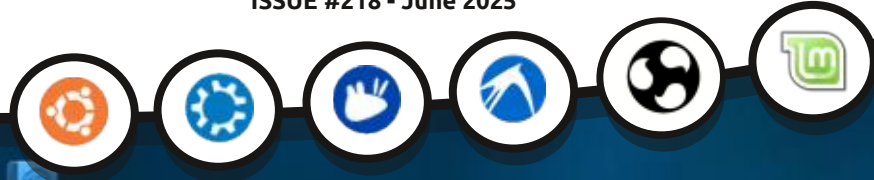




# Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #218 - June 2025



Lubuntu Manual



Network



Trash (Empty)

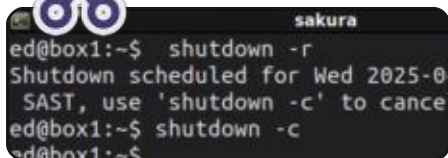


## LUBUNTU & XUBUNTU 25.04 UNDER REVIEW

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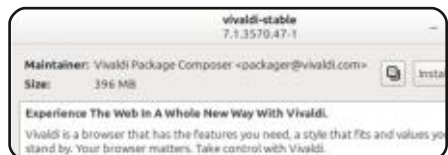


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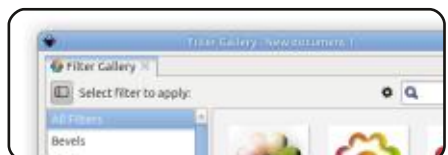
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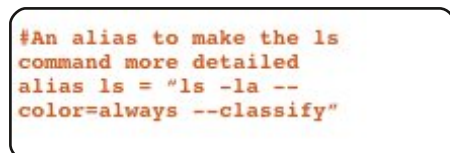
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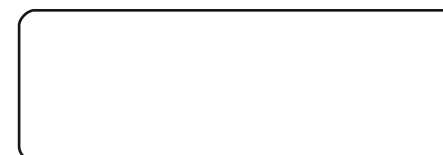
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## WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

Once again, we bring you the usual line up of Latex, Learn About, Trading Up, and Inkscape Bodhi shall return next month.

Under review, this month we have Lubuntu and Xubuntu. Erik gives his opinion on the ApplImage format. I've been pretty lucky with ApplImage files. The odd one or two have given me grief (and needed a --no-sandbox command to run) but with the help of ApplImageLauncher I've been fine.

Uports have released another OTA for Touch. I have to admit, I've been out of the loop with Touch as I don't have any devices that can run it. My BQ tablet and Meizu phone were abandoned in the move to the newer Ubuntu.

**Whilst I remember:** I'm going away for a couple of weeks and might not have access to internet. So don't be surprised if the July issue is maybe a day/week late.

Remember: the **Full Circle Weekly News** is available on **Spotify** and **YouTube**. The more upvotes and reviews you give it on those platforms the more exposure we get. And, we have a Table of Contents which lists every article from every issue of FCM. Huge thanks to **Paul Romano** for maintaining: <https://goo.gl/tpOKqm> and, if you're looking for some help, advice, or just a chinwag: remember that we have a **Telegram** group: <https://t.me/joinchat/24ec1oMFO1ZjZDc0>. I hope to see you there. Come and say hello.

**All the best!**

Ronnie

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## APT PACKAGE MANAGER

### 3.1.0:

19/05/2025

An experimental branch of the Advanced Package Tool package management tool has been released, which will be used as the basis for the stable 3.2 release after stabilization. The new APT branch will be integrated into Debian Unstable and will not be included in the upcoming Debian 13 release.

New features include:

New commands "apt why" and "apt why-not", added "Include" and "Exclude" options to ".sources" files to allow loading only specified packages from the repository (whitelist) or not processing certain

packages in the repository (blacklist). HTTPS support has been added to the dselect utility. For Ubuntu, the command-line utilities include the Solver3 dependency resolution engine by default, which uses a backtracking algorithm to resolve conflicts between dependencies.

<https://mastodon.social/@juliank/114535636195052836>

## DEBIAN 13 ENTERS HARD FREEZE BEFORE RELEASE:

19/05/2025

Debian developers have announced that Debian 13 has entered a pre-release hard freeze, where the process of moving key packages without autopkgtests

from unstable to testing has been completely halted and a phase of intensive testing and fixing of release-blocking issues has begun. The hard freeze is seen as a necessary interim step before a full freeze covering all packages. The full freeze will occur a few weeks before the release, which is expected in the northern hemisphere summer. There are currently 244 critical release-blocking bugs (there were 258 such bugs when Debian 12 went into a hard freeze).

This is the third stage of the freeze - the first stage was completed on March 15th and resulted in the cessation of "transitions" (package updates that require dependency adjustments in other packages, which results in packages being temporarily

removed from Testing) and the cessation of build-essential package updates.

The report from the Debian release team also announced the decision to stop creating official Debian 13 releases for the MIPS64EL platform. At the same time, the RISC-V 64 platform has been added to the list of officially supported platforms, and it has been decided to include it in Debian 13.

<https://lists.debian.org/debian-devel-announce/2025/05/msg00004.html>

## UBUNTU 25.10 TO REPLACE MORE APPS:

20/05/2025

Ubuntu Linux developers have announced changes to the Ubuntu Desktop 25.10 release, scheduled for October 9 this year. The upcoming release will include two new applications by default: the Ptyxis terminal emulator and



# DistroWatch.com

Put the fun back into computing. Use Linux, BSD.

the Loupe image viewer, replacing the previously shipped GNOME Terminal and Eye of GNOME. Ptyxis and Loupe were previously included by default in Fedora Linux.

Loupe is the default viewer in GNOME since GNOME 45, it has a lightweight interface and is optimized for fast image viewing. The glycin library is used to decode and parse image formats. Decoding is performed using sandbox isolation. The GPU is used to speed up rendering.

The Ptyxis terminal emulator, compared to GNOME Terminal, provides built-in capabilities for working with containers using the Toolbox, Distrobox, Podman and JHBuild toolkits. Ptyxis also features additional settings and very high rendering speed due to the use of Vulkan and OpenGL. The interface supports dark and light themes, uses GTK 4 and offers an overview mode for visual navigation through open sessions.

<https://discourse.ubuntu.com/t/ubuntu-desktop-25-10-the-questing-quokka-roadmap/61159>

## RELEASE OF THE LSFUSION 6.0:

20/05/2025

The release of the lsFusion 6.0 project is available. It develops a declarative platform for developing business and web applications. The platform is suitable for developing corporate and accounting applications and can be used as an open and free alternative to the 1C platform. The project code is written in Java and is distributed under the LGPLv3 license. The typical ERP solution for small and medium businesses MyCompany, which uses lsFusion, is distributed under the Apache 2.0 license. Version six focuses on improving the web interface: deep integration with Bootstrap, support for PWA and modern browser APIs, as well as expanding the tools for creating flexible forms and interfaces.

<https://github.com/lsfusion/platform/releases/tag/4.0>

## ALMALINUX 9.6:

21/05/2025

AlmaLinux 9.6 distribution release is available,

synchronized with the new Red Hat Enterprise Linux 9.6 release and containing all the changes proposed in that release. Installation images are prepared for the x86\_64, ARM64, ppc64le and s390x architectures in the form of a bootable (1 GB), minimal (2 GB) and full image (10 GB). Live builds with GNOME, KDE, MATE and XFCE will be formed later, as well as images for Raspberry Pi boards, containers, WSL (Windows Subsystem for Linux) and cloud platforms.

The Synergy repository is also available, which contains packages different from Red Hat Enterprise Linux. Currently, the Synergy repository already contains packages with the Pantheon user environment, developed by the Elementary OS project and the Warpinator utility, designed for encrypted file exchange between two computers.

The AlmaLinux distribution was founded by CloudLinux in response to the premature end of support for CentOS 8 by Red Hat (updates for CentOS 8 will end at the end of 2021, not in 2029 as users expected). The project is supervised by a separate non-profit organization, the AlmaLinux OS

Foundation, which was created to develop on a neutral platform with community participation and using a governance model similar to the Fedora project. The distribution is free for all categories of users. All AlmaLinux developments are published under free licenses.

[https://almalinux.org/blog/2025-05-20-almalinux\\_96\\_release/](https://almalinux.org/blog/2025-05-20-almalinux_96_release/)

## FREEBSD AND RUST:

21/05/2025

The HardenedBSD project, which works to improve FreeBSD's security mechanisms and releases hardened FreeBSD builds, has released the first results to enable the use of FreeBSD user space components written in Rust. The development is being conducted in a separate branch, hardened/current/rust-in-base.

A new build file share/mk/bsd.rust.mk was written to use Rust, allowing Rust applications to be built during the base system environment build. Rust user space components are optional and are located in a separate workspace in the FreeBSD source tree. The Cargo

package manager is used to build Rust applications and dependencies. All dependencies required to build the base system Rust components are located in a separate subdirectory `src/vendor/rust`.

At the time of writing, support is declared only for building and installing Rust applications running in user space. Support for library crate packages is planned for the future. Using Rust in the kernel is not yet supported, as such a feature requires a lot of work and is beyond the scope of the initial prototype.

<https://hardenedbsd.org/article/shawn-webb/2025-05-20/optional-rust-freebsd-support-may-2025-status-report>

## CENTOS AND ROCKY LINUX RISC-V VENTURES:

22/05/2025

Red Hat developers have announced the initial support for the RISC-V architecture in the CentOS Stream 10 repository, which serves as the basis for the development of Red Hat Enterprise

Linux 10. Previously, packages were released for the x86\_64 (x86\_64\_v3 in RHEL 10), Aarch64, ppc64le (POWER9), and s390x (IBM z14) architectures. Red Hat also presented experimental builds of RHEL 10 for RISC-V systems, developed jointly with SiFive.

Currently, most of the patches that solve problems with building and running various packages on riscv64 systems have already been integrated into the CentOS Stream git repository. Some patches have not yet been transferred to the main repository and remain in separate git branches, which are planned to be published on July 1, along with bootable builds ready for running on SiFive HiFive Premier P550 boards. After publishing the builds, a separate Koji server will be launched in the build infrastructure on RISC-V equipment and work will continue on transferring the created fixes to the main projects (upstream).

The Rocky Linux project, aimed at creating a free RHEL build capable of taking the place of the classic CentOS, went further and announced official support for RISC-V systems (riscv64gc) in Rocky Linux 10. Rocky Linux 10 will

support StarFive VisionFive 2 (VF2) and SiFive HiFive Premier P550 boards, as well as launch in the QEMU emulator, similar to RISC-V builds from the Fedora project. The possibility of implementing support for Milk-V and Banana Pi boards is being considered.

The RISC-V architecture has been given the status of alternatively supported and, unlike the primary architectures (x86\_64, Aarch64, ppc64le, and s390x), will not block releases for other architectures. The presence of RISC-V-specific issues in packages will not stop the publication of builds of these packages for other architectures.

Additionally, it is worth noting the initiative of the Alma Linux project to create a version of the EPEL 10 (Extra Packages for Enterprise Linux) repository for the x86-64-v2 architecture. Unlike the RHEL 10 distribution, which supplies packages with optimizations for the x86-64-v3 microarchitecture, the Alma Linux distribution creates separate builds for the x86-64-v2 microarchitecture, which are supported in parallel with the basic x86-64-v3 builds. From now on,

builds for x86-64-v2 in Alma Linux will cover not only the main repository, but also the EPEL repository. Compared to x86-64-v2, support for x86-64-v3 covers the AVX, AVX2, BMI2, FMA, LZCNT, MOVBE, and SXSVE processor extensions. Support for x86-64-v2 allows maintaining compatibility with CPUs older than Intel Haswell and AMD Excavator, designed before 2013.

<https://blog.centos.org/2025/05/initial-centos-support-for-risc-v/>

## AERYNOS DISTRIBUTION DECISIONS:

22/05/2025

The developers of AerynOS, formerly known as SerpentOS, have published a detailed article that details the concept and technical implementation of the project, with a rationale for the architectural decisions made. Project leader Ikey Doherty emphasizes that AerynOS is not just "another Linux distribution," but a platform, foundation, and toolset built with a clear vision.

The main idea of the project is



formulated as a question: "What if an operating system behaved like a modern infrastructure?" AerynOS is presented as an answer to this question - a system built from scratch, rather than following the traditional model of embedded mutations within a distribution. The project draws on the authors' experience in developing other distributions, including Solus and Clear Linux.

As the paper points out, "The performance advantage of glibc over musl is well documented, especially for compute-intensive workloads and applications that require optimal multi-threading performance." The creators emphasize that their goal is to build a working, usable system for a variety of use cases. The concept of "statelessness" - packages are not allowed to contain any files outside the /usr directory. As the developers explain, this approach forces sensible defaults at all levels and eliminates "horrible three-way merge conflicts when upgrading packages." There are no conflicts because everything in /etc and /var is owned by the user, while /usr is exclusively owned by the system. The concept was developed during the times of Clear Linux and Solus,

and AerynOS has taken it further.

The developers note that the current approach of emulating imperative package management is "completely pointless" and "actually introduces more bugs than it solves." Since a new root filesystem is created for each transaction, future plans include creating a new graph for each transaction, abandoning inline changes in favor of a declarative approach similar to Gentoo or Nix.

AerynOS is actively developed, already releasing ISO images with the GNOME environment, is suitable for games (support for NVIDIA drivers, Steam, Flatpak), has real users who note the stability and innovation of the system. According to the developers, the project is in the alpha version stage and is not without problems, but already represents a complete system that "just works".

<https://aerynos.com/blog/2025/03/29/aerynos-the-os-as-infrastructure/>

## LINUX MINT PROJECT CREATED LIBADAPTA: 23/05/2025

The developers of the Linux Mint distribution have published the first release of the libAdapta library, created as a fork of libAdwaita. The first release of libAdapta 1.5 is based on libAdwaita 1.5 and features support for design themes and some additional features. Otherwise, libAdapta supports all the functionality of libAdwaita and provides an identical look and feel to applications by default.

The creation of a fork is explained by the difficulties with the transfer of advanced features developed by the project to the main libAdwaita. As a soft fork, the code base is periodically transferred to new versions of libAdwaita to continue maintaining compatibility, it is considered the optimal solution for Linux Mint. By maintaining their own branch, Linux Mint developers are not limited in the implementation of their ideas and can quickly add changes, regardless of their approval by the libAdwaita developers.

<https://github.com/xapp-project/libadapta/releases/tag/1.5.0>

## UBUNTU 25.10 SWITCHES TO CHRONY BY DEFAULT: 23/05/2025

Ubuntu Linux developers have planned a transition to the Chrony project for precise time synchronization by default, in all Ubuntu 25.10 builds. Previously, Ubuntu used the systemd-timesyncd service, which was decided to be replaced due to the desire to use the NTS (Network Time Security) protocol for cryptographic protection of time synchronization.

The Chrony project provides an independent implementation of NTP client and server, already used for precise time synchronization in Fedora, SUSE/openSUSE, and RHEL. NTS ensures that the client is communicating with the intended NTP server and not a spoofed one. Spoofing an NTP server is dangerous because setting the wrong time can be used to compromise the security of other time-aware protocols, such as TLS and DNSSEC. Changing the time

can lead to incorrect interpretation of certificate validity data.

The Chrony package is already part of the main repository and is used by default in some Ubuntu cloud editions. Work to replace systemd-timesyncd with Chrony will begin on June 2. Including Chrony in builds will bring an additional dependency "libedit2" and will increase the image size by 803 KB. To replace systemd-timesyncd with Chrony in Ubuntu 25.04, you can use the command "apt-mark auto systemd-timesyncd && apt install chrony", and to return to systemd-timesyncd - "apt-mark auto chrony && apt install systemd-timesyncd".

<https://lists.ubuntu.com/archives/ubuntu-devel/2025-May/043355.html>

## UBUNTU SWAY REMIX 25.04 RELEASED:

24/05/2025

The Ubuntu Sway Remix 25.04 distribution is now available, providing a pre-configured and ready-to-use desktop based on the Sway tiled compositing manager. The distribution is an unofficial

edition of Ubuntu 24.10, created with an eye on both experienced GNU/Linux users and beginners who want to try an environment with a tiled window manager without the need for lengthy configuration. Builds for amd64 and arm64 (Raspberry Pi) architectures are available for download.

Sway is a compositing manager that uses the Wayland protocol and is fully compatible with the i3 tiled window manager, as well as the Waybar panel, the PCManFM-GTK3 file manager and utilities from the NWG-Shell project, such as the Azote desktop wallpaper manager, the nwg-drawer full-screen application menu, the nwg-wrapper program for displaying the contents of scripts on the screen (used to display hotkey hints on the desktop), the nwg-look GTK theme, cursor and font settings manager and the Autotiling script, which automatically composes the windows of open applications in the manner of dynamic tiled window managers.

The distribution includes programs with both a graphical interface, such as Firefox, Qutebrowser, Audacious, Transmission, Libreoffice, Pluma

and MATE Calc, and console applications and utilities, such as the Musicrobe music player, MPV video player, Swayimg image viewer, Zathura PDF document viewer, Neovim text editor, Ranger file manager and others.

Another feature of the distribution is the complete refusal to use the Snap package manager, all programs are supplied as regular deb packages. The distribution installer is based on the Calamares framework.

<https://github.com/Ubuntu-Sway/Ubuntu-Sway-Remix/releases/tag/25.04>

## ALT LINUX CREATES TUNER FOR GNOME:

24.05.2025 13:28

Developers from the ALT Linux community have introduced a new app for GNOME - Tuner, aimed at simplifying the expansion of functionality and providing additional settings. (Similar to GNOME Tweak)

The program implements a plugin-based architecture that allows adding new settings

sections, changing the interface, and expanding functionality through the delivery of individual plugins without changing the code of the main application. The libpeas engine, already used in the GNOME applications Gedit and Totem, is used to create plugins.

Tuner's other features include simplified integration with GSettings. Similar to the GNOME Refine application, Tuner has a mechanism for creating widgets using the Blueprint interface construction language. The project code is written in Vala and is distributed under the GPLv3 license. The user interface is built using the libadwaita library, complies with the GNOME HIG (Human Interface Guidelines) recommendations, and can adaptively adjust to the screen size. Templates for developing typical plugins in Vala and Python are available.

<https://thisweek.gnome.org/posts/2025/05/twig-201/%23third-party-projects>



## RUST COREUTILS AND GCC BACKEND:

25/05/2025

The rustc\_codegen\_gcc backend has achieved full bootstrapping of the rustc compiler.

Bootstrapping means that rustc can use a GCC-based code generator to build the rustc compiler itself. The back-end allows using the libgccjit library from the GCC project as a code generator in the rustc compiler, which allows building rust programs for all architectures available in GCC and using GCC-specific optimizations.

The Rust Coreutils 0.1.0 (utils) project, which is an analogue of the GNU Coreutils package written in Rust, is available. The Rust coreutils includes more than a hundred utilities, including sort, cat, chmod, chown, chroot, cp, date, dd, echo, hostname, id, ln and ls. The goal of the project is to create a cross-platform alternative implementation of Coreutils, capable of working on Windows, Redox and Fuchsia platforms. It was decided to use Rust Coreutils by default in Ubuntu, starting with the release of 25.10. Unlike GNU Coreutils, the Rust implementation

is distributed under a permissive MIT license, instead of the copyleft GPL license. In addition, the same team of developers is developing analogues of the util-linux, diffutils, findutils and bsdtails utility sets written in Rust.

[https://www.reddit.com/r/rust/comments/1ktph3c/media\\_the\\_gcc\\_compiler\\_backend\\_can\\_now\\_fully/](https://www.reddit.com/r/rust/comments/1ktph3c/media_the_gcc_compiler_backend_can_now_fully/)

## LINUX KERNEL 6.15

RELEASED:

26/05/2025

After two months of development, Linus Torvalds released kernel 6.15. Changes include: audit mechanism in Landlock, memory mapping pinning mode, fwctl subsystem, Nova driver for NVIDIA GPUs, host system implementation for the Hyper-V hypervisor, support for zoned storage devices in XFS, network subsystem optimization, removal of the HIGHMEM64G option, scrub checking in Bcachefs, the ability to control operations via io\_uring.

The new version includes 15945 fixes from 2154 developers, the

patch size is 59 MB (the changes affected 13596 files, 739608 lines of code were added, 312168 lines were deleted). The previous release had 12115 fixes from 1984 developers, the patch size was 39 MB. About 41% of all changes presented in 6.15 are related to device drivers, about 16% of changes are related to updating code specific to hardware architectures, 13% are related to the network stack, 5% - to file systems and 4% to internal kernel subsystems.

<https://lkml.org/lkml/2025/5/25/345>

## RELEASE OF ARMBIAN 25.5 AND DIETPI 9.13:

27/05/2025

The Armbian 25.5 Linux distribution has been released, providing a compact system environment for single-board computers with ARM, RISC-V and x86 processors, supporting various models of Raspberry Pi, Odroid, Orange Pi, Banana Pi, Helios64, pine64, Nanopi and Cubieboard based on Allwinner, Amlogic, Actionsemi, Freescale / NXP,

Marvell Armada, Rockchip, Radxa and Samsung Exynos processors.

Debian and Ubuntu are used to build with, but all components are completely rebuilt using our own assembly system with optimizations enabled to reduce size, increase performance, and apply additional protection mechanisms. For example, the /var/log partition is mounted using zram and stored in RAM in compressed form with data flushed to the drive once a day or upon shutdown. The /tmp partition is mounted using tmpfs.

The project supports more than thirty variants of Linux kernel builds for different ARM and ARM64 platforms. An SDK is provided to simplify the creation of your own system images, packages and distribution editions. ZSWAP is used for swapping. When logging in via SSH, an option is provided to use two-factor authentication. The package includes a box64 emulator, which allows you to run programs compiled for processors based on the x86 architecture. Ready-made packages are offered for running user environments based on KDE, GNOME, Budgie, Cinnamon, i3wm, Mate, Xfce and Xmonad.

<https://www.armbian.com/newsflash/armbian-25-5/>

## RELEASE OF LUANTI 5.12.0:

27/05/2025

After three months of development, Luanti 5.12.0 has been released. It is a free cross-platform sandbox game engine that allows you to create games similar to Roblox, (Some games on the engine seek to clone Minecraft.) but with voxel mechanics, using various blocks for players to jointly build various structures and buildings that form a semblance of a virtual world. The gameplay provided by the engine depends entirely on a set of mods created in the Lua language. The engine is written in C++ using the IrrlichtMt 3D library (a fork of Irrlicht). Luanti code is distributed under the LGPL license, and game resources are licensed under the CC BY-SA 3.0 license. Ready-made assemblies are generated for various Linux distributions, Android, FreeBSD, Windows and macOS.

<https://www.luanti.org/>

## ALMALINUX 10.0:

27/05/2025

The AlmaLinux 10.0 distribution is out, synchronized with Red Hat Enterprise Linux 10.0 and containing all the changes proposed in this release. Installation images have been prepared for the x86\_64\_v3, x86\_64\_v2, ARM64, ppc64le and s390x architectures in the form of a bootable (864 MB), minimal (1.4 GB) and full image (7.3 GB). Live builds with GNOME, KDE, MATE and Xfce will be created later, as well as images for Raspberry Pi boards, containers, WSL (Windows Subsystem for Linux) and cloud platforms.

The distribution is binary compatible with Red Hat Enterprise Linux where possible and can be used as a replacement for RHEL 10 and CentOS 10 Stream. The AlmaLinux distribution was founded by CloudLinux in response to the premature end of support for CentOS 8 by Red Hat (updates for CentOS 8 will end at the end of 2021, not in 2029 as users expected). The project is supervised by a separate non-profit organization, the AlmaLinux OS

Foundation, which was created to develop on a neutral platform with community participation and using a governance model similar to the Fedora project. The distribution is free for all categories of users. AlmaLinux is published under free licenses.

<https://almalinux.org/blog/2025-05-27-welcoming-almalinux-10/>

## THUNDERBIRD 139.0:

28/05/2025

Thunderbird 139.0, a community-developed email client based on Mozilla technologies, is now available. Thunderbird 139 is built on the Firefox 139 code base and is an intermediate version, with updates released before the next release. Thunderbird 128.11.0 is in the ESR branch, a long-term support branch with updates released throughout the year.

