, or Package columns.

To select the next package left click on the list of packages press the Down Arrow key to move to the next selected package. To select the previous package left click on the list of packages above press the Up Arrow. To move down a group of packages press the Page Down key. To move the packages up a page press the Page Up key. To move to the last package in results press the End key. To return to the first package press the Home key.

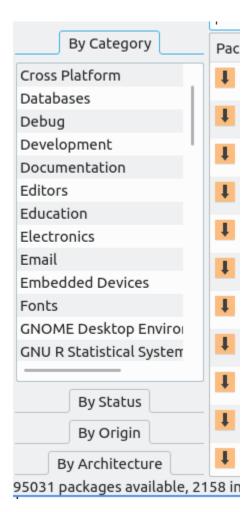
When you find your package you want to install on the bottom half of the screen there is a bar of tabs. The Details tab has a description of the package you are currently selected. The Technical Details will show you where the package comes from what category it is and what the installed size would be and what size it takes to download the package. The Dependencies tab shows you what other packages are needed by the package you wish to install. To view the changes of a package the Changes List and scroll down to view them. If you have installed a package you can see all files installed by that package in the Installed Files tab.



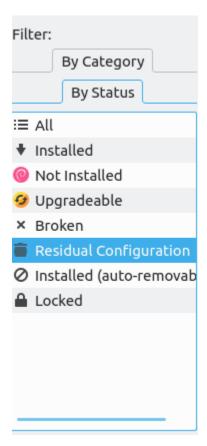
If you want to see your history of package updates and installed from the View • History or press control + h. To search through your history enter what you want to search for in the Search bar. To the right to the search is a drop down menu to choose whether to view All changes, Installations, Updates, or Removals. Under the Date field shows collapseable search results of the kind of packages you are looking for. To collapse or uncollapse a the operation on a particular date press the + button to uncollapse an operation on a date. To collapse operations on a particular date is to press the - button.



On the left hand side of Muon Package Manager there is a By Category divider. In this there are many different categories like Graphics and Games and Amusement. For example the graphics tab will have image editing or creating vector graphics in the Graphics category. To go back to seeing all packages select All under the By Category divider.



To view all installed packages on the left hand side of the window under filtered click the divider for By Status and select Installed. Now in the upper main part of the window will be a window with a scrollbar to see all packages on your system. To show only files that are not installed from the By Status divider select Not Installed. From the By Status divider select Upgradeable to see which packages can be upgraded. To see only packages that are broken the filter for By Status and select Broken. To view which packages that are not installed on your system but still have configuration file from the By Status divider select Residual Configuration. To view packages installed as a dependency and know can be removed from By Status and select Install(auto-removable). To go back to seeing all packages in the By Status and select All.



To see which packages come from which source select either By Status and then select Installed or All to select all or installed packages. Then select By Origin and the name of any PPA will show which packages come from. To go back to seeing all packages select All on the sidebar under both By Status and By Origin.

If you remove some packages you may have packages that were dependencies that are no longer needed anymore you can check on this by clicking the divider on the left hand side by By Status • Installed(auto-removeable) will show if you have packages that are now able to be removed without any problems that are no longer serving a purpose. Then select the Mark for Removal button. If you just want to mark all packages for removal Edit • Remove Unnecessary Packages. Then of course you will need to press the Apply Changes button to apply changes.

To see what repository a package comes from on the left hand side use the By Origin filter on the left hand side. Ubuntu shows packages from the official Ubuntu repositories.

To see what architecture a package uses use the By Architecture filter. To see all architectures use the All line. To see common packages see the Common for packages common to all architectures. To see 64 bit packages use the 64-bit line. To see 32 bit packages use the 32-bit line.

To check for updates in Muon press Control + R or the gear button with an arrow or Edit > Check for Updates. To actually update and install these upgrades fully press the Full Upgrade button or Edit > Full Upgrade and then press the Apply Changes button. After this a status bar towards the bottom will show how much total progress is on the upgrade. To have an upgrade where packages are not removed press the upward point arrow button or Edit > Cautious Upgrade.

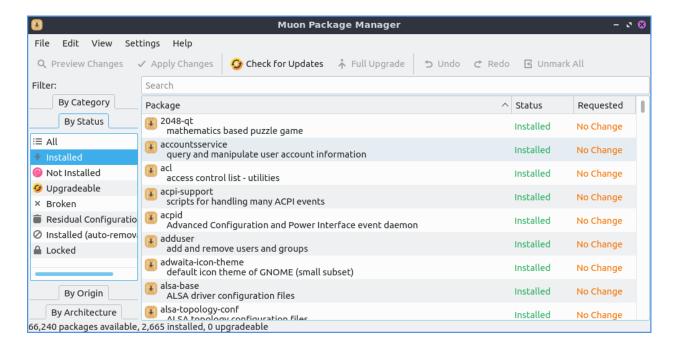
If you want to save all of your packages on a text file you can File ▶ Save Package Download

List. If you want to load these packages from a file such as if you get a new laptop File > Download Packages From List. If you want to quit Muon press Control+Q.

On the bottom of Muon package manager there is a toolbar that states how many packages are available, installed, and upgradeable.

To hide the toolbar uncheck the Settings ▶ Show Toolbar checkbox or right click on the menubar and uncheck Main Toolbar. Check the Settings ▶ Show Toolbar again to get your checkbox back.

#### **Screenshot**



#### **Version**

Lubuntu ships with version 4:5.8.0 of Muon Package Manager.

#### **How to Launch**

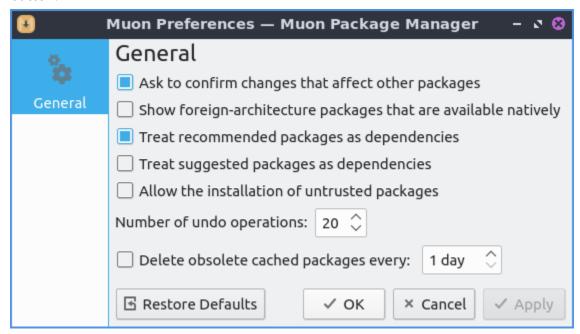
To launch Muon Package Manager from the menu System Tools ► Muon Package Manager or run

muon

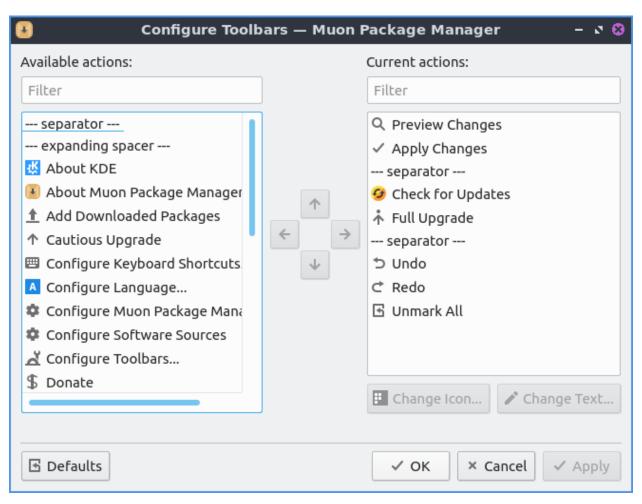
from the command line. The icon for Muon Package Manager is a tan box with a downward pointing black arrow.

## **Customizing**

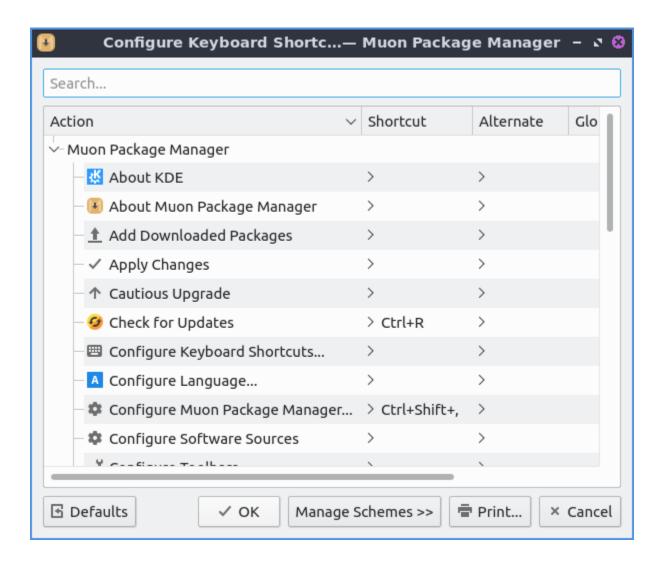
To get to your preferences for Muon package manager Settings • Configure Muon Package Manager. The checkbox Ask To confirm changes that affect other packages brings up confirmation dialog when you will affect multiple packages. The checkbox Treat recommended packages as dependencies will always install all recommended packages as dependencies and will automatically install one when you install a recommended package. To always install suggested packages as dependencies check the Treat Suggested packages as dependencies. To change the maximum number of package operations you can undo change the Number of undo operations field. To save space by deleting old cached packages check the Delete obsolete cached packages every checkbox and change the field to the right to change how often to delete the cache. To have your settings back to default press the Restore Defaults button.



To change settings on your toolbar Settings • Configure Toolbars. To remove an item from the current items on the toolbar press the button that is the leftward pointing arrow. To add an item to the toolbar press the button that is the rightward pointing arrow. To move an item up or down on the toolbar press the upward pointing arrow button. If you want to change the icon for things you have in your toolbar press the Change Icon button. To change what the toolbar says press the Change Text button and type what you want in the toolbar in the pop up menu. To set your toolbars back to the default press the Defaults button.



To view and configure your shortcuts Settings > Configure Shortcuts and a window to open shortcuts will appear. The column for Action says what the keyboard shortcut will do. The column Shortcut will let you have a shortcut to apply changes. To add shortcut to something that does not have it press the small faint > will bring a drop down menu and press the button next to the word Custom and input Your shortcut here. To restore all keyboard shortcuts to defaults press the Defaults button.



