



Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #221 - September 2025



CACHYOS UNDER REVIEW

Full Circle Magazine is neither affiliated with, nor endorsed by, Canonical Ltd.



HowTo



GTK Programming in C p.25



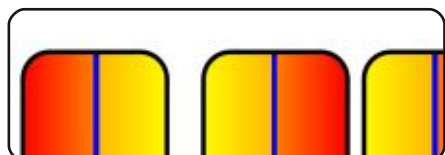
Trading Up p.29



Latex p.30



... p.XX



Inkscape p.33



Graphics



Full Circle

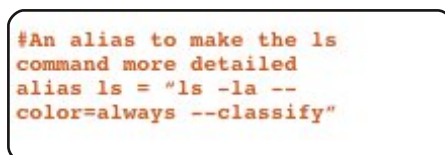
THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY



Linux News p.04



Bodhi Corner p.XX



Command & Conquer p.22



... p.XX



Ubuntu Devices p.xx



The Daily Waddle p.37



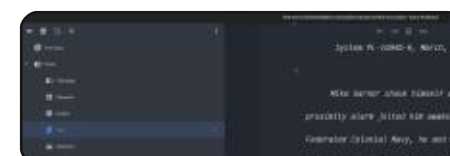
Review p.46



My Opinion p.43



Letters p.XX



Review p.51



Q&A p.55



Review p.XX



Ubuntu Games p.58



The articles contained in this magazine are released under the Creative Commons Attribution-Share Alike 3.0 Unported license. This means you can adapt, copy, distribute and transmit the articles but only under the following conditions: you must attribute the work to the original author in some way (at least a name, email or URL) and to this magazine by name ('Full Circle Magazine') and the URL www.fullcirclemagazine.org (but not attribute the article(s) in any way that suggests that they endorse you or your use of the work). If you alter, transform, or build upon this work, you must distribute the resulting work under the same, similar or a compatible license.

Full Circle magazine is entirely independent of Canonical, the sponsor of the Ubuntu projects, and the views and opinions in the magazine should in no way be assumed to have Canonical endorsement.



WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

Once again, we bring you more GTK, Latex, Trading Up, and Inkscape. We're nearing the end of Trading Up, but I have another couple of series to bring you. Of course, that doesn't mean I'm overflowing with articles. Far from it. So, please, send in anything you have.

As ever, we have a review from Adam. This month it's CachyOS. It seems to be making quite a splash in Linux circles. Is it worth trying? Next month will start the review cycle all over again with 25.10. Elsewhere, we have a rather spicy opinion piece from Erik regarding new users. So hot we had to censor some of his rather colorful language.

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

ronnie@fullcirclemagazine.org



This magazine was created using :



Find Full Circle on:



facebook.com/fullcirclemagazine



twitter.com/#!/fullcirclemag



<https://mastodon.social/@fullcirclemagazine>

Weekly News:



<https://fullcirclemagazine.org/podcasts/index.xml>



<https://open.spotify.com/show/6JhPBfSm6cLEhGSbYsGarP>



<https://www.youtube.com/playlist?list=PLnv0U8wOzXu487qi5I2Isf-rQjEyKPAif>

FCM PATREON: <https://www.patreon.com/fullcirclemagazine>



THE LINUX KERNEL TURNS 34:

25/08/2025

On August 25, 1991, after five months of development, 21-year-old student Linus Torvalds announced on the comp.os.minix newsgroup that he had created a working prototype of the new Linux operating system, marking the completion of the bash 1.08 and gcc 1.40 ports. The first public release of the Linux kernel was presented on September 17. Kernel 0.0.1 was 62 KB in compressed form and contained approximately 10,000 lines of source code. The modern Linux kernel contains approximately 41 million lines of code.

Linus originally intended to call

the kernel Freax, a combination of the words "free", "freak" and X (Unix). But the kernel was given the name "Linux" by Ari Lemmke, who, at Linus's request, placed the kernel on the university's FTP server, naming the directory with the archive not "freax", as Torvalds had requested, but "linux". It is noteworthy that the enterprising businessman William Della Croce managed to register the Linux trademark and wanted to collect royalties over time, but later changed his mind and transferred all rights to the trademark to Linus. The official mascot of the Linux kernel, the penguin Tux, was chosen as a result of a competition held in 1996. The name Tux stands for Torvalds UniX.

<http://www.cs.cmu.edu/~awb/linux.history.html>

UBUNTU USES SUDO-RS BY DEFAULT:

26/08/2025

In the daily experimental Ubuntu builds that reflect the development of the fall release of Ubuntu 25.10, the sudo-rs project, written in Rust, is used instead of the sudo utility by default. The decision to use sudo-rs in Ubuntu was made in May, but until recently it was unclear whether the developers would have time to implement the necessary missing features in sudo-rs before Ubuntu 25.10 entered the freeze stage.

To ship sudo-rs in Ubuntu 25.10, the following requirements were met: the ability to work on systems

with older versions of the Linux kernel (<5.9), support for the NOEXEC protection mechanism and AppArmor profiles, fixing stability issues, reviewing the package and adding it to the main repository. Delivering utilities written in Rust will reduce the risk of errors when working with memory, such as accessing a memory area after it has been freed and going beyond the buffer boundaries. If no unforeseen problems arise, Rust utilities will be used by default in the Ubuntu 26.04 LTS branch.

<https://discourse.ubuntu.com/t/sudo-rs-is-now-default-for-requesting-quokka/66912>

QEMU 10.1.0:

27/08/2025

The release of QEMU 10.1.0 is out. As an emulator, QEMU allows you to run a program compiled for one hardware platform on a system with a completely different architecture, for example, to run an ARM application on an x86-compatible



DistroWatch.com

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

PC. In virtualization mode in QEMU, the performance of code execution in an isolated environment is close to the actual hardware system due to direct execution of instructions on the CPU and the use of the Xen hypervisor or the KVM module in Linux, or the NVMM module in NetBSD.

The project was originally created by Fabrice Bellard to enable x86-based Linux binaries to run on non-x86 architectures. Over the years, full emulation support has been added for 14 hardware architectures, with over 400 emulated hardware devices. More than 2,700 changes from 226 developers were made in preparation for version 11.0.

<https://lists.nongnu.org/archive/html/qemu-devel/2025-08/msg03762.html>

COZYSTACK 0.35:

27/08/2025

The release of the free PaaS platform Cozystack 0.35, built on Kubernetes, is now available. The project aims to provide a ready-made platform for hosting

providers and a framework for building private and public clouds. The platform is installed directly on servers and covers all aspects of preparing the infrastructure for providing managed services. Cozystack allows you to launch and provide Kubernetes clusters, databases, and virtual machines. The platform code is available on GitHub and is distributed under the Apache-2.0 license.

The platform includes a free implementation of the network infrastructure (fabric) based on Kube-OVN, and uses Cilium for the service network and MetalLB to announce services to the outside. The storage is implemented on LINSTOR, which suggests using ZFS as a base layer for storage and DRBD for replication. There is a pre-configured monitoring stack based on VictoriaMetrics and Grafana. To launch virtual machines, KubeVirt technology is used, which allows you to launch classic virtual machines directly in Kubernetes containers and already has all the necessary integrations with the Cluster API to launch managed Kubernetes clusters inside a "hardware" Kubernetes cluster.

<https://github.com/cozystack/cozystack/releases/tag/v0.35.0>

RPM 6.0 BETA 2:

28/08/2025

Red Hat has published the second beta release of the RPM 6.0 package manager, which will be used in the fall release of the Fedora Linux 43 distribution. The project is used in such distributions as RHEL, Fedora, SUSE, openSUSE, OpenMandriva, Mageia, PCLinuxOS and more. RPM code is distributed under the GPLv2 and LGPLv2 licenses. RPM version 5 is skipped to avoid overlaps with the RPM5 project, which is not related to Red Hat's RPM and was developed by independent developers.

<https://lists.rpm.org/pipermail/rpm-announce/2025-August/000120.html>

AGAMA 17:

28/08/2025

The openSUSE project developers have introduced the Agama 17 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. 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, as well as the container-based MicroOS edition and openSUSE Leap Micro 6.2. The installer will be shipped with openSUSE Leap 16 and SUSE Linux Enterprise Server 16 (in beta testing).

<https://agama-project.github.io/blog/2025/08/27/agama-17>

MODICIA 6.12.41:

29/08/2025

The release of the MODICIA 6.12.41 distribution has been published. It 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 containing about 1000 packages. The size of the live iso image, is 4.7 GB (x86_64).

The distribution has been developing since 1998 and is notable for its default high-performance CPU mode (Turbo Boost) and the delivery of a kernel variant that works in real time. Wine is used to run multimedia programs compiled for Windows. Zram (RAM disk with compression) is used to compress data stored in RAM, and the kernel parameter `vm.swappiness` is reduced from 60 to 10 to reduce the activity of the swap partition.

<https://sourceforge.net/p/modicia-o-s/news/general/thread/625f1f4975/>

FREEDOMBOX:

29/08/2025

New FreedomBox Trixie builds have been published,

translated to the Debian 13 base. The project is developing a system for easy deployment of personal servers that protect users' personal data and allow you to quickly launch typical services on your equipment that can be used for personal use. All the code developed by the project are available through the Debian repositories. The installation image is generated for the x86_64 architecture (the formation of i386 builds has been discontinued). If desired, you can create your own image using the special Freedom-Maker installer and the freedombox-setup configurator .

FreedomBox was founded by Eben Moglen, a Columbia University law professor who provides legal support for the Free Software Foundation. The project was created to provide a means to create low-cost, low-power personal servers that users can use to store their personal data and securely communicate without relying on external centralized services.

<https://discuss.freedombox.org/t/debian-13-trixie-disk-images-now-available/3871>

GTK 4.20:

29/08/2025

After six months of development, the multi-platform GUI toolkit GTK 4.20 has been released. GTK 4 is being developed as part of a development process that tries to provide application developers with a stable and supported API for several years that they can use without the fear of having to rework their applications every six months due to API changes in the next GTK branch.

<https://gitlab.gnome.org/GNOME/gtk/-/tags/4.20.0>

SPAMASSASSIN 4.0.2:

30/08/2025

After a year and a half of development, the release of the SpamAssassin 4.0.2 spam filtering platform has been published. Blocking in SpamAssassin: first, the message is checked using various methods, such as contextual analysis, DNSBL black and white lists, trained Bayesian classifiers, signatures of

known spam, sender authentication by SPF and DKIM. As a result of the checks, a weighting coefficient is accumulated, which must not exceed a certain threshold, otherwise the message is blocked or marked as spam. The package can be used on both client and server systems. Automatic filter rule update tools are supported. SpamAssassin code is written in Perl and is distributed under the Apache 2.0 license.

<https://lists.apache.org/thread/vdmwnh6f05fnj9ddz93t70f9gy00ys0b>

GNOME FOUNDATION CEO STEPS DOWN:

30/08/2025

Steven Deobald has announced that he is stepping down as executive director of the GNOME Foundation, which oversees the development of the GNOME desktop environment. Steven took over four months ago, and at a recent board meeting, it was decided that he was not fit for the role despite accomplishments such as creating a new donation platform, working on the

guidelines, and building partnerships with related projects such as postmarketOS.

<https://blogs.gnome.org/steven/2025/08/29/so-short-and-thanks-for-all-the-flinch/>

ICEWM 3.9.0:

31/08/2025

The lightweight window manager IceWM 3.9.0 is now available. IceWM provides full control via keyboard shortcuts, the ability to use virtual desktops, taskbars and application menus, and tabs can be used to group windows. The window manager is configured via a fairly simple configuration file and themes can be used. Combining windows in the form of tabs is also supported. Built-in applets for monitoring CPU, memory, and network traffic are available. Several third-party GUIs for customization, desktop implementations, and menu editors are being developed separately. The code is written in C++ and is distributed under the GPLv2 license.

The new version adds support

for cursor themes. As an alternative to XPM cursors, support for cursor image files in the Xcursor format has been added. For themes that do not define a cursor image, the cursor from the Xcursor system theme is used. To load cursor images, gdk-pixbuf functions are used without using the libXpm library. The libXcursor library has been added to the dependencies. The dependency on libXpm has been removed. The "-covered" option has been added to the icesh utility to filter out windows covered by other windows.

<https://github.com/ice-wm/icewm/releases/tag/3.9.0>

LINUX FROM SCRATCH 12.4 & BEYOND LINUX FROM SCRATCH 12.4:

02/09/2025

New releases of the Linux From Scratch 12.4 (LFS) and Beyond Linux From Scratch 12.4 (BLFS) guides, as well as LFS and BLFS editions with the systemd system manager, are available. Linux From Scratch provides instructions for building a basic Linux system from scratch, using only the source code

for the necessary software. Beyond Linux From Scratch supplements the LFS instructions with information on building and configuring about 1,000 software packages, covering a variety of applications, from DBMSs and server systems to graphical shells and media players.

Linux From Scratch 12.4 updates 49 packages, including Linux kernel 6.16.1, Systemd 257.8, Binutils 2.45, gcc 15.2, glibc 2.42, Bash 5.3, Coreutils 9.7, Meson 1.8.3, OpenSSL 3.5.2, Perl 5.42.0, Python 3.13.7, Vim 9.1.1629. Bugs in boot scripts have been fixed, and explanatory materials throughout the book have been edited.

Beyond Linux From Scratch 12.4 features over 1,300 updates, including KDE Plasma 6.4.4, KDE Gears 25.08, GNOME 48, Xfce 4.20.2, LXQt 2.2.1, IceWM 3.8.2, LibreOffice 25.8.1, FFmpeg 7.1.1, Inkscape 1.4.2, Thunderbird 140.2, Firefox 140.2.0, SeaMonkey 2.53.21, GIMP 3.0.4, Mesa 25.1.8, GTK 4.18.6, MariaDB 11.8.3, PostgreSQL 17.6, SQLite 3.50.4, Postfix 3.10.4, Exim 4.98.2, BIND 9.20.12, Apache httpd 2.4.65. Added new packages: roman-numerals-py, Clone::PP and

fast_float. Removed packages libgdata, uhttpmock and AbiWord.

<https://lists.linuxfromscratch.org/sympa/arc/lfs-announce/2025-09/msg00000.html>

APACHE CLOUDBERRY 2.0.0:

02/09/2025

Apache Cloudberry 2.0.0 is the latest release of the distributed DBMS, continuing the development of the open source Greenplum DBMS codebase, which was closed sourced by Broadcom after its acquisition of VMware. Apache Cloudberry 2.0.0 marks the first release of the project after the code was transferred to the Apache community. The project is currently in the Apache Incubator and will be promoted to a primary Apache project once the infrastructure and maintainers are ready.

Cloudberry DBMS is a distributed edition of the open PostgreSQL DBMS optimized for executing analytical queries over large data arrays (Data Warehouse). Massively parallel processing (MPP) architecture is used for parallel

data processing, ensuring storage scalability up to petabyte sizes by dividing data into segments and using a cluster of servers for their storage and processing.

<https://cloudberry.apache.org/blog/announce-apache-cloudberry-2.0.0>

RELEASE OF MIRACLE-WM 0.7:

04/09/2025

Matthew Kosarek, a developer from Canonical, has released the miracle-wm 0.7 compositing manager, which uses the Wayland protocol and Mir compositing manager building components. Miracle-wm supports tiling window layout, similar to the i3 and Sway projects. Waybar can be used as a panel. The project code is written in C++ and is distributed under the GPLv3 license. Ready-made builds are available in Snap format, as well as deb packages for Ubuntu.

The goal of miracle-wm is to create a composite server that uses tiled window management, but is more functional and stylish than products like Swayfx. At the same

time, the project allows you to use classic techniques for working with floating windows, such as placing individual windows on top of a tiled grid or pinning windows to a specific place on the desktop. Virtual desktops are supported with the ability to set a default window mode for each desktop (tiled layout or floating windows).

It is expected that miracle-wm will be useful for users who prefer a tiled layout, but want visual effects and a more vivid graphical design with smooth transitions and colors. The configuration is defined in YAML format. To install miracle-wm, you can use the command "sudo snap install miracle-wm --classic".

<https://github.com/miracle-wm-org/miracle-wm/releases/tag/v0.7.0>

GDM BRINGS BACK X11 SUPPORT BY DEFAULT AHEAD OF GNOME 49:

04/09/2025

GNOME 49 RC has been released, the final testing release before the scheduled September 17 release. The published testing release is notable

for reverting an earlier change that disabled the default compilation of X11 support components in the GNOME Display Manager (GDM).

The original intent of GNOME 49 was to disable X11 support in GDM by default, but leave the ability to run X11-based desktop environments and retain X11-related code to optionally bring back X11 support in distributions. The reason for bringing back X11 support in GDM is the difficulty of separating the ability to run modern X11 sessions in GDM from the use of X11 in GDM itself, such as support for XDMCP, legacy x11 sessions, and non-user x11 sessions.

<https://discourse.gnome.org/t/gnome-49-rc-released/31234>

OPENSUSE LEAP AND OPENSUSE LEAP MICRO SUPPORT PERIOD EXTENDED TO 2 YEARS:

04/09/2025

The developers of the openSUSE distribution have announced an extension to the update period for new releases of the openSUSE Leap

and openSUSE Leap Micro distributions to two years. The new support period will be applied starting with the openSUSE Leap 16 branch, which is scheduled for October 1, 2025. Intermediate releases in the openSUSE Leap 16 branch, supported in parallel with the commercial distribution SUSE Linux Enterprise 16, will be generated until the fall of 2031 - the final release will be openSUSE Leap 16.6, updates will be released until the fall of 2033. As before, new releases of the distribution will be published once a year.

Since 2009, openSUSE has had a support period of one and a half years - a year until the next release + six months for upgrading to a new version. Since the development of the first release of the new openSUSE Leap 16 branch took longer than usual, an exception was made for the openSUSE Leap 15.6 release, formed in June last year and its support period was extended by an additional 4 months (the total period for publishing updates will be 1 year and 10 months). Starting with openSUSE 16, release support will be carried out during two full cycles of preparing new releases. For those who find two years of

support insufficient, a toolkit is provided for migrating installations to SUSE Linux Enterprise and SUSE Linux Enterprise Micro distributions.

<https://news.opensuse.org/2025/09/03/leap-16-doubles-support/>

RELEASE OF LINUX MINT 22.2:

04/09/2025

The release of Linux Mint 22.2 is out, continuing the development of the branch on the Ubuntu 24.04 LTS package base. The distribution is fully compatible with Ubuntu, but differs significantly in its approach to the user interface and the selection of applications used by default. The Linux Mint developers provide a desktop environment that corresponds to the classic layouts of the desktop, which is more familiar to users who do not accept the new ways of building the GNOME 3 interface. DVD builds based on MATE (3 GB), Cinnamon (3 GB) and Xfce (3 GB) are available for download. The Linux Mint 22 branch is classified as a long-term

support (LTS) release, updates for which will be generated until 2029.

<https://blog.linuxmint.com/?p%3D4881>

MICROSOFT OPENS BASIC INTERPRETER CODE FOR M6502 CPU's:

04/09/2025

Microsoft has announced the release of the source code for the BASIC interpreter for the MOS Technology 6502 eight-bit microprocessors developed in 1975. The version of BASIC that was released was installed in 8KB of ROM and supported the Apple II, Commodore PET, Ohio Scientific, MOS KIM-1c, and PDP-10 simulator. The code is 6,955 lines of assembly language and is licensed under the MIT license. The last change was made on July 28, 1978.

The 6502 BASIC code may be of interest to retro computer enthusiasts using emulators and FPGA-based implementations.

<https://opensource.microsoft.com/blog/2025/09/03/microsoft-open-source-historic-6502-basic/>

LKRG 1.0.0 RELEASED:

05/09/2025

The Openwall project has published the LKRG 1.0.0 kernel module (Linux Kernel Runtime Guard), designed to check the integrity of kernel structures and identify attempts to exploit kernel vulnerabilities. Assigning the version number 1.0.0 marked the project reaching a mature state. The project code is distributed under the GPLv2 license.

The module is suitable for both protection against attacks that manipulate known vulnerabilities in the Linux kernel and for countering exploits that use yet unknown vulnerabilities, if they do not use special measures to bypass LKRG. The protection is based on identifying unauthorized changes to the running kernel (integrity check) and tracking changes in user process permissions (determining the use of exploits).

The integrity check is performed based on comparison of hashes calculated for the most important memory areas and kernel data

structures, such as IDT (Interrupt Descriptor Table), MSR, system call tables, all procedures and functions, interrupt handlers, lists of loaded modules, contents of the ".text" section of modules and process attributes.

