LESSON-1b: The Desktop

Booting the system and login

When starting the system, there are some text messages on the screen. do I have to care about this?

If everything is ok, you can ignore this.

Linux systems show – depending on their configuration – more or less usefull information when starting up. If there is an error, you eventually are asked some questions: e.g. if you want to repair a filesystem

When booting the kalliope classroom pc I am not asked for a password. is this correct?

Yes, the systems are configured to login automatically.

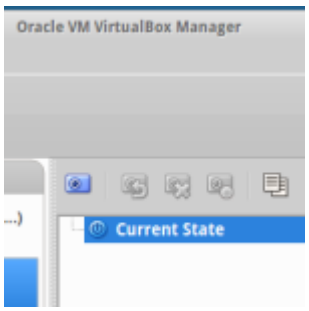
Linux is a multiuser-system. on every PC there can be several users with different desktops, application settings and seperated data. there is a permission system and one user cannot see the documents of an other for example. In order to know which user is working with the computer you have to login with a username and a password.

the kalliope pcs and classroom PCs are configured with auto-login so you are not asked for anything when booting the system up. But if you log out or if you want to install

software you will be asked for your password. the default username and password for kalliope-classroom PCs is

- username: kalliope
- password: kalliope

on your own PCs and Laptops you can and should change the password –> see “Settings”, on the classroom PCs please leave it as it is.



I changed the password on the classroom PC by mistake! Problem?

No.
We use a system called Virtualbox on all classroom PCs and we do Snapshots. In short this means that after a course we can undo all your changes (changed passwords, changed languauges and keyboards and so on…)

The desktop

After booting the system

and auto-login you are shown the desktop of the user “kalliope”

After booting the system and auto-login you are shown the desktop of the user “kalliope”.

The Desktop is the workspace you will see very often, it is always available (maybe hidden by some application) and it has elements for the main functions of your computer.

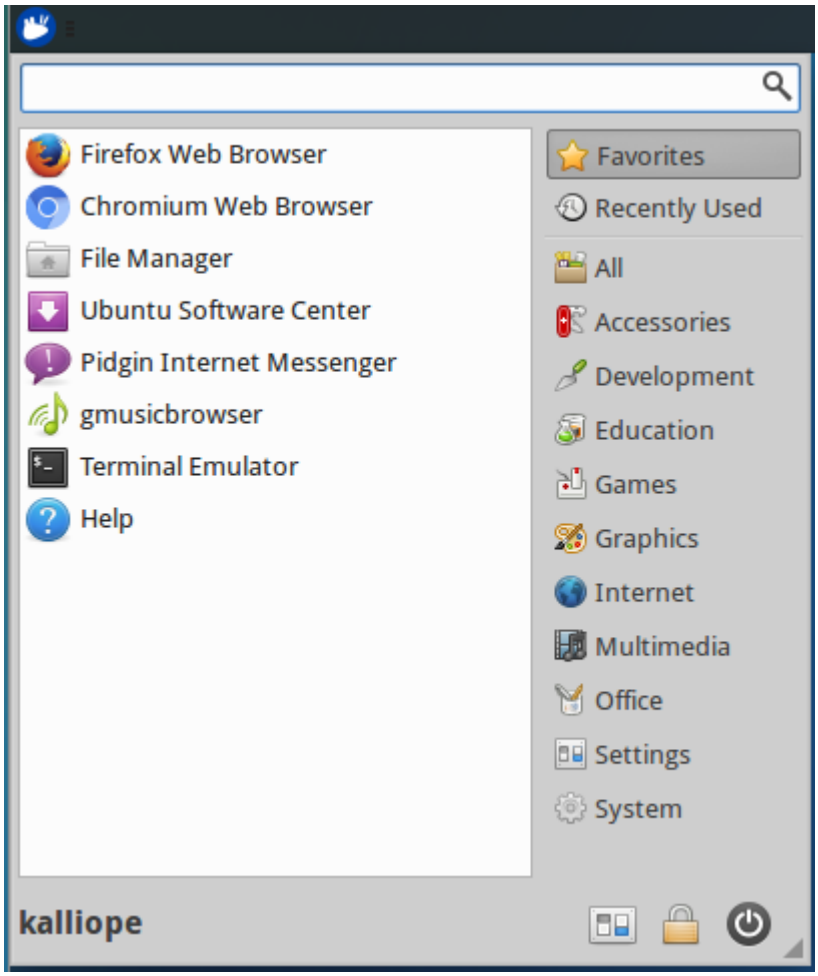
The inital elements you see are

- the top panel
  - application starter in the left
  - network icon
  - audio icon
  - time/date on the right
- the desktop area with folder icons
- a background image saying “kalliope classroom pc”