# 2.4.3 Chapter 4.3 Managing Software Sources

Occasionally you may need to change the setting of your software sources. This could involve:

- Changing update settings like update frequency, notification of new releases,
- Adding or removing sources such as PPAs
- · Changing download server
- Installing proprietary drivers

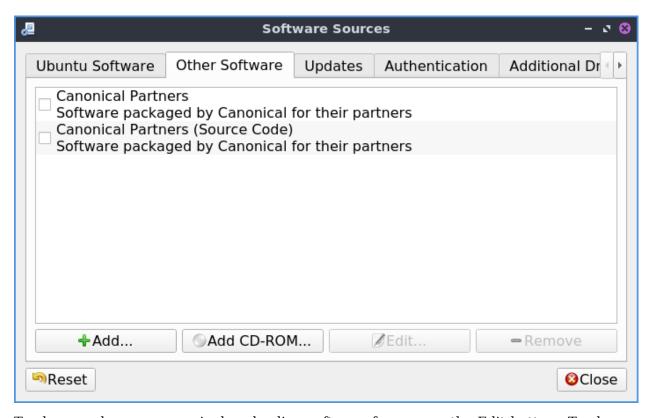
## **Usage**

To use Software Sources you will need to authenticate with your password as this changes systemwide settings. You can navigate the Software Sources using the tabs at the top of the window.

The Ubuntu Software tab contains settings involving the downloading of software from Ubuntu repositories. Here you can disable proprietary software and select a download server among other things. To toggle enabling /disabling the proprietary drivers check/uncheck the Proprietary drivers for devices(restricted) checkbox. To toggle enabling/disabling other proprietary software check/uncheck the Software restricted by copyright or legal issues(multiverse) checkbox. To change the mirror or where you download change the Download from drop down menu. The Main Server option downloads from the main Ubuntu server. There is an Other option with a large list of mirrors. The Mirror column lists a collapse list of mirrors to download from. To choose the fastest option press the Select Best Server. To see what protocol you will use to download packages from this mirror see the Protocol field.

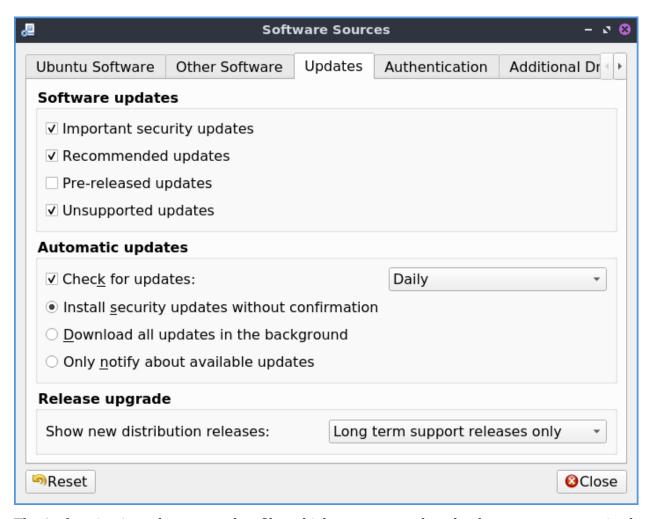


The Other software tab allows you to add, remove, or edit other software sources. Here you can manage remote repositories (PPAs) and CD-ROM repositories. To enable/disable a software source click the checkbox to the left of its name. To remove software from the list left click the Remove button. To add a third party source of software to your system press the Add button.

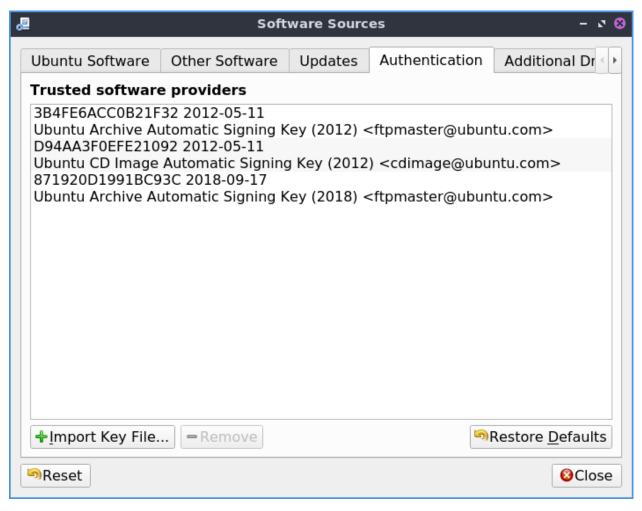


To change where a source is downloading software from press the Edit button. To change between downloading source and binary code use the Type menu. To change where the link to download software change the URI field. To change what distribution this source is for enter that in the Distribution field. To change what parts of the repository to use the Components field. To add a comment to yourself about a repository enter it in the Comment field.

The Updates tab allows you set which software updates you would like to subscribe to, in this case Important security updates, Recommended updates, Pre-released `, and :guilabel:`Unsupported updates. You can also set how frequently your system will automatically check for updates to the right of Check for updates and what actions it should take, namely notify you, download (without notification), or install updates. You can also specify which releases you would like to be notified of in the Show new distribution releases drop down, Normal Releases, Long term releases only, or Never.



The Authentication tab manages key files which ensure your downloads are not compromised, basically ensuring you are download from a reliable source and your download has not been intercepted. The list of all keys signed on your system are listed under Trusted software providers. To remove a key you no longer want to have access to your system press the Remove button. To only allow the default keys that ship with Lubuntu press the Restore Defaults button.



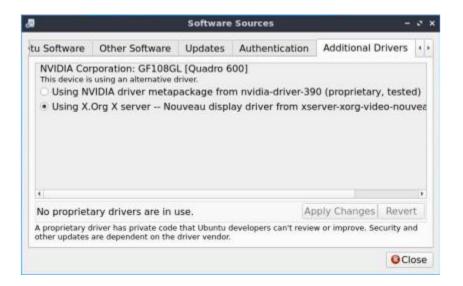
• Submitting statistical data will improve the Ubuntu experience allowing developers to know which software you are downloading anonymously. We urge you to enable this feature but it is disabled by default as Lubuntu has an "Opt-in" philosophy.

To reset changes to software sources press the Reset button. If you made changes and close software sources a dialog stating Your local copy of the software catalog is out of date and so press the Reload button to download a list of packages now from the new sources.

## **Proprietary Drivers**

To install proprietary drivers use the Additional Drivers tab. Then press the check box to use the Using Driver Name radio button to input the proprietary driver for that checkbox. To not use proprietary drivers for something press the Do not use the device radio button. To apply these changes you will need internet access and will need to press the Apply Changes button. To revert back to your previous changes press the Revert button.

To launch this part of the program directly Preferences • Additional Drivers with the icon that looks like a circuit board with pins on thee bottom.



#### **Version**

Lubuntu ships with version 0.99.19 of Software Sources.

#### **How to Launch**

To launch software properties from the menu you can Preferences ► Software Sources. In Muon Package Manager Settings ► Configure Software Sources. In Discover Software Center Settings ► Ubuntu (Default) ► Settings (Gear icon) ► Software Sources. From the command line run

lxqt-sudo software-properties-qt

The icon for Software Sources looks like a dark circle with three blue dots.

tags:PPA, software, download, sources, release, update, Discover, Muon, security,

# 2.4.4 Chapter 4.4 Update Notifier

Update Notifier is a simple program to upgrade your system.

## **Usage**

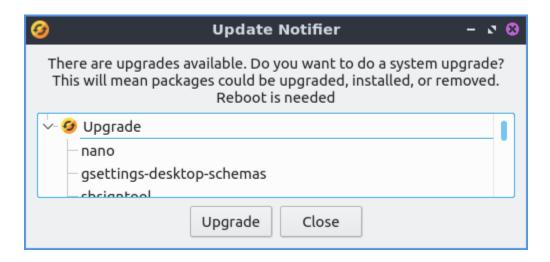
To apply an upgrade for the press the Upgrade button. This will bring up a prompt for Update Notifier with lxqt-sudo for you to authenticate applying updates. After this happens in the center will be a large progress bar showing the progress of installing. Press the OK button after entering your password. Once the update is done press the Close button.

To see what will change on a update left click on the a category most likely Upgrade and see what list of packages will be upgraded. If there are any security updates a second column will appear that says Security. Next to each security update a green shield will show up to denote that upgrade is a security upgrade. To see further what dependencies are pulling in

the upgrade and to collapse them click the arrow next to the package to be upgraded and again to collapse the list.

If you have to restart after an update the window will say Restart Required.

## **Screenshot**



#### **Version**

Lubuntu ships with version 0.4 of Update Notifier.

## **How to Launch**

To launch Update Notifier Preferences ► Apply Full Upgrade, press the Apply Full Upgrade from LXQt Configuration Center, or from the command line run

```
lubuntu-upgrader
```

The icon for Update Notifier looks like a yellow circle with two circular arrows above it.

# 2.5 Chapter 5 Panel, Desktop, and Runner

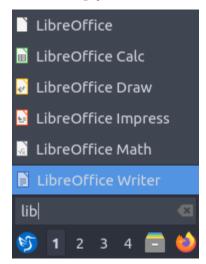
This chapter will teach you how to use the panel, desktop icons, the runner to launch applications, and window management.

# 2.5.1 Chapter 5.1 LXQt Panel

LXQt Panel is the bar situated at the bottom of your screen by default. The panel contains an application menu, a desktop switcher, a quicklaunch bar, a taskbar, a system tray containing applets, and a clock. The panel is highly configurable with a number of settings and plugins which is detailed in the Customizing section and also contains how to add or remove applets. To see information on widgets not installed by default see the Non-Default Widgets section.

## **Usage**

The application menu allows you to browse and search through available programs; a keyboard shortcut is conveniently available for this and is set to Super (Windows) by default. The menu has many subcategories to launch each application. To move an application from the menu to the desktop right click on it and select Add to desktop. The Leave menu has options to Hibernate, Leave, Logout, Reboot, Shutdown, or Suspend. If you want to lock your screen use Lock Screen. If you want to lock your screen select Lock Screen. If you mouseover a program you can see a description of that program in the menu. To go back one level or close the root level of the menu press the Escape key. The desktop switcher allows you to switch to another virtual desktop, allowing you to keep your workspace organized by left clicking on the desktop number or using the mousewheel to change desktops. To see your desktop names simply mouseover the desktop number to see the desktop name.