It supports x86-64, AArch64 (ARM64), ARM32, and x86 architectures. LKRG 1.0.0 has been tested with kernels from various distributions, ranging from RHEL/CentOS 7 kernel 3.10 to 6.17-rc4 from the Fedora 44 release repository. Packages are available for Arch, Gentoo, Guix, NixOS, Rocky, Whonix, Yocto and OpenBMC. Packages built for Rocky Linux can be used in RHEL 8/9 and derivatives such as AlmaLinux 8/9, and Whonix packages in Debian and Ubuntu.

<https://www.openwall.com/lists/announce/2025/09/02/1>

GIMP 3.1.4:

05/09/2025

The GIMP 3.1.4 graphics editor is now available, which is the second release in the experimental 3.1 branch, which forms the

functionality of the future stable GIMP 3.2 branch. The GIMP 3.2 branch develops support for link layers (Link layer) and vector layers (Vector layer), as well as features related to support for the CMYK color model and color management. Ready-made builds are published for Linux (AppImage and Flatpak for x86 and ARM64 architectures), macOS and Windows.

<https://www.gimp.org/news/2025/09/01/gimp-3-1-4-released/>

NEW VERSIONS OF DEBIAN 13.1 AND 12.12:

06/09/2025

The first corrective update of Debian 13 has been generated, which includes package updates released in the month since the release of the new branch, and fixes bugs in the installer. The release includes 72 updates with fixes for stability issues and 16 updates with fixes for vulnerabilities.

Changes include: update to the latest stable versions of certain packages, like, dpdk, galera, git,

glib, gnome-online-accounts, gnome-shell, gssdp, libadwaita-1, librepo, mariadb, mozjs128, network-manager-openvpn, pcre2, postfix, postgresql, ptyxis, qemu, samba, systemd. The package manager guix, which remained unsupported and contains security issues, was removed from the distribution.

At the same time, a new release of the previous stable branch Debian 12.12 is available, which includes 135 updates with fixes for stability issues and 83 updates with fixes for vulnerabilities. The following packages have been updated to the latest stable versions: apache2, clamav, dpdk, galera, libsoup3, llvm-toolchain, mariadb, openssl, postgresql, rar, rustc-web, systemd, usb.ids, wireless-regdb. Here too, the guix package has been removed.

<https://www.debian.org/News/2025/20250906>

THE FIRST ALPHA RELEASE OF THE KDE LINUX

DISTRIBUTION:

06/09/2025

The KDE project has released the first alpha release of its own KDE Linux distribution, which is positioned as a reference implementation of a Linux distribution for the KDE desktop and applications, optimally combined with KDE technologies and developed directly by KDE developers. System images (5 GB) are available for installation to create bootable USB drives that work in Live mode.

The distribution is based on Arch Linux, but is designed as an indivisible image that does not use division into separate packages, is mounted in read-only mode and is updated atomically. The components, in addition to the basic system environment, are built from source code using kde-builder or supplied as Flatpak packages. The distribution supports repeatable builds, allowing anyone to verify the distribution build process. All user (/home) and changeable system data are stored in encrypted partitions. The bootloader is systemd-boot, which supports booting only in EFI mode.

The limitations of the alpha version include support for UEFI-based systems only, no ability to

boot in UEFI Secure Boot mode, no ability to load new kernel modules during operation, an unfinished interface for updating the system and applications in Flatpak format, no support for old NVIDIA GPUs (only GPUs based on the Turing microarchitecture (GTX 16xx) and newer are supported, since licensing restrictions do not allow proprietary modules with support for old GPUs to be included in the image). Only a Wayland-based graphics session is available.

<https://discuss.kde.org/t/kde-linux-alpha-has-been-released/39476>

RELEASE OF UTILS 0.2.0:

07/09/2025

The release of the utils coreutils 0.2.0 (Rust Coreutils) project has been published. It develops an analogue of the GNU Coreutils package written in the Rust language. 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, among others, capable of running

on Windows, Redox and Fuchsia platforms.

Rust Coreutils is used in the AerynOS (Serpent OS) and Apertis distributions, and will be enabled by default in the fall release of Ubuntu 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 Rust-written analogs of the util-linux, diffutils, findutils and procs utility sets, as well as the sed and login programs.

<https://github.com/uutils/coreutils/releases/tag/0.2.0>

RELEASE OF ARMBIAN 25.8 & DIETPI 9.16:

07/09/2025

Armbian 25.8 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.

The project supports more than 30 variants of Linux kernel builds for different ARM and ARM64 platforms. A SDK is provided to simplify the creation of your own system images, packages and distribution editions. 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.

Additionally, DietPi 9.16, a distribution for single-board PCs based on ARM and RISC-V architectures, such as Raspberry Pi, Orange Pi, NanoPi, BananaPi, BeagleBone Black, Rock64, Rock Pi, Quartz64, Pine64, Asus Tinker, Odroid and VisionFive 2 is also out. The distribution is built on Debian and is available in builds for more than 50 boards. DietPi can also be used to create compact environments for virtual machines and regular PCs based on the

x86_64 architecture. Builds for the boards are small in size (on average 130 MB) compared to Raspberry Pi OS and Armbian. The tools for building and maintaining the distribution are distributed under the GPLv2 license.

The project is optimized for minimal resource consumption and develops several of its own utilities: an interface for installing DietPi-Software applications, a configurator DietPi-Config, a backup system DietPi-Backup, a mechanism for maintaining temporary logs DietPi-Ramlog (rsyslog is also supported), an interface for setting process execution priorities DietPi-Services and a system for delivering updates DietPi-Update. The utilities provide a console user interface with menus and dialogs based on whiptail. A fully automated installation mode is supported, allowing installation on boards without user intervention.

<https://blog.armbian.com/v25-8-1-is-here/>

BUDGIE DESKTOP ENVIRONMENT 10.9.3:

07/09/2025

More than a year after the last update, the Budgie 10.9.3 desktop environment has been released. The user environment consists of separately delivered components with the Budgie Desktop desktop implementation, the Budgie Desktop View icon set, the Budgie Control Center system configuration interface (a fork of GNOME Control Center), and the Budgie Screensaver screensaver (a fork of gnome-screensaver). The project code is distributed under the GPLv2 license.

The developers intended to form a major release of Budgie 10.10 in the first quarter of 2025. In this release, it was planned to completely abandon support for X11 and leave only the ability to work in environments based on the Wayland protocol. However, this branch is still not ready for release, one of the criteria for which was mentioned as achieving parity in the functionality of applets with the old environment based on X11. After the release of Budgie 10.10, the 10.x series will be transferred to maintenance mode, and all resources will be directed to the development of the Budgie 11

branch, notable for separating desktop functionality from the layer providing visualization and output of information.

The Budgie 10.9.3 update is notable for its synchronization with the changes in the upcoming GNOME 49 release, scheduled for September 17. To manage settings, Budgie uses the gnome-settings-daemon component, which was changed in GNOME 49, breaking backward compatibility. The code for managing the screen backlight was transferred from the Power plugin to GNOME Shell, and the code for supporting multimedia keys for changing brightness was transferred from the MediaKeys plugin. Also, the plugin for Wacom graphic tablets was removed from gnome-settings-daemon, the functionality of which is now integrated into the Mutter composite manager.

To ensure operation after the functionality cut, the Budgie developers created a fork of gnome-settings-daemon, aimed at preserving the old state of the MediaKeys, Power and Wacom components. With the exception of these components, which are supplied as separate plugins (bsd-

media-keys, bsd-power and bsd-wacom), and the return of desktop files for their autorun, the rest of the gnome-settings-daemon code is fully synchronized with the GNOME code base. Changes in Budgie itself include adaptation to the new API of the libxfce4windowing library, changes in the processing of the "overlay-key" key (by default "Super") in the Mutter composite manager and the removal of compact classes in Vala 0.56.18.

<https://github.com/BuddiesOfBudgie/budgie-desktop/releases/tag/v10.9.3>

FreeType Font Engine 2.14:

07/09/2025

FreeType 2 is a software font engine that is designed to be small, efficient, highly customizable and portable while capable of producing high-quality output (glyph images) of most vector and bitmap font formats.

Note that FreeType 2 is a font service and doesn't provide APIs to perform higher-level features, like text layout or graphics processing

(e.g., colored text rendering, 'hollowing', etc.). However, it greatly simplifies these tasks by providing a simple, easy to use, and uniform interface to access the content of font files.

FreeType 2 is released under two open-source licenses: our own BSD-like FreeType License and the GPL. It can thus be used by any kind of projects, be they proprietary or not.

<https://www.mail-archive.com/freetype-announce@nongnu.org/msg00141.html>

Alpha Testing Of FreeBSD 15:

08/09/2025

The first alpha release of FreeBSD 15.0 has been prepared. Installation builds are available for amd64, powerpc64le, aarch64 and riscv64 architecture. The release is scheduled for December 2. Upgrading to the 15.0-ALPHA1 branch from past versions with the help of the freesd-update utility has not yet been implemented.

Starting with the FreeBSD 15 branch, the support period of major branches after the first release (15.0) is reduced from 5 to 4 years, and new major branches will be formed every two years. Intermediate versions (15.1, 15.2, 15.3) will be developed as part of a fixed development cycle involving the publication of new versions in one branch approximately every 6 months and not once a year as it was until now.

In the official announcement of the alpha version of FreeBSD 15 there is a reference to the release notes with an incorrect list of changes. This refers to changes in the 14x branch relative to the release of 14.0, i.e. old data transferred from previously published notes to release 14.1, 14.2 and 14.3.

<https://lists.freebsd.org/archives/freebsd-stable/2025-September/003112.html>

Release of SysVinit 3.15:

08/09/2025

The release of the classic initialization system SysVinit

3.15, which was widely used in Linux distributions in times before systemd and upstart is available. It now continues to be used in distributions like Devuan, Slackware, Debian GNU/Hurd and antiX. The code is written in C and is distributed under the GPLv2 license.

The new version of SysVinit only changes the man-page, as far as we can see, "Patched manual page for runlevel command. This cleans up formatting and whitespace." In addition, the project has moved from GitHub to CodeCodeBerg hosting.

<https://codeberg.org/thejessesmith/sysvinit/>

RELEASE OF I2P 2.10.0 AND I2PD 2.58:

08/09/2025

The release of the anonymous network I2P 2.10.0 and C++ client i2pd 2.58.0 is out. I2P is a multi-layered anonymous distributed network running on top of the ordinary Internet, actively using end-to-end encryption, guaranteeing anonymity and

isolation. The network is built in P2P mode and is formed due to resources (bandwidth) provided by network users, which allows you to do without the use of centrally managed servers (communications within the network are based on the use of encrypted unidirectional tunnels between the participant and peers).

In the I2P network, you can anonymously create web sites and blogs, send instant messages and emails, share files and create P2P networks. I2P clients are used to build and use anonymous networks for client-server and P2P, I2P. The basic I2P client is written in Java and can work on a wide range of platforms such as Windows, Linux, macOS, Solaris, etc. I2pd is an independent implementation of the I2P client in C++ and is distributed under a modified BSD license.

https://geti2p.net/en/blog/post/2025/09/08/2.10.0_release

ALMALINUX, DEFAULTS TO ENABLE THE CRB

REPOSITORY:

09/09/2025

The developers of AlmaLinux announced the decision to have the CRB (CRBCodeReady Builder) repository turned on by default via an update in AlmaLinux OS 10.0 on 2025-09-09, while AlmaLinux OS Kitten 10 has had it enabled by default since the update on 2025-08-27 (almalinux-kitten-repos-10.0-9.el10.0.1). For those who do not want to include CRB, you can use the command "dnf config-manager --disable crb".

The CRB repository provides a selection of packages that by default is not offered in Red Hat Enterprise Linux, such as developer applications, additional libraries and strapping, as well as packages with debugging data, documentation, header files, static and code examples (packages "-devel", "example", "-doc" and "-static"). Among other things, the CRB has libraries used as dependencies in repository packages EPEL (Extra Packages for Enterprise Linux)

Since the CRB was not enabled

by default, installation of some packages from EPEL went down the dependency hell path that Red Hat is known for.

<https://almalinux.org/blog/2025-09-08-enabling-crb-by-default-for-almalinux10/>

RED HAT TRANSFER TO IBM:

09/09/2025

Red Hat's back office from general and administrative departments, such as lawyers, HR, financiers and accountants, will be transferred to IBM in 2026. The migration will affect ordinary employees and technicians who provide support for them, but the management of the transferred teams will remain with Red Hat. Red Hat will also have engineers and employees responsible for the production of products, sales and marketing, from a new group, Strategy & Operations.

Currently, about 19 thousand employees are employed in Red Hat and it is not yet clear how many of them will be retrenched in the processes carried out at IBM to

consolidate the functions of the back office and the abolition of duplicate positions. In January, IBM forecasts annual savings of \$ 3.5 billion, partly due to job cuts. Until now, Red Hat has functioned as a separate and independent division after the acquisition by IBM in 2019.

https://www.theregister.com/2025/09/08/red_hatters_to_be_big/

WARZONE 2100 4.6.0:

09/09/2025

The developers published the release of the real time strategy game Warzone 2100 4.6.0. The game was originally developed by Pumpkin Studios and released into the market in 1999. In 2004, the source code was opened under the GPLv2 license and the development of the game was continued by the community. Both a single player game against bots and multiplayer network games are supported. Packages are prepared for Ubuntu, Windows and macOS.

<https://wz2100.net/news/version-4-6-0/>

PEERTUBE 7.3:

09/09/2025

PeerTube 7.3, designed to create independent decentralized video hosting and video broadcasting systems, alternative to services such as YouTube, Dailymotion and Vimeo, is out. The content distribution network created with PeerTube is based on linking visitors' browsers and the use of P2P communications. The project code is distributed under the AGPLv3 license.

PeerTube allows you to run your own server to distribute videos and connect it to the general federated network. Visitors help in the delivery of content and have the ability to subscribe to channels and receive notifications about new videos, no matter which server they use. The Federated network of PeerTube is formed as a community of interconnected small video hosting servers, each of which has its own administrator and adopted its own rules.

<https://joinpeertube.org/news/release-7.3>

TERM.EVERYTHING:

10/09/2025

The first beta release of the Term.Everything utility has been published, which allows you to display any graphics applications inside the window with the terminal emulator. Among other things, the program allows you to run graphical applications in the terminal when accessing a remote system via SSH. The project code is distributed under the AGPL 3.0 license, written in the Typescript language and is executed using the Bun platform. Ready-made builds are available in Appliance format.

Term.Everything uses the Wayland protocol, which directs the output not on the screen, but into the terminal window. The ANSI library is used to convert images to the appropriate Unicode symbols with ANSI sequences that simulate graphics in the terminal, via the chafa library. Keypresses and mouse movements events in the terminal are broadcast into the Wayland input events.

On terminals that support the

extension for output of raster graphics, like kitty, Ghostty, Konsole, wezterm and iTerm2, one can get really good display to the point where even playing DOOM is possible.

<https://github.com/mmulet/term.everything/releases/tag/0.5.0>

CLEAR NDR 1.0:

10/09/2025

Stamus Networks has published a specialized distribution Clear NDR 1.0, (Previously the distro was named SELKS) designed to deploy detection and prevention systems for detecting and preventing network incursions, as well as organizing the response to identified threats and monitoring the security of the network. Users are given a ready-made solution to manage network security, which can be used immediately after downloading. The distribution supports Live mode and can launch in virtualization or container environments. The project is distributed under the GPLv3 license. The size of the boot image is 3.9 GB.

The distribution is built on Debian and uses an open Suricata attack detection system. The data coming from different sources is stored in the OpenSearch store. To track the current state and identified incidents, a web interface is used, implemented on top of Kibana. The distro also includes the Arkime network packet capture, storage and indexing system, an interface for estimating EveBox events and Fluentd data collector.

<https://www.stamus-networks.com/stamus-networks-announces-production-ready-clear-ndr-community-1.0>

DRACUT IN UBUNTU 25.10:

10/09/2025

With the release of Ubuntu 25.10, which is scheduled for October 9, use of the Dracut toolkit by default instead of the initramfs-tools package, (the development of which in recent years has paused and limited to support work) is planned. Since the development of the 25.10 release from mid-August is at the freezing stage, which does not allow the addition of new functionality, to switch to the

Dracut, the team responsible for the that release, is given an exception. Currently, the intramfs-tools package has already been replaced by dracut in meta-packages.

The transition to Dracut will solve problems such as: use systemd in intrid, the lack of support for NVMe over Fabric (NVM-oF), the abundance of code on shell intrid, the complexity of the tracking due to separate work with initrd and the root FS.

https://bugs.launchpad.net/ubuntu/+source/dracut/+bug/2121920#yui_3_10_3_1_1757530364083_145

OPENFIX FROM SELECTEL:

11/09/2025

Selectel, which develops the Linux distribution Selectel OS, based on Debian, presented their OpenFix initiative, in which it will begin to pay enthusiasts monetary rewards for participating in the tasks related to the development and correction of errors in open software. The code of completed projects will be published under a

permissive license (MIT, Apache or BSD) with the preservation of the authors of the participants.

The remuneration is not only for Debian, but Ubuntu as well: "Participants at their discretion, can choose problems confirmed in error tracking systems Debian and Ubuntu (Launchpad), then agree on the possibility of receiving a reward for correcting them with Selectel."

<https://promo.selectel.ru/openfix>

APACHE GETS A NEW LOGO:

11/09/2025

The non-profit organization, the Apache Software Foundation, which provides a neutral and independent platform for the development of about 400 open products, introduced a new logo, changed the design of the apache.org website and announced the transition to the use of the ASF brand instead of the full name "Apache Software Foundation". On the new logo instead of the pen, used as a symbol of Apache projects since 1997, depicts an oak leaf.

The name of the legal entity Apache Software Foundation has not changed and is still used where it is required by law, for example, in official documents, in the foot of the site and at the mention of copyright. In other cases, including documentation and references, AxF's acronym will now be used for visual identity. The fund's projects that have the word Apache in their names (e.g. Apache HTTP Server) will continue to use existing names.

<https://news.apache.org/foundation/entry/introducing-the-asfs-new-logo>

SAMBA 4.23.0:

12/09/2025

After 6 months of development, the release of Samba 4.23.0 is presented, which continued the development of the Samba 4 branch with the full implementation of the domain controller and Active Directory service, compatible with the implementation of Windows 2008 and is able to serve all supported versions of Windows Clients, including Windows 11. Samba 4 is a multifunctional server product,

which also provides the implementation of the file server, the print service and the identification server (winbind).

<https://lists.samba.org/archive/samba-announce/2025/000702.html>

Q4OS 6.1:

13/09/2025

The release of the Q4OS 6.1 distribution, based on the Debian batch database and supplied with desktops KDE Plasma and Trinity (continues the development of the KDE 3.5.x codebase). Both user environments can coexist in the same system at the same time, and the user can switch between them. The distribution is positioned as undemanding to hardware

resources and offering classic design of the desktop. The size of the loading image with KDE Plasma - 2 GB, with Trinity - 1.7 GB (x86_64). Plans to build for the ARM64 architecture.

The disro includes several own development applications, including 'Desktop Profiler' for quick installation of themes and save profiles with desktop status sections, 'Setup utility' to install third-party applications, 'Software center' for the installation of additional programs, 'Welcome Screen' to simplify the initial configuration, Lookswitcher to quickly switch the look, scripts for installing alternative environments LXQt, Xfce application is provided to install the distribution in a separate Windows directory, which allows you to use the distribution in parallel with Windows without

highlighting a separate disk partition for it.

<https://q4os.org/blog.html#news250912>

LIBADWAITA 1.8:

13/09/2025

The GNOME project published the release of the Libadwaita 1.8 library, including a set of components for the style design of the user interface corresponding to the recommendations of GNOME HIG (Human Interface Guidelines). The library includes ready-made widgets and objects for building applications that match the overall GNOME style, the interface can adapt to the screens of any size. The library code is written in C and is distributed under the LGPL 2.1+ license.

The library includes typical widgets covering various interface elements such as lists, panels, editing blocks, buttons, tabs, search forms, dialog boxes, etc. The proposed widgets allow you to create universal interfaces that operate organically both on major PC and laptop screens and on small smartphone touch screens. The application interface changes dynamically depending on the screen size and the input devices available. The library also includes a set of Adwaita styles that align the appearance with the GNOME recommendations, without the need for manual adaptation.

<https://nyaa.place/blog/libadwaita-1-8/>

WANT TO GET INTO FOSS, NOW'S YOUR CHANCE!

