Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #235 - November 2026



ARTICLES DESPERATELY NEEDED!

KUBUNTU 26.10 REVIEWED

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Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

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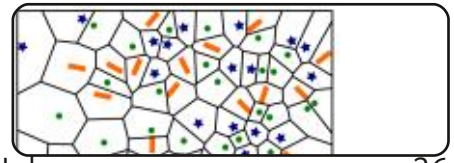
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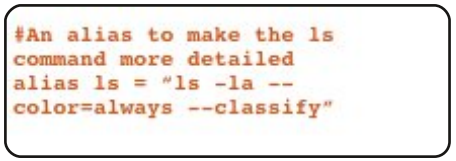

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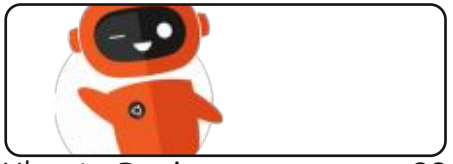
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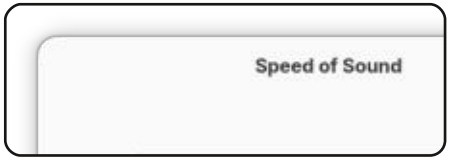

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EDITORIAL

Welcome to the latest issue of Full Circle

Once again we bring you some Latex, Inkscape and another part of our series on hosting your own wiki. We also have a piece (from the dev) on using Piburn.

Adam continues his reviews of 26.10 with Kubuntu. Next month we'll try and do Lubuntu and Xubuntu. Also check out the My Opinion piece from Art which is a set of brief reviews looking at speech to text software.

As you'll see (again) from the lack of a third HowTo, I'm **still** looking for articles. Please think about writing something and emailing it to me at the address below. Otherwise, there'll be less and less content each month I'm afraid.

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

All the best!
Ronnie
ronnie@fullcirclemagazine.org

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

NEW

https://www.youtube.com/playlist?list=PLnv0U8wOzXu487gi5I2Isf-rQjEyKPAiF

NEW

Ubuntu Touch 24.04-2.2:

26/10/2026

Ubuntu Touch 24.04-2.2, a continuation of the Ubuntu 24.04-based development branch, has been released. The firmware is being developed by the UBports project, which took over development of the Ubuntu Touch mobile platform after Canonical stepped away from it. The project is also developing an experimental port of the Unity 8 desktop, renamed Lomiri.

One of the main changes in this release: Due to the compromise of the eMudhra certificate authority, the list of root certificates has been updated.

https://ubports.com/blog/ubports-news-1/ubuntu-touch-24-04-2-2-and-24-04-1-6-release-4017

CoW 0.4:

26/10/2026

Thomas Adam, creator of the FVWM3 window manager, a key contributor to FVWM and maintainer of the portable tmux terminal multiplexer, has published the CoW (Compositor on Wayland) project, which aims to create a stacking window manager in the style of FVWM and MWM, using the Wayland protocol instead of X11. It aims for a simpler configuration mechanism, which, instead of a complex configuration syntax, uses a set of commands similar to tmux, used both in the configuration file and in the IPC remote control interface. The code is written in C and distributed under the ISC license. Builds are available for Arch Linux, Fedora and OpenBSD.

CoW is implemented on top of the modular River composite server, which handles the Wayland protocol implementation, rendering and input/output access control. CoW implements abstractions for window management, IPC, commands and capabilities for stack allocation, decoding and window compositing. This separation allows for a focus on window management functions without the intricacies of the Wayland protocol.

https://codeberg.org/cow-wm/cow/releases/tag/0.4

DinoX 2.3.2:

27/10/2026

DinoX 2.3.2, a cross-platform fork of the open-source Dino communications client using the XMPP protocol, is now available. Unlike Psi, Gajim, Pidgin and MirandaNG, DinoX offers all relevant XEP specifications out of the box, without the need for configuration changes or external plugins. DinoX also offers a more modern and user-friendly interface. The code is written in Vala (with a GTK interface) and is licensed under the GPLv3 license.

https://git.dinox.im/dinoxim/dinox/releases/tag/v2.3.2

Ginux kernel:

28/10/2026

Gregory Kurtzer, founder of the CentOS and Rocky Linux distributions, presented the Ginux project, an operating system kernel written in Rust, aiming to achieve

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

compatibility with the Linux kernel. The published research prototype is already capable of booting the system environment of Alpine with BusyBox and Rocky Linux 10 with systemd in multi-user console mode. The project's code is distributed under the Apache 2.0 license and supports x86-64 architecture systems. The core testing platform is a Q35 virtual machine (Intel Q35/ICH) running on the KVM hypervisor with OVMF (Open Virtual Machine Firmware), Intel IOMMU and virtio devices.

Of the 375 system calls in the Linux 6.12 kernel, 82 are fully implemented, 245 are partially implemented and 48 are blocked for security reasons. To identify failures that cannot be detected in synthetic tests, kernel performance is evaluated by running real applications and libraries such as musl, glibc, BusyBox and systemd.

https://x.com/gmkurtzer/status/2114958282481910115

GhostBSD 26.2:

28/10/2026

GhostBSD 26.2, a desktop-oriented distribution based on FreeBSD 15, was released. It offers builds with the Gershwin, MATE and Xfce desktop environments. GhostBSD uses the ZFS file system by default. It supports both live mode and hard drive installation (using the custom ginstall installer, written in Python). Bootable images are built for the x86_64 architecture.

https://ghostbsd.org/node/68

Development of Ubuntu Core Desktop has resumed:

29/10/2026

Jon Seager, Canonical's Vice President of Engineering and the technical lead for the Ubuntu project, announced the resumption of work on the Ubuntu Core Desktop project, which is developing an alternative desktop edition of Ubuntu that leverages the developments of the Ubuntu Core platform and uses Snap packages instead of.deb packages.

Unlike existing atomically updated distributions, where system components are mounted read-only, Ubuntu Core Desktop uses a "snap" model. With this model, the system environment, the Linux kernel, bootloader, desktop environments, multimedia servers, background processes and applications are delivered in snap format and managed by the snapd toolkit.

https://discourse.ubuntu.com/t/accelerating-ubuntu-core-desktop/90547

Hyprland 0.57:

29/10/2026

The Hyprland 0.57 compositing server, which uses the Wayland protocol, is now available. The project focuses on tiling windows, but also supports classic free-form window placement, tabbed window grouping, pseudo-tiling mode and full-screen window expansion. The code is written in C++ and distributed under the BSD license.

Features for creating visually appealing interfaces include gradients in window frames, background blur, animation effects and shadows. Plugins can be added for expanded functionality and socket-based IPC is provided for external control. Configuration is handled via a configuration file, with changes updated on the fly without restarting.

https://hypr.land/news/update56/

Tor Browser 16.0:

30/10/2026

Tor Browser 16.0, a specialized browser, has been released, featuring the upgrade to the Firefox 153 ESR branch. The browser focuses on privacy and security, routing all traffic exclusively through the Tor network. Direct access through the system's default network connection is impossible. Tor Browser builds are available for Linux android, Windows and macOS.

To protect against tracking user movements and highlighting visitor-specific features, the WebGL, WebGL2, WebAudio, Social,

SpeechSynthesis, Touch, AudioContext, HTMLMediaElement, Mediastream, Canvas, SharedWorker, WebAudio, Permissions, MediaDevices.enumerateDevices and screen.orientation APIs have been disabled or limited and telemetry senders, Pocket, Reader View, HTTP Alternative-Services, MozTCPSocket and "link rel=preconnect" have been disabled and libmdns has been modified.

https://blog.torproject.org/new-release-tor-browser-160/

Sculpt OS 26.10:

31/10/2026

Sculpt 26.10, a project developing an operating system based on Genode OS Framework technologies, is now available for everyday use. The project's source code is licensed under the AGPLv3 license. A 40 MB system image is available for download, suitable for use on PCs, PinePhone smartphones and MNT Reform laptops. It supports systems with Intel processors and graphics subsystems with VT-d and VT-x extensions enabled, as well as ARM systems with VMM extensions.

The Genode framework provides a unified infrastructure for creating user applications running on top of the Linux kernel. It includes the paravirtualized Linux kernel L4Linux, which runs on top of the Fiasco.OC microkernel, allowing regular Linux programs to run in the Genode environment. The L4Linux kernel does not interact directly with the hardware, but uses Genode services through a set of virtual drivers.

https://genode.org/news/sculpt-os-release-26.10

Enlightenment 0.28 and EFL 1.29 libraries:

31/10/2026

After nearly two years of development, the Enlightenment 0.28 user environment has been released. It is based on the Enlightenment Foundation Library (EFL) and Elementary widgets. The code is written in C and distributed under the BSD license.

The Enlightenment desktop is comprised of components such as a file manager, a set of widgets, an application launcher and control panel. The graphical configurators provide both high-level customization tools (changing the appearance, configuring virtual desktops, managing fonts, screen resolution, keyboard layout, localization, etc.) and low-level tuning capabilities (for example, configuring caching settings, graphics acceleration, power consumption and changing the window manager's behavior).

At the same time, the Enlightenment project published the EFL 1.29 (Enlightenment Foundation Library) set of libraries, enabling the creation of visually appealing graphical interfaces that are compact, lightweight and highly performant. Although initially developed for the Enlightenment environment, EFL components are often used to build interfaces for consumer electronics and mobile devices. For example, EFL is an integral part of the Tizen mobile platform and is used in Electrolux home appliances, Samsung products, ProFUSION, Free.fr and Cala

https://www.enlightenment.org/news/2026-10-31-enlightenment-0.28.0

RFC for the GNOME Project:

01/11/2026

GNOME developers have adopted a new decision-making process based on publishing proposals in the form of RFCs (Request for Comments) and then co-approving them. The RFC model introduces strict guidelines to increase transparency, structure the process and shift responsibility for decisions from individual to collective. The RFC-based model will be used to resolve deadlocks where consensus cannot be reached, to approve architectural changes and major interface redesigns and to approve major changes to the project that affect the workflows of participants or the code of various applications and subsystems.

https://thisweek.gnome.org/posts/2026/10/twig-272/

Trinity 14.1.7:

01/11/2026

After six months of development, the Trinity R14.1.7 desktop environment has been released, continuing the development of the KDE 3.5.x and Qt 3 code base. Binary packages will soon be prepared for distributions.

Trinity's features include native display management tools, a udev-based hardware layer, a new hardware configuration interface, a switch to the Compton-TDE composite manager (a fork of Compton with TDE extensions), an improved network configurator and user authentication mechanisms. Trinity can be installed and used alongside more recent KDE releases, including the ability to use KDE applications already installed on the system. Trinity also includes features for correctly displaying GTK program interfaces without disrupting the unified design style.

https://www.trinitydesktop.org/newsentry.php?entry%3D2026.11.01

SUSE wants AI over people:

02/11/2026

SUSE has announced a reduction of approximately 190 of the 1,900 full-time employees. The head of the company explained that the dismissals are dictated by the need to adapt the business model and revise the organizational structure, taking into account the fundamental changes in the industry caused by the exponential development of AI capabilities and automation tools.

Specific categories of reduced staff have not yet been disclosed, but it is noted that the decisions were made on the basis of an analysis where developers and engineers can delegate automation and which require the expansion of competences. Earlier SUSE tried to solve the problem through the program of voluntary retrenchment, but it failed. Tomorrow, the staff to be dismissed will receive the relevant notifications, and on November 16, the remaining employees will be presented with a strategy for the development of SUSE for the 2027 fiscal year, which will be based on a new development paradigm.

https://www.theregister.com/software/2026/11/02/suse-to-cut-one-in-ten-employees-because-of-ai/5306950

Cutefish OS:

02/11/2026

The developers of Cutefish, that develops the macOS-style desktop environment of the same name, announced the development of a Reef layer to launch macOS applications in Linux. The programs collected for macOS are installed from files in dmg format and integrated with the main desktop in Linux.

Applications are executed without emulators, virtual machines and proprietary components of macOS. Reef is developing from scratch without using the work of the Darling project and without reverse engineering of Apple's closed software. In the process of development, functionality is realized based on the capabilities necessary to launch specific applications - developers are trying to launch a program, identify non-working functions and implement them. The Reef code has not yet been published publicly, but soon the layer is promised to add to the Cutefish distribution.

https://cutefish.org/blog/mac-apps-first-milestone/

AerynOS 2026.11:

03/11/2026

The release of AerynOS 2026.11, (previously, Serpent OS) is out. The distribution uses its own batch manager and atomic system update model. The development is being carried out by the old development team of the Solus distribution, which include Ikey Doherty, the creator of Solus and Joshua Strobl, a key developer of the Budgie desktop environment. The boot iso image is 2.4 GB for the x86_64 architecture and comes with a GNOME desktop.

The distribution uses a batch manager named moss with its own format of Stone packages and tools for managing the state of the system.

https://aerynos.com/blog/2026/11/02/more-choice-and-developing-tooling/

Affinity for Linux:

03/11/2026

Representatives of Canva reported on the preparation of the Linux version of the Affinity package, which provides opportunities for editing raster and vector images, as well as computer layout. It is alleged that the Linux port is in active development, but the time of publication of the first release for Linux has not yet been determined.

Affinity is one of the main competitors to Adobe Photoshop, Illustrator and InDesign products, and is highly productive due to the active use of GPU capabilities and the parallelization of operations on different CPU cores. The package is popular with designers, illustrators and photographers thanks to a free basic version with a classic professional toolbox that can be used for personal and commercial projects. Monetization is carried out through the supply of AI-functions on a paid subscription and the use of paid Canva services.

https://www.omgubuntu.co.uk/2026/11/affinity-linux-release-confirmed

GIMP 3.2.8:

03/11/2026

We're glad to announce the release of GIMP 3.2.8! This new stable release contains a number of bugfixes and security updates from new and long-time contributors.

General Updates and UX Improvements
Highlighting New Contributor's Work
System-specific Updates
Security Updates

Please see the link below for long lists of CVE fixes.

https://www.gimp.org/news/2026/11/02/gimp-3-2-8-released/

Bazzite 45:

04/11/2026

The release of Bazitte 45, aimed at gamers, is out. The distribution is based on Fedora Kinoite 45 and Fedora Silverblue 45, developing the atomically updated editions of Fedora Linux with KDE and GNOME desktops. The builds are available for PCs, laptops, set-top boxes and game consoles such as Steam Deck, Asus Ally, GPD, Ayn and MSI Claw.

The distribution is supplied in the form of a monolithic image, not divided into separate packages and updated as a single whole. Applications are installed in Flatpak format or in container form. Waydroid is involved to run Android games. The distribution includes Steam and a selection of components that are in demand by fans of computer games, as well as additional drivers for game controllers and Wi-Fi. System components are optimized to enhance responsiveness and improve support for HDR and VRR.

https://universal-blue.discourse.group/t/bazzite-45-is-here/12702

MPV 0.42:

05/11/2026

After almost a year of development, the release of the open video player MPV 0.42 is out. (In 2013, it branched from the codebase of the MPlayer2 project.) MPV focuses on developing new opportunities without caring about maintaining compatibility with MPlayer. The MPV code is distributed under the LGPLv.1+ license, some parts remain under GPLv2, but the process of switching to LGPL is almost complete and the "--enable-lgpl" option can be used to disable the remaining GPL code.

https://github.com/mpv-player/mpv/releases/tag/v0.42.0

LXQt 2.5.0:

05/11/2026

After 6 months of development, the release of the LXQt 2.5.0 desktop environment, which continues to develop LXDE and Razor-qt projects, is presented. The LXQt interface follows the ideas of the classical layout of the desktop, but brings modern design and

techniques that increase convenience. LXQt is positioned as a lightweight, modular, fast and convenient environment, incorporating the best features of LXDE and Razor-qt. The code is placed on GitHub and is supplied under GPL 2.0+ and LGPL 2.1+ licenses. The appearance of ready-made builds is expected for Ubuntu (LXQt by default is offered in Lubuntu)

https://lxqt-project.org/release/2026/11/05/release-lxqt-2-5-0/

Vivaldi 8.3:

05/11/2026

The release of the proprietary browser Vivaldi 8.3, developed on the Chromium engine by former developers of the Opera Presto engine, is available. Vivaldi builds are prepared for Linux, Windows, macOS, Android and iOS. The changes made to the Chromium codebase, the project distributes under an open license. The browser interface is written in JavaScript using the React library, Node.js, Browserify platform, and various ready-made NPM modules. The implementation of the interface is available in source code, but under a proprietary license.

