

# Arch Linux

Arch Linux is an independently developed, x86-64 general-purpose [GNU/Linux](#) distribution that strives to provide the latest stable versions of most software by following a rolling-release model. The default installation is a minimal base system, configured by the user to only add what is purposely required.

## Principles

### Simplicity

Arch Linux defines simplicity as *without unnecessary additions or modifications*. It ships software as released by the original developers ([upstream](#)) with minimal distribution-specific (downstream) changes: patches not accepted by upstream are avoided, and Arch's downstream patches consist almost entirely of backported bug fixes that are obsoleted by the project's next release.

In a similar fashion, Arch ships the configuration files provided by upstream with changes limited to distribution-specific issues like adjusting the system file paths. It does not add automation features such as enabling a service simply because the package was installed. Packages are only split when compelling advantages exist, such as to save disk space in particularly bad cases of waste. GUI configuration utilities are not officially provided, encouraging users to perform most system configuration from the shell and a text editor.

### Modernity

Arch Linux strives to maintain the latest stable release versions of its software as long as systemic package breakage can be reasonably avoided. It is based on a [rolling-release](#) system, which allows a one-time installation with continuous upgrades.

Arch incorporates many of the newer features available to GNU/Linux users, including the [systemd](#) init system, modern [file systems](#), LVM2, software RAID, udev support and initcpio (with [mkinitcpio](#)), as well as the latest available kernels.

### Pragmatism

Arch is a pragmatic distribution rather than an ideological one. The principles here are only useful guidelines. Ultimately, design decisions are made on a case-by-case basis through developer consensus. Evidence-based technical analysis and debate are what matter, not politics or popular opinion.

The large number of packages and build scripts in the various Arch Linux repositories offer free and open source software for those who prefer it, as well as proprietary software packages for those who embrace functionality over ideology.

## User centrality

Whereas many GNU/Linux distributions attempt to be more *user-friendly*, Arch Linux has always been, and shall always remain *user-centric*. The distribution is intended to fill the needs of those contributing to it, rather than trying to appeal to as many users as possible. It is targeted at the proficient GNU/Linux user, or anyone with a do-it-yourself attitude who is willing to read the documentation, and solve their own problems.

All users are encouraged to [participate](#) and contribute to the distribution. Reporting and helping fix [bugs](#) is highly valued and patches improving packages or the core [projects](#) are very appreciated: Arch's developers are volunteers and active contributors will often find themselves becoming part of that team. *Archers* can freely contribute packages to the [Arch User Repository](#), improve the [ArchWiki documentation](#), provide technical assistance to others or just exchange opinions in the [forums](#), [mailing lists](#), or [IRC channels](#). Arch Linux is the operating system of choice for many people around the globe, and there exist several [international communities](#) that offer help and provide documentation in many different languages.

## Versatility

Arch Linux is a general-purpose distribution. Upon installation, only a command-line environment is provided; rather than tearing out unneeded and unwanted packages, the user is offered the ability to build a custom system by choosing among thousands of high-quality packages provided in the [official repositories](#) for the [x86-64](#) architecture.

Arch is a rolling-release model backed by [pacman](#), a lightweight, simple and fast package manager that allows for continuously upgrading the entire system with one command. Arch also provides the [Arch Build System](#), a ports-like system to make it easy to build and install packages from source, which can also be synchronized with one command. In addition, the *Arch User Repository* contains many thousands of community-contributed [PKGBUILD](#) scripts for compiling installable packages from source using the [makepkg](#) application. It is also possible for users to build and maintain their own custom repositories with ease.

## History

The Arch community has grown and matured to become one of the most popular and influential Linux distributions, also testified by the [attention and review](#) received over the years.

Arch developers remain unpaid, part-time volunteers, and there are no prospects for monetizing Arch Linux, so it will remain free in all senses of the word. Those curious to peruse more detail

about Arch's development history can browse the [Arch entry in the Internet Archive Wayback Machine](#) and the [Arch Linux News Archives](#).

## The early years

Judd Vinet, a Canadian programmer and occasional guitarist, began developing Arch Linux in early 2001. Its first formal release, Arch Linux 0.1, was on March 11, 2002. [Inspired](#) by the elegant simplicity of Slackware, BSD, PLD Linux and CRUX, and yet disappointed with their lack of package management at the time, Vinet built his own distribution on similar principles as those distros. But, he also wrote a package management program called [pacman](#), to automatically handle package dependency resolution, installation, removal, and upgrades.

## The middle years

The early Arch community grew steadily, as evidenced by [this chart of forum posts, users, and bug reports](#). Moreover, it was from its early days known as [an open, friendly, and helpful community](#).

## Birth of the ArchWiki

On 2005-07-08 the ArchWiki was first [set up](#) on the MediaWiki engine.

## The dawning of the age of A. Griffin

In late 2007, Judd Vinet retired from active participation as an Arch developer, and [smoothly transferred](#) the reins over to American programmer Aaron Griffin, also known as Phraktur.

## Arch Install Scripts

The 2012-07-15 release of the installation image [deprecated](#) the menu-driven *Arch Installation Framework* (AIF) in favor of the *Arch Install Scripts* ([arch-install-scripts](#)).

## The systemd era

Between 2012 and 2013 the traditional System V init system was replaced by systemd. [\[1\]](#)[\[2\]](#)[\[3\]](#)[\[4\]](#)

## Drop of i686 support

On 2017-01-25 it was [announced](#) that support for the i686 architecture would be phased out due to its decreasing popularity among the developers and the community. By the [end of November 2017](#), all i686 packages were removed from the mirrors.

## Review of Project Leader role and election

At the start of 2020, in a team effort the Arch Linux staff devised a new process for determining future leaders, documented in [DeveloperWiki:Project Leader](#).

As Aaron Griffin had decided to step down from his role, a poll was held to elect a new person to replace him, and on 2020-02-24 its results were [published](#), making the election of Levente Polyak official.

# Installation guide

This document is a guide for installing [Arch Linux](#) using the live system booted from an installation medium made from an official installation image. The installation medium provides accessibility features which are described on the page [Install Arch Linux with accessibility options](#). For alternative means of installation, see [Category:Installation process](#).

Before installing, it would be advised to view the [FAQ](#). For conventions used in this document, see [Help:Reading](#). In particular, code examples may contain placeholders (formatted in *italics*) that must be replaced manually.

This guide is kept concise and you are advised to follow the instructions in the presented order per section. For more detailed instructions, see the respective [ArchWiki](#) articles or the various programs' [man pages](#), both linked from this guide. For interactive help, the [IRC channel](#) and the [forums](#) are also available.

Arch Linux should run on any [x86\\_64](#)-compatible machine with a minimum of 512 MiB RAM, though more memory is needed to boot the live system for installation.<sup>[1]</sup> A basic installation should take less than 2 GiB of disk space. As the installation process needs to retrieve packages from a remote repository, this guide assumes a working internet connection is available.

## Pre-installation

### Acquire an installation image

Visit the [Download](https://archlinux.org/download/)(<https://archlinux.org/download/>) page and, depending on how you want to boot, acquire the ISO file or a netboot image, and the respective [GnuPG](#) signature.

## Verify signature

It is recommended to verify the image signature before use, especially when downloading from an *HTTP mirror*, where downloads are generally prone to be intercepted to [serve malicious images](#).

On a system with [GnuPG](#) installed, do this by downloading the *ISO PGP signature* ([under Checksums in the page Download](#)) to the ISO directory, and [verifying](#) it with:

```
$ gpg --keyserver-options auto-key-retrieve --verify archlinux-version-x86_64.iso.sig
```

Alternatively, from an existing Arch Linux installation run:

```
$ pacman-key -v archlinux-version-x86_64.iso.sig
```

### Note:

- The signature itself could be manipulated if it is downloaded from a mirror site, instead of from [archlinux.org](#) as above. In this case, ensure that the public key, which is used to decode the signature, is signed by another, trustworthy key. The `gpg` command will output the fingerprint of the public key.
- Another method to verify the authenticity of the signature is to ensure that the public key's fingerprint is identical to the key fingerprint of the [Arch Linux developer](#) who signed the ISO-file. See [Wikipedia:Public-key cryptography](#) for more information on the public-key process to authenticate keys.

## Prepare an installation medium

The installation image can be supplied to the target machine via a [USB flash drive](#), an [optical disc](#) or a network with [PXE](#): follow the appropriate article to prepare yourself an installation medium from the chosen image.

## Boot the live environment

**Note:** Arch Linux installation images do not support Secure Boot. You will need to [disable Secure Boot](#) to boot the installation medium. If desired, [Secure Boot](#) can be set up after completing the installation.

1. Point the current boot device to the one which has the Arch Linux installation medium. Typically it is achieved by pressing a key during the [POST](#) phase, as indicated on the splash screen. Refer to your motherboard's manual for details.
2. When the installation medium's boot loader menu appears, select *Arch Linux install medium* and press `Enter` to enter the installation environment.

### Tip:

- The installation image uses [GRUB](#) for UEFI and [syslinux](#) for BIOS booting. Use respectively [e](#) or [Tab](#) to enter the [boot parameters](#). See [README.bootparams](#) for a list.
  - A common example of manually defined boot parameter would be the font size. For better readability on HiDPI screens—when they are not already recognized as such—using [fbcon=font:TER16x32](#) can help. See [HiDPI#Linux console \(tty\)](#) for a detailed explanation.
3. You will be logged in on the first [virtual console](#) as the root user, and presented with a [Zsh](#) shell prompt.

To switch to a different console—for example, to view this guide with [Lynx](#) alongside the installation—use the [Alt+arrow shortcut](#). To [edit](#) configuration files, [mcedit\(1\)](#), [nano](#) and [vim](#) are available. See [pkglist.x86\\_64.txt](#) for a list of the packages included in the installation medium.

## Set the console keyboard layout and font

The default [console keymap](#) is [US](#). Available layouts can be listed with:

```
# ls /usr/share/kbd/keymaps/**/*.map.gz
```

To set the keyboard layout, pass a corresponding file name to [loadkeys\(1\)](#), omitting path and file extension. For example, to set a [German](#) keyboard layout:

```
# loadkeys de-latin1
```

[Console fonts](#) are located in [/usr/share/kbd/consolefonts/](#) and can likewise be set with [setfont\(8\)](#). For example, to use one of the largest fonts suitable for [HiDPI screens](#), run:

```
# setfont ter-132b
```

## Verify the boot mode

To verify the boot mode, check the UEFI bitness:

```
# cat /sys/firmware/efi/fw_platform_size
```

If the command returns [64](#), then system is booted in UEFI mode and has a 64-bit x64 UEFI. If the command returns [32](#), then system is booted in UEFI mode and has a 32-bit IA32 UEFI; while this is supported, it will limit the boot loader choice to GRUB. If the file does not exist, the

system may be booted in [BIOS](#) (or [CSM](#)) mode. If the system did not boot in the mode you desired (UEFI vs BIOS), refer to your motherboard's manual.

## Connect to the internet

To set up a network connection in the live environment, go through the following steps:

- Ensure your [network interface](#) is listed and enabled, for example with [ip-link\(8\)](#):  
# ip link
- For wireless and WWAN, make sure the card is not blocked with [rfkill](#).
- Connect to the network:
  - Ethernet—plug in the cable.
  - Wi-Fi—authenticate to the wireless network using [iwctl](#).
  - Mobile broadband modem—connect to the mobile network with the [mmcli](#) utility.
- Configure your network connection:
  - [DHCP](#): dynamic IP address and DNS server assignment (provided by [systemd-networkd](#) and [systemd-resolved](#)) should work out of the box for Ethernet, WLAN, and WWAN network interfaces.
  - Static IP address: follow [Network configuration#Static IP address](#).
- The connection may be verified with [ping](#):  
# ping archlinux.org

**Note:** In the installation image, [systemd-networkd](#), [systemd-resolved](#), [iwd](#) and [ModemManager](#) are preconfigured and enabled by default. That will not be the case for the installed system.

## Update the system clock

In the live environment [systemd-timesyncd](#) is enabled by default and time will be synced automatically once a connection to the internet is established.

Use [timedatectl\(1\)](#) to ensure the system clock is accurate:

```
# timedatectl
```

## Partition the disks

When recognized by the live system, disks are assigned to a [block device](#) such as [/dev/sda](#), [/dev/nvme0n1](#) or [/dev/mmcblk0](#). To identify these devices, use [lsblk](#) or [fdisk](#).

```
# fdisk -l
```

Results ending in [rom](#), [loop](#) or [airoot](#) may be ignored.

**Tip:** Check that your NVMe drives and Advanced Format hard disk drives are using the [optimal logical sector size](#) before partitioning.

The following [partitions](#) are **required** for a chosen device:

- One partition for the [root directory](#) /.
- For booting in [UEFI](#) mode: an [EFI system partition](#).

If you want to create any stacked block devices for [LVM](#), [system encryption](#) or [RAID](#), do it now.

Use [fdisk](#) or [parted](#) to modify partition tables. For example:

```
# fdisk /dev/the_disk_to_be_partitioned
```

**Note:**

- If the disk does not show up, [make sure the disk controller is not in RAID mode](#).
- If the disk from which you want to boot [already has an EFI system partition](#), do not create another one, but use the existing partition instead.
- [Swap](#) space can be set on a [swap file](#) for file systems supporting it.

**Example layouts**

Mount point	Partition	<a href="#">Partition type</a>	Suggested size
<a href="#">/mnt/boot</a> <sup>1</sup>	<a href="#">/dev/efi_system_partition</a>	<a href="#">EFI system partition</a>	At least 300 MiB. If multiple kernels will be installed, then no less than 1 GiB.
<a href="#">[SWAP]</a>	<a href="#">/dev/swap_partition</a>	Linux swap	More than 512 MiB
<a href="#">/mnt</a>	<a href="#">/dev/root_partition</a>	Linux x86-64 root (/)	Remainder of the device

1. [Other mount points](#), such as [/mnt/efi](#), are possible, provided that the used boot loader is capable of loading the kernel and initramfs images from the root volume. See the warning in [Arch boot process#Boot loader](#).

Mount point	Partition	<a href="#">Partition type</a>	Suggested size
<a href="#">[SWAP]</a>	<a href="#">/dev/swap_partition</a>	Linux swap	More than 512 MiB
<a href="#">/mnt</a>	<a href="#">/dev/root_partition</a>	Linux	Remainder of the device



on

See also [Partitioning#Example layouts](#).

## Format the partitions

Once the partitions have been created, each newly created partition must be formatted with an appropriate [file system](https://wiki.archlinux.org/title/File_system)([https://wiki.archlinux.org/title/File\\_system](https://wiki.archlinux.org/title/File_system)). See [File systems#Create a file system](https://wiki.archlinux.org/title/File_systems#Create_a_file_system)([https://wiki.archlinux.org/title/File\\_systems#Create\\_a\\_file\\_system](https://wiki.archlinux.org/title/File_systems#Create_a_file_system)) for details.

For example, to create an [Ext4](#) file system on `/dev/root_partition`, run:

```
# mkfs.ext4 /dev/root_partition
```

If you created a partition for [swap](#), initialize it with [mkswap\(8\)](#):

```
# mkswap /dev/swap_partition
```

**Note:** For stacked block devices replace `/dev/*_partition` with the appropriate block device path.

If you created an EFI system partition, [format it](#) to FAT32 using [mkfs.fat\(8\)](#).

**Warning:** Only format the EFI system partition if you created it during the partitioning step. If there already was an EFI system partition on disk beforehand, reformatting it can destroy the boot loaders of other installed operating systems.

```
# mkfs.fat -F 32 /dev/efi_system_partition
```

## Mount the file systems

[Mount](#) the root volume to `/mnt`. For example, if the root volume is `/dev/root_partition`:

```
# mount /dev/root_partition /mnt
```

Create any remaining mount points (such as `/mnt/boot`) and mount the volumes in their corresponding hierarchical order.

**Tip:** Run [mount\(8\)](#) with the `--mkdir` option to create the specified mount point. Alternatively, create it using [mkdir\(1\)](#) beforehand.

For UEFI systems, mount the EFI system partition:

```
# mount --mkdir /dev/efi_system_partition /mnt/boot
```

If you created a [swap](#) volume, enable it with [swapon\(8\)](#):

```
# swapon /dev/swap_partition
```

[genfstab\(8\)](#) will later detect mounted file systems and swap space.

## Installation

### Select the mirrors

Packages to be installed must be downloaded from [mirror servers](#), which are defined in `/etc/pacman.d/mirrorlist`. On the live system, after connecting to the internet, [reflectord](#) updates the mirror list by choosing 20 most recently synchronized HTTPS mirrors and sorting them by download rate.

The higher a mirror is placed in the list, the more priority it is given when downloading a package. You may want to inspect the file to see if it is satisfactory. If it is not, [edit](#) the file accordingly, and move the geographically closest mirrors to the top of the list, although other criteria should be taken into account.

This file will later be copied to the new system by *pacstrap*, so it is worth getting right.

### Install essential packages

**Note:** No software or configuration (except for `/etc/pacman.d/mirrorlist`) get carried over from the live environment to the installed system.

Use the [pacstrap\(8\)](#) script to install the [base](#) package, Linux [kernel](#) and firmware for common hardware:

```
# pacstrap -K /mnt base linux linux-firmware
```

#### Tip:

- You can substitute [linux](#) for a [kernel](#) package of your choice, or you could omit it entirely when installing in a [container](#).
- You could omit the installation of the firmware package when installing in a virtual machine or container.

The [base](#) package does not include all tools from the live installation, so installing more packages may be necessary for a fully functional base system. To install other packages or

package groups, append the names to the *pacstrap* command above (space separated) or use [pacman](#) to [install](#) them while [chrooted into the new system](#). In particular, consider installing:

- [userspace utilities for file systems](#) that will be used on the system—for the purposes of e.g. file system creation and [fsck](#),
- utilities for accessing and managing [RAID](#) or [LVM](#) if they will be used on the system,
- specific firmware for other devices not included in [linux-firmware](#) (e.g. [sof-firmware](#) for [onboard audio](#), [linux-firmware-marvell](#) for Marvell wireless and any of the multiple firmware packages for [Broadcom wireless](#)),
- software necessary for [networking](#) (e.g. a [network manager](#) or a [standalone DHCP client](#), [authentication software](#) for Wi-Fi, [ModemManager](#) for mobile broadband connections),
- a [text editor](#),
- packages for accessing documentation in [man](#) and [info](#) pages: [man-db](#), [man-pages](#) and [texinfo](#).

For comparison, packages available in the live system can be found in [pkglist.x86\\_64.txt](#).

## Configure the system

### Fstab

Generate an [fstab](#) file (use `-U` or `-L` to define by [UUID](#) or labels, respectively):

```
# genfstab -U /mnt >> /mnt/etc/fstab
```

Check the resulting `/mnt/etc/fstab` file, and [edit](#) it in case of errors.

### Chroot

[Change root](#) into the new system:

```
# arch-chroot /mnt
```

### Time zone

Set the [time zone](#):

```
# ln -sf /usr/share/zoneinfo/Region/City /etc/localtime
```

Run [hwclock\(8\)](#) to generate `/etc/adjtime`:

```
# hwclock --systohc
```

This command assumes the hardware clock is set to [UTC](#). See [System time#Time standard](#) for details.

## Localization

[Edit](#) `/etc/locale.gen` and uncomment `en_US.UTF-8` `UTF-8` and other needed [locales](#).  
Generate the locales by running:

```
# locale-gen
```

[Create](#) the [locale.conf\(5\)](#) file, and [set the LANG variable](#) accordingly:

```
/etc/locale.conf  
LANG=en_US.UTF-8
```

If you [set the console keyboard layout](#), make the changes persistent in [vconsole.conf\(5\)](#):

```
/etc/vconsole.conf  
KEYMAP=de-latin1
```

## Network configuration

[Create](#) the [hostname](#) file:

```
/etc/hostname  
myhostname
```

Complete the [network configuration](#) for the newly installed environment. That may include installing suitable [network management](#) software.

## Initramfs

Creating a new *initramfs* is usually not required, because [mkinitcpio](#) was run on installation of the [kernel](#) package with *pacstrap*.

For [LVM](#), [system encryption](#) or [RAID](#), modify [mkinitcpio.conf\(5\)](#) and recreate the initramfs image:

```
# mkinitcpio -P
```

## Root password

Set the root [password](#):

```
# passwd
```

## Boot loader

Choose and install a Linux-capable [boot loader](https://wiki.archlinux.org/title/Boot_loader). If you have an Intel or AMD CPU, enable [microcode](https://wiki.archlinux.org/title/Microcode) updates in addition.

## Reboot

Exit the chroot environment by typing `exit` or pressing `Ctrl+d`.

Optionally manually unmount all the partitions with `umount -R /mnt`: this allows noticing any "busy" partitions, and finding the cause with [fuser\(1\)](#).

Finally, restart the machine by typing `reboot`: any partitions still mounted will be automatically unmounted by *systemd*. Remember to remove the installation medium and then login into the new system with the root account.

## Post-installation

See [General recommendations](https://wiki.archlinux.org/title/General_recommendations) for system management directions and post-installation tutorials (like creating unprivileged user accounts, setting up a graphical user interface, sound or a touchpad).

For a list of applications that may be of interest, see [List of applications](https://wiki.archlinux.org/title/List_of_applications).

# Frequently asked questions

## General

### What is Arch Linux?

See the [Arch Linux](#) article.

### Why would I not want to use Arch?

You may **not** want to use Arch, if:

- you do not have the ability/time/desire for a 'do-it-yourself' GNU/Linux distribution.
- you require support for an architecture other than x86\_64.
- you take a strong stance on using a distribution which only provides free software as defined by GNU.
- you believe an operating system should configure itself, run out of the box, and include a complete default set of software and desktop environment on the installation media.
- you do not want a rolling release GNU/Linux distribution.
- you are happy with your current OS.

### Why would I want to use Arch?

Because [Arch is the best](#).

### What architectures does Arch support?

Arch only supports the [x86\\_64](#) (sometimes called amd64) architecture. Support for i686 was dropped in November 2017 [\[1\]](#).

There are *unofficial* ports for the i686 architecture [\[2\]](#) and [ARM](#) CPUs [\[3\]](#), each with their own community channels.

### Does Arch follow the Linux Foundation's Filesystem Hierarchy Standard (FHS)?

Arch Linux follows the *file system hierarchy* for operating systems using the [systemd](#) service manager. See [file-hierarchy\(7\)](#) for an explanation of each directory along with their designations. In particular, `/bin`, `/sbin`, and `/usr/sbin` are symbolic links to `/usr/bin`, and `/lib` and `/lib64` are symbolic links to `/usr/lib`.

### I am a complete GNU/Linux beginner. Should I use Arch?

If you are a beginner and want to use Arch, you must be willing to invest time into learning a new system, and accept that Arch is designed as a 'do-it-yourself' distribution; it is the user who assembles the system.

Before asking for help, do your own independent research by searching the Web, the forum and the superb documentation provided by the Arch Wiki. *There is a reason these resources were made available to you in the first place.* Many thousands of *volunteered* hours have been spent compiling this excellent information.

See also [Arch terminology#RTFM](#) and the [Installation guide](#).

## **Is Arch designed to be used as a server? A desktop? A workstation?**

Arch is not designed for any particular type of use. Rather, it is designed for a particular type of *user*. Arch targets competent users who enjoy its 'do-it-yourself' nature, and who further exploit it to shape the system to fit their unique needs. Therefore, in the hands of its target user base, Arch can be used for virtually any purpose. Many use Arch on both their desktops and workstations. And of course, archlinux.org, aur.archlinux.org and almost all of Arch's [infrastructure](#) runs on Arch.

## **I really like Arch, except the development team needs to implement feature X**

[Get involved](#), contribute your code/solution to the community. If it is well-regarded by the community and development team, perhaps it will be merged. The Arch community thrives on contribution and sharing of code and tools.

## **When will the new release be made available?**

Arch Linux releases are simply a live environment for installation or rescue, which include the [base meta package](#) and a few [other packages](#). The releases are issued usually in the first half of every month.

## **Is Arch Linux a stable distribution? Will I get frequent breakage?**

It is *the user* who is ultimately responsible for the stability of their own rolling release system. The user decides when to upgrade, and merges necessary changes when required. If the user reaches out to the community, help is often provided in a timely manner. The difference between Arch and other distributions in this regard is that Arch is truly a 'do-it-yourself' distribution; complaints of breakage are misguided and unproductive, since upstream changes are not the responsibility of Arch devs.

See the [System maintenance](#) article for tips on how to make an Arch Linux system as stable as possible.

## **Arch needs more press (i.e. advertisement)**

Arch gets plenty of press as it is. The goal of Arch Linux is not to be large; rather, organic, sustainable growth occurs naturally amongst the target user base.

## **Arch needs more developers**

Possibly so. Feel free to volunteer your time! Visit the [forums](#), [IRC channels](#), and [mailing lists](#), and see what needs to be done. See also [Getting involved](#) for details.

## **Installation**

### **Arch needs an installer. Maybe a GUI installer?**

Arch used to have an installer with a text-based user interface called the Arch Installation Framework (AIF). After its [last maintainer left](#), it [was deprecated](#) in favor of [arch-install-scripts](#).

Since [2021-04-01](#), Arch has an installer again. See [archinstall](#) for details.

### **I installed Arch, and now I am at a shell! What now?**

See [General recommendations](#).

### **Which desktop environment or window manager should I use?**

Since many are available to you, use the one that best fits your needs. Have a look at the [Desktop environment](#) and [Window manager](#) articles.

### **What makes Arch unique amongst other "minimal" distributions?**

See [Arch compared to other distributions](#).

## **System maintenance**

See also [System maintenance](#).

### **Why is my internet so slow compared to other operating systems?**

Is your network configured correctly? Have a look at the [Network configuration](#) article.

Also note that Arch Linux does not come with [traffic shaping](#) enabled. Thus, it is possible that if a program on it somehow utilizes your internet connection to the full – regardless if it is over P2P or classic client-server connections – other local ones will find it clogged, resulting in



severe lags and timeouts. Relief can be provided by [firewalls](#) such as *Shorewall* or *Vuurmuur*; there are also static scripts for [iproute2](#) (such as [this derivative](#) of *Wondershaper*), which allow shaping on the network layer.

## Why is Arch using all my RAM?

Essentially, unused RAM is wasted RAM.

Many new users notice how the Linux kernel handles memory differently than they are used to. Since accessing data from RAM is much faster than from a storage drive, the kernel caches recently accessed data in memory. The cached data is only cleared when the system begins to run out of available memory and new data needs to be loaded.

We could distinguish the difference from `free` command:

```
$ free -h
```

	total	used	free	shared	buff/cache	available
Mem:	2.8Gi	1.1Gi	283Mi	224Mi	1.4Gi	1.2Gi
Swap:	3.0Gi	881Mi	2.1Gi			

It is important to note the difference between "free" and "available" memory. In the above example, a laptop with 2.8 GiB of total RAM appears to be using most of it, with only 283 MiB as free memory. However, 1.4 GiB of it is "buff/cache". There is still 1.2 GiB available for starting new applications, without swapping. See [free\(1\)](#) for details. The result of all this? Performance!

See [this wonderful article](#) if your curiosity has been piqued. There is also a website dedicated to clearing this confusion: <https://www.linuxatemyram.com/>.

## Where did all my free space go?

The answer to this question depends on your system. There are some [fine utilities](#) that may help you find the answer.

## Package management

See the [pacman](#), [pacman/Tips and tricks](#) and [Official repositories](#) pages for more answers.

## I have found an error with package X. What should I do?

First, you need to figure out if this error is something the Arch team can fix. Sometimes it is not (e.g. Firefox crashes may be the fault of the Mozilla team); this is called an *upstream error*. If it is an Arch problem, there is a series of steps you can take:

1. Search the forums for information. See if anyone else has noticed it.
2. Post a [bug report](https://bugs.archlinux.org) with detailed information at <https://bugs.archlinux.org>.
3. If you would like, write a forum post detailing the problem and the fact that you have reported it already. This will help prevent a lot of people from reporting the same error.

## **Arch packages need to use a unique naming convention. ".pkg.tar.zst" is too long and/or confusing**

This has been discussed on the Arch mailing list. Some proposed a `.pac` file extension, but there is no plan to change the package extension. As Tobias Kieslich, one of the Arch developers, put it, "A package is a *[compressed]* tarball! And it can be opened, investigated and manipulated by any tar-capable application. Moreover, the mime-type is automatically detected correctly by most applications."

## **Pacman needs a library so other applications can easily access package information**

Pacman is a front-end to [libalpm\(3\)](#)—the "Arch Linux Package Management" library—which allows alternative front-ends, like a GUI front-end, to be written.

## **Pacman needs feature X!**

If you think an idea has merit, you may choose to discuss it on [pacman-dev](#). Also check <https://gitlab.archlinux.org/pacman/pacman/-/issues> and <https://bugs.archlinux.org/index.php?project=3> for existing feature requests.

However, the best way to get a feature added to pacman or Arch Linux is to implement it yourself. The patch or code may or may not be officially accepted, but perhaps others will appreciate, test and contribute to your effort.

## **I just installed Package X. How do I start it?**

If you are using a desktop environment like [KDE](#) or [GNOME](#), the program should automatically show up in your menu. If you are trying to run the program from a terminal and do not know the binary name, use:

```
$ pacman -Qlq package_name | grep /usr/bin/
```

## Why is there only a single version of each shared library in the official repositories?

Several distributions, such as Debian, have different versions of shared libraries packaged as different packages: `libfoo1`, `libfoo2`, `libfoo3` and so on. In this way it is possible to have applications compiled against different versions of `libfoo` installed on the same system.

In case of a distribution like Arch, only the latest packaged versions are officially supported. By dropping support for outdated software, package maintainers are able to spend more time ensuring that the newest versions work as expected. As soon as a new version of a shared library becomes available from upstream, it is added to the repositories and affected packages are rebuilt to use the new version.

## What if I run a full system upgrade and there will be an update for a shared library, but not for the applications that depend on it?

This scenario should not happen at all. Assuming an application called `foobaz` is in one of the official repositories and builds successfully against a new version of a shared library called `libbaz`, it will be updated along with `libbaz`. If, however, it does not build successfully, `foobaz` package will have a versioned dependency (e.g. `libbaz 1.5`), and will be removed by pacman during `libbaz` upgrade, due to a conflict.

If `foobaz` is a package that you [built yourself](#) and installed from AUR, you should rebuild `foobaz` against the new version of `libbaz`. If the build fails, report the bug to the `foobaz` developers.

## Is it possible that there is a major kernel update in the repository, and that some of the driver packages have not been updated?

No, it is not possible. Major kernel updates (e.g. `linux 3.5.0-1` to `linux 3.6.0-1`) are always accompanied by rebuilds of all supported kernel driver packages. On the other hand, if you have an unsupported driver package (e.g. from the [AUR](#)) installed on your system, then a kernel update might break things for you if you do not rebuild it for the new kernel. Users are responsible for updating any unsupported driver packages that they have installed.

## What to do before upgrading?

Follow the [System maintenance#Upgrading the system](#) section.

## A package update was released, but pacman says the system is up to date

*pacman* mirrors are not synced immediately. It may take over 24 hours before an update is available to you. The only options are be patient or use another mirror. [MirrorStatus](#) can help you identify an up-to-date mirror.

## **Upstream project X has released a new version. How long will it take for the Arch package to update to that new version?**

Package updates will be released when they are ready. The specific amount of time can be as short as a few hours after upstream releases a minor bugfix update to as long as several weeks after a large package group's major update. The amount of time from an upstream's new version to Arch releasing a new package depends on the specific packages and the availability of the package maintainers. Additionally, some packages spend some time in the [testing](#) repository, so this can prolong the time before a package is updated. [Package maintainers](#) attempt to work quickly to bring stable updates to the repositories. If you find a package in the official repositories that is out of date, go to that package's page at the [package website](#) and flag it.

## **If I need an older version of an installed library, can I just symlink to the newer version?**

If you are lucky, it might work, for a time. Regardless, it is not a proper solution, because:

- Libraries do not change versions randomly – the API/ABI will have likely changed (possibly with bits removed), and whether those changes affect the usage is just a matter of luck.
- The symlink would be untracked by a package manager. Beginners who immediately try to hack on system library files are in the greatest risk of making an unwanted change that they cannot diagnose/fix, which a package manager helps to guard against.
- A slight alternative of dumping the old library file into the filesystem, untracked, would be forgotten about, and not have potential security bugs noticed/patched.

Instead, e.g. use/write a [compat package](#), which provides the required library version.

## **64-bit**

### **How do I determine if my processor is x86\_64 compatible?**

If your processor is [x86\\_64](#) compatible, you will have the `lm` ([long mode](#)) flag in `/proc/cpuinfo`. For example,

```
$ grep -w lm /proc/cpuinfo
```

Under Windows, using the freeware [CPU-Z](#) helps determine whether your CPU is 64-bit compatible. CPUs with AMD's instruction set "AMD64" or Intel's solution "EM64T" should be compatible with the x86\_64 releases and binary packages.

## Why 64-bit?

It is faster under most circumstances and as an added bonus also inherently more secure due to the nature of [Address space layout randomization \(ASLR\)](#) in combination with [Position-independent code \(PIC\)](#) and the [NX Bit](#) which is not available in the stock i686 kernel due to disabled [Physical Address Extension \(PAE\)](#). If your computer has more than 4 GiB of RAM, only a 64-bit OS will be able to fully utilize it.

Programmers also increasingly tend to care less about 32-bit ("legacy") as "new" x86 CPUs typically support the 64-bit extensions.

There are many more reasons we could list here to tell you to avoid 32-bit, but between the kernel, userspace and individual programs it is simply not viable to list every last thing that 64-bit does much better these days.

# General recommendations

This document is an annotated index of popular articles and important information for improving and adding functionalities to the installed Arch system. Readers are assumed to have read and followed the [Installation guide](#) to obtain a basic Arch Linux installation. Having read and understood the concepts explained in [#System administration](#) and [#Package management](#) is *required* for following the other sections of this page and the other articles in the wiki.

## System administration

This section deals with administrative tasks and system management. See [Core utilities](#) and [Category:System administration](#) for more.

### Users and groups

A new installation leaves you with only the [superuser](#) account, better known as "root". Logging in as root for prolonged periods of time, possibly even exposing it via [SSH](#) on a server, [is insecure](#). Instead, you should create and use unprivileged user account(s) for most tasks, only using the root account for system administration. See [Users and groups#User management](#) for details.

Users and groups are a mechanism for *access control*; administrators may fine-tune group membership and ownership to grant or deny users and services access to system resources. Read the [Users and groups](#) article for details and potential security risks.

## Security

Read [Security](#) for recommendations and best practices on hardening the system.

For a list of applications to allow running commands or starting an interactive shell as another user (e.g. root), see [List of applications/Security#Privilege elevation](#).

## Service management

Arch Linux uses [systemd](#) as the [init](#) process, which is a system and service manager for Linux. For maintaining your Arch Linux installation, it is a good idea to learn the basics about it.

Interaction with *systemd* is done through the *systemctl* command. See [systemd#Basic systemctl usage](#) for more information.

A logging system is also provided, with the command *journalctl*. See [journal](#) for more information.

## System maintenance

Arch is a rolling release system and has rapid package turnover, so users have to take some time to do [system maintenance](#).

## Package management

This section contains helpful information related to package management. See [FAQ#Package management](#) and [Category:Package management](#) for more.

**Note:** It is imperative to keep up to date with changes in Arch Linux that require manual intervention **before** upgrading your system. Subscribe to the [arch-announce mailing list](#) or the [recent news RSS feed](#). Alternatively, check the front page [Arch news](#) every time before you update.

### pacman

[pacman](#) is the Arch Linux *package manager*: it is highly encouraged to become familiar with it before reading any other articles.

To enable downloading packages in parallel, see [pacman#Enabling parallel downloads](#).

For long term handling of cached packages, see [pacman#Cleaning the package cache](#).

See [pacman/Tips and tricks](#) for suggestions on how to improve your interaction with *pacman* and package management in general.

## Repositories

See the [Official repositories](#) article for details about the purpose of each officially maintained repository.

If you plan on using 32-bit applications, you will want to enable the [multilib](#) repository.

The [Unofficial user repositories](#) article lists several other unsupported repositories.

You may consider installing the [pkgstats](#) service.

## Mirrors

Visit the [Mirrors](#) article for steps on taking full advantage of using the fastest and most up to date mirrors of the official repositories. As explained in the article, a particularly good advice is to routinely check the [Mirror Status](#) page for a list of mirrors that have been recently synced. This can be automated with [Reflector](#).

## Arch Build System

*Ports* is a system initially used by BSD distributions consisting of build scripts that reside in a directory tree on the local system. Simply put, each port contains a script within a directory intuitively named after the installable third-party application.

The [Arch Build System](#) offers the same functionality by providing build scripts called [PKGBUILDs](#), which are populated with information for a given piece of software: integrity hashes, project URL, version, license and build instructions. These PKGBUILDs are parsed by [makepkg](#), the actual program that generates packages that are cleanly manageable by *pacman*.

Every package in the repositories along with those present in the AUR are subject to recompilation with *makepkg*.

## Arch User Repository

While the Arch Build System allows the ability of building software available in the official repositories, the [Arch User Repository](#) (AUR) is the equivalent for user submitted packages. It is an unsupported repository of build scripts accessible through the [web interface](#) or through the [Aurweb RPC interface](#).

## Booting

This section contains information pertaining to the boot process. An overview of the Arch boot process can be found at [Arch boot process](#). See [Category:Boot process](#) for more.

## Hardware auto-recognition

Hardware should be auto-detected by [udev](#) during the boot process by default. A potential improvement in boot time can be achieved by disabling module auto-loading and specifying required modules manually, as described in [Kernel modules](#). Additionally, [Xorg](#) should be able to auto-detect required drivers using [udev](#), but users have the option to configure the X server manually too.

## Microcode

Processors may have [faulty behaviour](#), which the kernel can correct by updating the *microcode* on startup. See [Microcode](#) for details.

## Retaining boot messages

Once the login prompt appears, the messages from boot are cleared, leaving users unable to gather feedback from them. [Disable clearing of boot messages](#) to overcome this limitation.

## Num Lock activation

[Num Lock](#) is a toggle key found in most keyboards. For activating Num Lock's number key-assignment during startup, see [Activating numlock on bootup](#).

# Graphical user interface

This section provides orientation for users wishing to run graphical applications on their system. See [Category:Graphical user interfaces](#) for additional resources.

## Display server

[Xorg](#) is the public, open-source implementation of the [X Window System](#) (commonly X11, or X). It is required for running applications with graphical user interfaces (GUIs), and the majority of users will want to install it.

[Wayland](#) is a newer, alternative display server protocol with several [compositors](#) to choose from.

## Display drivers

The default *modesetting* display driver will work with most video cards, but performance may be improved and additional features harnessed by installing the [appropriate driver](#) for [AMD](#) or [NVIDIA](#) products.



## Desktop environments

Although the display server provides the basic framework for building a graphical environment, additional components may be considered necessary for a complete user experience. [Desktop environments](#) such as [KDE](#), [GNOME](#), [Xfce](#), [Cinnamon](#), [LXDE](#), bundle together a wide range of well-integrated applications, such as a window manager or compositor, panel/taskbar, file manager, terminal emulator, text editor, icons, and other utilities. Users with less experience may wish to install a desktop environment for a more familiar environment. See [Category:Desktop environments](#) for additional resources.

## Window managers or compositors

A full-fledged desktop environment provides a complete and consistent graphical user interface, but tends to consume a good amount of system resources. Users seeking to maximize performance or otherwise simplify their environment may opt to install a [window manager](#) or [compositor](#) alone and hand-pick desired extras. Using [Xorg](#), most desktop environments allow use of an alternative window manager as well. [Dynamic](#), [stacking](#), and [tiling](#) window managers differ in their handling of window placement.

## Display manager

Most desktop environments include a [display manager](#) for automatically starting the graphical environment and managing user logins. Users without a desktop environment can install one separately. Alternatively you may [start X at login](#) as a simple alternative to a display manager.

## User directories

Well-known user directories like Downloads or Music are created by the `xdg-user-dirs-update.service` user service, that is provided by [xdg-user-dirs](#) and enabled by default upon install. If your desktop environment or window manager does not pull in the package, you can [install](#) it and run `xdg-user-dirs-update` manually as per [XDG user directories#Creating default directories](#).

## Power management

This section may be of use to laptop owners or users otherwise seeking power management controls. See [Category:Power management](#) for more.

See [Power management](#) for more general overview.

## ACPI events

Users can configure how the system reacts to ACPI events such as pressing the power button or closing a laptop's lid. For the recommended method using [systemd](#), see [Power management#Power management](#). For the old method, see [acpid](#).

## CPU frequency scaling

Modern processors can decrease their frequency and voltage to reduce heat and power consumption. Less heat leads to more quiet system and prolongs the life of hardware. See [CPU frequency scaling](#) for details.

## Laptops

For articles related to portable computing along with model-specific installation guides, please see [Category:Laptops](#). For a general overview of laptop-related articles and recommendations, see [Laptop](#).

## Suspend and hibernate

See the main article: [Power management/Suspend and hibernate](#).

## Multimedia

[Category:Multimedia](#) includes additional resources.

## Sound system

[ALSA](#) is a kernel [sound system](#) that should work out the box (it just needs to be [unmuted](#)). [Sound servers](#) such as [PipeWire](#) and [PulseAudio](#) can offer additional features and support more complex audio configuration.

See [Professional audio](#) for advanced audio requirements.

## Networking

This section is confined to small networking procedures. See [Network configuration](#) for a full configuration guide and [Category:Networking](#) for related articles.

## Clock synchronization

The [Network Time Protocol](#) (NTP) is a protocol for synchronizing the clocks of computer systems over packet-switched, variable-latency data networks. See [Time synchronization](#) for implementations of such protocol.

## DNS security

For better security while browsing the web, paying online, connecting to [SSH](#) services and similar tasks consider using [DNSSEC](#)-enabled [DNS resolver](#) that can validate signed [DNS](#) records, and an encrypted protocol such as [DNS over TLS](#), [DNS over HTTPS](#) or [DNSEncrypt](#). See [Domain name resolution](#) for details.

## Setting up a firewall

A firewall can provide an extra layer of protection on top of the Linux networking stack. While the stock Arch kernel is capable of using [Netfilter](#)'s [iptables](#) and [nftables](#), neither are enabled by default. It is highly recommended to set up some form of firewall. See [Category:Firewalls](#) for available guides.

## Network shares

To share files among the machines in a network, follow the [NFS](#) or the [SSHFS](#) article.

Use [Samba](#) to join a Windows network. To configure the machine to use Active Directory for authentication, read [Active Directory integration](#).

See also [Category:Network sharing](#).

## Input devices

This section contains popular input device configuration tips. See [Category:Input devices](#) for more.

### Keyboard layouts

Non-English or otherwise non-standard keyboards may not function as expected by default. The necessary steps to configure the keymap are different for virtual console and [Xorg](#), they are described in [Keyboard configuration in console](#) and [Keyboard configuration in Xorg](#) respectively.

### Mouse buttons

Owners of advanced or unusual mice may find that not all mouse buttons are recognized by default, or may wish to assign different actions for extra buttons. Instructions can be found in [Mouse buttons](#).

### Laptop touchpads

Many laptops use [Synaptics](#) or [ALPS](#) "touchpad" pointing devices. For these, and several other touchpad models, you can use either the Synaptics input driver or libinput; see [Touchpad Synaptics](#) and [libinput](#) for installation and configuration details.

## TrackPoints

See the [TrackPoint](#) article to configure your TrackPoint device.

## Optimization

This section aims to summarize tweaks, tools and available options useful to improve system and application performance.

## Benchmarking

[Benchmarking](#) is the act of measuring performance and comparing the results to another system's results or a widely accepted standard through a unified procedure.

## Improving performance

The [Improving performance](#) article gathers information and is a basic rundown about gaining performance in Arch Linux.

## Solid state drives

The [Solid state drive](#) article covers many aspects of solid state drives, including configuring them to maximize their lifetimes, e.g. with [TRIM](#).

## System services

This section relates to [daemons](#).

## File index and search

Most distributions have a `locate` command available to be able to quickly search files. Arch Linux provides several alternatives, see [locate](#) for details.

[Desktop search engines](#) provide a similar service, while better integrated into [desktop environments](#).

## Local mail delivery

A default setup does not provide a way to synchronize mail. A list of mail delivery agents is available in the [Mail server](#) article.

## Printing

[CUPS](#) is a standards-based, open source printing system developed by OpenPrinting for Linux. See [Category:Printers](#) for printer-specific articles.

## Appearance

This section contains frequently-sought "eye candy" tweaks for an aesthetically pleasing Arch experience. See [Category:Eye candy](#) for more.

## Fonts

You may wish to install a set of TrueType fonts, as only unscalable bitmap fonts are included in a basic Arch system. There are several general-purpose [font families](#) providing large [Unicode](#) coverage and even [metric compatibility](#) with fonts from other operating systems.

A plethora of information on the subject can be found in the [Fonts](#) and [Font configuration](#) articles.

If spending a significant amount of time working from the virtual console (i.e. outside an X server), users may wish to change the console font to improve readability; see [Linux console#Fonts](#).

## GTK and Qt themes

A big part of the applications with a graphical interface for Linux systems are based on the [GTK](#) or the [Qt](#) toolkits. See those articles and [Uniform look for Qt and GTK applications](#) for ideas to improve the appearance of your installed programs and adapt it to your liking.

## Console improvements

This section applies to small modifications that improve console programs' practicality. See [Category:Command-line shells](#) for more.

## Tab-completion enhancements

It is recommended to properly set up extended [tab completion](#) right away, as instructed in the article of your chosen [shell](#).

## Aliases

Aliasing a command, or a group thereof, is a way of saving time when using the console. This is especially helpful for repetitive tasks that do not need significant alteration to their parameters between executions. Common time-saving aliases can be found in [Bash#Aliases](#), which are easily portable to [zsh](#) as well.

## Alternative shells

[Bash](#) is the shell installed by default in an Arch system. The live installation media, however, uses [zsh](#) with the [grml-zsh-config](#) addon package. See [Command-line shell#List of shells](#) for more alternatives.

## Bash additions

A list of miscellaneous Bash settings, history search and [Readline](#) macros is available in [Bash#Tips and tricks](#).

## Colored output

This section is covered in [Color output in console](#).

## Compressed files

Compressed files, or archives, are frequently encountered on a GNU/Linux system. [Tar](#) is one of the most commonly used archiving tools, and users should be familiar with its syntax (Arch Linux packages, for example, are simply [zstd](#) compressed tarballs). See [Archiving and compression](#).

## Console prompt

The console prompt ([PS1](#)) can be customized to a great extent. See [Bash/Prompt customization](#) or [Zsh#Prompts](#) if using Bash or Zsh, respectively.

## Emacs shell

Emacs is known for featuring options beyond the duties of regular text editing, one of these being a full shell replacement. Consult [Emacs#Colored output issues](#) for a fix regarding garbled characters that may result from enabling colored output.

## Mouse support

Using a mouse with the console for copy-paste operations can be preferred over [GNU Screen](#)'s traditional copy mode. Refer to [General purpose mouse](#) for comprehensive directions. Note that you can already do this in [terminal emulators](#) with the [clipboard](#).

## Session management

Using terminal multiplexers like [tmux](#) or [GNU Screen](#), programs may be run under sessions composed of tabs and panes that can be detached at will, so when the user either kills the terminal emulator, terminates [X](#), or logs off, the programs associated with the session will continue to run in the background as long as the terminal multiplexer server is active. Interacting with the programs requires reattaching to the session.

# Arch compared to other distributions

This page attempts to draw a comparison between Arch Linux and other popular GNU/Linux distributions and UNIX-like operating systems. The summaries that follow are brief descriptions that may help a person decide if Arch Linux will suit their needs. Although reviews and descriptions can be useful, first-hand experience is invariably the best way to compare distributions.

For a more complete comparison, see [Wikipedia:Comparison of operating systems](#) and [Wikipedia:Comparison of Linux distributions](#).

In all of the following, only Arch Linux is compared with other distributions. Community ports that support architectures other than x86\_64 can be found listed among the [Arch-based distributions](#).

## Source-based

Source-based distributions are highly portable, giving the advantage of controlling and compiling the entire OS and applications for a particular machine architecture and usage scheme, with the disadvantage of the time-consuming nature of source compilation. The Arch base and all packages are only compiled for the x86\_64 architecture.

## CRUX

- [CRUX](#) is a lightweight distribution that focuses on the [KISS](#) principle. CRUX inspired Judd Vinet to create Arch.
- CRUX uses BSD-style init scripts, whereas Arch uses [systemd](#).
- While Arch uses a rolling release system, CRUX has more or less yearly releases.
- Both ship with ports-like systems, and, like \*BSD, both provide a base environment to build upon.
- Arch features [pacman](#), which handles binary system package management and works seamlessly with the [Arch Build System](#). CRUX uses a community contributed system called *prt-get*, which, in combination with its own ports system, handles dependency

resolution, but builds all packages from source (though the CRUX base installation is binary).

- Both Arch and CRUX officially support only the x86\_64 architecture.
- Arch features a large array of binary package repositories as well as the [Arch User Repository](#). CRUX provides a more slimmed-down officially supported ports system in addition to a comparatively modest community repository.

## LFS

- [LFS](#), (or Linux From Scratch) exists simply as documentation. The book instructs the user on obtaining the source code for a minimal base package set for a functional GNU/Linux system, and how to manually compile, patch and configure it from scratch. LFS is as minimal as it gets, and offers an excellent and educational process of building and customizing a base system.
- LFS provides no online repositories; sources are manually obtained, compiled and installed with *make*. (Several manual methods of package management exist, and are mentioned in LFS Hints).
- Arch provides these very same packages, plus [systemd](#), a few extra tools and the powerful [pacman](#) package manager as its base system, already compiled for x86\_64. Along with the minimal Arch base system, the Arch community and developers provide and maintain many thousands of binary packages installable via pacman as well as [PKGBUILD](#) build scripts for use with the [Arch Build System](#). Arch also includes the [makepkg](#) tool for expediently building or customizing packages, readily installable by pacman.
- Judd Vinet built Arch from scratch, and then wrote pacman in C. Historically, Arch was sometimes humorously described simply as "Linux, with a nice package manager."

## Gentoo/Funtoo Linux

- Both Arch Linux and [Gentoo Linux](#) are rolling release systems, making packages available to the distribution a short time after they are released upstream.
- The Gentoo packages and base system are built directly from source code according to user-specified *USE flags*. Arch provides a ports-like system for building packages from source, though the Arch base system is designed to be installed as pre-built x86\_64 binary. This generally makes Arch quicker to build and update, and allows Gentoo to be more systemically customizable.
- Arch only supports x86\_64 while Gentoo officially supports x86 (i486/i686), x86\_64, PPC/PPC64, SPARC, Alpha, ARM, MIPS, HPPA, S/390 and Itanium architectures.
- Gentoo's official package and system management tools tend to be rather more complex and "powerful" than those provided by Arch, and certain features which are at the very heart of Gentoo ([USE flags](#), [SLOTs](#), etc.) do not have any direct Arch Linux equivalent. Some of that is due to the fact that Arch is primarily a binary distribution, but differences in [design philosophy](#) also play a big role, with Arch taking a more principled stance in favor of architectural simplicity and avoiding over-engineering.



- Because both the Gentoo and Arch installations only include a base system, both are considered to be highly customizable. If comfortable with [systemd](#), Gentoo users will also generally feel at ease with most other aspects of Arch.

## GNU Guix System

- [GNU Guix System](#) has been inspired by [NixOS](#) in a way similar to how Arch has been inspired by [CRUX](#).
- Both Arch Linux and Guix System are rolling release distributions, making packages available to the distribution a short time after they are released upstream. Guix System is however primarily a source-based distribution (although pre-built binaries exist and are called "[substitutes](#)"), while Arch is primarily a binary distribution.
- Arch uses [pacman](#) as package manager, whereas Guix System uses [guix](#), which supports [experimental packaging features](#) not present in other distributions.
- Arch only supports x86\_64, while Guix System officially supports [several architectures](#).
- Arch uses [systemd](#) as [init](#) system, whereas Guix System uses the [GNU Shepherd](#).
- Guix System breaks up with many traditional concepts of Unix, including the [Filesystem Hierarchy Standard](#). For instance, many files that in traditional distributions are spread across different directories, in Guix System will be located somewhere under [/gnu/store/](#).
- Arch might occasionally ship software that is non-free (often drivers), while Guix System ships only free software and is endorsed by the [Free Software Foundation](#) – although alternative repositories that ship non-free software for Guix [exist](#).
- Arch expects the user directly to configure installed software packages, while Guix System encourages a global system configuration in Scheme, which in turn [instantiates](#) configuration files.

## General

These distributions offer a broad range of advantages and strengths, and can be made to serve most operating system uses.

## Debian

- [Debian](#) is the largest upstream Linux distribution with a bigger community and features stable, testing, and unstable branches, offering hundreds of thousands [packages](#). The available number of Arch binary packages is more modest. However, when including the [AUR](#), the quantities are comparable.
- Debian has a more vehement stance on free software but still includes non-free software in its non-free repositories. Arch is more lenient, and therefore inclusive, concerning *non-free packages* as defined by GNU.
- Debian focuses on stringent testing of the Stable branch, which is "frozen" and supported up to [five years](#). Arch packages are more current than Debian Stable, being

more comparable to the Debian Testing and Unstable branches, and has no fixed release schedule.

- Debian is available for many architectures, including alpha, arm, hppa, i386, x86\_64, ia64, m68k, mips, mipsel, powerpc, s390, and sparc, whereas Arch is x86\_64 only.
- Arch provides more expedient support for building custom, installable packages from outside sources, with a ports-like package build system. Debian does not offer a ports system, relying instead on its large binary repositories.
- The Arch installation system only offers a minimal base, transparently exposed during system configuration, whereas Debian's methods, such as the use of *apt tasks* to install pre-selected groups of packages, offer a more automatically configured approach as well as several alternative methods of installation.
- Arch generally packages software libraries together with their header files, whereas in Debian header files have to be downloaded separately.
- Arch keeps patching to a minimum, thus avoiding problems that upstream are unable to review, whereas Debian patches its packages more liberally for a wider audience.

## Fedora

- [Fedora Linux](#) is the upstream, community distribution of Red Hat® Enterprise Linux. Red Hat is the project's primary sponsor, but thousands of independent developers also contribute to Fedora. Packages and projects are released on Fedora, and through its own distinct set of tests and quality assurance processes, those features migrate to CentOS Stream and eventually get incorporated into a version of Red Hat Enterprise Linux, and some eventually become adopted by other distributions. Arch has no fixed releases and does not serve as a branch for another distribution, even if [many other distributions](#) are based on Arch Linux (e.g. SteamOS for the [Steam Deck](#)).
- Fedora packages use the RPM format with the [DNF](#) package manager. Arch uses [pacman](#) to manage its packages. Many packages of both projects, particularly desktop environments, are described as being 'vanilla', and without customization.
- Fedora refuses to include non-free software in official repositories due to its dedication to free software, though third-party repositories are available for such packages. Arch is more lenient in its disposition toward non-free software, leaving the discernment to the user.
- Fedora uses the graphical Anaconda installer and offers many installation images including an "everything" expert option which facilitates a base system install all the way up to a full-fledged desktop environment of your choosing. Fedora "spins" also provide alternative assortments of specific desktop environments, each with a modest assortment of default packages. Arch, on the other hand, is designed to be assembled from a minimal base system command line and therefore provides simple scripts meant to ease the process.
- Fedora has a scheduled ~6 month release cycle, but officially supports discrete version upgrades with the DNF system-upgrade plugin. Arch is a rolling-release system.
- Arch features a ports system, whereas Fedora does not.

- Both Arch and Fedora are targeted at experienced users and developers. Both strongly encourage their users to contribute to project development.
- Fedora has earned much community recognition for integration of SELinux, GCJ compiled packages (to remove the need for Oracle's JRE), and prolific upstream contribution; Red Hat and thus, Fedora developers by extension, contribute the highest percentage of Linux kernel code as compared to any other project.
- Arch Linux provides what is widely regarded as the most thorough and comprehensive distribution wiki. The Fedora wiki is used in the original sense of the word "wiki", or a way to exchange information between developers, testers and users rapidly. It is not meant to be an end-user knowledge base like Arch's. Fedora's wiki resembles an issue tracker or a corporate wiki.

## Slackware

- [Slackware](#) uses BSD-style init scripts, whereas Arch uses [systemd](#).
- Arch supplies a package management system in [pacman](#) which, unlike Slackware's standard tools, offers automatic dependency resolution and allows for more automated system upgrades. Slackware users typically prefer their method of manual dependency resolution, citing the level of system control it grants them, as well as Slackware's excellent supply of pre-installed libraries and dependencies.
- Arch is a rolling-release system. Slackware is seen as more conservative in its release cycle, preferring proven stable packages. Arch is more *bleeding-edge* in this respect.
- Arch Linux provides many thousands of binary packages within its official repositories, whereas Slackware official repositories are more modest.
- Arch offers the [Arch Build System](#), an actual ports-like system, and also the [AUR](#), a very large collection of PKGBUILDs contributed by users. Slackware offers a similar, though slimmer system at [slackbuilds.org](#) which is a semi-official repository of Slackbuilds, which are analogous to Arch PKGBUILDs. Slackware users will generally be quite comfortable with most aspects of Arch.

## Beginner-friendly

Sometimes called "newbie distros", the beginner-friendly distributions share a lot of similarities, though Arch is quite different from them. Arch may be a better choice if you want to learn about GNU/Linux by building up from a small base, as an installation of Arch installs few packages in comparison. Specific differences between distributions are described below.

## Ubuntu

- [Ubuntu](#) is a popular Debian-based distribution commercially sponsored by Canonical Ltd., while Arch is an independently developed system built from scratch.
- The two projects have very different goals and are targeted at a different user base. Arch is designed for users who desire a do-it-yourself approach, whereas Ubuntu provides a pre-configured system. Arch presents a simpler design from the base installation

onward, relying on the user to customize it to their own specific needs. Many Arch users have started on Ubuntu and eventually migrated to Arch.

- Arch development is not biased towards any one particular user interface beyond what its community provides support for. Furthermore, Canonical's commercial nature has led them to some controversial decisions, such as the inclusion of advertisements in Unity's *Dash* menu and user data collection. Arch is an independent, community-driven project with no commercial agenda.
- Ubuntu moves between discrete releases every 6 months, whereas Arch is a rolling-release system.
- Arch offers a ports-like package build system and the [Arch User Repository](#), where users can share source packages for the [pacman](#) package manager. Ubuntu uses the more complex [apt](#), and allows redistribution of binary packages via [Personal Package Archives](#).
- The two communities differ in some ways as well. The Arch community is much smaller and is strongly encouraged to contribute to the distribution. In contrast, the Ubuntu community is relatively large and can therefore tolerate a much larger percentage of users who do not actively contribute to development, packaging, or repository maintenance.

## Linux Mint

- [Linux Mint](#) was born as an [Ubuntu](#) derivative, and later added the LMDE (Linux Mint Debian Edition) that is instead based on [Debian](#). On the other hand, Arch is an independent distribution that relies on its own [build system](#) and [repositories](#).
- Mint includes several graphical tools for easier maintenance, called *MintTools*. Arch only provides simple command-line tools like [pacman](#) and leaves system management to be organized by the user.
- New versions of Mint are released every six months, about a month after Ubuntu. Each release is based on the most recent Ubuntu LTS and is supported for five years. Linux Mint Debian Edition (LMDE) is based on Debian Stable and only receives updates in Mint packages and security updates. Arch is instead a full rolling-release distribution.

## openSUSE

[openSUSE](#) was born from the original SUSE Linux and is sponsored by SUSE (the makers of SUSE Enterprise Linux). SUSE Enterprise Linux Desktop (SLED) is based on openSUSE Tumbleweed and shares a common codebase with openSUSE Leap

- OpenSUSE Uses the Zypp package manager (*zypper* on commandline), the RPM package format and its well-regarded YaST2 GUI-driven configuration tool. Arch uses [pacman](#) to manage tar.zstd packages and does not offer graphical configuration tools.
- openSUSE offers 2 different versions:
  - Leap is the long-term support version of openSUSE featuring discrete releases.
  - Tumbleweed is the rolling release version of openSUSE.

- In contrast, Arch is strictly a rolling-release model and does not offer discrete release versions. Rather than a complete desktop environment, Arch offers a minimal base system installation. openSUSE may therefore be more appropriate for users who want a more GUI-driven environment, automatic configuration, or expected functionality out of the box while still allowing the customization possible on all distributions.

## Mandriva/Mageia

Mandriva Linux (formerly Mandrake Linux) was created in 1998 with the goal of making GNU/Linux easy to use for everyone; it is RPM-based and uses the *urpmi* package manager. Mageia is a Mandriva fork created by former Mandriva employees which opposes its parent distribution's commercial position, being a non-profit and community-driven project. Arch takes a simpler approach than Mandriva or Mageia, being text-based and relying on more manual configuration, and is aimed at intermediate to advanced users.

## The BSDs

- The BSDs share a common origin and descend directly from the work done at UC Berkeley to produce a freely redistributable, free of cost, UNIX system. They are not GNU/Linux distributions, but rather, UNIX-like operating systems, and derived from the original AT&T UNIX code.
- Arch and the BSDs share the concept of a tightly-integrated base and ports system. However, unlike GNU/Linux distributions such as Arch, the BSDs' kernel and userland programs (such as the shell and core utilities like *ls*, *cp*, *cat*, and *ps*) are developed together in a single source repository.
- The [BSD license](#) is permissive, in contrast to the [GPL](#), which has the stipulation that derivatives need to be released under the same license. Arch is released under the GPL.
- To learn more about the BSD variants, see [Wikipedia:Comparison of BSD operating systems](#).

## See also

- [DistroWatch](https://distrowatch.com/)(https://distrowatch.com/) - Linux distributions news and reviews

# List of applications

This article is a general list of applications sorted by category, as a reference for those looking for packages. Many sections are split between console and graphical applications.

## Tip:

- This page exists primarily to make it easier to search for alternatives to an application that you do not know under which section has been added. Use the links in the template at the top to view the main sections as separate pages.
- Please consider [installing](#) the [pkgstats](#) package, which provides a [timer](#) that sends a list of the packages installed on your system, along with the architecture and the mirrors you use, to the Arch Linux developers in order to help them prioritize their efforts and make the distribution even better. The information is sent anonymously and cannot be used to identify you. You can view the collected data at the [Statistics page](#). More information is available in [this forum thread](#).
- Daemon packages usually include the relevant systemd unit file to [start](#); some packages even include different ones. After installation `pacman -Qql package | grep -Fe .service -e .socket` can be used to check and find the relevant one.

**Note:** Applications listed in "Console" sections can have graphical front-ends. Official ones are currently omitted.

## Internet

### Network connection

#### Network managers

See [Network configuration#Network managers](#).

#### VPN clients

- **chrootVPN** — A script for creating a chrooted Linux client CheckPoint VPN middleware+agent setup for connecting via their Web Mobile Access Portal.

<https://github.com/ruyrybeyro/chrootvpn> || not packaged? [search in AUR](#)

- **GlobalProtect-openconnect** — A GlobalProtect VPN client (GUI) for Linux, based on OpenConnect and built with Qt5, supports SAML auth mode.

<https://github.com/yuezk/GlobalProtect-openconnect/> || [globalprotect-openconnect-git](#)<sup>AUR</sup>

- **Libreswan** — A free software implementation of the most widely supported and standardized VPN protocol based on ("IPsec") and the Internet Key Exchange ("IKE").

<https://libreswan.org/> || [libreswan](#)<sup>AUR</sup>

- **Mullvad** — A GUI client for the Mullvad VPN service

<https://mullvad.net/> || [mullvad-vpn](#)<sup>AUR</sup>

- **Nebula** — A mesh VPN network

<https://nebuladefined.net/docs/> || [nebula](#)

- **NetworkManager** — Supports a variety of protocols (e.g. MS, Cisco, Fortinet) via a plugin system.

<https://wiki.gnome.org/Projects/NetworkManager/VPN> || [networkmanager](#)

- **OpenConnect** — Supports Cisco and Juniper VPNs.

<https://www.infradead.org/openconnect/> || [openconnect](#)

- **Openswan** — IPsec-based VPN Solution.

<https://www.openswan.org/> || [openswan](#)<sup>AUR</sup>

- **OpenVPN** — To connect to OpenVPN VPNs.

<https://openvpn.net/> || [openvpn](#)

- **PPTP Client** — To connect to PPTP VPNs, like Microsoft VPNs (MPPE). (insecure)

<https://pptpclient.sourceforge.net/> || [pptpclient](#)

- **RiseupVPN** — A GUI client for the Riseup VPN service from riseup.net.

<https://riseup.net/en/vpn/> || [riseup-vpn](#)<sup>AUR</sup> or [riseup-vpn-configurator](#)<sup>AUR</sup>

- **strongSwan** — IPsec-based VPN Solution.

<https://www.strongswan.org/> || [strongswan](#)

- **tinc** — tinc is a free VPN daemon.

<https://www.tinc-vpn.org/> || [tinc](#)

- **vopono** — OpenVPN and Wireguard wrapper to launch applications with VPN tunnels in network namespaces.

<https://github.com/jamesmcm/vopono> || [vopono](#)<sup>AUR</sup>

- **vpnc** — To connect to Cisco 3000 VPN Concentrators.

<https://www.unix-ag.uni-kl.de/~massar/vpnc/> || [vpnc](#)

- **WireGuard** — Next generation secure network tunnel.

<https://www.wireguard.com/> || [wireguard-tools](#)

## Proxy servers

- **Brook** — Proxy focusing on strong encryption and being undetectable.

<https://txthinking.github.io/brook/> || [brook](#)

- **Clash** — A rule-based tunnel in Go.

<https://github.com/Dreamacro/clash> || [clash](#)

- **Dante** — SOCKS server and SOCKS client, implementing [RFC:1928](#) and related standards.

<https://www.inet.no/dante/> || [dante](#)

- **Geph** — A modular Internet censorship circumvention system designed specifically to deal with national filtering.

<https://geph.io/en/> || [geph4-client](#)<sup>AUR</sup>

- **NaïveProxy** — A Proxy using Chrome's network stack to camouflage traffic with strong censorship resistance and low detectability.

<https://github.com/klzgrad/naiveproxy> || [naiveproxy](#)<sup>AUR</sup>

- **Privoxy** — Non-caching web proxy with advanced filtering capabilities for enhancing privacy, modifying web page data and HTTP headers, controlling access, and removing ads and other obnoxious Internet junk.

<https://www.privoxy.org/> || [privoxy](#)

- **V2Ray** — V2Ray is the core of Project V, which is a set of tools to help you build your own privacy network over the internet.

[https://www.v2fly.org/en\\_US/](https://www.v2fly.org/en_US/) || [v2ray](#)

- **Shadowsocks** — Secure socks5 proxy, designed to protect your Internet traffic.



<https://shadowsocks.org/> || Python: [shadowsocks](#), Rust: [shadowsocks-rust](#)<sup>AUR</sup>

- **Squid** — Caching proxy for the Web supporting HTTP, HTTPS, FTP, and more.

<http://www.squid-cache.org/> || [squid](#)

- **Stunnel** — A server and client to add and remove TLS encryption to TCP data flow.

<https://www.stunnel.org/> || [stunnel](#)

- **Tinyproxy** — Lightweight HTTP/HTTPS proxy daemon.

<https://tinyproxy.github.io/> || [tinyproxy](#)

- **Trojan** — An unidentifiable mechanism that helps you bypass GFW.

<https://trojan-gfw.github.io/trojan/> || [trojan](#)

- **Varnish** — High-performance HTTP accelerator.

<https://varnish-cache.org/> || [varnish](#)

- **XX-Net** — Easy to use web proxy tool.

<https://github.com/XX-net/XX-Net/> || [xx-net](#)<sup>AUR</sup>

- **Zipproxy** — Forwarding (non-caching) compressing HTTP proxy server.

<http://zipproxy.sourceforge.net/> || [zipproxy](#)

## Anonymizing networks

- **Arti** — Rust implementation of the Tor anonymizing overlay network.

<https://gitlab.torproject.org/tpo/core/arti> || [arti](#)

- **Freenet** — An encrypted network without censorship.

<https://freenetproject.org/> || [freenet](#)<sup>AUR</sup>

- **GNUnet** — Framework for secure peer-to-peer networking.

<https://gnunet.org/> || CLI: [gnunet](#)<sup>AUR</sup>, GUI: [gnunet-gtk](#)<sup>AUR</sup>

- **I2P** — Distributed anonymous network.

<https://geti2p.net/> || [i2pd](#), [i2p](#)<sup>AUR</sup>

- **Lantern** — Peer-to-peer internet censorship circumvention software.

<https://getlantern.org/> || [lantern-bin](#)<sup>AUR</sup>

- **Lokinet** — Anonymous, decentralized and IP based overlay network for the internet.

<https://lokinet.org/> || [lokinet](#)<sup>AUR</sup>

- **Tor** — Anonymizing overlay network.

<https://www.torproject.org/> || [tor](#)

## Network tunnels

- **6tunnel** — Tunnels IPv6 connections for IPv4-only applications.

<https://github.com/wojtekkka/6tunnel/> || [6tunnel](#)

- **iodine** — Tunnel IPv4 data through a DNS server.

<https://code.kryo.se/iodine/> || [iodine](#)

- **isatapd** — Creates and maintains an ISATAP tunnel ([RFC:5214](#)).

<http://www.saschahlusiak.de/linux/isatap.htm> || [isatapd](#)

- **Ping Tunnel** — A tool for reliably tunneling TCP connections over ICMP echo request and reply packets.

<https://www.cs.uit.no/~daniels/PingTunnel/> || [ptunnel](#)

- **Tunttox** — Tunnel TCP connections over the Tox protocol.

<https://github.com/gjedeer/tunttox/> || [tunttox](#)

## Web browsers

See also [Wikipedia:Comparison of web browsers](#).

## Console

- **browsh** — A fully-modern text-based browser. Runs as a frontend to headless Firefox.

<https://www.brow.sh/> || [browsh](#)<sup>AUR</sup>

- **ELinks** — Advanced and well-established feature-rich text mode web browser with mouse wheel scroll support, frames and tables, extensible with Lua & Guile (links fork).

<http://elinks.or.cz/> || [elinks](#)

- **[Links](#)** — Graphics and text mode web browser. Includes a console version similar to Lynx.

<http://links.twibright.com/> || [links](#)

- **[Lynx](#)** — Text browser for the World Wide Web.

<https://lynx.invisible-island.net/> || [lynx](#)

- **[w3m](#)** — Pager/text-based web browser. It has vim-like keybindings, and is able to display images.

<https://salsa.debian.org/debian/w3m> || [w3m](#)

## Graphical

### Gecko-based

See also [Wikipedia:Gecko \(software\)](#).

- **[Firefox](#)** — Extensible browser from Mozilla based on Gecko with fast rendering.

<https://mozilla.com/firefox> || [firefox](#)

- **[SeaMonkey](#)** — Continuation of the Mozilla Internet Suite.