15/09/2025

Nick Wellnhofer has announced his resignation as the libxml2 maintainer. Nick had been involved with libxml2 since 2016, was added to the maintainer's list in 2022, and since then has remained virtually the only active developer. Following



DistroWatch.com

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

Nick's departure, the project has been left without a maintainer.

The libxml2 library is used in operating systems and products from Apple, Google, and Microsoft. Open source packages that include libxml2 as a dependency include GNOME, Xfce, Mate, Cinnamon, Budgie, LibreOffice, Epiphany, libvirt, BIND, VirtualBox, lldb, Flatpak, Evolution, clang-tools, xsltproc, PostgreSQL, Apache httpd, Zyper and Scribus.

Before announcing his departure, Nick published libxml2 2.15.0 and promised to fix regressions by the end of the year. The new version disables Python and Schematron bindings by default. Reading compressed data in the parser is now only possible with the XML_PARSE_UNZIP option. The HTML serialization and character encoding handling code has been brought closer to the HTML5 specification. API documentation generation has been transitioned to Doxygen.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://discourse.gnome.org/t/stepping-down-as-libxml2-maintainer/31398>

JONATHAN RIDDELL LEAVES KDE:

15/09/2025

Jonathan Riddell announced his resignation from the KDE development team. Jonathan has been involved with KDE since 2000. He is also known as the creator of the KDE Neon distribution and the former leader of the Kubuntu project. The decision was made due to disagreements over profit sharing, employee rights, and management structure at Tech Paladin, a company founded by former Blue Systems employees after that company's closure. Jonathan wrote that he had lost friends, colleagues, his job, his career, and his family while trying to do something good for the community, and would now try his hand at being a digital nomad.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://jridell.org/2025/09/14/adios-chicos-25-years-of-kde/>

AMD HAS DISCONTINUED AMDVLK:

16/09/2025

Engineers at AMD have announced the end of development of the AMDVLK project, which developed an open-source driver for the Vulkan graphics API built on top of the AMD Platform Abstraction Library. AMDVLK was originally created by AMD for its proprietary AMDGPU-PRO driver suite, but was later converted to an open-source project.

In parallel, the community has been developing the initially open-source RADV driver since 2016, which is part of the core Mesa distribution. The discontinuation of AMDVLK is due to AMD's new Vulkan driver unification strategy, under which AMD will focus on developing a single, high-performance codebase and provide full official support for the RADV driver.

David Airlie, maintainer of the Direct Rendering Manager (DRM) subsystem in the Linux kernel and co-founder of the RADV driver, welcomed AMD's decision and

expressed hope that the company will provide additional engineering resources for the RADV project and share information on technical details.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://airlied.blogspot.com/2025/09/radv-takes-over-from-amdvlk.html>

RELEASE OF FHEROES2 1.1.11:

16/09/2025

The fheroes2 project, which sees very active development has another new version out. It recreates the Heroes of Might and Magic II game engine from scratch. The project code is written in C++ and is licensed under the GPLv2. To run the game, you need game resource files, which can be obtained from the original Heroes of Might and Magic II. The project includes a script for automatically downloading and extracting resources from the demo version of the game, which are sufficient for full functionality. They have a whole list of new features at the link below.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://github.com/ihhub/fheroes2/releases/tag/1.1.11>

JAVA SE 25 LTS AND OPENJDK 25:

17/09/2025

After six months of development, Oracle has released Java SE 25 (Java Platform, Standard Edition 25), which uses the open-source OpenJDK project as its reference implementation. With the exception of the removal of some deprecated features, Java SE 25 maintains backward compatibility with previous releases of the Java platform—most previously written Java projects will run unchanged under the new version. Ready-to-install builds of Java SE 25 (JDK, JRE, and Server JRE) are available for Linux (x86_64, AArch64), Windows (x86_64), and macOS (x86_64, AArch64).

Java SE 25 is an extended support release, with updates continuing until 2033 (generally available until September 2030).

Java SE 17 and 21 will also continue to be supported as long-term support (LTS) branches, with updates continuing until 2029 and 2031, respectively (generally available until 2026 and 2028). Extended support for Java SE 8 and 11 LTS branches will continue until 2030 and 2032.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://mail.openjdk.org/pipermail/jdk-dev/2025-September/010483.html>

GNOME 49, "BRESCIA":

17/09/2025

The GNOME project is delighted to unveil GNOME 49, a milestone that reflects six months of collective effort from our vibrant community. A heartfelt thank you goes to everyone who helped shape this release.

We code named the release "Brescia", after a beautiful Italian city that hosted this year's GUADEC. Let's explore what's new and improved in this edition.

Showtime becomes Video Player

In GNOME 49, Showtime replaces the long-standing Totem as the default GNOME video player app, bringing a sleek, modern experience built on GTK 4 and Libadwaita instead of Totem's aging GTK 3 base.

Showtime

The new Video Player prioritizes a distraction-free viewing experience: its chromeless window hides controls during playback and fades them back in only when needed. It supports essential features like adjustable playback speed, multiple audio and subtitle tracks, rotating video, and screenshot capture — all the core functionality users expect.

New Document Viewer

Papers replaces the long-serving Evince as the default Document Viewer. Originally based on Evince code, Papers delivers a modernized design built with GTK 4 and Libadwaita, instead of Evince's older GTK 3 foundation.

Papers screenshot

Papers brings improved performance and a refreshed user interface, with a streamlined PDF annotation feature being one

particular highlight. It supports viewing, searching, annotating, and organizing formats like PDF, DjVu, TIFF, and comic-book archives (CBR, CBZ, CBT, CB7), with added features such as digital signature integration.

Calendar

Calendar's interface has undergone significant accessibility enhancements for people with disabilities. These improvements have reached a level that allows us to confidently announce that Calendar is now accessible to individuals who rely exclusively on keyboard navigation, as well as to those who use assistive technologies.

Calendar sees a number of improvements in GNOME 49. The most visible change is the reorganized interface, which is now more flexible, and allows the window to adapt to different window sizes. It also makes it possible to manually hide the sidebar, which is ideal for smaller screens or tiled windows.

<https://release.gnome.org/49/>

STARTWINE-LAUNCHER:

17/09/2025

StartWine-Launcher, release 411, an application designed to run Windows-based programs and games on Linux systems, has been published. The primary goal of StartWine-Launcher's development was to simplify the process of creating Wine prefixes—sets of Windows libraries and dependencies required for Windows applications to run on Linux—for beginners. StartWine-Launcher is written in Python and licensed under the GPLv3 license. The interface is based on the GTK library.

<https://github.com/RusNor/StartWine-Launcher>

SYSTEMD 258:

17/09/2025

After nine months of development, the system manager, systemd 258 has been released. Key changes include the removal of support for cgroups v1 and System V-style system management components, new utilities systemd-factory-reset and

systemd-pty-forward, the concept of home areas, and support for booting into a disk image obtained via HTTP.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://lists.freedesktop.org/archives/systemd-devel/2025-September/051670.html>

THE CREATOR BLENDER STEPS DOWN AS HEAD OF THE BLENDER FOUNDATION:

18/09/2025

Ton Roosendaal, creator of the 3D modeling system Blender, announced at the Blender Conference that he is stepping down as the head of the Blender Foundation, a position he held for the past thirty(!) years. Following his departure, Roosendaal will take a seat on the newly formed Blender Foundation Supervisory Board. The stated reason for his departure is a desire to hand over leadership to a talented young team who can develop the project into the next decade (Ton turned 65 this year).

Effective January 1, 2026, the

responsibilities of Chairman of the Board of Directors and CEO will be transferred to current Chief Operating Officer Francesco Siddi, who has been involved with the Blender Foundation since 2012 and has held numerous roles, including animator, web developer, pipeline developer, producer, manager, head of Blender Studio, and COO. Additionally, the appointment of Sergey Sharybin as Head of Development, Dalai Felinto as Director of Product Development, and Fiona Cohen as COO has been announced.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://www.blender.org/press/blender-foundation-announces-new-board-and-executive-director/>

GNUNET 0.25:

18/09/2025

GNUnet 0.25, a framework for building secure, decentralized P2P networks, has been released. Networks built with GNUnet have no single point of failure and can guarantee users privacy, including preventing potential abuse by

administrators with access to network nodes.

GNUnet supports P2P networks over TCP, UDP, HTTP/HTTPS, Bluetooth, and WLAN, and can operate in F2F (Friend-to-Friend) mode. NAT traversal is supported, including using UPnP and ICMP. A distributed hash table (DHT) can be used for addressing data locations. Tools for deploying mesh networks are provided. ReclaimID, a decentralized service for exchanging identification attributes using GNS (GNU Name System) and Attribute-Based Encryption, is used for selectively granting and revoking access rights.

The system is characterized by low resource consumption and uses a multiprocess architecture to ensure isolation between components. Logging and statistics collection tools are provided. For end-user application development, GNUnet provides a basic C API and bindings for other programming languages.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://www.gnunet.org/en/news/2025-09-0.25.0.html>

VIVALDI 7.6:

18/09/2025

Vivaldi 7.6, a proprietary browser developed using the Chromium engine by former Opera Presto developers, has been released. The project distributes changes to the Chromium codebase under an open source license. The browser interface is written in JavaScript using the React library, Node.js, Browserify, and various ready-made NPM modules. The interface implementation is available in source code, but under a proprietary license.

The project aims to create a customizable and functional browser that preserves user privacy. Key features include a tracking and ad blocker, note, history, and bookmark managers, a private browsing mode, end-to-end encrypted sync, tab grouping, a sidebar, a highly customizable configurator, a horizontal tab display mode, and, in test mode, a built-in email client, RSS reader and calendar.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://vivaldi.com/ru/blog/desktop/desktop-releases/vivaldi-on-desktop-7-6/>

UBUNTU 25.10 BETA RELEASE:

19/09/2025

The Ubuntu Release team is pleased to announce the Beta release of the Ubuntu 25.10 Desktop, Server, WSL, and Cloud products.

Ubuntu 25.10, codenamed Questing Quokka, continues Ubuntu's proud tradition of integrating the latest and greatest open source technologies into a high-quality, easy-to-use Linux distribution. The team has been hard at work through this cycle, introducing new features and fixing bugs.

This Beta release includes images from not only the Ubuntu Desktop, Server, WSL, and Cloud products, but also the Edubuntu, Kubuntu, Lubuntu, Ubuntu Budgie, Ubuntu Cinnamon, Ubuntu Kylin,

Ubuntu Studio, Ubuntu Unity, and Xubuntu flavours.

The Beta images are known to be reasonably free of showstopper image build or installer bugs, while representing a very recent snapshot of 25.10 that should be representative of the features intended to ship with the final release expected on October 09, 2025.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://lists.ubuntu.com/archives/ubuntu-announce/2025-September/000316.html>

KDE PLASMA 6.5 BETA RELEASE:

20/09/2025

KDE Plasma 6.5 is to enter beta testing, with the codebase frozen from making any functional changes (only patches are accepted). KDE Plasma 6.5 is scheduled for release on October 21st.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://kde.org/announcements/plasma/6/6.4.90/>

MULTIKERNEL PROJECT:

20/09/2025

A series of patches developed by the Multikernel project, (which was recently moved to open source and will now be developed jointly with the community), have been submitted for discussion by Linux kernel developers. Multikernel allows multiple independent instances of the Linux kernel to run on a single physical computer. These instances have direct access to hardware resources and can be used to run multiple isolated system environments. The project was created by Multikernel Technologies, a company founded and led by Cong Wang, the maintainer of the Traffic Control subsystem in the Linux kernel.

Multikernel is being promoted as a new isolation architecture, filling a gap between hypervisor-based virtualization and shared-kernel container isolation. Unlike

virtualization, Multikernel does not require a hypervisor, simplifies the creation of isolated environments for running individual applications, and enables high performance without the overhead of virtualization. Unlike containers, Multikernel provides a high level of isolation and allows each isolated environment to use a separate kernel.

Performance using Multikernel is estimated to be close to that of execution on dedicated hardware. This was achieved by eliminating the overhead inherent to virtualization, such as VM exit handlers, IOMMU translation, and hypervisor intervention in privileged operations. Dynamic resource allocation to running environments is supported, ensuring predictable performance.

<https://translate.google.com/website?sl=auto&tl=en&hl=en-US&client=webapp&u=https://news.ycombinator.com/item?id%3D45302721>

FLX1s SMARTPHONE:

21/09/2025

The Furi Labs project announced the start of production of the FLX1s smartphone, supplied with the FuriOS distribution. The distribution is built on Debian 13 and is equipped with a Phosh user shell. The device is available for pre-order for \$550.

To ensure privacy, the device is equipped with three switches that allow you to disable the camera, microphone, GPS and Baseband module at the circuit level. The firmware does not send telemetry or access to external servers - all data remains on the user's device and is not synchronized with the cloud. To make calls, an oFono2MM stack and the GNOME Calls application are used.

The main system has a Linux kernel, made by Mediatek for the Android platform, as well as drivers for Android. The Linux-environment is organized using system components from the Halium project and the libhybris layer, which allows you to use Android drivers working in the user's space.

To install applications, the GNOME Software application and its own OpenStore catalog are used, which presents a selection of Linux programs, as well as applications for Android and Ubuntu. The device supports the multi-boot and the ability to simultaneously perform multiple operating systems using KVM hypervisor-based virtualization. As an example of the alternative systems supported for installation, Ubuntu Touch is mentioned. The project is available on GitHub under free licenses.

<https://news.ycombinator.com/item?id=45312326>



We have talked about quite a few things in our CnC articles so far. However, there is one, even I struggle with sometimes, mainly because I don't get to use it often. So as a refresher, let's talk about grep. As an Ubuntu newbie, it will not be high on your priority list, however, it is something you will use if you ever work in an environment that is Linux-based. Even if you never do, it is a rather weird thing to master. When you use it, to untrained eyes, it will seem like magic.

Let's start with the syntax, in other words, how we use it. It is as follows:

```
grep <pattern> file;
grep <pattern> filename;
command | grep <pattern>
```

So it's not difficult to grasp and the man page says this about it: *grep searches for PATTERNS in each FILE. PATTERNS is one or more patterns separated by newline characters, and grep prints each line that matches a pattern. Typically PATTERNS should be quoted when grep is used in a shell*

command.

Let's start simple, let's look for a "word" (pattern) in a file.

Here is my query: `grep distro /home/edd/dotfile.txt`

Broken down, search for the pattern "distro" inside the file at this location and we can see it in action:

```
edd@gift:~$ grep distro /home/edd/dotfile.txt
distro-icon=5
edd@gift:~$
```

Let's now take the output of a file and pipe it into grep to filter it.

Here is my query:

```
inxi -G | grep resolution
```

Broken down, run inxi, filter it by graphics and then pipe it to grep, isolating my pattern, namely resolution

```
edd@gift:~$ inxi -G | grep resolution
resolution: 2304x1440~60Hz
edd@gift:~$
```

Great, I'm sure we are all on the same page, so far. This is the very basics of finding your pattern. A lot of people will say "word" when showing you how to use grep, but you could type "reso" instead of "resolution", it does not need to be a "word".

Helpful hint no. 1: You can use the case insensitive flag if you want, say, VGA as well as vga. I use it mechanically, I had to reshoot these screen-shots, as they had the -i in default. (not that it made a big difference, but I'd rather not confuse newbies.)

The next most helpful way of finding things is via recursive searching.

Here is my query:

```
grep -r "lists.ubuntu.com" /
home/edd/Documents/FCM25/
Weekly\ news/
```

Broken down, search for my pattern in a directory (how many times I have cited lists.ubuntu.com as a source) . We can also use -R

here.

```
edd@gift:~$ grep -r "lists.ubuntu.com" /home/edd/Documents/FCM25/
/home/edd/Documents/FCM25/Weekly\ news/week13-25.txt->https://
/home/edd/Documents/FCM25/Weekly\ news/week 32-25.txt->https://
/home/edd/Documents/FCM25/Weekly\ news/week 3-25.txt->https://www
/home/edd/Documents/FCM25/Weekly\ news/week13-25.txt->https://
/home/edd/Documents/FCM25/Weekly\ news/week8-25.txt->https://
edd@gift:~$
```

So now our output is slightly different. I have the full pathname of the file, followed by a :> (which is not a smiley in this case) and followed by the instances where they were found.

Note: I cannot just do this: `grep "lists.ubuntu.com" /home/edd/Documents/FCM25/Weekly\ news/` - as the target of my search is a folder, not a file.

We can clean up our output with -h option/flag/tack, removing the path.

See what I did there? I want you

```
edd@gift:~$ grep -r -h "lists.ubuntu.com" /home/edd/Documents/FCM25/
->https://lists.ubuntu.com/archives/ubuntu-devel/2025-May/043355.html
->https://lists.ubuntu.com/archives/ubuntu-announce/2025-August/000310
https://www.mail-archive.com/ubuntu-devel-announce@lists.ubuntu.com/es
->https://lists.ubuntu.com/archives/ubuntu-announce/2025-March/000308
->https://lists.ubuntu.com/archives/ubuntu-announce/2025-February/0003
edd@gift:~$
```

to do this on your own files, to get a feeling.

Easiest is to use some text files, though it will work on config files, etcetera, but I'd rather you start with files you can modify freely.

Though we usually just search for patterns, you *can explicitly search for words. This can be helpful when you have multiple parts that conform to your pattern, but you want something specific. I have a file that contains rgb and rgba. If I were to search for the pattern rgb, it would return all the rgba instances as well.

Here is my query:

```
grep -w "rgb" /home/edd/
dotfile.txt
```

Broken down, I want only the "word" rgb to be returned out of my target file.

```
edd@gift:~$ grep -w "rgb" /home/edd/dotfile.txt
menu-border-color='rgb(63,62,64)'
menu-foreground-color='rgb(211,218,227)'
menu-item-active-fg-color='rgb(255,255,255)'
menu-item-hover-fg-color='rgb(255,255,255)'
menu-separator-color='rgb(63,62,64)'
active-window-hint-color='rgb(211,70,21)'
edd@gift:~$
```

Versus the normal output:

Let's circle back to my article

```
e {\n margin: 0 4px;\n background-color: rgba(0,0,0,0.5);\n border-color: rgba(0,0,0,0);\n border-radius: 4px;\n border-width: 0px;\n padding: 0px;\n space-bar-workspace-label.inactive.empty {\n margin: 0px;\n background-color: rgba(0,0,0,0);\n color: rgba(255,255,255,1);\n font-weight: 700;\n border-width: 0px;\n padding: 3px 8px;\n}\n active-window-hint-color='rgb(211,70,21)'\n}
edd@gift:~$
```

query, what if I wanted to know how many times it finds my pattern in each file that it traverses?

Here's my query:

```
grep -R -c "lists.ubuntu.com"
/home/edd/Documents/FCM25/
Weekly\ news/
```

Broken down, find my pattern, then tell me how many times it occurs inside each file.

```
edd@gift:~$ grep -R -c "lists.ubuntu.com" /home/edd/Documents/FCM25/Weekly\ news/
/home/edd/Documents/FCM25/Weekly\ news/week1-25.txt:1
/home/edd/Documents/FCM25/Weekly\ news/week2-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week3-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week4-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week5-25.txt:1
/home/edd/Documents/FCM25/Weekly\ news/week6-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week7-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week8-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week9-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week10-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week11-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week12-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week13-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week14-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week15-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week16-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week17-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week18-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week19-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week20-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week21-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week22-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week23-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week24-25.txt:0
/home/edd/Documents/FCM25/Weekly\ news/week25-25.txt:0
edd@gift:~$
```

Note that we have a full path like before, but not the location of our pattern.

How about if we have a few documents and we want to find out precisely where the pattern occurs?

Here's my query:

```
edd@gift:~$ grep -R -n "lists.ubuntu.com" /home/edd/Documents/FCM25/Weekly\ news/
/home/edd/Documents/FCM25/Weekly\ news/week1-25.txt:132:https://lists.ubuntu.com/archives/ubuntu/2005/01/msg00001.html
/home/edd/Documents/FCM25/Weekly\ news/week2-25.txt:85:https://lists.ubuntu.com/archives/ubuntu/2005/01/msg00001.html
/home/edd/Documents/FCM25/Weekly\ news/week3-25.txt:106:https://www.mail-archive.com/ubuntu-discussion@lists.ubuntu.com/msg00001.html
/home/edd/Documents/FCM25/Weekly\ news/week4-25.txt:170:https://lists.ubuntu.com/archives/ubuntu/2005/01/msg00001.html
/home/edd/Documents/FCM25/Weekly\ news/week5-25.txt:93:https://lists.ubuntu.com/archives/ubuntu/2005/01/msg00001.html
edd@gift:~$
```

Broken down, recursively search for my pattern and give me the line number where you found the match.