The quick launch bar allows you to conveniently launch your file manager (PCManFM) and web browser (Firefox) by left clicking on the program. If you right click on the icons in quick launch on something like Firefox will have items for each program. To add a program to quick launch open the menu and find it there and drag it down onto the panel. To move an item on your quick launch to the left right click the icon and select Move left or press Control and drag the icon to the left. To move an item to the left right click the icon and select Move right or press Control and drag the icon to the right. Another way to reorder items on quicklaunch is to hold Control and drag and drop to the desired position. To remove an item from quick launch right click on the icon and select Remove from quicklaunch. To show your desktop press the blue show desktop button between quick launch and the taskbar. To see all your windows again press the blue show desktop button again.

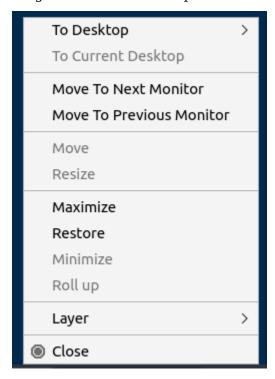
The taskbar lists the windows you currently have open. To bring one of these windows to focus simply left click the button with icon and name on the task bar. If you have multiple of the same window left clicking will open the group, allowing you to select between the different

windows by left clicking. If you want to close a group of multiple windows you can right click the group and click Close group. To see a list of all the windows in a group mouseover the group of windows on the taskbar. If you want to close one window out of a particular group left click to bring up the single window and then right click on the window and select Close.



On a single window on the taskbar to move it to a different desktop right click To Desktop to move the window to the desired desktop. To move a window to your current virtual desktop right click on the window on your taskbar and select To Current Desktop. If you have multiple monitors you can right click and select Move to next monitor to move a window to the next monitor. To move a window back to a previous monitor right click on the taskbar and select Move to previous monitor. Right clicking and selecting Move lets you drag the application around to the desired point on the desktop. The resize option from the same window lets you resize the window you right clicked on. Right click and select Maximize on a window to maximize it. Right clicking on window Restore will return a window back to its original size. To minimize a different window from the task bar you can minimize by right clicking on the window on the taskbar and selecting Minimize. Right clicking Roll up on a window will make the window only your titlebar.

Right clicking Layer on the taskbar will allow you to have move a window Always on top, Normal, or Always on bottom. Finally to close a window with right click on the taskbar and select Close will close the window. If you middle click on an item in the taskbar you will close the window. If you try to close a program that is not responding you will be asked if you want to end the task. To move items around on the taskbar into a particular order left click and drag them to the desired position.



The removable media applet will allow you to manage your remove flash drives and external hard drives and to unmount them without data loss on your system. To unmount such devices left click on the panel that looks like a disk and then click the eject button that is an upward pointing arrow. To open your removable media click on the removable media applet left click on the removable media to open the external media in your file manager.

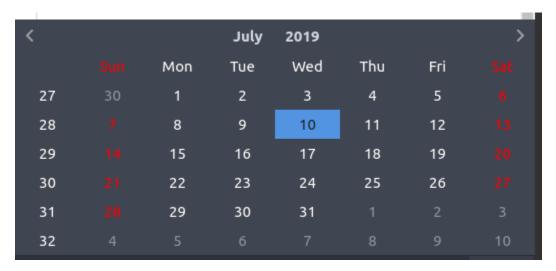


In the system tray there there are multiple widgets. To see more on how to use nm-tray which manages network in the tray see chapter 3.1.5. Also included is Qlipper which to see how to use view how to view chapter 2.4.5. Other Programs you install can also place a tray icon here as well. With the volume applet you can change the volume by using the mouse-wheel with the mouse over the speaker icon or left click the speaker icon and drag the volume up and down or press Up arrow or Down arrow. To mute the volume with the button at the bottom of the volume meter or middle click on the volume applet. To see what the current volume is you can hover the mouse over the volume applet. To close the volume applet press the Escape key.



Next over to the right is the status notifier applet with a blue exclamation point over a white rectangle. To view notifications you may have missed while away from the keyboard left click on this applet. To bring up a particular notification left click on that notification from the list and it will pop up like notifications on your screen. To clear all notifications click the button that says Clear All for notifications.

To the far right is a clock, you can left click the clock to bring up a pop up calendar window. To go to the next month on the calendar press the rightward pointing arrow. To go the previous month on the calendar press the leftward pointing arrow. Another way to change months on the calendar is to use the mousewheel. To change the month on a calendar to list all months in the year left click on the month and then select the month you want from your menu. To change the year on your calendar left click on the year in the calendar and then use up arrow or down arrow or the mouse wheel to select the year. Too see what week of the year it is read the number on the far left of the calendar.



If you are on a laptop the panel will also show the battery meter to show how much power you have remaining. To view your current charge level mouseover the battery meter and it will show if your battery is charging by mousing over. To view information about your battery left click the battery icon. The field Energy Full Design shows how much power your battery held when it was brand new. The field Energy Full shows the current full charge of your battery in your current health. The Energy Now shows how much power is in your battery. The Technology field shows what kind of battery you have.

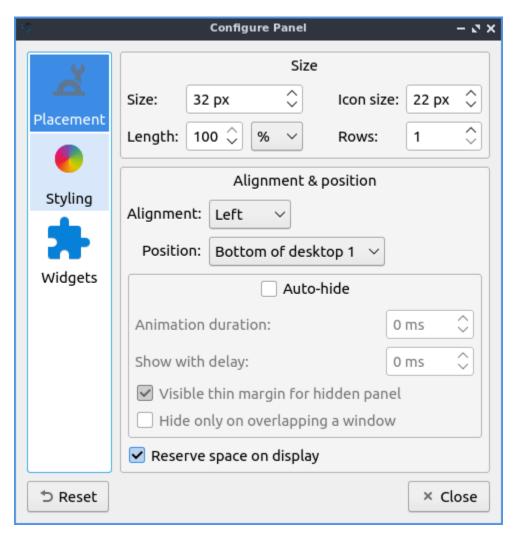


As mentioned below, the panel is highly configurable and you can customize it by right clicking at various places. If you do not want to mess up your panel right click on the panel and select Lock This Panel checkbox and do the same again to unlock your panel.

#### Customizing

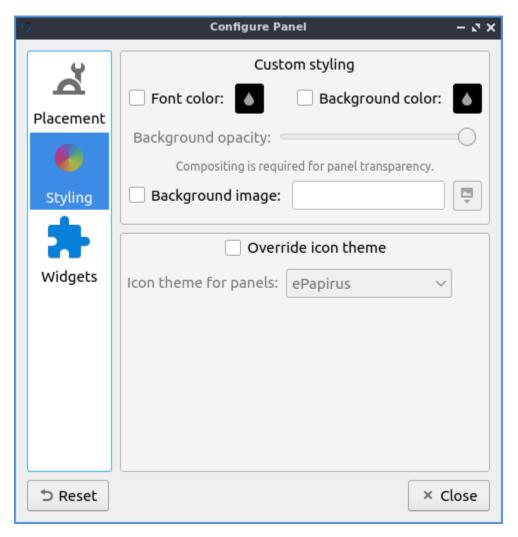
To change many panel settings right click not on the main taskbar and select Configure Panel. To close each of these windows you open by right clicking press the Escape key.

The Placement tab has settings for where the panel is. The Size menu lets you increase or decrease the width of the panel. Length has two fields the one is either px or % is to change the length of the panel in pixels while percent is a percent of the entire screen size that changes if you change resolution. The first is the number of pixels or percent of the screen you want the panel to cover. The Icon size makes the size of the icons bigger or smaller on the panel. If you want multiple rows in your system tray and taskbar make the Rows field. To move the panel there is a drop down menu of Position that can move it to the side of the screen you want. The Alignment drop down menu lets you set the alignment of the panel on your screen. Keep in mind changing the alignment will not change anything if your panel takes the entire screen. To change the position of your panel use the Position field to move the panel on your screen around. If you have multiple monitors the Position field will have different options for moving the panel onto different monitors.



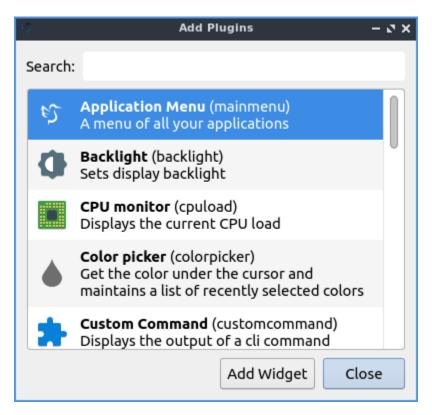
If you want to autohide the panel check the Auto-hide checkbox in panel settings. To change how long the animation takes to show or hide the panel change the Animation duration field. To show how long your panel will appear when it comes back after hiding in milliseconds change the Show with delay field. To show a little of the panel visible when the panel is autohidden check the Visible thin margin for hidden panel checkbox. To only hide the panel when the panel overlaps a window check the Hide only on overlapping a window checkbox. To have the space for the panel not be used for anything else check the Reserve space on display checkbox.

To change the appearance of the panel use the Styling tab. To change to a custom font color press the Font color checkbox. Press the dropper button to bring up a widget to choose the custom color. The checkbox for Background color sets a background color custom for the background of LXQt-panel and the dropper brings up how to select which color. If you use a compositor and want to change the background opacity for the panel you can change how transparent the background is with the Background opacity slider. To add an image to your panel background press the checkbox Background image and press the the dialog button on the right to choose your file.



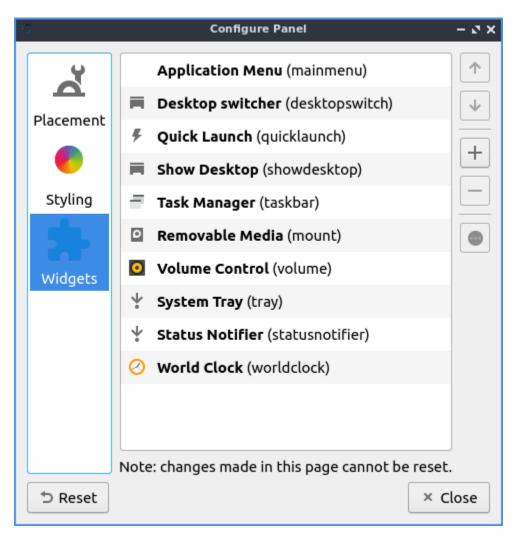
The checkbox for Override icon theme lets you choose a non system default icon theme for LXQt-panel. The dropdown Icon theme for panels lets you see what that icon theme from the dropdown list. If you do not like your changes to the system you can press the Reset button to reset changing to before trying to customize the panel.

