



Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #227 - March 2026



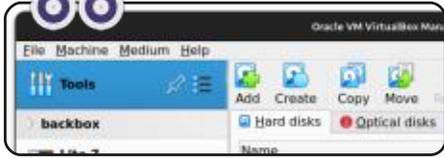
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UBUNTU BUDGIE 25.10 AND MXLINUX REVIEWED

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HowTo



Resize VB Disks p.30



Godot Intro p.32



Latex p.35



... p.XX



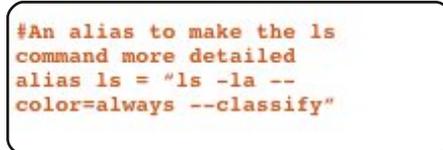
Inkscape p.37

Graphics



Full Circle

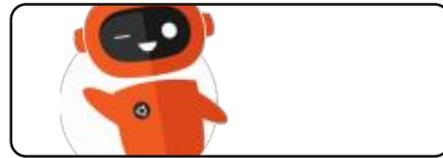
THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY



Command & Conquer p.28



... p.XX



Ubuntu Devices p.XX



The Daily Waddle p.41



My Opinion p.47



Letters p.59



Q&A p.60



Review p.XX



Linux News p.04



Bodhi Corner p.43



Review p.50



Review p.55



Ubuntu Games p.63



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WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

Once again we bring you some Latex, Godot, Inkscape and show you how to resize a VirtualBox disk. I'm running critically low on HowTo articles. So, please, if you can spare a few minutes to write up a short article on how to do something, I'd be much appreciated. The future of the magazine rests with you, the readers, to submit articles that help fill the magazine.

Elsewhere, we have a review of Ubuntu Budgie 25.10 and MxLinux and, of course, a game. This time, The Wandering Village.

We've also had good feedback on the quickie article that Erik did on LibreOffice. Check the Letters page for an example and to see my response directing you to the Special Editions page on the main FCM site. There's a Special Edition on there for the LibreOffice series we had many moons ago.

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.

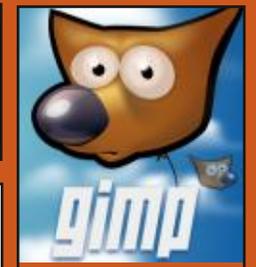
All the best to you and yours for 2026!

Ronnie

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GRAM 1.0 RELEASED

<https://lwn.net/Articles/1060912/>

Version 1.0 of Gram, an "opinionated fork of the Zed code editor", has been released. Gram removes telemetry, AI features, collaboration features, and more. It adds built-in documentation, support for additional languages, and tab-completion features similar to the Supertab plugin for Vim. The mission statement for the project explains:

At first, I tried to build some other efforts I found online to make Zed work without the AI features just so I could check it out, but didn't manage to get them to work. At some point, the curiosity turned

into spite. I became determined to not only get the editor to run without all of the misfeatures, but to make it a full-blown fork of the project. Independent of corporate control, in the spirit of Vim and the late Bram Moolenaar who could have added subscription fees and abusive license agreements had he so wanted, but instead gave his work as a gift to the world and asked only for donations to a good cause close to his heart in return.

This is the result. Feel free to build it and see if it works for you. There is no license agreement or subscription beyond the open source license of the code (GPLv3). It is yours now, to do with as you please.

According to a blog post on the site, the plan for the editor is to

diverge from Zed and proceed slowly.

NITRUX 6.0 RELEASED WITH LINUX 6.19, NEW LOGIN SCREEN, RESCUE MODE, AND MORE

<https://9to5linux.com/nitrox-6-0-released-with-linux-6-19-new-login-screen-rescue-mode-and-more>

Nitrox developer Uri Herrera announced today the release of Nitrox 6.0, a major update to this Debian-based, systemd-free, and immutable GNU/Linux distribution.

Powered by the Linux 6.19 kernel series with CachyOS patches,

t ships with the Hyprland 0.53.3 dynamic tiling Wayland compositor by default, which includes updated components like Hypr utilities, Hyprlock, Hyprpaper, Hypridle, and Hyprsysteminfo, as well as updated desktop configuration.

Nitrox 6.0 also introduces a Wayland-native login screen called QMLGreet, a QML-based, Wayland-native on-screen display for keyboard shortcuts and system notifications called NudgeOSD, and a hypervisor orchestration utility for Nitrox called VxM.

The Nitrox Update Tool System (NUTS) system upgrade utility has been revamped as well to use atomic updates for transaction integrity, XFS support for compressed system snapshots and offline rollbacks, and cryptographically verified metadata and PolicyKit for enhanced security.

Of course, several bugs were addressed as well, and many components have been updated to their latest release. Check out the release announcement page for



DistroWatch.com

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

more details. Downloads as live ISO images are available for 64-bit machines, as separate flavors for Intel/AMD and NVIDIA systems.

Pop!_OS 22.04 LTS Users Can Now Officially Upgrade to Pop!_OS 24.04 LTS

https://linuxiac.com/pop_os-22-04-lts-users-can-now-officially-upgrade-to-pop_os-24-04-lts/

Systems running Pop!_OS 22.04 LTS have received an upgrade notification. After installing updates, users can start the process in Settings > OS Upgrade & Recovery, as the upgrade preserves user files and most settings during the transition.

Of course, the main change for 22.04 users is that the upgrade replaces the old GNOME-based desktop used in earlier versions with COSMIC 1.0.8, System76's new desktop environment written in Rust.

It introduces a completely

redesigned workflow centered on window tiling, flexible workspaces, and layout customization. Tiling can be enabled or disabled from the panel and supports keyboard and mouse interaction. Windows can be rearranged with visual placement hints, stacked into tabbed groups, or snapped to predefined positions on screen.

Moreover, users can arrange workspaces horizontally or vertically, pin them to prevent removal, or span them across multiple displays. Importantly, workspace layouts and settings persist across reboots, allowing tiled and pinned configurations to remain unchanged after restarting.

In 24.04 LTS, multi-display support has also been improved. Displays are automatically scaled based on pixel density, and configurations are restored when reconnecting previously used monitors. If a display is unplugged, windows from that display are moved to a new workspace on the remaining screens.

Regarding customization, users can configure panel and dock layouts, place them on any screen edge, and add applets to expand

functionality. Theme colors can be adjusted directly from the settings interface using built-in color pickers.

The upgrade also introduces a whole new set of core applications designed for COSMIC. These include COSMIC Files, COSMIC Settings, COSMIC Store, COSMIC Terminal, COSMIC Text Editor, COSMIC Media Player, and COSMIC Screenshot.

BUNSENLABS CARBON KEEPS THE CRUNCHBANG FLAME ALIVE WITH DEBIAN 13

https://www.theregister.com/2026/03/03/bunsenlabs_carbon/

BunsenLabs Linux is a lightweight, Debian-based distro forked from CrunchBang, and seven months after Debian 13 "Trixie" arrived, the project has released its latest version, dubbed Carbon.

This version replaces multiple core components of the

BunsenLabs' characteristic and slightly idiosyncratic setup with alternatives that can work on both X11 and the Wayland-based labwc compositor. For now, this version still defaults to Openbox on X.org, but the maintainers are making things ready for a transition to Wayland.

BunsenLabs Linux is the original "community continuation" of the lightweight CrunchBang Linux distro. BunsenLabs was announced in February 2015, just days after CrunchBang called it quits.

ORIGAMI LINUX LEAVES BETA WITH FIRST STABLE SNAPSHOT RELEASE 2026.03

<https://linuxiac.com/origami-linux-leaves-beta-with-first-stable-snapshot-release-2026-03/>

Origami Linux, an immutable distro built on Fedora Atomic with COSMIC as the default desktop, has officially left beta, shipping v2026.03 as the distribution's first stable release

and marking the start of a new release model.

Until now, Origami Linux relied on continuously updated installation images generated from its automated build pipeline. With the project now considered stable, the developers are introducing a rolling snapshot release model, where periodically published ISOs represent tested points in time for new installations.

With this approach, version numbers now use a Year.Month format. Existing users do not need to reinstall or take special upgrade steps. Anyone running the latest updates is already on the 2026.03 state.

At its foundation is a Fedora 43 Atomic base, providing an immutable operating system where the core system image is protected from accidental modification. In the 2026.03 release, users will find the latest COSMIC Desktop 1.0.8.

The distribution also ships with a performance-focused kernel. Origami Linux 2026.03 includes the CachyOS 6.19.3 kernel compiled with full Link-Time Optimization, enabling aggressive performance

tuning and improved scheduling for a more responsive desktop experience.

According to the developers, the goal is to combine the stability of immutable operating systems with the freshness of rolling releases. With the beta phase now behind it, Origami Linux enters what the team calls its “stable era.” The new 2026.03 snapshot ISO is available for download from the project’s website.

LINUX MINT READY WITH ITS WAYLAND-COMPATIBLE CINNAMON SCREENSAVER

<https://www.phoronix.com/news/Linux-Mint-Wayland-Screensaver>

Linux Mint developers recently outlined their work on developing a new Wayland-compatible screensaver for use with their Cinnamon desktop environment. Linux Mint developers announced today that their new screensaver solution is ready for use.

Linux Mint developers

announced in their monthly development recap that their new Wayland-compatible screensaver is ready. This new screensaver works on Wayland, provides a better experience between the desktop and screensaver, and is built into Cinnamon itself. There is a native look and smooth animation with this new solution and should nicely work with both X.Org and Wayland environments.

More details on this new Cinnamon screensaver via the February monthly recap. Linux Mint developers have also added a dedicated sensors area to their System Repots tool.

GNOME 50 RELEASE CANDIDATE ARRIVES WITH HDR SCREEN SHARING SUPPORT

<https://9to5linux.com/gnome-50-release-candidate-arrives-with-hdr-screen-sharing-support>

The GNOME Project released today the RC (Release Candidate) version of the upcoming

GNOME 50 desktop environment series, scheduled for release later this month on March 18th, 2026.

The GNOME 50 Release Candidate introduces several notable changes, including HDR screen sharing support, enhanced performance with the NVIDIA graphics driver, an “sdr-native” color mode, support for wp-color-management v2, and improved support for logind inhibitors in system actions.

This release also changes the remote desktop plumbing to accept a hostname, so that it can correctly communicate this information to PAM and wtmp/utmp/btmp, adds arrow key navigation in the GNOME Calendar’s Month view, and adds a Primary Sim Slot setting in Settings > WWAN.

GNOME Maps received support for displaying place types (bus stops, railway stations, etc.) when selecting a place from a public transit itinerary and support for displaying localized results for public transit itineraries from Transitous/MOTIS when available in the upstream timetable feeds.

GNOME Remote Desktop got

explicit DMA buffer synchronization and zero-copy Vulkan and VA-API rendering by default, while GNOME Software now remembers its window size between app restarts and lets you remove Flatpak remotes from the system installation.

The Orca screen reader has been updated as well with a new "Say All" option to only speak displayed text, which makes reading a long web page smoother, a new option to read chat room messages from the active room when in any application, and support for using GSettings.

Among other noteworthy changes, the GNOME 50 Release Candidate disables tone mapping with HDR in the Mutter window and composite manager, and hides the availability of the long-anticipated session save/restore support, as it has been postponed to a future GNOME release.

REDOX OS GETS VULKAN & NODE.JS WORKING ON THIS RUST-BASED OPEN-SOURCE OS

<https://www.phoronix.com/news/Redox-OS-February>

There were some fairly exciting improvements made by the Redox OS developers over the course of February. They have the Vulkan API working on Redox OS for the first time along with more COSMIC desktop software and even Node.js.

The Redox OS project today published a blog post highlighting their accomplishments for the past month. Their February highlights include:

- The COSMIC compositor "cosmic-comp" is now able to run on Redox OS as a Winit window for proof of concept purposes. Input processing not yet working but it's a step toward getting the COSMIC compositor running on this Rust-based OS.
- COSMIC Settings is now running on Redox OS.
- There is initial Vulkan support on Redox OS now by using the CPU-

based Lavapipe driver for software rendering. This is the first time having Vulkan on Redox OS albeit not with any hardware driver support yet.

- Node.js is now running on Redox OS.
- Various package manager improvements for Redox OS.
- Multi-threading is now more reliable on Redox OS.
- An on-screen display performance monitor is being worked on for this open-source OS.
- Various kernel and driver improvements as well as ongoing work to its Relibc libc implementation.

More details on February's changes to Redox OS via the Redox-OS.org blog.

LINUX 7.1 TO PREVENT INTEL NPUS FROM BEING EXHAUSTED BY SINGLE PROGRAMS

<https://www.phoronix.com/news/Intel-NPU-Restrictions-Linux-71>

The Intel IVPU accelerator driver will be introducing limits on Intel NPU resource usage by non-root user-space programs beginning with the Linux 7.1 kernel.

In order to avoid situations where a single program could occupy all Intel NPU resources and deprive other programs or other users access to the Intel neural processing unit, the IVPU driver is setting default limits for non-root users. Root user-space programs will still be able to occupy all 128 available contexts and 255 doorbells for the Intel NPUs while non-root user-space will be limited to half the resources: 64 contexts and 127 doorbells.

The intent is to avoid situations of single user-space programs monopolizing all available NPU resources, i.e. NPU denial of service by other apps wanting to leverage

AI acceleration. Granted, so far aside from OpenVINO I am not aware of any prominent users of Intel NPUs under Linux. It'd be great if there was more robust Intel NPU software support under Linux already but there really is not. At least though for when there is more broad NPU usage under Linux for both Intel NPUs and AMD Ryzen AI NPUs, the IVPU driver is ready to make sure individual apps aren't stealing all the resources.

The IVPU safeguard was sent in via today's `drm-misc-next` pull request of new DRM/accelerator driver changes queuing ahead of next month's Linux 7.1 merge window.

LIBAVIF 1.4 RELEASED FOR ADVANCING AVIF IMAGE SUPPORT

<https://www.phoronix.com/news/libavif-1.4-Released>

The Alliance For Open Media on Wednesday released libavif 1.4, the latest version of this reference library for encoding and decoding AV1 Image File Format (AVIF)

content.

This official AVIF encode/decode library continues being rounded out with more features and improvements. In libavif 1.4 there is now support for converting JPEG files with Apple-style gain maps, supporting some Sample Transform schemes defined by the AVIF v1.2 specification, support for dealing with PNG cLCP chunks, support reading Sample-Transform-based 16-bit AVIF files, and various other improvements.

The AVIF encoder "avifenc" is also now able to read PNG and JPEG files from the standard input plus there are a few other options added.

Downloads and more details on the updated libavif 1.4 release via GitHub.

HAIKU OS PULLS IN WiFi DRIVER UPDATES FROM OPENBSD, OTHER IMPROVEMENTS IN FEBRUARY

<https://www.phoronix.com/news/Haiku-OS-February-2026>

Haiku open-source operating system project had a number of driver improvements and a variety of other enhancements.

The project published their February 2026 status report. Some of the interesting improvements made to this open-source OS in the past few weeks include:

- Synchronizing most of the OpenBSD WiFi drivers from the upstream code, which yields a number of bug fixes.
- The VirtIO block driver has been disabled since it's been broken in at least multi-threaded use for years.
- Adding missing parameters to the NVMe driver's feature management API.
- Fixing a crash in the NTFS driver and another separate crash in the FAT driver.
- Support for reading Zstd-compressed files in the Btrfs file-

system driver.

- A rework to the `pthread_barrier` code means less system calls and fixes some race conditions and a hang that would happen in some OpenGL software.

- An improvement to how TLB invalidations are handled on x86.

Lastly, Haiku developers continue inching toward the Haiku R1 Beta 6 release. They still are working through some regressions before they start working on that next long-anticipated beta release.

TUXEDO INFINITYBOOK MAX 16 LINUX LAPTOP NOW AVAILABLE WITH AMD RYZEN AI 300

<https://9to5linux.com/tuxedo-infinitybook-max-16-linux-laptop-now-available-with-amd-ryzen-ai-300>

TUXEDO InfinityBook Max 16 Gen10 was announced on January 7th, 2026, with the Intel Core Ultra 9 275HX processor, but, at the request of users, it's now also available with three AMD CPUs to

choose from, including AMD Ryzen AI 7 350, AMD Ryzen AI 9 365, and AMD Ryzen AI 9 HX 370.

These AMD Ryzen AI can be combined with either the NVIDIA GeForce RTX 5060 or NVIDIA GeForce RTX 5070 GPUs. The rest of the specs remain the same, including up to 96 GB DDR5 5600MHz RAM, up to 16TB NVMe PCIe 4.0 SSD storage, and a 99 Wh Lithium polymer battery.

TUXEDO InfinityBook Max 16 Gen10 features an OLED display, which takes image quality to the next level with brilliant, high-contrast color reproduction, 2560×1600 pixels resolution, 500 nits of brightness, 100% DCI-P3 color gamut, and up to 300Hz refresh rate for high FPS gaming.

As expected, the new InfinityBook Max 16 Gen10 laptop comes pre-installed with TUXEDO Computers' in-house built TUXEDO OS operating system featuring the latest KDE Plasma desktop environment, but you can also choose to have it shipped with Ubuntu 24.04 LTS (Noble Numbat) preinstalled.

US STATE LAWS PUSH AGE CHECKS INTO THE OPERATING SYSTEM

https://www.theregister.com/2026/03/06/os_age_verification/

Many web sites, social media services, and other platforms require age verification on the theory that it will protect kids from seeing inappropriate content. But now some US states want to require the operating system itself to check your age and that could cause big headaches for FOSS vendors.

In brief, California's Assembly Bill No. 1043 says:

Beginning January 1, 2027, the bill would require, among other things related to age verification with respect to software applications, an operating system provider to provide an accessible interface at account setup that requires an account holder to indicate the birth date, age, or both, of the user of that device.

To summarize: OS vendors must collect and store the age or date of

birth for each user account, and the OS must inform app stores. In a way that is not anti-competitive, of course. Yay, capitalism.

It's not alone. Colorado's Senate Bill 26-051 requires OS vendors to collect and store age brackets for users, and tell app stores if they're underage – and developers must check for it. If you fail to do this negligently, there's a \$2,500 fine; if you do so intentionally, the fine is \$7,500.

New York Senate Bill S8102A goes further. It "requires manufacturers of internet-enabled devices to conduct age assurance" to check all users' ages, and provide this info to "all websites, online services, online applications and mobile applications" – as well as app stores.

For commercial OSes, this is not such a big problem. Recent versions of most Microsoft and Apple OSes demand some kind of online account, and Apple wants you to add a payment method too. It's a bigger problem for FOSS OSes, though. Some are taking pre-emptive action. FreeBSD distribution MidnightBSD has added a clause to its license:

California residents are not authorized to use MidnightBSD for desktop use in the state of California effective January 1, 2027.

The DB48X scientific calculator app has done similar, banning users in California next year and Colorado in 2028.

It's causing wider concern, and there are discussions in the Fedora Project as well as in the Linux Mint forums. Even the FreeDOS Project is discussing it, although since FreeDOS doesn't have user accounts, or a web browser or an app store, there's little the project is able to do. Canonical's VP of engineering, Jon Seager, said in the Ubuntu Discourse that the company has its lawyers looking into it.

System76's Carl Richell argues against the bills, saying that they're too loosely specified and wide-ranging, and also that they won't work because kids will easily circumvent them.

This isn't just a US problem. The EU also has guidelines for protecting minors that could have wider ramifications.

WINE 11.4 RELEASED WITH DIRECTSOUND PERFORMANCE IMPROVEMENTS

<https://linuxiac.com/wine-11-4-released-with-directsound-performance-improvements/>

The Wine Project, a compatibility layer that allows Linux and macOS users to run Windows applications, has released version 11.4, the fourth maintenance update in the stable 11.x series. Here are the main highlights.

A key update is the reimplementing of the SAX reader in MSXML. This change modernizes XML parsing using Microsoft's XML technologies, which are essential for many Windows applications.

Wine 11.4 also improves audio performance. Developers have optimized resampling in DirectSound, which should increase efficiency and reduce overhead when processing audio streams.

On top of that, the release lays the groundwork for implementing CFGMGR32, the Windows Configuration Manager API, which enables applications to interact with hardware and system settings. Additionally, Wine 11.4 improves Unix timezone matching.

As with previous releases, this update includes bug fixes, with 17 issues resolved, addressing problems in applications such as Roblox Studio, FL Studio installers, Native Access 2, ROMCenter, and Explorer++.

Additional fixes address Windows API issues, including process handle inheritance, TreeView rendering, C++ exception handling, and failures in functions such as FormatMessageW. The release also resolves a wine-staging build issue caused by a missing VKD3D linkage.

For more information, visit the announcement.

FREEBSD 15.1 ON TRACK WITH BETTER REALTEK WiFi & KDE DESKTOP INSTALL OPTION

<https://www.phoronix.com/news/FreeBSD-15.1-Realtek-KDE-Wins>

FreeBSD 15.1 not only has a KDE desktop option from FreeBSD, but also improved Realtek WiFi adapter support, updating of the graphics drivers from Linux, and more is on the way.

The latest FreeBSD Foundation Laptop Update has been published, outlining recent progress in this initiative. One of the most exciting results for both desktop and laptop use is adding the ability to easily install a KDE Plasma 6 desktop from the FreeBSD installer.

The KDE desktop option should be good for introduction with the FreeBSD 15.1 release, scheduled for June.

Also on track for FreeBSD 15.1 is WiFi 4 and WiFi 5 support with the Realtek RTW88 and RTW89 hardware. FreeBSD developers are still working on supporting newer

WiFi 6 hardware and the WiFi 6 standard at large in their network stack.

On the graphics driver side, they remain in the middle of porting the Linux 6.11 open-source graphics drivers over to their platform.

FreeBSD developers also continue working on better s0ix modern standby support, S4 hibernation, and other power management improvements.

The February 2026 status update on the FreeBSD laptop project can be found via GitHub.

CACHYOS MARCH 2026 RELEASE BRINGS ANIMATED INSTALLER PREVIEWS

<https://linuxiac.com/cachyos-march-2026-release-brings-animated-installer-previews/>

CachyOS has released its second update of the year, powered by the Linux kernel 6.19.

A key change is the addition of animated previews in the installer.

When selecting a desktop environment, users now see GIF or WebP clips that offer a quick visual overview of each option. Previews are available for KDE Plasma, GNOME, Niri, and COSMIC.

The desktop selection list has been reorganized, now ordered from simpler setups to more advanced configurations. The installer also improves hardware handling by automatically detecting and installing the correct CPU microcode package.

Winboat integration is another key addition. Users can now install and enable Winboat with a single click via the CachyOS Welcome application. This tool provides a Windows virtual machine within Docker, simplifying the use of Windows software alongside Linux.

System configuration tools have also been updated. In cachyos-settings, the wireless regulatory domain is now set automatically based on the user's timezone. Additionally, the bug reporting script now automatically redacts sensitive data, including IP addresses, hostnames, usernames, and MAC addresses, before submission.

There are many more fixes. For details, check the link in the show notes.

DIGIKAM 9.0 LEADING OPEN-SOURCE DIGITAL PHOTO MANAGER SOFTWARE RELEASED

<https://www.phoronix.com/news/digiKam-9.0-Released>

The KDE/Qt-aligned digiKam software for managing RAW digital photos is out today with the big digiKam 9.0 release.

The major digiKam 9.0 release brings updates to its Qt6 toolkit integration, adds RAW camera support for a number of newer digital camera models, refines its user interface in different areas, a completely rewritten file copy and transfer tool, a new survey tool, better performance, and a lot of other enhancements. Plus there are many bug fixes too.

