



Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #219 - July 2025



Trash



Install Ubuntu
Cinnamon 25.04

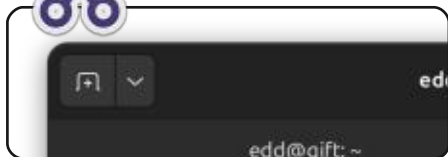


CINNAMON & MATE 25.04 UNDER REVIEW

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HowTo



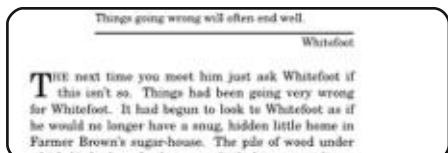
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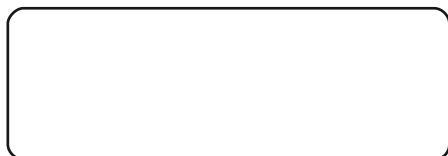
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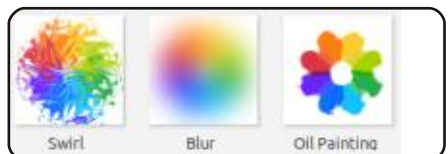
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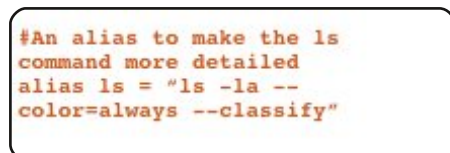
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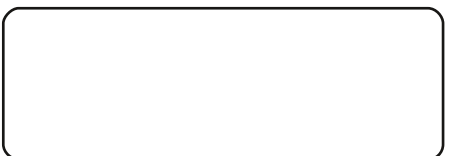
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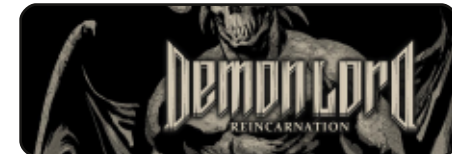
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WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

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

Under review, this month we have Ubuntu Cinnamon and Ubuntu MATE.

NOTE: Sorry about the late release this month. I was away for a week with almost no internet and with, at best, 3 bars of ye olde 4G. I'm glad to be back!

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

All the best!

Ronnie

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CRYPTSETUP 2.8:

30/06/2025

The Cryptsetup 2.8 utility set has been published. It is designed to configure encryption of disk partitions in Linux using the dm-crypt module. It supports dm-crypt, LUKS, LUKS2, BITLK, loop-AES and TrueCrypt/VeraCrypt partitions. The set also includes the veritysetup and integritysetup utilities for configuring data integrity control based on the dm-verity and dm-integrity modules.

<https://lore.kernel.org/cryptsetup/9df154c5-c3d1-43d9-9b76-986c7c7ebc0a@gmail.com/T/>

UBUNTU TO SHIP INTEL-COMPUTE-RUNTIME WITHOUT SPECTRE PROTECTION THAT REDUCES PERFORMANCE BY 20%:

30/06/2025

Ubuntu has decided to switch by default to the intel-compute-runtime package, compiled with the NEO_DISABLE_MITIGATIONS flag, which disables protection against Spectre attacks. According to Ubuntu developers, the presence of this protection leads to a decrease in the package's performance by about 20%.

The intel-compute-runtime package includes components required to use OpenCL and OneAPI Level Zero on systems with

Intel GPUs. When building the libraries supplied in the package, the presence of the NEO_DISABLE_MITIGATIONS build flag results in disabling the "-mretpoline -mindirect-branch=thunk -mfunction-return=thunk -mindirect-branch-register" compiler options, which provide additional protection against Spectre. These options do not affect the performance of OpenCL and GPU-side operations, but reduce the overhead of executing the code responsible for the API.

Security engineers at Intel and Canonical have discussed the need for Spectre mitigation at the Compute Runtime level, as the required mitigation is already present at the kernel level. The Spectre mitigation present in the

Compute Runtime is of interest mainly to those running kernels without proper mitigation, and the benefit does not outweigh the performance penalty. Additionally, Intel's releases of the Intel Graphics Compute Runtime are built with the NEO_DISABLE_MITIGATIONS flag set by default, which disables the mitigation.

<https://bugs.launchpad.net/bugs/2110131>

THIRD PREVIEW RELEASE OF PIDGIN 3.0 MESSENGER:

01/07/2025

The third experimental release of the instant messaging client, Pidgin 3.0 (2.92) is presented. The release is marked as a pre-alpha version, not intended for everyday use. The builds are prepared in Flatpak format (only the archive with the code is available for now).

The most notable improvement in the new version is the addition of the Appearance, Privacy, and



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Development sections to the configurator. The Appearance section offers an option to display message formatting elements. The Privacy section allows you to disable sending data for indicating text input. The Development section provides the ability to activate the developer mode, which simplifies debugging plugins and provides access to features that are still in development, such as support for the Bonjour and XMPP protocols.

<https://discourse.imfreedom.org/t/pidgin-3-0-0-experimental-3-2-92-1-has-been-released/296>

STEAM CLIENT FOR LINUX UPDATED:

01/07/2025

Valve has released the June update to the Steam game delivery service client for Linux. The release is notable for the inclusion of the Proton package by default for launching games that do not have a native Linux build. Previously, this feature required separately activating the "Enable SteamPlay for other titles" option in the settings. Also, the Linux version

has sped up the installation of updates, which in some cases took minutes and is now completed in a few seconds.

General improvements include a reduction in Steam Client startup time for players with a very large number of games not added via Steam. A system for tracking game performance has been implemented, displayed as an in-game overlay and showing detailed information about frame rate, CPU consumption and GPU performance. In this release, all the features of monitoring mode, is available for Windows only and for Linux it is already available, but with a minimum number of features. These features are promised to be included for Linux in one of the next updates.

The number of Linux games available in the Steam catalog has been increased to 16,139. According to the Steam Database service, Linux users launch 4,025 games through Steam. The top five games most popular with Linux users are: Counter-Strike 2, Dota 2, Banana, Stardew Valley, Team Fortress 2.

<https://steamcommunity.com/games/593110/announcements/detail/500577186633220572>

RELEASE OF BOOT FIRMWARE COREBOOT 25.06, LIBREBOOT 25.06 AND CANOEBOOT 25.06:

02/07/2025

The CoreBoot 25.06 project, that develops a free alternative to proprietary firmware and BIOS, has been released. The project code is distributed under the GPLv2 license. The new version includes 879 changes prepared with the participation of 128 developers.

<https://github.com/coreboot/coreboot/releases/tag/25.06>

GNOME 49 CHANGES:

02/07/2025

The GNOME release team has approved the inclusion of a new document viewer, Papers, into the core GNOME distribution. Starting with GNOME 49, Papers will replace Evince as the default document viewer under the name Document

Viewer. The changes to replace Evince with Papers have already been accepted into the GNOME repository. Ubuntu 25.04 already ships Papers instead of Evince.

The Papers application is a fork of Evince, created a year ago by one of the participants in the development of the evince-next branch with the aim of significantly modernizing the code base. The thing with Papers was porting to the GTK4 library using Rust for development. Significant differences also include a significant modernization of the design, increased performance and the integration of tools for certifying documents with a digital signature.

Papers is similar in functionality to Evince and also allows viewing, searching and annotating documents in PDF, DjVu, TIFF and comic book archives (CBR, CBT, CBZ, CB7). At the same time, Papers has cleaned up the API of the libppsdokument and libppsview libraries, and has stopped supporting the DVI format and the Windows platform. Many internal Evince widgets have been replaced with standard GTK widgets. The use of the background process papersd

has been discontinued. Instead of manually reloading a document, this operation is now performed automatically when a file change is detected. A separate panel with tools for adding annotations has been removed, and they recommend you use the context menu or hotkeys instead.

https://gitlab.gnome.org/Teams/Releng/AppOrganization/-/issues/24%23note_2487019

PERL 5.42 IS AVAILABLE:

02/07/2025

After a year of development, a new stable branch of the Perl programming language, 5.42, has been released. In preparing the new release, about 280,000 lines of code were changed, the changes affected 1,500 files, and 64 developers took part in the development.

The 5.42 branch is released in accordance with the fixed development schedule approved twelve years ago, which publishes the release of new stable branches once a year and correction releases every three months. In about a

month, the first correction release of Perl 5.42.1 is planned to be released, which will fix the most significant bugs discovered during the implementation of Perl 5.42.0. Along with the release of Perl 5.42, support for the 5.38 branch has ended, and updates for it may be released in the future only if critical security issues are discovered. The development of the experimental 5.43 branch has begun, based on the stable release. Perl 5.44 will be formed in June 2026, unless a decision is made to switch to 7.x numbering.

<https://www.nntp.perl.org/group/perl.perl5.porters/2025/07/msg270067.html>

WORK ON THE COPYLEFT-NEXT LICENSE HAS RESUMED:

03/07/2025

Bradley M. Kuhn, founder of the Software Freedom Conservancy (SFC) and former director of the Free Software Foundation, and Richard Fontana, one of the three key authors of the GPLv3 license (the other two being Richard Stallman and Eben Moglen) and former director of the Open

Source Initiative (OSI), have announced the resumption of work on the Copyleft-next license. Development of the new license began in 2012 under the name GPL.next, but the project has not been developed since 2016.

The goal of the project is to develop a new generation copyleft license that will replace the GPLv3 license and take into account modern realities and the needs of corporations developing free projects. It is noted that the GPLv3 license is 18 years old, and GPLv2 is 34 years old, and during this time the community has felt the need to reconsider the use of hard copyleft.

The Copyleft-next license text is based on the GPLv3 license, stripped of unnecessary clutter and restrictions, which improved compatibility with permissive licenses and made it portable to Apache-licensed projects. The license has been significantly shortened and simplified for understanding (for example, the introduction with the FOSS Foundation's policy, the appendix with explanations of application, and references to redundant and obsolete compromises have been removed).

One of the fundamental differences from existing copyleft licenses was the "Copyleft Sunset" clause, which cancels the conditions for copyleft compliance 15 years after the first publication of a work under the Copyleft-next license. In particular, after 15 years, the license becomes permissive, since clauses 3-5 cease to be effective with requirements for distributing derivative products under the Copyleft-next license, prohibiting the imposition of additional restrictions, and mandatory availability of the source code when distributing binary assemblies.

Another atypical innovation is the cancellation of copyleft protection in the case of dual licensing of a project - under a Copyleft-next license and a commercial license. If the product is additionally supplied under a commercial license or under conditions that contradict the criteria of the OSI or the FOSS Foundation, then in the free version of the product, points 3-5, which ensure copyleft protection of the work, cease to apply (the license becomes permissive).

Copyright-next also offers the ability to revoke a license if the terms of use are violated (for example, if a derivative product is distributed without providing access to the source code). You have 13 days to correct the violation. The license is also revoked from persons who have initiated a lawsuit for patent infringement (except for counterclaims) that intersect with a project under the Copyright-next license.

<https://lists.copyleft.org/pipermail/next/2025q2/000000.html>

ANGIE 1.10.0 RELEASED: 04/07/2025

The high-performance HTTP server and multi-protocol proxy server Angie 1.10.0 has been released. It was forked from Nginx by a group of former project developers who left F5 Network. The Angie source code is available under the BSD license.

The development is supported by the company "Web-server", founded in the fall of 2022 and having received investments of 1

million dollars. Among the co-owners of the Web-server company: Valentin Bartenev (leader of the team that developed the Nginx Unit product), Ivan Poluyanov (former head of front-end developers of Rambler and Mail.Ru), Oleg Mamontov (head of the technical support team of NGINX Inc) and Ruslan Ermilov (ru@FreeBSD.org).

<https://github.com/webserver-llc/angie/releases/tag/Angie-1.10.0>

KDE IS DEVELOPING ITS OWN VIRTUAL KEYBOARD: 05/07/2025

Nate Graham, a quality assurance developer for the KDE project, has published another KDE development report. The report mentions the KDE project's development of a new on-screen keyboard called plasma-keyboard, which is being developed to replace the Maliit virtual keyboard currently used on mobile devices and touchscreen systems.

Plasma-keyboard is based on the code of the Qt Virtual Keyboard included in Qt, expanded with

features for integration with the Plasma desktop and solving some usability issues. In the recent changes, the implementation of its own keyboard design style named "Breeze" and the use of a new scaling algorithm, which improved the display of the keyboard on narrow screens, are noted.

<https://blogs.kde.org/2025/07/05/this-week-in-plasma-chugging-along/>

MULTIPASS 1.16 RELEASED: 05/07/2025

Canonical has released version 1.16 of the multipass toolkit, designed to simplify the installation of various versions of Ubuntu in virtual machines running on Linux, Windows, and macOS virtualization systems. The release is notable for the complete open source nature of the project's codebase - the repository includes code for components for Windows and macOS, which had not previously been publicly distributed. The project code is written in C++ and is distributed under the GPLv3 license. A snap package has been prepared for quick installation of

multipass in Ubuntu.

Multipass allows a developer to launch the desired version of Ubuntu in a virtual machine with one command without additional settings, for example, for experiments or testing their application. To launch a virtual machine in Linux, KVM or VirtualBox is used, in Windows - Hyper-V, and in macOS - HyperKit. The following distributions are supported: Arch Linux, CentOS, Debian, elementary OS, Fedora, KDE Neon, Kubuntu, Manjaro, Pop!_OS, openSUSE, Red Hat Enterprise Linux, Ubuntu and Raspberry Pi OS.

The toolkit automatically extracts the required operating system image and keeps it up to date. Cloud-init can be used for configuration. You can both mount disk partitions in a virtual environment and transfer individual files between the host system and the virtual machine. Full integration of the installed virtual machine with the main desktop is supported (application icons, a system menu, and notifications are added).

<https://github.com/canonical/multipass/releases/tag/v1.16.0>

RELEASE OF 7-ZIP 25.00:

06/07/2025

Igor Pavlov announced a new version of the 7-Zip archiver v25.00. The project develops its own 7z archive format based on the LZMA and LZMA2 compression algorithms. Additionally, it supports packing and unpacking archives in XZ, BZIP2, GZIP, TAR, ZIP and WIM formats, as well as unpacking more than 30 archive formats, packages, virtual machine images and file systems (ISO, NTFS, EXT*, UDF, EFI, VDI, VHD, VMDK, CAB, RPM, SquashFS, QCOW2, etc.). For ZIP and GZIP formats, a 2-10% higher compression level is provided compared to PKZip and WinZip. The project code is written in C++ and is distributed under the LGPL license. Ready-made builds for Windows, macOS and Linux (i686, x86-64, ARM, ARM64) are available for download.

<https://sourceforge.net/p/sevenzip/discussion/45797/thread/4ed0e379f4/>

BASH 5.3 SHELL RELEASED:

06/07/2025

After almost three years of development, a new version of the GNU Bash 5.3 command interpreter, used by default in most Linux distributions, has been published. At the same time, the readline 8.3 library, used in bash for command line editing, has been released.

Key improvements include:

New command substitution forms "\${command;}" and "\${|command;}" are implemented, allowing you to intercept the command output without forking a separate child process and without using unnamed pipes. The results of command execution are given as the result of substitution or written to the REPLY variable.

<https://lists.gnu.org/archive/html/bug-bash/2025-07/msg00005.html>

RELEASE OF BRUSHSHE 2.0.0:

06/07/2025

The release of the lightweight raster graphics editor Brushshe

2.0.0 is available. The editor supports stickers, frames and effects, saving in different formats, using your own palettes and navigating through the gallery of drawings. The project code is written in Python using the Custom Tkinter graphical toolkit and is distributed under the GNU GPLv3 license. Ready-made builds are formed for Windows and Linux.

<https://github.com/limafresh/Brushshe/releases/tag/v2.0.0-skopjeS>

WAYLAND 1.24 IS AVAILABLE:

07/07/2025

After 13 months of development, the stable release of the Wayland 1.24 protocol, interprocess communication mechanism, and libraries has been released. The 1.24 branch is backwards compatible at the API and ABI level with the 1.x releases and contains mainly bug fixes and minor protocol updates. The project's code is distributed under the MIT license. The Weston reference composite server, which provides code and

working examples for using Wayland in desktop environments and embedded solutions, is being developed as part of a separate development cycle.

https://lore.freedesktop.org/?p=plU5smxin5VXbiedTGtL7CNHe0t2mHtgQlQ3-xwREmSSNYaClAcZpEBV8L7JvMT8JHwdD_a_uSFkDUaP45CAWyL545iZh5gInAdToX6hgt4%3D@emersion.fr/

WINDOWS SERVER UPDATE BREAKING SAMBA COMPATIBILITY:

07/07/2025

Samba 4.22.3 and 4.21.7 have been released as unscheduled updates to address an issue where Samba servers are no longer compatible with the next Windows Server update. If these patches are not installed, Samba servers will not be able to function as members of Windows Active Directory domains if the AD back-end is enabled in the user ID mapping settings.