<https://www.thunderbird.net/en-US/thunderbird/139.0/releasesnotes/>

## KAOS 2025.05:

28/05/2025

KaOS 2025.05 has been released, a rolling release distribution aimed at providing a user friendly desktop, based on the latest KDE releases and applications using Qt. Specific design features include the placement of a vertical panel on the right side of the screen. The distribution is being developed with an eye on Arch Linux, but maintains its own independent repository with over 1,500 packages. KaOS offers a number of its own graphical utilities in this release. XFS is used as the default file system. Builds are published for x86\_64 systems (3.8 GB). On systems with UEFI, Systemd-boot is used for booting.

<https://kaosx.us/news/2025/kaos05/>

## OPENSUSE ALTERNATIVE INSTALLER AGAMA 15:

29/05/2025

The openSUSE project developers have introduced the Agama 15 installer, which is being developed to replace the classic

SUSE and openSUSE installation interface, and is notable for separating the user interface from the internal YaST components. Agama supports the use of various front-ends, like one for managing the installation via a web interface. The code of the installer components is distributed under the GPLv2 license and is written in Ruby, Rust, and JavaScript/TypeScript.

To test the new installer, live builds have been created for the x86\_64, ppc64le, s390x, and ARM64 architectures. The builds include the beta version of openSUSE Leap 16, continuously updated builds of openSUSE Tumbleweed and openSUSE Slowroll, and a container-based MicroOS edition. The installer will be shipped with openSUSE Leap 16 (alpha version available) and SUSE Linux Enterprise Server 16.

The goals of Agama development are: to eliminate the existing limitations of the graphical interface; to expand the possibilities of using YaST functionality in other applications; to move away from being tied to a single programming language; to stimulate the creation of

alternative settings by community members.

The basic interface for managing the installation is built using web technologies. The web interface is written in JavaScript using the React framework and PatternFly components. The messaging service, as well as the built-in http server, are written in Ruby.

<https://agama-project.github.io/blog/2025/05/27/agama-15>

## NVIDIA PROPRIETARY DRIVER RELEASE 575.57.08:

30/05/2025

NVIDIA has published the release of the NVIDIA proprietary driver 575.57.08 (the first stable release of the new 575.57 branch). The driver is available for Linux (ARM64, x86\_64), FreeBSD (x86\_64), and Solaris (x86\_64). NVIDIA 575.x became the tenth stable branch after NVIDIA open-sourced its kernel-level components. The source code for the kernel modules nvidia.ko, nvidia-drm.ko (Direct Rendering Manager), nvidia-

modeset.ko, and nvidia-umv.ko (Unified Video Memory) from the new NVIDIA branch, as well as the common, non-OS-specific components they use, are hosted on GitHub. The firmware and user-space libraries, such as the CUDA, OpenGL, and Vulkan stacks, remain proprietary.

<https://github.com/NVIDIA/open-gpu-kernel-modules/releases/tag/575.57.08>

## RELEASE OF ALPINE LINUX 3.22:

30/05/2025

Alpine Linux 3.22 is now available, a minimalist distribution built on the Musl system library and the BusyBox utility suite. The distribution has increased security requirements and is built with SSP (Stack Smashing Protection). OpenRC is used as an initialization system, and its own apk package manager is used to manage packages. Alpine is used to generate official Docker container images and is used in the PostmarketOS project. Bootable ISO images (x86\_64, x86, armhf, aarch64, armv7, ppc64le, s390x,

riscv64, and loongarch64) are available in six flavors: standard (240 MB), network bootable (268 MB), extended (1 GB), virtual machine (64 MB), and Xen hypervisor (1 GB).

<https://alpinelinux.org/posts/Alpine-3.22.0-released.html>

## RADEON LINUX DRIVERS:

30/05/2025

AMD has released the AMD Radeon Software for Linux driver set 25.10.1, which runs on top of the AMDGPU module developed in the main Linux kernel. The release is notable for the implementation of official support for the open RADV and RadeonSI drivers for the Vulkan and OpenGL graphics APIs provided by the Mesa project. Previously offered proprietary drivers for Vulkan and OpenGL have been excluded from the set.

The AMF (Advanced Media Framework), which offers hardware-accelerated video encoders and decoders, has also been excluded from the composition. Instead of AMF, it is

proposed to use the VA-API (Video Acceleration API) software interface in conjunction with Mesa for hardware acceleration of video encoding and decoding.

<https://www.amd.com/en/resources/support-articles/release-notes/RN-AMDGPU-UNIFIED-LINUX-25-10-1.html>

## RELEASE OF VERA CRYPT 1.26.24:

31/05/2025

VeraCrypt 1.26.24 has been released. It is a fork of the defunct TrueCrypt disk partition encryption system. VeraCrypt is notable for replacing the RIPEMD-160 algorithm used in TrueCrypt with SHA-512 and SHA-256, increasing the number of hashing iterations, simplifying the build process for Linux and macOS, and eliminating issues identified during the audit of TrueCrypt source code. The code developed by the VeraCrypt project is distributed under the Apache 2.0 license, while borrowings from TrueCrypt continue to be distributed under the TrueCrypt License 3.0. Ready-made builds are generated for

Linux, FreeBSD, Windows, and macOS.

[https://github.com/veracrypt/VeraCrypt/releases/tag/VeraCrypt\\_1.26.24](https://github.com/veracrypt/VeraCrypt/releases/tag/VeraCrypt_1.26.24)

## CENTOS REPOSITORIES AND RHEL 10 TEST BUILDS FOR RISC-V PUBLISHED:

31/05/2025

The CentOS project has announced the preparation of git repositories with changes required to build and run the distribution on systems with RISC-V processors. RISC-V-specific changes are available in the project's git repositories in the "c10s-rv" branches. In the near future, the prepared changes will be transferred from separate repositories to the main CentOS Stream, which will allow the formation of standard CentOS Stream builds for RISC-V.

Meanwhile, Red Hat has opened access to a ready-to-test Red Hat Enterprise Linux 10 build for the SiFive HiFive Premier P550 RISC-V platforms. In addition, a 12.3 GB archive of source code for the

packages used in this build has been published. The data is available to registered users of the Red Hat Customer Portal.

<https://blog.centos.org/2025/05/centos-for-risc-v-now-available/>

## RELEASE OF DPSCREENOCR 1.5.0:

01/06/2025

The release of the program for optical character recognition dpScreenOCR 1.5.0, using Tesseract, is available. Ready-made builds are formed for Linux and Windows (package repositories for Debian and Ubuntu are also available). The program code is written in C++ and is distributed under the zlib license.

dpScreenOCR allows you to capture an arbitrary area of the screen using a global hotkey and the mouse, the text in that capture will then be 'recognized'. Depending on the user's choice, the program can copy the recognized text to the clipboard, add it to the history, or send it to an external program.

<https://github.com/danpla/dpscreenocr/releases/tag/v1.5.0>

## THE LINUX KERNEL BRANCH DRAMA:

01/06/2025

Linus Torvalds demanded that the kernel.org administrator immediately block the account of Kees Cook, the former chief sysadmin of kernel.org and leader of the Ubuntu Security Team, which maintains 14 security-related subsystems in the kernel. The reason for the blocking was a pull request to include changes in the 6.16 kernel branch, referring to a git repository in which the authorship information of some commits was changed.

The git repository maintained by Kees contained dummy commits that had "Linus Torvalds" as the author and committer, but Linus had not added them. For example, there was a commit under Linus's name on Kees's branch that was a duplicate of another commit on Linus's branch, but with a different SHA1 hash. Both commits looked identical except for the signature information.



The changes did not look like a random error during the "git rebase" operation, as they contained incorrect information about the author of the commit. Linus Torvalds considered this to be evidence of potentially malicious activity and initiated a block on accepting any changes from Kees until the reasons for such manipulations were determined and Kees's system was confirmed not to be compromised.

Kees replied that he did not understand how this could have happened. He had previously encountered problems when trying to merge several of his git branches, after which he tried to solve them with the "git rebase" operation, but it did not seem to help. All this happened against the background of a crashed SSD drive, which gave errors during copying. Kees believed that after the crash he managed to restore the state of his repositories, but apparently this is not the case. To restore integrity, Kees intends to recreate his branches from individual patches. Kees believes that the most likely reason for the author substitution that occurred was an unsuccessful

attempt to restore the repository after it was damaged.

Linus is not satisfied with this explanation, because he thinks the changes to the commit history in Kees's repository look very much like deliberate actions, not an accidental failure. Rebasing the commit history with "git rebase" could explain the committer overwrite, but Linus cannot understand how such a "git rebase" could have been done by mistake.

The rewriting of one or two commits could have been written off as a mistake, but Kees's repository had rewritten over six thousand merge commits, 330 of which had Linus as the author, even though those commits were not from Linus's git tree. The changes made look more like a script running than the result of data corruption on the drive, since they require a separate re-creation of a copy of each commit.

Kees assured Linus that he had not done this on purpose and would not have done such experiments without warning (for example, the previous experiment to cause commit collisions was cleared with Linus). He had

performed several manual operations on the repository this week and would now try to figure out what had gone wrong and reproduce the problem. For example, Kees had rebased the for-next/hardening and for-linus/hardening git trees, using the "master" branch instead of rc2, unlike previous rebases. During this operation, he had modified the scripts to test push requests.

UPDATE 1: Kees Cook posted another message stating that the problem was most likely caused by using the "git-filter-repo" utility, which rewrites the commit history of a repository, in combination with the "b4 trailers" command, which is designed to get and apply trailers to commits (e.g. "Signed-off-by:").

UPDATE 2: Konstantin Ryabtsev confirmed that the problem was caused by careless use of this program (Kees did not pay attention to the warning in the output and ignored some correctness checks). Konstantin is 100% sure that the change was made without malicious intent. Kees's access to kernel.org has been restored. A check will be added to the b4 utility to prevent similar situations in the future and

to prohibit rewriting commits whose author is different from the current user.

[https://lore.kernel.org/all/CAHk-%3Dwj4a\\_CvL6-%3D8gobwScstu-qJpX4XbX\\_hvcE%3De9zaQ\\_9A@mail.gmail.com/](https://lore.kernel.org/all/CAHk-%3Dwj4a_CvL6-%3D8gobwScstu-qJpX4XbX_hvcE%3De9zaQ_9A@mail.gmail.com/)

## RELEASE OF pfSense CE 2.8.0:

02/06/2025

A new release of pfSense CE 2.8.0 (Community Edition) has been published. The distribution is based on the FreeBSD code base with some code from the m0n0wall project and the pf packet filter. An iso image for the amd64 architecture has been prepared for download.

The distribution is managed via a web interface. Captive Portal, NAT, VPN (IPsec, OpenVPN) and PPPoE can be used to administer user access to a wired or wireless network. A wide range of options for limiting bandwidth, limiting the number of simultaneous connections, filtering traffic and creating fault-tolerant configurations based on CARP is

supported. Operation statistics are displayed as graphs or in a table. Authorization is supported by a local user database, as well as via RADIUS and LDAP. The user interface has been rewritten to use the free ACB (Automatic Configuration Backup) service, which allows you to automatically save backup copies of settings to the Netgate cloud storage (backup copies are transmitted encrypted). The ability to change the device key used for encryption has been added.

<https://www.netgate.com/blog/netgate-releases-pfsense-community-edition-version-2.8.0>

## GNOME OS DISTRIBUTION ENTERS TESTING ON REAL HARDWARE:

02/06/2025

The initiative to transform GNOME OS from a distribution for GNOME testers and developers into a general-purpose distribution suitable for everyday use by regular users has entered a new phase. The readiness of GNOME OS nightly builds for testing by developers and advanced users has been

announced. The main goal of testing is to hone the system while using GNOME OS on real hardware as the main OS.

GNOME OS uses the systemd-sysupdate component for atomic system updates and flatpak to install additional programs. A prototype installer is used for installation, which does not yet contain all the expected features. The size of the iso image offered for download is 1.9 GB.

To encourage GNOME OS testing, a contest has been established, where the winner will receive a OnePlus 6 smartphone with a firmware based on postmarketOS. The winner will be the user who has collected the most points, awarded based on the calculation: 10 points for daily use of GNOME OS on the main computer for at least 4 weeks; 1 point for each correct bug report; 3 points for each accepted pull request; 5 points for each fix of an issue posted in the bug tracking system.

<https://blogs.gnome.org/tbernard/2025/06/01/summer-of-gnome-os/>

## ORACLE LINUX 9.6

### RELEASED:

03/06/2025

Oracle has published Oracle Linux 9.6, created, based off of Red Hat Enterprise Linux 9.6 and fully binary compatible with it. Installation iso images of 13 GB and 1.3 GB in size, prepared for the x86\_64 and ARM64 (aarch64) architectures, are offered for download. For Oracle Linux 9, unlimited and free access to the yum repository with binary package updates with the elimination of errors and security issues is open. Separately supported repositories with sets of Application Stream and CodeReady Builder packages are also prepared for download.

In addition to the kernel package from RHEL (based on kernel 5.14), Oracle Linux offers its own kernel, Unbreakable Enterprise Kernel 8 (UEK 8), based on Linux kernel 6.12 and optimized for working with Oracle industrial software and hardware. The kernel source code, including a breakdown into separate patches, is available in Oracle's public Git repository. The Unbreakable Enterprise Kernel is installed by default, is positioned as

an alternative to the standard package with the RHEL kernel, and provides a number of advanced features, like DTrace integration and improved Btrfs support. In addition to the additional kernel, Oracle Linux 9.6 and RHEL 9.6 are completely identical in functionality.

<https://blogs.oracle.com/linux/post/oracle-linux-9-6-now-generally-available>

## RELEASE OF RAWTHERAPEE 5.12:

03/06/2025

The release of RawTherapee 5.12 has been published. It provides tools for editing photos and converting RAW images. The program supports a large number of RAW file formats, including cameras with Foveon and X-Trans sensors, and can also work with the Adobe DNG standard and with the JPEG, PNG and TIFF formats (up to 32 bits per channel). The project code is written in C++ using GTK and is distributed under the GPLv3 license. Builds are available for Linux (ApplImage), macOS and Windows.

RawTherapee provides a set of tools for color correction, white balance, brightness and contrast adjustment, as well as automatic image quality enhancement and noise removal. Several algorithms for image quality normalization, lighting correction, noise reduction, detail enhancement, shadow reduction, edge and perspective correction, automatic removal of dead pixels and exposure changes, sharpening, scratch and dust removal have been implemented.

Interestingly, they added a new "Dehaze" option to the Raw Black Points tool, which sets the black level in each channel to the intensity of the darkest point in the image.

<https://rawtherapee.com/2025/05/rawtherapee-5.12-released/>

## IGL 1.1 GRAPHICS LIBRARY RELEASED:

03/06/2025

Meta has released the IGL 1.1 (Intermediate Graphics Library) graphics library, which provides a universal low-level API

for GPU management. The IGL API covers typical GPU functionality and allows you to create cross-platform applications that can run on top of the OpenGL, Metal, and Vulkan graphics APIs on Android, iOS, Linux, macOS, and Windows systems, as well as use WebGL for rendering on the Web when compiling the application into WebAssembly intermediate code. The IGL library is written in C++ and is distributed under the MIT license.

For rendering, back-ends are provided for the Metal 2+, OpenGL 2.x, OpenGL 3.1+, OpenGL ES 2.0+, Vulkan 1.1, and WebGL 2.0 APIs. The library is suitable for developing games, 3D modeling systems, and any other projects that require high-quality graphics support. IGL code is optimized to achieve maximum performance even when working with complex and detailed models.

The API structure is designed with ease of use in mind and implements typical concepts that are understandable to most developers familiar with one of the graphics APIs. IGL is close to Vulkan and WebGPU in terms of abstraction level, but is free of specific engine-specific features.

The library supports extensions, which can be used to integrate additional functionality and implement emerging non-standard developer needs.

<https://github.com/facebook/igl/releases/tag/v1.0.0>

## RELEASE OF /e/OS 3.0: 03/06/2025

The /e/OS 3.0 mobile platform, focused on user privacy, has been released. The platform was founded by Gaël Duval, the creator of Mandrake Linux. The project supports 221 smartphone models and creates firmware builds for the most popular ones. Based on OnePlus, Fairphone, Teracube and Pixel smartphones, proprietary device editions have been prepared, distributed with pre-installed /e/ OS firmware under the Murena One, Murena 2, Murena Fairphone 4/5, Murena Teracube 2e and Murena Pixel 5/7 brands.

The /e/OS firmware is being developed as a fork of the LineageOS platform (based on Android), freed from the connection to Google services and

infrastructure to exclude the transmission of telemetry to Google servers and to increase the level of privacy. Among other things, implicit sending of information is blocked, for example, requests to Google servers when checking network availability, resolving DNS and determining the exact time.

The package includes the microG package, which offers independent analogues of Google services, which allows you to do without installing proprietary components. For determining the location via Wi-Fi and base stations (without GPS), the UnifiedNlp layer is capable of working via BeaconDB, OpenWlanMap, openBmap, OpenCellID, lacells.db and other alternative services. Instead of the Google search engine, the Murena Find metasearch service is offered, based on the Qwant search engine, a metasearch service based on a fork of the Searx engine, anonymizing the queries sent.

To synchronize the exact time, instead of accessing the Google NTP server, requests are sent to servers from the NTP Pool collection and instead of Google's DNS servers (8.8.8.8), the DNS

servers of the current provider are used. The web browser has an ad blocker and scripts for tracking movements enabled by default. To synchronize files and application data, a proprietary service has been developed that is compatible with the Nextcloud-based infrastructure. The server components are based on open source software and are available for installation on user-controlled systems.

The user interface includes its own environment for launching applications BlissLauncher ], an improved notification system, a new lock screen and a different style design. BlissLauncher uses a set of automatically scalable icons developed for /e/OS and a separate selection of widgets (for example, a widget for displaying the weather forecast).

The project is also developing its own authentication manager, allowing you to use a single account (user@murena.io) for all services, registered during the first installation. The account can be used to access your environment from other devices or via the Web. Murena Cloud provides 1GB free of charge for storing your data, synchronizing applications and

backups.

The included applications include: the 'Mail' email client (a fork of K9-Mail), the Cromite web browser (based on Chromium), the OpenCamera camera app, the QKSMS instant messaging app, the nextcloud-notes note-taking system, the MJ PDF PDF viewer, the opentasks scheduler, the Magic Earth map app, the gallery3d photo gallery, the file manager and the App Lounge application catalog.

<https://gitlab.e.foundation/e/os/releases/-/releases/v3.0-t>

## UBUNTU TOUCH OTA-9 FOCAL:

03/06/2025

The OTA-9 Focal (over-the-air) firmware has been released, developed by the UBports project, which took over the development of the Ubuntu Touch mobile platform after Canonical stepped away from it. This is the eighth release of Ubuntu Touch, based on the Ubuntu 20.04 package base. The project also develops an experimental port of the Unity 8 desktop, which has been renamed

Lomiri.

Ubuntu Touch OTA-9 Focal update will be generated in the coming days for Asus Zenfone Max Pro M1, F(x)tec Pro1 X, Fairphone 3/3+/4, Google Pixel 3a/3a XL, JingPad A1, OnePlus 5/5T/6/6T, OnePlus Nord N10 5G/N100, Sony Xperia X, Vollaphone X/22/X23 and Xiaomi Poco X3 NFC / X3, Xiaomi Poco M2 Pro, Xiaomi Redmi Note 9 Pro/Pro Max/9S, Volla Phone Quintus and Volla Tablet. Compared to the previous release, builds for Lenovo Tab M10 HD 2nd Gen and Xiaomi Redmi 9/9 Prime have been added.

The development of the new release focused on preparing for the transition to the newer LTS branch of Ubuntu.

<https://ubports.com/en/blog/ubports-news-1/post/ubuntu-touch-ota-9-focal-release-3962>

## PEERTUBE 7.2 HAS BEEN RELEASED:

04/06/2025

PeerTube 7.2 has been released. It is designed to create

independent decentralized video hosting and broadcasting systems that are an alternative to services such as YouTube, Dailymotion, and Vimeo. The content distribution network created with PeerTube is based on linking visitors' browsers together and using P2P communications. The project code is distributed under the AGPLv3 license.

PeerTube allows you to launch your own video distribution server and connect it to a common federated network. Visitors participate in the delivery of content and have the ability to subscribe to channels and receive notifications about new videos, regardless of which server they use. The PeerTube federated network is formed as a community of interconnected small video hosting servers, each with its own administrator and rules.

The ActivityPub protocol is used for interaction between servers in a federated network. The user ID is "@username@server\_domain". When viewing a video, data is loaded, if possible, by accessing the browsers of other visitors viewing the same content..



In addition to distributing traffic between users watching videos, PeerTube allows servers to cache videos from other authors. This creates a distributed network of not only clients, but also servers, and ensures fault tolerance. In addition to distributing finished videos, there is support for live streaming with content delivery in P2P mode. Standard programs such as OBS can be used to manage streaming .

Initially, the PeerTube platform was based on the use of the BitTorrent client WebTorrent, launched in the browser and using WebRTC technology to organize a direct P2P communication channel between browsers. Later, instead of WebTorrent, the HLS (HTTP Live Streaming) protocol was used in conjunction with WebRTC, allowing adaptive flow control depending on the bandwidth.

<https://joinpeertube.org/news/release-7.2>

## ROCKY LINUX 9.6 RELEASED: 04/06/2025

The release of Rocky Linux 9.6 was presented, aimed at creating a free RHEL build that can take the place of the classic CentOS. The distribution is binary compatible with Red Hat Enterprise Linux and can be used as a replacement for RHEL 9.6 and CentOS 9 Stream. Support for the Rocky Linux 9 branch will be carried out until May 31, 2032. Rocky Linux installation iso images are prepared for the x86\_64, aarch64, ppc64le and s390x (IBM Z) architectures. Additionally, live builds with GNOME, KDE, Cinnamon and Xfce desktops are offered , published for the x86\_64 architecture.

As with classic CentOS, the changes made to Rocky Linux packages come down to getting rid of the Red Hat brand and removing RHEL-specific packages such as redhat-\*, insights-client, and subscription-manager-migration\*. An overview of the list of changes in Rocky Linux 9.6 can be found in the RHEL 9.6 announcement.

Among the changes specific to Rocky Linux, it is worth noting the

delivery of openldap 2.6.8, PyQt-builder 1.12.2 and spirv-headers 1.5.5 packages in a separate plus repository, and in the NFV repository of packages for virtualization of network components, developed by the NFV (Network Functions Virtualization) SIG group. Rocky Linux also supports the CRB (Code Ready Builder with additional packages for developers, replaced PowerTools), RT (packages for working in real time), HighAvailability , ResilientStorage , SAP and SAP HANA (packages for SAP HANA) repositories. An experimental package with the Linux kernel - kernel-uki - has been added, providing a unified image UKI (Unified Kernel Image), certified with a separate key for SecureBoot.

<https://rockylinux.org/news/rocky-linux-9-6-ga-release>

## SEAMONKEY 2.53.21: 05/06/2025

The SeaMonkey 2.53.21 suite of Internet applications has been released. It combines a web browser, email client, NNTP conference client, news feed

aggregation system (RSS/Atom) and WYSIWYG HTML page editor Composer in one product. The ChatZilla IRC client, DOM Inspector web developer toolkit and Lightning calendar planner are offered as pre-installed add-ons. The new release includes fixes and changes from the current Firefox code base (SeaMonkey 2.53 is based on the Firefox 60.8 browser engine with security fixes and some improvements ported from the current Firefox branches).

<https://blog.seamonkey-project.org/2025/06/05/seamonkey-2-53-21-is-out/>

## CANONICAL TO END BAZAAR SUPPORT ON LAUNCHPAD: 05/06/2025

Canonical has announced that it will no longer support the Bazaar version control system in Launchpad, the Ubuntu development platform used to collaborate on code, track bugs, review changes, build and host packages. Launchpad initially supported version control only through Bazaar. In 2015, Launchpad

added support for Git, which has since become the primary change control system for code.