<https://www.seamonkey-project.org/> || [seamonkey](#)<sup>AUR</sup>

### Firefox spin-offs

- **[Dot](#)** — A fork of firefox focused on privacy and a sleeker UI.

<https://www.dothq.co/> || [dot-bin](#)<sup>AUR</sup>

- **[FireDragon](#)** — A fork of LibreWolf that includes KDE integration patches and custom branding.

<https://gitlab.com/dr460nf1r3/settings/> || [firedragon](#)<sup>AUR</sup>

- **[Floorp](#)** — Firefox-based browser with excellent privacy protection, developed by a community of students in Japan.

<https://floorp.ablaze.one> || [floorp](#)<sup>AUR</sup>

- **GNU IceCat** — A customized build of Firefox ESR distributed by the GNU Project, stripped of non-free components and with additional privacy extensions. Release cycle may be delayed compared to Mozilla Firefox.

<https://www.gnu.org/software/gnuzilla/> || [icecat](#)<sup>AUR</sup>

- **LibreWolf** — A fork of Firefox, focused on privacy, security and freedom.

<https://librewolf.net/> || [librewolf](#)<sup>AUR</sup>

- **Mercury** — Firefox fork with compiler optimizations and patches from LibreWolf, Waterfox, and GNU IceCat.

<https://thorium.rocks/mercury> || [mercury-browser-bin](#)<sup>AUR</sup>

- **Pulse Browser** — An experimental Firefox fork that enhances focus and increases work productivity due to its Hyper minimalist UI and built-in tools.

<https://pulsebrowser.app/> || [pulse-browser-bin](#)<sup>AUR</sup>

- **Tor Browser Launcher** — Securely and easily download, verify, install, and launch Tor Browser, a fork of Firefox ESR.

<https://github.com/micahflee/torbrowser-launcher> || [torbrowser-launcher](#)

- **Waterfox Classic** — Optimized fork of Firefox 56, without data collection and allowing unsigned extensions and NPAPI plugins.

<https://www.waterfox.net/> || [waterfox-classic-bin](#)<sup>AUR</sup>

- **Waterfox G5** — Updated feature-rich branch of Waterfox, a customizable privacy-conscious web browser based on Firefox 102 ESR.

<https://www.waterfox.net/> || [waterfox-g-bin](#)<sup>AUR</sup>

## Blink-based

See also [Wikipedia:Blink \(web engine\)](#).

- **Chromium** — Web browser developed by Google, the open source project behind Google Chrome.

<https://www.chromium.org/> || [chromium](#)

## Privacy-focused chromium spin-offs

- **Brave** — Web browser with builtin ad- and tracker blocking.

<https://www.brave.com/> || [brave](#)<sup>AUR</sup>

- **Iridium** — A privacy-focused [patchset](#) for Chromium. See [differences from Chromium](#).

<https://iridiumbrowser.de/> || [iridium-rpm](#)<sup>AUR</sup>

- **Ungoogled Chromium** — Modifications to Google Chromium for removing Google integration and enhancing privacy, control, and transparency

<https://github.com/ungoogled-software/ungoogled-chromium> || [ungoogled-chromium](#)<sup>AUR</sup>

- **Thorium** — Thorium develops a periodically synchronized fork of the Chromium browser, expanded with additional patches to optimize performance, improve usability and enhance security. According to the developers' tests Thorium is 8-40% ahead of the regular Chromium, mainly due to the inclusion of additional optimizations during compilation.

<https://thorium.rocks/> || [thorium-browser-bin](#)<sup>AUR</sup>

#### Proprietary chromium spin-offs

- **Google Chrome** — Proprietary web browser developed by Google.

<https://www.google.com/chrome/> || [google-chrome](#)<sup>AUR</sup>

- **Microsoft Edge** — Proprietary web browser developed by Microsoft.

<https://www.microsoft.com/edge/> || [microsoft-edge-stable-bin](#)<sup>AUR</sup>

- **Opera** — Proprietary browser developed by Opera Software.

<https://opera.com> || [opera](#)

- **Slimjet** — Fast, smart and powerful proprietary browser based on Chromium.

<https://www.slimjet.com/> || [slimjet](#)<sup>AUR</sup>

- **Vivaldi** — An advanced proprietary browser made with the power user in mind.

<https://vivaldi.com/> || [vivaldi](#)

- **Yandex Browser** — Proprietary browser that combines a minimal design with sophisticated technology to make the web faster, safer, and easier.

<https://browser.yandex.com/> || [yandex-browser-beta](#)<sup>AUR</sup>

#### Browsers based on qt5-webengine

- **Dooble** — Colorful Web browser.

<https://textbrowser.github.io/dooble/> || [dooble](#)<sup>AUR</sup>

- **Eric** — QtWebEngine-based HTML browser, part of the eric6 development toolset, can be launched with the `eric6_browser` command.

<https://eric-ide.python-projects.org/> || [eric](#)<sup>AUR</sup>

- **Falkon** — Web browser based on QtWebEngine, written in Qt framework.

<https://falkon.org/> || [falkon](#)

- **Konqueror** — Web browser based on Qt toolkit and Qt WebEngine (or KHTML layout engine), part of [kde-network](#).

<https://apps.kde.org/konqueror/> || [konqueror](#)

- **Liri Browser** — A minimalistic material design web browser written for Liri.

<https://github.com/lirios/browser> || [liri-browser-git](#)<sup>AUR</sup>

- **Otter Browser** — Browser aiming to recreate classic Opera (12.x) UI using Qt5.

<https://otter-browser.org/> || [otter-browser](#)<sup>AUR</sup>

- **Qt WebBrowser** — Browser for embedded devices developed using the capabilities of Qt and Qt WebEngine.

<https://doc.qt.io/QtWebBrowser/> || [qtwebbrowser](#)<sup>AUR</sup>

- **qutebrowser** — A keyboard-driven, [vim](#)-like browser based on PyQt5 and QtWebEngine.

<https://qutebrowser.org/> || [qutebrowser](#)

#### Browsers based on electron

- **Beaker** — Peer-to-peer web browser with tools to create and host websites.

<https://github.com/beakerbrowser/beaker> || [beaker-browser](#)<sup>AUR</sup>

- **Franz** — Messaging browser for WhatsApp, Facebook Messenger, Slack, Telegram and many other web services.

<https://meetfranz.com/> || [franz](#)<sup>AUR</sup>

- **Hamsket** — A GPL-licensed alternative to Franz, forked from the last open sources of Rambox.

<https://github.com/TheGoddessInari/hamsket> || [hamsket](#)<sup>AUR</sup>

- **Min** — A fast, minimal browser that protects your privacy. It includes an interface designed to minimize distractions.

<https://minbrowser.org/> || [min](#)<sup>AUR</sup>

- **Vieb** — Minimalist Electron-based browser with Vim-inspired keybindings and a built-in ad-blocker.

<https://vieb.dev> || [vieb-bin](#)<sup>AUR</sup>

### WebKit-based

See also [Wikipedia:WebKit](#).

**Note:** webkitgtk, webkitgtk2, qt5-webkit and qtwebkit-based browsers were removed from the list, because these are today considered insecure and outdated. More info [here](#) and [here](#).

### Browsers based on webkit2gtk

Most of these support ad-blocking via [wyebadblock](#).

- **Badwolf** — A minimalist privacy-focused browser.

<https://hacktavis.me/projects/badwolf> || [badwolf](#)<sup>AUR</sup>

- **Ephemeral** — A private-by-default, always-incognito browser for elementary OS.

<https://github.com/cassidyjames/ephemeral> || [ephemeral](#)<sup>AUR</sup>

- **Eolie** — Simple web browser for GNOME.

<https://wiki.gnome.org/Apps/Eolie> || [eolie](#)

- **GNOME Web** — Browser which uses the WebKitGTK rendering engine. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Web> || [epiphany](#)

- **Luakit** — Fast, small, webkit based browser framework extensible by Lua.

<https://luakit.github.io/> || [luakit](#)

- **Midori** — Lightweight web browser based on GTK and WebKit.

<https://www.midori-browser.org/> || [midori](#)

- **Nyxt** — Keyboard-oriented, infinitely extensible browser designed for power users. It has familiar key-bindings (Emacs, VI, CUA) and features fuzzy searching between tabs, multiple selections, history as a tree and more.

<https://nyxt.atlas.engineer/> || [nyxt](#)

- **surf** — Lightweight WebKit-based browser, which follows the [suckless philosophy](#) (basically, the browser itself is a single C source file).

<https://surf.suckless.org/> || [surf](#)<sup>AUR</sup>

- **Surfer** — Simple keyboard based web browser, written in C. It supports custom JS-scripts.

<https://github.com/nihilow/surfer> || [surfer-git](#)<sup>AUR</sup>

- **Tangram** — Integration of web applications into the desktop, specifically GNOME.

<https://github.com/sonnyp/Tangram> || [tangram](#)<sup>AUR</sup>

- **Vimb** — A Vim-like web browser written in C that is inspired by Pentadactyl and Vimprobable. It includes a manpage and a howto for common configurations. It supports custom JS-scripts, dark mode and handles geolocation requests.

<https://fanglingsu.github.io/vimb/> || [vimb](#)

- **wyeb** — A vim-like web browser inspired by dwb and luakit with Adblock.

<https://github.com/jun7/wyeb> || [wyeb-git](#)<sup>AUR</sup>

## Other

- **Dillo** — Small, fast graphical web browser built on [FLTK](#). Uses its own layout engine.

<https://www.dillo.org/> || [dillo](#)

- **Links** — Graphics and text mode web browser. Includes a graphical X-window/framebuffer version with CSS, image rendering, pull-down menus. It can be launched with the `xlinks -g` command.

<http://links.twibright.com/> || [links](#)

- **NetSurf** — Featherweight browser written in C, notable for its slowly developing JavaScript support and fast rendering through its own layout engine.



<https://www.netsurf-browser.org/> || [netsurf](#)

- **Pale Moon** — A Firefox fork focussing on speed, with a pre-Firefox 29 interface. Uses [Goanna](#) layout engine, a fork of Gecko. Firefox add-ons may not be compatible. Without support for newer Firefox features such as WebExtensions, cache2, e10s, and OTMC. Many of the old [93,598 versions of 19,450 Firefox add-ons created by 14,274 developers over the past 15 years using XUL/XPCOM technology in the Classic Add-ons Archive](#) still work.

<https://www.palemoon.org/> || [palemoon](#)<sup>AUR</sup>

## Gemini browsers

See also [Wikipedia:Gemini \(protocol\)#Software](#).

- **Amfora** — Terminal browser for the Gemini protocol.

<https://github.com/makeworld-the-better-one/amfora> || [amfora](#)

- **Bombabillo** — Non-web client for the terminal, supporting Gopher, Gemini and much more.

<https://bombadillo.colorfield.space/> || [bombadillo-git](#)<sup>AUR</sup>

- **Castor** — Graphical client for the Gemini, Gopher, and Finger protocols, written in Rust with GTK.

<https://git.sr.ht/~julienxx/castor> || [castor](#)<sup>AUR</sup>

- **Kristall** — Qt-based Gemini browser.

<https://github.com/MasterQ32/kristall> || [kristall](#)<sup>AUR</sup>

- **Lagrange** — Desktop GUI client for browsing Gemini space, offering modern conveniences familiar from web browsers.

<https://gmi.skyjake.fi/lagrange> || [lagrange](#)<sup>AUR</sup>

- **Telescope** — w3m-like browser for Gemini.

<https://telescope.omarpolo.com> || [telescope](#)<sup>AUR</sup>

## Web servers

A [web server](#) serves HTML web pages and other files via HTTP to clients like [web browsers](#). The major web servers can be interfaced with programs to serve dynamic content ([web applications](#)).

See also [Category:Web server](#) and [Wikipedia:Comparison of web server software](#).

- [Apache HTTP Server](#) — A high performance Unix-based HTTP server.

<https://httpd.apache.org/> || [apache](#)

- [Caddy](#) — HTTP/2 web server with automatic HTTPS.

<https://caddyserver.com/> || [caddy](#)

- [Hiawatha](#) — Secure and advanced web server.

<https://www.hiawatha-webserver.org/> || [hiawatha](#)<sup>AUR</sup>

- [Lighttpd](#) — A secure, fast, compliant and very flexible web-server.

<https://www.lighttpd.net/> || [lighttpd](#)

- [nginx](#) — Lightweight HTTP server and IMAP/POP3 proxy server.

<https://nginx.org/> || [nginx](#)

- [sthttpd](#) — Supported fork of the thttpd web server.

<https://github.com/blueness/sthttpd> || [sthttpd](#)<sup>AUR</sup>

- [Traefik](#) — A modern reverse proxy and load balancer that makes deploying microservices easy.

<https://traefik.io/traefik/> || [traefik-bin](#)<sup>AUR</sup>

- [yaws](#) — Web server/framework written in Erlang.

<http://yaws.hyber.org/> <sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [yaws](#)<sup>AUR</sup>

## Static web servers

- [darkhttpd](#) — A small and secure static web server, written in C, does not support HTTPS or Auth.

<https://unix4lyfe.org/darkhttpd/> || [darkhttpd](#)

- [miniserve](#) — Rust alternative to darkhttpd with UTF-8, optional HTTP authentication, file uploading, and more.

<https://github.com/svenstaro/miniserve> || [miniserve](#)

- **quark** — An extremely small and simple http get-only web server. It only serves static pages on a single host.

<https://tools.suckless.org/quark/> || [quark-git](#)<sup>AUR</sup>

- **serve** — Static file serving and directory listing.

<https://github.com/zeit/serve> || [nodejs-serve](#)<sup>AUR</sup>

- **servy** — A tiny little web server, single binary, written in Rust.

<https://github.com/zethra/servy> <sup>[dead link 2023-05-06 ⓘ]</sup> || [servy](#)<sup>AUR</sup>

- **Webfs** — Simple and instant web server for mostly static content.

<https://linux.bytesex.org/misc/webfs.html> || [webfs](#)<sup>AUR</sup>

The [Python](#) standard library module [http.server](#) can also be used from the command-line.

### Specialized web servers

- **chezdav** — WebDAV server that allows to share a particular directory.

<https://wiki.gnome.org/phodav> || [phodav](#)

- **Mongoose** — Embedded web server library, supports WebSocket and MQTT.

<https://github.com/cesanta/mongoose> || [mongoose](#)<sup>AUR</sup>

- **OnionShare** — Lets you securely and anonymously send and receive files. It works by starting a web server, making it accessible as a Tor onion service, and generating an unguessable web address so others can download files from you, or upload files to you.

<https://onionshare.org/> || [onionshare](#)

- **Transfer More** — A minimalist open-source upload HTTP server to store and share files temporarily, written in Crystal, and based on Kemal.

<https://up.sceptique.eu/> || [transfer-more](#)<sup>AUR</sup>

- **VServer** — GTK application, which opens an http server in the selected folder and shares your files.

<https://github.com/bcedu/ValaSimpleHTTPServer> || [vserver-git](#)<sup>AUR</sup>

- **webhook** — Small server for creating HTTP endpoints (hooks)

<https://github.com/adnanh/webhook> || [webhook](#)

- **Woof** — An ad-hoc single file webserver; Web Offer One File.

<http://www.home.unix-ag.org/simon/woof.html> || [woof](#)<sup>AUR</sup>

## WSGI servers

- **Gunicorn** — A Python WSGI HTTP Server for UNIX.

<https://gunicorn.org/> || [gunicorn](#)

- **uWSGI** — A fast, self-healing and developer/sysadmin-friendly application container server written in C.

<https://uwsgi-docs.readthedocs.io/> || [uwsgi](#)

- **Waitress** — A WSGI server for Python 3.

<https://github.com/Pylons/waitress> || [python-waitress](#)

Apache also supports WSGI with [mod\\_wsgi](#).

## Performance testing

- **http\_load** — A webserver performance testing tool, runs in a single process.

[https://www.acme.com/software/http\\_load/](https://www.acme.com/software/http_load/) || [http\\_load](#)<sup>AUR</sup>

- **httperf** — Can generate various HTTP workloads, written in C.

<https://github.com/httperf/httperf> || [httperf](#)<sup>AUR</sup>

- **htting** — A "ping"-like tool for HTTP requests

<https://www.vanheusden.com/htting/> || [htting](#)

- **siege** — An HTTP regression testing and benchmarking utility.

<https://www.joedog.org/siege-home/> || [siege](#)

- **vegeta** — HTTP load testing tool, written in Go.

<https://github.com/tsenart/vegeta> || [vegeta](#)

- **Web Bench** — Benchmarking tool, uses fork() for simulating multiple clients.

<http://home.tiscali.cz/~cz210552/webbench.html> || [webbench](#)<sup>AUR</sup>

## File sharing

## Download managers

See also [Wikipedia:Comparison of download managers](#).

### Console

- **aria2** — Lightweight download utility that supports HTTP/S, FTP, SFTP, BitTorrent and Metalink. It can run as a daemon controlled via a built-in JSON-RPC or XML-RPC interface.

<https://aria2.github.io/> || [aria2](#)

- **Axel** — Featherweight command line download accelerator sitting at under 250kB on disk. Supports HTTP/S and FTP.

<https://github.com/eribertomota/axel> || [axel](#)

- **cURL** — A URL retrieval utility and library. Supports HTTP, FTP and SFTP.

<https://curl.haxx.se/> || [curl](#)

- **HTTPIe** — Human-friendly command-line HTTP client for the API era.

<https://github.com/httpie/httpie> || [httpie](#)

- **HTTrack** — An easy-to-use offline browser utility. It allows you to download a World Wide Web site from the Internet to a local directory, building recursively all directories, getting HTML, images, and other files from the server to your computer.

<https://www.httrack.com/> || [httrack](#)

- **LFTP** — Sophisticated file transfer program. Supports HTTP, FTP, SFTP, FISH, and BitTorrent.

<https://lftp.yar.ru/> || [lftp](#)

- **mps-youtube** — Terminal based YouTube jukebox with playlist management. Plays audio/video through mplayer/mpv.

<https://github.com/mps-youtube/mps-youtube> || [mps-youtube-git](#)<sup>AUR</sup>

- **Plowshare** — A set of command-line tools designed for managing file-sharing websites (aka Hosters).

<https://github.com/mcrapet/plowshare> || [plowshare](#)<sup>AUR</sup>

- **quvi** — A command-line-tool suite to access the flash media stream properties.

<http://quvi.sourceforge.net/> || [quvi](#)<sup>AUR</sup>

- **RTMPDump** — Download FLV videos through RTMP (Adobe's proprietary protocol for Flash video players)

<http://rtmpdump.mplayerhq.hu/> || [rtmpdump](#)

- **snarf** — Command-line URL retrieval tool. Supports HTTP and FTP.

<https://www.xach.com/snarf/> || [snarf](#)<sup>AUR</sup>

- **Streamlink** — Launch streams from various streaming services in a custom video player or save them to a file.

<https://streamlink.github.io/> || [streamlink](#)

- **Streamripper** — Records and splits streaming mp3 into tracks.

<https://streamripper.sourceforge.net/> || [streamripper](#)<sup>AUR</sup>

- **You-Get** — Download media contents (videos, audios, images) from the Web.

<https://you-get.org/> || [you-get](#)

- **youtube-dl** — Download videos from YouTube and many other web sites.

<https://rg3.github.io/youtube-dl/> || [youtube-dl](#)

- **youtube-viewer** — Command line utility for viewing YouTube videos.

<https://github.com/trizen/youtube-viewer> || [youtube-viewer](#)<sup>AUR</sup>

- **ytfzf** — A POSIX script to find and watch youtube videos from the terminal.

<https://github.com/pystardust/ytfzf> || [ytfzf](#)

- **yt-dlp** — A youtube-dl fork with additional features and fixes.

<https://github.com/yt-dlp/yt-dlp> || [yt-dlp](#)

- **Wget** — A network utility to retrieve files from the Web. Supports HTTP and FTP.

<https://www.gnu.org/software/wget/> || [wget](#)

## Graphical

- **ClipGrab** — Downloader and converter for YouTube, Vimeo and many other online video sites.

<https://clipgrab.org/> || [clipgrab](#)

- **FatRat** — Qt based download manager with support for HTTP, FTP, SFTP, BitTorrent and Metalink.

<https://github.com/LubosD/fatrat> || [fatrat-git](#)<sup>AUR</sup>

- **Forklift** — Simple GUI for youtube-dl using PyGObject.

<https://github.com/Johnn3y/Forklift> || [forklift-git](#)<sup>AUR</sup>

- **FreeRapid** — Java-based downloader that supports downloading from file-sharing services.

<https://wordrider.net/freerapid/> || [freerapid](#)<sup>AUR</sup>

- **gtk-youtube-viewer** — GTK utility for viewing YouTube videos. See optional dependencies for the GUI.

<https://github.com/trizen/youtube-viewer> || [youtube-viewer](#)<sup>AUR</sup>

- **Gwget** — Download manager for GNOME. Supports HTTP and FTP.

<https://gitlab.gnome.org/Archive/gwget> || [gwget](#)

- **Gydl** — GUI wrapper around the already existing youtube-dl program to download content from sites like YouTube.

<https://github.com/JannikHv/gydl> || [gydl-git](#)<sup>AUR</sup>

- **Gyre** — GTK3 downloader for videos from Coub.

<https://github.com/HelpSeeker/Gyre> || [gyre](#)<sup>AUR</sup>

- **JDownloader** — Java-based downloader for one-click hosting sites.

<https://jdownloader.org/> || [jdownloader2](#)<sup>AUR</sup>

- **KGet** — Download manager for KDE. Supports HTTP, FTP, BitTorrent and Metalink. Part of [kde-network](#).

<https://apps.kde.org/kget/> || [kget](#)

- **MegaBasterd** — Yet another unofficial MEGA downloader/uploader/streaming suite.

<https://github.com/tonikelope/megabasterd> || [megabasterd-bin](#)<sup>AUR</sup>

- **Motrix** — Full-featured download manager that supports downloading HTTP, FTP, BitTorrent, Magnet, etc. Based on the [Electron](#) platform.

<https://motrix.app/> || [motrix](#)<sup>AUR</sup>

- **Persepolis** — Graphical front-end for aria2 download manager with lots of features. Supports HTTP and FTP.

<https://persepolisdm.github.io/> || [persepolis](#)

- **pyLoad** — Downloader written in Python and designed to be extremely lightweight, easily extensible and fully manageable via web.

<https://pyload.net/> || [pyload-ng](#)<sup>AUR</sup>

- **Steadyflow** — Simple download manager for GNOME. Supports HTTP and FTP.

<https://launchpad.net/steadyflow> || [steadyflow](#)

- **Streamtuner2** — Internet radio station and video browser. It simply lists stations in categories from different directories and launches your preferred media apps for playback.

<https://sourceforge.net/projects/streamtuner2/> || [streamtuner2](#)<sup>AUR</sup>

- **uGet** — GTK download manager featuring download classification and HTML import. Supports HTTP, FTP, BitTorrent, Metalink, YouTube and Mega.

<https://ugetdm.com/> || [uget](#)

- **Video Downloader** — GTK application to download videos from websites like YouTube and many others (based on youtube-dl).

<https://github.com/Unrud/video-downloader> || [video-downloader](#)<sup>AUR</sup>

- **Xtreme Download Manager** — Powerful tool to increase download speed up-to 500%. Supports HTTP and FTP. Video grabber works in a general way and is not limited to certain websites.

<https://subhra74.github.io/xdm/> || [xdman](#)<sup>AUR</sup>

- **youtubedl-gui** — Simple-to-use graphical interface for youtube-dl.

<https://github.com/JaGoLi/ytdl-gui> || [youtubedl-gui](#)<sup>AUR</sup>

## LAN file transfer

See also [#LAN messengers](#).



- **LAN Share** — Cross platform local area network file transfer application, built using Qt GUI framework. It can be used to transfer a whole folder, one or more files, large or small immediately without any additional configuration.

<https://github.com/abdularis/LAN-Share> || [lanshare](#)<sup>AUR</sup>

- **NitroShare** — Cross-platform network file transfer application, built using Qt GUI framework. It is designed to make transferring files from one device to another on the local network extremely simple.

<https://nitroshare.net/> || [nitroshare](#)

- **Teleport** — Native GTK3 application to effortlessly share files on the local network.

<https://gitlab.gnome.org/jsparber/teleport> || [teleport-share-git](#)<sup>AUR</sup>

- **Warpinator** — GTK application to share files across the LAN.

<https://github.com/linuxmint/warpinator> || [warpinator](#)

## Cloud storage servers

- **Cozy** — A personal cloud you can hack, host and delete.

<https://cozy.io/> || [cozy-stack](#)

- **Nextcloud** — A cloud server to store your files centrally on a hardware controlled by you.

<https://nextcloud.com> || [nextcloud](#)

- **Pydio** — Mature open source web application for file sharing and synchronization.

<https://pydio.com/> || [pydio](#)<sup>AUR</sup>

- **Seafile** — An online file storage and collaboration tool with advanced support for file syncing, privacy protection and teamwork.

<https://www.seafile.com/> || [seafile-server](#)<sup>AUR</sup>

## Cloud synchronization clients

### Tip:

- Some [synchronization and backup programs](#) provide direct support for some cloud-storage services.

- Some [FUSE filesystems](#) provide a way to mount cloud-storage as a filesystem. Google Drive can be accessed also by [gvfs-google](#) for GVFS-based applications (like [Nautilus](#)), and by [kio-gdrive](#) for KIO-based applications (like [Dolphin](#)).
- See [Data-at-rest encryption#Cloud-storage optimized](#) to achieve zero-knowledge (client-side transparent encryption) storage on any third-party cloud service.

### Multi-protocol clients

- **CloudCross** — Synchronize local files and folders with many cloud providers. Mail.ru Cloud, Yandex Disk, Google Drive, OneDrive and Dropbox support is available.

<https://cloudcross.mastersoft24.ru/><sup>[[dead link](#) 2022-09-20 ⓘ]</sup> || [cloudcross](#)<sup>AUR</sup>

- **Rclone** — Multi-provider sync, copy, and mount client.

<https://rclone.org/> || [rclone](#)

- **Rclone Browser** — GUI client for Rclone.

<https://github.com/kapitainsky/RcloneBrowser> || [rclone-browser](#)<sup>AUR</sup>

### Google Drive clients

- **drive** — Tiny program to pull or push Google Drive files.

<https://github.com/odeke-em/drive> || [drive](#)<sup>AUR</sup>

- **DriveSync** — Command line utility that synchronizes your Google Drive files with a local folder on your machine.

<https://github.com/MStadlmeier/drivesync> || [drivesync](#)<sup>AUR</sup>

- **gdrive** — Command line utility for interacting with Google Drive.

<https://github.com/prasmussen/gdrive> || [gdrive](#)<sup>AUR</sup>

- **Grive** — Google Drive client with support for new Drive REST API and partial sync.

<https://github.com/vitalif/grive2> || [grive](#)<sup>AUR</sup>

- **Insync** — Unofficial proprietary Google Drive desktop client.

<https://www.insynchq.com/> || [insync](#)<sup>AUR</sup>

- **ODrive** — Google Drive GUI based on the [Electron](#) platform.

<https://github.com/liberodark/ODrive> || [odrive-bin](#)<sup>AUR</sup><sup>[[broken link](#): package not found]</sup>

- **VGrive** — GTK-based GUI client (back-end and front-end) for Google Drive made in Vala.

<https://github.com/bcedu/VGrive> || [vgrive](#)<sup>AUR</sup>

#### Other synchronization clients

- **aws-cli** — CLI for Amazon Web Services, including efficient file transfers to and from Amazon S3.

<https://aws.amazon.com/cli/> || [aws-cli](#)

- **Backblaze B2** — Backblaze B2 open-source command-line client.

<https://www.backblaze.com/b2/cloud-storage.html> || [backblaze-b2](#)<sup>AUR</sup>

- **Baidu Netdisk** — Proprietary client for cloud storage service launched by Baidu (formerly Baidu Cloud).

<https://pan.baidu.com> || [baidunetdisk-bin](#)<sup>AUR</sup>

- **Cozy Drive** — Desktop client for Cozy.

<https://cozy-labs.github.io/cozy-desktop/> || [cozy-desktop](#)

- **Dropbox** — Proprietary desktop client for Dropbox.

<https://www.dropbox.com/> || [dropbox](#)<sup>AUR</sup>

- **Mega Sync Client** — Proprietary desktop client to sync files with Mega.

<https://mega.nz/> || [megasync](#)<sup>AUR</sup>

- **Megatools** — Unofficial CLI for Mega.

<https://megatools.megous.com/> || [megatools](#)

- **Nextcloud Client** — Desktop client for Nextcloud.

<https://nextcloud.com/> || [nextcloud-client](#)

- **Nutstore** — Proprietary desktop client for Nutstore.

<https://www.jianguoyun.com/> || [nutstore](#)<sup>AUR</sup>

- **OneDrive** — Unofficial CLI for [OneDrive](#).

<https://github.com/skilion/onedrive> || [onedrive](#)<sup>AUR</sup>

- **OneDrive** — Fork of the unofficial CLI for [OneDrive](#).

<https://github.com/abraunegg/onedrive> || [onedrive-abraunegg](#)<sup>AUR</sup>

- **ownCloud Desktop Client** — Desktop syncing client for ownCloud.

<https://owncloud.com/client/> || [owncloud-client](#)

- **pCloud Drive** — Proprietary desktop syncing client for pCloud. Based on the [Electron](#) platform.

<https://www.pcloud.com/download-free-online-cloud-file-storage.html> || [pcloud-drive](#)<sup>AUR</sup>

- **PydioSync** — Desktop client for Pydio.

<https://pydio.com/> || [pydio-sync](#)<sup>AUR</sup>

- **S3cmd** — Unofficial CLI for Amazon S3.

<https://s3tools.org/s3cmd> || [s3cmd](#)

- **Seafile Client** — GUI client for Seafile.

<https://www.seafile.com/> || [seafile-client](#)<sup>AUR</sup>

- **SpiderOak One** — Proprietary client for SpiderOak One.

<https://spideroak.com/> || [spideroak-one](#)<sup>AUR</sup>

- **Synology Drive** — Proprietary GUI client to sync and share files between a centralized Synology NAS and multiple client computers.

<https://www.synology.com/> || [synology-drive](#)<sup>AUR</sup>

- **Tresorit** — Proprietary desktop syncing client for Tresorit.

<https://tresorit.com/download> || [tresorit](#)<sup>AUR</sup>

- **Yandex Disk** — Proprietary CLI for Yandex Disk.

<https://disk.yandex.ru/> || [yandex-disk](#)<sup>AUR</sup>

## FTP

### FTP clients

See also [Wikipedia:Comparison of FTP client software](#).

- **FileZilla** — Fast and reliable FTP, FTPS and SFTP client.

<https://filezilla-project.org/> || [filezilla](#)

- **ftp** — Simple ftp client provided by GNU Inetutils

<https://www.gnu.org/software/inetutils/manual/inetutils.html#ftp-invocation> || [inetutils](#)

- **ncftp** — A set of free application programs implementing FTP.

<https://www.ncftp.com/> || [ncftp](#)

- **tnftp** — FTP client with several advanced features for [NetBSD](#).

<https://freshmeat.sourceforge.net/projects/tnftp> || [tnftp](#)

Some file managers like [Dolphin](#), [GNOME Files](#) and [Thunar](#) also provide FTP functionality.

### FTP servers

See also [Wikipedia:List of FTP server software](#).

- **bftpd** — Small, easy-to-configure FTP server

<https://bftpd.sourceforge.net/> || [bftpd](#)

- **ftpd** — Simple ftp server provided by GNU Inetutils

<https://www.gnu.org/software/inetutils/manual/inetutils.html#ftpd-invocation> || [inetutils](#)

- **proFTPD** — A secure and configurable FTP server

<http://www.proftpd.org/> || [proftpd](#)<sup>AUR</sup>

- **Pure-FTPd** — Free (BSD-licensed), secure, production-quality and standard-compliant FTP server.

<https://www.pureftpd.org/project/pure-ftpd/> || [pure-ftpd](#)<sup>AUR</sup>

- **SSH** — SFTP is a network protocol that provides file access, file transfer, and file management over any reliable data stream.

<https://www.openssh.com> || [openssh](#)

- **vsftpd** — Lightweight, stable and secure FTP server for UNIX-like systems.

<https://security.appspot.com/vsftpd.html> || [vsftpd](#)

## BitTorrent clients

Some [download managers](#) are also able to connect to the BitTorrent network: [Aria2](#), [LFTP](#), FatRat, [KGet](#), [MLDonkey](#), uGet.

See also [Wikipedia:Comparison of BitTorrent clients](#).

## Console

- **Ctorrent** — CTorrent is a BitTorrent client implemented in C++ to be lightweight and quick.

<https://www.rahul.net/dholmes/ctorrent/><sup>[dead link 2023-05-06 ⓘ]</sup> || [enhanced-ctorrent](#)<sup>AUR</sup>

- **Deluge** — BitTorrent client with multiple user interfaces in a client/server model. This package includes a console client.

<https://deluge-torrent.org/> || [deluge](#)

- **peerflix** — Streaming torrent client for node.js.

<https://github.com/mafintosh/peerflix> || [peerflix](#)<sup>AUR</sup>

- **rTorrent** — Simple and lightweight ncurses BitTorrent client.

<https://rakshasa.github.io/rtorrent/> || [rtorrent](#)

- **Transmission CLI** — Simple and easy-to-use BitTorrent client with a daemon version and multiple front-ends. This package includes backend, daemon, command-line interface, and a Web UI interface.

<https://transmissionbt.com/> || [transmission-cli](#)

## Graphical

- **Deluge (GTK interface)** — User-friendly BitTorrent client written in Python using GTK.

<https://deluge-torrent.org/> || [deluge-gtk](#)

- **Fragments** — Easy to use BitTorrent client for the GNOME desktop environment.

<https://gitlab.gnome.org/World/Fragments> || [fragments](#)

- **FrostWire** — Easy to use cloud downloader, BitTorrent client and media player.

<https://www.frostwire.com/> || [frostwire](#)<sup>AUR</sup>

- **Ktorrent** — Feature-rich BitTorrent client for KDE.

<https://apps.kde.org/ktorrent/> || [ktorrent](#)

- **Powder Player** — Hybrid between a streaming BitTorrent client and a player. Based on the [Electron](#) platform.

<https://powder.media/> || [powder-player-bin](#)<sup>AUR</sup>

- [qBittorrent](#) — Open source (GPLv2) BitTorrent client with an integrated torrent search engine that strongly resembles µTorrent.

<https://www.qbittorrent.org/> || [qbittorrent](#)

- [Tixati](#) — Proprietary peer-to-peer file sharing program that uses the popular BitTorrent protocol.

<https://tixati.com/> || [tixati](#)<sup>AUR</sup>

- **Torrential** — Simple torrent client for elementary OS.

<https://github.com/davidmhewitt/torrential> || [torrential](#)

- [Transmission](#) — Simple and easy-to-use BitTorrent client with a daemon version and multiple front-ends.

<https://transmissionbt.com/> || GTK: [transmission-gtk](#), Qt: [transmission-qt](#)

- **[Transmission Remote](#)** — GTK client for remote management of the Transmission BitTorrent client, using its HTTP RPC protocol.

<https://github.com/transmission-remote-gtk/transmission-remote-gtk> || [transmission-remote-gtk](#)

- **Tremotesf** — Qt client for remote management of the Transmission BitTorrent client, using its HTTP RPC protocol.

<https://github.com/equeim/tremotesf2> || [tremotesf](#)<sup>AUR</sup>

- [Tribler](#) — 4th generation file sharing system BitTorrent client.

<https://www.tribler.org> || [tribler](#)<sup>AUR</sup>

- [Vuze](#) — Feature-rich BitTorrent client written in Java (formerly Azureus).

<https://www.vuze.com/> || [vuze](#)<sup>AUR</sup>

- **WebTorrent Desktop** — Streaming BitTorrent application. Based on the [Electron](#) platform.

<https://webtorrent.io/desktop/> || [webtorrent-desktop](#)<sup>AUR</sup>

## Other P2P networks

See also [Wikipedia:Comparison of file-sharing applications](#).

- **aMule** — Well-known eDonkey/Kad client with a daemon version and GTK, web, and CLI front-ends.

<https://www.amule.org/> || [amule](#)

- **EiskaltDC++** — Direct Connect and ADC client.

<https://github.com/eiskaltdcpp/eiskaltdcpp> || GTK: [eiskaltdcpp-gtk](#)<sup>AUR</sup>, Qt: [eiskaltdcpp-qt](#)<sup>AUR</sup>

- **gtk-gnutella** — GTK server/client for the Gnutella peer-to-peer network.

<http://gtk-gnutella.sourceforge.net/> || [gtk-gnutella](#)<sup>AUR</sup>

- **KaMule** — KDE graphical front-end for aMule.

<https://www.linux-apps.com/content/show.php?content=150270><sup>[dead link 2023-05-06 ⓘ]</sup> || [kamule](#)<sup>AUR</sup>

- **LBRY** — Browser and wallet for LBRY, the decentralized, user-controlled content marketplace. Based on the [Electron](#) platform.

<https://lbry.io/> || [lbry-desktop](#)<sup>AUR</sup>

- **lbt** — Small set of command-line tools for LBRY.

<https://gitlab.com/gardenappl/lbt> || [lbt](#)<sup>AUR</sup>

- **MLDonkey** — Multi-protocol P2P client that supports HTTP, FTP, BitTorrent, Direct Connect, eDonkey and FastTrack.

<https://mldonkey.sourceforge.net/> || [mldonkey](#)<sup>AUR</sup>

- **ncdc** — Modern and lightweight Direct Connect and ADC client with a friendly ncurses interface.

<https://dev.yorhel.nl/ncdc> || [ncdc](#)<sup>AUR</sup>

- **Nicotine+** — A graphical client for the Soulseek P2P network.

<https://github.com/Nicotine-Plus/nicotine-plus> || [nicotine+](#)

- **Send Anywhere** — Proprietary file sharing service where users can directly share digital content in real time. Based on the [Electron](#) platform.

<https://send-anywhere.com/> || [sendanywhere](#)<sup>AUR</sup>



- [IPFS](#) — IPFS is a P2P Network capable of sharing and receiving files.

<https://ipfs.io/> || [kubo](#)

## Pastebin services

See also [Wikipedia:Pastebin](#).

Pastebin services are often used to quote text or images while collaborating and troubleshooting. Pastebin clients provide a convenient way to post from the command line.

**Note:** An acceptable pastebin service does not require enabling JavaScript for viewing, does not display adverts, manipulate the pasted content or require a login. [pastebin.com](#) is blocked for some people because of malware found on the site and has a history of annoying issues (requires JavaScript, displays adverts, inserts CRLF line-endings and displaying CAPTCHAs at random). Do **not** use it.

### Without a dedicated client

Some services can be used with more general command line tool, such as [cURL](#). For extensions, such as line numbers, one can use more command line tools. Such as `cat -n`.

- [0x0.st](#) is a file hosting and URL shortening service. Usage examples are:

*command* | `curl -F 'file=@-' 0x0.st`

or upload a file:

`curl -F 'file=@-' 0x0.st < file`

- [ix.io](#) Usage examples are:

*command* | `curl -F 'f:1=<-' ix.io`

or upload a file:

`curl -F 'f:1=<-' ix.io < file`

- [termbin.com](#) works with [nc](#).

### Dedicated clients

- **Elmer** — Pastebin client similar to [wgetpaste](#) and `curlpaste`, except written in Perl and usable with [wget](#) or [curl](#). Servers: [codepad.org](#), [rafb.me](#), [sprunge.us](#).

<https://github.com/sudokode/elmer> || [elmer](#)<sup>AUR</sup>

- **Fb-client** — Client for the [paste.xinu.at](#) pastebin.

<https://paste.xinu.at> || [fb-client](#)

- **Gist** — Command-line interface for the [gist.github.com](https://gist.github.com) pastebin service.

<https://github.com/defunkt/gist> || [gist](#)

- **imgur** — A CLI client which can upload image to [imgur.com](https://imgur.com) image sharing service.

<https://github.com/tremby/imgur.sh> || [imgur.sh](#)<sup>AUR</sup>

- **ix** — Client for the ix.io pastebin.

<http://ix.io/client> || [ix](#)<sup>AUR</sup>

- **Pastebinit** — Really small Python script that acts as a Pastebin client. Servers: [pastie.org](https://pastie.org), [paste.kde.org](https://paste.kde.org), [paste.debian.net](https://paste.debian.net), [paste.ubuntu.com](https://paste.ubuntu.com) and others (for a full list see `pastebinit -l`).

<https://launchpad.net/pastebinit> || [pastebinit](#)

- **ruby-haste** — Client for [hastebin.com](https://hastebin.com).

<https://github.com/seejohnrun/haste-client> || [ruby-haste](#)<sup>AUR</sup>

- **Uppity** — The pastebin client with an attitude.

<https://github.com/Kiwi/Uppity> || [uppity-git](#)<sup>AUR</sup>

- **Wgetpaste** — Bash script that automates pasting to a number of pastebin services. Servers: [pastebin.ca](https://pastebin.ca) <sup>[dead link 2023-05-06 ⓘ]</sup>, [codepad.org](https://codepad.org), [dpaste.com](https://dpaste.com) and [pastebin.osuosl.org](https://pastebin.osuosl.org).

<http://wgetpaste.zlin.dk/> || [wgetpaste](#)

## Communication

### Email clients

See also [Wikipedia:Comparison of email clients](#)

### Console

- **aerc** — Work in progress asynchronous email client.

<https://sr.ht/~rjarry/aerc> || [aerc](#)

- **alot** — An experimental terminal MUA based on [notmuch mail](#). It is written in python using the [urwid](#) toolkit.

<https://github.com/pazz/alot> || [alot](#)

- **Alpine** — Fast, easy-to-use and Apache-licensed email client based on [Pine](#).

<https://alpine.x10host.com/> [[dead link](#) 2022-09-20 ⓘ] || [alpine-git](#)<sup>AUR</sup>

- **S-nail** — a mail processing system with a command syntax reminiscent of *ed* with lines replaced by messages. Provides the functionality of [mailx](#).

<https://www.sdaoden.eu/code.html#s-mailx> || [s-nail](#)

- **mu/mu4e** — Email indexer (mu) and client for emacs (mu4e). Xapian based for fast searches.

<https://www.djcbsoftware.nl/code/mu/mu4e.html> || [mu](#)<sup>AUR</sup>

- **Mutt** — Small but very powerful text-based mail client.

<http://www.mutt.org/> || [mutt](#)

- **NeoMutt** — Command line mail reader (or MUA). It is a fork of Mutt with added features.

<https://neomutt.org/> || [neomutt](#)

- **nmh** — A modular mail handling system.

<https://www.nongnu.org/nmh/> || [nmh](#)<sup>AUR</sup>

- **notmuch** — A fast mail indexer built on top of *xapian*.

<https://notmuchmail.org/> || [notmuch](#)

- **sendmail** — A lightweight command line SMTP email client written in Perl.

<http://caspian.dotconf.net/menu/Software/SendEmail/> || [sendmail](#)<sup>AUR</sup>

- **Sup** — CLI mail client with very fast searching, tagging, threading and GMail like operation.

<https://sup-heliotrope.github.io/> || [sup](#)<sup>AUR</sup>

- **swaks** — Swiss Army Knife SMTP; Command line SMTP testing, including TLS and AUTH, can be used to send emails.

<https://jetmore.org/john/code/swaks/> || [swaks](#)

- **Wanderlust** — Email client and news reader for Emacs.

<http://www.gohome.org/wl/><sup>[dead link 2023-05-06 ⓘ]</sup> || [wanderlust](#)

## Graphical

- **Balsa** — Simple and light email client for GNOME.

<https://pawsa.fedorapeople.org/balsa/> || [balsa](#)

- **Betterbird** — Fork of thunderbird.

<https://www.betterbird.eu/> || [betterbird-bin](#)<sup>AUR</sup>

- **Claws Mail** — Lightweight GTK-based email client and news reader.

<https://www.claws-mail.org/> || [claws-mail](#)

- **ElectronMail** — Unofficial desktop application for several end-to-end encrypted email providers (like ProtonMail, Tutanota). Based on the [Electron](#) platform.

<https://github.com/vladimiry/ElectronMail> || [electronmail-bin](#)<sup>AUR</sup>

- **Evolution** — Mature and feature-rich e-mail client that is part of the GNOME project. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Evolution> || [evolution](#)

- **Geary** — Simple desktop mail client built in [Vala](#). Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Geary> || [geary](#)

- **Kmail** — Mature and feature-rich email client. Part of [kde-pim](#).

<https://kontact.kde.org/components/kmail/> || [kmail](#)

- **Kube** — Modern communication and collaboration client built with QtQuick.

<https://kube-project.com/> || [kube](#)<sup>AUR</sup>

- **Mailspring** — Fork of [Nylas Mail](#) by one of the original authors. The paid "Pro" version requires a Mailspring ID and has extra features like snooze, send later. Based on the [Electron](#) platform.

<https://getmailspring.com/> || [mailspring](#)<sup>AUR</sup>

- **openWMail** — The missing desktop client for Gmail & Google Inbox. Based on the [Electron](#) platform.

<https://openwmail.github.io/> || [openwmail](#)<sup>AUR</sup>

- **SeaMonkey Mail & Newsgroups** — Email client included in the SeaMonkey suite.

<https://www.seamonkey-project.org/> || [seamonkey](#)<sup>AUR</sup>

- **Sylpheed** — Lightweight and user-friendly GTK email client.

<https://sylpheed.sraoss.jp/en/> || [sylpheed](#)<sup>AUR</sup>

- **Thunderbird** — Feature-rich email client from Mozilla written in GTK.

<https://www.thunderbird.net/> || [thunderbird](#)

- **Trojita** — Qt IMAP email client. Only supports [one IMAP account](#).

<http://trojita.flaska.net/> || [trojita](#)<sup>AUR</sup>

- **Tutanota** — Email client for Tutanota mail service. Based on the [Electron](#) platform.

<https://tutanota.com/> || [tutanota-desktop](#)<sup>AUR</sup>

- **Viagee** — It allows desktop mail actions, such as 'Send File as Email' or web 'mailto' links, to be handled by the Gmail web client.

<https://davesteele.github.io/viagee/> || [viagee](#)<sup>AUR</sup>

## Web-based

- **Nextcloud Mail** — An email webapp for NextCloud.

<https://github.com/nextcloud/mail> || [nextcloud-app-mail](#)

- **Roundcubemail** — Browser-based multilingual IMAP client webapp with a native application-like user interface.

<https://roundcube.net/> || [roundcubemail](#)

- **SquirrelMail** — Webmail for Nuts!

<https://squirrelmail.org/> || [squirrelmail](#)<sup>AUR</sup>

## Mail notifiers

- **Ayatana Webmail** — Webmail notifications and actions for any desktop.

<https://tari.in/www/software/ayatana-webmail/> || [ayatana-webmail](#)<sup>AUR</sup>

- **Bubblemail** — New and Unread mail notification service for local mailboxes, pop, imap, and gnome online accounts. A fork of Mailnag.

<http://bubblemail.free.fr/> || [bubblemail](#)<sup>AUR</sup>

- **CheckMails** — System tray unread mail checker using IMAP protocol.

<https://github.com/j4321/CheckMails> || [checkmails](#)<sup>AUR</sup>

- **Gnubiff** — Mail notification program that checks for mail and displays headers when new mail has arrived.

<http://gnubiff.sourceforge.net/> || [gnubiff](#)

- **Mailnag** — Extensible mail notification daemon.

<https://github.com/pulb/mailnag> || [mailnag](#)

- **QGmailNotifier** — Portable Qt5 based GMail notifier.

<https://github.com/eteran/qgmailnotifier> || [qgmailnotifier](#)<sup>AUR</sup>

## Mail servers

See [Mail server](#).

- **DavMail** — POP/IMAP/SMTP/Caldav/Carddav/LDAP exchange gateway allowing users to use any mail/calendar client with an Exchange server.

<https://davmail.sourceforge.net/> || [davmail](#)<sup>AUR</sup>

- **Modoboa** — A modular mail hosting and management platform, written in Python.

<https://modoboa.org/> || [modoboa](#)<sup>AUR</sup>

## Mail retrieval agents

See also [Wikipedia:Mail retrieval agent](#).

- **fdm** — Program to fetch and deliver mail.

<https://github.com/nicm/fdm> || [fdm](#)

- **Fetchmail** — A remote-mail retrieval utility.

<https://www.fetchmail.info/> || [fetchmail](#)

- **getmail** — A POP3/IMAP4 mail retriever with reliable Maildir and command delivery.

<http://pyropus.ca/software/getmail/> || [getmail](#)<sup>AUR</sup>

- **hydroxide** — A third-party, open-source ProtonMail CardDAV, IMAP and SMTP bridge

<https://github.com/emersion/hydroxide> || [hydroxide](#)<sup>AUR</sup>

- **imapsync** — IMAP synchronisation, sync, copy or migration tool

<https://imapsync.lamiral.info/> || [imapsync](#)

- **isync** — IMAP and MailDir mailbox synchronizer

<http://isync.sourceforge.net/> || [isync](#)

- **mpop** — A small, fast POP3 client suitable as a fetchmail replacement

<https://marlam.de/mpop/> || [mpop](#)

- **vomit** — Rust utility to sync between Maildir mailbox and IMAP mailbox

<https://git.sr.ht/~bitfehler/vomit-sync/tree/master/item/cli/README.md> || [vsync](#)<sup>AUR</sup> (sync-only part of [vomit](#)<sup>AUR</sup> mail toolkit)

- **OfflineIMAP** — Synchronizes emails between two repositories.

<https://www.offlineimap.org/> || [offlineimap](#)

## Instant messaging clients

See also [Wikipedia:Comparison of instant messaging clients](#) and [Wikipedia:Comparison of VoIP software](#).

This section lists all client software with [instant messaging](#) support.

## Multi-protocol clients

**Note:** All messengers that support several networks by means of direct connections to them belong to this section.

The number of networks supported by these clients is very large but they (like any multi-protocol clients) usually have very limited or no support for network-specific features.

## Console

- **BarnOwl** — Ncurses-based chat client with support for the Zephyr, XMPP and IRC protocols.

<https://barnowl.mit.edu/> || [barnowl](#)<sup>AUR</sup>

- **BitlBee** — IRC gateway to popular chat networks (XMPP and ICQ).

<https://bitlbee.org/> || [bitlbee](#)<sup>AUR</sup>

- **EKG2** — Ncurses based XMPP, Gadu-Gadu, ICQ and IRC client.

<https://github.com/ekg2/ekg2> || [ekg2](#)<sup>AUR</sup>

- **Finch** — Ncurses-based chat client that uses libpurple and supports all its protocols (Bonjour, Gadu-Gadu, Groupwise, ICQ, IRC, SIMPLE, XMPP, Zephyr).

<https://developer.pidgin.im/wiki/Using%20Finch> || [finch](#)

- **WeeChat** — Modular, lightweight ncurses-based IRC client. A variety of other protocols are supported through plugins.

<https://weechat.org/> || [weechat](#)

#### Graphical

- **Jitsi** — Audio/video VoIP phone and instant messenger written in Java that supports protocols such as SIP, XMPP, ICQ, IRC and many other useful features.

<https://jitsi.org/> || [jitsi](#)<sup>AUR</sup>

- **Kopete** — User-friendly IM supporting Bonjour, Gadu-Gadu, GroupWise, ICQ, XMPP.

<https://apps.kde.org/kopete/> || [kopete](#)

- **KDE Telepathy** — KDE instant messaging client using the [Telepathy](#) framework. Meant as a replacement for Kopete.

<https://userbase.kde.org/Telepathy> || [telepathy-kde-meta](#)

- **Lith** — WeeChat Relay client, allowing to connect to a running WeeChat instance from anywhere.

<https://lith.app/> || [lith-git](#)<sup>AUR</sup>

- **Pidgin** — Multi-protocol instant messaging client with audio support that uses libpurple and supports all its protocols (Bonjour, Gadu-Gadu, Groupwise, ICQ, IRC, SIMPLE, XMPP, Zephyr).

<https://pidgin.im/> || [pidgin](#)

- **qutIM** — Simple and user-friendly IM supporting ICQ, XMPP, Mail.Ru, IRC and VKontakte messaging.

<https://qutim.org/> || [qutim](#)<sup>AUR</sup>



- **Smuxi** — Cross-platform IRC client that also supports XMPP.

<https://smuxi.im/> || [smuxi](#)<sup>AUR</sup>

- **Thunderbird** — Feature-rich email client supports instant messaging and chat using IRC and XMPP.

<https://www.thunderbird.net/> || [thunderbird](#)

- **Volt** — Proprietary native desktop client for Skype, Telegram, Slack, XMPP, Discord, IRC and more.

<https://volt-app.com/> || [volt](#)<sup>AUR</sup>

## IRC clients

See also [Wikipedia:Comparison of Internet Relay Chat clients](#).

## Console

- **BitchX** — Console-based IRC client developed from the popular [ircII](#).

<http://www.bitchx.org/> || [bitchx-git](#)<sup>AUR</sup>

- **ERC** — Powerful, modular and extensible IRC client for [Emacs](#).

<https://savannah.gnu.org/projects/erc/> || included with [emacs](#)

- **ii** — Featherweight IRC client, literally `tail -f` the conversation and `echo` back your replies to a file.

<https://tools.suckless.org/ii/> || [ii](#)<sup>AUR</sup>

- **ircii** — Oldest maintained IRC client which lays claim to being small and fast owing to its reduced feature set.

<http://www.eterna.com.au/ircii/> || [ircii](#)<sup>AUR</sup>

- **Irssi** — Highly-configurable ncurses-based IRC client.

<https://irssi.org/> || [irssi](#)

- **pork** — Programmable, ncurses-based IRC client that mostly looks and feels like ircII.

<http://dev.ojnk.net/> || [pork](#)

- **ScrollZ** — Advanced IRC client based on [ircII](#).

<https://www.scrollz.info/> || [scrollz](#)<sup>AUR</sup>

- **senpai** — An IRC client that works best with bouncers (e.g. [soju-git](#)<sup>AUR</sup>): no logs are kept, history is fetched from the server via [CHATHISTORY](#), networks are fetched from the server via [bouncer-networks](#).

<https://sr.ht/~taiite/senpai/> || [senpai-irc-git](#)<sup>AUR</sup>

- **sic** — Extremely simple IRC client, similar to [ij](#).

<https://tools.suckless.org/sic/> || [sic](#)<sup>AUR</sup>

- **tiny** — an IRC client written in Rust with a clutter-free interface

<https://github.com/osa1/tiny> || [tiny-irc-client-git](#)<sup>AUR</sup>

#### Graphical

- **ChatZilla** — Clean, easy to use and highly extensible Internet Relay Chat (IRC) client, built on the Mozilla platform using [XULRunner](#). Included in the [SeaMonkey](#) suite.

<http://chatzilla.hacksrus.com/> || [seamonkey](#)<sup>AUR</sup>

- **HexChat** — Fork of XChat for Linux and Windows.

<https://hexchat.github.io/> || [hexchat](#)

- **Konversation** — Qt-based IRC client for the KDE desktop.

<https://konversation.kde.org/> || [konversation](#)

- **KVirc** — Qt-based IRC client featuring extensive themes support.

<http://kvirc.net/> || [kvirc](#)

- **Loqui** — GTK IRC client.

<https://loqui.sunnyone.org/> || [loqui](#)<sup>AUR</sup>

- **LostIRC** — Simple GTK IRC client with tab-autocompletion, multiple server support, logging and others.

<http://lostirc.sourceforge.net> || [lostirc](#)<sup>AUR</sup>

- **Polari** — Simple IRC client by the GNOME project. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Polari> || [polari](#)

- **Quassel** — Modern, cross-platform, distributed IRC client.

<https://quassel-irc.org/> || KDE: [quassel-monolithic](#), Qt: [quassel-monolithic-qt](#)

- **Srain** — Modern, beautiful IRC client written in GTK 3.

<https://srain.silverrainz.me> || [srain](#)<sup>AUR</sup>

## XMPP clients

See also [Wikipedia:XMPP](#) and [Wikipedia:Comparison of XMPP clients](#).

## Console

- **Freetalk** — Console-based XMPP client.

<https://www.gnu.org/software/freetalk/> || [freetalk](#)<sup>AUR</sup>

- **jabber.el** — Minimal XMPP client for [Emacs](#).

<http://emacs-jabber.sourceforge.net/> || [emacs-jabber](#)<sup>AUR</sup>

- **MCabber** — Small XMPP console client, includes features: SSL, PGP, MUC, OTR and UTF8.

<https://mcabber.com/> || [mcabber](#)

- **Poezio** — XMPP client with IRC feeling

<https://poez.io/> || [poezio](#)<sup>AUR</sup>

- **Profanity** — A console based XMPP client inspired by Irssi.

<https://profanity-im.github.io/> || [profanity](#)

## Graphical

- **Converse.js** — Web-based XMPP chat client written in JavaScript.

<https://conversejs.org/> || [conversejs-git](#)<sup>AUR</sup>

- **Dino** — A modern, easy to use XMPP client, with PGP and OMEMO support.

<https://dino.im/> || [dino](#)

- **Gajim** — XMPP client with audio support written in Python using GTK.

<https://gajim.org/> || [gajim](#)

- **Kaidan** — A simple, user-friendly Jabber/XMPP client providing a modern user interface using Kirigami and QtQuick.

<https://www.kaidan.im/> || [kaidan](#)

- **Kadu** — Qt-based XMPP and Gadu-Gadu client.

<http://www.kadu.im/> || [kadu](#)<sup>AUR</sup>

- **Libervia (Salut à Toi)** — Web frontend for Salut à Toi, multi-purpose XMPP client

<https://libervia.org/> || [libervia-web-hg](#)<sup>AUR</sup>

- **Nextcloud JavaScript XMPP Client** — Chat app for Nextcloud with XMPP, end-to-end encryption, video calls, file transfer & group chat.

<https://github.com/nextcloud/jsxc.nextcloud> || [nextcloud-app-jsxc](#)<sup>AUR</sup>

- **Psi** — Qt-based XMPP client.

<https://psi-im.org/> || [psi](#) or [psi-nowebengine](#)

- **Spark** — Cross-platform real-time XMPP collaboration client optimized for business and organizations.

<https://www.igniterealtime.org/projects/spark/> || [spark](#)<sup>AUR</sup>

- **Swift** — XMPP client written in C++ with Qt and Swiften.

<https://swift.im/> || [swift-im](#)<sup>AUR</sup>

- **Tkabber** — Easy to hack feature-rich XMPP client by the author of the ejabberd XMPP server.

<http://tkabber.jabber.ru/> <sup>[dead link 2023-05-20 ⓘ]</sup> || [tkabber](#)<sup>AUR</sup>

- **Vacuum IM** — Full-featured crossplatform XMPP client.

<https://github.com/Vacuum-IM/vacuum-im> || [vacuum-im](#)<sup>AUR</sup>

## SIP clients

See also [Wikipedia:List of SIP software#Clients](#).

- **Blink** — State of the art, easy to use SIP client.

<https://icanblink.com/> || [blink](#)<sup>AUR</sup>

- **baresip** — portable and modular SIP User-Agent with audio and video support

<https://github.com/baresip/baresip> || [baresip](#)

- **Jami** — SIP-compatible softphone and instant messenger for the decentralized Jami network. Formerly known as Ring and SFLphone.

<https://jami.net/> || [jami-qt](#)

- **Linphone** — VoIP phone application (SIP client) for communicating freely with people over the internet, with voice, video, and text instant messaging.

<https://www.linphone.org/> || [linphone-desktop](#)<sup>AUR</sup>

- **Twinkle** — Qt softphone for VoIP and IM communication using SIP.

<http://twinkle.dolezel.info/> || [twinkle](#)<sup>AUR</sup>

- **Zoiper** — Proprietary SIP and IAX2 VoIP softphone

<https://zoiper.com> || [zoiper](#)<sup>AUR</sup>

## Matrix clients

See also [Matrix](#) and [Matrix Clients](#).

- **Element** — Glossy Matrix client with an emphasis on performance and usability. Web application and desktop application based on the [Electron](#) platform.

<https://element.io/> || [element-web](#), [element-desktop](#)

- **QuickMedia** — A rofi inspired native client for web services. Supports Matrix and several other sites.

<https://git.dec05eba.com/QuickMedia/about/> || [quickmedia-git](#)<sup>AUR</sup>

- **FluffyChat** — Multi-platform Matrix client with a simple and clean UI written in Dart/Flutter.

<https://fluffychat.im/> || [fluffychat](#)<sup>AUR</sup>

- **Fractal** — Matrix client for GNOME written in Rust.

<https://wiki.gnome.org/Apps/Fractal> || [fractal](#)

- **Gomuks** — Terminal Matrix client written in Go using [mautrix](#) and [mauview](#).

<https://maunium.net/go/gomuks> || [gomuks](#)

- **Mirage** — A fancy, customizable, keyboard-operable Matrix chat client for encrypted and decentralized communication. Written in Qt/QML + Python with nio, currently in alpha.

<https://github.com/mirukana/mirage> || [matrix-mirage](#)<sup>AUR</sup>

- **Neochat** — KDE client for the Matrix protocol.

<https://apps.kde.org/neochat/> || [neochat](#)

- **nheko** — Desktop client for the Matrix protocol.

<https://github.com/Nheko-Reborn/nheko> || [nheko](#)

- **Quaternion** — Qt5-based IM client for the Matrix protocol.

<https://github.com/QMatrixClient/Quaternion> || [quaternion](#)<sup>AUR</sup>

- **SchildiChat** — Matrix client based on Element with a more traditional instant messaging experience. Based on the [Electron](#) platform.

<https://schildi.chat/> || [schildichat-desktop](#)<sup>AUR</sup>

- **Spectral** — Qt5-based Glossy cross-platform client for Matrix.

<https://gitlab.com/spectral-im/spectral> || [spectral-matrix](#)<sup>AUR</sup>

- **Syphon** — Privacy-centric cross-platform Matrix client with E2EE support, currently in alpha.

<https://github.com/syphon-org/syphon> || [syphon-bin](#)<sup>AUR</sup>

## Tox clients

See also [Tox](#) and [comparison clients](#)

- **qTox** — Powerful Tox client written in C++/Qt that follows the Tox design guidelines.

<https://qtox.github.io/> || [qtox](#)

- **rattox** — FIFO based tox client.

<https://git.z3bra.org/rattox/file/README.html> || [rattox-git](#)<sup>AUR</sup>

- **Toxic** — ncurses-based Tox client

<https://github.com/Jfreegman/toxic> || [toxic](#)

- **Toxygen** — Tox client written in pure Python3.

<https://github.com/toxygen-project/toxygen> || [toxygen-git](#)<sup>AUR</sup>

- **Venom** — a modern Tox client for the GNU/Linux desktop

<https://github.com/naxuroqa/Venom> || [venom](#)<sup>AUR</sup>

- **µTox** — Lightweight Tox client.

<https://github.com/uTox/uTox> || [utox](#)

## LAN messengers

See also [Avahi#Link-Local \(Bonjour/Zeroconf\) chat](#) and [Wikipedia:Comparison of LAN messengers](#).

- **BeeBEEP** — Secure LAN Messenger.

<https://www.beebeep.net/> || [beebeep](#)

- **iptux** — LAN communication software, compatible with IP Messenger.

<https://github.com/iptux-src/iptux> || [iptux](#)

- **LAN Messenger** — P2P chat application for intranet communication and does not require a server. A variety of handy features are supported including notifications, personal and group messaging with encryption, file transfer and message logging.

<https://lanmessenger.github.io/> || [lmc](#)<sup>AUR</sup>

## P2P messaging clients

See also [Ring](#) and [Tox](#).

- **Bitmessage** — Decentralized and trustless P2P communications protocol for sending encrypted messages to another person or to many subscribers.

<https://bitmessage.org/> || [pybitmessage](#)<sup>AUR</sup>

- **Briar** — Briar is a messaging application designed for activists, journalists, and anyone else who needs a safe, easy and robust way to communicate.

<https://briarproject.org/> || [briar-desktop](#)<sup>AUR</sup>, [briar-headless](#)<sup>AUR</sup>

- **Patchwork** — Decentralized messaging and sharing application built on top of Secure Scuttlebutt (SSB). Based on the [Electron](#) platform.

<https://github.com/ssbc/patchwork> || [ssb-patchwork](#)<sup>AUR</sup>

- **RetroShare** — Serverless encrypted instant messenger with filesharing, chatgroups, mail.

<https://retroshare.cc/> || [retroshare](#)<sup>AUR</sup>

- **Ricochet** — Anonymous peer-to-peer instant messaging system built on [Tor](#) hidden services.

<https://www.ricochetrefresh.net/> || [ricochet-refresh](#)<sup>AUR</sup>

#### Other IM clients

- **BlueJeans** — Proprietary desktop application for BlueJeans video calls. Based on the [Electron](#) platform.

<https://www.bluejeans.com/> || [bluejeans](#)<sup>AUR</sup>

- **Caprine** — Unofficial Facebook Messenger app. Based on the [Electron](#) platform.

<https://github.com/sindresorhus/caprine> || [caprine](#)

- **Chatterino** — Chat client for Twitch chat.

<https://chatterino.com/> || [chatterino2-git](#)<sup>AUR</sup>

- **Delta Chat** — A privacy oriented chat application built on e-mail. Based on the [Electron](#) platform.

<https://delta.chat/> || [deltachat-desktop-git](#)<sup>AUR</sup>

- **Discord** — Proprietary all-in-one voice and text chat application for gamers that's free and works on both your desktop and phone. Based on the [Electron](#) platform.

<https://discordapp.com/> || [discord](#)

- **Gitter** — Communication product for communities and teams on GitLab and GitHub.

<https://gitter.im/> || [gitter-bin](#)<sup>AUR</sup>

- **Hangups** — Third-party instant messaging client for Google Hangouts with console interface.

<https://github.com/tdryer/hangups> || [hangups](#)<sup>AUR</sup>

- **ICQ** — Official ICQ client for Linux.

<https://icq.com/linux/> || [icq-bin](#)<sup>AUR</sup>



- **IRCCloud** — Desktop client for a modern, always-connected IRC client service. Based on the [Electron](#) platform.

<https://www.irccloud.com/> || [irccloud](#)<sup>AUR</sup>

- **Jitsi Meet** — Desktop application for Jitsi Meet. Based on the [Electron](#) platform.

<https://github.com/jitsi/jitsi-meet-electron> || [jitsi-meet-desktop](#)<sup>AUR</sup>

- **Kotatogram Desktop** — Experimental fork of Telegram Desktop.

<https://kotatogram.github.io/> || [kotatogram-desktop](#)<sup>AUR</sup>

- **Matterhorn** — Console client for the Mattermost chat system.

<https://github.com/matterhorn-chat/matterhorn> || [matterhorn](#)<sup>AUR</sup>

- **Mattermost Desktop** — Desktop application for Mattermost. Based on the [Electron](#) platform.

<https://github.com/mattermost/desktop> || [mattermost-desktop](#)

- **Microsoft Teams** — Official proprietary client for Microsoft Teams. Based on the [Electron](#) platform.

<https://teams.microsoft.com/downloads> || [teams](#)<sup>AUR</sup>

- **Mumble** — Voice chat application similar to TeamSpeak.

<https://www.mumble.info/> || [mumble](#)

- **Paper Plane** — Chat over Telegram on a modern and elegant client.

<https://github.com/paper-plane-developers/paper-plane> || [paper-plane-git](#)<sup>AUR</sup>

- **QQ** — Proprietary instant messaging software developed by Tencent (imitating ICQ).

<https://im.qq.com/> || [linuxqq](#)<sup>AUR</sup>

- **Rocket.Chat Desktop** — Desktop application for Rocket.Chat. Based on the [Electron](#) platform.

<https://github.com/RocketChat/Rocket.Chat.Electron> || [rocketchat-desktop](#)<sup>AUR</sup>

- **Session Desktop** — Onion routing based messenger. Based on the [Electron](#) platform.

<https://getsession.org/> || [session-desktop](#)<sup>AUR</sup>

- **Signal Desktop** — Desktop application for Signal private messenger. Based on the [Electron](#) platform.

<https://github.com/signalapp/Signal-Desktop> || [signal-desktop](#)

- **Skype** — Popular but proprietary application for voice and video communication. Based on the [Electron](#) platform.

<https://www.skype.com/> || [skypeforlinux-stable-bin](#)<sup>AUR</sup>

- **Slack** — Proprietary Slack client for desktop. Based on the [Electron](#) platform.

<https://slack.com/downloads/linux> || [slack-desktop](#)<sup>AUR</sup>

- **teams-for-linux** — Unofficial Microsoft Teams for Linux client. Based on the [Electron](#) platform.

<https://github.com/IsmaelMartinez/teams-for-linux> || [teams-for-linux](#)<sup>AUR</sup>

- **TeamSpeak** — Proprietary VoIP application with gamers as its target audience.

<https://www.teamSpeak.com/> || [teamspeak3](#)

- **TeamTalk** — Proprietary VoIP application with video chat, file and desktop sharing. Desktop sharing does not appear to be working in Linux though. AUR package is server only, but client is built in the make process.

<https://bearware.dk> || [teamtalk](#)<sup>AUR</sup>

- **Telegram Desktop** — Official Telegram desktop client.

<https://desktop.telegram.org/> || [telegram-desktop](#)

- **ThreemaQT** — Unofficial Threema Web desktop client.

<https://gitlab.com/bit3/threemaqt> || [threemaqt](#)<sup>AUR</sup><sup>[[broken link](#): package not found]</sup>

- **Viber** — Proprietary cross-platform IM and VoIP software.

<https://www.viber.com/products/linux/> || [viber](#)<sup>AUR</sup>

- **Wire** — Modern, private messenger. Based on the [Electron](#) platform.

<https://wire.com/> || [wire-desktop](#)

- **YakYak** — Unofficial desktop client for Google Hangouts. Based on the [Electron](#) platform.

<https://github.com/yakyak/yakyak> || [yakyak-git](#)<sup>AUR</sup>

- **Zoom** — Proprietary video conferencing, online meetings and group messaging application.

<https://zoom.us/> || [zoom](#)<sup>AUR</sup>

- **Zulip** — Desktop client for Zulip group chat. Based on the [Electron](#) platform.

<https://zulipchat.com/apps/linux> || [zulip-desktop](#)<sup>AUR</sup>

## Instant messaging servers

See also [Wikipedia:Comparison of instant messaging protocols](#).

### IRC servers

- **InspIRCd** — A stable, modern and lightweight IRC daemon.

<https://www.inspircd.org/> || [inspircd](#)<sup>AUR</sup>

- **IRCD-Hybrid** — A lightweight, high-performance internet relay chat daemon.

<https://www.ircd-hybrid.org/> || [ircd-hybrid](#)<sup>AUR</sup>

- **miniircd** — A small and configuration free IRC server, suitable for private use.

<https://github.com/jrosdahl/miniircd> || [miniircd-git](#)<sup>AUR</sup>

- **ngIRCd** — A free, portable and lightweight Internet Relay Chat server for small or private networks.