The new version offers a fully redesigned ad and tracker blocker, in which users are given the option to customize their own lock levels. By default, there are four levels available: "Disabled" (disables the blocker), "Weak" (blocks most surveillance and part of advertising), "Medium" (blocks almost all surveillance and advertising, sites can break) and "Strong" (blocks almost all surveillance and advertising, sites can often break). Also now the browser remembers individual blocking level settings for each site.

https://vivaldi.com/ru/blog/desktop/desktop-releases/vivaldi-on-desktop-8-3/

Cinnamon 6.8:

05/11/2026

After 11 months of development, the release of the Cinnamon 6.8 desktop environment has been formed. This is where the Linux Mint developer community develops a fork of the GNOME Shell shell, the Nautilus file manager and the Mutter window manager, aimed at providing a classic-style environment to GNOME 2 with support for successful interaction elements from GNOME Shell. Cinnamon is based on GNOME components, but these components come as a periodically synchronized fork not bound by external dependencies with GNOME. The new release of Cinnamon will be offered in the Linux Mint 27 distribution (in numbering it was decided to use the year following the release), which is planned to be released in the second half of December.

https://github.com/linuxmint/cinnamon/releases/tag/6.8.0

FluxCast 0.3.0:

06/11/2026

The release of the FluxCast 0.3.0 project, designed to organize Linux desktop streaming on Smart TV screens on Wi-Fi Direct (Miracast), DLNA and Chromecast protocols with minimal delay, was released. The source code of the project is written in Python and distributed under the GPLv3 license.

Changes:

For the Debian and Ubuntu distributions, they made their own APT repository. Previously, deb packages were attached only to the release pages on GitHub and to update it was necessary to manually track new releases and download the build corresponding to its version of the distribution. Connecting the repository is reduced to the installation of the fluxcast-repo package, adding a key to the system for checking the digital signature and a file with repository parameters. A suitable build is determined automatically by python3 version, rather than by the distribution code name, allowing you to properly maintain the derivative builds, such as Linux Mint and Pop! _OS, as well as intermediate Ubuntu issues. Supported currently, Debian 12 and 13, Ubuntu 24.04 and 26.04, architecture amd64.

https://github.com/IlyaP358/fluxcast

Asahi Remix 45:

06/11/2026

The Fedora Asahi Remix 45 distribution is published, designed to be installed on Mac computers equipped with ARM chips developed by Apple. Fedora Asahi Remix 45 is based on the Fedora Linux 45 package base and is equipped with the Calamares installer. Initially, the Asahi Linux distribution developed on the basis of Arch Linux, but in 2023 it was transferred to the Fedora package base, which allowed to focus efforts on reverse engineering and support of the equipment and the assembly of the finished distribution to transfer to the working group Fedora Asahi SIG.

KDE Plasma 6.8 is supplied as the main user environment, but the editorial board with GNOME 51 is optional, as well as the server version and minimalist build. In the editions with KDE and GNOME, Wayland is used, and the XWayland DDX server is used to launch X11 applications. The graphics drivers support OpenGL 4.6, OpenGL ES 3.2 and Vulkan 1.4 (in the native graphics drivers for M1 chips from Apple only the OpenGL 4.1 specification is implemented).

The support level for Apple M3 hardware is close to level for M1 and M2 devices. Restrictions in functionality when working on M3 systems are associated with incomplete support for the display processor (DCP) and GPU, as well as insufficient performance and power efficiency when using 3D acceleration.

https://fedoramagazine.org/fedora-asahi-remix-45-is-now-available/

Zabbix 8.0:

07/11/2026

The release of the open monitoring system Zabbix 8.0, (LTS), was released. Zabbix is a universal system for monitoring the performance and availability of servers, engineering and network equipment, applications, databases, virtualization systems, containers, IT services, web services and cloud infrastructure. The project code is distributed under the AGPLv3 license.

The system implements a full cycle from data collection, processing and conversion, analysis of this data for problem detection, and ending with the storage of this data, visualization and sending alerts using the rules of escalation. The system also provides flexible opportunities to expand data collection and alert methods, as well as automation capabilities through a powerful API. A web interface is provided for centralized management.

https://github.com/zabbix/zabbix/releases/tag/8.0.0

OpenIndiana 2026.10:

08/11/2026

The release of the free distribution OpenIndiana 2026.10, which replaced the discontinued OpenSolaris distribution, by Oracle, is presented. OpenIndiana provides the user with a working environment built on the basis of a fresh slice of the codebase of the Illumos project. The development of OpenSolaris technologies continues with the Illumos project, which develops the kernel, network stack, file systems, drivers, as well as a basic set of custom system utilities and libraries. Three types of iso-images are available for download - server version with console applications (594 MB), minimum assembly (543 MB) and assembly with MATE graphics environment (2.5 GB)

https://www.openindiana.org/announcements/openindiana-hipster-2026-10-announcement/

OmniOS r151060:

08/11/2026

Related to the above: The release of the OmniOS Community Edition r151060 distribution, based on the development of the Illumos project, which continues to develop the core, network stack, file systems, drivers, libraries and a basic set of system utilities OpenSolaris, has been published. OmniOS is notable for providing support for hypervisors bhyve and KVM, the Crossbow virtual network stack, the ZFS file system, and the means to run lightweight Linux containers. The distribution can be used to build scalable web systems, virtualize and create storage

systems.

https://github.com/omniosorg/omnios-build/blob/r151060/doc/ReleaseNotes.md

Slax 2026.11:

09/11/2026

Three years after the last version, there is a new version of the compact Live distribution, Slax2026.11, based on Debian 13. The graphical environment in Slax is built on the FluxBox window manager and program startup interface xLaunch, specially developed by the project participants. Bootable iso image occupies 530 MB (x86_64).

The distribution moved on to Debian. Until 2013, the distribution was based on Slackware, after which it stopped updating and was revived in 2018, but was rebuilt using Debian packages, the APT package manager and the systemd initialization system. In 2022, the project returned to Slackware and has now switched back to Debian again.

https://www.slax.org/blog/49064-Slax-2026.11-is-out.html

Apache Cloudberry 2.2.0:

10/11/2026

The distributed DBMS Apache Cloudberry 2.2.0, continuing the development of open code base Greenplum DBMS, which was turned into a closed product by Broadcom after the acquisition of VMware, has a new version. The project is currently in the Apache incubator and will be transferred to the number of Apache primary projects after the infrastructure and accompanying ones are ready.

The Cloudberry DBMS is a distributed edition of the open PostgreSQL DBMS, optimized for performing analytical queries on large data sets (Data Warehouse). For parallel data processing it uses massively parallel architecture (MPP, massively parallel processing), which ensures scalability of storage to petabyte sizes by dividing data into segments and using a cluster of servers to store and process them.

https://cloudberry.apache.org/blog/announce-apache-cloudberry-2.2.0/

Cyanogen and GameOS are developing the KORA OS:

11/11/2026

KORA OS, built on the Linux kernel and notable for the integration of AI models, AI services and AI agents into the system environment, is unveiled. Instead of building a desktop around directories and applications in the new OS, work is organized based on meaning, context and knowledge base. In addition to the classic FS, a "neural FS" is offered, indexing files according to their meaning and allowing users and AI agents to find information by content rather than file and directory names. The project is being developed under the leadership of Kirt McMaster, co-founder of the Cyanogen mobile platform (now LineageOS), John Lagerling, who ran the Android business at Google and served as vice president at Facebook, and Frank De Girolami, creator of the game series Alone in the Dark and distribution GameOS. Among the investors and partners of the project are Samsung and Qualcomm.

The first release of KORA is planned to be released in 2027.

https://press.kora.fun/#announcement

Blender 5.3:

11/11/2026

Blender Foundation published a new release of a free 3D modeling package, Blender 5.3, suitable for solving various problems related to 3D modeling, 3D graphics, computer game development, simulation, rendering, compositing, motion tracking, sculptural modeling, animation creation and video editing. The code is distributed under the GPL license. Ready builds are formed for Linux, Windows and macOS. Also Blender LTS branches 5.2 and 4.5 continues to be supported, updates will be generated until July 2027 and 2028, respectively.

https://www.blender.org/press/blender-5-3-release/

64-bit Steam client for Linux:

12/11/2026

Valve company published a November update of the Steam game delivery service client for Linux. The release is notable for the formation of 64-bit builds and the transition to executing the Steam client inside a container with Steam Runtime. The change significantly simplifies the arrangement of Steam in Linux distributions. Until now, the Steam client was distributed only in 32-bit builds, which prevented distributions from completely ending support for 32-bit CPUs and forced Steam specifically to supply the necessary 32-bit dependencies or package Steam in self-sufficient packages in formats snap and flatpak.

https://store.steampowered.com/news/app/593110/view/678515036155543747

Red Hat Enterprise Linux 10.3 and 9.9:

12/11/2026

Red Hat Enterprise Linux 10.3 and also the previous branch - Red Hat Enterprise Linux 9.9 has been updated. Ready installation images are available for registered Red Hat Customer Portal users (public iso images can be used to evaluate functionality CentOS Stream 10, as well as free builds RHEL for developers). The release was created for the x86_64, s390x (IBM System z), ppc64le (POWER9), Aarch64 (ARM64) and RISC-V (preview) architectures. The RHEL 10 branch will be be supported until 2035 (+ 4 years of extended paid support), RHEL 9 - until the end of May 2032, and RHEL 8 - until 2029.

https://www.redhat.com/en/blog/introducing-red-hat-enterprise-linux-103-and-99

UDisks 2.12.0:

14/11/2026

After two years of development UDisks 2.12.0, including a system background process, libraries and tools for organizing access and managing disks, storage devices and related technologies was released. UDisks provides D-Bus API for working with disk partitions, setting up MD RAID, working with block devices in a file (loop mounting), manipulating file systems, etc. Additionally, modules for monitoring and managing BTRFS, iSCSI, libStorageManagement, LVM2 and LVM Cache are supplied.

https://github.com/storaged-project/udisks/releases/tag/udisks-2.12.0

Desktop builds of Euro-Office:

14/11/2026

Nextcloud project announced the formation of desktop builds of Euro-Office DesktopEditors and a variant distributed under the name Nextcloud Office Desktop. Euro-Office DesktopEditors is marketed as a community-formed build for testing and development, and Nextcloud Office Desktop is presented as a ready-to-use product with package repositories, integration with Nextcloud Hub and technical support. Unlike the previously available server version of Euro-Office, which worked through a browser, desktop builds are self-sufficient desktop applications that combine client and server components.

Separately mentioned is the possibility of using fonts already installed in the system, as well as support for authenticating documents with an electronic signature and restricting access through encryption using a password. Declared compatibility with MS Office and OpenDocument formats (DOCX, PPTX, XLSX, ODT, ODS, ODP).

https://nextcloud.com/blog/euro-office-comes-to-your-desktop-with-the-nextcloud-office-desktop-app/

XRAID:

15/11/2026

Christoph Hellwig, maintainer of DMA, KVM, Slab Allocator subsystems and PowerPC architecture in the Linux kernel presented first public issue XRAID, of implementation declassified parity-controlled RAID integrated

into the XFS file system. The project was created to add the ability to use RAID on zoned storage devices such as SMR (Shingled Magnetic Recording) discs and provide a high-performance RAID implementation to maintain data integrity. In addition to zoned devices, XRAID also supports regular hard drives and SSD drives, demonstrating significant performance gains on the latter compared to mdraid(up to 20 times when recording).

Work on XRAID has been going on for a year and a half, and although the implementation is not yet ready for integration into the main core, it is already suitable for testing by a wide audience.

https://lore.kernel.org/lkml/20261113112913.GA31748@lst.de/

Deepin 25.3:

15/11/2026

Deepin 25.3, developing its own desktop Deepin Desktop Environment (DDE), as well as about 40 user applications, including the Deepin Music music player, the Deepin Movie video player, the Deepin Store installer and program installation center, was published. The distribution repository includes more than 8,000 packages. All the code is licensed under GPLv3. Boot size iso images 7.2 GB (amd64, arm64, riscv64 and loongarch64).

Desktop and application components are being developed using the C/C++ languages and Go. The GUI is built using the Qt library.

https://www.deepin.org/en/deepin-25-3-release/



I was going to take all the newbies on a sorting tour this issue, but I decided to widen the range a bit. So if you are new and you have a terminal (CTRL+ALT+T by default in Ubuntu), let's travel!

We can start simple. Navigate to Public and make a file:

```
cd Public

touch realdata.txt
```

now let us fill that file with:

rob has 6 screws

```
echo "rob screws 6" >> realdata.txt
```

Now that you know how, add the following:

pete has 4 nuts
john has 7 hooks
allen has 2 bolts
brad has 9 washers
chad has 1 wingnut

If we would like to see who is at the top of our list, we use head.

For example:

```
head -3 realdata.txt
```

So why is it -3 and not 3? Well, go ahead and try it.

At the opposite end of "head" we have "tail". It works precisely the same, making it easy to remember.

```
tail -3 realdata.txt
```

So what do you think the "sort" command will do???

Try:

```
sort realdata.txt
```

What happened?

If we cat out our file, we get a layout, starting with "rob". So let us try:

```
tac realdata.txt
```

What happened?

If a file is too long to fit on screen, this is another way to look at the data in reverse. Note that it is not the same as tail.

Okay, now that you know how to look at data in sections, let's quantify. We will start with "wc" – word count

Try:

```
wc realdata.txt
```

The output we got was words, characters and lines, but not in that order. If you want any one of those, you need to add the tack "w", "c" or "l".

Try:

```
wc -w realdata.txt

wc -c realdata.txt

wc -l realdata.txt
```

Now lump some together:

Try:

```
wc -lw realdata.txt
```

But say we needed to see which person is at which line? That is where nl comes in. No, not the Netherlands, number line.

```
nl realdata.txt
```

Great! Now what number is Allen?

Try:

```
nl -v10 realdata.txt
```

Great! Now what number is Allen? Let's get fancy...

Try:

```
nl -s ' = ' -w 4 realdata.txt
```

Can you figure out what happened?

It is a lot easier to see which number Allen is now, right?

We just coaxed the output somewhat. Check the man page for nl to see how we used the two switches.



I specifically added a space, before and after the equals sign, so

that you cannot cheat and leave out the single quotes. That is because bash treats spaces as what goes between arguments. To learn more, mess about a bit, I won't mind and you will learn.

Right! Let's mess with bash.

Try:

```
cat realdata.txt >> notrealdata.txt
```

```
cat notrealdata.txt >> realdata.txt
```

What do you think happened?