Microsoft has scheduled updates for supported versions of

Windows Server to be released on July 8 that will address security issues in the Active Directory domain controller implementation. The update will make changes to the Microsoft RPC Netlogon protocol in all supported versions of Windows Server, including Windows Server 2008, to add additional access checks to some RPC calls. The extended checks were previously only implemented in Windows Server 2025, but will be implemented in other versions starting July 8.

<https://www.mail-archive.com/samba-announce@lists.samba.org/msg00669.html>

RELEASE OF OBS STUDIO 31.1:

08/07/2025

After six months of development, OBS Studio 31.1, a package for streaming, compositing and recording video, has been released. The code is written in C/C++ and is distributed under the GPLv2 license. Builds are available for Linux, Windows and macOS.

Compositing support is provided with scene construction based on arbitrary video streams, data from web cameras, video capture cards, images, text, application window contents or the entire screen. During broadcasting, switching between several predefined scene options is allowed (for example, to switch views with an emphasis on screen content and web camera image). The program also provides tools for audio mixing, filtering using VST plugins, volume leveling and noise suppression.

<https://github.com/obsproject/obs-studio/releases/tag/31.1.0>

ARDOUR MOVING TO A FORK OF YTK:

08/07/2025

The developers of the Ardour audio editor have removed support for building with the GTK2 library from the codebase, leaving only the ability to use YTK. YTK is a fork of GTK2 created by the Ardour project in February 2024. The reason for stopping building with GTK2 is the addition of additional functionality to YTK, providing support for touch input devices and

the ability to render on the macOS platform.

Initially, YTK was just a copy of GTK2, integrated into the Ardour repository to simplify maintenance. Changes to the codebase were limited to fixing bugs and cleaning up features not used in Ardour. At the same time, YTK was used only as an option for building Ardour in distributions that stopped supporting GTK2, and the default was to continue building with GTK2.

In February, YTK began adding additional functionality not found in GTK2, and the build scripts in the experimental Ardour branch, which forms the basis for the Ardour 9.0 release, were switched to YTK by default. A few days ago, support for GTK2 was removed. Like GTK2, YTK only supports X11 and requires XWayland to run in Wayland-based environments.

<https://github.com/Ardour/ardour/commit/99c1f50a72d513ba9e7f678401d51e8bb0f8912e>

AMAROK 3.3 RELEASED:

08/07/2025

After six months of development, the Amarok 3.3.0 music player, has been released. After the release of KDE 5, the project was abandoned, but last year it was revived and ported to Qt5/Qt6 and KDE Frameworks 5/6 libraries. The project code is written in C++ and is distributed under the GPLv2 license.

Amarok provides a three-panel mode for displaying information (collection, current track and playlist), allows you to navigate through your music collection, tags and individual directories, supports dynamic playlists and quick creation of your own playlists, can automatically generate recommendations, statistics and ratings of popular tracks, supports downloading song lyrics, covers and informational references about tracks from various services, makes it possible to automate actions by writing scripts.

The new version completes porting to Qt 6 and KDE Frameworks 6. Removed Qt5 support. Updated database

schema, resolving encoding issues. Implemented GStreamer-based audio backend, supporting additional features missing in phonon-vlc backend available for Qt6. Improved code for scanning music collections.

<https://github.com/KDE/amarok/releases/tag/v3.3.0>

RELEASE OF MIRACLE-WM 0.6:

09/07/2025

Matthew Kosarek, a developer from Canonical, has released the miracle-wm 0.6 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 the snap format, as well as in 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). 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/mattkae/miracle-wm/releases/tag/v0.6.0>

SURICATA 8.0 NOW AVAILABLE:

09/07/2025

After two years of development, the OISF (Open Information Security Foundation) has released the Suricata 8.0 network intrusion detection and prevention system, which provides tools for inspecting various types of traffic. Suricata configurations allow the use of the signature database developed by the Snort project, as well as the Emerging Threats and Emerging

Threats Pro rule sets. The project's source code is distributed under the GPLv2 license.

<https://suricata.io/2025/07/08/suricata-8-0-0-released/>

KWIN DEVELOPER DECLARES ALTERNATIVE X SERVERS UNDESIRABLE IN KDE:

10/07/2025

The KDE Community wiki has added alternative X.org implementations such as XLibre to the unwanted packages section. According to the note, only the official X.Org Server and XWayland will be supported to provide a KDE session on X11. The note was added by Xavier Hugl, one of the key developers of the Kwin compositing manager and the second-largest committer since 2020. Before this, the XLibre project considered KDE a supported desktop environment.

https://community.kde.org/index.php?title%3DDistributions/Packaging_Recommendations%26diff%3Dprev%26oldid%3D103702

ALT LINUX VIRTUALIZATION 11.0 DISTRIBUTION:

11/07/2025

The Alt Linux Virtualization 11.0 distribution, based on ALT Linux 11, has been released. The distribution is intended for use on servers and for implementing virtualization functions in corporate infrastructure. The builds are prepared for the x86_64 and AArch64 platforms. The product is supplied under a License Agreement which provides the opportunity for free use by individuals, but legal entities are only allowed to test and it is necessary to purchase a commercial license or conclude a license agreement in writing for usage.

Starting with the eleventh version, the distribution is released in two editions - virtualization-pve and virtualization-one, based on the Proxmox Virtual Environment (PVE) and OpenNebula platforms. At the moment, only the PVE edition is available for download, which uses the tools supplied by the Proxmox VE distribution and is designed to manage virtual machines and containers using the KVM hypervisor and LXC tools (the

Kubernetes, Docker, CRI-O and Podman containerization tools have been transferred to the Alt Server distribution).

https://lists-altlinux-org.translate.goog/pipermail/altlinux-announce-ru/2025/000058.html?x_tr_sl=auto&x_tr_tl=en&x_tr_hl=en-US&x_tr_pto=wapp

<https://freshcode.club/projects/altlinux>

RELEASE OF LABWC 0.9.0:

12/07/2025

The labwc 0.9.0 (Lab Wayland Compositor) project has been released. It develops a composite server for Wayland with capabilities reminiscent of the Openbox window manager (the project is presented as an attempt to create an Openbox alternative for Wayland). Among the features of labwc, minimalism, compact implementation, wide customization options, and high performance are mentioned. Animated effects, gradients, and icons, with the exception of window buttons, are not supported

in principle. The project code is written in C and is distributed under the GPLv2 license.

In addition to the built-in root menu, which is configurable via the menu.xml file, you can connect third-party implementations of the application menu, such as bemenu, fuzzel and wofi. Waybar, sfbbar, Yambar or LavaLauncher can be used as a panel. To manage the connection of monitors and change their parameters, they suggest you use wlr-randr or kanshi. The screen is locked using swaylock. The composite manager is used in the graphical environment of the Raspberry Pi OS distribution and is optionally supported in the Xfce and LXQt desktop environments.

<https://github.com/labwc/labwc/releases/tag/0.9.0>

KDE IMPROVES DAY/NIGHT THEME SWITCHING SETTINGS:

12/07/2025

Nate Graham, a quality assurance developer for the KDE project, has published the latest KDE development report. Among the recent changes to the

code base that will form the upcoming KDE Plasma 6.5 release:

With the new feature to automatically change wallpapers between their light and dark versions, there's now more than one feature that makes use of the day/night cycle. Accordingly, the place where you configure your location so the system knows what sunrise and sunset timings to use has been moved out of the Night Light page in System Settings and onto its own page. The cycle you set up here will be used for both Night Light and automatic wallpaper switching, and later for automatic theme or color scheme switching too, once either of those are finalized.

<https://blogs.kde.org/2025/07/12/this-week-in-plasma-tablet-dials-and-day/night-cycles/>

NIXOS MAINTAINERS HAVE DROPPED SUPPORT FOR XLIBRE:

13/07/2025

During the discussion of the prospect of adding XLibre support to NixOS, the maintainers

considered the proposals to supply alternative packages with the X server to be inappropriate. The reasons cited include possible changes to the XLibre ABI, the increased workload on the NixOS maintainers who would be forced to test two server variants, and difficulties in interacting with those responsible for XLibre, whose views make themselves known far more often than is necessary for conducting technical discussions. The low quality of the changes introduced in the fork was also mentioned separately.

NixOS users are offered an alternative to use the overlay mechanism, which allows replacing the original X.Org Server with any other package, including XLibre. In this case, the user is responsible for eliminating any problems that may arise on their system. The status of XLibre support in other distributions can be found on the "Are We XLibre Yet" page, which is periodically updated by the authors of the fork.

<https://github.com/NixOS/nixpkgs/issues/419940>

DRI2 SUPPORT REMOVED FROM MESA:

13/07/2025

The code base on which the Mesa 25.2 release is based has removed support for the DRI2 (Direct Rendering Infrastructure), which has been replaced by the DRI3 interface for direct access to the video adapter, using DMA-BUF. The reason given is that the DRI3 interface has existed for over 10 years, DRI2 has long been outdated, and all supported GPU drivers have long implemented the DRI3 interface. In Mesa 24.2, the use of DRI2 was already hidden behind the "legacy-x11" option, and for a year this has not caused any special questions.

You can note that in the future Mesa plans to get rid of support for other mechanisms that have become obsolete after the appearance of DMA-BUF. In particular, they plan to stop supporting the EGL extension `EGL_WL_bind_wayland_display`, implemented for Wayland. To exchange pixel buffers between the Wayland client and server, they propose to use the Wayland protocol `linux_dmabuf`. Support for

`EGL_WL_bind_wayland_display` is planned to be disabled by default and activated only when specifying the "legacy-wayland" build flag, thereafter it will be removed after several releases.

https://gitlab.freedesktop.org/mesa/mesa/-/merge_requests/35885

NETHSERVER 8.5:

13/07/2025

NethServer 8.5, a platform for deploying server applications infrastructure in isolated containers, using a cluster of local or cloud servers, is available. NethServer is positioned as a simple platform for organizing containers for SME system administrators, who do not want to associate with complicated tools such as Kubernetes.

Before the 8.x line, the project developed its own distribution for the rapid deployment of typical servers, based on CentOS, and starting with the release of NethServer 8, it is transformed into a universal platform installed on top of Rocky Linux 9, CentOS

Stream 9, AlmaLinux 9 and Debian 12.

Applications in containers can be run on different hosts and managed through one centralized web interface. Installation and commissioning of selected server components is made in one click and does not require knowledge of the features of the configuration of each service.

<https://community.nethserver.org/t/nethserver-project-milestone-8-5/26008>

A LINUX VERSION OF THE LOSSLESS SCALING FRAME GENERATION UTILITY:

14/07/2025

The lsfg-vk project has prepared an unofficial port of the Lossless Scalings Frame Generation (LSFG) utility for Linux, using DXVK and the Vulkan graphics API. The project code is written in C++ and is licensed under the MIT license. The development was carried out by a third-party enthusiast who recreated the functionality of the proprietary LSFG by reverse engineering Windows libraries.

The application allows you to scale the output of games designed to run in windowed mode to display them in full-screen mode. The utility may also be needed to get rid of blurry output when scaling using the standard graphics subsystem or to bypass restrictions in games tied to fixed screen resolutions. You can also increase the smoothness of the output and increase the frame rate in games not designed for high FPS by substituting additional intermediate frames created based on the interpolation of adjacent frames. There is more to come soon in this project.

<https://github.com/PancakeTAS/lsfg-vk>

RELEASE OF PARROT 6.4:

15/07/2025

The release of Parrot 6.4 has been published. It is based on Debian 12 and includes a selection of tools for security auditing, conducting forensic analysis and reverse engineering. Live builds with the MATE environment, images for virtual machines, container images in Docker format

and builds for Raspberry Pi boards are offered for download. There is also a script offered that allows you to create a Parrot environment on top of an already installed Debian distribution.

The distribution is positioned as a portable laboratory with an environment for security and forensic experts, focusing on tools for testing cloud systems and IOT devices. The release also includes cryptographic tools and programs for providing secure access to a network, like TOR, I2P, anonsurf, gpg, tccf (Two Cents Cryptography Frontend), zulucrypt, veracrypt, truecrypt and luks.

<https://www.parrotsec.org/blog/2025-07-07-parrot-6.4-release-notes/>

THE OPENCUT PROJECT:

15/07/2025

The OpenCut project attempts to develop a simple video editor positioned as an open alternative to CapCut from ByteDance(TikTok). The project code is written in TypeScript using the Bun platform and is distributed under the MIT

license. The build is supported as a desktop application, a mobile application, and a web version.

The advantages of the new project include concerns for user privacy (videos are edited on the local system and are not transmitted anywhere) and free distribution, which does not require purchasing individual features or a paid subscription to disable a watermark. Features include: video editing based on the timeline, real-time preview and multi-track editing.

The project was originally created under the name AppCut, but was then renamed OpenCut. The developers will probably be forced to rename the program again, as the project has been sued for violating the OpenCut trademark, registered last year and already used in the online video editor of the same name.

<https://opencut.app/>

PHP MOVES TO GPL-COMPATIBLE BSD-3

LICENSE:

15/07/2025

The developers of the PHP programming language plan to transfer the PHP interpreter and Zend Engine from the PHP License and Zend Engine License to the 3-clause BSD license (BSD-3). The transition to the BSD-3 license will simplify licensing terms, unify licenses for PHP and Zend Engine, ensure compatibility with the GPL and solve long-standing problems, while preserving all the rights of users and developers. The license change is intended to be made in the release of PHP 9.0, which may be out next year. All members of the PHP Group approved the license change and this proposal is currently up for general discussion.

The transition to the BSD-3 license requires approval from Perforce Software, which owns Zend Technologies. It is noted that the issue of changing the license has already been informally agreed upon with Perforce and it only remains to receive official legally significant written confirmation. At the same time, changing the license

will not require obtaining separate consent from each developer, since the text of the PHP and Zend licenses defines the powers that allow PHP Group to make changes to the license and release new versions of the license. The process of switching to a new license will be formalized as an update of the code to versions PHP License v4 and Zend Engine License v3, where the wording will coincide with the wording of the BSD-3 license.

<https://news-web.php.net/php.internals/127984>

AUDACIOUS 4.5:

16/07/2025

The release of the lightweight music player Audacious 4.5 is presented. It was forked from the Beep Media Player (BMP) project, which is a fork of the classic XMMS player. The release comes with two user interfaces: based on GTK and Qt. Ready-made builds will soon be prepared for various Linux distributions (snap, flatpak, PPA) and for Windows .

<https://audacious-media-player.org/news/62-audacious-4-5-released>

DEVELOPMENT OF KDE PLASMA BIGSCREEN HAS RESUMED:

16/07/2025

Devin Lin has announced the continuation of the Plasma Bigscreen project, which develops a user interface based on KDE technologies, designed for use on multimedia devices connected to TVs and projectors. The environment is optimized for working with large screens and control without a keyboard using remote controls or a voice assistant.

The project was last actively developed in 2020, after which it fell into stagnation and was not included in KDE Plasma 6, as it was not transferred to use the KDE 6 and Qt 6 libraries and was tied to the defunct Mycroft voice assistant. A couple of months ago, several developers decided to revive the project and carried out work on modernizing the interface and refining the configurator.

The publication of packages

with Plasma Bigscreen is planned to be established starting with the release of Plasma 6.5. Until then, you can use the Plasma Bigscreen build script for postmarketOS or the plasma-bigscreen package for the Arch Linux distribution from the nightly and AUR repositories.

<https://espi.dev/posts/2025/07/plasma-bigscreen/>

RELEASE OF HYPRLAND 0.50:

16/07/2025

The Hyprland 0.50 composite server is available, using the Wayland protocol. The project is focused on tiling window layout, but also supports classic arbitrary window placement, grouping of windows in the form of tabs, pseudo-mosaic mode and full-screen windowing. The code is written in C++ and is distributed under the BSD license.

The possibilities for creating visually attractive interfaces are provided: gradients in window frames, background blur, animation effects and shadows. Plugins can be connected to expand functionality,

and socket-based IPC is provided for external control. Configuration is carried out through a configuration file, changes are picked up on the fly without restarting.

<https://hyprland.org/news/update50/>

LINUX ADOPTION ON THE RISE:

17/07/2025

According to the StatCounter service, which monitors global statistics on web browser usage, the share of Linux distributions in the US (5.03%) and Germany (5.47%) exceeded the 5% mark for the first time. The statistics were collected based on a counter placed on 1.5 million sites.