The top panel

The most left icon on the panel is the “whisker menu”

it is a pull down menu -> click on it and it opens



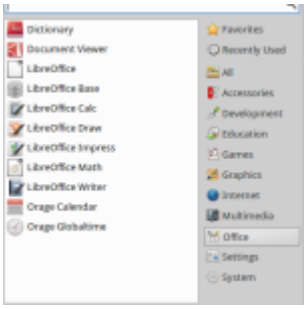
you will see

- a search field to search for applications on top

- your favorite applications on the left
- categorized application tabs on the right

- settings tab
- system tab
- settings, lock and power off icon on the bottom

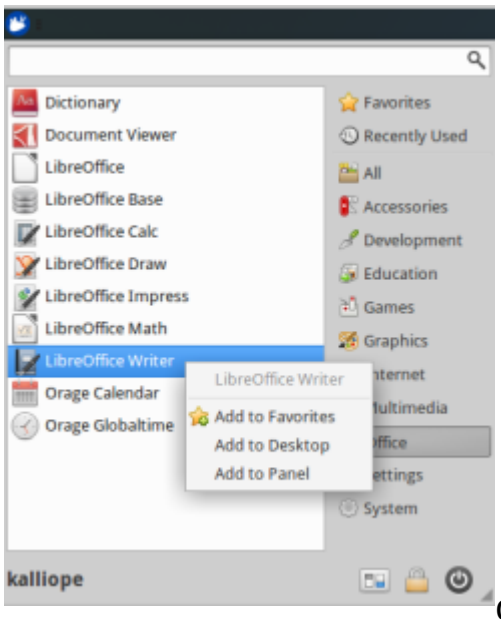
if you click on an application tab, you will see the installed applications. for example in the office tab, you will find Libre Office Write (a text processor like Microsoft Word), Libre Office Calc (comparable to Microsoft Excel) and much more.



Take a look at all the tabs and find out which software is pre-installed on your PCs. You will learn how to install more software later in this course

I want “Libre Office Writer” in my “Favorites” so that I don’t have to click the office tab. How can I do this?

you can add any application you want to the favorite tab

- 

open the application tab of your choice (e.g. office)
- choose the application you want to add

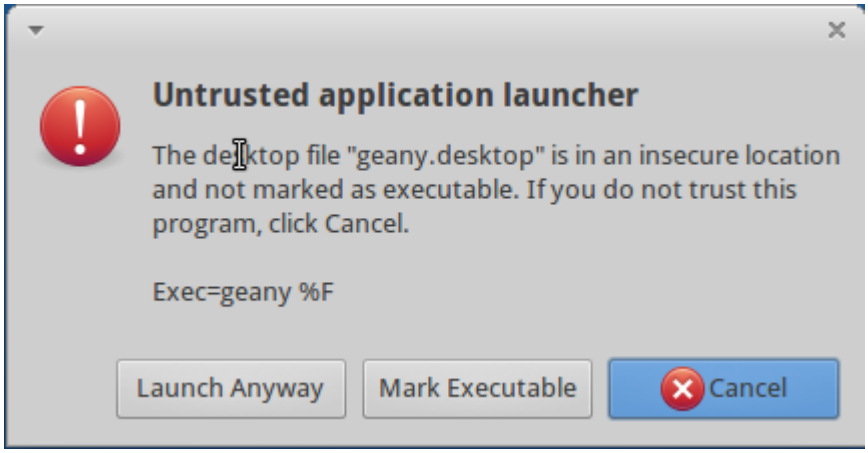
- and click it with the right mouse button
- a menu pops up and you can choose “Add to Favorites”

after that your application will appear in “Favorites”

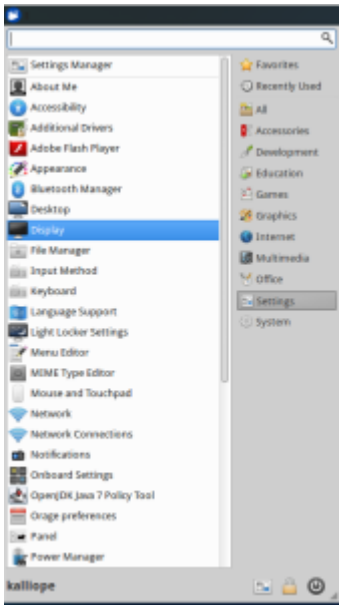
I see “Add to Desktop” and “Add to Panel”, what about that?

with the same procedure as described above you can add Icons to the top-panel or the desktop.
you can then start your favorite application by clicking on the icons.