Try:

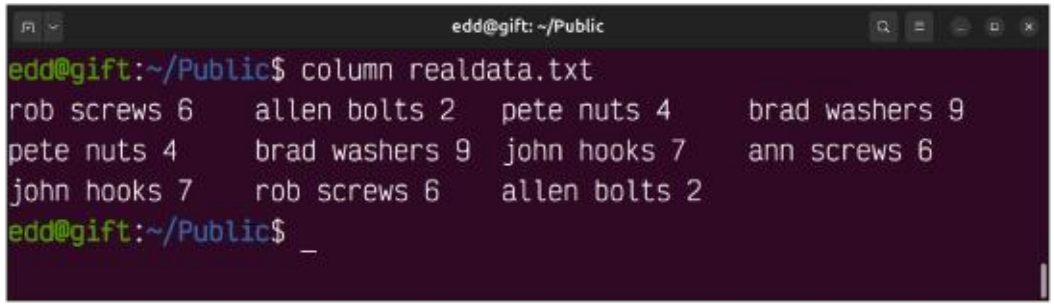
```
echo "ann screws 6" >> realdata.txt
```

So now rob has 6 screws and ann also has 6 screws. Check it out with the cat command. We have lots of people with the same stuff. Let's simplify our lives. Try:

```
uniq realdata.txt
```

but BEFORE you hit <enter>, tell me what you think the output will be?

Hit <enter> and see if it was what you thought it would be.



Hehehehe... Ann was the red herring!

Let's get another view on our world. Try (shown above):

```
column realdata.txt
```

Though this view allows us to have our data in columns, it looks a bit iffy. It is not what we wanted. Try: column realdata.txt -t



You know the drill – hit the manpage to know more!

The lower case t is to work out the columns while the uppercase T is to truncate. (this trips me up still)

If we want finer control, we have to look at sed and awk, but more on those in another issue.

If we made any mistakes, misc@fullcirclemagazine.org



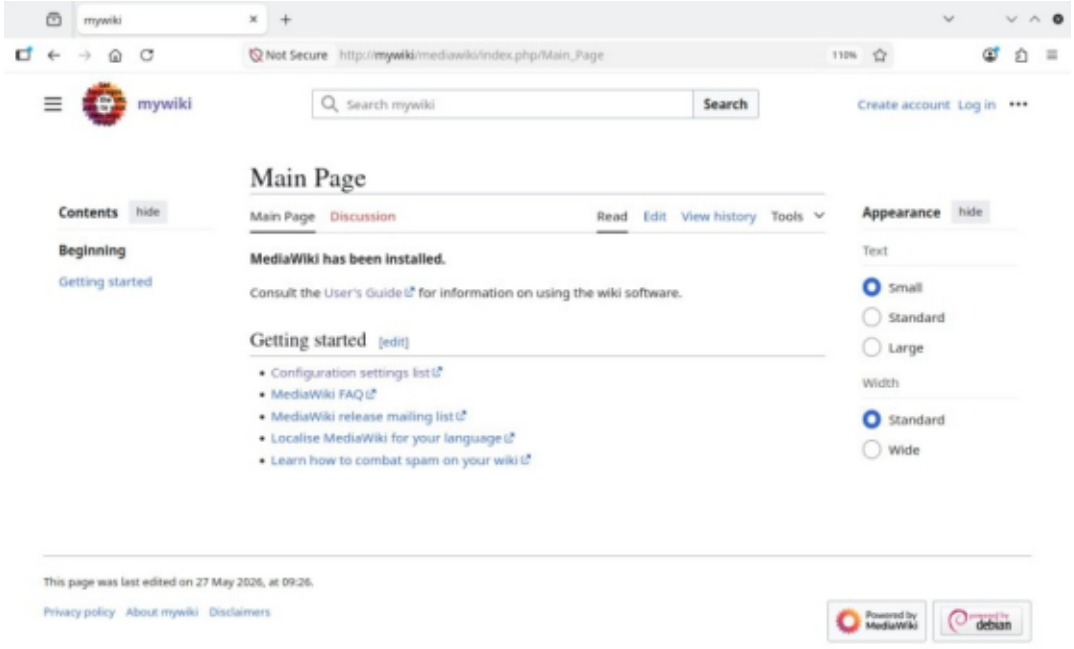
Erik has been in IT for 30+ years. He has seen technology come and go. From repairing washing machine sized hard drives with multimeters and oscilloscopes, laying cable, to scaling 3G towers, he's done it.

Build Your Own Wiki - Part 6

Written by Bruce Goodman

Last month, we succeeded in getting a default MediaWiki installation running in our VirtualBox server. We can now move on to creating and editing pages to turn that default setup into the note-taking application we came for. First though, I am going to take both a VirtualBox snapshot and a file-copy backup of the VM - better to have too many backups than not enough.

The default wiki installation is shown below.



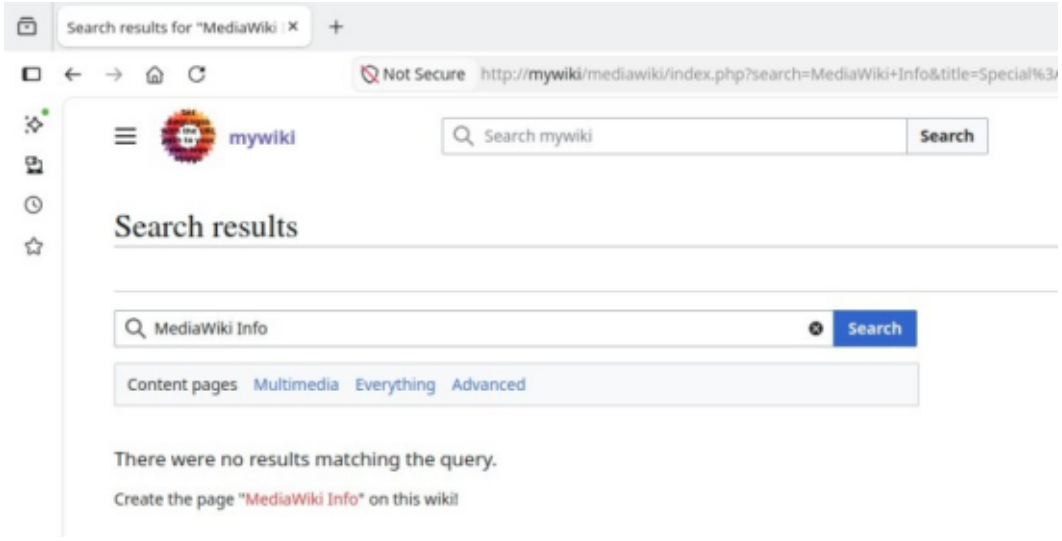
It's worth spending a moment or two getting familiar with the content of this page. We can hide the "Appearance" menu, noting how we can get it back if need be. We can look at the content of the top-left hamburger menu as well as the "Tools" dropdown - just to get the lie of the land. We can also hide and unhide the "Contents" menu. I'd suggest leaving it visible though, as it's dynamically created as we make new headings on the page which can assist in page navigation.

The "User Guide" page has everything you ever needed to know about using and managing a wiki, and, in places, goes into far more detail than those of us just wanting a note-taking app will ever need. To get started, we need to know how to;

- create a new page,
- add some headings,
- add some text - exploring basic formatting options, and
- create links between pages (and sections of pages).

Little note; I'm a Firefox user, so any keyboard shortcuts I use may be tailored to that browser - your mileage may vary. The complete list of keyboard shortcuts is in a page of that name, with a link to it from the left panel in the "User Guide" page.

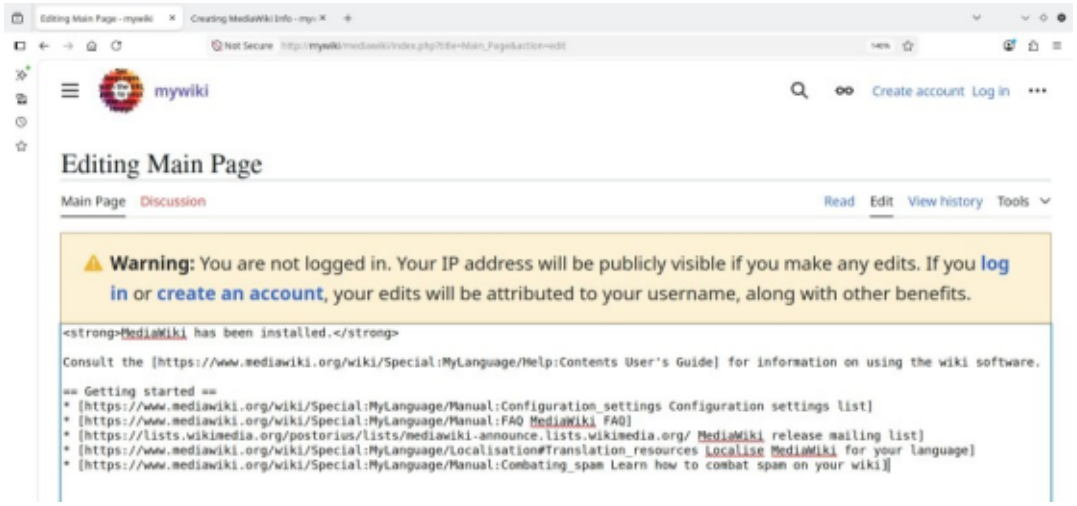
I want to retain the information and links on the default landing page, but I'd prefer to have my own home page. What I need to do then is create a new page, copy the current home page content to that new page, then remove it from its current location, and create a link from my new home page. I find the easiest way to start a new page is to use the search bar at the top of the page. I'll call my new page "MediaWiki Info" (see screenshot below) and I'm given the option of creating a new page with that



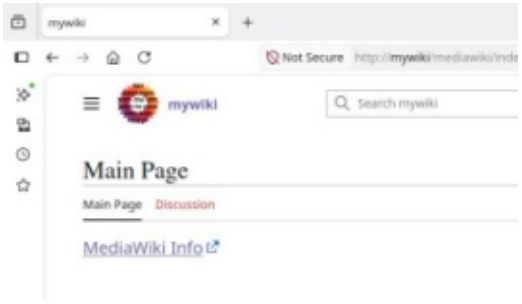
name.

Right-click to create the new page in another tab, then click your wiki's name at the top to go to the Home page - there's also a very useful keyboard shortcut to go to Home - it's "Shift+Alt+z". We now move the content of the Home page to the new one - click the "Edit" link upper-right (keyboard shortcut is "Shift+Alt+e" for this action, although I had to press the "Enter" key as well) to see a screen like;

Copy the page content into the newly created page on the other tab and save the page - there's a "Save" button lower-left, but I suspect it won't take long for the keyboard shortcut "Shift+Alt+s" to become muscle memory.



Next, we create a link, temporary at this stage, from our Home page to the newly created MediaWiki Info page. On that page, use "Ctrl+l" to highlight the address bar content, "Ctrl+c" to copy it, "Ctrl+Tab" to flip to the next tab. The text you copied may still be highlighted, if so "Ctrl+v" to paste the new page's address. Add a space after the address, then some text to identify the page - I'll use the page name "MediaWiki Info", then a closing square bracket - "]" -



then a line-break - "<br>". Finally, put an opening square bracket - "[" at the beginning of the line and save your changes.

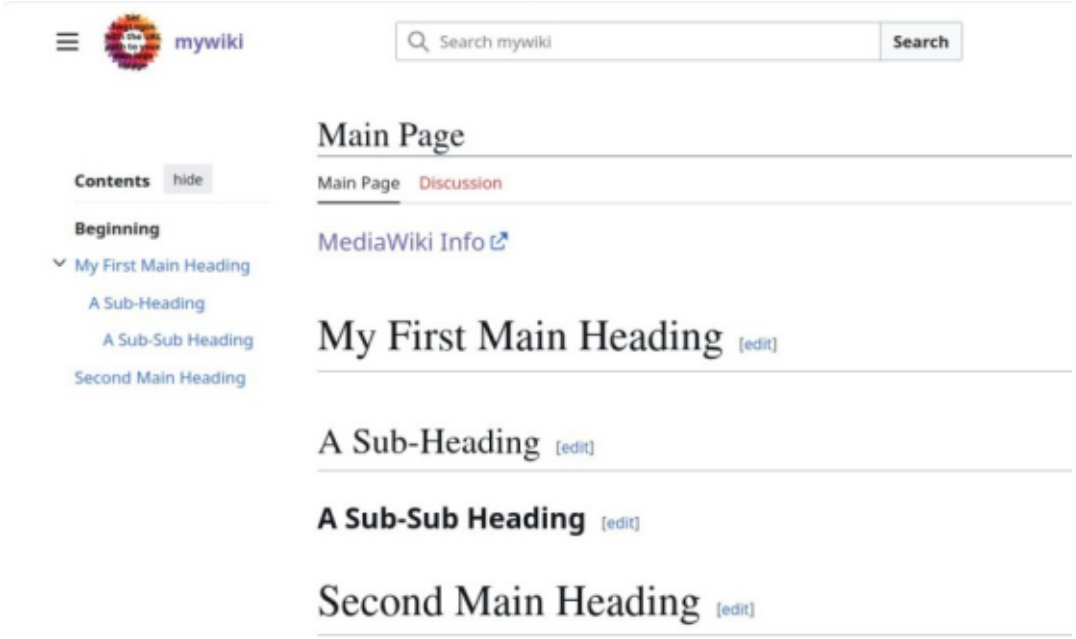
Not much of a home page, granted, but we are on our way.

In the "Tools" menu there is a "Special Pages" link, and on that page we find a link to "All Pages". This page can be handy in identifying "orphan" pages at some point in the future. Another potentially useful page I see under "Special Pages" is one called "Recent Changes" - I could see value here if there's a need to restore from a backup but some doubt on how far back in time to go - more on that subject in an upcoming chapter.

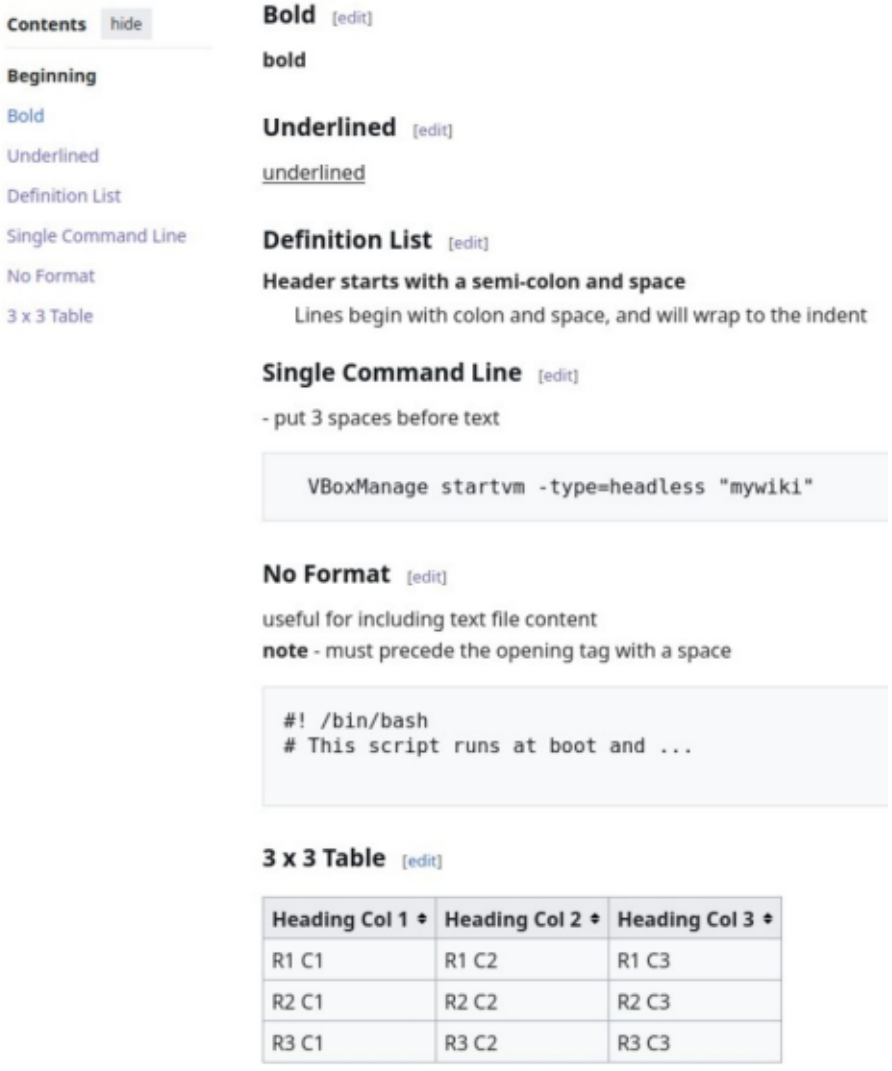
The "Tools" menu also links to "What Links Here" which I'd expect to be useful, but it doesn't work for me.