The last release of Bazaar was published by Canonical in 2016, after which development slowed down and the project was never ported to Python 3 (the release of Bazaar 2.8, which was expected to switch to Python 3, remained in the planning stage). Bazaar and Git have similar functionality and after the widespread distribution of Git and the decline in popularity of Bazaar, there is no point in continuing to provide hosting of Bazaar repositories in Launchpad. Keeping such hosting afloat requires significant resources for development and infrastructure, which could be spent on more useful things.

In 2018, Bazaar enthusiasts founded a fork - Breezy (brz), which ported it to Python 3 and added optional support for the Git storage format. Breezy combines the capabilities of decentralized (git/hg) and centralized version control systems (cvs/svn), and supports features such as Subversion-style checkout of repository contents, separate branches for working on new features in the Mercurial style,

and the ability for multiple developers to collaborate on a single working copy of the repository, similar to Git. The system continues to be actively developed - the latest release of Breezy 3.3.12 was published two weeks ago.

Launchpad will deprecate Bazaar in two stages. The first stage will see Launchpad disable the web front-end used to navigate code in Bazaar repositories. Log analysis has shown that almost no one uses this interface anymore, and almost all requests are related to bot activity. The second stage will see the code hosting back-end disabled, which will make it impossible to pull, push, and merge Bazaar repositories hosted in Launchpad. The launch date for the first stage has not yet been determined (it was said to be coming soon). The second stage is scheduled for September 1, 2025. Launchpad users should migrate their repositories from Bazaar to Git before September 1.

<https://discourse.ubuntu.com/t/phasing-out-bazaar-code-hosting/6218>

## RELEASE OF WXWIDGETS 3.3.0:

06/06/2025

After three years of development, the cross-platform wxWidgets 3.3.0 toolkit has been released, allowing you to create graphical interfaces for Linux, Windows, macOS, UNIX-like systems, and mobile platforms. The toolkit is written in C++ and is distributed under the free wxWindows Library License, approved by the Free Software Foundation and the OSI organization. The license is based on the LGPL and allows you to set your own conditions for distributing derivative works in binary form.

In addition to C++ support, wxWidgets provides bindings for most popular programming languages, including PHP, Python, Perl, Haskell, and Ruby. The interface in applications using wxWidgets has a native look and feel for the target system, thanks to the use of system APIs rather than a simulated GUI.

wxWidgets 3.3.0 is positioned as a development branch, where new features are developed for the next

stable release 3.4.0. At the same time, the wxWidgets 3.3.0 branch is marked as suitable for use in working projects - the difference from stable branches is that in intermediate releases of development branches, changes to the ABI and API that violate compatibility are allowed. Changes that break compatibility are isolated and, in general, the 3.3 branch is almost completely compatible with wxWidgets 3.2 at the API level.

<https://github.com/wxWidgets/wxWidgets/blob/master/docs/publicity/announce.txt>

## REDOX OS ADDS SUPPORT FOR X11, GTK 3, AND MESA3D EGL:

06/06/2025

The developers of the Redox operating system, written using the Rust language and microkernel concept, announced the implementation of support for the X11 protocol in the Orbital display server developed by the project, which uses the iced library. The added feature allows you to run applications using X11 in Redox

without making changes to the code. The implementation of X11 support in Orbital is conceptually similar to the use of XWayland in Wayland-based environments. The implementation also uses the DRI backend to improve rendering performance, which does not yet fully implement support for hardware graphics acceleration.

Among the achievements related to the graphics stack, the implementation of GTK 3 library support in Redox and the provision of Mesa EGL (libEGL) support, which allowed for faster rendering of X11 applications, are also noted. A separate project is being developed to port Wayland support to Redox. It is assumed that the code created for launching X11 applications will be used in the future to implement Wayland support.

The project develops its own package manager, a set of standard utilities (binutils, coreutils, netutils, extrautils), the ion command shell, the relibc standard C library, the vim-like sodium text editor, a network stack, and a file system. Configuration is specified in the Toml language. For compatibility with existing applications, a POSIX layer is provided, allowing many programs to be run without porting.

You can test Redox using daily updated builds for virtual machines and real hardware (aarch64, i686, riscv64gc, x86\_64). Supported hardware includes USB input devices (keyboards, mice, touchpads), graphics output via VESA BIOS API or UEFI GOP (GPU drivers are not supported), AC'97 and Intel HD Audio sound chips, SATA (AHCI, IDE) and NVMe.

Support for Wi-Fi and USB storage devices is not yet ready.

<https://www.redox-os.org/news/this-month-250531/>

## FLOWBLADE VIDEO EDITOR 2.22:

07/06/2025

The multi-track video editor Flowblade 2.22 is now available. It is designed to compose videos from individual videos, audio files and images. The editor provides tools for trimming clips down to individual frames, using filters, defining your own order of application of tools, adjusting the behavior of the timeline, compositing images (for example, you can rotate, gradually replace and create transition effects).

The project code is written in Python and distributed under the GPLv3 license. It is available as a Flatpak. The MLT framework is used to manage video editing. The FFmpeg package is used to process various video, audio and image formats. The interface is built using PyGTK. The NumPy library is used for mathematical calculations, and PIL is used for image processing. More than 50 image filters and more than 30 sound filters are provided. In addition, it is possible to use plugins with video effects from the Frei0r collection, as well as LADSPA sound plugins and G'MIC image filters.

<https://github.com/jliljeb/flowblade/releases/tag/v2.22>

## LINUX FOUNDATION DEVELOPS FAIR:

07/06/2025

The Linux Foundation has introduced the FAIR (Federated and Independent Repositories) project, which provides a decentralized alternative to the WordPress plugin and theme distribution ecosystem. FAIR allows you to create your own repositories



# DistroWatch.com

*Put the fun back into computing. Use Linux, BSD.*



and mirrors for plugin delivery on your servers, independent of the centralized WordPress.org hosting. The code is written in PHP and is distributed under the GPLv2+ license.

FAIR can be delivered both as a standalone plugin and as a FAIR Distro distribution, which includes the WordPress platform with pre-installed FAIR components. Using FAIR allows you to create separate infrastructures that are not dependent on possible blocking and protected from package substitution in the centralized catalog. The need for an independent tool for delivering add-ons arose after an incident in which the owner of the official plugin catalog Wordpress.org replaced the ACF plugin with his own fork and blocked access to the add-on catalog from WP Engine and everyone who discussed creating a WordPress fork.

<https://www.linuxfoundation.org/press/linux-foundation-announces-the-fair-package-manager-project-for-open-source-content-management-system-stability>

## HYPRLAND REMOVED FROM DEBIAN:

08/06/2025

The Hyprland composite server and related packages such as hyprland-protocols and hyprutils have been removed from the Debian Testing repository and will not be included in the final stable release of Debian 13. The Debian Unstable branch retains the Hyprland packages, but they are still based on the legacy 0.41 release.

The reason for excluding Hyprland from the next stable release was a request from the maintainer, who stated that the version of Hyprland 0.41.2 supplied in the Debian package was far behind the current state of the project ( 0.49 ) and it was impossible to provide support for the older version throughout the life cycle of Debian 13.

The Hyprland project is under active development and regularly creates new releases with changes that do not preserve backward compatibility. Supporting the old version of Hyprland by the Debian package maintainer in such

conditions is greatly complicated. The migration of packages to the new release is hampered by the fact that Hyprland 0.42 stopped using the wlroots library in favor of its own implementation of the Wayland protocol and the Aquamarine rendering library .

<https://tracker.debian.org/news/1648117/hyprland-removed-from-testing/>

## NETWORK SECURITY TOOLKIT 42:

08/06/2025

The release of the NST 42 (Network Security Toolkit) Live distribution was announced. It is designed to analyze network security and monitor the operation thereof. The bootable ISO image (x86\_64) is 5 GB. A special repository has been prepared for Fedora Linux users, which makes it possible to install everything created within the NST project into an already installed system. The distribution is based on Fedora and allows installation of additional packages from external repositories compatible with Fedora Linux.

The distribution includes a large selection of applications related to network security (for example: Wireshark, NTop, Nessus, Snort, NMap, Kismet, TcpTrack, Etherape, nsttracroute, Ettercap, etc.). A special web interface has been prepared to manage the security verification process and automate the calling of various utilities, which also integrates a web front-end for the Wireshark network analyzer. The distribution's graphical environment is based on FluxBox.

<https://sourceforge.net/p/nst/news/2025/06/nst-version-42-14476-released/>

## SWAY USER ENVIRONMENT 1.11:

09/06/2025

After 7 months of development, the Sway 1.11 compositing manager has been released. It is built using the Wayland protocol and is compatible with the i3 tiling window manager and the i3bar panel. The project code is written in C and is distributed under the MIT license.



Sway allows you to arrange windows on the screen logically rather than spatially. Windows are arranged in a grid that optimally uses the screen space and allows you to quickly manipulate windows using only the keyboard. You can use Sway as a transparent replacement for i3, using Wayland instead of X11.

To create a complete user environment, the following accompanying components are offered: swayidle (background process with standby mode implementation), swaylock (screen saver), mako (notification manager), grim (creating screenshots), slurp (selecting an area on the screen), wf-recorder (video capture), waybar (application panel), virtboard (on-screen keyboard), wl-clipboard (working with the clipboard), wallutils (desktop wallpaper management).

Sway is being developed as a modular project built on top of the wlroots library, which contains all the basic primitives for a composite manager. Wlroots includes backends for abstracting access to the screen, input devices, rendering without direct access to OpenGL, interaction with KMS/DRM,

libinput, Wayland and X11 (a layer is provided for launching X11 applications based on Xwayland). In addition to support for C/C++, bindings are provided for Scheme, Common Lisp, Go, Haskell, OCaml, Zig, Python and Rust.

<https://github.com/swaywm/sway/releases/tag/1.11>

## NEW LTS BRANCH OF MARIADB 11.8:

09/06/2025

**M**ariaDB 11.8.2 is released and is marked as the first stable release of the 11.8 branch. MariaDB 11.8 is a long-term support release and will be supported for at least 5 years. MariaDB 12.0.1 is also available as a release candidate.

The MariaDB project is a fork of MySQL that maintains backward compatibility and features additional storage engines and advanced features. MariaDB development is overseen by the independent MariaDB Foundation, following an open and transparent development process that is independent of individual vendors. MariaDB is shipped as a

replacement for MySQL in many Linux distributions (RHEL, SUSE, Fedora, openSUSE, Slackware, OpenMandriva, ROSA, Arch Linux, Debian) and is used in major projects such as Wikipedia, Google Cloud SQL and Nimbuzz.

<https://mariadb.com/kb/en/mariadb-12-0-1-release-notes/>

## FREEBSD 14.3 RELEASED:

10/06/2025

**A**fter six months of development, FreeBSD 14.3 has been released. Installation images have been prepared for the amd64, i386, powerpc, powerpc64, powerpc64le, powerpcspe, armv7, aarch64, and riscv64 architectures. Additionally, builds have been prepared for virtualization systems (QCOW2, VHD, VMDK, raw) and cloud environments Amazon EC2, Google Compute Engine, and Vagrant.

The next FreeBSD 14.4 release is scheduled for March 2026. The current FreeBSD 14.3 release will be supported until June 30, 2026, and the previous FreeBSD 14.2 release will be supported until

September 30, 2025. Overall, the FreeBSD 14 branch will be supported until November 30, 2028, and the FreeBSD 13.x branch until April 30, 2026. The first release of the next major FreeBSD branch, FreeBSD 15, which will drop support for 32-bit architectures (except armv7 and COMPAT\_FREEBSD32 mode), is scheduled for December 2025.

<https://www.freebsd.org/releases/14.3R/announce/>

## UBUNTU DROPS X11 SESSION SUPPORT IN GNOME:

10/06/2025

**T**he autumn release of Ubuntu 25.10 will drop support for the X11-based GNOME session and leave only the Wayland-based session launch options on the login screen. The ability to launch X11 applications using XWayland remains unchanged. The distribution will also continue to ship packages with X.org components and alternative desktop environments using X11, which can be installed from the repository.

The reasons cited for removing the X11 session include the GNOME project's plans to deprecate X11 and Ubuntu's long-term strategy to provide a secure, high-performance, and modern desktop environment. Maintaining both X11 and Wayland sessions results in technical debt, increases maintenance costs, and limits the ability to innovate effectively.

In the fall release of GNOME 49, the GNOME Display Manager (GDM), which provides the login screen, decided to disable the X11 session by default. The complete removal of the code for running an X11-based session from GNOME in a realistic scenario is expected in the GNOME 50 release, scheduled for spring next year. An ideal scenario is also mentioned in which the X11 code may be removed in

GNOME 49 if no new problems or bugs are discovered during the process of disabling X11.

It is noted that the Wayland-based session in Ubuntu has been stabilized and has reached a mature state suitable for most typical tasks - Wayland support in NVIDIA proprietary drivers has been improved, a more robust security model has been implemented, the isolation of the graphics stack has been strengthened, the desktop environment has been brought to readiness for everyday use, and touchscreen and hi-DPI support has been improved.

<https://discourse.ubuntu.com/t/ubuntu-25-10-drops-support-for-gnome-on-xorg/62538>

## GNOME TO INCREASE DEPENDENCE ON SYSTEMD: 11/06/2025

Adrian Vovk, the creator of the Atomically updated carbonOS distribution and installer for GNOME OS, as well as one of the developers of systemd-homed and systemd-sysupdate, announced changes to GNOME that will increase the project's dependence on systemd. In the upcoming GNOME 49 and 50 releases, some of the native components for launching the login screen will be replaced with standard systemd capabilities, which will require the creation of new layers for delivering GNOME in distributions and operating systems that do not use systemd. By removing old code in favor of standard systemd capabilities, will simplify maintenance, rid the project of

workarounds and allow for the implementation of additional functionality, like saving and restoring sessions.

Since 2015, GNOME has used the systemd-logind session manager, which replaced ConsoleKit. Distributions that do not support systemd use elogind, can get a stripped-down version of logind independent of systemd, or patches that return support for ConsoleKit. Such workarounds for working without systemd are not taken into account or tested during the development of GNOME, so their functionality depends on third-party enthusiasts.

In future releases of GNOME, the GDM display manager will additionally use the userdb infrastructure provided by systemd, replacing its own AccountsService. GNOME and systemd themselves do not support running more than one graphical session for the same user. However, GDM can display multiple login screens at the same time to run multiple graphical sessions, which is useful for remote desktop access and on multi-seat systems with multiple monitors and input devices. This functionality was implemented in GDM 15 years ago



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as a temporary workaround and is not compatible with the modern dbus-broker, so it was decided to move to a new implementation that uses systemd-userdb to dynamically allocate accounts and run each login screen instance under a unique user.

Also, it was decided to remove the implementation of its own service manager from GNOME, which was used in gnome-session as a fallback handler for starting GNOME services in environments without systemd. The built-in service manager has remained almost unchanged for the last 17 years and the only reason it was not removed was its use in GDM to start the login screen. After switching GDM to use systemd to start the login screen, the project had no reason to support its own built-in service manager, which interferes with the implementation of the ability to save and restore sessions.

<https://blogs.gnome.org/adrianvovk/2025/06/10/gnome-systemd-dependencies/>

## ROSA FRESH SERVER 13.0:

11/06/2025

The company NTC IT ROSA has published the ROSA Fresh Server 13.0 distribution, built on the Rosa 13 platform. The release is aimed at enthusiasts and is positioned as an experimental compact server distribution with a text interface. When using a text installer, the distribution can work on computers or virtual machines with 1 GB of RAM. An installation iso image of 2 GB (x86\_64) has been prepared for download.

ROSA Fresh Server is suitable not only for creating servers, but also for building your own workstation. For quick installation, there are sets for installing KDE Plasma 6 (task-plasma6), KDE Plasma 5 (task-plasma5), GNOME (task-gnome) and LXQt (task-lxqt). Depending on the user's needs, one can install a minimal system if required.

<https://forum.rosa.ru/viewtopic.php?t%3D11497>

## ROCKY LINUX 10.0

RELEASED:

12/06/2025

The Rocky Linux 10.0 distribution has been released, developing a free build of Red Hat Enterprise Linux, capable of replacing the classic CentOS. The distribution is binary compatible with Red Hat Enterprise Linux and can be used as a replacement for RHEL 10 and CentOS 10 Stream. Support for the Rocky Linux 10 branch will be provided until 2035. Rocky Linux installation iso images are prepared for the x86-64-v3, aarch64, ppc64le (IBM POWER), s390x (IBM Z) and riscv64 architectures. Additionally, live builds with GNOME and KDE desktops, published for the x86\_64 architecture, are offered.

The Rocky Linux distribution is being developed under the auspices of the Rocky Enterprise Software Foundation (RESF), which is registered as a non-profit corporation. The owner of the organization is Gregory Kurtzer, the founder of CentOS, but the management functions in accordance with the adopted charter are delegated to the board of directors, to which the

community elects participants involved in the work on the project. In parallel, a commercial company Ctrl IQ was created to develop extended products based on Rocky Linux and support the community of developers of this distribution, which received \$ 26 million in investments. Companies such as Google, Amazon Web Services, GitLab, MontaVista, 45Drives, OpenDrives and NAVER Cloud have joined the development and financing of the project.

<https://rockylinux.org>

## WARZONE 2100 IN YOUR BROWSER:

12/06/2025

On the 20th anniversary of the first open release of the project, a web version of the RTS game Warzone 2100 was presented, which can be launched in any browser that supports WebAssembly and WebGL 2. Among other things, the game can be launched in a browser on iPad tablets and Android devices equipped with a relatively large screen. The web version has a single-player mode, including the



original campaign and battle.

To run the game on stationary systems, assemblies for Linux, Windows, macOS and FreeBSD continue to be distributed. Stationary machine builds are distinguished by higher quality graphics, support for multiplayer games, the ability to use add-ons and mods. The game was originally developed by Pumpkin Studios and released to the market in 1999. In 2004, the source code was opened under the GPLv2 license, and on June 11, 2005, the first open release was formed.

<https://wz2100.net/news/warzone-2100-web-edition/>

## WAYLAND-PROTOCOLS

### 1.45:

13/06/2025

The wayland-protocols 1.45 package is out, containing a set of protocols and extensions that complement the core Wayland protocol and provide the capabilities needed to build composite servers and user environments.

Wayland-Protocols 1.45 includes 4 new protocols (two in the "staging" category and two experimental):

ext-background-effect - apply effects to semi-transparent parts of a Wayland surface, such as background blur.

pointer-warp - Allows an application to instantly move the pointer to a specified position.

xx-session-management - restore window state for interrupted sessions (e.g. after compositing manager crash).

xx-input-method - development of a new protocol for using text input methods.

All protocols consistently go through the development, testing and stabilization phases. After the development stage is completed ("unstable" category), the protocol is placed in the "staging" branch and officially included in the wayland-protocols set, and after testing is completed, it is moved to the stable category. Protocols from the "staging" category can already be used in composite servers and clients where the functionality associated with them is required. Unlike the "unstable" category, "staging" prohibits making changes that break compatibility.

<https://www.mail-archive.com/wayland-devel@lists.freedesktop.org/msg43591.html%0D%0A>

## DEVELOPMENT OF JEMALLOC HAS BEEN DISCONTINUED:

13/06/2025

The author of the jemalloc memory management library has announced that he is ceasing development of the project and has moved the GitHub repository to archive mode, allowing read-only access. The jemalloc library offered an alternative implementation of malloc functions, optimized for reducing fragmentation and working on multiprocessor systems. In 2005, the library was included in FreeBSD, and in 2007, it was used in Firefox.

In 2009, the author of jemalloc moved to Facebook, where the library was used in internal projects. In 2017, the author of jemalloc left Facebook, and the development was continued by the remaining team from Facebook. After renaming to Meta, the company's priorities changed, the library's



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development stalled, and the development focused only on internal needs. The public code base has degraded over time, and significant refactoring is now required to eliminate the accumulated technical debt. The author of jemalloc is not ready to spend his time on refactoring, and therefore decided to wind down the development.

<https://jasone.github.io/2025/06/12/jemalloc-postmortem/>

## KDE HAS ADDED SUPPORT FOR XDG-PIP:

14/06/2025

Nate Graham, a quality assurance developer for the KDE project, has published the latest KDE development report. The most notable changes being

developed for the KDE Plasma 6.5 release are:

Adding support for the experimental Wayland protocol xdg-pip (picture-in-picture), which allows for the correct display of permanently visible floating windows with multimedia content, such as the "picture-in-picture" window in Firefox. The code for supporting the xdg-pip protocol was recently added to the Firefox code base, which is the basis for release 141.

In the settings, the invert and scale settings have been moved to the "Accessibility" page, where they are more appropriate than on the desktop effects page.

The Spectacle screenshot program now includes a hint that you can stop recording a screencast by pressing the same key combination used to start

recording.

Breeze styles provide effects for animating clicks on switches in QtQuick-based applications and on configurator pages.

Widgets for managing device connections, setting up a network connection, and configuring Bluetooth have been moved to the standard style of section headers.

When using Wayland, support for rearranging virtual desktops via the Pager widget has been implemented. Rearrangement operations in overview mode and the Pager widget have been synchronized.

KWin combines the interdependent effects of blur and changing the background contrast - the Blur effect uses the BackgroundContrast shader.

Improved search in the Emoji

picker interface - the search field is now shown constantly, and the search itself covers the full set of characters, not just the content of the current page.

KDE Gear 25.04.3 fixes a thumbnailer crash that could occur when using certain widget styles on X11 systems.

<https://blogs.kde.org/2025/06/14/this-week-in-plasma-wayland-pip-and-accessibility/>

## NITRUX PROJECT MOVES TO HYPRLAND:

14/06/2025

The developers of the Nitrox distribution have announced the end of development of the NX Desktop desktop, which was an add-on for KDE Plasma 5. All nx-desktop repositories on GitHub have been moved to archive mode and NX Desktop support has been discontinued. The reason cited is the closure of the long-term support program for KDE Plasma releases.

According to the new plan, the Nitrox distribution will be migrated to a user environment built using



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the Hyprland composite server, the Waybar panel, and the Wlogout system shutdown menu. The SDDM display manager will be replaced by the greetd login manager and the QtGreet login screen for session startup.

The Hyprland composite server uses Wayland, supports tiling, classic free-form window placement, tabbed window grouping, pseudo-mosaic mode, and full-screen window deployment. Features include: dynamically created virtual desktops; screen element layout modes; global hotkey handling; touchpad/touchscreen gesture control; rich interface features (gradients in window frames, background blur, animation effects, and shadows); and plugin-based expansion.

The Linux kernel in the Nitrox distribution was going to be switched from using Liquorix patches to the kernel variant from the CachyOS project. The reason was the lack of a patch in Liquorix to enable the PSI (Pressure Stall Information) mechanism, which allows user space to analyze information about the waiting time for receiving various resources

(CPU, memory, input/output) to accurately assess the level of system load and the nature of the slowdown. PSI support is necessary for the operation of Waydroid, a layer for running Android applications.

The NX AppHub toolkit and the AppBox format will be used to install additional programs, which are now presented as more preferable than AppImage packages. Distribution updates are planned to be published twice a month. The nuts utility (Nitrox Update Tool System) will continue to be used to install updates. More distant plans for the future include replacing SquashFS with DwarFS and creating builds for ARM64 devices, in addition to the previously supported x86\_64 architecture.

<https://nxos.org/news/news-farewell-nx-desktop-and-plasma/>

## DANISH GOVERNMENT PLANS MOVE TO OPEN SOURCE:

14/06/2025

Caroline Stage, Minister for Digitalisation in the Danish

Government, confirmed that the government and regional authorities have agreed on a digital sovereignty strategy. In the first phase of the new strategy, the Danish Ministry of Digitalisation will stop using Microsoft products in favour of open source software. LibreOffice will be used as the office suite. Half of the employees will be transferred to LibreOffice within the next month. The plan is to have all employees transferred to open source software by the end of the year.