<https://ngircd.barton.de/> || [ngircd](#)<sup>AUR</sup>

- **Ergo** — A modern and simple to set up IRC server written in Go. Combines the features of an IRCd, a services framework, and a bouncer.

<https://ergo.chat/> || [ergochat](#)<sup>AUR</sup>

- **UnrealIRCd** — Open Source IRC Server.

<https://www.unrealircd.org/> || [unrealircd](#)

### XMPP servers

See also [Wikipedia:Comparison of XMPP server software](#).

- **Prosody** — An XMPP server written in the [Lua](#) programming language. Prosody is designed to be lightweight and highly extensible. It is licensed under a permissive [MIT license](#).

<https://prosody.im/> || [prosody](#)

- **Ejabberd** — Robust, scalable and extensible XMPP Server written in Erlang

<https://www.ejabberd.im/> || [ejabberd](#)

- **Jabberd2** — An XMPP server written in the C language and licensed under the GNU General Public License. It was inspired by jabberd14.

<https://jabberd2.org/> || [jabberd2](#)<sup>AUR</sup>

- **Openfire** — An XMPP IM multiplatform server written in Java

<https://www.igniterealtime.org/projects/openfire/> || [openfire](#)

## SIP servers

See also [Wikipedia:List of SIP software#Servers](#).

- **Asterisk** — A complete PBX solution.

<https://www.asterisk.org/> || [asterisk](#)<sup>AUR</sup>

- **Kamailio** — Rock solid SIP server.

<https://www.kamailio.org/> || [kamailio](#)<sup>AUR</sup>

- **openSIPS** — SIP proxy/server for voice, video, IM, presence and any other SIP extensions.

<https://opensips.org/> || [opensips](#)

- **Repro** — An open-source, free SIP server.

[https://www.resiprocate.org/About\\_Repro](https://www.resiprocate.org/About_Repro) || [repro](#)<sup>AUR</sup>

- **Yate** — Advanced, mature, flexible telephony server that is used for VoIP and fixed networks, and for traditional mobile operators and MVNOs.

<http://yate.ro/> || [yate](#)

## Other IM servers

- **Mattermost** — Open source private cloud server, Slack-alternative.

<https://github.com/mattermost/mattermost-server> || [mattermost](#)

- **[Murmur](#)** — The voice chat application server for Mumble.

<https://www.mumble.info/> || [mumble-server](#)

- **Nextcloud Talk** — Video- and audio-conferencing app for Nextcloud.

<https://github.com/nextcloud/spreed> || [nextcloud-app-spreed](#)

- **Rocket.Chat** — Web chat server, developed in JavaScript, using the Meteor fullstack framework.

<https://github.com/RocketChat/Rocket.Chat> || [rocketchat-server](#)<sup>AUR</sup>

- **Spread WebRTC** — WebRTC audio/video call and conferencing server.

<https://github.com/strukturag/spreed-webrtc> || [spreed-webrtc-server](#)<sup>AUR</sup>

- **[Synapse](#)** — Reference homeserver for the Matrix protocol.

<https://github.com/matrix-org/synapse> || [matrix-synapse](#)

- **[TeamSpeak](#) Server** — Proprietary VoIP conference server.

<https://teamspeak.com/> || [teamspeak3-server](#)

- **uMurmur** — Minimalistic Mumble server.

<https://umurmur.net/> || [umurmur](#)

## Collaborative software

See also [Wikipedia:Collaborative software](#).

- **[Citadel/UX](#)** — Includes an email & mailing list server, instant messaging, address books, calendar/scheduling, bulletin boards, and wiki and blog engines.

<https://www.citadel.org/> || [webcit](#)<sup>AUR</sup>

- **[SOGO](#)** — Groupware server built around OpenGroupware.org (OGGo) and the SOPE application server.

<https://sogo.nu/> || [sogo](#)<sup>AUR</sup>

## Link shortening servers

- **microbin** — A tiny, self-contained, configurable paste bin and URL shortener written in Rust.

<https://github.com/szabodanika/microbin> || [microbin](#)<sup>AUR</sup>

- **pb** — A lightweight pastebin and url shortener built using flask.

<https://github.com/ptpb/pb> || [pb](#)<sup>AUR</sup>

- **shlink** — Self-proclaimed definitive self-hosted URL shortener.

<https://shlink.io/> || [shlink](#)<sup>AUR</sup>

- **YOURLS** — A self-hosted link shortening service written in PHP.

<https://yourls.org/> || [yourls](#)<sup>AUR</sup>

## News, RSS, and blogs

### News aggregators

[Web feeds](#) aggregators. Some [email clients](#) are also able to act as news aggregator: [Claws Mail](#) RSSyl plugin, [Evolution](#), [SeaMonkey Mail & Newsgroups](#), [Thunderbird](#).

See also [Wikipedia:Comparison of feed aggregators](#).

### Console

- [Canto](#) — Ncurses RSS aggregator.

<https://github.com/themoken/canto-curses> || [canto-curses](#)

- [Gnus](#) — Email, NNTP and RSS client for Emacs.

<https://www.gnus.org/> || [emacs](#)

- **feed2imap-go** — [feed2imap](#) reimplemented in Go that aggregating RSS/Atom/jsonfeed into folders of your IMAP mailbox.

<https://github.com/Necoro/feed2imap-go> || [feed2imap-go](#)<sup>AUR</sup>

- [Newsboat](#) — Ncurses RSS aggregator with layout and keybinding similar to the [Mutt](#) email client.

<https://newsboat.org/> || [newsboat](#)

- **Rawdog** — "RSS Aggregator Without Delusions Of Grandeur" that parses RSS/CDF/Atom feeds into a static HTML page of articles in chronological order.

<https://offog.org/code/rawdog/> || [rawdog](#)<sup>AUR</sup>

- **rss2email** — Aggregating your RSS/Atom feed into your IMAP/Maildir mailbox as a cronjob.

<https://github.com/rss2email/rss2email> || [rss2email](#)

- **sfeed** — Crontab oriented shell-scriptable feed aggregator setup with a RSS/Atom parser utility plus a simple ncurses reader.

<https://codemadness.org/sfeed-simple-feed-parser.html> || [sfeed](#)<sup>AUR</sup>

- **Snownews** — Text mode RSS news reader.

<https://sourceforge.net/projects/snownews/> || [snownews](#)<sup>AUR</sup>

## Graphical

- **Akregator** — News aggregator for KDE, part of [kde-pim](#).

<https://apps.kde.org/akregator/> || [akregator](#)

- **Alligator** — Kirigami-based RSS/Atom feed reader for mobile devices.

<https://apps.kde.org/alligator/> || [alligator](#)

- **FeedReader** — Modern desktop application designed to complement existing web-based RSS accounts. Discontinued.

<https://jangernert.github.io/FeedReader/> [[dead link](#) 2023-05-06 ⓘ] || [feedreader](#)<sup>AUR</sup>

- **Feeds** — An RSS/Atom feed reader for GNOME.

<https://gabmus.gitlab.io/gnome-feeds/> || [gfeeds](#)

- **Fluent Reader** — Modern desktop RSS reader built with React and Fluent UI. Based on the [Electron](#) platform.

<https://hyliu.me/fluent-reader/> || [fluent-reader](#)<sup>AUR</sup>

- **HackUp** — Read Hacker News from the desktop.

<https://github.com/mdh34/hackup> || [hackup-gi](#)<sup>AUR</sup>

- **Liferea** — GTK news aggregator for online news feeds and weblogs.

<https://lzone.de/liferea/> || [liferea](#)

- **NewsFlash** — Modern feed reader designed for the GNOME desktop. The spiritual successor to FeedReader.

[https://gitlab.com/news-flash/news\\_flash\\_gtk](https://gitlab.com/news-flash/news_flash_gtk) || [newsflash](#)

- **Nextcloud News** — RSS/Atom feed reader for Nextcloud.

<https://github.com/nextcloud/news> || [nextcloud-app-news](#)

- **Raven** — Simple desktop RSS reader made using VueJS. Based on the [Electron](#) platform.

<https://ravenreader.app/> || [raven-reader](#)<sup>AUR</sup>

- **RSS Guard** — Very tiny RSS and ATOM news reader developed using Qt framework.

<https://github.com/martinrotter/rssguard> || [rssguard](#) or [rssguard-lite](#)

- **selfoss** — The new multipurpose RSS reader, live stream, mashup, aggregation web application.

<https://selfoss.aditu.de/> || [selfoss](#)<sup>AUR</sup>

- **Tickr** — GTK-based RSS Reader that displays feeds as a smooth scrolling line on your desktop, as known from TV stations.

<https://www.open-tickr.net/> || [tickr](#)<sup>AUR</sup>

- **Tiny Tiny RSS** — Web-based news feed (RSS/Atom) aggregator.

<https://tt-rss.org/> || [tt-rss](#)

## Podcast clients

Some media players are also able to act as podcast client: [Amarok](#), Cantata, [Clementine](#), Goggles Music Manager, [Rhythmbox](#), [VLC media player](#). [git-annex](#) can also [function as podcatcher](#).

See also [Wikipedia:List of podcatchers](#).

## Console

- **castero** — A TUI podcast client for the terminal.

<https://github.com/xgi/castero> || [castero-gi](#)<sup>AUR</sup>

- **castget** — Simple, command-line RSS enclosure downloader, primarily intended for automatic, unattended downloading of podcasts.



<https://castget.johndal.com/> || [castget](#)

- **gpo** — Text mode interface of gPodder.

<https://gpodder.github.io/> || [gpodder](#)

- **Greg** — A command-line podcast aggregator.

<https://github.com/manolomartinez/greg> || [greg-git](#)<sup>AUR</sup>

- **Marrie** — A simple podcast client that runs on the Command Line Interface.

<https://github.com/rafaelmartins/marrie/> || [marrie-git](#)<sup>AUR</sup>

- **pcd** — A minimal podcast client written in go

<https://github.com/kvannotten/pcd> || [pcd](#)<sup>AUR</sup>

## Graphical

- **CPod** — Simple, beautiful podcast app. Based on the [Electron](#) platform.

<https://github.com/z-----/CPod> || [cpod](#)<sup>AUR</sup>

- **GNOME Podcasts** — Podcast client for the GNOME Desktop written in Rust.

<https://gitlab.gnome.org/World/podcasts> || [gnome-podcasts](#)

- **gPodder** — Podcast client and media aggregator (GTK interface).

<https://gpodder.github.io/> || [gpodder](#)

- **Vocal** — Simple podcast client for the Modern Desktop (GTK).

<https://vocalproject.net/> || [vocal](#)

- **Kasts** — Kasts is a convergent podcast application that looks good on desktop and mobile.

<https://apps.kde.org/kasts/> || [kasts](#)

- **Pocket Casts** — Electron wrapper around the Pocket Casts web app with support for MPRIIS (media controls).

<https://pocketcasts.com/> || [pocket-casts-linux](#)<sup>AUR</sup>

## Usenet newsreaders

Some [email clients](#) are also able to act as Usenet newsreader: [Claws Mail](#), [Evolution](#), [NeoMutt](#), [SeaMonkey Mail & Newsgroups](#), [Sylpheed](#), [Thunderbird](#).

See also: [Wikipedia:List of Usenet newsreaders](#), [Wikipedia:Comparison of Usenet newsreaders](#).

## Console

- **nn** — Alternative more user-friendly (curses-based) Usenet newsreader for UNIX.

<http://www.nndev.org/> || [nn](#)<sup>AUR</sup>

- **slrn** — Text-based news client.

<https://www.slrn.org/> || [slrn](#)<sup>AUR</sup>

- **tin** — A cross-platform threaded NNTP and spool based UseNet newsreader.

<http://tin.org/> || [tin](#)<sup>AUR</sup>

- **trn** — A text-based Threaded Usenet newsreader.

<http://trn.sourceforge.net/> || [trn](#)<sup>AUR</sup>

## Graphical

- **NZBGet** — Usenet binary downloader for .nzb files with web and CLI interface.

<https://nzbget.net/> || [nzbget](#)

- **Pan** — GTK Usenet newsreader that's good at both text and binaries.

<https://pan.rebelbase.com/> || [pan](#)

- **SABnzbd** — An open-source binary newsreader webapp written in Python.

<https://sabnzbd.org/> || [sabnzbd](#)<sup>AUR</sup>

- **XRN** — Usenet newsreader for X Window System.

<http://www.mit.edu/people/jik/software/xrn.html> || [xrn](#)<sup>AUR</sup>

## Microblogging clients

- **Choqok** — Microblogging client for KDE that supports Mastodon, Pump.io and GNU social.

<https://choqok.kde.org/> || [choqok](#)

- **Dianara** — Pump.io client written in Qt.

<https://jancoding.wordpress.com/dianara/> || [dianara](#)<sup>AUR</sup>

- **Giara** — Reddit app, built with Python, GTK and Handy.

<https://gitlab.gnome.org/World/giara> || [giara](#)<sup>AUR</sup>

- **Mikutter** — Simple, powerful Mastodon client using GTK and Ruby.

<https://mikutter.hachune.net/><sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [mikutter](#)<sup>AUR</sup>

- **Pumpa** — Pump.io client written in C++ and Qt.

<https://pumpa.branchable.com/> || [pumpa-git](#)<sup>AUR</sup>

- **Tokodon** — Mastodon client for KDE.

<https://apps.kde.org/tokodon/> || [tokodon](#)

- **toot** — CLI and TUI tool for interacting with Mastodon instances.

<https://github.com/ihabunek/toot> || [toot](#)<sup>AUR</sup>

- **tuba** — GTK4 client for Mastodon.

<https://tuba.geopjr.dev/> || [tuba](#)<sup>AUR</sup>

- **Whalebird** — Mastodon client application. Based on the [Electron](#) platform.

<https://whalebird.social/> || [whalebird](#)<sup>AUR</sup>

## Blog engines

See also [Wikipedia:Blog software](#) and [Wikipedia:List of content management systems](#).

**Note:** Content managers, social networks, and blog publishers overlap in many functions.

- **Diaspora** — A distributed privacy aware social network.

<https://diasporafoundation.org> || [diaspora-mysql](#)<sup>AUR</sup> or [diaspora-postgresql](#)<sup>AUR</sup>

- **Drupal** — A PHP-based content management platform.

<https://www.drupal.org/> || [drupal](#)

- **Joomla** — A php Content Management System (CMS) which enables you to build websites and powerful online applications.

<https://www.joomla.org/> || [joomla](#)<sup>AUR</sup>

- **Wordpress** — Blog tool and publishing platform.

<https://wordpress.org/> || [wordpress](#)

## Static site generators

- **Hexo** — Fast, simple and powerful blog framework.

<https://hexo.io/> || [hexo-cli](#)<sup>AUR</sup>

- **Hugo** — Hugo is a static HTML and CSS website generator written in Go. It is optimized for speed, ease of use, and configurability.

<https://gohugo.io/> || [hugo](#)

- **Jekyll** — Static blog engine, written in Ruby, which supports Markdown, textile and other formats.

<https://jekyllrb.com/> || [jekyll](#)<sup>AUR</sup>

- **Nanoblogger** — A small weblog engine written in Bash for the command line. It uses common UNIX tools such as cat, grep, and sed to create static HTML content. It is not maintained anymore.

<http://nanoblogger.sourceforge.net/> || [nanoblogger](#)<sup>AUR</sup>

- **Nikola** — Static site generator written in Python, with incremental rebuilds and multiple markup formats.

<https://getnikola.com/> || [nikola](#)

- **Pelican** — Static site generator, powered by Python.

<https://docs.getpelican.com/> || [pelican](#)

- **Zola** — An opinionated static site generator, written in Rust.

<https://www.getzola.org/> || [zola](#)

## Remote desktop

See also [Wikipedia:Remote desktop software](#) and [Wikipedia:Comparison of remote desktop software](#).

See also [Chrome Remote Desktop](#) for a web browser based solution.

## Remote desktop clients

- **AnyDesk** — Proprietary remote desktop software.

<https://anydesk.com/> || [anydesk-bin](#)<sup>AUR</sup>

- **GNOME Connections** — Remote desktop client for GNOME. Supports RDP and VNC. Part of [gnome](#).

<https://gitlab.gnome.org/GNOME/connections> || [gnome-connections](#)

- **GVncViewer** — Simple VNC Client on Gtk-VNC. Run with [gvncviewer](#).

<https://wiki.gnome.org/Projects/gtk-vnc> || [gtk-vnc](#)

- **KRDC** — Remote Desktop Client for KDE. Supports RDP and VNC. Part of [kde-network](#).

<https://apps.kde.org/krdc/> || [krdc](#)

- **Remmina** — Remote desktop client written in GTK. Supports RDP, VNC, NX, XDMCP and SSH.

<https://remmina.org/> || [remmina](#)

- **Remote Viewer** — Simple remote display client. Supports SPICE and VNC.

<https://virt-manager.org/> || [virt-viewer](#)

- **Remotely** — Simple VNC viewer for GNOME. Discontinued.

<https://gitlab.gnome.org/World/Remotely> || [remotely](#)<sup>AUR</sup>

- **RustDesk** — A remote desktop software, open source, written in Rust.

[https://rustdesk.com](https://rustdesk.com/) || [rustdesk](#)<sup>AUR</sup>

- **Sunlogin Remote Control** — Proprietary software that supports remote control of mobile devices, Windows, Mac, Linux and other systems. It uses its own proprietary protocol.

<https://sunlogin.oray.com/en/about/about> || [sunloginclient](#)<sup>AUR</sup>

- **ToDesk** — Proprietary remote desktop client that suits for remote teamwork. It uses its own proprietary protocol.

<https://www.todesk.com/> || [todesk-bin](#)<sup>AUR</sup>

- **TeamViewer** — Proprietary remote desktop client. It uses its own proprietary protocol.

<https://www.teamviewer.com/> || [teamviewer](#)<sup>AUR</sup>

- **[vncviewer \(TigerVNC\)](#)** — VNC viewer for X.

<https://tigervnc.org/> || [tigervnc](#)

- **[Vinagre](#)** — Remote desktop viewer for GNOME. Supports RDP, VNC, SPICE and SSH.

<https://wiki.gnome.org/Apps/Vinagre> || [vinagre](#)

- **[xfreerdp](#)** — FreeRDP X11 client. Run with [xfreerdp](#).

<https://www.freerdp.com/> || [freerdp](#)

- **[X2Go Client](#)** — A graphical client (Qt5) for the X2Go system that uses the [NX technology](#) protocol.

<https://wiki.x2go.org/doku.php> || [x2goclient](#)<sup>AUR</sup>

## Remote desktop servers

- **[Krfb](#)** — VNC server for KDE. Part of [kde-network](#).

<https://apps.kde.org/krfb/> || [krfb](#)

- **[NoMachine](#)** — Proprietary remote desktop server and client based on [NX technology](#).

<https://nomachine.com/> || [nomachine](#)<sup>AUR</sup>

- **[wayvnc](#)** — VNC server for wlroots based wayland compositors (such as [sway](#)).

<https://github.com/any1/wayvnc> || [wayvnc](#)

- **[x0vncserver \(TigerVNC\)](#)** — VNC Server for X displays.

<https://tigervnc.org/> || [tigervnc](#)

- **[x11vnc](#)** — VNC server for real X displays.

<http://www.karlrunge.com/x11vnc/> || [x11vnc](#)

- **[X2Go Server](#)** — An open source remote desktop software that uses the [NX technology](#) protocol.

<https://wiki.x2go.org/doku.php> || [x2goserver](#)<sup>AUR</sup>

- **[Xpra](#)** — A multi-platform screen and application forwarding system.

<https://xpra.org/> || [xpra](#)

- **Xrdp** — A daemon that supports RDP. It uses Xvnc, X11rdp or xorgxrdp as a backend.

<http://xrdp.org/><sup>[dead link 2023-05-06 ⓘ]</sup> || [xrdp](#)<sup>AUR</sup>

## Multimedia

### Codecs

See the main article: [Codecs](#).

### Image

#### Image viewers

See also [Wikipedia:Comparison of image viewers](#).

#### Framebuffer image viewers

- **fbi** — Image viewer for the linux framebuffer console.

<https://www.kraxel.org/blog/linux/fbida/> || [fbida](#)

- **fbv** — Very simple graphic file viewer for the framebuffer console.

<http://s-tech.elsat.net.pl/fbv/> || [fbv](#)<sup>AUR</sup>

- **fim** — Highly customizable and scriptable framebuffer image viewer based on fbi.

<https://www.nongnu.org/fbi-improved/> || [fim](#)<sup>AUR</sup>

- **jfbview** — Framebuffer PDF and image viewer based on lmlib2. Features include Vim-like controls, rotation and zoom, zoom-to-fit, and fast multi-threaded rendering.

<https://github.com/jichu4n/jfbview> || [jfbview](#)<sup>AUR</sup>

#### Graphical image viewers

- **CoreImage** — Simple lightweight easy to use image viewer based on Qt. Part of C-Suite.

<https://cubocore.org/><sup>[dead link 2023-06-17 ⓘ]</sup> || [coreimage](#)<sup>AUR</sup>

- **Deepin Image Viewer** — Image viewer for Deepin desktop.

<https://www.deepin.org/en/original/deepin-image-viewer/> || [deepin-image-viewer](#)

- **Ephoto** — A light image viewer based on EFL.

<https://www.enlightenment.org/about-ephoto> || [ephoto](#)

- **Eye of GNOME** — Image viewer for GNOME desktop. Part of [gnome](#).

<https://wiki.gnome.org/Apps/EyeOfGnome> || [eog](#)

- **Eye of MATE** — Simple graphics viewer for the MATE desktop.

<https://github.com/mate-desktop/eom> || [eom](#)

- **EyeSight** — Image viewer for the Hawaii desktop environment.

<https://github.com/hawaii-desktop/eyesight> || [eyesight](#)<sup>AUR</sup>

- **feh** — Fast, lightweight image viewer that uses imlib2.

<https://github.com/derf/feh> <https://feh.finalrewind.org> || [feh](#)

- **GPicView** — Simple and fast image viewer for X, which is part of the [LXDE](#) desktop.

<http://lxde.sourceforge.net/gpicview/> || [gpicview](#)

- **Gwenview** — Fast and easy to use image viewer for the KDE desktop.

<https://apps.kde.org/gwenview/> || [gwenview](#)

- **ida** — X11 application (Motif based) for viewing images. Install the optional dependencies as needed.

<https://www.kraxel.org/blog/linux/fbida/> || [fbida](#)

- **image-roll** — Simple and fast GTK image viewer with basic image manipulation tools.

<https://github.com/weclaw1/image-roll> || [image-roll](#)<sup>AUR</sup>

- **imv** — Lightweight image viewer with support for Wayland and animated GIFs which uses FreeImage.

<https://sr.ht/~exec64/imv/> || [imv](#)

- **Koko** — Image viewer designed for desktop and touch devices.

<https://apps.kde.org/koko/> || [koko](#)

- **KuickShow** — Fast and convenient image viewer for KDE.



<https://userbase.kde.org/KuickShow> || [kuickshow](#)

- **LxImage-Qt** — The LXQt image viewer.

<https://github.com/lxde/lximage-qt> || [lximage-qt](#)

- **meh** — meh is a small, simple, super fast image viewer using raw XLib.

<https://www.johnhawthorn.com/meh/> || [meh-git](#)<sup>AUR</sup>

- **Mirage** — PyGTK image viewer featuring support for crop and resize, custom actions and a thumbnail panel.

<https://sourceforge.net/projects/mirageiv.berlios/> || [mirage](#)<sup>AUR</sup>

- **nomacs** — Qt image viewer. It is feature-rich but starts fast and can be configured to show additional widgets or only the image.

<https://nomacs.org/> || [nomacs](#)<sup>AUR</sup>

- **nsxiv** — Simple image viewer based on imlib2 that works well with tiling window managers. Community fork of sxiv.

<https://codeberg.org/nsxiv/nsxiv> || [nsxiv](#)

- **PhotoQt** — Fast and highly configurable image viewer with a simple and nice interface.

<https://photoqt.org/> || [photoqt](#)<sup>AUR</sup>

- **pqiv** — GTK 3 based command-line image viewer with a minimal UI supporting images in compressed archives, rewrite of qiv.

<https://github.com/phillipberndt/pqiv/> || [pqiv](#)

- **qimgv** — Fast and easy to use Qt5 image viewer. Supports webm/mp4 playback via mpv.

<https://github.com/easymodo/qimgv/> || [qimgv](#)<sup>AUR</sup>

- **qeh** — Actually fast and simple image viewer. Like feh but faster and simpler, and support for more formats.

<https://github.com/sandsmark/qeh/> || [qeh-git](#)<sup>AUR</sup>

- **Quick Image Viewer** — Very small and fast image viewer based on GTK and imlib2.

<http://spiegl.de/qiv/> || [qiv](#)<sup>AUR</sup>

- **qView** — Qt image viewer designed with minimalism and usability in mind.

<https://interversehq.com/qview/> || [qview](#)<sup>AUR</sup>

- **Ristretto** — Fast and lightweight image viewer for the Xfce desktop environment.

<https://docs.xfce.org/apps/ristretto/start> || [ristretto](#)

- **shufti** — shufti non-destructively saves and restores the zoom level, rotation, window size, desktop location and viewing area on a per-image/file location basis

<https://github.com/danboid/shufti> || [shufti](#)<sup>AUR</sup>

- **sxiv** — Simple image viewer based on imlib2 that works well with tiling window managers.

<https://github.com/muennich/sxiv> || [sxiv](#)

- **Viewnior** — Minimalistic GTK image viewer featuring support for flipping, rotating, animations and configurable mouse actions.

<https://siyanpanayotov.com/project/viewnior> || [viewnior](#)

- **Vimiv** — An image viewer with vim-like keybindings. It is written in python3 using the Gtk3 toolkit.

<https://karlch.github.io/vimiv/> || [vimiv](#)

- **Vimiv (Qt port)** — An image viewer with vim-like keybindings. It is written in python3 and PyQt5.

<https://karlch.github.io/vimiv-qt/> || [vimiv-qt](#)<sup>AUR</sup>

- **vpv** — Image viewer designed for scientific image visualization.

<https://github.com/kidanger/vpv> || [vpv](#)<sup>AUR</sup>

- **Xloadimage** — Classic X image viewer.

<https://sioseis.ucsd.edu/xloadimage.html> <sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [xloadimage](#)

## Image organizers

See also [Wikipedia:Image organizer](#).

- **Deepin Album** — Photo manager for viewing and organizing pictures, for Deepin desktop.

<https://github.com/linuxdeepin/deepin-album> || [deepin-album](#)

- **[digiKam](#)** — KDE-based image organizer with built-in editing features via a plugin architecture. digiKam asserts it is more full featured than similar applications with a larger set of image manipulation features including RAW image import and manipulation.

<https://www.digikam.org/> || [digikam](#)

- **Frogr** — Small application for the GNOME desktop that allows users to manage their accounts in the Flickr image hosting website.

<https://wiki.gnome.org/Apps/Frogr> || [frogr](#)<sup>AUR</sup>

- **[Geeqie](#)** — Image browser and viewer (fork of GQview) that adds additional functionality such as support for RAW files.

<http://geeqie.org/> || [geeqie](#)

- **GNOME Photos** — Access, organize, and share your photos on GNOME. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Photos> || [gnome-photos](#)

- **[gThumb](#)** — Image viewer and browser for the GNOME desktop.

<https://wiki.gnome.org/Apps/Gthumb> || [gthumb](#)

- **[KPhotoAlbum](#)** — Digital image cataloging software that supports annotation, browsing, searching and viewing of digital images and videos.

<https://www.kphotoalbum.org/> || [kphotoalbum](#)

- **Memories** — Image viewer and manager designed for elementary OS.

<https://anufrij.org/memories/> || [showmypictures](#)<sup>AUR</sup>

- **Pantheon Photos** — Photo organizer for Pantheon.

<https://launchpad.net/pantheon-photos> || [pantheon-photos](#)

- **PhotoPrism** — Personal Photo Management powered by Go and Google TensorFlow

<https://photoprism.app/> || [photoprism](#)<sup>AUR</sup>

- **Phototonic** — Fast and functional image viewer and browser (Qt).

<https://github.com/oferkv/phototonic/> || [phototonic](#)

- **Pix** — Image gallery and image viewer that can be used to open images with other applications like an image editor, add tags to the files, add annotations to pictures, rotate and share them.

<https://apps.kde.org/pix/> || [maui-pix](#)

- **Pix** — Image viewer and browser based on gthumb. X-Apps Project.

<https://github.com/linuxmint/pix> || [pix](#)<sup>AUR</sup>

- **Rapid Photo Downloader** — Download photos and videos from cameras, memory cards and portable storage devices.

<https://www.damonlynch.net/rapid/> || [rapid-photo-downloader](#)

- **Shotwell** — A digital photo organizer designed for the GNOME desktop environment

<https://wiki.gnome.org/Apps/Shotwell> || [shotwell](#)

## Image processing

- **CairoSVG** — SVG to PNG, PDF, PS converter.

<https://cairosvg.org/> || [python-cairosvg](#)

- **Converseen** — Qt-based batch image converter and resizer.

<https://converseen.fasterland.net/> || [converseen](#)

- **CropGUI** — GTK utility for lossless cropping and rotation of JPEG files.

<https://github.com/jepler/cropgui> || [cropgui](#)<sup>AUR</sup>

- **dcraw** — Converts many camera RAW formats.

<https://dechifro.org/dcraw/> || [dcraw](#)

- **G'MIC** — Full-featured open-source framework for image processing, providing several different user interfaces to convert/manipulate/filter/visualize generic image datasets, ranging from 1d scalar signals to 3d+t sequences of multi-spectral volumetric images, including 2d color images.

<https://www.gmic.eu/> || [gmic](#)

- **GraphicsMagick** — Fork of ImageMagick designed to have API and command-line stability. It also supports multi-CPU for enhanced performance and thus is used by some large commercial sites (Flickr, etsy) for its performance.

<http://www.graphicsmagick.org/> || [graphicsmagick](#)

- **ImageMagick** — Command-line image manipulation program. It is known for its accurate format conversions with support for over 100 formats. Its API enables it to be scripted and it is usually used as a backend processor.

<https://www.imagemagick.org/script/index.php> || [imagemagick](#)

- **ImPPG** — performs Lucy-Richardson deconvolution, unsharp masking, brightness normalization and tone curve adjustment

<http://greatattractor.github.io/imppg/> || [imppg](#)<sup>AUR</sup>

- **PosteRazor** — Cut an image or PDF into pieces which can be printed and assembled to a poster.

<https://posterazor.sourceforge.io/> || [posterazor](#)

- **waifu2x** — Image Super-Resolution for Anime-style art using Deep Convolutional Neural Networks.

<https://github.com/nagadomi/waifu2x> || [waifu2x-git](#)<sup>AUR</sup>

## Image compression

### Console

- **Guetzli** — A perceptual JPEG encoder, aiming for excellent compression density at high visual quality.

<https://github.com/google/guetzli> || [guetzli](#)

- **jpegoptim** — JPEG optimization utility providing lossless and lossy compression.

<https://www.kokkonen.net/tjko/projects.html#jpegoptim> || [jpegoptim](#)

- **optipng** — Lossless PNG compressor.

<https://optipng.sourceforge.net/> || [optipng](#)

- **oxipng** — Lossless multithreaded PNG compressor.

<https://github.com/shssoichiro/oxipng> || [oxipng](#)

- **pngcrush** — Tool for optimizing the compression of PNG files.

<https://pmt.sourceforge.io/pngcrush/> || [pngcrush](#)

- **pngquant** — Lossy compression of PNG images.

<https://pngquant.org/> || [pngquant](#)

- **zopfli** — Highly efficient PNG optimisation tool using Google's zopfli library

<https://github.com/google/zopfli> || [zopfli](#)

#### Graphical

- **Curtail** — GTK-based image compressor, supporting PNG and JPEG file types.

<https://github.com/Huluti/Curtail> || [curtail](#)

- **Image Optimizer** — Simple lossless image optimizer built with Vala and Gtk for Elementary OS.

<https://github.com/GijsGoudzwaard/Image-Optimizer> || [image-optimizer-git](#)<sup>AUR</sup>

- **Trimage** — Qt-based tool for optimizing PNG and JPG files.

<https://trimage.org/> || [trimage](#)<sup>AUR</sup>

#### Raster graphics editors

See also [Wikipedia:Comparison of raster graphics editors](#).

- **AzPainter** — Painting software for illustration drawing.

<https://gitlab.com/azelpg/azpainter> || [azpainter](#)<sup>AUR</sup>

- **CorePaint** — Simple bitmap painting tool to produce very simple graphics. Part of C-Suite.

<https://cubocore.org/> <sup>[dead link 2023-06-17 ⓘ]</sup> || [corepaint](#)<sup>AUR</sup>

- **Deepin Draw** — Lightweight drawing tool for Deepin desktop.

<https://github.com/linuxdeepin/deepin-draw> || [deepin-draw](#)

- **Drawing** — Drawing application for the GNOME desktop, using Cairo and GdkPixbuf for basic drawing operations.

<https://github.com/maoschanz/drawing> || [drawing](#)

- **Drawpile** — Collaborative drawing program that allows multiple users to sketch on the same canvas simultaneously.

<https://drawpile.net/> || [drawpile](#)<sup>AUR</sup>

- **GIMP** — Image editing suite in the vein of proprietary editors such as [Adobe Photoshop](#). GIMP ([GNU](#) Image Manipulation Program) has been started in the mid 1990s and has acquired a large number of [plugins](#) and additional tools.

<https://www.gimp.org/> || [gimp](#)

- **Gpaint** — [Paintbrush](#) clone for GNOME.

<https://www.gnu.org/software/gpaint/> || [gpaint](#)<sup>AUR</sup>

- **GrafX2** — Bitmap paint program specialized in 256 color drawing.

<http://grafx2.chez.com/> || [grafx2](#)

- **ImEditor** — Simple and versatile image editor.

<https://imeditor.github.io/> || [imeditor](#)<sup>AUR</sup>

- **KolourPaint** — Free raster graphics editor for KDE, similar to Microsoft's Paint application before Windows 7, but with some additional features such as support for transparency. Part of [kde-applications](#) and [kde-graphics](#) groups.

<http://kolourpaint.org/> || [kolourpaint](#)

- **Krita** — Digital painting and illustration software included based on the KDE platform.

<https://krita.org/> || [krita](#)

- **Milton** — Infinite-canvas paint program.

<https://www.miltonpaint.com/> || [milton-git](#)<sup>AUR</sup>

- **mtPaint** — Graphics editing program geared towards creating indexed palette images and pixel art.

<https://mtpaint.sourceforge.net/> || [mtpaint](#)

- **MyPaint** — Free software graphics application for digital painters.

<http://mypaint.org> || [mypaint](#)

- **PhotoFlare** — Simple but powerful image editor originally inspired by PhotoFiltre.

<https://photoflare.io/> || [photoflare](#)

- **Pinta** — Drawing and editing program modeled after [Paint.NET](#). Its goal is to provide a simplified alternative to GIMP for casual users.

<https://pinta-project.com/> || [pinta](#)

- **Pixelitor** — Advanced image editor with support for layers, layer masks, text layers, multiple undo, blending modes, cropping, Gaussian blurring, unsharp masking, histograms, etc.

<https://pixelitor.sourceforge.io/> || [pixelitor](#)<sup>AUR</sup>

- **Swappy** — Wayland native snapshot editing tool.

<https://github.com/jtheoof/swappy> || [swappy](#)

- **XPaint** — Color image editing tool which features most standard paint program options.

<https://sourceforge.net/projects/sf-xpaint/> || [xpaint](#)<sup>AUR</sup>

Some image viewers and organizers like [digiKam](#), Ephoto, GNOME Photos, [gThumb](#), [ida](#), [nomacs](#), [Pantheon Photos](#), [Phototonic](#) and [Shotwell](#) also provide some basic image manipulation functionality.

### Specialized photo editors

- **A Photo Tool (Libre)** — Photo editor with easy to use basic image editing tools.

<https://www.ahola.me/aphototoollibre.html> || [aphototoollibre](#)<sup>AUR</sup>

- **darktable** — Photography workflow and RAW development application.

<https://www.darktable.org/> || [darktable](#)

- **Filmulator** — Simple raw photo editor based on the process of developing film.

<https://filmulator.org/> || [filmulator](#)<sup>AUR</sup>

- **FOSStriangulator** — Tool for making triangulated illustrations out of photos.

<https://github.com/FOSStriangulator/FOSStriangulator> || [fosstriangulator](#)<sup>AUR</sup>

- **Hugin** — Panorama photo stitcher.

<http://hugin.sourceforge.net/> || [hugin](#)

- **LightZone** — Professional-level digital darkroom and photo editor comparable to Photoshop Lightroom.



<http://lightzoneproject.org/> || [lightzone](#)<sup>AUR</sup>

- **Luminance HDR** — Open source graphical user interface application that aims to provide a workflow for HDR imaging.

<https://qtpfsgui.sourceforge.net/> || [luminancehdr](#)

- **nUFRaw** — Utility to read and manipulate raw images from digital cameras using DCRaw.

<https://sourceforge.net/projects/nufraw/> || [gimp-nufraw](#)

- **Oqapy** — Photographic workflow application.

<https://oqapy.eu/> || [oqapy](#)<sup>AUR</sup>

- **Rawstudio** — Raw-image converter written in GTK.

<https://rawstudio.org/> || [rawstudio](#)<sup>AUR</sup>

- **RawTherapee** — A powerful cross-platform raw image processing program.

<https://www.rawtherapee.com/> || [rawtherapee](#)

- **Showfoto** — Photo editor with powerful image editing tools.

<https://www.digikam.org/> || [digikam](#)

## Photo geotagging

- **Geotag** — Match date/time information from photos with location information from a GPS unit or from a map.

<https://geotag.sourceforge.net/> || [geotag](#)

- **Geotagging** — Photography geotagging tool to synchronize photos with gps track log (GPX).

<https://github.com/jmlich/geotagging> || [geotagging](#)<sup>AUR</sup>

- **GottenGeography** — Easy to use photo geotagging application for the GNOME desktop.

<https://launchpad.net/gottengeography> || [gottengeography](#)

- **GPicSync** — Inserts location in your pictures metadata from a GPS tracklog.

<https://github.com/FrancoisSchnell/GPicSync> || [gpicsync](#)<sup>AUR</sup>

- **GPSCorrelate** — Correlate (geotagging) digital camera photos with GPS data in GPX format.

<https://github.com/freefoote/gpscorrelate> || [gpscorrelate](#)

## Vector graphics editors

See also [Wikipedia:Comparison of vector graphics editors](#).

- **Dia** — GTK-based diagram creation program.

<https://wiki.gnome.org/Apps/Dia> || [dia](#)<sup>AUR</sup>

- **diagrams.net** — Diagram drawing application built on web technology. Based on the [Electron](#) platform.

<https://www.diagrams.net/> || [drawio-desktop](#)<sup>AUR</sup>

- **Dot Matrix** — The glyph playground of creativity from simple lines.

<https://github.com/lainsce/dot-matrix/> || [dot-matrix](#)<sup>AUR</sup>

- **Figma** — Unofficial desktop application for Figma collaborative design tool. Based on the [Electron](#) platform.

<https://github.com/Figma-Linux/figma-linux> || [figma-linux](#)<sup>AUR</sup>

- **Gravit Designer** — Proprietary vector design application. Based on the [Electron](#) platform.

<https://designer.io/> <sup>[dead link 2023-05-06 ⓘ]</sup> || [gravit-designer-bin](#)<sup>AUR</sup>

- **Inkscape** — Vector graphics editor, with capabilities similar to [Illustrator](#), [CorelDraw](#), or [Xara X](#), using the SVG (Scalable Vector Graphics) file format.

<https://inkscape.org/> || [inkscape](#)

- **Karbon** — Vector graphics editor, part of the Calligra Suite.

<https://www.calligra.org/karbon/> || [calligra](#)

- **LazPain** — Image editor, like PaintBrush or Paint.Net, written in Lazarus (Free Pascal)

<https://lazpaint.github.io/> || [lazpaint-bin](#)<sup>AUR</sup>

- **LibreOffice Draw** — Vector graphics editor and diagramming tool included in the LibreOffice suite similar to Microsoft Visio.

<https://www.libreoffice.org/discover/draw/> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **Mockitt** — Proprietary online design, prototyping, and collaboration platform. Based on the [Electron](#) platform.

<https://mockitt.wondershare.com/> || [mockitt](#)<sup>AUR</sup>

- **OpenOffice Draw** — Vector graphics editor and diagramming tool included in the OpenOffice suite.

<https://www.openoffice.org/product/draw.html> || [openoffice-bin](#)<sup>AUR</sup>

- **Pencil Project** — GUI prototyping and mockup tool. Based on the [Electron](#) platform.

<https://pencil.evolus.vn/> || [pencil](#)<sup>AUR</sup>

- **sk1** — Replacement for Adobe Illustrator or CorelDraw, oriented for "prepress ready" PostScript & PDF output.

<https://sk1project.net/> || [sk1](#)<sup>AUR</sup>

- **SvgVi** — SVG viewer and editor using XML declarations.

<https://gitlab.com/pwmc/svgvi> || [svgvi](#)<sup>AUR</sup>

- **yEd** — General-purpose proprietary diagramming program for flowcharts, network diagrams, UML diagrams, BPMN diagrams, mind maps, organization charts, and Entity Relationship diagrams.

<https://www.yworks.com/products/yed> || [yed](#)<sup>AUR</sup>

- **Xfig** — Interactive drawing tool.

<https://mcj.sourceforge.net/> || [xfig](#)<sup>AUR</sup>

## Font editors

See also [Wikipedia:Comparison of font editors](#).

- **Birdfont** — Font editor which lets you create vector graphics and export TTF, EOT and SVG fonts.

<https://birdfont.org/> || [birdfont](#)

- **FontForge** — Outline font editor.

<https://fontforge.github.io/> || [fontforge](#)

- **TruFont** — Font-editing application.

<https://trufont.github.io/> || [trufont](#)<sup>AUR</sup>

## 2D animation

- **enve** — Flexible, user expandable 2D animation software.

<https://maurycyliebner.github.io/> || [enve-git](#)<sup>AUR</sup>

- **Glaxnimate** — Vector 2D animation software, mainly for Lottie and TGS formats, but have a good standard animated SVG export

<https://glaxnimate.mattbas.org/> || [glaxnimate](#)<sup>AUR</sup>

- **OpenToonz** — 2D animation creation software.

<https://opentoonz.github.io/e/> || [opentoonz](#)

- **Pencil2D** — Easy, intuitive tool to make 2D hand-drawn animations.

<https://www.pencil2d.org/> || [pencil2d](#)

- **qStopMotion** — Application for creating stop-motion animation movies. The users will be able to create stop-motions from pictures imported from a camera or from the harddrive and export the animation to different video formats such as mpeg or avi.

<https://qstopmotion.org/> || [qstopmotion](#)

- **Scribl** — Application to create simple video lectures that combine audio with hand-drawn animation.

<https://www.scribl.in/> || [scribl](#)<sup>AUR</sup>

- **Stopmotion** — Application to create stop-motion animations. It helps you capture and edit the frames of your animation and export them as a single file.

<http://linuxstopmotion.org/> || [stopmotion](#)<sup>AUR</sup>

- **Synfig Studio** — 2D animation software, designed as powerful industrial-strength solution for creating film-quality animation using a vector and bitmap artwork.

<https://www.synfig.org/> || [synfigstudio](#)

- **TupiTube Desk** — Desktop application to create and share 2D animations, focused on kids and teenagers.

<https://www.maefloresta.com/> || [tupitube](#)

- **Aseprite** — Pixel art 2d animation

<https://www.aseprite.org/> || [aseprite](#)<sup>AUR</sup>

- **Pixelorama** — Pixel art 2d animation

<https://orama-interactive.itch.io/pixelorama> || [pixelorama](#)<sup>AUR</sup>

The drawing application [Krita](#) and the 3D editor [Blender](#) (Grease Pencil mode) have both 2D animation features too.

### 3D computer graphics

See also [Wikipedia:Comparison of 3D computer graphics software](#).

- **Art of Illusion** — 3D modeling and rendering studio written in Java.

<http://www.artofillusion.org/> || [aoi](#)<sup>AUR</sup>

- **Blender** — Fully integrated 3D graphics creation suite capable of 3D modeling, texturing, and animation, among other things.

<https://www.blender.org/> || [blender](#)

- **Blockbench** — A low-poly 3D model editor

<https://www.blockbench.net/> || [blockbench](#)<sup>AUR</sup>

- **CloudCompare** — 3D point cloud and mesh processing software.

<https://cloudcompare.org/> || [cloudcompare](#)<sup>AUR</sup>

- **Dust3D** — 3D modeling software. It helps you create a 3D watertight base model in seconds. Use it to speed up your character modeling in game making, 3D printing, and so on.

<https://dust3d.org/> || [dust3d](#)<sup>AUR</sup>

- **F3D** — A fast and minimalist KISS 3D viewer. Supported file formats: VTK (legacy and XML), STL, GLTF, PLY, OBJ, 3DS, ...

<https://f3d.app> || [f3d](#)

- **Goxel** — Open Source 3D voxel editor.

<https://goxel.xyz/> || [goxel](#)

- **MakeHuman™** — Parametrical modeling program for creating human bodies.

<http://www.makehumancommunity.org/> || [makehuman](#)<sup>AUR</sup>

- **MeshLab** — System for processing and editing 3D triangular meshes.

<https://www.meshlab.net/> || [meshlab](#)<sup>AUR</sup>

- **Sweet Home 3D** — Interior design software application for the planning and development of floor plans

<http://sweethome3d.com/> || [sweethome3d](#)

- **POV-Ray** — Script-based raytracer for creating 3D graphics.

<https://www.povray.org/> || [povray](#)

- **VoxelShop** — Extremely intuitive and powerful software to modify and create voxel objects.

<https://github.com/simlu/voxelshop> || [voxelshop](#)<sup>AUR</sup>

- **Wings 3D** — Advanced subdivision modeler that is both powerful and easy to use.

<http://www.wings3d.com/> || [wings3d](#)<sup>AUR</sup>

## Color pickers and palettes

- **Agave** — Colorscheme designer tool for GNOME.

<https://web.archive.org/web/20170327063642/http://home.gna.org/colorscheme/> || [agave](#)<sup>AUR</sup>

- **Chameleon** — Simple color picker for X11 which outputs colors to stdout.

<https://github.com/seebye/chameleon> || [chameleon-git](#)<sup>AUR</sup>

- **ColorGrab** — Cross-platform color picker.

<https://github.com/nielssp/colorgrab> || [colorgrab](#)<sup>AUR</sup>

- **Color Palette** — Tool for viewing the GNOME color palette as defined by the design guidelines.

<https://gitlab.gnome.org/World/design/palette> || [palette](#)<sup>AUR</sup>

- **colorpicker** — Click on a pixel on your screen and print its color value in RGB. Written for X11.

<https://github.com/Jack12816/colorpicker> || [colorpicker](#)<sup>AUR</sup>

- **Color Picker** — Simplistic color picker for the Pantheon desktop.

<https://github.com/RonnyDo/ColorPicker> || [color-picker](#)<sup>AUR</sup>

- **Coulr** — Color box to help developers and designers.

<https://github.com/Huluti/Coulr> || [coulr](#)<sup>AUR</sup>

- **Deepin Picker** — Color picker tool for Deepin desktop.

<https://www.deepin.org/en/original/deepin-picker/> || [deepin-picker](#)

- **delicolour** — Lightweight GTK 3 color finder.

<https://github.com/eepp/delicolour> || [delicolour](#)<sup>AUR</sup>

- **Gcolor3** — Simple GTK 3 color selector.

<https://www.hjdskes.nl/projects/gcolor3/> || [gcolor3](#)

- **GPick** — Advanced color picker tool.

<http://www.gpick.org/> || [gpick](#)

- **KColorChooser** — Simple application to select the color from the screen or from a palette. Part of [kde-graphics](#).

<https://apps.kde.org/kcolorchooser/> || [kcolorchooser](#)

- **Kontrast** — Tool to check contrast for colors that allows verifying that your colors are correctly accessible. Part of [kde-accessibility](#).

<https://apps.kde.org/kontrast/> || [kontrast](#)

- **MATE Color Selection** — Choose colors from the palette or the screen. Run with `mate-color-select`.

<https://mate-desktop.org/> || [mate-desktop](#)

- **Pick** — Simple color picker tool for the Linux desktop.

<https://www.kryogenix.org/code/pick> || [pick-colour-picker](#)<sup>AUR</sup>

- **PrestoPalette** — An artist's tool for creating harmonious color palettes.

<https://github.com/PrestoPalette/PrestoPalette> || [prestopalette](#)<sup>AUR</sup>

- **xcolor** — Lightweight color picker for X11.

<https://soft.github.io/xcolor/> || [xcolor](#)

## Screenshot

See [Screen capture#Screenshot software](#).

## Digital camera managers

See [gPhoto#Installation](#).

## Audio

### Audio systems

See also the main article [Sound system](#) and [Wikipedia:Sound server](#).

### Audio players

See also [Wikipedia:Comparison of audio player software](#).

Many applications in the [#Video players](#) section also support audio playback.

### Server

- [Music Player Daemon](#) — Audio player that has a server-client architecture. In order to interface with it, a separate client is needed.

<https://www.musicpd.org/> || [mpd](#)

- [Funkwhale](#) — self-hosted, modern, free and open-source music server, heavily inspired by Grooveshark. Instances can be federated.

<https://funkwhale.audio/> || [funkwhale](#)<sup>AUR</sup>

- [Sonospy](#) — A music server for Sonos that allows you overcome the 65,000 local track limit and also offers various customization options.

<https://github.com/henkelis/sonospy/wiki/Welcome-to-Sonospy> || [sonospy-git](#)<sup>AUR</sup>

### Console

- [cmus](#) — Very feature-rich ncurses-based music player.

<https://cmus.github.io/> || [cmus](#)

- [cplay](#) — Curses front-end for various audio players (ogg123, mpg123, mpg321, splay, madplay, and mikmod, xmp, and sox) [archived since Jul 11, 2018].



<https://github.com/hukka/cplay/> || [cplay](#)<sup>AUR</sup>[\[broken link: package not found\]](#)

- **cplay-ng** — Updated fork of cplay.

<https://github.com/xi/cplay-ng> || [cplay-ng-git](#)<sup>AUR</sup>

- **davis** — A CLI client for [mpd](#), written in Rust.

<https://github.com/SimonPersson/davis> || [davis](#)<sup>AUR</sup>

- **Herrie** — Minimalistic console-based music player with native AudioScrobbler support [archived on Feb 9, 2021, last commit May 5, 2017].

<https://github.com/EdSchouten/herrie> || [herrie](#)<sup>AUR</sup>[\[broken link: package not found\]](#)

- **MOC** — Ncurses console audio player with support for the MP3, OGG, and WAV formats.

<https://moc.daper.net/> || [moc](#)

- **mous-ncurses** — Lightweight audio player & converter for FreeBSD/Linux/macOS.

<https://github.com/bsdelf/mous> || not packaged? [search in AUR](#)

- **MPFC** — Gstreamer-based audio player with curses interface.

<https://code.google.com/archive/p/mpfc/> || [mpfc](#)<sup>AUR</sup>[\[broken link: package not found\]](#)

- **mpg123** — Fast free MP3 console audio player for Linux, FreeBSD, Solaris, HP-UX and nearly all other UNIX systems (also decodes MP1 and MP2 files).

<https://www.mpg123.org/> || [mpg123](#)

- **musikcube** — A cross-platform, terminal-based music player, audio engine, metadata indexer, and server in c++.

<https://github.com/clangen/musikcube> || [musikcube](#)<sup>AUR</sup>

- **playmidi** — Playmidi is a web and curses and SDL-based MIDI file player for Linux and MacOS and Chrome (via Web MIDI and Web Audio apis).

<https://github.com/nlaredo/playmidi> || not packaged? [search in AUR](#)

- **vitunes** — Curses-based music player and playlist manager with vim-like keybindings.

<http://vitunes.org/> || [vitunes](#)<sup>AUR</sup>

- **whistle** — Curses-based commandline audio player.

<https://github.com/ap0calypse/whistle/> || [whistle-git](#)<sup>AUR</sup>

- **XMMS2** — Complete rewrite of the popular music player.

<https://github.com/xmms2/wiki/wiki> || [xmms2](#)

## Graphical

### GStreamer-based

- **Blanket** — Improve focus and increase your productivity by listening to different sounds.

<https://github.com/rafaelmardojai/blanket> || [blanket](#)

- **Byte** — Music player designed for elementary OS.

<https://github.com/alainm23/byte> || [byte](#)<sup>AUR</sup>

- **Clementine** — Amarok 1.4 clone, ported to Qt5. See also Strawberry (below).

<https://www.clementine-player.org/> || [clementine](#)<sup>AUR</sup>

- **Cozy** — Modern audio book player for Linux using GTK 3.

<https://cozy.geigi.de/> || [cozy-audiobooks](#)<sup>AUR</sup>

- **Exaile** — GTK clone of Amarok.

<https://www.exaile.org/> || [exaile](#)<sup>AUR</sup>

- **GNOME Music** — Music player for GNOME. It aims to combine an elegant and immersive browsing experience with simple and straightforward controls. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Music> || [gnome-music](#)

- **Guayadeque** — Full featured media player that can easily manage large collections and uses the GStreamer media framework.

<https://www.guayadeque.org/> || [guayadeque](#)<sup>AUR</sup>

- **Lollypop** — A GNOME music player.

<https://wiki.gnome.org/Apps/Lollypop> || [lollypop](#)

- **Melody** — Music player for listening to local music files, online radios and audio CD's.

<https://anufrij.org/melody/> || [playmymusic](#)<sup>AUR</sup>

- **Pantheon Music** — Simple, fast, and good looking music player. The official elementary music player.

<https://github.com/elementary/music> || [pantheon-music](#)

- **Parlatype** — Minimal audio player for manual speech transcription, for GNOME. It plays audio sources to transcribe them in your favorite text application.

<https://www.parlatype.org/> || [parlatype](#)<sup>AUR</sup>

- **Pragha** — A lightweight two-panel GTK music manager written in C.

<https://pragha-music-player.github.io/> || [pragha](#)

- **Quod Libet** — Audio player written with GTK, Python and GStreamer with support for regular expressions in playlists.

<https://github.com/quodlibet/quodlibet/> || [quodlibet](#)

- **Rhythmbox** — GTK clone of iTunes, used by default in GNOME.

<https://wiki.gnome.org/Apps/Rhythmbox> || [rhythmbox](#)

- **Sayonara** — Small, clear and fast audio player for Linux written in C++, uses the Qt framework.

<https://sayonara-player.com/> || [sayonara-player](#)<sup>AUR</sup>

- **Strawberry** — Fork of Clementine aimed at audio enthusiasts and music collectors. Uses Qt6.

<https://www.strawberrymusicplayer.org/> || [strawberry](#)

- **Tauon Music Box** — Modern, comfortable and streamlined music player for the playback of your music collection.

<https://tauonmusicbox.rocks/> || [tauon-music-box](#)<sup>AUR</sup>

#### Phonon-based

- **Amarok** — Mature Qt-based player known for its plethora of features.

<https://amarok.kde.org/> || [amarok](#)<sup>AUR</sup>

- **JuK** — JuK is an audio jukebox application, supporting collections of MP3, Ogg Vorbis, and FLAC audio files.

<https://juk.kde.org/> || [juk](#)

- **Yarock** — Modern looking music player, packed with features, that doesn't depend on any specific desktop environment. Yarock is designed to provide an easy and pretty music browser based on cover art.

<https://seb-apps.github.io/yarock/> <sup>[dead link 2023-05-06 ⓘ]</sup> || [yarock](#)<sup>AUR</sup>

#### Other

- **Aqualung** — Advanced music player, which plays audio CDs, internet radio streams and podcasts as well as soundfiles in just about any audio format and has the feature of inserting no gaps between adjacent tracks.

<https://aqualung.jeremyevans.net/> || [aqualung](#)<sup>AUR</sup>

- **Audacious** — [Winamp](#) clone like Beep and old XMMS versions.

<https://audacious-media-player.org/> || [audacious](#)

- **DeaDBeeF** — Light and fast music player with many features, no GNOME or KDE dependencies, supports console-only, as well as a GTK GUI, comes with many plugins, and has a metadata editor.

<https://deadbeef.sourceforge.io/> || [deadbeef](#)<sup>AUR</sup>

- **Deepin Music** — Awesome music player with brilliant and tweakful UI Deepin-UI based.

<https://www.deepin.org/en/original/deepin-music/> || [deepin-music](#)

- **Drumstick MIDI File Player** — MIDI file player based on Drumstick.

<https://sourceforge.net/projects/dmidiplayer/> || [dmidiplayer](#)<sup>AUR</sup>

- **Elisa** — Simple music player by the KDE community aiming to provide a nice experience for its users.

<https://apps.kde.org/elisa/> || [elisa](#)

- **gmusicbrowser** — Open-source jukebox for large collections of MP3/OGG/FLAC files.

<https://gmusicbrowser.org/> || [gmusicbrowser](#)<sup>AUR</sup>

- **Goggles Music Manager** — Music collection manager and player that automatically categorizes your music, supports gapless playback, features easy tag editing, and internet radio support. Uses the [Fox toolkit](#).

<https://gogglesmm.github.io/> || [gogglesmm](#)

- **LXMusic** — A minimalist xmms2-based music player.

<https://wiki.lxde.org/en/LXMusic><sup>[dead link 2023-05-06 ⓘ]</sup> || [lxmusic](#)

- **museeks** — Minimalistic and easy to use music player. Based on the [Electron](#) platform.

<https://museeks.io/> || [museeks-bin](#)<sup>AUR</sup>

- **Musique** — Just another music player, only better.

<https://flavio.tordini.org/musique> || [musique](#)<sup>AUR</sup>

- **Qmmp** — Qt-based multimedia player with a user interface that is similar to Winamp or XMMS.

<https://qmmp.ylsoftware.com/> || [qmmp](#)

- **Soundux** — Soundboard that features a simple user interface.

<https://soundux.rocks/> || [soundux](#)<sup>AUR</sup>

- **Vvave** — Tiny Qt music player to keep your favorite songs at hand.

<https://vvave.kde.org/> || [vvave](#)

## Internet radio listeners

- **GNOME Radio** — Easily find live radio programs based on geographical location of radio broadcasters on the Internet.

<http://www.gnomeradio.org/> || [gnome-radio](#)<sup>AUR</sup>

- **Goodvibes** — Lightweight internet radio player.

<https://gitlab.com/goodvibes/goodvibes> || [goodvibes](#)<sup>AUR</sup>

- **Radiotray-NG** — Internet radio player systray applet.

<https://github.com/ebruck/radiotray-ng> || [radiotray-ng](#)<sup>AUR</sup>

- **Shortwave** — GTK 3 application for finding and listening to internet radio stations.

<https://gitlab.gnome.org/World/Shortwave> || [shortwave](#)<sup>AUR</sup>

- **Tuner** — Minimalist radio station player.

<https://github.com/louis77/tuner> || [tuner](#)<sup>AUR</sup>

## Music streaming clients

- **Cider** — An open source and community oriented Apple Music client for Windows, Linux, macOS, and more. Based on the [Electron](#) platform.

<https://cider.sh/> || [cider](#)<sup>AUR</sup>

- **Google Play Music Desktop Player** — Beautiful cross platform desktop player for Google Play Music. Based on the [Electron](#) platform.

<https://github.com/MarshallOfSound/Google-Play-Music-Desktop-Player-UNOFFICIAL-/> || [gpmddp](#)<sup>AUR</sup>

- **Headset** — Desktop application that turns YouTube into a world class music streaming service. Based on the [Electron](#) platform.

<https://headsetapp.co/> || [headset](#)<sup>AUR</sup>

- **MellowPlayer** — A free, open source and cross-platform Qt-based desktop application that runs web-based music streaming services in its own window and provides integration with your desktop.

<https://colinduchesnoy.gitlab.io/MellowPlayer/> || [mellowplayer](#)<sup>AUR</sup>

- **ncspot** — Cross-platform ncurses Spotify client written in Rust, inspired by ncmtcp and the likes.

<https://github.com/hrkfdn/ncspot> || [ncspot-bin](#)<sup>AUR</sup>

- **Nuclear** — Modern music player focused on streaming from free sources. Based on the [Electron](#) platform.

<http://nuclear.gumblert.tech/> || [nuclear-player-bin](#)<sup>AUR</sup>

- [pianobar](#) — Console-based frontend for the online radio Pandora.

<https://6xq.net/projects/pianobar/> || [pianobar](#)

- **Pithos** — Python/GTK Pandora Radio desktop client.

<https://pithos.github.io/> || [pithos](#)<sup>AUR</sup>

- [Spotify](#) — Proprietary music streaming service. It supports local playback and streaming from Spotify's vast library (requires a free account).

<https://www.spotify.com/> || [spotify](#)<sup>AUR</sup>

- **spotify-qt** — Lightweight Spotify client using Qt.

<https://github.com/kraxarn/spotify-qt> || [spotify-qt](#)<sup>AUR</sup>

- **spotify-tui** — Spotify for the terminal written in Rust.

<https://github.com/Rigellute/spotify-tui> || [spotify-tui](#)<sup>AUR</sup>

## Audio tag editors

### Console

- **Beets** — Music library organizer, tagger and more.

<https://beets.io/> || [beets](#)

- **Demlo** — Batch music tagger, encoder, renamer and more.

<https://gitlab.com/ambrevar/demlo> || [demlo](#)<sup>AUR</sup>

- **id3** — Command-line utility to edit ID3 1.x and 2.x tags.

<https://squell.github.io/id3/> || [id3](#)<sup>AUR</sup>

- **id3v2** — Command line editor for id3v2 tags.

<http://id3v2.sourceforge.net/> || [id3v2](#)

- **MP3Info** — MP3 technical info viewer and ID3 1.x tag editor.

<https://ibiblio.org/mp3info/> || [mp3info](#)

- **MP3Unicode** — Command line utility to convert ID3 tags in mp3 files between different encodings.

<http://mp3unicode.sourceforge.net/> || [mp3unicode](#)

- **Taffy** — Simple command-line tag editor for many audio formats.

<https://github.com/jangler/taffy> || [taffy](#)<sup>AUR</sup>

- **Tagutil** — CLI tool to edit music file's tag. It aims to provide both an easy-to-script interface and ease of use interactively.

<https://github.com/kAworu/tagutil> || [tagutil](#)<sup>AUR</sup>

### Graphical

- **Audio Tag Tool** — Tool to edit tags in MP3 and Ogg Vorbis files.

<https://github.com/impegoraro/tagtool> || [tagtool](#)<sup>AUR</sup>

- **Coquillo** — Metadata editor for various audio formats.

<https://github.com/sjuvonen/coquillo> || [coquillo](#)<sup>AUR</sup>

- **EasyTag** — Utility for viewing, editing and writing ID3 tags of music files, supports many audio formats.

<https://wiki.gnome.org/Apps/EasyTAG> || [easytag](#)

- **Ex Falso** — Cross-platform free and open source audio tag editor and library organizer. Run with `exfalso`.

<https://github.com/quodlibet/quodlibet/> || [quodlibet](#)

- **GabTag** — Audio tagging tool written in GTK.

<https://github.com/lachhebo/gabtag> || [gabtag](#)<sup>AUR</sup>

- **Kid3** — MP3, Ogg/Vorbis, FLAC, MPC, MP4/AAC, MP2, Speex, TrueAudio, WavPack, WMA, WAV and AIFF files tag editor.

<https://kid3.kde.org/> || KDE: [kid3](#), Qt: [kid3-qt](#)

- **KTag Editor** — ID3v tag editor developed in Qt5 framework. Supported files are mp3, wav, ogg, wma, flac, asf.

<https://karoljkocmaros.blogspot.com/p/ktag-editor.html> || [ktageditor](#)<sup>AUR</sup>

- **MP3Info GUI** — MP3 technical info viewer and ID3 1.x tag editor. The graphical interface can be launched with the `gmp3info` command.

<https://ibiblio.org/mp3info/> || [mp3info](#)

- **NickvisionTagger** — GTK Music file tag editor. Can load tags from MusicBrainz database. Works with mp3, ogg, flac, wma, and wav. Convert filenames to tags and tags to filenames.

<https://github.com/nlogozzo/NickvisionTagger> || [nickvision-tagger](#)<sup>AUR</sup>[[broken link](#): package not found]

- **Picard** — Cross-platform audio tag editor written in Python (the official [MusicBrainz](#) tagger).

<https://picard.musicbrainz.org/> || [picard](#)

- **NTag** — Graphical tag editor focused on everyday life use cases.

<https://github.com/nrittsti/ntag> || [ntag](#)<sup>AUR</sup>



- **Puddletag** — Replacement for the famous MP3tag for Windows.

<https://docs.puddletag.net/> || [puddletag](#)<sup>AUR</sup>

- **Qoobar** — Universal Qt-based audio tagger (specialized for classical music).

<http://qoobar.sourceforge.net/en/index.htm> || [qoobar](#)<sup>AUR</sup>

- **Tag Editor** — A tag editor with Qt GUI and command-line interface supporting MP4/M4A/AAC (iTunes), ID3v1/ID3v2, Vorbis, Opus, FLAC and Matroska.

<https://github.com/Martchus/tageditor> || [tageditor](#)<sup>AUR</sup>

- **Thunar Media Tags Plugin** — Adds special features for media files to the Thunar File Manager, including the ability to edit tags.

<https://goodies.xfce.org/projects/thunar-plugins/thunar-media-tags-plugin> || [thunar-media-tags-plugin](#)

## Lyrics

### Lyrics players

- **Floodlight Presenter** — Presentation and lyrics program for churches to display lyrics and media.

<https://floodlight.gitlab.io/> || [floodlight-presenter](#)<sup>AUR</sup>

- **Give Me Lyrics** — See the lyrics of the song that is playing, from any application.

<https://github.com/muriloventuroso/givemelyrics> || [givemelyrics](#)<sup>AUR</sup>

- **OSD Lyrics** — Lyric show compatible with various media players.

<https://github.com/osdlyrics/osdlyrics> || [osdlyrics](#)

### Lyrics downloaders

- **clyrics** — Extensible lyrics fetcher, with daemon support for cmus and mocp.

<https://github.com/trizen/clyrics> || [clyrics](#)<sup>AUR</sup>

- **glyrc** — Command-line music related metadata searchengine, including support for downloading lyrics.

<https://github.com/sahib/glyr> || [glyr](#)

### Lyrics editors

- **Karaoke Lyrics Editor** — Lyrics editor and CD+G/video exporter for Karaoke.

<https://www.uldussoft.com/linux/karaoke-lyrics-editor/> || [karlyriceditor](#)<sup>AUR</sup>

- **LyricsX** — Lyrics editor.

<https://github.com/timxx/lyricsx> || [lyricsx](#)<sup>AUR</sup>

## Audio converters

- **Caudec** — A multiprocess command line audio converter that supports many formats (FLAC, MP3, Ogg Vorbis, Windows codecs and many more)

<https://caudec.cocatre.net/> [[dead link](#) 2023-05-07 ⓘ] || [caudec](#)<sup>AUR</sup>

- **Ecasound** — Command line tools designed for multitrack audio processing. It can be used for simple tasks like audio playback, recording and format conversions, as well as for multitrack effect processing, mixing, recording and signal recycling.

<https://nosignal.fi/ecasound/> || [ecasound](#)

- **FFaudioConverter** — Batch audio converter and effects processor. It can convert files or whole folders containing music and video files to other audio formats with FFmpeg.

<https://github.com/Bleuzen/FFaudioConverter> || [ffaudioconverter](#)<sup>AUR</sup>

- **Flacon** — Extracts individual tracks from one big audio file containing the entire album of music and saves them as separate audio files.

<https://flacon.github.io/> || [flacon](#)<sup>AUR</sup>

- **fre:ac** — Audio converter and CD ripper with support for various popular formats and encoders.

<https://freac.org/> || [freac](#)<sup>AUR</sup>

- **Gnac** — Audio converter for GNOME.

<http://gnac.sourceforge.net/> || [gnac](#)

- **SoundConverter** — A graphical application to convert audio files into different formats.

<https://soundconverter.org/> || [soundconverter](#)

- **soundKonverter** — Qt-based GUI front-end to various audio converters.

<https://github.com/dfaust/soundkonverter> || [soundkonverter](#)

- **SoX** — Command line utility that can convert various formats of computer audio files into other formats.

<https://sox.sourceforge.net/> || [sox](#)

## Audio editors

See also [Wikipedia:Comparison of digital audio editors](#).

- **Audacity** — Program that lets you manipulate digital audio waveforms.

<https://www.audacityteam.org/> || [audacity](#)

- **GNOME Sound Recorder** — Provides a straight-forward way to record and play audio. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/SoundRecorder> || [gnome-sound-recorder](#)

- **Gnome Wave Cleaner** — Digital audio editor to denoise, dehiss and amplify audio files.

<http://gwc.sourceforge.net/> || [gwc](#)<sup>AUR</sup>

- **Kwave** — Sound editor for KDE.

<http://kwave.sourceforge.net/> || [kwave](#)

- **mhWaveEdit** — Graphical program for editing, playing and recording sound files.

<https://github.com/magnush/mhwaveedit/> || [mhwaveedit](#)<sup>AUR</sup>

- **Mp3splt** — Utility to split mp3, ogg vorbis and native FLAC files selecting a begin and an end time position, without decoding.

<https://mp3splt.sourceforge.net/> || CLI: [mp3splt](#), GUI: [mp3splt-gtk](#)

- **ocenaudio** — Proprietary cross-platform, easy to use, fast and functional audio editor.

<https://www.ocenaudio.com/en/> || [ocenaudio-bin](#)<sup>AUR</sup>

- **Play it Slowly** — Play back audio files at a different speed or pitch.

<https://29a.ch/playitslowly> || [playitslowly](#)

- **Polyphone** — A soundfont editor to create and edit a musical instrument based on samples, using the sf2 format.

<https://www.polyphone-soundfonts.com/> || [polyphone](#)

- **Snd** — Advanced sound editor modeled loosely after Emacs.

<https://ccrma.stanford.edu/software/snd/> || [snd](#)

- **Swami** — A SoundFont editor

<http://www.swamiproject.org> || [swami](#)<sup>AUR</sup>

- **Sweep** — Audio editor and live playback tool.

<http://www.metadecks.org/software/sweep/> || [sweep](#)<sup>AUR</sup>

- **WaveSurfer** — Tool for sound visualization and manipulation. Typical applications are speech/sound analysis and sound annotation/transcription.

<https://www.speech.kth.se/wavesurfer/> <sup>[dead link 2023-05-06 ⓘ]</sup> || [wavesurfer](#)<sup>AUR</sup>

## Digital audio workstations

See also [Professional audio](#).

- **Ardour** — Multichannel hard disk recorder and digital audio workstation.

<https://ardour.org/> || [ardour](#)

- **Bitwig Studio** — Proprietary professional digital audio workstation.

<https://www.bitwig.com/en/home.html> || [bitwig-studio](#)<sup>AUR</sup>

- **Frinika** — Digital audio workstation, features sequencer, soft-synths, realtime effects and audio recording.