Now to look at a brief sample of some text layout - edit the Home page and add this text and save, to get a screen like;

```
= My First Main Heading =
== A Sub-Heading ==
=== A Sub-Sub Heading ===
= Second Main Heading =
```



Two things to notice here - this text formatting is done in both a "markdownish" kind of way by the inclusion of special characters (in this case one or more equal signs), and HTML type tags. Secondly, as foreshadowed, the table-of-contents panel is created from headings. Those headings can now be removed. There is a comprehensive list of available text formatting/layout methods on a page called "Wikitext examples" - the link to it is lower-left on the "User Guide" page. A WikiMedia



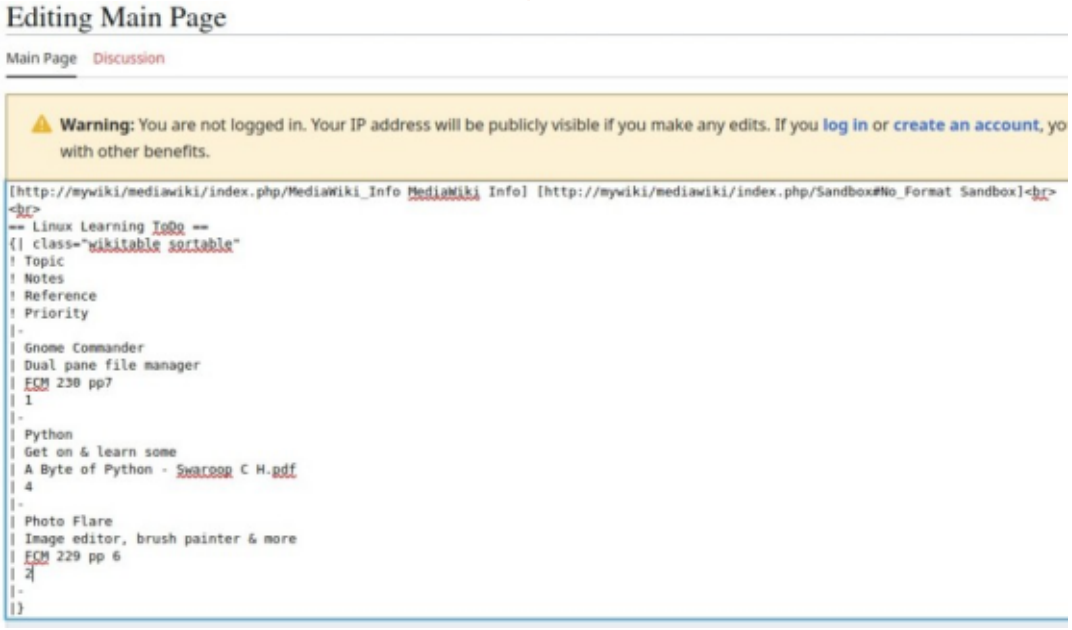

```
=== Bold ===
'''bold'''
=== Underlined ===
<u>underlined</u>
===Definition List ===
; Header starts with a semi-colon and space
: Lines begin with colon and space, and will wrap to the
indent

=== Single Command Line ===
- put 3 spaces before text
   VBoxManage startvm -type=headless "mywiki"
=== No Format ===
useful for including text file content<br>
'''note''' - must precede the opening tag with a space<br>
 <nowiki>
#! /bin/bash
# This script runs at boot and ...
</nowiki>

=== 3 x 3 Table ===
{| class="wikitable sortable"
! Heading Col 1
! Heading Col 2
! Heading Col 3
|-
| R1 C1
| R1 C2
| R1 C3
|-
| R2 C1
| R2 C2
| R2 C3
|-
| R3 C1
| R3 C2
| R3 C3
|-
|}
```

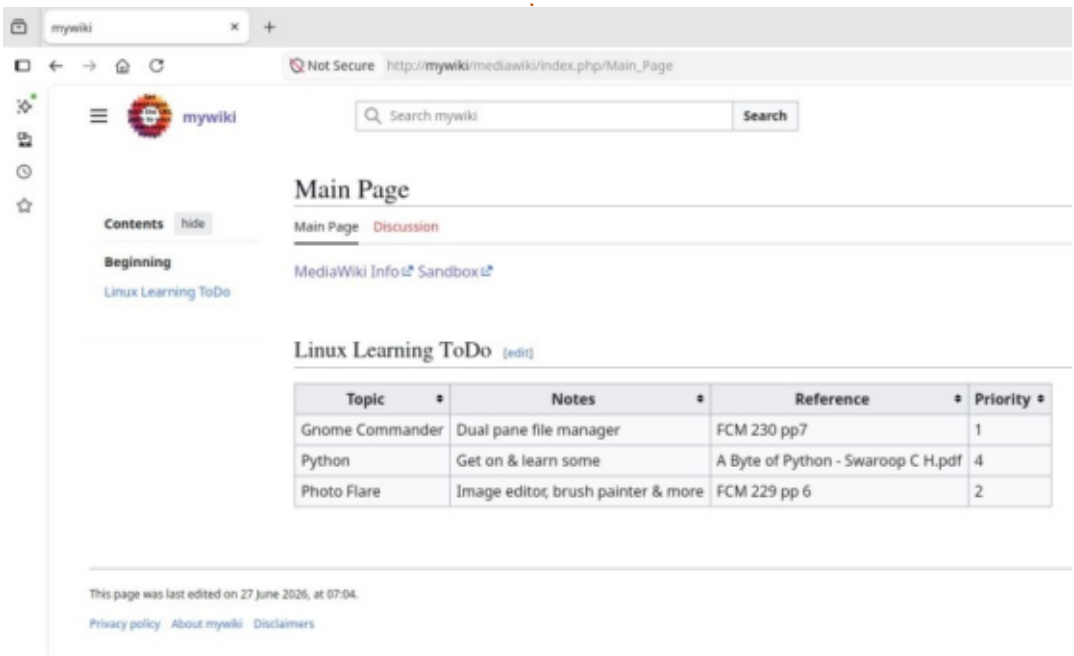
used just as a note-taking application uses only a fraction of its capability, and I find I use a small selection of its formatting options, so I make a "Sandbox" page to keep a few examples for quick reference and copy/paste. The page is shown below and the content of the page is shown in the code listing.

Having got those essential support pages out of the way, we can now create the type of notes we're interested in. As an example, a listing of Linux commands/applications/topics to learn more about, and, for that, we can use a sortable table. For now, I'll have this list on the Home page, but as my notes collection grows, I can move it off to its own page. I'll first open the "Sandbox" page in a new tab and put it into edit mode, because I want to copy the text for a table, and modify it to my needs. I'll set up my (editing mode) "Main" page as shown here, to get the saved final form below.

At the top of the editing pane, you see the links to the only other two pages we have so far, followed by a line-break for spacing, then a level 2 heading, and finally the table. The table can be sorted on any column by clicking the small arrow symbol beside the headings. Note too that column widths adjust automatically; if you find that one of yours grows too much you can insert a "soft line feed" - "Shift" + " Enter" - to get an effective word-wrap.

That's it for this month, hopefully you can see that a wiki of your own has big potential as a note-taker. Actually, WikiMedia presents huge possibilities, and maybe we may get to explore some of those down the track. Meanwhile though, our work here is not yet done - next time we'll look into automating regular updating/patching, and we need to implement a backup regime.





Bruce Goodman lives in Melbourne, Australia, and alternates between his Linux machines and the golf course.

One Card Reader, Three Raspberry Pi's

Written by pomponchik

I wanted a small Raspberry Pi cluster. I expected the interesting problems to begin after the boards booted. Instead, the microSD cards became the project: the same image, the same network and login settings, a different hostname for every node, a check that each card was healthy, and a reliable record of which card belonged to which machine.

For one Raspberry Pi, a graphical flasher is ideal. Choose an operating system, choose a card, enter a few settings, and click Write. A cluster changes the shape of the job. Now the sequence is: select the image, select the correct device, customize the node, wait, verify, eject, label, and repeat. Then repeat the checks with another utility if the cards are new, old, cheap, or simply unknown.

By the time I reached the third card, the process felt less like installing an operating system and more like performing a small deployment by hand. The real problem was not flashing one card. It was producing several nearly identical Ubuntu Server nodes without forgetting a setting, reusing a hostname, trusting a bad card or writing to the wrong disk.

THE THIRD CARD WAS THE TURNING POINT

I could have continued with Raspberry Pi Imager, balenaEtcher, or another friendly GUI. These tools are excellent at the general job of writing an image, and some can remember customisation settings or validate a completed write. I still use and recommend them for one-off cards.

But my task had become narrower and more repetitive. I wanted to describe the cluster once: prepare three cards, call the nodes pi-1, pi-2, and pi-3, give them the same network and SSH configuration, check the media, verify the final write, and leave me with an Ansible inventory. I also wanted to do all of this with one card reader, swapping cards only when prompted.

The first version was a script for my own desk. Then came the uncomfortable questions. What if macOS changes a device number? What if a card reports more capacity than it really has? What if the image write completes but the bytes read back are different? What if the Mac sleeps halfway through a raw write? Each answer added another safeguard. Eventually the script became piburn, an MIT-licensed Python command-line tool.

WHAT PIBURN DOES

piburn is deliberately specialised. It runs on macOS and prepares removable microSD cards that boot Raspberry Pis with Ubuntu Server. By default, it downloads the latest stable official image and verifies the published SHA-256 checksum before using it.

You enter the cluster settings once. For each card, piburn creates a numbered hostname, configures Wi-Fi and Ethernet through cloud-init, adds either an SSH public key or a hashed login password, enables discovery through a .local name, and arranges for Ubuntu to use the full card capacity on first boot. After the final card, it can generate an Ansible inventory and print one SSH command per node.

The cautious part happens around the Write itself. piburn offers only physical, writable, removable media of at least 4 GiB, and it rechecks the selected device before destructive operations. An optional full-capacity integrity test writes a new position-dependent pattern across the card and reads it back directly. This can expose defective media and counterfeit cards whose real capacity is smaller than the capacity they report. After Ubuntu is written, piburn performs a separate byte-for-byte comparison with the verified source image.

This is not meant to replace every GUI flasher. It trades breadth for repeatability. A GUI is usually faster and more comfortable for a single board, for exploring many operating systems, or for users on Linux and Windows. piburn is useful when the job is specifically: make

several predictable Ubuntu Server nodes from one recipe, and prove that each card was prepared as intended.

BUILD A SMALL CLUSTER

The following walkthrough uses three Raspberry Pis and one card reader. Two nodes work just as well. You need a Mac, Python 3.8 or newer, microSD cards of at least 4 GiB, a network, and suitable power supplies. All existing data on every selected card will be destroyed. The full integrity test also overwrites the card's entire reported capacity and can take longer than flashing Ubuntu.

STEP 1 - INSTALL PIBURN

Install the current release from PyPI:

```
python3 -m pip install --upgrade piburn
```

Confirm that the command is available:

```
piburn --help
```

STEP 2 - PREPARE SSH LOGIN

SSH keys make a headless cluster easier to use and work well with Ansible. If you already have a public key in your ~/.ssh directory, piburn can find it. Otherwise, create one:

```
ssh-keygen -t ed25519
```

You can choose password login instead. In that mode, only the password hash is written to the card.

STEP 3 - DESCRIBE THE CLUSTER ONCE

Insert the first microSD card and start the interactive workflow:

```
piburn
```

Choose three cards, decide whether to run the full-capacity integrity test, and enter the network, hostname, username, and login settings. For this example, use pi as the hostname prefix and 1 as the starting number. The resulting names will be pi-1, pi-2, and pi-3.

Use the full test for cards of uncertain origin, cards that have behaved strangely, or media whose advertised capacity you do not entirely trust. Skipping that test saves time, but it also removes the only check that covers the card beyond the area occupied by the Ubuntu image.

STEP 4 - CHECK THE DEVICE, THEN LET PIBURN WORK

For every card, piburn shows the available removable devices. Read the device name, model, and capacity before confirming. The programme may ask for macOS administrator authentication because raw disk writing requires elevated privileges.

piburn then tests the card if requested, writes Ubuntu, verifies the written image, adds the per-node cloud-init configuration, and ejects the card. Label it with the node number, insert the next card into the same reader, and continue when prompted. The shared answers stay the same while the hostname number advances automatically.

STEP 5 - BOOT THE NODES

Insert the finished cards into the Raspberry Pis and power them on. The first boot takes longer than later boots because Ubuntu and cloud-init are applying the initial configuration. Once a node appears on the network, connect using the username you selected:

```
ssh your-user@pi-1.local
ssh your-user@pi-2.local
ssh your-user@pi-3.local
```

If .local discovery is unavailable on your network, use the addresses assigned by your router instead.

STEP 6 - CHECK THE WHOLE CLUSTER

When piburn offers to create an inventory, accept the default path, ansible/inventory.ini. With Ansible installed and SSH-key login configured, one command should contact every node:

```
ansible all -i ansible/inventory.ini -m ping
```

Three successful replies are the

moment the original repetitive card-writing job finally turns into a cluster. From here, Ansible can install packages, copy configuration files, create users, deploy containers, or prepare the boards for whatever experiment motivated the cluster in the first place.

A SMALL TOOL FOR A SPECIFIC KIND OF FRICTION

piburn is for home-lab builders, teachers preparing a set of Raspberry Pis, developers maintaining a small test bench, and anyone creating several headless Ubuntu Server nodes from the same plan. It is especially useful when the cards themselves deserve suspicion, or when you want a repeatable path from blank media to SSH and Ansible.

It is not the best choice for every situation. For a single Raspberry Pi, a GUI tool is simpler. If your workstation runs Linux or Windows, piburn currently does not fit. If you want a desktop image or a non-Ubuntu system, use a general-purpose imager.

But when the boring part of building a cluster is repeating the same choices and checks for every card, a narrow tool can give that time back. Gather two or three boards, run piburn, swap the cards when asked, and let the interesting work begin after the nodes boot.

DISCLOSURE

I am the author and maintainer of piburn. The project is open source under the MIT licence, so the implementation and its safety checks can be inspected, tested, and changed.

LINKS

Project source:
https://github.com/pomponchik/piburn

PyPI package:
https://pypi.org/project/piburn/

Ubuntu for Raspberry Pi:
https://ubuntu.com/download/raspberry-pi



pomponchik is a Python developer and the author of piburn. More projects and contact links are available at https://github.com/pomponchik.

Latex - More Beamer

Written by Robert Boardman

Last issue I talked about the various themes available for Beamer presentations. I said this time I would talk about parts of a presentation that are not text. There were two images in the sample presentation in the Latex article in FCM 233. Anyone who read (or reads) that article will get an introduction to using image files in Beamer presentations.

Using image files in presentations is very much the same as using image files in any other Latex document. The writer / designer has a basic choice to make for each image. Is the image external to the Latex file and imported into the file or is the image built by Latex commands?