All around the digiKam 9.0 release today is a big one. There are

a lot of great improvements in digiKam 9.0 for photographers or those casual users and hobbyists as well just wanting to manage their photos. Downloads and more details on digiKam 9.0 via digiKam.org.

MARIADB BACKS DOWN ON GALERA REMOVAL AFTER COMMUNITY OUTCRY

https://www.theregister.com/2026/03/09/mariadb_galera/

After a couple of years of relative calm, the relationship between MariaDB and its open source foundation was ruffled in February, leaving observers with a few unanswered questions.

Concern centered on Galera, a database clustering technology that the MariaDB plc company bought with Codership Oy in May last year.

In February, it appeared that the technology had been removed from future MariaDB Server versions, the open source version of MariaDB run by the MariaDB

Foundation.

Federico Razzoli, director and founder of MariaDB consultancy Vettabase, posted online that the MariaDB community has reacted to the decision because Galera is important for building highly available architectures.

"Galera dependencies are being removed even from the binaries, without a commit message or a task description. From the GitHub discussions, those who should know what is happening appear to be in the dark," he complained.

Since then, there has been a U-turn from MariaDB. It announced that MariaDB Community Server 12.3 would continue to include Galera Cluster libraries. Galera is licensed under GPLv2.

"Community feedback is an important part of MariaDB, and recently, you made your voices heard regarding the inclusion of Galera Cluster in the 12.3 series... We've thoroughly considered your feedback and decided that now is not the time for a major change," said Max Mether, co-founder and veep for product management at MariaDB Corporation.

Nonetheless, Razzoli said the community needs reassurance that the company will not make a similar move to encourage users onto MariaDB plc's proprietary code. "I would like to see a promise from [MariaDB plc] on their website, saying 'our open source software will remain open,'" he told The Register.

MariaDB was forked from MySQL, the open source relational database created in 1995, after Oracle bought then-owner Sun Microsystems in 2010. In late 2022, MariaDB plc saw a SPAC-enabled IPO, after which there were layoffs, "going concern" warnings, a sub-dollar share price, and a new management team. It also ditched flagship products. After all this, MariaDB plc was taken private, after which MariaDB Foundation CEO Kaj Arnö said "sanity" had returned to the relationship between the community and the company.

In a recent post on the Galera question, Arnö said there had been open dialogue, mutual respect, and a shared long-term interest in the MariaDB ecosystem.

MariaDB Foundation's Frederic Descamps, a community advocate, said there had been a "friendly reset" in the relationship. He added that the concerns about the future of Galera in MariaDB were a "predictable outcome of people caring about continuity."

He said the Galera library belongs with the community server packages. "A production-grade database needs a credible high-availability story, and I don't think removing long-standing capabilities from community users is the right direction. That's also why I consider 'part of the server' to include what has historically shipped as part of the community packages," he wrote in a post.

He said MariaDB plc deserved some credit for not simply forking Galera code after the acquisition, which would have been cheaper.

However, Peter Zaitsev, open source advocate and co-founder of the consultancy Percona, said the U-turn was "a good move for the community as a whole, and it shows how much impact a coordinated community can have when they

speak with one voice."

But he added that it remains unclear what would happen when a more advanced form of Galera becomes available. "What will the long-term future for Galera development as part of MariaDB be? Will the Community edition continue to get Galera updates, or will this be held in place as a way to convince people to move to other versions of MariaDB?"

FREEBSD 14.4 RELEASED FOR THOSE NOT YET READY TO MOVE TO FREEBSD 15

<https://www.phoronix.com/news/FreeBSD-14.4-Released>

FreeBSD 14.4 is out today as the latest update to the aging FreeBSD 14 series for those not yet ready to upgrade to FreeBSD 15 that debuted as stable last year.

FreeBSD 14.4 backports various improvements and fixes to the FreeBSD 14 series for those still planning to use this release branch for a while. FreeBSD 14.4 is bringing a number of application updates,

such as minor updates to OpenSSL and OpenZFS and XZ. FreeBSD 14.4 also includes new hardware support coming thanks to various device driver changes such as for supporting the Fujitsu RAID Controller SAS D3116 controllers, NVMe support on Google Compute C4 machines, Intel Ethernet E610 NIC support, and ACPI support for the Intel IWLWIFI driver.

FreeBSD 14.4 also adds the 9P file-system support for use with Bhyve VirtIO-9P devices as a nice virtualization enhancement. There is also a fix to prevent hangs on AMD systems with recent Microsoft Windows guests when using the Bhyve hypervisor.

More details on the many FreeBSD 14.4 changes via the release notes.

KITTY 0.46 TERMINAL EMULATOR RELEASED WITH SMOOTH SCROLLING AND TAB DRAGGING

<https://linuxiac.com/kitty-0-46-terminal-emulator-released-with-smooth-scrolling-and-tab-dragging/>

The terminal emulator Kitty has released version 0.46, introducing several long-requested usability improvements. One is the addition of pixel-based scrolling in the scrollbar buffer. Instead of jumping line by line, scrolling now moves smoothly at the pixel level, providing a more fluid experience.

On Linux, Kitty 0.46 introduces momentum scrolling for touchpads and touchscreens, allowing the scrollbar buffer to continue moving naturally after a gesture. On X11, high-resolution scroll events from modern touchpads are now supported.

Another notable improvement is tab management. Users can now drag tabs in the tab bar to reorder them. Tabs can also be moved to another Kitty OS window or detached to create a new window.

Window management in Kitty has also been enhanced. For the first time, users can resize terminal splits using the mouse by dragging window borders. This feature works across layout modes and can be configured using the `window_drag_tolerance` setting.

On top of that, Kitty 0.46 introduces a new command palette that lets users browse and trigger both mapped and unmapped actions. This feature provides a centralized way to discover and execute commands without needing to remember specific keybindings.

The release includes additional improvements and fixes across platforms. Users can now display configurable titles for individual Kitty windows using a window title bar. The configuration system now supports OKLCH and LAB color spaces in `kitty.conf`.

On Wayland, support has been added for the background blur extension, while macOS users gain Apple dictation input support and stability fixes.

Lastly, numerous regressions and bugs from earlier releases have been addressed. These include fixes for tab bar rendering glitches, ncurses behavior, emoji alignment on Linux, session handling issues, and problems affecting key repeat events under Wayland compositors.

SIGIL 2.7.5 OPEN-SOURCE EPUB EBOOK EDITOR IS OUT WITH NEW FEATURES AND BUG FIXES

<https://9to5linux.com/sigil-2-7-5-open-source-epub-ebook-editor-is-out-with-new-features-and-bug-fixes>

Sigil 2.7.5 has been released today for this free, open-source, and cross-platform e-book editor software designed for those who want to edit books in the EPUB format, supporting both EPUB 2 and EPUB 3.

The new Sigil release introduces several enhancements, including the addition of possible shortcut ID numbers to the ClipEditor to make assigning clip shortcuts easier, as

well as “min” and “max” buttons to the titlebar in the Reports and Spellcheck Editor to ease use on small screens.

Sigil 2.7.5 also extends the Python Function Replace feature to allow easier creation of a SigilMatch object, adds a status message when updating the Validation result, and adds a Unicode Codepoint name to the status bar for the character after the cursor in the CodeView.

Moreover, it adds a “Save Selected Data to CSV” option in the SpellcheckEditor dialog via the pop-up menu, extends the Codepoint name to include the Codepoint itself, and converts the ClipboardHistorySelector and MDViewer (GetInfo) dialogs to be non-modal.

On top of that, Sigil 2.7.5 redesigns how web cache profiles are used and cleared to improve the stability and speed of the application, sets the initial focus in the Regex Rename dialog to the regex field on launch, and adds support for opening the class definition in the Classes Used Report when using the CodeView.

Under the hood, this release

uses the latest Python 3.14.2 and Qt 6.10.2. Multiple bugs were addressed as well to improve the overall stability and reliability of the application. Check out the release notes on the project's GitHub page for more details about the changes included in this version.

You can download Sigil 2.7.5 from the same location as an AppImage bundle that you can run on any GNU/Linux distribution without installing anything, as well as binaries for macOS and Windows systems. The source tarball is also available if you fancy compiling software from sources.

OBS STUDIO 32.1 RELEASED WITH WEBRTC SIMULCAST SUPPORT

<https://www.phoronix.com/news/OBS-Studio-32.1-Released>

OBS Studio 32.1 is now available for this popular cross-platform desktop screen recording app that is also popular with game live-streaming and other uses.

Notable with OBS Studio 32.1 is

now having WebRTC Simulcast support. The obs-webrtc output now supports simulcasting for multiple quality levels to be sent over one track in WebRTC/Whip. More details on this WebRTC Simulcast support can be found via this pull request that landed the support.

OBS Studio 32.1 also introduces a new audio mixer, adds missing undo/redo actions for scene items, and adds partial support for canvases to obs-websocket.

OBS Studio 32.1 also now sets the default bitrates to 6000 kbps, enables palette for light theme audio mixer, rearranged default dock positions, and various other improvements. Downloads and more details on OBS Studio 32.1 via GitHub.

UBUNTU'S APPARMOR HIT BY SEVERAL SECURITY ISSUES - CAN YIELD LOCAL PRIVILEGE ESCALATION

<https://www.phoronix.com/news/Ubuntu-AppArmor-Security-Issues>

The AppArmor Linux kernel security module used notably by Ubuntu Linux and currently maintained by Canonical has been affected by several vulnerabilities made public today.

Qualys researchers discovered vulnerabilities within the AppArmor code of the Linux kernel they are calling CrackArmor. Some issues can lead to denial of service to kernel memory information leaks but when paired with a sudo discovery can together lead to local privilege escalation.

The Ubuntu Blog is publicizing these AppArmor security vulnerabilities and the important fixes. Updates for all affected Ubuntu Linux releases are rolling out.

There are 11 fixes listed in the tracking ticket.

Where it gets nasty is this issue for sudo that can in turn lead to privilege escalations for local users.

There was also discovered to be unsafe behavior within the su utility that can lead to the exploitation of the AppArmor vulnerabilities in host deployments. So hardening to su is also being carried out.

The sudo issue affects Ubuntu Linux releases back to Ubuntu 22.04 LTS. For the su hardening in util-linux that goes back to Ubuntu 20.04 LTS.

MESA 26.0.2 HAS PLENTY OF GRAPHICS DRIVER FIXES FROM INTEL & RADV VULKAN TO OLD R300G

<https://www.phoronix.com/news/Mesa-26.0.2-Released>

Mesa 26.0.2 is now available as the latest bi-weekly stable point release for this set of open-source graphics drivers predominantly used on Linux systems.

There is a wide assortment of different bug fixes in Mesa 26.0.2. No particularly big fixes stand out with this point release but a lot of small changes, such as:

- Several Zink OpenGL-on-Vulkan driver fixes.
- A few Intel ANV Vulkan driver fixes
- A DriConf workaround for the game No Man's Sky with the NVK NVIDIA Vulkan driver.
- The old Radeon R300g and R600g driver have seen a few minor fixes.
- The RADV Vulkan driver has seen a few fixes for a possible GPU hang, fixing copying images with different swizzle modes on SDMA7, missing L2 cache invalidation around Stream-Out on RDNA4/GFX12, and other minor fixes.
- A GLSL workaround for fixing OpenGL rendering with MDK2 HD:
- Various other minor bug fixes.

VULKAN 1.4.346 RELEASED WITH NOTABLE VK_KHR_DEVICE_ADDRESS_COMMANDS

<https://www.phoronix.com/news/Vulkan-1.4.346-Released>

Vulkan 1.4.346 was published today with one big new extension in tow: `VK_KHR_device_address_commands`.

The `VK_KHR_device_address_commands` extension is now public as a big addition worked on by the likes of AMD, Valve, NVIDIA, Collabora, Intel, LunarG, and others. It's a big one coming and allows for applications to use device addresses in place of buffer objects for most functionality.

`VK_KHR_device_address_commands` is intended to address a current Vulkan API limitation that applications / game engines end up currently needing to pass both buffer handles and device addresses. Since Vulkan 1.2 with `VK_KHR_buffer_device_address` there is the ability to obtain device

addresses for buffers, but lots of functionality still depends upon buffer objects rather than device addresses. With `VK_KHR_device_address_commands`, that gap has been addressed. `VK_KHR_device_address_commands` adds new versions of older functions to be able to accept device addresses.

Since the publishing of Vulkan 1.4.346 overnight, there are already Mesa merge requests open for the RADV driver and Intel ANV driver for supporting `VK_KHR_device_address_commands`.

Besides this big new extension, Vulkan 1.4.346 brings other minor issue corrections too. All the details via this Vulkan-Docs commit.

MARKNOTE 1.5 WYSIWYG NOTE-TAKING APP IS HERE WITH SOURCE MODE, KRUNNER PLUGIN

<https://9to5linux.com/marknote-1-5-wysiwyg-note-taking-app-is-here-with-source-mode-krunner-plugin>

KDE announced the release of Marknote 1.5, the WYSIWYG (What You See Is What You Get) note-taking application for the Linux desktop, which lets you create, edit, and organize rich text notes.

Highlights of Marknote 1.5 include a highly requested Source Mode, allowing you to bypass the rich-text WYSIWYG interface entirely by turning Marknote into a dedicated source editing app, and support for internal wiki-style links for notes with cross-notebook lookup.

Also new and highly requested is the full-text search and replace functionality, which is now available in Marknote 1.5. Moreover, the new Marknote release introduces a KRunner plugin to make it easier for Plasma users to search and

access their notes.

The new Marknote release also makes it easier to manage your growing number of notes by displaying how many notes your notebook contains, while allowing you to easily move notes between notebooks via drag and drop, and easily create templates and copy existing notes with the new “Duplicate Note” action.

On top of all that, Marknote 1.5 adds beautiful, all-new animations for note and notebook items and the search bar, brings back the smooth sidebar transitions for a dynamic navigation feel, and adds full Undo/Redo functionality to the Quick Sketch dialog.

Of course, this release also includes the usual quality-of-life improvements and bug fixes, especially to table formatting and actions to make managing grids less frustrating, as well as a Flatpak bug that prevented notes from opening via file managers.

Also fixed is an annoying issue where opening a note updated its modification timestamp. Check out the release announcement page for more details about the changes

included in Marknote 1.5, which you can download right now as a Flatpak or Snap app from Flathub and Snapcraft app stores.

Marknote is built with KDE’s Kirigami framework, and it’s designed as a markdown note management tool that promises to help you easily organize your markdown files into notebooks. By default, the application saves your rich text notes as Markdown files in the Documents folder.

GIMP 3.2 OPEN-SOURCE IMAGE EDITOR OFFICIALLY RELEASED, HERE’S WHAT’S NEW

<https://9to5linux.com/gimp-3-2-open-source-image-editor-officially-released-heres-whats-new>

The GIMP project released GIMP 3.2 today as a major update of this open-source, free, and cross-platform image editing software for GNU/Linux, macOS, and Windows.

Highlights of GIMP 3.2 include

new non-destructive layers, a new paint blend mode called Overwrite that lets you directly replace the pixels over the area you paint, a new setting in the text tool to control the direction of the text outline, and automatic matching of Linux and Windows OS themes.

Also new in GIMP 3.2 is support for using ART (AnotherRawTherapee) as a Camera Raw loader, a new option to export to Krita’s .kpl palette format, support for importing Photoshop patterns, and support for using presets from Photoshop’s Curves and Levels filters in GIMP’s Curves and Levels filters.

Another interesting feature is initial support for exporting Photoshop’s PSB (Large Document Format) files. Moreover, GIMP 3.2 adds support for importing APNG animations, support for loading multi-layer OpenEXR images, and support for importing and exporting JPEG 2000 images.

On top of that, this release introduces support for loading and exporting Sony PlayStation 1 TIM textures and images, theme colors for Brush, Font, and Palette tools, and support for importing the GIF

variant known as Jeff’s Image Format (.jif).

Among other noteworthy changes, GIMP 3.2 adds support for importing Advanced Video Coding (AVCI) still images, support for importing Nokia’s historical black and white Over-the-Air Bitmap format, and a new API to create a GimpCoordinates widget in the auto-generated dialog.

As expected, this release also improves non-destructive editing, updates the CMYK Color Selector to calculate and display the Total Ink Coverage of the selected color, and improves the Foreground Selection algorithm and the “Merge Filter” checkbox.

There are also some notable UX/UI updates in GIMP 3.2, such as support for the Palette dockable to automatically select the next swatch when you delete a previous one, as well as support for “Lock pixels” to generate an undo step in undo history.

Check out the release announcement page for more details about the changes introduced in GIMP 3.2, which you can download right now from the

official website as an AppImage bundle that you can run on virtually any GNU/Linux distribution without installing anything.

DEBIAN 13.4 RELEASED WITH SECURITY FIXES AND STABILITY UPDATES

<https://linuxiac.com/debian-13-4-released-with-security-fixes-and-stability-updates/>

Over two months after the previous 13.3 release, the Debian Project rolled out the fourth update to the stable 13 “Trixie” series, consolidating corrections for security vulnerabilities and serious functional issues across a wide range of packages.

However, if you’ve been keeping your system updated through security.debian.org, there’s not much to do with this release, because most of the fixes were already included in earlier updates. 13.4 just brings them together in one place.

Debian 13.4 delivers bug fixes for a broad set of packages,

including an HTTP/2 regression in Apache2, enhancements to Bird2 routing software, crash resolutions in Dovecot, and corrections in the dpkg package manager. The release also features updated upstream versions of MariaDB, Samba, Xen, Flatpak, OpenSSL, PostgreSQL 17, and QEMU.

Several low-level components received updates. The glibc library was refreshed from the upstream stable branch to address vulnerabilities and memory-handling issues. This update also changes the currency symbol in the Bulgarian locale to the euro and resolves bugs in optimized functions.

Additional fixes resolve security vulnerabilities in packages such as libpng, Suricata, Python libraries, SQLite, wget2, and Wireshark. Many packages were rebuilt with the updated glibc to ensure system compatibility and stability.

Moreover, the update refreshes the Debian Installer, which now includes fixes from the stable repository and uses Linux kernel 6.12.73.

In addition to package fixes,

Debian’s security team issued a large set of security advisories covering widely used applications and libraries. These include updates for Chromium, Firefox ESR, Thunderbird, OpenJDK, ImageMagick, Nginx, PostgreSQL, BIND9, and many others.

Once again, Debian 13.4 doesn’t add any new features to the “Trixie” release. It’s all about fixing bugs and addressing security issues in certain packages. If you’re already using it, simply run the command below to update your system to the latest stable version. `sudo apt update && sudo apt upgrade`

SPARKYLINUX 2026.03 TIAMAT RELEASED BASED ON DEBIAN TESTING FORKY

<https://linuxiac.com/sparkylinux-2026-03-tiamat-released-based-on-debian-testing-forky/>

SparkyLinux has published new installation images for its semi-rolling branch with the release of SparkyLinux 2026.03, code-named “Tiamat.” These updated ISOs are based on Debian Testing “Forky”

and include the latest updates from both Debian and Sparky repositories as of March 14, 2026.

Consistent with Sparky’s semi-rolling approach, this release updates the installation media without introducing a new version. Existing rolling edition users do not need to reinstall; a standard system update will provide the latest packages.

The updated images include Linux kernel 6.19.6 by default. Additional kernel versions, such as 7.0-rc3, 6.19.8, 6.18.18-LTS, and 6.12.77-LTS, are available through the Sparky repositories.

SparkyLinux 2026.03 LXQt Edition
SparkyLinux 2026.03 LXQt Edition

The release features Firefox 140.8.0 ESR and Thunderbird 140.8.0 ESR. Users seeking a newer version of Firefox can install Firefox 148 from the Sparky repositories. The distribution also includes the Calamares 3.4.2 graphical installer, as well as GCC 15 and GCC 16 base packages.

The Sparky CLI installer, sparky-installer, now offers the option to

install the 32-bit ia32 version of GRUB UEFI on 64-bit machines. The Calamares graphical installer now technically permits single-character passwords during installation, though developers recommend a strong password with a minimum length of 8 to 12 characters.

The project notes that installing SparkyLinux on UEFI systems requires an active internet connection. For these systems, the graphical Calamares installer is recommended. Installation on older hardware with a 64-bit processor and BIOS or UEFI firmware can be completed using the CLI installer with the `sudo sparky-installer` command.

SparkyLinux 2026.03 is available for amd64 systems in several editions: LXQt, KDE Plasma, MATE, Xfce, MinimalGUI with Openbox, and MinimalCLI for a text-only environment.

SUPERTUX 0.7 RELEASED WITH ENHANCED GRAPHICS, LEVEL REDESIGN

<https://www.phoronix.com/news/SuperTux-0.7-Released>

SuperTux 0.7 officially released overnight for this nostalgic open-source game now seeing its first new release since December 2021. SuperTux 0.7 brings many significant improvements for this open-source game inspired by Super Mario.

The v0.7 release announcement explains of this first new SuperTux release in more than four years:

"The SuperTux Team is pleased to announce the stable release of version 0.7.0! You may wonder what took us so long to develop another release. Over the past couple of years, we've made dozens of changes and improvements to the game, bringing it to a much more polished state. As such, this is likely one of the biggest releases since Milestone 2! Despite that, SuperTux remains the trusted run'n'jump game as you know well... but with this update, it should bring it into a

much more finishable state moving forward."

SuperTux 0.7 brings new sprites and abilities for Tux, such as slop sliding and rock rolling and crawling. SuperTux 0.7 also brings revamped graphics, a complete level design and story rework, new music, and various other in-game assets. SuperTux also now supports local multi-player mode and new gameplay mechanics.

The SuperTux 0.7 release also revives its Android port and also now provides Flatpak builds too.

Downloads and more details on SuperTux 0.7 via GitHub, including Flatpak and AppImage Linux builds.

ZIMACUBE 2 PERSONAL CLOUD NAS OPENS FOR PRE-ORDER WITH MULTIPLE CONFIGURATIONS

<https://linuxgizmos.com/zimacube-2-personal-cloud-nas-opens-for-pre-order-with-multiple-configurations/>

IceWhale has opened pre-orders for the ZimaCube 2, a compact NAS and mini server platform designed for storage, media processing, and self-hosted applications. The system is based on 12th Gen Intel processors and adds updated connectivity, expansion options, and storage flexibility compared to earlier ZimaCube systems.

The platform is offered in multiple configurations, including a standard model with an Intel Core i3-1215U processor and a Pro variant based on the Intel Core i5-1235U. A Creator Pack configuration is also available, adding a discrete GPU along with increased memory and storage capacity.

Memory support includes DDR5 SO-DIMM configurations up to

64GB, with base configurations starting at 8GB. The system includes a 256GB NVMe SSD for the operating system, with higher-capacity options depending on configuration.

Storage combines NVMe and SATA, supporting up to six 3.5-inch or 2.5-inch drives alongside multiple M.2 slots. A “7th bay” configuration provides additional NVMe capacity with up to four M.2 SSDs. RAID modes including RAID 0, 1, 5, and 6 are supported, with total capacity dependent on installed drives.

Expansion is provided through two PCIe slots, including one PCIe 4.0 x4 slot (physical x16) and one PCIe 3.0 x2 slot (physical x8). These slots support GPUs, network adapters, and storage expansion cards. The Creator Pack configuration includes a discrete GPU based on the NVIDIA RTX Pro 2000.

Connectivity includes dual 2.5GbE Ethernet ports on the standard model, while higher-end configurations add 10GbE alongside 2.5GbE. Two Thunderbolt 4 ports support up to 40 Gbps for direct-attached storage or PC

connectivity.