I suggest you just try it and find out, where you want your most used applications. find your personal “style”.



Addition: if you place an application icon on the desktop, you have to click “mark as executable” when started the first time. This will be a one time question only.



The “Settings Tab”

A very important tab is the settings tab. Here you reach many of the settings for your computer. You can change your screen resolution for example, your language, the look & feel of your desktop, the energy-saving and power functions and much more.

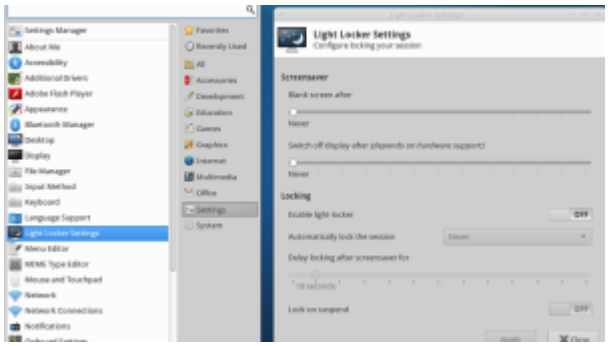
We will come back here during our courses and show some of the settings in detail.

A quick tip / Some common problems with old hardware we give away in the Kalliope Project:

If I do not use my computer for some time, the screen gets black and I cannot do anything. What can I do?

Especially with some old Computers the “power management” functions are not working correctly. The easiest things you

can to to prevent your computer to fall asleep (and never wake up again) is to disable all the energy savings

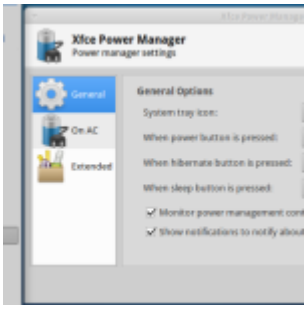


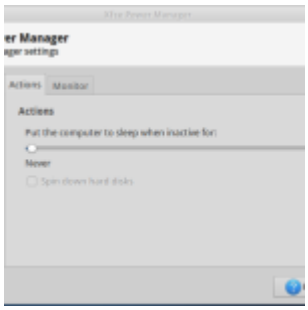
go to “whisker menu” -> “settings” -> “light locker setting”.
Set all Screensaver bars to “never”
Set “Enable light-locker” to “Off”
Set “Lock on suspend” to “Off”

Press “Apply” and “Close” to make the changes effective.

open “Whisker Menu” -> “Settings” -> “Power manager”:

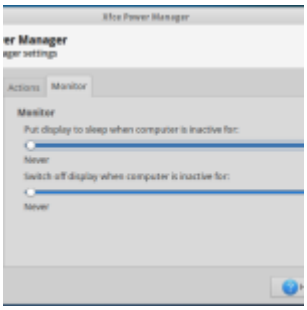
Set “General ” “Monitor power management control” to “On”





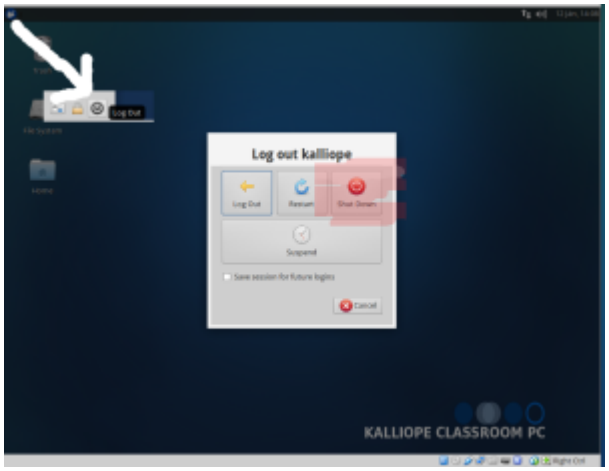
In “On AC” (and if available “On Battery” set “Put the computer to sleep when inactive for:” to “Never

and in “On AC” Monitor-Tab



set both available sliders to “Never”

The Power Button in the “Whisker Menu”. How can I shutdown my computer?