The Widgets tab lets you change the widgets or individual items on the panel and their configuration. You can also get to this directly by right clicking on the panel and select Manage Widgets. To move an applet down on the order of presentation press the down arrow button while the up arrow button moves the applet up on the order of presentation. To add a new widget click on the widget on the panel configuration screen and press the + button and select the widget you want to add some of which are not on the panel by default. To remove an applet you do not want you can press the - button. The dark circle with three blue dots button has the settings for certain but not all of the applets in the panel for example the Application menu and Task manager are customizable but Quick launch and Show desktop do not.



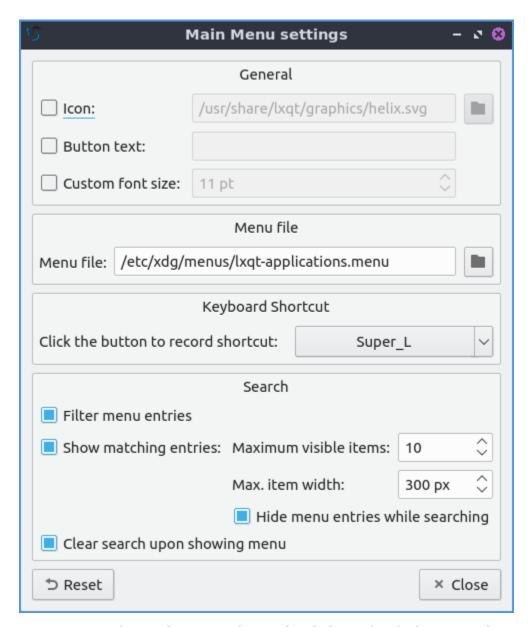
# Shipped applets not enabled by default:

- Backlight
- CPU monitor
- Color Picker
- Custom Command
- Panel DOM Tree
- Sensors
- Spacer
- System Statistics

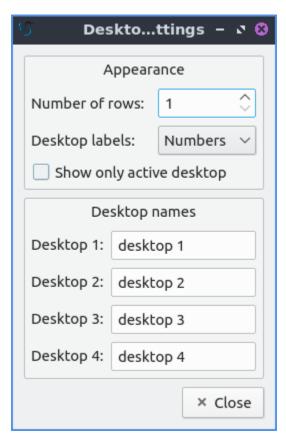


To configure options for your Application Menu right click on the menu configure application menu or from the panel configuration dialog with the widget selected for application menu click on the circle with three dots button. The Icon checkbox lets you choose a custom icon to use in your menu if you want one and then use the folder button to browse for the path of the custom file you want for your menu. The checkbox for Button text lets you add text that can be anything you want to your menu. To change your own font size check the Custom font size checkbox and change your font size on the field to the right. To change the shortcut to open the menu from the default Left Super (Windows) you can press the button for keyboard shortcut and a countdown will begin a countdown and press the button. To choose another file to use as a menu press use the Menu file field to choose a different menu. To set a custom keyboard shortcut to open the menu left click on Click the button to record shortcut button then press the keyboard shortcut you want.

To turn off searching in the menu uncheck the Filter menu entries checkbox. To turn off showing matching items directly in top layer of the menu uncheck the Show matching entries checkbox. Leave both of these checked to allow searching. To set the most number of search results in the menu change the Maximum visible items field. To change how wide each search result can be change the Max. item width field. To not hide what section of the menu everyone has Hide menu entries while searching checkbox. To not clear your search upon reopening the menu uncheck the Clear search upon showing menu checkbox.

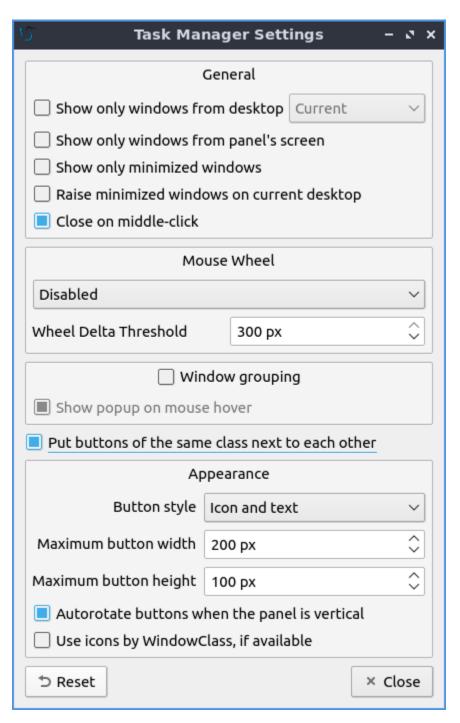


To customize the Desktop switcher right click on the desktop switcher Configure Desktop Switcher or press the three dots button. To change the number of rows on your desktop change the Number of rows field. To change how desktops are labeled change the Desktop Labels field. To only show the current desktop check the Show only active desktop checkbox. To change the name of each desktop enter a name under Desktop Names.



To move an item in quick launch to the right right click on the icon and select Move right. To move an item in quick launch to the left right click on the icon and select Move left. To remove an item from quicklaunch right click on the icon Remove from quicklaunch. Another way to move an item on quicklaunch hold Control and drag thee quick launch to where you want. To add an item to quick launch click and drag it down from the main menu.

To change options for your task manager or taskbar open the panel configuration dialog select Task Manager (taskbar) and click the three dots button. The checkbox for Show only windows from desktop will only show windows from a certain desktop and will have a drop down that will default to the current desktop but can also be shown. To hide windows on a different screen check the Show only windows from panel's screen checkbox. To have the taskbar only show minimized windows check the Show only minimized windows. To raise minimized windows on your current desktop check the Raise minimized windows on current desktop checkbox. To close windows on a middle click check the checkbox Close on middle-click. To cycle windows by scrolling with the mousewheel check the Cycle windows on wheel scrolling checkbox. The Window grouping checkbox will group multiple windows of the same program into a group of windows. The checkbox for Show popup on mouse hover will allow you to hover the mouse over the window group to show them off. If you want all windows of the same program next to each other check the Put buttons of the same class next to each other checkbox.



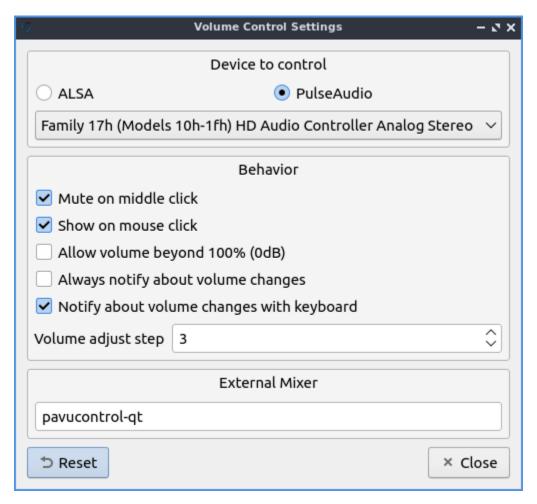
To change the look of your taskbar in the same window as above the appearance section the Button style menu will change whether to show only the icon or the icon only for only the icons. To show window and the text label of the program Icon and text. Icons only will work best with a panel aligned to the left or right side of your screen. To have only the text on your taskbar and no icons select Only text. To change the maximum width of a button change the Maximum button width which is measured in pixels to how wide on maximum a button could be. To change how high a button will be when a panel is vertical change the Maximum button height field. To reset your changes to this window press the Reset button.

The settings for Removable Media is able to be opened up is right click the applet Configure

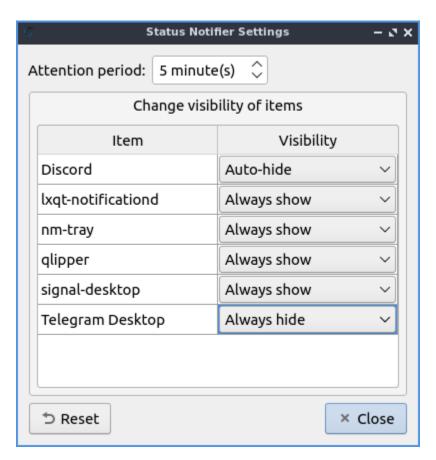
"Removable media" from When a device is connected you can select and Show info, Popup menu, or Do nothing. If you want to reset the setting for this press the Reset button. To change what to do when the eject button is pressed on optical drives change the When eject button is pressed menu.



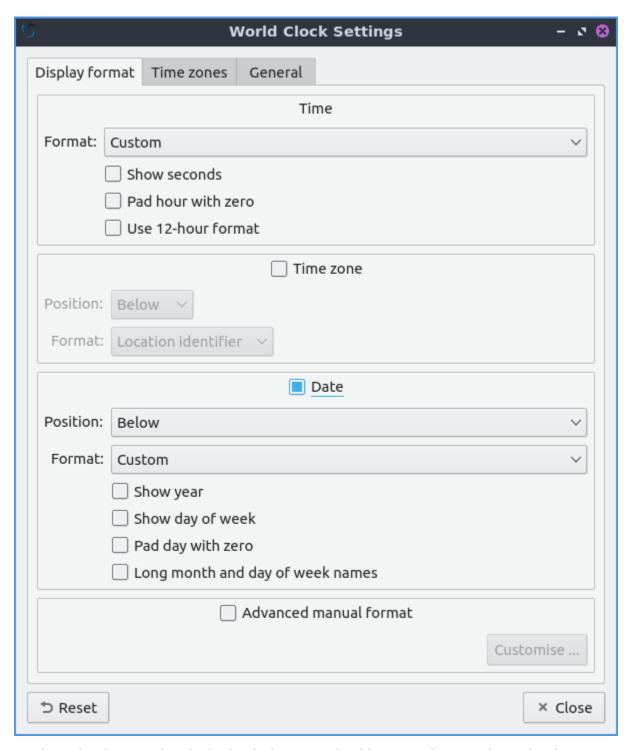
To configure the volume applet right click on the volume applet and select Configure "Volume Control". To change which audio output to have the applet control change the dropdown at the bottom of the Device to control box. To switch to changing sound settings for only ALSA press the ALSA button. To switch back to changing pulse audio settings press the PulseAudio button. To toggle muting on middle clicking check the Mute on middle click checkbox. To toggle having to click to bring up the volume applet check the Show on mouse click checkbox. To allow your volume in software to be over 100 percent check the Allow volume beyond 100% checkbox however this will cause distortion. To always show notification on volume changes check the Always notify about volume changes checkbox. To notify about volume changes via keyboard check the Notify about volume changes with keyboard checkbox. To change how what percentage your volume meter changes use the Volume adjust step field. To change what you use as your mixer type the command in the External Mixer field.