Additional I/O includes USB 3.0 Type-A ports, USB-C, HDMI 2.0, DisplayPort 1.4, and a 3.5 mm audio jack.

The system ships with ZimaOS Plus, a Linux-based operating system designed for personal cloud and self-hosted services.

It supports virtual machines, containers, and media server applications, enabling use cases such as file storage, media streaming, backups, and development environments.

SYSTEMD 260 DROPS SYSV INIT SUPPORT IN MAJOR CLEANUP UPDATE

<https://linuxiac.com/systemd-260-drops-sysv-init-support-in-major-cleanup-update/>

Systemd 260 has been released, bringing one of the most disruptive updates in recent cycles. It removes long-deprecated legacy components, raises baseline requirements, and introduces new

frameworks for modern Linux systems.

The most notable change is the complete removal of System V init script support. Components like `systemd-sysv-generator`, `systemd-sysv-install`, and `rc-local.service` are gone, ending compatibility with legacy init scripts. Systems and software that still rely on SysV must now provide native systemd unit files to continue working.

Systemd 260 also raises minimum requirements across the stack. The baseline Linux kernel moves to version 5.10, with newer kernels recommended for full functionality. Several core dependencies have been updated, including `glibc 2.34`, `OpenSSL 3.0`, and `Python 3.9`.

A new key addition in this release is “mstack,” a feature that allows defining overlayfs and bind mount setups using a structured directory layout. This enables services and containers to be deployed from self-contained directories that describe their runtime environment.

To support this, `systemd 260` also introduces a new `systemd-`

`mstack` command-line tool, which allows interacting with and managing `mstack` configurations directly.

Additionally, a new metrics and reporting framework is introduced. System components can expose structured data through Varlink endpoints under `/run/systemd/report/`, which can be collected using the new `systemd-report` tool in JSON format. This provides a unified way to gather system-level insights across components.

Systemd 260 also continues expanding its use of Varlink as an IPC mechanism. New capabilities include a registry for discovering services and additional Varlink counterparts for existing D-Bus methods, further integrating it across the system.

On top of that, power management methods in `logind` now return more detailed states to better represent inhibitor conditions, which may require updates in desktop environments and related tools. Other changes include new unit settings like `BindNetworkInterface=`, `MemoryTHP=`, and enhancements to user namespace handling.

Networking improvements include expanded configuration options in systemd-networkd and new integration with ModemManager, allowing direct management of cellular connections through systemd.

Finally, the release brings updates to container and image workflows. OCI image handling is improved, and new options in tools like systemd-nspawn and systemd-vmspawn align with the new mstack concept.

AGELESS LINUX EMERGES TO PROTEST OS-LEVEL AGE VERIFICATION LAWS

<https://itsfoss.com/news/ageless-linux/>

Ageless Linux is a registered operating system under the definitions established by the California Digital Age Assurance Act. We are in full, knowing, and intentional noncompliance with the age verification requirements of Cal. Civ. Code § 1798.501(a).

Ageless Linux is basically Debian with the age-verification pieces removed or avoided. The goal isn't to reinvent Linux, but to ensure that users who oppose these laws still have a distribution that does not participate in age-verification frameworks.

Ageless Linux did not stop at "Debian without age verification". Browsing the website, it seems they are more of a project that stands against age verification.

They have a dedicated page, and hopefully a database in the future, that lists the stance of various distros and organizations on the age verification issue. There is a page that lists US state laws that require operating system providers to collect age data from users.

So it's not just a distro; it's becoming a full-fledged portal documenting and opposing age-verification laws.

In addition to that, they also have an ambitious hardware project that is "designed to satisfy every element of the California Digital Age Assurance Act's regulatory

scope while deliberately refusing to comply with its requirements."

This hardware is basically a \$12 RISC-V ARM board. They have named it "Ageless Device" and the aim is to give it to children in schools.

And I'm glad they are not restricting themselves to just a distro, but are moving toward becoming a non-profit organization that educates people about the potential dangers of age verification turning into surveillance infrastructure.

BLENDER 5.1 OPEN-SOURCE 3D GRAPHICS SOFTWARE RELEASED WITH MANY NEW FEATURES

<https://9to5linux.com/blender-5-1-open-source-3d-graphics-software-released-with-many-new-features>

The Blender Foundation released Blender 5.1 as a major update of this powerful, free, open-source, and cross-platform 3D graphics software for GNU/Linux, macOS,

and Windows.

Highlights of Blender 5.1 include hardware ray-tracing enablement for AMD GPUs by default through HIP RT, improved GPU rendering performance by up to 10 percent on various benchmark scenes, and a new F-Curve modifier called "Gaussian Smooth" that allows non-destructive smoothing of F-Curves.

For Linux users, Blender 5.1 adds support for opening windows without decorations on Wayland by using the `--no-window-frame` argument, removing the dependence on the libdecor client-side decorations library for Wayland clients. Also, Blender now uses `TBB_MALLOC_PROXY` for memory allocation on Linux.

Also new in Blender 5.1 is an operator to replace the action on multiple objects, support for loop selection in the Weight Paint mode when using Vertex Selection, support for snapping to the face-center, and a new corrective flip normals boolean option in the Apply Object Transform redo panel.

Among other noteworthy changes, Blender 5.1 introduces support for lasso/box/circle

selection in the curves sculpt mode, support for snapping (Ctrl) and precision (Shift) while using Bevel, a new fill workflow for the Grease Pencil, and support for adjusting Vertex Slide settings.

On top of that, the Blender 5.1 release implements a new Mask To SDF node to compute signed distance fields, adds a new Sequencer Strip Info node, enables support for the Index Switch, Radial Tiling, Boolean, Integer, and Vector Input nodes, adds a new Font socket, and adds support for AVIF images.

For motion tracking, this release adds anamorphic coefficients to the Nuke lens distortion model, for OpenXR support, it implements a new HTJ2K lossless encoding option, and for audio output, it adds support for setting the audio bitrate to higher values than 384kb/s, up to 2048kb/s.

For Virtual Reality (VR) it revamps the Arc teleportation ray drawing and functionality, adds a new View Scale property to the VR Scene Inspection settings to allow for fine-tuning of session-specific views, and introduces a new Metal OpenXR graphics binding to enable

OpenXR support on macOS.

There's also a new "Apply to Basis" operator that applies the deformations of the selected shape keys to the basis key and then removes them, a new Raycast node that allows casting rays against the scene geometry, as well as two new light path intensity properties for global tweaking of light path contributions.

There are also many under-the-hood changes to make the evaluation performance of the animation system faster, improve font filling for 3D text object the Blender Foundation released Blender 5.1 as a major update of this powerful, free, open-source, and cross-platform 3D graphics software for GNU/Linux, macOS, and Windows.

Last but not least, Blender 5.1 adds a performance timing statistics overlay for the 3D viewport, adds an edge opacity slider in the UV editor to match the face opacity slider, adds transparency evaluation for the Shader To RGB node, and brings back the lookdev HDRI view space lighting option.

FEDORA ASAHI REMIX 43 IS NOW AVAILABLE

<https://fedoramagazine.org/fedora-asahi-remix-43-is-now-available/>

Fedora Asahi Remix is developed in close collaboration with the Fedora Asahi SIG and the Asahi Linux project. This release incorporates all the exciting improvements brought by Fedora Linux 43. Notably, package management is significantly upgraded with RPM 6.0 and the new DNF5 backend for PackageKit for Plasma Discover and GNOME Software ahead of Fedora Linux 44. It also continues to provide extensive device support. This includes newly added support for the Mac Pro, microphones in M2 Pro/Max MacBooks, and 120Hz refresh rate for the built-in displays for MacBook Pro 14/16 models.

Fedora Asahi Remix offers KDE Plasma 6.6 as our flagship desktop experience. It contains all of the new and exciting features brought by Fedora KDE Plasma Desktop 43. It also features a custom

Calamares-based initial setup wizard. A GNOME variant is also available, featuring GNOME 49, with both desktop variants matching what Fedora Linux offers. Fedora Asahi Remix also provides a Fedora Server variant for server workloads and other types of headless deployments. Finally, we offer a Minimal image for users that wish to build their own experience from the ground up.

You can install Fedora Asahi Remix today by following our installation guide. Existing systems running Fedora Asahi Remix 41 or 42 should be updated following the usual Fedora upgrade process. Upgrades via GNOME's Software application are unfortunately not supported. Either KDE's Plasma Discover or DNF's System Upgrade command must be used.

SAMBA 4.24 RELEASED WITH REMOTE PASSWORD MANAGEMENT SUPPORT, OTHER IMPROVEMENTS

<https://www.phoronix.com/news/Samba-4.24-Released>

Samba continues strong in 2026 for this leading open-source SMB protocol re-implementation for Microsoft Windows file and print services interoperability. Samba 4.24 brings more features, including remote password management support.

Samba 4.24 brings authentication information audit support for some attributes that are not secret but relied on for some forms of authentication. Samba 4.24 also now allows larger streams with `vfs_streams_xattr` with the likes of XFS able to handle more than 64k of extended `xattrs`. There is also support for remote password management, Kerberos PKINIT KeyTrust log-on support, KDC improvements, and improvements to the Samba tool. Samba also now has an AIO rate-limiting VFS module if wanting to rate-limit async I/O operations.

Downloads and more details on the many Samba 4.24 changes via the project site at samba.org.

GNOME 50 IS HERE, AND X11 IS FINALLY GONE

<https://itsfoss.com/news/gnome-50-release/>

GNOME is built around a Wayland-first approach, with a consistent design system through Libadwaita, a decent attempt at accessibility, and a core app suite that handles most everyday tasks without much additional configuration. Its latest release, GNOME 50, continues on that path with some major changes.

There is a decent amount packed into this release. On the shell side, there is more control over screen time limits, the top bar now shows a power mode indicator when you are not on the default profile, and a few annoyances around keyboard layouts and folder handling have been addressed.

The removal of X11 from GDM is

the change most people will have an opinion about. It was supposed to happen in GNOME 49 but got pulled back at the last minute due to a bug. GNOME 50 sees it through, and this time it is not coming back.

Accessibility also sees some attention, specifically around Orca. The screen reader gets a redesigned preferences window, global settings that no longer need to be saved on a per-app basis, and a new option for reading chat room messages.

Features that depended on X11, including XDCMP and the system-wide X server, are also gone. Desktop environments that ship their own X11 sessions can still be launched via a per-user X server, so Plasma, Xfce, and the others are not caught out by this.

The Shell picks up a mix of new features and reliability fixes. Parents can now extend screen time limits directly from the interface, and screen time tracking has been corrected to work properly when idle inhibitors are active (i.e. when apps are preventing the system from going idle).

The Files (aka Nautilus) app sees a significant round of improvements with this release. Path completion in the location bar is now case-insensitive, which is a small change that makes the experience noticeably smoother when you are typing quickly and not thinking about capitalization.

Thumbnails are now loaded through Glycin, GNOME's sandboxed image loading library, completing a change that caused missing image thumbnails for some users (including myself).

Orca gets a substantial overhaul, where the screen reader gets a redesigned preferences window that is more visually consistent with the rest of the GNOME ecosystem (it is still GTK3 tho).

More practically, all settings and commands are now global by default, meaning that you don't need to manually save settings on a per-application basis, though doing so is still possible.

This is a huge release, obviously I could spend the whole show just talking about this release.

LUCKFOX LUME BOARD FEATURES ALLWINNER T153 SoC WITH DUAL GIGABIT ETHERNET AND MIPI INTERFACES

<https://linuxgizmos.com/luckfox-lume-board-features-allwinner-t153-soc-with-dual-gigabit-ethernet-and-mipi-interfaces/>

Luckfox has introduced the Lume, a compact development board based on the Allwinner T153 industrial processor. The board combines a quad-core Arm Cortex-A7 with a RISC-V E907 core, along with dual Gigabit Ethernet, MIPI display and camera interfaces, and onboard memory and storage.

The T153 uses a heterogeneous architecture combining a quad-core Arm Cortex-A7 cluster with a dedicated RISC-V E907 microcontroller. This allows partitioning of workloads, where the Arm cores handle Linux-based applications while the RISC-V core can be used for real-time control, peripheral management, or low-

power tasks.

The platform also integrates 128MB DDR3 memory and 256MB SPI NAND flash, with additional storage available via a MicroSD card slot.

The board provides a MIPI DSI 4-lane interface for displays and a MIPI CSI 2-lane interface for cameras. The display interface supports resolutions up to 1920 × 1080 at 60 Hz.

Networking is handled through two Gigabit Ethernet ports. One port supports Power over Ethernet when used with an optional PoE module, enabling single-cable power and data configurations.

USB connectivity includes a USB Type-C port for power and programming and a USB 2.0 Type-A host port. A 40-pin GPIO header exposes common interfaces such as UART, SPI, and I2C for expansion.

The board measures approximately 68 × 55 mm and includes additional connectors such as an RTC battery header and a PoE module header. Reset and FEL buttons are also available for system control and firmware loading.

The Luckfox Lume is priced at \$20.99 for the standard version and \$25.99 for the PoE variant through the Luckfox website and distributors such as Waveshare.

There are lots of images and a ton of technical information to be found at the link in the show notes.

AGAMA 19 - A NEW BEGINNING

<https://agama-project.github.io/blog/2026/03/20/agama-19>

Version 19 of the Agama installer for openSUSE and SUSE has been released. This release includes major changes in Agama's architectural design, organization of the web interface, and more.

"We always wanted Agama to follow the schema [...] in which the core of the installer could be controlled through a consistent and simple programming interface (an API, in developers jargon). In that schema, the web-based user

interface, the command-line tools and the unattended installation are built on top of that generic API.

But previous versions of Agama were full of quirks that didn't allow us to define an API that would match our quality standards as a solid foundation to build a simple but comprehensive installer. Agama 19 represents a quite significant architectural overhaul, needed to leave all those quirks behind and to define mechanisms that can be the cornerstone for any future development."

TRUCE IN MANJARO MANAGEMENT ACHIEVED

<https://forum.manjaro.org/t/manjaro-2-0-manifesto/186171>

Members of the Manjaro Linux distribution's community have published a "Manjaro 2.0 Manifesto" that contains a list of complaints and a demand to restructure the project to provide a clear separation between the community and Manjaro as a company. The manifesto asserts that the project's leadership is not

acting in the best interests of the community, which has caused developers to leave and innovation to stagnate. It also demands a handover of the Manjaro trademark and other assets to a to-be-formed nonprofit association. The responses on the Manjaro forum showed widespread support for the manifesto; Philip Müller, project lead and CEO of the Manjaro company, largely stayed out of the discussion. However, he surfaced on March 19 to say he was ""open to serious discussions"", but only after a nonprofit had actually been set up.

WINE 11.5 RELEASE IS BIG: SYSCALL USER DISPATCH FEATURE SUPPORTED ON LINUX

<https://www.phoronix.com/news/Wine-11.5-Released>

Wine 11.5 is out as the latest bi-weekly development release for this software to run Windows games and applications on Linux and other platforms. Most exciting with Wine 11.5 is the introduction of the Syscall User Dispatch feature on Linux.

Wine's NTDLL implementation has merged support for system call emulation on Linux using Syscall User Dispatch. Syscall User Dispatch is a feature of Linux 5.11+ to allow redirecting specific non-native system calls back to user-space for handling by compatibility layers like

Wine. With Syscall User Dispatch allowing emulated system calls back to user-space, allows for better performance than alternatives and a cleaner design.

What this Syscall User Dispatch feature in Wine now means for end-users is addressing bugs like this bug report with multiple games/applications crashing on Wine due to direct use of x86_64 SYSCALL instruction. Detroit: Become Human, Red Dead Redemption 2, and Arknights: Endfield are among the known titles affected. That particular bug report was open since 2019 and now only closed by today's Wine 11.5 release.

Wine 11.5 also adds C++ support in its build system, bundled ICU libraries, VBScript compatibility fixes, and other bug fixes. 22 known bug fixes were addressed over the past two weeks.

ANTI-X 26 RELEASED AS SYSTEMD-FREE DEBIAN 13 DISTRO WITH FIVE INIT SYSTEMS

<https://linuxiac.com/antix-26-released-as-systemd-free-debian-13-distro-with-five-init-systems/>

antiX 26 has been released, bringing a new version of the lightweight, systemd-free Linux distribution based on Debian 13 "Trixie."

The first thing that immediately stands out is that this release offers five init systems, giving users a level of choice rarely seen in modern Linux distributions: runit, SysVinit, dinit, s6-rc, and s6-66, with runit being the default.

As expected, antiX 26 stays true to its systemd-free philosophy. It ships without systemd, elogind, Flatpak, or Snap, relying on alternatives such as eudev. The distro is available in two main variants: a full edition of about 2 GB and a smaller core edition around 660 MB.



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Both are offered for 64-bit and 32-bit systems. The full version includes more preinstalled applications, while the core edition provides a minimal base for customization.

The desktop experience remains lightweight, built around window managers instead of full desktop environments. IceWM is the default, with Fluxbox, JWM, and the tiling window manager herbstluftwm also available.

Under the hood, antiX 26 includes customized Linux kernel options. A 5.10 LTS kernel is available alongside a newer 6.6 kernel for 64-bit systems. The distribution integrates PipeWire and WirePlumber by default on 64-bit full installations, while 32-bit systems continue using ALSA for audio support.

The software selection covers everyday needs while staying resource-efficient. Users get LibreOffice, Firefox ESR, Claws Mail, and multimedia tools such as MPV, Celluloid, and XMMS.

antiX 26 also includes a bunch of

its in-house tools and scripts. The release ships the antiX Control Centre, snapshot and remastering tools, and utilities for managing network shares, backups, and system configuration. Additional tools like antiX Radio, antiX TV, and Finder extend functionality without adding significant overhead.

Finally, command-line users are also well served, with applications like newsboat, irssi, mcp, and rtorrent included out of the box. The distribution also provides specialized tools for remote access, voice communication, and SSH-based resource sharing via its repositories.

ELM11-FEATHER BOARD WITH 70 MHz MCU, LUA, AND HARDWARE OVERLAY SUPPORT

<https://linuxgizmos.com/elm11-feather-board-with-70-mhz-mcu-lua-and-hardware-overlay-support/>

Brisbane Silicon has unveiled the ELM11-Feather, a Feather-compatible microcontroller board

designed to run Lua natively for embedded applications. The board targets developers looking for a scriptable platform with closer integration between software and configurable hardware.

The system is built around a microcontroller operating at up to 70 MHz and includes 1 MB of RAM. Programs are stored in internal flash memory, with the architecture supporting configurable hardware elements through a hardware overlay mechanism that defines CPU behavior, timers, and peripheral routing.

The board follows the standard Feather form factor, enabling compatibility with existing FeatherWing expansion boards. It supports battery-powered operation through an onboard LiPo charging circuit and includes a 3.3 V regulator capable of delivering up to 500 mA peak current.

A total of 20 general-purpose I/O pins are available, each supporting multiple interfaces including GPIO, PWM, UART, SPI, and I2C depending on configuration. Most pins provide full functionality, although some SPI-related limitations apply to

specific pins.

Additional onboard components include five user-programmable LEDs, a user pushbutton, a reset button, and a hardware watchdog.

The firmware executes Lua programs either interactively through a REPL or from scripts stored in flash memory, with a separate REPL instance available per CPU core. The runtime supports standard digital interfaces including GPIO, PWM, UART, SPI, and I2C, along with interrupt handling, timers, and watchdog functionality.

The hardware overlay system allows developers to customize low-level hardware functionality, including CPU parameters, timers, interrupt configuration, I/O buses, and communication interfaces. Custom hardware modules can be integrated into the overlay and exposed directly to the Lua scripting layer.

The ELM11-Feather is expected to launch on Crowd Supply in early May 2026 and is priced at approximately \$19.95 per unit, according to Brisbane Silicon.

BIG WIN FOR OPEN SOURCE AS GERMANY BACKS OPEN DOCUMENT FORMAT

<https://itsfoss.com/news/germany-digital-stack-mandate/>

Germany has strictly standardized its digital document requirements. The Deutschland-Stack (in Deutsch), the country's new sovereign digital infrastructure framework, names just two document formats that public administrations are allowed to use: ODF and PDF/UA.

Proprietary document formats from Microsoft like .doc, .ppt, and .xls are not included.

The framework is published by Germany's Federal Ministry for Digital Transformation and Government Modernisation, and it covers every level of public administration in the country, from federal government bodies down to states and municipalities.

Also keep in mind that the rollout of key infrastructure components is targeted for 2028.

ODF, or OpenDocument Format, is an XML-based file format for office documents. It covers text files, spreadsheets, charts, and graphical documents. The standard is maintained by OASIS and is also an ISO standard (ISO/IEC 26300), which means it is vendor-neutral and not controlled by any single company.

PDF/UA, short for PDF/Universal Accessibility, is the ISO accessibility standard for PDF files (ISO 14289). It lays out specs that make PDF documents readable by assistive technologies like screen readers, making it a sensible choice for a government that has to serve a diverse population.

The reasons behind this are not hard to understand. Vendor lock-in is the obvious one.

When public administrations run on proprietary document formats, they end up dependent on the vendor that controls those formats, with no real way out without significant disruption and cost.

The Deutschland-Stack explicitly calls this out, with reducing lock-in

effects listed as one of its core goals. The framework also prioritizes use of open source solutions where possible, and explicitly favors sourcing from European providers over foreign alternatives.

Moves like this take time to matter, but they do matter. Governments adopting open standards at this scale sends a clear signal about where things are heading, and it makes the case for interoperable, vendor-neutral infrastructure in a way that no amount of social media preaching can.

Germany doing this in a binding, nationwide framework is a meaningful step, and the rest of Europe would benefit if they took note of this.

SOMEONE FORKED SYSTEMD TO STRIP OUT ITS AGE VERIFICATION SUPPORT

<https://itsfoss.com/news/systemd-fork-strips-out-age-verification/>

Systemd is the init system and service manager that most major Linux distributions ship with by default. It boots the system, manages services, and has taken on more responsibilities over the years than a lot of people think it should. For some, running a distro that avoids it entirely is a feature.

The project's latest move has not helped its reputation among the skeptics. Last week, developers merged a pull request adding a birthDate field to its user records, tied to age verification laws in California, Colorado, and Brazil.

Earlier, we covered what that actually means, but to recap, the field is optional, can only be set by an administrator, and systemd itself does nothing with the data. It is simply a standardized field in the user record file that other projects like xdg-desktop-portal can build age verification compliance on top of—distros that do not need it can

ignore it entirely.

But "optional" has not been enough to stop people from treating it as a line being crossed, and now a solo developer has responded the way the open source community usually reacts: by forking.

Liberated as in?

Liberated systemd is a fork of mainline systemd started by Jeffrey Seathrún Sardina, a machine learning/AI researcher who apparently had enough of where things were heading. The project is straightforward about its purpose; strip out what it considers surveillance-enabling code, keep everything else intact, and stay in sync with upstream as it develops.

The repository puts it bluntly:

Mass surveillance is bad,

actually. So here's a fork of systemd with surveillance enablement removed, which will be kept up-to-date with other changes in systemd/main. However you use this, or do not, is your choice and yours alone.

Compared to mainline systemd, the fork changes 12 files across 5 commits, all focused on scrubbing out everything related to the birthDate addition. That means not just the field itself but also the option to set a birth date via homectl, the relevant man page entries, display code, and tests.

Though, as of writing this, it was 37 commits behind from systemd, so that is something to keep in mind if you are hoping to implement this on a general-use or production system.