The municipal authorities of Copenhagen and Aarhus have also decided to abandon Microsoft as their main IT service provider. The reasons cited for the switch include financial reasons, dependence on a company with a near-monopoly position in the market, and the worsening geopolitical climate due to the US President's statements about wanting to gain control over Greenland. The financial reasons are related to the fact that the costs of purchasing Microsoft software have increased by 72% in five years - from NOK 313 million in 2018 to NOK 538 million in 2023.

<https://www.windowscentral.com/software-apps/windows-11/its-the-year-of-linux-at-least-for-denmark-heres-why-the-countrys-government-is-dumping-windows-and-office-365>

## KALI LINUX 2025.2 RELEASED:

16/06/2025

The release of the Kali Linux 2025.2 distribution is presented. It is based on Debian and is designed to test systems for vulnerabilities, conduct security audits, analyze residual information and identify the consequences of attacks. All original developments created for the distribution are distributed under the GPL license and are available through a public Git repository. ISO images of 646 MB and 4.2 GB are prepared for download. Builds are available for x86\_64 and ARM64 architectures. Xfce, KDE and GNOME desktops are available to choose from.

Kali offers a selection of tools for computer security professionals, ranging from web application testing and wireless

network penetration tools to RFID chip data readers. The package includes a collection of exploits and about 400 specialized security testing utilities, such as Aircrack, Maltego, SAINT, Kismet, Bluebugger, Btcrack, Btscanner, Nmap, p0f. In addition, the distribution includes password cracking tools (Multihash CUDA Brute Forcer) and WPA key cracking tools (Pyrit), which use NVIDIA and AMD GPU's for acceleration.

<https://www.kali.org/blog/kali-linux-2025-2-release/>

## SECURONIS LINUX 3.0:

16/06/2025

The Securonis Linux 3.0 distribution has been released, focusing on maintaining privacy and enhancing security. The distribution is based on the Debian "Testing" package base, is preconfigured to send all traffic only through the Tor network (I2P is optionally supported) and includes a selection of changes to settings and components to improve security. MATE is offered as a desktop. You can install the distribution for everyday work or boot into Live

mode to test. The size of the iso image is 2.5 GB.

<https://securonis.github.io/release-notes.html>

## ARCH LINUX MOVES TO 64-BIT WINE BUILDS:

17/06/2025

The developers of the Arch Linux distribution have announced the default build of Wine and Wine-Staging in Wow64 (64-bit Windows-on-Windows) mode, which enables the execution of 32-bit Windows applications on 64-bit Unix systems. The delivery of 64-bit Wine builds has made it possible to stop using the multilib repository with 32-bit library versions for wine and wine-staging packages.

The reason for the change is cited as synchronization with changes in the main Wine project related to simplifying packaging and shortening the dependency chain. Among the problems that may arise after migrating to Wow64 are mentioned a decrease in OpenGL performance for 32-bit Windows programs and the need to

recreate existing 32-bit Wine prefixes.

<https://archlinux.org/news/transition-to-the-new-wow64-wine-and-wine-staging/>

## QT CREATOR 17:

18/06/2025

The release of Qt Creator 17, an integrated development environment for creating cross-platform applications using the Qt library, has been published. Both the development of classic programs in C++ and the use of the QML language are supported, in which JavaScript is used to define scenarios, and the structure and parameters of interface elements are specified by CSS-like blocks. The new version is available as an update in the Qt Online Installer. Offline installers under a commercial license can be found on the Qt Account Portal, and open-source packages can be found on the corresponding downloads page. This is a free update for all users.

<https://www.qt.io/blog/qt-creator-17-released>

## ONLYOFFICE 9.0:

19/06/2025

ONLYOFFICE DocumentServer 9.0 is now available, implementing a server for ONLYOFFICE online editors and collaborative work. Editors can be used to work with text documents, tables, and presentations. For collaborative work on your own hardware, you can also use the Nextcloud Hub platform, which provides full integration with ONLYOFFICE. Ready-made builds are created for Linux, Windows, and macOS. The project code is written in JavaScript using web technologies and is distributed under the free AGPLv3 license.

ONLYOFFICE claims full compatibility with MS Office and OpenDocument formats. Supported formats include: DOC, DOCX, ODT, RTF, TXT, PDF, HTML, EPUB, XPS, DjVu, XLS, XLSX, ODS, CSV, PPT, PPTX, ODP. You can expand the functionality of editors through plugins, for example, plugins are available for creating templates and adding videos from YouTube. The open product



ONLYOFFICE DesktopEditors is being developed separately, built on a single code base with online editors and combining client and server components in one set, designed for self-sufficient use on the user's local system and capable of working without access to an external service.

Also the capabilities of the built-in AI assistant have been expanded.

<https://www.onlyoffice.com/blog/2025/06/onlyoffice-docs-9-0-released>

### AMAZON'S OPEN 3D ENGINE RELEASED:

19/06/2025

The Open 3D Foundation (O3DF), a non-profit organization, has released the Open 3D Engine 25.05

(O3DE), an open-source 3D game engine suitable for developing modern AAA games and high-fidelity simulators capable of running in real time and providing cinematic-level quality. The code is written in C++ and published under the Apache 2.0 license. There is support for Linux, Windows, macOS, iOS and Android platforms.

The engine includes an integrated game development environment, a multi-threaded photorealistic rendering system Atom Renderer with support for Vulkan, Metal and DirectX 12, an extensible 3D model editor, a character animation system (Emotion FX), a prefab development system, a real-time physics simulation engine and mathematical libraries using SIMD instructions. A visual programming environment (Script Canvas), as well

as the Lua and Python languages, can be used to define game logic.

The project is initially designed to be adaptable to your needs and has a modular architecture. In total, more than 30 modules are offered, supplied as separate libraries, suitable for replacement, integration into third-party projects and use separately. For example, thanks to modularity, developers can replace the graphics renderer, sound system, language support, network stack, physics engine and any other components.

<https://o3de.org/o3de-25-05-0-release-june-18-2025/>

### RELEASE OF MODICIA OS: 20/06/2025

The formation of new builds of the MODICIA distribution, created in 1998, has been announced. The distribution is based on Debian and offers a selection of applications for musicians, designers and video creators. The user environment is built using the Cinnamon desktop environment. The project maintains an application catalog of about 1000 packages. The size of the iso image, capable of running in live mode, is 5.1 GB (x86\_64).

<https://sourceforge.net/p/modicia-o-s/news/general/thread/0a4a821379/>

### LIBXML2 MAINTAINER DROPS SPECIAL TREATMENT FOR VULNERABILITY FIXES

21.06.2025 11:12

Nick Wellnhofer, the maintainer of libxml2, announced that he would now treat vulnerabilities as regular bugs. Vulnerability reports would not be prioritized, but would be fixed as time allowed.



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Information about the nature of the vulnerability would be made publicly available immediately, without waiting for a patch to be created and for the fix to be distributed across distributions and operating systems. Nick also resigned from his role as the maintainer of libxslt and expressed doubt that anyone would be willing to take on its support.

According to Nick, libxml2 is not of a quality level suitable for use in browsers and operating systems. However, large companies such as Apple, Google, and Microsoft have started using libxml2 in their operating systems and products. Such actions are called irresponsible, and the work being done is an attempt to get rid of symptoms, not to eliminate the cause of the problems. According to Nick, it would be better for the project if the mentioned companies stopped using libxml2.

<https://gitlab.gnome.org/GNOME/libxml2/-/issues/913>

## **XLIBRE 25.0 RELEASE, X.ORG SERVER FORK:**

21/06/2025

The first release of the XLibre project, which develops the X.Org Server fork, is presented. The release is positioned as having beta quality and is intended for testing and identifying possible flaws. XLibre 25.0 includes ABI changes, i.e., for correct operation, rebuilding of X11 drivers is required. The project is open to cooperation with distributions and is ready to integrate patches accumulated in the process of maintaining packages with the X.Org server.

<https://lists.x.org/archives/xorg-devel/2025-June/059400.html>

## **KDE PLANS TO END X11 SESSION SUPPORT:**

22/06/2025

Nate Graham, a quality assurance developer for the KDE project, has summarized the plans for KDE Plasma support running in X-server environments. The end of X11 session support is

seen as inevitable, but the timing is not set and is unlikely to happen in the next two years. In March, when the kwin composite server was split into kwin\_x11 and kwin\_wayland, it was expected that kwin\_x11 would be deprecated in the KDE 7 branch.

The timing of the end of X11 session support depends on how quickly the developers can resolve the issues specific to the Wayland-based session, such as limitations in saving and restoring the position of Wayland application windows, shortcomings in graphics tablet support, and the inability to use the global menu in non-Qt applications. It is expected that by the time X11 session support is ended, the Wayland session will contain all previously available features, and even the most demanding X11 users should not notice a loss of functionality.

<https://pointieststick.com/2025/06/21/about-plasmas-x11-session>

## **BILL GATES, DAVE CUTLER AND LINUS TORVALDS MEET:**

22/06/2025

Mark Russinovich, the author of the NTFS driver for DOS and the CTO of Microsoft Azure, hosted a joint dinner with Bill Gates, Dave Cutler and Linus Torvalds. This was Linus' first meeting with the founder of Microsoft and creator of the Windows NT, RSX-11M, VAXELN and VMS operating systems. It is noted that no important decisions regarding the kernel were made at the dinner, but perhaps this will happen at the next meeting. LOL

[https://www.linkedin.com/posts/markrussinovich\\_i-had-the-thrill-of-a-lifetime-hosting-dinner-activity-7341857033932914691-f5Kw](https://www.linkedin.com/posts/markrussinovich_i-had-the-thrill-of-a-lifetime-hosting-dinner-activity-7341857033932914691-f5Kw)



# COMMAND & CONQUER

Written by Erik

Last issue we covered more settings and why I like to add byobu to the mix. My proofreader friend asked me why I don't continue and do an overview of terminator. I mean if I have to cover terminator and tilix I will, but I feel that, if I do, we are moving laterally and not towards my goal of getting done before Christmas... :) Instead of me heading down that road, I'd rather ask our readers if they would like an article on Terminator and Tilix. I mean we have done an article on Wezterm before, but it was more of a "make wezterm your own" sort of article. I can make it separate and not part of command-and-conquer, as I want us to do more "command" on here and less applications. We were looking at

foreground and background processes and command chains, which is fundamental. We ran through a bunch of commands in the beginning and I want to return there.

When we run our commands or scripts, they become processes in the shell. We can see what processes we have running with the "ps" command.

If we look at this screenshot (below), we can see that I have a

```
edd@gift: ~  
edd@gift:~$ ps -aux | grep -i btop  
edd    2474920  1.1  0.0 278648 22400 pts/0    Sl+  10:54   0:23 btop  
edd    2483072  0.0  0.0 17812  2240 pts/2    S+   11:28   0:00 grep --color=auto -i btop  
edd@gift:~$
```

terminal open and I am running btop and I ran ps. If you want to see which process launched which process, you need to append "f" (so ps -af ; not to be confused with F!). This is not live though; it is a snapshot of what was running when I hit enter. If you hit the ps man page, it will tell you that it accepts unix style options with one dash, BSD style options with no dash, and gnu style with double-dashes. Meaning "almost" anything goes, you can type ps aux or ps -aux and it will work. As a newbie, just remember, this is not the case in other Linux commands. In my early days of using Linux, the only way I knew to get the environment variables was with ps. If you have no idea what I'm talking about, then in your terminal, type: ps e

Do not file this away as not helpful; for instance, in the latest

MacOS, they have hidden the sandboxd process from the process viewer. (It is what makes older Mac's slow as treacle flowing down the road as it uses 100% CPU on one of your cores and also heating it up and getting it to choke.) So the only way to kill it now, is to go and find the process ID and kill it in the terminal.

I'm using btop as an example here, but this would be how one would look for the sandboxd process on a Mac, as it is more-or-less the same. I like the "top" derivatives, like htop, btop, etc, as they are live. This does not mean that we cannot get the same information via ps. Though this is a bit convoluted, I can show you how.

I just took the top 5 here, but you can clearly see that my game, ADOM, is at the beginning, that

```
edd@gift: ~  
edd@gift:~$ ps -a  
  PID TTY          TIME CMD  
 921506 tty2        00:00:00 gnome-session-b  
2474920 pts/0        00:00:01 btop  
2475156 pts/2        00:00:00 ps  
edd@gift:~$
```

Pid	Program	User	MemB	Cpu%
2488082	adom	edd	364M	9.2
921607	gnome-s	edd	608M	0.3
958082	firefox	edd	662M	0.3

corresponds with btop. (I was just not fast enough in my image capture to show 18% CPU use as the game launched). The same goes for RAM, I can just choose column "6" instead.

The quickest way to find a PID I know of is via 'pgrep'. Now that you know the long way (and the how), let me do it the short way. If I type: `pgrep btop` -I just get the PID back, nothing else. Try this yourself on one of your own processes.

OK, once we find the culprit, we can kill it (stab-stab) No? The kill command actually sends a signal to

a process. (It sounds a lot less exciting if you put it this way.) Remember we spoke about `SIGHUP` previously, that is a signal. If we use keyboard shortcuts, like `CTRL+C` or `CTRL+D`, it also just sends off a signal and they are numbered. The one we are interested in is `SIGKILL` with an ID of 9. (Should be 47... don't you agree?).

I already know that my btop process has an PID of 2474920, as you can see in previous screenshots. I can now issue the kill command and give it '-9' (`SIGKILL`) as my option, followed by the PID. That would be: `kill -9 2474920`

-And just like that, btop is gone. 'Gracefully' would be the: -15 (`SIGTERM`) option, but sometimes you just need violence, amiright?

I always go and look at the PID, just in case there is more than one process running, but if you are confident, you could use the 'pkill' command and simply type: `pkill btop` (`SIGTERM` by default). If you want to know the PID of the process that pkill just closed, you can specify the -e option. Maybe I'm living in a bubble, but I have never used any of the other options and I don't think any of you other n00bs will, it is just usually easier with `htop`.

But, as I said, in my previous example with the Mac, as the PID keeps changing, one would need to extract the PID before feeding it to the kill command if you were to

script it. Now you see why it would be important. Running a script to kill a nasty process is quicker than manually finding and killing it each time. The one we did not talk about is `killall`. The reason \*I like `killall` is not because video games made me violent, but I can use the -u option to specify a user name and kill only the processes that particular user owns. This is particularly handy on systems with a lot of users. If you are the only user of your system, you would probably not use this option. `Killall` can work like `kill` with a PID or like `pkill` with just the process name. So typing: `killall btop` -is acceptable.

There are lots of processes waiting to die. No, seriously, practice!

If you have any complaints about the violence, [misc@fullcirclemagazine.org](mailto:misc@fullcirclemagazine.org)

PID	PPID	%CPU	%MEM	VSZ	SSZ	T	TIME	COMMAND
2486478	352	0.7	3419008	501060	?	Sl	11:39 5:53	/snap/adom/45/adom
2487085	300	0.0	24040	5760	pts/2	R+	11:41 0:00	ps -aux
921607	7.2	0.9	8749360	638476	?	Ssl	Jan14 187:58	/usr/bin/gnome-shell
958082	5.5	1.0	5263236	679144	?	Sl	Jan14 143:24	/snap/firefox/5437/usr/l
ib/firefox/firefox								https://www.patreon.com/oguzhaninan
2484072	2.2	0.1	1416364	113428	?	SLl	11:32 0:11	/usr/bin/mpv --no-quiet



**Erik** has been in IT for 30+ years. He has seen technology come and go. From repairing washing machine sized hard drives with multimeters and oscilloscopes, laying cable, to scaling 3G towers, he's done it.





# HOW-TO

Written by Erik

## Learn About Pt5

We chatted about the boot process in the last article, let's quickly look at shutting down. On my virtual machines, I usually just click the big red "x" and choose "send the shutdown signal" hehehehehehe. However, when you remote to a machine in a data centre, it is not that easy. You may never know, one day you may set up a VPS and it needs a reboot after some updates. Maybe you ran out of space and need to make some? I don't know, there are lots of reasons to shut down a Linux box or reboot it. Failing hardware is the number one reason. Usually, one should not need to. I went to a monkey-pality, where the Red Hat mail server had been running for nine years, without rebooting (as it should!). With all the security intrusions lately, you may even need to shut it down to get rid of pests. From the command line, you can use the 'shutdown' or 'poweroff' command, depending on the type of Linux server you connect to.

If you look at the man page for 'poweroff', you will also see the

```
[ OK ] Finished Shuts down the "live" preinstalled system cleanly...rogress polling.
[ OK ] Reached target Final Step.
      Starting Halt...
[ 23.557710] sd-umoun[1768]: Failed to unmount /oldroot: Device or resource busy
[ 23.558520] sd-umoun[1769]: Failed to unmount /oldroot/dev/pts: Device or resource busy
[ 23.559381] sd-umoun[1770]: Failed to unmount /oldroot/dev: Device or resource busy
[ 23.560916] shutdown[1]: Failed to finalize file systems, ignoring
```

deprecated command 'halt'. They did not used to be, but these days they are the same. I usually use the mnemonic "halt, who goes there". You see, when you type halt at the command line, you will usually be asked for your password. Poweroff, not so much. This is not the case for all Linux distributions though. Also, halt is problematic, usually just hanging up Ubuntu.

You see, when you shut down or reboot, the system goes through a list of things to make sure that it does a clean shutdown, flushing caches, making sure processes exit cleanly, etcetera. If you yank out the power cord, this does not happen.

The same goes for the reboot command; on Ubuntu, it is instant, like 'poweroff -r now'. (If you do not use 'now', the default is 60 seconds)

The 'shutdown' command is the one you should be using on Ubuntu. The shutdown command incorporates all the others with a hyphen/tack, so for instance, shutdown -r is equal to reboot. But! It is safer. Using shutdown on a multi-user system should let everyone know that the system is being shut down. When in doubt, use shutdown! The shutdown command has its own quirks though, that you need to be aware of. When you type 'shutdown' to halt the system, you can use -h and -H; however, one requires

authentication.

My suggestion is to navigate to the man page, and try the options out for yourself, as they differ in different flavours and versions of Ubuntu.

As to the time, you can set the time in minutes or use the twenty-four hour clock to set when you want the system to reboot. For example: shutdown -r 21:00 for it to reboot at 9pm.

My poor cousin has a lot of power failures, and I have to help

```
sakura
ed@box1:~$ shutdown -r
Shutdown scheduled for Wed 2025-04-23 15:07:51
SAST, use 'shutdown -c' to cancel.
ed@box1:~$ shutdown -c
ed@box1:~$
```



# HOWTO - LEARN ABOUT

the man recover quite often, so I know all about repairing after a dirty shutdown. Proper power down is essential if you have low memory and use a swap-file, if you don't you may end up with a corrupt system. Ubuntu has a rather nice rescue mode or recovery mode, whatever you want to call it. You can access it via the GRUB menu; if you look under "Advanced options" you should see an entry tagged with (recovery mode). When you click that you are taken to the magenta screen with options to repair your system, like: 'make free space'. This may not always work, and you may need to boot from a live medium to actually make space.

Also be aware that while you are in recovery mode, it is a single user target and no-one else will be able to log in. It will also not respond to the shutdown signals, so you may need the 'reboot' command. Also some systems drop you to busybox, not bash, so you need to always check which commands are at your disposal. It's a lot to remember, so make a note. :)

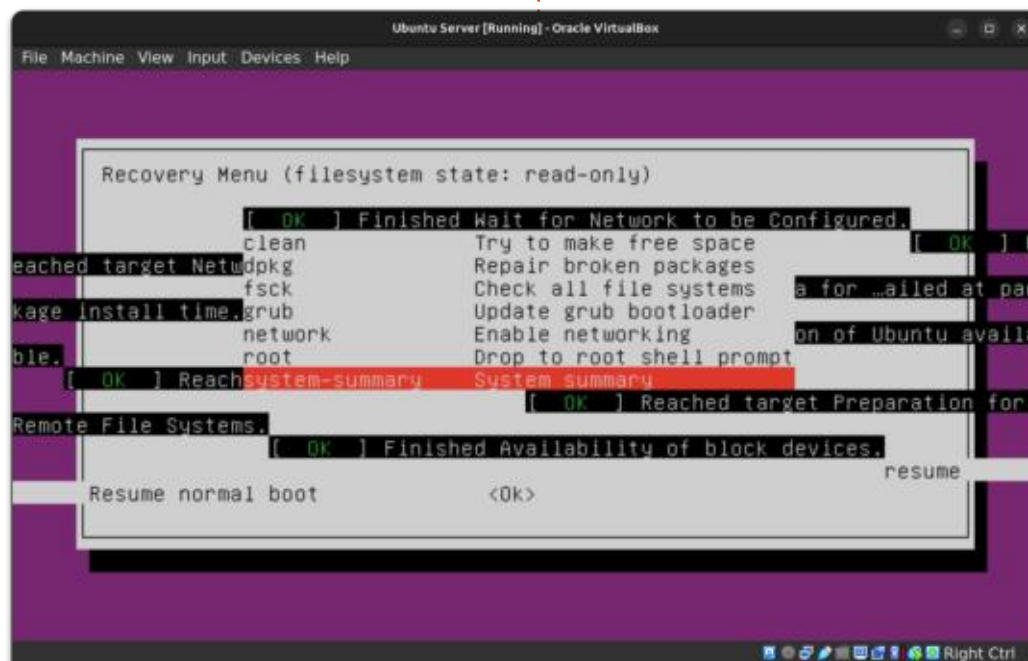
If you know you are in a bad power area, you should make sure your data is on another partition or



drive. (Something I should have done for my cousin, but he had generators, etc, so I did not think it would be needed.) <insert clown face>

Since we covered booting and shutting down, maybe we should also look at startup applications. In

vanilla Ubuntu, one can simply navigate to the startup applications program and have a look at what is starting when you log in. It is not as comprehensive as say XFCE, where you get to see items like bluetooth as well, but it is safe, as it only affects user applications, not system applications. On the Ubuntu



Gnome version, you may see nothing, depending on what you have installed. (I'm not going to go through all the flavours).

This is where gnome-tweaks comes in, allowing you further customization of startup items, but as both these applications cover only logged-on user applications, yours may be empty (mine has only virtualbox, so there is no point for me to add screen-shots.) I want to segue into startup services, but that will have to be an article on its own.

So until next time... [misc@fullcirclemagazine.org](mailto:misc@fullcirclemagazine.org) if you feel I missed something.



**Erik** has been in IT for 30+ years. He has seen technology come and go. From repairing washing machine sized hard drives with multimeters and oscilloscopes, laying cable, to scaling 3G towers, he's done it.



# HOW-TO

Written by Alan German

## Trading Up To Linux Pt.6

We have seen that one of the good things about installing Linux is that the operating system comes bundled with a whole host of useful software, such as office applications, a web browser, an Email client, and media players for audio and video files. However, how do we install other applications to replace or supplement those that are provided by default? In Linux, this can be really easy since there are many curated applications available in web-based repositories and accessible directly through the Software Manager.

The Software Manager can be loaded from one of the icons (a circular green “waffle”) in the favourites section along the left side of the menu, or by navigating through the menu to Administration > Software Manager. The program’s main screen (Figure 1) provides a variety of ways to access individual applications.

The most obvious entry point is the colorful banner across the top of the window. This does allow

access to the listed application but the banner changes through a series of five different applications, so this is more in the way of software promotion rather than a serious method of installation. A number of featured programs are displayed as individual tiles, such that double-clicking on any individual tile will load that program’s information. A series of software categories appears at the

bottom of the window and can be used to access a further series of tiles for relevant packages. Finally, a search bar at the top of the window can be used to enter the name, or the partial name, of a specific application which then results in a series of tiles being displayed from which the desired software can be selected.

When a specific program has

been selected, a new window provides information about the software such as the version number, the size of the file to be downloaded, and a chart of user reviews using a 1-5 star rating system. An Install button in the top-right corner of the window is used to start the installation process. In some instances, a secondary, pop-up dialogue indicates additional packages that are required to fulfill any software dependencies for the chosen application. In this case, it is simply necessary to press the Continue button in the dialogue box to allow the installation to proceed.