Boom!

I'm going to leave it here for this issue, as it is getting a bit image heavy, (I don't want Ronnie to fire me, yet) but we can talk about it more in the next issue.

For those of you that saw the youtube video about figuring out who wrote what in the constitution, yes, this is inspired by that. One gentleman used a certain phrase the others did not, so searching for it, sort of identified his contributions. Though we cannot say for sure, there is certainty that he wrote certain documents.

Any corrections, we are all human, to:

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.



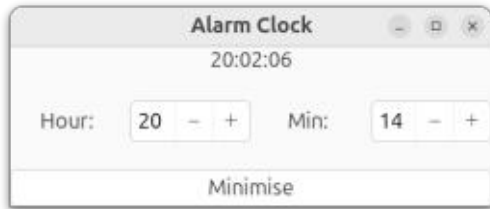
HOW-TO

Written by Alan Crispin

GTK4 Programming in C - Pt.2

The first article showed how to install GTK4 and associated libraries and developed a program to create a window containing button and label widgets. This article shows how to create an alarm clock application with a Graphical User Interface (GUI).

A screenshot of the GTK4 alarm clock application that has been developed using Ubuntu 24.04 is shown below.



In this application a label widget for displaying the time, spin buttons for setting the alarm time (hour and minute) and a minimise button are going to be used. A grid container for positioning the widgets will also be used.

CODING THE ALARM CLOCK

The full source code for this

project can be downloaded using the web link below:
<https://github.com/crispinprojects/fullcircle>

Open and view the main.c file to follow the explanation below.

Two static integer variables called `m_alarm_hour` and `m_alarm_min` are declared. These are used to store the hour and minute values for a specific alarm time. The alarm clock is going to play some audio beeps when the desired time is reached. In this context the static keyword means that the variables are not available outside the source code file (`main.c` in this case) and they retain their value between multiple function calls.

A set of `GtkWidget` pointers are created in the `activate()` function for the widgets to be used in the application. These include the window, grid container, time label, the minimise button and two spin buttons for setting the alarm hour and minute values.

A window is created using `gtk_application_window_new()` and the window title set to "Alarm Clock" and the default size to 400x150. Then the grid layout container is created which arranges its child widgets in rows and columns. The function `gtk_grid_set_column_homogeneous()` is used to set all columns of the grid to have the same width. A label called `label_time` is created which will display the current time value. Two dummy spacer labels called `label_spacer1` and `label_spacer2` are used to help with grid alignment.

Two `GtkAdjustment` objects called `adjustment_alarm_hour` and `adjustment_alarm_min` are created. Adjustments are used by `GtkSpinButton` widgets to set the lower and upper bounds of step increments. The online GTK4 Application Programming Interface (API) documentation shows that the `gtk_adjustment_new()` constructor for creating a new `GtkAdjustment` takes the following parameter values: the initial value, minimum value, maximum value, step increment, page increment

and page size.

The `GtkSpinButton` widgets called `spin_button_alarm_hour` and `spin_button_alarm_min` allow a user to enter or change hour and minute numeric values within the 24 hour time bounds (e.g. hours can be changed from 0 to 23 and minutes from 0 to 59).

Using `g_signal_connect()`, the spin button called `spin_button_alarm_hour` is connected to the callback function in the program named `callbk_spin_alarm_hour()` using the "value-changed" state of the spin button. Likewise the spin button called `spin_button_alarm_min` is connected to a function named `callbk_spin_alarm_min()` again called when the spin button numerical value is changed. Within these functions the value of the spin button is set to an integer using `gtk_spin_button_get_value_as_int()` so that the variables `m_alarm_hour` and `m_alarm_min` can be set.

TIMER

The GLib function `g_timeout_add_seconds()` can be used to create a timer. It allows a function to be called repeatedly until the function returns FALSE. The arguments are the interval (i.e. the time between calls to the function, in seconds), the function to call and the data to pass to the function.

```
g_timeout_add_seconds(1,
label_update, label_time);
```

In this application, the first parameter is set to one second, the second parameter is set to the function named `label_update()` and the third to `label_time`. The `label_update()` function must match the signature of `GSourceFunc` which means that it must be a static member function, have return type of `gboolean` and have a parameter of `gpointer`. In this example it always returns TRUE and the `gpointer` data is the time label. The `gpointer` (generic pointer) was discussed in the last article and is untyped and requires casting. Here it is cast as a `GtkLabel` pointer using `(GtkLabel*)` so that the `label_time` widget can be updated with the

time. See the GLib `timeout_add_seconds()` API information in the external links below for more information.

Inside the function `label_update()` `GDateTime` is used. This combines a date and time into a single structure and provides many methods to manipulate dates and times. The function `g_date_time_new_now_local()` is used to get the hour and minute in the local time zone. Then `g_date_time_format()` is used to format the time value and then `gtk_label_set_text()` is used to set the time label text.

If the hour value equals the `m_alarm_hour` and the minute value equals the `m_alarm_min` then an audio alarm WAV file called `alarm.wav` is played using the system command.

MINIMISE

The button widget called `button_minimise` connects to a callback named `callbk_button_minimise()` using the clicked state of the button. Again `g_signal_connect()` is used to link

the button to the callback function named `callbk_button_minimise()` using the "clicked" state of the button. Notice that the window is passed as the `gpointer` parameter. This enables the use of `gtk_window_minimize()` to minimise the alarm clock when the button is clicked so that it is out of sight while it ticks away until the alarm time is reached.

GRID CONTAINER

The `gtk_grid_attach()` function is used to position the child widgets on the grid. The GTK4 API shows that it takes the following parameters: the grid pointer, the child widget pointer, the column, the row, the width and the height. The position of the child widget is determined by the column and row values. The number of "grid cells" that the child widget will occupy is determined by the width and height. For example, the `button_minimise` widget is positioned on the first column and on the fifth row. It has a width of four cells and a height of one. The function `gtk_window_set_child()` is used to set the grid as the child widget of the window and then `gtk_window_present()` is used to

show the window.

MAKE

The Makefile to build the application is included in the download. As discussed in the first article run the "make" command in the project directory to build the alarm clock application. An executable called "alarmclock" is produced.

DESKTOP FILE

A desktop file for the alarm clock can be created using the application ID which is set to "org.gtk.alarmclock". Create a directory called "Software" in the home directory and inside this a sub-directory called "alarmclock". Place the alarmclock executable and the audio file `alarm.wav` in this. Then save a file called "org.gtk.alarmclock.desktop" to the hidden local directory ".local/share/applications" with the contents below. Substitute your own user name where it says "your-user-name"

```
[Desktop Entry]
Version=0.1.0
Type=Application
Name=Alarm Clock
```



```
Comment=Alarms
Exec=/home/your-user-name/
Software/alarmclock/
alarmclock
Path=/home/your-user-name/
Software/alarmclock
Icon="time.svg"
```

The alarm clock will pop up in the applications list so that it can be pinned to the dash.

This article provides an overview of the source code which can be downloaded for further study.

EXTERNAL LINKS

GTK4 Widget Gallery
https://docs.gtk.org/gtk4/visual_index.html

GTK4 API documentation
<https://docs.gtk.org/gtk4/index.html>

Glib API documentation
<https://docs.gtk.org/glib/index.html>

Glib timeout_add_seconds
https://docs.gtk.org/glib/func.timeout_add_seconds.html



Alan is retired and a Linux enthusiast. He has worked in education and industry and has used many programming languages including C, C++, Delphi and Java. His Linux projects can be found on his Github: <https://github.com/crispinprojects>.



In Part 7 of this series, we looked at running Windows programs in Linux using Wine or Play on Linux. The primary example was installing my copy of Office 2010 which has a top-rated Platinum ranking in the Wine AppDB listings. In this same database, Office 2016 rates as Gold and so is eminently usable. However, Office 365, which is the current release of Microsoft's office suite, is listed as Garbage – which means that it can't be installed and run in Linux. But, what about the web apps? For example, can we run Word 365 as a web-based application in a Linux browser? Let's find out...

One major problem that I have with Microsoft 365 is that it doesn't allow me to open, edit, and save files stored in my preferred folder on my local hard disk, ie, it does not offer the usual File-Open and File-Save options. Rather, it tries to insist that files should be accessed from Microsoft OneDrive. It is possible to upload a file from a local drive, edit the file in Word 365, and then download the resulting file back to local storage but this is a

very cumbersome process.

Using OneDrive in Linux is further complicated by the fact that Microsoft, in its undoubted wisdom, does not offer a Linux client for OneDrive. Nevertheless, the Linux development community has come to the rescue with not one, but two related applications that make using OneDrive in Linux a breeze, or at least a moderate gale!

OneDrive Client for Linux is described by its developer as a free Microsoft OneDrive Client that

seamlessly supports OneDrive Personal, OneDrive for Business, OneDrive for Office365, and SharePoint Libraries. It is compatible with all major Linux distributions and offers both one-way and two-way synchronization capabilities. The companion application is OneDriveGUI which, as the name suggests, provides a graphical user interface for the OneDrive client.

The good news is that Linux Mint includes OneDrive Client for Linux in its repositories, so the

package can be installed directly in the Software Manager. However, check the available version number to make sure that it is supported by the current version of OneDriveGUI. If the version of OneDrive Client for Linux available through Software Manager is too old, it will be necessary to manually install the current client. Instructions to do this are available on abraunegg's website on GitHub: <https://github.com/abraunegg/onedrive/blob/master/docs/ubuntu-package-install.md>.

In a perfect world the easiest option is to use the Software Manager. Simply search for onedrive and install the package. Check that onedrive has been installed correctly by opening a Terminal window and typing `onedrive --version`. Currently, this command will return `onedrive v2.5.5-1+np1+1.1`.

To run OneDrive manually and authorize access to Microsoft's OneDrive server, type `onedrive` in the Terminal window. The response is shown in Figure 1. Take careful

```
toaster@i7-Inspiron-7547:~$ onedrive
D-Bus message bus daemon is available; GUI notifications are now enabled

WARNING: Your curl/libcurl version (8.5.0) has known HTTP/2 bugs that impact the
use of this client.
Please report this to your distribution, requesting an update to a newer
curl version, or consider upgrading it yourself for optimal stability.
Downgrading all client operations to use HTTP/1.1 to ensure maximum operational
stability.
Please read https://github.com/abraunegg/onedrive/blob/master/docs/usage.md#compatibility-with-curl for more information.

Using IPv4 and IPv6 (if configured) for all network operations
Attempting to contact Microsoft OneDrive Login Service
Successfully reached Microsoft OneDrive Login Service
Configuring Global Azure AD Endpoints
Authorise this application by visiting:

https://login.microsoftonline.com/common/oauth2/v2.0/authorize?client_id=d50ca740-c83f-4d1b-b616-12c519384f0c&scope=Files.ReadWrite%20Files.ReadWrite.All%20Sites.ReadWrite.All%20offline_access&response_type=code&prompt=login&redirect_uri=https://login.microsoftonline.com/common/oauth2/nativeclient

Enter the response uri from your browser: 
```

HOWTO - TRADING UP

note of the final set of instructions that (a) provide a URL that is to be entered into a web browser, and (b) indicate Enter the response uri from your browser.

While the instructions are correct, some users (me!) may find their implementation confusing. The highlighted URL calls up the web page for Microsoft's OneDrive Login Service. At this point, it is clear that it is necessary to log in and that the user's login credentials (username and password) are to be entered. However, once this has been done, at first glance, the result appears to be a blank page. But what has actually happened is that the URL in the address bar has changed. This is by no means obvious. However, it is important to note that this is the "response URI" that is to be cut and pasted from the browser's address bar into the Terminal window *. With the pasted URL having been accepted, the Terminal window now indicates that The application has been successfully authorised.

* Take special note of how to cut and paste the response URI as we will need to repeat the process to configure OneDriveGUI

Rather than running OneDrive manually from the Terminal, we will use OneDriveGUI to provide a graphical user interface to the actual client. We can download OneDriveGUI as an ApplImage, a special type of file that packages the application and any necessary dependencies into a single executable file. At the time of writing, the current version is OneDriveGUI-1.1.1-x86_64.ApplImage.

With this file having been obtained and stored in the

Downloads folder, we can right-click on the file, navigate to Properties, and set the execute permission (Properties > Permissions > Execute) by checking the box labelled Allow executing file as a program. Now, simply double-clicking on the ApplImage file launches OneDriveGUI.

When OneDriveGUI is first run, a dialogue box indicates that the use of Microsoft's OneDrive Login Service is once again required to provide access to OneDrive's server. The process of logging in, obtaining

and using the response URI, is exactly the same as described above – complete with the "blank" page, and the required response URI in the address bar!

The initial synchronization process can now be started manually by clicking on the white triangle in the window's header. This provides a startup wizard that first checks the installed version of OneDrive Client for Linux, and then offers to add a OneDrive profile. Check the box labelled Create new OneDrive profile. In the next dialogue box (Figure 2), specify the name of the new profile (e.g. OneDriveMint), and browse for the folder that is to be used for synchronizing files between the local hard drive (e.g. /media/DataDisk/OneDriveFiles) and Microsoft's OneDrive server. Now, click on Create new profile.

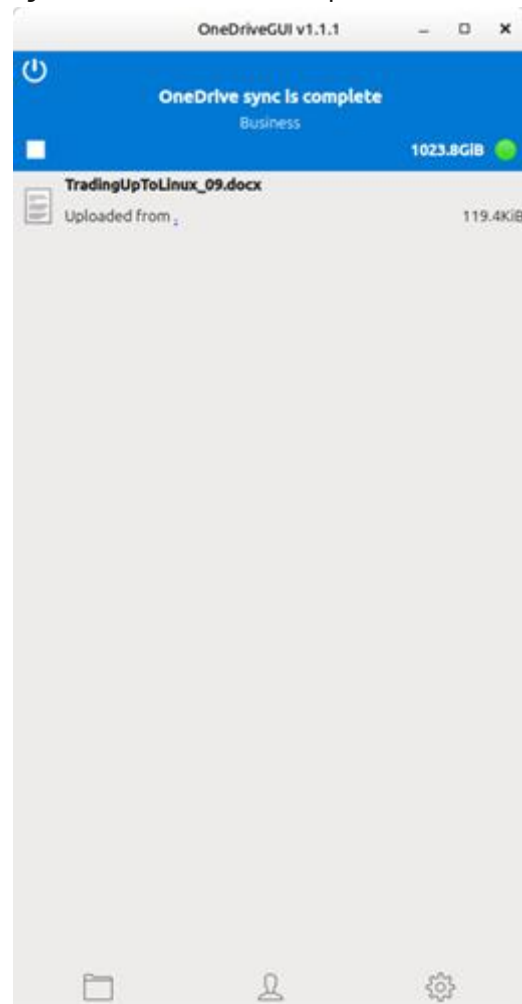
One additional change to the configuration may be useful. Click on the person icon in the centre of the bottom edge of the OneDriveGUI window (Figure 3) to load the OneDriveGUI – Profiles window. On the Sync Options tab, check the box labelled Bypass data preservation. This prevents the application creating backups of files



HOWTO - TRADING UP

that are synchronized between the local hard drive and OneDrive's server. This is an optional setting and my preference is to maintain a "clean" folder of synchronized files without any additional backups.

Normally, when OneDriveGUI is started, the application scans the two folders and automatically synchronizes the files present in



both. By default, this is a two-way process, with new and modified files being copied between the folders, and files that have been deleted in one folder being removed from the other folder. This behaviour can be customized through an extensive set of options in the profile. If OneDriveGUI is left running, the application continues to monitor the folder pair and will copy or delete files according to the established profile.

Microsoft 365 doesn't make it easy to use local files in apps such as Word, Excel, and PowerPoint, and is even less accommodating for those of us who use Linux. The availability of OneDrive Client for Linux and OneDriveGUI goes a long way to making the process of using the web-based apps from Microsoft's office suite more efficient and hence much more useful to Linux users.

BOTTOM LINE

OneDrive Client for Linux (Open Source)
Version 2.5.5
abraunegg, Melbourne, Australia
<https://github.com/abraunegg/onedrive>

OneDriveGUI
Version 1.1.1
Boris Pozdena
<https://github.com/bpozdena/OneDriveGUI>



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 - jwjournal

As I mentioned at the end of my column in FCM-220, in my explorations to find a Linux Package for a personal journal I discovered a very interesting recent addition to ctan.org. It is the `jwjournal` package and it has some good tools to customize a daily journal or diary or whatever else this kind of document might be called.

I have never recorded a diary or journal in a regular or systematic way. I have done it from time to time as an aid to finding patterns in my own life, usually when there was a significant change ahead. There was a period of several months when I would write two or three pages while commuting on the train. For the last year I have written a sentence or two at the end of day while sitting in bed. However, that has been the extent of my journal keeping. During a recent vacation I decided to use an electronic journal to keep track of my experiences each day. I was not completely successful following the discipline of a daily record. Several times I wrote two days of events in one evening. I realized how much of the

previous day had been erased or written over by the events of the current day. Developing a daily habit of writing a journal might be something I should do.

I am not convinced using a keyboard is a better way of writing a personal record than using a pen on paper. I learned to print with a fat pencil, then learned to write cursive with a pen that had to be dipped in ink every few words. Now when I write by hand I use a fountain pen. I resort to a ballpoint only when necessary. I suppose my history with writing instruments sets my current choice of writing tool just as your history sets yours. I do not relish the idea of sitting in bed at the end of the day with a laptop and typing my thoughts for the day. Having said all that, there are some features of the `jwjournal` package which may persuade me to change my thinking.

The package documentation for `jwjournal` is excellent. There is sample code and a three-page sample PDF which matches the code (not always true in package

documentation). There are comments in the sample code which are helpful. There are screen shots of different parts of the PDF which show the effect of relevant parts of the code. The last few pages of the documentation shows some customizing options. The author also says the code compiles faster if certain fonts are installed. These five fonts are for Chinese, Japanese and Korean documents, not something I normally produce. I cannot check this claim since the fonts he lists are already installed in `TeXLive` by default.

I used `jwjournal` during a recent three-week visit as a tourist in China. I think I can write faster with a pen than with a keyboard. I know I do not make as many spelling mistakes when I write with a pen. On the plus side, the keyboard edits on the computer obviously are much easier. I also like the ability to include an electronic graphic (sketch, photo, etc.) in the middle of the text. Of course the computer makes changing fonts including bold and italic easy, something that is difficult or impossible to do with

an ordinary pen.

`Jwjournal` includes tools for adding colour behind text. It highlights each day of the week in a different colour automatically. It can put text into boxes with coloured borders. Documents can be written in about ten languages: English, French, German, Chinese, Korean, Japanese, Spanish and others. The order of the items in the date and the names of day of the week are amended to correspond with the language of the document you specify in the preamble. Dates can be input in a variety of ways. The one you wish to use is specified as an option with the document class instruction.

To start an entry simply type the date as the first item in a new line. Other text can be included in this line. Each day I wrote a basic description of the weather (hot and humid) and the name of the city. Items on this line can be right-aligned using the vertical bar `|` in front of the text. You can see these in the sample included with the column.

Images can be included using one of three pairs of characters: `||` centres the image, `((` puts the image on the left, `))` puts the image on the right. The width of the image can be controlled by a number inside angle brackets, e.g. `<0.50>`. I experimented with this option a little. However there seems to be what I call a drawback with images in `jwjournal`. I was unable to use the image inclusion capabilities with images stored in directories other than the same directory as my journal.

This is a drawback because I normally save my photos in a directory identified by the time and place of the photos. I do not include text files in the same directory as photos. In order to use `jwjournal` graphics commands to include photos I needed a second copy of each photo with the journal text file. If I were writing a document that required a large number of photos I would either have to change how I store some of my photos or have duplicates, one copy in the regular location and one with the journal text. In either case I would need to store the text of the journal with the photos of the

journal.

In order to use images in my travel journal and to keep the images in one directory and the journal text in another I used the following code (shown top right)

On the plus site, `jwjournal` makes adding a caption to an image very simple. Being able to add a centred caption under a centred image is certainly a nice feature and one I will use the next time I work with `jwjournal`.

One of the things I want to explore is floating text around a graphic. I know it is possible in Latex, but I have to learn how to do it. For my simple journal I will take the default which is no float. That means the text stops above the graphic and starts again below the graphic.