Jeffrey also maintains a companion repository, systemd-

suite, which is meant for testing the fork. So, while this is very much a one-person project, there seems to be at least some technical groundwork behind it beyond the birthDate revert.



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The Ubuntu landscape is getting larger; we have Debian packages, Snap packages, ApptImages, and Flatpak images to contend with. In one of the QnA discussions we had, I answered a question, but it left me thinking afterwards. Scenarios where one would need that sort of thing. While syncing multiple computers may not be your forte, there could be other reasons to know what you have to work with.

For example, you might want to verify whether a specific package is installed or pin-point a package(s) before you remove said packages.

This article explains how you can go about checking installed packages in Ubuntu. We will try to provide examples for anyone to try out, if they do not know how.

The apt command is the one most users know to do package management within Ubuntu. To list installed packages, run the following command:

```
apt list --installed
```

This needs no explanation, but if you have not tried it, I suggest that you do.

Now let's do the same thing using the dpkg command; dpkg is the tool used to manage Debian packages. To list installed packages, run the following command:

```
dpkg-query -l
```

What you are doing here is querying the dpkg database.

snap is a modern package management system by Canonical. To check installed Snap-packages, use the following command:

```
snap list
```

You will notice that it is the easiest of the lot.

We won't dive into Flatpak as it is not a native Ubuntu package and ApptImages are not installed.

So how do we check for a specific package? With apt, the

easiest would be to filter with grep:

```
apt list --installed | grep <package-name>
```

this differs from apt search!!

To check if the nnn package is installed:

```
apt list --installed | grep nnn
```

Since dpkg does almost exactly the same, you can treat it the same:

```
pkg-query -l | grep <package-name>
```

For example, to check if unrar is installed:

```
dpkg-query -l | grep unrar
```

By the way, if no result is returned either the package is not installed or you spelled it incorrectly. Notice the "ii" to indicate installed packages, not the word "installed".

Third time's no different, you just filter your snap results as you would the others:

```
snap list | grep <package-name>
```

For example, to check if nmap is installed as a Snap package:

```
snap list | grep nmap
```

That is only the tip of the iceberg, you can really dig in. If you need to get version information, you'd go a slightly different route. You see, sometimes Ubuntu maintains its own packages and does not use the vanilla debian packages. I'll include an example.

Let's start with apt again.

```
apt show <package-name>
```

For example, to view more information about the zenmap package:

```
apt show zenmap
```

If you pay attention to the 'Version' -output, you will see the build is different from our next image.

This clearly tells you that you

```
edd@gift:~$ dpkg -s librewolf
Package: librewolf
Status: install ok installed
Priority: optional
Section: web
Installed-Size: 204 MB
Maintainer: Bert van der Weerd <bert@stanzabird.nl>
Architecture: amd64
Version: 146.0-2
```

have an “ubuntu” version of this package.

This will also tell you where a package was downloaded from, should you use a PPA.

I suggest that you try that on some of your own packages, I know that fsearch is installed from a PPA, so I cheated a bit.

Using apt show <package-name> is also a great way to check dependencies, they will all be listed in “depends on:”.

So do you think that we can do the same with dpkg? Of course we can!

```
dpkg -s <package-name>
```

For example, to view details about a package in another repo:

```
dpkg -s librewolf
```

And now you can see what it looks like if the maintainer is not Ubuntu maintainers.

The same goes for Snap packages.

```
snap info <package name>
```

For example, to view details about ADOM:

```
snap info adom
```

Since snap packages have no dependencies, you will not find any, but if you look at the last lines of the output, you can see when last the package was updated, using the “refresh-date” as your guide.

One last hint I’d like to throw your way if you are a newbie and that is to use the “ii” preamble of

```
edd@gift:~$ snap info adom
name:      adom
summary:   An epic roguelike & RPG game - graphical version
publisher: Barry Price (bp)
license:   unset
description: |
  Ancient Domains Of Mystery (ADOM) is an epic roguelike & RPG game
  customizable to a wide variety of playing styles.
```

dpkg output to filter with grep, when you want to work with installed packages.

That’s the basics you need to know when it comes to the packages installed on your system. Obviously you can do things with the output, as it is all text, like pipe it to a text file or word count. :) Anything else, refer to last month’s guide.

If you think we made mistakes, misc@fullcirclemagazine.org; we promise, we don’t bite.



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

This is a quick tutorial for @bearbunny?@berbunny? @bearbunny (forgive me I can't remember) and for anyone else stuck with this.

You do not need to resize the vdi through the command line, but you can. I looked on Ubuntu and they had this to say: <https://discourse.ubuntu.com/t/increase-disk-size-of-virtual-machine-virtualbox/57416/2>

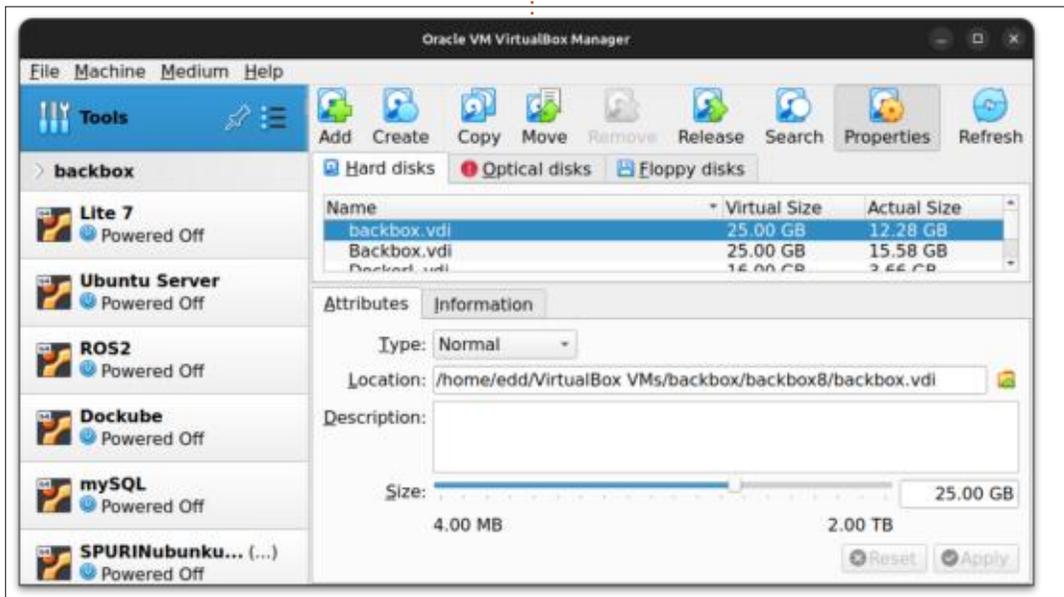
and this command:

```
VBoxManage modifyhd YOUR_HARD_DISK.vdi --resize SIZE_IN_MB
```

The first answer is technically correct, but if you want step-by-step instructions, it does not help. The second is outdated, I think the subcommand is now 'modifymedia', but let's do an image-heavy tutorial quickly...

On the main window, navigate to: File > Tools > Virtual media manager (CTRL+ D)

The screen will then list all the



Resize Virtualbox Disks

virtual hard disks (VDIs) on your machine. Find the one you want to resize.

The thing that trips up most people is that once you get to this point, there is no **visible** way to resize the drive. The trick is to highlight the drive you want, and look at the bottom left output. Mine already shows the output, as I have resized drives before.

But to get to this output for the first time, you need to double-click the VDI in the pane above, or it does not show up.

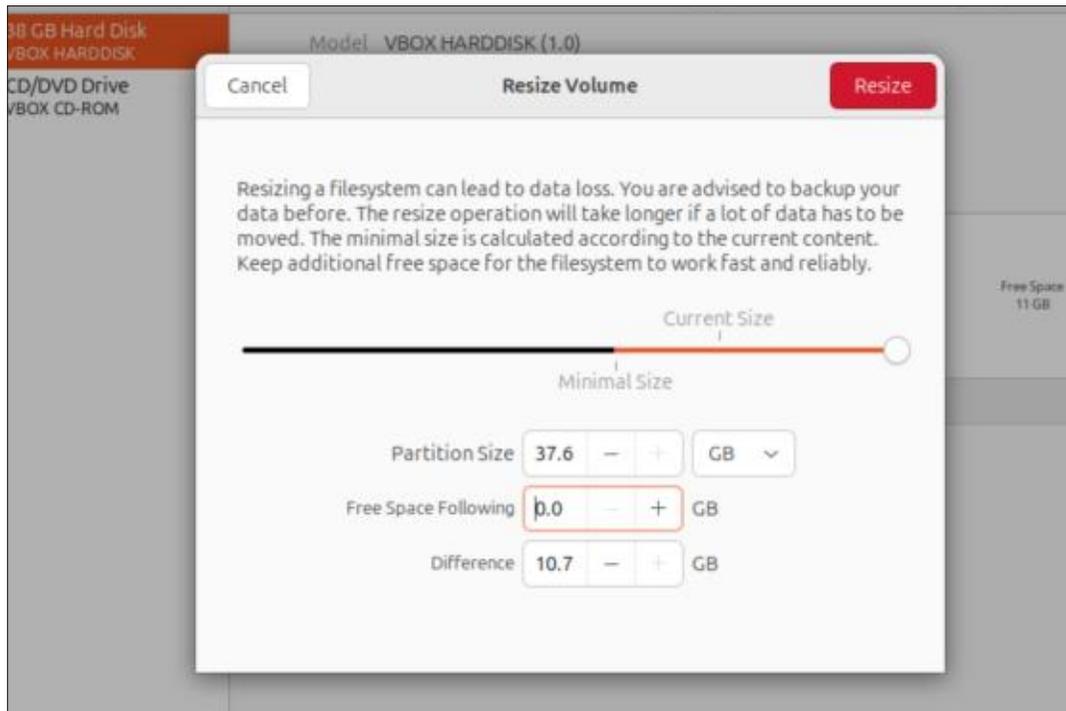
The next step is to go back to the virtual machine settings and confirm that you have the right size allocated. (Sometimes you may have missed something, so it's better to make sure.)

Fire up your virtual machine and open the disks application (shown below).

You should now see some free space. In my example here, you can see that I have 11 GB. Just below the orange "partition 1", you will see a cog. When you click on that,



HOWTO: RESIZE VIRTUALBOX DISKS



you will be presented with another menu.

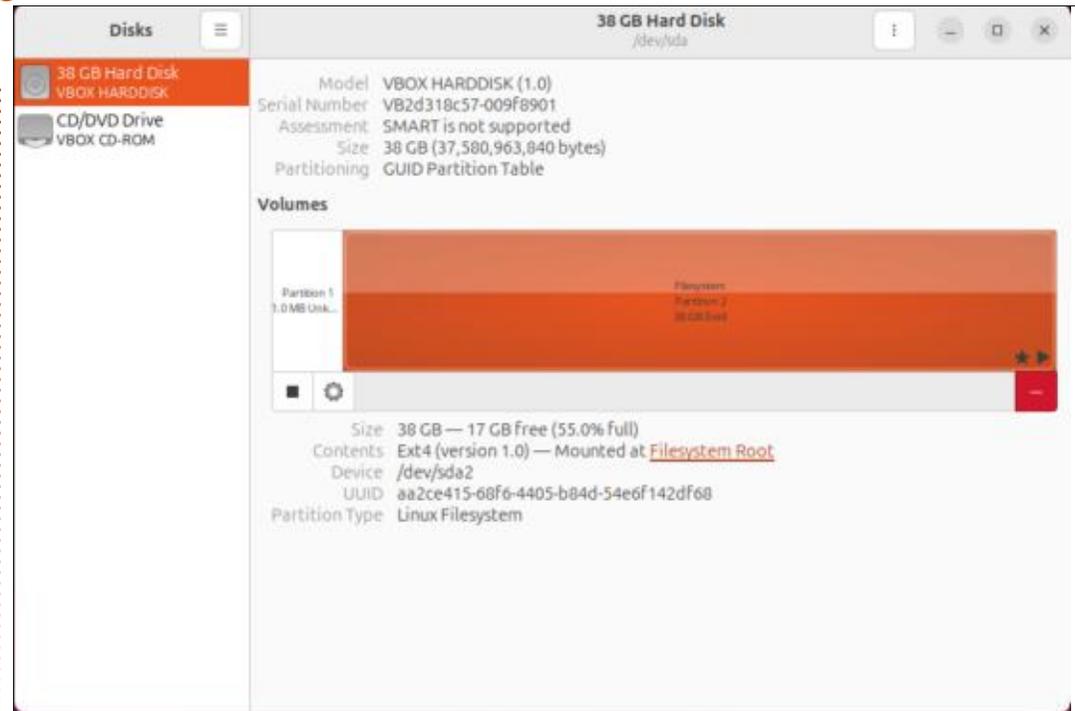
In that menu, simply click the minus button in the “free space following” row to make it zero, so your Ubuntu virtual machine takes up all the space, or however much you need. Then click the resize button and enter your password when prompted.

As you can see from the highlighted orange, the disk now spans the original size, plus the 11GB extra.

That is really how easy it is, the

catch being that the resize menu is hidden originally, as we saw in Berbunny’s output. Once you have double-clicked to make it visible, it will stay visible for all your other VDIs.

If any of you are interested how to do it from the command line, simply drop us a line at: 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

Godot Intro Pt.5

OK this is the first time we will do something. (Still no code!) Hopefully this will make you realise the power of this small engine that could.

In the top, center, please click on 2D, as the editor starts in 3D by default. The Scene panel will already have a few options for you to click on. The FileSystem panel should have a Godot icon by default, as our only resource.

Click on 2D Scene, and you will see that our tab in the center

changes from "(empty)" to "(unsaved)(*)". The asterisk will appear every time a scene has changed and is not saved. When we save a scene, the name that Godot assigns automatically, will be the name of the node. If you press CTRL+S, the short-cut for save, the name filled in would be "node_2d." If you press escape, we can double click on the Node2D in the Scene tree and rename it, anything you like. "world", "level" or "bob" are all valid. I'll go with "world". Now when I hit save, the name filled in for me is "world". When I save it, it now

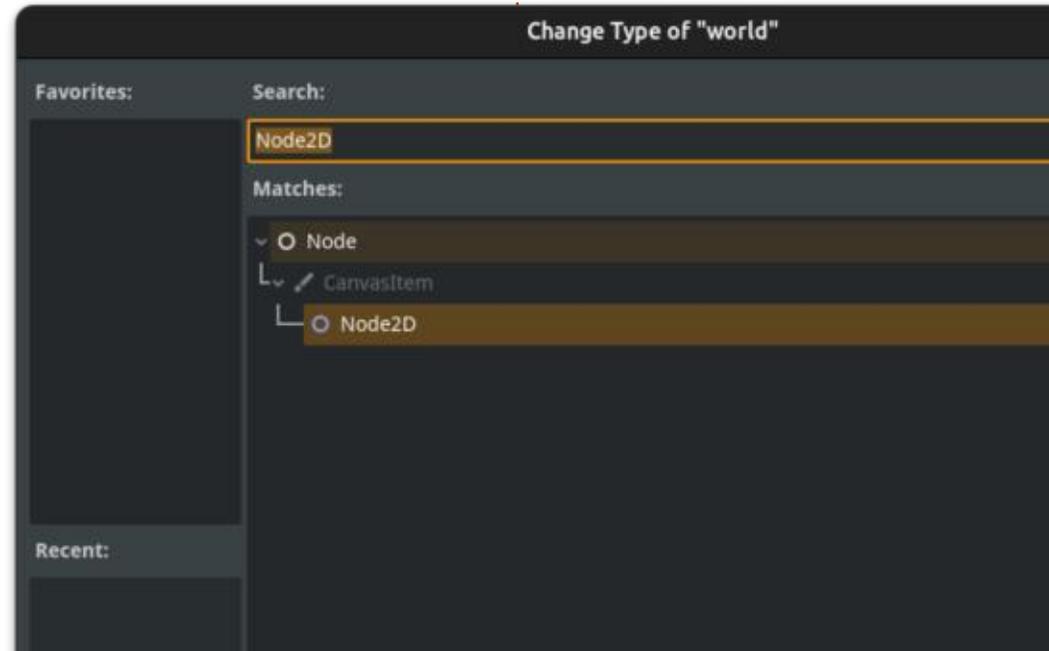
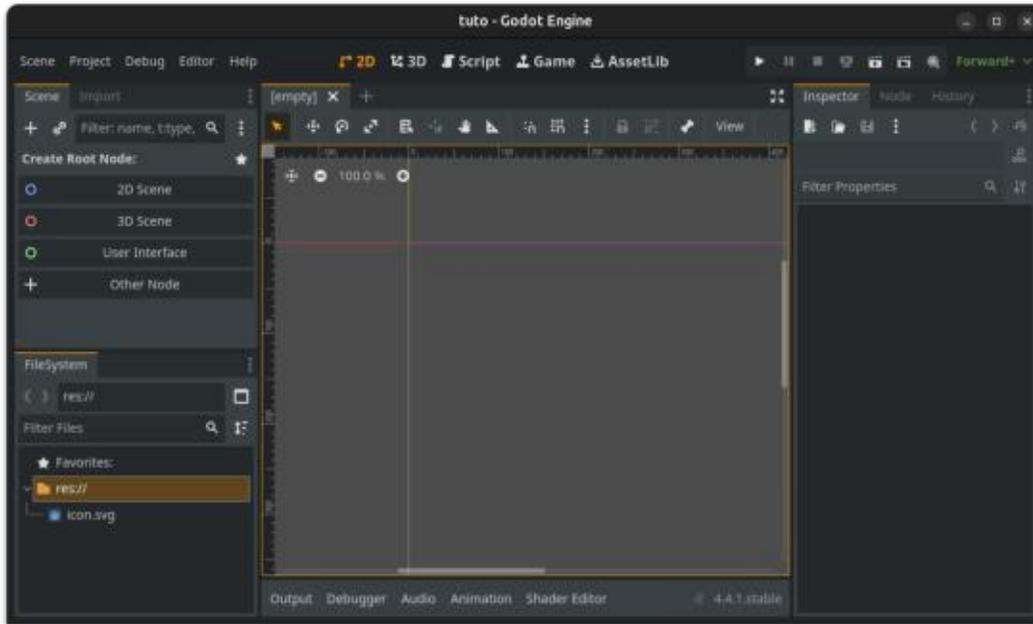
becomes an object in the FileSystem tab, as "world.tscn"

Now, I want us to test what we learned previously. With our 2D node named "world" selected, pass your eye over to the right, to the inspector tab. Node2D being on top, so if you ever forget what the node was, before you renamed it, look here. Drink it in for a moment, then head back on over to the left, to the Scene tree and right click on world, and click on "change type".

Just click on the white "node"

for now. Now eyes right again and look at the inspector. Mmmm... Missing a few things, eh? As this type of node does not even have a position, let's change it back. (I suggest you try a few others, just to see the changes in the inspector before you go back.)

Now that you know how to change nodes and where to look to find out what type it is, let's forge ahead. Remember to save if you see the asterisk! Now, next to the tab that you just looked at to see if it has an asterisk, I want you to click



HOWTO - GODOT INTRO

the plus icon. Again we are greeted with a blank canvas and nothing in the scene tree, but suggestions. We now see two tabs, one named "world" in my case, and a new one, named "(unsaved)(*)". This is the very basic blueprint of how the program works, if you want something in your application or game, create a scene for it. For Asteroids (as an example) we would want a scene for the level, one for the player, one for the rocks, one for the alien and one for the interface. That way we can build like Lego. We can take the "player" block and place it in the "level" then we can take the "rocks" block and place it in the "level", like it was

Lego. See where I'm going?

OK, we will start with the floor. A floor is something we don't want to move. It may be different for a platform, but I'm talking "terra firma" here. This means it needs to be static. OK, so this time, in the scene tree, I want you to click on "Other Node" and in the "Search" bar at the top, type the word "static".

I suggest you read the description. Boring, I know, but do it anyway. Notice that there are certain words highlighted. When you move your mouse over them, they will become underlined. You

can click on them to go directly to the built in help for that item. Though as a beginner, most of them will be gobbeldygook to most of you. This is the issue I have with something that is touted as beginner-friendly. It's not. So let's skip it for now. Go ahead and add the StaticBody2D. The description says it is an object that cannot be moved by external forces. In engine terms, this means that "physics" does not affect it (more later). Immediately, you will notice it adds to your scene-tree with a yellow triangle with an exclamation mark, to the right, a warning. Hover your mouse pointer over it for the tooltip. *This on the other hand, is not gobbeldygook. It tells us *precisely what is missing. It's a "thing" without a shape that cannot interact with anything. If we wanted it to interact with the world, say like the rocks in the Asteroids example, we would not choose this node, instead we would choose a "RigidBody2D". Go ahead and look at that node's description.

Do you think you understand the difference between the two, now that you have read both descriptions?

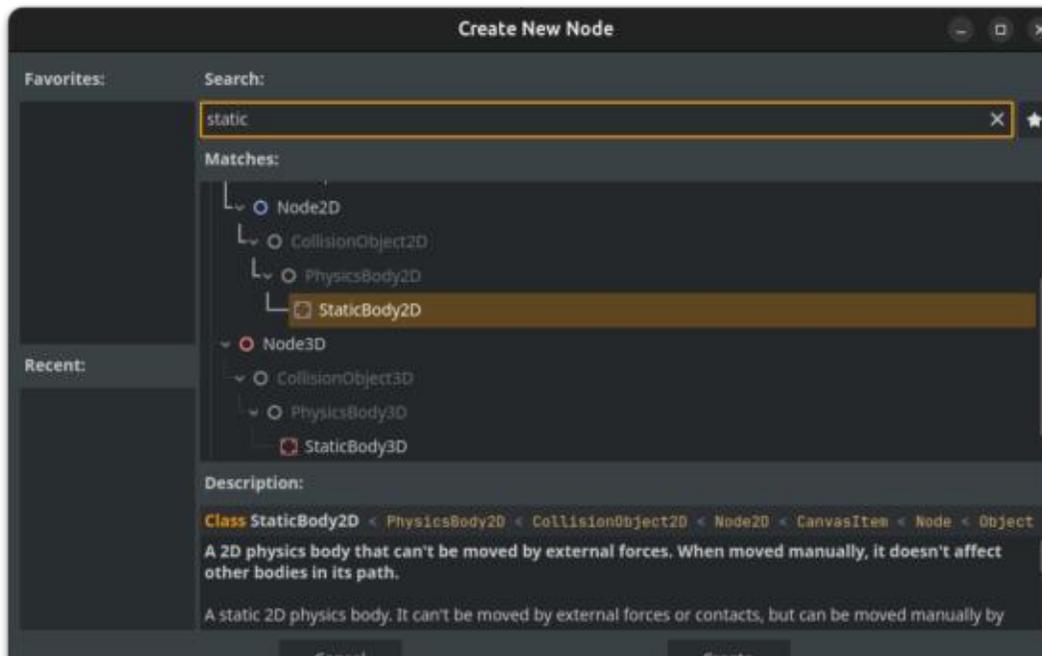
At any time, if you do not see

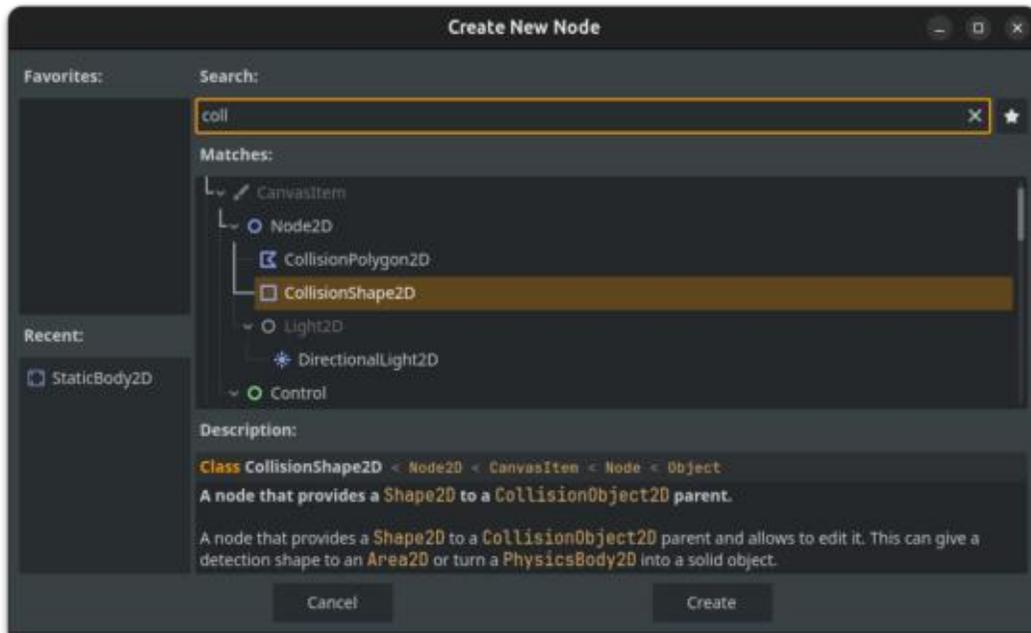
the tooltip, go ahead and left click on the warning and you should get a popup window with the explanation.