To change settings of your Status Notifier press the ... button in the list of applets or on the status notifier applet left click on Options. To change how long to have something visible you will autohide will have change the Attention period. To hide or authide notifications from a particular application is to change the app settings under the:guilabel:Visibility column.



To change the settings on your clock right click on the clock and then Configure World clock. To change settings on how your clock shows stuff use the Display format tab. The Format drop down menu allows you to change how the clock shows. To select a short format allows you to have a preselected short format which shows a 12 hour format and am just telling you what time it is. Selecting long from the menu will show you the time with seconds and the time zone. To have a customizable clock message select custom and then checkboxes to show seconds, pad the hours with zeros or to use a 12 hour format. The Time zone checkbox will show your your time zone. The Position drop down says where to put the time zone on the clock. The Format field changes how the time zone is displayed on your clock. To change how the date appears change the Format field.



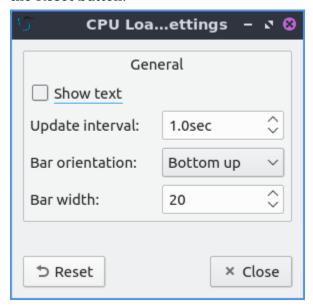
To show the date on the clock check the Date checkbox. To change where the date appears change the Position drop down menu. To further customize your panel select Custom from the Format drop down. To show the year press the Show year checkbox. To show what day of the week it is check the Show day of week checkbox. To make the day two digits check the Pad day with zero checkbox. To not abbreviate the months and days of week check the Long month and day of week names checkbox. To reset your changes to the clock press the Reset button.

To add two or more panels right click on the panel and Add New Panel and a new panel will

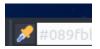
be created with the dialog to customize your second panel. To remove a panel right click on the panel and select Remove Panel and you will be asked if you really want to do this as it can't be undone. To then make your new panel useful you will need to add widgets which you will need to see the above section.

## Non-Default widgets

To have a bar that shows CPU Load shows a bar graph with your CPU usage. To bring up settings for your CPU usage is right click on the CPU bar Configure CPU Monitor. The Show text checkbox shows a number for CPU usage. The field for Update interval is how often to update your CPU usage. The Bar orientation says what side to start the bar graph. The Bar width is how many pixels wide to make the bar graph. If you want to reset your changes press the Reset button.

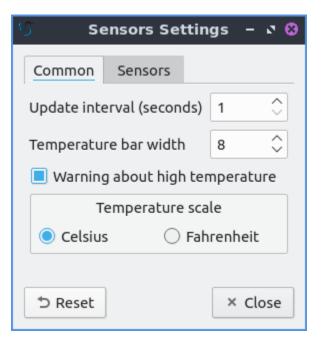


The Color picker is shows what color something is on your screen usually useful for web developers. To get a color off the screen press the color dropper button and your mouse will turn into crosshair and then left click on what you want to take the color. Then a numeric field to the right of the dropper will appear with the color in a numeric field to the right.



To use your sensors widgets which you would have to add manually as shown above. A sensor bar will appear with as many sensors as on your panel. To view the temp as a number mouse over the sensor bar to see what your temperature is in a number in the Cur field. Also shown on mouseover is the Crit field shows the temperature the sensor should not read above without overheating.

To customize the sensors right click on the sensors applet Configure "Sensors". The Update interval(seconds) field lets you choose how often in seconds to update the sensors. The Temperature bar width field shows how wide to make the bar for your sensors. The Temperature scale field lets you select Celsius or Fahrenheit for your sensors. The checkbox Warning about high temperature puts a warning if your temperature gets too high. If you want to reset your settings press the Reset button.

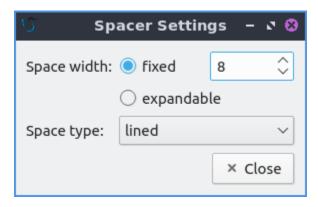


To have a custom command add the Custom Command widget. To have this have meaningful output you need to configure the widget by right clicking on the Custom Command widget and selection Configure "Custom Command". To have the output not rotate when the panel is vertical uncheck the Autorotate when the panel is vertical checkbox. To change what output your custom command has left click the button next to Font. To type the command you want to run type in the box above and to the right of Command. To run the command with bash running the command check the Run with "bash -c" checkbox. To change if or how often the command is run on repeat check the Repeat command after checkbox and change how often it runs in the field to the right. To change the maximum width the output of the text can be type in the Max Width field. To run a command with clicking on the applet enter the command in the Click in mouse commands. To run a specific command upon going up on the mouse wheel enter the command in the Wheel Up field. To run a specific command with scrolling down on the mousewheel enter the command in the Wheel Down field.

The Sensors tab provides settings for each individual sensor on your processor. To enable/disable each sensor press to the Enabled checkbox for each sensor. The Label shows a label for each sensor. The Color column shows the color for the bar to appear in the panel and you can bring up a dialog to change color by left clicking on the button. To switch to a different chip to set the sensors for change the Detected chips menu.



To add a spacer to your panel add the spacer widget. It creates a blank space on your panel which can separate different items. To change how wide your spacer is change the Space Width field to the number of pixels you want the spacer to be wide. The setting for Space type selects lined, dotted, or invisible for changing the spacers appearance.



To add an easy way to change brightness to your panel add the Backlight widget. To bring the applet to change backlight level left click on the icon. To make the backlight more faint drag the slider to the bottom and to make it brighter drag the slider towards the top.

#### **Version**

Lubuntu ships with version 1.1.0 of LXQt-panel.

#### **How to Launch**

LXQt-panel should auto launch by default. If you need to manually start it, run

lxqt-panel

from the command line.

## 2.5.2 Chapter 5.2 Desktop Icons

The icons on your desktop can be moved by left clicking, holding and dragging the desktop icon to the position you want it. Shortcuts or desktop entry files can be opened by double click on the icon. If you want to view or edit a desktop file say for launching an application is to right click on the icon open with and select say a text editor like FeatherPad to open file. To move a desktop icon hold left click and drag the icon to the desired position. If you move a desktop icon and then want to move it back right click and uncheck Stick to current Position. If you have an new executable file on your desktop and always want to run it right click and select Trust this executable. If an executable is not trusted it will have an! on the icon.

If you want to not see all your icons to show off your awesome desktop right click on the desktop background and select Hide Desktop Items. If you have hidden files in your desktop and want to toggle showing them right click on your desktop, check/uncheck, and select the Show Hidden checkbox. To create a new folder on your desktop right click and select Create New • Folder. To create a new blank file on your desktop right click on it and select Create New • Blank File. To paste a file right click and select Paste and this shares things you have copied in PCManFM-Qt.

To rearrange your files by when they were last modified right click on the desktop Sorting

By Modification Time. To sort by how large each file is right click on the desktop Sorting

By File Size. To return to sorting by name right click on the desktop and select Sorting

By File Name. To reverse the order of sorting right click on the desktop and select Sorting

Descending. To sort back to the way you had before right click and select Sorting

Ascending.

To make your sorting of desktop icons case sensitive right click on the desktop and select Sorting ► Case Sensitive. To make folders appear first right click on your checkbox and select Sorting ► Folder First.

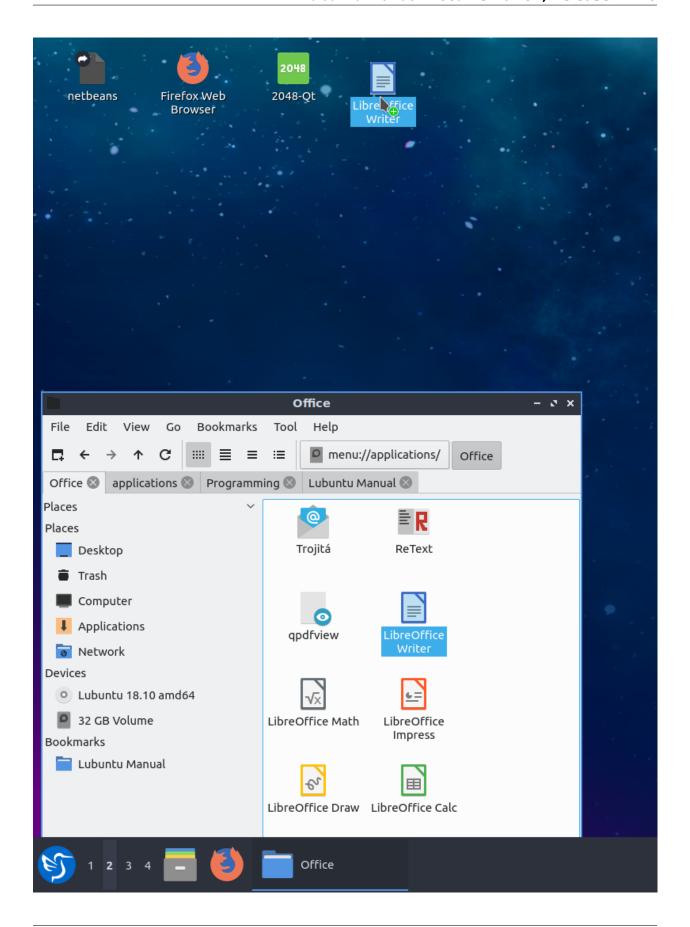
To select all items on your desktop right click on the desktop background and select Select All. To select the opposite to what you currently have select right click on the desktop and select Invert Selection.