In India, the share of Linux has dropped to 8.77% (it was 17.25% in September last year). The global share of Linux is estimated at 4.1% (the peak value of 4.55% was reached in August last year). Since September 2024, there has also been a decline in the popularity of ChromeOS, whose global share has dropped from 2.25% to 1.24%, and

its share in the US from 5.53% to 2.71%.

<https://linux.slashdot.org/story/25/07/16/2048246/linux-reaches-5-on-desktop>

COZYSTACK 0.33 RELEASED:

17/07/2025

The release of the free PaaS platform Cozystack 0.33, built on Kubernetes, is 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.

Talos Linux and Flux CD are used as the basic technology stack. Images with the system, kernel and necessary modules are generated in advance and updated atomically, which eliminates the need for

components such as dkms and a package manager and guarantees stable operation. A simple installation method is provided in an empty data center using PXE and a debian-like installer talos-bootstrap. You can deploy Kafka, FerretDB, PostgreSQL, Cilium, Grafana, Victoria Metrics and other services with a click.

The platform includes a free implementation of the network infrastructure (fabric) based on Kube-OVN, and uses Cilium for the service network, 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://blog.aenix.io/cozystack-v0-31-0-33-ae241c739b23>

BLENDER 4.5:

17/07/2025

The Blender Foundation has released Blender 4.5, a free application suitable for a variety of tasks related to 3D modeling, 3D graphics, computer game development, simulation, rendering, compositing, motion tracking, sculpting, animation and video editing. The code is distributed under the GPL license. Ready-made builds are available for Linux, Windows, and macOS. The release is tagged as LTS and will be supported until July 2027. The Blender 4.2 LTS branch also continues to be supported, with updates being generated until July 2026. Support for the Blender 3.6 LTS branch has been discontinued.

<https://www.blender.org/press/blender-4-5-lts-release/>

FORGEJO 12.0:

18/07/2025

The release of the Forgejo 12.0 collaborative development platform has been published. It allows you to deploy a system for

collaborative work with Git repositories on your servers, similar in its tasks to GitHub, Bitbucket, and Gitlab. Forgejo is a fork of the Gitea project, which in turn forked from the Gogs platform, back in 2022, after attempts to commercialize Gitea and the transfer of control to a commercial company. The Forgejo project adheres to the principles of independent management and community control. Git hosting Codeberg.org has switched to using Forgejo. The project code is written in Go and is distributed under the GPLv3 license.

The key features of the platform are low resource consumption (can be used on a Raspberry Pi board or in cheap VPS) and a simple installation process. It provides typical project capabilities, such as task management, issue tracking, pull requests, wiki, tools for coordinating developer groups, preparing releases, automating package placement in repositories, managing access rights, interfacing with continuous integration platforms, code search, authentication via LDAP and OAuth, access to the repository via SSH and HTTP/HTTPS protocols, connecting web hooks for

integration with Slack, Discord and other services. It has support for Git hooks and Git LFS, tools for migrating and mirroring repositories. The ability to use the ActivityPub protocol to unite individual developer servers into a federated network is highlighted separately.

<https://forgejo.org/2025-07-release-v12-0/>

INTEL HAS STOPPED DEVELOPING CLEAR LINUX:

19/07/2025

Intel has announced the closure of the Clear Linux project, which develops a distribution with strict application isolation implemented using containers separated using full virtualization. Starting today, Intel will stop supporting it and will no longer release updates and patches to eliminate vulnerabilities. The GitHub repositories where the distribution was developed will soon be transferred to archive mode.

Clear Linux users are advised to migrate their systems to other distributions. It is noted that Intel

will continue to actively support the Linux ecosystem and participate in the development of various open projects and Linux distributions to add support for its equipment and optimize work with it. Sadly, it is assumed that Intel employees involved in the development of Clear Linux are subject to mass layoffs, during which the company's staff will be reduced by 5 thousand people.

<https://community.clearlinux.org/t/all-good-things-come-to-an-end-shutting-down-clear-linux-os/10716>

KDE SWITCHED TO RENDERING WINDOWS WITH ROUNDED CORNERS:

19/07/2025

Nate Graham, a quality assurance developer for the KDE project, has published the latest KDE development report. The most significant change accepted into the KDE Plasma 6.5 branch, scheduled for release on October 16, is a significant change in the visual style. When using the Breeze theme, windows are now rendered in KWin with rounded bottom corners (previously only the top corners were rounded, while the bottom ones remained sharp). The new window style is offered by default, but can be disabled in the settings if desired.

<https://blogs.kde.org/2025/07/19/this-week-in-plasma-rounded-bottom-corners/>

DXVK-SAREK 1.11.0 RELEASED:

20/07/2025

The DXVK-Sarek 1.11.0 project has been released, developing a fork of the DXVK layer, aimed at working on systems with GPUs or drivers limited to support of older versions of the Vulkan graphics API - 1.1 or 1.2. In the main DXVK project, support for Vulkan 1.3 became mandatory in the DXVK 2.0 release.

DXVK-Sarek continues to use the codebase of the DXVK 1.10.x branch (the last branch of the DXVK 1.x series), which carries over changes related to game support

and bug fixes from new DXVK releases. In parallel, the project is supported by a fork Proton-Sarek, that develops a version of the Proton package (based on GE-Proton 10 and Proton 10-beta) for running Windows games for devices and systems without Vulkan 1.3 support.

Additionally, it is worth noting the adoption of a large portion of fixes for older AMD Radeon HD 2000/3000/4000 GPUs, preceding the HD 5000 Evergreen family GPUs, into the Mesa code base, on which release 25.2 is based. One of the fixes made it possible to establish the passage of about 120 tests from the Piglit package, aimed at identifying regressions in OpenGL support.

<https://github.com/pythonlover02/DXVK-Sarek/releases/tag/v1.11.0>



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COMMAND & CONQUER

Written by Erik

I just had a question as to where to find help in Ubuntu. While the man pages are there, they are sometimes so bad, I have no idea what they are trying to say. I realise these pages were written for eggheads, by eggheads, so maybe we can help ourselves a bit?

Open a terminal and let's get busy. Try this on for size:

```
help printf
```

You should see something like the below. Now go look at the man page for printf.

```
edd@gift:~$ help printf
printf: printf [-v var] format [arguments]
      Formats and prints ARGUMENTS under control of the FORMAT.

Options:
  -v var   assign the output to shell variable VAR rather than
           display it on the standard output

FORMAT is a character string which contains three types of objects: plain
characters, which are simply copied to standard output; character escape
sequences, which are converted and copied to the standard output; and
format specifications, each of which causes printing of the next successive
argument.

In addition to the standard format specifications described in printf(1),
printf interprets:
```

```
edd@gift:~$ help -d printf
printf - Formats and prints ARGUMENTS under control of the FORMAT.
edd@gift:~$
```

You may say, all good and well, but as they say in the adverts, wait, there's more!

Try that same command with tack d, like so:

```
help -d printf
```

See image above.

Right, you can see where I am going here, so I will not add screenshots of everything; if you

are a n00b, I want you to actually do it to see the output change.

Now we know:

Option: -d

Display a short description for each topic.

Now I want you to repeat that with the -m instead of the -d.

You will notice that it looks a bit more like a man page. What do you think the -m is for? Yes!

Option: -m

Display usage in pseudo-manpage format.

You will agree that it is better

```
edd@gift:~$ echo Jess drew the way some people drank whiskey.
Jess drew the way some people drank whiskey.
edd@gift:~$ echo Jess          drew          the way some people drank whiskey.
Jess drew the way some people drank whiskey.
edd@gift:~$ _
```

than the manpage. If you are not sure, go look at the manpage again.

So if we wanted to see the syntax, what do you think we would use? Correct -s ! See you guys are really good at this. Suddenly the Linux command line is not so scary any more! So go ahead and try: help -s printf

Option: -s

Display a short usage synopsis for each topic.

The other thing I want to address in this CnC is echo. Yes, that thing you use to print something to the screen. I want you to try the command in the image below.

It is just a quote from 'Bridge to Tarabithia', but you can type anything. Put as many spaces as you like between the words. See what you get. So if you have some

```
edd@gift:~$ echo "some horrible   spacing   to   be seen"
some horrible   spacing   to   be seen
edd@gift:~$ _
```

horribly formatted text, you can use echo to straighten it out for you; neat, hey? Simply type echo, then copy and paste the badly formatted text in and press enter. There may also be the odd occasion where you need to actually push spaces to the screen. The way to do that is to encapsulate the text with quotes.

Obviously, if the text has no quotes, it does not matter which quotes you use, double or single. Usually one uses these quotes to insert escape characters. Quoted lines can include special escaped characters recognized by the echo command (when using echo -e).

Try:

```
echo -e " a new line\n here
and also a \t tab"
```

You may not know all these escape characters, but now is a great time to give the help command a go as above. I suggest

using all the options at your disposal to get used to them.

Those of you who actually did it before I suggested it, bravo! You will have this command line thing down in no time!

Just be aware that some commands are installed with external applications and may not have a help file or a man page. Here you usually need to try -h or --help as an alternative. My suggestion is to make sure of what you are installing, from say, github, by reading the new command's documentation. Some of these may not even have any help built in, so it would be up to you to familiarise yourself with the command before you forget where you installed it from.

If the program you installed does not seem to respond to any of the usual channels, you can try the "Windows" way by using "/"

instead. Sometimes these things are written with Windows in mind and somehow find their way into the Linux ecosystem.

Remember that as per my answer in QnA, there is always F1. F1 from within a program, is usually help, though it will not help you on the command line.

OK, I hope I helped someone find help and gave one of you, at least, a handy tip to format text.

If you think there are errors here: 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 Erik

In this issue, I wanted to dive into startup files, but let's take a step back and look at files in general. (Yes, I know I'm squirreling, but it is an odd and interesting one.) We all use files, but rarely think about them. We can have a file in a folder or a file pointing to another file in another folder. This article is for bash only, as I don't know if this is valid for all shells. I don't want to confuse any newbies, so just forge ahead with me, it will sound confusing, but you will come away with a better understanding, I promise.

In this article, we will look at the

'readlink' and 'dirname' commands, and how they can be used to obtain the absolute path of a relative path, and the directory containing a path; I dare you to say that three times in a row, as fast as possible! If you want to see it in action, see: <https://stackoverflow.com/questions/3373132/get-the-name-of-the-directory-where-a-script-is-executed>

How do we get an absolute path you may ask? Well, to obtain the full path of a file, we use the 'readlink' command. Typing 'readlink' prints the absolute path of a symbolic link, but, as a side-effect, it also prints

the absolute path for a relative path. (sound confusing yet?). At this stage, please type: `man readlink` - in your terminal, and have a look at the man-page. If you would like to see examples, look here: <https://labex.io/tutorials/linux-how-to-resolve-symbolic-links-with-the-readlink-command-422882>

We will be discussing it at a slightly different level or perspective, if you will. If you just want to find your file with a full path, I suggest find as in the image bottom left.

Now let us set the stage, we will

use readlink on a symbolic file, as shown in the image bottom right.

The readlink command works only if you have the full path; that is a given, as it cannot find a file that does not exist.

The man page tells us: -f, --canonicalize, canonicalize by following every symlink in every component of the given name recursively; all but the last component must exist

If you were to use 'find', it would not tell you that the turquoise file above is a symbolic link and would

```
edd@gift: ~  
edd@gift:~$ find "$(pwd -P)" -name "issue216_en.epub"  
/home/edd/Downloads/issue216_en.epub  
edd@gift:~$ find $PWD -name "issue216_en.epub"  
/home/edd/Downloads/issue216_en.epub  
edd@gift:~$
```

```
edd@gift: /usr/share/icons/default  
edd@gift:~$ find "$(pwd -P)" -name "issue216_en.epub"  
/home/edd/Downloads/issue216_en.epub  
edd@gift:~$ find $PWD -name "issue216_en.epub"  
/home/edd/Downloads/issue216_en.epub  
edd@gift:~$ cd /usr/share/icons/default  
edd@gift:/usr/share/icons/default$ ls  
index.theme  
edd@gift:/usr/share/icons/default$ readlink -f index.theme  
/usr/share/icons/DMZ-White/cursor.theme  
edd@gift:/usr/share/icons/default$
```


HOWTO - LEARN ABOUT

return:

```
edd@gift:~$ find $PWD -name  
"index.theme"  
/home/edd/testfldr/  
index.theme
```

Now I will be honest; before researching this for the article, I thought, and will remember it this way forever, that the -f flag was for “follow” as in follow the full path.

Anyway, moving forward, `dirname` is a command I never used directly, as it had no point (sort of like the ‘basename’ command). It is useful in scripts though. See the example in the image below to get an understanding of what it does.

It gives you the directory, containing your directory. But(!), if I am in a folder and I want to check the directory name of a symbolic

link, it starts to get interesting (see image bottom right).

OK, you now know what both commands do, let’s combine them (top right).

We can also do it another way (middle right).

Guys, I apologise for all the screenshots, but I need to show things like back ticks, that just do not work in Abiword.

As we played around, we realised that files and symbolic links behave a bit differently at the command prompt. The ‘tree’ command (shown right) can be a useful way to visualise your directory.

```
edd@gift:~$ dirname /home/edd/testfldr/newdir  
/home/edd/testfldr  
edd@gift:~$
```

```
edd@gift:~$ dirname $(readlink -f testfldr/index.theme)  
/usr/share/icons/DMZ-White  
edd@gift:~$ _
```

```
edd@gift:~$ dirname `readlink -f testfldr/index.theme`  
/usr/share/icons/DMZ-White  
edd@gift:~$
```

```
edd@gift:~$ tree testfldr/  
testfldr/  
├── index.theme -> /etc/alternatives/x-cursor-theme  
└── newdir  
  
2 directories, 1 file  
edd@gift:~$
```

```
edd@gift:~/testfldr$ ls  
index.theme newdir  
edd@gift:~/testfldr$ dirname index.theme  
.  
edd@gift:~/testfldr$ dirname /testfldr/index.theme  
/testfldr  
edd@gift:~/testfldr$ _
```


HOWTO - LEARN ABOUT

Now I want you to notice that the symbolic link points to another folder, but that folder was not the absolute path.

Wiggle your eyebrows, do you 'get' it? Do you see how it may be useful to get an absolute path for a script?

This is actually something I like to get students to do, so that the penny drops. I hope reading about it inspires you to try it yourself, so that the penny will drop for you too.

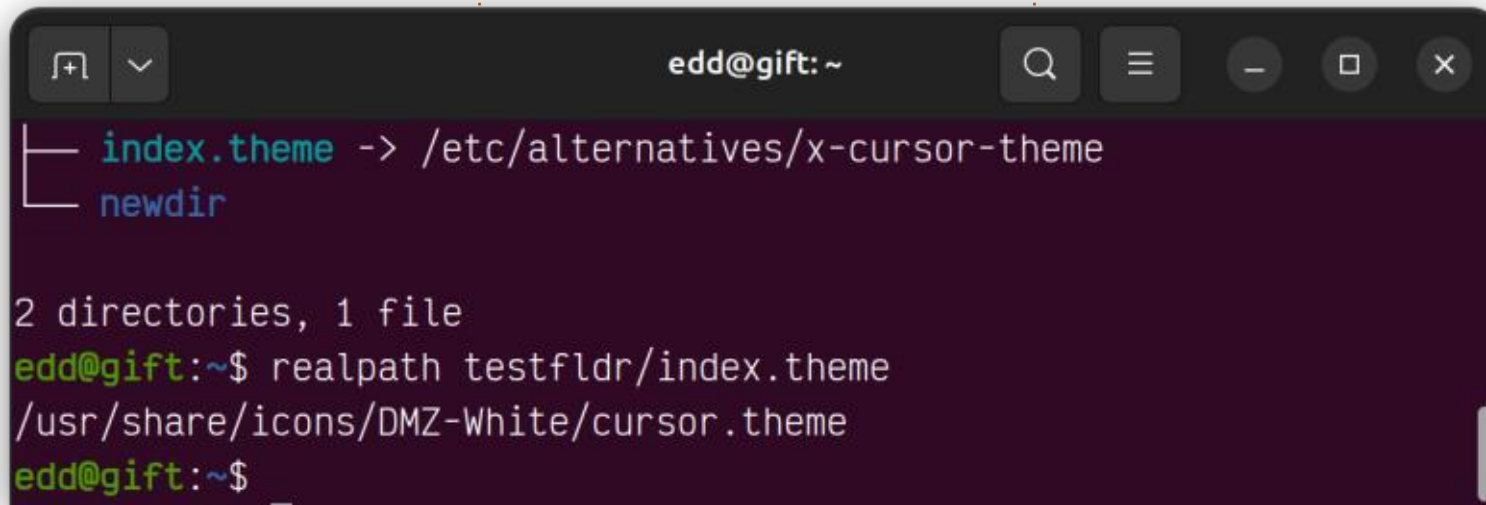
Now let's put a spanner in the works. We can use the 'realpath' command to get the real path (it

does what it says on the tin!).