Let's fix that. Either click on the plus above your staticbody2D or press CTRL+A to add another node to it. We only have one node now, so the new node will attach to the "root" one. This is not always the case, as it attaches to the highlighted one (For future reference). Since the tooltip suggests adding a collision shape, we can type "coll" in the search bar, and we add the basic "CollisionShape2D".

You will see that the warning next to StaticBody2D has now vanished and we have a new one next to our newly created CollisionShape2D. Not much fun, is it? Well, rinse and repeat. ;) We are told, "Please create a shape resource for it. How now brown cow? Don't panic. Eyes right to the "Inspector" again. Can you spot the "Shape" property? Select the "New Rectangle" property.

Eyes left, specifically to (0,0). There is now a blue-ish block with a bunch of orange-ish dots all over it. We can zoom in with the mouse



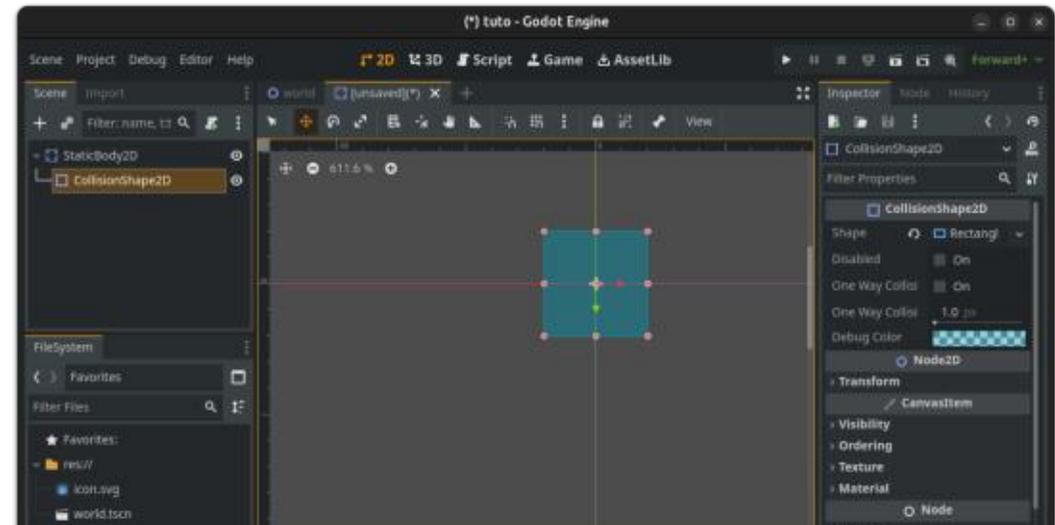


wheel, with CTRL++ or by clicking the white plus in the top left hand corner. If you zoom in, the shape may move out of our display port. Remember Q and W from our previous articles? This is where it gets important. Move the shape, but it must remain at (0,0), to the center of your viewport. (You can even use the scroll bars if you want to)

If the orange-ish dots disappear, simply click on the collision shape 2d in your scene tree. Be aware – that if you are on “move”, additional red and green arrows may appear. (I’ll add a picture)



We can drag the orange-ish dots to resize the square, but how do we know how big it is? Well, here is our first “hidden setting”, so-to-speak. You need to head right again and click on the word “Rectangle”, next to shape, and it will unfold to show its properties.



Next to the word “Size” you will see an undo icon. This resets the size changes you made by dragging on the orange-ish dots. (Not to be confused with the one next to “Shape”). You can undo the rectangle too, and try our other shapes, but we will need a rectangle in the end.

Notice that we have no warning triangles any more. Now we have a shape that allows for collisions, but we have no representation on the screen. We need a graphic or a sprite. We only have “icon.svg”. Let’s remedy our situation. Make sure that the “StaticBody2D” is highlighted, (We can move it, but let’s do it right from the start) and add a Sprite2D. I’m confident in

your ability to do that now as we have done it twice before.

Now with Sprite2D highlighted in your scene tree, eyes right to the top property of the sprite, the “Texture”. Left-click drag your icon.svg into the block that says <empty>. You will notice that the icon appeared at (0,0).

As per the collision shape, see if you can find the “hidden properties” for the texture.



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 Robert Boardman

Latex - Q and R

This month I look at topics starting with Q and R. The first topic combines both letters tools for Latex to make quick response (QR) codes. The first package in this topic makes QR codes for bibliographic entries (bib2qr). The author of the package uses them in beamer presentations to make access to references easier for his audience. I have not discussed bibliographies or the beamer package in this series of columns so I will skip this package. If you wish to include a QR code in a Latex document I suggest you investigate the qrcode package.

The qrcode package has been available since early 2015. The package will make a QR code for any text up to nearly three kilobytes. However the codes are most often used to encode URLs to make them easier to use on phones and other devices with scanning capabilities. The author says the qrcode package works with Latex primitives and does not invoke any other packages. That means it should work with any Tex variation.

The five page documentation is clear. The package has three (four) options: nolinks, forget and draft/final. Final is the only default option. It instructs Tex to generate the required QR code. Draft tells the package not to generate the QR code but to generate a box to indicate the size and position of the QR code. Using the draft option will speed up compilation of the document and is especially useful when building or editing a document. When the document is ready for final generation simply remove the option from the usepackage[draft]{qrcode} instruction in the preamble.

The nolinks option only takes effect if the hyperref package is also loaded. Nolinks means no codes are made for any links built by the hyperref package. The forget option forces qrcode to regenerate any QR codes in the document. This is necessary if the relevant aux file is lost or corrupted.

Placing a QR code in a document is very straight forward: `qrcode{desired text}`. This will

generate a 2 cm high and wide QR code for the desired text. Size can be easily adjusted `qrcode[height-1cm]{desired text}` for example. There are a few other options which could be useful in specific cases. The author warns the qrcode package cannot encode for numeric, alphanumeric or Kanji data.

If you write papers for submission to academic institutions and peer-reviewed journals it is important to use the appropriate punctuation for quotations. Since Tex / Latex is used internationally, there are variations in the punctuation used in various languages. If this is of concern to you then I suggest you investigate the csquotes package. It has extensive documentation. I have not done this kind of work for many years so I cannot comment on this package's usefulness. Let me know if you have any comments about it.

There are ten topics listed in the R area, two of them to do with Latex and the Russian language and one for typesetting Romanian. In

the Reports topic I found twenty-one different packages. Several of them are for reports for specific institutions: Carmel High School, US Army Corps of Engineers, etc. I was intrigued by the name of the Hebdomon package so I experimented with it.

It is a class, not a package, so must be used in the documentclass instruction at the beginning of a document. There is an eleven-page document which demonstrates the various instructions available in the Hebdomon class. It is a fairly simple class to use. Most of the instructions simply override similar instructions in the default Latex report class. Of course if your particular institution demands you follow their report structure exactly (and most do) then you will either need to customize Hebdomon, find an appropriate package or write your own template. I used the chapter section name in the demonstration page. There is also a Chapter section name which is supposed to generate a table of contents for that chapter at the beginning of the chapter. This is

very common in textbooks.

Page geometry is probably one area your institution may do differently. The defaults in Hebdomon are top: 2.5cm, right: 2cm, bottom:2.5cm, left: 3cm. I suspect Hebdomon is set up for A4 paper which is the default in most of the world. In my writing I use top and bottom as 2.5cm, I set right and left margins at 3.25cm for one-sided “printing” and adjust the inside margin when I use two-sided “printing”. These defaults can easily be changed by opening the hebdomon.cls file in a text editor (vi, emacs, nano, etc), searching for “cm” and then making the desired changes.

Images can be included in Hebdomon reports in much the same way as in regular reports. That is also true for code samples, equations and tables. Text can be highlighted and examples and short quotations, called excerpts can be shown in highlighted boxes. The documentation also has examples of using PGFPlots and Tikz to make two dimensional and three dimensional plots (graphs). I used the example code for a two-dimensional plot on my system and generated only errors. I also could

not get a mini table of contents to appear. If I used the command Chapter (as the documentation says) instead of chapter the chapter heading and subheading appeared in blue instead of black. You can see the difference in the graphic.

Code for the graphic is shown top right.

Another package in the reports topic is practicalreports. It contains a number of macros which each do a separate task. Each macro calls one or more other packages. The author claims each additional package is part of a default installation of Tex / Latex and should be available. There is an exponent macro which is a shortcut to typesetting powers of 10. For example $\E{6}$ will compile as x^{108} . There is a header and a footer macro which can put headers or footers at the left, centre or right of a document. There is another command to generate a title page called newtitlepage. There are macros to alter the display of figures (images or plots), three macros for tables, a macro to place a box around specific contents, plus three others including one to string multiple PDF files together to make one file when compiled. I think this

```
\documentclass[letterpaper,11pt]{hebdomon}
\usepackage{lipsum}
\begin{document}
\Chapter{To Begin}
  This is the beginning of my report about some
  experimental results for the timing of backups on our
  network. ...
  \Section{Current Hardware}
  Blah, blah, blah. Backup Server storage capacity
  \section{Current Software}
  We purchased DIY Backup from DIY Inc. four years ago.
  Blah blah blah
\chapter{Second}
  \lipsum[1-2]
```

could be a useful set of tools and is worth investigating.

One final report writing tool is simply called report. It is the package for the default report class. It was revised last about one year ago. The fifty-eight page documentation is essentially a listing of the 1353 lines of code of the package with annotations and some explanations. It is a very detailed explanation of the default settings for all possibilities in the class called “report”. However I think it is not much help to users, particularly inexperienced users.

That is all for this time. There are more than thirty topics starting with “s”. I will explore a few of those next time. As always if there is a topic or a package or a situation

in Latex you would like me to investigate please send me or the editor an email.





HOW-TO

Written by Mark Crutch

Inkscape - Part 167

I've covered the Spray Tool twice before in this column. The first time was back in part 26 (FCM #86), when I dedicated a whole article to it. Back then, there were 10 controls on the toolbar to talk about. I revisited this tool briefly in part 153 (FCM #213), when the release of Inkscape 1.4 added some more features. I noticed then that in the intervening years the number of controls had ballooned, and promised to revisit this tool in a later column. This is that later column.

As of Inkscape 1.4.3, the Spray Tool (Shift-F3 or 'A') has 23 controls on the toolbar (though not necessarily all visible at once). So many, in fact, that I've had to split this screenshot (below) across two lines.

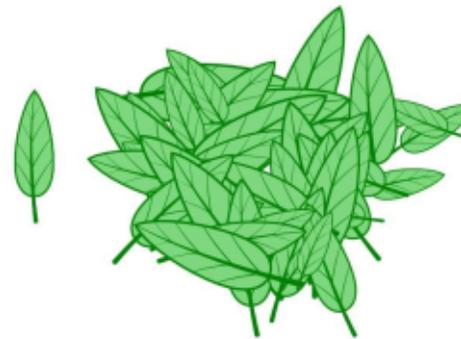
The basic functionality I described back in part 26 still applies, so I'll race through that as a refresher, but feel free to read the

original article for all the details.

In short, the spray tool is used to quickly create multiple copies of an object, semi-randomly positioned on the canvas. Depending on the settings, the object could also be randomly rotated and/or scaled. When the original source object is something like a small circle, this can result in something similar to the paint from a spray can – hence the name of the tool and the icon in the toolbar. Indeed, a similar tool in bitmap editors can often be found for exactly that purpose. But Inkscape isn't fussy about the source object, so it can equally be a much larger shape, or even a group containing several complex objects. When used in this way the tool becomes more of a way to quickly fill an area with copies (or clones) of your object.

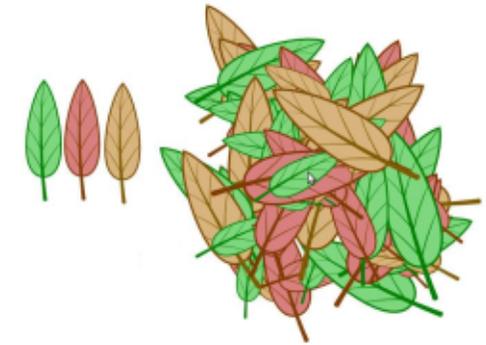
The classic example of this – and the one I used previously – is to create an impression of fallen

leaves. Consider a real autumnal footpath: while the leaves may all have a roughly similar shape, they will be of different sizes, and land in different orientations. (Note: the leaf on the left is the source object which was first selected before spraying the pile on the right)



In real life they'll also have different colors, which can be achieved by selecting multiple objects to spray. Each is sprayed independently of the others so, in the example below, you still end up with lots of individual leaves rather than blocks of three at a time (if you do want to achieve that, just

group the objects first).



The first four icons on the tool control bar determine the basic mode of operation for this tool:

- Create copies of the original object
- Create clones of the original object
- Merge the sprayed copies together into a single shape (doesn't work when spraying groups)
- Delete objects that you spray over (can be useful for clearing previous copies from a specific area)

The next four controls determine the main parameters of the spray tool: 'Width' sets the size of the spray area; 'Amount' has a



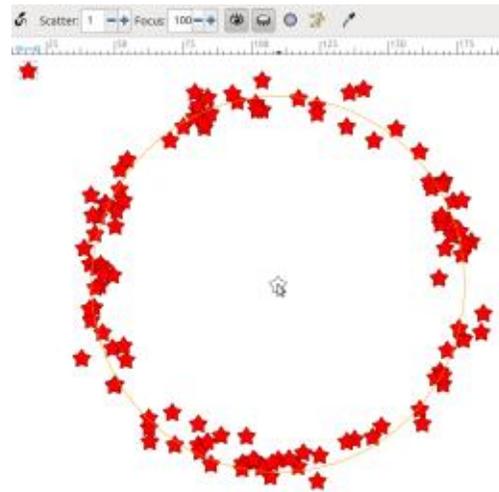
HOWTO - INKSCAPE

misleading tooltip that talks about 'the number of items per click' whereas a better description might be that it sets the speed at which the sprayed items are generated when you move the mouse around; 'Rotation' and 'Scale' are used to determine how much the copies can vary in rotation or size compared with the original – set them to 0 for identical copies, or higher numbers for a more random effect.

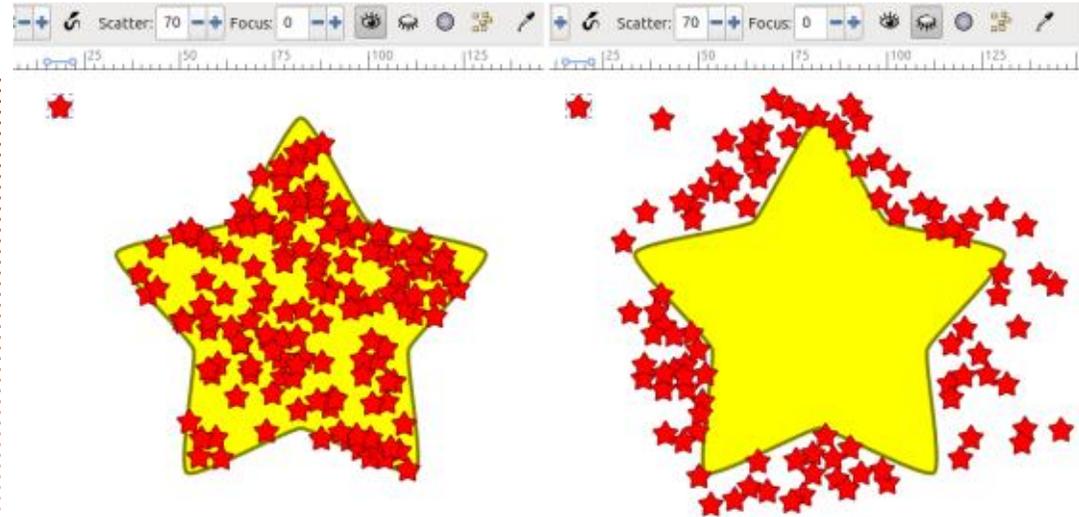
Each of these controls has a right-click context menu which is usually more useful than setting values in the spinboxes directly. The reason is that the menus provide some additional annotations to indicate which values are the defaults, and what the effect of the extreme values might be. Another way to adjust these controls, if you're using a suitable drawing tablet, is to use the toggle buttons next to most of them to determine whether or not that control is affected by the pressure you apply.

The 'Scatter' and 'Focus' controls work together to determine the spread of objects within the spray area. In many cases they'll appear to have little impact – but if you crank the 'Width' up to a

high value, and spray a small object, you can start to tease out their effects. 'Scatter' determines how tightly grouped the objects are, with higher values spreading them out more. Meanwhile, 'Focus' determines where in the spray area they'll be placed: a low value puts them near the center, which feels right most of the time as it corresponds most directly to the mouse position; a high value distributes them around the outside edge, leading to a visible ring if the 'Scatter' value is low.



Next we have two icons which, on my system at least, appear as an open and a closed eye. These can be used to restrict the areas in which the Spray Tool will have an effect – limiting it to only transparent areas (i.e. parts of the canvas with no



current content), or only non-transparent areas (i.e. parts where you've already drawn things). As an example, here's the same large star sprayed over with smaller stars in each of these two modes:

When determining whether or not to place a copy, the spray tool looks at the location under the mouse pointer, and doesn't take into account the size of the object being sprayed. That's why you can see small stars straddling the boundary of the larger one in the previous examples: the center points of the sprayed stars correspond to the relevant (non-)transparent areas, even though their actual content might extend beyond, into the 'forbidden' area.

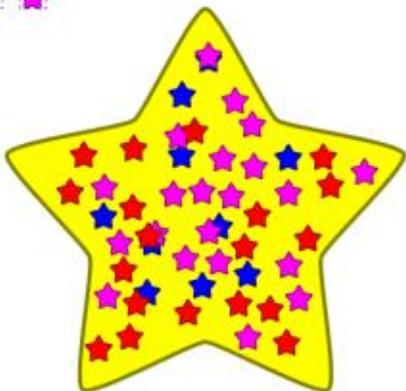
If you just want to be able to spray anywhere, without being limited to those areas that have or haven't already been drawn, you need to enable both these toggle buttons. But don't ever disable both of them as that will prevent you spraying objects anywhere at all, and is likely to lead to some amount of head-scratching while you work out why the tool isn't working.

The next control is another toggle, this time with a tooltip of 'No overlap between colors'. To be honest I find that description to be rather confusing. Enabling this toggle for a simple source object results in sprayed objects that don't

overlap.

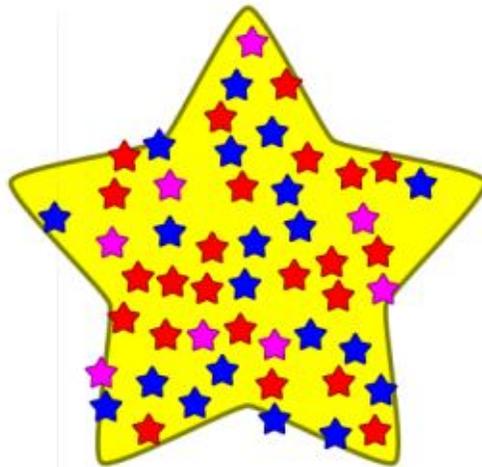


The mention of color in the tooltip made me wonder what would happen when spraying multi-colored objects. Simply setting a gradient on my small star didn't appear to have much effect on the result. But creating three



differently colored stars to spray produced a result whereby the sprayed objects of each individual color don't overlap with each other, but do sometimes overlap with those of a different color.

I can't say that I can see much of a use case for this. If all you want to do is prevent overlapping objects then the very next toggle does exactly that, regardless of color.



The other advantage of this control is that toggling it on also reveals a spinbox for setting the offset amount (i.e., the spacing between the objects). Setting this to a low value can result in objects overlapping once more, whereas too high a value may result in very few objects being sprayed – but at least this approach gives you some

amount of fine control over the density and spacing of objects.

Near the end of the tool control bar is an icon that looks like an eye dropper. This is used to toggle 'tracing mode' on and off. Enabling this reveals several other controls – but also has the odd side-effect of opening the 'Create Tiled Clones' dialog. The reason for this is explained in the control's tooltip, which mentions that "you can use clonetiler [sic] trace dialog for advanced effects". In other words, this control actively suggests using a different tool entirely, and even opens the relevant dialog for you – albeit without activating the relevant tab, to further confuse matters.

Tracing is a feature that can be used with tiled clones to create objects that take their fill and/or stroke color from the elements behind them on the canvas. A common use – and the one we'll look at here – is using the color information from a bitmap image to set the fill of a collection of vector objects.

If you want to create this effect using a regimented array of clones, or want tighter control over the

amount of randomness applied, then the 'Create Tiled Clones' dialog is, indeed, the best tool for the job. I described this in detail early in this series, starting with part 32 (FCM #93) and culminating in the 'Trace' tab in part 36 (FCM #96). If you're not familiar with the workings of this dialog, I recommend reading the earlier instalments rather than jumping straight to the 'Trace' article, as there are a lot of important details that are necessary to understand if you hope to produce a specific result.

But this article is about the Spray Tool, so let's close that dialog and get back to the tool control bar. Having enabled tracing mode, you might be tempted to start spraying over your background image with whatever source object you happen to be experimenting with. Much like the two 'eye' buttons, however, there are another pair of buttons here that need to be set correctly for your spraying to work.

For now I'll assume that you're spraying copies rather than clones, as the latter comes with some specific requirements. Just after the 'eye dropper' control you'll find toggle buttons for setting the fill

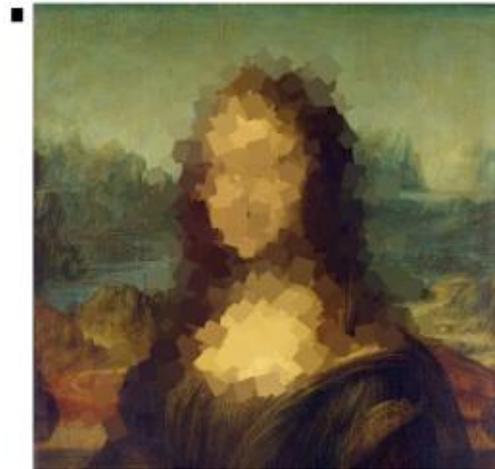
HOWTO - INKSCAPE

and stroke colors. With neither of these enabled, your sprayed items will retain their original color. Set one or both of these to get the tracing effect to work.