Having a folder on your desktop gives you a few more options. To open a folder in your terminal from the desktop right click and select Open in Terminal.

Some icons also have special actions associated with them. You can right click on the trash and select Empty Trash to get rid of all files in your trash can.

### Adding and removing items from the desktop

- 1. Shortcuts can be copied to the desktop by dragging and dropping them from the application menu.
- 2. You can also create shortcuts by dragging and dropping files and folders from the File manager onto the desktop.
- 3. To rename a file on the desktop right click on the icon Rename.
- 4. To open the properties of a file or icon on your desktop right click the icon Properties.
- 5. You can create files on your desktop by saving them in the desktop directory in your home folder.



To remove a desktop icon right click on the file and click Move to Trash.

### **Editing**

To edit a desktop entry including those on your menu you will need to open the .desktop entry in FeatherPad or the text editor of your choice you can also on desktop icons right click on the icon and Open With. To launch a program with an option simply add that option to the line that starts with Exec=. To change what the name of the desktop file shows up as on the desktop and in file manger change the entry line that starts with Name=. To change the icon to that used by something else change the line starting with Icon=.

### **Creating**

To create a launcher graphically you can right click on the desktop and select Create Launcher. To add a name for the launcher you want enter in the Name field. To enter a description of the program enter the Description field. To add a comment to your .desktop file enter it in the Comment field. To add which command you want your desktop file to execute enter that in the Command field. To choose which icon to use for your icon enter it in the Icon file or press the ... button to find browse for what icon to use. To change whether the apps launches in a terminal change the Terminal field. To change to make this a link use the Type field and select Link. When you select link you can add the URL with the URL field.

### 2.5.3 Chapter 5.3 Runner

Runner allows you to search for and launch applications and commands in the LXQt environment. It is a quick and convenient way of finding what you're looking for and launching it quickly.

#### **Usage**

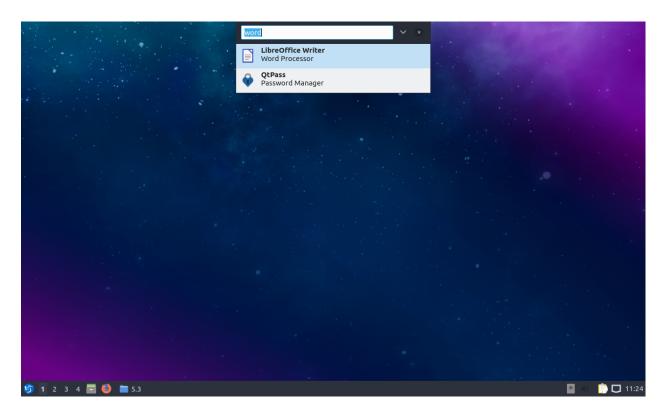
To search for a program, press Super(windows)+R and start typing a command. The search results will show below, similar to address bar behavior in browsers. All installed applications can be launched this way and Runner can be configured to store a history of recent programs. If you want to clear history open the downward pointing arrow and select Clear History. The runner even lets you logout, shutdown, or other ways to leave your session through the runner. Also keep in mind you do not have to search for the start of an application like inputting grab will show results for ScreenGrab. To paste a command to run into the runner press Control +V or right click on the runner and select Paste. To change to the last result of what you are searching for press End. To move to the first result press Home.

Runner can also work as a calculator if you put for example 2+2= and you will get the answer. To add numbers together with the calculator enter the + in the bar. To subtract numbers together with the calculator enter the - in the bar. To multiply numbers enter \* into the bar. To divide numbers in runner enter / into the bar. To exponentiate enter  $^$  into the bar. To actually get the result you will need to put a = at the end. After typing = the result will be copied to your clipboard.

You can also leave your session with lxqt-runner. To shut your computer all the way down press the button that looks like a downward pointing arrow and select Shutdown. To suspend your system press the downward pointing arrow and select Suspend. To reboot your system press the downward pointing arrow and select Reboot. To logout of your system press the

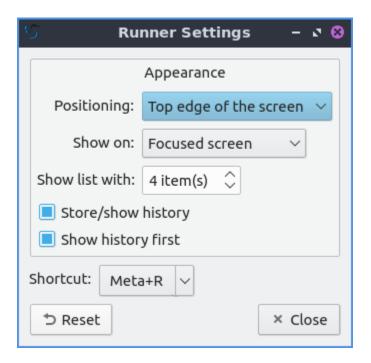
downward pointed arrow and select Logout. To lock your screen from the runner press the downward pointing arrow and select Lock Screen. If you decide against running something press the Escape key or click on the x button.

#### **Screenshot**



#### **Configuration**

Runner has a few configuration options. If you want to change the keyboard shortcut to launch programs, click the downward arrow on the right side of the search bar to open up the menu and select the gear icon to Configure. To change where the runner appears to the center change Positioning drop down menu. To choose which monitor to put the runner on change the Show On drop down menu. To select to show the monitor on the currently focused monitor select Focused screen from the Show on menu. To change how many results are shown when you show a result for runner change the Show list with x item(s) field. In this screen there is a checkbox for Store/show history. If you want to show history first check the Show history first check the Show history first checkbox. To change the shortcut press the Shortcut button and a countdown will begin in which time you need to press the key or combination of keystrokes you want to launch lxqt-runner. To reset your changes in this window press the Reset button.



#### How to launch

Runner should be running in the background and Super(windows)+R should bring it forward to launch an application. If you need to manually start it for some reason run

lxqt-runner

from the command line.

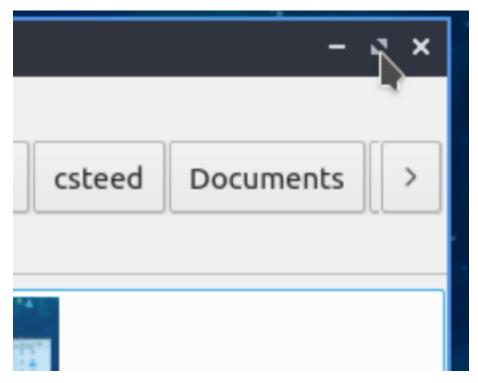
## 2.5.4 Chapter 5.4 Window Management

Window are the area which contains the graphical user interface that we interact with programs. In Lubuntu these windows can typically be opened, closed, resized, and minimized. Underneath Lubuntu uses Openbox as a default window manager.

#### Using the mouse

In the top-right corner of a window three buttons allow you basic controls of the window. Starting from left to right

- Iconify hides/minimizes the window making it only appear on the task bar of the Panel. It can be recalled by clicking on the application on the task bar, or cycling through open windows with ALT + Tab. Another way to Iconify is to middle click on the titlebar.
- Maximize resizes the window to fill the entire screen.
- Close circled x attempts to close the window unless a dialog asks for to save or the program is not responding.

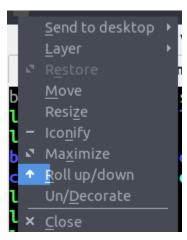


In the top center is the title of your window.

The window can be moved by by clicking on the title-bar and dragging the mouse, holding alt+drag the mouse, or from the menu on the titlebar select Move. Windows can be minimized by middle clicking on the titlebar with the mouse. You can resize the window by grabbing the border (sides or corners which should be highlighted in blue) and dragging or from the menu on the titlebar select Resize.

Right clicking on the title bar, pressing Alt+Space, or left clicking on the icon in the top-left corner of the window brings the window management menu. Here you can:

- Using Send to desktop, send the window to a virtual desktop of your choice or All Desktops
- Using Layer option allows you to set whether this windows the layer to Always on top, Normal, or Always on bottom
- If you want to move something Always on bottom or Always on top you can move it back to Normal.
- The earlier mentioned Iconify, Maximize, and Close options are also available here.
- Roll up/down rolls the window into the title-bar.
- Un/Decorate hides them title-bar. If you want to get decorations back press Alt+Space and then select Decorate from the menu.



### **Useful keyboard shortcuts**

- Closing a window Alt + F4
- Switching through windows Hold Alt + hit Tab
- To switch between tabs in the reverse direction Hold Alt + Shift+Tab
- To open the menu normally on the left hand top corner press Alt+Space.
- To make a window fullscreen press F11 and then press F11 again to make it not fullscreen.

### **Virtual Desktop Switching**

To switch to the next virtual desktop press Control +Alt + Right arrow. To shift to the previous virtual desktop press Control+ Alt + Left Arrow. To Do this with a combination of mouse wheel and keyboard Alt+ Mousewheel.

#### Moving windows between monitors

If you have extended multiple monitor setup with multiple windows you can move a window to the monitor by dragging the window through the titlebar past the edge of the monitor towards the monitor you want to move it to. Also you can say make a video take up one monitor and making the video fullscreen takes one whole monitor while you can do anything else you want with your second monitor.

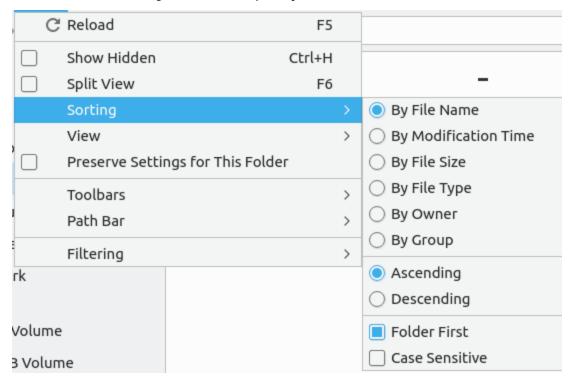
## 2.5.5 Chapter 5.5 Keyboard Menu Navigation

Lubuntu allows you to move through the menus of with only the keyboard instead of having to use the mouse. Looking at the menus there is an underlined with a letter. To open that menu with a for example the file menu in LibreOffice Writer can be opened with Alt + F. One other thing to notice is that with Alt + underlined character. The currently selected menu item will appear in a different color. If you want to see on your menu to have the menu shown hold down Alt and then press that key to see what it is to press.