There are obviously other ways to skin the cat, but I'll stop here, as it would become too image-heavy and Ronnie will reject it.

Please try it out, by copying a symbolic link to your home folder somewhere and try the above.

If I made a mistake anywhere, misc@fullcirclemagazine.org as we are all human.



```
ed@gift: ~  
└─ index.theme -> /etc/alternatives/x-cursor-theme  
└─ newdir  
  
2 directories, 1 file  
ed@gift:~$ realpath testfldr/index.theme  
/usr/share/icons/DMZ-White/cursor.theme  
ed@gift:~$ _
```



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



HOW-TO

Written by Alan German

Trading Up To Linux Pt.7

One of the reservations many people have about moving to Linux is that they think learning to use the new operating system will be hard and, in particular, that they will be unable to use the Windows applications to which they have become accustomed over many years. Neither of these scenarios is necessarily true. In recent articles in this series, we have seen that modern Linux distros compare very favourably with Windows. Many of the features of the Windows desktop, such as the ability to create on-screen program shortcuts and add quick-launch icons to the taskbar (panel) are present in Linux. The menu system in Linux Mint, with its layout of software categories allowing rapid access to specific applications, is particularly easy to navigate. The Software Manager, with curated applications available from secure repositories, and the Update Manager, offering exceptional user control, give Linux definite advantages for these aspects of computer maintenance.

Linux also has the ability to run many Windows programs, for

example by using Wine or PlayonLinux (a graphical front end for Wine). Windows and Linux have very different system software and, while Linux is open-source, the Windows system is proprietary, with its under-the-hood operations not being documented in the public domain. Nevertheless, Linux developers have created a “compatibility layer” that translates

Windows Application Program Interface (API) calls to their Portable Operating System Interface (POSIX) standard equivalents. In short, this means that many Windows programs can be run in Linux.

While a large number of Windows programs will work quite satisfactorily on Linux using Wine,

some will function better than others, and even different versions of the same program may not function in the same manner. The Wine Application Database (AppDB) lists almost 30,000 applications, and assists end users in identifying the ability of Wine to run specific programs. Individual applications are ranked on a five-point scale, from Platinum, for Windows programs that run flawlessly, through to Garbage, where problems are so severe to make the program unusable in Linux.

Microsoft Office is a favourite software package for Windows users and features the Word (word processing), Excel (spreadsheet), and PowerPoint (presentation) modules. These provide an excellent example of the variation of performance for different versions of the same program under Wine. For example, Microsoft Word has rankings across all of the available categories – Platinum, Gold, Silver, Bronze and Garbage – as shown left.

Version	Description	Latest Rating	Latest Wine version tested	Test results	Comments
'95	The 1st mass produced 32bit version of Word. Many updates to bring it up to the new GUI of Win95.	Platinum	2.9-rc3	6	0
'97	Word processing component of Office '97.	Platinum	3.12	7	0
2000	Word processing component of Office 2000.	Silver	3.12	12	0
2002/XP	Word processing component of Office XP/2002.	Gold	1.1.8	2	0
2003	Word processing component of Office 2003.	Bronze	7.17	21	0
2007	Word processing component of Office 2007.	Gold	8.3-staging	42	0
2010 (32 bit)	Part of Office 2010.	Platinum	5.9.1	20	1
2013 (32 bit)	Word processing component of Office 2013.	Bronze	5.9	12	1
2016 (32-bit)	Word processing component of Office 2016.	Gold	5.0	9	4
5.5	Word 5.5 for DOS.	Garbage	1.3.0	1	0
8.8	Microsoft TextEditor	Garbage	1.1.25	3	0
6.0 (32 bit)	Rare 32bit version of Word 6.0. It has been released in 1993 for Win NT.	Platinum	2.16	2	0
Microsoft 365 for Enterprise latest	The latest version of Microsoft 365.	Garbage	9.16	1	0

HOWTO - TRADING UP

Wine is available through the Software Manager so this is the easiest way to install the package. It's a command-line utility, so to install a Windows program requires opening a Linux Terminal and typing in some appropriate commands. Fortunately, the structure of the main command is very simple – `wine <program-name>.exe`. Note that this assumes that the wine command is being run on the folder that contains the Windows executable. If this is not the case, then a change directory (`cd`) command needs to be added. For example, installation of the Homesite HTML editor from a USB drive to my hard drive on Linux uses the command sequence:

```
cd /media/toaster/KINGSTON/  
Homesite
```

```
wine Setup.EXE
```

The setup program loads from the Kingston USB drive and the subsequent installation prompts are exactly the same as those that appear when installing the program in Windows, including the need to enter the activation code when this is requested. A category for Wine-based applications, and an associated entry for Homesite, is automatically created in the Linux

Mint menu structure. Homesite can then be run on the Linux system exactly as is done on Windows.

When it comes to software like Microsoft Office, PlayOnLinux provides a graphical user interface and also pre-built scripts to install several versions of the office suite. PlayOnLinux can be installed through the Software Manager; however, subsequently trying to immediately install Office results in an error message that the Winbind package is also required. Installing both PlayOnLinux and Winbind resolves this issue.

PlayOnLinux is somewhat restricted in the versions of Microsoft Office that are supported. I have Office 2010 which is one of the versions on the supported list. Starting the installation process in PlayOnLinux is simply a matter of searching for "Office" and, in my case, selecting "Microsoft Office 2010". It should be noted that you must own a copy of the software, as a valid 25-character product key is required to be entered as part of the installation process.

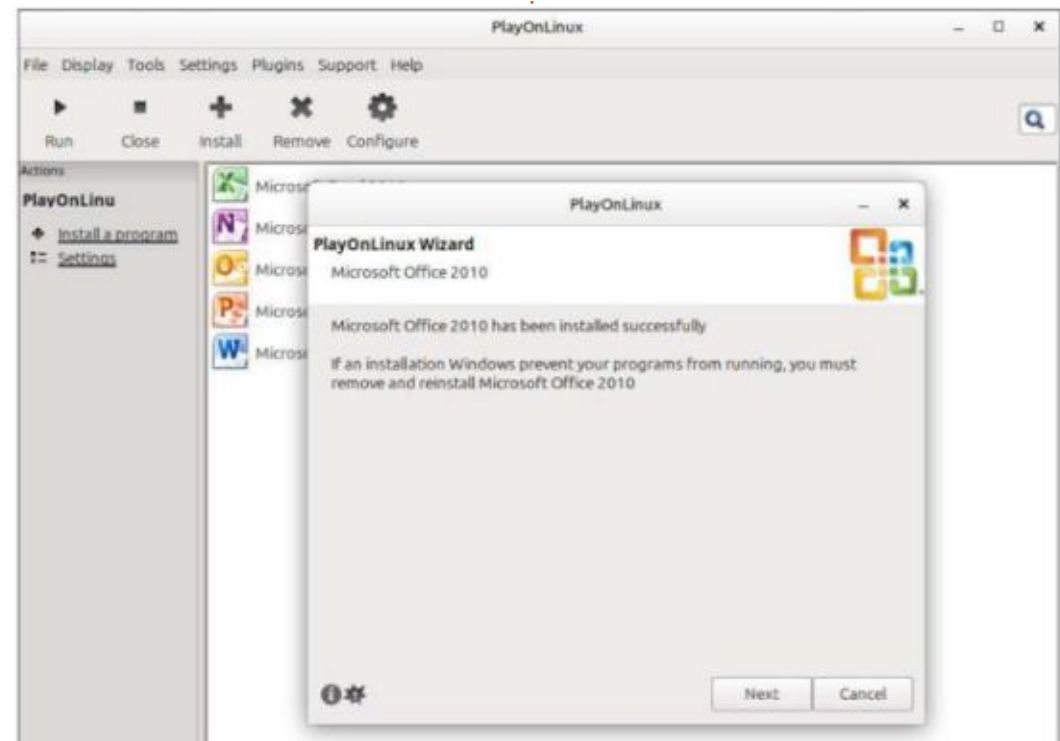
As the installation proceeds, a series of dialogue boxes provide

information, installation options, and error/warning messages. For example, an initial screen indicates that Office should be installed on the (default) "C: drive" which is effectively a virtual drive in the Linux file system. One interesting "error" that I encountered was a screen that showed a file system check error pointing to the USB drive that was being used to access the installation files for Office. Cancelling and ignoring this error allowed the installation to proceed normally.

Subsequently, more error

screens were displayed, seemingly due to an inability of the installer to locate various WindowsXP-KB files. Asking the installer to retry was ineffective as the same screens immediately reappeared. So, responding negatively to the retry query allowed the installation to proceed. Despite such error messages, a final screen indicated "Microsoft Office 2010 has been installed successfully" (below).

The installation resulted in on-screen program icons being displayed for each of the Microsoft Office modules, including Word,



HOWTO - TRADING UP

Excel, and PowerPoint, all of which I use regularly, but also for Outlook and OneNote that I never use. However, it was very easy to delete the unwanted icons, and place those that are useful along the top of the screen, which is my preferred location.

The screenshot below shows a newsletter article being prepared in Microsoft Word running in Linux. We can also see the program icons

for Word and Excel along the top-left edge of the screen. The icon for PowerPoint is covered by the Word program window. Also, note the Homesite icon in the top-right corner of the Linux desktop. All of these Windows programs are available for use in Linux by simply double-clicking!

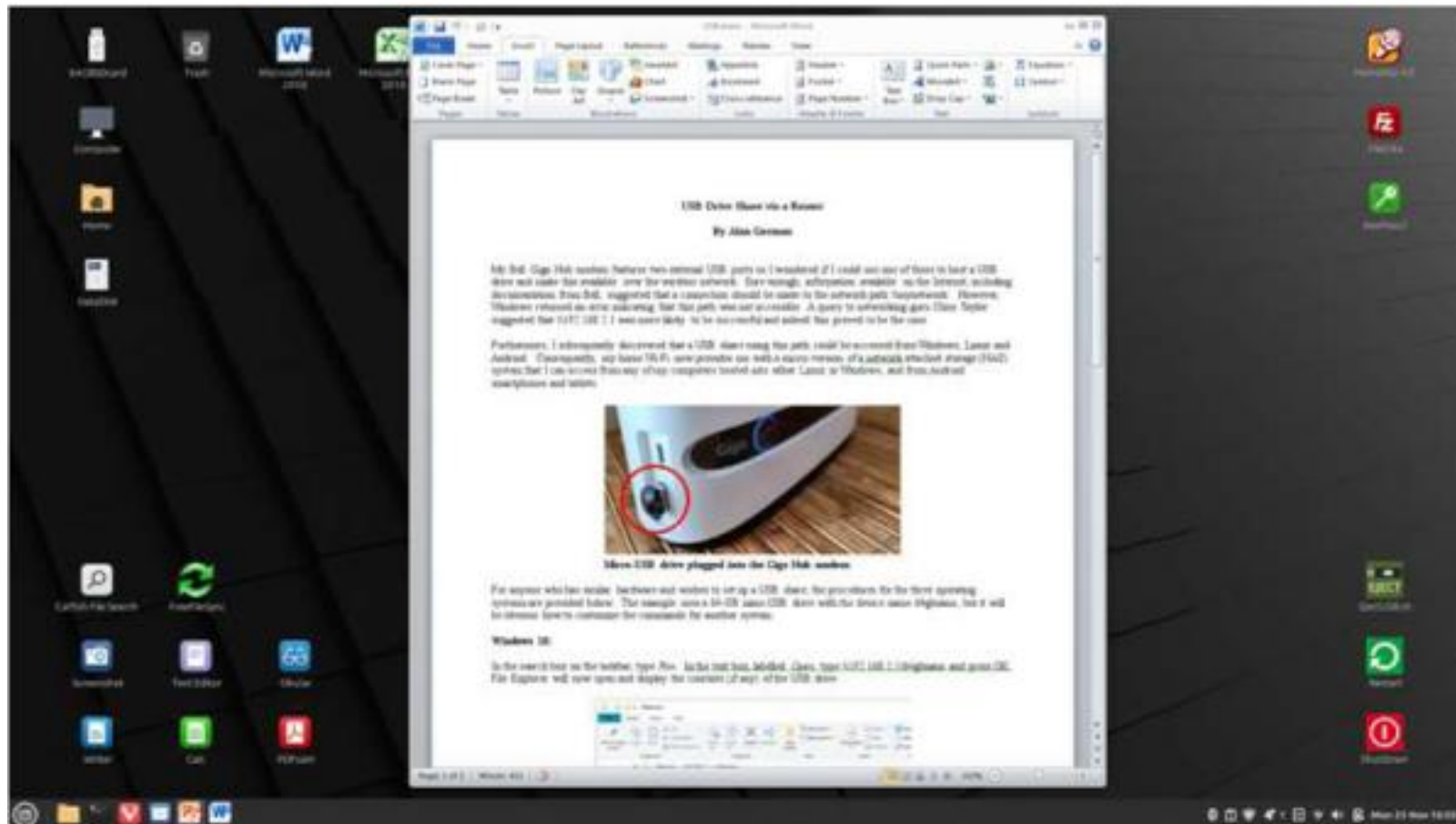
BOTTOM LINE

Wine (Open Source)
Version 10.0

<https://www.winehq.org>

PlayonLinux (Open Source)
Version 4.4

<https://www.playonlinux.com/en/>



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



HOW-TO

Written by Robert Boardman

Latex - H Topics

If you read the Latex column in FCM 218, you may remember I am going to try adding three more features to the book about Whitefoot the Wood Mouse: drop caps for the initial paragraph of each chapter, the geometry package, and illustrations. Before I do those three, I will change the size of the type to be a little friendlier to children's eyes. When I finished last time, I had reset the font to Noto Serif but made no change to the type size.

Note: For those who do not know, Noto is a shortened form of "No tofu". It means this font has an extensive set of characters and supports Unicode. That means it can be used for many languages of the world without generating little blank boxes ("tofu" -) as substitutes for missing characters. The various styles of the Noto font family are available for free from fonts.google.com, fontquirrel.com, exfont.com, and other font distributors.

Without a type size in the documentclass instruction, Latex

generates 68 pages. Setting the default type size to 10pt generates 109 pages. Since this is a book, every chapter will start on a right-hand page by default. Without a default type size, almost all 32 chapters use two pages, a right page and a left page. If I increase the type size, many or all chapters become three pages (right, left, right), then Latex will automatically add a blank left page at the end of each chapter. I would like to avoid using all that extra paper.

During my scan of the pages, I noticed many of the epigraphs were occupying four lines of type, not two. In order to adjust most of them to two lines I increased the width of the epigraph area usually to to eight centimetres but to ten or twelve centimetres if necessary: `\setlength{\epigraphwidth}{8cm}`

Changing the default size of the Noto type to 11pt in the documentclass command generates 120 pages and 12pt further increases the page count to 124. Removing the paragraph indent and extra line spacing, and

returning to 10pt default size, drops the page count to 75. However, that is not a good design choice. Perhaps a different typeface would be better. These are the choices book designers and other desktop publishing experts encounter regularly.

After several experiments and a few test prints, I decided to use the FourierNC package at 11pt. It generates New Century Schoolbook text. That seems appropriate to me since I first encountered Thornton W. Burgess in a grade school classroom. Using the default margins for the document class "book", and using letter size paper, this choice generates 91 pages.

As I scrolled through each variation in type size, I noticed some widows and orphans. These terms denote only the first line of a paragraph appearing at the bottom of a page (orphan), or only the last line of a paragraph appearing at the top of a page (widow). These problems and others can be identified in the error log in TexStudio using the widows-and-

orphans package. Widows, and often orphans, can be eliminated using the nowidow package. Even if you use the nowidow package, I strongly recommend looking through the generated document carefully to find any orphans that appear in the TexStudio log. Almost always, the adjustments made by the nowidow package will also eliminate orphans. However, you may need to edit the text or introduce an artificial line break or page break in order to correct any orphaned line you find.

Note: Do the final check for widows and orphans after you have made all the other adjustments which affect how much text is on a page. Otherwise you may insert a line break or page break that causes another widow or orphan or generates an undesirable blank page.

Setting up the drop caps has to be done for each chapter individually. For drop caps, I used the lettrine package. It has good documentation and three sample documents. I chose not to use any

options, to have the first letter of the first word in a chapter use two lines, and the rest of the first word in small caps. (See the accompanying image in this issue.) This had to be done for each chapter separately, which was a little tedious to do for thirty-two chapters. However I am pleased with the result.