The next button provides the option to invert the color that will be sprayed. Perhaps there's some artistic use for this but I'll wager that, most of the time, you would be better off leaving this deselected then grouping the sprayed objects and applying a color-modifying filter. That will give you far more control over the resultant colors.

The last button changes the way that Inkscape determines the color to apply. When toggled on, a single color value from the center of the spray area will be used to set the fill and/or stroke color of the sprayed copy. When toggled off, Inkscape will calculate the color value based on an average of the area covered by the spray tool. The latter approach is more processor intensive, and tends to even out highly contrasting areas, whereas the former – especially when used with a small source object – tends to do a better job of preserving some of the color changes in the underlying image.

So, with all that out of the way, let's look at an example of the sort of effect this mode can create. Here I've taken the classic example image of La Gioconda and sprayed a small rectangle, with high values for the 'Rotation' and 'Scale' controls, to produce a cubist interpretation – but only in some parts of the image. This ability to control the location of the effect interactively is what sets the spray tool apart from the 'Tiled Clones' dialog,.



A final note on using this feature with the Spray Tool configured to create clones rather than copies: In addition to requiring the correct setting of the fill and stroke toggle buttons, the source object must have the fill and/or stroke color as 'unset' for tracing to work. I usually

do this via the right-click context menu on the fill and stroke swatches at the bottom-left of the status bar, but the colors can also be unset within the 'Fill & Stroke' dialog. If your clones aren't adopting the background colors, that should be the first thing to check (with the toggle buttons being the second).

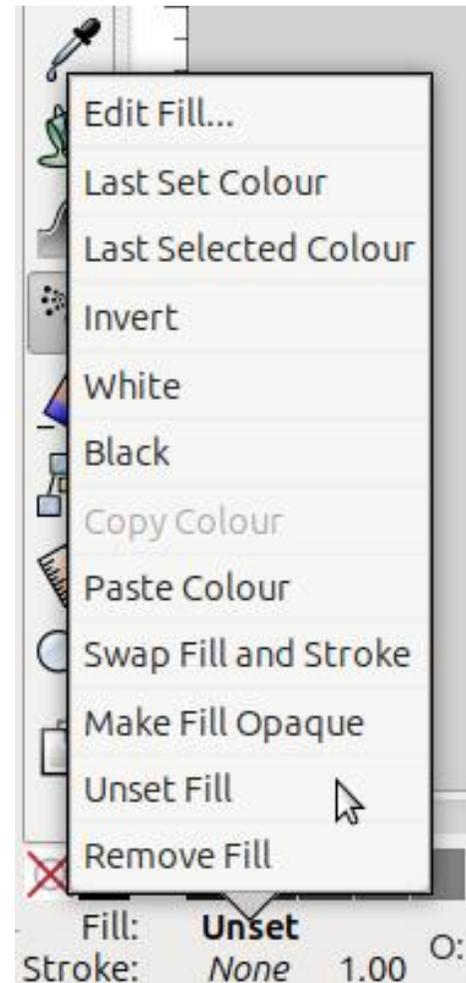


Image Credits

"La Gioconda" (aka "Mona Lisa") by Leonardo da Vinci
http://en.wikipedia.org/wiki/File:Mona_Lisa,_by_Leonardo_da_Vinci,_from_C2RMF_retouched.jpg



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

I PREFER COMING TO KAWÉSQRAR
FOR XMAS. THAT WAY I CAN STILL
SAY XMAS WAS CHILE...





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Several users have asked me to describe the various versions of Bodhi Linux and the reasons for them. Here goes.

Bodhi Linux is an ultra-lightweight, Ubuntu-based distribution featuring the Moksha Desktop, available in four main versions tailored to different hardware needs.

Key Aspects of All Versions

- **Moksha Desktop:** All versions utilize the Moksha desktop (a fork of Enlightenment E17), known for being extremely fast, customizable, and visually unique.
- **Base System:** Based on Ubuntu LTS, ensuring stability, security, and access to a vast repository of packages.
- **AppCenter:** A web-based tool allowing users to easily install additional software in all versions.
- **Development:** While standard releases are Ubuntu-based, the team has Debian-based options; also 32-bit versions later than 5.1

are Debian-based.

Different Versions of Bodhi Linux

- **Standard Release (64-bit):** The default version based on the latest Ubuntu LTS (Long Term Support). It is highly minimal, providing only essential applications (web browser, file manager, terminal) to give users a clean slate.
- **AppPack Edition:** Pre-configured with a broader selection of common applications, themes, and tools. Ideal for users who want a complete, ready-to-use desktop experience immediately after installation.
- **HWE (Hardware Enablement) Edition:** Specifically designed for newer, modern hardware. It includes updated kernels to better support recent hardware components, using the Ubuntu HWE kernel.
- **S76 (System76 kernel edition):** This version is for your hardline gamers, featuring an even newer kernel developed by System76.
- **Legacy Edition (32-bit):** Aimed at older hardware (systems over 15 years old), including support for non-PAE processors. It is optimized to run on low-power machines with as little as 512MB of RAM.

Bodhi Linux 7.0.0 is the latest official version for 64-bit computers, based on Ubuntu 22.04. Bodhi Linux 5.1.0 features the latest official 32-bit version, based on Ubuntu 18.04. However, there are also a number of other versions in beta:

- **DeBodhi** is Bodhi Standard Release but based on Debian, rather than Ubuntu. The latest version is 7.0.0 beta 3, based on Debian 12 Bookworm, and it is available from <https://sourceforge.net/projects/bodhilinux/files/7.0.0-beta/>.
- **Bodhi Legacy Edition** version 7.0.0 beta is based on Debian 12 Bookworm, and it is also available from <https://sourceforge.net/projects/bodhilinux/files/7.0.0-beta/>. Due to the fact that Debian dropped 32-bit in Debian 13, this might be the last version of Bodhi for 32-bit machines.

Unlike most distros, Bodhi betas are extremely close to what most distros would consider "official". There may be a few bugs the devs are still not satisfied with, but several users are known to be using DeBodhi 7 beta 3 with no issues.

Key Aspects of All Versions

- **Moksha Desktop:** All versions utilize the Moksha desktop (a fork of Enlightenment E17), known for being extremely fast, customizable, and visually unique. In addition, many features of later versions of Enlightenment have been ported to Moksha.
- **Base System:** Based on Ubuntu LTS, ensuring stability, security, and access to a vast repository of packages.
- **AppCenter:** A web-based tool allowing users to easily install additional software in all versions.
- **Development:** While standard releases are Ubuntu-based, the team is exploring Debian-based options.

Why isn't Bodhi 8 out yet?

Bodhi Linux features a very small team, with Robert Wiley in charge of creating the ISOs. Ubuntu 24.04 featured some major changes over 22.04, not all of which have been synergized with the way Bodhi works, including the fact that the Bodhi developers have yet to embrace Wayland. There is, however, a new version of Moksha available, and various users have experimented with using the latest Moksha on a variety of distros plus it is updated in Bodhi 7 (all variants). Also, if you are brave enough, Robert Wiley has created scripts you can use to build Moksha yourself on Debian or Ubuntu bases, and some users have been successful modifying the scripts to add Moksha to Fedora, Arch, and other distros.

As you might expect, the Bodhi team needs more helpers. The biggest needs are for developers in C with a familiarity (or a willingness to become familiar) with EFL (Enlightenment Foundation Libraries, the basis for Moksha desktop). If you are willing to help,

please join the Bodhi Forum at <https://bodhilinux.boards.net/> or join the discussion on our Discord (we haven't left yet OL).

Feel free to send questions or comments to me at bardmoss@pm.me, or ask the team in either the Discord or the Forum.



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

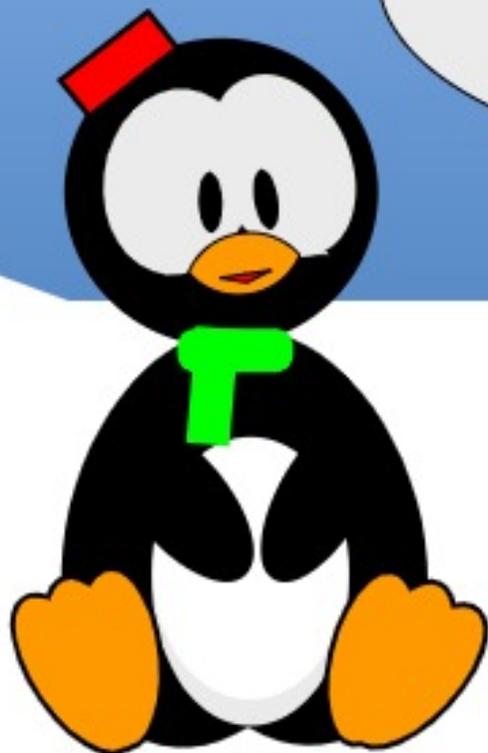
BACK NEXT MONTH?



THE DAILY WADDLE

WHAT'S THAT ?

THE THIN BOOK OF GETTING
STARTED WITH LATEX !





MY OPINION

Written by Erik

Open Source Christmas

This article will reach you only in 2026 some time, but the seed was sown on Christmas day, when we were discussing gifts. You see, some person walked into a store and gave all the people at the store, who had lay-byes (referred to as layaways in the US), a clearance of their lay-byes. This is quite noble, as for people who cannot get credit, their only option is to lay-by. This usually means it is really poor people. Some other philanthropists donated a large sum of money, to be distributed to people's lay-by accounts, at the company headquarters. This caused great headaches for the people working at the group headquarters, with how to distribute this donation to the people. At first, they tried sending people SMSs with voucher details, but no-one wanted to click on the links, afraid of being scammed. While the tale is amusing, it also highlights the wealth gap. It's amazing how quick people have learned not to click on links that promise free stuff!

The fact of the matter is, whether you are rich or poor, you

can still give a gift – the gift of your time. Our time is finite, there is no denying that. Here at FCM we give our time to reach out to as many people as possible. If you give your time to help someone set up Ubuntu on their computer, that is great too. One-on-one interactions with others are always better. I like helping people, and FCM is a way for me to reach out to people I have never met and start them on their Ubuntu journey. Back in the day, the fact that there was a free magazine for Ubuntu, got me more interested in Ubuntu, when I was only skimming the surface of it. Here I am, many years later, trying to give back and maybe influence some of you, to join in and write us a few articles, even if it is just your experience with Ubuntu. If you don't know much, like me, you can help others to help themselves. For instance, where to look when you experience a problem, or where to find information on a subject. I love talking to people about Linux, especially when they know very little, as the perception is changing. We have come a long way with Linux, I can sit in a coffee shop with

my 'Linux for all' to see, and no one bats an eyelid, but about 16 years ago, some woman threatened to call the police on me, because I was using Linux, "because that is what the bad hackers use", and therefore I was doing something nefarious. I suppose the fight is uphill, but we are gaining traction.

I love open source software. Even if I don't always 'get' what the code does, I can go have a look and maybe even fix something for me – and I'm *not a programmer! Sometimes I just grab someone's little Debian script off github and I'll twist it to suit me, on Ubuntu. The script automatically installs, say VSCode, and I don't want it, I simply delete it out of the script and use the rest. Proprietary software is not accessible. The original coder knows all that it does, but you may never know. The software may have *just the thing you need, but it is not documented, so you'll never use it and struggle on with other tools. Years ago, Microsoft turned off networking monitor mode in Windows and did not allow it. I recall many professionals at the

time who were writing software to do more advanced things on the network, suddenly started to pull their hair out in frustration.

Also, you don't have to show someone around Ubuntu only, you can teach them about open source applications. Teaching someone is the best way to learn, as now you have to explain what you have learned. It helps you make those elusive connections that you may have missed when reading a book or watching a video. You can impart some of what you learned onto someone else and even though you may have done it to teach yourself, you may have gifted someone else with your time. I know very little about SQL (just the basics), but I like to listen to people who do. I enjoy spending time with them, maybe because our brains crave learning.

People who complain about the payment of open source developers, miss the point completely. If, say, Red Hat is paying you to write open source software, they are gifting your time to humanity. If you write a program

MY OPINION

For an hour every Tuesday night, you are gifting that hour to others. *You have to make that decision. If you want to show off your coding prowess, by all means do so. Complaining about it after the fact is not cool, however. If you don't want big tech to use your program or a derivative of your program, without payment, put it in the T&Cs, I mean 'they' do!!

It is because of selfless people, that you and I (the ones reading this – because I'm assuming you are all Linux users) are where we are today; we are able to use a free operating system, with free software. Go on, give the gift that keeps on giving, and Merry Christmas and a Happy new year to all who I have missed.



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 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 Budgie 25.10

The Ubuntu Budgie developer's big project for the current release cycle is to move the distribution from the X11 display server to Wayland and there is progress there to report. The last release, 25.04, and this new one, Ubuntu Budgie 25.10, still use X11, but both have an optional Personal Package Archive that can be installed to carry out Wayland testing.

When 25.04 came out back in April, 2025, the stated intention with the follow-up Ubuntu Budgie 25.10 release was to use budgie-desktop 10.10 which would be Wayland-only, but that did not happen and it uses budgie-desktop 10.9.3 instead. Today, the updated plan is that the next release, Ubuntu Budgie 26.04 LTS, will ship with budgie-desktop 10.10, employing the lightweight labwc (Lab Wayland Compositor) and support for X11 will be dropped, leaving it as Wayland-only. Normally it would be considered risky to introduce something this new and critical in a long term support (LTS) release, but a year of testing and

development work seems to have convinced the developers that it can be done safely.

Ubuntu Budgie 25.10 made its debut on 9 October, 2025. This is the third and final of the three interim releases in this development cycle leading to the next long term support version, Ubuntu Budgie 26.04 LTS, expected on 23 April 2026.

Ubuntu Budgie 25.10 is the distribution's 20th release and the 18th as an official Ubuntu flavor. Because it is an interim release it is

only supported for nine months, until July 2026.

Installation

I downloaded the ISO file for Ubuntu Budgie 25.10 from the official website using the Transmission bit torrent client and then did an SHA256 sum check using the command line to make sure it was an uncorrupted download. This is always a good precaution which can save much trouble later on.

The downloaded ISO file was 3.6

GB in size which is 100 MB bigger than the last release, Ubuntu Budgie 25.04.

I dropped the ISO file onto a USB stick equipped with Ventoy 1.1.07 and booted it up for testing. Ubuntu Budgie is officially supported by Ventoy and it worked flawlessly.

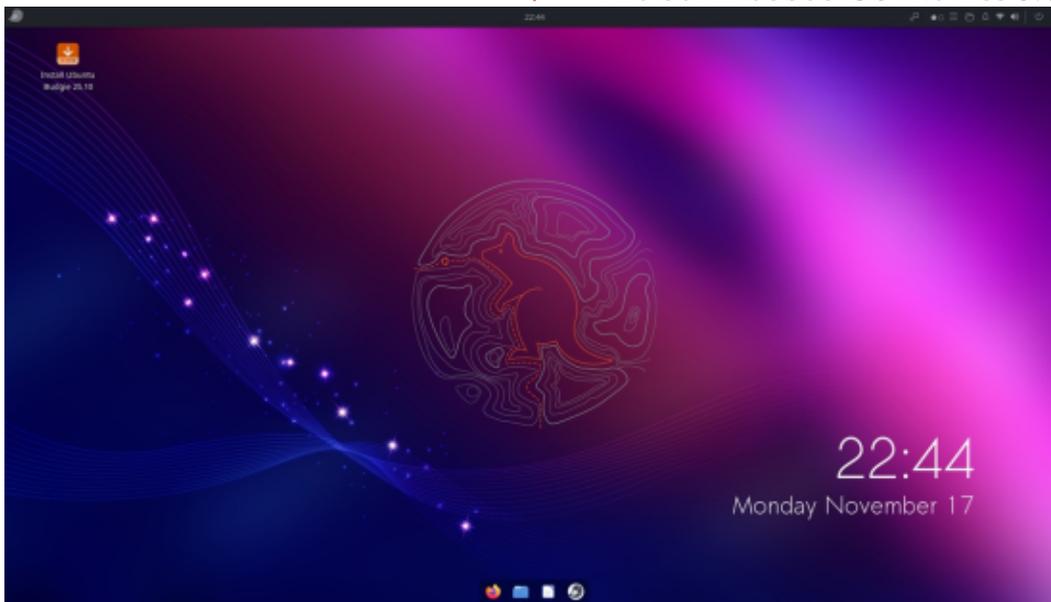
System requirements

The recommended minimum system requirements for Ubuntu Budgie 25.10 have not changed over the last few releases and are still:

Processor speed: 2.4 GHz
RAM: 4 GB
Hard Disk space: 60 GB

New

Because the recent developer focus has been on getting Ubuntu Budgie ready for Wayland, most of the activity has been behind the scenes and, as a result, very little new has been introduced in 25.10



that users will notice.

This release brings budgie-desktop 10.9.3, an upgrade from version 10.9.2-8 shipped with the last release, 25.04. Budgie-desktop 10.9.3 introduces compatibility with GNOME 49, to make those applications work right.

As with all the flavors based on Ubuntu 25.10, in this release the Linux kernel has been updated to version 6.17 and the initialization system is now systemd 257.9. Ubuntu Budgie 25.10 also incorporates rust-coreutils and sudo-rs, which it inherits from the upstream Ubuntu 25.10.

Settings

Ubuntu Budgie has a lot of user settings but they are widely scattered and can be quite confusing for new users. I am sure experienced users get used to where everything is, though.

Here is where to find the settings:

Budgie Desktop Settings:

- These are window themes, under Style - Widgets. There are 14 window themes to choose from with Pocillo-dark as the default.
- Dark theme on or off
- Icon styles, eight to choose from, with Pocillo as the default

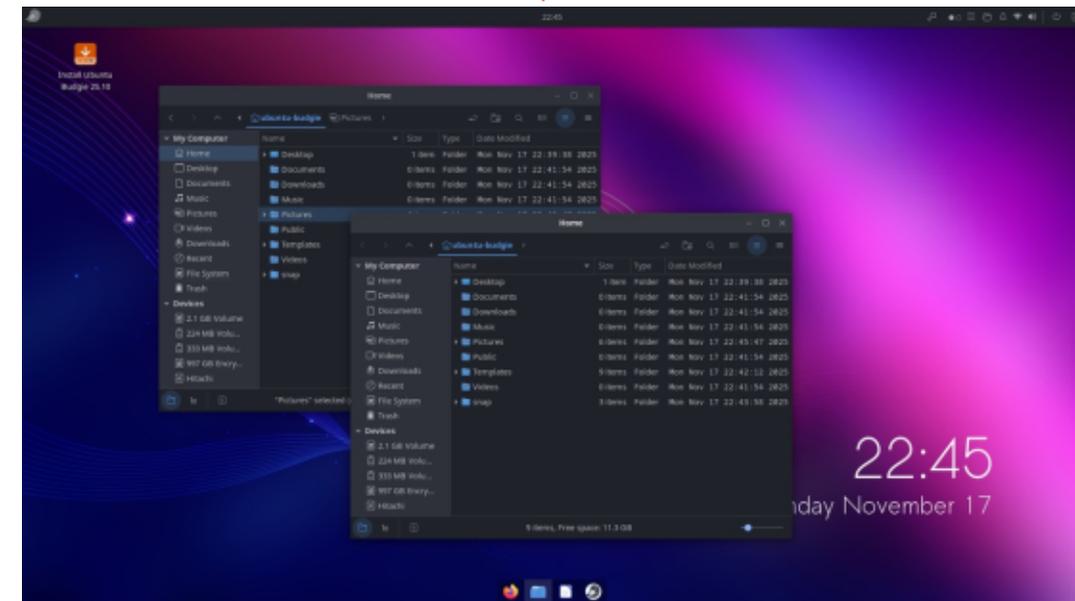
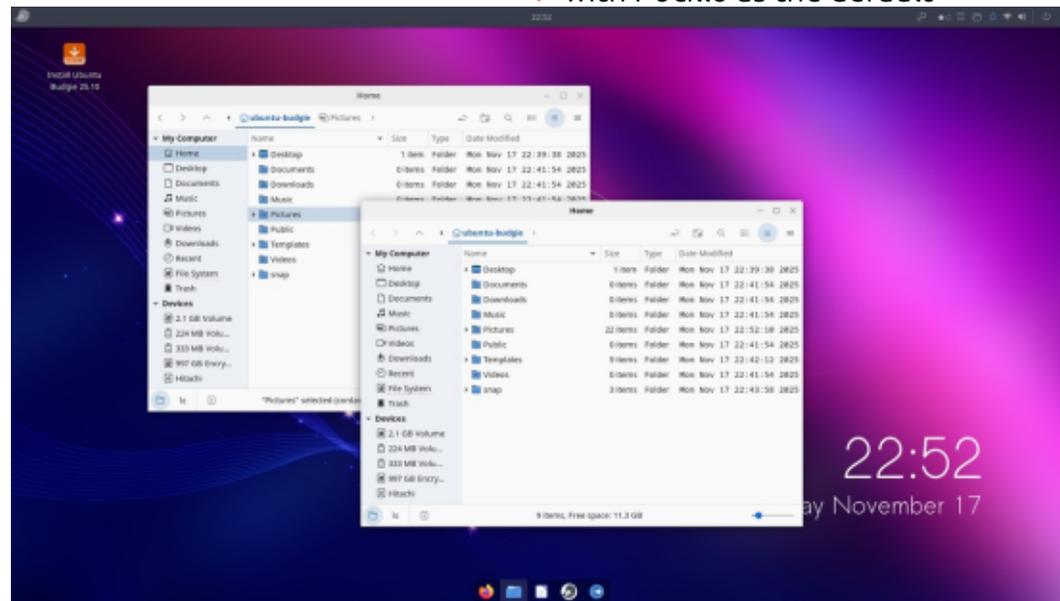
- Cursor styles, nine to choose from with DMZ-White as default
- Notification screen positions: four to choose from, one in each corner, with top right as default.

Budgie Makeovers & Layouts:

- Switch Appearance: these are complete one button wallpaper, window theme and icon packages with ten to choose from, three preinstalled (*) and the remaining seven as downloads. Choices are: Arc Design*, Colliod, Fluent, Material Design (Materia), Material Design (Vimix), Mojave, Orchis, Pocillo*, QogirBudgie* and WhiteSur.
- Desktop Layout: Eight to choose

from. Each one includes launchers and menus that mimic most common desktop set-ups. All are preinstalled (*) except Chrome that requires downloading. The choices are: Ubuntu Budgie*, Classic Ubuntu Budgie*, Redmond*, Eleven*, Chrome, Traditional Budgie*, The One* and Cupertino*.

- Budgie Extras: these are desktop applets, 39 included. These applets add features such as calendars, weather and other functionality to the desktop.
- Budgie Control Center: this is a modified version of GNOME Settings for configuring such items as WiFi, wallpaper, sound and power settings.



For this release, which is code-named Questing Quokka, a quokka motif has been added to the standard Budgie spacey-looking wallpaper ("ubuntu_budgie_wallpaper1") which has been in use since Ubuntu Budgie 19.04, to create the new 25.10 default wallpaper. The current release comes with 15 wallpapers, the same number as the last release. In addition to some space-themed ones, there are also some nice photographic wallpapers included.

As in the past, the Budgie main menu can be set to either show application tiles in alphanumerical order or a list of icons by category.