Once you have the menu opened you can use the Up arrow and Down arrow keys to move up and down in a menu. Another way to move down in the menu is to press Tab key. If you want

to move up in a different way press Shift+Tab. If the menu has \* to the right you can press Right arrow to expand into a submenu. To move back up a level from the menu press Left arrow. If you want to exit the menu press Escape. To move to adjacent menu to the left press :kbd:` Left arrow`. To move to an adjacent menu to the right press :kbd:` right arrow`. To activate an item on your menu press Enter. If you press the Down arrow or Tab keys at the bottom of the menu you will be taken back to the top of the menu.

If there is not a submenu available you can use Right arrow to move to the next menu to the right. If you are at the highest level of a menu press Left arrow to move to the menu to the left. To close a menu press the Escape key.



## 2.6 Appendix A Tips and Tricks

If you run a hypervisor on your system putting a different mouse cursor for both the host and the guest can let you tell them apart. If you want to install many more colors you can search the repositories for cursor or if you just want many different colors install the oxygen-cursor-theme-extra package. To have a different style for applications to install you can install the qt-style-plugin-plastique package.

If you select text on X11 you can do what is called middle click paste the selected text with the middle mouse button by clicking down on the scroll wheel.

To find out what version of software you have you can view the Ubuntu packages website<sup>23</sup> from whatever kind of computer you are on. On the command line you can run

apt policy packagename

even if it does not ship with Lubuntu by default or if it is not installed.

<sup>23</sup> https://packages.ubuntu.com/

If you want to boot an older kernel for troubleshooting use the advanced options for Lubuntu at the grub bootloader screen if shown. If you need to get into this bootloader hold down shift key at booting and then select the different kernel you want to boot into. To move down to Advanced options press Down Arrow. To select the advanced options press the Right Arrow or Enter key. To go back up a level from a submenu of grub press the Escape key.

To add a boot option press the e key and then type the boot parameter you want to add to the end of the line. The nomodeset option will try to load things for graphic compatibility if for example you get a black screen without proprietary drivers.

If you want more openbox customization than the openbox settings can provide you can look at the openbox wiki openbox wikiopenbox wiki

If you have multiple monitors and run either fullscreen games and video adding a second panel with the world clock plugin will help you tell what time it is. Also setting individual wallpaper for each monitor can make the wallpaper look much better see chapter 3.2.5 for how to do this.

In Modern Lubuntu release DNS is managed by systemd-resolvedd. To find the configuration file you need to edit to change your DNS settings you will need to edit /etc/systemd/resolved.conf. To apply your changes you will need to run

sudo systemctl restart systemd-resolved

to get your changes actually applied.

## 2.7 Appendix B Contributing

## 2.7.1 We need help

We're always making hints about contributing. Lubuntu, like most every open source project out there, relies on the contributions of volunteers to develop as well as to maintain.

#### ...not code

That does not mean you need to be a developer, either. Though there is some new code we write, this is relatively rare. Including upstream changes in our packaging can be a little advanced, but even that is not the sum total of what we do. You have the skills necessary.

If you're nothing more than a user, you can help out with the following without really knowing much more than you already do:

- Support and Bug Triage
- Documentation<sup>25</sup>
- Testing<sup>26</sup>
- Bug triage<sup>27</sup>

And we could always use help with art/graphic design!

<sup>&</sup>lt;sup>24</sup> http://openbox.org/wiki/Main Page

<sup>25</sup> https://phab.lubuntu.me/source/manual/

<sup>&</sup>lt;sup>26</sup> https://phab.lubuntu.me/w/testing/

https://phab.lubuntu.me/w/bugs/

### No strings attached

Contributions can be done on an extended basis (making becoming a Lubuntu Member easy) or can be little bits here and there. You can come and go as you like. You can work only on one issue you feel particularly strongly about, or you can get involved over a wide scope.

### Free training

For those interested in a deeper understanding of the system or that would like to develop additional skills, the Lubuntu team is happy to provide assistance.

### Why not join?

That said, you're all users, so you all can contribute. For those of you that are not contributing, why not? For those of us that do contribute, we all have responsibilities in real life, including school, work and families, etc. And yet we find a little time here and there to sneak in a little help. What would encourage you to contribute?

### 2.7.2 Support and Bug Triage

Support and Bug Triage contributors are on the front line when it comes to interacting with users and solving problems. They use their knowledge about Lubuntu and Linux as a whole to help users solve problems, and if the problem is on our end, take that and turn it into a bug report that developers can solve.

#### **Support**

Support is mainly for the purpose of helping users solve their problems. If this is something you would be interested in, join our support channel<sup>28</sup> and jump in to assist when someone asks for help. The more active people we have around, the more questions can be answered.

People helping with support might find it helpful to learn debugging procedures<sup>29</sup> and have a Lubuntu machine available to be able to reproduce any issues. It is difficult to write a "one size fits all" guide for answering support questions, but idling in the channel and seeing how support questions are typically answered can help.

Besides the support channel, we have a tag on the Ask Ubuntu  $site^{30}$ , where people ask more long-form support questions. We also have a topic on our Discourse forum<sup>31</sup> and a tag on the Ubuntu  $Forum^{32}$ .

<sup>&</sup>lt;sup>28</sup> https://phab.lubuntu.me/w/support/

<sup>&</sup>lt;sup>29</sup> https://wiki.ubuntu.com/DebuggingProcedures

 $<sup>^{30}\ \</sup>mathrm{https://askubuntu.com/questions/tagged/lubuntu}$ 

<sup>31</sup> https://discourse.lubuntu.me/c/support

<sup>32</sup> https://ubuntuforums.org/tags.php?tag=lubuntu

### **Bug Triage**

Bug Triage can be compared to support in many ways, as the end goal of both is the same: try to figure out what the problem is and help the user solve it. With bugs, the approach is different. The user has identified that there is a problem, they have (hopefully) submitted logs, and they would like to see the bug fixed as an update.

## 2.8 Appendix C Command Line

The command line or CLI is text interface to your computer and an alternative to graphical user interfaces like windows. It typically involves typing text commands into a terminal to perform some operation. Although not necessary to learn, it can be helpful. The terminal which can be launched from Control + Alt + T is a command line running in a window.

An exhaustive tutorial on the command line is a bit beyond the scope of the manual. The man command brings up the user manual and can be used to learn more about a commands use, its options, and inputs. If you wanted to learn more about the df (disk free) command, enter the following into a command line and press enter:

man df

This will show you the user manual for the df command containing and explanation of the command and other useful information. For example is the -h option gives a human readable output. If the manual is way too long you can press the / key and type in what you want to search for. To scroll up and down in a manual page press Up arrow or Down arrow. To quit a man page press q.

df -h

will make a much nicer output than

df

To list files on the current file system one of the most important commands to know is ls.

ls

will show the files in your current directory and the man page lists more options such as viewing all files or long listing.

To change to another directory an important command is

cd [dir]

where [dir] is the directory you want to switch to. Another thing that is useful is you can append .. after cd to make it go up one level.

Many command line commands have what are called options that use one or sometimes two - to type before options that allow you to do different options on different commands which checking the man page to see what options for each command.

There is also the command line for managing and installing packages which is beyond the scope of this appendix but please see apt package management<sup>33</sup> for how to insert and remove packages from the command line.

<sup>33</sup> https://ubuntu.com/server/docs/package-management

If you need to edit a text file from the command line the easiest editor included is nano so to edit a file from the command line if you broke something run

nano [file]

where you replace [file] with the file you want to edit.

If you want to stop something running in the terminal press Control +C.

If you want just to see the contents of a file on standard output run

cat [filename]

If you have a command and you don't want to type the whole thing out you can press the tab key. If this does not work press tab again and see the list of available commands to run. This process is called tab completion.

If you want a command to run if the first completes run

command 1 && command 2

One of the most powerful uses of the command line is called a pipe which allows you to take the output of one command and pipe it to a second to this for example

lspci |less

. Also | is called the pipe character.

## 2.9 Appendix D Upgrading from Previous Releases

With every release upgrade comes many changes across the entire landscape of packages. Naturally, an extremely large change like this can cause problems, so **we strongly recommend you back up your files**. Also, if your computer runs on a battery (such as a laptop), please ensure that the power is connected, as it may take a while and unexpected power failures could be disastrous. Also keep in mind upgrading from a previous release will download will take time and data.

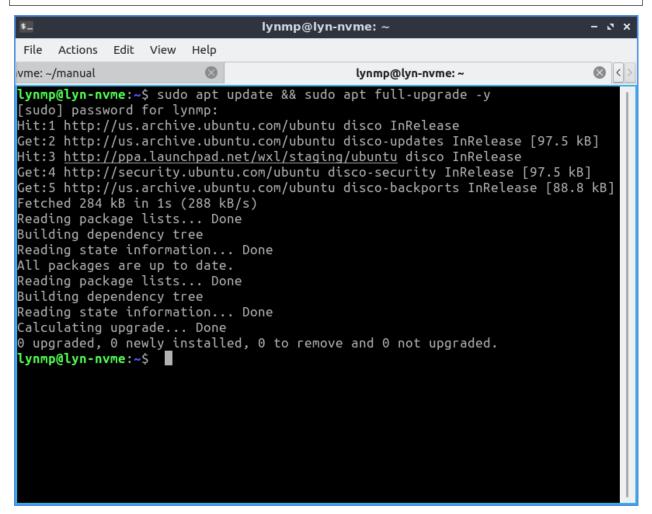
This way of upgrading involves the command line and is also useful for server upgrades. Unfortunately with main Ubuntu and Lubuntu dropping 32-bit upgrades, 32-bit upgrades after Lubuntu 18.04 are not supported.

**Note:** Upgrading will keep all of your files in your home folder and configuration files intact however this will mean some changes to default keybindings for example will still be the same as when you installed but will keep all of your customizations different from reinstalling Lubuntu.

### 2.9.1 Upgrading with command line

The first step will be to ensure your system is up to date. This can be done by entering the following command into the terminal. If prompted, enter your password. Another way updating is running the graphical updater from Preferences • Apply Full Upgrade.

sudo apt update && sudo apt full-upgrade



Once the software upgrade has completed, you need to restart your PC. This can be done in a number of ways however, the following command is the simplest.