To get the document ready for printing as a book, some margin adjustments are required. Books are printed on both sides of the sheet of paper. In order to bind the pages into a book, the right-hand side of the left pages and the left-hand side of the right pages must be set wide enough so there is extra paper which will be used in the binding process. In book printing terminology, these two margins are the inside margins. Usually inside margins are larger than outside margins. It is also customary for bottom margins to be larger than top margins.

This is a children's book and needs to be sized to fit a child's hand. Standard letter paper is too large. After measuring some children's books in my house I decided to set the page size to 230mm * 150mm (9in * 6in).

```
\begin{figure}[h] %Use [b] to move to bottom of page
\centering
\includegraphics[scale=1]{whitefootcouple}
% Scale determines the size of the image.
% Image is in the same directory as text and is a
% standard image format so only the name is required
\end{figure}
```

Outside margins will be 25mm, inside margins will be the same. Contents will start 20mm from the top. The bottom margin will be 40mm, this includes the space for page numbers. These measurements need to be set in the options for the geometry package. You can see the code in the accompanying image.

In an Internet search, I found only one illustration suitable to this particular book. I had expected to find several good images and some not-so-good images. I guess either the original book did not have many illustrations, or the images are still protected by copyright. The image is of Whitefoot and Mrs. Whitefoot, so it belongs near the end of the story. The Latex code for the image contains a few explanations in comments.

Code to insert an image is shown above.

I experimented with a package called `zwpagelayout`. I think it could be a useful substitute for the geometry package. It includes some features I wished to use for this book. After reading the documentation several times, I was unable to learn how to turn on the extra features. `Zwpagelayout` did not offer any advantages over geometry. Since I was reasonably content with the page layout I got with geometry, I abandoned `zwpagelayout`. It will be worth learning but will take more time than I have at present.

As I have said before, I intend to print the PDF and then bind it into a book. That means I need to print on two sides of each sheet of paper. Organizing the pages into the desired page layout and getting them to print in the correct order is called imposition. This is the last important task before printing. All of the publisher's design choices must be finished before imposition.

The `pgfmorepages` package seems to be a reasonable choice to use for imposition with Latex. It can reduce four pages of text to two pages (1 sheet) of paper or eight pages to four pages (2 sheets). This package presented two problems for me. It puts four pages into two by reducing the type by 50%. That means the text of page 5 for example remains on page 5 but it is difficult to read. Of course I can solve that by doubling the default size of the text before applying `pgfmorepages`. Adjusting the font can mean generating more widows, which will be corrected with the `no-widows` package. It also means a page-by-page review to look for orphans and for any unnecessary blank pages. Any linebreak or pagebreak commands would also have to be examined to find out if they are still appropriate.

The other is an issue for binding, not for printing. If I accept the eight pages into four pages then the first eight pages will print as a group. When this group is folded together they will make a two-sheet signature. I would prefer to work with sixteen-page or four-sheet signature when I come to bind this

book. The documentation for pgfmorepages has a sample to help with defining a new layout. There are many comments. In the future, I may try to make a new layout which will be 16 text pages on eight physical pages (four sheets of paper), book format.

Because of time pressure (not from FCM but from other things in my life), I decided to abandon the pgfmorepages package. My desire to bind Whitefoot the Wood Mouse is a personal one. I need to be able to use Latex to make a PDF with appropriate page sizes and crop marks for a children's book. Generating that PDF can wait a little while. The final code for the preamble and the heading for the first chapter accompanies this text.

For now that is the end of our adventures with Whitefoot. Next issue, I will resume my perusal of some of the packages available at ctan.org. There are sixteen topics starting with I and seven starting with J. In those two groups, I will look for topics that might be of general interest. If you have any special requests for tasks you want to do in Latex, send me an email (rboardman@psmail.net). Talk to you again in the next issue.

```
\documentclass[letterpaper]{book}
\usepackage[paperheight=230mm,
paperwidth=150mm,inner=25mm,outer=25mm,
top=20mm,bottom=40mm]{geometry}
\usepackage{graphicx} %for image
\usepackage[fontsize=12pt]{fontsize}
\usepackage{epigraph}
\usepackage{fouriernc} %fonts
\usepackage{lettrine} %dropcaps
\usepackage[defaultlines=2,all]{nowidow} %corrects widows
\usepackage[check=warning]{widows-and-orphans} %finds
widows and orphans
\title{Whitefoot the Wood Mouse}
\author{Thornton W. Burgess}
\date{\today}
\begin{document}
  \maketitle
  \tableofcontents

  \chapter{Whitefoot Spends A Happy Winter}
```

Chapter 5

The End Of Whitefoot's Worries

You never can tell! You never can tell!
Things going wrong will often end well.

Whitefoot

THE next time you meet him just ask Whitefoot if
this isn't so. Things had been going very wrong
for Whitefoot. It had begun to look to Whitefoot as if

KILOBYTE MAGAZINE

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

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



HOW-TO

Written by Mark Crutch

Inkscape - Part 159

Last month, I looked at the new Filter Gallery dialog. This month, I'm going to start by looking at the Extension Gallery dialog, which bears more than a passing resemblance to its filtery counterpart (Filter Gallery on the bottom left, Extension Gallery on the bottom right).

This common design means they also share most of the same user experience oddities I described last time. For example, there are no ellipses after the extension names, to indicate those that open an additional dialog. Instead an ellipsis appears after the word 'Run' on the (oddly positioned) button at the bottom of the dialog, if you've

selected such an extension. This isn't a major problem, by any means, but I don't really understand why some other badge or indicator couldn't be used on the thumbnails themselves.

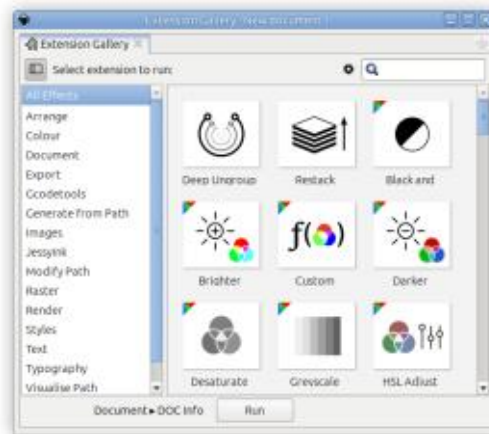
The category list on the left corresponds to the top-level entries in the Extensions menu. As with the Filters Gallery, selecting one will restrict the displayed thumbnails as you would expect. Hiding the list using the toggle at the top-left switches back to show all the Extensions – which is a sensible design choice, in my view. But if you then toggle back again, you're left with a view that shows all the extensions, but a list that has a

single category selected. Once more, not a major problem, but a silly UX oversight nevertheless.

It's worth noting that, unlike the Filters menu, some of the entries in the Extensions menu also contain submenus. These are not reflected in the category list. For example, selecting the 'Render' category mixes all the extensions together, including those from the 3D, Barcodes, Gear, and Grid submenus. The actual location of the extension in the menu hierarchy is shown to the left of the Run button when you select a thumbnail, and also in a tooltip when you hover the mouse over one. Again, not a problem as such, but if the hierarchical position is important enough to display at all, then surely it's important enough to reflect somewhere more obvious in the UI, perhaps by grouping thumbnails through the use of an additional badge or some color coding.

Initially I thought that there was some use of badges to indicate categories, when I noticed the flash of triangles at the top-left of some

of the thumbnails. This marker indicates that these are all part of the Color category, but there are no such markers used for any of the other categories. Some do have more of a common style within their group, such as the lined notepad design in the Text category. But even here the style isn't applied consistently across all the extensions.

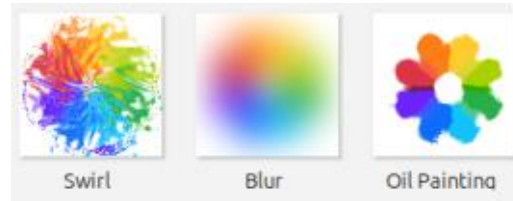


In the Filter Gallery, the thumbnails roughly displayed what the effect of the filter might look like (subject to a few caveats, as I described last month). But for many

extensions this isn't really a practical option, so the thumbnails tend to be more abstract representations of their functionality. On the whole, I would say that the developers have done an excellent job in this respect... with one glaring exception. Of all the categories that could actually have been represented with thumbnails that show the effect of each extension, surely it's the Raster section? This contains extremely filter-like tools to manipulate bitmap images, with extensions such as Blur, Oil Paint, and Swirl. And yet what we've ended up with is a whole category of arbitrary puzzle pieces – presumably the fallback design used when no specific thumbnail has been created.



By comparison, these are the thumbnails from the Filter Gallery for the Blur, Oil Painting and Swirl filters. Surely we could have had something similar for the extensions?



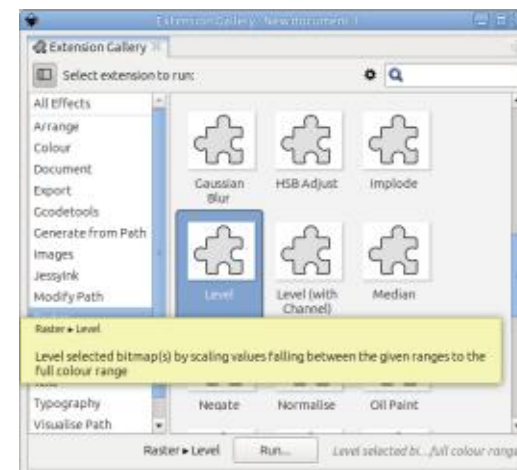
I'm also going to point out a couple of even more petty issues: Notice how the descender of the 'g' in the 'Oil Painting' label is cut off? That's not bad cropping on my part when taking the screenshot – it's how all the labels with descenders appear in both dialogs. Some of the labels are okay if you select a smaller thumbnail size, but even at the smallest option some are still cut off.

And the second petty issue? On my ApplImage version, at least, the top entry in the categories list says 'All Effects' rather than 'All Extensions'. Does this hint at a Path Effects Gallery to come? Or is it just a typo?

While I like the idea of the

Extension Gallery, in practice I don't think it's as useful as the Filter Gallery. While the thumbnails for filters give a good idea of what each one does, those for extensions are often too abstract to have the same effect. To that end you still end up choosing your extension largely by its name, rather than the thumbnail image – at which point it's actually less useful than the menu, due to its flattening of the submenus.

It might work better if selecting a thumbnail displayed a good description of what the extension does. In some cases there is a description shown on the tooltip, and to the right of the 'Run' button when selected. But those descriptions are often so terse as to be useless, and when they are longer, the space next to the 'Run'



button is far too small to hold them. See, for example, this screenshot with the 'Level' extension selected. Compare the description in the tooltip with the useless version next to the 'Run' button.

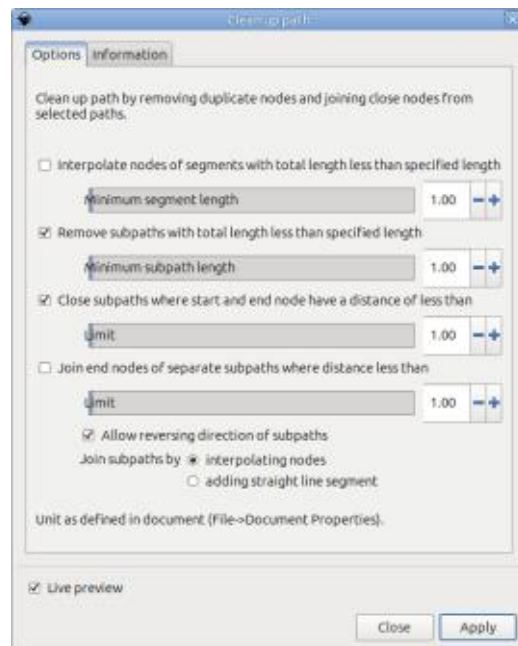
Still, at least the tooltip shows the complete description, which still makes this a useful dialog, right? Except that the only extensions I've found with such descriptions are 'Grid', and those in the 'Raster' category. Yes, ironically, the extensions which could most benefit from a proper thumbnail are pretty much the only ones that have a description. And those same tooltips also appear when hovering over entries in the Extensions menu anyway.

While we're on the subject of extensions, let's look at the 'Clean up path' extension that was added with the latest release, version 1.4.2. You can find it in the Extensions > Modify Path submenu, or you could, y'know, search for it in the Extensions Gallery. However you run it, you'll need a path for it to operate on. I first tried with a traced bitmap image which had lots of erroneous speckles and gaps, resulting in a complex path with

HOWTO - INKSCAPE

lots of nodes. I was quickly forced to change tack, however, to much simpler example paths that I created specifically to test this extension.

Running the extension opens a dialog with four main options that can be toggled with checkboxes. Each of these has a single parameter, controlled by a slider and spinbox combination. The fourth also has a couple of additional parameters.



I had hoped to demonstrate the usefulness of this extension, and how the additional controls make it better than Path > Simplify. But the

truth is that I was unable to get this extension to work particularly well with my test images. The reason my screenshot shows the first and fourth checkboxes un-ticked is because enabling either of those usually led to Python error messages and the extension failing to do anything on my machine. On a few occasions Inkscape itself crashed entirely.

Of the two options that did work, 'Remove subpaths' was the one best suited to my primary test image, and it did do the job well. My only complaint is that the scale of the slider wasn't a great match for my image. At the lower end, it removed speckles and smaller dots, then quickly moved to affecting larger parts. But by the time I was less than a third of the way along the range, it had reached its maximum effect – meaning that all the 'useful' values were crammed into the first third of the control, leaving two thirds that effectively did nothing.

This issue will be more or less pronounced depending on your specific path, but I think the underlying problem is that the cut-off lengths are measured in document units, per the note at the

bottom of the dialog. Perhaps the option to use units that are proportional to the bounding box perimeter might be more useful, as that should result in ranges that have a similar effect regardless of the absolute size of the path object.

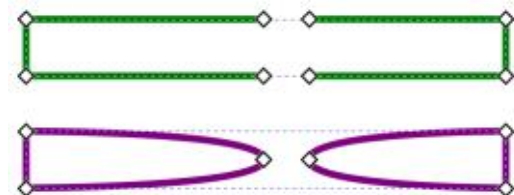
The 'Information' tab of this extension has this to say about it: "Originally created to clean up paths for cutters/plotters by removing excessive nodes or small gaps." With that description in mind, I set off to create the sort of paths that I thought might be better suited to this tool. With a drastically reduced example, I was able to get slightly more useful results. My main conclusion is that the safest way to use this extension is to stick to fairly simple paths and run it multiple times, selecting only one of the options for each pass. For example, the 'Interpolate nodes' option – which blew up every time on my complex bitmap trace – was happy to turn this straight segment path into a much smoother alternative.



The 'Remove subpaths' option, which had actually worked well on my complex traced path, threw errors when used on a much simpler test path. Simplifying even further, however, it worked once more, removing the short segments from the red duplicate of the green path in this example.

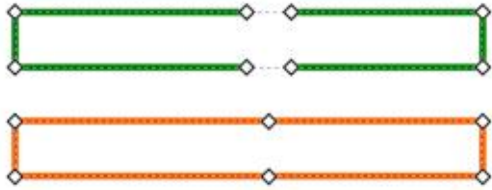


The 'Close subpaths' option felt like it needed another control, to determine exactly how to close the subpath. In this example, a copy of the green path did, indeed, have its subpaths closed. But where I had expected an extra line segment to be added, leaving the nodes unmoved, instead the two end nodes were replaced with a single node placed at the average position between them.

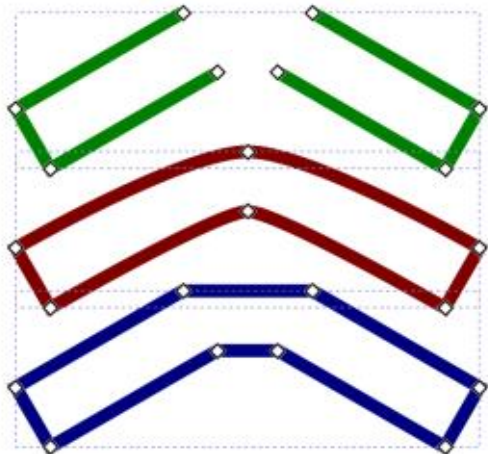


HOWTO - INKSCAPE

Finally, the 'Join end nodes' option – which failed on the complex path – seemed quite happy to do its job on a much simpler one, healing the break between the two halves of the green path to create the orange version.



Changing the angle at which the parts meet shows the difference between the two 'Join subpaths by' choices, with the red path being an example of interpolating nodes, and the blue being the result of the straight line option.