However, unlike on the Cinnamon and Xfce desktops, the Budgie menu cannot be resized.

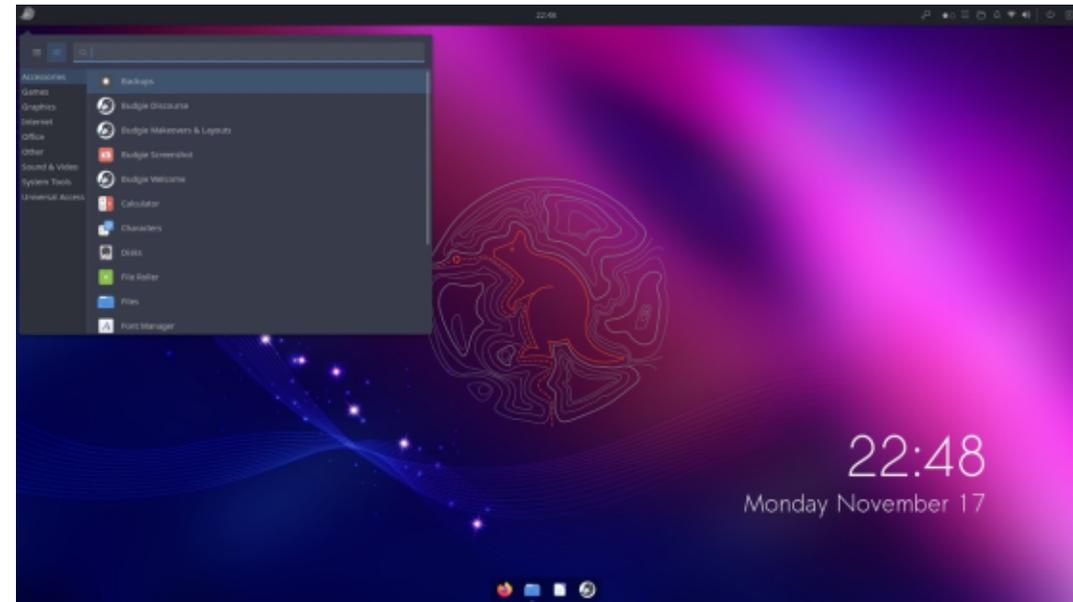
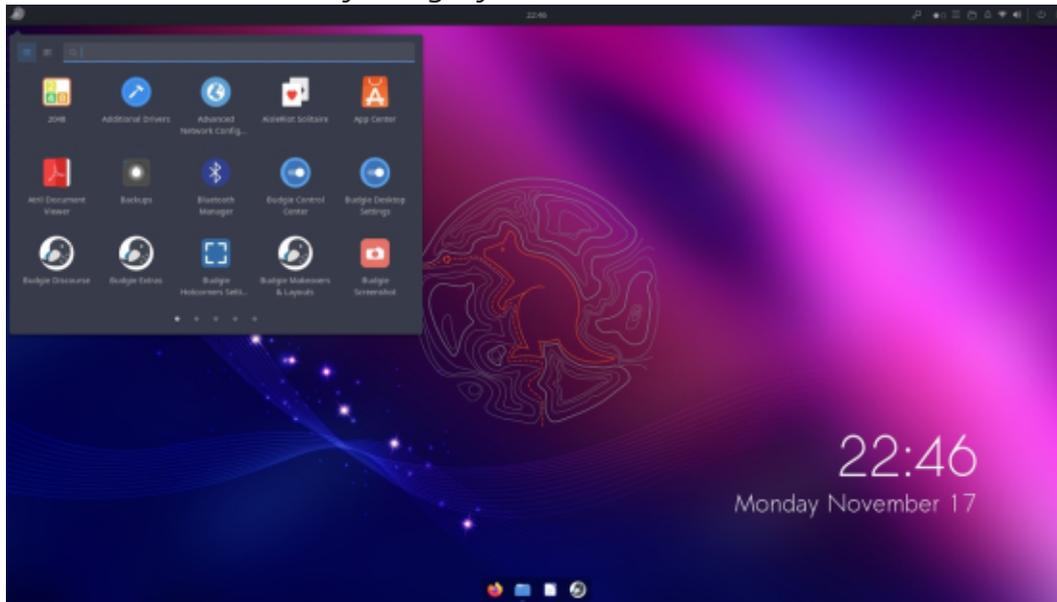
This release continues to use the budgie-desktop dock which replaced the previously-used Plank dock starting with Ubuntu Budgie 24.10, back at the beginning of this release cycle. Plank's limitation is that it is X11-only and the new dock is Wayland compatible (although it works on X11 as well), so this was one early piece of the Wayland puzzle completed. The new dock works well and has many configuration options found in Budgie Desktop Settings- Bottom Dock, including adjusting the icon size, moving the dock location to any screen edge and even turning

off "dock mode" which renders it similar to a panel instead. In fact, in that mode it can be placed on the left screen edge and there it looks and works much like Ubuntu's dock. It can even be deleted (using "remove panel") and then you can use alt-tab to find open applications and the menu to launch them. Unlike the old Plank dock which could be just turned on and off, once this one is deleted it is gone and takes some work to reinstall. I would suggest, if you want to see how Ubuntu Budgie works without the dock, do it in a live session first instead of the full installation.

Some of the applications included with Ubuntu Budgie 25.10 are:

- Archive Manager (File Roller) 44.5 archiver*
- Atril 1.26.2 PDF viewer*
- Budgie Screenshot Applet screenshot tool
- CUPS 2.4.12 printing system*
- Deja Dup 49.0 back-up tool
- Document Scanner (Simple Scan) 48.1 optical scanner
- Drawing 1.0.2 image editor*
- Firefox 143.0.4 web browser**
- Goodvibes 0.8.2 internet radio
- GNOME Disks 46.1 disk manager*
- Gparted 1.6.0 partition editor*
- Gpodder 3.11.3 podcast player*
- gThumb 3.12.7 image viewer*
- Guvvview 2.2.1 webcam

Applications



REVIEW

application*
LibreOffice 25.8.1 office suite
Lollypop 1.4.42 music player
Magpie 0.9.4 window manager
Mate Calculator 1.26.0 calculator*
Mate System Monitor 1.26.3 system resource monitor*
Nemo 6.4.5 file manager*
Parole 4.18.2 movie player*
Pipewire 1.4.7 audio controller
Systemd 257.9 init system
Text Editor (gedit) 48.1 text editor*
Transmission 4.1.0 bit torrent client
Ubuntu App Center 1.0.0 package management system**
Xfce4 Terminal 1.1.4 terminal emulator*

Plus five games:

Aisleriot Solitaire 3.22 35*

GNOME 2048 3.38.2*
GNOME Mahjongg 48.1
GNOME Mines 48.1
GNOME Sudoku 49~RC-1

* indicates same application version as used in Ubuntu Budgie 25.04
** supplied as a snap, so version depends on the upstream package manager

This release has no change to the list of default applications provided. It does come with a reasonably complete suite of applications, enough at least to get most desktop users started.

Ubuntu Budgie 25.10 continues to use the Cinnamon desktop's Nemo file manager. Nemo is a good

file manager with lots of customization options but, in this implementation, it has no integral bulk file renaming so installing a standalone bulk file renamer like GPRename is a good idea.

Ubuntu Budgie 25.04 includes the LibreOffice 25.8.1 office suite, complete except for LibreOffice Base, the database program. It is probably the least-used part of LibreOffice and can be installed if needed.

Conclusions

Ubuntu Budgie 25.10 is a good release with not much in the way of new features, so it is very similar to

the last release, Ubuntu Budgie 25.04.

The major change in this development cycle is really still pending: the move from the X11 display server to Wayland. Originally scheduled for this release, it is now expected in the next release, Ubuntu Budgie 26.04 LTS, due out on 23 April 2026. Hopefully that particular budgie will fly straight and true because you don't want any serious issues in an LTS release. I suspect, in practice, it will turn out to be an easy transition given that Ubuntu and Kubuntu's recent moves to Wayland were smooth.

Ubuntu Budgie will appeal to



REVIEW

users looking for a desktop that has a classic menu system plus an optional dock. For users, the only real downside is that the user settings are widely scattered and confusing, which takes some getting used to.

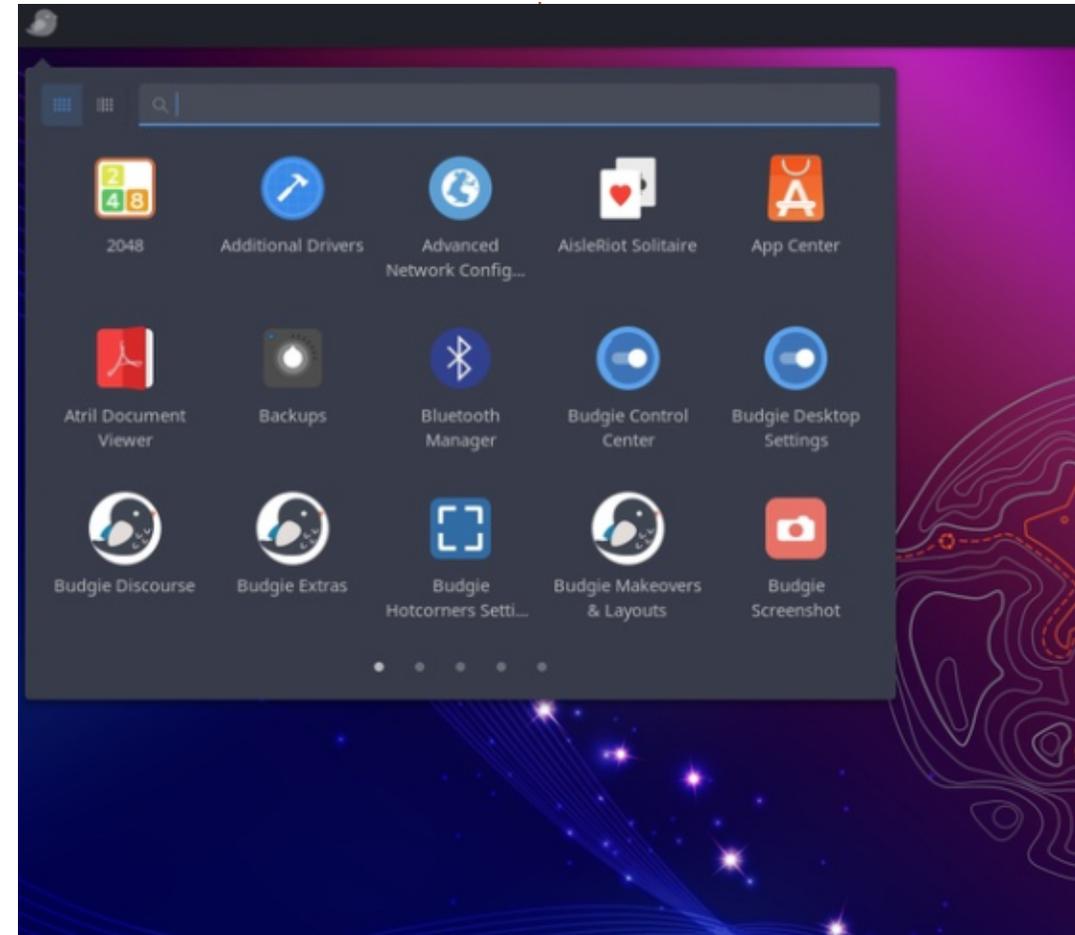
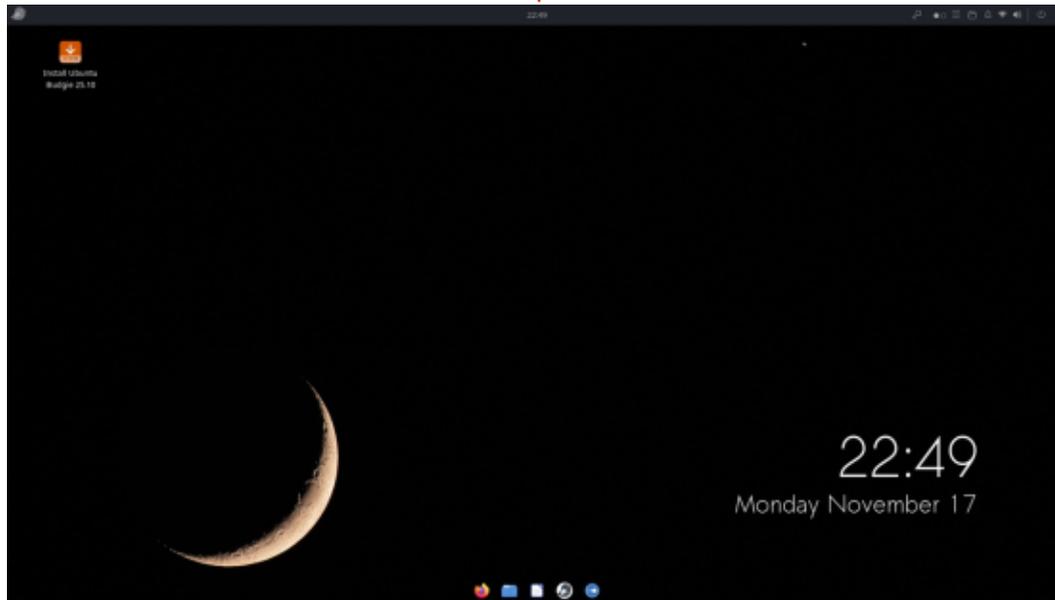
External links

Official website:

<https://ubuntubudgie.org/>



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





I go to occasional recovery groups for my addiction to distro hopping.

Unfortunately, these get-togethers (usually called Linux conferences) usually result in me picking up yet another USB with some group's pride and joy on it.

You name it, I've probably tried it. Windows (including the awful Vista and Me series), Mac OS, Linux, Android, iOS, MS-DOS (and its identical twin, IBM DOS), Tandy OS (Radio Shack's stab at MS DOS) and the dreaded JavaOS.

No matter what, it's back to some version of Linux for me, mainly because it works quite well on older machines and that's great, especially since I'm a cheapskate always on the prowl for an inexpensive laptop that used to be pricey.

My main test machine is a 2018 Dell 7490 that the owner gave up because the battery was dead. Originally costing around \$1,500, this was the pinnacle of business

class portable powerhouses in its day, sporting a 14 inch touchscreen, Intel i7 processor, 32GB RAM and a 512GB SSD. Add a carbon fiber lid and backlit keyboard, and I'm in laptop bliss.

Installed a newer battery and it was off to the races.

Now comes the hard choice, which version of Linux?

Ubuntu? Capable but ho-hum and then there's that whole Snap thing. My last test with Ubuntu Cinnamon was fraught with issues

and updates that caused more headaches than they solved.

Linux Mint? Again, capable, but it really needs a refresh, at least to me. The desktop looks and sometimes acts dated.

Distrowatch to the rescue. While Mint and Ubuntu are always in the top 10 (although some Ubuntu variants have slipped way down the listing), I recently noticed that MX Linux (often abbreviated MX) had managed a slot at number 3 for the November, 2025 rankings, quite a feat given previous versions

were often much lower.

It could be that the newest version, 25 (AKA "Infinity") was just released 11/9/25, but I had a hunch something was afoot.

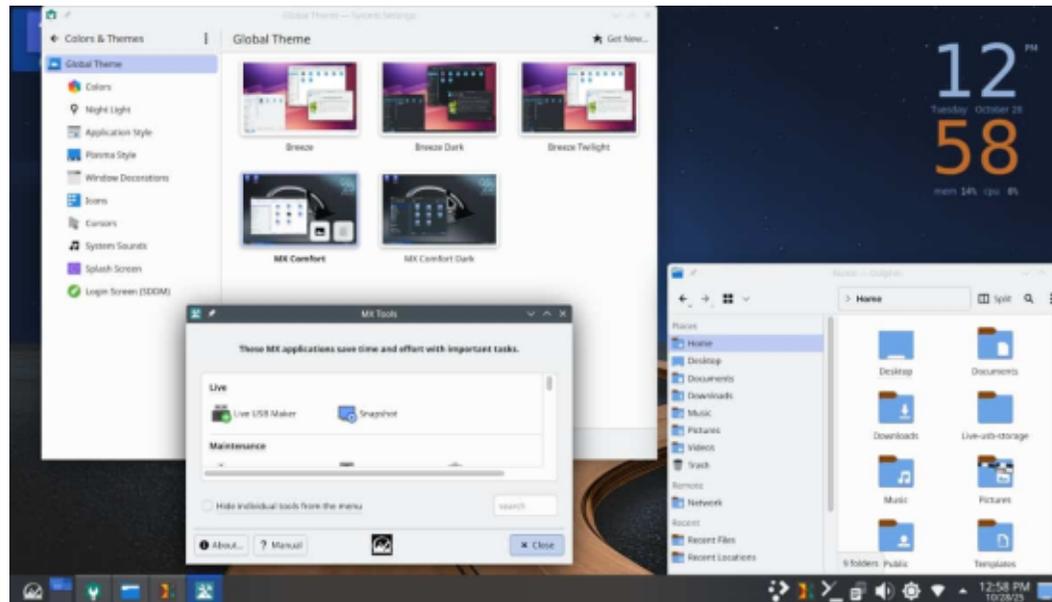
While it's true that the Distrowatch ratings are based upon website hits and no actual usage or download stats, it struck me as odd that MX has climbed so high so quickly. They're even beating out the newest Cosmic DE release from PopOS!

Seems they did something to spark interest and that's when I decided to give them a shot.

While it may be true that MX is aligned with Debian, so is Ubuntu. More or less, they are both based upon the stable branch of Debian with a few tweaks here and there.

Plus it has a history, as outlined at mxlinux.org:

MX Linux began in a discussion about future options among members of the MEPIS community in December 2013. Developers from



antiX then joined them, bringing the ISO build system as well as the Live-USB/DVD technology. The name "MX" was chosen to combine the first letter of Mepis with the last of antiX, thus symbolizing their collaboration. In order to be listed on DistroWatch, MX Linux was presented as a version of antiX and released its first version in March of 2014. It received its own DistroWatch page as a separate distribution with the release of the first Public Beta of MX-16 on November 2, 2016.

It appears MX has come quite far in a little over a decade. No longer a lightweight distro like its sibling, antiX (520MB to 1.8GB), it is now in the middle category at 2.56GB, not much smaller than baseline Ubuntu or Linux Mint offerings.

I tried Mx Linux before (version 23.x) and while it started out strong, things got glitchy for unknown reasons. Hardware would work one day and not the next, etc.

But, I'm a glutton for punishment, so why not try it again, even if the website changes names from MXLinux to MX Linux (with a space) and just plain MX?

The website gives you three choices, KDE, XFCE and Fluxbox. There is even a Raspberry Pi version but it's for Pi series processors.

Potential users have sub-categories to consider, at least for the KDE and XFCE options. You can choose the standard iso or the "ahs" for advanced hardware support on newer computers.

Seeing that my test laptop is at least 7 years old, I opted for the standard XFCE version.

And for the really adventurous, there are community respins at MX-Linux - Browse / Community_Respins at SourceForge.net . There is even a

<1GB version called minimal (nothing but the system and the Firefox browser), but MX Linux states to tread lightly here and I merely looked but didn't bite.

I tested the live version first and found it interesting enough to merit a full install.

MX and antiX share the Gazelle installer which differs from most in that it handles the BIOS/UEFI matters for you and the whole procedure is pretty much intuitive, although I did find it odd I had to keep hitting the next button to go forward through multiple screens until I could enter my user name and password.

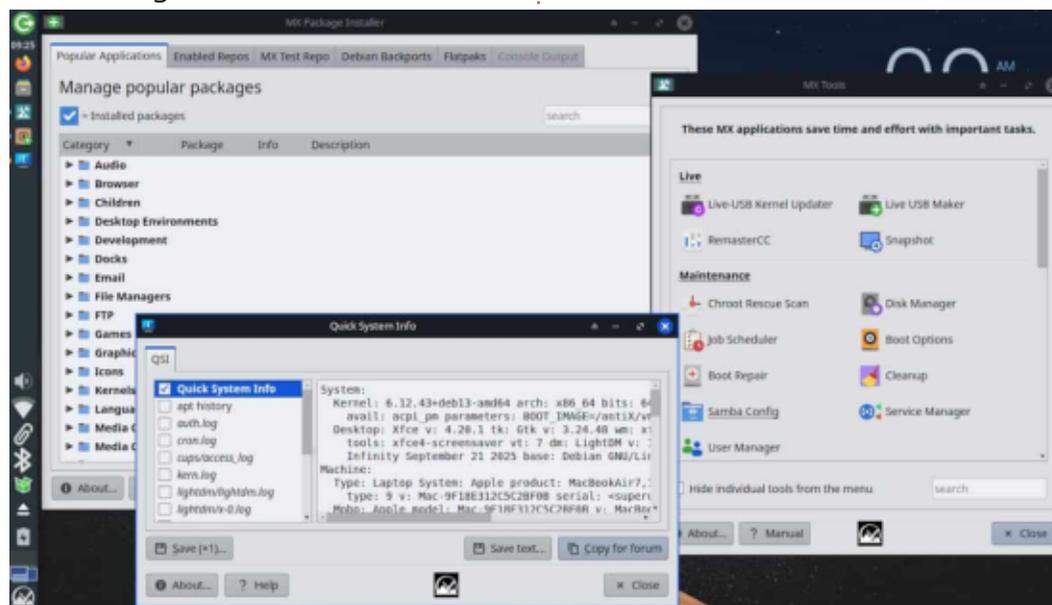
One addition that merits acknowledgment is the inclusion of an option to keep everything you altered or added during the live session.

That's right - everything I changed during the live session carried over to the full install. That has always been a standard for MX and something other OS developers should strive for.

The full installation took all of 5 minutes. Come to think of it, creating the bootable USB took longer.

As for initial impressions, it looks a lot like every other XFCE offering out there, but there are subtle twists.

At every boot (until you cancel that option via the check box) you'll see this:



REVIEW

It's the welcome screen that gives you immediate options.

If you need initial information and assorted tools, this is where you'll find them.

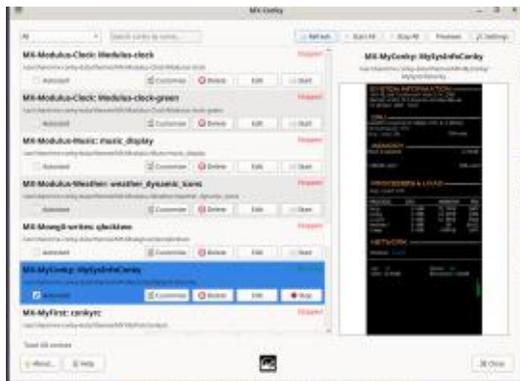
Of course, they are also repeated in the main menu.

But that's not the only thing that'll open at boot.

Remember Conky, the desktop system monitoring app from the early 2000s that seemed to be everywhere but then faded?

Well, it's back!

And it's not that lackluster, cartoonish-like variation from 20+ years ago. Nope, this version comes with 86 variations to choose from.