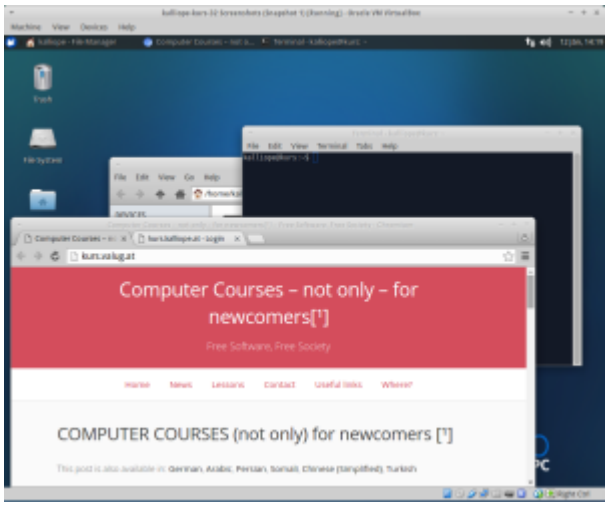


On the left bottom of the “Whisker Menu” you see a “Power Button”.

If you want to quit working with your computer you have to use this button and then click “Shut Down”.

Never (!) plug the power cord or otherwise cut your computer from the power-source without shutting down in this way. Otherwise data may be lost or your filesystems get damaged

The top panel notify area – tasks



every application you start will show in the “task bar”. this is a space in the top bar.
in the example you see a browser, a terminal and a file manager open.

remember: every application you start need some memory and computing power!
especially with old computers you should not open many applications at the same time.

if you are used to smart phones where you normally do not “close” or “stop” applications, with a PC you should think of doing so. Of course, if you have a new high-end computer with much memory it is no problem to run a dozend applications at the same time.

The top panel – network ico

nearly every of our computers today is connected to a network (internet or local network)

this can be either through a cable -> wired connection
or through wireless / radio -> Wi-Fi Network

Most of the time, yours networks are configured in a way, that the “networking-stuff” work automatic (you get a ip address, a router, a nameserver and so on – this will be part of an advanced lesson of this course) so you just have to either connect a cable or choose a Wi-Fi network.

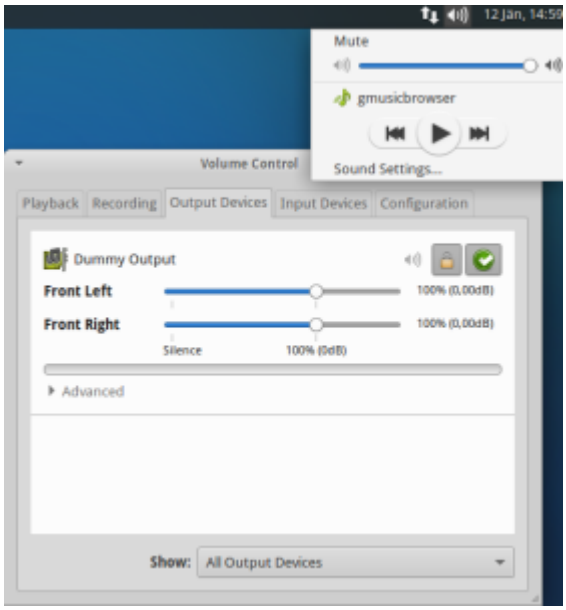
in the example 3 Wi-Fi Networks are found. Choose the one you want. If it is not an open network, you will be ask for a passphrase.

I have a Laptop and there are Wi-Fi networks in my location but none is showing up. What can I do?

> There can be several reasons why Wi-Fi networks do not show up.
>
> If your Wi-Fi networks normally work (btw in Austria Wi-Fi Networks are mostly called “WLAN”), take a look if your Laptop has a (phyiscal) switch or a “function button” to switch Wi-Fi on/off

If Wi-Fi never work on your Laptop your Wi-Fi Card is not working with Linux out of the box (or it doesn’t have one). In this case we provide Wi-Fi USB-Sticks. As we are dependent on donations it can vary from time to time, if we can give away these sticks.