The option to "Allow reversing direction of subpaths" allows some amount of control if the extension is joining the wrong parts together. Usually you should leave this enabled, but you can try disabling it in the event that there's a problem with the join, such as the connecting lines crossing over when they shouldn't.

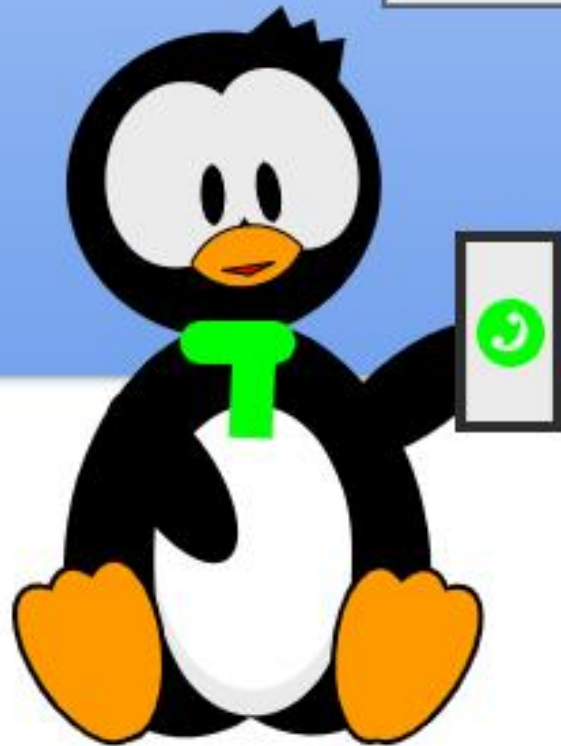
This extension certainly has potential, but is currently a little too unstable to recommend as the solution to cleaning up all your messy bitmap traces. By all means play around with it to see how it fares with your own images – just make sure to save frequently!



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

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MATTERS ... SINCERELY ,
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BODHI CORNER

Written by Moss Bliss

BACK NEXT MONTH



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



UBPORTS DEVICES

Written by UBports Team

BACK NEXT MONTH



The Daily Waddle

IT'S MY MOTHER-IN-LAW AGAIN,
WHERE ARE THE TELEMARKETERS
WHEN YOU NEED THEM?



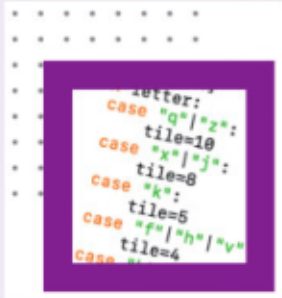


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Written by Erik

BACK NEXT MONTH



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

Ubuntu Cinnamon 25.04

Released with the other Ubuntu flavors on 17 April, 2025, Ubuntu Cinnamon 25.04 brings a new version of the Cinnamon desktop from Linux Mint and some changes in the application line-up, too. Over time, it is slowly culling the very long default application list and that can only be a good move.

Ubuntu Cinnamon 25.04 is the 12th version of this distribution and the fifth since becoming an official Ubuntu flavor.

This is the middle of the three interim releases that make up this development cycle which will result in the next long term support (LTS) version. That will be Ubuntu Cinnamon 26.04 LTS and is expected in April 2026. As an interim release Ubuntu Cinnamon 25.04 has nine months of support, running until January 2026.

INSTALLATION

I downloaded the ISO file from the official website using Transmission BitTorrent. Once I had

the file, I did an SHA256 sum check on it from the command line. This simple check is always a good idea, just to make sure the ISO file is uncorrupted.

This ISO file was 4.8 GB in size which is actually 200 MB (4%) smaller than the last release, Ubuntu Cinnamon 24.10, which was 5.0 GB. This is the second release in a row to shave 200 MB off the ISO file, so Ubuntu Cinnamon is shrinking over time. I have some information on where that extra space was saved, too.

I dropped the Ubuntu Cinnamon 25.04 ISO file onto a USB stick equipped with Ventoy 1.1.05 and booted it up for testing from there. Ubuntu Cinnamon is not officially listed as Ventoy-supported, but it worked fine.

SYSTEM REQUIREMENTS

Ubuntu Cinnamon does not list any system requirements but it is probably safe to assume that it is the same as Ubuntu 25.04 which would be a minimum of:

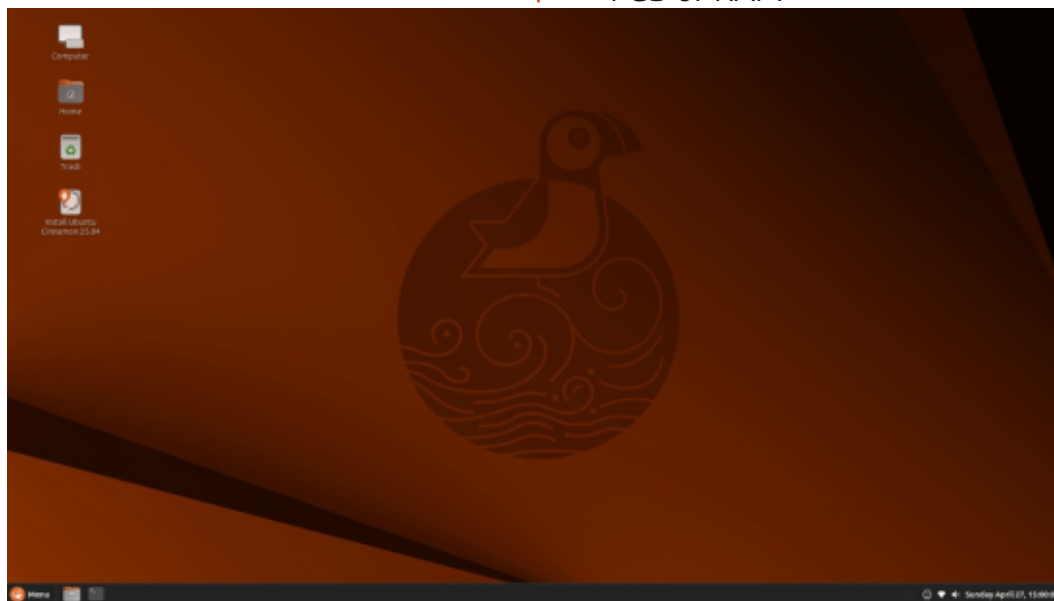
2 GHz dual-core processor
4 GB of RAM

That recommended 4 GB of RAM is probably a bit minimal if you are doing web browsing here in 2025. 8 GB is probably a more realistic minimum.

NEW

This release uses the Cinnamon 6.4.8 desktop, an update from the last few releases, which employed 6.0.4. This new desktop version includes some overall user interface modernization. Also, the nightlight configuration is now in the display settings, the main menu can be controlled using the number pad arrow keys, the power applet supports more devices and their labels, and the user's profile picture can now be displayed with the user applet.

Cinnamon desktop components which have been upgraded include the Cinnamon Control Center 6.4.1, Cinnamon Screensaver 6.4.1 which adds delays in five and ten second increments, Cinnamon Settings Daemon 6.4.2 which has a new



REVIEW

audio device selection dialog box, the Muffin 6.4.1 window manager, and CJS 6.40 (which are some Mozilla-based javascript bindings for the Cinnamon platform), which still uses mozjs115.

As with all the Ubuntu 25.04 flavors, the included Linux kernel is now version 6.14 and the systemd initialization system is version 257.4. Because Ubuntu Cinnamon has only been around since 19.10, all its releases have used systemd from the start.

The Yaru-Cinnamon theme has received some updates as well.

One thing that is not new in this release is that the live session

version of Ubuntu Cinnamon 25.04 will not mount any drives, including USB drives, just like in the last two releases, Ubuntu Cinnamon 24.10 and 24.04 LTS. This prevents using it as a rescue disk, and also makes doing screenshots more complicated. The screenshots for this review had to be uploaded to a cloud service as a .zip file and downloaded to my laptop, rather than simply putting them on a USB stick. Most of the other Ubuntu flavors (other than Xubuntu 25.04) do not lock drives out of live sessions, as it serves no useful purpose.

As far as reducing the size of the ISO file goes, the release notes state, "some extra, unnecessary

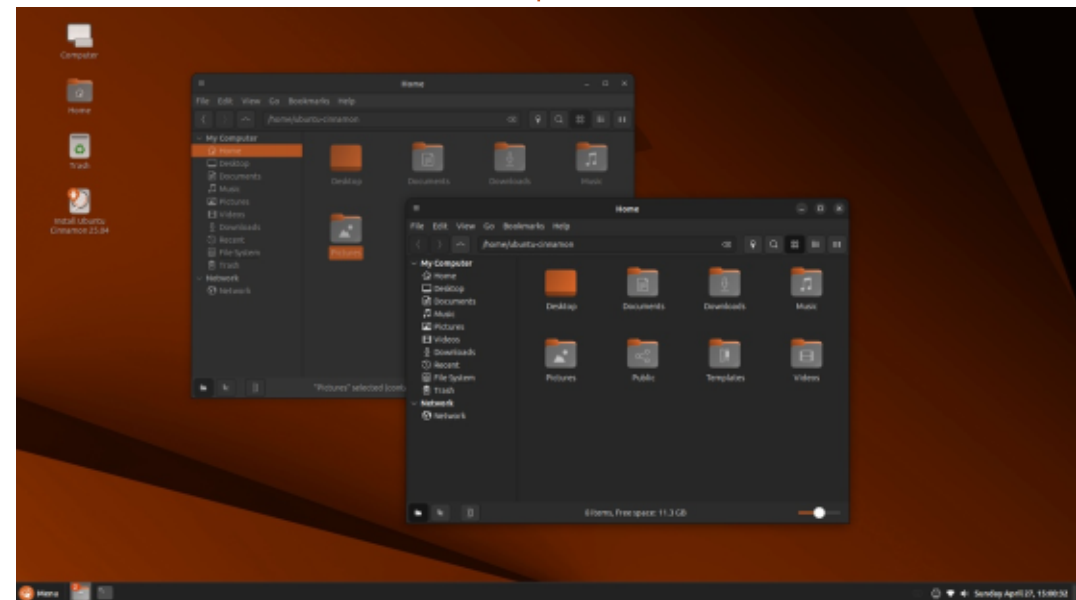
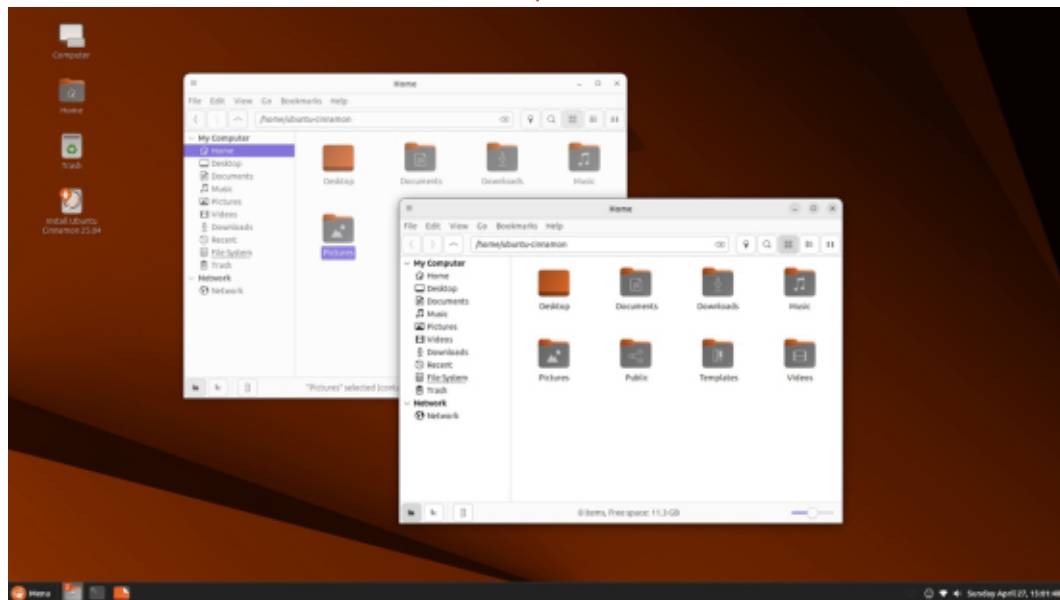
packages were removed, most notably language packs. You need to install only the language pack of your choice. This decreases the image size a little". There are also some other places where space has been saved, covered below under settings and applications.

SETTINGS

Ubuntu Cinnamon 25.04 introduces some changes to the amount of user customization compared to the last release. There are now three different mouse pointer themes (down by one); 32 window color themes (down by three); 26 icon themes (down by seven) and 32 desktop themes

which set the panel colors (up by four). These theme revisions probably contribute to reducing the ISO download size.

Since this release is code-named "Plucky Puffin", there is also a new puffin-themed default wallpaper. The number of wallpapers provided has changed over the last three releases from 43 in 24.04 LTS, down to 15 in 24.10, and now up to 48 in this release which includes the reintroduction of some previously deleted Debian logo wallpapers. At first glance, it may seem unusual to include Debian wallpapers but there is some legitimacy here. Ubuntu Cinnamon is ultimately a Debian derivative, since Ubuntu is based on Debian.



As in past versions of the Cinnamon desktop, in 6.4.8 the bottom panel still can be adjusted in size over a large width range and the icons on the panel automatically size to fit. The menu continues to be adjustable in size by mouse drag from its default size to a much larger or much smaller size.

The range of customization provided is extensive and gives a lot of user control as to how the resulting desktop looks.

APPLICATIONS

Some of the applications included with Ubuntu Cinnamon

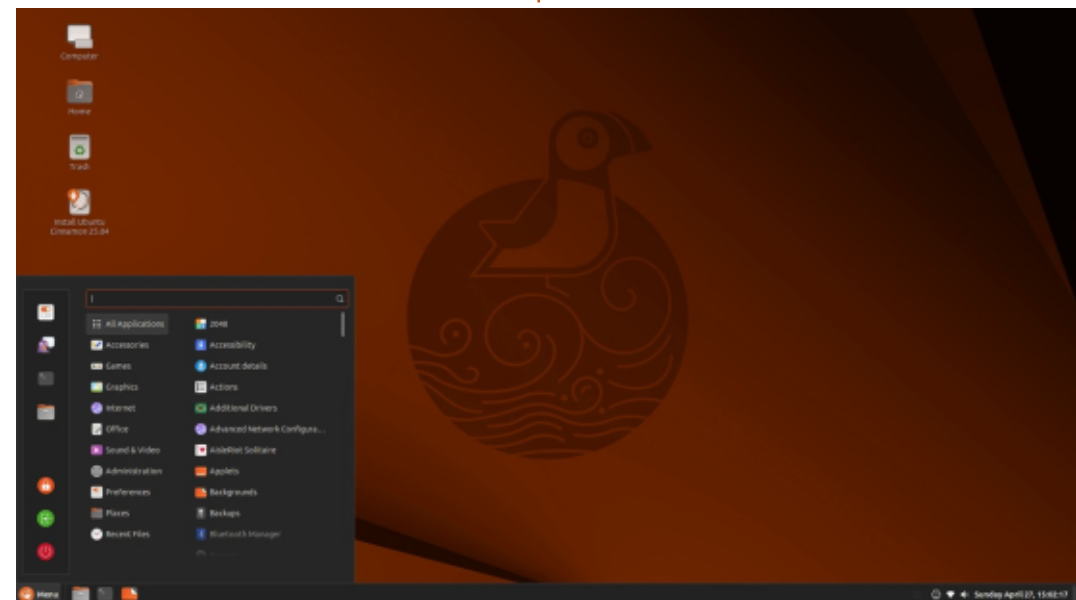
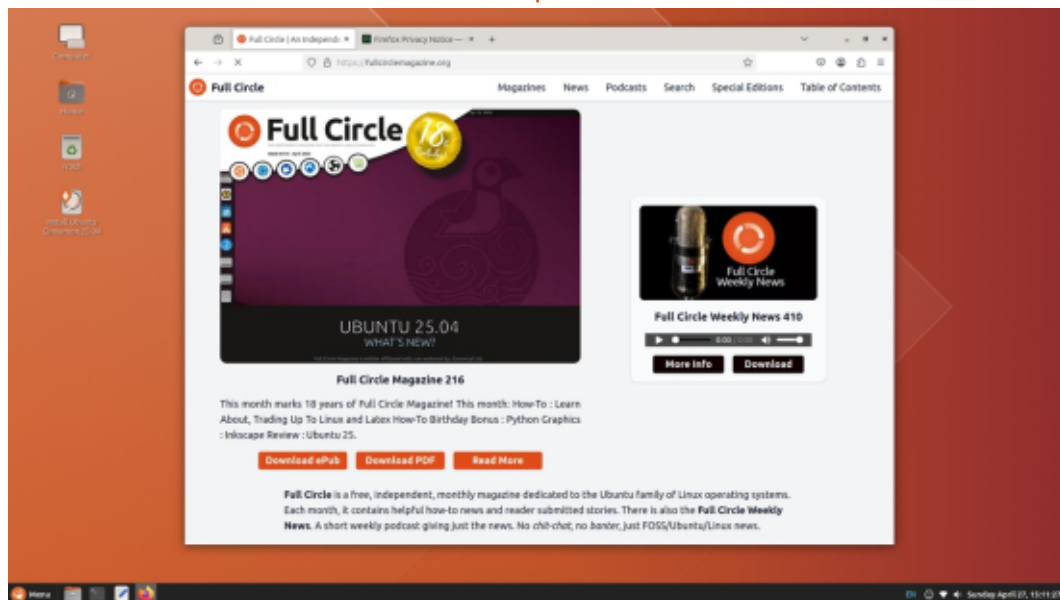
25.04 are:
 Archive Manager (File Roller) 44.5 archiver
 Blueman 2.4.4 Bluetooth controller
 Brasero 3.12.3 CD/DVD burner*
 Cheese 44.1 webcam*
 Cinnamon 6.4.8 desktop environment
 CUPS 2.4.12 printing system
 Document Scanner (Simple Scan) 46.0 optical scanner*
 Document Viewer 48.0 (Evince) PDF viewer
 Firefox 137.0.2 web browser**
 Deja Dup 45.2 back-ups*
 GDebi 0.9.5.8 package installer
 GIMP 3.0.2 image editor
 GNOME Calculator 48.0.2 calculator
 GNOME Calendar 48.1 desktop calendar
 GNOME Disks 46.1 disk manager*