Every line that starts with a date (written in the appropriate format) starts a new journal entry. The appropriate date format for input can be entered by the user. Monday is shaded yellow, Tuesday is shaded green, Wednesday is shaded blue, etc., for the rest of the week. Anything typed after the vertical bar in the first line is aligned right.

```
\begin{figure}
\centering
\includegraphics[width=0.4\linewidth]{../..../photos/
china2025/20250724-01}
\end{figure}
```

I like to use the ISO standard for dates: year month day. That is what I specified in the options for the document class. However the display format is dictated by the chosen language. If I selected a language that uses the year-month-day input then the names of the days of the week are translated into that language. The date output should match the date input.

From time to time I like to include words or phrases in a second language. I included the `babel` package and generated an error showing a conflict between the `jwjournal` package and the `babel` package. For now I will be limited to recording my observations in one language in each journal file. Not a great loss but I wish for a change.

There are many features of `jwjournal` I did not explore. As I said I used it simply to record my thoughts and experiences at the end of each day of my short trip.

There is good documentation and a good example available when you download the package from ctan. I think this package would be useful in many situations when you need to record sequential events. The daily diary of my tourist trip is one example. It would be useful for training exercises or research or study notes or others. It has a “sub journal” feature so the user can set up separate files for different things and include them in the main journal.

I recommend the `jwjournal` package to anyone who has been wishing for a Latex / Tex journal. If you do use it and find ways to get around the limitations I mentioned in this article please write your own article or let me know how you did it and I will include your suggestions in a follow-up article.

Next page, top left, is the initial code for starting a journal using `jwjournal` plus a few sample entries.

```
\documentclass[11pt, paperstyle=light yellow, color entry, year-month-day, title in
boldface, title in sffamily, use style = classical]{jwjournal}

% "paperstyle = ..." adjusts the paper color, options include:
lightyellow'yellow'parchment'green'lightgray'gray'nord'dark

% "color entry" adds more color to the title of each entry

% "scroll" turns on the scroll mode and can generate a single-page pdf similar to a
long
screenshot

\UseLanguage{English} % Not needed if document is in English

\usepackage{graphicx} % Not needed with jwjournal, needed for figure environment

\begin{document}

2025/07/19 Warm (26) and Sunny | Agincourt

This morning I continued with packing for my trip to China. I will leave on Tuesday
July 22.

2025/07/20 Warmer (28) and humid | Agincourt

Today I got some advice about my trip.

2025/7/22 Warm (25) | Toronto to Beijing

Plane left Toronto about 5:30pm after boarding delayed because of late arrival of
plane from Beijing.
```



HOW-TO

Written by Mark Crutch

Inkscape - Part 161

This month I'm going to start by looking at a couple of small-but-useful quality of life improvements in the gradient editor that were added in Inkscape 1.4. So I guess the first thing to do is to create an object with a gradient...

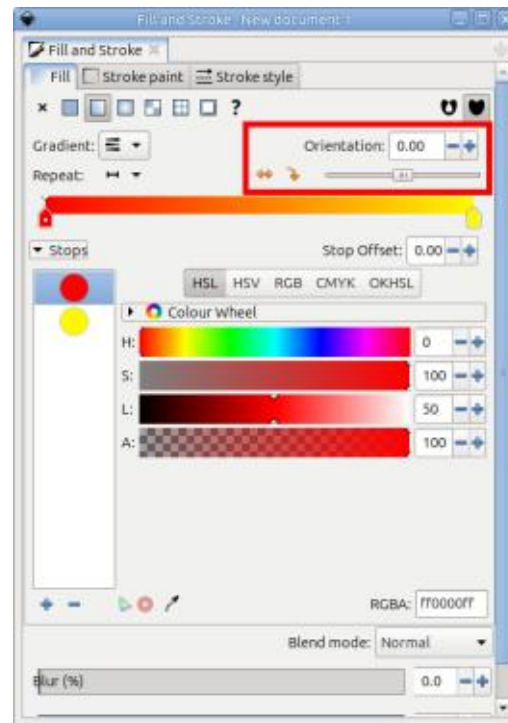


I've only applied a gradient to the fill, but the new features are also available on strokes with a gradient. In this case the gradient runs from red to yellow, and from left to right. In terms of SVG, that's the default direction, with 0° towards the right of the object, and angles increasing clockwise from there. Remember that, it will be important.

In practice, as you can see, there's also a thin blue section in the middle of the gradient. I've included that simply to make any

orientation changes clearer in the following screenshots, but for simplicity I'm going to ignore it and continue as though this is just a simple red-yellow gradient.

Opening the Fill & Stroke dialog we see roughly the same layout as the past few Inkscape versions, but with some new controls at the top-right (outlined in red).



The first new control here is a numeric input to adjust the rotation of the gradient. Setting it to 45°, for example, does exactly what you would expect it to.



Remember that the blue line runs through the middle of the gradient, perpendicular to the gradient direction. Our 45° angle, therefore, runs from top-left to bottom-right. Of course you can set any other angle you wish to in this field but, disappointingly, there are no presets available when right-clicking. One useful feature of Inkscape is its presentation of sensible presets associated with a lot of other input fields, but it's something that seems to be increasingly falling by the wayside with each new field added to the application. It would be handy for

this field to offer a list of presets at 15° angles across the available range but, as it stands, you'll just have to type them in yourself.

Neither does this field support the ability to enter simple equations as found in many other inputs in Inkscape. The lack of presets might be forgiven if it were possible to enter "15*5" and have the program calculate the result for you, but that's not an option here.

If you want to change the value in 1° increments there are plus and minus buttons – for smaller or larger increments you'll need to do some typing. You can also focus the field and scroll your mouse wheel for the same effect – but, again, only in 1° steps. It would have been useful to switch to 10° steps with the Shift key held, or 0.1° steps for Ctrl, but that level of coarse and fine control hasn't been implemented.

For a more interactive approach there is also a new slider, below the numeric input. If you don't need a precise angle, but just want to

adjust it until it looks “right” on the canvas, this might be a better tool. As is the nature of sliders, the exact resolution of each step will change depending on how wide the dialog is. But even with an extremely wide dialog, and therefore a longer slider, the resolution still appears to bottom out at 1° steps. Once again, if you want finer control than that you’ll need to adjust the value in the input box, but I’ll forgive that given that a slider isn’t really the right control for such exacting requirements.

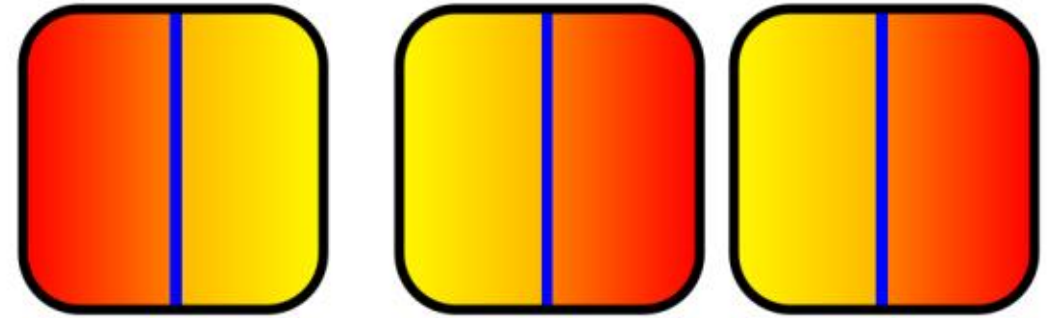
To the left of the slider, a new button rotates the gradient clockwise in 90° steps. To be clear, it rotates the existing gradient by an additional 90° with each click, so if you start with an angle of 30° it will jump to 120°. Note that the rotation control covers a range of +/-180°, so an additional click on the button won’t jump to 210°, but rather to -150°. From there, another click jumps to -60° before a fourth click brings it back to the starting value of 30°.

Dragging the slider to either end is a quick way to initialise the gradient to a base number such that the button cycles through the four cardinal directions.

This button is a potentially handy shortcut with one glaring omission: it only rotates clockwise. It’d be more useful still if a Shift-click caused it to rotate anti-clockwise for those times when you overshoot your intended rotation, or know that you specifically want to adjust the value by -90°.

One possible use for this button is to flip the orientation of a gradient through 180° – in the case of my example shape, to change it from red-yellow to yellow-red. But right next to the rotate button is one that was already present in earlier releases, which reverses the direction of the gradient. Obviously it makes more sense to use that single-click button, rather than two clicks on the rotate button, right?

In the vast majority of cases, either button will do the job. But there is a technical difference between the way they work which means they’re not quite equivalent, in ways that could affect your design if you’re sharing gradients among multiple objects. To demonstrate this, I’ve taken my original square and made two duplicates. Then I reversed the gradient on the first one, and



rotated it twice on the second. As you might expect, both duplicates look the same.

The differences appear when looking at the gradient settings in the Fill & Stroke dialog (below).

On the left we can see that the ‘Reverse’ button has done exactly that – it’s reversed the order of the color stops entirely. The gradient that had previously run from red to yellow now runs from yellow to red, but with a rotation of 0°. The ‘Rotate’ version, on the right,

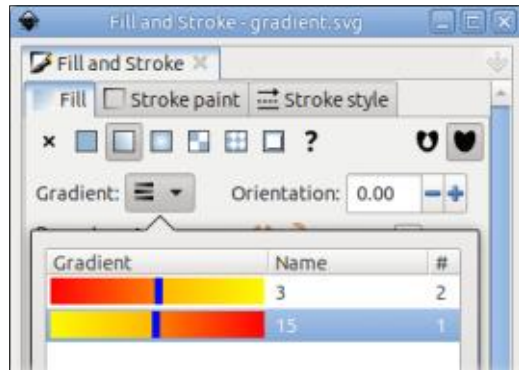
maintains the same stop order as the original object, but with a rotation of 180°.

Within the Inkscape Preferences (Edit > Preferences), in the Tools > Gradient Tool panel, there’s an option called “Prevent sharing of gradient definitions”. So long as this is checked, you’re unlikely to be adversely affected by the difference between these two approaches. Under the hood, this option causes Inkscape to automatically duplicate your gradient when changes to it would



HOWTO - INKSCAPE

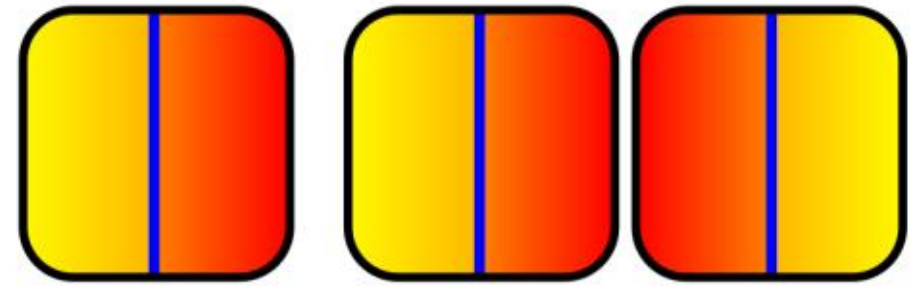
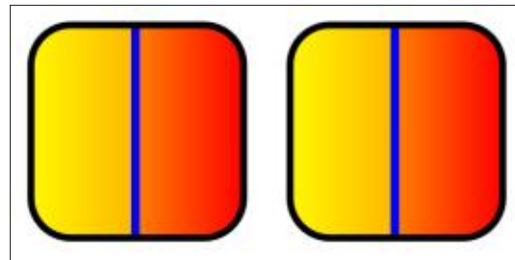
affect more than one object. A change to the rotation of the gradient is okay, as that's set at the point the gradient is used, allowing two different objects to share a single gradient definition but to display it with different orientations. But using the 'Reverse' button results in a change to the gradient definition itself due to the change to the order of stops. Inkscape creates another copy of the gradient, which you can see by opening the 'Gradient' pop-up in the Fill & Stroke dialog.



Notice that there are now two gradients for our three objects. The first is shared by two objects (as indicated by the number in the '#' column) – our original, and the copy with the rotated gradient. The second was created as soon as the 'Reverse' button was clicked, and is only used by one object.

The problems arise when you do want to share gradients. Consider that you might want that yellow changed to green throughout your entire drawing – perhaps due to a change of corporate style or branding. As I discussed last time, you can't use swatches as gradient color stops, so it's not possible to define your gradient in terms of named swatches that you can edit in a single place. Instead you're faced with tracking down and changing the color in every gradient separately.

Un-checking the option in the Preferences dialog causes Inkscape to not create additional gradients on a whim, but comes with its own set of issues. This time, as soon as you reverse the gradient on the first copy, the gradient on the original also flips direction, resulting in a pair of yellow-red gradients and no sign of the original red-yellow direction at all. We've told Inkscape to share the gradient definition, so a change in the order of stops (due



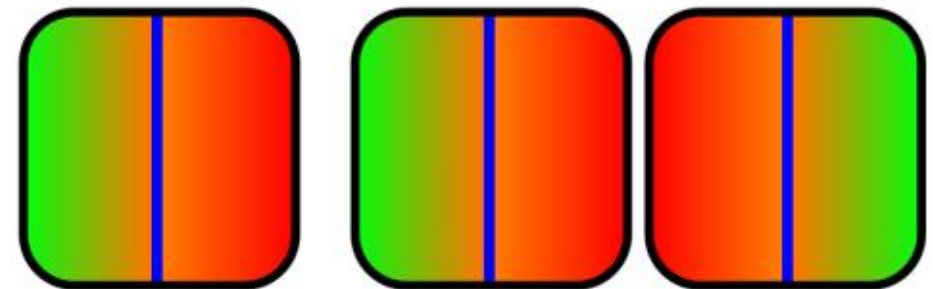
to the 'Reverse' button) has affected both our objects.

Using the rotate button a couple of times, however, does not affect the original. Let's create another copy, and flip that one back to red-yellow using this technique (above).

Now there's only a single gradient used across three objects even though, visually, we have them running in two different directions. Changing a color stop now affects all the objects using that gradient, as with the yellow-to-green swap I suggested earlier (below).

Now our entire document has been updated to match the new (if tasteless) corporate branding, without us having to change myriad gradients across lots of objects.

Note, however, that disabling this preference means it's easy to inadvertently change the gradient of another object when you didn't mean to. For example, if you absent-mindedly use the 'Reverse' button, you may find that an object that's currently off-screen and out of sight also has its gradient reversed. For this reason, unless you really, really want to share gradients, and you understand the implications of doing so, I



HOWTO - INKSCAPE

recommend most users leave this setting checked, and just accept that you may have a bit more work to do if you genuinely do want to change a single stop color across multiple objects.

If you just want to reverse a gradient, therefore, using the 'Rotate' button a couple of times is a better option than the 'Reverse' button. It won't result in an additional gradient being created, regardless of the state of this setting, and will give you the same visual result.

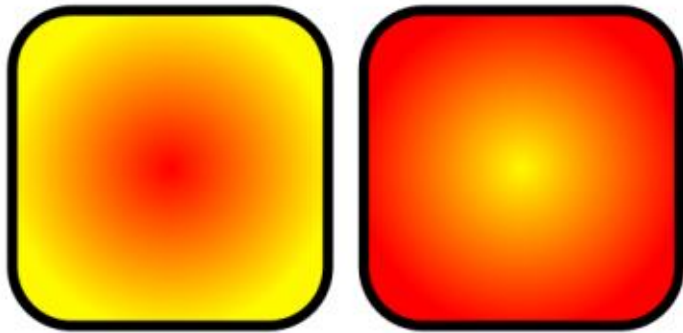
So does that mean that the 'Reverse' button is completely useless? Not at all! Everything I've written above applies only to linear gradients. When working with radial gradients the Orientation section of the Fill & Stroke dialog is disabled entirely, so if you want to flip your gradient from being red in

the center and yellow at the edge to the opposite style, you have no choice but to use the 'Reverse' button, even though it does mean creating a second gradient.

The fact that the Orientation section is disabled for radial gradients is, itself, a little odd. Although it serves no purpose when the gradient is completely circular, if you extend one of the two arms your gradient becomes elliptical. The angle of the ellipse can be altered by dragging the end handle of one of the arms, so it's a shame that the orientation controls don't work for this situation.

The addition of these new controls is another case where a small, seemingly insignificant change to the UI opens up a can of worms when you begin to dig into what's actually happening in your SVG file. I think the new Orientation

controls are definitely a positive addition (despite the lack of shortcuts, arithmetic and support for radial gradients), but it's worth being aware of the underlying details if your needs fall outside of 'normal' use.



Mark uses Inkscape to create comics for the web (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

THE INTERVIEWER ASKED ME TO
EXPLAIN THE GAPS IN MY RESUME .

O.M.W ! I HOPE THEY DID
NOT MAKE YOU EXPLAIN
HOW THE SPACEBAR WORKS ?





Linux on Your iPad

For as low as \$4.95, you can have your own personal Linux cloud computer in minutes on any device.





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.



UBPORTS DEVICES

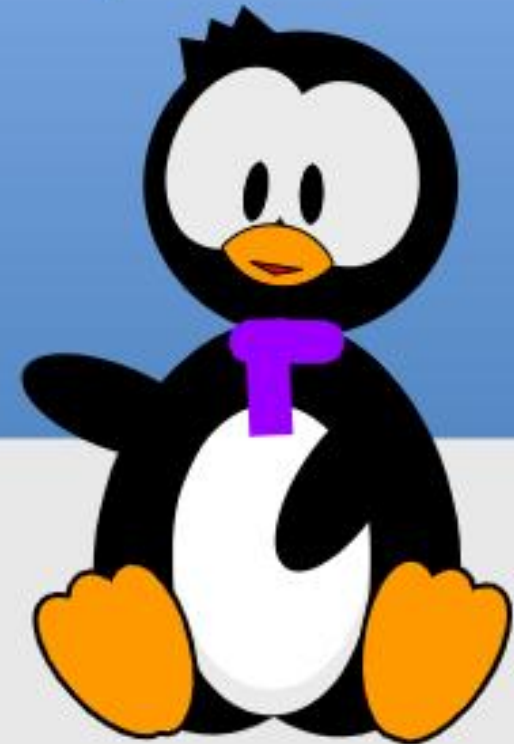
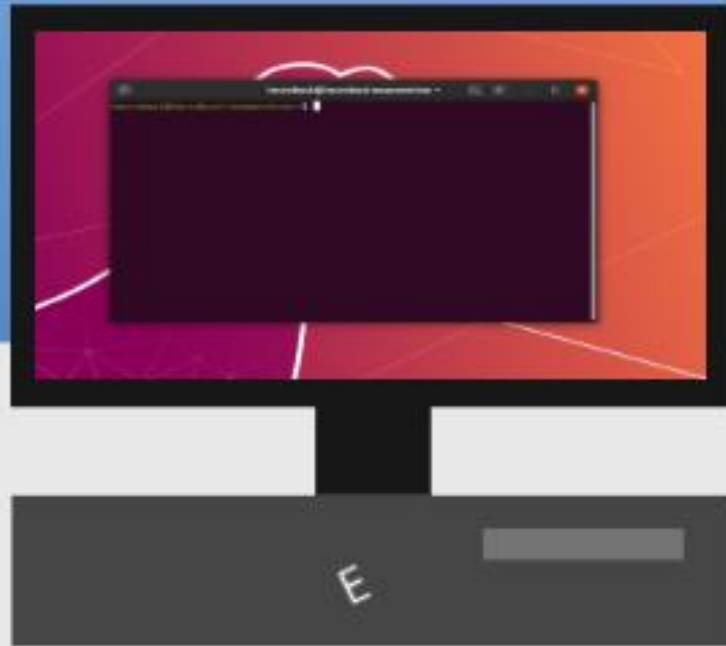
Written by UBports Team

BACK NEXT MONTH



The Daily Waddle

*UP,*UP,*UP,*UP,*UP,*UP,*UP,
*UP,*UP,*UP,*UP,*UP,*UP,*UP,
AH THERE'S LS!



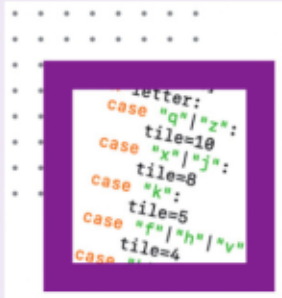


NEW – online courses
from In Easy Steps

Subscribe at iescourses.com before the
end of October and get **40% discount!**
Enter discount code **CIRC40** at the checkout.



Python for Beginners



Learn how to code



Create your own
programs



Learn at your
own pace

A NEW online course from In Easy Steps

Check out the first of our new series of online courses:
Python for Beginners

- Learn how to code.
- Create your own programs.
- Become a Python expert.

This course will help you take your first steps with Python.

- You will learn how to use loops, inputs, variables, lists, and classes.
- Discover how to build simple applications including slideshows, clocks, painting programs, and a variety of games.
- Learn at your own pace, guided by tutorial videos, written guides and help sheets.
- Quizzes, downloads, and additional challenges will test and enhance your learning.