A progress bar indicates the degree of completion for the installation and, once the process is finished, the progress bar is replaced by Launch and Remove control buttons. Typically, an installed program will be automatically added to the menu system. For example, installing the VLC media player results in this app being added to the Sound & Video category in the main menu. Should an application no longer be



## HOWTO - TRADING UP

required, it can be easily uninstalled by launching Software Manager, selecting the application, and clicking on the Remove button.

When an application is not available in the software repositories and hence not listed by Software Manager, or the available version isn't the latest release, the developer may have provided an installation package that can be utilized. In particular, Linux Mint is based on Debian and uses a special type of archive file (i.e. a .deb file) to distribute installation packages. These can be downloaded from the developer's website.

For example, at the time of writing, the current Linux release of the Vivaldi web browser is available as the file **vivaldi-stable\_7.1.3570.47-1\_amd64.deb**. Linux Mint has a built-in installer, named Gdebi, that will unpack such deb files and initiate the installation process.

Double-clicking on the Vivaldi installation file loads Gdebi (Figure 2). Clicking on the Install Package button results in a request for root authorization. The installation of the software proceeds with a final pop-up message indicating that the

installation was successful.

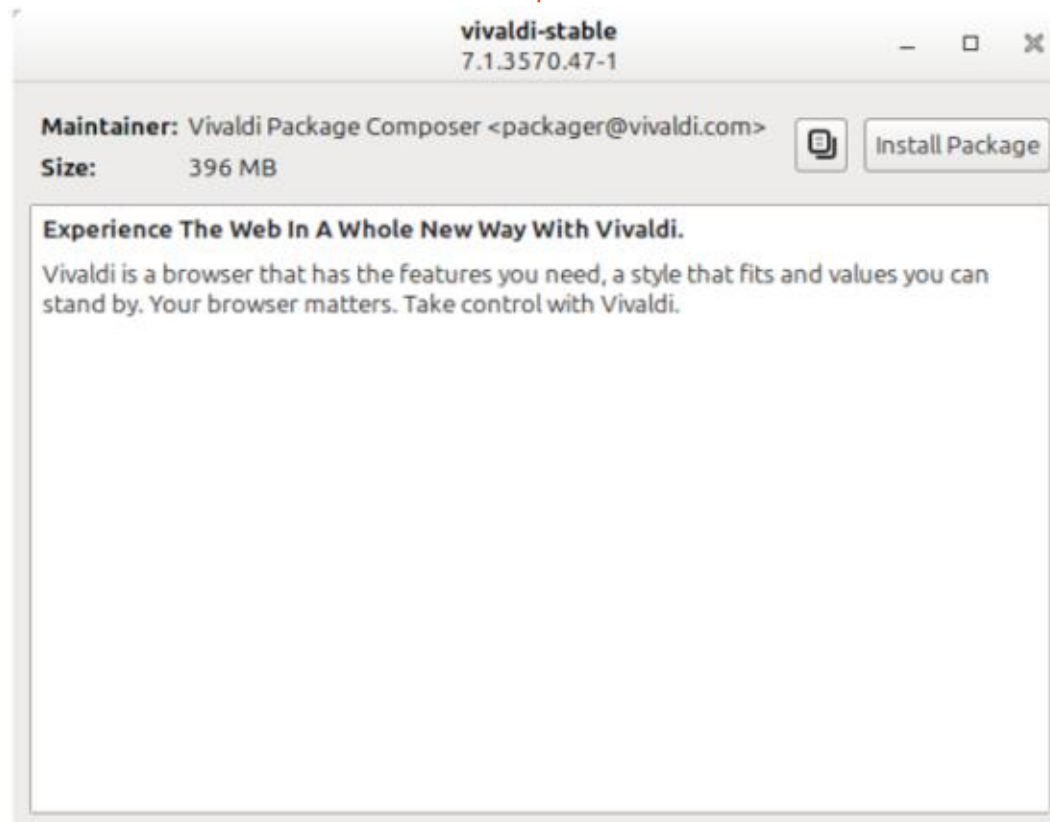
A third method for installing software uses Terminal commands. This is generally a last resort when no method using a GUI is available. A developer will provide the required commands which may include links to software files on the Internet or instructions to install a Personal Package Archive (PPA) which is a type of online repository. Since these third-party systems are not directly supported by the developers of specific Linux

distros they should only be used when deemed to be safe.

An example of establishing a PPA and using a set of terminal commands to install a software package is Grub Customizer (<https://launchpad.net/grub-customizer>). This package and its associated PPA have been maintained by Daniel Richter for many years. As the name suggests, Grub Customizer, allows a user to modify the grub menu. The program features a GUI and

provides the abilities to add, edit, or remove individual menu items. The instructions for use, including those for adding the PPA and installing Grub Customizer, are best obtained from a secondary source, e.g. <https://go.lightnode.com/tech/install-grub-customizer>

Further examples of the use of terminal commands and scripts will be provided in the next part of our series where we look at how to install and run Windows applications on our Linux system.



**Alan** is a computer enthusiast based in the Great White North where he is an active member of the Ottawa PC Users' Group (<https://opcug.ca>) and maintains the LinuxNorth blog at <https://linuxnorth.wordpress.com>



# HOW-TO

Written by Robert Boardman

## Latex - H Topics

This time, I am going to work with a real document, not with any of the thousands of packages available on [ctan.org](http://ctan.org). I am going to convert an existing text file of a book into a Latex – PDF file. I was inspired to do this after I watched a professional bookbinder on Youtube print and bind a book starting from a PDF. The starting file I will use is the text file for a children's book called Whitefoot the Wood Mouse by Thornton W. Burgess. Burgess was a favourite author of mine when I was in elementary school. He wrote more than 170 books and over 15,000 stories. Some of the books are available at [gutenberg.org](http://gutenberg.org).

First I need to have a text file for the selected book. It is available in three different epub formats on the Gutenberg site as well as two Kindle formats, and a html and a plain text file which is the one I want. The text file needs to be edited somewhat. The Table of Contents needs to be removed because Latex will build a new one. I removed the Gutenberg Licence since I plan to print and bind one copy as a gift. I saved the

txt file as an odt file using LibreOffice. Then I used the Writer2Latex filter extension to convert the file to the tex format.

Once the file has been converted, I opened the tex file in my preferred editor, TexStudio, to do the cleanup. Of course I could do some of the cleanup in the odt file before converting it to a tex file. I could also edit the tex file LibreOffice generated in a text editor but I like the advantage of the color coding in TexStudio. I find it easier and faster to work with the tex file instead of the odt file.

The first thing I did was generate the pdf file using TexStudio before I started editing. I wanted to be sure it was error free before I started deleting unnecessary code. Good thing I compiled first. LibreOffice inserted two Latex commands to make the Table of Contents clickable but there was an error somewhere in the `\hypersetup` command. Since I intend to print the generated pdf file on paper, any hypertext links are irrelevant. So I commented out both the

`\hypersetup` and the `\usepackage{hyperref}` commands from the generated file. Since that cleared the error I then deleted those two commands.

Remember each time you make a change to the Latex commands, regenerate the PDF. This will check for errors in the code and it will also save the current code. Doing this step after every change is a little

time consuming. However, I learned long ago when making changes to code (or just about anything) change one thing then make sure it works as you want, then change the next one thing and check again.

There were a number of “length” commands which were generated by LibreOffice in order to be sure the geometry of the Latex-generated PDF document would

### Chapter 1

## Whitefoot Spends A Happy Winter

In all his short life Whitefoot the Wood Mouse never had spent such a happy winter. Whitefoot is one of those wise little people who never allow unpleasant things of the past to spoil their present happiness, and who never borrow trouble from the future. Whitefoot believes in getting the most from the present. The things which are past are past, and that is all there is to it. There is no use in thinking about them. As for the things of the future, it will be time enough to think about them when they happen.

If you and I had as many things to worry about as does Whitefoot



match the page style used in LibreOffice. I will set page size, printed area size, and other page geometry options later in the Latex process, so I removed those length commands. There was a short section of footnote rules and another section of page styles. Both are not needed so I removed them. Then I generated the PDF again to check for any errors. This time there were no errors. Next I made necessary corrections to the title and author in the preamble. That made the title and author in the body redundant so they were removed.

I noticed every paragraph of the text started with `\ttfamily{` and ended with a closing curly brace. While those defined the paragraph, they were unnecessary, because every paragraph was separated from the next one with at least two CR/LF (two presses of the `<enter>` key). Two CR/LF codes is the necessary indicator in Latex to separate paragraphs. This `\ttfamily` command also sets the font for all the text to “tt” – a monospaced font family which is inappropriate unless you desire text that looks as if it were made with a typewriter. I eliminated `\ttfamily{ ...}` for the first two paragraphs to make sure this

```
\documentclass[letterpaper]{book}
    %book document class means pages will be printed on both sides
    %each chapter will start on a right hand page
\usepackage[]{} %See code below and accompanying image
\usepackage[regular]{noto-serif} %An initial font change
\usepackage{setspace} %Sets space environment between lines
\usepackage[indent=3em,parfill=1em,skip=\baselineskip]{parskip}
\title{Whitefoot the Wood Mouse}
\author{Thornton W. Burgess}
\date{\today}
\begin{document}
    \maketitle
    \tableofcontents
\begin{spacing}{1.3} %Gives entire document extra space between lines
\chapter{Whitefoot Spends A Happy Winter}
```

was safe. No problems I could see. So I used Search and Replace in TexStudio and deleted them all.

As I scrolled through the tex file, I saw the `\bigskip` command many times. This is used by Latex to make large vertical areas of white space. I assume the Writer2Latex extension converted multiple CR/LF codes to `\bigskip`. Since I will use other Latex instructions to control white space, I removed the `\bigskip` commands as well. Again I generated the PDF and scrolled through it to make sure there was no inappropriate white space and no long paragraphs. (This is a children’s book, so paragraphs should be short, two or three sentences. If you are working with a different file then adjust your editing accordingly.)

This finished the majority of the cleanup. Then it was time to make this text file look more like a book. At this point in the editing process, the PDF was 33 full letter-size pages. The document class was `article`, and the default type size was 10pt. This is a book for children. It was originally printed and bound in a size suitable to be held by small hands. Like most books, each chapter should start on a separate page.

I changed document class to `book` and changed the default font to Noto Serif. In order to take advantage of the built-in heading formatting, I styled each chapter heading as a chapter. Search and Replace was my friend to do this. The original text has the word `CHAPTER` at the beginning of each

one. It is easy to change the word `CHAPTER` to the command `\chapter` for each one. Be aware of three things.

- Chapters are only allowed in the document class `book` so change that first.
- The text for each chapter needs to be inside curly braces so each chapter heading needs personal attention.

Latex automatically numbers chapters. If the text you work with has chapter numbers, as Whitefoot the Wood Mouse did, you should probably delete them when you edit the chapter command.

Note: If you do not want the automatic chapter numbering then change the `\chapter` command to `\chapter*`, i.e. add an asterisk after

the word “chapter”. This also removes the chapter from the Table of Contents.

Many of the chapters in Whitefoot the Wood Mouse have two-line poems at the beginning. The text from these poems started with either a curly brace or a backslash, both will cause problems when the file is compiled. As I edited the chapter commands, I also removed the troublemakers.

Those two-line poems reminded me of a package I reviewed in FCM #212 which formats small bits of text at the beginning of chapters. The package is called epigraph and is very simple to use. However there were a lot of epigraphs in this little book. Adding the code so each one was coded as an epigraph took time. These changes had to be done individually. Using Search and Replace could have eliminated all the backslashes and curly braces in

the file, not just the ones for the epigraphs. That would have caused more work than I wanted to think about doing.

I adjusted the leading (spacing between lines), and added a paragraph indent. After I use the geometry package (next issue), I will look at a printed page to find out if I think my work is usable by primary school students. I am also considering using drop caps, large initial capital letters at the beginning of the first paragraph of each chapter. Perhaps I can find some illustrations to add to the text. These are tasks for the time.

Here is the code (with a few comments) for the preamble so far followed by the code to make an epigraph.

To make an epigraph I used the following:

```
\epigraph{You never can tell!  
You never can tell!  
Things going wrong will often  
end well.}{Whitefoot}
```

There are images of an epigraph and of the beginning of a chapter with this column.

project, I am going to add a drop cap in the first paragraph of each chapter to add a little visual interest. I will alter the page geometry to get the file ready for imposition. Imposition is a process used to put the text on the correct printed pages in order to bind them into a book. If you do not need or want to make your file into a printed book, then imposition is not necessary. However you might want to change the page geometry to make the PDF look more like a printed book. If I can find some suitable illustrations I may include them. I hope you will join me next time.

## Chapter 4

### Whitefoot Grows Anxious

'Tis sad indeed to trust a friend,  
Then have that trust abruptly  
end.

Whitefoot

I know of nothing that is more sad than to feel that a friend is no longer to be trusted. There came a time when Whitefoot the Wood Mouse almost had this feeling. It was a very, very anxious time for Whitefoot.

You see, Whitefoot and Farmer Brown's boy had become the very best of friends there in the little sugar-house. They had become such good friends that Whitefoot did not hesitate to take food from the hands of Farmer Brown's boy. Never in all his life had he had so much to eat or such good things to eat. He was getting so fat that his handsome little coat was uncomfortably tight. He ran about fearlessly while Farmer Brown

# KILOBYTE MAGAZINE

Kilobyte Magazine is a fanzine for 8bit enthusiasts. It covers consoles, computers, handhelds and more, as well as new games for old systems. If you grew up with Commodore, Atari, Sinclair or Amstrad, this magazine is for you.

<https://retro.wtf/kilobytemagazine/>





# HOW-TO

Written by Mark Crutch

After a couple of false starts, the latest bug fix version of Inkscape is out. There was an attempt to release 1.4.1, which was stopped at the last minute when significant issues were found, so the new version is 1.4.2. But even that suffered a Windows-only problem initially, so had to be repackaged and re-released. The official release date was May 12th 2025, so if you installed a Windows version of 1.4.2 around that time, it might be worth downloading again to make sure you've got the latest version.

There is a long list of bugs addressed in this release, so it's worth updating if you're running 1.4. There are very few new features though, and only one that I think will be worth covering in detail in this column (the Clean Up Paths extension). Some improvements and additions to the import filters are worth mentioning in passing: the importer for Affinity Designer files (added in 1.4) has been substantially improved, and there is a new import filter for Linearity Curve (formerly

Vectornator) files. As usual with import filters, if you do experience issues then please raise a bug and provide a file showing the problem, in order for the developers to improve the code further.

Continuing with the changes in version 1.4, this month I'm going to look at the Filter Gallery: a new dialog that aims to make it easier for you to preview and select from the many filters that Inkscape ships with. Before I get into that, however, it's been a while since I did an explanation of how filters actually work in the SVG world, so let's begin with a quick introduction for anyone new to Inkscape or to SVG, the native format for Inkscape files.

SVG is an open format for defining vector graphics files. Compared with raster (also known as bitmap) files, vector files are more about defining the way in which an image is drawn, rather than the final result. A raster image consists of lots of individual dots – pixels – whereas a vector file is more of a mathematical description

of the parameters needed to draw shapes. A circle in a raster image is actually an approximation made up of a large number of dots; a circle in an SVG image is defined by its center coordinates and radius. Raster files lose quality as they are scaled up or down from their 'native' size, whereas vector images – in theory at least – are infinitely resizable without any loss of quality or resolution.

That's not to say that SVG files are always purely vector data. It's possible to link to external raster files so that they become part of your image, or to embed the raster data directly into the SVG file itself. This causes something of a dilemma, however, as it means you effectively lose the infinite scalability of your vector file – it now has an optimum size, defined by the raster image. To confuse matters further, you could potentially include multiple raster images, each with a different optimum size, to create an SVG file which no longer scales infinitely without losing quality, but which also no longer has a single optimum

size, either. The worst of all worlds.

In truth this is often more of a theoretical problem than a practical one. If your original raster images are high enough resolution then they can usually be scaled down quite a bit without the quality suffering, subjectively speaking. Scaling up is more of an issue, but it depends on how your image is going to be used. A blocky raster image might be a problem in a magazine, but that same level of blockiness could be unnoticeable on a billboard poster.

But, as a general rule, vectors are scalable, rasters are not, and SVG is primarily a vector format. So it might come as a surprise to you if I say that filters are raster operations, despite being one of the core components of the SVG format.

At this point, it's important to consider the output device being used to present your Inkscape image to the world. Like images, output devices broadly fall into two categories: raster and vector. A

computer screen, phone or tablet are raster devices – the hardware itself is made up of thousands or millions of individual pixels arranged (usually) in a rectangular grid. Likewise with laser or inkjet printers, which produce their images by placing dots of toner or ink in a rectangular grid on the page. But there are other output devices – such as laser engravers, pen plotters and vinyl cutters – which work with raw vectors in order to move a laser, pen or blade in two dimensions. For those devices, a line isn't an array of individual dots, but rather instructions to drive a pair of motors controlling the x and y position of the output head in one continuous movement.

We've got some vector data in our SVG file. We can send that directly to a plotter or cutter (possibly after converting to a different file format) to create images that are, in theory, infinitely scalable. Whether you have a tiny desktop pen plotter, or a large industrial laser cutter, the same basic vector data can be used. The output device will convert the vector geometry into the correct signals to drive those x and y motors.

But we can't send that vector data directly to a screen or printer. Instead we have to turn it into a raster image that the device knows how to handle, through a process called rasterisation. Without going into detail, this basically entails doing the mathematics to work out which part of the vector file should be visible for each pixel of the output. It turns your smooth vectors into a blocky raster – albeit at a resolution high enough that it shouldn't look particularly blocky on your screen or printed page, unless you inspect it with a magnifying lens.

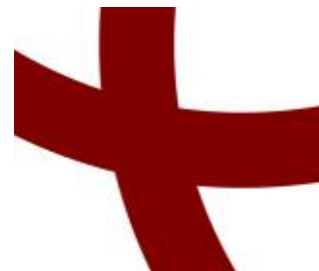
SVG filters apply to the image just before this final rasterisation step. Since this step is only relevant to screens, printers and the like, the first take-home is that filters are useless for any device which receives vector data. It doesn't matter what your filter looks like, it will be ignored by a pen plotter or vinyl cutter. Laser engravers are a different matter, as they can often also be used to 'print' raster graphics by varying the laser's intensity and drawing lots of dots – but when used as a pure vector cutting device, for example, this same restriction applies.

Consider these two images. They may look identical, but the one on the left was created by duplicating one circle and moving it, whereas the one on the right is the result of using a filter.



Send these two images to a screen (such as when editing in Inkscape, or loading the SVG image in a web browser), or a printer, and you'll get four circles in total. Send it to a pen plotter and you'll get only three – the fourth one isn't really a vector object, so the plotter won't be able to do anything with it.

So, if one of the circles on the right is actually a raster graphic, we'll be able to see the blockiness if we zoom in, right? Let's give it a try by zooming in within Inkscape...



It still looks pretty smooth to me. That's because the filter is applied as one of the very last steps in the rasterisation process, just before it's displayed on screen. Zooming in within Inkscape isn't taking a raster version then scaling it, it's creating a whole new raster image of the zoomed in content. Effectively filters always output at the native resolution of the device they're being rendered on, creating an optimally sized raster image. This means that you can, to some extent, ignore the distinction between raster and vector for screen or print work – the output will always be the optimum size.

From this, I hope you've understood that filters are a purely visual thing – they don't alter the underlying geometry of your objects in any way. All they do is apply a series of operations to determine what color and opacity each rendered output pixel should be, as part of the rasterisation process. Which precise operations are performed will vary from filter to filter, with each filter (or "filter chain") typically being made up of several "filter elements" which are connected to each other in a network. Each filter element does

# HOWTO - INKSCAPE

one job: it could be generating a color or fractal noise pattern as a source of image data for the filter chain; it might blur its input before passing it on; it might remap the colors of the input image. There are many more of these primitives which can be combined to create an incredible variety of filter chains for an infinite range of effects.

In early versions of Inkscape, there were no predefined filters included. There was an editor with which you could make your own – but that’s a skill that most of us simply don’t have. Filter chains can become very complex very quickly. For example, here’s one in which I’ve applied the Textures > Wax Print filter to one of those circles from earlier in the article. The result is on the left, with the corresponding filter chain on the right. This one is relatively simple,

with only eight filter elements connected in a mostly linear way, but it’s still not something that most Inkscape users could create for themselves.

With version 0.47, the program shipped with a large selection of predefined filters, grouped into related types and exposed via the Filters menu. This was a great step forward, but working out which filter you need for a given design is often a case of trial and error, selecting each filter in succession to see the effect it has. This is made more complex by the fact that filters can be combined, so it’s important to undo (Ctrl-Z) the previous filter before trying the next one, if you really want to see its effect in isolation.

With 1.4, however, we finally have a more graphical way to select

filters. The menu entries still exist, but at the very top of the Filters menu is now a ‘Filter Gallery...’ option. Selecting this opens a new dialog.

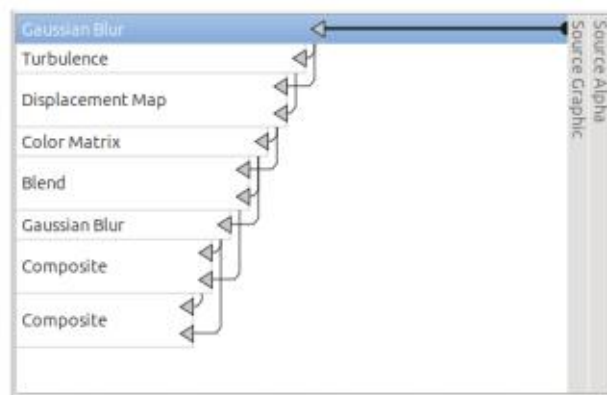


The obvious good news here is that we now have thumbnails that give some idea of the effect each filter might have. All the thumbnails use the same flower-like shape as their base, with no option to change it – a limitation that I’ll come back to shortly. You can alter the thumbnail size using the slider hidden in the Settings pop-up (the ‘cog’ button) – though I have to wonder whether there’s a need for a separate pop-up with only a single entry in it. Surely the slider could have been squeezed into the dialog directly.

To the left is a list of the filter

categories, matching the categories in the Filter menu. This list also features an “All Filters” entry at the top if you just want to see all the thumbnails at once. The button at the top-left will toggle the visibility of this list. When it’s hidden, the view is automatically switched to show all the filters, which makes sense. Re-showing the list, however, can lead to a mismatch in the UI, whereby all the filters are still visible despite the previously selected category being highlighted. I don’t see that this will be much of an issue though – you’re either the sort of person who uses the categories, in which case it makes no sense to hide the list at all; or you’re the sort of person who prefers the “All Filters” view, in which case you may as well leave the list permanently hidden.

Completing the top of the dialog is a disappointing search box. It’s disappointing for two reasons: firstly it searches only the filters for the currently selected category, whereas searching across all filters would make more sense to me; secondly it searches only in the filter name and category, not in the well-worded descriptions that accompany each filter, making it harder to find a filter unless you





know its specific name.

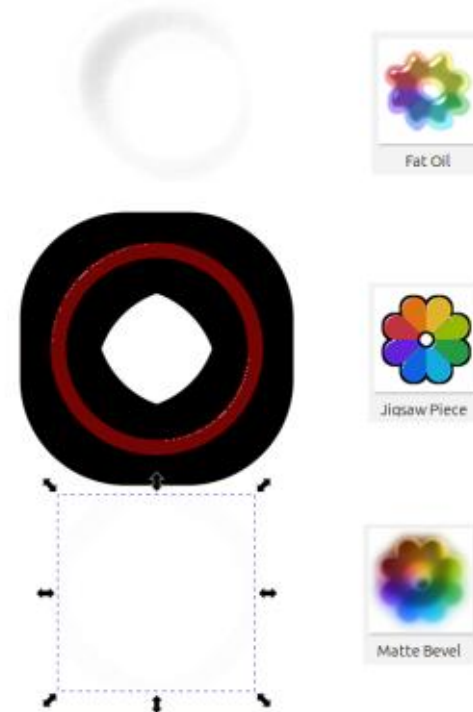
Once you've found the filter you want to use, click on the thumbnail to select it. Despite the wording at the top of the dialog ("Select filter to apply"), the act of selecting doesn't actually apply it. For that you have to click on the "Apply" button, oddly positioned at the bottom-center of the dialog, and your selected filter will be applied. Possibly.