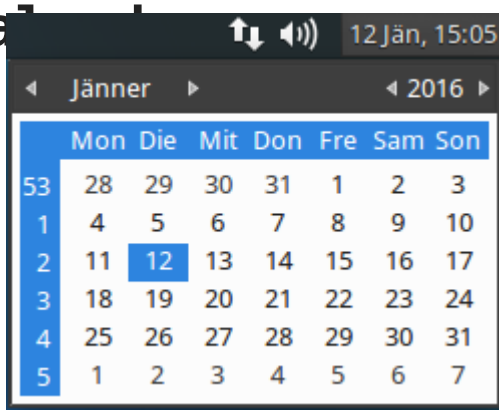
The top panel – audio icon



the audio- or sound panel is a quick way to control volume and start/stop music-/video player

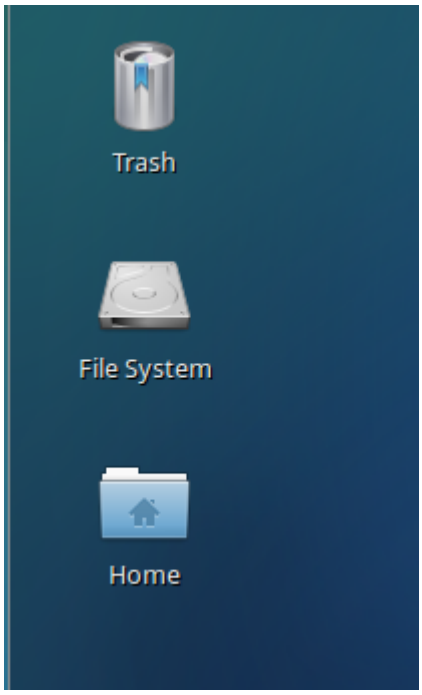
if you click on “Sound settings” you get some more detailed configuration options

The top panel – time and ca



well, the panel shows …. time and date .-). there is not much more to say. Kalliope PCs show preconfigured Austrian time but of course this can be configured in many ways

The Desktop icons, Home and window manager



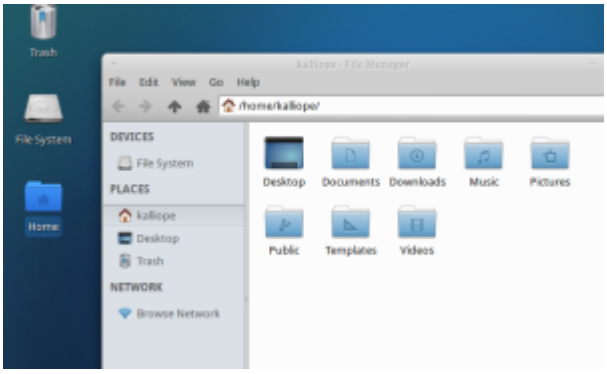
after starting your computer and looking at the desktop, you see 3 icons by default

- Trash
- File System

- Home

To understand what your computer does (and therefore what you can do with it) we will show some very basic functionality and Linux standards in this section:

If a save a picture, a writer document or if I download a file where can I find it again?



In general Linux saves all your files in your “home” directory. You can access this directory by double-clicking the “Home” Icon on your desktop. A file management application will show up (this one is called “thunar” but there are others too) and you will see all your folders and files within /home.

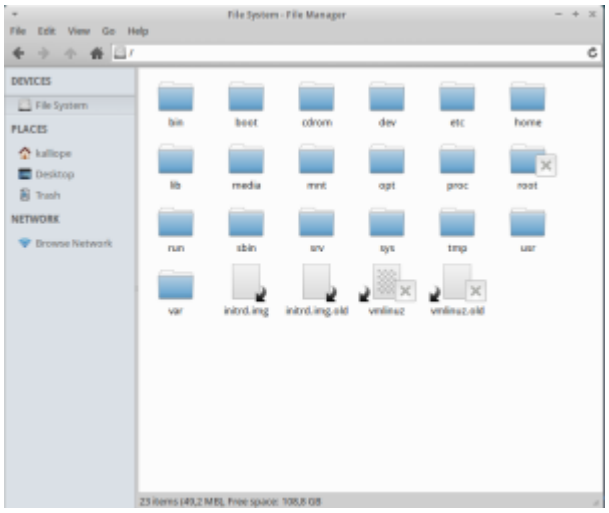
In technical language and many documentations your “Home” or referred to as “/home”. The slash at the beginning / tells you that this notation is a so called “path”. See below.