Special price for Full Circle readers of £30 (normal price £50)

Visit iescourses.com and enter discount code **CIRC40** at the checkout to get your discount!

(Discount valid until 30 October 2025)

Get started NOW!



MY OPINION

Written by Erik

I just watched a video on Youtube that commented on some twitch streamer dude with long hair, (he said “pirate software”, not sure if it is the channel name or the streamer handle) that apparently weighed in on the game preservation petition going around in the EU and the comments he got. While the things he said all pertained to this issue, it had stark parallels to some of our forums and groups on the Linux side. As FCM is a magazine dedicated to welcoming n00bs, I thought it may be appropriate.

Trigger warning: I will use the term “Code of Conduct” (CoC) here and though it has lots of negative connotations, as it gets weaponised to get politics or political opinions into things that should not have them, think of it as the old “forum rules” that you used to see on, well, forums, when I use it.

Currently, there are a few (and getting fewer!) easy accessible options where users can get help on Linux issues, in the local vernacular particularly. Lots of

times there are n00b questions, like, I’m new to Linux what is the best distro? Or, what is the best app to do x or y. While I think that people need to learn to ask better questions, myself included, we are also products of our cultural influences. (For instance, listening to the radio, or conversations, the local word for “song” gets replaced with the English word, “song”, in almost every interview and group chat, and no-one bats an eyelid.) People are bad at asking questions because they are lazy too, they don’t want to type out a paragraph, just a short sentence.

You’d have to admit, that if someone told you their fridge stopped running, and asked you, how to fix it? We could all agree that one needs more information. Lets face it, a fridge is a fairly simple appliance, but just saying that it stopped running, tells you nothing. While this is frustrating to someone trying to help, a comment like, “move to Alaska, so you don’t need it”, is not helping the situation.

After n00b questions like these,

come the smarty pants comments like, RTFM (read the f-ing manual), or the really non-helpful comments or downright nasty ones. At this point, I’m asking myself, why are you weighing in? This is where the Youtube video struck home for me. People think their opinion matters (and we will get back to this). They don’t bother to read the previous comments and just want to express their opinion. For the people who genuinely want to help, you now need to wade through the marshes to find out if your own was applied, or not. The other part is that when you get the same thing over and over, it “dulls” the senses.

While I like to type the word n00b, as it stands out, (catches the eye) some people may think that I’m talking down to a new user, but I’m not. I kind of giggle when people call me a n00b somewhere, as being the n00b allows me some liberties. For me, these are just words on a screen that convey no emotion - any emotion you find in the word n00b, you put there. The same could be said for the word “newbie”.

I used to work for an OEM and had to join lots of forums for manufacturers and to get issues sorted out with compatibility between brands, for instance and I would gladly be the n00b if I needed help. However, these types of forums are a lot more professional, unlike dealing with the unwashed masses of say, facebook. They have a CoC you need to adhere to and it is moderated by a professional in the field, (or if company owned, an employee) unlike say, social media. The CoC’s here are all related to the forum and the subject though, nothing to do with politics.

While I don’t advocate for AI, it could be helpful in pointing users to resources based on the content of their questions. I mean, you do not need to answer the same question over-and-over-and-over of “I forgot my password on Ubuntu, how to reset?” when it can point them to a knowledge base (KB) immediately, thus avoiding those unhelpful and toxic answers like, “KYS, use Arch”. Why I say AI here, is because

searching knowledge bases is not as straight forward as you may think. You could use the “wrong” phrase or structure your query “wrong” and get no answer, while it is definitely there. I can speak from experience here, as I used to work for a UK based company and when I got no joy from their KB, I would ask in our group and someone would search with another term and find what I was looking for and comment that “you did not look hard enough”, whatever that means. English, not being my first language, I would never have found it, as I did not know that specific search term, so I truly understand when n00bs cannot find what they are looking for.

Getting back to the other point, some people just want to add their two cents, they think their opinion matters or it will change anything. Telling a Cinnamon user to switch to KDE is not helpful. Yes, you may find KDE easier, but they may not, also it is your opinion and it does to solve the problem the user has, of connecting their phone to their computer. Though as a whole, we have to be open and welcoming to new users of Linux, we also somehow need to eliminate the common questions that you see

every day and also keep the channels clear of the Dunning-Kruger type of users, who have installed some obscure i3-looking desktop and think they are superior to new users who are struggling and leave nasty comments.

If I look at it from the perspective of a maintainer of free software, I can understand the frustration when people who don’t donate just “demand” things and I also understand that there are people who use Linux because they cannot afford software. But! I’m not talking about those, I’m talking about the common everyday Linux n00b asking a question somewhere that is open to everyone, like say, facebook, as that is all they know. I won’t say social media as a whole, as I find that to me mostly empty cans making the most noise.

To N00bs, I want to say, put as much effort into the question you are asking, stating what you have read and tried before asking, as equivalent to the effort that you would expect in explaining the answer. A quick search in the forum also never hurt anyone before asking your question. Never write off real people and real answers related to their experience, for AI

slop. The glue may keep the cheese on the pizza, but the following diarrhoea won’t be fun.

I know I have mentioned AI as a possible solution, but I mean there can also be manual means, where a user has to read the rules and common questions first, before being allowed to post. Making the questions searchable in a way that if a user asks a question, that not only direct hits come up, but related ones too. Maybe the forum software or KB software has to change, which expands the search to the next nearest term? All I know is that if we want Linux to be accepted, we need to keep the n00bs and the trolls apart and maybe get more moderators to just “sweep and clean”, removing “nonsense” answers to posts.

If you think I was picking on facebook, maybe I was, but you have to admit, that there are still ‘eedjits’ on there that post crap like, 1like = 1prayer or send this to everyone, Bill Gates will share his wealth, just saying...



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

TRANSLATIONS

If you would like to translate Full Circle into your native language please send an email to 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

CachyOS

CachyOS has been making the tech news recently, the subject of quite a number of positive reviews, and gaining a lot of user interest. It is currently at the top of the page view popularity charts on DistroWatch, indicating that people are at least looking for information about it.

It's time for Full Circle to dive in and see what the hoopla is all about!

BACKGROUND

I should start off by saying that I did not find an official explanation of where the name "cachy" comes from, but my best information is that it is a colloquial term meaning "cool, catchy, trendy, or in" and probably derives from the French word "cachet", meaning "a mark or quality, as of distinction, individuality, or authenticity. Great prestige or appeal. "OS" is, of course, just short for "operating system".

CachyOS was started in 2022 by Peter Jung from Germany and the

project website lists 12 guys who make up the CachyOS development team.

Based on Arch Linux, CachyOS uses Arch's rolling release model. This means that there is no regular schedule of releases, just an installer with updates every month or so to add recent changes. You install CachyOS once and then get regular updates forever which include patches and fixes as well as new application versions and features. Arch is famous for always providing the latest "bleeding edge" application versions. This is

different from most other Linux distributions, like Ubuntu, where there are distinct releases and then bug fixes and updates to those releases but, other than updated web browsers, you mostly get to keep the same application versions within a given release.

The rolling release model is advantageous because you never have to install a new release version and you always have the latest application versions. On the downside, this also means that new applications and features may not be as fully tested, and that older

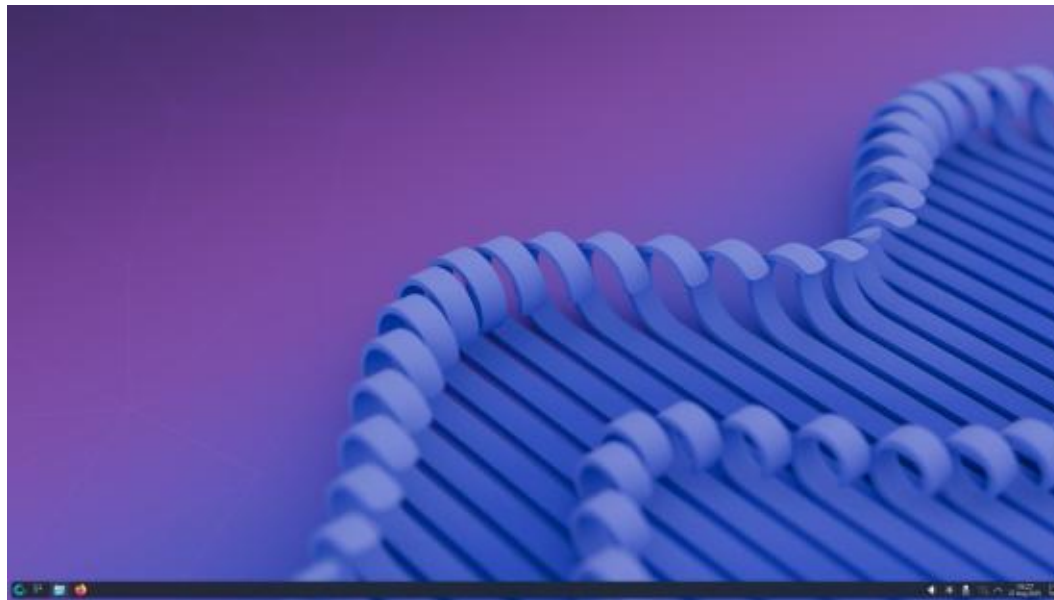
hardware may run out of support as new kernels are pushed out.

The official website lays out the project's goals: "CachyOS is designed to deliver lightning-fast speeds and stability, ensuring a smooth and enjoyable computing experience every time you use it. Whether you're a seasoned Linux user or just starting out, CachyOS is the ideal choice for those looking for a powerful, customizable and blazingly fast operating system."

CachyOS is more than just re-branded Arch though; it has many changes and optimizations, falling under four general areas:

Optimized Packages: CachyOS compiles packages with the x86-64-v3, x86-64-v4 and Zen4 instruction set, plus Linear Tape-Open (LTO) for higher performance. The core packages also get Profile-Guided Optimization (PGO) or Binary Optimization and Layout Tool (BOLT) optimization.

Desktop choices: The default live session desktop is KDE Plasma

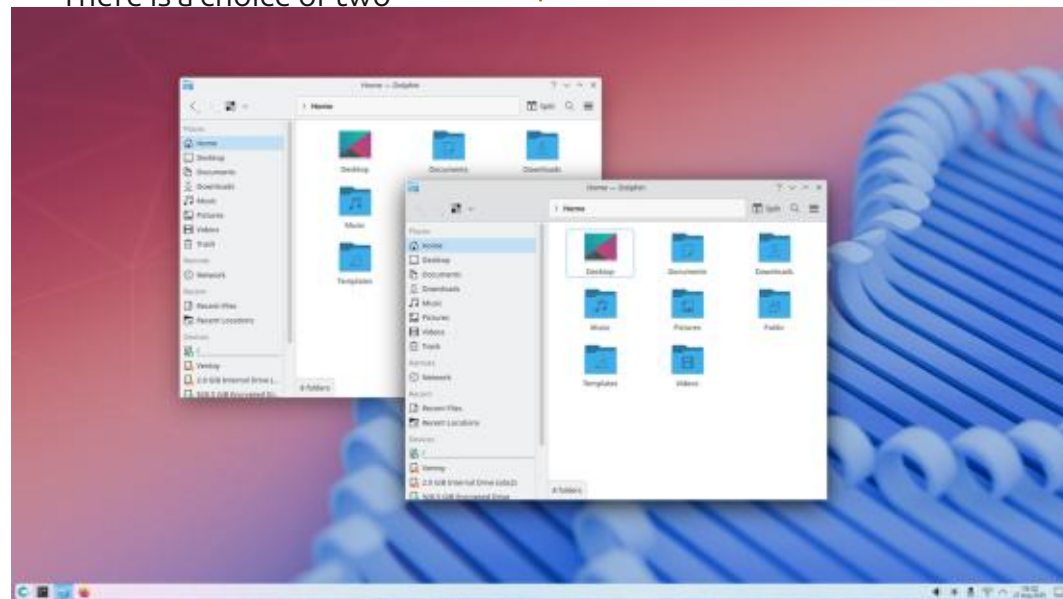


REVIEW

6, but there are many other choices at installation for desktop environments, Wayland compositors or X11 window managers. These include KDE Plasma, GNOME, XFCE, i3, Wayfire, Niri, Openbox, Cinnamon, COSMIC, UKUI, LXDE, LXQt, MATE, Budgie, Qtile, Hyprland, bspwm, and Sway. There is also a choice of boot managers (systemd-boot, rEFInd, GRUB, and Limine), with systemd-boot as default, and a choice of file systems (XFS, BTRFS, ext4, ZFS, F2FS (Flash-Friendly File System), and BcacheFS), with BTRFS as the default.

INSTALLATION

There is a choice of two



installers, a user-friendly graphical version based on Calamares, and a command-line option.

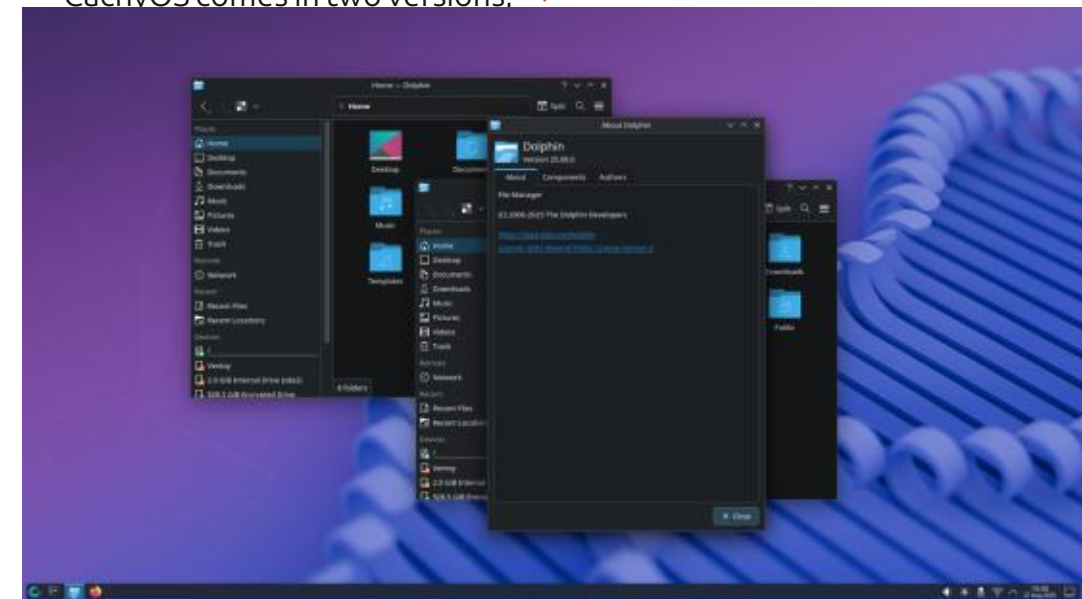
Robust kernel support: CachyOS utilizes a Burst-Oriented Response Enhancer (BORE) Scheduler. This is designed to improve responsiveness for tasks with quick user input, particularly under heavy CPU loads, such as gaming. BORE enhances existing Linux schedulers by prioritizing tasks based on their "burstiness", which helps reduce lag during multitasking. CachyOS has many scheduler options including EEVDF, sched-ext, ECHO, and RT. All the Linux kernels used are compiled with optimized x86-64-v3, x86-64-v4, Zen4 instructions and LTO, to be optimized for individual CPUs and

hardware.

So, overall, there are many optimizations and lots of choices. Much of CachyOS's improvements are intended to make it a better gaming platform, although it works just as well for general desktop use. For gaming, it has a button in the CachyOS Hello greeter to "Install gaming packages", which will install Steam, Lutris, and the Heroic Games Launcher. Between them, these platforms will run a lot of games and, depending on your hardware, the kernel tuning will mean they should run quickly.

GETTING CACHYOS

CachyOS comes in two versions,



one for desktop and another for handheld gaming devices. I downloaded the August update, CachyOS 2025.08.25 Desktop Edition as a BitTorrent from the official source, using Transmission. I carried out a command-line SHA256 sum check to ensure I had a good download.

The ISO file turned out to be relatively lightweight for these days. At 2.98 GB, it is less than half the size of Ubuntu 25.04 which is 6.28 GB. There are some good reasons for this, including the number of applications and customization options included, described below.

As far as installation goes, the

REVIEW

website warns, "it is not recommended to install CachyOS on a virtual machine. VMs can have issues with incorrect configuration or can be broken entirely. It is recommended to install CachyOS on bare metal."

The ISO file also supports a KDE Plasma live session, enabling you to try it out without installing it on your hard drive.

INSTALLING

I dropped the ISO file onto a USB stick equipped with Ventoy 1.1.05 and booted it up to a live session for testing. Like Arch Linux, CachyOS is officially supported by

Ventoy, and it booted up without any issues.

SYSTEM REQUIREMENTS

The listed minimum system requirements are:

- 3 GB RAM
- 30 GB of Storage Space (HDD/SSD)
- A stable internet connection

and the recommended specs are:

8 GB RAM
50 GB of storage space (SSD/NVMe)
x86-64-v3 capable CPU
50 Mbps or better internet speed
NVIDIA GPU (900+ - e.g: GTX 950),
AMD +GCN 1.0 (e.g: AMD R7 240) or
Intel (Integrated HD Graphics series

or higher. Arc Series)

So, it can be seen that Cachy is not intended for old or lower spec hardware.

TRYING OUT CACHYOS

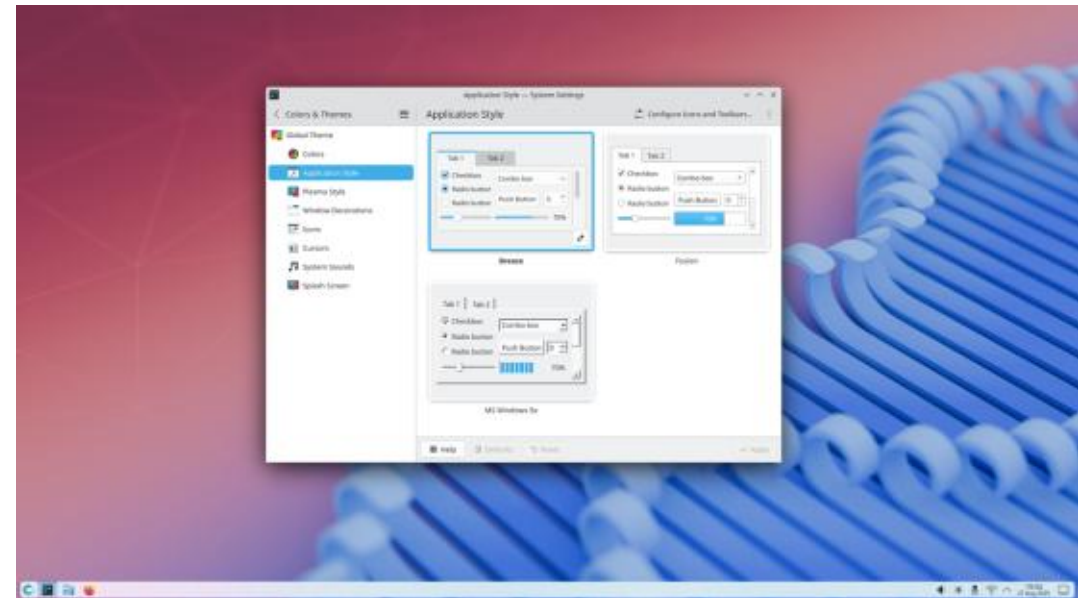
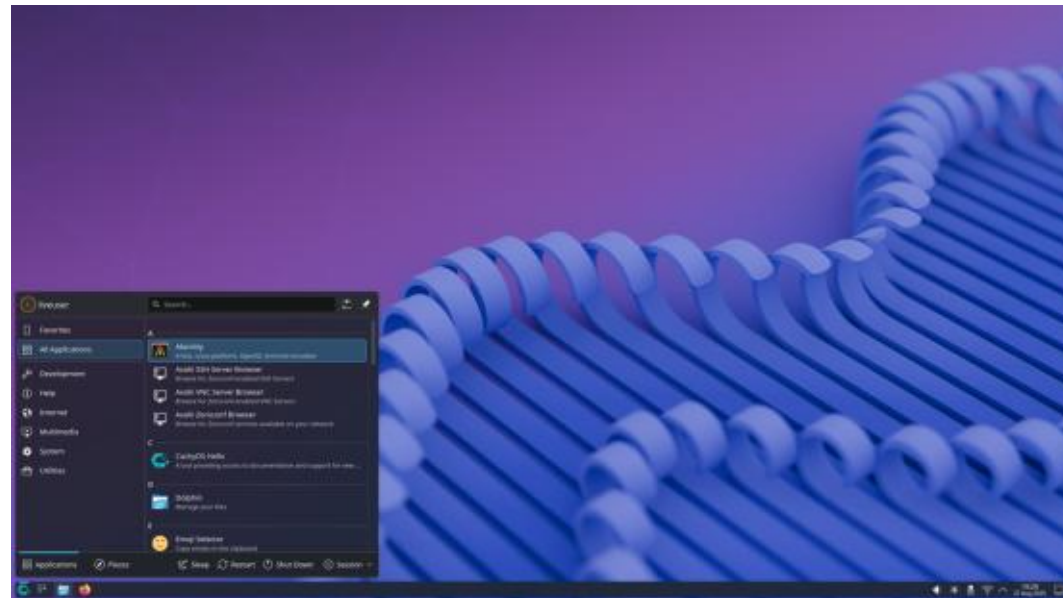
Booting up CachyOS as a live session gives the latest KDE Plasma 6.44 desktop. The other listed desktops and window managers can be chosen only when doing a full installation.