The first option is often seen as the default: use an image external to the Latex file. If you know how to use image-generating software or can download an appropriate image (which is either public domain or for which you can obtain the rights) then it can be of the quality you desire. This method has some disadvantages.

```
      \begin{figure}[h] %Use [b] to move to bottom of page
            \centring
            \includegraphics[height=3cm,width=3cm]{atom}
            \caption{Model atom}
            \label{fig:atom}
      \end{figure}
\section*{Graphics}
      \includegraphics[scale=0.25]{135}
      \includegraphics[angle=35, scale=0.25]{135}

      \includegraphics*[height=4cm, width=2.5cm, angle=45]{135}
      \includegraphics*[height=4cm, angle=45, width=2.5cm]{135}
```

You have to keep track of files other than the main Tex file. You have to know what directory they are in. The imported image is static, if you change the source file you will have to export the changed image from the graphic software and regenerate the Latex PDF file. It can be difficult to get line widths, fonts, font sizes and colours in the image to match the same elements in the Latex file. Generating formulas as part of images can be difficult or impossible.

There are some Latex packages that allow you to build images directly in a Latex file. Their main disadvantage is that it can be difficult and time-consuming to learn how to make the required graphics. Other disadvantages include: poor quality of the generated image and incompatibilities with pdflatex, lualatex and xelatex. The incompatibilities are strongest with the most powerful and easiest to use package which generates images: PSTricks. PSTricks works well with latex and dvips. Another graphic-generating package called PGF works well with pdflatex, lualatex and xelatex but it is not as powerful as PSTricks and harder to use.

I suggest you read through the section in the Beamer User Guide about graphics for particulars about using eps or ps or mps or mpp graphics.

For standard pdf, jpg / jpeg and png graphic files use the various commands available in all Latex documents. Eric wrote some initial commands in FCM 184. I followed up in FCM 203 in a column about colours and graphics. As long as you remember to include the graphicx package in the preamble to the document you can use the same set of commands with graphics in Beamer presentations as in articles or books. Remember to include either a relative or absolute path in the graphic file name if it is not located in the same folder as your Tex file. There is no need to include the file type if you use jpg, jpeg, or png images.

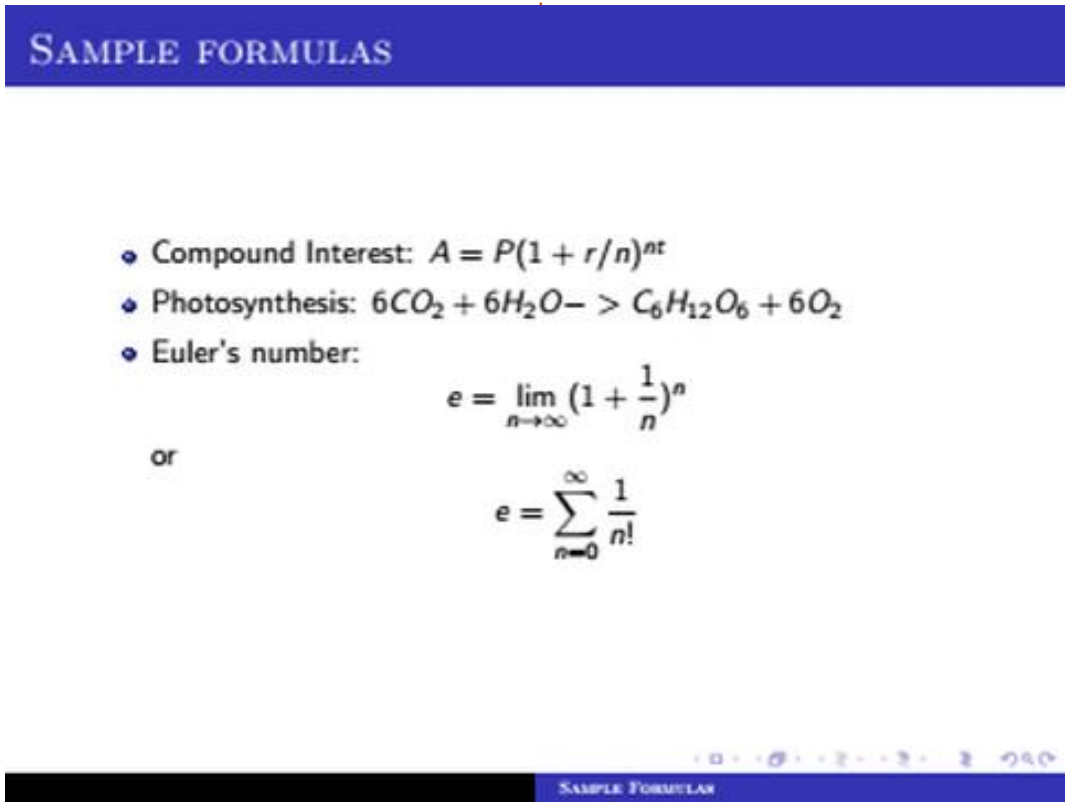
If you need help with commands in the graphicx package read through the documentation. Pages seven to the end are for the graphics and graphicx packages. Here is a sample of code from FCM 203 to illustrate some of what is possible with external image files in a Latex document.

Atom and 135 are the names of the two external files. Atom is a png file, 135 is a jpg file. The preamble of the Tex file has the command \includepackage{graphicx}. That "include" is essential. I suggest you use these commands with one of your own Beamer presentations. If you are not familiar with the graphicx package then try these commands in a standard Latex file before trying them in Beamer. Do the simpler task first then the more complicated one. You want to be sure to be able to identify the source of any syntax error easily.

When I taught math I often needed to include a mathematical expression or formula in my presentations. Formulas are also necessary in many other fields of study. Physics and chemistry probably come to mind first. Formulas and calculations are also necessary in biology, psychology, medicine, etc. Even in English calculations are done to generate reading levels for documents. Of course business runs on numbers. How can they be included in Beamer presentations?

(Note I much prefer the plural formulae to the commonly used formulas. My preference is probably because I studied Latin in high school. For clarity I defer to common use most of the time.)

One response is to generate a formula in an external document, save the formula on its own in a file and then paste it into the presentation. You are simply including the file containing the formula in the presentation. That is the method discussed above for images, it can also work for formulas if you can generate formulas which can be saved and pasted. I think there is a better way for most, probably almost all, formulas. Use Latex commands to write the formula onto the relevant slide. Tex was developed in order to make reproduction of both simple and complicated formulas consistent in printed documents. Beamer presentation designers can use all of the relevant Tex / Latex commands to write formulas on slides.



As I suggested when learning about the various Latex graphic tools, I suggest you start a Latex file and write the formula there first. Then you can copy the code to the presentation. This is the simplest way to find and correct any syntax errors before adding the complication of coding a Beamer frame.

Here is the code for the three sample formulas shown in the graphic.

```
\item Compound Interest: $A = P(1+r/n)^{nt}$

\item Photosynthesis: $ 6CO_2 + 6H_2O -> C_6H_{12}O_6 + 6O_2$

\item Euler's number: \[ e = \lim\limits_{n \to \infty} (1 + \frac{1}{n})^n \] or \[ e = \sum_{n=0}^{\infty}\frac{1}{n!} \]
```

The dollar signs at the beginning and ending of the first two

formulas tell Latex what is between them must be interpreted and displayed as a mathematical expression. The back slash and square bracket combinations in the Euler's number formulas tell Latex what is between them must be interpreted and displayed as a mathematical expression and each expression will be displayed centred on its own line.

If you wish to include external documents which are animated in a Beamer file I refer you to the Beamer User Guide. I suggest you remember your Beamer Latex file is going to generate a PDF for distribution as well as a Beamer file you can project from a computer to a screen. It might be more appropriate to include a link / hyperlink to the animated file instead of including it in the Beamer document. In either case you need to put "\usepackage{multimedia}" into the preamble of your document. The multimedia package can be used in any Latex document. There are sixteen options available for use with an incorporated animation and other options are available with a hyperlinked file.

Sounds can also be included in Beamer files with the multimedia package. As with movies the choices and decisions needed for sound are explained clearly in the user guide. To explain the choices I would have to copy the information from the user guide. It is better if you read a copy of the user guide.

As is well known, both movies and animation rely on rapid sequences of frames to simulate movement. Beamer has the ability to present a series of slides very quickly which can simulate animation. Of course using this set of tools requires you to have the sequence of frames available during the presentation. Building such frames (images) is a challenge that is beyond my skills. For some sample code see the Beamer User Guide pp. 133ff.

If frames can be flashed across a screen to simulate animation they can also change slowly, a process called a transition. Transitioning from one slide (or frame) to another can be done in a variety of ways and at speeds controlled by the presentation designer. Like movies, animation and sound transitions are not something which can be shown in FCM. There are sixteen different transition actions in Beamer. Each action has both a duration in seconds (and fractions of a second) and a direction (0, 90, 180, 270 degrees plus 315 degrees for the glitter transition). There is also the command \transduration which controls how long a particular slide is visible. The transition actions need to be placed with the "next" slide, the slide that will appear next. The transition effect describes how the next slide will be revealed. A frame will often contain multiple slides, the code for one frame may describe multiple slides. Each slide can be numbered with angle brackets, transitions can easily be made to apply to specific slides within the frame.

Note: Please be aware different PDF generators may handle the various multimedia commands in different, and perhaps unusual, ways. The PDF software was designed initially to generate printed documents not slide shows with multimedia parts.

Next time I will take a look at generating presenter notes and participant handouts. Generating presenter notes has long been a sticky point for me with other presentation software packages. I hope Beamer can show us a better way.

Inkscape - Part 175

This month we'll be completing our tour of the Extensions > Generate from Path sub-menu with a look at the last two entries: Pattern along Path and Voronoi Diagram

Generate from Path > Pattern along Path...

I like it when an extension has a simple name that tells you exactly what it does. I like it even more if the extension author has included a Help tab in the dialog which is well-written and covers some of the more important details about how to use the tool. This extension wins on both counts.

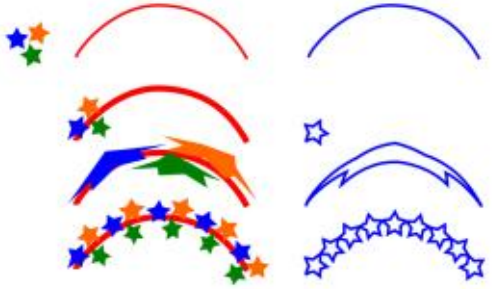
From the name, therefore, you've already worked out that this extension puts a pattern along a path. From the Help tab, we can narrow down what 'pattern' and 'path' actually mean in this case. First, the pattern:

- There can only be a single pattern object
- It can be a primitive shape, a clone, a path, or a group of any of these
- It can't be a text object – they have to be converted to paths first
- It must be the topmost object in the selection
- For the skeleton path you're placing the pattern along:
- There can actually be multiple path objects – the pattern will be applied along each one independently
- They must be paths. No other types of object are allowed

That last point means that you can't use this to put a pattern along the perimeter of a star or circle, for example – at least, not without converting them to paths first. You also can't use a clone of a path. That's no great loss though: as I've noted before, the output of an extension is not live in the same sense that a Live Path Effect is. Therefore, a clone of a path is no better than a straight copy, since modifying the original won't change the result of the extension after it's been run.

On the subject of LPEs, you may be wondering how this extension differs from the identically named path effect. They're actually quite distinct in behaviour, despite also having similar controls. This extension creates a distorted copy of your original pattern, complete with different objects and colors if your pattern was actually a group of objects. The LPE, on the other hand, only ever outputs a single path – so it doesn't work well with groups of objects, and can't support multiple colors. In effect, the extension distorts the pattern to follow the path, whereas the LPE distorts the path based on the geometry of the pattern.

An example with multiple colored objects demonstrates the difference clearly.



At the top we have the pattern (a group of colored stars) that was used for all the tests. The red and blue curved paths are copies of the paths that were used for the extension (red, left) and the LPE (blue, right). Each row below them shows the effect of using similar settings in the extension (left) and the LPE (right). In each case only the "Copies of the pattern" or "Pattern copies" control was changed: 'Single' on the first row, 'Single, stretched' on the second, and 'Repeated' on the third. The fourth option – 'Repeated, stretched' – looked so similar to 'Repeated' with this pattern that it wasn't worth including.

Clearly the extension has maintained the multiple objects and colors of the pattern, whereas the LPE has used just one of the stars in the group to modify the original path. They may share a name, but the extension and the LPE are clearly doing different things.

Let's look at the rest of the

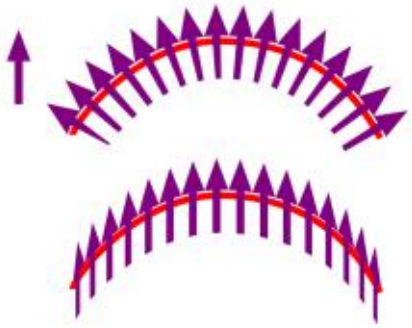
controls for this extension.



We've already seen three of the four options for 'Copies of the pattern'. The fourth one – 'Repeated, stretched' – creates multiple copies of the pattern, but stretches or shrinks each one so that the result extends to the full length of the target path. This example shows a circle being applied using 'Repeated' mode at the top, and 'Repeated, stretched' mode at the bottom. Both examples result in six copies of the pattern being applied, but whereas the first stops short of the end of the path, the second allows each copy to distort a little more in order to fill the same path completely.



The 'Deformation type' control – with the less than intuitive options of 'Snake' and 'Ribbon' – determine whether or not the pattern will rotate with the direction of the path. 'Snake' allows it to rotate, whereas 'Ribbon' keeps all the copies vertical. You can see the difference clearly if we use an arrow as the pattern (top: Snake, bottom: Ribbon).



The 'Space between copies' control allows you to add some extra space between each copy of the pattern, which may result in fewer copies being rendered. Putting a negative number in here causes the copies to overlap, which can result in more being rendered.

The 'Normal offset' and 'Tangential offset' change the positions of the rendered pattern copies. Normal moves them perpendicular to the target path (either positive or negative), while Tangential moves them along the length of the path – effectively changing the starting point. Although Tangential also accepts negative values, in my testing the results weren't very good. As usual, the best option is to enable the 'Live preview' checkbox and play around with the values to see how it behaves with your own images.

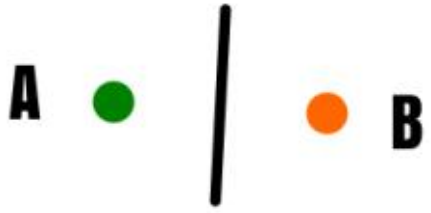
The 'Pattern is vertical' checkbox causes the extension to rotate the pattern through 90° before applying it. Here's my previous vertical arrow in 'Snake' mode with this option applied.



Finally 'Duplicate the pattern before deformation' simply determines whether your original pattern is deformed and used for the result (unchecked), or if a duplicate of the pattern is made first, leaving the original untouched (checked). I usually leave this enabled, as I can just manually delete the original afterwards if I don't want it. Often it's handy to leave it hanging around, perhaps moved off the side of the canvas, in case I want to try using the extension again later, with different parameters.

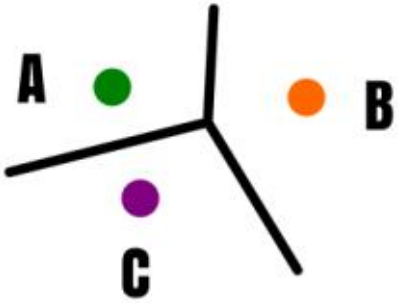
Generate from Path > Voronoi Diagram...

Imagine two dots on a page, A and B. We can draw a line placed halfway between them so that every point on one side of the line is closer to A than B, and every point on the other side of the line is closer to point B than A. We've divided the plane (i.e. the canvas) into two regions.