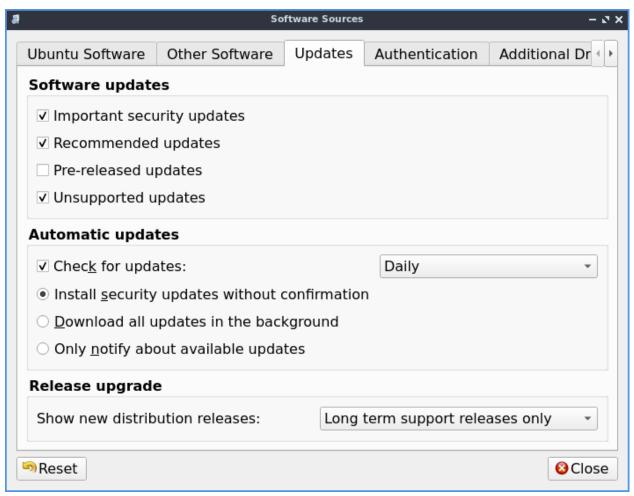
```
sudo reboot
```

The next thing you want to do is do the release upgrade command. do-release-upgrade is the command line tool for upgrading Lubuntu installations. To run it, you need root privileges, which, from the command line means prefixing the command with sudo. Upgrades to a new operating system version can sometimes cause problems; so **always backup your files beforehand**.

```
sudo do-release-upgrade
```

You may be prompted "No new release found", if so follow this step, else skip it. Go into software sources by Preferences > Software Sources and on the Updates tab change Show

new distribution releases and select Normal Releases. If you want to stay on the Long Term Support release from the Updates tab in Show new distribution releases select Long term support releases only.



While running the command line upgrade you will see what a chance to Cancel the installation, Continue, or see Details of what will change. To see details of what will change press d. To get back to the choice of whether to upgrade from viewing the details of changes press q. To cancel the upgrade press N. To actually do the upgrade press y. After pressing y the command line upgrader will download all the new software versions and then install new versions. Some things like a screensaver may need to be prompted to be restarted after you upgrade the package. After the new packages are installed you be asked to conitnue to remove uneeded packages. To remove the uneeded old pacakages press y. To view details on what will be removed press d.

```
Checking package manager
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating the changes
Calculating the changes
Do you want to start the upgrade?

5 packages are going to be removed. 60 new packages are going to be installed. 1511 packages are going to be upgraded.

You have to download a total of 1,276 M. This download will take about 4 minutes with a 40Mbit connection and about 34 minutes with a 5Mbit connection.

Fetching and installing the upgrade can take several hours. Once the download has finished, the process cannot be canceled.

Continue [yN] Details [d]
```

After the installation, reboot into the newly upgraded system and log in and enjoy your upgraded release of Lubuntu.

## 2.10 Appendix E Live Session

It is possible to use Lubuntu without installing it. In a live session your computer is running off a bootable media (USB or DVD). The live session can also be used to install Lubuntu.

#### **Reasons for using live session:**

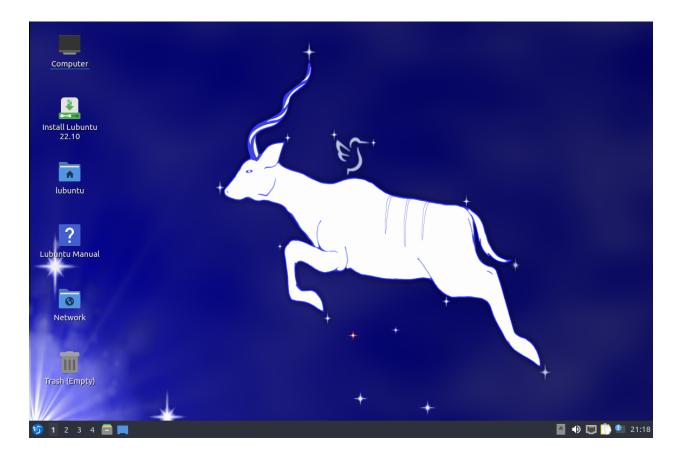
- Hardware testing and trouble shooting.
- · OS testing.
- Fixing broken installs.
- · Backing up files

A good example of when you would use a live session is if your computer turns on and won't boot, you can run the live session. You could then mount the disk and backup all of your pictures or send an email. If your hard drive or SSD is no longer working, you can boot a live session and then order replacement parts. You also can feel free to try different things out in a live session and not worry about breaking your install. A live session is also useful to see if you have misconfigured something that broke it or confirm that is a problem always without configuration changes.

**Warning:** In a live session anything you do not save to external media or a mounted drive specifically will be lost when you power off your machine.

A live session will not save your things to disk but will not by default mess up your installed system. This is not the case if you mount your filesystems on your disk and write to the disk. By default the live session uses UTC as the default time zone.

### 2.10.1 Screenshot



## **2.11 Appendix F Hotkeys Shortcuts**

Hotkeys, also known as keyboard shortcuts, allow users to easily navigate, start applications, and change settings like resizing windows. These are useful as they create a smooth and time efficient user experience. It would benefit users to take a few minutes to learn some of these shortcuts.

Lubuntu has manages the keyboard shortcuts using two layers. Namely, LXQt Global Keys and Openbox.

## 2.11.1 Global-keys

Global-keys (lxqt-globalkeysd) is a component of the LXQt environment. Global-keys takes preference over Openbox keyboard shortcuts. Global keys are viewed, (dis)enabled and managed using Shortcut keys (Chapter 3.2.14).

## 2.11.2 Openbox keyboard shortcuts

Openbox keyboard shortcuts is the second layer managing keyboard shortcuts. It is preferred for windows management like resizing. To change these settings see this link on the openbox wiki bindings $^{34}$ 

**Note:** Global-keys will take preference over openbox bindings. If a key is used in Global-keys, it will not work in Openbox keyboard shortcuts. For example if the W(indows) key opens the LXQT application menu (equivalent of the windows start menu) in Global-keys, Openbox commands like window resizing (W + arrow keys) will not work correctly. Keep this in mind when using and editing keyboard shortcuts.

The table below shows Lubuntu's default Openbox keyboard shortcuts:

#### **Modifier keys**

Key description

S	Shift key
С	Control key
A	Alt key
W	Super key (Usually bound to the Windows key on keyboards which have one)
M	Meta key
Η	Hyper key (If it is bound to something)

### **Keybindings for desktop switching**

GoToLeftDesktop	C-A-Left
GoToRightDesktop	C-A-Right
GoToDesktop	C-A-Up
GoToDesktop	C-A-Down
SendToDesktoaToLeft	S-A-Left
SendToDesktopToRight	S-A-Right
SendToDesktop	S-A-Up
SendToDesktop	S-A-Down

### **Keybindings for windows**

Close	A-F4
Lower (minimize)	A-Escape
ShowMenu	A-space

#### **Keybindings for window switching**

NextWindow	A-Tab
PreviousWindow	A-S-Tab
NextWindow	C-A-Tab

### Keybindings for window switching with the arrow keys

<sup>34</sup> http://openbox.org/wiki/Help:Bindings

DirectionalCycleWindows	W-S-Right
DirectionalCycleWindows	W-S-Left
DirectionalCycleWindows	W-S-Up
DirectionalCycleWindows	W-S-Down

### **Keybindings to toggle fullscreen**

ToggleFullscreen F11

Launch lxqt-runner	W-r
Open Panel Menu	W

### Launch task manager on Ctrl + Alt + Del

Open qps | C-A-Delete

### Launch a terminal on Ctrl + Alt + T

Open qterminal | C-A-T

Launch firefox	XF86WWW
Open qterminal	XF86Terminal

### **Keybinding for computer button**

Open pcmanfm-qt | XF86MyComputer

### **Keybinding for backlight**

Toggle turn off monitor	C-F7
Decrease backlight brightness	C-S-F6
Increase backlight brightness	C-S-F7

### **Keybindings fo Volume**

Decrease Volume	XF86VolumeLower
Increase Volume	XF86VolumeRaise
Mute Volume	XF86AudioMute

## 2.12 Appendix G Advanced Networking

nm-tray has the benefit of being Qt instead of GTK (use already loaded libraries, consuming less resources) and lighter than conman. But, it is a little short for more complicated networking like VPN.

### 2.12.1 VPN

To configure a VPN the best way to do it is with in the Menu under Preferences • Advanced Network Configuration. That will open network-manager-gnome you will need also to install the corresponding packages. In case of pptp those will be network-manager-pptp and network-manager-pptp-gnome. The you can follow the configuration instruction for each VPN type. After the creation, it will appear as a new connection in nm-tray. One thing to consider is that nm-tray does not support password asking, so either you save the password FOR ALL USERS or you will need to connect differently. One of the option is through terminal with typing

```
nmcli con up id <VPN_name> --ask changing <VPN_name>
```

with the actual VPN connection name. The other option is to use nm-applet, the "simil" to nm-tray from network-manager.gnome. You can run it from the terminal typing

```
nm-applet
```

and you will end up with 2 connection indicators in the tray. The you can connect to the VPN with nm-applet and after the connection is established, you can close nm-applet and the connection will still be present.

## 2.12.2 Changing nm-tray for nm-applet

If you don't want to run by terminal nm-applet you could change nm-tray for nm-applet. You will need to change the autostart. The easiest form to do this from the GUI is in the Menu going to Preferences • LXQt settings • Session Settings. There go to the Autostart tab. You will see a list with checked and unchecked box, to autostart nm-applet, check Network to disable autostart for nm-tary uncheck nm-tray.

## **Contact Us**

Do you have questions? Want to get involved? Take a look at our official website at Lubuntu.me $^{35}$  where you can find the Lubuntu blog $^{36}$ , the Lubuntu discourse $^{37}$ , ways to get in contact with us $^{38}$ , and our Phabricator instance $^{39}$  where we do most of the Lubuntu development.

<sup>35</sup> https://lubuntu.me
36 https://lubuntu.me/blog/
37 https://discourse.lubuntu.me/
38 https://lubuntu.me/links/

<sup>39</sup> https://phab.lubuntu.me/

4

# Thank you!

Thank you for choosing to use Lubuntu!

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