<https://www.frinika.com/> || [frinika](#)<sup>AUR</sup>

- **LMMS** — Digital audio workstation which allows you to produce music with your computer.

<https://lmms.io/> || [lmms](#)

- **MusE** — MIDI/Audio sequencer (digital audio workstation) with recording and editing capabilities, aims to be a complete multitrack virtual studio for Linux.

<https://muse-sequencer.github.io/> || [muse](#)

- **Non** — Modular digital audio workstation composed of four main parts: Timeline, Sequencer, Mixer and Session Manager.

<https://non.tuxfamily.org/> || [non-timeline](#), [non-sequencer](#), [non-mixer](#), [new-session-manager](#)

- **Qtractor** — Qt-based hard disk recorder and digital audio workstation application that aims to provide digital audio workstation software simple enough for the average home user, and yet powerful enough for the professional user.

<https://qtractor.sourceforge.io/qtractor-index.html> || [qtractor](#)

- **REAPER** — Proprietary digital audio workstation, offering a full multitrack audio and MIDI recording, editing, processing, mixing and mastering toolset.

<https://www.reaper.fm/> || [reaper](#)

- **Rosegarden** — Digital audio workstation program developed with ALSA and Qt that acts as an audio and MIDI sequencer, scorewriter and musical composition and editing tool.

<https://www.rosegardenmusic.com/> || [rosegarden](#)

- **Tracktion Waveform** — Proprietary digital audio workstation, specifically designed for the needs of modern music producers.

<https://www.tracktion.com/> || [tracktion-waveform](#)<sup>AUR</sup>

- **Zrythm** — A highly automated and intuitive digital audio workstation.

<https://www.zrythm.org/> || [zrythm](#)<sup>AUR</sup>

## Audio analyzers

- **audioprism** — Spectrogram tool for PulseAudio input and WAV files.

<https://github.com/vsergeev/audioprism> || [audioprism](#)<sup>AUR</sup>

- **BRP-PACU** — Dual channel FFT based acoustic analysis tool to help engineers analyze live professional sound systems using the transfer function.

<https://sourceforge.net/projects/brp-pacu/> || [brp-pacu](#)<sup>AUR</sup>

- **Baudline** — Proprietary time-frequency and spectrogram analyzer

<http://www.baudline.com/index.html> || [baudline-bin](#)<sup>AUR</sup>

- **FMIT** — Graphical utility for tuning your musical instruments, with error and volume history and advanced features.

<https://gillesdegottex.github.io/fmit/> || [fmit](#)<sup>AUR</sup>

- **Friture** — Real-time audio analyzer.

<https://friture.org/> || [friture](#)<sup>AUR</sup>

- **Mousai** — Simple application for identifying songs using the API of audd.io.

<https://github.com/SeaDve/Mousai> || [mousai](#)<sup>AUR</sup>

- **rtspeccy** — Real time audio spectrum analyzer.

<https://www.uninformativ.de/git/rtspeccy/> || [rtspeccy-git](#)<sup>AUR</sup>

- **sndpeek** — Real-time audio visualization tool.

<https://soundlab.cs.princeton.edu/software/sndpeek/> || ALSA: [sndpeek-alsa](#)<sup>AUR</sup>, JACK: [sndpeek-jack](#)<sup>AUR</sup>

- **SongRec** — Unofficial Shazam client to recognize audio from an arbitrary audio file or from the microphone, written in Rust.

<https://github.com/marin-m/SongRec> || [songrec](#)

- **Sonic Visualiser** — Viewing, analyzing, and annotating the contents of music audio files.

<https://www.sonicvisualiser.org/> || [sonic-visualiser](#)

- **Spek** — A barebones interface for ffmpeg's spectrogram png output, helps to analyse your audio files by showing their spectrogram.

<http://spek.cc/> || [spek](#)<sup>AUR</sup>

## Scorewriters

See also [LilyPond#Front-ends](#) and [Wikipedia:Comparison of scorewriters](#).

- **Canorus** — Music score editor. It supports an unlimited number and length of staves, polyphony, a MIDI playback of notes, chord markings, lyrics, import/export filters to formats like MIDI, MusicXML, ABC Music, MusiXTeX and LilyPond.

<https://sourceforge.net/projects/canorus/> || [canorus](#)<sup>AUR</sup>

- **Impro-Visor** — Music notation program designed to help jazz musicians compose and hear solos similar to ones that might be improvised.

<https://www.cs.hmc.edu/~keller/jazz/improvisor/> || [impro-visor](#)<sup>AUR</sup>

- **LilyPond** — Music engraving program, devoted to producing the highest-quality sheet music possible.

<https://lilypond.org/> || [lilypond](#)

- **MuseScore** — Create, playback, and print sheet music.

<https://musescore.org/> || [musescore](#)

- **TuxGuitar** — Multitrack guitar tablature editor and player.

<https://sourceforge.net/projects/tuxguitar/> || [tuxguitar](#)<sup>AUR</sup>

## Audio synthesis environments

See also [Wikipedia:Comparison of audio synthesis environments](#).

- **Blue** — Music composition environment for Csound, written in Java.

<https://blue.kunstmusik.com/> || [csound-blue](#)<sup>AUR</sup>

- **Cabbage** — Framework for audio software development using simple markup text and the Csound audio synthesis language.

<https://cabbageaudio.com/> || [cabbage-bin](#)<sup>AUR</sup>

- **Cardinal** — Virtual modular synthesizer plugin based on the [VCV Rack](#), includes lots of virtualized [Eurorack](#) modules.

<https://github.com/DISTRHO/Cardinal> || [cardinal](#)

- **Chuck** — Strongly-timed, concurrent, and on-the-fly music programming language.

<https://chuck.cs.princeton.edu/> || [chuck](#)

- **Csound** — Sound and music computing system.

<https://csound.com/> || [csound](#)

- **CsoundQt** — Frontend for Csound featuring a highlighting editor with autocomplete, interactive widgets and integrated help.

<https://csoundqt.github.io/> || [csoundqt](#)

- **FoxDot** — Live Coding with Python and SuperCollider.

<https://foxdot.org/> || [foxdot](#)

- **Pure Data** — Real-time music and multimedia environment.

<http://msp.ucsd.edu/software.html> || [pd](#)

- **Sonic Pi** — Code-based music creation and performance tool.

<https://sonic-pi.net/> || [sonic-pi](#)

- **SuperCollider** — Platform for audio synthesis and algorithmic composition, used by musicians, artists, and researchers working with sound.

<https://supercollider.github.io/> || [supercollider](#)

- **VCV Rack** — Virtual Eurorack DAW. Use a plugin systems to add more [Eurorack](#) emulated modules.

<https://vcvrack.com/> || [vcvrack](#)<sup>AUR</sup>

## Sound generators

This section contains [drum machines](#), [software samplers](#) and [software synthesizers](#).

- **ADLMIDI** — OPL3/OPN2 synthesizer using ADLMIDI.

<https://github.com/jpcima/adljack> || [adljack](#)

- **ADLplug** — FM Yamaha OPL3 synthesizer for ADLMIDI.

<https://github.com/jpcima/ADLplug> || [adlplug](#)

- **Agordejo** — Music and audio production session manager based on NSM.

<https://www.laborejo.org/agordejo/> || [agordejo](#)

- **ams** — Alsa Modular Synth. Realtime modular synthesizer and effect processor.

<http://alsamodular.sourceforge.net/> || [ams](#)

- **amsynth** — Analog Modelling SYNTHesizer. Easy-to-use software synthesizer with a classic subtractive synthesizer topology.

<https://amsynth.github.io/> || [amsynth](#)

- **DIN** — Sound synthesizer and musical instrument.

<https://dinisnoise.org/> || [din](#)

- **Drumstick** — Set of MIDI tools: drum grid, MIDI player, virtual piano.

<https://drumstick.sourceforge.io/> || [drumstick](#)

- **Element** — A modular LV2/VST3 audio plugin host.

<https://kushview.net/element/><sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [element](#)



- **Fluajho** — SF2 soundfont sample player for JACK based on Fluidsynth.

<https://www.laborejo.org/fluajho/> || [fluajho](#)

- **FluidSynth** — Real-time software synthesizer based on the SoundFont 2 specifications.

<https://www.fluidsynth.org/> || [fluidsynth](#)

- **Geonkick** — Synthesizer that can synthesize elements of percussion. The most basic examples are: kicks, snares, hit-hats, shakers, claps.

<https://gitlab.com/iurie-sw/geonkick> || [geonkick](#)

- **Gigedit** — Graphical instrument editor for sample based virtual instruments, based on the GigaStudio/Gigasampler file format.

<http://doc.linuxsampler.org/Gigedit/> || [gigedit](#)

- **GrandOrgue** — Virtual pipe organ sample player application supporting a HW1 compatible file format.

<https://sourceforge.net/projects/ourorgan/> || [grandorgue-git](#)<sup>AUR</sup>

- **GSequencer** — Provides various tools to play, create, edit and mix your own music. It features a step sequencer, piano roll, automation and wave-form editor.

<https://nongnu.org/gsequencer/> || [gsequencer](#)<sup>AUR</sup>

- **Helm** — Software synthesizer to create electronic music on your computer.

<https://tytel.org/helm/> || [helm-synth](#)

- **Hydrogen** — Advanced drum machine to create drum sequences.

<https://github.com/hydrogen-music/hydrogen> || [hydrogen](#)

- **JSampler** — Java GUI for [LinuxSampler](#) software audio sampler.

<http://jsampler.sourceforge.net/> || [jsampler](#)

- **OPNplug** — FM Yamaha OPN2 synthesizer for OPNMIDI.

<https://github.com/jpcima/ADLplug> || [opnplug](#)

- **Patroneo** — Easy to use pattern based midi sequencer.

<https://www.laborejo.org/patroneo/> || [patroneo](#)

- **PySynth** — Suite of simple music synthesizers and helper scripts written in Python 3.

<https://mdoege.github.io/PySynth/> || [python-pysynth-git](#)<sup>AUR</sup>

- **QMidiArp** — Advanced MIDI arpeggiator, programmable step sequencer and LFO.

<http://qmidiarp.sourceforge.net/> || [qmidiarp](#)

- **QmidiCtl** — MIDI remote controller application that sends MIDI data over the network, using UDP/IP multicast.

<https://qmidictl.sourceforge.io/> || [qmidictl](#)

- **QmidiNet** — MIDI network gateway application that sends and receives MIDI data over the network, using UDP/IP multicast.

<https://qmidinet.sourceforge.io/> || [qmidinet](#)

- **QMidiRoute** — MIDI router and processor for ALSA.

<http://alsamodular.sourceforge.net/> || [qmidiroute](#)

- **Qsampler** — Qt GUI for [LinuxSampler](#) software audio sampler.

<https://qsampler.sourceforge.io/> || [qsampler](#)

- **Qsynth** — Qt GUI for Fluidsynth.

<https://qsynth.sourceforge.io/> || [qsynth](#)

- **Qwertone** — Simple music synthesizer (like a toy-piano), but based on usual qwerty-keyboard for input.

<https://gitlab.com/azymohliad/qwertone> || [qwertone-git](#)<sup>AUR</sup>

- **QXGEdit** — Qt GUI for editing MIDI System Exclusive files for XG devices (eg. Yamaha DB50XG).

<https://qxgedit.sourceforge.io/> || [qxgedit](#)

- **setBfree** — DSP tonewheel organ.

<https://setbfree.org/> || [setbfree](#)

- **SpectMorph** — Analyze samples of musical instruments and combine them (morphing).

<http://spectmorph.org/> || [spectmorph](#)

- **Surge XT** — Cross platform, subtractive hybrid synthesizer. Installs the standalone application ([surge-xt-standalone](#)), plugins ([surge-xt-clap](#), [surge-xt-lv2](#), [surge-xt-vst3](#)), and common files ([surge-xt-common](#)).

<https://surge-synthesizer.github.io/> || [surge-xt](#)

- **TiMidity++** — Software synthesizer, which can play MIDI files by converting them into PCM waveform data.

<https://timidity.sourceforge.net/> || [timidity++](#)

- **Vee One Suite** — Old-school software instruments: synthv1, a polyphonic subtractive synthesizer; samplv1, a polyphonic sampler synthesizer; drumkv1, yet another drum-kit sampler; padthv1, a polyphonic additive synthesizer.

<https://www.rncbc.org/> || [synthv1](#), [samplv1](#), [drumkv1](#), [padthv1](#)

- **Vico** — Minimalistic Midi sequencer that is intended to be used in parallel with other software.

<https://www.laborejo.org/vico/> || [vico](#)

- **VMPK** — Virtual MIDI Piano Keyboard. MIDI events generator and receiver. It can use midi SoundFonts to generate sound by itself, or can be used to drive a MIDI synthesizer.

<https://vmpk.sourceforge.io/> || [vmpk](#)

- **Yoshimi** — Software synthesizer, a fork of ZynAddSubFX.

<http://yoshimi.sourceforge.net/> || [yoshimi](#)

- **ZynAddSubFX** — Fully featured software synthesizer capable of making a countless number of instruments, from some common heard from expensive hardware to interesting sounds that you will boost to an amazing universe of sounds.

<https://zynaddsubfx.sourceforge.io/> || [zynaddsubfx](#)

## Music trackers

- **Buzztrax** — Music studio to compose songs using only a computer with a soundcard.

<https://www.buzztrax.org/> || [buzztrax](#)<sup>AUR</sup>

- **FamiStudio** — Very simple music editor for the Nintendo Entertainment System or Famicom.

<https://famistudio.org/> || [famistudio](#)<sup>AUR</sup>

- **[FastTracker II](#)** — A clone of the same tracker name using SDL2 in C.

<https://16-bits.org/ft2.php> || [ft2-clone](#)

- **Furnace** — A chiptune tracker compatible with DefleMask modules. Emulates a variety of sound chips.

<https://github.com/tildearrow/furnace> || [furnace](#)

- **klystrack** — Tracker for making C64/NES/Amiga-style chiptunes on a modern platform.

<https://kometbomb.github.io/klystrack/> || [klystrack-git](#)<sup>AUR</sup>

- **[MilkyTracker](#)** — Music application for creating .MOD and .XM module files.

<https://milkytracker.titandemo.org/> || [milkytracker](#)

- **[OpenMPT](#)** — Tracker software to create and play back some great music on your computer.

<https://openmpt.org/> || [openmpt](#)<sup>AUR</sup>

- **[ProTracker 2](#)** — A clone of the original tracker from the amiga. Written using SDL2 in C.

<https://16-bits.org/pt2.php> || [pt2-clone](#)

- **Radium** — Music editor with a new type of interface.

<https://users.notam02.no/~kjetism/radium/> || [radium](#)<sup>AUR</sup>

- **Schism Tracker** — Create high quality music without the requirements of specialized, expensive equipment, and with a unique "finger feel" that is difficult to replicate in part.

<http://schismtracker.org/> || [schismtracker](#)

- **SunVox** — Small, fast and powerful modular synthesizer with pattern-based sequencer (tracker).

<https://warmplace.ru/soft/sunvox/> || [sunvox](#)<sup>AUR</sup>

## DJ

- **Giada** — Minimal, hardcore audio tool for DJs, live performers and electronic musicians.

<https://giadamusic.com/> || [giada](#)<sup>AUR</sup>

- **IDJC** — Powerful yet easy to use source-client for individuals interested in streaming live radio shows over the Internet using Shoutcast or Icecast servers.

<http://idjc.sourceforge.net/> || [idjc](#)<sup>AUR</sup>

- **Linux Show Player** — Powerful and feature-rich software to arrange cue lists. Designed for theater plays and live music shows.

<https://www.linux-show-player.org/> || [linux-show-player](#)<sup>AUR</sup>

- **Luppp** — Music creation tool, intended for live use. The focus is on real time processing and a fast and intuitive workflow.

<http://openavproductions.com/luppp/> || [luppp](#)

- **Mixxx** — Integrates the tools DJs need to perform creative live mixes with digital music files.

<https://mixxx.org/> || [mixxx](#)

- **Seq24** — Minimal loop based MIDI sequencer for a live performance with a very simple interface for editing and playing MIDI 'loops'.

<http://filter24.org/seq24/> || [seq24-bzr](#)<sup>AUR</sup>

- **xwax** — Digital Vinyl System (DVS) for Linux. It allows DJs and turntablists to playback digital audio files (MP3, Ogg Vorbis, FLAC, AAC and more), controlled using a normal pair of turntables via timecoded vinyls.

<https://xwax.org/> || [xwax](#)

## Audio effects

- **Calf Plugin Pack for JACK** — Process and produce sounds using a set of plugins with JACK interface. ([calfjackhost](#))

<https://calf-studio-gear.org/> || [calf](#)

- **Carla** — Audio plugin host, with support for many audio drivers and plugin formats.

<https://kxstudio.linuxaudio.org/Applications:Carla> || [carla](#)

- **guitarix** — Virtual guitar amplifier for JACK.

<https://guitarix.org/> || [guitarix](#)

- **EasyEffects** — Apply effects to audio applications and input sources over PipeWire (or PulseAudio with legacy package).

<https://github.com/wwmm/easyeffects> || [easyeffects](#), [pulseeffects-legacy-git](#)<sup>AUR</sup>

- **Rakarrack** — Richly featured multi-effects processor emulating a guitar effects pedalboard.

<https://rakarrack.sourceforge.net/> || [rakarrack](#)<sup>AUR</sup>

## Audio visualizers

- **Barva** — Visualizer for PulseAudio that pulses the background of your terminal.

<https://github.com/Kharacternyk/barva/> || [barva-git](#)<sup>AUR</sup>

- **C.A.V.A.** — Console-based audio visualizer for ALSA, MPD and PulseAudio.

<https://github.com/karlstav/cava/> || [cava](#)<sup>AUR</sup>

- **Cavalcade** — GTK GUI for C.A.V.A.

<https://github.com/worron/cavalcade/> || [cavalcade-git](#)<sup>AUR</sup>

- **cli-visualizer** — Highly configurable CLI-based audio visualizer.

<https://github.com/dpayne/cli-visualizer> || [cli-visualizer](#)<sup>AUR</sup>

- **GLava** — OpenGL audio spectrum visualizer. Its primary use case is for desktop windows or backgrounds.

<https://github.com/wacossusca34/glava> || [glava](#)

- **GLMViz** — Fully configurable OpenGL music visualizer.

<https://github.com/hannesha/GLMViz> || [glmviz-git](#)<sup>AUR</sup>

- **Le Biniou** — User-friendly, powerful music visualization / VJing tool.

<https://biniou.net/> || [lebiniou](#)<sup>AUR</sup>

- **projectM** — Music visualizer which uses 3D accelerated iterative image-based rendering.

<https://github.com/projectM-visualizer/projectm> || [projectm-pulseaudio](#)

- **VSXu** — OpenGL-based (hardware-accelerated), modular programming environment with its main purpose to visualize music and create graphic effects in real-time.

<https://www.vsxu.com/> || [vsxu](#)<sup>AUR</sup>

## Remote audio

- **jammr** — Play jam sessions with musicians around the world over the internet.

<https://jammr.net/> || [jammr](#)<sup>AUR</sup>

- **Jamulus** — Enables musicians to perform real-time jam sessions over the internet.

<https://jamulus.io/> || [jamulus](#)<sup>AUR</sup>

- **netaudio** — List, configure, and control Audinate Dante network audio devices.

<https://github.com/chris-ritsen/network-audio-controller> || [python-netaudio](#)<sup>AUR</sup>

- **Noson** — Fast and smart controller for SONOS devices.

<https://janbar.github.io/noson-app/> || [noson-app](#)<sup>AUR</sup>

- **SonoBus** — Application for streaming high-quality, low-latency peer-to-peer audio between devices over the internet or a local network.

<https://sonobus.net/> || [sonobus](#)<sup>AUR</sup>

- **Upplay** — Qt-based UPnP audio control point.

<https://lesbonscomptes.com/upplay/> || [upplay](#)<sup>AUR</sup>

## Volume control

See also [PulseAudio#Front-ends](#) and [JACK Audio Connection Kit#Comparison of JACK control GUIs](#).

- **alsamixer** — Soundcard mixer for ALSA soundcard driver, with ncurses interface.

<https://alsa-project.org/> || [alsa-utils](#)

- **AlsaVolume** — Tray ALSA volume changer written using gtkmm.

<https://github.com/Vitozz/cppAlsaVolume> || [cpp-alsa-volume](#)<sup>AUR</sup>

- **AMixST** — Volume wheel using ALSA and Qt5.

<https://github.com/FenixFyreX/amixst><sup>[dead link 2023-05-06 ⓘ]</sup> || [amixst](#)<sup>AUR</sup>

- **Emixer** — Utility to control volume levels. Part of Enlightenment.

<https://www.enlightenment.org/about-enlightenment> || [enlightenment](#)

- **GNOME ALSA Mixer** — ALSA mixer for GNOME.

<https://launchpad.net/gnome-alsamixer> || [gnome-alsamixer](#)<sup>AUR</sup>

- **GVolWheel** — Audio mixer which lets you control the volume through a tray icon.

<https://github.com/Junker/gvolwheel> || [gvolwheel](#)<sup>AUR</sup>

- **KMix** — KDE volume control program.

<https://apps.kde.org/kmix/> || [kmix](#)

- **MATE Volume Control** — Audio mixer application and system tray applet for MATE to mix audio and adjust volume levels of various audio mixer devices.

<https://github.com/mate-desktop/mate-media> || [mate-media](#)

- **PNMixer** — A fork of Obmixer. It has many new features such as ALSA channel selection, connect/disconnect detection, shortcuts, etc.

<https://github.com/nicklan/pnmixer/wiki> || [pnmixer](#)<sup>AUR</sup>

- **QasTools** — Collection of desktop applications for the Linux sound system ALSA. It provides QasMixer (mixer), QasHctl (HCTL mixer) and QasConfig (configuration browser).

<https://gitlab.com/sebholt/gastools> || [gastools](#)

- **Retrovol** — Retro-looking volume setting tray applet.

<https://github.com/pizzasgood/retrovol> || [retrovol](#)<sup>AUR</sup>

- **Volctl** — Per-application system tray applet volume control for PulseAudio.

<https://buzz.github.io/volctl/> || [volctl](#)<sup>AUR</sup>

- **Volnoti** — A lightweight volume notification daemon for GNU/Linux and other POSIX operating systems.

<https://github.com/davidbrazdil/volnoti> || [volnoti](#)<sup>AUR</sup>

- **Volti** — A GTK application for controlling audio volume from system tray with an internal mixer and support for multimedia keys that uses only ALSA.

<https://github.com/gen2brain/volti> || [volti](#)<sup>AUR</sup>

- **Volume Icon** — Another volume control for your system tray with channel selection, themes and an external mixer.

<http://nullwise.com/volumeicon.html> || [volumeicon](#)



- **VolWheel** — A little application which lets you control the sound volume easily through a tray icon you can scroll on.

<https://oliwer.net/b/volwheel.html> || [volwheel](#)<sup>AUR</sup>

- **Xfce ALSA Panel Plugin** — Simple ALSA volume control plugin for [Xfce4](#) panel.

<https://github.com/equeim/xfce4-alsa-plugin> || [xfce4-alsa-plugin](#)<sup>AUR</sup>

## CD ripping

See [Optical disc drive#Audio CD](#).

## Video

### Video players

See also [Wikipedia:Comparison of video player software](#).

### Console

- **FFplay** — Very simple and portable media player using the FFmpeg libraries and the SDL library. It is mostly used as a testbed for the various FFmpeg APIs.

<https://ffmpeg.org/> || [ffmpeg](#)

- **gst-play-1.0** — Simple command line playback testing tool for GStreamer.

<https://gstreamer.freedesktop.org/> || [gst-plugins-base-libs](#)

- **MPlayer** — Video player that supports a complete and versatile array of video and audio formats.

<https://mplayerhq.hu/design7/news.html> || [mplayer](#)

- **mpv** — Movie player based on MPlayer and mplayer2.

<https://mpv.io/> || [mpv](#)

- **VLC media player** — Command-line version of the famous video player that can play smoothly high definition videos in the TTY. The rc interface can be launched with `vlc -I rc`, and the ncurses interface can be launched with `vlc -I ncurses`.

<https://www.videolan.org/vlc/> || [vlc](#)

### Graphical

#### GStreamer-based

- **Cinema** — Video player and manager for watching local video files.

<https://anufrij.org/cinema/> || [playmyvideos](#)<sup>AUR</sup>

- **Clapper** — GNOME media player built using GJS with GTK4 toolkit and powered by GStreamer with OpenGL rendering.

<https://rafostar.github.io/clapper/> || [clapper](#)<sup>AUR</sup>

- **Glide** — Simple and minimalistic media player relying on GStreamer for the multimedia support and GTK for the user interface.

<https://github.com/philn/glide> || [glide](#)

- **GNOME Videos** — Media player (audio and video) for the GNOME desktop that uses [GStreamer](#). Part of [gnome](#).

<https://wiki.gnome.org/Apps/Videos> || [totem](#)

- **Identity** — Program for comparing multiple versions of an image or video.

<https://gitlab.gnome.org/YaLTeR/identity> || [identity](#)<sup>AUR</sup>

- **Movie Monad** — Free and simple to use video player made with Haskell using [GStreamer](#) and GTK. Precompiled and no Haskell dependency in run-time.

<https://lettier.github.io/movie-monad/> || [movie-monad](#)<sup>AUR</sup>

- **Pantheon Videos** — Video player and library designed for elementary OS using [GStreamer](#).

<https://github.com/elementary/videos> || [pantheon-videos](#)

- **Parole** — Modern media player based on the [GStreamer](#) framework.

<https://docs.xfce.org/apps/parole/start> || [parole](#)

- **Rage** — Video and audio player written with Enlightenment Foundation Libraries with some extra bells and whistles. Uses [GStreamer](#)

<https://www.enlightenment.org/about-rage> || [rage](#)

- **Snappy** — Powerful media player with a minimalistic interface that uses [GStreamer](#).

<https://wiki.gnome.org/Apps/Snappy> || [snappy-player](#)

- **Spivak** — Karaoke player based on [GStreamer](#) and Qt5.

<https://github.com/gyunaev/spivak> || [spivak](#)<sup>AUR</sup>

#### mpv-based

- **Baka MPlayer** — Free and open source, cross-platform, [mpv](#) based multimedia player (Qt 5).

<https://github.com/u8sand/Baka-MPlayer> || [baka-mplayer](#)

- **Bomi** — bomi is a graphical user interface(GUI) player based on mpv for Linux.

<https://bomi-player.github.io/> || [bomi-git](#)<sup>AUR</sup>

- **Celluloid** — Simple GTK frontend for [mpv](#), formerly GNOME MPV.

<https://celluloid-player.github.io/> || [celluloid](#)

- **Clip** — Video player and collection manager utilizing [mpv](#) as the backend.

<https://mauikit.org/> || [maui-clip](#)

- **Deepin Movie** — Movie player for Deepin desktop based on [mpv](#).

<https://www.deepin.org/en/original/deepin-movie/> || [deepin-movie](#)

- **Haruna Video Player** — Qt/QML video player built on top of [mpv](#).

<https://invent.kde.org/multimedia/haruna> || [haruna](#)

- **Kawaii-Player** — Audio/video manager and multimedia player (based on [mpv](#)) with PC-to-PC casting feature, along with functionalities of portable media server and torrent streaming server.

<https://github.com/kanishka-linux/kawaii-player> || [kawaii-player](#)<sup>AUR</sup>

- **Media Player Classic Qute Theater** — Clone of [Media Player Classic](#) reimplemented in Qt and based on [mpv](#).

<https://github.com/mpc-qt/mpc-qt> || [mpc-qt](#)<sup>AUR</sup>

- **Minitube** — YouTube desktop application written in C++ using [mpv](#) and Qt.

<https://flavio.tordini.org/minitube> || [minitube](#)

- **MoonPlayer** — Video player for playing and downloading online videos from YouTube, Youku etc.

<https://github.com/coslyk/moonplayer> || [moonplayer](#)<sup>AUR</sup>

- **mpv** — Very basic GUI for mpv. Can be launched with `mpv --player-operation-mode=pseudo-gui`.

<https://mpv.io/> || [mpv](#)

- **mpvz** — Qt5/QML based GUI for libmpv. Based on the Tethys theme for Bomi.

<https://github.com/Zren/mpvz> || [mpvz-git](#)<sup>AUR</sup>

- **ImPlay** — Cross-Platform Desktop Media Player, built on top of mpv and ImGui.

<https://github.com/tsl0922/ImPlay> || [implay](#)<sup>AUR</sup>

- **SMPlayer** — Qt multimedia player with extra features (CSS themes, YouTube integration, etc.) based on [mpv](#). It can use [MPlayer](#) as alternative backend.

<https://www.smplayer.info/> || [smplayer](#)

- **xt7-player-mpv** — Qt/Gambas GUI to [mpv](#) with a rich set of configurable options including filters and drivers, ladspa plugins support as well as library/playlist management, YouTube, online radios, podcasts, DVB-T and more.

<https://github.com/kokoko3k/xt7-player-mpv> || [xt7-player-mpv](#)<sup>AUR</sup>

#### MPlayer-based

- **GNOME MPlayer** — Simple GTK-based GUI for [MPlayer](#).

<https://sites.google.com/site/kdekorte2/gnomemplayer> || [gnome-mplayer](#)

#### Phonon-based

- **Dragon Player** — Simple video player for KDE based on [Phonon](#). Part of the [kde-multimedia](#) group.

<https://apps.kde.org/dragonplayer/> || [dragon](#)

- **KMPlayer** — Simple [Phonon](#)-based video player for KDE and video player plugin for Konqueror. It can use [MPlayer](#) as alternative backend.

<https://apps.kde.org/kmplayer/> || [kmplayer](#)<sup>AUR</sup>

#### Other

- **Electronplayer** — An application using the [Electron](#) framework. It is used for viewing Netflix, YouTube, Twitch, Floatplane, Hulu, Amazon Prime Video and more. Most notably to isolate the cookies from these websites from your main web browser.

<https://github.com/oscartbeaumont/ElectronPlayer/> || [electronplayer](#)<sup>AUR</sup>

- **FreeTube** — Desktop YouTube player built with privacy in mind. Use YouTube without advertisements and prevent Google from tracking you with their cookies and JavaScript. Based on the [Electron](#) platform.

<https://freetubeapp.io/> || [freetube](#)<sup>AUR</sup>

- **Kaffeine** — Very versatile KDE media player that, by default, utilizes [VLC](#) as its backend and has excellent support of digital TV ([DVB-T](#), DVB-C, [DVB-S](#)).

<https://apps.kde.org/kaffeine/> || [kaffeine](#)

- **Kaku** — Highly integrated music player supports different online platform like YouTube, SoundCloud, Vimeo and more. Based on the [Electron](#) platform.

<https://kaku.rocks/> || [kaku-bin](#)<sup>AUR</sup>

- **Kodi** — Media player and entertainment hub for digital media.

<https://kodi.tv/> || [kodi](#)

- **QMPlay2** — Qt based video player. It can play and stream all formats supported by [FFmpeg](#) and libmodplug. It has an integrated module system, which includes a YouTube browser.

<https://github.com/zaps166/QMPlay2> || [qmpay2](#)<sup>AUR</sup>

- **QtAV Player** — Simple media player based on QtAV and [FFmpeg](#). Run with [Player](#) or [QMLPlayer](#).

<https://www.qtav.org/> || [qtav](#)<sup>AUR</sup>

- **Stremio** — Extensible media center.

<https://www.stremio.com/> || [stremio](#)<sup>AUR</sup>

- **tvtime** — High quality television application for use with video capture cards.

<https://linuxtv.org/> || [tvtime](#)

- **VLC media player** — Middleweight video player with support for a wide variety of audio and video formats.

<https://www.videolan.org/vlc/> || [vlc](#)

- **xine** — Free multimedia player.

<https://www.xine-project.org/> || [xine-ui](#)

- **Xjadeo** — Video player that displays a video-clip in sync with an external time source (MTC, LTC, JACK-transport).

<https://xjadeo.sourceforge.net/> || [xjadeo](#)

- **YUView** — Qt-based YUV player with an advanced analytic toolset.

<https://github.com/IENT/YUView> || [yuview](#)<sup>AUR</sup>

## Video converters

See also [Wikipedia:Comparison of video converters](#) and [Codecs and containers#Container format tools](#).

## Console

- **Avidemux CLI** — Free video editor designed for simple cutting, filtering and encoding tasks.

<https://www.avidemux.org/> || [avidemux-cli](#)

- **FFmpeg** — Complete, cross-platform solution to record, convert and stream audio and video.

<https://ffmpeg.org/> || [ffmpeg](#)

- **HandBrake CLI** — Simple yet powerful video transcoder ideal for batch mkv/x264 ripping.

<https://handbrake.fr/> || [handbrake-cli](#)

- **MEncoder** — Free command line video decoding, encoding and filtering tool.

<https://mplayerhq.hu/design7/news.html> || [mencoder](#)

- **Transcode** — Command line tool for video stream processing.

<http://www.transcoding.org/> || [transcode](#)

## Graphical

- **Ciano** — Simple multimedia file converter using FFmpeg and ImageMagick.

<https://robertsanseries.github.io/ciano/> || [ciano](#)

- **FFmpegYAG** — Advanced GUI for the popular FFmpeg audio/video encoding tool.

<https://sourceforge.net/projects/ffmpeggyag/> || [ffmpeggyag](#)<sup>AUR</sup>

- **FF Multi Converter** — Simple graphical application which enables you to convert audio, video, image and document files between all popular formats, by utilizing other command-line tools.

<https://sites.google.com/site/ffmulticonverter/> || [ffmulticonverter](#)<sup>AUR</sup>

- **HandBrake** — Simple yet powerful video transcoder ideal for batch mkv/x264 ripping. GTK version.

<https://handbrake.fr/> || [handbrake](#)

- **QWinFF** — Qt5 GUI for FFmpeg that can read audio and video files in various formats and convert them into other formats.

<https://qwinff.github.io/> || [qwinff](#)<sup>AUR</sup>

- **Transmageddon** — Simple python application for transcoding video into formats supported by GStreamer.

<http://www.linuxrising.org/> || [transmageddon](#)

- **WinFF** — Graphical video and audio batch converter using FFmpeg.

<https://www.biggmatt.com/winff/> || [winff](#)<sup>AUR</sup>

## Video editors

See also [Wikipedia:Comparison of video editing software](#).

- **Avidemux** — Free video editor designed for simple cutting, filtering and encoding tasks.

<http://fixounet.free.fr/avidemux/> || [avidemux-qt](#)

- **Blender** — Fully integrated 3D graphics creation suite with a built-in non-linear video editor.

<https://www.blender.org/> || [blender](#)

- **Cinelerra (Community Version)** — Advanced video editing and compositing environment.

<http://cinelerra-cv.wikidot.com/> || [cinelerra-cv](#)<sup>AUR</sup>

- **Cinelerra GG Infinity** — Professional video editing and compositing environment.

<https://www.cinelerra-gg.org/> || [cinelerra-gg-git](#)<sup>AUR</sup>

- **[DaVinci Resolve](#)** — Proprietary A/V post-production software suite.

<https://www.blackmagicdesign.com/products/davinciresolve/> || [davinci-resolve](#)<sup>AUR</sup>

- **[Flowblade](#)** — Multitrack non-linear video editor for Linux, designed to provide a fast, robust editing experience.

<https://jliljeb1.github.io/flowblade/> || [flowblade](#)

- **[Kdenlive](#)** — Non-linear video editor designed for basic to semi-professional work.

<https://kdenlive.org/> || [kdenlive](#)

- **[Lightworks](#)** — Professional proprietary non-linear editing system for editing and mastering digital video in various formats.

<https://www.lwks.com/> || [lightworks](#)<sup>AUR</sup>

- **[LIVES](#)** — Video editor and VJ (live performance) platform.

<http://lives-video.com/> || [lives](#)<sup>AUR</sup>

- **[LosslessCut](#)** — GUI tool for lossless trimming/cutting of video/audio files. Based on the [Electron](#) platform.

<https://mifi.no/losslesscut/> || [losslesscut-bin](#)<sup>AUR</sup>

- **[Natron](#)** — Open-source compositing software. Node-graph based. Similar in functionalities to Adobe After Effects and Nuke by The Foundry.

<https://natrongithub.github.io/> || [natron](#)<sup>AUR</sup>

- **[Olive](#)** — Non-linear video editor aiming to provide a fully-featured alternative to high-end professional video editing software.

<https://www.olivevideoeditor.org/> || [olive](#)<sup>AUR</sup>

- **[OpenShot](#)** — Non-linear video editor based on MLT framework.

<https://www.openshot.org/> || [openshot](#)

- **[Pitivi](#)** — Video editor designed to be intuitive and integrate well in the GNOME desktop.

<https://www.pitivi.org/> || [pitivi](#)

- **[Shotcut](#)** — Shotcut is a free, open source, cross-platform video editor.

<https://www.shotcut.org/> || [shotcut](#)



- **V2Mixer** — free cross-platform movie editor,mixer

<http://v2mixer.livev2.com/> || [v2mixer-bin](#)<sup>AUR</sup>

- **VapourSynth Editor** — Editor for VapourSynth scripts.

[https://bitbucket.org/mystery\\_keeper/vapoursynth-editor](https://bitbucket.org/mystery_keeper/vapoursynth-editor) || [vapoursynth-editor](#)<sup>AUR</sup>

- **VidCutter** — Fast lossless media cutter + joiner w/ frame-accurate SmartCut options powered by mpv, FFmpeg via a sleek Qt5 GUI.

<https://vidcutter.ozmartians.com/> || [vidcutter](#)

- **Video Trimmer** — Cut out a fragment of a video given the start and end timestamps. The video is never re-encoded, so the process is very fast and does not reduce the video quality.

<https://gitlab.gnome.org/YaLTeR/video-trimmer> || [video-trimmer](#)<sup>AUR</sup>

## Subtitles

### Subtitle players

- **Penguin Subtitle Player** — Standalone subtitle player that provides a translucent window which always stays on the top so subtitles can be shown on top of the video without blocking anything.

<https://github.com/carsonip/Penguin-Subtitle-Player> || [penguin-subtitle-player](#)

- **SubtitlesPrinter** — Print subtitles above a X-screen, independently of the video player.

<https://github.com/OlivierMarty/SubtitlesPrinter> || [subtitles-printer-git](#)<sup>AUR</sup>

### Subtitle downloaders

- **QNapi** — Qt client for downloading movie subtitles from NapiProjekt, OpenSubtitles, Napisy24.

<https://qnapi.github.io/> || [qnapi](#)

- **subdl** — Command-line tool for downloading subtitles from opensubtitles.org.

<https://github.com/akexakex/subdl> || [subdl](#)

- **SubDownloader** — Automatic download/upload of subtitles using fast hashing.

<https://github.com/subdownloader/subdownloader> || [subdownloader](#)<sup>AUR</sup>

## Subtitle editors

See also [Wikipedia:Comparison of subtitle editors](#).

- **[Aegisub](#)** — Subtitle editor.

<https://github.com/Aegisub/Aegisub> || [aegisub](#)

- **Gaupol** — Full-featured subtitle editor.

<https://otsaloma.io/gaupol/> || [gaupol](#)

- **[Gnome Subtitles](#)** — Video subtitle editor for GNOME.

<http://www.gnomesubtitles.org/> || [gnome-subtitles](#)

- **Jubler** — Open-source multiplatform subtitle editor written in Java.

<https://www.jubler.org/> || [jubler](#)<sup>AUR</sup>

- **Subtitle Composer** — Subtitle editor for KDE supporting various formats, features different player backends, able to display wave form.

<https://subtitlecomposer.kde.org/> || [subtitlecomposer](#)<sup>AUR</sup>

- **[Subtitle Edit](#)** — Subtitle editing program. Written in C# using mono.

<https://github.com/SubtitleEdit/subtitleedit> || [subtitleedit](#)<sup>AUR</sup>

- **Subtitle Editor** — GTK 3 tool to edit subtitles for GNU/Linux/\*BSD.

<https://kitone.github.io/subtitleeditor/> || [subtitleeditor](#)

## Screencast

See [Screen capture#Screencast software](#).

## Miracast

[Miracast](#) is a standard for wireless connections from sending devices to display receivers mainly using [Wi-Fi Direct](#). Use `iw dev` to check your hardware support.

- **GNOME Network Displays** — GTK application to cast your desktop to a remote display. Not specific to the [GNOME](#) environment, depends on [PipeWire](#).

<https://gitlab.gnome.org/GNOME/gnome-network-displays> || [gnome-network-displays](#)<sup>AUR</sup>

- **MiracleCast** — Command line tools to connect external monitors to your system via Wi-Fi Display specification also known as Miracast.

<https://github.com/albfan/miraclecast> || [miraclecast-git](#)<sup>AUR</sup>

## Webcam

See also [FFmpeg#Recording webcam](#) and [Wikipedia:Comparison of webcam software](#).

- **Cheese** — Take photos and videos with your webcam, with fun graphical effects. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Cheese> || [cheese](#)

- **Deepin Camera** — Tool to view camera, take photo and video.

<https://github.com/linuxdeepin/deepin-camera> || [deepin-camera](#)

- **fswebcam** — Small and simple command line webcam software that generates images for a webcam.

<https://www.sanslogic.co.uk/fswebcam/> || [fswebcam](#)<sup>AUR</sup>

- **Guvview** — Simple interface for capturing and viewing video from v4l2 devices.

<https://guvview.sourceforge.net/> || GTK: [guvview](#), Qt: [guvview-qt](#)

- **cameractrls** — Command line and graphical application for configuring v4l2 devices.

<https://github.com/soyersoyer/cameractrls> || [cameractrls](#)

- **Kamoso** — Webcam recorder from KDE community.

<https://apps.kde.org/kamoso/> || [kamoso](#)

- **MJPEG-streamer** — Command line application which can be used to stream M-JPEG over an IP-based network from a webcam to various types of viewers.

<https://github.com/jacksonliam/mjpg-streamer> || [mjpg-streamer-git](#)<sup>AUR</sup>

- **Motion** — Highly configurable program that monitors video signals from many types of cameras. It is able to detect if a significant part of the picture has changed; in other words, it can detect motion.

<https://motion-project.github.io/> || [motion](#)

- **Pantheon Camera** — Camera application designed for elementary OS.

<https://github.com/elementary/camera> || [pantheon-camera](#)

- **QtCAM** — Webcam software with more than 10 image control settings, extension settings and color space switching.

<https://www.e-consystems.com/opensource-linux-webcam-software-application.asp> || [qtcam-git](#)<sup>AUR</sup>

- **v4l2loopback** — Kernel module that allows to create virtual video (v4l2) devices. This can be used to create virtual webcams with video passed by programs like FFmpeg.

<https://github.com/umlaeute/v4l2loopback> || [v4l2loopback-dkms](#)

- **v4l2ucp** — Universal control panel for V4L2 devices.

<http://v4l2ucp.sourceforge.net/> || [v4l2ucp](#)<sup>AUR</sup>

- **v4l-utils** — Provides a series of utilities for media devices.

<https://linuxtv.org/> || [v4l-utils](#)

- **Webcamoid** — Full featured webcam suite.

<https://webcamoid.github.io/> || [webcamoid](#)<sup>AUR</sup>

## DVD authoring

See also [Wikipedia:List of DVD authoring applications](#).

- **Bombono DVD** — DVD authoring program with nice and clean GUI.

<https://bombono.com/> || [bombono-dvd](#)<sup>AUR</sup>

- **Devede** — Program to create VideoDVDs and CDs.

<https://rastersoft.com/programas/devede.html> || [devede](#)

- **DVDStyler** — DVD authoring application for the creation of professional-looking DVDs.

<https://www.dvdstyler.org/> || [dvdstyler](#)

## DVD ripping

See [Optical disc drive#DVD-Video](#).

## Video thumbnails

- **vcsi** — Create video contact sheets. A video contact sheet is an image composed of video capture thumbnails arranged on a grid.

<https://github.com/amieln/vcsi> || [vcsi](#)<sup>AUR</sup>

- **Video Contact Sheet** — Bash script meant to create video contact sheets (previews) of videos. Any video supported by mplayer and ffmpeg can be used.

<https://p.outlyer.net/vcs> || [video-contact-sheet](#)<sup>AUR</sup>

## Collection managers

- **Data Crow** — Media cataloger and media organizer.

<https://datacrow.net/> || [datacrow](#)<sup>AUR</sup>

- **GCstar** — GNOME application for organizing various collections (board games, comic books, movies, stamps, etc.).

<http://www.gcstar.org/> || [gcstar](#)<sup>AUR</sup>

- **Griffith** — Movie collection manager application.

<https://gitlab.com/Strit/griffith> || [griffith](#)

- **MediaElch** — Media manager for Kodi. Information about movies, TV shows, concerts and music are stored as nfo files.

<https://www.kvibes.de/mediaelch/> || [mediaelch](#)

- **Tellico** — KDE application for organizing various collections (books, video, music, coins, etc.).

<https://tellico-project.org/> || [tellico](#)

- **tinyMediaManager** — Media management tool to provide metadata for Kodi.

<https://www.tinymediamanager.org/> || [tiny-media-manager](#)<sup>AUR</sup>

- **vMovieDB** — Movie collection manager for the Gnome desktop.

<https://sourceforge.net/projects/vmoviedb/> || [vmoviedb](#)<sup>AUR</sup>

## Media servers

- **Airsonic** — Web-based media streamer, providing ubiquitous access to your music. (Fork of Subsonic.)

<https://airsonic.github.io/> || [airsonic](#)<sup>AUR</sup>

- **DMS** — A UPnP DLNA Digital Media Server that includes basic video transcoding (thus with minimum dependencies).

<https://github.com/anacrolix/dms> || [dms](#)<sup>AUR</sup>

- **Emby** — Proprietary media server, which automatically converts and streams your media on-the-fly to play on any device.

<https://emby.media/> || [emby-server](#)

- **Gerbera** — UPnP Media Server to stream your media to devices on your home network. (Fork of MediaTomb.)

<https://gerbera.io/> || [gerbera](#)

- **Icecast** — Streaming media (audio/video) server which currently supports Ogg (Vorbis and Theora), Opus, WebM and MP3 streams.

<https://icecast.org/> || [icecast](#)

- **Jellyfin** — Media system that puts you in control of managing and streaming your media.

<https://jellyfin.org/> || Server: [jellyfin](#)<sup>AUR</sup>, desktop client: [jellyfin-media-player](#)<sup>AUR</sup>, cast client: [jellyfin-mpv-shim](#)<sup>AUR</sup>

- **OwnTone** — DAAP (iTunes) and MPD media server with support for AirPlay devices, Apple Remote, Chromecast, Spotify and internet radio.

<https://owntone.github.io/owntone-server/> || [owntone-server](#)<sup>AUR</sup>

- **Plex** — Proprietary media server, which organizes your personal video, music, and photo collections and streams them to all of your devices.

<https://www.plex.tv/> || [plex-media-server](#)<sup>AUR</sup>

- **ReadyMedia** — Simple media server software, with the aim of being fully compliant with DLNA/UPnP-AV clients.

<https://sourceforge.net/projects/minidlna/> || [minidlna](#)

- **Rygel** — UPnP AV MediaServer and MediaRenderer that allows you to easily share audio, video and pictures, and control of media player on your home network. Part of [gnome](#).

<https://wiki.gnome.org/Projects/Rygel> || [rygel](#)

- **Serviio** — Proprietary media server, which allows you to stream your media files (music, video or images) to renderer devices (e.g. a TV set, Bluray player, games console or mobile phone) on your connected home network.

<https://serviio.org/> || [serviio](#)<sup>AUR</sup>

- **Subsonic** — Proprietary media server to stream from your own computer.

<http://www.subsonic.org/> || [subsonic](#)<sup>AUR</sup>

- **Tvheadend** — TV streaming server and recorder supporting DVB-S, DVB-S2, DVB-C, DVB-T, ATSC, ISDB-T, IPTV, SAT>IP and HDHomeRun as input sources.

<https://tvheadend.org/> || [tvheadend](#)<sup>AUR</sup>

- **Universal Media Server** — UPnP media server, which is capable of sharing video, audio and images between most modern devices. (Fork of PS3 Media Server.)

<https://www.universalmediaserver.com/> || [ums](#)<sup>AUR</sup>

## Metadata

- **CoreInfo** — Simple media metadata viewer built on mediainfo library. Part of C-Suite.

<https://cubocore.org/> <sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [coreinfo](#)<sup>AUR</sup>

- **DV Analyzer** — Technical quality control and reporting tool that examines DV streams in order to report errors.

<https://mediaarea.net/DVAnalyzer> || CLI: [dvanalyzer](#)<sup>AUR</sup>, GUI: [dvanalyzer-gui](#)<sup>AUR</sup>

- **ExifTool** — Command-line application for reading, writing and editing meta information in a wide variety of files.

<https://sno.phy.queensu.ca/~phil/exiftool/> || [perl-image-exiftool](#)

- **ExifCleaner** — Desktop app to clean metadata from images, videos, PDFs, and other files.

<https://exifcleaner.com> || [exifcleaner-bin](#)<sup>AUR</sup>

- **Exiv2** — Command line utility to manage image metadata. It provides fast and easy read and write access to the Exif, IPTC and XMP metadata and the ICC Profile embedded within digital images in various formats.

<https://exiv2.org/> || [exiv2](#)

- **ffprobe** — Gather information from multimedia streams and print it in human- and machine-readable fashion.

<https://ffmpeg.org/ffprobe.html> || [ffmpeg](#)

- **jExifToolGUI** — Java/Swing graphical frontend for ExifTool, which reads and writes all kind of metadata tags from/to image files.

<https://hvdwolf.github.io/jExifToolGUI/> || [jexiftoolgui](#)<sup>AUR</sup>

- **jhead** — Exif jpeg header manipulation tool.

<https://sentex.net/~mwandel/jhead/> || [jhead](#)

- **mat2** — Metadata removal tool, supporting a wide range of commonly used file formats.

<https://0xacab.org/jvoisin/mat2> || [mat2](#)

- **MediaConch** — Implementation checker, policy checker, reporter, and fixer.

<https://mediaarea.net/MediaConch> || CLI: [mediaconch](#)<sup>AUR</sup>, GUI: [mediaconch-gui](#)<sup>AUR</sup>

- **MediaInfo** — Convenient unified display of the most relevant technical and tag data for video and audio files.

<https://mediaarea.net/en/MediaInfo> || CLI: [mediainfo](#), GUI: [mediainfo-gui](#)

- **sndfile-info** — Obtaining information about the contents of an audio file.

<http://mega-nerd.com/libsndfile/> || [libsndfile](#)

## Mobile device managers

- **Android 2 Linux Notifications** — Display your Android phone notifications on your desktop using a LAN connection.

<https://www.patri9ck.dev/a2ln/> || [a2ln](#)<sup>AUR</sup>

- **Android File Transfer** — Interactive [Media Transfer Protocol](#) client with Qt5 GUI.

<https://whoozle.github.io/android-file-transfer-linux/> || [android-file-transfer](#)

- **gMTP** — Simple MP3 and media player client for [Media Transfer Protocol](#).

<https://gmtp.sourceforge.io/> || [gmtp](#)



- **gnokii** — Tools and user space driver for use with mobile phones.

<https://www.gnokii.org/> || [gnokii](#)<sup>AUR</sup>

- **GNOME Phone Manager** — Control your mobile phone from your GNOME desktop.

<https://wiki.gnome.org/Attic/PhoneManager> || [gnome-phone-manager](#)<sup>AUR</sup>

- **gtkpod** — GUI for Apple's iPod using GTK. It allows you to import your existing iTunes database, add songs, podcasts, videos and cover art, and to edit ID3 tags.

<https://sourceforge.net/projects/gtkpod/> || [gtkpod](#)<sup>AUR</sup>

- **KDE Connect** — Provides integration between devices.

<https://kdeconnect.kde.org/> || [kdeconnect](#)

- **Modem Manager GUI** — Control EDGE/3G/4G broadband modem specific functions.

<https://linuxonly.ru/page/modem-manager-gui> || [modem-manager-gui](#)

- **Ttwatch** — Linux TomTom GPS Watch Utilities.

<https://github.com/ryanbinns/ttwatch> || [ttwatch-git](#)<sup>AUR</sup>

- **Wammu** — Manage data in your cell phone such as contacts, calendar or messages.

<https://wammu.eu/> || [wammu](#)<sup>AUR</sup>

## Optical disc burning

See [Optical disc drive#Burning CD/DVD/BD with a GUI](#).

## Personal video recorders

- **MythTV** — A homebrew PVR project.

<https://www.mythtv.org/> || [mythtv-git](#)<sup>AUR</sup>

- **XMLTV** — Set of utilities to download tv listings and format them in xml.

<http://xmltv.org/wiki/> || [xmltv](#)<sup>AUR</sup>

## Utilities

### Terminal

## Command shells

See the main article: [Command-line shell](#).

See also [Wikipedia:Comparison of command shells](#).

## Terminal emulators

Terminal emulators show a GUI Window that contains a terminal. Most emulate Xterm, which in turn emulates VT102, which emulates typewriter. For further background information, see [Wikipedia:Terminal emulator](#).

For a comprehensive list, see [Wikipedia:List of terminal emulators](#).

- **[Alacritty](#)** — A cross-platform, GPU-accelerated terminal emulator.

<https://github.com/alacritty/alacritty> || [alacritty](#)

- **[aterm](#)** — Xterm replacement with transparency support. It has been deprecated in favour of urxvt since 2008.

<http://www.afterstep.org/aterm.php> || [aterm](#)<sup>AUR</sup>

- **[cool-retro-term](#)** — A good looking terminal emulator which mimics the old cathode display.

<https://github.com/Swordfish90/cool-retro-term> || [cool-retro-term](#)

- **[CoreTerminal](#)** — Terminal emulator based on qtermwidget. Part of C-Suite.

<https://cubocore.org/><sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [coreterminal](#)<sup>AUR</sup>

- **[CuteCom](#)** — A graphical serial terminal.

<https://gitlab.com/cutecom/cutecom> || [cutecom](#)<sup>AUR</sup>

- **[Deepin Terminal](#)** — Terminal emulation application for Deepin desktop.

<https://www.deepin.org/en/original/deepin-terminal/> || [deepin-terminal](#)

- **[Eterm](#)** — Terminal emulator intended as a replacement for xterm and designed for the [Enlightenment](#) desktop.

<https://github.com/mej/Eterm> || [eterm](#)<sup>AUR</sup>

- **[foot](#)** — Lightweight terminal emulator for Wayland with [sixel](#) support

<https://codeberg.org/dnkl/foot> || [foot](#)

- **Hyper** — A terminal with JS/CSS support. Based on the [Electron](#) platform.

<https://github.com/zeit/hyper> || [hyper](#)<sup>AUR</sup>

- **Konsole** — Terminal emulator included in the [KDE](#) desktop.

<https://konsole.kde.org/> || [konsole](#)

- **kitty** — A modern, hackable, featureful, OpenGL based terminal emulator

<https://github.com/kovidgoyal/kitty> || [kitty](#)

- **Liri Terminal** — Material Design terminal for Liri.

<https://github.com/lirios/terminal> || [liri-terminal](#)

- **mlterm** — A multi-lingual terminal emulator supporting various character sets and encodings, variable-width fonts and bidi rendering.

<https://sourceforge.net/projects/mlterm/> || [mlterm-git](#)<sup>AUR</sup>

- **moserial** — GTK-based serial terminal for the GNOME desktop.

<https://wiki.gnome.org/Apps/Moserial> || [moserial](#)

- **PuTTY** — Highly configurable ssh/telnet/serial console program.

<https://www.chiark.greenend.org.uk/~sgtatham/putty/> || [putty](#)

- **QTerminal** — Lightweight Qt-based terminal emulator.

<https://github.com/qterminal/qterminal> || [qterminal](#)

- **rxvt** — Popular replacement for xterm.

<https://rxvt.sourceforge.net/> || [rxvt](#)<sup>AUR</sup>

- **shellinabox** — A web-based SSH Terminal

<https://github.com/shellinabox/shellinabox> || [shellinabox-git](#)<sup>AUR</sup>

- **st** — Simple terminal implementation for X.

<https://st.suckless.org> || [st](#)<sup>AUR</sup>

- **Station** — Terminal emulation features different view modes such as split vertically and horizontally, a tabbed interface, and copy and paste commands.

<https://mauiokit.org/> || [maui-station](#)

- **Terminology** — Terminal emulator by the Enlightenment project team with innovative features: file thumbnails and media play like a media player.

<https://www.enlightenment.org/about-terminology> || [terminology](#)

- **urxvt** — Highly extendable (with Perl) unicode enabled rxvt-clone terminal emulator featuring tabbing, url launching, a Quake style drop-down mode and pseudo-transparency.

<http://software.schmorp.de/pkg/rxvt-unicode.html> || [rxvt-unicode](#)

- **wayst** — Simple terminal emulator for Wayland and X11 with OpenGL rendering and minimal dependencies.

<https://github.com/91861/wayst> || [wayst-git](#)<sup>AUR</sup>

- **xterm** — Simple terminal emulator for the X Window System. It provides DEC VT102 and Tektronix 4014 compatible terminals for programs that cannot use the window system directly.

<https://invisible-island.net/xterm/> || [xterm](#)

- **Yakuake** — Drop-down terminal (Quake style) emulator based on Konsole.

<https://apps.kde.org/yakuake/> || [yakuake](#)

- **zutty** — A high-end terminal for low-end systems.

<https://tomscii.sig7.se/zutty/> || [zutty](#)

## VTE-based

**VTE** (Virtual Terminal Emulator) is a widget developed during early GNOME days for use in the GNOME Terminal. It has since given birth to many terminals with similar capabilities.

- **Deepin Terminal (GTK version)** — Old terminal emulation application for Deepin desktop.

<https://github.com/linuxdeepin/deepin-terminal-gtk> || [deepin-terminal-gtk](#)

- **EasySSH** — SSH Connection Manager.

<https://github.com/muriloventuroso/easyssh> || [easyssh](#)<sup>AUR</sup>

- **Germinal** — Minimalist terminal emulator which provides a borderless maximized terminal, attached to a tmux session by default, hence providing tabs and panels.

<https://www.imagination-land.org/tags/germinal.html> || [germinal](#)<sup>AUR</sup>

- **GNOME Console** — Formerly known as King's Cross, a simple user-friendly terminal emulator for the [GNOME](#) desktop. Part of [gnome](#).

<https://gitlab.gnome.org/GNOME/console> || [gnome-console](#)

- **GNOME Terminal** — A terminal emulator included in the [GNOME](#) desktop with support for Unicode. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Terminal> || [gnome-terminal](#)

- **Guake** — Drop-down terminal for the GNOME desktop.

<http://guake-project.org/> || [guake](#)

- **kermi**t — A VTE-based terminal emulator that aims to be simple, fast and effective.

<https://github.com/orhun/kermi> || [kermi](#)<sup>AUR</sup>

- **LXTerminal** — Desktop independent terminal emulator for [LXDE](#).

<https://wiki.lxde.org/en/LXTerminal><sup>[dead link 2022-09-20 ⓘ]</sup> || [lxterminal](#)

- **MATE terminal** — A fork of [Wikipedia:GNOME terminal](#) for the [MATE](#) desktop.

<https://www.mate-desktop.org/> || [mate-terminal](#)

- **Pantheon Terminal** — A super lightweight, beautiful, and simple terminal emulator. It is designed to be setup with sane defaults and little to no configuration.

<https://github.com/elementary/terminal> || [pantheon-terminal](#)

- **ROXTerm** — Tabbed terminal emulator with a small footprint.

<https://rosterm.sourceforge.net/> || [rosterm](#)<sup>AUR</sup>

- **sakura** — Terminal emulator based on GTK and VTE.

<https://www.pleyades.net/david/projects/sakura> || [sakura](#)<sup>AUR</sup>

- **Terminator** — Terminal emulator supporting multiple resizable terminal panels.

<https://gnome-terminator.org/> || [terminator](#)

- **Termite** — Keyboard-centric VTE-based terminal, aimed at use within a window manager with tiling and/or tabbing support. Unmaintained - the developers recommend switching to Alacritty.

<https://github.com/thestinger/termite> || [termite](#)<sup>AUR</sup>

- **Termit** — Simple VTE-based terminal emulator with Lua scripting support

<https://github.com/nonstop/termit> || [termit-git](#)<sup>AUR</sup>

- **Tilda** — Configurable drop down terminal emulator.

<https://github.com/lanox/tilda/> || [tilda](#)

- **Tilix** — Tiling terminal emulator for GNOME.

<https://gnunn1.github.io/tilix-web/> || [tilix](#)

- **Xfce Terminal** — Terminal emulator included in the [Xfce](#) desktop with support for a colorized prompt and a tabbed interface.

<https://docs.xfce.org/apps/terminal/start> || [xfce4-terminal](#)

### KMS-based

The following terminal emulators are based on the [kernel mode setting](#) that could be invoked without X.

- **KMSCON** — A KMS/DRM-based system console(getty) with an integrated terminal emulator for Linux operating systems.

<https://github.com/dvdhrm/kmscon> || [kmscon](#)<sup>AUR</sup>

### framebuffer-based

In the GNU/Linux world, the [framebuffer](#) can refer to a virtual device in the Linux kernel (**fbdev**) or the virtual framebuffer system for X (**xvfb**). This section mainly lists the terminal emulators based on the in-kernel virtual device, i.e. **fbdev**.

- **yaft** — A simple terminal emulator for living without X, with UCS2 glyphs, wallpaper and 256color support.

<https://github.com/uobikiemukot/yaft> || [yaft](#)<sup>AUR</sup>

- **Fbterm** — a fast FrameBuffer based TERMinal emulator for linux

<https://salsa.debian.org/debian/fbterm> || [fbterm](#)<sup>AUR</sup>

### Terminal pagers

See also [Wikipedia:Terminal pager](#).

- **less** — A program similar to more, but with support for both forward and backward scrolling, as well as partial loading of files.

<https://www.gnu.org/software/less/> || [less](#)

- **mcview** — A pager with mouse and colour support. It is bundled with midnight commander.

<https://midnight-commander.org/> || [mc](#)

- **moar** — Moar is a pager. It's designed to just do the right thing without any configuration.

<https://github.com/walles/moar> || [moar](#)<sup>AUR</sup>

- **more** — A simple and feature-light pager. It is a part of util-linux.

<https://git.kernel.org/pub/scm/utils/util-linux/util-linux.git/about/> || [util-linux](#)

- **most** — A pager with support for multiple windows, left and right scrolling, and built-in colour support

<http://www.jedsoft.org/most/> || [most](#)

- [Vim](#) can [also be used as a pager](#).

## Terminal multiplexers

See also [Wikipedia:Terminal multiplexer](#).

- **abduco** — Tool for session attach and detach support which allows a process to run independently from its controlling terminal.

<https://www.brain-dump.org/projects/abduco/> || [abduco](#)

- **byobu** — An GPLv3 licensed addon for tmux or screen. It requires a terminal multiplexer installed.

<https://byobu.org/> || [byobu](#)

- **dtach** — Program that emulates the detach feature of [GNU Screen](#).

<http://dtach.sourceforge.net/> || [dtach](#)<sup>AUR</sup>

- **dvtm** — [dwm](#)-style window manager in the console.

<https://www.brain-dump.org/projects/dvtm/> || [dvtm](#)

- **GNU Screen** — Full-screen window manager that multiplexes a physical terminal.

<https://www.gnu.org/software/screen/> || [screen](#)

- **mtm** — Simple terminal multiplexer with just four commands: change focus, split, close, and screen redraw.

<https://github.com/deadpiki/mtm> || [mtm-git](#)<sup>AUR</sup>

- **tmate** — A fork of [tmux](#) aiming to help with remote access and pair programming.

<https://tmate.io/> || [tmate](#)

- **tmux** — BSD licensed terminal multiplexer.

<https://tmux.github.io/> || [tmux](#)

- **zellij** — Terminal multiplexer on steroids written in Rust

<https://zellij.dev/> || [zellij](#)

- **wezterm** — GPU-accelerated cross-platform terminal emulator and multiplexer implemented in [Rust](#).

<https://wezfurlong.org/wezterm/> || [wezterm](#)

**Tip:** [Kitty](#), a terminal emulator, offers similar functions.

## Files

### File managers

See also [Wikipedia:Comparison of file managers](#).

### Console

- **Clex** — File manager with full-screen user interface

<http://www.clex.sk/> || [clex](#)<sup>AUR</sup>

- **ClIFM** — The command line file manager: full-featured, fast, extensible, and lightweight as hell.

<https://github.com/leo-arch/clifm> || [clifm](#)<sup>AUR</sup>

- **ded** — directory editor, file manager similar to Emacs dired

<https://invisible-island.net/ded/ded.html> || [ded](#)<sup>AUR</sup>



- **Dired** — Directory editor integrated with [Emacs](#).

[https://www.gnu.org/software/emacs/manual/html\\_node/emacs/Dired.html](https://www.gnu.org/software/emacs/manual/html_node/emacs/Dired.html) || [emacs](#)

- **fff** — A simple file manager written in Bash.

<https://github.com/dylananaraps/fff> || [fff](#)

- **fm** — A terminal based file manager.

<https://github.com/knipferre/fm> || [fm-git](#)<sup>AUR</sup>

- **joshuto** — ranger-like terminal file manager written in Rust.

<https://github.com/kamiyaa/joshuto> || [joshuto-git](#)<sup>AUR</sup>

- **Last File Manager** — Powerful file manager written in Python 3 with a curses interface.

<https://inigo.katxi.org/devel/lfm/> || [lfm](#)<sup>AUR</sup>

- **lf** — Terminal file manager written in Go using server/client architecture.

<https://github.com/gokcehan/lf> || [lf](#)

- **Midnight Commander** — Console-based, dual-paneled file manager.

<https://midnight-commander.org> || [mc](#)

- **nffm** — "Nothing Fancy File Manager", a mouseless ncurses file manager written in C.

<https://github.com/mariostg/nffm> || [nffm-git](#)<sup>AUR</sup>

- **nnn** — Tiny, lightning fast, feature-packed file manager.

<https://github.com/jarun/nnn> || [nnn](#)

- **Pilot** — File manager that comes with the [Alpine](#) email client.

<https://alpine.x10host.com/> <sup>[dead link 2022-09-20 ⓘ]</sup> || [alpine-git](#)<sup>AUR</sup>

- **Ranger** — Console-based file manager with vi bindings, customizability, and lots of features.

<https://ranger.github.io/> || [ranger](#)

- **sfm** — simple file manager for unix-like systems.

<https://github.com/afify/sfm> || [sfm](#)<sup>AUR</sup>

- **TUIFI Manager** — A cross-platform terminal-based termux-oriented file manager (and component), meant to be used with a Uni-Curses project or as is.

<https://github.com/GiorgosXou/TUIFIManager> || [tuifimanager](#)<sup>AUR</sup>

- **Vifm** — Ncurses-based two-panel file manager with vi-like keybindings.

<https://vifm.info> || [vifm](#)

- **xplr** — A hackable, minimal, fast TUI file explorer.

<https://xplr.dev> || [xplr](#)

## Graphical

- **Caja** — The file manager for the MATE desktop.

<https://github.com/mate-desktop/caja> || [caja](#)

- **CoreFM** — Simple lightweight easy to use file manager with many features like image previews, mime-icon support, split view, auto-mounting of removable media, drag-n-drop support etc. Part of C-Suite.

<https://cubocore.org/><sup>[dead link 2023-06-17 ⓘ]</sup> || [corefm](#)<sup>AUR</sup>

- **Deepin File Manager** — File manager developed for [Deepin](#).

<https://www.deepin.org/en/original/dde-file-manager/> || [deepin-file-manager](#)

- **Dolphin** — File manager included in the KDE desktop.

<https://apps.kde.org/dolphin/> || [dolphin](#)

- **fm** — Small, general purpose file manager built with GTK4.

<https://github.com/euclio/fm> ||

- **Gentoo** — A lightweight file manager for GTK.

<https://sourceforge.net/projects/gentoo/> || [gentoo](#)<sup>AUR</sup>

- **GNOME Files** — Extensible, heavyweight file manager used by default in GNOME with support for custom scripts. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Files> || [nautilus](#)

- **Index** — File manager that lets you browse your system files and applications and preview your music, text, image and video files and share them with external applications.

<https://apps.kde.org/index-fm/> || [index-fm](#)

- **Konqueror** — File manager and web browser for the KDE desktop.

<https://apps.kde.org/konqueror/> || [konqueror](#)

- **Liri Files** — The file manager for Liri.

<https://github.com/lirios/files> || [liri-files](#)

- **Nemo** — Nemo is the file manager of the Cinnamon desktop. A fork of Nautilus.

<https://projects.linuxmint.com/cinnamon/> || [nemo](#)

- **Pantheon Files** — File browser designed for elementary OS.

<https://github.com/elementary/files> || [pantheon-files](#)

- **PathFinder** — File browser that comes with the [FOX toolkit](#).

<http://fox-toolkit.org/> || [fox](#)

- **PCManFM** — Very fast and lightweight file manager which can also optionally manage the desktop icons and background.

<https://wiki.lxde.org/en/PCManFM><sup>[dead link 2022-09-20 ⓘ]</sup> || [pcmanfm](#), [pcmanfm-gtk3](#)

- **PCManFM-Qt** — Qt port of PCManFM file manager.

<https://github.com/lxqt/pcmanfm-qt> || [pcmanfm-qt](#)

- **Peony** — File manager for the UKUI desktop.

<https://github.com/ukui/peony> || [peony](#)

- **qtFM** — Small, lightweight filemanager for Linux desktops based on pure Qt.

<https://qtfm.eu/> || [qtfm](#)<sup>AUR</sup>

- **ROX Filer** — Small and fast file manager which can optionally manage the desktop background and panels.

<https://rox.sourceforge.net/> || [rox](#)<sup>AUR</sup>

- **Thunar** — File manager that can be run as a daemon with excellent start up and directory load times.

<https://docs.xfce.org/xfce/thunar/start> || [thunar](#)

#### Twin-panel

Note that some of these twin-panel file managers can also be set to have only one pane.

- **Double Commander** — File manager with two panels side by side. It is inspired by Total Commander and features some new ideas.

<https://doublecmd.sourceforge.io/> || GTK: [doublecmd-gtk2](#), Qt5: [doublecmd-qt5](#)

- **GNOME Commander** — A dual-paned file manager for the GNOME Desktop.

<https://gcmd.github.io/> || [gnome-commander](#)<sup>AUR</sup>

- **Krusader** — Advanced twin panel (Midnight Commander style) file manager for the KDE desktop.

<https://krusader.org/> || [krusader](#)

- **muCommander** — A lightweight, cross-platform file manager with a dual-pane interface written in Java.

<https://www.mucommander.com/> || [mucommander](#)<sup>AUR</sup>

- **SpaceFM** — GTK multi-panel tabbed file manager.

<https://ignorantguru.github.io/spacefm/> || [spacefm](#)<sup>AUR</sup>

- **Sunflower** — Small and highly customizable twin-panel file manager for Linux with support for plugins.