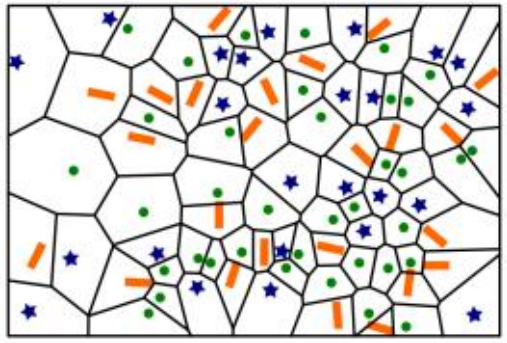
If we extend this idea further we can add another point, C. We can

also add a line halfway between A and C, and another halfway between B and C. This divides the plane into three regions. For each region, every point in it is closer to one of the original points than it is to either of the others.



You can continue to extend this idea to more and more seed points, splitting the plane into multiple regions, each of which contains all the points that are closer to one seed than to any of the others. This is a Voronoi Diagram.

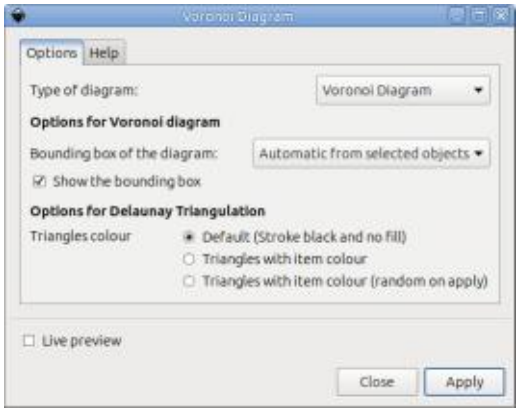
In terms of the extension, the starting point is a selection of seed points. But those seeds don't actually have to be drawn as points or dots – the extension calculates them from the centroids of the selected objects. If you want fine-grained control over the result then using small circles is your best option. But as this example shows, you can use any shape you want – it's their bounding boxes that are relevant. In this case I used the Spray Tool (default shortcut: A) to quickly create a random field of seed objects.



Voronoi diagrams often have the look of cells under a microscope – each growing from a single nucleus. They also have numerous applications in engineering and science, though the ones produced using this extension are mostly useful for aesthetic reasons. If you really need a Voronoi diagram for analytical purposes then you would do better to seek out a more mathematical tool.

There are only a few options in the dialog for this extension.

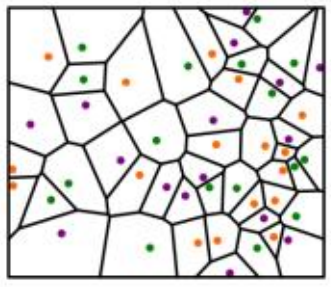
The first selection is for the type of diagram. As well as a Voronoi diagram you can produce a Delaunay Triangulation. This is a

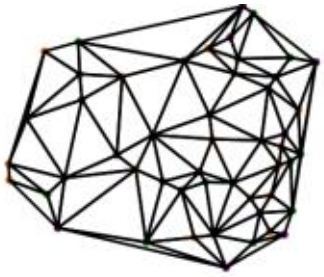


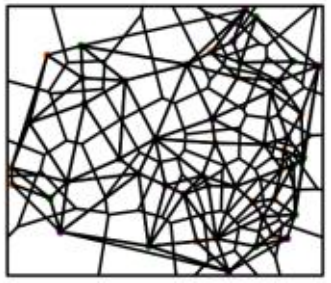
closely related pattern which joins the seed points with lines to form a mesh of triangles. If you want lots of lines on your screen, a third option allows you to have both types of diagram in one. This image shows all three options using the same set of original points.

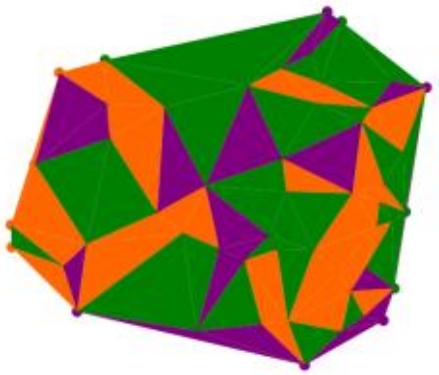
For Voronoi or mixed diagrams you can have the final diagram extend out to the edges of the page, or constrain it to the bounding box of the original objects (as I have in these examples) using the 'Bounding box of the diagram' control. The checkbox below that determines whether or not the bounding box itself is drawn. It would have been nice to have a third option – to use the bounding box but set an offset so that you don't end up with points directly on the edges – but if that's the look you want, you'll just have to let it extend to the whole page, then clip it to size afterwards.

For Delaunay triangulations only, the set of radio buttons at the bottom apply. These let you set the colors of the triangles. The first option gives the black lines shown previously, whereas the second and third will color the triangles from the colors of the seed objects. There's no way to colour the triangles and to have a black outline, though you can select the entire group of triangles and manually set a stroke to have if applied to them all.



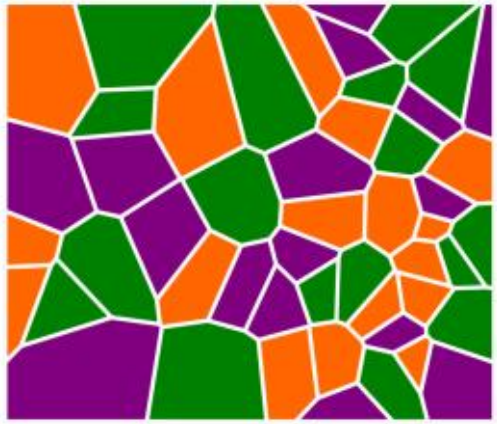






The second radio button gives a stable set of colors that are always the same (given the same set of seed points). The color of each triangle is always taken from the same seed. The third option randomises the colors – presumably picking randomly from each of the three seeds that form the vertices of each triangle. As is typical in extensions, the only way to generate a different random selection is to change one of the controls. I suggest toggling the 'Show bounding box' checkbox on and off, or disable then enable the Live Preview option.

Disappointingly, there's no option to color a Voronoi diagram based on the color of the seed in each cell. This feels like a huge oversight which greatly diminishes the artistic appeal of this extension – unless you want to fill each cell by hand afterwards. While I usually advise avoiding the Paint Bucket Tool (default shortcut: U), this might be a rare case where it's genuinely useful. The process is still more painful than if the extension offered this option by default, but the results may be worth it. In this example I've manually filled the cells, but then set the dividing lines to white.



One thing I would not advise is using the color options when opting to render both types of diagram at once. The colors appear on top of the lines, resulting in a bit of a mess, in my opinion. You can move the lines to the top easily enough, as they're a single group. That improves matters, I think, but I still doubt that there's much practical use for this combination.

That's the end of the Generate from Path sub-menu. I think this contains some of the more interesting extensions that are worth keeping in your mental arsenal. In particular, the 'Distribut along Path' and 'Pattern along Path' extensions both offer capabilities that the 'Pattern along Path' Live Path Effect does not.

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**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BODHI CORNER

Written by Joseph "Flux-Abyss" Wiley

BACK NEXT MONTH



24.04-2.2 and 24.04-1.6

We are announcing the release of Ubuntu Touch 24.04-2.2 and Ubuntu Touch 24.04-1.6, out-of-cycle maintenance releases for 24.04-2.x and 24.04-1.x series, respectively. Both releases will become available for the supported Ubuntu Touch devices over the coming days.

What's new?

These releases are made in response to the eMudhra Intermediate CA Compromise (https://emudhra.we-have-a-problem.com/) incident. They include changes from Ubuntu upstream and our own changes which block the root certificates chaining up to the compromised certificates.

In addition to that, both releases include a small amount of bugfixes and improvements which are merged into respective series in the meantime. Most notable ones are:

- Fixes AppArmor-related issue which prevents users from launching Morph Browser after upgrading from 24.04-1.5 to 24.04-2.0 or later.
- Preparation changes to VoLTE stack to support VoLTE on newer devices in the future (24.04-2.2 only).

Unfortunately, there's one known problem in both releases:

- Gallery app 3.2.0, included in both of the releases, contains a regression where photo albums can't be opened. Given the cost of re-spinning a new RC is relatively high, we've decided to continue with the releases and then publish a new update to Gallery app through Open-Store as soon as possible. If you're offered an update to Gallery app 3.2.1 or later, we recommend you to update Gallery app before updating to 24.04-2.2 or 24.04-1.6.

See the full list of changes in both of the releases at the end of the blog.

How to get Ubuntu Touch 24.04-2.2 and 24.04-1.6

Existing Ubuntu Touch users will receive the updates by going to System Settings > Updates. Devices running Ubuntu Touch 24.04-2.1 will receive Ubuntu Touch 24.04-2.2, while devices running Ubuntu Touch 24.04-1.5 will receive Ubuntu Touch 24.04-1.6.

Devices will randomly be allocated the update starting from today. This spread is to give us a breathing space to stop the roll out of any bad update (should that ever become necessary), and is **not** to accommodate any bandwidth restrictions.

There is also the system update broadcast facility, which will send each online device a trigger message. If the device can find its update, it will be downloaded for you and when everything is ready, a notification will pop up and you can install right away. This only works if you have enabled automatic update download.

If however you would like to receive the update immediately, turn on ADB access and issue the following command over `adb shell`:

```
sudo system-image-cli -v -p 0 --progress dots
```

Your device should then download the update and install it. This process may take a while, depending on your download speed.

Devices running Ubuntu Touch 24.04-1.5 have to upgrade to 24.04-1.6 first before upgrading to Ubuntu Touch 24.04-2.2.

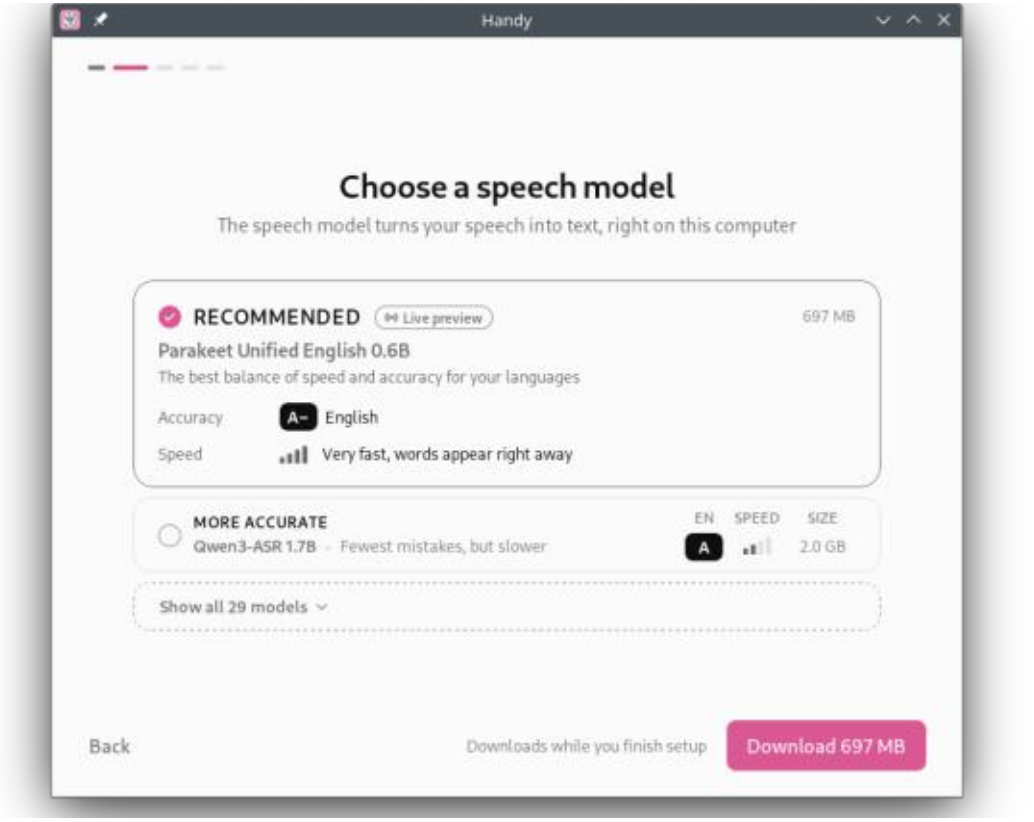
New Ubuntu Touch users

You will find instructions for installing Ubuntu Touch on your device at https://devices.ubuntu-touch.io.


The Daily Waddle
DON'T FORGET TO LIKE AND SUBSCRIBE . . .
Windows Update
10 hours
Preparing to configure Windows
Don't turn off your computer
Your PC will restart several times

I guess I'm spoiled, but when I talk to my tablet or phone (Apple or Android) by keying the mic symbol on the relative keyboard (or summoning Alexa or Siri) I get a response or my speech is typed in whatever app I happen to be in.

While Windows and Mac computers have offered similar advantages for years, Linux has been a laggard of sorts in this area.



Unless you consider **Handy** (https://handy.computer/), **Speech Note** (app from Flathub.org, not to be confused with the web version, Speech Notes), and **Speed of Sound** (https://www.speedofsound.io/ or available in some apps stores).

By comparison, these are app based and local, i.e,, they do not send your voice out to some website where it's converted to text and sent back (in case you didn't know, talking to your phone or tablet often results in your voice going to the web and then back to your unit).

But they are hefty and do require some horsepower and, possibly, some compromises.

In short, your beater box pushing 2gb RAM and an early Celeron chip just won't cut it here. In fact, some, like Speed of Sound, require X11 or Wayland display servers. Xfce is out, but KDE is in along with Gnome and a couple of others.

Why? The individual apps are merely fronts for what has to be added - voice models.

And just what is a voice model, you ask?

About 500mb to a few GB, that's what. And they can suck up the RAM and processor power at a good clip, especially if you go overboard on the voice models (sometimes pegging my processor well over 60%).

In layman's terms, a voice model is a software collection that allows for your speech to be recognized and converted into text.

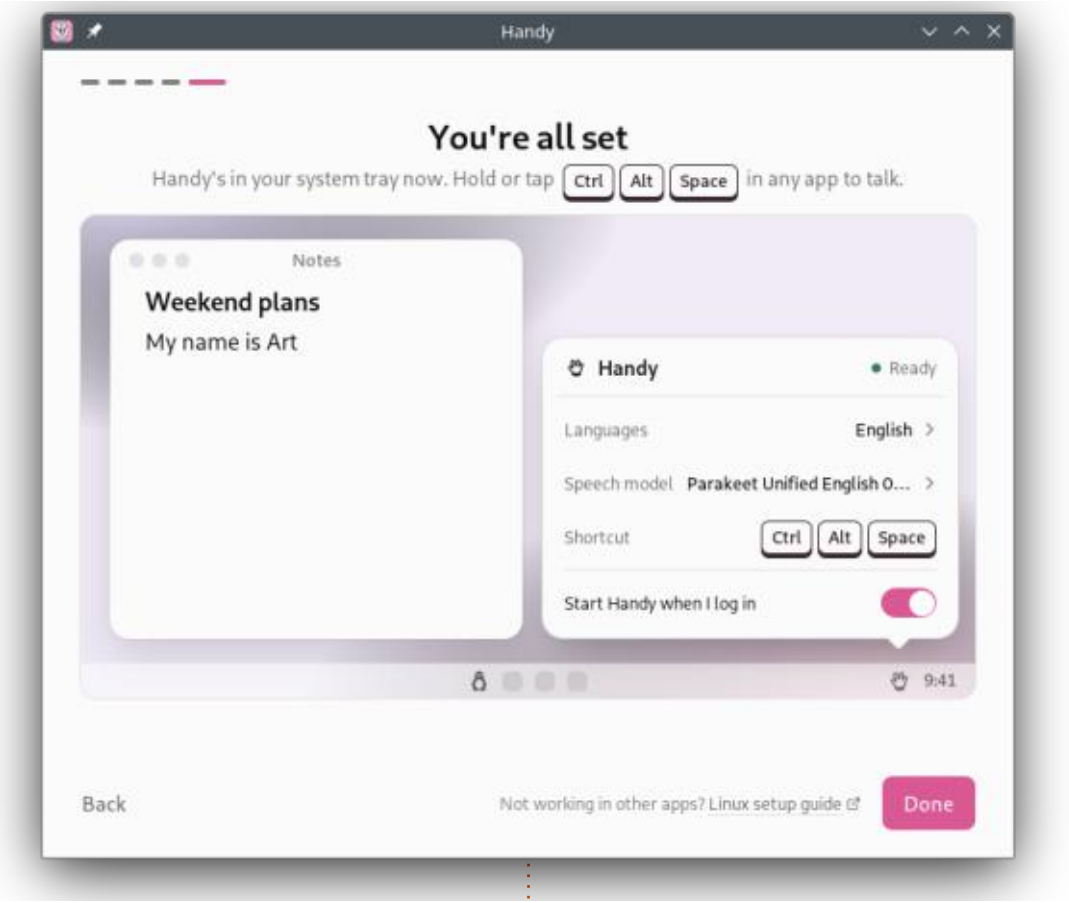
For Linux, the apps I have experience with are Handy and Speech Note with Speed of Sound being a recent discovery.