This is a mostly stock Plasma desktop, with some Cachy-specific additions like the CachyOS Hello greeter to get you started. The live session provides a bit of an

- abbreviated experience and omits some tools like the graphical CachyOS Package Installer and CachyOS Kernel Manager.

NEW

This August 2025 version, CachyOS 2025.08.25, brought a long list of new things over the previous July download. Some of the highlights are the introduction of the linux-cachyos-lts LTS Linux kernel fallback as a hedge against stability issues, the ISO now uses the LTS kernel instead of the latest stable kernel, and this update adds the Niri window manager as a desktop option. Choosing the combination of the GRUB



REVIEW

bootloader with BTRFS as the filesystem now automatically enables bootable snapshots. S0ix sleep is now supported on NVIDIA hardware. Cachy-Update, a fork of arch-update, is now available in the CachyOS repository. This provides a system tray indicator to tell users about available updates from both the official Cachy repository and the Arch User Repository. There are also several improvements to the Limine bootloader and the Launch Installer button, plus many more fixes and patches included.

CachyOS now has a new packages website, packages.cachyos.org, which is similar to Ubuntu's Launchpad and gives the rundown on each package available in the repositories.

SETTINGS

The KDE Plasma desktop is well-known for its wide range of user customization choices. For example, Kubuntu, which also uses the KDE Plasma desktop, comes with a veritable blizzard of included user options, but CachyOS has fewer choices which is one way to save space on the ISO download.

CachyOS's installed customization options include: three global themes (Breeze, Breeze Dark, and Breeze Twilight), two icon sets (Breeze, Breeze Dark), three Plasma styles (Breeze, Breeze Dark, and Breeze Light), two quick settings (Breeze, Breeze Dark), two splash screen options (Breeze and none), two system soundscapes (Ocean and FreeDesktop), one wallpaper (Coast by Krystian Zajdel, which has automatic light and dark modes), two window decorations (Breeze and Plastik), three application styles (Breeze, Fusion, and MS Windows 9x), and four cursor styles (Breeze light, Breeze Dark, Capitaine, and Capitaine white).

As always, the KDE Plasma desktop's customization options are all arranged in a single, organized place and each one allows downloading many more options than are provided by default.

The included Linux kernel is version 6.12.43, and the initialization system is Systemd 257.8. That is one area where there is no user choice: Arch uses systemd and so does CachyOS. Systemd haters should choose a different distro.

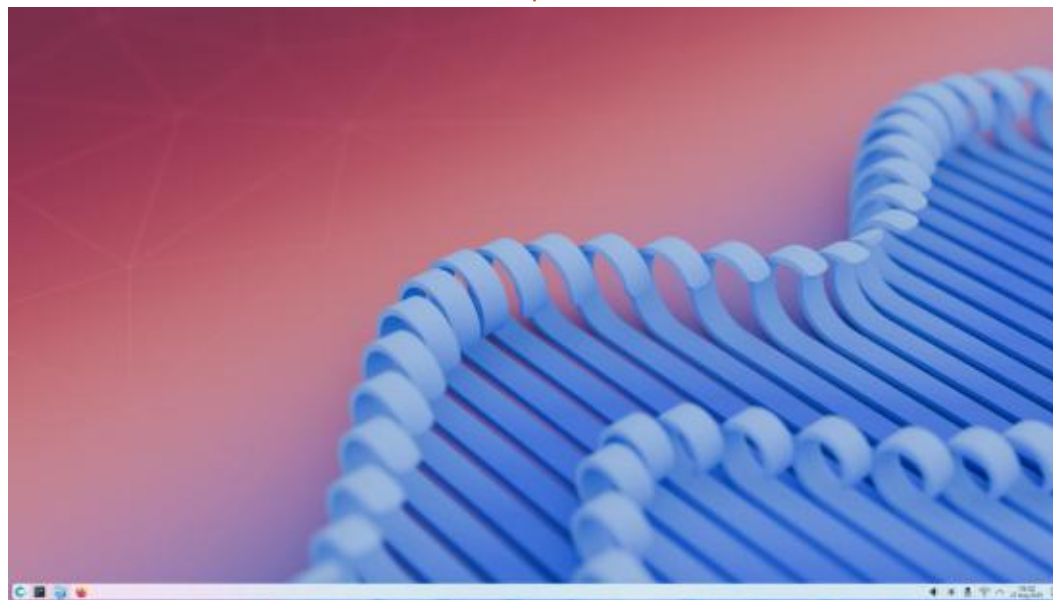
APPLICATIONS

Some of the applications included with CachyOS KDE

2025.08.25 are:
Alacritty 0.15.1 terminal emulator
Dolphin 25.08.0 file manager
Firefox 142.0 web browser
Gparted 1.7.0 partition manager
Kate 25.08.0 text editor
KCalc 25.08.0 calculator
KDE Partition Manager partition manager
Konsole 25.08.0 terminal emulator
KWrite 25.08.0 text editor
Systemd 257.8 init system
Vim 9.1.1623 text editor

The first thing noticeable about the provided suite of applications is that it is very minimal, which is not necessarily a bad thing. This approach helps keep the ISO file down to a smaller download size so users can just add what they need and do not have to remove a lot of what they don't need. It does also mean that CachyOS is not really ready to get to work right out-of-the-box, though, either for gaming or general desktop use. Some application installing and configuring is required.

The second notable thing is that, even though the list of applications included is short, there is an odd amount of duplication here. There are three text editors, two terminal emulators and two partition



REVIEW

managers so some cleanup may be needed after installation.

Any of the 22,981 packages in the Cachy repository can be installed or removed either using the pacman package manager via the command-line or using the graphical CachyOS Package Installer.

CONCLUSIONS

It is not hard to see why CachyOS is getting quite a lot of attention across the Linux world, as there really is a lot to like here. It combines the best of Arch Linux's cutting edge rolling release model with some useful optimizations,

plus a mountain of choices in desktops, window managers, file and boot systems (although not init systems).

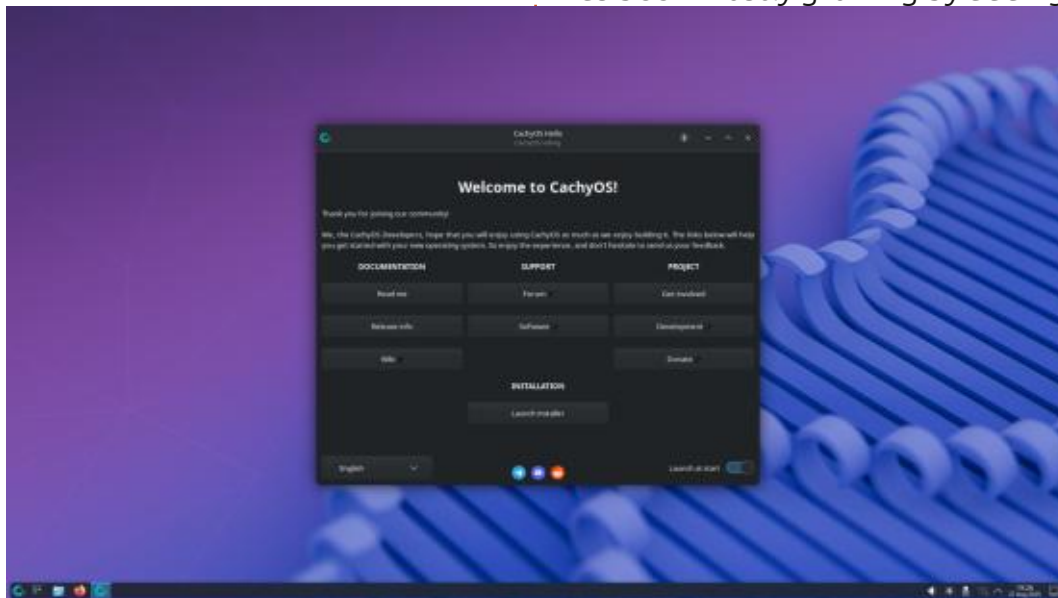
Even though Cachy is aimed at both experienced and new Linux users, I think most beginners are going to need a bit of experienced help with installation due to the myriad of choices presented. This is not Ubuntu, where installation is very straightforward due to few choices. Once installed though, I think most beginners will do fine with CachyOS.

One thing about rolling release Linux distributions is that they can morph over time. So far, CachyOS has been mostly growing by adding

more desktop and window manager options. We'll see when it stabilizes and keep an eye on how it does, including whether its popularity continues to grow.

EXTERNAL LINKS

Official website:
<https://cachyos.org/>



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 Erik

Starc a.k.a Story Architech

Website: <https://starc.app>

Telegram: @starcapp

Price: Free for personal use, \$150 Lifetime

Blurb: *"Reinventing the screenwriting software. Become an early user to get exclusive access to all features and get unlimited power to your creativity."*

So what is it? We have looked at Starc before, but in case you missed it, Starc is a writing aid. It provides tools to simplify your life as a writer. As you can tell by their blurb, the application is mainly aimed at screenwriting, replacing KIT scenartist, but it has other options and you do not need to know anything about screenwriting to use the application.

INSTALLATION

Starc is supplied in ApplImage format, supplied as a 71Mb "starc-setup.ApplImage" file. When you

run the application, it immediately tries to call home. Not a good sign – and it continues to do so, until you block it completely. While this sort of behaviour is considered normal in Windows and MacOS circles, it is frowned upon in Linux circles, where privacy matters and programs do not just do whatever they want. The application can be

managed with the ApplImage launcher.

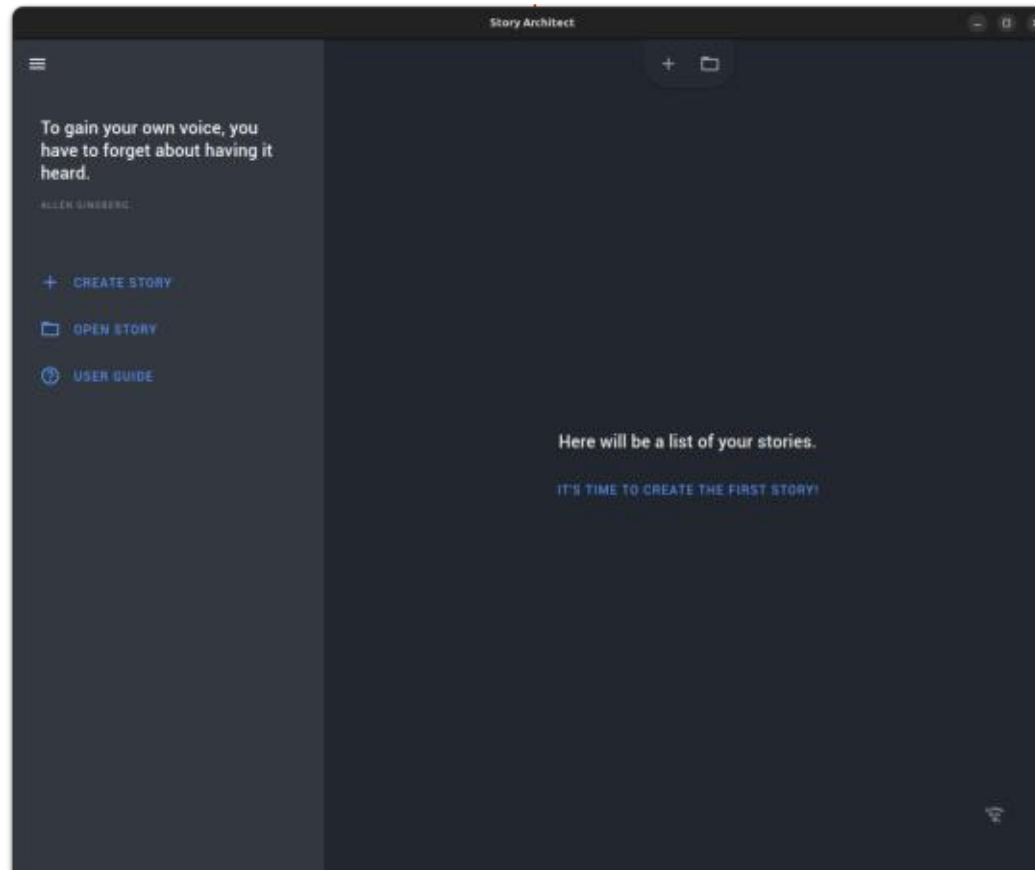
OPERATION

When you launch Starc, you are greeted with a pleasingly simple interface, that is straight to business. There is only one

hamburger menu, in one frame. It does not load up in pure white, (praise the pope!) recognizing that most writers ply their craft in the wee hours of the day. That said, there are different themes available if you'd like, and you can even create your own. The menu is simple with three options, create story, open story and the user guide. This is in line with the direction the developers have chosen: "Starc is being developed with strong author's involvement and support so we won't waste the app performance on features you don't need".

Though the direction is clear, how you go about changing the things that matter, like the font, is unclear. You are presented with only two options, for the basic module, courier and roboto, both good fonts for developers, but not for writers and two more in other modules, that include Arial and New Times Roman.

After asking in the Telegram group how to change the ugly fonts that come with the application, I



REVIEW

was pointed to a web page, as the way to change them is not apparent.

starc.app.blog, [5/19/25 11:27 AM]
Hello, what fonts do you talk about?

EriktheUnready, [5/19/25 11:37 AM]
Will there be an option to change these soon? I'm talking about having readable or dyslexic friendly fonts? I want to do another article on Starc for the magazine, but only when there are some major changes.

starc.app.blog, [5/19/25 11:38 AM]
Do you mean interface font? or font for the text of your article?

EriktheUnready, [5/19/25 1:32 PM]
the font you type in, in the starc text editor, or am I missing something?

starc.app.blog, [5/19/25 2:08 PM]
You can set up your own template and use fonts you like. Here is the short how to about this feature - <https://starc.app/help/custom-templates>

This opens up the application to people with disabilities and those with dyslexia, who can then use large readable fonts. It may not

seem like an issue now, but we will all get old one day... Most writers I know, prefer clear fonts that do not have squiggly g's and a's and so forth as they create eye strain and fatigue from using an application, specially with an application like Starc, where a writer will spend all day staring at the screen. I think fonts are overlooked by many application developers inside their own applications, even when they themselves get very pedantic about the fonts that they code in. I'm not sure if it is a good or a bad thing, not being able to change your font on-the-fly, as when writing, one needs the environment to be distraction free, so one needs to

plan accordingly.

The application caters for all sorts of writers, screenwriters, novel writers, play writers and even casual notes. It is not a completely distraction-free writer, but it is very close to it with its minimal design choices.

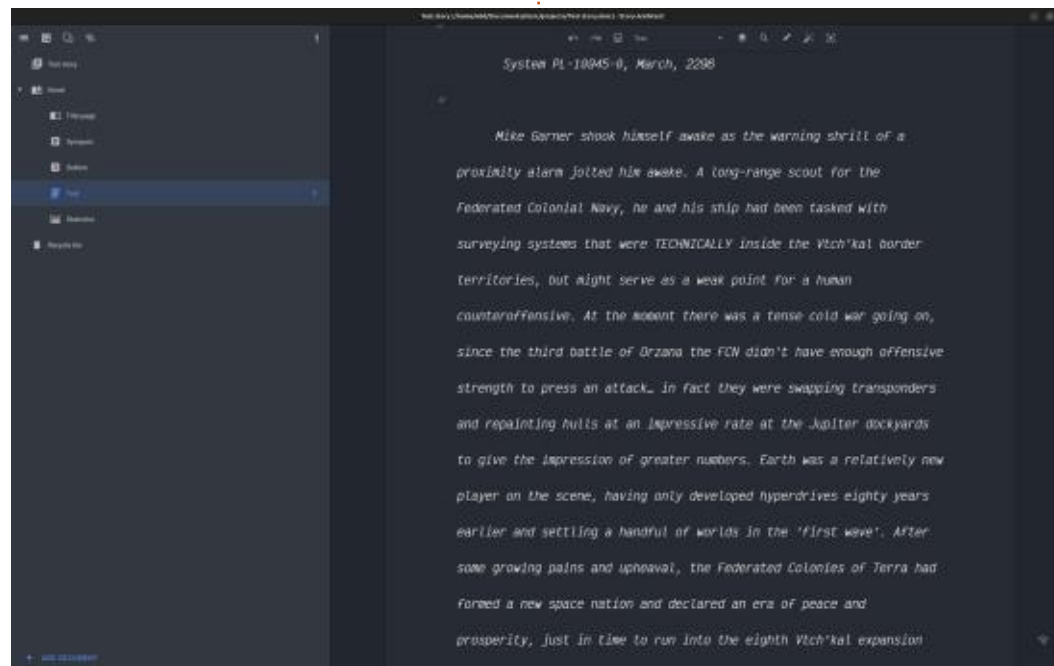
Another great feature for writers is the ability to split the screen into two, with F2. This way you can keep track of something that came before, to keep the continuity, allowing you to edit in both splits, should you need to balance your story. It saves you from searching back and forth and

even helps if you split your chapters.

The application saves automatically, so if the application should crash or your laptop runs out of battery, your progress will be saved.

For most casual writers, the basic package will be enough, however, the cloud features for professional writers are becoming more feature rich by the month. While I am not going to discuss the Starc mobile application here, as it has nothing to do with Ubuntu, I will say that interoperability is a thing and you can seamlessly edit on other platforms via the cloud. Their cloud options even allow for co-writing with another author, on another platform, which I think is awesome!

Now let's talk about the elephant in the room, the so-called Starc AI. While I do agree that AI can be a tremendous help in writing as well as help you brainstorm great ideas, I don't trust the techbro's not to steal your story or your idea. (we've all seen how well it went for the digital artists.) Thus, having it inside your application is utterly crazy to me. If I were to need a



prompt, I'd open up ChatGPT in my browser and simply clear my cookies every time I want to use it, (or else you need to sign in) only getting the bare minimum from that information hoover. Luckily for us, this is not integrated into the free version, which is a plus. Since I do not have an income at the moment, I could not try out the paid version, so if any of our readers wants to try and report back, it would be great.

I have to point out that the application is still pre version 1.0, and there are still bugs, but for what the developers have so far, it is really cool.

(current bug, where if you quit and do not save, it will still save an unnamed file)

For me, it is the little things that set this application apart from other writers on Linux, for instance, it would automatically correct my double capitals, from something like "Linux" to Linux, for when I hold down the shift key for a fraction too long, sort of like LibreOffice Writer does, and I appreciate that as it saves me from correcting obvious mistakes. Once this application achieves predictive text,

it should blow any other writing application on Linux out of the water.