GNOME Software 48.1 package management system
 GNOME System Monitor 48.0 system resource monitor
 GNOME Terminal 3.56.0 terminal emulator
 GNOME Videos 43.1 (totem) video player
 GNote 48.0 note taking application
 Gparted 1.6.0 partition editor***
 gThumb 3.12.7 image viewer
 Hexchat 2.16.2 IRC client*
 Image Viewer 47.0 (Eye of Gnome) image viewer*
 LibreOffice 25.2.2.2 office suite
 Muffin 6.4.1 window manager
 Nemo 6.4.5 file manager
 Pidgin 2.14.14 IRC client
 Pipewire 1.2.7 audio controller
 Remmina 1.4.39 remote desktop client

Rhythmbox 3.4.8 music player
 Shotwell 0.32.10 photo organizer
 Sound Juicer 3.40.0 CD ripper*
 Synaptic 0.91.5 package manager
 Systemd 257.4 init system
 Text Editor (gedit) 48.1 text editor
 Thunderbird 128.9.1 ESR email client**
 Transmission 4.0.6 bit torrent client*

* indicates same application version as used in Ubuntu Cinnamon 24.10
 ** supplied as a Snap, so version depends on the upstream package manager
 *** only present in the live session version, not in the normal installation.

As can be seen from the small



number of single asterisks, a lot of the applications have received new versions, with many of those from the newest GNOME 48 desktop.

There have been several changes in the default application mix provided this time. The release notes state that the Alacritty terminal emulator has been removed in favor of GNOME Terminal, which was already included, thus removing one application redundancy.

Not announced, but gone anyway, is the Image Magick command line image editor. This was redundant to the much more user-friendly GIMP image editor and I am not sure what the user case was for including it in the first place.

These two removals contribute to a net reduction in size for the ISO file, too.

Swapped out is the neofetch hardware and software configuration display command line application, which is replaced with fastfetch instead, for whatever practical value either of those have to any users.

Ubuntu Cinnamon uses the Cinnamon desktop's own Nemo file manager, which is now updated to version 6.4.5. It includes a new "actions" sub-menu. Since it is not configured for bulk file renaming, a standalone bulk file renamer, such as GPRename is recommended.

Ubuntu Cinnamon 25.04 includes the LibreOffice 25.2.2.2 office suite which is complete except for the LibreOffice Base database program. It is probably the least-used part of LibreOffice but it can be installed if needed.

Ubuntu Cinnamon also comes with 19 games, probably more than any other Ubuntu flavor. These are: Aisleriot Solitaire, Five-or-more, Four-in-a-row, GNOME 2048, GNOME chess, GNOME Klotski, GNOME Mahjongg, GNOME Mines, GNOME Nibbles, GNOME Robots, GNOME Sudoku, GNOME Taquin, GNOME Tetravex, Iagno (Reversi), Hitori, Lights Off, Quadrapassel, Swell Foop and Tali. That is a lot of games! Again, I am not sure of the user case for so many games to be included by default.

Even though it is being slowly reduced over each recent release, the list of default applications in

Ubuntu Cinnamon is still extremely long. It includes just about anything a desktop user could want, except perhaps a video editor. There are also a lot of duplicate applications still included, like two IRC clients, two image viewers and two software package managers, plus those 19 listed games, as well. There is a "minimal installation" option which now additionally omits the Evince PDF viewer, GNOME Disks, GNOME Font Viewer, GNOME Photos, the Nemo Fileroller (archive manager) extension, and the Synaptic package manager. I am not sure if it is easier to install the minimal version and add what you want, or use the regular installation and remove everything you don't want. Hopefully, over time, the regular installation will get slimmer, with fewer redundancies.

CONCLUSIONS

Overall Ubuntu Cinnamon is a great distribution that is being slowly refined with each release, while avoiding any major changes.

Ubuntu Cinnamon 25.04 is a good release with some evolutionary improvements over 24.10 and this probably indicates

that we can expect further small updates in the last interim release in October 2025, before the next LTS arrives. That LTS will be Ubuntu Cinnamon 26.04 LTS, expected in April 2026.

EXTERNAL LINKS

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



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



REVIEW

Written by Adam Hunt

Ubuntu MATE 25.04

Ubuntu MATE is celebrating an anniversary! It has been ten years since it became an official Ubuntu flavor with the release of Ubuntu MATE 15.04.

Ubuntu MATE is a continuation of the GNOME 2 desktop that mainstream Ubuntu itself used from its inception in 2004 until it moved to the Unity interface in 2011. Today, Ubuntu MATE appeals to people who still like that vintage desktop or who are looking for a simple, easy-to-use, lightweight Linux distribution. One of its stated aims is to "recreate the halcyon days of Ubuntu for users who prefer a traditional desktop metaphor."

The latest version, Ubuntu MATE 25.04, came out on 17 April, 2025, the same day as the other Ubuntu 25.04 flavors. This is the 23rd overall Ubuntu MATE release. As an interim release, it is supported for nine months, until January 2026.

This is the middle of the three interim releases in this development cycle which will lead

to the next LTS version, Ubuntu MATE 26.04 LTS, due out in April 2026.

INSTALLATION

I downloaded the ISO file via BitTorrent from the official website using Transmission. After shrinking in size for the last release, the ISO file size has now grown 200 MB, from 3.5 GB to 3.7 GB. It is still half the size of mainstream Ubuntu's ISO file, though.

Once I had the file downloaded, I carried out the usual command



line SHA256 sum check to make sure the download was good. This is always a good practice as it saves issues later on.

I dropped the ISO file onto a USB stick equipped with Ventoy 1.1.05 and booted it up. Ubuntu MATE is listed as officially supported by Ventoy and it ran without any issues.

SYSTEM REQUIREMENTS

The listed the minimum hardware has been increased slightly over the last release and is

now:

Core 2 Duo processor
64-bit
2 GB of RAM (up from 1 GB)
10 GB of disk space (up from 8 GB)
Display 1024 X 768 pixels

The recommended hardware is:
Core i3 processor
64-bit
4 GB of RAM
20 GB of disk space (up from 16 GB)
Display 1440 x 900 pixels or higher (with graphics acceleration)

As well, Raspberry Pi B models are supported, including Raspberry Pi 2, 3, 3+ and 4 (all memory sizes).

NEW

The focus of Ubuntu MATE is preserving a classic desktop and thus avoiding any change. After all, it was created to keep the GNOME 2 desktop going after the switch to GNOME 3 happened in 2011. As a result, new releases of Ubuntu MATE keep changes to a minimum. If nothing else, this flattens the learning curve for users upgrading from one release to another.



In this release, all the changes incorporated are inherited from upstream projects. The biggest one is from Ubuntu 25.04: the installer now supports better dual-booting with encrypted BitLocker-enabled Windows partitions.

As with the other Ubuntu 25.04 flavors, the provided Linux kernel has been upgraded to version 6.14 and the initialization system is now systemd version 257.4. Ubuntu MATE has been using systemd since its first official flavor status over ten years and 21 releases, with no noted problems.

One thing that has not changed in this release is the MATE 1.26.2

desktop, which is the same version used in the last two versions, Ubuntu MATE 24.04 LTS and 24.10. The MATE 1.28 desktop has actually been released, but it apparently has some bugs that need addressing prior to its arrival in the Ubuntu repositories. As of the previous 24.10 release, MATE 1.28 was still expected to be introduced later in this development cycle, in time for inclusion in the next LTS, but it was not mentioned in the 25.04 release notes. I guess we will see what happens in the next release, Ubuntu MATE 25.10, which is due out on 9 October, 2025.

Another thing that is not new is that Ubuntu MATE still mounts external drives in live sessions

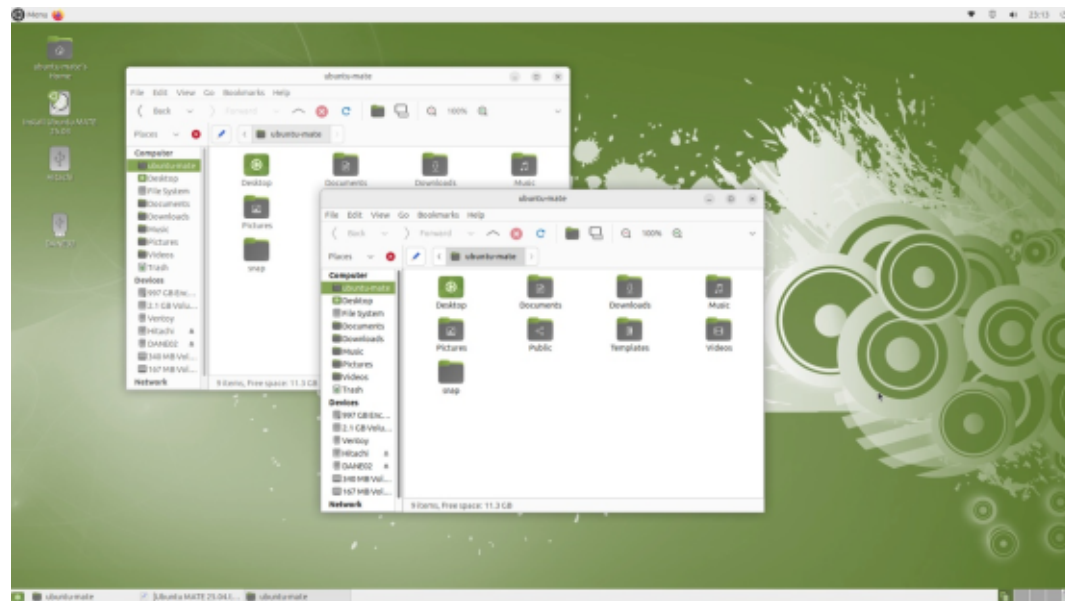
unlike some other Ubuntu flavors that are now blocking them (including Lubuntu 25.04, Ubuntu Cinnamon 25.04 & Xubuntu 25.04). Keeping this feature facilitates doing screenshots and reviews, so something I personally appreciate. It also makes it easy to use Ubuntu MATE as a rescue disk.

SETTINGS

Since “keeping everything as close to the same as possible” is considered a virtue in Ubuntu MATE, this new release retains the long-used default green-colored theme Yaru-MATE-Light, and the same green default wallpaper. It still comes with 23 window color

themes but this time has 33 wallpapers provided, five more than the last release. More wallpaper choices will be popular with any users who are not keen on that default hue of green.

Since Ubuntu MATE 18.04 LTS, the default menu system used on Ubuntu MATE has been the single Brisk menu. Brisk works well and includes a modern menu search feature. The panel options include several other menus, which are easy to install, including the original GNOME 2 triple menu. The GNOME 2 menu system is nostalgic, of course, and is still really easy to use. It does not have menu searching so you have to navigate the menu to find what you are looking for. Not



REVIEW

everything is where you expect it to be, either!

It is worth noting that not all Linux distributions shipping with the MATE desktop use the Brisk menu. For instance, AlmaLinux MATE, CentOS Stream MATE, and Debian MATE all use the GNOME 2 triple menu by default.

As in past releases, if you like launchers or desktop docks, the Plank dock is already installed, although not activated. It can easily be turned on by opening it from the menu. It is also just as easy to turn off: right click "quit" on it and it disappears. As desktop docks go, Plank is fairly unobtrusive and hides whenever a window touches it.

Ubuntu MATE comes with the default MATE desktop's dual panel set-up, one at the top and one at the bottom of the screen. It is straight-forward to change to a single panel, just add the top panel icons to the bottom one, including the menu button, and then delete the top panel. If you don't like the result, reset them all back to the default two-panel configuration with just one click.

The MATE desktop does not include a "large text" feature, desktop zoom or scaling control. This has been identified as an issue if you have a laptop with a small, high resolution screen, as many come with 14 inch 1920 X 1080

pixel screens these days. MATE does however have the ability to adjust system fonts at Control Center - Appearance - Fonts, and this actually solves the problem reasonably well. You will need to increase all the font sizes from the 11 point defaults to 14 or 16, and then set the default zoom in Firefox to 133%, LibreOffice Writer to 160%, plus increase the font for the Pluma text editor to 16 pt or so, and it all works fine.

APPLICATIONS

Some of the applications included with Ubuntu MATE 25.04 are:

Atril 1.26.2 PDF viewer*

Caja 1.26.3 file manager*
Celluloid 0.27 video player*
CUPS 2.4.12 printing system
Document Scanner (Simple Scan) 46.0 optical scanner*
Engrampa 1.26.2 file archiver*
Evolution 3.56.0 email client
Eye of MATE 1.26.1 image viewer*
Firefox 137.0.2 web browser**
GDebi 0.9.5.8 package installer
GNOME Disks 46.1 disk manager*
GNOME Maps 48.1 maps
GNOME Weather 48.0 weather
Gparted 1.6.0 partition editor
GUFW 24.04.0 firewall controller*
MATE Calculator 1.26.0 calculator*
MATE Control Center 1.26.1 settings manager*
MATE Disk Usage Analyzer 1.26.1 (baobab) disk display*
MATE System Monitor 1.26.3



REVIEW

system resource monitor*
MATE Terminal 1.26.1 terminal emulator*
LibreOffice 25.2.2.2 office suite
Pipewire 1.2.7 audio controller
Plank 0.11.89 desktop dock*
Pluma 1.26.1 text editor*
Redshift 1.12 screen color temperature adjuster*
Rhythmbox 3.4.8 music player
Shotwell 0.32.10 photo manager
Systemd 257.4 init system
Transmission 4.0.6 bit torrent client*
Ubuntu App Center 1.0.0 package management system**
Webcamoid 9.2.3 web cam

* indicates same application version as used in Ubuntu MATE 24.10

** supplied as a snap, so version

depends on the upstream package manager

There is not much new here in the applications, either. There has been no change to the mix of applications provided and very few of them have been updated, as can be seen by the number of asterisks.

The file browser remains the MATE desktop's native Caja file manager. Caja is an earlier fork of Nautilus (now called GNOME Files) from before version 3.6 removed a lot of features in the name of simplification. Caja reinstates some of those removed features like the "up one level" button, and adds some other useful features like bulk file renaming.

Ubuntu MATE 25.04 also includes the LibreOffice office suite, complete except for the database program, LibreOffice Base. This is probably the least-used part of LibreOffice, but it can be installed if needed.

The default suite of applications provided is fairly complete and includes most of what an average desktop user would need, at least to get started. Obvious additions would be an image editor and video editor. It is probably also worth removing anything you don't use, just to reduce menu clutter, especially if you opt to use the GNOME 2 triple menu.

CONCLUSIONS

Who likes Ubuntu MATE? Users who thought GNOME 2 was the pinnacle of the Linux desktop, plus anyone else looking for a simple, lightweight distribution with no glitz or bling. Ubuntu MATE is certainly quick to learn and easy to use.

Ubuntu MATE 25.04 is a good, solid release with no obvious vices. There is probably no reason for

most users to install it over the last LTS version, unless they are dual-booting with an encrypted Windows installation or need the latest hardware support that Linux kernel 6.14 brings.