Handy

Handy's app comes in at 33mb (as an app image, park it on your desktop), but you have to add anywhere from 500MB to or 1GB per voice/transcription model.

For example, you will be offered models such as Whisper, Parakeet and Canary, Qwen, Moonshine/ SenseVoice and, give or take, about 25 more.

Download them all and you'll be kissing a good chunk of your hard drive goodbye and any model you choose requires GPU and CPU specs



in the upper range to handle properly.

It works on my computer (complete with a panel logo that looks suspiciously close to the Hamburger Helper hand) but it can cause RAM and processor limits to peak quickly.

Operation is simple enough - press and hold the Ctrl, Alt and Space keys and talk. Release the keys when you're finished and your speech should be converted.

Whatever you spoke is held in the Handy app and you merely right click the taskbar icon, go to "Copy Last Transcript" and then paste into any app.

So far, it's surprisingly accurate for me having one of the smallest voice models available, the Parakeet Unified English version (about 600mb).

Speech Note

Speech Note was a different monster, and I mean that in a figurative way.

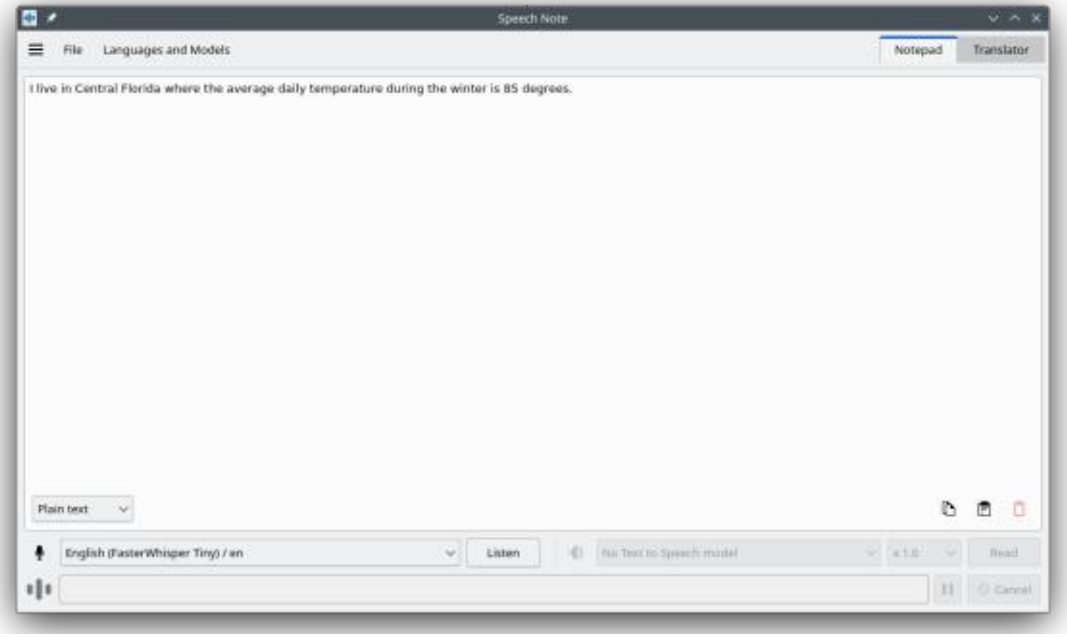
At nearly 4gb for the download (1.2gb of which was for the base voice model), this is nearly the size of the Kubuntu iso image (almost 5gb) I have on my laptop.

Ah, but the fun doesn't end there. You then have to download another voice model file. In my case, just to save space on my laptop, I opted for the Faster Whisper Tiny model.

Operation is a bit different here. It has its built-in notepad system that opens when the app is activated.

Press on the Listen button (the mic icon is decorative as I soon discovered) and press Stop when finished. Cut and paste into your favorite app beyond that point.

Again, not too bad in the accuracy department, but much like Handy before it, using words like "comma" or "period" have no meaning and will be added to any text. It takes pauses as areas to add commas (sometimes) and periods



(sometimes).

Speed of Sound

The minor leaguer of the group is Speed of Sound and it comes in at roughly 100mb but that includes the Whisper Tiny voice model.

And that's it my friends - no more voice models available for that app.

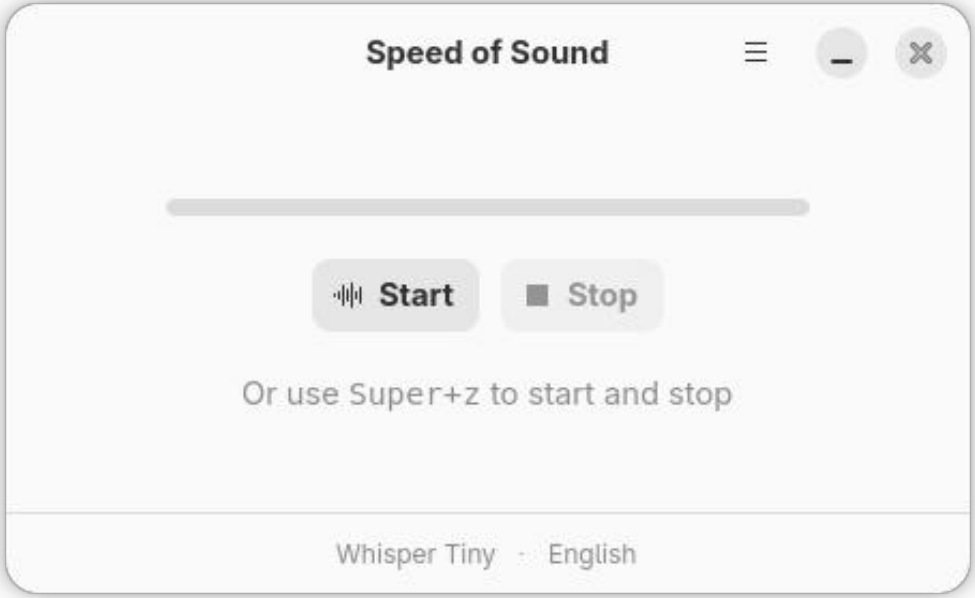
But here's where it operates differently. Whatever app you have open, it will add text to.

You press the Start button at which time you have 30 seconds to talk and, much like the two others, pausing will automatically enter a comma or period.

Here's an example using the phrase, "I live in central Florida where the average daily temperature during the winter is 85 degrees".

I live in central Florida where the average daily temperature during the winter is 85 degrees.

Spot on, including the period at the end.



So, curiously the app that comes in the smallest does just as good a job as the big boys, at least in most respects.

Some things still give any of these apps fits.

2 + 2 = 4 will almost always translate into "2 plus 2 equals 4". These apps recognize the numbers but not the mathematical symbols.

Hey, everything can't be perfect and even cities can give it fits. "Calumazoo, Michigan" comes up instead of Kalamazoo, Michigan yet Chihuahua, Mexico comes up correctly.

Go figure.

End Analysis

If you're doing minor text insertions, email or text responses or anything else of a minor nature, go with Speed of Sound.

Adventurous? Go with either one of the other two, just realize you'll be sacrificing a lot more hard drive space.

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

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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.

Kubuntu 26.10

Marking the start of this new development cycle, Kubuntu 26.10 arrived on 15 October, 2026.

This is Kubuntu's 44th release and the fifth one with both the Qt-based Plasma 6 desktop and a Wayland display server by default, so all the basics here are quite mature now.

Because this is an interim release, it comes with only nine months of support, running until July 2027. This version will be followed by two more interim releases, all leading to the next long term support version which will be Kubuntu 28.04 LTS, due out in April 2028.

This fresh release does bring some new things, along with a bit more polish, as befits a really mature Linux distribution.

Installation

I used the Transmission BitTorrent client to get the Kubuntu 26.10 ISO file via the official source. As I usually do, I carried out a SHA256 sum check from the command line, to make sure that the file download was good, which it was. This check only takes a few seconds and avoids a lot of potential problems.

This Kubuntu ISO file is 5.1 GB in size, the same size as the last release, Kubuntu 26.04 LTS.

I dropped the ISO file onto a USB stick equipped with Ventoy 1.1.18 and it booted perfectly. This was expected as Kubuntu is listed as officially supported by Ventoy.

System requirements

Due to a reorganization of the Ubuntu Wiki, there do not seem to be any published recommended minimum system requirements for Kubuntu at present.

New

Pretty much everything new in this release comes from its upstream projects including the KDE Plasma 6.7.5 desktop and the underlying Ubuntu 26.10 backend.



From the KDE project, Kubuntu 26.10 uses the Qt 6.11.2 toolkit, KDE Frameworks 6.29.0 and has updated applications from KDE Gear 26.08.1. From Ubuntu 26.10, Kubuntu 26.10 gets Linux kernel 7.3 and also systemd 261.3 as its initialization system. All of these are upgrades from the previous release.

The Plasma 6.7.5 desktop has its own upgrades. This includes "per-screen virtual desktops", so that each display can have its own set of virtual desktops. It also has faster virtual desktop switching in the overview. The Discover software manager has been improved with a clearer "install" button, redesigned app cards, a simpler sort order and with the installed software displayed grouped by type.

In the themes department, changes allow switching between the light and dark global themes at once. The Oxygen and Air themes have been updated and the Breeze theme now has rounded highlights and click effects. The new Union theming system is introduced in the

ISO file as a preview. This new desktop version also includes many more smaller fixes and upgrades.

This release is the fifth one to employ a Wayland display server and it works really well. Even though the previous X11 display server is no longer installed in Kubuntu as a fallback option, you can install plasma-session-x11 from the repositories if it is needed. It is worth noting that X11 is no longer supported by the Kubuntu developer team and this will be the last release that will offer the plasma-session-x11 even as an option, as it will be gone for good in the next release. Old X11 applications which have not been updated for Wayland will still run fine on Kubuntu though, using XWayland which comes already installed.

Inherited from Ubuntu 26.10, Kubuntu 26.10 includes fully-upgraded, Rust-based core utilities, many updated toolchains and the capability for TPM-backed full-disk encryption to be installed on machines lacking a hardware root of trust, by setting a PIN or passphrase.

Settings

Kubuntu has always been known for its broad range of user customization and Kubuntu 26.10 maintains that reputation with:

Nine global themes: Air, Breeze, Breeze Dark, Breeze Twilight, Kubuntu, Kubuntu Dark, Kubuntu Light, Oxygen Dark & Oxygen Light (increased from seven last time)

Five application styles: Breeze, Fusion, MS Windows 9X, Oxygen & Union (marked as "under development") (one more than last release)

Eight Plasma styles: Air, Breeze, Breeze Dark, Breeze Light, Kubuntu, Kubuntu Dark, Kubuntu Light & Oxygen (increased from seven last time)

Six window color schemes: Breeze Classic, Breeze Dark, Breeze Light, Oxygen, Oxygen Cold & Oxygen Dark (one more than last release)

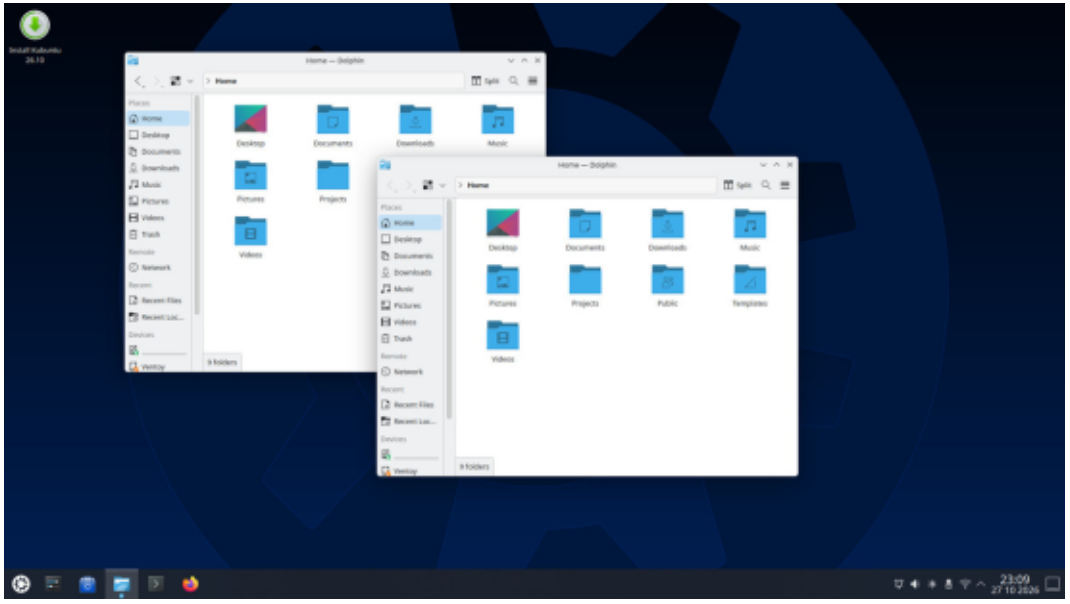
Three window decoration styles: Breeze, Oxygen & Plastik (same as last release)

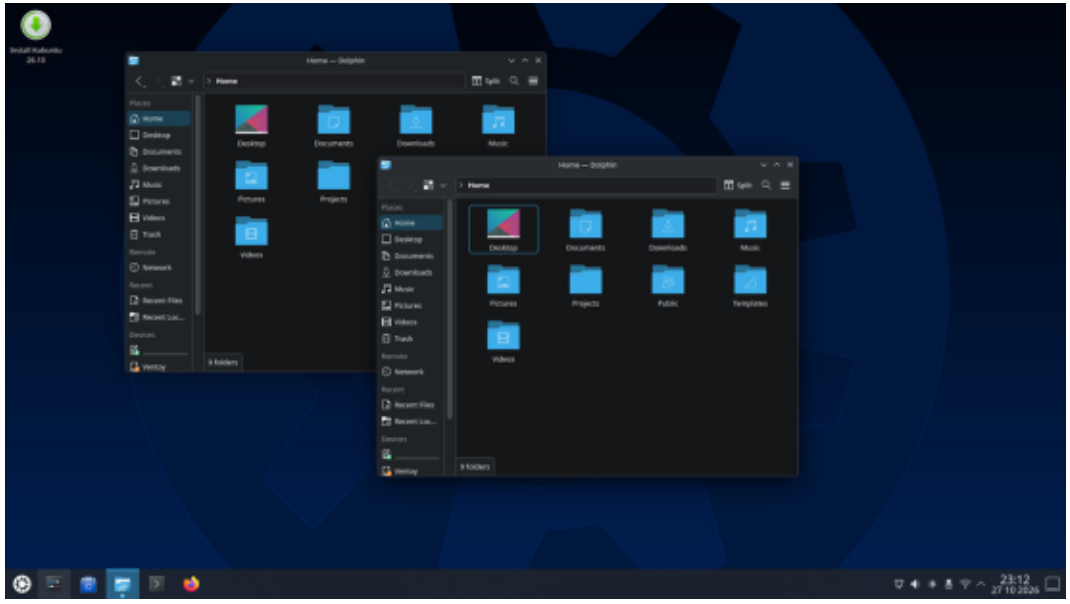
Two icon sets: Breeze & Breeze Dark (same as last release)

Eight cursor styles: Breeze Dark, Breeze Light, KDE Classic, Oxygen Black, Oxygen Blue, Oxygen White, Oxygen Yellow & Oxygen Zion (same as last release)

Three system soundscapes: Ocean, Oxygen & FreeDesktop (same as last release)

Four splash screens: Air, Breeze,





Oxygen Dark & None (one more than last release)

Three login screens: Breeze, Kubuntu & Kubuntu Light (same as last release)

Ten boot splash screens: BGRT, Breeze, Breeze (Text Mode), Details, Kubuntu Logo, Kubuntu Text, Spinner, Text, Tribar & Ubuntu Text (same as last release)

43 wallpapers (three more than last release)

As always, these are just the installed options with most of the settings pages featuring one-button downloads to retrieve many more options.