In your /home you can store all your data and nearly every application will store your personal preferences, your downloads and so on here. Some are more intelligent or

"magic" and will store pictures automatically in "Pictures" and downloads in "Downloads" others will ask you where you want to save your data to.

On the left side of your file manager window you see some "devices": File System for example and if you plug in a USB-Device or a CD-ROM, then these devices will appear here.

Last but not least you can browse your local computer network (Windows- and Apple networks) by clicking on the "Browse Network" icon on the left.



Filesystem, path, /home? What is that all about?

this is just for understanding Linux better. I you are already bored, skip this .-)

A Linux system stores everything in a hirarchial system, there are no "drive letters" like c:\ or d:\ as you maybe know from windows. The top of this hirarchy is the so called "root" an it's symbol is / – a single slash

So if you want to tell someone where something is stored in you system the "path" to this data will always start with a /

for example I would store my downloads in this path: /home/peter/Downloads/

There are other paths of interest when reaching more advanced topics for example "/etc" where many system wide configurations are stored or "/media" where you will find

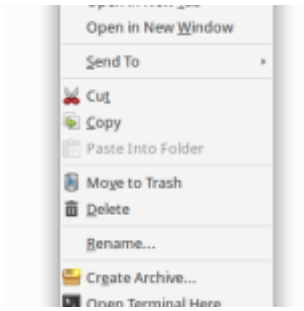
plugged in CD-ROMs and USB-Sticks (no panic, if you plug it in it will appear automatically).

For now the most important thing is that you know what “a path” means and you should know “where is my home directory”. This is always /home/”username” -> so for the user “kalliope this would be “/home/kalliope”, for the user peter “/home/peter” and so on…

Some basics of window and file handling:

whenever you start an application or you click/double click a file you will see an application in a window.
windows can be moved, resized, have focus, be on top, minimized to task bar and of course windows can be closed (the application will be stopped).

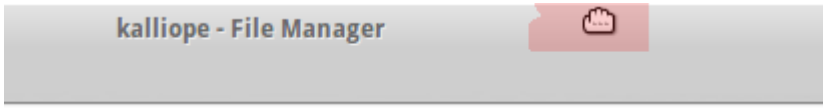
“Click with right button”, “double click”, left… single…. What is the difference between left and right mouse buttons?

- the left mouse button is of more general use. you can move windows with it (see below), select files in a folder or menu entries with a single click or start application and
- 

the right button is context sensitive. that means depending on where and when you click it you will get different functions and menus. If you are searching for some functionallity it is

often a good idea to the a right click and see what is offered

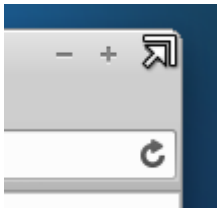
How can I move a window?



click with the left mouse button on the top of the windows and hold. the icon will change to a hand. now move your mouse and window where you want it and then release the button

How can I resize a window?

move your cursor (the moving arrow) to any of the edges of a window untill it changes it’s shape. click and hold the left mouse button. now move the mouse and the windows size will follow



How can I minimize, maximize a window? How can I stop an application?

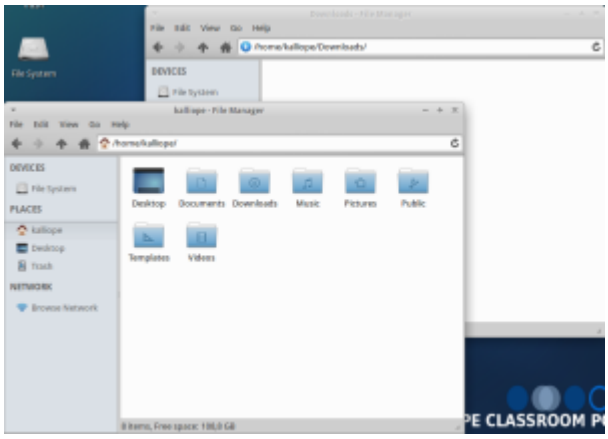
maximize: click on the + symbol and the window will use the full screen. Click again on + and it will revert to it’s original size.

minimize: click on the – symbol and the window will disappear. the application will still be running and you find the application in the task bar (see above top bar -> tasks). click on the task bar item and the window will be back.

stop an application: click on the X symbol and the application will stop. Most applicationions like Libre Office Writer will ask if there are undone tasks like saving

your current document

Several Windows overlap. How can I get the one I want to the front?