You see, there are two types of filter in Inkscape: those that apply immediately, and those which open a dialog to let you adjust the parameters, and even preview the result. In the Filters menu the latter is indicated by an ellipsis ("...") after the filter name. In the Filter Gallery, however, there's no indication in the name or the thumbnail as to which filters will open another dialog and which won't. Only after you've made your selection can you tell: the "Apply" button changes to "Apply..." if there's a dialog to follow. I'd much rather have that information presented on the thumbnails themselves, via an ellipsis, a badge, or some other indicator.

Aside from these UI niggles,

there's one big problem with this dialog: the shape used for the thumbnails. It's not that there's anything wrong with it, as such – but no single shape can possibly be representative of how a filter will work in all cases. Many filters work best on bold, solid objects – use them on thin filigree lines and they'll disappear to nothingness. Others might be the opposite, with fine details that work best with thin shapes or sharp angles, rather than the soft roundness of the flower shape in the thumbnails. I'd love to see that settings pop-up extended to allow a choice of preview objects: perhaps some basic primitives such as a triangle, square, star and circle – with the option to have them filled or just use a stroke. And, most of all, the ability to preview using a text sample, in the font of my choice, would make using filters with text a lot more practical.

This may seem like nit-picking, but you'll quickly find that the thumbnails can be very, very misleading. Consider the crimson circle from earlier: here's what it looks like with three of the filters, alongside the thumbnails for reference:

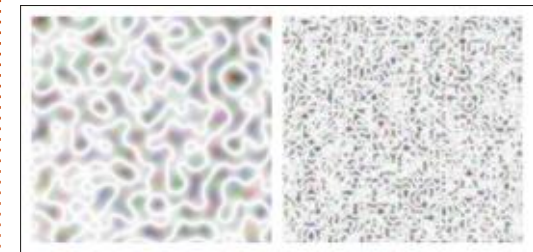


The result of the top one is less "Fat Oil" and more "grease stain". The second doesn't give me the thin black stroke I expected from the "Jigsaw Piece" preview, but rather a super-thick outline instead. And "Matte Bevel" just causes the crimson circle to disappear entirely – to the extent that I've left the selection box visible, to provide some evidence of its existence.

This isn't a problem with the new dialog, so much as it is an issue with SVG filters in general. This is where I come back round to that distinction between vector and

raster. Filters can themselves contain raster data – and often do. Some filter primitives require a raster graphic which is used as part of its operation. For example, the `feDisplacementMap` element often uses a raster graphic as a way of storing a 2D matrix of numbers that are used to define x and y displacements.

Similarly, the commonly used `feTurbulence` primitive generates an array of random(ish) data, but does so with a "size" parameter that defines the resolution of the noise it creates. Here's the output of that filter applied to two rectangles, with the only difference between them being the value of the size parameter:



This size parameter remains constant in the filter, whether it's applied to a large object or a small one – or to a small one that's then resized to make it larger (or vice versa). There's no way to link the size parameter to the final

## HOWTO - INKSCAPE

dimensions of the object it's being applied to in order to make it change when the object's size is altered. That's just the way SVG filters work, but it does mean that they can be extremely sensitive to the size of the object you're applying them to. Here's that "Fat Oil" filter again, this time applied to four filled circles. Clearly it works as expected for larger objects, but not so well for smaller ones.

For this reason, while I applaud the addition of this dialog, please don't get too excited by the possibilities the thumbnails suggest. It's not until a filter is applied to your objects in your drawing that you can really see whether or not you'll get the effect

you expected. Perhaps, one day, we'll get live on-canvas previews of all the filters so we can more easily select the right one for each design. Until then, the Filter Gallery is perhaps most useful as a way to definitively rule out some filters, rather than as a means to choose a specific one. Even when using this dialog, I still find myself following the familiar approach of applying a filter, then undoing, then applying another, and so on. The difference now is that it's easier to skip the ones that are more obviously wrong.



**Mark** uses Inkscape to create comics for the web ([www.peppertop.com/](http://www.peppertop.com/)) as well as for print. You can follow him on Twitter for more comic and Inkscape content: [@PeppertopComics](https://twitter.com/PeppertopComics)

# The Daily Waddle

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YEAH , BUT WADDLE YOU DO  
WITHOUT ME?







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# BODHI CORNER

Written by Moss Bliss

BACK NEXT MONTH



**Moss** has been using Linux since 2002, and has been co-host of mintCast since Oct 2018, Distrohoppers Digest from 2019 to 2024, and host of Full Circle Weekly News since April 2021. He is retired but works as a substitute teacher, and lives in Eastern Tennessee.





Ubuntu Touch 20.04 OTA-9 is released, a maintenance release of Ubuntu Touch 20.04. Ubuntu Touch 20.04 OTA-9 becomes available for the following supported Ubuntu Touch devices over the next days:

Asus Zenfone Max Pro M1  
F(x)tec Pro1 X  
Fairphone 3 and 3+  
Fairphone 4  
Google Pixel 3a and 3a XL  
JingPad A1  
Lenovo Tab M10 HD 2nd Gen WiFi / LTE  
Oneplus 5 and 5T  
OnePlus 6 and 6T  
OnePlus Nord N10 5G  
OnePlus Nord N100  
Sony Xperia X  
Volla Phone  
Volla Phone X  
Volla Phone 22  
Volla Phone X23  
Volla Phone Quintus  
Volla Tablet  
Xiaomi Poco M2 Pro  
Xiaomi Poco X3 NFC / X3  
Xiaomi Redmi Note 9 Pro/Pro Max/ 9S  
Xiaomi Redmi 9 and 9 Prime

### WHAT IS NEW?

Ubuntu Touch 20.04 OTA-9 contains only minimal changes due to our current focus on Ubuntu base OS upgrade. Still there are interesting changes:

VoLTE support is updated so that it works out-of-box with more carriers (thanks to Nikita (@Notkit) from Volla). Please note that we've tested VoLTE on a few Volla devices only. Other ports may have VoLTE support enabled; such support is experimental and may not always function correctly.

Waydroid has been updated to version 1.5.1, containing initial support for upcoming official Android 13 images, among other fixes (thanks to Jami (@deathmist) from Volla).

Font for emoji is switched from Emoji One to Noto Color Emoji, with improved support for some of the newer emojis (thanks to Alfred (@fredldotme)).

General bug fixes and security updates, both from upstream Ubuntu and from UBports.

Full list of changes: <https://ubports.com/blog/ubports-news-1/post/ubuntu-touch-ota-9-focal-release-3962>





# The Daily Waddle

YOU HAVE REACHED THE REJECTION  
HOTLINE , ALL OUR AGENTS AR CURRENTLY  
BUSY , PLEASE CALL BACK LATER.





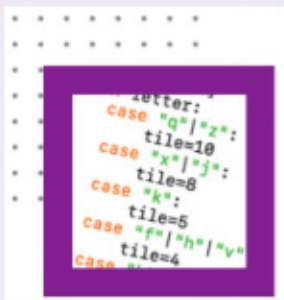
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To draw the FCM comic, I use Gravit designer, the free drawing application. I use version 3.33 or 3.49, as they clock in at around 64MB and do what I need them to do. I have version 2020 1.2.1 as well, that is three times the size (198MB), and honestly, I don't see a difference, except that the bigger one tries to contact gravit.io the whole time and if you allow it, it downloads s#1t to your computer, and turns into "nagware", and forces you to sign in. Not on my watch! With Ubuntu updating from 22.04, Gravit designer stopped working. No error message, nada! So it has been a hot minute since I have made any comics for the magazine. Trawling through the human knowledge base, I came across people saying that it is the sandboxing. The "fix" was supposed to be relaxing apparmor, like so:

```
sudo systemctl -w
kernel.apparmor_restrict_unpr
ivileged_users=0
```

**spoiler:** it did not work!

If you search for the reason that Applimages do not run on Ubuntu

24.04, you will find that people point to libfuse as the culprit. Apparently libfuse2 was replaced with libfuse3, and I was living under a rock. While it may be the case in Ubuntu Gnome, it certainly was not in Xubuntu derivatives. If one tries to install libfuse2, apt tells you that it has been superseded by libfuse2t64 and that it was already the latest version. I made doubly sure with: `sudo apt install libfuse2t64`. This did not solve my issue, but gave me insights into why so many of my Applimages failed during testing (Markdown editors).

After dredging through some documentation, I found that the "sudo systemctl -w kernel.apparmor\_restrict\_unprivileged\_users=0" command does nothing permanent, so I ran it. (This will reset as soon as you reboot, so I was not worried). This time around, there was an error. It was apparently missing "libgconf-2.so.4". As it is supposed to be self-contained, why is it not contained? I tried to look for the file, but it seemed that it was deprecated. However, this error only appeared

on the smaller/older version, which was curious in itself. Finding the file was not so easy. According to the Debian website, it was contained in "libgconf-2-4\_3.2.6-7\_amd64.deb". I downloaded the file from a Debian repository, to take it apart. (Remember, I only needed the .so-file). I created a folder to unpack the .deb-file, copied the .deb-file to the unpack folder, and used Engrampa to unpack it. I then rummaged through the folders and found paydirt in "/UNPACK/usr/lib/x86\_64-linux-gnu/". Not a 100% match, but an updated version, "libgconf-2.so.4.1.5". Since only my gifted laptop runs Gnome Ubuntu, the others run Linux Mint and Linux Lite, they don't have gconf installed as they use XFCE. What to do?

My first thought was to stick it in the Gravit designer folders, but this did nothing. You see, this ApplImage creates folders in places like .config in your home folder and I tried those first. I was not about to put it in any of my system folders, no matter what. When I say "it", I mean "libgconf-2.so.4.1.5", just to clarify, as someone mentioned that I'm too

liberal with the word "it".

At this point you may be asking me, why don't you just use Inkscape? Well, I have a very fast workflow in Gravit designer, that takes me up to six times as long in Inkscape. (I use a very small portion of the Inkscape landscape, so it is the difference between riding a bike and flying a plane. I have no idea what all the buttons are for, and where the ones I need are hiding.) Maybe I need to get used to it, but I feel like a Photoshop user, moving to GIMP. Though the two programs do exactly the same thing, it is about how intuitive it is for new users to get to grips with... and Inkscape is a sensory overload. Though Gravit designer is constrained, I have learned to work, nay, thrive, within those constraints. I suppose I will have to move some day, but that day is not today, plus, I like taking things apart and tinkering with them. Always have, always will.

Since an ApplImage is simply a collection of files all zipped up, it stands to reason that it can be



## MY OPINION

unzipped. Since the application is a Chrome sandbox with Electron, it also stands to reason that I can update the Applmage to the latest Chrome / Electron and enjoy the benefits. (I'm not entirely sure what they are, so don't quote me.) I'll be using this opportunity to learn all about Electron and Chrome sandboxing and also packaging up an Appimage, but I'm getting ahead of myself. I need to make it work first. If I look in the larger version of Gravit designer, I do find libgconf-2.so.4 in the `"/usr/lib/"` folder, but this file is absent in the smaller version. Oh right, you may be wondering how I know this. Well, I unpacked the Applmage as well. :)

To unpack an Applmage, you only need to run it with `--appimage-extract`. (That's two dashes, no space). In my case it was: `./GravitDesigner.AppImage --appimage-extract` and it unpacked the contents to a `squashfs-root` folder. I proceeded to dump the updated `.so`-file into the `"/usr/lib/"` folder. (Why? Because that is where the `libgconf-2.so.4` file was in the larger Applmage.) But that did nothing for me. While deleting the `squashfs-root` folder and unpacking again and switching between the larger and smaller specimen,

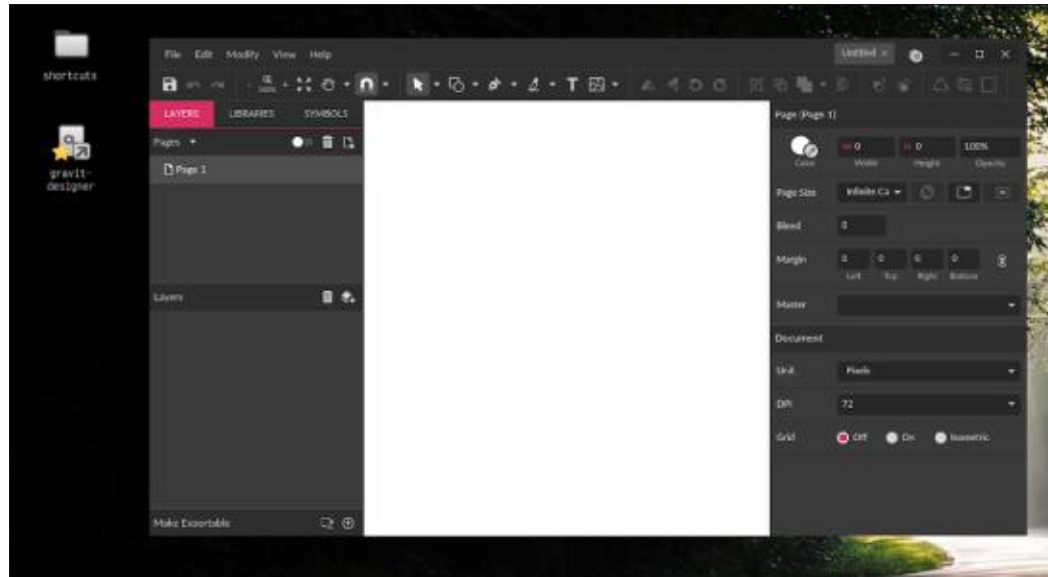
etcetera, I just dumped the `"libgconf-2.so.4.1.5"` file in the `squashfs-root` folder, so I could move it later as I needed to copy another file. I was about to copy the `"/usr/lib/"` folder to the other version, when I clicked on the executable file, to record the error, for a before and after, useful when comparing errors. (There is a bash script in the Applmage too, to integrate it into Linux and launch it, but I wanted to see what just the executable did.) To my surprise it launched! I wish I could say that I planned it or figured it out, but it was sheer luck and not giving up. I tried it on the other version too. When I say "it", I mean just copying the `"libgconf-2.so.4.1.5"` file to the `squashfs-root` folder and running

the `gravit-designer` executable file. This seems to work for all the versions that I have. Hah! Not so obsolete now, eh??? Now our beloved magazine can get comics again, even though the humour is only funny in my head. By-the-way, if any of you want to follow along, you can still find a copy of Gravit designer Applmage on the Pling store. If it is also removed from there, ping me on Telegram and I will give you a copy to play with. Learning whilst playing is the best way. The reason I use the older versions and the Applmage version is that it does not come with the annoying login screen, you can simply fire it up and use it. Just remember to turn off your networking when using this

application to avoid wasting your bandwidth and turning a perfectly working program into garbage. If you block it in your firewall, remember that it needs internal connections, but any requests out of the system should be blocked. If you block the internal requests, the application will not launch.

While I was inside the unpacked Applmage file, I used the opportunity to delete all the unnecessary files, like extra languages, the pesky `update.yml` and whatnot, reducing the file size even more. The question now is, how do I repack it up back into an Applmage file and how do I go about updating Electron?

If you would like to know more, I'll tell you about it in the next issue. If you don't let me know too, I will drop it like a hot potato as I do not like writing for myself. I hope I managed to help someone with a similar Applmage problem.





# HOW-TO

Written by Ronnie Tucker

# Write For Full Circle Magazine

## GUIDELINES

The single rule for an article is that **it must somehow be linked to Ubuntu or one of the many derivatives of Ubuntu (Kubuntu, Xubuntu, Lubuntu, etc).**

## RULES

- There is no word limit for articles, but be advised that long articles may be split across several issues.

- For advice, please refer to the **Official Full Circle Style Guide:** <http://bit.ly/fcmwriting>

- Write your article in whichever software you choose, I would recommend LibreOffice, but most importantly - **PLEASE SPELL AND GRAMMAR CHECK IT!**

- In your article, please indicate where you would like a particular image to be placed by indicating the image name in a new paragraph or by embedding the image in the ODT (Open Office) document.

- Images should be JPG, no wider than 1200 pixels, and use low compression.

- Do not use tables or any type of **bold** or *italic* formatting.

If you are writing a review, please follow these guidelines :

When you are ready to submit your article please email it to: [articles@fullcirclemagazine.org](mailto:articles@fullcirclemagazine.org)

## TRANSLATIONS

If you would like to translate Full Circle into your native language please send an email to [ronnie@fullcirclemagazine.org](mailto:ronnie@fullcirclemagazine.org) and we will either put you in touch with an existing team, or give you access to the raw text to translate from. With a completed PDF, you will be able to upload your file to the main Full Circle site.

## REVIEWS

### GAMES/APPLICATIONS

**When reviewing games/applications please state clearly:**

- title of the game
- who makes the game
- is it free, or a paid download?
- where to get it from (give download/homepage URL)
- is it Linux native, or did you use Wine?
- your marks out of five
- a summary with positive and negative points

### HARDWARE

**When reviewing hardware please state clearly:**

- make and model of the hardware
- what category would you put this hardware into?
- any glitches that you may have had while using the hardware?
- easy to get the hardware working in Linux?
- did you have to use Windows drivers?
- marks out of five
- a summary with positive and negative points

**You don't need to be an expert to write an article - write about the games, applications and hardware that you use every day.**



# REVIEW

Written by Adam Hunt

Even though I use Ubuntu Cinnamon these days, I did use Lubuntu over a period of 12 years, from 10.10 to 22.04 LTS, and every time I boot it up it feels like coming home for a visit again.

Lubuntu 25.10 came out on 17 April 2025, the same day as all the other Ubuntu flavors. It is the middle of three interim releases and comes with nine months of support, until January 2026. This development cycle is working towards the next long term support version (LTS), which will be Lubuntu 26.04 LTS, scheduled for April 2026.

Lubuntu 25.04 marks the 14th release with the LXQt desktop, the 28th since Lubuntu became an official Ubuntu "flavor", and the 31st overall Lubuntu release since that very first one, Lubuntu 10.04. Once again, the official release announcement does not take credit for the first three Lubuntu releases prior to it becoming an official flavor, but some of us are old enough to have been using it back then! I actually ran Lubuntu 10.10.

According to the official release announcement, the developers state that "our focus this release can be put quite simply: stabilize, refine, and refresh." They also noted that they would "port as much software as reasonable from Qt 5 to Qt 6" and also "get Lubuntu fully prepared for Wayland". These do sound like laudable goals.

## INSTALLATION

I downloaded Lubuntu 25.04 via BitTorrent, using Transmission, from the official source. As always, I did a command line SHA256 sum

check, just to make sure it was a good download. I dropped it into a USB stick equipped with Ventoy 1.1.05 and it booted up perfectly. This was as expected, given that Lubuntu is officially listed as supported by Ventoy.

The Lubuntu 25.04 ISO file was 3.3 GB to download, which is 6% smaller than the previous version, Lubuntu 24.10, which was 3.5 GB.

## SYSTEM REQUIREMENTS

Since the release of Lubuntu 18.10, the project announced that

# Lubuntu 25.04

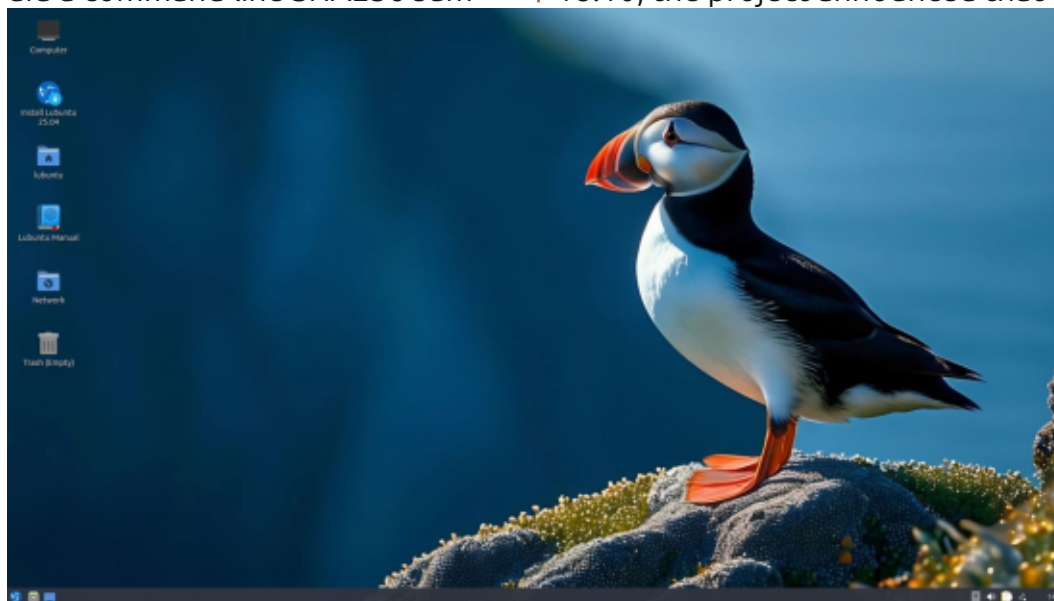
it would no longer publish any minimum system requirements.

## NEW

This release uses the LXQt 2.1.0 desktop and the latest Qt toolkit, version 6.8.3. The project has bumped up the toolkit version in an attempt to improve stability.

There is an updated version of the Calamares installer to version 3.3.14. The installer provides fewer options than the last version used in Lubuntu 24.10 due to issues with the "additional options" and third-party packages. This move was necessary due to issues found, but the team committed to coordinating getting a fixed version out soon in a new Lubuntu 25.04.1 version, or at least as a personal package archive (PPA).

The developers have also changed the way the Lubuntu minimal installation works. In the past, it ran a full installation and then used an automated script using APT to remove the non-





# REVIEW

desired packages. As can be imagined, that resulted in a slower installation process. This has now been changed to a separate installation squashfs file instead. It is worth noting that the minimal installation does not include snapd to enable Snap packages.

This release does introduce the LXQt Fancy Menu which is a redesigned version of the previous menu system. Because it goes only one level deep, it has a slightly different organization to the last menu used. It does include application searching.

"Not new" in this release is the display server used, which remains as X11 rather than a Wayland-based

one. The last release, Lubuntu 24.10, and this one, were each intended to include Wayland support, but it did not happen. The developers indicated that they prioritized stability and decided to hold Wayland until the next release, writing "this is the last time we are delaying this." The intention is that the next release, Lubuntu 25.10, will use Miriway as its default Wayland compositor, backed by the .deb-based Mir 2.20. If for some reason that slips again, that would leave the LTS to introduce Miriway instead, something I am sure the developers would really want to avoid, as an LTS release is almost never the place to bring in something this big and new. The Lubuntu developers are working

with the LXQt desktop team to make sure that Miriway is going to work right from the start. There is even one developer who is both working on Lubuntu and LXQt, which should be an advantage.