<https://sunflower-fm.org/> || [sunflower](#)<sup>AUR</sup>

- **trolCommander** — Lightweight, dual-pane file manager written in Java. Fork of muCommander.

<https://github.com/trol73/mucommander> || [trolcommander](#)<sup>AUR</sup>

- **Tux Commander** — Windowed file manager with two panels side by side similar to popular Total Commander or Midnight Commander file managers.

<http://tuxcmd.sourceforge.net/description.php> || [tuxcmd](#)<sup>AUR</sup>

- **Worker** — Fast, lightweight and feature-rich file manager for the X Window System.

<http://www.boomerangsworld.de/cms/worker/> || [worker](#)<sup>AUR</sup>

- [Xfe](#) — Microsoft Explorer-like file manager for X (X File Explorer).

<http://roland65.free.fr/xfe/> || [xfe](#)<sup>AUR</sup>

## Trash management

See [Trash management#Trash creation](#).

## File synchronization and backup



This article or section is a candidate for merging with [Synchronization and](#)

[backup programs#Data synchronization](#).



**Notes:** There is a dedicated article. (Discuss in [Talk:List of applications](#))

See also [Synchronization and backup programs](#), [Wikipedia:Comparison of file synchronization software](#), and [Wikipedia:Comparison of backup software](#).

- **borg** — Deduplicating backup program with compression and authenticated encryption that supports backing up over ssh

<https://www.borgbackup.org> || [borg](#)

- **Déjà Dup** — Simple GTK backup program. It hides the complexity of doing backups the 'right way' (encrypted, off-site, and regular) and uses [duplicity](#) as the backend.

<https://launchpad.net/deja-dup> || [deja-dup](#)

- [DirSync Pro](#) — Small, but powerful utility for file and folder synchronization.

<https://dircsyncpro.org/> || [dircsyncpro](#)<sup>AUR</sup>

- [Duplicati](#) — Backup client that securely stores encrypted, incremental, compressed backups on cloud storage services and remote file servers.

<https://www.duplicati.com/> || [duplicati-canary-bin](#)<sup>AUR</sup>

- [duplicity](#) — Simple command-line utility which allows encrypted compressed incremental backup to nearly any storage.

<https://www.nongnu.org/duplicity/> || [duplicity](#)

- **Duply** — Command-line front-end for [duplicity](#) which simplifies running it. It manages backup job settings in profiles and allows to batch execute commands.

<https://www.duply.net/> || [duply](#)<sup>AUR</sup>

- **FreeFileSync** — Folder comparison and synchronization software that creates and manages backup copies of all your important files.

<https://www.freefilesync.org/> || [freefilesync](#)<sup>AUR</sup>

- **git-annex** — Manage files with git, without checking the file contents into git.

<https://git-annex.branchable.com/> || [git-annex](#)

- **grsync** — GTK+ GUI for rsync to synchronize folders, files and make backups

<https://www.opbyte.it/grsync/> || [grsync](#)

- **hsync** — Command line program to sync only those files that have been renamed/moved but otherwise unchanged. It works by issuing simple move operations at the destination without actually transferring the files, and is meant to be used in conjunction with other synchronization programs that lack this capability.

<https://ambrevar.bitbucket.io/hsync/> || [hsync](#)<sup>AUR</sup>

- **rclone** — Command line program to sync files and directories to and from Amazon S3, Dropbox, Google Drive, Microsoft OneDrive, Yandex Disk and many other cloud storage services as well as between local paths.

<https://rclone.org/> || [rclone](#)

- **restic** — Fast, secure, efficient backup program that supports backing up to many cloud services.

<https://restic.net/> || [restic](#)

- **rsync** — File transfer program that uses the "rsync algorithm" which provides a very fast method for bringing remote files into sync. It does this by sending just the differences in the files across the link, without requiring that both sets of files are present at one of the ends of the link beforehand. Has [multiple frontends available](#).

<https://rsync.samba.org/> || [rsync](#)

- **SparkleShare** — File sharing and collaboration application written in C#. It can sync with any Git server over SSH.

<https://www.sparkleshare.org/> || [sparkleshare](#)

- **Syncthing** — Continuous file synchronization program. It synchronizes files between two or more computers in a simple way without advanced configuration.

<https://syncthing.net/> || [syncthing](#)

- **Syncany** — Cloud storage and filesharing application with a focus on security and abstraction of storage.

<https://www.syncany.org/> || [syncany](#)<sup>AUR</sup>

- **Synkron** — Application that helps you keep your files and folders always updated. You can easily sync your documents, music or pictures to have their latest versions everywhere.

<https://synkron.sourceforge.net/> || [synkron](#)<sup>AUR</sup>

- **Tarsnap** — Secure, efficient proprietary online backup service.

<https://www.tarsnap.com/> || [tarsnap](#)

- **Timeshift** — A system restore tool for Linux.

<https://github.com/teejee2008/timeshift> || [timeshift](#)<sup>AUR</sup>

- **Unison** — File synchronization tool that allows two replicas of a collection of files and directories to be stored on different hosts (or different disks on the same host), modified separately, and then brought up to date by propagating the changes in each replica to the other.

<https://www.cis.upenn.edu/~bcpierce/unison/> || [unison](#)

- **YARsync** — A Python wrapper around rsync, providing file synchronization and backup with an interface similar to git.

<https://github.com/ynikitenko/yarsync> || [yarsync](#)<sup>AUR</sup>

## Archiving and compression tools

For archiving and compression command-line tools, see [Archiving and compression](#).

### Archive managers

- **360zip** — A proprietary archiving tool.

<https://yasuo.360.cn/> || [360zip](#)<sup>AUR</sup>

- **Ark** — Archiving tool included in the KDE desktop.

<https://apps.kde.org/ark/> || [ark](#)

- **Arkiver** — Simple Qt archive manager based on libarchive.

<https://github.com/tsujan/Arkiver> || [arkiver-git](#)<sup>AUR</sup>

- **CoreArchiver** — Simple file compressing/extracting utility based on Qt and libarchive-qt. Part of C-Suite.

<https://cubocore.org/><sup>[dead link 2023-06-17 ⓘ]</sup> || [corearchiver](#)<sup>AUR</sup>

- **Deepin Archive Manager** — Fast and lightweight application for creating and extracting archives.

<https://github.com/linuxdeepin/deepin-compressor> || [deepin-compressor](#)

- **Engrampa** — Archive manager for [MATE](#)

<https://github.com/mate-desktop/engrampa> || [engrampa](#)

- **GNOME Archive Manager** — Archive manager included in the GNOME desktop (previously File Roller). Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/FileRoller> || [file-roller](#)

- **LXQt File Archiver** — Simple and lightweight desktop-agnostic Qt file archiver.

<https://github.com/lxqt/lxqt-archiver> || [lxqt-archiver](#)

- **p7zip-gui** — The GUI belonging to the p7zip software.

<https://p7zip.sourceforge.net/> || [p7zip-gui](#)<sup>AUR</sup>

- **PeaZip** — Open source file and archive manager.

<https://peazip.github.io/peazip-linux.html> || GTK: [peazip-gtk2-bin](#)<sup>AUR</sup>, Qt: [peazip-qt-bin](#)<sup>AUR</sup>

- **Xarchiver** — Lightweight desktop independent archive manager built with GTK.

<https://github.com/ib/xarchiver> || GTK 3: [xarchiver](#), GTK 2: [xarchiver-gtk2](#)

## Comparison, diff, merge

See also [Wikipedia:Comparison of file comparison tools](#).

For managing *pacnew*/*pacsave* files, specialised tools exist. See [Pacnew and Pacsave files#Managing .pac\\* files](#).



## Console

See [diff\(1\)](#) from [diffutils](#) and [its alternatives](#).

- **colordiff** — A Perl script wrapper for 'diff' that produces the same output but with pretty 'syntax' highlighting.

<https://www.colordiff.org/> || [colordiff](#)

- **diff-highlight** — Perl script to highlight changed parts within pairable lines of `diff -u` output

<https://github.com/git/git/tree/master/contrib/diff-highlight> || [git](#)

- **diffrr** — A Rust utility to pretty-print diff with highlighting at word-level for ease of review.

<https://github.com/mookid/diffrr> || [diffrr](#)<sup>AUR</sup>

- **ydiff** — A Python wrapper to get highlighted diff output from stdin or VCS-tracked file/dirs, in either unified or side-by-side view.

<https://github.com/ymattw/ydiff> || [ydiff](#)<sup>AUR</sup>

- **delta** — A diff viewer written in Rust with syntax highlighting.

<https://github.com/dandavison/delta> || [git-delta](#)

- **diff-so-fancy** — A diff output decorator. It does not calculate the diff, it only decorates it.

<https://github.com/so-fancy/diff-so-fancy> || [diff-so-fancy](#)

- **diffastic** — Compares files using their syntax trees

<https://diffastic.wilfred.me.uk> || [diffastic](#)

## Graphical

- **DiffPDF** — Compare the text or the visual appearance of each page in two PDF files.

<https://gitlab.com/eang/diffpdf> || [diffpdf](#)

- **Diffuse** — Small and simple text merge tool written in Python.

<https://diffuse.sourceforge.net/> || [diffuse](#)

- **KDiff3** — File and directory diff and merge tool for the KDE desktop.

<https://apps.kde.org/kdiff3/> || [kdiff3](#)

- **Kompare** — GUI front-end program for viewing and merging differences between source files. It supports a variety of diff formats and provides many options to customize the information level displayed.

<https://apps.kde.org/kompare/> || [kompare](#)

- **Meld** — Visual diff and merge tool that can compare files, directories, and version controlled projects.

<https://meldmerge.org/> || [meld](#)

- **xxdiff** — A graphical browser for file and directory differences.

<https://furius.ca/xxdiff/> || [xxdiff](#)<sup>AUR</sup>

[Vim](#) and [Emacs](#) provide merge functionality with [vimdiff](#) and [ediff](#).

## Batch renamers

### Console

See [rename\(1\)](#) from [util-linux](#).

- **edir** — Rename, delete, and copy files and directories using your editor (enhanced vidir).

<https://github.com/bulletmark/edir> || [edir](#)<sup>AUR</sup>

- **f2** — Cross-platform command-line tool for batch renaming files and directories quickly and safely, can also rename files based on audio tags.

<https://github.com/ayoisaiiah/f2> || [f2](#)<sup>AUR</sup>

- **nomino** — A batch rename utility for developers.

<https://github.com/yaa110/nomino> || [nomino](#)<sup>AUR</sup>

- **rename.pl** — Batch renamer based on perl regex.

<https://search.cpan.org/~pederst/rename/> || [perl-rename](#)

- **vidir** — Rename and delete files and directories using your editor.

<https://linux.die.net/man/1/vidir> || [vidir](#)<sup>AUR</sup>

### Graphical

- **Caja-Rename** — Batch renaming extension for Caja.

<https://tari.in/www/software/caja-rename> || [caja-rename](#)<sup>AUR</sup>

- **CoreRenamer** — Simple lightweight batch file renamer application. Part of C-Suite.

<https://cubocore.org/><sup>[dead link 2023-06-17 ⓘ]</sup> || [corerenamer](#)<sup>AUR</sup>

- **GPRename** — GTK batch renamer for files and directories.

<http://gprenamer.sourceforge.net> || [gprenamer](#)

- **KRename** — Very powerful batch file renamer for the KDE desktop.

<https://apps.kde.org/krename/> || [krename](#)

- **metamorphose2** — wxPython based batch renamer with support for regular expressions, renaming multimedia files according to their metadata, etc.

<http://file-folder-ren.sourceforge.net> || [metamorphose2](#)<sup>AUR</sup>

- **Thunar Bulk Rename** — Change the name of multiple files at once using some criterion that applies to at least one of the files. Run with `thunar -B`.

<https://docs.xfce.org/xfce/thunar/bulk-renamer/start> || [thunar](#)

## File searching

This section lists utilities for file searching based on filename, file path or metadata. For full-text searching, see the next section.

See also [Wikipedia:List of search engines#Desktop search engines](#).

## Console

See [find\(1\)](#) from [findutils](#) and [its alternatives](#).

## Graphical

- **Catfish** — Versatile file searching tool by Xfce, can be powered by find, locate and Zeitgeist.

<https://launchpad.net/catfish-search> || [catfish](#)

- **CoreHunt** — Easy to use fast file searching tool with categorized search and search history. Part of C-Suite.

<https://cubocore.org/><sup>[dead link 2023-06-17 ⓘ]</sup> || [corehunt](#)<sup>AUR</sup>

- **Czkawka** — GTK file searching utility with advanced features, it can also find similar images and videos.

<https://github.com/garmin/czkawka> || [czkawka-gui](#)<sup>AUR</sup>

- **GNOME Search Tool** — GNOME utility to search for files, depends on [GNOME/Files](#).

<https://gitlab.gnome.org/GNOME/gnome-search-tool> || [gnome-search-tool](#)<sup>AUR</sup>

- **KFind** — Search tool for KDE to find files by name, type or content. Has internal search and supports locate.

<https://apps.kde.org/kfind/> || [kfind](#)

- **MATE Search Tool** — MATE utility to search for files.

<https://github.com/mate-desktop/mate-utils> || [mate-utils](#)

- **regexxer** — Interactive search and replace tool featuring Perl-style regular expressions.

<http://regexxer.sourceforge.net/> || [regexxer](#)

- **Searchmonkey** — Powerful GUI search utility for matching regex patterns.

<https://sourceforge.net/projects/searchmonkey/> || [searchmonkey-gtk](#)<sup>AUR</sup>

#### File indexers

These programs index your files to allow for quick searching.

- **Basenji** — Volume indexing tool designed for easy and fast indexing of CD/DVD and other type of volume collections.

<https://github.com/pulb/basenji> || [basenji](#)<sup>AUR</sup>

- **fsearch** — A fast file search utility for Unix-like systems based on GTK 3.

<https://github.com/cboxdoerfer/fsearch> || [fsearch-gtk](#)<sup>AUR</sup>

- **angrysearch** — Linux file search tool with instant results as you type.

<https://github.com/DoTheEvo/ANGRYsearch> || [angrysearch](#)<sup>AUR</sup>

#### Full-text searching

See [grep\(1\)](#) from [grep](#) and [its alternatives](#), which provide non-indexed [full-text search](#).

#### Full-text indexers

- **Baloo** — KDE's file indexing and search solution, has a CLI and is used by [KRunner](#).

<https://community.kde.org/Baloo> || [baloo](#)

- **DocFetcher** — Graphical Java desktop search application.

<https://docfetcher.sourceforge.net> || [docfetcher](#)<sup>AUR</sup>

- **MeiliSearch** — Lightning Fast, Ultra Relevant, and Typo-Tolerant Search Engine.

<https://www.meilisearch.com/> || [meilisearch](#)

- **Namazu** — A Full-Text Search Engine

<http://www.namazu.org/> || [namazu](#)

- **Recoll** — Full text search tool based on Xapian, has CLI and GUI.

<https://lesbonscomptes.com/recoll/> || [recoll](#)

- **Tracker** — All-in-one indexer, search tool and metadata database, used by [GNOME](#) Documents, Music, Photos and Videos.

<https://gnome.pages.gitlab.gnome.org/tracker/> || [tracker3](#)

- **Zeitgeist** — Event aggregation framework for the user's activities and notifications (files opened, websites visited, conversations had, etc.), has several third-party front-ends.

<https://launchpad.net/zeitgeist-project> || [zeitgeist](#)

## Development

### Code forges

- **GitLab** — Project management and code hosting application.

<https://gitlab.com/gitlab-org/gitlab-foss> || [gitlab](#)

- **Gitea** — Painless self-hosted Git service. Community managed fork of Gogs.

<https://gitea.io> || [gitea](#)

### Code forge clients

- **git-open** — Open a repository website (GitHub, GitLab, Bitbucket) in your browser

<https://github.com/paulirish/git-open> || [git-open](#)<sup>AUR</sup>

- **github-cli** — GitHub's official command line tool

<https://github.com/cli/cli> || [github-cli](#)

- **hub** — Command line interface for GitHub

<https://hub.github.com> || [hub](#)

- **hut** — Command line interface for Sourcehut

<https://sr.ht/~emersion/hut/> || [hut](#)

- **lab** — A hub-like tool for GitLab

<https://zaquestion.github.io/lab/> || [lab](#)<sup>AUR</sup>

- **snippet** — A terminal based interface to create a new GitLab snippet

<https://gitlab.com/zj/snippet> || [snippet](#)<sup>AUR</sup>

## Version control systems

See also [Wikipedia:Comparison of revision control software](#).

- **Bazaar** — Distributed version control system that helps you track project history over time and to collaborate easily with others.

<https://bazaar.canonical.com/> || [bzi](#)<sup>AUR</sup>

- **CVS** — Concurrent Versions System, a client-server revision control system.

<http://cvs.nongnu.org/> || [cvs](#)

- **Darcs** — Distributed revision control system that was designed to replace traditional, centralized source control systems such as CVS and Subversion.

<http://darcs.net/> || [darcs](#)

- **Fossil** — Distributed VCS with bug tracking, wiki, forum, and technotes.

<https://www.fossil-scm.org/> || [fossil](#)

- **Git** — Distributed revision control and source code management system with an emphasis on speed.

<https://git-scm.com/> || [git](#)

- **[Mercurial](#)** — Distributed version control system written in Python and similar in many ways to Git.

<https://www.mercurial-scm.org/> || [mercurial](#)

- **[Subversion](#)** — Full-featured centralized version control system originally designed to be a better CVS.

<https://subversion.apache.org/> || [subversion](#)

## Build automation

See also [Wikipedia:List of build automation software](#).

- **[Apache Ant](#)** — Java library and command-line tool whose mission is to drive processes described in build files as targets and extension points dependent upon each other.

<https://ant.apache.org/> || [ant](#)

- **[Apache Maven](#)** — Build automation tool used primarily for Java.

<https://maven.apache.org/> || [maven](#)

- **[Bazel](#)** — An open-source tool that allows for the automated building and testing of software.

<https://bazel.build/> || [bazel](#)

- **[CMake](#)** — Family of tools designed to build, test and package software.

<https://cmake.org/> || [cmake](#)

- **[GNU make](#)** — GNU make utility to maintain groups of programs.

<https://www.gnu.org/software/make/> || [make](#) (dependency of [base-devel](#))

- **[Meson](#)** — Extremely fast and user friendly build system.

<https://mesonbuild.com/> || [meson](#)

- **[Gradle](#)** — Powerful build system for the JVM.

<https://gradle.org/> || [gradle](#)

- **[Phing](#)** — PHP program designed to automate tasks of all kinds.

<https://www.phing.info/> || [phing](#)<sup>AUR</sup>

## Integrated development environments

See also [Wikipedia:Comparison of integrated development environments](#).

For PHP specific list, see [PHP#Development tools](#).

- [Android Studio](#) — The official Android development environment based on IntelliJ IDEA.

<https://developer.android.com/studio/index.html> || [android-studio](#)<sup>AUR</sup>

- [Anjuta](#) — Versatile IDE with project management, an application wizard, an interactive debugger, a source editor, version control support and many more tools.

<https://wiki.gnome.org/Apps/Anjuta> || [anjuta](#)<sup>AUR</sup>

- [Aptana Studio](#) — IDE based on Eclipse, but geared towards web development, with support for HTML, CSS, Javascript, Ruby on Rails, PHP, Adobe AIR and others.

<http://www.aptana.com/> || [aptana-studio](#)<sup>AUR</sup>

- [Bluefish](#) — Powerful editor targeted towards programmers and webdevelopers, with many options to write websites, scripts and programming code. It supports many programming and markup languages.

<https://bluefish.openoffice.nl/> || [bluefish](#)

- [Code::Blocks](#) — C, C++ and Fortran IDE built to meet the most demanding needs of its users. It is designed to be very extensible and fully configurable.

<https://codeblocks.org/> || [codeblocks](#)

- [CLion](#) — A cross-platform IDE for C and C++.

<https://www.jetbrains.com/clion/> || [clion](#)<sup>AUR</sup>

- [CodeLite](#) — Open source and cross-platform C/C++/PHP and Node.js IDE written in C++ .

<https://codelite.org/> || [codelite](#)<sup>AUR</sup>

- [Eclipse](#) — IDE for Java, C/C++, PHP, Perl and Python with subversion support and task management.

<https://www.eclipse.org/> || Java EE: [eclipse-jee](#)<sup>AUR</sup>, Java: [eclipse-java](#)<sup>AUR</sup>, RCP: [eclipse-rcp](#)<sup>AUR</sup>, C/C++: [eclipse-cpp](#)<sup>AUR</sup>, PHP: [eclipse-php](#)<sup>AUR</sup>, JavaScript and Web: [eclipse-dltk-javascript](#)<sup>AUR</sup>

- [Eric](#) — Full-featured Python and Ruby IDE written in PyQt5.



<https://eric-ide.python-projects.org/> || [eric](#)<sup>AUR</sup>

- **Gambas** — IDE based on a Basic interpreter with object extensions.

<https://gambas.sourceforge.net/en/main.html> || [gambas3-ide](#)

- **Geany** — Small and lightweight IDE with many supported many programming and markup languages including C, Java, PHP, HTML, Python, Perl, Pascal.

<https://geany.org/> || [geany](#)

- **GNOME Builder** — Tool to write and contribute to great GNOME-based applications. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Builder> || [gnome-builder](#)

- **KDevelop** — Feature-full, plugin extensible IDE for C/C++ and other programming languages.

<https://www.kdevelop.org/> || [kdevelop](#)

- **Komodo Edit** — A free, multi-language editor.

<https://www.activestate.com/products/komodo-edit/> || [komodo-edit](#)<sup>AUR</sup>

- **Lapce** — Lightning-fast and Powerful Code Editor written in Rust.

<https://lapce.dev/> || [lapce](#)

- **Lazarus** — Delphi (Object Pascal) compatible IDE for Rapid Application Development. It has variety of components ready for use and a graphical form designer to easily create complex graphical user interfaces.

<https://www.lazarus-ide.org/> || [lazarus](#)

- **LiteIDE** — Simple Go IDE.

<https://github.com/visualfc/liteide> || [liteide](#)

- **Lite XL** — A lightweight, simple, fast, feature-filled, and extremely extensible text editor written in C, and Lua, adapted from lite.

<https://lite-xl.com/> || [lite-xl](#)<sup>AUR</sup>

- **MPLAB** — IDE for Microchip PIC and dsPIC development.

<https://www.microchip.com/mplabx> || [microchip-mplabx-bin](#)<sup>AUR</sup>

- **Netbeans** — IDE for developing with Java, JavaScript, PHP, Python, Ruby, Groovy, C, C++, Scala, Clojure, and other languages.

<https://netbeans.org/> || [netbeans](#)

- **PhpStorm** — JetBrains PhpStorm is a commercial, cross-platform IDE for PHP built on JetBrains' IntelliJ IDEA platform, providing an editor for PHP, HTML and JavaScript with on-the-fly code analysis, error prevention and automated refactorings for PHP and JavaScript code.

<https://www.jetbrains.com/phpstorm/> || [phpstorm](#)<sup>AUR</sup>, [phpstorm-eap](#)<sup>AUR</sup>

- **Qt Creator** — Lightweight, cross-platform C++ integrated development environment with a focus on Qt.

<https://www.qt.io/ide/> || [qtcreator](#)

- **Theia** — Eclipse Theia is a free and open-source IDE for desktop and web applications. It is implemented in TypeScript, is based on Visual Studio Code, and emphasizes extensibility. It can be run as a web or a desktop application.

<https://theia-ide.org/> || [theia-electron](#)<sup>AUR</sup>

- **Visual Studio Code** — Visual Studio Code is a cross-platform, free and open-source text editor developed by Microsoft, written in JavaScript and TypeScript. It supports a variety of languages thanks to its extensions.

<https://code.visualstudio.com/> || [code](#)

- **VSCodium** — Free/Libre Open Source Software Binaries of VSCode.

<https://vscodium.com/> || [vscodium](#)<sup>AUR</sup>

- **ZeroBrane Studio** — IDE with debugging support for Lua 5.1, Lua 5.2, Lua 5.3, LuaJIT, and other Lua engines.

<https://studio.zerobrane.com/> || [zerobrane-studio](#)<sup>AUR</sup>

## Java IDEs

- **BlueJ** — Fully featured Java IDE used mainly for educational and beginner purposes.

<https://bluej.org/> || [bluej](#)<sup>AUR</sup>

- **IntelliJ IDEA** — IDE for Java, Groovy and other programming languages with advanced refactoring features.

<https://www.jetbrains.com/idea/> || [intellij-idea-community-edition](#)

## Python IDEs

- **[Ninja-IDE](#)** — IDE for Python development.

<https://ninja-ide.org/> || [ninja-ide](#)<sup>AUR</sup>

- **[PyCharm](#)** — Python IDE with support for code analysis, debugging, unit testing, version control and web development with Django.

<https://www.jetbrains.com/pycharm/> || community edition: [pycharm-community-edition](#), professional edition: [pycharm-professional](#)<sup>AUR</sup>, edu edition: [pycharm-edu](#)<sup>AUR</sup>

- **[Spyder](#)** — Scientific Python Development Environment providing MATLAB-like features.

<https://github.com/spyder-ide/spyder> || [spyder](#)

- **[Thonny](#)** — Python IDE for beginners.

<https://thonny.org/> || [thonny](#)<sup>AUR</sup>

- **[WingIDE](#)** — Proprietary Python development environment. It is fully featured and meant for professional use.

<https://wingware.com/> || [wingide](#)<sup>AUR</sup>

## Educational IDEs

- **[KTurtle](#)** — Educational programming environment that aims to make learning how to program as easily as possible. Part of [kde-education](#).

<https://apps.kde.org/kturtle/> || [kturtle](#)

- **[Processing](#)** — Playground for teaching non-programmers the fundamentals of computer programming in a visual context.

<https://processing.org/> || [processing](#)<sup>AUR</sup>

- **[Scratch](#)** — Programming system and content development tool for educational and entertainment purposes, such as creating interactive projects and simple sprite-based games. It is used primarily by unskilled users (such as children) as an entry to [event-driven programming](#).

<https://scratch.mit.edu/> || [scratch](#)

## Debuggers

- **Accerciser** — Interactive Python accessibility explorer. It uses the AT-SPI library to inspect, examine, and interact with widgets, allowing you to check if an application is providing correct information to assistive technologies and automated testing frameworks. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Accerciser> || [accerciser](#)

- **Bustle** — Draws sequence diagrams of D-Bus activity. It shows signal emissions, method calls and their corresponding returns, with time stamps for each individual event and the duration of each method call.

<https://www.freedesktop.org/wiki/Software/Bustle/> || [bustle-git](#)<sup>AUR</sup>

- **Data Display Debugger** — Graphical front-end for command-line debuggers such as GDB.

<https://www.gnu.org/software/ddd/> || [ddd](#)<sup>AUR</sup>

- **Desed** — TUI-based debugger for sed. Features variable and regex preview, setting breakpoints and stepping back and forth.

<https://github.com/SoptikHa2/desed> || [desed](#)<sup>AUR</sup>

- **D-Feet** — Easy to use D-Bus debugger to inspect D-Bus interfaces of running programs and invoke methods on those interfaces.

<https://wiki.gnome.org/Apps/DFeet> || [d-feet](#)

- **D-Spy** — Easy to use D-Bus debugger. It's like d-feet, but written in C and blisteringly fast. Part of [gnome-extra](#).

<https://gitlab.gnome.org/GNOME/d-spy> || [d-spy](#)

- **GammaRay** — Qt-application inspection and manipulation tool.

<https://www.kdab.com/development-resources/qt-tools/gammaray/> || [gammaray](#)

- **GDBFrontend** — Easy, flexible and extensible graphical debugger.

<https://github.com/rohanrhu/gdb-frontend> || [gdb-frontend-bin](#)<sup>AUR</sup>

- **KCachegrind** — Profile data visualization tool, used to determine the most time consuming execution parts of program.

<https://apps.kde.org/kcachegrind/> || KDE: [kcachegrind](#), Qt: [qcachegrind](#)

- **KDbg** — Graphical user interface to GDB, the GNU debugger. It provides an intuitive interface for setting breakpoints, inspecting variables, and stepping through code.

<https://www.kdbg.org/> || [kdbg](#)

- **Massif-Visualizer** — Visualizer for Valgrind Massif data files.

<https://apps.kde.org/massif-visualizer/> || [massif-visualizer](#)

- **Nemiver** — Easy to use standalone C/C++ debugger (GDB front-end) that integrates well in the GNOME environment.

<https://wiki.gnome.org/Apps/Nemiver> || [nemiver](#)<sup>AUR</sup>

- **Qt QDBusViewer** — Tool to introspect D-Bus objects and messages.

<https://doc.qt.io/qt-5/qdbusviewer.html> || [qt5-tools](#)

- **scanmem** — Debugging utility designed to isolate the address of an arbitrary variable in an executing process.

<https://github.com/scanmem/scanmem> || CLI: [scanmem](#), GUI: [gameconqueror](#)

- **Sysprof** — Profiling tool that helps in finding the functions in which a program uses most of its time. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Sysprof> || [sysprof](#)

## Lexing and parsing

[Lex](#) and [Yacc](#) are part of POSIX.

- **flex** — A tool for generating text-scanning programs, alternative to Lex.

<https://github.com/westes/flex> || [flex](#)

- **Berkeley Yacc** — Berkeley reimplement of the Unix parser generator Yacc.

<https://invisible-island.net/byacc/> || [byacc](#)

- **GNU Bison** — The GNU general-purpose parser generator, alternative to *byacc*.

<https://www.gnu.org/software/bison/> || [bison](#)

And then there are also:

- **ANTLR** — Parser generator, written in Java, for parsing structured text or binary files.

<https://www.antlr.org/> || [antlr4](#)

- **LPeg** — Pattern-matching library, based on PEGs, for Lua.

<http://www.inf.puc-rio.br/~roberto/lpeg/> || [lua-lpeg](#), [lua52-lpeg](#), [lua51-lpeg](#)

- **peg/leg** — Recursive-descent parser generators for C.

<https://www.piumarta.com/software/peg/> || [peg](#)

- **Ragel** — Compiles finite state machines from regular languages into executable C, C++, Objective-C, or D code.

<https://www.colm.net/open-source/ragel/> || [ragel](#)

## GUI builders

- **FLUID** — FLTK GUI designer.

<https://www.fltk.org/> || [fltk](#)

- **Glade** — Create or open user interface designs for GTK applications. Part of [gnome-extra](#).

<https://glade.gnome.org/> || [glade](#)

- **KUIViewer** — Quick viewer for Qt Designer UI File.

<https://apps.kde.org/kuiviewer/> || [kde-dev-utils](#)

- **Qt Designer** — Tool for designing and building graphical user interfaces (GUIs) with Qt Widgets.

<https://doc.qt.io/qt-5/qtdesigner-manual.html> || [qt5-tools](#)

## Hex editors

See also [Wikipedia:Comparison of hex editors](#).

- **Bless** — High quality, full featured hex editor.

<https://web.archive.org/web/20170503150524/http://home.gna.org/bless/> || [bless](#)

- **GHex** — Hex editor for GNOME, which allows the user to load data from any file, view and edit it in either hex or ascii. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Ghex> || [ghex](#)

- **hyx** — A minimalistic (< 2300 lines of C) but powerful (hex/ASCII, insert/replace/delete, copy/paste, undo/redo, search, colors, vim-inspired controls) Linux terminal hex editor.

<https://yx7.cc/code/> || [hyx](#)<sup>AUR</sup>

- **ImHex** — A hex editor for reverse engineers, programmers, and people who value their retinas when working at 3 AM.

<https://imhex.werwolv.net/> || [imhex](#)<sup>AUR</sup>

- **Okteta** — KDE hex editor for viewing and editing the raw data of files.

<https://apps.kde.org/okteta/> || [okteta](#)

- **Reverse Engineer's Hex Editor** — Hex editor with features for analyzing and annotating binary file formats

<https://github.com/solemnwarning/rehex> || [rehex](#)<sup>AUR</sup>

- **wxHexEditor** — Hex editor for large files with advanced features such as raw memory and disk editing capabilities.

<https://www.wxhexeditor.org/> || [wxhexeditor](#)<sup>AUR</sup>

## JSON tools

- **gron** — gron transforms JSON into discrete assignments to make it easier to grep.

<https://github.com/tomnomnom/gron> || [gron](#)

- **jid** — JSON incremental digger

<https://github.com/simeji/jid> || [jid](#)<sup>AUR</sup>

- **jo** — A command to create JSON.

<https://github.com/jpmens/jo> || [jo-git](#)<sup>AUR</sup>

- **jq** — Command-line JSON processor

<https://stedolan.github.io/jq/> || [jq](#)

- **jshon** — A JSON parser for the shell.

<http://kmkeen.com/jshon/> || [jshon](#)

- the [Elvish](#) shell has built-in support for JSON

## Literate programming

See also [Wikipedia:Literate programming](#).

- **Noweb** — A Simple, Extensible Tool for Literate Programming build against ICON libs and texlive

<https://www.cs.tufts.edu/~nr/noweb/> || [noweb](#)<sup>AUR</sup>

- **nuweb** — A Simple Literate Programming Tool

<http://nuweb.sourceforge.net/> || [nuweb](#)<sup>AUR</sup>

## UML modelers

See also [Wikipedia:List of Unified Modeling Language tools](#).

- **ArgoUML** — UML modeling tool with support for all standard UML 1.4 diagrams.

<https://argouml-tigris-org.github.io/> || [argouml](#)<sup>AUR</sup>

- **Eclipse Modeling Tools** — Tools and runtimes for building model-based applications.

<https://www.eclipse.org/> || [eclipse-modeling-tools](#)<sup>AUR</sup>

- **Gaphor** — Simple modeling tool for UML.

<https://github.com/gaphor/gaphor> || [python-gaphor](#)<sup>AUR</sup>

- **Modelio** — Modeling environment supporting the main standards: UML, BPMN, MDA, SysML.

<https://www.modelio.org/> || [modelio-bin](#)<sup>AUR</sup>

- **Papyrus** — Model-based engineering tool based on Eclipse.

<https://www.eclipse.org/papyrus/> || [papyrus](#)<sup>AUR</sup>

- **PlantUML** — Tool to create UML diagrams from a plain text language.

<https://plantuml.com> || [plantuml](#)

- **PlantUML QEditor** — PlantUML editor written in Qt.

<https://github.com/borco/plantumlqeditor> || [plantumlqeditor-git](#)<sup>AUR</sup>

- **Umbrello** — Unified Modelling Language (UML) diagram program based on KDE Technology.



<https://umbrello.kde.org/><sup>[dead link 2023-05-07 ⓘ]</sup> || [umbrello](#)

- **UML Designer** — Graphical tool based on Eclipse to edit and visualize UML models.

<https://www.umldesigner.org/> || [umldesigner](#)<sup>AUR</sup>

- **UMLet** — UML tool with a simple user interface: draw UML diagrams fast, build sequence and activity diagrams from plain text, export diagrams to eps, pdf, jpg, svg, and clipboard, share diagrams using Eclipse, and create new, custom UML elements.

<https://umlet.com/> || [umlet](#)<sup>AUR</sup>

- **UML/INTERLIS-editor** — Facilitate the application of the model driven approach to a greater number of users.

<http://www.umleditor.org/> || [umleditor](#)<sup>AUR</sup>

- **Violet** — Very easy to learn and use UML editor that draws nice-looking diagrams.

<https://sourceforge.net/projects/violet/> || [violetumleditor](#)<sup>AUR</sup>

## API documentation browsers

- **Devhelp** — Developer tool for browsing and searching API documentation. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Devhelp> || [devhelp](#)

- **Doc Browser** — API documentation browser with support for DevDocs and Hoogle.

<https://github.com/qwfy/doc-browser> || [doc-browser-git](#)<sup>AUR</sup>

- **Qt Assistant** — Tool for viewing on-line documentation in Qt help file format.

<https://doc.qt.io/qt-5/qtassistant-index.html> || [qt5-tools](#)

- **quickDocs** — Fast developer docs reader for reading Valadoc and DevDocs.

<https://github.com/mdh34/quickDocs> || [quickdocs](#)<sup>AUR</sup>

- **Zeal** — Offline API documentation browser for software developers.

<https://zealdocs.org/> || [zeal](#)<sup>AUR</sup>

## Issue tracking systems

- **Bugzilla** — Bug tracker from Mozilla.

<https://www.bugzilla.org> || [bugzilla](#)

- **Flyspray** — Lightweight, web-based bug tracking system written in PHP

<https://www.flyspray.org/> || [flyspray](#)

- **MantisBT** — Web-based issue tracking system

<https://www.mantisbt.org/> || [mantisbt](#)<sup>AUR</sup>

- **Redmine** — A flexible project management web application. Written using the Ruby on Rails, it is cross-platform and cross-database.

<https://www.redmine.org> || [redmine](#)

- **Trac** — Trac Integrated SCM & Project Management using Apache & Subversion.

<https://trac.edgewall.org/> || [trac](#)<sup>AUR</sup>

See also [Git server#Advanced web applications](#).

## Code review

- **Gerrit** — A web-based code review tool built on top of the Git version control system

<https://www.gerritcodereview.com/> || [gerrit](#)<sup>AUR</sup>

- [GitLab](#) also supports code reviews.

See also [Wikipedia:List of tools for code review](#).

## Game development

See also [Wikipedia:List of game engines](#).

- **Allegro** — A cross-platform library mainly aimed at video game and multimedia programming.

<https://liballeg.org/> || [allegro](#)

- **GDevelop** — Game creator designed to be used by everyone - no programming skills required.

<https://gdevelop-app.com/> || [gdevelop](#)<sup>AUR</sup>

- **Godot** — Advanced, feature-packed, multi-platform 2D and 3D game engine. Create games with ease, using Godot's unique approach to game development.

<https://godotengine.org/> || [godot](#)

- **LibreSprite** — Animated sprite editor and pixel art tool lets you create 2D animations for videogames.

<https://github.com/LibreSprite/LibreSprite> || [libresprite](#)<sup>AUR</sup>

- **LÖVE** — Lua based game development environment.

<https://love2d.org/> || [love](#)

- **Pixelorama** — 2D sprite editor with animation support, made by Orama Interactive in the Godot Engine using GDScript.

<https://orama-interactive.itch.io/pixelorama> || [pixelorama](#)<sup>AUR</sup>

- **TIC-80** — Fantasy computer/console.

<https://tic80.com/> || [tic-80-git](#)<sup>AUR</sup>

- **Tiled** — General purpose 2D level editor with powerful tile map editing features. It is built to be easy to use and is suitable for many type of games.

<https://www.mapeditor.org/> || [tiled](#)

- **Unity** — Unity is a flexible and powerful development platform for creating multi-platform 3D and 2D games. Proprietary, but a free version is available for certain use-cases (see [here](#) for more details).

<https://unity3d.com/unity> || [unityhub](#)<sup>AUR</sup>

## Repository managers



This article or section needs language, wiki syntax or style improvements. See



[Help:Style](#) for reference.

**Reason:** Redirects to company blogs should not be here. (Discuss in [Talk:List of applications](#))

- **Nexus 2** — Nexus 2 Repository Manager (OSS)

<https://www.sonatype.com/nexus-repository-oss> || [nexus](#)<sup>AUR</sup>

- **Nexus 3** — Nexus 3 Repository OSS

<https://www.sonatype.com/nexus-repository-oss> || [nexus-oss](#)<sup>AUR</sup>

- **Artifactory** — Artifactory is an advanced Binary Repository Manager for use by build tools, dependency management tools and build servers

<https://bintray.com/jfrog/product/JFrog-Artifactory-Oss/view> || [artifactory-oss](#)<sup>AUR</sup>

## Text input

### Character selectors

- **emote** — A modern emoji picker written in GTK3.

<https://github.com/tom-james-watson/Emote> || [emote](#)<sup>AUR</sup>

- **GNOME Characters** — Character map application for GNOME. Part of [gnome](#).

<https://gitlab.gnome.org/GNOME/gnome-characters> || [gnome-characters](#)

- **gucharmap** — GTK 3 character selector for GNOME.

<https://wiki.gnome.org/Apps/Gucharmap> || [gucharmap](#)

- **KCharSelect** — Tool to select special characters from all installed fonts and copy them into the clipboard. Part of [kde-utilities](#).

<https://apps.kde.org/kcharselect/> || [kcharselect](#)

### On-screen keyboards

- **CellWriter** — Grid-entry handwriting recognition input panel.

<https://github.com/risujin/cellwriter> || [cellwriter](#)<sup>AUR</sup>

- **CoreKeyboard** — Simple X11 based Qt virtual keyboard with word suggestions. Part of C-Suite.

<https://cubocore.org/> <sup>[dead link 2023-06-17 ⓘ]</sup> || [corekeyboard](#)<sup>AUR</sup>

- **eekeyboard** — Easy to use virtual keyboard toolkit.

<https://github.com/ueno/eekeyboard> || [eekeyboard](#)<sup>AUR</sup>

- **Florence** — Extensible scalable on-screen virtual keyboard for GNOME that stays out of your way when not needed.

<https://sourceforge.net/projects/florence/> || [florence](#)<sup>AUR</sup>

- **Maliit Keyboard** — Virtual keyboard useful for KDE Plasma-Wayland

<https://maliit.github.io/> || [maliit-keyboard](#)

- **Onboard** — Onscreen keyboard useful for tablet PC users and for mobility impaired users.

<https://launchpad.net/onboard> || [onboard](#)

- **qtvkbd** — Virtual keyboard written in Qt, a fork of kvkbd.

<https://github.com/Alexander-r/qtvkbd> || [qtvkbd](#)<sup>AUR</sup>

- **QVKbd** — Virtual keyboard written in Qt.

<https://github.com/KivApple/qvkbd> || [qvkbd](#)

- **Squeekboard** — GTK 3 virtual keyboard for [Wayland](#), written in Rust/C.

<https://gitlab.gnome.org/World/Phosh/squeekboard> || [squeekboard](#)<sup>AUR</sup>

- **theShell On Screen Keyboard** — Touchscreen keyboard for theShell.

<https://github.com/vicr123/ts-kbd> || [ts-kbd](#)<sup>AUR</sup>

- **xvkbd** — Virtual keyboard for X window system.

<http://t-sato.in.coocan.jp/xvkbd/> || [xvkbd](#)<sup>AUR</sup>

- **wvkbd** — Virtual keyboard for Wayland and wlroots.

<https://github.com/jjsullivan5196/wvkbd/> || [wvkbd](#)<sup>AUR</sup>

## Keyboard layout switchers

- **fbxkb** — A NETWM compliant keyboard indicator and switcher. It shows a flag of current keyboard in a systray area and allows you to switch to another one.

<http://fbxkb.sourceforge.net/> || [fbxkb](#)<sup>AUR</sup>

- **xxkb** — A lightweight keyboard layout indicator and switcher.

<https://sourceforge.net/projects/xxkb/> || [xxkb](#)

- **gxkb** — X11 keyboard layout indicator and switcher.

<https://github.com/zen-tools/gxkb> || [gxkb](#)

- **qxkb** — A keyboard switcher written in Qt.

<https://github.com/disels/qxkb> || [qxkb](#)<sup>AUR</sup>

- **X Neural Switcher** — A text analyser, it detects the language of the input and corrects the keyboard layout if needed.

<https://xneur.ru/> || [gxneur](#)<sup>AUR</sup>

## Keybinding managers

See [Keyboard shortcuts#Xorg](#).

## Input methods

See the main article: [Input method](#).

## Disks

### Partitioning tools

See [Partitioning#Partitioning tools](#).

### Formatting tools

See [File systems#Types of file systems](#).

### Cloning tools

See [Disk cloning](#).

### Mount tools

See also [udisks#Mount helpers](#).

- **9mount** — Mount 9p filesystems.

<http://sqweek.net/code/9mount/> || [9mount](#)<sup>AUR</sup>

- **cryptmount** — Mount an encrypted file system as a regular user.

<https://sourceforge.net/projects/cryptmount/> || [cryptmount](#)<sup>AUR</sup>

- **KDiskFree** — Displays information about hard disks and other storage devices. It also allows to mount and unmount drives and view them in a file manager.

<https://apps.kde.org/kdf/> || [kdf](#)

- **ldm** — A lightweight daemon that mounts drives automatically using *udev*

<https://github.com/LemonBoy/ldm> || [ldm](#)<sup>AUR</sup>

- **pmount** — Mount *source* as a regular user to an automatically created destination */media/source\_name*.

[Debian:pmount](#) || [pmount](#)<sup>AUR</sup>

- **pmount-safe-removal** — Mount removable devices as regular user with safe removal

<https://mywaytoarch.tumblr.com/post/13111098534/pmount-safe-removal-of-usb-device> || [pmount-safe-removal](#)<sup>AUR</sup>

- **udevil** — Mounts removable devices as a regular user, show device info, and monitor device changes. Only depends on *udev* and *glib*.

<https://ignorantguru.github.io/udevil> || [udevil](#)<sup>AUR</sup>

- **ws** — Mount Windows network shares ([CIFS](#) and [VFS](#)).

<https://sourceforge.net/projects/winshares/> || [ws](#)<sup>AUR</sup>

- **zulucrypt** — A GUI frontend for cryptsetup to create, manage and mount encrypted volumes; supports encfs as well

<https://mhogomchungu.github.io/zuluCrypt/> || [zulucrypt](#)<sup>AUR</sup>

## Disk usage display

### Console

- **duc** — A library and suite of tools for inspecting disk usage.

<https://duc.zevv.nl/> [[dead link](#) 2023-05-20 ⓘ] || [duc](#)<sup>AUR</sup>

- **dust** — A more intuitive version of *du* in rust.

<https://github.com/bootandy/dust> || [dust](#)

- **gdu** — Disk usage analyzer with console interface written in Go.

<https://github.com/Dundee/gdu> || [gdu](#)

- **gt5** — Diff-capable "du-browser".

<http://gt5.sourceforge.net> || [gt5](#)<sup>AUR</sup>

- **ncdu** — Simple ncurses disk usage analyzer.

<https://dev.yorhel.nl/ncdu> || [ncdu](#)

## Graphical

- **Filelight** — Disk usage analyzer that creates an interactive map of concentric, segmented rings that help visualise disk usage on your computer.

<https://apps.kde.org/filelight/> || [filelight](#)

- **GNOME Disk Usage Analyzer** — Disk usage analyzer for the [GNOME](#) desktop to check folder sizes and available disk space. Part of [gnome](#).

<https://wiki.gnome.org/Apps/DiskUsageAnalyzer> || [baobab](#)

- **Graphical Disk Map** — Disk usage analyzer that draws a map of rectangles sized according to file or dir sizes.

<http://gdmapp.sourceforge.net/> || [gdmapp](#)<sup>AUR</sup>

- **fsview (part of Konqueror)** — KDE based disk usage analyzer that draws a map of rectangles sized according to file or dir sizes.

<https://docs.kde.org/trunk5/en/konqueror/konqueror/view-extensions.html> || [konqueror](#)

- **MATE Disk Usage Analyzer** — Disk usage analyzing tool for MATE Desktop.

<https://github.com/mate-desktop/mate-utils> || [mate-utils](#)

- **qdirstat** — Qt-based directory statistics (KDirStat/K4DirStat without any KDE - from the original KDirStat author).

<https://github.com/shundhammer/qdirstat> || [qdirstat](#)<sup>AUR</sup>

## Disk health status

See [S.M.A.R.T.#GUI applications](#).

## File recovery tools

See [File recovery#List of utilities](#).

## Disk cleaning

## Console



- **Czkawka CLI** — Simple, fast and free app to remove unnecessary files from your computer.

<https://github.com/garmin/czkawka> || [czkawka-cli](#)<sup>AUR</sup>

- **duff** — A command-line utility for quickly finding duplicates in a given set of files.

<https://github.com/elmindreda/duff> || [duff](#)<sup>AUR</sup>

- **fclones** — Very fast duplicate file Finder written in rust.

<https://github.com/pkolacz/fclones> || [fclones](#)<sup>AUR</sup>

- **fdupes** — Program for identifying or deleting duplicate files residing within specified directories.

<https://github.com/adrianlopezroche/fdupes> || [fdupes](#)

- **jdupes** — Identify and take actions upon duplicate files.

<https://github.com/jbruchon/jdupes> || [jdupes](#)<sup>AUR</sup>

- **rdfind** — Command line tool that finds duplicate files. It compares files based on their content.

<https://github.com/pauldreik/rdfind> || [rdfind](#)<sup>AUR</sup>

- **rmlint** — Tool to quickly find (and optionally remove) duplicate files and other lint.

<https://github.com/sahib/rmlint> || [rmlint](#)

## Graphical

- **BleachBit** — Frees disk space and guards your privacy; frees cache, deletes cookies, clears Internet history, shreds temporary files, deletes logs, and discards junk you did not know was there.

<https://www.bleachbit.org/> || [bleachbit](#)

- **Czkawka GUI** — Simple, fast and free app to remove unnecessary files from your computer. Looks similar to FSInt.

<https://github.com/garmin/czkawka> || [czkawka-gui](#)<sup>AUR</sup>

- **dupeGuru** — GUI tool to find duplicate files in a system.

<https://dupeguru.voltaicideas.net/> || [dupeguru](#)<sup>AUR</sup>

- **FSlint** — A utility to find and clean various forms of lint on a filesystem.

<https://www.pixelbeat.org/fslint/> || [fslint](#)<sup>AUR</sup>

- **GConf Cleaner** — cleans up the unknown/invalid GConf keys that still sitting down on your GConf database.

<https://code.google.com/archive/p/gconf-cleaner/> || [gconf-cleaner](#)<sup>AUR</sup>

- **Shredder** — Graphical user interface for rmlint.

<https://github.com/sahib/rmlint> || [rmlint-shredder](#)

- **Sweeper** — System cleaning utility for KDE.

<https://apps.kde.org/sweeper/> || [sweeper](#)

## Disk image writing

See also [Wikipedia:List of tools to create Live USB systems](#).

**Warning:** Some disk image writing tools are known to be [adware](#), for example [etcher](#).

- **Bytewalk** — Bytewalk is a firmware extraction tool and binwalk fork.

<https://gitlab.com/bytesweep/bytewalk> || [bytewalk](#)<sup>AUR</sup>

- **Deepin Boot Maker** — Tool to make boot disk for Deepin OS.

<https://www.deepin.org/en/original/deepin-boot-maker/> || [deepin-boot-maker](#)

- **Fedora Media Writer** — Tool that helps users put Fedora images on their portable drives such as flash disks.

<https://github.com/FedoraQt/MediaWriter> || [mediawriter](#)<sup>AUR</sup>

- **GNOME MultiWriter** — Write an ISO file to multiple USB devices at once. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/MultiWriter> || [gnome-multi-writer](#)

- **Image Burner** — Simple imageburner designed for elementary OS.

<https://github.com/artemanufrij/imageburner> || [imageburner](#)<sup>AUR</sup>

- **ISOImageWriter** — Tool to write a .iso file to a USB disk.

<https://community.kde.org/ISOImageWriter> || [isoimagewriter](#)<sup>AUR</sup>

- **LiveUSB Install** — Install various Linux distributions and operating systems on removable flash drive or external disk drive.

<http://live.learnfree.eu/> || [live-usb-install](#)<sup>AUR</sup>

- **MultiBootUSB** — Install multiple live distributions on a USB disk non-destructively and has an option to uninstall them.

<https://github.com/mbusb/multibootusb/> || [multibootusb](#)<sup>AUR</sup>

- **Popsicle** — Utility for flashing multiple USB devices in parallel, written in Rust.

<https://github.com/pop-os/popsicle> || [popsicle](#)<sup>AUR</sup>

- **SUSE Studio ImageWriter** — Utility for writing raw disk images & hybrid isos to USB keys.

<https://github.com/openSUSE/imagewriter> || [imagewriter](#)<sup>AUR</sup>

- **UNetbootin** — Installs Linux/BSD distributions to a partition or USB drive.

<https://unetbootin.github.io/> || [unetbootin](#)<sup>AUR</sup>

- **Usbimager** — Minimal GUI application to write compressed disk images to USB drives.

<https://gitlab.com/bztsrc/usbimager> || [usbimager](#)<sup>AUR</sup>

- **WoeUSB** — Simple tool to create USB stick windows installer from an ISO image or a real DVD. (Fork of WinUSB).

<https://github.com/WoeUSB/WoeUSB> || [woeusb](#)<sup>AUR</sup>, [woeusb-ng](#)<sup>AUR</sup>

- **windows2usb** — Windows ISO to Flash Drive burning utility for Linux with MBR/GPT, BIOS/UEFI, FAT32/NTFS support

<https://github.com/ValdikSS/windows2usb> || [windows2usb-git](#)<sup>AUR</sup>

## System

### Task managers

- **CoreStats** — Simple lightweight system resource viewer to monitor the CPU, RAM, Network and Disk IO statistics. Part of C-Suite.

<https://cubocore.org/> [[dead link](#) 2023-06-17 ⓘ] || [corestats](#)<sup>AUR</sup>

- **Deepin System Monitor** — Monitor system process status for Deepin desktop.

<https://www.deepin.org/en/original/deepin-system-monitor/> || [deepin-system-monitor](#)

- **GNOME System Monitor** — System monitor for [GNOME](#) to view and manage system resources. Part of [gnome](#).

<https://wiki.gnome.org/Apps/SystemMonitor> || [gnome-system-monitor](#)

- **GNOME Usage** — View information about use of system resources, like memory and disk space.

<https://wiki.gnome.org/Apps/Usage> || [gnome-usage](#)

- **htop** — Simple, ncurses interactive process viewer.

<https://htop.dev/> || [htop](#)

- **bashtop** — A Linux resource monitor written in bash.

<https://github.com/aristocratos/bashtop> || [bashtop](#)

- **bpytop** — Htop but more lightweight with more features.

<https://github.com/aristocratos/bpytop> || [bpytop](#)

- **btop** — Rewrite of bpytop in C++

<https://github.com/aristocratos/btop> || [btop](#)

- **bottom** — A cross-platform graphical process/system monitor.

<https://github.com/ClementTsang/bottom> || [bottom](#)

- **gtop** — A system monitoring dashboard for the terminal.

<https://github.com/aksakalli/gtop> || [gtop](#)

- **KSysGuard** — System monitor for [KDE](#) to monitor running processes and system performance.

<https://apps.kde.org/ksysguard/> || [ksysguard](#)

- **Linux Process Explorer** — Graphical process explorer for Linux.

<https://github.com/wolfc01/procexp> || [procexp](#)<sup>AUR</sup>

- **LXTask** — Lightweight task manager for [LXDE](#).

<https://wiki.lxde.org/en/LXTask><sup>[dead link 2022-09-20 ①]</sup> || [lxtask](#)

- **qps** — Lightweight task manager for [LXQt](#).

<https://github.com/lxqt/qps> || [qps](#)<sup>AUR</sup>

- **MATE System Monitor** — System monitor for [MATE](#).

<https://github.com/mate-desktop/mate-system-monitor> || [mate-system-monitor](#)

- **Plasma System Monitor** — Advanced and customizable system monitor for [KDE](#).

<https://apps.kde.org/plasma-systemmonitor/> || [plasma-systemmonitor](#)

- **Stacer** — System optimizer and application monitor that helps users to manage entire system with different aspects, its an all in one system utility.

<https://oguzhaninan.github.io/Stacer-Web/> || [stacer](#)<sup>AUR</sup>

- **Task Manager** — GTK2/GTK3 based process manager with basic system resource monitor for [Xfce](#).

<https://goodies.xfce.org/projects/applications/xfce4-taskmanager> || [xfce4-taskmanager](#)

## System monitors

See also [Category:Monitoring](#).

- **Conky** — Lightweight, scriptable system monitor.

<https://github.com/brndnmtthws/conky> || [conky](#)

- **Collectd** — Simple, extensible system monitoring daemon based on [rrdtool](#). It has a small footprint and can be set up either stand-alone or as a server/client application.

<https://collectd.org/> || [collectd](#)<sup>AUR</sup>

- **collectl** — Collectl is a light-weight performance monitoring tool capable of reporting interactively as well as logging to disk. It reports statistics on cpu, disk, infiniband, lustre, memory, network, nfs, process, quadrics, slabs and more in easy to read format.

<https://collectl.sourceforge.net/> || [collectl](#)<sup>AUR</sup>

- **CoreFreq** — Low-level CPU monitor with BIOS like functionalities.

<https://github.com/cyring/CoreFreq/> || [corefreq-client](#)<sup>AUR</sup>

- **dstat** — Versatile resource statistics tool.

<http://dag.wiee.rs/home-made/dstat/> || [dstat](#)

- **Fsniper** — Daemon to run scripts based on changes in files monitored by inotify.

<https://github.com/l3ib/fsniper> || [fsniper](#)<sup>AUR</sup>

- **GKrellM** — Simple, flexible system monitor package for [GTK](#) with many plug-ins.

<https://billw2.github.io/gkrellm/gkrellm.html> || [gkrellm](#)

- **glances** — CLI curses-based monitoring tool in Python.

<https://nicolargo.github.io/glances/> || [glances](#)

- **hitome** — A quick & dirty system monitor that's light on resources.

<https://github.com/artefact2/hitome> || [hitome-git](#)<sup>AUR</sup>

- **kmon** — Linux kernel manager and activity monitor.

<https://github.com/orhun/kmon> || [kmon](#)

- **Nagstamon** — Status monitor that connects to multiple Nagios, Icinga, Opsview, Centreon, Op5 Monitor/Ninja, Checkmk and Thruk monitoring servers.

<https://github.com/orhun/kmon> || [nagstamon](#)<sup>AUR</sup>

- **netdata** — Web-based real-time performance monitor.

<https://github.com/firehol/netdata/wiki> || [netdata](#)

- **Telegraf** — Agent written in Go for collecting, processing, aggregating, and writing metrics.

<https://docs.influxdata.com/telegraf/latest/> || [telegraf](#)<sup>AUR</sup>

- **Paramano** — Light battery monitor and a CPU frequency scaler. Forked from [trayfreq](#)

<https://github.com/phillid/paramano> || [paramano](#)<sup>AUR</sup>

- **Sysstat** — Collection of resource monitoring tools: iostat, isag, mpstat, pidstat, sadf, sar.

<http://sebastien.godard.pagesperso-orange.fr/> || [sysstat](#)

- **xosview** — System monitor that resembles gr\_osview from SGI IRIX.

<https://www.pogo.org.uk/~mark/xosview/> || [xosview](#)<sup>AUR</sup>

- **zps** — A small utility for listing and reaping zombie processes on GNU/Linux.

<https://github.com/orhun/zps> || [zps](#)

## Hardware sensor monitoring

See [lm\\_sensors#Graphical front-ends](#).

## System information viewers

### Console

- **alsi** — A system information tool for Arch Linux. It can be configured for every other system without even touching the source code of the script.

<https://trizenx.blogspot.com/2012/08/alsi.html> || [alsi](#)<sup>AUR</sup>

- **archey3** — Python script to display system information alongside the Arch Linux logo.

<https://lclarkmichalek.github.io/archey3> || [archey3](#)

- **dmidecode** — It reports information about your system's hardware as described in your system BIOS according to the SMBIOS/DMI standard.

<https://www.nongnu.org/dmidecode/> || [dmidecode](#)

- **hwdetect** — Simple script to list modules that are exported in `/sys/`.

<https://github.com/archlinux/svntogit-packages/blob/packages/hwdetect/trunk/hwdetect> || [hwdetect](#)

- **hwinfo** — Powerful hardware detection tool come from openSUSE.

<https://github.com/openSUSE/hwinfo> || [hwinfo](#)

- **hw-probe** — Tool to probe for hardware, check operability and find drivers with the help of [Linux Hardware Database](#).

<https://github.com/linuxhw/hw-probe> || [hw-probe](#)<sup>AUR</sup>

- **inxi** — A script to get system information.

<https://github.com/smx/inxi> || [inxi](#)

- **neofetch** — A fast, highly customizable system info script that supports displaying images with w3m.

<https://github.com/dylananaraps/neofetch> || [neofetch](#)

- **nmon** — Console based application for monitoring various system components.

<https://nmon.sourceforge.net/> || [nmon](#)

- **pfetch** — A pretty system information tool written in POSIX sh.

<https://github.com/dylanaraps/pfetch> || [pfetch](#)<sup>AUR</sup>

- **screenfetch** — Similar to archey but has an option to take a screenshot. Written in bash.

<https://github.com/KittyKatt/screenFetch> || [screenfetch](#)

## Graphical

- **GPU-Viewer** — GUI to glxinfo, vulkaninfo, clinfo and es2\_info; written in Python with GTK.

<https://github.com/arunsivaramanneo/GPU-Viewer> || [gpu-viewer](#)<sup>AUR</sup>

- **hardinfo** — A small application that displays information about your hardware and operating system, it looks like the Device Manager in Windows.

<https://www.berlios.de/software/hardinfo/> || [hardinfo](#)<sup>AUR</sup>

- **i-Nex** — An application that gathers information for hardware components available on your system and displays it using an user interface similar to the popular Windows tool CPU-Z.

<http://i-nex.linux.pl/> || [i-nex-git](#)<sup>AUR</sup>

- **lshw** — A small tool to provide detailed information on the hardware configuration of the machine with CLI and GTK interfaces.

<https://ezix.org/project/wiki/HardwareLiSter> || [lshw](#)

- **KInfoCenter** — Centralized and convenient overview of system information for KDE.

<https://userbase.kde.org/KInfoCenter> || [kinfocenter](#)

- **USBView** — Display the topology of devices on the USB bus.

<http://www.kroah.com/linux/usb/> || [usbview](#)

## System log viewers

- **GNOME Logs** — Viewer for the systemd journal. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Logs> || [gnome-logs](#)



- **KSystemLog** — System log viewer tool for KDE.

<https://apps.kde.org/ksystemlog/> || [ksystemlog](#)

- **MATE System Log** — System log viewer for MATE.

<https://github.com/mate-desktop/mate-utils> || [mate-utils](#)

- **Pacman Log Viewer** — Tool used to inspect pacman log file, in particular it lists installed, removed and upgraded packages letting you to filter by package's name and/or date.

<https://www.opendesktop.org/content/show.php?content=150484> <sup>[[dead link](#) 2023-05-06 ⓘ]</sup> || [pacmanlogviewer](#)

- **QJournalctl** — Qt-based graphical user interface for systemd's *journalctl* command.

<https://github.com/pentix/qjournalctl> || [qjournalctl](#)

## Font viewers

See also [Wikipedia:Font management software](#).

- **Deepin Font Manager** — A font management tool for Deepin desktop.

<https://www.deepin.org/en/original/deepin-font-manager/> || [deepin-font-manager](#)

- **Font Manager** — Simple font management for GTK desktop environments.

<https://fontmanager.github.io/> || [font-manager](#)

- **Fonty Python** — Manage, view and find your fonts.

<https://savannah.nongnu.org/projects/fontypython> || [fontypython](#)<sup>AUR</sup>

- **GNOME Fonts** — Font viewer for GNOME. Part of [gnome](#).

<https://gitlab.gnome.org/GNOME/gnome-font-viewer> || [gnome-font-viewer](#)

- **KFontview** — KDE application to view and install different types of fonts.

<https://kde.org/> || [plasma-desktop](#)

- **MATE Font Viewer** — Font viewer for MATE.

<https://github.com/mate-desktop/mate-control-center> || [mate-utils](#)

## Help viewers

See [man page#Installation](#).

## Command schedulers

See also [Cron](#).

- **FcronQ** — Fcron GUI, an advanced periodic command scheduler.

<http://fcronq.xavion.name/> || [fcronq](#)<sup>AUR</sup>

- **GNOME Schedule** — Graphical interface to crontab and at for GNOME.

<http://gnome-schedule.sourceforge.net/> || [gnome-schedule](#)<sup>AUR</sup>

- **KCron** — Tool for KDE to run applications in the background at regular intervals. It is a graphical interface to the Cron command.

<https://apps.kde.org/kcron/> || [kcron](#)

- **KTimer** — Little tool for KDE to execute programs after some time. It allows you to enter several tasks and to set a timer for each of them. The timers for each task can be started, stopped, changed, or looped.

<https://apps.kde.org/ktimer/> || [ktimer](#)

## Shutdown timers

- **GShutdown** — Advanced shutdown utility which allows you to schedule the shutdown or the restart of your computer, or logout your actual session.

<https://gshutdown.tuxfamily.org/> || [gshutdown](#)<sup>AUR</sup>

- **Hsiu-Ming's Timer** — Graphical shutdown timer, which enables you to shutdown, turn off monitor, reboot or play sound after a period of time.

<https://cges30901.github.io/hmtimer-website/> || [hmtimer](#)<sup>AUR</sup>

- **KShutdown** — Graphical shutdown utility, which allows you to turn off or suspend a computer at a specified time. It features various time and delay options, command-line support, and notifications.

<https://kshutdown.sourceforge.io/> || [kshutdown](#)

## Clock synchronization

See [Time synchronization](#).

## Screen management

See [Xrandr#Graphical front-ends](#).

## Backlight management

See [Backlight#Backlight utilities](#).

## Color management

See [ICC profiles#Utilities](#) and [Backlight#Color correction](#).

## Printer management

See [CUPS#GUI applications](#).

## Bluetooth management

See [Bluetooth#Front-ends](#).

## Power management

See [Power management#Userspace tools](#).

## System management

See [Systemd#GUI configuration tools](#).

## Boot management

See [GRUB/Tips and tricks#GUI configuration tools](#).

## Package management

See [pacman tips#Utilities](#).

## Configuration management

- **aconfmgr** — Package to track, manage, and restore the configuration of an Arch Linux system.

<https://github.com/CyberShadow/aconfmgr> || [aconfmgr-git](#)<sup>AUR</sup>

- **Ansible** — IT automation engine that automates cloud provisioning, configuration management, application deployment, intra-service orchestration, and many other IT needs.

<https://www.ansible.com/> || [ansible](#)

- **cdist** — Simple configuration management system with Arch Linux support.

<https://www.cdi.st/> || [cdist](#)<sup>AUR</sup>

- **Chef** — Automation Software for Continuous Delivery of Secure Applications and Infrastructure.

<https://www.chef.io/> || [chef-workstation](#)<sup>AUR</sup>, [chef-client](#)<sup>AUR</sup>

- **etckeeper** — Collection of tools to let `/etc` be stored in a VCS repository.

<https://etckeeper.branchable.com/> || [etckeeper](#)

- **Puppet** — IT automation software that helps system administrators manage infrastructure throughout its lifecycle, from provisioning and configuration to patch management and compliance.

<https://puppet.com/> || [puppet](#)

## Virtualization

See [Libvirt#Client](#) and [VirtualBox](#).

## Compatibility layers

See [Wine](#) (Windows) and [Darling](#) (MacOS).

# Documents and texts

## Text editors

See also [Wikipedia:Comparison of text editors](#).

Some of the lighter-weight [Integrated development environments](#) can also serve as text editors.

## Vi-style text editors

- **Amp** — Text editor written in Rust, that aims to take the core interaction model of Vim, simplify it, and bundle in the essential features required for a modern text editor.

<https://amp.rs/> || [amp](#)<sup>AUR</sup>

- **Aretext** — Minimalist text editor with vim-compatible key bindings.

<https://aretext.org/> || [aretext](#)<sup>AUR</sup>

- **BusyBox vi** — Provides "a small 'vi' clone". Can be invoked with `busybox vi`.

<https://git.busybox.net/busybox/tree/editors/vi.c> || [busybox](#)

- **Kakoune** — Modal editor. Fewer keystrokes. Selection based, multi-cursor editing. Orthogonal design.

<https://github.com/mawww/kakoune> || [kakoune](#)

- **Helix** — A post-modern modal text editor.

<https://helix-editor.com/> || [helix](#)

- **Neovim** — Vim's rebirth for the 21st century.

<https://neovim.io/> || [neovim](#)

- **Neovim-Qt** — Qt GUI for Neovim.

<https://github.com/equalsraf/neovim-qt> || [neovim-qt](#)

- **vi** — The original ex/vi text editor.

<https://ex-vi.sourceforge.net/> || [vi](#)

- **Vim** — Advanced text editor that seeks to provide the power of the de-facto Unix editor 'vi', with a more complete feature set.

<https://www.vim.org/> || with GUI: [gvim](#), without GUI: [vim](#)

- **Vis** — Modern, legacy free, simple yet efficient vim-like editor.

<https://github.com/martanne/vis> || [vis](#)

## Emacs-style text editors

- **Emacs** — The extensible, customizable, self-documenting real-time display editor by GNU.

<https://www.gnu.org/software/emacs/emacs.html> || with GUI: [emacs](#), without GUI: [emacs-nox](#)

- **mg** — Small, fast, and portable Emacs-like editor.

<https://github.com/hboetes/mg> || [mg](#)

- **vile** — Lightweight Emacs clone with vi-like key bindings.

<https://invisible-island.net/vile/vile.html> || [vile](#)<sup>AUR</sup>

- **Zile** — Lightweight Emacs clone.

<https://www.gnu.org/software/zile/> || [zile](#)<sup>AUR</sup>

## Console

- **dte** — Small, easy to use editor with multi-tabbed interface, syntax highlighting, ctags navigation, etc.

<https://craigbarnes.gitlab.io/dte/> || [dte](#)<sup>AUR</sup>

- **e3** — Tiny editor without dependencies, written in assembly.

<https://sites.google.com/site/e3editor/> || [e3](#)

- **ee** — Classic curse-based text editor. Born in HP-UX, used in FreeBSD.

<https://web.archive.org/web/20160719002816/http://www.users.qwest.net/~hmahon/> || [ee-editor](#)<sup>AUR</sup>

- **JED** — Text editor that makes extensive use of the [S-Lang library](#). Includes a console version (jed) and an X-window version (xjed).

<http://jedsoft.org/jed/> || [jed](#)<sup>AUR</sup>

- **JOE (Joe's Own Editor)** — Terminal-based text editor designed to be easy to use.

<https://joe-editor.sourceforge.io/> || [joe](#)<sup>AUR</sup>

- **mcedit** — Useful text editor that comes with Midnight Commander file manager.

<https://www.ibiblio.org/mc/> || [mc](#)

- **micro** — Modern and intuitive terminal-based text editor, written in go and extensible through plugins.

<https://micro-editor.github.io/> || [micro](#)

- **Minimum Profit** — Text editor for programmers.

<https://triptico.com/software/mp.html> || [mp](#)<sup>AUR</sup>

- **nano** — Console text editor based on pico with on-screen key bindings help.

<https://nano-editor.org/> || [nano](#)

- **ne** — Minimalist text editor with Windows-like key-bindings.

<http://ne.di.unimi.it/> || [ne](#)<sup>AUR</sup>

- **ScalpiEditor** — ANSI only text editor without dependencies designed for folder-like navigation in code.

<https://github.com/sergey6661313/ScalpiEditor> || not packaged? [search in AUR](#)

- **slap** — Sublime-like terminal-based text editor.

<https://github.com/slap-editor/slap> || [slap](#)<sup>AUR</sup>

- **Tilde** — Intuitive text editor with Windows-like key bindings.

<https://os.ghalkes.nl/tilde/> || [tilde](#)<sup>AUR</sup>

- **jove** — Jonathan's Own Version of Emacs is an Emacs-like editor without Lisp.