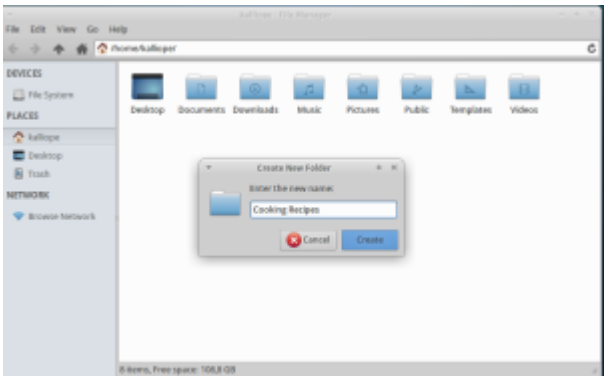


if you open more than one window they usually overlap. the one window most front accepts all your keyboard inputs etc. This is called “the windows has the focus”.

you can manage the windows by

- resizing them and order manually so that you see all
- pressing left ALT (hold this) and TAB several time, the borders of the windows and the icons will be shown, if you release the ALT key, the selected window will get the focus
- click on the task bar item, the selected window will disappear/appear and get the focus
- move the window to the top or bottom and it will automatically resize to the half of the screen (usefull to have exactly 2 windows open

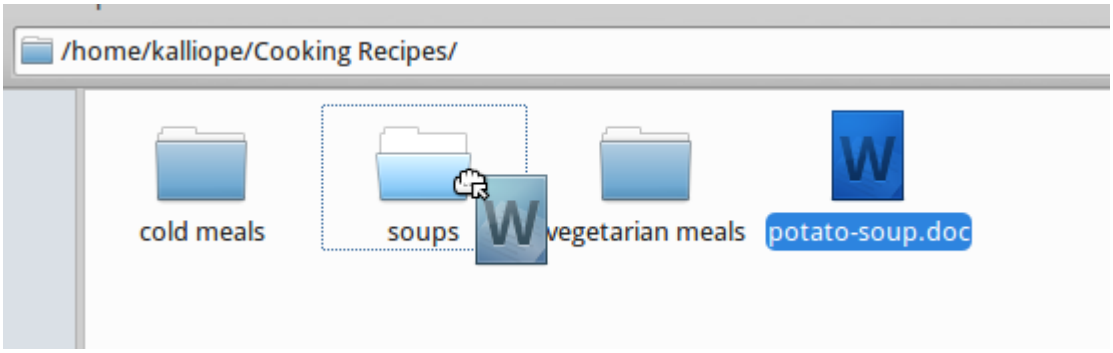
I want to create a folder for my cooking recipies. How can I do that?



- open the file manager by double clicking the “Home” icon (or by choosing file manager in whisker menu)
- do a right-click somewhere in the white area. remember it’s case sensitive! so if you right-click an existing folder something different will happen as in the white area
- choose “Create Folder”
- give the folder a name, for example “Cooking Recipes”. Of course you can give (nearly) any name to folders you like (allthough I think it’s no good style to use “non-international” characters, but maybe I am just an old-school computer-nerd .-))

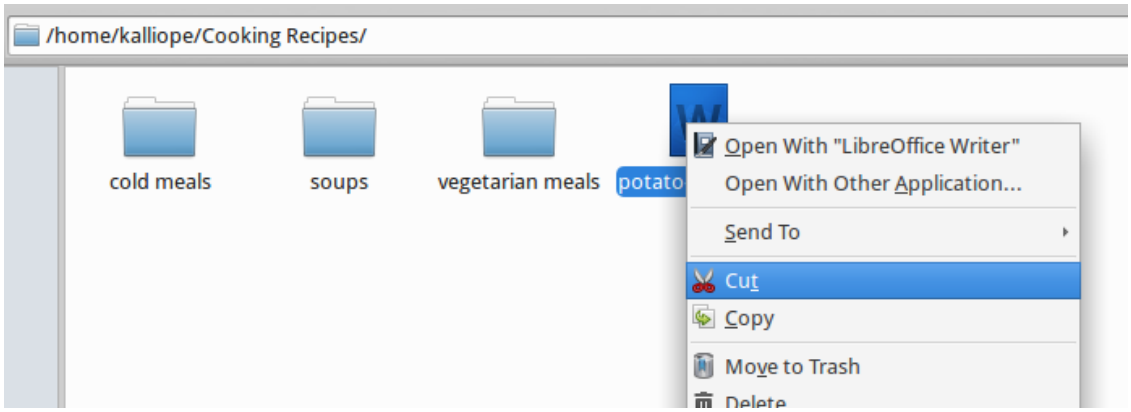
I want to move a document somewhere else. How can I do that?