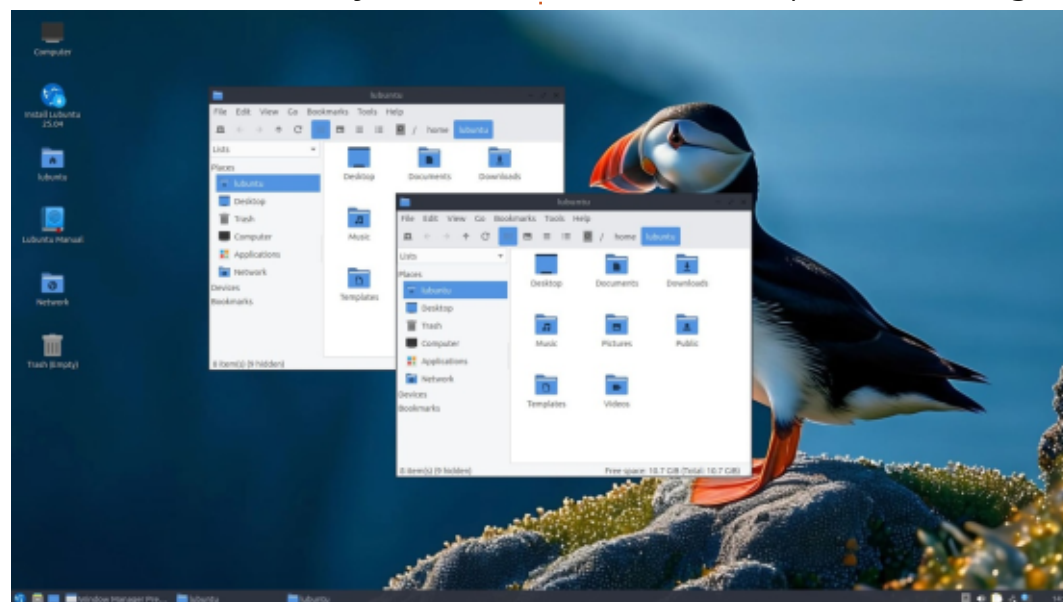
The Lubuntu developers also note that their default media player, VLC, has still not been updated to the Qt 6 toolkit, which needs to happen for Wayland compatibility, and also to finish removing the last vestiges of Qt 5 from the distribution. It is expected that the upcoming VLC 4.0 will be based on Qt 6. If the VLC developers do not get that new version completed in time, the Lubuntu team have noted that the distribution may have to remove

VLC and ship with a different media player.

Like all of the Ubuntu 25.04 family of releases, Lubuntu uses Linux kernel 6.14 and systemd 257.4 as the initialization system. Lubuntu has been using systemd since 15.04 so this is the 21st release over ten years using it with no issues.

There also has been work done improving translation support for languages other than English on Lubuntu.

One thing that is new in Lubuntu 25.04, and not at all welcome, is that the live session will not mount drives, just like Ubuntu Cinnamon



# REVIEW

25.04 and Xubuntu 25.04. As with those other distributions, this makes it pretty useless as a rescue disk and also makes doing screenshots and getting them out of the live session more difficult.

## SETTINGS

Lubuntu 25.04 is code named "Plucky Puffin" and so it comes with a new puffin-themed default wallpaper and this may well be the nicest Plucky Puffin wallpaper in the Ubuntu universe. There are 21 wallpapers provided including the new, simple and elegant SDDM Ocean, the classic Lubuntu Friends-dark, plus many Lubuntu wallpapers from recent releases.

Other settings include 19 window themes, 11 icon themes, 15 LXQt themes, two cursor themes, nine GTK3 and six GTK2 themes, providing a good range of user customization.

## APPLICATIONS

Some of the applications included with Lubuntu 25.04 are: 2048-qt 0.1.6 simple lightweight game\* Blueman 2.4.4 bluetooth connector Discover Software Center 6.3.4 package management system FeatherPad 1.6.0 text editor Firefox 137.0.2 web browser\*\* KDE partition manager 24.12.3

partition manager  
LibreOffice 22.2.2 office suite, Qt interface version  
Lubuntu Update 1.1.1 software update notifier  
LXImage-Qt 2.1.1 image viewer  
LXQt Archiver 1.1.0 archive manager  
Noblenote 1.4.0 note taker  
PCManFM-Qt 2.1.0 file manager  
PipeWire 1.2.7 audio controller  
Qalculate! 5.5.1 calculator  
qPDFview 0.5.0 PDF viewer\*  
Qlipper 5.1.2 clipboard manager\*  
QTerminal 2.1.0 terminal emulator  
Qtransmission 4.0.6 BitTorrent client, Qt interface version\*  
ScreenGrab 2.9.0 screenshot tool  
Skanlite 24.12.3 scanning utility  
Startup Disk Creator 0.4.1 (usb-creator-kde) USB boot disk maker

Systemd 257.4 init system  
VLC 3.0.21 media player\*  
Wget 1.24.5 command line webpage downloader\*  
XScreenSaver 6.08 screensaver and screen locker\*

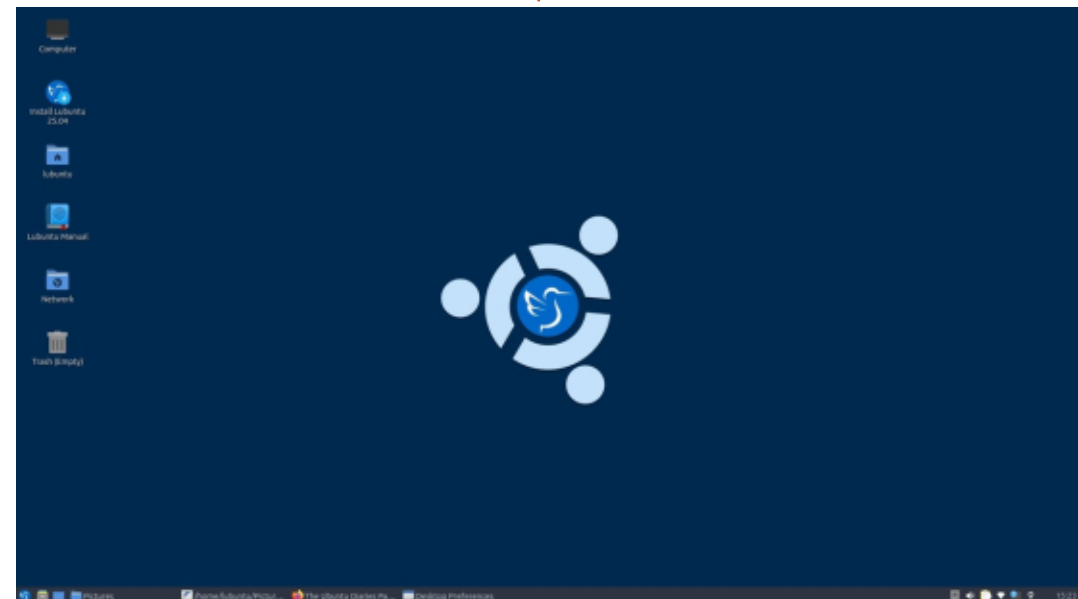
\* Indicates the same version as used in Lubuntu 24.10.

\*\* supplied as a Snap, so version depends on the upstream package manager.

One of the advantages of reviewing Lubuntu is that the release announcement typically tends to have a lot of information. Unfortunately in this case, while it has a lot to say, it misses some important details, like which default applications have been added and



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removed.

Lubuntu 25.04 removes the ImageMagick command line image editor and also the Quassel IRC client (Internet Relay Chat) . I am not sure that there was a good user case for including ImageMagick in the first place. As far as IRC clients

go, the use of IRC seems to have peaked almost 20 years ago and is not now in widespread use, if indeed it ever was. An IRC client can always be added from the repositories, if desired.

The Kcalc desktop calculator from KDE has been swapped out for

Qalculate! 5.5.1.

As in the past, the indispensable LibreOffice 25.2.2.2 office suite is supplied complete, less only LibreOffice Base, the office suite's database application. Base is probably the least used component of the suite and can be added from the repositories, if needed.

Lubuntu 25.04 does not come with an email client, image editor, video editor or web cam application, although there are good choices for these in the repositories.

## CONCLUSIONS

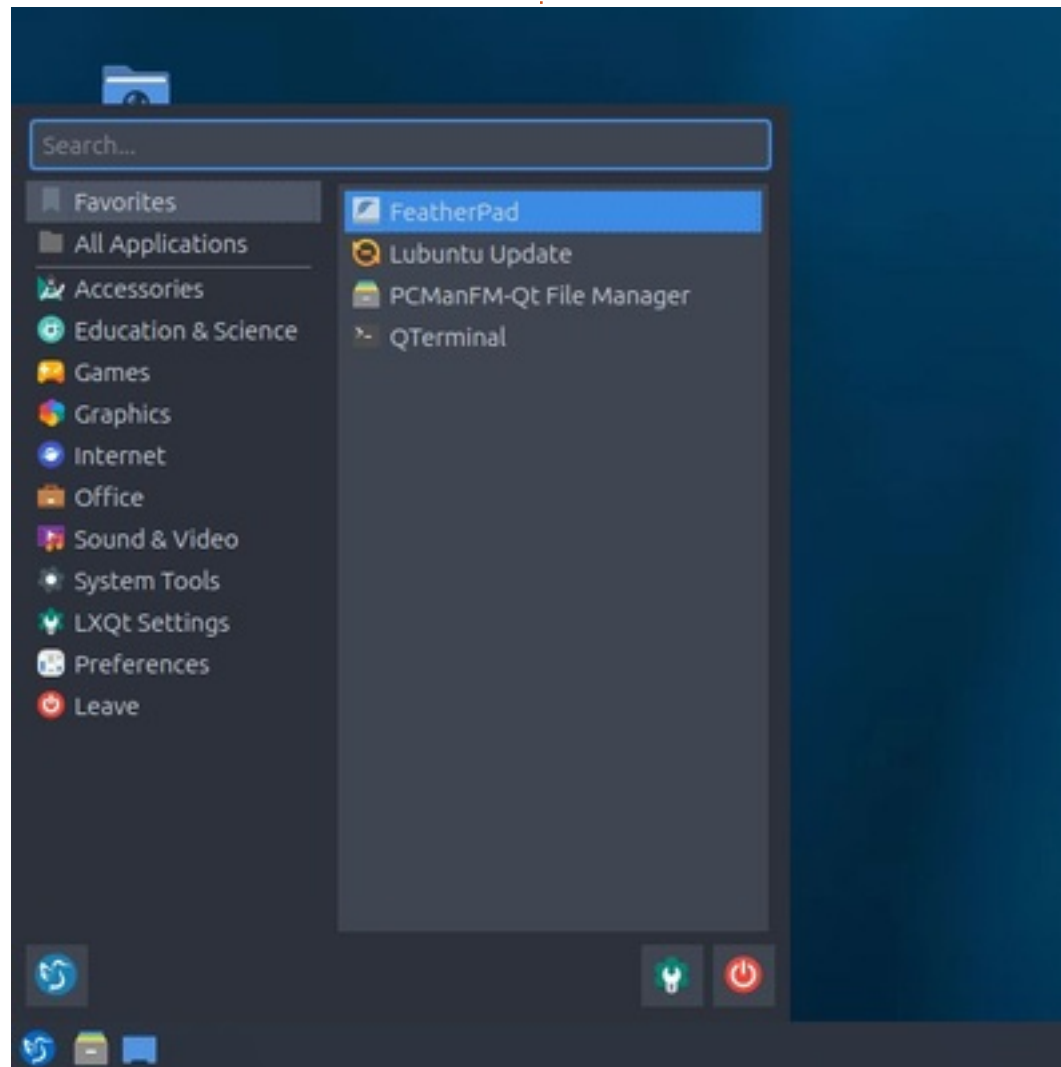
Lubuntu 25.04 is a good, solid release with very little new beyond nice wallpaper and a small application shuffle. The full implementation of Qt 6 and Wayland remains a future goal, hopefully for Lubuntu 25.10.

We'll check up on Lubuntu 25.10 in October and see if those items can be checked off as completed in that final interim release of this cycle, and also look ahead to what may be in store for the next LTS version, Lubuntu 26.04 LTS, due out

in April 2026.

## EXTERNAL LINKS

Official website:  
<https://lubuntu.me/>



**Adam Hunt** started using Ubuntu in 2007 and has used Lubuntu since 2010. He lives in Ottawa, Ontario, Canada, in a house with no Windows.





# REVIEW

Written by Adam Hunt

# Xubuntu 25.04

My previous review of Xubuntu in Full Circle 212 was a look at Xubuntu Minimal, the separate ISO file for download that omits almost all the normally included applications. With the release of Xubuntu 25.04, I thought we would get back to the full Xubuntu Desktop edition. Xubuntu Minimal is still available for any users who would rather pick their own applications after installation.

This fresh Xubuntu release came out on 17 April, 2025 and is the middle of three interim releases that will take us to the next long term support (LTS) version, Xubuntu 26.04 LTS, due to arrive in April, 2026.

The three interim releases in between the LTS versions are where improvements and new ideas are usually tried out, but Xubuntu 25.04 does not bring a lot that is new. This is the 39th Xubuntu release and it comes with nine months of support, running until January, 2026.

## INSTALLATION

I downloaded Xubuntu 25.04 from the official source using the Transmission BitTorrent client and then carried out an SHA256 sum check from the command line to ensure I had a good download.

I tested Xubuntu 25.04 using a USB stick equipped with a new version of Ventoy, 1.1.05, by just dropping the ISO file onto the stick. Ventoy officially supports Xubuntu and it booted up and ran fine.

## SYSTEM REQUIREMENTS

The recommended system requirements for Xubuntu 25.04 have not changed in the past four years since 21.04 and remain:

- 1.5 GHz dual core processor
- 2 GB RAM
- 20 GB of hard-drive space

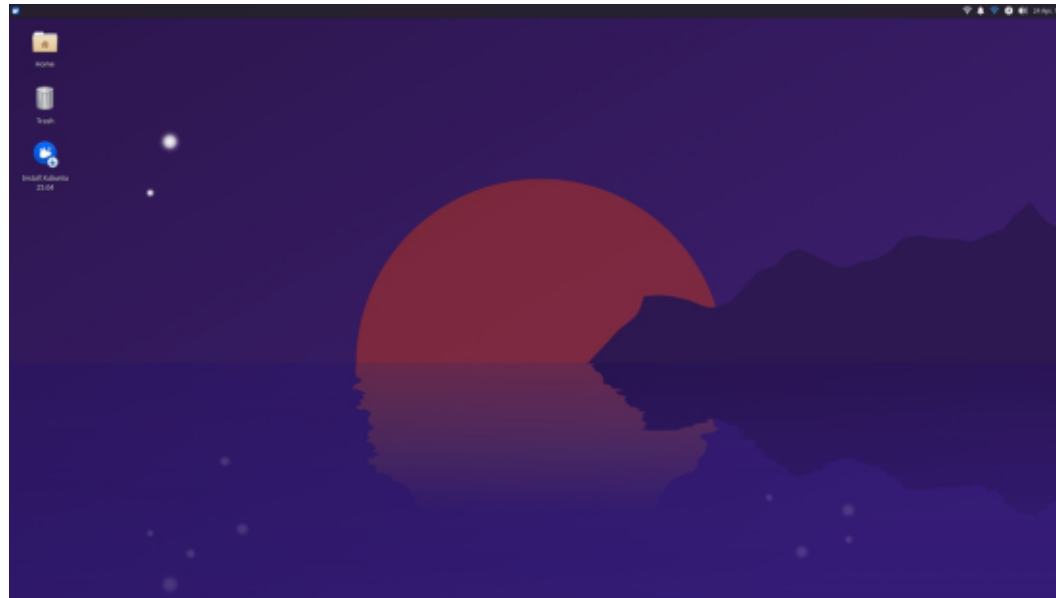
For web browsing, 8 GB of RAM is probably a more realistic minimum these days and, of course, more RAM is always better.

## NEW

Xubuntu 25.04 introduces the Xfce 4.20 desktop, for which the developers claim that they did "a gazillion of bug fixes and did various minor improvements", although it does not bring any new features. It also includes one updated application from the latest GNOME desktop, 48.

The Linux kernel has been upgraded to version 6.14 and the initialization system is now systemd 257.4. It is worth noting that Xubuntu has been using systemd since its 15.04 release so this is the 21st release over the past ten years with no noted issues.

All the Ubuntu flavors have been moving towards replacing the X11 display server with Wayland. Ubuntu and Kubuntu are already there with default Wayland sessions. For Xubuntu, this release notes that with the Xfce 4.20 desktop that "early Wayland support has been added, but is not available in Xubuntu". So it is close...but not quite there.



Not new, but still an annoyance in Xubuntu live sessions, is that once again in this release all drives are locked out and will not mount. This makes Xubuntu 25.04 pretty useless as a rescue disk and also makes doing screenshots for a review and getting them off the live session much more difficult. In my case, I normally just save them to a plugged in USB stick. For these screenshots, I had to sign into a cloud service, upload the screenshots and then download them to my laptop. I can't think of any good reason to lock USB devices and all other drives out of a live session and most of the other Ubuntu flavors don't do it.

The lack of much new in this release, beyond just bug fixes, points towards the next LTS being not much different from the last one. This will actually make most Xubuntu fans happy, as most seem to think that there is nothing much that needs changing in their favorite distribution. In many ways that is the story with most of the Ubuntu flavors. They work well, are not currently adding much in the way of new features, the user base for each flavor likes the way they work and isn't looking for changes. It may sound boring but this is actually a sign of success. What history has shown us is what Linux users really revolt against is change-for-the-sake-of change, so it is good that developers are not doing that!

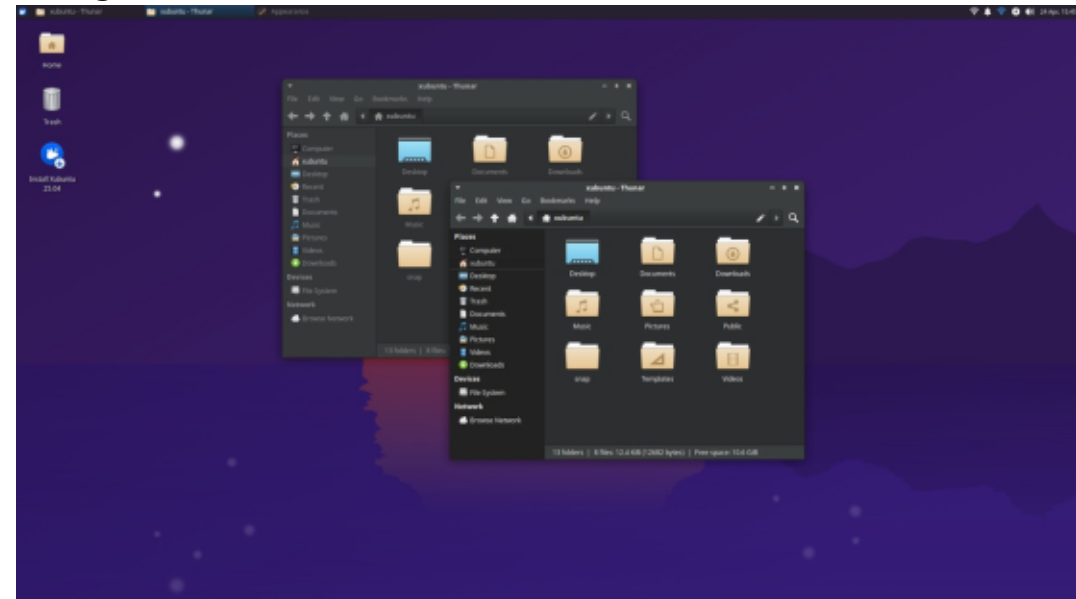
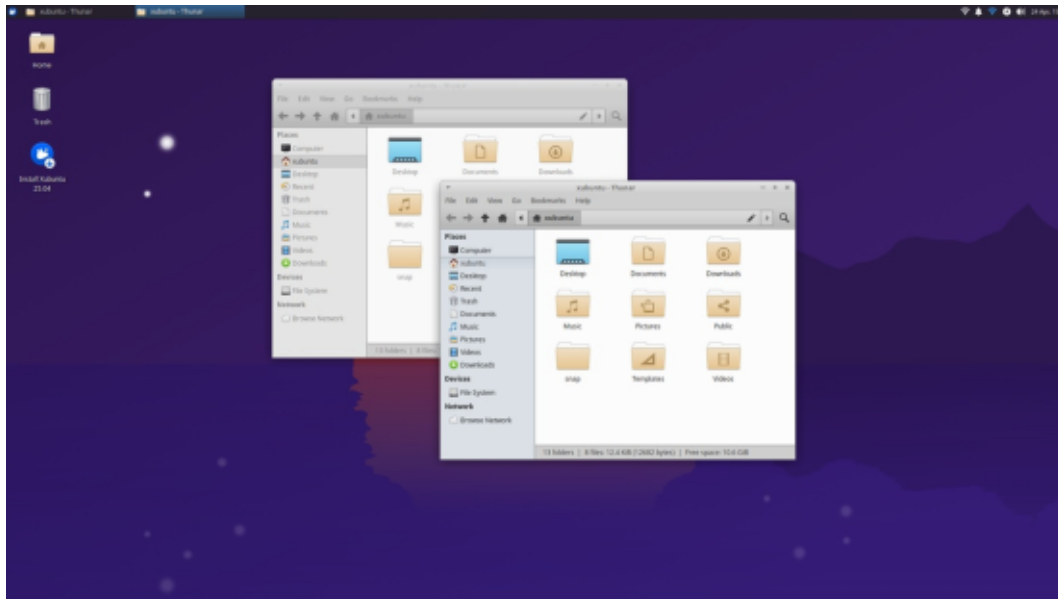
## Settings

As it has done for many years, Xubuntu 25.04 uses Greybird as its default window color scheme. There are still six window themes provided in the "Appearance" manager: Adwaita, Adwaita-dark, Greybird, Greybird-dark, High Contrast and Numix. The separate Window Manager also has 12 window top title bar themes: Default (which, oddly, is not the default), Daloo, Default-hdpi, Default-xhdpi, Greybird, Greybird-accessibility, Greybird-compact, Greybird-dark, Greybird-dark-accessibility, Kokodi, Moheli and Numix. You can use these two settings selectors to mix and match

the window look as desired.

There are now six icon themes, four fewer than in the last release, with Elementary Xfce the new default, replacing Elementary Xfce Dark.

The default Xubuntu 25.04 wallpaper for this release is once again designed by Pasi Lallinaho, who has done all the release wallpapers for the last 16 years, since Xubuntu 9.04. This one is an abstract night landscape. If you don't fancy it, Xubuntu 25.04 comes with ten other additional wallpapers. You can easily download any of the previous Xubuntu ones from the Xubuntu GitHub wallpaper repository or use



# REVIEW

your own wallpaper. Even though this release is code named "Plucky Puffin" there are no puffin-themed wallpapers.

Just like all the Xubuntu releases since 14.04 LTS, this one employs the Whisker Menu as its menu system. In Xubuntu 23.10 and earlier, the Whisker Menu was able to be resized but in the last two releases, Xubuntu 24.04 LTS and 24.10, it was no longer re-sizable. That seems to have been a bug which has now been fixed since, once again, the menu may be resized in this release. This is a welcome feature fix in the Xfce 4.20 desktop.