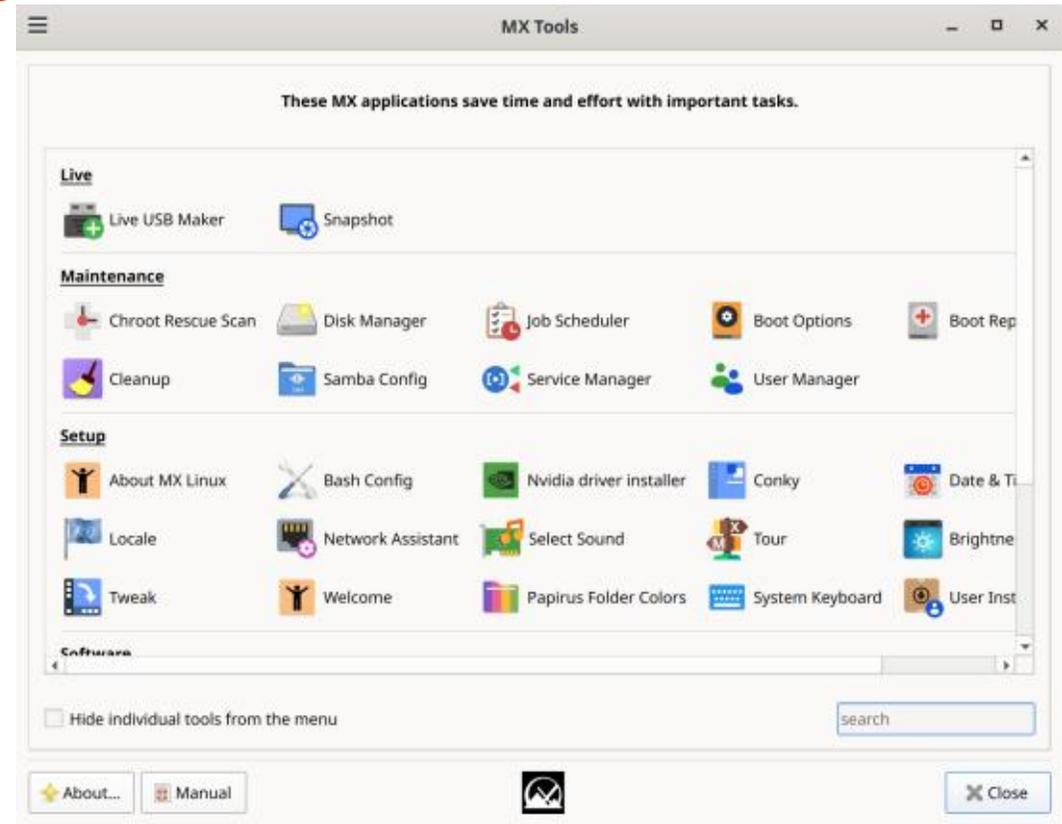
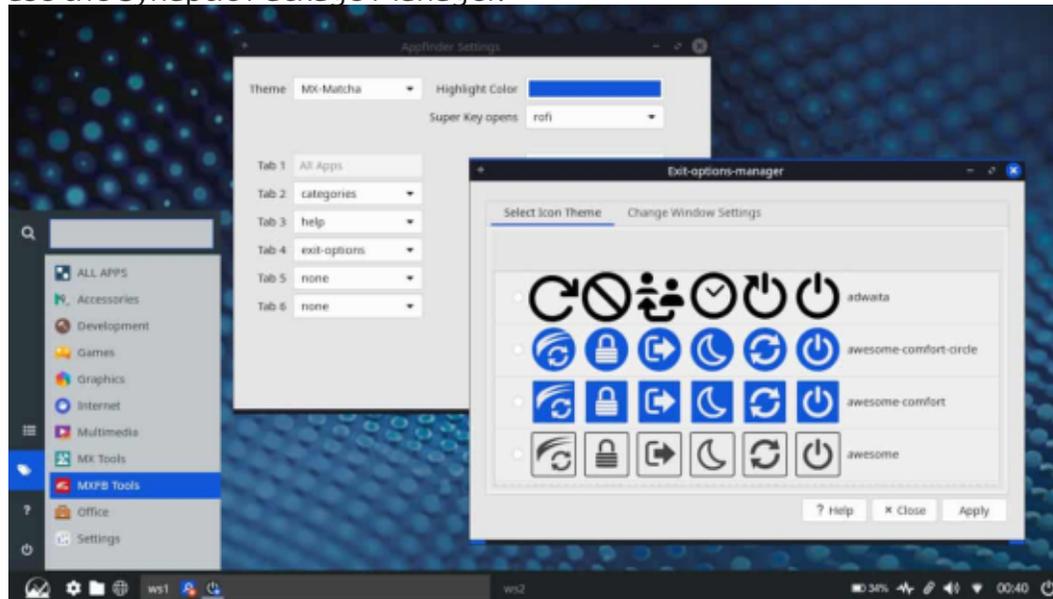


In my case, I whittled that number down to below 70 (some were just too old or limited), but I have a choice of designs merely by clicking a button.

Now on to the really important stuff - how does this operate and what can you add?

The menu itself is the standard affair and you'll also notice the usual apps like Firefox, Thunderbird and LibreOffice, among others.

As it comes, MX offers the option to add apps via their own branded software repository but Flatpaks can be added, or you can use the Synaptic Package Manager.



As for me, I added the Kila Store which offers a direct link to the flathub.org website and all related apps.

In doing some research, I found that some users have even gone as far as adding the Linux Mint apps store; however, the MX package manager does quite well on its own if you prefer to keep it simple.

Beyond app acquisition, the MX Tools category offers a decent set

of tweaks that should keep most of us busy for an afternoon and I do appreciate the Cleanup tool that is tailored to this OS.

One of the first tweaks I used was to cut the boot wait time from 5 seconds to 0. Since I have no other OS on this SSD, it makes no sense to wait.

Now it boots within 15 to 20 seconds and a few seconds of that is me entering the password.

As for hardware recognition, so far I've had no issues. Webcam, microphone, soundcard, keyboard (backlighting, too), touchpad and assorted USB/SD ports all work. Function keys still function and, for unknown reasons, my battery life has gone from 6 hours with Ubuntu to over 8 with MX. My cooling fan works less, too.

And that's after adding the Cinnamon desktop so it would be a fair comparison to the Ubuntu Cinnamon offering.

In case you're wondering, MX Package Installer offers, under the Desktop Environment section, the options to add Gnome (base), KDE6, LXDE or Mate. I added Cinnamon

via the terminal and saw no issues even though it's a bit more power hungry than what MX offers as standard.

Just for giggles, I added a boatload of apps from various outlets. Some from Synaptic, yet others from the MX offerings, a few via the terminal and several more from Flathub via Kila.

Just one failed to work and I had a hunch it wouldn't - atanks, AKA Atomic Tanks. Older than Methuselah, this game was so overwhelmed by modern specs it zipped through a game in less than 1 second. Why it's still offered, I don't know.

Curiously, XBill, a game from 1994 where players must battle against Bill Gates and Steve Jobs so they don't dominate the computing world, played like nothing had changed since the last update in 2001 or so.

Otherwise, everything opened quickly, even GIMP, a notoriously power hungry photo editing tool.

Call me impressed.

Then I tried a RAM choker by

adding desktop icons galore. On my Windows 11 laptop (I'm testing the Snapdragon processor) I watched as too many icons caused the boot ending sequence to induce a "please wait" swirly.

With MX, a couple icons did flash but no real wait was forthcoming.

There is one oddity though, and it's minor. While Ubuntu and Linux Mint use their own software update systems, MX relies on the Synaptic Package Manager. Click on the update icon and that's where it'll take you.

Harkens back to the old days, doesn't it? Fortunately, it works and the update system presents no issues for me.

In essence, this is a worthy competitor to the likes of Ubuntu and Linux Mint. If nothing else, you might not find too many others using it at your next Linux conference. Then again, maybe you will.

And now that leaves one final question - how long will I keep this before hopping to yet another distro?

Don't lay any bets yet.



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ubuntuforums.org/forumdisplay.php?f=270

LibreOffice Shorts

Erik, thank you for your first LibreOffice short in FCM#225.

Much appreciated. Keep up the good work.

Johan Landman

Erik, it was short, to the point, and a bit of interesting trivia. Please continue with the idea. I use LibreOffice on Ubuntu but I am not a writer. This type of article is an easy way to learn more. Any and all pieces of LibreOffice are welcome.

Bill

Ronnie says: *don't forget that there's a LibreOffice Special Edition that lumps 50 previous articles about LibreOffice into one PDF:* <https://fullcirclemagazine.org/special/libre-office/>

FULL CIRCLE NEEDS YOU!



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

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

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



Q&A

Compiled by EriktheUnready

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

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

The saying goes, "you can't judge a book by its cover", but it turns out, you can! In a recent study of 400 university students, they all judged the books correctly. Most were able to tell the genre from just looking at the cover. The students who confessed to reading a lot, scored the highest. Some genres were 100% accurate, meaning that no-one misjudged the category. While I know that the idiom means something else, it is

no longer "valid" to newer generations, who did not know books to be very expensive and bookmakers inlaying covers with fancy fake gold etcetera, to pump up the value. Kids already do not know why you "dial" someone on the phone. I had a chat with a friend, where a "programmer", who did not know the underlying programming language, but knew the "framework" back-to-front and got demos and mock-ups out the door faster than any programmer, was paid the most and seen as the most valuable employee. (What I'm getting at is; things move on.) Since I use LibreOffice all the time, to me it is "normal", but other people say it looks "dated" or "old", like Windows '95, what part needs to be "updated" to make it "look modern"? Should that top bar move to the side to take advantage of wider screens? Do the icons need a re-work? People are judging LibreOffice by its cover and are they correct?

Q : Recently a friend introduced me to freetube. It's great. I get to subscribe to all my favorite channels without needing Gmail. For the last two weeks now, I see [BAD_HTTP_STATUS: 403] Potential causes: IP block or streaming URL deciphering failed on all the videos. I have been checking the website for updates, but there are none, meaning the issue is with Ubuntu then. What could be wrong?

A : The issue is with YouTube. As a long time user of FreeTube, I can tell you that not only is it still in BETA, but every time YouTube changes something it takes a while to figure out what and patch it. I can confirm that it currently does not work, the last update was v0.23.9 Beta. (I knew it was coming, as when I downloaded something with yt-dlp, I saw new formats. It seems like YouTube added translations to the audio channels, so instead of just "250", for instance, you now have 250-1, 250-2 etc.) Just give it some time.

Q : I have installed Debian 13 KDE inside of Virtualbox on Ubuntu 24 as I have always used Ubuntu Gnome and wanted to try KDE. So while I'm at my father-in-law's house I turn off the wifi, but then the Debian VM keeps telling me that wired connection 1 lost connection and then immediately that wired connection enp03 lost connection. How can I fake it in Ubuntu for the VM? The constant popups drive me crazy.

A : Won't it just be easier to turn off the network in your VM? If you just click "disconnect" the notifications should go away.

Q : Help! I'm trying to install GhostWriter from the Snap store. It definitely says it is 56MiB. After about 700MiB I gave up. Then I tried via the command line with `sudo snap install ghostwriter`, but that "hangs" at plugins. Though it is still downloading something? After about another 700Mib of data I gave up. Software center says it is installed, but it cannot uninstall it. I'm so confused rn. I'm still on

24.04.

A: I tried to install it to confirm and it seems to be trying to install the KDE version of core for me, (I'm on Ubuntu Gnome) I suspect you are too, as I can install it on Debian KDE without issue. I think it is a Gnome/KDE underlying support files bug. Try reaching out to the Snap creator. Maybe look for it in another package format?

Q: I can't seem to find any REAL info on tracker3. It's driving me insane. It constantly sits at 104% CPU usage. The little I could find on the internet says I should use tracker3 reset -s -r, but I need to do it multiple times and it only works for a minute, before it restarts again. If I check the error log inside /home/nobody/.cache/tracker3/files/errors I find that it has issue with "Message=Could not get any metadata for uri:'file:///home/nobody/Videos/fpga/Ex_Files_Learning_Verilog_FPGA_Development/Exercise%20Files/Ch02/02_08/if_else/if_else.sim/sim_1/behav/xsim/mux_TB_behav.wdb' and mime:'application/vnd.ms-works'" and every chapter and subchapter has the .wb files. It also seems to

crash/hang on my pdf files. I have search turned off in settings, so why is it still forging ahead?... <https://manpages.ubuntu.com/manpages/noble/man1/tracker-miner-fs-3.1.html> is about as useful as a pimple on my butt. It's a problem since my last update.

A: I found the following on the Arch wiki, that you could try: (It is something I would try if I had your issue)

```
systemctl --user mask
tracker-miner-fs-3.service
```

```
systemctl --user mask
tracker-store.service
```

```
systemctl --user mask
tracker-extract.service
```

Now reboot

You may get an error with one or two of the inputs, but it won't break anything.

Q: So I can see my own history when I run history, but I noticed some commands were missing. I may have used sudo for them. Obviously there is no root account to log into, so how can I check to see what was done on my account as root?

A: Off the bat, from what I understand you are asking, I think you need journalctl. The -t option is syslog identifier, so it would be something like: journalctl -t sudo -and it *should show you the missing ones. If any of our readers have better ideas, you know where to send them. **Also if you use a space as the first character, the command is not stored in history.

Q: I'm not very geeky, so I consider myself quite the newbie. I am not a fan of Gnome, so I use XFCE. I liked the Neon distro, but it crashed too much, so I went back to XFCE. This year round I thought it would be great to reconnect with KDE. Now with KDE in 2025, I use the default Kate to edit my text documents. I make sure to save everything and close Kate, but when I shut down, there is this diff pop-up that annoys me and I never know what it is actually trying to tell me. How can I get rid of it please?

A: Don't use Kate to open your text files, use Kwrite instead. Set it as default if you have to. Your problem should go away. Kate is

more of a programmer's tool.

Q: Another question please, is there a way I can view .HEIC files on KDE? The default viewer fails and I don't want to install Gnome apps.

A: You can install Geeqie, from what I have found on the web. (Says it supports .heif and .heic files.) It is also a QT application, so it should fit in with KDE.

Q: How can I update only some of my snaps please? <removed> I can do this <removed> on the desktop but not on the desktopless machine.

A: So what you are looking for is this: snap refresh --hold=999h sublime-text (reference: <https://snapcraft.io/blog/hold-your-horses-i-mean-snaps-new-feature-lets-you-stop-snap-updates-for-as-long-as-you-need>)

Q: Are the different office packages in Kubuntu 100% compatible? Can I choose any one? I am leaning towards Calligra Office?

A : The short answer is “yes”, but the long answer is a resounding “NO”. It’s too long an answer for a Q and A. Needless to say, it is how you use it. If you just type letters, then sure. Pick one, try it, if you like it, keep it. If you don’t, try another. If you use images etcetera, I’d stick with LibreOffice or OpenOffice, but the files are not interchangeable between these two even, except on the surface.



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.



Website: <https://thewanderingvillage.com/>

Price: \$15-29 Fluctuations (Steam)

Blurb: *"The Wandering Village is a city-building simulation game on the back of a giant, wandering creature. Build your settlement and form a symbiotic relationship with the colossus. Will you survive together in this hostile, yet beautiful post-apocalyptic world, contaminated by poisonous plants?"*

The game starts by treating you to an animé intro scene. It is heavily inspired by 'Nausicaä of the Valley of the Wind', right down to the spore infection (infestation?) and single person gliders. Instead of giant grubs, you have some giant dinosaurs instead.

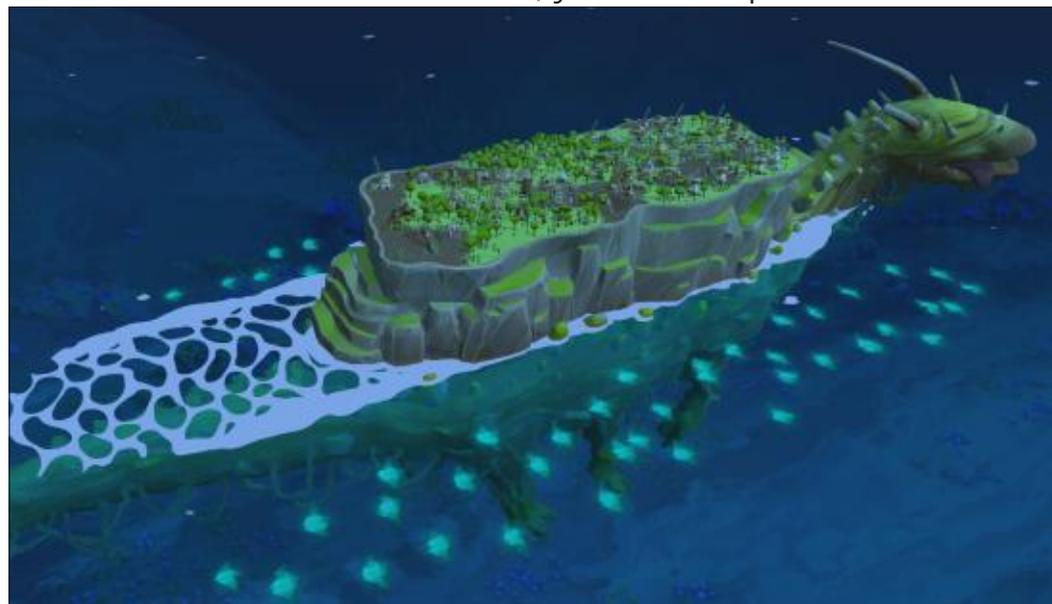
Before we start, let's call a spade a spade. In this game, you are fleas on a dog. Maybe not in so many words, but you are. :)

Though the game launched in 2022, in early access, the full game

was released on 17 July 2025. There were a few hiccups (constant crashes) and we waited a while. Now with version 1.1.3, it seems all is well.

Installation

If you install the game via Steam or shell script, it is as simple as clicking 'go'. There are no dependencies and it launches quite smoothly. That said, it did try to call home, which was not cool, not during installation, but during the first launch.



Sounds and Music

You are greeted by what feels like typical animé music. (<https://www.youtube.com/watch?v=FQox1rePF84>) It's different, I'll give them that, sort of an imagining of what tribal music would be like if they had access to more instruments and better composers. The OST has thirteen tracks and they are all sort of the same, with the fake choir chirping to the tune. That said, they do seem to fit the game perfectly, especially when you draw the parallel with Nausicaä

of the Valley of the Wind.

The game sounds are also cool, the sound of that horn had me looking up. :P

Graphics

We are going with the obvious, first. Why the heck does this dinosaur have a mountain of rock on its back? Heck, the other game similar to this, has you travelling on the shell of a giant turtle. This part made no sense, whatsoever. Imagine putting Mount Roraima or Table mountain on a creature's back. It is insane and borders on animal cruelty. If there is one thing I detest, it's animal cruelty. Thus I never tried the game in early access. Only later, when I found out it was an underground creature that came to the surface, carrying some with it, did I venture to try the game. The sprites in the game are okay, not great, but they are trying to emulate the animé characters, rather than be their own thing. The overworld map could have been a bit better, I think, just for that extra

immersion. My tip is once you start playing, remember to zoom in and out all the way, every now and then!

Gameplay

So far, it's been a great little romp that lets your imagination run wild. If you don't know already, this is a delightful narrative city builder / colony management game. Though it reminds one of Ixion, it does not feel as rich in lore, but it is close. Another parallel would be Frostpunk, if you need to picture the type of game. I'm sure most of you get one reference or the other. In the case of The wandering village, it is rather more relaxed.

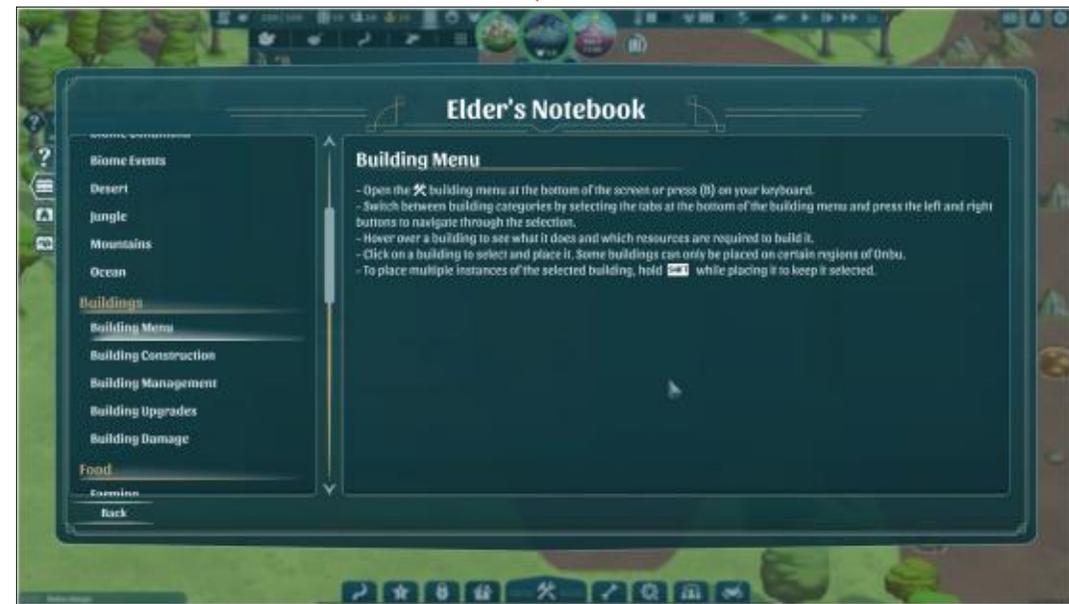
Don't get me wrong, there are still plenty of opportunities to get stressed and vexed, but to a lesser degree than say, Frostpunk. Overall it feels well crafted, the colony is just that colony from the intro video and because Hayao Miyazaki directed Nausicaä of the Valley of the Wind, it feels sort of Studio Ghibli and that sort of transfers to this game, which I think is what they were going for.

The management is two-fold in this game, where you need to manage your village and its people, as well as the Onbu. At first you cannot control where the Onbu goes on the map. The Onbu simply "wanders" (if it did not, the title would need a change...) but later on

you can entice Onbu not to go into the poison clouds. You have to realise that the Onbu is an independent creature and it will sleep when it wants, eat when it wants and poop when it wants. The slab of rock that the Onbu is hauling around for no apparent reason is also not infinite in size, so you need to plan accordingly. Since the Onbu wanders, one day you are in a rainforest, the next, you are in a desert, so you adapt in real time. Obviously you have those gliders, so you scout ahead and get some idea of what is in store over the next few days.

You start out with some berries and some trees and you need to manage them, or all will be used up.

Don't worry, it's not one of those games telling you how humans are polluting everything and chopping down all the trees and whatnot. You simply need to become sustainable. No woke garbage detected. You can support this title with a clean conscience. Soon you realise a wandering rock needs water and that is your next objective. You are eased into the city building. While the Onbu is still wild, it will wander into the spores and your people will get sick, prompting you to get a doctor going, ramping up your tension. The Onbu is not invincible (at one point you find a dead one) and you will have to care for it too, if you plan on surviving. I think that - and the post-apocalyptic (does an



UBUNTU GAMES

ecocide count as apocalyptic?) setting is what makes the game so endearing.

Because the Onbu moves at the rate of knots, your scouting parties can only go so far – meaning you cannot visit every point of interest on your path. This is yet another thing to manage as you need to decide if you need x over y. At no point does the game feel unfair and you should not have the urge to

rage quit, but sometimes I wonder how the Onbu's survive, sleeping in the middle of a poison patch. *Le Sigh...

If you like survival games and you like oddball scenario's, The wandering village is for you. If you are an animé fan and wished you could play in an animé world, The wandering village is for you. If you like animals, you guessed it, The wandering village is for you.

Because the world is not linear, there is some re-playability here, even if the story is sort-of fixed. The in-game wiki is well fleshed out and should help you with most situations.

We tested on an HP laptop, first generation i5 with integrated graphics, 16GB memory and SATA SSD and the game ran fine.



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



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

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

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