there are again several ways to move files and folders

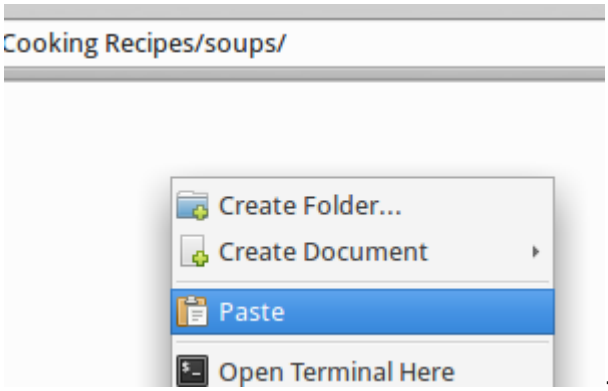


- drag & drop. you can “take” a file or folder -> click it with the left mouse button and hold the button -> then drag it somewhere by moving the mouse -> and “drop” it at the right destination (releasing the

mouse button). usually a file or folder moved that way is really “moved” from the origin location to the destination you chose. under some circumstances the file or folder will not be moved but copied. for example when you do this to a network folder. you will than see a “+” symbol on the hand instead of the arrow (see picture above).

- 

cut & paste: right click your file or folder, choose “cut” (cut it like using scissors)

- 

then go to your destinantion by double-clicking the folders. In the destination folder right click an empty/white area and choose “paste”. In the example the destination folder is “soups” as you see in the “path”

LESSON-1a: a bit of theoretical background

Welcome to the course

- This is an experiment – we have no clue if it works out
- By the people for the people
- Help if you like:
    - Support others
    - Ask questions
    - Participate
- What we have at our disposal:
    - Some physical PCs/Laptops, preinstalled with Xubuntu Linux
    - Virtual PCs that you may use
    - The laptops/tablets/PCs you brought?
    - The course website

Getting started

What is this all about?

- Computer curses for newcomers
- We love to pass on our knowledge
- We want to support people to get their computer stuff

done
- Bring internet connectivity to cities/guest houses

The course

- We start from the beginning and slowly move to more advanced topics.
- An open project – the topics depend on the needs of the visitors.
- What do you expect from this course?
- Please contribute if you can (comments, translations, …)

Who are we?

- Members of the local Linux User Group: VALUG
- Computer enthusiasts
- Volunteers

What is …

Hardware

- Physical elements of a computer: mouse, keyboard, cpu, hard disk, …
- A lot of different parts in a casing.
- Can be of almost any form factor: laptop, pc, mobile phone, tablet.

Software

- Software or programs: instructions for the computer.
- Developers write those progams and special tools translate this into executable code.
- Performs task on the hardware.
- System software: kernel, control the hardware (Linux, Windows, Mac)

- User software: programs to perform user tasks: Word processor, calculator, web browser, mail client

Why do we use Linux?

- Free software. Not only gratis (as in free beer) but also free (as in a free society):
    - The freedom to run the program, for any purpose.
    - The freedom to study how the program works, and change it so it does your computing as you wish. Access to the source code is a precondition for this.
    - The freedom to redistribute copies so you can help your neighbor.
    - The freedom to distribute copies of your modified versions to others. By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.
- Easy to use
- General purpose operating system: mail, web browser, provide services, gaming, …
- Fits our needs best
- You might already be using it

Internet and Linux

- Linux would not be possible without the Internet
- Internet would not be possible without Linux
- Unix-like operating systems have about 70% market share

Xubuntu

- We try to refurbish old hardware for newcomers
- Xubuntu Linux is installed on all Kalliope PCs:
    - It is an elegant and easy to use operating system

for anyone.
    - It looks good and runs smoothly on old hardware.
    - It provides all programs that are required for day-to-day usage.
    - It is free software and anyone can download and install it.
- Hardware is donated by individuals/companies.
- We have almost no budget, there is no way for us to buy a windows license for each and every Kalliope PC.