## APPLICATIONS

Applications included with Xubuntu 25.04 are:

- Atril 1.26.2 PDF viewer\*
- Blueman 2.4.4 bluetooth connector
- CUPS 2.4.12 printing system
- Catfish 4.20.0 desktop search
- Document Scanner 46.0 (simple-scan) scanning utility\*
- Engrampa 1.26.2 file archiver\*
- Firefox 137.0.2 web browser\*\*
- Firmware Updater 0+git.22198be firmware updater\*\*
- Gdebi 0.9.5.8 application installer
- GIMP 3.0.2 graphics editor
- GNOME Disk Utility 46.1 disk space and health monitor\*
- GNOME Disk Usage Analyzer 48.0 (baobab) disk display
- Gparted 1.6.0 partition editor

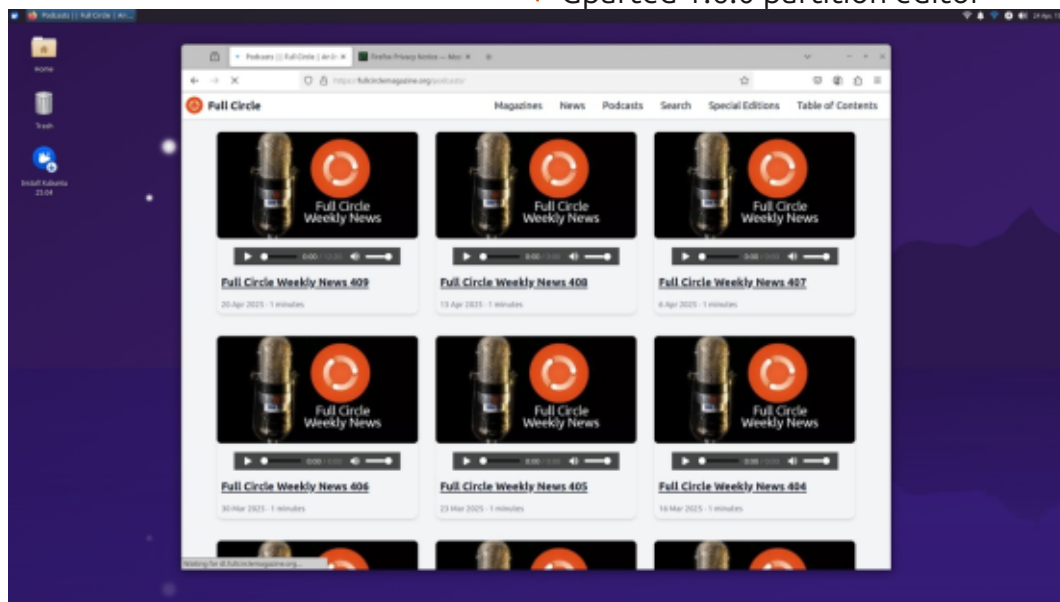
- Hexchat 2.16.2 IRC client\*
- LibreOffice 25.2.2.2 office suite (less LibreOffice Base database application)
- MATE Calculator 1.26.0 calculator\*
- Mousepad 0.6.3 text editor\*
- Parole 4.18.2 media player
- Pipewire 1.2.7 audio controller
- Ristretto 0.13.3 image viewer
- Rhythmbox 3.4.8 music player\*
- Software Updater 25.04.4 (update-manager) software update manager
- Synaptic 0.91.5 package management system
- Systemd 257.4 init system
- Thunar 4.20.2 file manager
- Thunderbird 128.9.1 esr email client\*\*
- Transmission 4.0.6 BitTorrent client
- Ubuntu App Center 1.0.0 package

- management system\*\*
- Wget 1.24.5 command line webpage downloader
- Xfburn 0.7.2 CD/DVD burner
- Xfce4 Panel 4.20.3 desktop panel
- Xfce4 Power Manager 4.20.0 system power manager
- Xfce4 Screenshotter 1.11.1 screenshot tool
- Xfce4 Terminal 1.1.4 terminal emulator

\* indicates same application version as in Xubuntu 24.10

The supplied default mix of applications has not changed in this release, although most of them have newly updated versions.

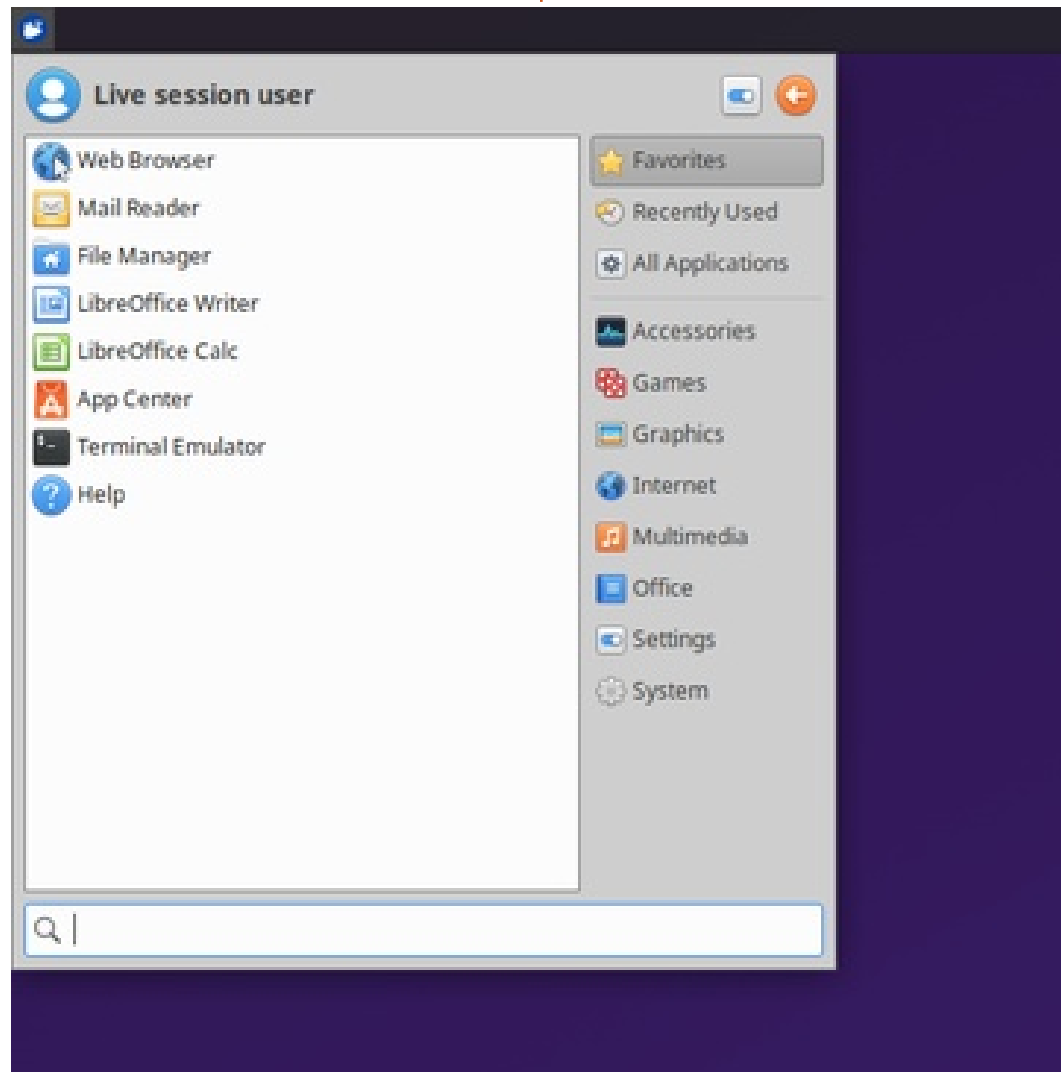
As can be seen, the list of



# REVIEW

applications included in the full Xubuntu Desktop ISO is extensive, including pretty much everything a desktop user might need, except perhaps a webcam client and video editor. If you think that this list has a lot of stuff that you do not want, rather than remove it all after installation, you can always use the

Xubuntu Minimal ISO instead. It really only comes with the file manager and then you can add just what you want. For experienced users, this may be a more efficient installation plan, particularly if you create a checklist to speed things up.



It is worth noting that Xubuntu is the only Ubuntu derivative, other than Ubuntu Cinnamon, that still comes with a CD/DVD burning application by default. Optical drives started disappearing on new laptops in about 2011, 14 years ago. Once included with all releases, since then most of the rest of the Ubuntu universe have dropped their optical drive burners from their default application list, although they are still in the Ubuntu repositories if you have a CD/DVD drive and any disks left to actually burn. It will be interesting to see if and when the Xubuntu Team makes that same move and drops Xfburn.

## CONCLUSIONS

Xubuntu 25.04 is a good, solid release with very little new included aside from the bug fixes included with the Xfce 4.20 desktop and some refreshed applications. Overall, I think Xubuntu fans will like what they see here as there is no "learning curve" from recent releases and most Xubuntu users are not looking for big changes anyway.

The next version out will be

Xubuntu 25.10, the third and final interim release of this cycle, due on 09 October 2025. That release will be the last chance to introduce anything new before the next LTS arrives and we'll have a look at it in the autumn.

## EXTERNAL LINKS

Official website:

<https://xubuntu.org/>

Wallpaper repository:

<https://github.com/Xubuntu/xubuntu-marketing/blob/master/wallpapers/README.md>



**Adam Hunt** started using Ubuntu in 2007 and has used Lubuntu since 2010. He lives in Ottawa, Ontario, Canada, in a house with no Windows.





# LETTERS

If you would like to submit a letter for publication, compliment or complaint, please email it to: [letters@fullcirclemagazine.org](mailto:letters@fullcirclemagazine.org). PLEASE NOTE: some letters may be edited for space.

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forumdisplay.php?f=270](https://ubuntuforums.org/forumdisplay.php?f=270)

## FULL CIRCLE NEEDS YOU!



Without reader input **Full Circle** would be an empty PDF file (which I don't think many people would find particularly interesting). We are always looking for articles, reviews, anything! Even small things like letters and desktop screens help fill the magazine.

See the article **Writing for Full Circle** in this issue to read our basic guidelines.

Have a look at the last page of any issue to get the details of where to send your contributions.





# Q&A

Compiled by EriktheUnready

If you have a Linux question, email it to: [questions@fullcirclemagazine.org](mailto:questions@fullcirclemagazine.org), and Erik will answer them in a future issue. Please include as much information as you can about your query.

Welcome back to another edition of Questions and Answers! In this section, we will endeavour to answer your Ubuntu questions. Be sure to add details of the version of your operating system and your hardware. I will try to remove any personally identifiable strings from questions, but it is best not to include things like serial numbers, UUIDs, or IP addresses. If your question does not appear immediately, it is just because there are many waiting, and I do them first-come-first-served.

As a FSE, I used to go around doing installations of various IT equipment. Lots of companies wanted their projectors installed in the ceiling. One day I was at Mercedes Benz installing a projector. As they have their own IT, the jobs they don't \*want to do, like installing a projector in the ceiling, are outsourced. The issue with ceiling projectors is that the cabling can get too long, even if the

projector has WiFi, some people need that cable. When the room is too big, like this case, the cabling cannot travel to the wall, then down the wall and along the floor back to the table. You start to get signal degradation. The alternative is to drop a pole for the cable to travel in. I asked my contact person why it had to go in the ceiling, as the pole was a bit contentious. They explained that the branch manager had called their on-site contracted IT to sort out an issue with him not being able to centre the image, with the projector on the table. It turned out that he had put his cup down, in front of the lens and the left hand side caught about 2cm of the cup...

I'm sure I don't have to explain that. Lots of people say they can't use Linux because they "need" M\$ office. However there are office suites that boast 100% compatibility. Isn't it just a case of a cup in front of the lens?

Q : I installed Freetube from the snap store, it worked for a month, then there was an update, but the snap wasn't being updated, so I installed the debian package from the website. It is still on my menu, but it won't launch. I'm not sure if the thing is still pointing to the snap, as I removed it after installing the debian package. If I launch it from the ops folder, it launches, but I don't know where to edit gnome menus.

A : I think we covered this with the Steam issue, I use the Applmage, but I installed it for you. If you run it in the terminal you will see: "FATAL:setuid\_sandbox\_host.cc(163)] The SUID sandbox helper binary was found, but is not configured correctly. Rather than run without sandboxing I'm aborting now." You need to make sure that /opt/FreeTube/chrome-sandbox is owned by root and has mode 4755. (sudo chmod u+s chrome-sandbox)

Q : I sort of have this question; in the snap store, under manage,

all is updated, but the snap store itself says "switch channel". When I click that, it says I need to close it as it can't be open. How the hell do I do that? It's chicken and egg.

A : The terminal is your friend, and the only way I know how, just issue:

```
sudo snap switch snap-store
--channel stable
```

Q : I am on Ubuntu 24.04 LTS and I have 8GB memory. After opening 1 (ONE) page in Firefox, I am using 2.46GB of memory. That did seem correct, but I counted the processes in htop and I have 40 firefox processes at 6.1MB each and 40 firefox-bin processes at 5MB each and then more sub-processes. It is crazy! How can I reduce this?

A : You have Google and Chrome to thank for that; that is how they made Chrome so fast (their V8 engine) and obviously FireFox had to keep up or lose out. The other problem is the HIV of the internet, JavaScript. I don't think you can turn it off any more, but you can try

adding “noScript” extension and restart your browser? Or... get a lightweight browser that does not support JavaScript?

**Q** : Hi, I run Audacious on my PC in Ubuntu Mate to play all those glorious sid tunes, with my Winamp skin (because nostalgia). However, on my laptop in Ubuntu Gnome, I can launch it, but once launched, I cannot move the window at all. It spawns randomly, and just sits there.

**A** : Right-click on it, go to settings, and change the “winamp classic” back to “GTK interface”. It needs to be in ugly mode :P for it to be dragged around in Gnome.

**Q** : My three-year-old hit my keyboard and I saw something about ‘bounce’ flash on my screen. Though I have not had any issues after that, I’d like to know what it is and how he turned it on or off and how I can undo what he did.

**A** : My guess is bouncy keys? That is usually under accessibility settings and then under the typing option in Vanilla Ubuntu. As you did

not tell me what version and flavour you are using, that’s as far as I can help you.

**Q** : I got my Dell laptop with Ubuntu and I’m very happy with it. I signed up for Ubuntu pro, as it kept saying there were VLC updates that I needed pro for. I was following the steps from the official documentation, but I noticed that it said that my kernel is not supported. The when I type `sudo pro status`, I can see “realtime-kernel\* yes disabled Ubuntu kernel with PREEMPT\_RT patches integrated” Do I need to install the real-time kernel then?

**A** : Oof, that is Microsoft tactics right there! As I don’t use VLC, I have never seen that; on the other hand, the kernel is probably the OEM kernel, so you can get firmware updates from Dell. I would not worry about that too much, it does not mean that you won’t get updates to your kernel. It just means they will come in the regular channel instead of via pro.

**Q** : In the top right-hand menu of Ubuntu, it has “power mode balanced” in the dropdown, and

when I click it and it goes orange, it changes to “power mode power saver”. So I changed it to power saver permanently, but now when I turn it on, and it goes to orange, it goes to “power mode balanced”, so I’m confused, what is it?

**A** : It is a toggle switch, so when you toggle it, it does the opposite of what you had. It is not an on-off switch in the way that you are thinking (I’m assuming), or what I understand from your message. It also allows for performance mode, then you can toggle between performance mode and balanced. If you go to settings-> power, you will see the three listed, it toggles between the top two or the bottom two.

**Q** : Kind sir, I draw on the company prescribed Dell Precision laptop, with a 2k screen and the colors are spot-on; however, it only has 32GB memory and an i7 (this is the standard for junior artists like me). Then there is the i9, 64GB XPS laptop with 4k screen that IT loaned me, because it is a beast, but its colors are off and also faded. As a digital artist, I’m torn between color correctness and work flow speed. I mostly work

directly on my Wacom, but I still need the laptop.

**A** : OK, but you seem to have forgotten to add your question... Have you tried adding a color profile in settings?

**Q** : I don’t use github for anything, so I don’t want it installed on my system, keeping it as lean as possible. There is this one software I want, but the list of commands to get it, starts with `git clone...` You see where I am headed? I CAN add git and delete it, but I’m stubborn and I’m sure it will not uninstall all the extra files it installs. That seems to be par for the course these days with installing software. There must be another way?

**A** : Several, actually; you can download the zip file on the github website with one click, or you can use curl? I mean if you don’t have a desktop or want to do things in the terminal, just:

```
curl -L https://github.com/
<username>/<path>/
somesoftware.tgz |tar xz
```

## Q&A

**Q**: I want to install FreeOffice and get rid of Libreoffice as Freeoffice is touted as having touchscreen support. When I search in the software centre, there is something odd, "freeoffice" gets me zip, "free office" gets me junk, and just "office", the same junk. How do I do this? Before you say I'm slow, I am 69 years old, going on 70, so be gentle. I'm still on LTS, not 24.10 or 25.04.

**A**: 69? Nice! Anyway, not all software is in the store, you can head on out to <https://www.freeoffice.com/en/>. I think it used to be <https://www.softmaker.com/en/products/softmaker-office/download>, but both seem to be up. Grab the **softmaker-freeoffice-2024-01.deb** package in the downloads section and once downloaded, just double click it or:

```
sudo apt install ./softmaker-freeoffice-2024-01.deb
```

As for removing LibreOffice, I suggest you hold out until you are satisfied with Softmaker FreeOffice, as I have a niggle in the back of my head it was nagware or something. It is also not always

updated, there is a trial version of the full product that is the latest version.



**Erik** has been in IT for 30+ years. He has seen technology come and go. From repairing washing machine sized hard drives with multimeters and oscilloscopes, laying cable, to scaling 3G towers, he's done it.





# UBUNTU GAMES

Written by Erik

## Starsector

Website:

<https://fractalsoftworks.com/category/releases/>

Blurb: *"The story of Starsector concerns a dense region of space in the Perseus Arm left remaining after the calamity which presumably destroyed the Domain. For over 200 cycles, humanity has been losing its grip on interstellar civilization and struggling desperately to hang on to what is left."*

*What will you discover in the ongoing development of the world of Starsector?"*

I have been on a bit of a space game binge lately, and this arrived at just the right time for that. You see, with it not being light at 5am any more, I go to bed a bit later, and I usually have an hour to spare, what better to fill it with?

What exactly is it, you may ask? Well it is a space sandbox game, where you get to play the way you want to. Want to be an explorer like

Captain Kirk? You can! Do you want to be a bounty hunter or a smuggler, like Han Solo, go for it! If you like or have played Endless sky or Naev or Space Pirates and Zombies, or even Sunless skies, this should be on your list.

One of the main changes is that the game has been updated to Java17, and should now run much faster and smoother. The modding API has also been improved, yay! (It is still scary how many mods there are for this game!).

Since the game has not been released yet, you can download and play for free, but you can also pre-order the game at \$15 USD. If I remember correctly, you can just ask for a serial key, or just search for it in your web browser. I have had mine for a few years now, so I have not been down that road again, but I recall that even with it being free, you needed a key to play.

Since the game is written in JAVA, you don't need a fancy PC, I

used to play it on the potato, which had 1366x768 display an IGP and 4GB of memory. However, I would recommend a beefier CPU (I'm playing on a dual-core i5, 2.5GHz with IGP), \*not a Celeron with two cores and 1.2GHz speed. My Potato has a 1.8GHz 4-core i3 (I think!), so let's use that as a minimum. I was playing the game on battery power on my laptop as the power plug came out slightly and I never knew!

There is no installation; to run the Linux version, unzip the file, cd starsector, and then run ./starsector.sh

You should now be hit with that brr-brr grr-grr soundtrack, then you know you are ready. If you are on a potato, there may be a second or so before you see anything displayed, but once it is up, it should play nicely without any delays even on office hardware.

For this article, I am just going to show off and talk about the Vanilla game. If you had any issues running the game, I suggest launching it from your terminal. If you had



previous mods, I suggest checking the compatibility matrix. The 'mods' for this game is another rabbit hole that will eat your free time for breakfast, you have been warned. :)

How not to get lost in this amaze-balls game? Sorry, I cannot answer that, since it has been three days since I wrote the previous paragraph. The game will suck you in so deep, you will forget what day it is.

If you have never played before, do the tutorials, it will save you a lot of frustration later. If you have played before, the keys are slightly different in this release, so check the bindings.

Speaking of keys, you play with WASD and SPACE, but left(A) and right(D) rotate you around a central axis. The mouse will move the viewport. This may feel weird in the beginning, but they will grow on you.

You guys know me by now; if a game has a kick-ass soundtrack, my ears perk up and the game has my full attention. Luckily with Starsector, you can listen to the music in your media player. You navigate to the sounds folder and

find 'music.bin', don't worry it is not really a binary file, it is a zip archive, pretending to be something else. If you are new to Linux, you can use the "type" command to find out what a file is. Unzip it with your archive manager and you should have a whole lot of awesome .ogg-files. Starsector does not have an outstanding soundtrack, but it has an appropriate one, one that fits the game. (Sounds space-y?).

In the current iteration, there are sixty seven (67) different music files that will play in accordance with your place in the star system and your allegiance. I cannot tell you which tracks are new, without finding my backup drive where I backed up to, before my second OS install this year, but I can definitely tell you that there are. Since the game is not complete, I suspect there will be more groovy sounds in the future. Currently there is only one battle tune that plays when combat is initiated and it definitely needs more (or maybe not... as you "hear" danger before you recognise it by the sound that plays), and the same is true for going to and leaving home base. As I play on a craptop with tinny speakers, it sounds like pins falling at a bowling alley. I'm not judging, the game

supports Linux out of the box and is not complete yet and gets more new sounds with every release! \*\*\*When I say this, I mean it may as well be complete and just enter the polishing phase, if we consider only the way it plays. Some people have complained about missing triggers, but as a casual gamer, I cannot say I have found any such issues. If I look at all the bug fixes and changes (for the better), in every version, I am amazed, as I have never had any issues playing the game. Not one! It is true that I have only been playing since version 0.91 (but remember, that 0.91 was even before the scamdemic!). This obviously does not excuse my bad game-play, losing most of my fleet on my last run...

Let's talk turkey as the Yanks say. The game-play is smooth and has always been smooth for me, even when there are other space battles happening around me. The progression is also at just the right pace, to make you feel like you have accomplished something. Mmm... Dopamine...

You start off with just your ratty old ship and before you know it, you have your own base and a fleet of vessels where you have to drag

tankers with them, just to have enough fuel! If you are new to the game, the game does require you to have fuel to travel places, so keep an eye on yours, you can get stranded! In the beginning, this is a major thorn in your side, but it adds to the stress of being a new pilot making you "feel" more invested.

You can be a bull in a China shop and simply try to fight everyone, or you can trade. Buy and sell and then buy and upsell. The game features a 'live' economy too, so you need to be smart about trading. You can also smuggle. Hell, I became an accidental smuggler when I took drugs and organs from a pirate and sold them to another pirate, jumping me two ranks at a time. Dealing in contraband is a high risk, high reward scenario and will put a target on your back.

The western spiral arm of the Milky way is huge. (Sorry, Perseus arm!), so I still play with pen and paper next to me, as there is no way I can remember where all the good prices are. Hint: You can't go wrong selling lobster, hahahaha. Though the game has a fast-travel system, it still takes time to travel inside star systems, so make sure that you have a few hours and change when

you play this. Do your homework first, or tuck the kids into bed first, whatever you need to do.

The game world is also ‘alive’ with people liking and not liking each other. If you are chased by pirates, head for the police and if you are chased by police, head for the pirates. There is nothing more satisfying than introducing the two and watching them fight it out and then you make your getaway near the end. If both like you, even better, but if neither likes you, you can turn off your transponder and sneak around. I think it is that feeling, that the universe is a living breathing thing, that makes me like it so much and I would like to see it expanded on, before the final release.

There is also always the feeling of the unknown, I mean, I have taken on a Hammerhead with a Kite and come out on top. That said, I probably got wasted ten times as much. :) The game-play does feel a bit repetitive after a while, but no game loop is perfect and getting enough money to start your own faction is not something you will achieve in a day. While the game is not as in-depth as dwarf fortress, I get the same vibe whilst playing it.

(Or the old “Pirates!” game from long ago).

With the 2025 release, there’s a bunch of new ships for you to try out. You also now get the ability to manufacture alpha cores, over time, which can be a boost to your defence (late game). This also means that when you build your own empire (yes, you most certainly can!), there will be things that will drain your coffers like nothing else, so you will need to manufacture them. (I just realised this may be part of Ashes of the Domain mod and I apologise if it is, as I said before it will take more than a day to reach your own empire level, and I want to get this to Ronnie while it is fresh!). The new ships are in the

Vanilla update, and I have even spotted new weapons, and the UI has been improved when surveying planets. I have not tried out any of the new story missions, but I am burning to do so. There has also been some rebalancing, some weapons hit harder and take longer to recharge/fire, so if you were used to a certain build, check your recipes. The mass drivers have definitely been affected.

If you can afford to, go and buy this game for your Ubuntu machine. If I could get it for fifteen local dollars, I’d buy it in a heartbeat. Sadly, there is no local pricing, so it is 300 dollars here, so it’s not affordable. Even if you don’t play it immediately, this is one of those

‘rainy day’ games you can have a lot of fun with, without realising it!

If you think I missed something or I was unfair towards the game, you know what to do, [misc@fullcirclemagazine.org](mailto:misc@fullcirclemagazine.org)



**Erik** has been in IT for 30+ years. He has seen technology come and go. From repairing washing machine sized hard drives with multimeters and oscilloscopes, laying cable, to scaling 3G towers, he's done it.



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The Patreon page is to help pay the domain and hosting fees. The money also helps with the new mailing list.

Several people have asked for a PayPal (single donation) option, so I've added a button below.

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