<https://github.com/jonmacs/jove> || [jove](#)<sup>AUR</sup>

## Graphical

- **Acme** — Minimalist and flexible programming environment developed by Rob Pike for the Plan 9 operating system.

<http://acme.cat-v.org/> || [plan9port](#)

- **Adie** — Fast and convenient programming text editor.

<http://fox-toolkit.org/> || [fox](#)

- **Atom** — Promising text editor developed by GitHub. With support for plug-ins written in Node.js and embedded [Git](#) Control.

<https://atom.io/> || [atom](#)<sup>AUR</sup>

- **Beaver** — GTK editor designed to be modular, lightweight and stylish.

<http://beaver-editor.sourceforge.net/> || [beaver](#)<sup>AUR</sup>

- **Brackets** — Code editor for the web, written in JavaScript, HTML and CSS.

<https://brackets.io/> || [brackets-extract](#)<sup>AUR</sup>

- **CorePad** — Simple lightweight but powerful text editor with syntax-highlighting support for a dozen or more languages. Part of C-Suite.

<https://cubocore.org/> <sup>[[dead link](#) 2023-06-17 ⓘ]</sup> || [corepad](#)<sup>AUR</sup>

- **Deepin Text Editor** — Simple text editor for Deepin desktop.

<https://www.deepin.org/en/original/deepin-editor/> || [deepin-editor](#)

- **Ecrire** — Simple text editor based on EFL.

<https://git.enlightenment.org/apps/ecrive.git/><sup>[dead link 2022-09-20 ⓘ]</sup> || [ecrive-git](#)<sup>AUR</sup>

- **Enki** — Text editor for programmers.

<http://enki-editor.org/> || [enki-editor](#)<sup>AUR</sup>

- **FeatherPad** — Minimal Qt5 plain text editor featuring a native dark theme and support for tabs, printing and syntax highlighting.

<https://github.com/tsujan/FeatherPad> || [featherpad](#)

- **FLTK Editor** — Simple text editor application for FLTK.

<https://www.fltk.org/> || [fltk-editor](#)<sup>AUR</sup>

- **gCSVedit** — Simple text editor for CSV, TSV and other kinds of delimiter-separated values (DSV) files.

<https://github.com/swilmet/gCSVedit><sup>[dead link 2022-09-20 ⓘ]</sup> || [gcsvedit](#)<sup>AUR</sup>

- [gedit](#) — GTK editor for the GNOME desktop with syntax highlighting, automatic indentation, matching brackets, etc., and a number of add-ons to increase functionality. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Gedit> || [gedit](#)

- **GNOME Text Editor** — Simple text editor for GNOME focused on a pleasing default experience. Part of [gnome](#).

<https://gitlab.gnome.org/GNOME/gnome-text-editor> || [gnome-text-editor](#)

- **Gobby** — Collaborative editor supporting multiple documents in one session and a multi-user chat.

<https://gobby.github.io/> || [gobby](#)

- **Howl** — General purpose, fast and lightweight editor with a keyboard-centric minimalistic user interface.

<https://howl.io/> || [howl](#)

- [jEdit](#) — Text editor for programmers, written in Java.

<http://www.jedit.org/> || [jedit](#)<sup>AUR</sup>



- **JuffEd** — Simple tabbed text editor with syntax highlighting, written in Qt.

<http://juffed.com/en/index.html> || [juffed](#)<sup>AUR</sup>

- **Kate** — Full-featured programmer's editor for the KDE desktop with MDI and a filesystem browser.

<https://kate-editor.org/> || [kate](#)

- **KWrite** — Lightweight text editor for the KDE desktop that uses the same editor widget as Kate, now provided by the kate package.

<https://apps.kde.org/kwrite/> || [kate](#)

- **L3afpad** — Simple text editor forked from Leafpad, supports GTK 3.

<https://github.com/stevenhoneyman/l3afpad> || [l3afpad](#)

- **Lapce** — Lightning-fast and Powerful Code Editor written in Rust.

<https://lapce.dev/> || [lapce](#)

- **Leafpad** — Notepad clone for GTK that emphasizes simplicity.

<http://tarot.freeshell.org/leafpad/> || [leafpad](#)

- **Light Table** — Next generation code editor that connects you to your creation with instant feedback.

<http://lighttable.com/> || [lighttable-bin](#)<sup>AUR</sup>

- **Liri Text** — Text editor for Liri.

<https://github.com/lirios/text> || [liri-text](#)

- **Lite XL** — A lightweight, simple, fast, feature-filled, and extremely extensible text editor written in C, and Lua, adapted from lite.

<https://lite-xl.com/> || [lite-xl](#)<sup>AUR</sup>

- **medit** — Programming and around-programming text editor.

<http://mooodit.sourceforge.net> || [medit](#)<sup>AUR</sup>

- **Mousepad** — Fast text editor for the Xfce Desktop Environment.

<https://www.xfce.org> || [mousepad](#)

- **NEdit** — Text editor for the Motif environment.

<https://sourceforge.net/projects/nedit/> || [nedit](#)<sup>AUR</sup>

- **Notepadqq** — Qt-based, Notepad++-like text editor with support for syntax highlighting for more than 100 languages.

<https://notepadqq.com/s/> || [notepadqq](#)

- **Nota** — Easy to use text editor with a simple interface with support for tabbed documents, syntax highlighting for various languages, Focus mode, annotations, configurable fonts, and colors, a side panel with an integrated file browser, and more.

<https://mauikit.org/> || [maui-nota](#)

- **Pantheon Code** — Code editor for elementaryOS. It auto-saves your files, meaning they are always up-to-date. Plus it remembers your tabs so you never lose your spot, even in between sessions.

<https://github.com/elementary/code> || [pantheon-code](#)

- **Pluma** — Powerful text editor for MATE.

<https://mate-desktop.org/> || [pluma](#)

- **QScI TE** — Qt clone of the SciTE text and code editor.

<https://code.google.com/archive/p/qscite/> || [qscite](#)<sup>AUR</sup>

- **Sam** — Minimalist text editor with a graphical user interface, a very powerful command language and remote editing capabilities, developed by Rob Pike.

<http://sam.cat-v.org> || [plan9port](#) or [9base](#)

- **SciTE** — Generally useful editor with facilities for building and running programs.

<https://scintilla.org/SciTE.html> || [scite](#)

- **Sublime Text** — Proprietary C++ and Python-based editor with many advanced features and plugins while staying lightweight and pretty.

<https://www.sublimetext.com/> || version 3: [sublime-text-dev](#)<sup>AUR</sup>, version 4: [sublime-text-4](#)<sup>AUR</sup>

- **Tau** — Minimal GTK front end to the xi editor core written in Rust.

<https://gitlab.gnome.org/World/Tau> || [tau-editor](#)<sup>AUR</sup>

- **TEA** — Qt-based feature-rich text editor.

<http://semiletov.org/tea/> || [tea-qt](#)<sup>AUR</sup>

- **Textadept** — Lua-extensible feature rich text editor based on Scintilla and written in C.

<https://foicica.com/textadept/> || [textadept](#)<sup>AUR</sup>

- **Textosaurus** — Simple cross-platform text editor based on Qt and QScintilla.

<https://github.com/martinrotter/textosaurus> || [textosaurus](#)<sup>AUR</sup>

- **Visual Studio Code** — Editor for building and debugging modern web and cloud applications.

<https://code.visualstudio.com> || [code](#)

- **VSCodium** — Visual Studio Code, but compiled without telemetry.

<https://vscodium.com/> || [vscodium](#)<sup>AUR</sup>

- **xed** — Text editor based on Pluma developed for Linux Mint.

<https://github.com/linuxmint/xed> || [xed](#)

- **XEdit** — Simple text editor for the X Window System.

<https://www.x.org/wiki> || [xorg-xedit](#)

- **wxMEdit** — Text/Hex editor written in C++ and wxWidgets.

<https://wxmedit.github.io/> || [wxmedit](#)<sup>AUR</sup>

## Office

### Office suites

See also [Wikipedia:Comparison of office suites](#).

- **Calligra** — Actively developed fork of KOffice, the [KDE](#) office suite. It offers most of the features of OpenOffice while also having versions for smartphones (Calligra Mobile) and tablets (Calligra Active).

<https://calligra.org/> || [calligra](#)

- **LibreOffice** — The office productivity suite compatible to the open and standardized ODF document format. Fork of OpenOffice, supported by The Document Foundation.

<https://www.libreoffice.org/> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **[OnlyOffice](#)** — Office suite that combines text, spreadsheet and presentation editors.

<https://www.onlyoffice.com/> || [onlyoffice-bin](#)<sup>AUR</sup>

- **[OpenOffice](#)** — Open-source office software suite for word processing, spreadsheets, presentations, graphics, databases and more, under the Apache Licence.

<https://www.openoffice.org/> || [openoffice-bin](#)<sup>AUR</sup>

- **[SoftMaker Office](#)** — Complete, reliable, lightning-fast and Microsoft Office-compatible proprietary office suite with a word processor, spreadsheet, and presentation graphics software.

<https://www.freeoffice.com/> || [freeoffice](#)<sup>AUR</sup>

- **[WPS Office](#)** — Proprietary office productivity suite, previously known as Kingsoft Office.

<https://www.wps.com/> || [wps-office](#)<sup>AUR</sup>

- **[Yozo Office](#)** — Proprietary office suite, compatible with MS Office.

<https://www.yozosoft.com/product-officelinux.html> || [yozo-office](#)<sup>AUR</sup>

## Word processors

See also [Wikipedia:Comparison of word processors](#).

- **[AbiWord](#)** — Full-featured word processor.

<https://www.abisource.com/> || [abiword](#)

- **[Calligra Words](#)** — Powerful word processor included in the Calligra Suite.

<https://www.calligra.org/words/> || [calligra](#)

- **[LibreOffice Writer](#)** — Full-featured word processor included in the LibreOffice suite.

<https://www.libreoffice.org/discover/writer> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **[OpenOffice Writer](#)** — Full-featured word processor included in the OpenOffice suite.

<https://www.openoffice.org/product/writer.html> || [openoffice-bin](#)<sup>AUR</sup>

- **[Ted](#)** — Easy to use GTK-based rich text processor (with footnote support).

<https://nllgg.nl/Ted/> || [ted](#)<sup>AUR</sup>

- **[WordGrinder](#)** — Word processor for the console.

<https://cowlark.com/wordgrinder/> || [wordgrinder](#)<sup>AUR</sup>

## WYSIWYG HTML editors

- **PageEdit** — ePub visual XHTML editor.

<https://github.com/Sigil-Ebook/PageEdit> || [pageedit](#)

- **SeaMonkey Composer** — Powerful yet simple HTML editor included in the SeaMonkey suite.

<https://www.seamonkey-project.org/> || [seamonkey](#)<sup>AUR</sup>

## Desktop publishing

- **gLabels** — Program for creating labels, business cards and media covers.

<http://glabels.org/> || [glabels](#)

- **Scribus** — Desktop publishing program. Uses [hyphen](#) and its language packs for hyphenation.

<https://www.scribus.net/> || [scribus](#)

## Presentations

- **Calligra Stage** — Easy to use yet still flexible presentation application included in the Calligra Suite.

<https://www.calligra.org/stage/> || [calligra](#)

- **LibreOffice Impress** — Presentation program included in the LibreOffice suite.

<https://www.libreoffice.org/discover/writer> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **MDP** — A command-line based markdown presentation tool.

<https://github.com/visit1985/mdp> || [mdp](#)

- **OpenOffice Impress** — Presentation program included in the OpenOffice suite.

<https://www.openoffice.org/product/impress.html> || [openoffice-bin](#)<sup>AUR</sup>

- **sent** — Simple plaintext presentation tool.

<https://git.suckless.org/sent/> || [sent](#)<sup>AUR</sup>

- **Sozi** — Zooming presentation editor and player. Based on the [Electron](#) platform.

<https://sozi.baierouge.fr/> || [sozi](#)<sup>AUR</sup>

- **Spice-Up** — Create simple and beautiful presentations.

<https://github.com/Philip-Scott/Spice-up> || [spice-up](#)

## Spreadsheets

See also [Wikipedia:Comparison of spreadsheet software](#).

- **Calligra Sheets** — Powerful spreadsheet application included in the Calligra Suite.

<https://www.calligra.org/sheets/> || [calligra](#)

- **Gnumeric** — Spreadsheet program for the GNOME desktop.

<http://www.gnumeric.org/> || [gnumeric](#)

- **LibreOffice Calc** — Full-featured spreadsheet application included in the LibreOffice suite.

<https://www.libreoffice.org/discover/calc/> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **OpenOffice Calc** — Full-featured spreadsheet application included in the OpenOffice suite.

<https://www.openoffice.org/product/calc.html> || [openoffice-bin](#)<sup>AUR</sup>

- **Pyspread** — Pyspread is a non-traditional spreadsheet application that is based on and written in the programming language Python.

<https://pyspread.gitlab.io> || [pyspread](#)<sup>AUR</sup>

- **sc** — Curses-based lightweight spreadsheet.

<https://ibiblio.org/pub/linux/apps/financial/spreadsheet/INDEX.html> || [sc](#)

- **sc-im** — Spreadsheet program based on sc.

<https://github.com/andmarti1424/sc-im/> || [sc-im](#)<sup>AUR</sup>

## Database tools

For DBMS-specific tools, see:

- [MySQL#Graphical tools](#)
- [PostgreSQL#Graphical tools](#)
- [SQLite#Graphical tools](#)

- [MongoDB#Tools](#)

See also [Wikipedia:Comparison of database tools](#).

- **[Adminer](#)** — Full-featured database management webapp with support for many database types.

<https://www.adminer.org/> || [adminer](#)<sup>AUR</sup>

- **[DBeaver](#)** — Java-based graphical database editor with support for many database types.

<https://dbeaver.io/> || [dbeaver](#)

- **[DbVisualizer](#)** — The Universal Database Tool

<https://www.dbvis.com/> || [dbvis](#)<sup>AUR</sup>

- **[GdaBrowser](#)** — Graphical tool to get a quick access to a database's structure and contents.

<https://www.gnome-db.org/GdaBrowser> || [libgda](#)

- **[GSQL](#)** — Integrated database development tool for GNOME. Last released in 2010.

<http://gsql.org/> || [gsql](#)<sup>AUR</sup>

- **[Kexi](#)** — Visual database applications creator tool by KDE, designed to fill the gap between spreadsheets and database solutions requiring more sophisticated development.

<http://kexi-project.org/> || [kexi](#)

- **[LibreOffice Base](#)** — Full-featured desktop database front end included in the LibreOffice suite, designed to meet the needs of a broad array of users.

<https://www.libreoffice.org/discover/base/> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **[OpenOffice Base](#)** — Full-featured desktop database front end included in the OpenOffice suite, designed to meet the needs of a broad array of users.

<https://www.openoffice.org/product/base.html> || [openoffice-bin](#)<sup>AUR</sup>

- **[Orbada](#)** — Excellent tool for database developers, SQL developers, DBA administrators, as well as for users who wish to broaden their knowledge and skills in SQL.

<https://orbada.sourceforge.io/> || [orbada](#)<sup>AUR</sup>

- **Sequeler** — SQL client built in Vala and Gtk. It allows you to connect to your local and remote databases, write SQL in a handy text editor with language recognition, and visualize SELECT results in a Gtk.Grid Widget.

<https://github.com/Alecadd/sequeler> || [sequeler](#)<sup>AUR</sup>

- **Squirrel SQL Client** — Graphical Java program that will allow you to view the structure of a JDBC compliant database, browse the data in tables, issue SQL commands etc.

<http://www.squirrelsql.org/> || [squirrel-sql](#)<sup>AUR</sup>

- **Tora** — Database management GUI that supports accessing most of the common database platforms in use, including Oracle, MySQL, and PostgreSQL, as well as limited support for any target that can be accessed through Qt's ODBC support.

<https://github.com/tora-tool/tora/wiki> || [tora](#)<sup>AUR</sup>

### Plain-text database utilities

These kinds of software are in a substance somewhat between [text processing core utilities like awk, spreadsheets](#) and production-level [database system](#). And they usually come with a non-SQL command-line interface.

- **recutils** — GNU utilities to work with human-editable, plaintext database files (in a simple format called "recfile")

<https://gnu.org/s/recutils/> || [recutils](#)<sup>AUR</sup>

### "Simplified" database software (beginner-friendly database tools)

- **Glom** — Easy-to-use database designer and user interface.

<https://gitlab.gnome.org/GNOME/glom/> || [glom](#)

- **Symphytum** — Personal database software for everyone who desires to manage and organize data in an easy and intuitive way, without having to study complex database languages and software user interfaces.

<https://github.com/giowck/symphytum> || [symphytum](#)

- **TreeLine** — Store almost any kind of information in a tree structure, which makes it easy to keep things organized.

<https://treeline.bellz.org/> || [treeline](#)<sup>AUR</sup>

### Formula editors

See also [#TeX formula editors](#) and [Wikipedia:Formula editor](#).



- **LibreOffice Math** — Create and edit scientific formulas and equations. Included in the LibreOffice suite.

<https://www.libreoffice.org/discover/math/> || [libreoffice-still](#) or [libreoffice-fresh](#)

- **OpenOffice Math** — Create equations and formulas for your documents. Included in the OpenOffice suite.

<https://www.openoffice.org/product/math.html> || [openoffice-bin](#)<sup>AUR</sup>

## Markup languages

See also [Wikipedia:Comparison of document markup languages](#).

- **txt2tags** — Dead-simple, KISS-compliant lightweight, human-readable markup language to produce rich format content out of plain text files.

<https://txt2tags.org/> || [txt2tags](#)

## AsciiDoc

See also [Wikipedia:AsciiDoc](#).

- **AsciiDoc** — The original implementation, written in Python. Used by Arch for generating *pacman*'s man pages.<sup>[1]</sup>

<https://asciidoc.org/> || [asciidoc](#)

- **Asciidoctor** — An implementation written in Ruby, with [many extra features](#).

<https://asciidoctor.org/> || [asciidoctor](#)

## Markdown

See also the [official website](#) and [Wikipedia:Markdown](#).

- **cmark** — CommonMark parsing and rendering library and program in C.

<https://github.com/commonmark/cmark> || [cmark](#)

- **Discount** — A Markdown implementation written in C.

<https://www.pell.portland.or.us/~orc/Code/discount/> || [discount](#), Ruby wrapper library: [ruby-rdiscount](#)

- **lowdown** — Markdown translator producing HTML5 and roff documents in the ms and man formats.

<https://kristaps.bsd.lv/lowdown/> || [lowdown](#)

- **Marked** — Markdown parser and compiler built for speed.

<https://marked.js.org/> || [marked](#)

- **md2html** — C Markdown parser.

<https://github.com/mity/md4c> || [md4c](#)

- [Pandoc](#) also supports Markdown.

### Python implementations

- **CommonMark-py** — Python parser for the CommonMark Markdown specification.

<https://github.com/rtd/Markdown-py> || [python-commonmark](#)

- **M2R** — Markdown to reStructuredText converter.

<https://github.com/miyakogi/m2r> || [python-m2r](#)<sup>AUR</sup>

- **Mistune** — The fastest markdown parser in pure Python with renderer feature.

<https://github.com/lepture/mistune> || [python-mistune](#)

- **Python-Markdown** — Extensible Python implementation of John Gruber's Markdown.

<https://github.com/Python-Markdown/markdown> || [python-markdown](#)

- **PyMdown Extensions** — Extensions for Python-Markdown.

<https://facelessuser.github.io/pymdown-extensions/> || [pymdown-extensions](#)<sup>AUR</sup>

- **MkDocs** — Project documentation with Markdown.

<https://www.mkdocs.org/> || [mkdocs](#)<sup>AUR</sup>

- **Material for MkDocs** — [Material design](#) theme for MkDocs.

<https://squidfunk.github.io/mkdocs-material/> || [mkdocs-material](#)<sup>AUR</sup>

- **MkDocs Material Extensions** — Markdown extension resources for MkDocs Material.

<https://github.com/facelessuser/mkdocs-material-extensions> || [mkdocs-material-extensions](#)<sup>AUR</sup>

### Ruby implementations

- **kramdown** — Fast, pure Ruby Markdown superset converter, using a strict syntax definition.

<https://kramdown.gettalong.org/> || [ruby-kramdown](#)

- **Maruku** — Pure Ruby Markdown-superset interpreter.

<https://github.com/bhollis/maruku> || [ruby-maruku](#)

- **mdless** — Pure Ruby terminal-based markdown viewer/interpreter.

<https://github.com/ttscoff/mdless> || [ruby-mdless](#)<sup>AUR</sup>

## Markdown editors

- **Abricotine** — Markdown editor built for desktop. Based on the [Electron](#) platform.

<https://abricotine.brrd.fr/> || [abricotine](#)<sup>AUR</sup>

- **Apostrophe** — Distraction free Markdown editor made with GTK.

<https://gitlab.gnome.org/World/apostrophe> || [apostrophe](#)<sup>AUR</sup>

- **CuteMarkEd** — Qt-based Markdown editor with live HTML preview, math expressions, code and markdown syntax highlighting. Discontinued since 2016.

<https://cloose.github.io/CuteMarkEd/> || [cutemarked-git](#)<sup>AUR</sup>

- **Formiko** — reStructuredText and Markdown editor and live previewer written in Python with GTK.

<https://github.com/ondratu/formiko> || [formiko](#)<sup>AUR</sup>

- **ghostwriter** — Distraction-free Markdown editor.

<https://ghostwriter.kde.org> || [ghostwriter](#)

- **Marker** — Simple yet robust Markdown editor.

<https://fabiocolacio.github.io/Marker/> || [marker](#)

- **Mark My Words** — Minimal markdown editor.

<https://github.com/voldyman/MarkMyWords> || [markmywords](#)<sup>AUR</sup>

- **Mark Text** — Next generation markdown editor. Based on the [Electron](#) platform.

<https://github.com/marktext/marktext> || [marktext](#)<sup>AUR</sup>

- **Remarkable** — Fully featured Markdown editor.

<https://remarkableapp.github.io/> || [remarkable](#)<sup>AUR</sup>

- **ReText** — Simple text editor for Markdown and reStructuredText.

<https://github.com/retext-project/retext> || [retext](#)

- **ThiefMD** — Markdown and Fountain editor inspired by Ulysses.

<https://thiefmd.com/> || [thiefmd](#)<sup>AUR</sup>

- **Typora** — Proprietary, minimalist Markdown editor.

<https://typora.io/> || [typora](#)<sup>AUR</sup>

- **Zettlr** — A cross-platform markdown editor, inspired by the [Zettelkasten](#) system for note-taking and personal knowledge management.

<https://www.zettlr.com/> || [zettlr](#)

## reStructuredText

See also [reStructuredText](#).

- **Docutils** — Set of tools for processing plaintext (reStructuredText) docs into formats such as HTML, XML, or LaTeX.

<https://docutils.sourceforge.io/> || [python-docutils](#)

- **rstcheck** — Checks syntax of reStructuredText and code blocks nested within it.

<https://github.com/rstcheck/rstcheck> || [rstcheck](#)

- **Sphinx** — A documentation generation system using reStructuredText to generate output in multiple formats (primary documentation system for the Python project).

<https://www.sphinx-doc.org/> || [python-sphinx](#)

## Typesetting systems

- **groff** — [GNU](#) implementation of troff, a heirloom Unix document processing system and the default formatter for [man pages](#).

<https://www.gnu.org/software/groff/groff.html> || [groff](#)

- **Lout** — A lightware document formatting system. Reads a high-level description of a document similar in style to LaTeX and produces a PostScript.

<https://savannah.nongnu.org/projects/lout> || [lout](#)

- **SILE** — Modern typesetting system inspired by TeX.

<https://sile-typesetter.org/> || [sile](#)

- **TeX** — A high-quality typesetting system popular in academia.

<https://tug.org/> || [texlive-basic](#)

- **Texinfo** — Typesetting syntax for software manuals used by the [GNU Project](#).

<https://www.gnu.org/software/texinfo/> || [texinfo](#)

- **Typst** — A markup-based typesetting system for the sciences.

<https://github.com/typst/typst> || [typst](#)

## TeX editors

With [TeX, LaTeX and friends](#), creation of any scientific document, article, journal, etc. is made commonplace.

See also [Wikipedia:Comparison of TeX editors](#) and [Wikibooks:LaTeX/Installation#Editors](#).

- **AUCTeX** — Together with RefTeX, AUCTeX provides an extensible environment for writing and formatting TeX files in [Emacs](#).

<https://www.gnu.org/software/auctex/> || [auctex](#)<sup>AUR</sup>

- **gedit LaTeX Plugin** — Add code-completion to gedit and allows for compiling LaTeX documents and managing BibTeX bibliographies.

<https://wiki.gnome.org/Apps/Gedit/LaTeXPlugin> || [gedit-latex](#)<sup>AUR</sup>

- **GNOME LaTeX** — LaTeX editor for the GNOME Desktop including support for code completion, compiling and project management.

<https://wiki.gnome.org/Apps/GNOME-LaTeX> || [gnome-latex](#)

- **Gummi** — Lightweight TeX/LaTeX GTK-based editor. It features a continuous preview mode, integrated BibTeX support, extendable snippet interface and multi-document support.

<https://github.com/alexandervdm/gummi/> || [gummi](#)

- **Kile** — User-friendly TeX/LaTeX editor for the KDE desktop with many features.

<https://apps.kde.org/kile/> || [kile](#)

- **Ktikz** — Small application helping you to create [PGF/TikZ](#) diagrams for your publications.

<http://www.hackenberger.at/blog/ktikz-editor-for-the-tikz-language/> || KDE: [ktikz](#), Qt: [qtikz](#)

- **LyX** — Document processor that encourages an approach to writing based on the structure of your documents (WYSIWYM) and not simply their appearance (WYSIWYG).

<https://www.lyx.org/> || [lyx](#)<sup>AUR</sup>

- **Setzer** — LaTeX editor written in Python with GTK.

<https://www.cvfosammm.org/setzer/> || [setzer](#)<sup>AUR</sup>

- **TeXmacs** — WYSIWYW (what you see is what you want) editing platform with special features for scientists.

<https://www.texmacs.org/> || [texmacs](#)<sup>AUR</sup>

- **Texmaker** — Cross-platform, light and easy-to-use LaTeX IDE. It integrates many tools needed to develop documents with LaTeX, in just one application

<https://www.xm1math.net/texmaker/> || [texmaker](#)

- **TeXstudio** — Fork of TeXMaker including support for code completion of bibtex items, grammar check and automatic detection of the need for multiple LaTeX runs.

<https://texstudio.sourceforge.net/> || [texstudio](#)

- **TeXworks** — Simple TeX front-end program modeled after TeXShop.

<https://tug.org/texworks/> || [texworks](#)

- **TikZiT** — Graphical tool for rapidly creating graphs and diagrams using [PGF/TikZ](#).

<https://tikzit.github.io/> || [tikzit](#)<sup>AUR</sup>

- **Vim-LaTeX-suite** — Customizable LaTeX environment for Vim.

<https://vim-latex.sourceforge.net/> || [vim-latexsuite](#)

## TeX formula editors

- **EqualX** — LaTeX equation editor with real time preview.

<http://equalx.sourceforge.net/> || [equalx](#)<sup>AUR</sup>

- **KLatexFormula** — GUI for generating images from LaTeX equations.

<https://klatexformula.sourceforge.io/> || [klatexformula](#)<sup>AUR</sup>

- **LibreOffice TexMaths extension** — LaTeX equation editor for LibreOffice.

<http://roland65.free.fr/texmaths/> || [libreoffice-extension-texmaths](#)

## XML editors

See also [Wikipedia:Comparison of XML editors](#).

- **QXmLEdit** — Simple Qt XML editor and XSD viewer.

<https://qxmledit.org/> || [qxmledit](#)

- **XML Copy Editor** — Fast, validating XML editor.

<https://xml-copy-editor.sourceforge.io/> || [xmlcopyeditor](#)<sup>AUR</sup>

- **XML Tree Editor** — Displays XML files as tree views and allows basic operations: adding, editing and deleting text nodes and their attributes.

<https://sourceforge.net/projects/xmltreeeditor/> || [xmltreeedit-bin](#)<sup>AUR</sup>

## Document converters

See also [#Markup languages](#) and [PDF, PS and DjVu](#).

- **Antiword** — MS Word to text converter.

<http://www.winfield.demon.nl/><sup>[dead link 2023-04-25 ⓘ]</sup> || [antiword](#)

- **catdoc** — Converter for Microsoft Word, Excel, PowerPoint and RTF files to text.

<https://wagner.pp.ru/~vitus/software/catdoc/> || [catdoc](#)

- **docx2txt** — MS Word Docx to text converter.

<http://docx2txt.sourceforge.net/> || [docx2txt](#)

- **HTMLDOC** — Reads HTML and Markdown source files or web pages and generates corresponding EPUB, HTML, PostScript, or PDF files with an optional table of contents.

<https://www.msweet.org/htmldoc/> || [htmldoc](#)

- **mutool** — All purpose tool based on MuPDF for dealing with document files in various manners.

<https://mupdf.com/> || [mupdf-tools](#)

- **Pandoc** — Swiss-army knife for converting markup and document formats.

<https://pandoc.org/> || [pandoc-cli](#)

- **unoconv** — Libreoffice-based document converter.

<http://dag.wiee.rs/home-made/unoconv/> || [unoconv](#)

- **UnRTF** — Command-line program which converts RTF documents to other formats.

<https://www.gnu.org/software/unrtf/unrtf.html> || [unrtf](#)

## Bibliographic reference managers

See also [Wikipedia:Comparison of reference management software](#).

- **Bibus** — A bibliographic database that can directly insert references in OpenOffice.org/LibreOffice and generate the bibliographic index.

<https://sourceforge.net/projects/bibus-biblio/> || [bibus](#)<sup>AUR</sup>

- **DocEar** — Docear is an academic literature suite for searching, organizing and creating academic literature, built upon the mind mapping software Freeplane and the reference manager JabRef.

<https://www.docear.org/> || [docear](#)<sup>AUR</sup>

- **JabRef** — Java GUI frontend for managing BibTeX and other bibliographies.

<https://www.jabref.org/> || [jabref](#)<sup>AUR</sup>

- **KBibTeX** — BibTeX editor by KDE to edit bibliographies used with LaTeX.

<https://apps.kde.org/kbibtex/> || [kbibtex](#)

- **Mendeley Desktop** — Proprietary reference manager and academic social network.

<https://www.mendeley.com/> || [mendeleydesktop](#)<sup>AUR</sup>

- **Papis** — A command-line based document and bibliography manager.

<https://github.com/papis/papis> || [papis](#)<sup>AUR</sup>

- **Pybliographer** — Tool for managing bibliographic databases.

<https://pybliographer.org/> || [pybliographer](#)<sup>AUR</sup>



- **Referencer** — GNOME application to organize documents or references, and ultimately generate a BibTeX bibliography file.

<https://launchpad.net/referencer/> || [referencer](#)<sup>AUR</sup>

- **Zotero** — An easy-to-use tool to help you collect, organize, cite, and share your research sources. Can import and export BibTeX and has browser extensions.

<https://www.zotero.org/> || [zotero](#)<sup>AUR</sup>

## Readers and viewers

- **NFO Viewer** — Simple viewer for NFO files.

<https://otsaloma.io/nfoview/> || [nfoview](#)

## PDF and DjVu

See [PDF, PS and DjVu](#).

## E-book

- **Bookworm** — Simple, focused e-book reader for Elementary OS with EPUB, PDF, Mobipocket and Comicbook support.

<https://babluboy.github.io/bookworm/> || [bookworm](#)

- **Calibre** — E-book library management application that can also edit EPUB files, convert between different formats and sync with a variety of e-book readers. Supported formats include CHM, Comicbook, DjVu, DOCX, EPUB, FictionBook, HTML, HTMLZ, Kindle, LIT, LRF, Mobipocket, ODT, PDF, PRC, PDB, PML, RB, RTF, SNB, TCR, TXT and TXTZ.

<https://calibre-ebook.com/> || [calibre](#)

- **Cool Reader** — E-book viewer with many supported formats such as EPUB (non-DRM), FictionBook, TXT, RTF, HTML, CHM and TCR.

<https://sourceforge.net/projects/crengine/> || [coolreader](#)

- **FBReader** — E-book viewer with many supported formats such as EPUB, FictionBook, HTML, plucker, PalmDoc, zTxt, TCR, CHM, RTF, OEB, Mobipocket (non-DRM) and TXT.

<https://fbreader.org/> || [fbreader](#)

- **Foliate** — Simple and modern GTK eBook reader. Supports EPUB, Mobipocket, Kindle, FictionBook, and Comicbook formats.

<https://johnfactotum.github.io/foliate/> || [foliate](#)

- **GNOME Books** — E-book manager application for GNOME with EPUB, Mobipocket, FictionBook, DjVu and Comicbook support.

<https://wiki.gnome.org/Apps/Books> || [gnome-books-git](#)<sup>AUR</sup>

- **Lector** — Qt based e-book reader with PDF, EPUB, Kindle, Mobipocket and Comicbook support.

<https://github.com/BasioMeusPuga/Lector> || [lector](#)<sup>AUR</sup>

- **Sigil** — WYSIWYG EPUB e-book editor.

<https://sigil-ebook.com/> || [sigil](#)

Some [PDF viewers](#) like apvlv, Atril, [MuPDF](#), [Okular](#) and Xreader also support the EPUB format.

## Comic book

- **Automedia** — A very small downloader for manga and anime from various websites. Designed to be a much more lightweight alternative to HakuNeko. Written primarily in C.

<https://git.dec05eba.com/AutoMedia/about/> || [automedia-git](#)<sup>AUR</sup>

- **HakuNeko** — Downloader for manga and anime from various websites. Based on the [Electron](#) platform.

<https://github.com/manga-download/hakuneko> || [hakuneko-desktop-bin](#)<sup>AUR</sup>

- **Kindle Comic Converter** — Allows you to transform your PNG, JPG, GIF, CBZ, CBR and CB7 files into EPUB or MOBI format e-books.

<https://github.com/ciromattia/kcc/> || [kcc](#)<sup>AUR</sup>

- **Komikku** — Online/offline manga reader for GNOME.

<https://gitlab.com/valos/Komikku> || [komikku](#)<sup>AUR</sup>

- **Manga Reader** — Manga reader for local files. Supports zip, rar, tar, 7z, cbz, cbr, cbt, cb7 files and also folders.

<https://github.com/g-fb/mangareader> || [mangareader](#)<sup>AUR</sup>

- **MComix** — GTK3 image viewer specifically designed to handle comic book archives (fork of Comix). Also includes library manager.

<https://github.com/multiSnow/mcomix3> || [mcomix](#)<sup>AUR</sup>

- **Peruse** — Comic book reader by KDE.

<https://peruse.kde.org/> || [peruse](#)<sup>AUR</sup>

- **QComicBook** — Viewer for comic book archives that aims at convenience and simplicity.

<https://github.com/stolowski/QComicBook> || [qcomicbook](#)<sup>AUR</sup>

- **QuickMedia** — Online manga reader. Supports automatically upscaling pages with [waifu2x-ncnn-vulkan](#)

<https://git.dec05eba.com/QuickMedia/about/> || [quickmedia-git](#)<sup>AUR</sup>

- **YACReader** — Comic book viewer written in C++ and Qt5. Comes with YACReaderLibrary for managing comics.

<https://yacreader.com/> || [yacreader](#)<sup>AUR</sup>

Some [PDF](#) and E-book viewers like Atril, Bookworm, [Calibre](#), [Evince](#), Foliate, Lector, [MuPDF](#), [Okular](#), Xreader and [Zathura](#) also support the Comicbook format.

## CHM

See also [Wikipedia:Microsoft Compiled HTML Help](#).

- **Archmage** — Extensible reader and decompiler for files in the CHM format.

<https://github.com/dottedmag/archmage> || [archmage](#)<sup>AUR</sup>

- **Kchmviewer** — Qt-based CHM viewer that uses chmlib and borrows some ideas from xchm. It does not depend on [KDE](#), but it can be compiled to integrate with it.

<http://www.ulduzsoft.com/linux/kchmviewer/> || [kchmviewer](#)

- **xCHM** — Lightweight CHM viewer, based on chmlib.

<https://github.com/rzvncj/xCHM> || [xchm](#)

Some [PDF](#) and E-book viewers like Cool Reader, [FBReader](#) and [Okular](#) also support the CHM format.

## Document managers

- **Paperwork** — Personal document manager. It manages scanned documents and PDFs.

<https://openpaper.work/> || [paperwork](#)

- **Shelf** — Document and EBook collection manager that supports PDF and EPUB files.

<https://mauikit.org/apps/shelf/> || [maui-shelf](#)

## Scanning software

See [SANE#Frontends](#)

- **ScanTailor Advanced** — Interactive post-processing tool for scanned pages. Fork of Scan Tailor with additional features and fixes.

<https://github.com/4lex4/scantailor-advanced> || [scantailor-advanced](#)

## OCR software

### Console

See also [Wikipedia:Comparison of optical character recognition software](#).

- **Cuneiform** — Command line OCR system originally developed and open sourced by Cognitive technologies. Supported languages: eng, ger, fra, rus, swe, spa, ita, ruseng, ukr, srp, hrv, pol, dan, por, dut, cze, rum, hun, bul, slo, lav, lit, est, tur.

<https://launchpad.net/cuneiform-linux> || [cuneiform](#)

- **GOOCR** — OCR engine which also supports barcode recognition.

<https://www-e.uni-magdeburg.de/jschulen/ocr/> || [gocr](#)

- **Ocrad** — OCR program based on a feature extraction method.

<https://www.gnu.org/software/ocrad/> || [ocrad](#)

- **OCRmyPDF** — Adds an OCR text layer to scanned PDF files, allowing them to be searched.

<https://github.com/jbarlow83/OCRmyPDF> || [ocrmypdf](#)<sup>AUR</sup>

- **OCRopus** — OCR *platform*, modules exist for document layout analysis, OCR engines (it can use Tesseract or its own engine), natural language modeling, etc.

<https://github.com/tmbdev/ocropy> || [ocropy-git](#)<sup>AUR</sup>

- **Tesseract** — Accurate open source OCR engine. Package splitted, you need install some datafiles for each language ([tesseract-data-eng](#) for example).

<https://github.com/tesseract-ocr> || [tesseract](#)

## Graphical

- **gImageReader** — Graphical GTK/Qt frontend to Tesseract.

<https://github.com/manisandro/gImageReader> || GTK: [gimagereader-gtk](#), Qt: [gimagereader-qt](#)

- **gscan2pdf** — Scans, runs an OCR engine, minor post-processing, creates a document.

<https://gscan2pdf.sourceforge.net/> || [gscan2pdf](#)

- **Linux-Intelligent-Ocr-Solution** — Easy-OCR solution and Tesseract trainer for converting print into text using either scanner or a camera.

<https://sourceforge.net/projects/lios/> || [lios-git](#)<sup>AUR</sup>

- **OCRFeeder** — Python GUI for Gnome which performs document analysis and rendition, and can use either CuneiForm, GOCR, Ocrad or Tesseract as OCR engines. It can import from PDF or image files, and export to HTML or OpenDocument.

<https://wiki.gnome.org/Apps/OCRFeeder> || [ocrfeeder](#)

- **Paperwork** — Personal document manager. It manages scanned documents and PDFs.

<https://openpaper.work/> || [paperwork](#)

- **Scans to PDF** — Create small, searchable PDFs from scanned documents.

<https://github.com/Unrud/djpdf> || [djpdf](#)<sup>AUR</sup>

- **YAGF** — Graphical interface for the CuneiForm text recognition program on the Linux platform.

<https://sourceforge.net/projects/yagf-ocr/> || [yagf](#)<sup>AUR</sup>

## Notes

### Note-taking software

See also [Wikipedia:Comparison of notetaking software](#).

### Console

- **dnote** — A simple command line notebook for programmers

<https://github.com/dnote/dnote> || [dnote-cli-bin](#)<sup>AUR</sup>

- **Org mode** — [Emacs](#) mode for notes, project planning and authoring.

<https://orgmode.org/> || [emacs-org-mode](#)<sup>AUR</sup>

- **eureka** — CLI tool to input and store your ideas without leaving the terminal

<https://github.com/simeg/eureka> || [eureka-notes](#)<sup>AUR</sup>

- **hierarchical notebook** — Program to organize many kinds of data (addresses, to-do lists, ideas, book reviews, etc.) in one place using the XML format.

<http://hnb.sourceforge.net/> || [hnb](#)<sup>AUR</sup>

- **kb** — A minimalist terminal-based knowledge manager.

<https://github.com/gnebbia/kb> || [kb](#)<sup>AUR</sup>

- **nb** — A command line and local web note-taking, bookmarking, archiving, and knowledge base application.

<https://xwmx.github.io/nb/> || [nb](#)<sup>AUR</sup>

- **tnote** — Small note taking program for the terminal.

<https://sourceforge.net/projects/tnote/> || [tnote](#)<sup>AUR</sup>

- **Vimwiki** — Personal wiki for [Vim](#) – interlinked, plain text files written in a markup language.

<https://vimwiki.github.io/> || [vim-vimwiki](#)<sup>AUR</sup>

## Graphical

- **BasKet** — Application for organizing, sharing, and taking notes. It can manage various types of information such as to-do lists, links, pictures, and other types, similar to a scrapbook.

<https://basket-notepads.github.io/> || [basket](#)<sup>AUR</sup>

- **Boostnote** — Note-taking application for programmers that focuses on markdown, snippets, and customizability. Based on the [Electron](#) platform.

<https://boostnote.io/> || [boost-note-bin](#)<sup>AUR</sup>

- **Buho** — Task and note keeper to save links, write quick notes and organize pages as books.

<https://mauikit.org/apps/buho/> || [buho](#)

- **Cherrytree** — Hierarchical note taking application, featuring rich text and syntax highlighting, storing data in a single xml or sqlite file.

<https://www.giuspen.com/cherrytree/> || [cherrytree](#)

- **Deepin Voice Notes** — Lightweight memo tool to make text notes and voice recordings.

<https://github.com/linuxdeepin/deepin-voice-note> || [deepin-voice-note](#)

- **Encryptic** — JavaScript note taking application with Markdown editor and encryption support. Based on the [Electron](#) platform.

<https://www.encryptic.org/> || [encryptic](#)<sup>AUR</sup>

- **FeatherNotes** — Lightweight Qt hierarchical notes-manager.

<https://github.com/tsujan/feathernotes> || [feathernotes](#)

- **FromScratch** — Simple but smart note-taking application that you can use as a quick note taking or todo app. Based on the [Electron](#) platform.

<https://fromscratch.rocks/> || [fromscratch-bin](#)<sup>AUR</sup>

- **GNOME Notes** — Note editor for GNOME designed to remain simple to use. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Notes> || [gnome-notes](#)

- **Gnote** — Port of Tomboy to C++. It is the same note taking application, including most of the add-ins.

<https://wiki.gnome.org/Apps/Gnote> || [gnote](#)

- **Joplin** — Note taking and to-do application, which can handle a large number of notes organized into notebooks. Based on the [Electron](#) platform.

<https://joplinapp.org/> || CLI app: [joplin](#)<sup>AUR</sup>, desktop app: [joplin-desktop](#)<sup>AUR</sup>

- **KeepNote** — Cross-platform GTK note-taking application with rich text formatting.

<http://keepnote.org> || [keepnote](#)<sup>AUR</sup>

- **KJots** — Note taking application for KDE.

<https://userbase.kde.org/KJots> || [kjots](#)

- **Logseq** — A local-first, non-linear, outliner notebook for organizing and sharing your personal knowledge base.

<https://logseq.com/> || [logseq-desktop](#)<sup>AUR</sup>

- **Mikidown** — Note taking application featuring markdown syntax.

<https://shadowkyogre.github.io/mikidown/> || [mikidown](#)<sup>AUR</sup>

- **MyNotex** — Note-taking, document file and activity manager.

<https://sites.google.com/site/mynotex/> || [mynotex](#)<sup>AUR</sup>

- **Nextcloud Notes** — Simple notes app for Nextcloud.

<https://github.com/nextcloud/notes> || [nextcloud-app-notes](#)

- **NixNote** — Helps you take notes and stay organized. Create text notes, attach files or images, and even synchronize with Evernote. Formerly called Nevernote.

<http://nixnote.org/> || [nixnote2](#)<sup>AUR</sup>

- **Norka** — Note-taking software with Markdown support designed for Pantheon.

<https://tenderowl.com/work/norka/> || [norka](#)<sup>AUR</sup>

- **Notejot** — Stupidly simple sticky notes applet for elementaryOS.

<https://github.com/lainsce/notejot> || [notejot](#)<sup>AUR</sup>

- **Notes** — Note-taking application, write down your thoughts.

<https://www.get-notes.com/> || [notes](#)<sup>AUR</sup>

- **Notes-Up** — Markdown notes editor and manager for elementaryOS.

<https://github.com/Philip-Scott/Notes-up> || [notes-up](#)

- **Notion** — Note-taking, task management, project management, knowledge management software

<https://www.notion.so> || [notion-app](#)<sup>AUR</sup>

- **Notorious** — Keyboard centric note-taking application with Markdown syntax highlighting support.

<https://notorious.gabmus.org/> || [notorious-git](#)<sup>AUR</sup>

- **nvPY** — Simplenote syncing note-taking application, inspired by Notational Velocity and ResophNotes, but uglier and cross-platformer.



<https://github.com/cpbotha/nvpy> || [nvpy](#)<sup>AUR</sup>

- **Obsidian** — Personal knowledge base that uses markdown text files to organize notes in a format that mirrors the human brain.

<https://obsidian.md/> || [obsidian](#)

- **OutWiker** — Store notes in a tree.

<https://jenyay.net/Outwiker/English> || [outwiker](#)<sup>AUR</sup>

- **QOwnNotes** — Notepad and todo list manager with markdown support and optional ownCloud integration built on Qt5.

<https://www.qownnotes.org/> || [qownnotes](#)<sup>AUR</sup>

- **Simplenote** — The simplest way to keep notes. Based on the [Electron](#) platform.

<https://simplenote.com/> || [simplenote-electron-bin](#)<sup>AUR</sup>

- **Standard Notes** — Simple and private notes application which focuses on simplicity, and encrypts data locally before it ever touches a cloud. Based on the [Electron](#) platform.

<https://standardnotes.com/> || [standardnotes-desktop](#)<sup>AUR</sup>

- **TagSpaces** — Offline personal data manager for managing of your local files. Based on the [Electron](#) platform.

<https://www.tagspaces.org/> || [tagspaces](#)<sup>AUR</sup>

- **TiddlyWiki** — Unique non-linear notebook for capturing, organizing and sharing complex information.

<https://tiddlywiki.com/> || [tiddlywiki](#)<sup>AUR</sup>

- **Tomboy** — Desktop note-taking application for Linux and Unix with a wiki-like linking system to connect notes together.

<https://wiki.gnome.org/Apps/Tomboy> || [tomboy](#)<sup>AUR</sup>

- **Trilium** — Build your personal knowledge base with Trilium Notes.

<https://github.com/zadam/trilium> || [trilium](#)<sup>AUR</sup>, [trilium-server](#)<sup>AUR</sup>

- **TuxCards** — Hierarchical notebook to enter and manage ever every kind of notes and ideas in a structured manner.

<https://tuxcards.de/> || [tuxcards](#)

- **VNote** — Vim-inspired note-taking application that knows programmers and Markdown better.

<https://vnotex.github.io/vnote> || [vnote](#)<sup>AUR</sup>

- **WikidPad** — Wiki-like notebook for storing your thoughts, ideas, todo lists, contacts, or anything else you can think of to write down.

<https://wikidpad.sourceforge.net/> || [wikidpad](#)<sup>AUR</sup>

- **WizNote** — Cloud based note-taking client.

<https://github.com/WizTeam/WizQTClient> || [wiznote](#)

- **Zim** — WYSIWYG text editor that aims at bringing the concept of a wiki to the desktop.

<https://zim-wiki.org/> || [zim](#)

- **zNotes** — Lightweight application for notes management with simple interface.

<https://sourceforge.net/projects/znotes/> || [znotes](#)<sup>AUR</sup>

- **µPad** — Note-taking app that helps you organise + take notes without restrictions. Based on the [Electron](#) platform.

<https://getmicropad.com> || [micropad](#)<sup>AUR</sup>

## Stylus note-taking

- **Cournal** — Collaborative note taking and journal application using a stylus. It allows multiple users to annotate PDF files in real-time.

<https://github.com/flyser/cournal> || [cournal](#)<sup>AUR</sup>

- **Saber** — Open source libre cross platform note taking app

<https://github.com/adil192/saber> || [saber](#)<sup>AUR</sup>

- **Write** — A proprietary word processor for handwriting.

<http://www.styluslabs.com/> || [write\\_stylus](#)<sup>AUR</sup>

- **Xournal** — Application for notetaking, sketching and keeping a journal using a stylus. Capable of annotating existing PDF files as well.

<https://xournal.sourceforge.net/> || [xournal](#)<sup>AUR</sup>

- **Xournal++** — Notetaking software designed around a tablet. C++ rewrite of Xournal with PDF annotation support.

<https://github.com/xournalpp/xournalpp> || [xournalpp](#)

- **Rnote** — A simple note taking application written in Rust and GTK4.

<https://github.com/flxzt/rnote> || [rnote](#)

## Diary

- **Almanah** — Small GTK application to allow you to keep a diary of your life.

[https://wiki.gnome.org/Apps/Almanah\\_Diary](https://wiki.gnome.org/Apps/Almanah_Diary) || [almanah](#)

- **Hazama** — Simple and highly customizable application for keeping diary. There is no calendar but a big list that contains preview of diaries.

<https://hazama.cc/> || [hazama](#)<sup>AUR</sup>

- **Lifeograph** — Off-line and private journal and note taking application. It offers a rich feature set presented in a clean and simple user interface.

<https://lifeograph.sourceforge.net/> || [lifeograph](#)

- **RedNotebook** — Modern journal, which lets you format, tag and search your entries.

<https://rednotebook.sourceforge.io/> || [rednotebook](#)

- **Simple Diary** — Simple and lightweight diary app with Markdown support.

<https://github.com/johan-bjareholt/simple-diary-gtk> || [simple-diary-gtk](#)<sup>AUR</sup>

## Mind-mapping

See also [Wikipedia:List of concept- and mind-mapping software](#).

- **FreeMind** — Mind-mapping software written in Java.

<https://freemind.sourceforge.net> || [freemind](#)<sup>AUR</sup>

- **Freeplane** — Fork of FreeMind, supports thinking, sharing information and getting things done at work. The software can be used for mind mapping and analyzing the information contained in mind maps.

<https://www.freeplane.org/> || [freeplane](#)

- **Minder** — Mind-mapping application designed for Pantheon.

<https://github.com/phase1geo/Minder> || [minder](#)

- **MindMaster** — Proprietary mindmap and brainstorm software with modern UI and beautiful template. It also provides online mindmap service and cross-platform sharing.

<https://www.edrawsoft.com/mindmaster/> || [mindmaster\\_en](#)<sup>AUR</sup>

- **Semantik** — Mind-mapping application for KDE.

<https://waf.io/semantik.html> || [semantik](#)<sup>AUR</sup>

- **TreeSheets** — A "hierarchical spreadsheet" that is a great replacement for spreadsheets, mind mappers, outliners, PIMs, text editors and small databases.

<https://strlen.com/treesheets/> || [treesheets-git](#)<sup>AUR</sup>

- **View Your Mind** — Tool to generate and manipulate maps which show your thoughts. Such maps can help you to improve your creativity and effectivity. You can use them for time management, to organize tasks, to get an overview over complex contexts, to sort your ideas etc.

<https://sourceforge.net/projects/vym/> || [vym](#)

- **Visual Understanding Environment** — Flexible tools for managing and integrating digital resources in support of teaching, learning and research.

<https://vue.tufts.edu/> || [vue](#)<sup>AUR</sup>

- **XMind** — Brainstorming and mind mapping application. It provides a rich set of different visualization styles, and allows sharing of created mind maps via their website.

<https://www.xmind.net/> || [xmind](#)<sup>AUR</sup>

## Sticky notes

- **GloboNote** — Easy to use desktop note taking application. You can use it to create sticky notes, to-do lists, personal journals, reminders and other notes all in one application.

<https://globonote.info/> || [globonote](#)<sup>AUR</sup>

- **KNotes** — Program that lets you write the computer equivalent of sticky notes. Part of [kde-pim](#).

<https://kontact.kde.org/components/knotes.html><sup>[[dead link](#) 2022-09-20 ⓘ]</sup> || [knotes](#)

- **MyNotes** — Sticky note application. An icon appears in the system tray and from it you can create and manage your sticky notes.

<https://github.com/j4321/MyNotes> || [mynotes](#)<sup>AUR</sup>

- **Notes** — Provides you a quick way to paste text, to write down a list of things, to leave a note to your friend, or whatever you had do with Post-It's.

<https://goodies.xfce.org/projects/panel-plugins/xfce4-notes-plugin> || [xfce4-notes-plugin](#)

- **PrimeNote** — Most polished, cross-platform sticky note application (PyQt5). Provides support for Cloud, Vim, CSS styling and more !

<https://gitlab.com/william.belanger/primenote> || [primenote-git](#)<sup>AUR</sup>

- **xNots** — Desktop post-it/sticky note system for the Unix geek.

<https://github.com/thePalindrome/xnots> || [xnots-git](#)<sup>AUR</sup>

- **Xpad** — Sticky note application for jotting down things to remember.

<https://launchpad.net/xpad> || [xpad](#)

## Special writing environments

### Distraction-free writing

See also [#Markdown editors](#) and [Wikipedia:Full-screen writing program](#).

- **FocusWriter** — Simple, distraction-free writing environment. It utilizes a hide-away interface that you access by moving your mouse to the edges of the screen, allowing the program to have a familiar look and feel to it while still getting out of the way so that you can immerse yourself in your work.

<https://gottcode.org/focuswriter/> || [focuswriter](#)

- **PyRoom** — Fullscreen editor without buttons, widgets, formatting options, menus and with only the minimum of required dialog windows, it does not have any distractions and lets you focus on writing and only writing.

<https://pyroom.org/><sup>[dead link 2023-04-25 ⓘ]</sup> || [pyroom](#)<sup>AUR</sup>

- **Quilter** — Focus on your writing and write beautiful solid stories with the Focus Mode in tow in this Markdown editor.

<https://github.com/lainsce/quilter> || [quilter](#)<sup>AUR</sup>

- **TextRoom** — Fullscreen text editor for writers.

<https://github.com/dbuksbaum/TextRoom> || [textroom](#)<sup>AUR</sup>

## Story writing

- **Manuskript** — Provides a rich environment to help writers create their first draft and then further refine and edit their masterpiece.

<http://www.theologeek.ch/manuskript/> || [manuskript](#)

- **NovProg** — Tool to graph your progress in writing a NaNoWriMo style novel.

<https://gottcode.org/novprog/> || [novprog](#)<sup>AUR</sup>

- **oStorybook** — Tool for writers, essayists, authors from the draft to the final work.

<https://ostorybook.tuxfamily.org/?lng=en> || [ostorybook](#)<sup>AUR</sup>

## Screenwriting

- **KIT Scenarist** — Simple and powerful application for creating screenplays.

<https://kitscenarist.ru/en/> || [scenarist](#)

- **Magic Fountain** — Fountain syntax editor and viewer for writing screenplays.

<https://aztorius.github.io/magicfountain/> || [magicfountain](#)<sup>AUR</sup>

- **Trelby** — Simple, fast and elegantly laid out to make screenwriting simple.

<https://www.trelby.org/> || [trelby-git](#)<sup>AUR</sup>

- **Fade In** — Fade In Professional Screenwriting Software is the most advanced software used by professionals writing for motion pictures, television, video games, the stage, radio, and more.

<https://www.fadeinpro.com/> || [fadein](#)<sup>AUR</sup>

## Language

### Dictionary and thesaurus

See also [Wikipedia:Category:Dictionary software](#) and [Wikipedia:DICT#DICT clients](#).

### Console

- **dictd** — Client/server software for the DICT protocol.

<https://sourceforge.net/projects/dict/> || [dictd](#)

- **sdcv** — Command line dictionary. It provides access to dictionaries in StarDict's format.

<https://dushistov.github.io/sdcv/> || [sdcv](#)

- **thesauromatic** — Static, offline, command-line thesaurus written in Rust.

<https://github.com/cjrh/thesauromatic> || [thesauromatic-git](#)<sup>AUR</sup>

## Graphical

- **Artha** — English thesaurus that works completely off-line and is based on WordNet.

<https://artha.sourceforge.net/> || [artha](#)<sup>AUR</sup>

- **Gjiten Kai** — Rewrite of Gjiten, a GTK Japanese dictionary.

<https://github.com/odrevet/gjiten-kai> || [gjitenkai-git](#)<sup>AUR</sup>

- **GNOME Dictionary** — GNOME application to check word definitions and spellings in an online dictionary. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Dictionary> || [gnome-dictionary](#)

- **GoldenDict** — Feature-rich dictionary lookup program.

<http://www.goldendict.org/> || [goldendict-ng-git](#)<sup>AUR</sup>

- **Kiten** — Japanese reference and study tool. Part of [kde-education](#).

<https://apps.kde.org/kiten/> || [kiten](#)

- **MATE Dictionary** — MATE application to look up words in dictionary sources.

<https://github.com/mate-desktop/mate-utils> || [mate-utils](#)

- **OpenDict** — Computer dictionary, which supports popular computer dictionary formats including Slowo and Mova. It also acts as a client for DICT servers.

<http://opendict.sourceforge.net/> || [opendict](#)<sup>AUR</sup>

- **Palaura** — Handy dictionary to find any word's definition.

<https://github.com/lainsce/palaura> || [palaura](#)<sup>AUR</sup>

- **PowerWord** — Proprietary Chinese-English dictionary tool.

<https://www.iciba.com> || [powerword-bin](#)<sup>AUR</sup>

- **QStarDict** — Dictionary program written using Qt. The user interface is similar to StarDict.

<http://qstardict.ylsoftware.com/> || [qstardict](#)

- **Quick Lookup** — Simple GTK dictionary application powered by Wiktionary.

<https://github.com/johnfactotum/quick-lookup> || [quick-lookup](#)<sup>AUR</sup>

- **StarDict** — International dictionary software.

<https://stardict-4.sourceforge.net/> || [stardict](#)

- **Xfce4 Dictionary** — Search different kinds of dictionary services for words or phrases.

<https://goodies.xfce.org/projects/applications/xfce4-dict> || [xfce4-dict](#)

## Spell checkers

See [Language checking](#).

## Translation and localization

See also [Wikipedia:Comparison of computer-assisted translation tools](#).

- **Apertium** — Free and open source rule-based machine translation platform with available language data. It supports the following formats: HTML, Microsoft Office 2007 XML, OpenDocument, TMX, MediaWiki and others.

<https://www.apertium.org/> || [apertium](#)<sup>AUR</sup>

- **Crow Translate** — Simple and lightweight translator that allows to translate and speak text using Google, Yandex and Bing.

<https://crow-translate.github.io/> || [crow-translate](#)<sup>AUR</sup>

- **Dialect** — A translation app for GNOME based on Google Translate.

<https://github.com/dialect-app/dialect> || [dialect](#)<sup>AUR</sup>

- **Gtranslator** — Enhanced gettext po file editor for the GNOME. It handles all forms of gettext po files and includes very useful features.

<https://wiki.gnome.org/Apps/Gtranslator> || [gtranslator](#)



- **Lokalize** — Standard [KDE](#) tool for software translation. It includes basic editing of PO files, support for glossary, translation memory, project managing, etc. It belongs to [kdesdk](#)

<https://apps.kde.org/lokalize/> || [lokalize](#)

- **Moses** — Statistical machine translation tool (language data not included).

<http://statmt.org/moses/> || [mosesdecoder](#)<sup>AUR</sup>

- **OmegaT** — General translator's tool which contains a lot of translation memory features and can give suggestions from Google Translate. It supports the following formats: HTML, Microsoft Office 2007 XML, OpenDocument, XLIFF/Okapi, MediaWiki, plain text, TMX and others.

<https://omegat.org/> || [omegat](#)<sup>AUR</sup>

- **Poedit** — Simple translation editor for gettext (PO, POT) and XLIFF.

<https://poedit.net> || [poedit](#)

- **Pology** — Set of Python tools for dealing with gettext/po-files.

<https://techbase.kde.org/Localization/Tools/Pology> || [pology](#)<sup>AUR</sup>

- **Qt Linguist** — Translating Qt C++ and Qt Quick applications into local languages.

<https://doc.qt.io/qt-5/qtlinguist-index.html> || [qt5-tools](#)

- **Translate Shell** — Command-line interface and interactive shell for Google Translate.

<https://www.soimort.org/translate-shell/> || [translate-shell](#)

- **Translate Toolkit** — Localization and translation toolkit, which provides a set of tools for working with localization file formats and files that might need localization.

<https://toolkit.translatehouse.org/> || [translate-toolkit](#)

## Barcode generators and readers

### Console

- **barcode** — A tool to convert text strings to printed bars.

<https://www.gnu.org/software/barcode/> || [barcode](#)

- **iec16022** — Produce 2D barcodes often also referenced as DataMatrix.

<https://datenfreihafen.org/projects/iec16022.html> || [iec16022](#)

- **qrencode** — C library and command line tool for encoding data in a QR Code symbol.

<https://fukuchi.org/works/qrencode/> || [qrencode](#)

- **ZBar** — Application and library for reading bar codes from various sources.

<https://zbar.sourceforge.net/> || [zbar](#)

- **Zint** — Barcode encoding library and command line tool supporting over 50 symbologies.

<http://zint.org.uk/> || [zint](#)

## Graphical

- **CoBang** — QR Code scanner application.

<https://github.com/hongquan/CoBang> || [cobang](#)<sup>AUR</sup>

- **gLabels** — Program for creating labels and business cards. It also supports creating barcodes.

<http://glabels.org/> || [glabels](#)

- **QRab** — Simply grabs QR code from screen and copies decoded text into clipboard.

<https://qgrab.sourceforge.io/> || [qgrab](#)<sup>AUR</sup>

- **Qreator** — Graphical utility for creating QR codes.

<https://davidplanella.org/qreator/> || [qreator](#)

- **QtQR** — QR Code generator and decoder.

<https://launchpad.net/qr-tools> || [qtqr](#)

- **ZBarCam GUI** — Simple GUI for ZBar to read bar codes from various sources.

<https://zbar.sourceforge.net/> || [zbar](#)

- **Zint Barcode Studio** — Barcode generator GUI.

<http://zint.org.uk/> || [zint-qt](#)

## Security

For detailed guides, see the main ArchWiki page, [Security](#).

## Network security

See also [Wikipedia:Comparison of packet analyzers](#).

- **airgeddon** — Multi-use bash script to audit wireless networks

<https://github.com/v1s1t0r1sh3r3/airgeddon> || [airgeddon-git](#)<sup>AUR</sup>

- **Arpwatch** — Tool that monitors ethernet activity and keeps a database of Ethernet/IP address pairings.

<https://ee.lbl.gov/> || [arpwatch](#)

- **bettercap** — Swiss army knife for network attacks and monitoring.

<https://www.bettercap.org/> || [bettercap](#)

- **darkstat** — Captures network traffic, calculates statistics about usage, and serves reports over HTTP.

<https://unix4lyfe.org/darkstat/> || [darkstat](#)

- **dsniff** — Collection of tools for network auditing and penetration testing.

<https://www.monkey.org/~dugsong/dsniff/> || [dsniff](#)

- **EtherApe** — Graphical network monitor for Unix modeled after etherman. Featuring link layer, IP and TCP modes, it displays network activity graphically. Hosts and links change in size with traffic. Color coded protocols display.

<https://etherape.sourceforge.io/> || [etherape](#)

- **Ettercap** — Multipurpose Network sniffer/analyser/interceptor/logger.

<https://ettercap.github.io/ettercap/> || CLI: [ettercap](#), GUI: [ettercap-gtk](#)

- **GNOME Network Tools** — GNOME interface for various networking tools.

<https://gitlab.gnome.org/GNOME/gnome-nettool> || [gnome-nettool](#)

- **Honeyd** — Tool that allows the user to set up and run multiple virtual hosts on a computer network.

<http://www.honeyd.org/> || [honeyd](#)<sup>AUR</sup>

- **hping** — Command-line oriented TCP/IP packet assembler/analyzer.

<http://hping.org/> || [hping](#)

- **IPTraff** — Console-based network monitoring utility.

<https://sourceforge.net/projects/iptraf-ng/> || [iptraf-ng](#)

- **jnettop** — top-like console network traffic visualizer.

<https://sourceforge.net/projects/jnettop/> || [jnettop](#)

- **justniffer** — Network protocol analyzer that captures network traffic and produces logs in a customized way, can emulate Apache web server log files, track response times and extract all "intercepted" files from the HTTP traffic.

<http://justniffer.sourceforge.net/> || [justniffer](#)<sup>AUR</sup>

- **Kismet** — 802.11 layer2 wireless network detector, sniffer, and intrusion detection system.

<https://www.kismetwireless.net/> || [kismet](#)

- **LinSSID** — Graphical wireless scanner.

<https://sourceforge.net/projects/linssid/> || [linssid](#)

- **Nemesis** — Command-line network packet crafting and injection utility.

<http://nemesis.sourceforge.net/> || [nemesis](#)<sup>AUR</sup>

- **Net Activity Viewer** — Graphical network connections viewer, similar in functionality with Netstat.

<http://netactview.sourceforge.net/> || [netactview](#)<sup>AUR</sup>

- **netsniff-ng** — High performance Linux network sniffer for packet inspection.

<http://netsniff-ng.org/> || [netsniff-ng](#)

- **ngrep** — grep-like utility that allows you to search for network packets on an interface.

<https://github.com/jpr5/ngrep> || [ngrep](#)

- **Nmap** — Security scanner used to discover hosts and services on a computer network, thus creating a "map" of the network.

<https://nmap.org/> || CLI: [nmap](#), GUI: [zenmap](#)<sup>AUR</sup>

- **Ntop** — Network probe that shows network usage in a way similar to what top does for processes.

<https://www.ntop.org/> || [ntop](#)<sup>AUR</sup>

- **pyNeighborhood** — GTK-based SMB/CIFS browsing utility.

<https://launchpad.net/pyneighborhood> || [pyneighborhood](#)<sup>AUR</sup>

- **Smb4K** — Advanced network neighborhood browser and Samba share mounting utility for KDE.

<https://smb4k.sourceforge.io/> || [smb4k](#)

- **Snort** — Network intrusion prevention and detection system.

<https://www.snort.org/> || [snort](#)<sup>AUR</sup>

- **Spectools** — A set of utilities for spectrum analyzer hardware including Wi-Spy devices.

<https://www.kismetwireless.net/static/spectools/> || [spectools](#)<sup>AUR</sup>

- **Sshguard** — Daemon that protects SSH and other services against brute-force attacks, similar to Fail2ban.

<https://www.sshguard.net/> || [sshguard](#)

- **Suricata** — High performance Network IDS, IPS and Network Security Monitoring engine.

<https://suricata-ids.org/> || [suricata](#)<sup>AUR</sup>

- **Tcpdump** — Common console-based packet analyzer that allows the user to intercept and display TCP/IP and other packets being transmitted or received over a network.

<https://www.tcpdump.org/> || [tcpdump](#)

- **vnStat** — Console-based network traffic monitor that keeps a log of network traffic for the selected interfaces.

<https://humdi.net/vnstat/> || [vnstat](#)

- **What IP** — Small GTK application to get info on your IP.

<https://gabmus.gitlab.io/whatip/> || [whatip](#)<sup>AUR</sup>

- **Wireshark** — Network protocol analyzer that lets you capture and interactively browse the traffic running on a computer network.

<https://www.wireshark.org/> || CLI: [wireshark-cli](#), GUI: [wireshark-gt](#)

- **Xplico** — Network forensics analysis tool (NFAT), which is a software that reconstructs the contents of acquisitions performed with a packet sniffer.

<https://www.xplico.org/> || [xplico](#)<sup>AUR</sup>

- **Zeek** — Powerful network analysis framework that is much different from the typical IDS you may know.

<https://zeek.org/> || [zeek](#)<sup>AUR</sup>

## Firewall management

See [iptables#Front-ends](#) and [nftables#Front-ends](#).

## Threat and vulnerability detection

- **AFICK** — Security tool that allows to monitor the changes on your file systems, and so can detect intrusions.

<http://afick.sourceforge.net/> || [afick](#)<sup>AUR</sup>

- **Lynis** — Security and system auditing tool to harden Unix/Linux systems.

<https://cisofy.com/lynis/> || [lynis](#)

- **Metasploit Framework** — An advanced open-source platform for developing, testing, and using exploit code.

<https://www.metasploit.com/> || [metasploit](#)

- **Nessus** — Comprehensive vulnerability scanning program.

<https://www.tenable.com/products/nessus> || [nessus](#)<sup>AUR</sup>

- **OpenVAS** — Framework of several services and tools offering a comprehensive and powerful vulnerability scanning and vulnerability management solution. FOSS Nessus fork.

<https://www.openvas.org/> || [openvas-scanner](#)<sup>AUR</sup>

- **OSSEC** — Open Source Host-based Intrusion Detection System that performs log analysis, file integrity checking, policy monitoring, rootkit detection, real-time alerting and active response.

<https://ossec.github.io/> || [ossec-local](#)<sup>AUR</sup>, [ossec-server](#)<sup>AUR</sup>

- **Samhain** — Host-based intrusion detection system (HIDS) provides file integrity checking and log file monitoring/analysis, as well as rootkit detection, port monitoring, detection of rogue SUID executables, and hidden processes.

<https://www.la-samhna.de/samhain/index.html> || [samhain-client](#)<sup>AUR</sup>, [samhain-server](#)<sup>AUR</sup>, [samhain-standalone](#)<sup>AUR</sup>

- **Tiger** — Security tool that can be used both as a security audit and intrusion detection system.

<https://www.nongnu.org/tiger/> || [tiger](#)<sup>AUR</sup>

- **Tripwire** — Intrusion detection system.

<https://github.com/Tripwire/tripwire-open-source> || [tripwire-git](#)<sup>AUR</sup>

## File security

- **AIDE** — File and directory integrity checker.

<https://aide.github.io> || [aide](#)<sup>AUR</sup>

- **Logwatch** — Customizable log analysis system.

<https://sourceforge.net/projects/logwatch/> || [logwatch](#)

## Anti malware

- **ClamAV** — Open source antivirus engine for detecting trojans, viruses, malware & other malicious threats.

<https://www.clamav.net/> || [clamav](#)

- **ClamTk** — Graphical front-end for ClamAV using Perl and Gtk libraries. It is designed to be an easy-to-use, lightweight, on-demand antivirus scanner for Linux systems.

[https://gitlab.com/dave\\_m/clamtk/](https://gitlab.com/dave_m/clamtk/) || [clamtk](#), Nautilus plugin: [clamtk-gnome](#)<sup>AUR</sup>, Thunar plugin: [thunar-sendto-clamtk](#)<sup>AUR</sup>

- **Linux Malware Detect** — Malware scanner designed around the threats faced in shared hosted environments.