That said, there are also some annoyances, for instance, once you have selected a category, say novel writing, and you quickly want to add some notes in the notes section, clicking "create" or the plus at the top, you now only have access to the "novel" section... and the notes, the plays and the screenwriting

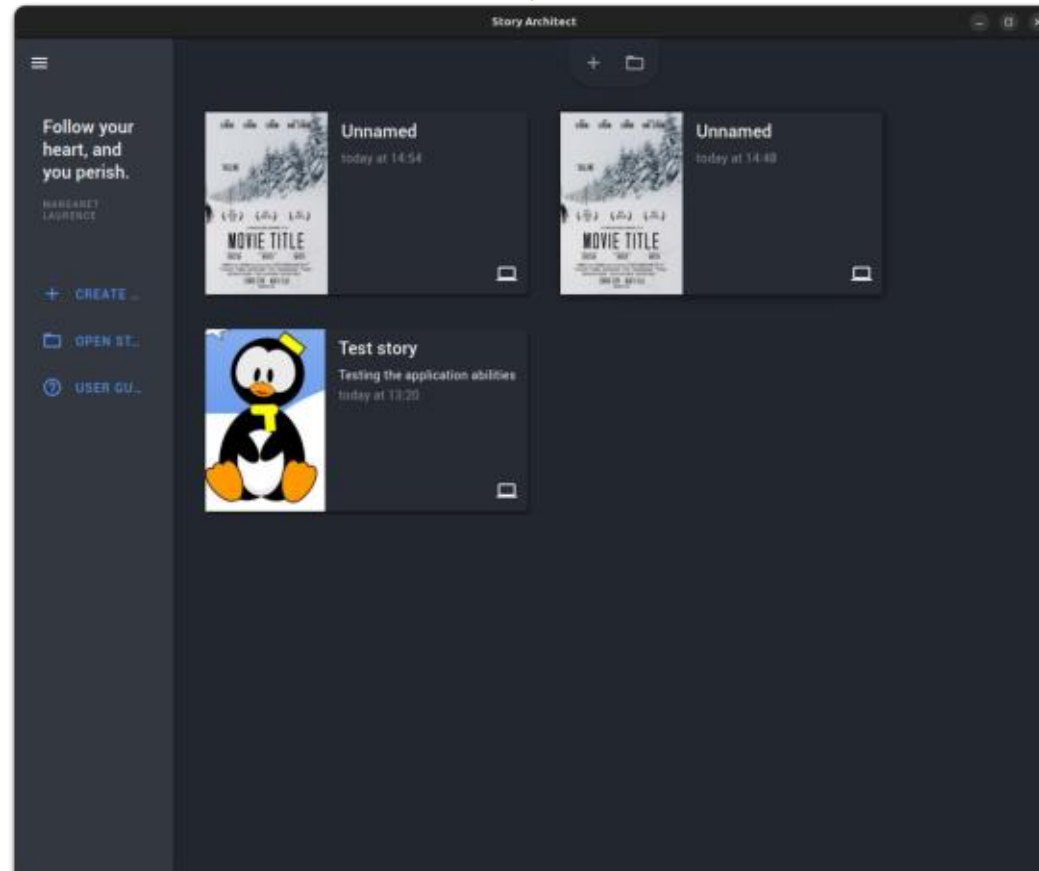
sections are now not available any more.

To get to the others, you need to then take the scenic route, by choosing the "not set" and create - and on the next window, at the bottom, you will find "+ Add Document)

For me, digital is the way to go and I'm always looking for an application that is a good fit. After

losing all my stories since 1984 in a move, recently - (if anyone reading this ever receives a box that is not theirs, filled with red notebooks, let me know!) I can back up my stuff to SD card, to the cloud, to hard drive and DVD ROM, if it is in digital format. Thus I'll be keeping an eye on Starc as it develops and following them on Telegram as it is a promising application.

As it stands now, it is still a bit clunky, or that is how it feels, but I see improvement all the time, and that cannot be bad!





LETTERS

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

Join us on:



<https://mastodon.social/@fullcirclemagazine>



twitter.com/#!/fullcirclemag



linkedin.com/company/full-circle-magazine



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, 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.

You know, for something that is supposed to be “fair” the law is not. I was looking at a case of a man clearly seen stealing the company product, by opening a side door and passing the products off to his accomplices. The value of the lost product was much more than his yearly salary. He obviously got fired and took the case for arbitration, arguing that it wasn't him. There are video cameras inside and

outside and anyone with eyes can clearly identify the person. He won the case, because the company had no sign up, saying the door was under surveillance. That's just stealing small in comparison to the EA's of the gaming industry. (People who sell you games with obsolescence built in) There is an initiative going around in the EU now, “stop killing games” and if you are in the EU, I hoped you supported it, (I'd like to say support, but by the time this hits the magazine it will be over, four months from now.) as it would be a blow to the “you will own nothing and be happy” billionaires of this world. This may also wake people up to “free” software and other indian-givers, who update your software with crap to force you to buy the latest. You know, can we not all have terms and conditions to our money that these people take? Level the playing field, so to speak? For one, I think that would be fair. My terms and conditions are tied to yours, if you change your terms or sell me a product that is not really a product, but a license, then my money is also not money and only a

license and you have to return it. Fair is fair?

Q : I want to install the latest version 7.1.06 of Virtualbox on Ubuntu 24.04. I'm following this tutorial -- <https://www.baeldung.com/linux/install-virtualbox-extension-pack> -- “Next, we add and install the extension pack from the VirtualBox GUI. To do this, we'll open the VirtualBox GUI and click on “Preferences”:” <removed> but it seems that it is not in version 7.1.06 as there are no preferences.

A : I looked at the link and it clearly states version 6.1.4, as far as I know in version 7, you need to right click on the “tools” bar (The very first entry before your first VM) to get to the properties. There is no menu entry for it.

Q : My old Dell Optiplex 3050 PC is not new by any stretch of the imagination and has been very happily running LXLE for the last five years, or so. It was snappy and

had easy to use software pre-installed and was easy to configure. It also shipped with my favourite idler, Zaz. The only janky thing for me was Parole. The main reason I changed to Lubuntu was basically Appgrid stopped working and Librewolf told me ublock could not be “verified” and was disabled. Lubuntu doesn't even have a store and has weird choices for software. It used to be LXDE, right? Can I make it into LXLE?

A : Your question is a lot more involved than you think. While it is possible to add the LXDE desktop and software to match LXLE, you have to remember that the underlying tooling also differs. One could replace SDDM with LightDM etc, *if you have the time and patience. You also have to keep in mind that no-one is updating LXDE or fixing any bugs or vulnerabilities. Last time I checked, AppGrid was also dead, but I'm sure you can install another app store. The reason for Librewolf bombing is because the keys changed and it needs to have the old ones

removed and then reinstalled. As for Zaz, it should* work on Ubuntu. I understand you like and prefer LXDE, but should you run into issues, there will be no help from zero developers.

Q: I'm running the latest version of Virtualbox on Ubuntu 24.04, but when the window is not fullscreen, it "drops" to the bottom of the screen. Then it seems to do this flashy thing, where if I type during a "flash", the key strokes are not recognized. If I make it fullscreen, it goes away. If I'm on another virtual desktop I can see the icons for Virtualbox and the dot next to them "flashing" and it affects everything else. What can I do about it? I have tried VBoxSVGA and VMSVGA, but it makes no difference.

A: If you change your host system login to X11 instead of Wayland, you should be good. As far as I know, Wayland cannot remember screen positions yet, (see LeoCAD blog) without lots of finagling, so it seems Oracle had not yet wrangled that one.

Q: I have two laptops, they are the same brand, but somehow one has ctrl, fn, win, alt and the other has ctrl, win, fn, alt. And my work one is ctrl, win, alt with fn on the right side of the keyboard. Is there a way I can get them on the same page? Obviously the work one has Windows, but I have Ubuntu WSL. I prefer working in Linux, but I'm not a power user.

A: OK as far as I know, there is no way to remap the Fn-key as it is hard wired. That said, you can faff with the others to get it to your liking. I'm going to assume Gnome, as you didn't say what desktop you were using. Go to tweaks -> keyboard -> additional layout options -> Alt and Win behaviour, or -> switching to another layout option at the bottom.

Q: I have recently installed deb-get, but I'm yet to use it. I did the update and I was ready to install Skype, when it was announced that Skype would be ending in 3 months' time. I was also thinking of getting Firefox instead of the Snap version, but I think that the Snap version may be safer as it is sandboxed. I tether my laptop via my phone for

internet, as I live outside of town, so I don't like to waste bandwidth as bandwidth = money. Can I see what's on offer without internet connection?

A: In your terminal, if you type in `deb-get` and hit tab twice, it will bring up a list of sub commands, one of which is `list`. If you are not comfortable with the terminal, you could navigate to: `/etc/deb-get/01-main.d` and you should see the configuration file for each application available, by name.

Q: With Ubuntu now dropping X11, will I still be able to run my X11 apps? I use quite a few and I'm getting worried. I'm thinking of escaping to Linux Mint, but won't it just spill over?

A: I would think so, but I'd say, let's cross that bridge when we get there. You can always remain on Ubuntu 24.04, a bit longer, as it is a LTS release and see which way the wind blows. As for Linux Mint, it is a great distro, you cannot go wrong, just remember it always releases a bit after Ubuntu LTS.

Q: I recently installed Minder on Ubuntu 24.04 Gnome edition, it is an elementary OS application. I set the application to be in dark mode in the settings, but nothing changed. Then I set the font bigger and again, nothing changed. I read that elementary applications are written in Vala. Is that incompatible with Ubuntu?

A: I installed Minder and tested it. It seems that any changes you make do not apply to open documents, only to new documents. Open a new document and it should reflect your changes. Not sure why, maybe log a ticket with the Minder developers?

Q: VirtualBox can't operate in VMX root mode. Please disable the KVM kernel extension, recompile your kernel and reboot (`VERR_VMX_IN_VMX_ROOT_MODE`). Result Code: `NS_ERROR_FAILURE` (0x80004005) This happened after an update that I didn't check, just did a `sudo apt update` & `sudo apt upgrade -y` I know now it said yes to something I didn't want, but it's too late now? <removed> Ubuntu 24.04 & Virtualbox version: 7.0.18 I

Q&A

updated Virtualbox, but it did nothing and Ubuntu is up to date.

A : It tells you to disable the KVM kernel extension, so let's do that.

First we check if it is actually the case, open a terminal and type:

```
lsmod | grep kvm
```

The result will spit back `_intel` or `_amd` if installed, you need to pay attention to that. Now run: `sudo modprobe -r kvm_intel` or `sudo modprobe -r kvm_amd` depending on what it said in the command before that. Open virtualbox and if that works, we can make it permanent:

```
sudo nano /etc/modprobe.d/blacklist-kvm.conf
```

add these lines:

```
blacklist kvm
```

```
blacklist kvm_intel # or  
kvm_amd
```

save & exit

Update the initial ram filesystem:

```
sudo update-initramfs -u
```

Now reboot

Reference: <https://superuser.com/questions/1845776/virtualbox-cant-operate-in-vmx-mode>

Q : How can I make Ubuntu headless with no GUI? Ubuntu 24.04 please.

A : I'm not sure what you want, headless means no monitor attached, it has nothing to do with GUI or CLI. If you just want a CLI machine with SSH, I suggest using Ubuntu server. <https://ubuntu.com/download/server> If this is about minecraft (I'm assuming as I get this a lot from the minecraft crowd) see: <https://idroot.us/install-minecraft-server-ubuntu-24-04/>

Q : Hey mate, is there a way I can see if Steam is actually using my Nvidia card or my intel IGP? I saw chuggies and it got me thinking. I'd prefer not to install more software, trying to keep it lean.

A : Sure, first launch steam and be sure it is running, next, open a terminal and type:

```
nvidia-smi
```

Look towards the bottom at "processes", if Steam is in the list it is using your Nvidia graphics.



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

Caves of Qud

Website: <https://www.cavesofqud.com/>

Price: \$26 USD GOG/Itch/Steam

Blurb: *"Caves of Qud is a science fantasy RPG & roguelike epic. It's set in a far future that's deeply simulated, richly cultured, and rife with sentient plants. Come inhabit an exotic world and chisel through a layer cake of thousand-year-old civilizations."*

So Caves of Qud (CoQ) finally released in the final form, after being in alpha for a very long time.

Let me start off by saying that this game did not intrigue me at all. (look at the cover art for one) I have a love/hate relationship with roguelikes. When you keep having to do the same thing over and over and over and over ... see you already got bored, just reading that. When it is new and shiny, sure, I'll take a gander. I don't want to see how I got fifty steps further this time compared to the last time.

Thus it was with a polite thank you, that I accepted the game as a gift. Playing it, well, I was not planning to, unless I was really, really bored. It was only with my friend's constant pestering that I loaded the game. Boy, am I glad I did!

This is one of those "traditional" roguelikes, in RPG form, turn based, top down, with side-on graphics. Instead of ASCII characters, an effort was made to bring more modern graphics into the game. (Now, I can look past these types of graphics, I just feel there was an opportunity here, I mean, we are in

2025!) Lets face it, the first thing that you interact with in a video game is the graphics. While it may be primitive by any standard after the year 2000, it has its charm, though it suffers from the same issue as many games, when it comes to scale. Every sprite is "one" block, is say, four 8x8 pixels in size. (I didn't check the precise pixels, but everything is one of your characters, in size) Even with that, it looks amazing on my friend's Steam Deck. However the font sucks like an electrolux! (I'll include a screen-shot)

My first impressions were that this game oozes potential. My imagination ran wild! But let's get back to the game... You get to create a character as a pure human or a mutant. You get to "create" your class, rather than choose it. There are more than seventy! (70) mutations to choose from. This allows for *very different runs every time you play, as the map is semi-static. Also it frustrated the heebie-jeebies out of me, the first five times that I played!

Once you have your character, you are booted from the nest with the message, "fly"! Since this is a sandbox, you can do whatever you like, you can take quests and carve out your story. You can be friends with anyone, but not with everyone. There are ruins to explore, creatures to battle, (or share your water with!) lore to collect and treasures to uncover. Put it this way, all the effort of the game went into world building.

When I said the map was semi-static, I mean that the overworld stays the same, but the terrain and



UBUNTU GAMES

encounters are randomized. (Each overworld block consists of 3x3 screens, iirc) That holds true for the histories you find as well, as they will shape your game. This is the important part, the glue, if you will. Though it is random, there is a method to the madness. The first time I fired up the game, I was... and still am, boggled by the controls. There are a lot of keys used here! You literally have two pages worth of keys!! <https://wiki.cavesofqud.com/wiki/Controls>

I think I have a better chance of mastering Vim, than mastering Caves of Qud, but my friend, who has been playing from the start, will play a game in two or three evenings.

LET'S GO DUNGEONEERING!

CoQ is the story of a world in a post-apocalyptic state. Eaters have ruined it beyond recognition and to the point where water is the only currency worth a dram. (not a spelling mistake) Yep, they were marvelous and terrible at the same time. When they said "layer cake" in the blurb, they were not kidding, the story is layered, the world is layered, the dungeons are layered,

you name it! Story-wise as you start out, it makes no sense, you find a statue telling you about some or other Sultan that did x or y and you may pay no heed, as it is disjointed, but it actually becomes important, allowing you to be immersed in the world of Qud. I suppose that is what I like most about this game, enough to overlook the weird controls. (They work well on a 102 full sized keyboard, btw.) If you choose to start with the main quest, you will go on a journey, suited for anyone with ADHD, befriending talking crocodiles and buying books from Albino apes. If you have an over-active imagination, I cannot recommend this game enough. Potential, potential everywhere. Making friends is harder than it

seems, as the goats may not like the Kobolds and will not be your friends if you are friends with the Kobolds. Kind of high school, all over. I suggest you stay in the good graces of the dragonflies, while your character is weak... This faction system can lead to hilarious encounters and dialogue options. You will get riddles to solve and murals to admire and it all is delivered in a unique way. Stop and smell the flowers, read the signs and figure out what it all means.

If you choose the pureblood route, you will be able to use technology, pew-pew laser guns, that are very strong, but require batteries. If you choose the mudbloods, you may grow extra

arms and hit others with every arm in your arsenal before they even get a turn, for instance. Yes, it gets weird, but nowhere near as weird as the music. I'm afraid to classify the soundtrack as music. It is an eerie cacophony that puts you on edge, (<https://www.youtube.com/watch?v=AL9wHhEoRcq>) and emphasizes the weirdness of Qud. It is what I imagine will be playing when I go to a rainforest to take Ayahuasca... hahahaha

The little touches also make for a more immersive game. If you walk through water, you will leave a wet trail, and should you step in fresh water, you will contaminate it. Because everything is covered in salt water, anything metal will rust like crazy, unless it is Roberto, from Futurama, that wants to stab you! (watch out for robots!)

If you are new to this type of game, the controls may be frustrating as well as the randomness of the story itself. The game is about learning and you need to learn the mechanics to survive and thrive. Be prepared to fail, a lot... and even if you play the same character again, the run will be completely different, with a hint of familiarity, due to a static



UBUNTU GAMES

overworld map. That said, there is a story to enjoy, so build the castles in your mind. While it is not as in-depth as Dwarf Fortress, it is just as much fun!

Imagine rating this game for one of the early 2000's gaming magazines, it may have gone something like this: graphics – could be better, music – what the hell? ... gameplay 8/10... hahaha.

I'll be honest, 500 bucks is a bit steep. Considering that it will not sell millions of copies, as it has a niche (and cover art that does not grab the attention), it may go on sale sooner than you think. Honestly, if it had better graphics (I don't mean the sprites, the ugly font, the horrible colours and so fourth, though the sprites could be better too) and I had the money, I'd fork over the dosh.



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.



PATRONS

MONTHLY PATRONS

Alex Crabtree
 Alex Popescu
 Andy Garay
 Bill Berninghausen
 Bob C
 Brian Bogdan
 Carl Andersen
 CBinMV
 Darren
 Dennis Mack
 Devin McPherson
 Doug Bruce
 Duncan Bell
 Elizabeth K. Joseph
 Eric Meddleton
 Francis Gernet
 Gary Campbell
 George Smith
 Henry D Mills
 Hugo Sutherland
 Jack
 Jack Hamm
 Jason D. Moss
 Joao Cantinho Lopes
 John Andrews
 John Malon
 John Prigge
 Jonathan Pienaar
 Joseph Gulizia
 j s

JT
 Katrina
 Kevin O'Brien
 Lee Allen
 Lee Layland
 Leo Paesen
 Linda P
 Mark Shuttleworth
 Moss Bliss
 Norman Phillips
 Oscar Rivera
 Paul Anderson
 Paul Readovin
 Rino Ragucci
 Rob Fitzgerald
 Robin Woodburn
 Roy Milner
 Scott Mack
 Sony Varghese
 Taylor Conroy
 Tom Bell
 Tony
 Tony Hughes
 Vincent Jobard
 Volker Bradley
 William von Hagen

Brian Kelly
 Frits van Leeuwen
 Randy Brinson
 Frank Dinger
 Robert JERÔME
 Yvo Geens

SINGLE DONATIONS

2025:
 Louis W Adams Jr
 Borso Zsolt

The current site was created thanks to **Arun** (from our Telegram channel) who took on the task of completely rebuilding the site, from scratch, in his own time.

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.

A big thank you to all those who've used Patreon and the PayPal button. It's a HUGE help.



<https://www.patreon.com/fullcirclemagazine>



<https://paypal.me/ronnietucker>



<https://donorbox.org/recurring-monthly-donation>



HOW TO CONTRIBUTE

FULL CIRCLE NEEDS YOU!

A magazine isn't a magazine without articles and Full Circle is no exception. We need your opinions, desktops, stories, how-to's, reviews, and anything else you want to tell your fellow *buntu users. Send your articles to: articles@fullcirclemagazine.org

We are always looking for new articles to include in Full Circle. For help and advice please see the **Official Full Circle Style Guide**: <http://bit.ly/fcmwriting>

Send your **comments** or Linux experiences to: letters@fullcirclemagazine.org
Hardware/software **reviews** should be sent to: reviews@fullcirclemagazine.org
Questions for Q&A should go to: questions@fullcirclemagazine.org
Desktop screens should be emailed to: misc@fullcirclemagazine.org
... or you can visit our **site** via: fullcirclemagazine.org

FCM#222

Deadline:

Sunday 05th Oct. 2025

Release:

Friday 31st Oct. 2025



Full Circle Team



Editor - Ronnie Tucker

ronnie@fullcirclemagazine.org

Webmaster -

admin@fullcirclemagazine.org

Editing & Proofreading

Mike Kennedy, Gord Campbell, Robert Orsino, Josh Hertel, Bert Jerred, Jim Dyer and Emily Gonyer

Our thanks go to Canonical, the many translation teams around the world and **Thorsten Wilms** for the FCM logo.

Getting Full Circle Magazine:

For the Full Circle Weekly News:



You can keep up to date with the Weekly News using the RSS feed: <https://fullcirclemagazine.org/podcasts/index.xml>



back on Spotify:

<https://open.spotify.com/show/6JhPBfSm6cLEhGSbYsGarP>



and now on YouTube:

<https://www.youtube.com/playlist?list=PLnv0U8wOzXu487gi5I2Isf-rQjEyKPAif>



EPUB Format - Most editions have a link to the epub file on that issue's download page. If you have any problems with the epub file, email: mobile@fullcirclemagazine.org

FCM PATREON : <https://www.patreon.com/fullcirclemagazine>