I'll be reviewing the last interim release in this cycle, Ubuntu MATE 25.10, due out on 9 October 2025, and then we'll take a look at the next LTS version, 26.04 LTS, when it arrives in April, 2026.

EXTERNAL LINKS

Official website:

<https://ubuntu-mate.org/>



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



LETTERS

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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.

People often point to the older generation as computer illiterate, but I think that it is not a generational thing. I have a friend who asked if I would assist one of his friends with a laptop issue (about fifteen years younger than me). Apparently the laptop has been in three times and still had the same issue. Overheating in a laptop, no matter how advanced the unit is, can cause issues. Though

this was Windows 11, which I try to avoid like the plague, I decided to put a lot of effort into the problem, as I am currently unemployed, due to bent laws, in the hope that this business owner may put in a good word for me somewhere. I looked at the laptop, ran stress tests in Windows and with Ubuntu, but it handled it like a champ. The fan and heatsink were new, so dust was not an issue. After a few hours of testing I was stumped. This was a beast of a laptop and I could not get it to overheat or misbehave. Every test I threw at it, it passed. I did not have infinite time to look and he came to collect the laptop. He was annoyed with me for taking up so much time and not finding the issue. Just as I was leaving and this rude guy ignored my good-bye, I noticed that he had put the laptop on a cooling stand. The odd thing was, that he had it back-to-front. On closer inspection, I saw he somehow managed to get the “stopper” (the elongated part that prevents your laptop from sliding off the pad) wedged between the laptop body and the laptop screen. Sure, it is a “creative solution” and

“thinking out of the box” and it won’t go anywhere, but it also blocks his laptop’s exhaust vent from expelling the hot air...

Q : I have had no issues with my Dell laptop until Ubuntu started updating my firmware all the time. Now my laptop will just randomly freeze and the only way forward is to power it off - by holding in the power button. It’s getting as bad as Windows, is there a way to stop it? I’m getting annoyed now, as my computing experience is being ruined by junk minor updates.

A : If you wish to wait for the firmware updates to stabilize, I suggest going into your Dell BIOS/UEFI settings and removing the boot option that says “Linux Firmware”. That way, even if the update is downloaded it cannot install. I suggest looking at the Dell driver updates page to see what the firmware “fixes”. There may even be a fix for the “freezing”? You can then enable it again when you want to update the firmware.

Q : I moved to Ubuntu 24.04 when windows 10 was forcing updates on me every day and rebooting when I could not afford to. Now it seems Ubuntu is doing the same. I see, “Updated software is available for your computer. Do you want to install it now?” more than Windows 10!! Everything I have tried to mitigate this, has met with failure. What, in your opinion, is the best way to give it the finger?

A : Thanks for the laugh; I feel you. What I have done is install something called “OpenSnitch” and you can block the apt and snap requests until you feel you have time to update. It will create rules and you can delete the rules or pause the application, when you want to update, putting the power back in your hands.

Q : I got a new laptop for my birthday and I made some space for Ubuntu. It installed fine. Everything is better than my 2008 laptop, just one hiccup. I’m dual-booting Ubuntu, but I don’t see my

GRUB menu, is that normal?

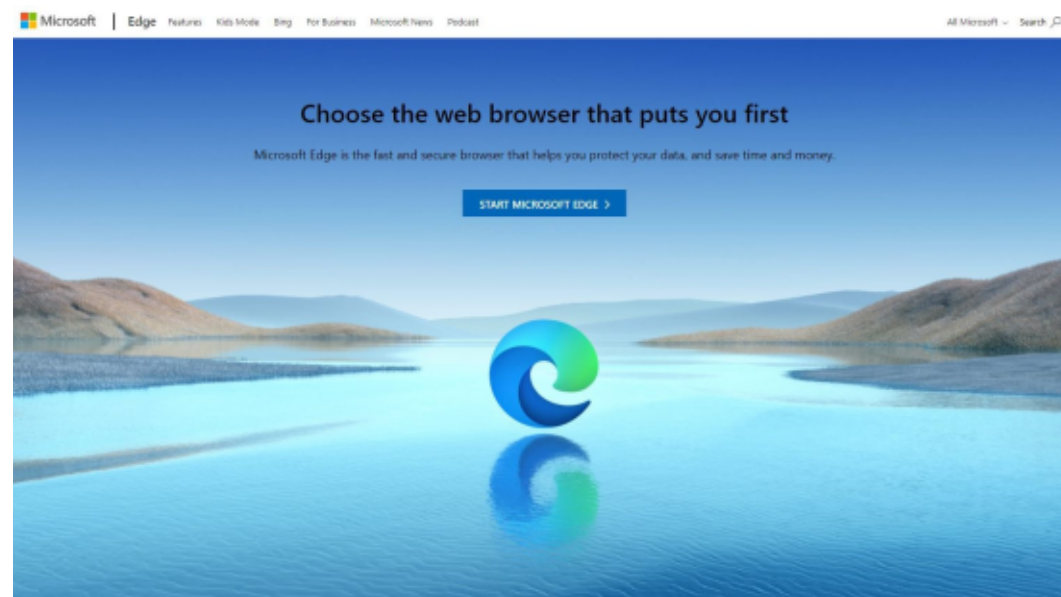
A : I'm going to go out on a limb here and guess the old laptop had spinning rust and the new laptop has a fast SSD? You can always extend the grub-timeout if you wish for it to remain on the screen longer? Other than that, sometimes the newer UEFI's have image overlays and "signs of life" that produce a logo and may overwrite it. You may need to turn it off (or on!) depending on your laptop.

Q : Can you help me as to what would be a good password for an encrypted partition on my drive please? I tend to forget passwords and my password manager is in my OS, so it does not help before it is booted.

A : Not really? But, may I suggest a rhyme, say old mcdonald had a farm, and you leave out the "o's" or "d's" use only the first letter from each word of your National Anthem, something you cannot forget. Personally, I used a CD key from a game, including the dashes, where I never remember it, but it is always on hand via the CD cover?

(And backed up on another computer with my other CD-keys). If you want to get cryptic, try: https://github.com/exarobibliologist/Password_Chart (something you can print out!)

Q : I decided to breathe new life into my ageing PC by replacing the Pentium G CPU with a second-hand i5 CPU. It already had 32GB of memory. It worked great with Windows 7, but Windows 11 won't work. Can I just stick a CD in like Windows? How do I make the switch? What version do I get? Our payment kiosk at work uses Ubuntu, so I based my decision off that.



A : I suggest just plopping in head first. Watch a few installation videos on Youtube and take the plunge, with the LTS release. If you are asking about "flavours", I suggest Kubuntu, if you like Windows, otherwise go out of your comfort zone with Gnome. Of course there are others, but the journey of a thousand miles, starts with one step.

Q : I'm having second thoughts here, I have installed Ubuntu on my server and I want to buy 2 drives to go in there. The problem is that I've been having so many issues with drive failures, I think that NTFS is the problem. What drives should I get that are both supported by

Ubuntu and for media access with Volumio?

A : Seriously, If you are not using Microsoft Windows, there is no benefit to using NTFS. If the drives will be internal, consider a journalling filesystem. Drives are universally compatible with Linux, I cannot ever recall one not working. As to drive failures, if it is mechanical, try not to move it while powered. Do not bump it, do not drop it, keep it cool, and it should last a long time.

Q : I'm so over this Edge horse**** I have decided to give Ubuntu a go. PC is a no-name build with an RX580 and 16Gb RAM and 2 x 256GB SSDs. It is smooth so far, other than this: <removed> <removed> <removed>, and it just bounces around like that. I have this in the driver section - <removed>

A : You somehow turned on the desktop magnifier. Go to settings (the gear icon next to the shutdown icon, or type settings in the search, then go all the way down to "Accessibility", then find "Zoom" on the right, and turn off "Desktop Zoom" slider.

Q : What is exfat, and why can't I read an old USB drive? Granted, the USB has been through the washing before, but it has always worked. But now I get a exfat error in Ubuntu 24.04. How do I solve this?

A : First, water causes rust, so my first instinct is to tell you to spray WD-40 or whatever passes for water displacement spray, where you are, into the USB thumb drive. It will also help prevent tarnish. Then I suggest using the gnome-disks application to scan and fix the filesystem. (You may need to do it a few times). Good luck!



Q : My machine is Ubuntu 24.10 Intel. I am following an online course. Question is how to start the command line interface in Administration mode? Normal shortcut keys for this ctrl, alt, t?

A : The quick answer is you don't. Ubuntu is not Windows. You can open the terminal and use sudo to get admin rights for the command you need to run. For example: sudo apt update -gives the 'apt' command "administrator" rights.

Q : I use Ubuntu 24.10 with Firefox snap and I listen to Youtube to fall asleep almost every night. My current plan is split into

day and night allocation, and even though the video is rather static, just rain on glass, for instance, I burn through my night allocation quite quickly. Is there something like glasswire that I can use to measure my usage when I sleep? I'm not saying that I'm hacked, just that I use a lot of data for static graphics channels, like lofi.

A : You can try btop – the "net" section should give you totals. For real time, you can use nethogs, so see what is eating your bandwidth. That said, even so-called static pages on YouTube can have a real impact on bandwidth when played in HD. My suggestion is to use 'yt-dlp' like so: yt-dlp -F <url> before you plunge in, as the third column will give you the audio & video size.



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.



Homepage: None?

Version 1.0.6.0 (Linux) : 28 February 2024

Price: \$5 USD

Blurb: *"Assemble a party, explore the dungeon, fight your way through hordes of monsters, and defeat the Demon Lord in this brutal dungeon crawler. Are you up to the challenge?"*

OK, I could not find Grave Robber Foundation, it seems to be an indie game studio, as everything points to Steam, but the developer and the publisher are the same, so I cannot tell you too much about them, other than I have never heard of any of their other four games. I missed the 1.0 of this game last year, as I generally avoid party-based games, but due to the insistence of Grant and Roger wanting me to give it a once-over, I buckled. (Thank you for the copy!)

With a name like Demon Lord Reincarnation, it is no wonder you

need 666MB of drive space to install it. I was never really a fan of Wizardry from Sir-Tech, or Legend of Grimrock, but I liked some of the single player ones in the genre, like Barony. I don't like thinking for other people, I suppose, hahaha. This is not like Legend of Grimrock with high quality gameplay and really good looking environments; the developer here went with the opposite aesthetic, low budget and monochrome, to make it feel like something you would play on your NES (I suppose?). This does not mean that it is bad, not by a long shot! The first thing that came to mind was Return of the Obra Din, and the second thing I noticed, which was a breath of fresh air, was

that the standard HUD for this type of game was not there. Just that alone peaked my interest. I like it when indie games try something new.

Since I started talking about graphics, let's talk about the visuals. My first impression was awww... and then I moved to, and through, the first door. Technically it is amazing, because first impressions can be deceiving! Yes, at first I thought this may be an e-ink version of Daggerfall (which is free on Steam, btw), but it is not; this is actually high-resolution emulating low-resolution, tricking your brain. You see, with a title like the return of the Obra Din, it mimicked a very

old apple computer, something like the apple II, making sure you saw the pixels in the shading. This game mimics that style, but in HD, and is continuous and smooth instead of flip screen. The only thing that let me down a bit, was that you do not see anyone on your screen. What I mean by that is that you will enter an empty room, and suddenly your screen will change to a portrait of someone, and you will be in the chat option or combat option. This means that you literally need to enter every small room, just in case it contains an encounter, and while I am all for exploring, I have FOMO in games like these, so it really works my nerves. On top of that, the scenery does not change much, so you will get lost. A definite oversight on the developer's part. There are also some really dark corridors with no way to cast a light spell or take a torch from a wall.

The music is also something you can take note of. The first tune, "bonfire", is just what I expected, a sort of low-budget church bells-sounding thing to go with the title of the game. The mood suddenly



changes to an amazing fallout-style atmospheric tune in the second tune, “camp”. The third one, “entering the maze”, will fill you with dread. I’m not going to lie, but I like the emotional rollercoaster ride the music provides. The upbeat drum beat, and the organ music of “monster massacre”, had me expectant and tense immediately. The melodic industrial sounds of “confusion” gave the game a more futuristic feel, well for me at least. You may read something else into it. I can definitely recommend the soundtrack to anyone wanting to sit in a dark room with your eyes closed and letting your mind wander. There are a few tracks that are short (by this I mean like 30 second tracks) in the mix. Some, like “Trial of Heroes” will have that NES-style music, but with a modern

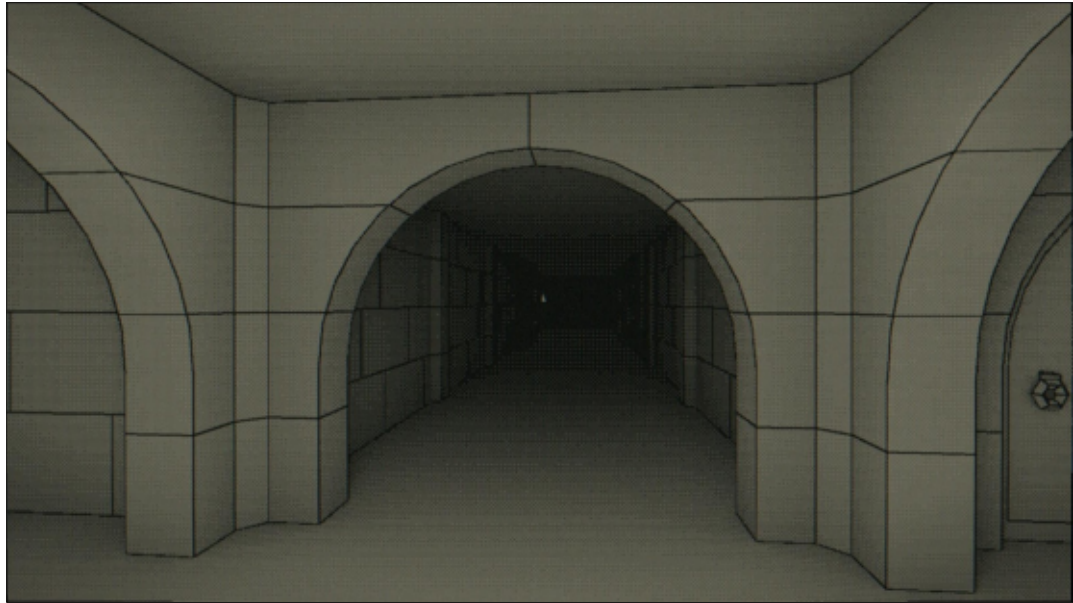
take, so if it was nostalgia you were looking for, they catered for you. The downside is that every combat encounter uses the same tune, which is noticeable.

The game play is where I feel like there is room for improvement. You see, the combat system is like a JRPG, the combat HUD is simple and similar to old console titles, and you have that turn-based, I go, you go, system. It is easy to pick up, lowering the bar for newbie players of the genre (but not easy). A game map is conspicuously missing. I did break out the grid paper, until I found the Steam community dedicated to mapping the game (<https://steamcommunity.com/sharedfiles/filedetails/?id=30098326763>). You see, rather than procedurally generated

hoodoo, this was lovingly hand-crafted. Much of the dungeon looks the same (which is a shame!), so you cannot really remember where you were, making mapping a necessity. I would have preferred a bit more decorations, like vines or roots on the walls. As I told you earlier, the game feels like a JRPG in the fight scenes, but unlike the other games in the genre, you do not have two guys in front and two in the back, usually two tanks and two ranged, but here everyone is in a line, with enemies usually attacking mages first. Ouch. Your options are fight, defend, repeat or escape.

The game also stuck to the usual Wizardry tropes with the enemies; you will run into “the usual” like

goblins or zombies, but breaks from the recipe again with no character management or equipment management. I like finding treasure, my inner treasure goblin was crying at the windows, banging on the walls, but nothing. You may come across a chest that may, or may not, be trapped, with something that increases or decreases a character's stats, but it just flatly changes the number. Again, sparking no joy. No gold or jewels or toilet paper, just a whole chest containing one vial to restore one character's health. C’mon developers, I need some dopamine! The same goes for leveling, your characters level flatly, level one he has 32 hit points, level two he has 61 hit points. This does not spark



joy.

Did I mention the story? No? Well it may not even be there, that's how shallow and generic it is. I will not waste your precious time with it.

MY IMPRESSION

The game is an indie game and only costs a fiver, so I can forgive a

lot of things. The game looks gorgeous and plays very smoothly. The art is great, the music bumping. The enemies feel unimaginative, the combat feels boring, the dungeon feels soulless as it is empty from your point of view, and the treasure is just, meh.

The Legend of Grimrock is just two dollars more, with enemies you can see, inventory management, food, torches, and lots of loot, just

saying...

If you feel we treated the game unfairly:

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

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

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