<https://www.rfxn.com/projects/linux-malware-detect/> || [maldet](#)<sup>AUR</sup>

- **Rootkit Hunter** — Checks machines for the presence of rootkits and other unwanted tools.

<https://rkhunter.sourceforge.net/> || [rkhunter](#)

- **Hostsblock** — A script that downloads, sorts, and compiles multiple ad- and malware-blocking `hosts` files.

<https://gaenserich.github.io/hostsblock/> || [hostsblock](#)<sup>AUR</sup>

## Screen lockers



This article or section is a candidate for merging with [Session lock#By](#)



[environment](#).

**Notes:** Same purpose. (Discuss in [Talk:List of applications](#))

See also [Session lock](#).

**Warning:** Only *sflock*, *physlock*, *Cinnamon Screensaver*, *MATE Screensaver* and *GNOME Screensaver* are able to block tty access. See [Xorg#Block TTY access](#) on how to manually block tty access.

- **betterlockscreen** — *i3lock-color* wrapper. Betterlockscreen allows you to cache images with different filters and lockscreen with blazing speed.

<https://github.com/pavanjadhaw/betterlockscreen> || [betterlockscreen](#)<sup>AUR</sup>

- **Cinnamon Screensaver** — Screen locker for the Cinnamon desktop.

<https://github.com/linuxmint/cinnamon-screensaver> || [cinnamon-screensaver](#)

- **Deepin Screensaver** — A lightweight Qt5 based screensaver.

<https://github.com/linuxdeepin/deepin-screensaver> || [deepin-screensaver](#)

- **GNOME Screensaver** — Legacy screen locker for the GNOME desktop. Unmaintained since 2012.

<https://wiki.gnome.org/Attic/GnomeScreensaver> || [gnome-screensaver](#)<sup>AUR</sup>

- **i3lock** — A simple screen locker. Provides user feedback and uses PAM authentication. The background can be set to an image or solid color.

<https://i3wm.org/i3lock/> || [i3lock](#)



- **i3lock-blur** — Fork of *i3lock* which can use your desktop with the blur effect applied as a background.

<https://github.com/karulont/i3lock-blur> || [i3lock-blur](#)<sup>AUR</sup>

- **i3lock-color** — Fork of *i3lock* with color and positioning configuration support and can use your desktop with the blur effect applied as a background.

<https://github.com/Raymo111/i3lock-color> || [i3lock-color](#)<sup>AUR</sup>

- **Light-locker** — A simple locker (forked from *gnome-screensaver*) that aims to have simple, sane, secure defaults and be well integrated with the desktop while not carrying any desktop-specific dependencies. It relies on [LightDM](#) for locking and unlocking your session via ConsoleKit/UPower or *logind/systemd*.

<https://github.com/the-cavalry/light-locker> || [light-locker](#)

- **MATE Screensaver** — Screensaver and locker for MATE Desktop Environment.

<https://github.com/mate-desktop/mate-screensaver> || [mate-screensaver](#)

- **physlock** — Screen and console locker.

<https://github.com/muennich/physlock> || [physlock](#)

- **sflock** — Simple screen locker utility for X, based on slock. Provides a very basic user feedback.

<https://github.com/benruijl/sflock> || [sflock-git](#)<sup>AUR</sup>

- **slock** — Very simple and lightweight X screen locker. Offers only a black background when locked, there are no animations or text fields.

<https://tools.suckless.org/slock/> || [slock](#)

- **sxlock** — Fork of sflock with a few enhancements. Provides basic user feedback, uses PAM authentication, supports DPMS and RandR. Supports `sxlock.service` to lock the screen on suspend/hibernation. See the [README](#) for more information.

<https://github.com/lahwaacz/sxlock> || [sxlock-git](#)<sup>AUR</sup>

- **tsscreenlock** — Screen locker used in theShell. Shows music controls, and if used with theShell, also shows desktop notifications.

<https://github.com/vicr123/tsscreenlock> || [tsscreenlock](#)<sup>AUR</sup>

- **vlock** — TTY locker. A mirror of the [original vlock](#) is available at [github](#).

<https://kbd-project.org/> || [kbd](#)

- **xfce4-screensaver** — A screen saver and locker that aims to have simple, sane, secure defaults and be well integrated with the xfce desktop.

<https://git.xfce.org/apps/xfce4-screensaver/about/> || [xfce4-screensaver](#)

- **xlockmore** — Simple X11 screen lock with PAM support.

<https://sillycycle.com/xlockmore.html> || [xlockmore](#)

- **XScreenSaver** — Screen saver and locker for the X Window System.

<https://www.jwz.org/xscreensaver/> || [xscreensaver](#)

- **XSecureLock** — X11 screen lock utility designed with the primary goal of security.

<https://github.com/google/xsecurelock> || [xsecurelock](#)

- **xtrlock** — Very lightweight X display locker. Keeps windows visible and displays lock icon instead of mouse cursor. Typing password followed by enter unlocks the screen.

<https://packages.debian.org/sid/xtrlock> || [xtrlock](#)

- **swaylock** — Screen locker for Wayland.

<https://github.com/swaywm/swaylock> || [swaylock](#)

- **swaylock-effects** — Swaylock, with fancy effects.

<https://github.com/jirutka/swaylock-effects> || [swaylock-effects-git](#)<sup>AUR</sup>

- **gtklock** — GTK-based lockscreen for Wayland.

<https://github.com/jovanlanik/gtklock> || [gtklock](#)<sup>AUR</sup>

## Password auditing

- **John the Ripper** — Password cracker.

<https://www.openwall.com/john> || [john](#)

- **Hashcat** — Multithreaded advanced password recovery utility.

<https://hashcat.net/hashcat> || [hashcat](#)

## Password managers

## Console

- **1password CLI** — Proprietary command line tool for 1Password password manager.

<https://1password.com/downloads/command-line/> || [1password-cli](#)<sup>AUR</sup>

- **Bitwarden** — Open source password manager with desktop, mobile, browser, and CLI versions. Cloud or self-hosted.

<https://bitwarden.com/> || [bitwarden-cli](#)

- **gopass** — Advanced console based password manager, supporting GnuPG and other backends.

<https://github.com/jtwatchcom/gopass> || [gopass](#)

- **Himitsu** — Secret storage manager.

<https://himitsustore.org/> || [himitsu](#)<sup>AUR</sup>

- **KeePassC** — Curses-based password manager compatible to KeePass v.1.x.

<https://outerhaven.de/keepassc/> || [keepassc](#)<sup>AUR</sup>

- **LastPass** — Hosted password manager.

<https://www.lastpass.com/> || [lastpass-cli](#)

- **pass** — Simple console-based password manager featuring flat text file organization and GnuPG encryption.

<https://www.passwordstore.org/> || [pass](#)

- **pwsafe** — Unix command-line program that manages encrypted password databases.

<http://nsd.dyndns.org/pwsafe/> || [pwsafe](#)<sup>AUR</sup>

- **spm** — Simple Password Manager written entirely in POSIX shell using PGP. Fast, lightweight and easily scriptable.

<https://notabug.org/kl3/spm/> <sup>[[dead link](#) 2023-05-06 ⓘ]</sup> || [spm](#)<sup>AUR</sup>

- **tpm** — Tiny password manager, inspired by pass, written entirely in POSIX shell.

<https://github.com/nmeum/tpm> || [tpm](#)<sup>AUR</sup>

- **Vault** — A tool for managing secrets.

<https://vaultproject.io/> || [vault](#)

- **Ylva** — Command-line password manager, written in C, uses OpenSSL.

<https://www.ylvapasswordmanager.com/> <sup>[dead link 2022-09-20 ⓘ]</sup> || [ylva](#)<sup>AUR</sup>

## Graphical

- **Authenticator** — Open source, two-factor authentication application built for GNOME.

<https://gitlab.gnome.org/World/Authenticator> || [authenticator](#)<sup>AUR</sup>

- **Bitwarden** — Open source password manager with desktop, mobile, browser, and CLI versions. Cloud or self-hosted.

<https://bitwarden.com/> || [bitwarden](#)

- **Figaro's Password Manager 2** — GTK2 port of [Figaro's Password Manager](#) with some new enhancements.

<https://als.regnet.cz/fpm2/> || [fpm2](#)<sup>AUR</sup>

- **GNOME Password Safe** — Password manager for GNOME which makes use of the KeePass v.4 format.

<https://gitlab.gnome.org/World/secrets> || [gnome-passwordsafe](#)

- **Ked Password Manager** — A password manager that helps to manage large numbers of passwords.

<http://kedpm.sourceforge.net> || [kedpm](#)<sup>AUR</sup>

- **KeePass Password Safe** — Mono-based password manager, which helps you to manage your passwords in a secure way.

<https://keepass.info/> || [keepass](#)

- **KeePassXC** — Community fork of KeePassX with more active development. Compatible with KeePass v.1.x (import only) and KeePass v.2.x.

<https://keepassxc.org/> || [keepassxc](#)

- **Keysmith** — OTP generation software by KDE.

<https://apps.kde.org/keysmith/> || [keysmith](#)

- **KDE Wallet Manager** — Tool to manage the passwords on your system. By using the KDE wallet subsystem, it not only allows you to keep your own secrets but also to access and manage the passwords of every application that integrates with the wallet.

<https://apps.kde.org/kwalletmanager5/> || [kwalletmanager](#)

- **OTPClient** — Highly secure and easy to use GTK software for two-factor authentication that supports both Time-based One-time Passwords (TOTP) and HMAC-Based One-Time Passwords (HOTP).

<https://github.com/paolostivanin/OTPClient> || [otpcient](#)<sup>AUR</sup>

- **Passbook** — Modern password manager for GNOME.

<https://wiki.gnome.org/Apps/Passbook> || [passbook](#)<sup>AUR</sup>

- **Password Gorilla** — A cross-platform password manager.

<https://github.com/zdia/gorilla/wiki> || [password-gorilla](#)<sup>AUR</sup>

- **Password Safe** — Simple and secure password manager.

<https://pwsafe.org/> || [passwordsafe](#)<sup>AUR</sup>

- **QPass** — Easy to use password manager with built-in password generator.

<http://qpass.sourceforge.net/> || [qpass](#)<sup>AUR</sup>

- **QtPass** — GUI for pass, the standard unix password manager.

<https://qtpass.org/> || [qtpass](#)

- **Revelation** — Password manager for the GNOME desktop.

<https://revelation.olasagasti.info/> || [revelation](#)<sup>AUR</sup>

- **Seahorse** — GNOME application for managing encryption keys and passwords in the GNOME Keyring. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Seahorse> || [seahorse](#)

- **Universal Password Manager** — Allows you to store usernames, passwords, URLs and generic notes in an encrypted database protected by one master password.

<https://upm.sourceforge.net/> || [universal-password-manager](#)<sup>AUR</sup>

## Cryptography

## Hash checkers

- **cfv** — Tiny utility to both test and create checksum files, support *.sfv*, *.csv*, *.crc*, *.md5*, *md5sum*, *sha1sum*, *.torrent*, *par*, and *.par2* files.

<http://cfv.sourceforge.net/> || [cfv](#)<sup>AUR</sup>

- **GtkHash** — A GTK utility for computing message digests or checksums

<https://github.com/tristanheaven/gtkhash> || [gtkhash](#)<sup>AUR</sup>

- **hashdeep** — A cross-platform tools to compute hashes, or message digests, for any number of files

<https://md5deep.sourceforge.net/> || [hashdeep](#)

- **Quick Hash GUI** — A GUI to enable the rapid selection and subsequent hashing of files (individually or recursively throughout a folder structure) text and (on Linux) disks.

<https://www.quickhash-gui.org/> || [quickhash-gui-bin](#)<sup>AUR</sup>

- **RHash** — Utility for verifying hash sums (SFV, CRC, etc). Supports lots of algorithms.

<https://github.com/rhash/RHash/> || [rhash](#)

- **MassHash** — A set of file hashing tools (both CLI and GTK GUI) written in Python. Supported algorithms include MD5, SHA-1, SHA-224, SHA-256, SHA-384, SHA-512.

<https://jdleicher.github.io/MassHash/> || [masshash](#)<sup>AUR</sup>

- **Parchive** — Utility which creates and uses PAR2 files to detect damage in data files and repair them if necessary.

<https://github.com/Parchive/par2cmdline> || [par2cmdline](#)

## Encryption, signing, steganography

- **age** — A simple, modern and secure encryption tool (and library) with small explicit keys, no config options, and UNIX-style composability.

<https://age-encryption.org/v1> || Go: [age](#) Rust: [rust-age](#)

- **ccrypt** — A command-line utility for encrypting and decrypting files and streams based on [Rijndael](#).

<https://ccrypt.sourceforge.net/> || [ccrypt](#)<sup>AUR</sup>

- **Enigmail** — A security extension to Mozilla Thunderbird and Seamonkey. It enables you to write and receive email messages signed and/or encrypted with the OpenPGP standard.

<https://enigmail.net> || [thunderbird-extension-enigmail-git](#)<sup>AUR</sup>

- **GNOME Keysign** — GTK/GNOME application to use GnuPG for signing other people's keys. Quickly, easily, and securely.

<https://wiki.gnome.org/Apps/Keysign> || [gnome-keysign](#)<sup>AUR</sup>

- **GnuPG** — The GNU project's complete and free implementation of the OpenPGP standard as defined by RFC4880. Free and Open Source replacement of PGP, mostly used for digital signing of packages.

<https://gnupg.org/> || [gnupg](#)

- **GPG-Crypter** — Graphical front-end to GnuPG(GPG) using the GTK3 toolkit and GPGME library.

<https://sourceforge.net/projects/gpg-crypter/> || [gpg-crypter](#)

- **KeePassXC** — Mainly used for password management and generation, but also supports attaching arbitrary files to entries in an encrypted database.

<https://keepassxc.org> || [keepassxc](#)

- **Keybase** — Key directory mapping social media identities, with cross platform encrypted chat, cloud storage, and git repositories.

<https://keybase.io/> || [keybase](#)

- **KGpg** — Simple interface for GnuPG, for KDE.

<https://apps.kde.org/kgpg/> || [kgpg](#)

- **Kleopatra** — Certificate Manager and Unified Crypto GUI for KDE. It supports managing X.509 and OpenPGP certificates in the GpgSM keybox and retrieving certificates from LDAP servers.

<https://apps.kde.org/kleopatra/> || [kleopatra](#)

- **minisign** — Simple program that only implements key signing

<https://github.com/jedisct1/minisign> || [minisign](#)

- **OpenSSH** — De facto SSH implementation that supports message signing

<https://github.com/openssh/openssh-portable/blob/master/PROTOCOL.sshsig> || [openssh](#)

- **passphrase2pgp** — Reproducibly generate private key in OpenPGP/OpenSSH formats according to user input passphrase and optionally sign message in one go

<https://github.com/skeeto/passphrase2pgp> || [passphrase2pgp](#)<sup>AUR</sup>

- **Seahorse** — GNOME application for managing encryption keys and passwords in the GNOME Keyring.

<https://wiki.gnome.org/Apps/Seahorse> || [seahorse](#)

- **scrypt** — Command-line encryption utility featuring the memory-hardened **scrypt** key derivation function.

<https://www.tarsnap.com/scrypt.html> || [scrypt](#)

- **steghide** — A steganography utility that is able to hide data in various kinds of image and audio files.

<https://steghide.sourceforge.net> || [steghide](#)<sup>AUR</sup>

## Data-at-rest encryption

See [Data-at-rest encryption](#).

## Privilege elevation

- **doas** — A portable version of OpenBSD's *doas* command, known for being substantially smaller in size compared to *sudo*.

<https://github.com/Duncaen/OpenDoas> || [opendoas](#)

- **pkexec(1)** — A [Polkit](#) application that allows an authorized user to run commands or an interactive shell as another user. Configured using Polkit rules.

<https://gitlab.freedesktop.org/polkit/polkit/> || [polkit](#)

- **polkit-fakesudo** — A wrapper for polkit that emulates *sudo*.

<https://github.com/Aleksanaa/polkit-fakesudo> || [polkit-fakesudo](#)<sup>AUR</sup>

- **su** — Command used to assume the identity of another user on the system.

<https://git.kernel.org/pub/scm/utils/util-linux/util-linux.git/about/> || [util-linux](#)



- **sudo** — Command to delegate the ability to run commands as root or another user while providing an audit trail.

<https://www.sudo.ws/sudo/> || [sudo](#)

## Science

**Note:** For possibly more up to date selection of scientific applications, try checking the [AUR 'science' category](#)

## Mathematics

### Calculator

See also [Wikipedia:Comparison of software calculators](#).

### Console

- **bc** — Arbitrary precision calculator language.

<https://www.gnu.org/software/bc/> || [bc](#)

- **calc** — Arbitrary precision console calculator.

<http://www.isthe.com/chongo/tech/comp/calc/> || [calc](#)

- **clac** — Command-line, stack-based calculator with postfix notation.

<https://github.com/soveran/clac> || [clac](#)<sup>AUR</sup>

- **kalker** — Command-line calculator with math syntax that supports user-defined variables and functions, complex numbers, and estimation of derivatives and integrals.

<https://github.com/PaddiM8/kalker> || [kalker](#)<sup>AUR</sup>

- **qalc** — Command-line calculator and equation solver with fault-tolerant parsing, constant recognition and units.

<https://qalculate.github.io/> || [libqalculate](#)

### Graphical

- **Deepin Calculator** — Easy to use calculator for Deepin desktop.

<https://www.deepin.org/en/original/deepin-calculator/> || [deepin-calculator](#)

- **Extcalc** — Qt-based scientific graphical calculator.

<http://extcalc-linux.sourceforge.net/> || [extcalc](#)<sup>AUR</sup>

- **FOX Calculator** — Simple desktop calculator.

<http://fox-toolkit.org/> || [fox](#)

- **galculator** — GTK-based scientific calculator.

<http://galculator.mnim.org/> || [galculator](#)

- **Genius** — Advanced calculator including a mathematical programming language.

<https://www.jirka.org/genius.html> || [genius](#)<sup>AUR</sup>

- **GNOME Calculator** — Scientific calculator included in the GNOME desktop. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Calculator> || [gnome-calculator](#)

- **KAlgebra** — Calculator and 3D plotter. Part of [kde-education](#).

<https://apps.kde.org/kalgebramobile/> || [kalgebra](#)

- **KCalc** — Scientific calculator included in the KDE desktop.

<https://apps.kde.org/kcalc/> || [kcalc](#)

- **Liri Calculator** — Calculator for Liri.

<https://github.com/lirios/calculator> || [liri-calculator](#)

- **MATE Calc** — Calculator for the MATE desktop environment.

<https://mate-desktop.org/> || [mate-calc](#)

- **Qalculate!** — Calculator and equation solver with fault-tolerant parsing, constant recognition and units.

<https://qalculate.github.io/> || GTK: [qalculate-gtk](#), Qt: [qalculate-qt](#)

- **SpeedCrunch** — Fast, high precision and powerful cross-platform calculator.

<https://speedcrunch.org> || [speedcrunch](#)

- **xcalc** — Scientific calculator for X with algebraic and reverse polish notation modes.

<https://www.x.org/> || [xorg-xcalc](#)

## Computer algebra system

See also [Wikipedia:Comparison of computer algebra systems](#).

- **[AXIOM](#)** — FriCAS: derivative of the powerful AXIOM-CAS

<https://fricas.sourceforge.net> || [fricas](#)<sup>AUR</sup>

- **[GAP](#)** — Computer algebra system for computational discrete algebra with particular emphasis on computational group theory.

<https://www.gap-system.org/> || [gap](#)

- **[Maple](#)** — Famous commercial CAS. Often used in education.

<https://www.maplesoft.com/products/maple/> ||

- **[Mathics](#)** — A free CAS for symbolic mathematical computations which uses [Python](#) as its main language. It aims at achieving a Mathematica-compatible syntax and functions. It relies mostly on Sympy for most mathematical tasks and, optionally, Sage for more advanced functionality.

<https://mathics.github.io/> || [mathics](#)<sup>AUR</sup>

- **[Mathomatic](#)** — General purpose Computer Algebra System written in C.

<https://github.com/mfillpot/mathomatic> || [mathomatic](#)<sup>AUR</sup>

- **[Maxima](#)** — [Maple/Mathematica](#)-like computer algebra system.

<http://maxima.sourceforge.net/> || [maxima](#)

- **[PARI/GP](#)** — Computer algebra system designed for fast computations in number theory.

<https://pari.math.u-bordeaux.fr/> || [pari](#)

- **[Singular](#)** — Computer algebra system for polynomial computations, with special emphasis on commutative and non-commutative algebra, algebraic geometry, and singularity theory.

<https://www.singular.uni-kl.de/> || [singular](#)

- **[wxMaxima](#)** — Graphical user interface for Maxima being a powerful computer algebra system.

<https://andrejv.github.io/wxmaxima/> || [wxmaxima](#)<sup>AUR</sup>

- **[Xcas](#)** — User interface to Giac, a free, basic computer algebra system.

<https://www-fourier.ujf-grenoble.fr/~parisse/giac.html> || [giac](#)

## Visualization of networks/graphs

- **Glue** — Linked data visualizations across multiple files.

<http://glueviz.org/> || [glueviz](#)<sup>AUR</sup>

- **Graphviz** — The established tool for displaying smallish graphs in 2D.

<https://www.graphviz.org> || [graphviz](#)

## Scientific or technical computing

See also [Wikipedia:Comparison of numerical analysis software](#).

- **Cadabra** — A field-theory motivated approach to computer algebra.

<https://cadabra.science/> || [cadabra2](#)<sup>AUR</sup>

- **Cantor** — Application that lets you use your favorite mathematical applications from within a nice KDE-integrated Worksheet Interface. Part of [kde-education](#).

<https://cantor.kde.org/> || [cantor](#)

- **EngLab** — Cross-compile mathematical platform with a C like syntax.

<http://englab.bugfest.net> || [englab](#)<sup>AUR</sup>

- **FFTW** — A [Fast Fourier Transform](#) library for computing discrete Fourier transforms. Used for a wide variety of numerical applications, which includes spectral methods.

<https://www.fftw.org/> || [fftw](#)

- **FreeMat** — Matlab-like program that supports many of its functions and features a codeless interface to external C, C++, and Fortran code, further parallel distributed algorithm development (via MPI), and 3D visualization capabilities.

<https://freemat.sourceforge.net/> || [freemat](#)<sup>AUR</sup>

- **GeoGebra** — Dynamic mathematics software with interactive graphics, algebra and spreadsheet

<https://www.geogebra.org/> || [geogebra](#)

- **Julia** — High-level, high-performance dynamic language for technical computing.

<https://julialang.org/> || [julia](#)

- **Kig** — Application for Interactive Geometry. Part of [kde-education](https://apps.kde.org/kig/).

<https://apps.kde.org/kig/> || [kig](#)

- **matplotlib (PyLab)** — Collection of Python modules (pyplot, numpy, etc.) used for scientific calculations.

<https://www.scipy.org/> || [python-matplotlib](#)

- **Octave** — **MATLAB**-like language and interface for numerical computations.

<https://www.gnu.org/software/octave/> || [octave](#)

- **SageMath** — Mathematics software system, that combines many existing open-source packages into a common Python interface. Alternative to Magma, Maple, Mathematica and Matlab.

<https://www.sagemath.org/> || [sagemath](#)

- **Scilab** — Matlab alternative used for numerical computations. Its syntax is not equivalent to that of Matlab, but it can be easily converted.

<https://www.scilab.org/> || [scilab](#)<sup>AUR</sup>

## Statistics

See also [Wikipedia:Comparison of statistical packages](#).

- **gretl** — A cross-platform software package for econometric analysis, written in the C programming language.

<https://gretl.sourceforge.net/> || [gretl](#)<sup>AUR</sup>

- **JAGS (Just another Gibbs sampler)** — Cross-platform program for analysis of Bayesian hierarchical models using Markov Chain Monte Carlo (MCMC) simulation.

<http://mcmc-jags.sourceforge.net/> || [jags](#)<sup>AUR</sup>

- **jamovi** — Statistics package, which is easy to use, and designed to be familiar to users of SPSS. Based on the [Electron](#) platform.

<https://www.jamovi.org/> || [jamovi-git](#)<sup>AUR</sup>

- **Python Data Analysis Library (pandas)** — Providing high-performance, easy-to-use data structures and data analysis tools with Python programming language.

<https://pandas.pydata.org/> || [python-pandas](#)

- **PSPP** — Free SPSS implementation.

<https://www.gnu.org/software/pspp/> || [pspp](#)<sup>AUR</sup>

- **R** — Software environment for statistical computing and graphics.

<https://cran.r-project.org/> || [r](#)

- **RKward** — Frontend for the statistical language R.

<https://rkward.kde.org/> || [rkward](#)

- **RStudio** — A powerful and productive IDE for R written in Qt.

<https://www.rstudio.com/> || [rstudio-desktop](#)<sup>AUR</sup>

## Data analysis and plotting



This article or section is a candidate for merging with [List of](#)

[Applications#Scientific and technical computing](#).



**Notes:** Many overlaps. (Discuss in [Talk:List of applications](#))

See also [Wikipedia:List of information graphics software](#).

- **AlphaPlot** — Application for scientific data analysis and visualization, fork of [SciDAVis](#) / QtiPlot.

<https://alphaplot.sourceforge.io/> || [alphaplot](#)<sup>AUR</sup>

- **DataWarrior** — Open-source data visualization and analysis program with embedded chemical intelligence.

<https://openmolecules.org/datawarrior/> || [datawarrior](#)<sup>AUR</sup>

- **Engauge Digitizer** — Extracts data points from images of graphs.

<https://markummittchell.github.io/engauge-digitizer/> || [engauge](#)<sup>AUR</sup>

- **Fityk** — Curve fitting and data analysis application, predominantly used to fit analytical, bell-shaped functions to experimental data.

<https://fityk.nieto.pl/> || [fityk](#)<sup>AUR</sup>

- **Gnuplot** — Command-line program that can generate 2D and 3D plots of functions, data, and data fits.

<http://www.gnuplot.info/> || [gnuplot](#)

- **Grace** — WYSIWYG 2D graph plotting tool.

<https://plasma-gate.weizmann.ac.il/Grace/> || [grace](#)<sup>AUR</sup>, [qtgrace](#)<sup>AUR</sup>, [gracegtk](#)<sup>AUR</sup>

- **KmPlot** — Program to draw graphs, their integrals or derivatives. Part of [kde-education](#).

<https://apps.kde.org/kmplot/> || [kmplot](#)

- **LabPlot** — Free software data analysis and visualization application, similar to SciDAVis.

<https://labplot.kde.org/> || [labplot](#)

- **Plots** — A graph plotting application for GNOME.

<https://github.com/alexhuntley/Plots> || [plots](#)<sup>AUR</sup>

- **Rocs** — Graph Theory IDE for everybody interested in designing and analyzing graph algorithms (e.g., lecturers, students, researchers). Part of [kde-education](#).

<https://apps.kde.org/rocs/> || [rocs](#)

- **ROOT** — Data analysis program and library (originally for particle physics) developed by CERN.

<https://root.cern.ch/> || [root](#)

See also [List of applications/Documents#Spreadsheets](#).

## Proof assistants

See also [Wikipedia:Proof assistant](#).

- **Agda** — Dependently typed functional programming language and proof assistant. It is an interactive system for writing and checking proofs.

<https://wiki.portal.chalmers.se/agda/> || [agda](#)

- **Coq** — Formal proof management system. It provides a formal language to write mathematical definitions, executable algorithms and theorems together with an environment for semi-interactive development of machine-checked proofs.

<https://coq.inria.fr/> || CLI: [coq](#), GUI: [coqide](#)

- **Isabelle** — Generic proof assistant that allows mathematical formulas to be expressed in a formal language and provides tools for proving those formulas in a logical calculus.

<https://www.cl.cam.ac.uk/research/hvg/Isabelle/> || [isabelle](#)<sup>AUR</sup>

- **Lean Theorem Prover** — Proof assistant developed principally by Leonardo de Moura at Microsoft Research, used in conjunction with the Lean mathematical library.

<https://leanprover-community.github.io/> || [lean-community](#)<sup>AUR</sup>

## Physics

### Tools

- **Geiger Counter Logger** — Is a lightweight daemon running in the background and constantly reporting your Geiger counter readings to various radiation monitoring websites

<https://www.dateihal.de/cms/gclog> || [gclog](#)<sup>AUR</sup>

- **GWtool** — Simple tools for working with gravitational waves

<https://gwtool.sourceforge.net/> || [gwtool](#)<sup>AUR</sup>

- **JaxoDraw** — A particle physics program for drawing Feynman diagrams.

<https://jaxodraw.sourceforge.io/> || [jaxodraw](#)<sup>AUR</sup>

- **InterSpec** — spectral radiation analysis software

<https://sandialabs.github.io/InterSpec/> || [interspec-bin](#)<sup>AUR</sup>

- **Libint** — A high-performance library for computing Gaussian integrals in quantum mechanics

<https://github.com/evaleev/libint> || [libint2](#)<sup>AUR</sup>

- **Pysolar** — Collection of Python libraries for simulating the irradiation of any point on earth by the sun. It includes code for extremely precise ephemeris calculations.

<https://pysolar.org/> || [python-pysolar](#)<sup>AUR</sup>

- **Silx** — A collection of Python packages for data analysis at synchrotron radiation facilities.

<http://www.silx.org/> || [python-silx](#)<sup>AUR</sup>



## Physics simulation

- **Calculix** — A three-dimensional structural finite element program.

<http://www.calculix.de/> || [calculix-ccx](#)<sup>AUR</sup>

- **Code\_Aster** — Software package for Civil and Structural Engineering finite element analysis (FEA) and numeric simulation in structural mechanics.

<https://www.code-aster.org/V2/spip.php?rubrique2> || [aster](#)<sup>AUR</sup>

- **DFTB+** — A quantum mechanical simulation software package based on the DFTB method

<https://dftbplus.org/> || [dftbplus](#)<sup>AUR</sup>

- **EPANET** — EPANET performs extended period simulation of the water movement and quality behavior within pressurized pipe networks.

<https://www.epa.gov/> || [epanet2-git](#)<sup>AUR</sup>

- **Elmer FEM solver** — Finite element analysis (FEA/FEM) software for multiphysics problems. Includes models for fluid dynamics, structural mechanics, electromagnetics, heat transfer, and acoustics.

<https://www.csc.fi/web/elmer> <http://www.elmerfem.org/> || [elmerfem](#)<sup>AUR</sup>

- **FEniCS** — An open-source computing platform for solving partial differential equations, enabling users to quickly translate scientific models into efficient finite element code with the high-level Python and C++ interfaces that scale across platforms ranging from laptops to high-performance clusters.

<https://fenicsproject.org/> || [dolfin](#)<sup>AUR</sup>, [python-dolfin](#)<sup>AUR</sup>

- **Finesse** — Frequency domain INterfErometer Simulation SoftwarE

<https://www.gwoptics.org/finesse/> || [finesse](#)<sup>AUR</sup>

- **Geant4** — A simulation toolkit for particle physics interactions.

<https://geant4.web.cern.ch/> || [geant4](#)<sup>AUR</sup>

- **ONELAB/Gmsh** — An open-source, lightweight interface to finite element software, by default containing the mesh generator Gmsh, the finite element solver GetDP and the optimization library conveks.

<http://onelab.info/> <https://getdp.info/> <https://gmsh.info/> <http://onelab.info/conveks/> || [gmsh](#)<sup>AUR</sup>,  
[getdp](#)<sup>AUR</sup>

- **Herwig** — Herwig is a multi-purpose particle physics event generator.

<https://herwig.hepforge.org/> || [herwig](#)<sup>AUR</sup>

- **Netgen/NGSolve** — A high performance multiphysics finite element software, with a flexible Python interface to implement new physical equations and solution algorithms easily.

<https://ngsolve.org/> || [netgen-git](#)<sup>AUR</sup>, [ngsolve-git](#)<sup>AUR</sup>

- **OpenFOAM** — Software package and toolkit for computational fluid dynamics (CFD).

<https://openfoam.org/> || [openfoam-org](#)<sup>AUR</sup>

- **OpenLoops 2** — A particle physics package for the fast numerical evaluation of tree and one-loop matrix elements.

<https://openloops.hepforge.org/> || [openloops](#)<sup>AUR</sup>

- **QuTiP** — QuTiP is open-source software for simulating the dynamics of open quantum systems

<https://qutip.org/> || [python-qutip](#)<sup>AUR</sup>

- **Rivet** — A particle physics package for data analysis and validation of Monte Carlo event generators

<https://rivet.hepforge.org/> || [rivet](#)<sup>AUR</sup>

- **Speaq** — Tools for Nuclear Magnetic Resonance (NMR) Spectra Alignment, Peak Based Processing, Quantitative Analysis and Visualizations

<https://cran.r-project.org/web/packages/speaq/index.html> || [r-speaq](#)<sup>AUR</sup>

- **SWMM** — Storm Water Management Model is a dynamic rainfall-runoff-subsurface runoff simulation model used for simulation of the surface/subsurface hydrology quantity and quality.

<https://www.epa.gov/> || [swmm5-git](#)<sup>AUR</sup>

- **Sherpa** — A particle physics package for Monte Carlo simulation of collider events.

<https://sherpa-team.gitlab.io/> || [sherpa](#)<sup>AUR</sup>

- **Step** — Two-dimensional physics simulation engine. Part of [kde-education](#).

<https://apps.kde.org/step/> || [step](#)

- **VESTA** — 3D visualization program for structural models, volumetric data such as electron/nuclear densities, and crystal morphologies.

<https://jp-minerals.org/vesta/en/> || [vesta](#)<sup>AUR</sup>

- **WHIZARD** — The Generator of Monte Carlo Event Generators for Tevatron, LHC, ILC, CLIC, CEPC, FCC-ee, FCC-hh, SppC and other High Energy Physics Experiments.

<https://whizard.hepforge.org/> || [whizard](#)<sup>AUR</sup>

## Unit conversion

- **ConvertAll** — Unit conversion application that allows one to combine units in any way (e.g. inches per decade), even if it does not make sense.

<https://convertall.bellz.org/> || [convertall](#)<sup>AUR</sup>

- **Gonvert** — Conversion utility that allows conversion between many units like CGS, Ancient, Imperial with many categories like length, mass, numbers, etc.

<http://www.unihedron.com/projects/gonvert/> || [gonvert](#)<sup>AUR</sup>

- **UDUNITS** — A tool for calculations of physical quantities.

<https://www.unidata.ucar.edu/software/udunits/> || [udunits](#)<sup>AUR</sup>

- **Units** — Command-line unit converter and calculator that can handle multiplicative scale changes, nonlinear conversions such as Fahrenheit to Celsius or wire gauge and others.

<https://www.gnu.org/software/units/> || [units](#)<sup>AUR</sup>

## Chemistry

- **TCcalc** — A basic CLI [Chemical thermodynamics](#) calculator. Allows for calculating delta S and H of reactions/state changes.

<https://gitlab.com/calcs1/tccalc/> || [tccalc](#)<sup>AUR</sup>

## Molecules

### Viewers

See also [Wikipedia:List of molecular graphics systems](#).

- **Avogadro** — Editor, viewer and simulator for 3D molecule structures (also supports downloading files from the [Protein Data Bank](#)).

<https://avogadro.cc/> || [avogadro](#)<sup>AUR</sup>

- **BALLView** — Standalone molecular modeling and visualization application, part of the [BALL](#) framework.

<https://ball-project.org/> || [ball](#)<sup>AUR</sup>

- **Chemical** — Computational chemistry software package used to edit, view and simulate molecular structures.

<http://bioinformatics.org/ghemical/ghemical/index.html> || [ghemical](#)<sup>AUR</sup>

- **PyMOL** — Open-source molecular visualization system that can produce high quality 3D images of small molecules and biological macromolecules, such as proteins.

<https://pymol.org/> || [pymol](#)

- **UCSF Chimera** — Extensible molecular modeling system.

<https://rbvi.ucsf.edu/chimera/> || [ucsf-chimera](#)<sup>AUR</sup>

- **UCSF ChimeraX** — Next-generation molecular visualization program, following UCSF Chimera.

<https://rbvi.ucsf.edu/chimerax/> || [chimerax](#)<sup>AUR</sup>

- **VMD** — VMD is a molecular visualization program for displaying, animating, and analyzing large biomolecular systems using 3-D graphics and built-in scripting.

<https://www.ks.uiuc.edu/Research/vmd/> || [vmd](#)<sup>AUR</sup>

- **wxMacMolPlt** — An open-source GUI for preparing, submitting and visualizing input and output for the GAMESS quantum chemistry package.

<https://brettbode.github.io/wxmacmolplt/> || [wxmacmolplt](#)<sup>AUR</sup>

## Drawing

- **Chemtool** — GTK-based program for drawing chemical structural formulas.

<http://ruby.chemie.uni-freiburg.de/~martin/chemtool/chemtool.html> || [chemtool](#)<sup>AUR</sup>

- **Gabedit** — Graphical user interface to computational chemistry packages like [GAMESS](#), [Gaussian](#), [MOLCAS](#), [MOLPRO](#), [MPQC](#), [OpenMopac](#), [Firefly](#) (previously PC GAMESS) and [Q-Chem](#).

<https://gabedit.sourceforge.net/> || [gabedit](#)<sup>AUR</sup>

- **Marvin** — Java-based program for drawing chemical structural formulas.

<https://chemaxon.com/marvin> || [marvin](#)<sup>AUR</sup>

## Modeling

- **AmberTools** — AmberTools consists of several independently developed packages that work well by themselves, and with Amber18 itself. The suite can also be used to carry out complete molecular dynamics simulations, with either explicit water or generalized Born solvent models.

<https://ambermd.org/AmberTools.php> || [ambertools](#)<sup>AUR</sup>

- **APBS** — Electrostatic and solvation properties for complex molecules.

<https://www.poissonboltzmann.org/> || [apbs](#)<sup>AUR</sup>

- **COPASI** — COmplex PATHway Simulator for analysis of biochemical networks and their dynamics.

<https://copasi.org/> || [copasi](#)<sup>AUR</sup>

- **CP2K** — A quantum chemistry and solid state physics software package.

<https://www.cp2k.org/> || [cp2k](#)<sup>AUR</sup>

- **Fpocket** — Fpocket is a very fast open source protein pocket detection algorithm based on Voronoi tessellation.

<https://github.com/Discngine/fpocket> || [fpocket-git](#)<sup>AUR</sup>

- **GROMACS (GROningen MACHine for Chemical Simulations)** — Versatile package to perform molecular dynamics, i.e. simulate the Newtonian equations of motion for systems with hundreds to millions of particles.

<https://www.gromacs.org> || [gromacs](#)<sup>AUR</sup>

- **LAMMPS** — Large-scale Atomic/Molecular Massively Parallel Simulator.

<https://www.lammps.org/> || [lammps](#)<sup>AUR</sup>

- **MODELLER** — 3D structure homology modeller.

<https://salilab.org/modeller/> || [modeller](#)<sup>AUR</sup>

- **NAMD** — NAMD is a parallel molecular dynamics code designed for high-performance simulation of large biomolecular systems.

<https://www.ks.uiuc.edu/Research/namd/> || [namd](#)<sup>AUR</sup>

- **NWChem** — Ab initio computational chemistry software package.

<https://nwchemgit.github.io/> || [nwchem](#)<sup>AUR</sup>

- **Open Babel** — A library designed to interconvert between many file formats used in molecular modeling and computational chemistry.

<https://openbabel.org/> || [openbabel](#)

- **ORCA** — ORCA is an ab initio, DFT, and semi-empirical SCF-MO package.

<https://orcaforum.kofo.mpg.de/app.php/portal> || [orcaqm](#)<sup>AUR</sup>

- **PDB2PQR** — Electrostatic and solvation properties for complex molecules.

<https://www.poissonboltzmann.org/> || [python-pdb2pqr](#)<sup>AUR</sup>

- **PLUMED** — An open source plugin for free energy calculations in molecular systems which works together with some of the most popular molecular dynamics engines.

<https://www.plumed.org/> || [plumed](#)<sup>AUR</sup>

- **PMEMD** — PMEMD module of AMBER software package.

<https://ambermd.org/AmberMD.php> || [pmemd](#)<sup>AUR</sup>

- **PSI4** — Open-source quantum chemistry

<https://psicode.org/> || [psi4-git](#)<sup>AUR</sup>

- **Quantum ESPRESSO** — Integrated suite of applications for electronic-structure calculations and materials modeling at nanoscale. It is based on density-functional theory, plane waves, and pseudopotentials (both norm-conserving and ultrasoft).

<https://www.quantum-espresso.org/> || [quantum-espresso](#)<sup>AUR</sup>

- **RDKit** — A collection of cheminformatics and machine-learning software written in C++ and Python.

<https://www.rdkit.org/> || [rdkit](#)<sup>AUR</sup>

- **rDock** — A fast, versatile and open-source program for docking ligands to proteins and nucleic acids.

<https://rdock.sourceforge.net/> || [rdock](#)<sup>AUR</sup>

- **smina** — Smina is a fork of Autodock Vina that focuses on improving scoring and minimization.

<https://sourceforge.net/projects/smina/> || [smina-bin](#)<sup>AUR</sup>

## Simulation analysis

- **mdanalysis** — An object-oriented python toolkit to analyze molecular dynamics trajectories in many popular formats.

<https://www.mdanalysis.org> || [python-mdanalysis](#)<sup>AUR</sup>

- **MDTraj** — A modern, open library for the analysis of molecular dynamics trajectories.

<https://github.com/mdtraj/mdtraj> || [python-mdtraj](#)<sup>AUR</sup>

- **xdrfile** — Allows to read GROMACS [trr](#) and [xtc](#) files and also to convert from one format to another.

<https://manual.gromacs.org/current/reference-manual/file-formats.html#xdr> || [xdrfile](#)<sup>AUR</sup>

## Periodic table

- **eperiodique** — A simple Periodic Table Of Elements viewer using the EFL.

<http://eperiodique.sourceforge.net/> || [eperiodique](#)<sup>AUR</sup>

- **gElemental** — Periodic table of the elements with additional information.

<https://freshmeat.sourceforge.net/projects/gelemental> || [gelemental](#)<sup>AUR</sup>

- **Kalzium** — Periodic table of the elements with molecule editor and equation solver. Part of [kde-education](#).

<https://apps.kde.org/kalzium/> || [kalzium](#)

## Earth science

### Climatology

- **Climate Data Operators** — Command line tool manipulate and analyse Climate model Data. Supported data formats are GRIB, netCDF, SERVICE, EXTRA and IEG.

<https://code.mpimet.mpg.de/projects/cdo> || [cdo](#)<sup>AUR</sup>

### Geography

### Cartography

- **JOSM** — Main editor for OpenStreetMap written in Java.

<https://josm.openstreetmap.de/> || [josm](#)

- **Merkaartor** — OpenStreetMap editor.

<http://merkaartor.be/> || [merkaartor](#)

- **OpenOrienteering Mapper** — Orienteering mapmaking program.

<https://www.openorienteering.org/apps/mapper/> || [openorienteering-mapper](#)<sup>AUR</sup>

- **Phyghtmap** — Generate OSM contour lines from NASA SRTM data

<http://katze.tfiu.de/projects/phyghtmap/> || [phyghtmap](#)<sup>AUR</sup>

#### GPS, travel, tracking

- **BT747** — The swiss army knife for MTK GPS dataloggers.

<https://sourceforge.net/projects/bt747/> || [bt747](#)

- **FoxtrotGPS** — Lightweight and fast mapping application.

<https://www.foxtrotgps.org/> || [foxtrotgps](#)<sup>AUR</sup>

- **Gebabbel** — Alternative GUI for GPSTools.

<http://gebabbel.sourceforge.net/> || [gebabbel](#)<sup>AUR</sup>

- **Gpredict** — Real-time satellite tracking and orbit prediction application.

<http://gpredict.oz9aec.net/> || [gpredict](#)<sup>AUR</sup>

- **GPSTools** — Reads, writes, and manipulates GPS waypoints, tracks, routes in a variety of formats.

<https://www.gpsbabel.org/> || [gpsbabel](#)

- **gpsd** — Service daemon that monitors one or more GPSes or AIS receivers attached to a host computer through serial or USB ports, making all data on the location/course/velocity of the sensors available to be queried on TCP port 2947 of the host computer.

<http://catb.org/gpsd/> || [gpsd](#)

- **GpsPrune** — View, edit and convert coordinate data from GPS systems.



<https://activityworkshop.net/software/gpsprune/> || [gpsprune](#)

- **GPX Viewer** — Simple tool to visualize tracks and waypoints stored in a gpx file.

<https://blog.sarine.nl/tag/gpxviewer/> || [gpx-viewer](#)

- **GPXSee** — GPS log file viewer and analyzer.

<https://www.gpxsee.org/> || [gpxsee](#)

- **Navit** — Modular turn-by-turn car navigation system.

<https://www.navit-project.org/> || [navit](#)

- **PreviSat** — PreviSat is a satellite tracking software for observing purposes

<https://previsat.sourceforge.net/> || [previsat](#)<sup>AUR</sup>

- **QMapShack** — Plan your next outdoor trip.

<https://github.com/Maproom/qmapshack/> || [qmapshack](#)

- **Satellite** — Displays Global Navigation Satellite System (GNSS: GPS, Galileo, Glonass etc.) information obtained from NMEA sources and saves your tracks

<https://codeberg.org/tpikonen/satellite> || [satellite-gtk](#)<sup>AUR</sup>

- **Subsurface** — Diving logbook to keep track of your dives by logging dive locations (with GPS coordinates), weights and exposure protection used, divemasters and dive buddies, etc.

<https://subsurface-divelog.org/> || [subsurface](#)<sup>AUR</sup>

- **Viking** — GTK 2 application to manage GPS data.

<https://sourceforge.net/projects/viking/> || [viking](#)

## Data analysis and GIS

- **GeoDa** — A tool for spatial data analysis.

<https://geodacenter.github.io/> || [geoda-bin](#)<sup>AUR</sup>

- **GRASS GIS** — Geospatial data management and analysis, image processing, graphics/maps production, spatial modeling and visualization.

<https://grass.osgeo.org/> || [grass](#)<sup>AUR</sup>

- **gvSIG** — vSIG is a geographic information system (GIS), that is, a desktop application designed for capturing, storing, handling, analyzing and deploying any kind of referenced geographic information in order to solve complex management and planning problems.

<http://www.gvsig.com/en> || [gvsig-desktop-bin](#)<sup>AUR</sup>

- **Panoply** — NetCDF, HDF and GRIB Data Viewer by NASA GISS

<https://www.giss.nasa.gov/tools/panoply/> || [panoply](#)<sup>AUR</sup>

- **QGIS** — [Geographic Information System \(GIS\)](#) that supports vector, raster & database formats.

<https://qgis.org/> || [qgis](#)

- **SAGA** — A Geographic Information System (GIS) software with immense capabilities for geodata processing and analysis.

<https://saga-gis.sourceforge.io/en/index.html> || [saga-gis](#)<sup>AUR</sup>

- **WCSTools** — A package of programs for setting and using the world coordinate systems

<http://tdc-www.harvard.edu/wcstools/> || [wcstools](#)<sup>AUR</sup>

## Map client

- **Cruiser** — Map and navigation application using offline vector maps

<https://wiki.openstreetmap.org/wiki/Cruiser> || [cruiser](#)<sup>AUR</sup>

- **GNOME Maps** — A simple map client for GNOME. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Maps> || [gnome-maps](#)

- **MapSCII** — Console Map Viewer.

<https://github.com/rastapasta/mapscii> || [nodejs-mapscii](#)<sup>AUR</sup>

- **Mapton** — Extensible desktop map and globe application written in Java.

<https://mapton.org/> || [mapton](#)<sup>AUR</sup>

- **Marble** — Virtual Globe and World Atlas that can be used to learn more about the Earth. Part of [kde-education](#).

<https://marble.kde.org/> || KDE: [marble](#), Qt: [marble-qt](#)

- **OffRoad** — Offline vector map display ported from OsmAnd.

<https://sourceforge.net/projects/offroadosm/> || [offroad](#)

- **Pure Maps** — Display vector and raster maps, places, routes, etc.

<https://rinigus.github.io/pure-maps/> || [pure-maps](#)<sup>AUR</sup>

## Weather status

- **Gis Weather** — Customizable weather forecast desktop widget.

<https://sourceforge.net/projects/gis-weather/> || [gis-weather](#)<sup>AUR</sup>

- **GNOME Weather** — Small application for GNOME that allows you to monitor the current weather conditions for your city, or anywhere in the world, and to access updated forecasts provided by various internet services. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Weather> || [gnome-weather](#)

- **meteo-qt** — System tray application for weather status information.

<https://github.com/dglent/meteo-qt> || [meteo-qt](#)<sup>AUR</sup>

- **wttr** — A simple console application to check the weather, using data from <https://wttr.in>

<https://github.com/AmirrezaFiroozi/wttr> || [wttr](#)<sup>AUR</sup>

- **Xfce Weather Panel Plugin** — Weather forecast plugin for the Xfce4 panel.

<https://goodies.xfce.org/projects/panel-plugins/xfce4-weather-plugin> || [xfce4-weather-plugin](#)

- **wego** — A terminal weather application.

<https://tylerwolf35.github.io/wego> || [wego](#)<sup>AUR</sup>

## Geology

- **CDI** — Is a general purpose C-library with an additional Fortran interface for file IO in the geoscience area.

<https://code.mpimet.mpg.de/projects/cdi> || [cdi](#)<sup>AUR</sup>

- **EnhancedVolcano** — Publication-ready volcano plots with enhanced colouring and labeling.

<https://bioconductor.org/packages/release/bioc/html/EnhancedVolcano.html> || [r-enhancedvolcano](#)<sup>AUR</sup>

- **GEOmap** — Topographic and Geologic Mapping.

<https://cran.r-project.org/web/packages/GEOmap/index.html> || [r-geomap](#)<sup>AUR</sup>

- **GPlates** — Is a plate tectonics program. Manipulate reconstructions of geological and paleogeographic features through geological time.

<https://www.gplates.org/> || [gplates](#)<sup>AUR</sup>

- **Gsegview** — SEG-Y seismic data file viewer

<https://sourceforge.net/projects/gsegview/> || [gsegview-bin](#)<sup>AUR</sup>

- **Gstat** — Spatial and Spatio-Temporal Geostatistical Modelling, Prediction and Simulation

<https://cran.r-project.org/web/packages/gstat/index.html> || [r-gstat](#)<sup>AUR</sup>

- **Madagascar** — Multidimensional data analysis and reproducible computational experiments.

<https://www.reproducibility.org> || [madagascar](#)<sup>AUR</sup>

- **SeisComP** — A seismological software for data acquisition, processing, distribution and interactive analysis.

<https://github.com/SeisComP/seiscomp> || [seiscomp](#)<sup>AUR</sup>

- **Seismic Un\*x** — A seismic processing and research environment developed at the Center for Wave Phenomena, Colorado School of Mines

<https://wiki.seismic-unix.org/start> || [seismic-unix](#)<sup>AUR</sup>

- **TauP** — A seismic travel time calculator.

<https://github.com/crotwell/TauP> || [taup-git](#)<sup>AUR</sup>

## Oceanography

- **Cmocean** — Colormap setup for standardizing commonly-plotting oceanographic variables.

<https://github.com/matplotlib/cmocean> || [python-cmocean](#)<sup>AUR</sup>

## Astronomy

### Astrometrical and image processing software

See also [Wikipedia:List of astrometric solvers](#).

- **APTS** — Set of tools for automatic astrophotography images acquisition and processing

<https://github.com/pozar87/aps> || [python-aps](#)<sup>AUR</sup>

- **Astap** — Astrometric (plate) solver, stacking of images, photometry and FITS viewer

<https://www.hnsky.org/astap.htm> || [astap-bin-qt5](#)<sup>AUR</sup>

- **AstroCrop** — Astronomical image preprocessing tool

<https://www.astrodmx-capture.org.uk/astrocrop/> || [astrocrop](#)<sup>AUR</sup>

- **AstroImageJ** — ImageJ for Astronomy

<https://www.astro.louisville.edu/software/astroimagej/> || [astroimagej](#)<sup>AUR</sup>

- **Astrometry.net** — Automatic recognition of astronomical images

<http://astrometry.net/> || [astrometry.net](#)<sup>AUR</sup>

- **AudeLA** — AudeLA is a TCL extension aimed at providing amateur astronomers with image processing, telescope controlling, ccd camera driving, and various astronomical algorithms

<https://sourceforge.net/projects/audela/> || [audela-bin](#)<sup>AUR</sup>, [audela-svn](#)<sup>AUR</sup>

- **CARTA** — Cube Analysis and Rendering Tool for Astronomy

<https://cartavis.org/> || [carta-appimage](#)<sup>AUR</sup>

- **FITSH** — a software package for astronomical image processing

<https://fitsh.net/> || [fitsh](#)<sup>AUR</sup>

- **GIMP Astronomy Plugins** — Set of GIMP plugins for astronomical image processing.

<http://hennigbuam.de/georg/gimp.html> || [gimp-plugin-astronomy](#)<sup>AUR</sup>

- **Ginga** — A viewer for astronomical data FITS (Flexible Image Transport System) files

<https://ejeschke.github.io/ginga/> || [python-ginga](#)<sup>AUR</sup>

- **SCAMP** — reads SExtractor catalogs and computes astrometric and photometric solutions for any arbitrary sequence of FITS images in a completely automatic way.

<https://www.astromatic.net/software/scamp/> || [astromatic-scamp](#)<sup>AUR</sup>

- **SExtractor** — Is a program that builds a catalogue of objects from an astronomical image.

<https://www.astromatic.net/software/sextractor/> || [astromatic-sextractor](#)<sup>AUR</sup>

- **Montage** — An astronomical image mosaic engine

<http://montage.ipac.caltech.edu/> || [montage](#)<sup>AUR</sup>

- **Munipack** — A general astronomical image processing software

<http://munipack.physics.muni.cz/> || [munipack](#)<sup>AUR</sup>, [c-munipack](#)<sup>AUR</sup>

- **oaCapture** — A planetary imaging application using Qt5

<https://www.openastroproject.org/oacapture/> || [oacapture](#)<sup>AUR</sup>

- **PlanetarySystemStacker** — Produce a sharp image of a planetary system object

<https://github.com/Rolf-Hempel/PlanetarySystemStacker> || [planetarysystemstacker-git](#)<sup>AUR</sup>

- **THELI** — THELI is a data processing pipeline for optical, near-infrared and mid-infrared astronomical images

<https://github.com/schirmermischa/THELI> || [theli](#)<sup>AUR</sup>

## Image capture software

- **CCDciel** — A CCD capture software intended for the amateur astronomer.

<https://www.ap-i.net/ccdcie//en/start> || [ccdcie](#)<sup>AUR</sup>

- **FireCapture** — The leading planetary capture tool

<http://www.firecapture.de/> || [firecapture](#)<sup>AUR</sup>

- **GoQat** — Camera acquisition software, especially for QSI cameras, that provides other features such as autoguiding, focusing help and others.

<https://canburytech.net/GoQat/> || [goqat](#)<sup>AUR</sup>

- **lin\_guider** — astronomical autoguiding program

<https://sourceforge.net/projects/linguider/> || [lin-guider](#)<sup>AUR</sup>

- **Mrcal** — Is a generic toolkit built to solve the calibration and SFM-like problems we encounter at NASA/JPL.

<http://mrcal.secretsauce.net/> || [mrcal](#)<sup>AUR</sup>

- **Open PHD Guiding** — PHD2 astrophotography autoguiding tool

<https://openphdguiding.org/> || [phd2](#)<sup>AUR</sup>

- **SAOImageDS9** — SAOImage DS9: Astronomical Data Visualization Application

<https://sites.google.com/cfa.harvard.edu/saoimageds9> || [ds9](#)<sup>AUR</sup>

- **Siril** — Siril is a software application for astrophotography, which allows pre-processing and processing of images from any type of camera (CCD, planetary camera, webcam etc.)

<https://siril.org/> || [siril](#)<sup>AUR</sup>

## Common Library

- **Astropy** — The Astropy Project is a community effort to develop a common core package for Astronomy in Python and foster an ecosystem of interoperable astronomy packages.

<https://www.astropy.org/> || [python-astropy](#)

- **CASA** — the Common Astronomy Software Applications package.

<https://casa.nrao.edu/> || [casa6-bin](#)<sup>AUR</sup>

- **Casacore** — package contains the core libraries of the old AIPS++/CASA package.

<https://casacore.github.io/casacore/> || [casacore](#)<sup>AUR</sup>, [python-casacore](#)<sup>AUR</sup>

- **CDF** — NASA Common Data Format (CDF) library for scientific data management

<https://cdf.gsfc.nasa.gov/> || [cdf-nasa](#)<sup>AUR</sup>

- **ERFA** — Essential Routines for Fundamental Astronomy

<https://github.com/liberfa/erfa> || [erfa](#)

- **HEASoft** — NASA high energy astrophysics library

<https://heasarc.gsfc.nasa.gov/docs/software/lheasoft/> || [heasoft](#)<sup>AUR</sup>

- **libTheSky** — Fortran library to compute the positions of celestial bodies and events with great accuracy

<https://libthesky.sourceforge.net/> || [libthesky](#)<sup>AUR</sup>, [libthesky-data](#)<sup>AUR</sup>

- **Pal** — Positional Astronomy Library.

<https://github.com/Starlink/pal> || [starlink-pal](#)<sup>AUR</sup>

- **PyEphem** — PyEphem provides scientific-grade astronomical computations

<https://rhodesmill.org/pyephem/> || [python-pyephem](#)<sup>AUR</sup>

- **SOFA** — Set of algorithms and procedures used in fundamental astronomy

<http://www.iausofa.org/> || [sofa](#)<sup>AUR</sup>

## Toolkits

- **AstroML** — Machine learning, statistics, and data mining for astronomy and astrophysics

<https://www.astroml.org/> || [python-astroml](#)<sup>AUR</sup>

- **Exoplanet** — exoplanet is a toolkit for probabilistic modeling of time series data in astronomy with a focus on observations of exoplanets

<https://github.com/exoplanet-dev/exoplanet> || [exoplanet-git](#)<sup>AUR</sup>

- **Galpy** — Galactic Dynamics in python

<https://www.galpy.org/> || [python-galpy](#)<sup>AUR</sup>

- **Gammapy** — A Python package for gamma-ray astronomy

<https://gammapy.org/> || [python-gammapy](#)<sup>AUR</sup>

- **HEALPix** — Software for pixelization, hierarchical indexation, synthesis, analysis, and visualization of data on the sphere

<https://healpix.jpl.nasa.gov/> || [healpix](#)<sup>AUR</sup>

- **JHelioviewer** — Visualization software for solar image data in space weather context

<https://www.jhelioviewer.org/> || [jheliviewer](#)<sup>AUR</sup>

- **JMARS** — Java Mission-planning and Analysis for Remote Sensing.

<https://jmars.mars.asu.edu/> || [jmars](#)<sup>AUR</sup>

- **JSkyCalc** — A tool for observing preparation in java

<https://caligari.dartmouth.edu/public/downloads/skycalc/> || [jskycalc](#)<sup>AUR</sup>



- **Period04** — Period04 is a computer program especially dedicated to the statistical analysis of large astronomical time series containing gaps

<http://period04.net/> || [period04](#)<sup>AUR</sup>

- **Pywwt** — Is the official toolkit for accessing AAS WorldWide Telescope (WWT) from Python

<https://pywwt.readthedocs.io/en/stable/> || [python-pywwt](#)<sup>AUR</sup>

- **RochePlot** — Plot the key stages in the evolution of a binary star

<https://rocheplot.sourceforge.net/> || [rocheplot](#)<sup>AUR</sup>

- **Skyfield** — Elegant astronomy for Python

<https://rhodesmill.org/skyfield/> || [python-skyfield](#)<sup>AUR</sup>

- **SolTrack** — A free, fast and accurate C/C++ routine to compute the position of the Sun

<https://soltrack.sourceforge.net/> || [soltrack](#)<sup>AUR</sup>

- **SPICE** — A comprehensive toolkit and api to design, simulate and analyse space missions

<https://naif.jpl.nasa.gov/naif/index.html> || [cspice](#)<sup>AUR</sup>

- **STILTS** — Starlink Tables Infrastructure Library Tool Set

<https://www.star.bris.ac.uk/~mbt/stilts/> || [stilts](#)<sup>AUR</sup>

- **sunclock** — An astronomical world map that shows day and night and the Sun and Moon positions

<https://www.spinnaker.de/debian/sunclock.html> || [sunclock](#)<sup>AUR</sup>

- **Tempo** — Pulsar Timing Software

[https://tempo.sourceforge.net/tempo\\_idx.html](https://tempo.sourceforge.net/tempo_idx.html) || [tempo-git](#)<sup>AUR</sup>

- **TOPCAT** — Tool for OPerations on Catalogues And Tables

<https://www.star.bris.ac.uk/~mbt/topcat/> || [topcat](#)<sup>AUR</sup>

- **VaST** — VaST is a software tool for finding variable objects on a series of astronomical images

<http://scan.sai.msu.ru/vast/> || [vast-astronomical-git](#)<sup>AUR</sup>

- **VStar** — VStar is a multi-platform, easy-to-use variable star data visualization and analysis tool that was originally developed as part of the AAVSOs Citizen Sky project

<https://www.aavso.org/vstar> || [vstar-aavso](#)<sup>AUR</sup>

## Calculators and CLI utils

- **astroTools** — Command-line tools for astronomy and astrophysics

<https://astrotools.sourceforge.net/> || [astrotools](#)<sup>AUR</sup>

- **Gnuastro** — Various programs and library functions for the manipulation and analysis of astronomical data

<https://www.gnu.org/software/gnuastro/> || [gnuastro](#)<sup>AUR</sup>

- **Kosmorro** — A program to calculate the ephemerides

<https://kosmorro.space/> || [kosmorro](#)<sup>AUR</sup>

- **Project Pluto** — Project Pluto supplies astronomical software, both commercial and freeware, to amateur and professional astronomers

<https://www.projectpluto.com/> || [pluto-lunar-git](#)<sup>AUR</sup>, [pluto-sat-code-git](#)<sup>AUR</sup>, [pluto-jpl-eph-git](#)<sup>AUR</sup>, [pluto-find-orb-git](#)<sup>AUR</sup>}

- **star-charter** — A command-line tool for producing vector-graphics charts of the night sky in SVG, PDF and PNG formats

<https://github.com/dcf21/star-charter> || [star-charter-git](#)<sup>AUR</sup>

- **Sunwait** — Calculate sunrise/sunset times with civil, nautical, astronomical and custom twilights

<https://www.risacher.org/sunwait><sup>[dead link 2023-06-17 ⓘ]</sup> || [sunwait](#)<sup>AUR</sup>

## Management of telescopes and observatories

- **GILDAS** — Is a collection of state-of-the-art software oriented toward (sub-)millimeter radioastronomical applications (either single-dish or interferometer)

<https://www.iram.fr/IRAMFR/GILDAS/> || [gildas](#)<sup>AUR</sup>

- **imSim** — software package that simulates the LSST telescope and survey

<https://github.com/LSSTDESC/imSim> || [python-imsim-git](#)<sup>AUR</sup>

- **rubin\_sim** — Scheduler, survey strategy analysis, and other simulation tools for Rubin Observatory

[https://github.com/lsst/rubin\\_sim](https://github.com/lsst/rubin_sim) || [python-rubinsim-git](#)<sup>AUR</sup>

- **Srt-py** — Small Radio Telescope Control Code for Python.

<https://github.com/MITHaystack/srt-py> || [srt-py-git](#)<sup>AUR</sup>

## Simulation

- **APSYNSIM** — Aperture Synthesis Simulator for Radio Astronomy

<https://launchpad.net/apsynsim> || [apsynsim](#)<sup>AUR</sup>

- **Galaxy2** — Is program which simulates the motion of stars under the influence of gravity

<https://www.kornelx.net/galaxy2/galaxy2.html> || [galaxy2](#)<sup>AUR</sup>

- **GalSim** — Modular galaxy image simulation toolkit

<https://github.com/GalSim-developers/GalSim> || [python-galsim](#)<sup>AUR</sup>

- **FriendlyVRI** — Is designed to simulate astronomical observations using linked arrays of radio antennas in a technique called earth rotation aperture synthesis

<https://github.com/crpurcell/friendlyVRI> || [friendlyvri-git](#)<sup>AUR</sup>

- **Pynterferometer** — Is a graphical interface designed to demonstrated the techniques of radio interferometry used by telescopes

<https://www.jb.man.ac.uk/pynterferometer/index.html> || [pynterferometer](#)<sup>AUR</sup>

## Space exploration programs

- **Cosmonium** — 3D astronomy and space exploration program

<https://github.com/cosmonium/cosmonium> || [cosmonium-bin](#)<sup>AUR</sup>

- **OpenSpace** — OpenSpace is an open source, non-commercial, and freely available interactive data visualization software designed to visualize the entire known universe and portray our ongoing efforts to investigate the cosmos

<https://www.openspaceproject.com/> || [openspace-git](#)<sup>AUR</sup>

- **Our Galaxy** — Is a unique app that helps you understand the structural components of the Galaxy and visualize the locations and physical properties of deep sky objects in and around it

<https://www.otherwise.com/> || [ourgalaxy-bin](#)<sup>AUR</sup>

## Planetary and Virtual Atlas

See also [Wikipedia:Planetarium software](#).

See also [Wikipedia:List of observatory software](#).

- **Aladin** — Interactive software sky atlas

<http://aladin.u-strasbg.fr/aladin.gml> || [aladin](#)<sup>AUR</sup>

- **Celestia** — 3D astronomy simulation program that allows users to travel through an extensive universe, modeled after reality, at any speed, in any direction and at any time in history.

<https://celestiaproject.space/> || [celestia](#)<sup>AUR</sup>

- **Gaia Sky** — An open source 3D universe simulator with support for more than a billion objects

<https://zah.uni-heidelberg.de/gaia/outreach/gaiasky> || [gaiasky](#)<sup>AUR</sup>

- **HNSKY** — Hallo Northern Sky is the semi professional free planetarium program

<https://sourceforge.net/projects/hnsky/> || [hnsky-hq](#)<sup>AUR</sup>

- **KStars** — Planetarium application that provides an accurate graphical simulation of the night sky, from any location on Earth, at any date and time. It is included in KDE Edu.

<https://apps.kde.org/kstars/> || [kstars](#)

- **Skychart / Cartes du Ciel** — Planetarium that maps out and labels most of the constellations, planets, and objects you can see with a telescope. It can also download Digitized Sky Survey Charts and superimpose images over these charts.

<https://www.ap-i.net/skychart/> || [skychart](#)<sup>AUR</sup>

- **StarPlot** — 3-dimensional star chart viewer.

<http://starplot.org/> || [starplot](#)<sup>AUR</sup>

- **Stellarium** — Beautiful 3D planetarium that uses OpenGL to render a realistic sky in real time.

<https://stellarium.org/> || [stellarium](#)<sup>AUR</sup>

- **Virtual Moon Atlas** — Software for Moon observation and survey

<https://www.ap-i.net/avl/en/start> || [virtualmoonatlas](#)<sup>AUR</sup>

- **XEphem** — Motif-based ephemeris and planetarium program.

<https://xephem.github.io/XEphem/Site/xephem.html> || [xephem](#)<sup>AUR</sup>

## Biology

### Computational biology and bioinformatics

See also [Wikipedia:List of open source bioinformatics software](#).

- **BALL (Biochemical Algorithms Library)** — Application framework in C++ that provides an extensive set of data structures as well as classes for molecular mechanics, advanced solvation methods, comparison and analysis of protein structures, file import/export, and visualization.

<https://ball-project.org/> || [ball](#)<sup>AUR</sup>

- **BioJava** — Set of Java tools for computational biology, as well as bioinformatics.

<https://biojava.org/> || [biojava](#)<sup>AUR</sup>

- **Biopython** — Python package with tools for computational biology, as well as bioinformatics.

<https://biopython.org/wiki/Biopython> || [python-biopython](#)

- **EMBOSS (European Molecular Biology Open Software Suite)** — Open source software analysis package specially developed for the needs of the molecular biology and bioinformatics user community.

<https://emboss.sourceforge.net/> || [emboss](#)<sup>AUR</sup>

- **MUMmer** — Bioinformatics software system for sequence alignment based on suffix trees.

<https://mummer.sourceforge.net/> || [mummer](#)<sup>AUR</sup>

- **Snapgene** — Closed source molecular cloning application that offers a fast and easy way to plan, visualize, and document molecular biology procedures. Supports a wide range of cloning and PCR manipulations. The free version allows most common visualizations of a molecular biology workflow.

<https://www.snapgene.com/> || [snapgene-viewer](#)<sup>AUR</sup>

- **UGENE** — Application that integrates dozens of well-known biological tools and algorithms, providing both graphical user and command-line interfaces.

<https://ugene.net/> || [ugene](#)<sup>AUR</sup>

## Genealogy

- **Gramps** — Genealogy program, which helps you track your family tree.

<https://gramps-project.org/> || [gramps](#)

- **LifeLines** — Text based genealogy software for family trees and reports.

<https://github.com/lifelines/> || [lifelines](#)<sup>AUR</sup>

## Image manipulation

- **ImageJ** — Java-based image processing and analysing program that provides extensibility via plugins and macros. It is widely used in microscopy (e.g. for cell counting).

<https://imagej.nih.gov/ij/> || [imagej](#)<sup>AUR</sup>

- **Fiji** — ImageJ distribution (and soon ImageJ2) with a lot of plugins organized into a coherent menu structure.

<https://fiji.sc> || [fiji-bin](#)<sup>AUR</sup>

## DICOM viewers and volume rendering

- **aeskulap** — Simple DICOM data viewer

<https://www.nongnu.org/aeskulap/> || [aeskulap](#)<sup>AUR</sup>

- **weasis** — Multipurpose DICOM viewer with a highly modular architecture

<https://nroduit.github.io/en/> || [weasis-bin](#)<sup>AUR</sup>

- **aliza** — Open 2D, 3D and 4D images in DICOM, MetaIO, Nifti, Nrrd and other formats, meshes in DICOM, VTK, STL and OBJ formats

<https://www.aliza-dicom-viewer.com/> || [aliza](#)<sup>AUR</sup>

- **3DSlicer** — Comprehensive [MRI](#), [CT](#), [LSCM microscopy](#) volume processing, segmentation and 3D-reconstruction

<https://www.slicer.org/> || [3dslicer](#)<sup>AUR</sup>

- **ParaView** — Interactive data visualization tool built using VTK that can scale across distributed computer hardware.

<https://www.paraview.org/> || [paraview](#)

## Engineering

### Computer-aided design

See also [Wikipedia:List of computer-aided design editors](#).

- **BRL-CAD** — Constructive solid geometry modeling CAD system that includes an interactive geometry editor, ray tracing support for graphics rendering and geometric analysis, computer network distributed framebuffer support, scripting, image-processing and signal-processing tools.

<https://brlcad.org/> || [brlcad](#)<sup>AUR</sup>

- **FreeCAD** — Parametric 3D CAD modeler based on OpenCascade, Coin3D, Qt, and Python with features such as macro recording, workbenches and the ability to run as a server.

<https://freecadweb.org/> || [freecad](#)

- **LeoCAD** — CAD program for creating virtual LEGO models. It has an easy to use interface and currently includes over 10,000 different pieces created by the LDraw community.

<https://www.leocad.org/> || [leocad](#)

- **LibreCAD** — A 2D CAD application based on Qt5. Forked from QCAD Community Edition.

<https://www.librecad.org/> || [librecad](#)

- **OpenSCAD** — A 3D CAD modeler that uses a textual, programmatic approach to creating and manipulating objects.

<https://www.openscad.org> || [openscad](#)

- **QCAD** — A 2D CAD application based on Qt. Supports the DFX and HPGL standard file formats, and optionally the DWG format through a proprietary plugin.

<https://www.qcad.org/> || [qcad](#)

- **SolveSpace** — Powerful 3D CAD constraint-based parametric modeler with simple mechanical simulation capabilities.

<https://solvespace.com/> || [solvespace](#)<sup>AUR</sup>

## 3D printing

See also [RepRap](#).

### Slicers

Slicers convert 3D models into a format supported by the 3D printer, usually this format is G-code.

- **PrusaSlicer** — Slicer by Prusa Research. A fork of Slic3r. Aimed at their printers but supports other brands as well. Open source.

<https://github.com/prusa3d/PrusaSlicer> || [prusa-slicer](#)

- **Cura** — Slicer by Ultimaker. Aimed at their printers but supports other brands as well. Open source.

<https://ultimaker.com/software/ultimaker-cura> || [cura](#)<sup>AUR</sup>

- **SuperSlicer** — Community maintained improved fork of PrusaSlicer. Not brand specific. Open source.

<https://github.com/supermerill/SuperSlicer> || [superslicer](#)

- **BambuStudio** — Slicer for printers from BambuLabs. Fork of PrusaSlicer. Open source.

<https://github.com/bambulab/BambuStudio> || [bambustudio](#)<sup>AUR</sup>

- **orca-slicer** — Community maintained fork of BambuStudio (in turn forked from PrusaSlicer). Open Source.

<https://github.com/SoftFever/OrcaSlicer> || [orca-slicer](#)<sup>AUR</sup>

- **MatterControl** — Simple 3D editor, slicer, and 3D printer control software by MatterHackers. Not brand specific. Open source.

<http://www.mattercontrol.com> || [mattercontrol](#)<sup>AUR</sup>

- **IdeaMaker** — Slicer by Raise3D. Aimed at their printers but supports other brands as well. Closed source.

<https://www.raise3d.com/pages/ideamaker> || [ideamaker](#)<sup>AUR</sup>

- **Slic3r** — One of the earliest slicers. Not used much any longer. Not brand specific. Open source.



<https://slic3r.org/> || [slic3r](#)<sup>AUR</sup>

- **icesl** — Modelling software with integrated slicer. Not brand specific. Closed source.

<https://icesl.loria.fr/> || [icesl](#)<sup>AUR</sup>

- **FlashPrint** — Slicer for the FlashForge 3D printers. Closed source.

<http://www.ff3dp.com/> || [flashprint](#)<sup>AUR</sup>

## Control software

Software for controlling 3D printers, usually over a cable or wireless.

- **OctoPrint** — Web interface for FDM 3D printers using G-code. Open source.

<https://octoprint.org/> || [octoprint](#)<sup>AUR</sup>

- **PrintRun** — GUI control software for FDM 3D printers using G-code. Open source.

<https://github.com/kliment/Printrun> || [printrun](#)<sup>AUR</sup>

- **Repetier-Host** — Combined slicer and control software for 3D printers. Closed source.

<https://www.repetier.com/> || [repetier-host](#)<sup>AUR</sup>

## Electronics

See also [Wikipedia:Comparison of EDA software](#).

### Digital logic

Digital logic software are mainly simple educational tools that intended for only designing and simulating logic circuits.

- **Digital** — Interactive simulator similar to the discontinued Logisim. Features Karnaugh maps, logic tables, FSM editor, VHDL export and more, written in Java.

<https://github.com/hneemann/Digital> || [digital](#)<sup>AUR</sup>

- **glogic** — An educational graphical logic circuit simulator, written in Python.

<https://launchpad.net/glogic> || [glogic](#)<sup>AUR</sup>

- **GTKWave** — Fully featured GTK-based wave viewer which reads LXT, LXT2, VZT, FST, and GHW files as well as standard Verilog VCD/EVCD files and allows their viewing.

<https://gtkwave.sourceforge.net/> || [gtkwave](#)

- **Logisim** — Educational digital logic design and simulation software, written in Java, officially its development has stopped.

<https://sourceforge.net/projects/circuit/> || [logisim](#)<sup>AUR</sup>

- **Logisim Evolution** — Project which continue the development of the original Logisim with new features, written in Java.

<https://github.com/reds-heig/logisim-evolution> || [logisim-evolution-git](#)<sup>AUR</sup>

- **PulseView** — Logic analyzer, oscilloscope and MSO GUI.

<https://sigrok.org/wiki/PulseView> || [pulseview](#)

- **SmartSim** — Simple and beautiful digital logic circuit design and simulation software, mainly target teachers and students, very lightweight and cross platform, GPL licensed, written in Vala.

<https://smartsim.org.uk> || [smartsim-git](#)<sup>AUR</sup>

- **WaveDrom editor** — Timing diagram rendering in real-time from simple textual description. Can also be edited and embedded in the browser.

<https://wavedrom.com/> || [wavedrom-editor](#)<sup>AUR</sup>

## HDL

Also see [Wikipedia:Hardware description language](#).

- **Gowin EDA Edu IDE** — An IDE for Gowin's FPGA devices, including Sipeed Tang Nano and Sipeed Tang Nano 4K.

<http://www.gowinsemi.com.cn/faq.aspx> || [gowin-eda-edu-ide](#)<sup>AUR</sup>

- **Intel Quartus Prime** — A set of design tools for Intel's FPGA devices that includes Quartus Prime, ModelSim-Intel, HLS Compiler, etc.

<https://www.intel.com/content/www/us/en/software/programmable/overview.html> || [quartus-free](#)<sup>AUR</sup>

- **Lattice Diamond** — A set of design tools for Lattice's FPGA chips.

<https://www.latticesemi.com> || [lattice-diamond](#)<sup>AUR</sup>

- **Microsemi Libero** — Development tools for designing with Microsemi's PolarFire, IGLOO2, SmartFusion2, RTG4, SmartFusion, IGLOO, ProASIC3 and Fusion families.

<https://www.microsemi.com/product-directory/design-resources/1750-libero-soc#overview> || see [Microsemi Libero](#)

- **Xilinx ISE WebPACK** — FPGA programmable logic design suit.

<https://www.xilinx.com/products/design-tools/ise-design-suite/ise-webpack.html> || see [Xilinx ISE WebPACK](#)

- **GHDL** — Free and Open Source VHDL 2008/93/87 analyzer, compiler and simulator.

<https://github.com/ghdl/ghdl> || [ghdl-gcc-git](#)<sup>AUR</sup>

- **OpenFPGALoader** — Universal utility for programming FPGA. Try [openfpgaloader-git](#)<sup>AUR</sup> if your board is not managed by the stable version.

<https://github.com/trabucayre/openFPGALoader> || [openfpgaloader](#)

- **Verilator** — A Verilog/SystemVerilog simulator, performs lint code-quality checks, compile to threaded C++ code for simulation.

<https://verilator.org> || [verilator](#)

- **iverilog** — Icarus Verilog compiler and simulation tool (slower but older than Verilator).

<http://iverilog.icarus.com/> || [iverilog](#)

- **VTR** — Verilog to Routing, Open Source CAD Flow for FPGA ResearchVerilog to Route.

<https://verilogtorouting.org> || [vtr](#)

## MCU IDE and programmers

- **Arduino** — Arduino prototyping platform SDK.

<https://www.arduino.cc/en/Main/Software> || [arduino](#)

- **avrcalc** — Calculator to speed development of Atmel AVR.

<https://sourceforge.net/projects/avrcalc> || [avrcalc](#)<sup>AUR</sup>

- **AVRDUDE** — Download/upload/manipulate the ROM and EEPROM contents of AVR microcontrollers.

<https://www.nongnu.org/avrdude/> || [avrdude](#)

- **dfu-util** — Device firmware update (DFU) USB programmer.

<https://dfu-util.sourceforge.net/> || [dfu-util](#)

- **SPIPGM** — Tool for programming serial SPI FlashROM memories attached to PC via parallel port cable.

<http://rayer.g6.cz/programm/programe.htm> || [spipgm-bin](#)<sup>AUR</sup>

- **esp-idf** — Espressif IoT Development Framework. Official development framework for ESP32.

<https://github.com/espressif/esp-idf> || [esp-idf](#)<sup>AUR</sup>

- **platformio** — Collaborative platform for embedded development, embedded development, with debugger, unit testing, code analysis. Default IDE is [VSCode](#), but can be used by Atom, Eclipse, Emacs Qt Creator, Vim and several other IDE. Core CLI utils.

<https://platformio.org/> || [platformio](#)<sup>AUR</sup>

### Electronic circuit simulation and schematic capture editing

- **easy\_spice** — Electronic circuit simulator. SPICE frontend, using gschem for schematics and ngspice as simulator.

<http://easy-spice.sourceforge.net> || [easy\\_spice](#)<sup>AUR</sup>

- **gnucap** — GNU circuit simulator.

<http://gnucap.org> || [gnucap](#)<sup>AUR</sup>

- **gspiceui** — GUI to various freely available Spice electronic circuit simulators.

<http://users.tpg.com.au/micksw012/gspiceui.html> || [gspiceui](#)<sup>AUR</sup>

- **Oregano** — Graphical software application for schematic capture and simulation of electrical circuits. The actual simulation is done by the [ngspice](#) or [Gnucap](#) engines.

<https://github.com/drahnr/oregano> || [oregano](#)<sup>AUR</sup>

- **ngspice** — The established Linux circuit simulator. Open source successor of the [spice3f5](#) code. Has the most versatile user interface; supporting scripting within the circuit descriptions, use through an interpreter, as a C library, through tcl or various external wrappers (e.g., Python).

<http://ngspice.sourceforge.net/> || [ngspice](#)

- **Qucs** — Electronics circuit simulator application that gives you the ability to set up a circuit with a graphical user interface and simulate its large-signal, small-signal and noise behaviour.

<https://qucs.sourceforge.net> || [qucs](#)<sup>AUR</sup>

- **qucs-s** — Electronics circuit simulator that gives you the ability to set up a circuit with a GUI and simulate it. Fork of qucs that uses external, better, programs to do actual simulation.

<https://ra3xdh.github.io/> || [qucs-s](#)<sup>AUR</sup>

- **Xyce** — SANDIA Xyce is an open source, SPICE-compatible, high-performance analog circuit simulator, capable of solving extremely large circuit problems by supporting large-scale parallel computing platforms.

<https://xyce.sandia.gov> <https://github.com/Xyce/Xyce> || [xyce-serial](#)<sup>AUR</sup>

### Electronic design and schematic capture editing

- **asco** — SPICE Circuit Optimizer.

<http://asco.sourceforge.net> || [asco](#)<sup>AUR</sup>

- **Fritzing** — Easy to use program to draw good-looking circuit diagrams, and also create schematics and PCBs.

<https://fritzing.org/home/> || [fritzing](#)<sup>AUR</sup>

- **gEDA** — Full suite and toolkit of Electronic Design Automation tools that are used for electrical circuit design, schematic capture, simulation, prototyping, and production.

<http://www.geda-project.org/> || [geda-gaf](#)<sup>AUR</sup>

- **gEDA PCB** — Interactive printed circuit board editor.

<http://pcb.geda-project.org/> || [pcb](#)<sup>AUR</sup>

- **KiCad** — Software suite for electronic design automation (EDA) that facilitates the design of schematics for electronic circuits and their conversion to PCB (printed circuit board).

<https://kicad.org/> || [kicad](#)

- **QElectroTech** — Application used to draw advanced electrical circuits.

<https://qelectrotech.org/> || [qelectrotech](#)<sup>AUR</sup>

### Telecommunication

- **GNU Radio** — Software development toolkit that provides signal processing blocks to implement software radios.

<https://www.gnuradio.org/> || [gnuradio](#)

- **Gqrx** — Software defined radio receiver implemented using GNU Radio and the Qt GUI toolkit.

<https://gqrx.dk/> || [gqrx](#)

- **Pothos** — The Pothos project is a complete data-flow framework for creating topologies of interconnected processing blocks.

<https://github.com/pothosware/PothosCore/wiki> || [pothos](#)<sup>AUR</sup>, [pothos-git](#)<sup>AUR</sup>

- **SDR#** — The most popular SDR program.

<https://airspy.com/> || [sdrsharp](#)<sup>AUR</sup>

- **SigDigger** — Qt-based digital signal analyzer, using Suscan core and Sigutils DSP library.

<https://github.com/BatchDrake/SigDigger> || [sigdigger-git](#)<sup>AUR</sup>

## Amateur radio

See the main article: [Amateur radio#Software](#).

See also [Wikipedia:List of software-defined radios](#).

## Simulation modeling

- **Flight Gear** — Open-source, multi-platform atmospheric and orbital flight simulator with a flight dynamics engine (JSBSim) that is part of a [2015 NASA benchmark](#) to judge new simulation code to space industry standards.

<https://www.flightgear.org/> || [flightgear](#)<sup>AUR</sup>

- **gephi** — Gephi is an open-source network analysis and visualization software package written in Java.

<https://gephi.org/> || [gephi](#)

- **golly** — Golly is an open source, cross-platform application for exploring Conway's Game of Life and many other types of cellular automata.

<https://golly.sourceforge.net/> || [golly](#)<sup>AUR</sup>

- **Netlogo** — NetLogo is a multi-agent programmable modeling environment.

<http://ccl.northwestern.edu/netlogo/> || [netlogo](#)<sup>AUR</sup>

- **AnyLogic** — AnyLogic is a cross-platform proprietary multimethod simulation modeling tool, which is also available for personal use.

<https://www.anylogic.com/> || [anylogic-ple](#)<sup>AUR</sup>, [anylogic-university](#)<sup>AUR</sup>, [anylogic-professional](#)<sup>AUR</sup>

## Computer science

### Architecture

- **edumips64** — Cross-platform educational MIPS64 CPU simulator.

<https://edumips.org/> || [edumips64](#)<sup>AUR</sup>

- **Qiskit Aer** — A high performance simulator for quantum circuits that includes noise models.

<https://github.com/Qiskit/qiskit-aer> || [python-qiskit-aer-gpu](#)<sup>AUR</sup>

- **QtMips** — MIPS CPU simulator for education purposes with pipeline and cache visualization.

<https://github.com/cvut/QtMips> || [qtmips](#)<sup>AUR</sup>

- **QtRvSim** — RISC-V CPU simulator for education purposes.

<https://github.com/cvut/qtrvsim> || [qtrvsim](#)<sup>AUR</sup>

### Artificial intelligence

See also [Wikipedia:Comparison of deep learning software](#).

- **Fast Artificial Neural Network** — Library for developing feedforward Artificial Neural Networks.

<http://leenissen.dk/fann/wp/> || [fann](#)<sup>AUR</sup>

- **Mycroft** — Intelligent personal assistant and knowledge navigator with speech recognition.

<https://mycroft.ai/> || [mycroft-core](#)<sup>AUR</sup>

- **Orange** — Data visualization, machine learning and data mining toolkit, accessible via visual programming and Python.

<https://orange.biolab.si/> || [python-orange](#)<sup>AUR</sup>

- **Torch** — Machine learning library, scientific computing framework, and script language based on LuaJIT.

<http://torch.ch/> || [torch7-git](#)<sup>AUR</sup>

- **X Neural Switcher** — Automatic (intelligent) keyboard layout adaption.

<https://xneur.ru/> || [xneur-devel-git](#)<sup>AUR</sup>, [gxneur](#)<sup>AUR</sup>

- **Tensorflow** — An end-to-end open source machine learning platform.

<https://www.tensorflow.org/> || [python-tensorflow](#), with non x86-64 CPU optimization [python-tensorflow-opt](#), with CUDA [python-tensorflow-cuda](#), with CUDA and with non x86-64 CPU optimizations [python-tensorflow-opt-cuda](#)

- **PyTorch** — An open source machine learning framework that accelerates the path from research prototyping to production deployment.

<https://pytorch.org/> || [python-pytorch](#), with CUDA [python-pytorch-cuda](#)

- **Theano** — Theano is a Python library that allows you to define, optimize, and evaluate mathematical expressions involving multi-dimensional arrays efficiently.

<http://deeplearning.net/software/theano/> || [python-theano](#)<sup>AUR</sup>

## Distributed systems

- **SimGrid** — A scientific instrument to study large-scale distributed systems.

<https://simgrid.org/> || [simgrid](#)<sup>AUR</sup>

- **Shadow** — An open-source distributed system/network simulator/emulator hybrid (e.g. for [Tor](#) and [Bitcoin](#)).

<https://shadow.github.io/> || [tor-shadow](#)<sup>AUR</sup>

## Networking

- **CORE** — Common Open Research Emulator.

<https://www.nrl.navy.mil/Our-Work/Areas-of-Research/Information-Technology/NCS/CORE/> || [core](#)<sup>AUR</sup>

- **IMUNES** — Integrated Multiprotocol Network Emulator/Simulator.

<http://imunes.net/> || [imunes](#)<sup>AUR</sup>



- **GNS3** — Network software emulator using a combination of virtual and real devices to simulate complex networks.

<https://gns3.com/> || [gns3-gui](#)<sup>AUR</sup> (graphical user interface package), [gns3-server](#)<sup>AUR</sup> (server package)

- **ns-2** — Discrete event simulator targeted at networking research.

<https://www.isi.edu/nsnam/ns/> || [ns](#)<sup>AUR</sup>

- **ns-3** — Discrete-event network simulator for Internet systems.

<https://www.nsnam.org/> || [ns3](#)<sup>AUR</sup>

- **OMNeT++** — Component-based simulation package designed for modeling communication networks.

<https://omnetpp.org/> || [omnetpp](#)<sup>AUR</sup>

## Photogrammetry

See also [Wikipedia:Comparison of photogrammetry software](#).

- **OpenMVS** — A library for computer-vision scientists and especially targeted to the Multi-View Stereo reconstruction community.

<https://cdcseacave.github.io> || [openmvs](#)<sup>AUR</sup>

- **OpenMVG** — OpenMVG provides an end-to-end 3D reconstruction from images framework compounded of libraries, binaries, and pipelines.

<https://github.com/openMVG/openMVG> || [openmvg-git](#)<sup>AUR</sup>

- **AliceVision** — Photogrammetric Computer Vision Framework

<https://alicevision.org/> || [alice-vision](#)

## Others

### Organization

#### Personal information managers

These applications support time, task and contacts management.

- **Evolution** — Personal information management application that provides integrated mail, calendaring and address book functionality. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Evolution> || [evolution](#)

- **Kontact** — Integrated solution to your personal information management.

<https://kontact.kde.org/> || [kontact](#)

- **Osmo** — GTK personal organizer, which includes calendar, tasks manager and address book modules.

<http://osmo-pim.sourceforge.net> || [osmo](#)

- **SeaMonkey Mail & Newsgroups with Lightning** — Extension to SeaMonkey that provides calendar and task support.

<https://www.seamonkey-project.org/> || [seamonkey](#)<sup>AUR</sup>

- **Thunderbird with Lightning** — Extension to Mozilla Thunderbird that provides calendar and task support.

<https://www.thunderbird.net/calendar/> || [thunderbird](#)

## Time management

### Console

- **Calcurse** — Text-based ncurses calendar and scheduling system (supports CalDAV)

<https://calcurse.org> || [calcurse](#)

- **ccal** — A console program which writes a calendar together with Chinese calendar to standard output.

<http://ccal.chinesebay.com/ccal/ccal.htm> || [ccal](#)<sup>AUR</sup>

- **khal** — Command-line (non-interactive) and ncurses (interactive) calendar system (supports CalDAV)

<https://github.com/pimutils/khal> || [khal](#)

- **mail2rem** — Small script for importing .ics calendars from Maildir to Remind calendar.

<https://github.com/esovetkin/mail2rem> || [mail2rem-git](#)<sup>AUR</sup>

- **Pal** — Very lightweight calendar with both interactive and non-interactive interfaces.

<http://palcal.sourceforge.net/> || [pal](#)<sup>AUR</sup>

- **pal** — A tool to create pdf calendars from pcal input which can be exported by some calendar programs.

<https://sourceforge.net/projects/pcal/> || [pcal](#)<sup>AUR</sup>

- **Remind** — Highly sophisticated text-based calendaring and notification system.

<https://dianne.skoll.ca/projects/remind/> || [remind](#)

- **When** — Simple personal calendar program.

<http://lightandmatter.com/when/when.html> || [when](#)

- **Wyrd** — Text-based front-end to Remind, a calendar and alarm program used on UNIX and Linux computers.

<https://gitlab.com/wyrd-calendar/wyrd> || [wyrd](#)<sup>AUR</sup>

## Graphical

- **chinese-calendar** — Chinese traditional calendar for Ubuntu Kylin.

<https://launchpad.net/chinese-calendar/> || [chinese-calendar](#)

- **CoreTime** — Very simple Clock/Calendar application which shows a clock, supports alarms, reminders, a stop watch and a timer. Part of C-Suite.

<https://cubocore.org/> <sup>[dead link 2023-06-17 ⓘ]</sup> || [coretime](#)<sup>AUR</sup>

- **Day Planner** — Program designed to help you easily plan and manage your time. It can manage appointments, birthdays and more.

<https://www.day-planner.org/> || [dayplanner](#)<sup>AUR</sup>

- **Deepin Calendar** — Calendar application for Deepin.

<https://www.deepin.org/en/original/dde-calendar/> || [deepin-calendar](#)

- **etmtk (Event and Task Manager)** — Simple application with a "Getting Things Done!" approach to handling events, tasks, activities, reminders and projects.

<https://people.duke.edu/~dgraham/ETMtk/> || [etmtk](#)<sup>AUR</sup>

- **Gahshomar** — Persian (Jalali/Farsi) calendar.

<https://www.gahshomar.org/gahshomar/> || [gahshomar](#)<sup>AUR</sup>

- **GNOME Calendar** — Calendar application for GNOME. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Calendar> || [gnome-calendar](#)

- **KAlarm** — Personal alarm message, command and email scheduler, part of [kde-pim](#).

<https://apps.kde.org/kalarm/> || [kalarm](#)

- **KOrganizer** — Calendar and scheduling program, part of [kde-pim](#).

<https://kontact.kde.org/components/korganizer> || [korganizer](#)

- **Kalendar** — A calendar application using Akonadi to sync with external services (NextCloud, GMail, ...).

<https://invent.kde.org/pim/kalendar> || [kalendar](#)

- **Nextcloud Calendar** — Calendar app for Nextcloud.

<https://github.com/nextcloud/calendar> || [nextcloud-app-calendar](#)

- **Outspline** — Extensible outliner with advanced time management features, supporting events with complex recurrence schemes.

<https://kynikos.github.io/outspline/> || [outspline](#)<sup>AUR</sup>

- **TkRemind** — Sophisticated calendar and alarm program.

<https://dianne.skoll.ca/projects/remind/> || [remind](#)

## Timers

### Countdown timers and stopwatch

- **GNOME Clocks** — Clocks application for GNOME, including alarm, stopwatch and timer functionality. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Clocks> || [gnome-clocks](#)

- **Hourglass** — Simple time keeping application designed for elementary OS.

<https://github.com/sgpthomas/hourglass> || [hourglass-git](#)<sup>AUR</sup>

- **Kronometer** — Stopwatch application for KDE.

<https://apps.kde.org/kronometer/> || [kronometer](#)

- **KTeaTime** — Handy timer for steeping tea.

<https://apps.kde.org/kteatime/> || [kteatime](#)

- **pystopwatch** — Stopwatch written in Python with a clock and two countdown functions that can minimize to the tray.

<https://xyne.dev/projects/pystopwatch/> || [pystopwatch](#)<sup>AUR</sup>

- **snore** — A program like sleep, but with feedback.

<https://github.com/clamiaux/snore> || [snore-git](#)<sup>AUR</sup>

- **termdown** — Countdown timer and stopwatch in your terminal.

<https://github.com/trehn/termdown> || [termdown](#)

### Break timers

- **GNOME Break Timer** — Keeps track of how much you are using the computer, and it reminds you to take regular breaks.

<https://wiki.gnome.org/Apps/BreakTimer> || [gnome-break-timer](#)

- **RSI Break** — Takes care of your health and regularly breaks your work to avoid repetitive strain injury (RSI).

<https://apps.kde.org/rsibreak/> || [rsibreak](#)

- **Safe Eyes** — Tool to reduce and prevent repetitive strain injury (RSI).

<https://slgobinath.github.io/SafeEyes/> || [safeeyes](#)<sup>AUR</sup>

- **Workrave** — Program that assists in the recovery and prevention of RSI [on Xorg](#).

<https://workrave.org/> || [workrave](#)

### Pomodoro timers

See [Wikipedia:Pomodoro Technique](#) for an introduction.

- **flow** — Pomodoro app that blocks distractions while you work.

<https://github.com/iamsergio/flow-pomodoro> || [flow-pomodoro](#)<sup>AUR</sup>

- **Gnomato** — Timer for the Pomodoro Technique.

<https://github.com/diegorubin/gnomato> || [gnomato](#)<sup>AUR</sup>

- **GNOME Pomodoro** — Time management utility for GNOME based on the Pomodoro Technique.

<https://gnomepomodoro.org/> || [gnome-shell-pomodoro](#)<sup>AUR</sup>

- **Pilorama** — Eye-candy timeboxing tool written in QML

<https://github.com/eplatonoff/pilorama> || [pilorama-git](#)<sup>AUR</sup>

- **Pomodoro-Logger** — Pomodoro timer and logger with [Kanban board](#) for task management and tracking.

<https://github.com/zxch3n/PomodoroLogger> || [pomodoro-logger](#)<sup>AUR</sup>

- **Solanum** — A pomodoro timer for the GNOME desktop

<https://gitlab.gnome.org/World/solanum> || [solanum](#)<sup>AUR</sup>

- **Tomate** — Timer for the Pomodoro Technique.

<https://github.com/eliostrvs/tomate-gtk> || [tomate-gtk](#)<sup>AUR</sup>

- **Tomato** — Simple, usable and efficient pomodoro app designed for elementaryOS.

<https://github.com/luizaugustomm/tomato> || [tomato-git](#)<sup>AUR</sup>

- **Tomighty** — Desktop timer for the Pomodoro Technique.

<https://tomighty.github.io> || [tomighty](#)<sup>AUR</sup>

## Time trackers

- **ActivityWatch** — A self/local-hosted, cross-platform, client-server, privacy-focused active window tracker.

<https://github.com/ActivityWatch/activitywatch> || [activitywatch-bin](#)<sup>AUR</sup>

- **Hamster** — Time tracking application that helps you to keep track on how much time you have spent during the day on activities you choose to track.

<http://projecthamster.org/> || [hamster-time-tracker](#)

- **Kapow** — Punch clock to track time spent on projects.

<https://gottcode.org/kapow/> || [kapow](#)<sup>AUR</sup>

- **KTimeTracker** — Todo management and time tracking application.

<https://apps.kde.org/ktimetracker/> || [ktimetracker](#)

- **Tider** — Lightweight time tracking application (GTK)

<https://github.com/naspeh/tider> || [tider-git](#)<sup>AUR</sup>

- **Timenaut** — Time tracker that tracks active windows and lets you sort them into categories. Based on the [Electron](#) platform.

<https://timenaut.app/> || [timenaut-appimage](#)<sup>AUR</sup>

- **Timewarrior** — A command-line time-tracking application.

<https://timewarrior.net/> || [timew](#)

- **Timetrack** — Simple time-tracking app for GNOME.

<https://gitlab.gnome.org/danigm/timetrack> || [timetrack](#)<sup>AUR</sup>

- **Waketime** — Open source plugins for metrics about your programming with intuitive web-interface.

<https://wakatime.com/> || [wakatime](#)

## Task management

### Console

- **DevTodo** — Small command line application for maintaining lists of tasks.

<https://swapoff.org/devtodo1.html> || [devtodo](#)<sup>AUR</sup>[[broken link](#): package not found]

- **Taskbook** — Tasks, boards & notes for the command-line habitat.

<https://github.com/klauscfhq/taskbook> || [taskbook](#)<sup>AUR</sup>

- **Taskwarrior** — Command-line To-do list application with support for lua customization and more.

<https://taskwarrior.org/> || [task](#)

- **todoman** — Command-line To-do list manager (supports CalDAV)

<https://github.com/pimutils/todoman> || [todoman](#)

- **Todo.txt** — Small command-line To-do manager.

<https://github.com/todotxt/todo.txt-cli/> || [todotxt](#)<sup>AUR</sup>

- **TuDu** — Ncurses-based hierarchical To-do list manager with vim-like keybindings.

<https://code.meskio.net/tudu/> || [tudu](#)<sup>AUR</sup>

- **dijo** — Scriptable, curses-based, digital habit tracker

<https://github.com/nerdypepper/dijo> || [dijo](#)<sup>AUR</sup>

## Graphical

- **Agenda** — Simple, fast, no-nonsense to-do (task) list for elementary OS.

<https://github.com/dahenson/agenda> || [agenda-git](#)<sup>AUR</sup>

- **Effitask** — Graphical task manager, based on the [Todo.txt](#) format.

<https://github.com/sanpii/effitask> || [effitask](#)<sup>AUR</sup>

- **Getting Things GNOME!** — Personal tasks and TODO list items organizer for GNOME inspired by the [Getting Things Done \(GTD\)](#) methodology.

<https://github.com/getting-things-gnome/gtg> || [gtg](#)<sup>AUR</sup>

- **Go For It!** — Simple and stylish productivity app, featuring a to-do list, merged with a timer that keeps your focus on the current task. To-do lists are stored in the [Todo.txt](#) format.

<http://manuel-kehl.de/projects/go-for-it/> <sup>[[dead link](#) 2023-05-06 ⓘ]</sup> || [go-for-it-git](#)<sup>AUR</sup>

- **Endeavour** — Personal task manager for GNOME. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/ToDo> || [endeavour](#)

- **Nextcloud Tasks** — Tasks app for Nextcloud.

<https://github.com/nextcloud/tasks> || [nextcloud-app-tasks](#)

- **Planner** — Task manager with Todoist support.

<https://useplanner.com/> || [planify](#)<sup>AUR</sup>

- **ptask** — GTK task manager based on [Taskwarrior](#).

<https://wpitchoune.net/ptask/> || [ptask](#)<sup>AUR</sup>

- **QTodoTxt** — UI client for [todo.txt](#) files.

<https://github.com/mNantern/QTodoTxt> || [qtodotxt](#)<sup>AUR</sup>



- **sleek** — todo.txt app with modern GUI. Based on the [Electron](#) platform.

<https://github.com/ransome1/sleek/> || [sleek](#)<sup>AUR</sup>

- **Task Coach** — Simple todo manager to manage personal tasks and todo lists.

<https://www.taskcoach.org> || [taskcoach](#)<sup>AUR</sup>

- **TickTick** — Is a simple and effective to-do list and task manager app with seamless cloud synchronization across all your devices

<https://ticktick.com/> || [ticktick](#)<sup>AUR</sup>

- **Tasque** — Easy quick task management app written in C#.

<https://wiki.gnome.org/Attic/Tasque> || [tasque](#)<sup>AUR</sup>

- **Zanshin** — To-do management application for KDE.

<https://zanshin.kde.org/> || [zanshin](#)

## Contacts management

### Console

- **Abook** — Text-based contacts manager designed for use with mutt.

<http://abook.sourceforge.net/> || [abook](#)<sup>AUR</sup>

- **Khard** — Command-line addressbook that is able to sync with CardDAV-servers.

<https://github.com/scheibler/khard> || [khard](#)

### Graphical

- **Communicator** — Integrated address book and dialer application features the search for and view of contacts, edit contact details, and make new contacts, favorites, and dialer pad.

<https://mauikit.org/> || [communicator](#)

- **GNOME Contacts** — Contacts manager for GNOME. Part of [gnome](#).

<https://wiki.gnome.org/Apps/Contacts> || [gnome-contacts](#)

- **KAddressBook** — Address book manager for KDE.

<https://kontact.kde.org/components/kaddressbook> || [kaddressbook](#)

- **LDAP Administration Tool** — Browse LDAP-based directories and add/edit/delete entries contained within.

<https://sourceforge.net/projects/ldap-at/> || [lat](#)<sup>AUR</sup>

- **Nextcloud Contacts** — Contacts app for Nextcloud.

<https://github.com/nextcloud/contacts> || [nextcloud-app-contacts](#)

- **phpLDAPadmin** — LDAP client webapp. Its hierarchical tree-viewer and advanced search functionality make it intuitive to browse and administer your LDAP directory.

<https://phpldapadmin.sourceforge.net/> || [phpldapadmin](#)

- **Thunderbird with CardBook extension** — address book based on the CardDAV and vCard standards.

<https://gitlab.com/CardBook/CardBook> || [thunderbird](#)

## Financial management

See also [Wikipedia:Comparison of accounting software](#).

## Console

- **Beancount** — A double-entry bookkeeping computer language that lets you define financial transaction records in a text file, read them in memory, generate a variety of reports from them, and provides a web interface.

<https://beancount.github.io/> || [beancount](#)<sup>AUR</sup>

- **esniper** — Simple, lightweight tool for [sniping](#) eBay auctions.

<https://esniper.sourceforge.net/> || [esniper](#)<sup>AUR</sup>

- **hledger** — An accounting program for tracking money, time, or any other commodity, using double-entry accounting and a simple, editable file format. hledger is inspired by and largely compatible with ledger.

<https://hledger.org/> || [hledger](#)

- **Ledger** — Ledger is a powerful, double-entry accounting system that is accessed from the UNIX command-line.

<https://www.ledger-cli.org/> || [ledger](#)

## Graphical

- **Eqonomize!** — Cross-platform personal accounting software, with focus on efficiency and ease of use for the small household economy.

<https://eqonomize.github.io/> || [eqonomize](#)<sup>AUR</sup>

- **ERPNext** — Free and open source Enterprise Resource Planning (ERP).

<https://github.com/frappe/erpnext> || [erpnext](#)<sup>AUR</sup>

- **GnuCash** — Financial application that implements a double-entry book-keeping system with features for small business accounting.

<https://www.gnucash.org/> || [gnucash](#)

- **Grisbi** — Personal finance system which manages third party, expenditure and receipt categories, as well as budgetary lines, financial years, and other information that makes it suitable for associations.

<https://www.grisbi.org/> || [grisbi](#)<sup>AUR</sup>

- **HomeBank** — Easy to use finance manager that can analyse your personal finance in detail using powerful filtering tools and graphs.

<http://homebank.free.fr/> || [homebank](#)

- **KMyMoney** — Personal finance manager that operates in a similar way to [Microsoft Money](#). It supports different account types, categorisation of expenses and incomes, reconciliation of bank accounts and import/export to the “QIF” file format.

<https://kmymoney.org/> || [kmymoney](#)

- **Kresus** — Self-hosted personal finance management software. It automatically retrieves every day all your new bank transactions and lets you categorize them, study them through charts and establish a budget.

<https://kresus.org/en/> || [kresus](#)

- **Manager** — Proprietary accounting software for small business.

<https://www.manager.io/> || [manager-accounting](#)<sup>AUR</sup>

- **Money Manager EX** — An easy-to-use personal finance suite

<https://www.moneymanagerex.org/> || [moneymanagerex](#)<sup>AUR</sup>

- **Odoo** — Open source ERP system purely in Python. Previously known as OpenERP.

<https://www.odoo.com/> || [odoo](#)<sup>AUR</sup>

- **Skrooge** — Personal finances manager for the KDE desktop.

<https://skrooge.org/> || [skrooge](#)

## Cryptocurrency

- **ARK Desktop Wallet** — Wallet for ARK.

<https://github.com/ArkEcosystem/desktop-wallet> || [ark-desktop](#)<sup>AUR</sup>

- **Atomic Wallet** — Manage your Bitcoin, Ethereum, XRP, Litecoin, XLM, and over 300 other coins and tokens.

<https://atomicwallet.io/> || [atomicwallet](#)<sup>AUR</sup>

- **Bitcoin Core** — Connect to the Bitcoin P2P Network.

<https://bitcoincore.org/> || [bitcoin-qt](#)

- **Coinomi** — Securely store, manage and exchange Bitcoin, Ethereum, and more than 1,770 other blockchain assets.

<https://www.coinomi.com/> || [coinomi-wallet-bin](#)<sup>AUR</sup>

- **Cointop** — Terminal based application for tracking cryptocurrencies.

<https://cointop.sh/> || [cointop](#)<sup>AUR</sup>

- **Electrum** — Lightweight Bitcoin client.

<https://electrum.org/> || [electrum](#)

- **Etherwall** — [Ethereum](#) wallet.

<https://www.etherwall.com/> || [etherwall](#)

- **Exodus** — All-in-one proprietary application to secure, manage, and exchange blockchain assets. Based on the [Electron](#) platform.

<https://www.exodus.io/> || [exodus](#)<sup>AUR</sup>

- **Mist** — [Ethereum](#) Dapp browser.

<https://github.com/ethereum/mist> || [mist](#)<sup>AUR</sup>

- **Monero** — Monero wallet.

<https://getmonero.org/> || [monero-gui](#), [monero](#)

- **Dogecoin Core** — Dogecoin Core wallet, Allows you to connect to the Dogecoin P2P Network.

<https://dogecoin.com/> || [dogecoin-qt](#)<sup>AUR</sup>, [multidoge](#)<sup>AUR</sup>

## Project management

See also [Wikipedia:Comparison of project management software](#).

- **Calligra Plan** — Project management application, which is intended for managing moderately large projects with multiple resources.

<https://www.calligra.org/plan/> || [calligra-plan](#)

- **GanttProject** — Project scheduling application featuring gantt chart, resource management, calendaring.

<https://www.ganttproject.biz/> || [ganttproject](#)<sup>AUR</sup>

- **Notion-app** — A note-taking software and project management software that is used for note-taking, task management, project management, knowledge management, and personal knowledge management.

<https://www.notion.so/> || [notion-app](#)<sup>AUR</sup>

- **Planner** — Project management application for GNOME.

<https://wiki.gnome.org/Apps/Planner> || [planner](#)<sup>AUR</sup>

- **ProjectLibre** — Project management software alternative to [Microsoft Project](#).

<https://www.projectlibre.com/product/projectlibre-open-source> || [projectlibre](#)<sup>AUR</sup>

- **TaskJuggler** — Modern and powerful project management tool. Its new approach to project planning and tracking is more flexible and superior to the commonly used Gantt chart editing tools.

<https://taskjuggler.org/> || [taskjuggler](#)<sup>AUR</sup>

## Recipe management

- **GNOME Recipes** — Recipe management application for GNOME. Part of [gnome-extra](#).

<https://wiki.gnome.org/Apps/Recipes> || [gnome-recipes](#)

- **Gourmand** — Simple but powerful recipe-managing application.

<https://github.com/GourmandRecipeManager/gourmand> || [gourmand](#)<sup>AUR</sup>

- **KRecipes** — KDE application designed to make organizing your personal recipes collection fast and easy.

<https://apps.kde.org/krecipes/> || [krecipes](#)<sup>AUR</sup>

## Education

See also [List of games#Education](#).

- **Moodle** — Open-source software learning management system.

<https://moodle.org/> || [moodle](#)<sup>AUR</sup>

- **OpenBoard** — Interactive whiteboard software for schools and universities.

<https://openboard.ch/index.en.html> || [openboard](#)<sup>AUR</sup>

## Flashcards

See also [Wikipedia:List of flashcard software](#).

- **Anki** — Intelligent spaced-repetition memory training program.

<https://apps.ankiweb.net/> || [anki](#)<sup>AUR</sup>

- **jVLT** — Vocabulary learning tool.

<https://www.linuxlinks.com/jVLT/> || [jvlt](#)<sup>AUR</sup>

- **KWordQuiz** — Tool that gives you a powerful way to master new vocabularies. Part of [kde-education](#).

<https://apps.kde.org/kwordquiz/> || [kwordquiz](#)

- **Mnemosyne** — Flash-card tool which optimizes your learning process.

<https://mnemosyne-proj.org/> || [mnemosyne](#)<sup>AUR</sup>

- **Parley** — Program to help you memorize things. It uses the spaced repetition learning method, also known as flash cards. Part of [kde-education](#).

<https://apps.kde.org/parley/> || [parley](#)

- **Pauker** — Flash card based learning tool using shortterm and longterm memory training.

<http://pauker.sourceforge.net/> || [pauker](#)<sup>AUR</sup>

- **OpenTeacher** — Open source application that helps you learn a variety of subjects

<http://openteacher.org/en/> || [openteacher](#)<sup>AUR</sup>

- **StudyFlash** — Learn flashcards inside your terminal

<https://github.com/Alone2/studyFlash> || [studyflash](#)<sup>AUR</sup>

## Touch typing

### Console

- **Dvorak 7min** — Simple ncurses-based typing tutor for those trying to become fluent with the Dvorak keyboard layout.

<https://github.com/yaychris/dvorak7min> || [dvorak7min](#)<sup>AUR</sup>

- **GNU Typist** — Universal typing tutor.

<https://www.gnu.org/software/gtypist/> || [gtypist](#)<sup>AUR</sup>

- **psani-profi** — Program that will teach you touchtyping (Czech).

<https://www.sallyx.org/sally/psani-vsemi-deseti/> || [psani-profi](#)<sup>AUR</sup>

- **Typing Trainer** — ncurses-based typing trainer program that knows the English and Hungarian languages.

<http://tpgt.sourceforge.net/> || [tpgt](#)<sup>AUR</sup>

- **Typespeed** — Test your typing speed, and get your fingers' CPS.

<http://typespeed.sourceforge.net/> || [typespeed](#)<sup>AUR</sup>

- **typiskt** — touchtype training in the terminal (Bash).

<https://github.com/budlabs/typiskt> || [typiskt](#)<sup>AUR</sup>

### Graphical

- **Amphetype** — Layout-agnostic typing program aimed at people who do not need an on-screen keyboard, but would still like to improve their speed and accuracy.

<https://code.google.com/p/amphetype/> || [amphetype-svn](#)<sup>AUR</sup>

- **Klavaro** — Teaching touch typing that intends to be keyboard and language independent.

<https://klavaro.sourceforge.io/> || [klavaro](#)

- **KTouch** — Program to learn and practice touch typing. Part of [kde-education](#).

<https://apps.kde.org/ktouch/> || [ktouch](#)

- **TIPP10** — Intelligent touch typing tutor.

<https://www.tipp10.com/> || [tipp10](#)

- **TypingTest** — Typing test desktop program with a large amount of customization.

<https://github.com/laelath/typingtest> || [typingtest-git](#)<sup>AUR</sup>

## Accessibility

See [Accessibility](#) for tips on operating the desktop and [Category:Accessibility](#) for all available articles. See also [On-screen keyboards](#).

## Speech synthesizers

See also [Wikipedia:Comparison of speech synthesizers](#) and [listening comparison of the different engines](#).

- **Ekho** — Chinese text-to-speech (TTS) software for Cantonese, Mandarin, Zhaoan Hakka, Tibetan, Ngangien and Korean.

<https://eguidedog.net/ekho.php> || [ekho](#)<sup>AUR</sup>

- **eSpeak** — Compact speech synthesizer for more than 50 languages.

<https://espeak.sourceforge.net/> || [espeak](#)<sup>AUR</sup>

- **eSpeak NG** — Fork of eSpeak (due to inactivity of original maintainer).

<https://github.com/espeak-ng/espeak-ng> || [espeak-ng](#)

- **Festival** — General framework for building speech synthesis systems as well as including examples of various modules. As a whole it offers full text to speech.

<https://www.cstr.ed.ac.uk/projects/festival/> || [festival](#)

- **Flite** — Lightweight speech synthesis engine.

<http://festvox.org/flite/> || [flite](#)

- **Gespeaker** — GTK frontend for espeak. It allows you to play a text in many languages with settings for voice, pitch, volume and speed.

<https://muflone.com/gespeaker/english/> || [gespeaker](#)<sup>AUR</sup>



- **KMouth** — Speech synthesizer frontend which enables persons that cannot speak to let their computer speak.

<https://apps.kde.org/kmouth/> || [kmouth](#)

- **MaryTTS** — Multilingual text-to-speech synthesis platform written in Java.

<http://mary.dfki.de/> || [marytts](#)<sup>AUR</sup>

- **MBROLA** — Proprietary phonemes-to-audio program which supports more than 70 languages. Mbrola-voices can also be used with eSpeak.

<http://tcts.fpms.ac.be/synthesis/mbrola.html> || [mbrola](#)<sup>AUR</sup>

- **Mimic** — Text-to-speech voice synthesis from the Mycroft project (based on Flite).

<https://mimic.mycroft.ai/> || [mimic](#)<sup>AUR</sup>

- **Open JTalk** — Japanese text-to-speech synthesis system.

<https://sourceforge.net/projects/open-jtalk/> || [open-jtalk](#)<sup>AUR</sup>

- **Orca** — Screen reader for individuals who are blind or visually impaired, using eSpeak (via Speech Dispatcher). Part of [gnome](#).

<https://wiki.gnome.org/Projects/Orca> || [orca](#)

- **RHVoice** — Cross-platform (including Android) text-to-speech from a blind Russian-speaking developer, based on [HTS](#) (ru, ka, uk, ky, tt, en, pt, eo)

<https://github.com/RHVoice/RHVoice> || [rhvoice](#)

- **SOPS** — Provides a simple way to write custom plugins for screen reader Orca.

<https://github.com/chrys87/simple-orca-plugin-system> || [simpleorcapluginsystem](#)<sup>AUR</sup>

- **Speech Dispatcher** — Common interface to speech synthesis. It has backends for eSpeak, Festival, and a few other speech synthesizers.

<https://freebsoft.org/speechd> || [speech-dispatcher](#)

- **SVOX Pico** — The text-to-speech engine used on Android phones. (en-US, en-GB, de-DE, es-ES, fr-FR, it-IT)

<https://android.googlesource.com/platform/external/svox/+master> || [svox-pico-bin](#)<sup>AUR</sup>

## Speech recognition

See also [Wikipedia:Speech recognition software for Linux](#).

- **Julius** — Large vocabulary continuous speech recognition engine.

<https://github.com/julius-speech/julius> || [julius](#)<sup>AUR</sup>

- **Kaldi** — Speech recognition toolkit.

<https://github.com/kaldi-asr/kaldi> || [kaldi](#)<sup>AUR</sup>

- **Kalliope** — Modular always-on voice controlled personal assistant designed for home automation.

<https://kalliope-project.github.io/> || [kalliope](#)<sup>AUR</sup>

- **Kaylee** — Somewhat fancy voice command recognition program that performs actions when a user speaks loosely preset sentences.

<https://github.com/Ratfink/kaylee> || [kayleevc](#)<sup>AUR</sup>

- **Mycroft** — Hackable voice assistant.

<https://github.com/MycroftAI/mycroft-core> || [mycroft-core](#)<sup>AUR</sup>

- **Numen** — Voice control for handsfree computing

<https://sr.ht/~geb/numen/> || [numen](#)<sup>AUR</sup>

- **Simon** — Speech recognition program that can replace your mouse and keyboard.

<https://simon.kde.org/> || [simon](#)<sup>AUR</sup>[[broken link](#): package not found]

- **nerd-dictation** — Light weight manually activated dictation using the VOSK-API

<https://github.com/ideasman42/nerd-dictation> || [nerd-dictation-git](#)<sup>AUR</sup>

## Screen magnifiers

- **KMag** — Small KDE utility to magnify a part of the screen.

<https://apps.kde.org/kmag/> || [kmag](#)

- **Magnus** — Very simple desktop magnifier, showing the area around the mouse pointer in a separate window magnified two, three, four, or five times.

<https://kryogenix.org/code/magnus/> || [magnus](#)<sup>AUR</sup>

- **Virtual Magnifying Glass** — Simple, customizable and easy-to-use screen magnification tool.

<https://magnifier.sourceforge.net/> || [vmg](#)<sup>AUR</sup>

- **xzoom** — Zoom, rotate and mirror area of X display.

<https://www.ibiblio.org/pub/Linux/X11/libs/!INDEX.short.html> || [xzoom](#)<sup>AUR</sup>

## On-screen annotation

- **Gromit-MPX** — Tool to make annotations on the screen.

<https://github.com/bk138/gromit-mpx> || [gromit-mpx](#)<sup>AUR</sup>

- **Pylote** — Tool to draw on the screen.

<http://pascal.peter.free.fr/pylote-en.html> || [pylote-git](#)<sup>AUR</sup>

- **Screenkey** — Tool to display pressed keys.

<https://www.thregr.org/~wavexx/software/screenkey/> || [screenkey](#)

- **Show Me The Key** — A screenkey alternative that works under Wayland via libinput

<https://showmethekey.alynx.one> || [showmethekey](#)<sup>AUR</sup>

## Mouse

- **Easystroke** — Use mouse gestures to initiate commands and hotkeys.

<https://github.com/thjaeger/easystroke/wiki> || [easystroke](#)<sup>AUR</sup>

- **KMouseTool** — Clicks the mouse whenever the mouse cursor pauses briefly. It was designed to help those with repetitive strain injuries, for whom pressing buttons hurts.

<https://apps.kde.org/kmousetool/> || [kmousetool](#)

- **Mousetweaks** — Accessibility enhancements for pointing devices.

<https://wiki.gnome.org/Projects/Mousetweaks> || [mousetweaks](#)

## Display managers

See the main article: [Display manager#List of display managers](#).

## Desktop environments

See the main article: [Desktop environment#List of desktop environments](#).

## Window managers

### Console

See also [List of applications/Utilities#Terminal multiplexers](#), which offer some of the functions of window managers for the console.

- **twin** — Text-mode window manager.

<https://sourceforge.net/projects/twin/> || [twin](#)<sup>AUR</sup>

- **Wmutils** — A set of tools for X windows manipulation.

<https://github.com/wmutils/core> || [wmutils-git](#)<sup>AUR</sup>

### Graphical

See the main article: [Window manager#List of window managers](#).

### Composite managers

See the main article: [Xorg#List of composite managers](#).

## Wayland Compositors

See the main article: [Wayland#Compositors](#).

### Window tilers

- **QuickTile** — Lightweight standalone alternative to Compiz Grid plugin.

<http://ssokolow.com/quicktile/> || [quicktile-git](#)<sup>AUR</sup>

- **wumwum** — The Window Manager manager. It can turn emwh compliant window managers into a tiling window manager while retaining all initial functionalities.

<http://wumwum.sourceforge.net/> || [wumwum](#)<sup>AUR</sup>

### Taskbars

See also [Wikipedia:Taskbar](#).

- **Bmpanel** — Lightweight, NETWM compliant panel.

<https://github.com/nsf/bmpanel2> || [bmpanel2](#)<sup>AUR</sup>

- **Cairo-Dock** — Highly customizable dock and launcher application.

<https://www.glx-dock.org/> || [cairo-dock](#)

- **CoreAction** — Side bar with some handy gadgets like system loads, calendar, calculator, notes etc. Part of C-Suite.

<https://gitlab.com/cubocore> || [coreaction](#)<sup>AUR</sup>

- **Dash to Panel** — A fully customizable icon taskbar for [gnome-shell](#). Moves the dash into the GNOME main panel, similar to KDE Plasma and Windows 10.

<https://github.com/home-sweet-gnome/dash-to-panel> || [gnome-shell-extension-dash-to-panel](#)

- **eww** — Elkowars Wacky Widgets is a standalone widget system made in Rust that allows you to implement your own, custom widgets in any window manager.

<https://github.com/elkowar/eww> || [eww](#)<sup>AUR</sup>

- [fbpanel](#) — Lightweight, NETWM compliant desktop panel.

<https://aanatoly.github.io/fbpanel/> || [fbpanel](#)<sup>AUR</sup>

- [GNOME Panel](#) — Panel included in the [GNOME Flashback](#) desktop.

<https://wiki.gnome.org/Projects/GnomePanel> || [gnome-panel](#)

- **Latte** — Dock based on Plasma frameworks that provides an elegant and intuitive experience for your tasks and plasmoids.

<https://invent.kde.org/plasma/latte-dock> || [latte-dock](#)

- [Lemonbar](#) — A featherweight bar based on XCB. Provides UTF-8 support, background and foreground colors, text alignment, and not much more.

<https://github.com/LemonBoy/bar> || [lemonbar-git](#)<sup>AUR</sup>

- **LXPanel** — Lightweight X11 desktop panel and part of the LXDE desktop.

<https://lxde.org/> || [lxpanel](#)

- **MATE Panel** — Panel included in the [MATE](#) desktop.

<https://github.com/mate-desktop/mate-panel/> || [mate-panel](#)

- **nwg-dock** — GTK-based dock designed for the Sway window manager.

<https://github.com/nwg-piotr/nwg-dock> || [nwg-dock](#)<sup>AUR</sup>

- **nwg-panel** — GTK-based panel designed for the Sway window manager.

<https://github.com/nwg-piotr/nwg-panel> || [nwg-panel](#)<sup>AUR</sup>

- **PerlPanel** — The ideal accompaniment to a light-weight Window Manager such as OpenBox, or a desktop-drawing program like iDesk.

<https://savannah.nongnu.org/projects/perlpanel> || [perlpanel-git](#)<sup>AUR</sup>

- **Plank** — Elegant, simple, clean dock from [pantheon](#) desktop environment.

<https://launchpad.net/plank> || [plank](#)

- **Polybar** — a fast and easy-to-use tool for creating status bars.

<https://github.com/jaagr/polybar> || [polybar](#)

- **Tint2** — Simple panel/taskbar developed specifically for Openbox.

<https://gitlab.com/o9000/tint2> || [tint2](#)

- **Vala Panel** — Gtk3 panel for compositing window managers

<https://gitlab.com/vala-panel-project/vala-panel> || [vala-panel-git](#)<sup>AUR</sup>

- **Xfce Panel** — Panel included in the [Xfce](#) desktop.

<https://docs.xfce.org/xfce/xfce4-panel/start> || [xfce4-panel](#)

- **xmobar** — A lightweight, text-based, status bar written in Haskell.

<https://archives.haskell.org/projects.haskell.org/xmobar/> || [xmobar](#)

- **Waybar** — A customizable taskbar for Wlroots-based Wayland compositors.

<https://github.com/Alexays/Waybar/> || [waybar](#)

- **yambar** — A modular and lightweight status panel for X11 and Wayland that goes to great lengths to be both CPU and battery efficient.

<https://codeberg.org/dnkl/yambar> || [yambar](#)<sup>AUR</sup>

## System tray

- **AllTray** — Dock other applications into the system tray (notification area).

<https://github.com/mbt/alltray> || [alltray](#)

- **Docker** — Docking application which acts as a system tray.

<https://icculus.org/openbox/2/docker/> || [docker-tray](#)<sup>AUR</sup>

- **KDocker** — Dock any application in the system tray (notification area).

<https://github.com/user-none/KDocker> || [kdocker](#)<sup>AUR</sup>

- **Stalonetray** — Stand-alone freedesktop.org and KDE system tray (notification area) for [Xorg](#). It has full XEMBED support and minimal dependencies: an X11 lib only. Stalonetray works with virtually any EWMH-compliant window manager.

<http://stalonetray.sourceforge.net/> || [stalonetray](#)

- **Trayer** — Lightweight GTK-based system tray (notification area).

<https://github.com/sargon/trayer-srg/> || [trayer](#)

## Application launchers

See also [Wikipedia:Comparison of desktop application launchers](#).

- **Albert** — Sophisticated, plugin based standalone keyboard launcher.

<https://albertlauncher.github.io/> || [albert](#)<sup>AUR</sup>

- **Application Finder** — Easy-to-use application launcher from Xfce.

<https://docs.xfce.org/xfce/xfce4-appfinder/start> || [xfce4-appfinder](#)

- **Bashrun2** — Provides a different, barebones approach to a run dialog, using a specialized Bash session within a small xterm window.

<http://henning-bekel.de/bashrun2/> || [bashrun2](#)<sup>AUR</sup>

- **bemenu** — Lightweight dynamic menu inspired by dmenu. Works natively on Wayland.

<https://github.com/Cloudef/bemenu> || [bemenu](#)

- **dmenu** — Fast and lightweight dynamic menu for X which is also useful as an application launcher.

<https://tools.suckless.org/dmenu/> || [dmenu](#)

- **dmenu-extended** — Extension to *dmenu* for quickly opening files and folders.

<https://github.com/markjones112358/dmenu-extended> || [dmenu-extended-git](#)<sup>AUR</sup>

- **dmenu2** — Unmaintained fork of dmenu with many useful patches applied and additional options like screen select, dim or opacity change.

<https://github.com/spcmd/dmenu2> || [dmenu2](#)<sup>AUR</sup>

- **dswitcher** — *dmenu*-based window switcher that works regardless of workspace or minimization.

<https://github.com/Antithesisx/dswitcher> || [dswitcher-git](#)<sup>AUR</sup>

- **Gmrun** — Lightweight GTK-based application launcher, with the ability to run programs inside a terminal and other handy features.

<https://sourceforge.net/projects/gmrun/> || [gmrun](#)

- **GNOME Do** — Application launcher inspired by [Quicksilver](#) with many plugins, originally developed for the GNOME desktop.

<https://do.cooperteam.net/> || [gnome-do](#)<sup>AUR</sup>

- **Gnome-Pie** — Circular application launcher (pie menu) for Linux. It is made of several pies, each consisting of multiple slices.

<https://simmesimme.github.io/gnome-pie.html> || [gnome-pie](#)

- **higgins** — Desktop agnostic application launcher, file finder, calculator and more. Plugin based and freely and easily extendable via user-written plugins

<https://github.com/kokoko3k/higgins> || [higgins-git](#)<sup>AUR</sup>

- **j4-dmenu-desktop** — Very fast dmenu application launcher.

<https://github.com/enkore/j4-dmenu-desktop> || [j4-dmenu-desktop](#)

- **jgmenu** — Simple, independent, contemporary-looking X11 menu, designed for scripting, ricing and tweaking.

<https://github.com/johanmalm/jgmenu> || [jgmenu](#)

- **Kupfer** — Convenient command and access tool for the GNOME desktop that can launch applications, open documents and access different types of objects and act on them.

<https://kupferlauncher.github.io/> || [kupfer](#)

- **launch** — Simple command for launching applications from a terminal emulator.

<https://github.com/silverhammermba/launch> || [launch-cmd](#)<sup>AUR</sup>

- **Launchy** — Very popular cross-platform application launcher with a plugin-based system used to provide extra functionality.



<https://www.launchy.net/> || [launchy](#)

- **Lighthouse** — Simple scriptable popup dialog to run on X.

<https://github.com/emgram769/lighthouse> || [lighthouse-git](#)<sup>AUR</sup>

- **nwg-drawer** — GTK-based application drawer designed for the Sway compositor.

<https://github.com/nwg-piotr/nwg-drawer> || [nwg-drawer](#)<sup>AUR</sup>

- **nwg-menu** — GTK-based application menu designed for the Sway compositor.

<https://github.com/nwg-piotr/nwg-menu> || [nwg-menu](#)<sup>AUR</sup>

- **rofi** — Popup window switcher roughly based on superswitcher, requiring only xlib and pango.

<https://github.com/davatorium/rofi/> || [rofi](#)

- **rlaunch** — An extremely fast and light-weight dmenu-like application launcher written in Rust

<https://github.com/Ponaskovas/rlaunch> || [rlaunch](#)<sup>AUR</sup>

- **Synapse** — Semantic launcher written in Vala that you can use to start applications as well as find and access relevant documents and files by making use of the Zeitgeist engine.

<https://launchpad.net/synapse-project> || [synapse](#)

- **Ulauncher** — Modern and shiny launcher that provides fuzzy search, extensions, and themes

<https://ulauncher.io/> || [ulauncher](#)<sup>AUR</sup>

- **wofi** — GTK-based popup window switcher for Wayland compositors such as [sway](#). Inspired by [rofi](#).

<https://hg.sr.ht/~scoopta/wofi> || [wofi](#)

- **yofi** — Minimalistic menu for Wayland-based compositors.

<https://github.com/l4l/yofi> || [yofi](#)<sup>AUR</sup>

## Application menu editors

- [Alacarte](#) — Add or remove applications from the main menu.

<https://gitlab.gnome.org/GNOME/alcarte> || [alcarte](#)

- **AppEditor** — Edit application entries in the application menu.

<https://github.com/donadigo/appeditor> || [appeditor-git](#)<sup>AUR</sup>

- **Ezame** — Desktop and menu file editor.

<https://github.com/linux-man/ezame> || [ezame](#)<sup>AUR</sup>

- **KMenuEdit** — Edit one of the KDE application launchers.

<https://kde.org/> || [kmenuedit](#)

- **lxmed** — Application menu editor written in Java.

<https://sourceforge.net/projects/lxmed/> || [lxmed](#)<sup>AUR</sup>

- **MenuLibre** — Advanced menu editor that provides modern features in a clean, easy-to-use interface.

<https://launchpad.net/menulibre> || [menulibre](#)<sup>AUR</sup>

- **Meow** — Application menu editor written in Java.

<https://pnmougel.github.io/meow/> || [meow-bin](#)<sup>AUR</sup>

- **Mozo** — Change which applications are shown on the main menu.

<https://github.com/mate-desktop/mozo> || [mozo](#)

## Wallpaper setters

See also [Wikipedia:Wallpaper \(computing\)](#).

- **bgs** — An extremely fast and small background setter for X based on imlib2.

<https://github.com/Gottox/bgs/> || [bgs-git](#)<sup>AUR</sup>

- **esetroot** — Eterm's root background setter, packaged separately.

<http://www.eterm.org/> || [esetroot](#)<sup>AUR</sup>

- **feh** — A lightweight and powerful image viewer that can also be used to manage the desktop wallpaper.

<https://feh.finalrewind.org/> || [feh](#)

- **Fondo** — Find a variety of the most beautiful wallpapers from Unsplash.com.

<https://github.com/cal001/fondo> || [fondo](#)<sup>AUR</sup>

- **habak** — A background changing app.

<https://fwm-crystal.sourceforge.io/> || [habak](#)<sup>AUR</sup>

- **Hanabi** — Live Wallpaper for GNOME.

<https://github.com/jeffshee/gnome-ext-hanabi> || [gnome-shell-extension-hanabi-git](#)<sup>AUR</sup>

- **Hidamari** — Video wallpaper for Linux. Written in Python.

<https://github.com/jeffshee/hidamari> || [hidamari](#)<sup>AUR</sup>

- **hsetroot** — A tool to create compose wallpapers.

<https://packages.debian.org/sid/hsetroot> || [hsetroot](#)

- **HydraPaper** — GTK utility to set two different backgrounds for each monitor on GNOME.

<https://gabmus.gitlab.io/HydraPaper/> || [hydrapaper-git](#)<sup>AUR</sup>

- **Hyprpaper** — Hyprpaper is a blazing fast wayland wallpaper utility with IPC controls.

<https://github.com/hyprwm/hyprpaper> || [hyprpaper-git](#)<sup>AUR</sup>

- **LiveWallpaper** — Animated 3D wallpapers.

<https://launchpad.net/livewallpaper> || [livewallpaper](#)

- **mpvpaper** — A video wallpaper program for wlroots based wayland compositors.

<https://github.com/GhostNaN/mpvpaper> || [mpvpaper](#)<sup>AUR</sup>

- **Nitrogen** — A fast and lightweight desktop background browser and setter for X windows.

<https://github.com/l3ib/nitrogen> || [nitrogen](#)

- **oguri** — An animated wallpaper daemon for Wayland compositors.

<https://github.com/vilhalmer/oguri> || [oguri-git](#)<sup>AUR</sup>

- **pacwall** — A live wallpaper that shows the dependency graph and status of installed packages.

<https://github.com/Kharacternyk/pacwall> || [pacwall-git](#)<sup>AUR</sup>

- **pybgsetter** — Multi-backend (hsetroot, Esetroot, habak, feh) to set desktop wallpaper.

<https://bbs.archlinux.org/viewtopic.php?id=88997> || [pybgsetter](#)<sup>AUR</sup>

- **pywal** — Changes the wallpaper and creates matching colorschemes for various applications (rofi, i3, terminals)

<https://github.com/dylanaraps/pywal> || [python-pywal](#)

- **swaybg** — Wallpaper tool for Wayland compositors.

<https://github.com/swaywm/swaybg> || [swaybg](#)

- **swww** — Efficient animated wallpaper daemon for wayland, controlled at runtime.

<https://github.com/Horus645/swww> || [swww](#)<sup>AUR</sup>

- **Variety** — Changes the wallpaper on a regular interval using user-specified or automatically downloaded images.

<https://peterlevi.com/variety/> || [variety](#)

- **xli** — An image display program for X.

<https://packages.debian.org/sid/xli> || [xli](#)<sup>AUR</sup>

- **Xlivebg** — A live wallpaper framework and collection of live wallpapers for the X window system.

<http://nuclear.mutantstargoat.com/sw/xlivebg/> || [xlivebg](#)<sup>AUR</sup>

- **xwallpaper** — Minimalistic wallpaper setting utility for X.

<https://github.com/stoeckmann/xwallpaper> || [xwallpaper](#)

**Tip:** In order to avoid installing one more package, you may find convenient to use the **display** utility from [imagemagick](#) or **gm display** from [graphicsmagick](#). E.g.: **display -backdrop -background '#3f3f3f' -flatten -window root image**.

## Virtual desktop pagers

See also [Wikipedia:Pager \(GUI\)](#).

- **bbpager** — Dockable pager for [blackbox](#) and other window managers.

<http://bbtools.sourceforge.net/download.php?file=6><sup>[dead link 2022-09-20 ⓘ]</sup> || [bbpager](#)

- **fbpager** — Virtual desktop pager for fluxbox.

<http://www.fluxbox.org/fbpager> || [fbpager-git](#)<sup>AUR</sup>

- **IPager** — A configurable pager with transparency, originally developed for Fluxbox.

<http://useperl.ru/ipager/index.en.html> || [ipager](#)<sup>AUR</sup>

- **Netwmpager** — A NetWM/EWMH compatible pager.

<https://sourceforge.net/projects/sf-xpaint/files/netwmpager/> || [netwmpager](#)<sup>AUR</sup>

## Desktop widgets

- [gDesklets](#) — System for bringing mini programs (desklets) onto your desktop.

<https://launchpad.net/gdesklets> || [gdesklets](#)<sup>AUR</sup>

- **KRuler** — Displays on screen a ruler measuring pixels. Part of [kde-graphics](#).

<https://apps.kde.org/kruler/> || [kruler](#)

## Desktop notifications

See: [Notification servers](#).

## Clipboard managers

See [Clipboard#Managers](#).

## Logout UI

- **clearine** — Beautiful Logout UI for X11 window manager

<https://github.com/okitavera/clearine> || [clearine-git](#)<sup>AUR</sup>

- **nwg-bar** — Configurable button bar for wlroots-based compositors.

<https://github.com/nwg-piotr/nwg-bar> || [nwg-bar](#)<sup>AUR</sup>

- [oblogout](#) — Openbox logout script

<https://launchpad.net/oblogout> || [oblogout](#)<sup>AUR</sup>

- **wlogout** — Logout menu for wayland

<https://github.com/ArtsyMacaw/wlogout> || [wlogout](#)<sup>AUR</sup>

## Text art

See [ASCII art#Software](#).

## See also

### Generic software lists

- [Wikipedia:Portal:Free and open-source software](#)
- [Wikipedia:List of free and open-source software packages](#)
- [Wikipedia:List of GNU packages](#)
- [AlternativeTo](#) - Linux alternatives to popular applications
- [Awesome Linux Software](#) - Collection of Linux applications and tools
- [Linux Alternative Project](#) - Linux equivalents to Windows software
- [Linux Links Directory](#) - Linux applications directory
- [Open Source Alternative](#)<sup>[[dead link](#) 2023-05-20 ⓘ]</sup> - Alternatives to commercial software

### Software lists of other distributions

- [AppImageHub](#)
- [Flathub](#)
- [Snapcraft](#)
- [Debian packages](#) and [screenshots](#)
- [Fedora packages](#)
- [Gentoo packages](#)
- [openSUSE Software](#)
- [Ubuntu packages](#)

### Software **forges**

- [GitHub\(https://github.com/explore\)](https://github.com/explore)
- [GitLab\(https://gitlab.com/explore\)](https://gitlab.com/explore)
- [Launchpad\(https://launchpad.net/\)](https://launchpad.net/)
- [SourceForge\(https://sourceforge.net/\)](https://sourceforge.net/)
- [SourceHut\(https://sourcehut.org/\)](https://sourcehut.org/)

### Specialized software lists

- [GNOME applications\(https://wiki.gnome.org/Apps\)](https://wiki.gnome.org/Apps)
- [KDE's Applications\(https://kde.org/applications/\)](https://kde.org/applications/)
- [awesome-linuxaudio\(https://github.com/nodiscc/awesome-linuxaudio\)](https://github.com/nodiscc/awesome-linuxaudio) - Software for audio/video/live production

- [awesome-selfhosted](https://github.com/Kickball/awesome-selfhosted)(https://github.com/Kickball/awesome-selfhosted) - Network services and web applications
- [awesome-shell](https://github.com/alebcay/awesome-shell)(https://github.com/alebcay/awesome-shell) - Command-line frameworks, toolkits and guides
- [awesome-sysadmin](https://github.com/n1trux/awesome-sysadmin)(https://github.com/n1trux/awesome-sysadmin) - Software for system administrators
- [Inconsolation](https://inconsolation.wordpress.com/index/)(https://inconsolation.wordpress.com/index/) - Lightweight and minimalist applications reviews
- [K.Mandla's blog](https://kmandla.wordpress.com/software/)(https://kmandla.wordpress.com/software/) - Console applications screenshots and reviews
- [Libre Projects](https://libreprojects.net/)(https://libreprojects.net/) - Open source hosted web services
- [LinApp](https://web.archive.org/web/20200530213904/http://lin-app.com/)(https://web.archive.org/web/20200530213904/http://lin-app.com/) - Commercial applications and games for Linux
- [PRISM Break](https://prism-break.org/en/all/)(https://prism-break.org/en/all/) - Software against mass surveillance
- [Privacy Tools](https://www.privacytools.io/)(https://www.privacytools.io/) - Knowledge and tools to protect your privacy against global mass surveillance

### Arch Linux forum threads

- [Arch Linux Forums / LnF Awards 2011](#) - The best Light & Fast apps of 2011
- [Arch Linux Forums / LnF Awards 2012](#) - The best Light & Fast apps of 2012
- [Arch Linux Forums / most popular apps of 2013-2014](#)
- [Arch Linux Forums / most popular apps of 2017+](#) (requires login)