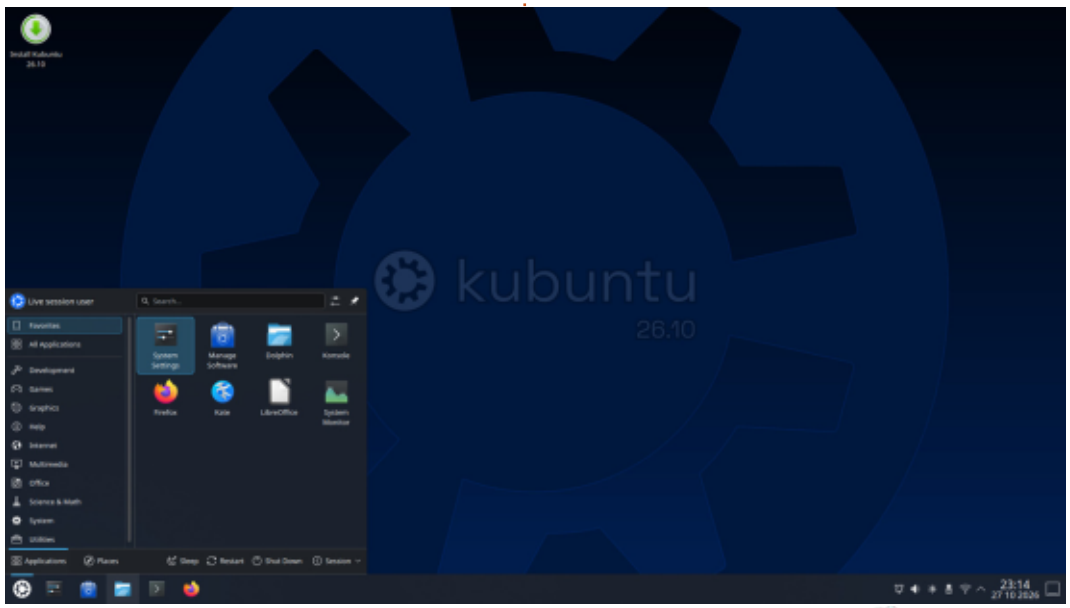
Kubuntu 26.10 has 66 pre-installed widgets, one fewer than in the last release. These KDE widgets are small applications that can be added to the panel and displayed on the desktop when activated. They include things like clocks, timers and weather reports. Hundreds more of them can be downloaded for installation, limited only by your tolerance for panel clutter. On the Plasma 6 desktop, the widget installation options are hidden away in the panel's or the desktop's right-click menu and not in settings where you might expect to find them, so they are easy to miss. The widgets in Plasma 6 are also displayed differently from Plasma 5. On that old desktop, most appeared directly on the desktop itself, whereas now they are displayed as panel icons until clicked to open. This is actually an improvement and makes them less intrusive.

As is usual, this release comes with a new default light/dark Kubuntu wallpaper from Kubuntu Focus Design. There are a total of 43 wallpapers provided, three more than the last release. There are many favorites from past Kubuntu releases included. As is usually the case with Kubuntu, the developers have completely ignored the code name for this family of Ubuntu releases, "Stonking Stingray", and there are no stingray-themed wallpapers. You could however go and get an Ubuntu one if you really want a stingray wallpaper.

Just like in the last release, Kubuntu 26.04 LTS, Kubuntu 26.10 has the "wobbly windows" desktop effect turned on by default. This is where you move an open window on the desktop and the window wobbles like it is made out of jello. The good news is that if you find it as annoying as I do, it is easy to turn it off at System Settings - Window Management - Desktop Effects.

The desktop animations on this release have been set to "slow", which I will admit makes them a bit more elegant-looking and calming. If you like them faster, go to the speed slider found at System





Settings - Animations. They can be turned off, too.

Moving a window also induces transparency which again can be disabled if too annoying. These three effects by default do make the desktop look more polished and if nothing else at least they showcase some of the available Plasma 6 options, even if you later turn them off. This also illustrates that there is no shortage of customization available on the Kubuntu desktop.

Applications

Some of the applications included with Kubuntu 26.10 are:

Ark 26.08.1 archive manager
CUPS 2.4.16 printing system*
Discover 2.1.2 software store*
Dolphin 26.08.1 file manager
Elisa 26.08.1 music player
Firefox 157.0.1 web browser**
Gwenview 26.08.1 image viewer
Haruna 1.8.1 video player
Kate 26.08.1 text editor
Kcalc 26.08.1 calculator
KDE Connect 26.08.1 smartphone connection
KDE Partition Manager 26.08.1 partition editor
Konsole 26.08.1 terminal emulator
LibreOffice 26.8.1.1 office suite, less only LibreOffice Base database
NeoChat 26.08.1 Matrix client
Okular 26.08.1 PDF viewer
PipeWire 1.6.8 audio controller
Plasma System Monitor 6.7.5 system monitor
SkanPage 26.08.1 multi-page scanning utility
Spectacle 6.7.5 screenshot tool
Startup Disk Creator 0.4.1 (usb-creator-kde) USB ISO writer*
Systemd 261.3 init system
Thunderbird 158.0.1 email client**
Vim 9.2.0858 console text editor

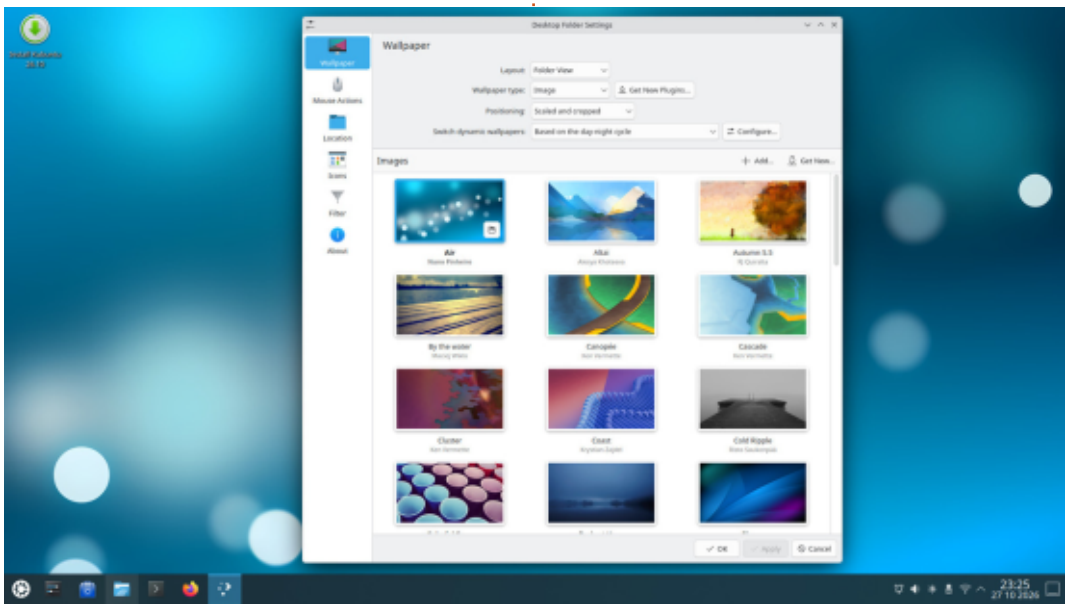
Plus four games:

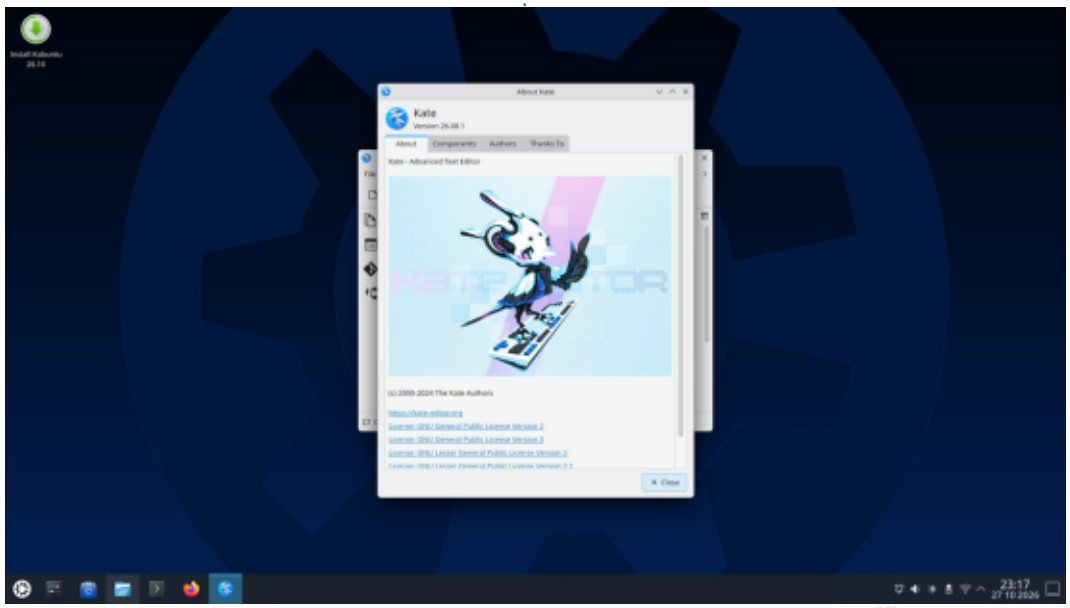
Kmahjongg 26.08.1
Kmines 26.08.1
Kpatience 26.08.1
Ksudoku 26.08.1

* indicates same application version as used in Kubuntu 26.04 LTS
** supplied as a Snap, so version depends on the upstream package manager

As always, the selection of default applications provided is pretty complete for most desktop users, so that Kubuntu is ready to get to work for you, right out of the box.

Pretty much all of the KDE applications provided have been updated to their KDE Gear 26.08.1 versions. There is only one change to the mix of default applications provided. It is not mentioned in the release notes, so there is no reason given as to why the Skanlite scanning utility has been dropped. If you need it, it can still be installed from the repositories. SkanPage, the multi-page scanning utility, is





included, however.

Conclusions

As the first interim release in this new development cycle, Kubuntu 26.10 brings mostly upstream changes from the Plasma 6.7.5 desktop and from Ubuntu, and not much new from the Kubuntu developers, aside from some additional theme options.

It will be interesting to see how the next two interim releases turn out, whether they will introduce larger changes or if this will be a quieter development cycle than the last one was. I have to admit, with Wayland now fully implemented and proven in service, I am not sure what else needs changing in Kubuntu right now. A quiet development cycle might be a welcome gift for both users and developers!

This is a great release that looks good and works smoothly. Since the introduction of the Plasma 6 desktop, now five releases ago, Kubuntu really feels like it has hit its stride. I think anyone installing Kubuntu 26.10 will find it very complete, attractive and fairly flawless.

External links

Official website:
https://kubuntu.org/

kubuntu





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

LETTERS

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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.

Recently, I was on a Russian forum and the hate for Ubuntu was quite hectic. On one hand, I can understand it, as the frustration is real. I'm not going to lie, boot speed is my first priority. I loved Solus when my spinning rust drive on my Dell T20 server booted in seven (7) seconds after the BIOS initiated. I was all fire and flame to help Ikey thereafter. I designed an icon set for Solus, a mouse pointer set etcetera, but then Ikey went AWOL. Contrast that to me setting up a bunch of HP mini PCs to act as a Kubernetes cluster and Ubuntu takes three (3) minutes – not seconds! - to boot on a SSD. Seriously? Even on my spiffy laptop, with NVME, every Snap adds 2 seconds to the boot time, as a loop device. On top of that I'd already trimmed out the fat, like waiting for network and so forth and still it boots slower than that Solus PC. What is the answer? Pop!_OS? ShiftOS? FunOS? Is it time for someone else to "stand on the shoulders of giants"?

Before I start this issue, I'd like to point out that sending me a message on Telegram stating, "my wifi is not working" and your specs, does not inspire confidence that you know how to ask for assistance. Tell me what you have done to get to the point where you are. This helps more than you think!

Q: I am new to Ubuntu and am going away from Windows. However, upon installing my Ubuntu on my HP Elitebook, the backlight is not working. Ubuntu 26.04 Gnome.

A: OK, "not working" – is your screen dark? Does the slider on your desktop not work, do the short-cut keys no longer work? Did it work on Ubuntu 24.04 previously?

Q: Have you ever verified the SHA256 of an Ubuntu flavour?

A: Yes, because it turned out I had a funky USB stick. It diagnoses more than authenticity.

Q: I install Kubuntu Linux on my Dell laptop, but it still boots Windows? Why?

A: BIOS/UEFI settings: on Dell laptops you need to set the boot options to Ubuntu. I'd change my security settings to audit mode too, just to install, if I were you.

Q: Should I use XFS or EXT4 for Ubuntu?

A: That's like asking if you should wear red or black underwear. Personally. I'd recommend EXT4, as XFS has been around for as long as I can remember and is not really made for home computers. (That's the short version, feel free to ask XFS vs EXT4 on your favourite search engine)

Q: I was given a gaming PC by my son-in-law. It is a bit old to run windows 11, so I went with Ubuntu Budgie. Every few months it starts failing, then I need to run fsck. I decided to replace the Western digital drive with a Crucial SSD. The problem is still there, so it is not a failing drive. What else could be the issue?

A: My next port of call would be the drive controller. So check cables and ports. If they are fine, check to see that all heat sinks are fastened properly, heat causes weird errors. Then also check all

your caps on the mainboard, as voltage may be your next issue. Then lastly, check the PSU, swap out the connectors to your drive and maybe the whole unit. If none of this seems to work, take the mainboard out and gently(!) bend it the opposite way – micro fractures can occur when components are inserted forcefully.

Q: I'm trying to install Ubuntu 26.04 on my PC. It seems to fail all the time. "/snap/ubunut-desktop-bootstrap" and "stderr=err" the rest is too fast to see. Please help me.

A: The bootstrap process is trying to locate your hard drive to install Ubuntu on to. It's probably not finding it. However... First verify your downloaded ISO then verify your install medium. I'd say your problem lies with one of those two.

Q: I have to install Ubuntu on a bunch of machines for a school. What is the faster option to install about 60 machines?

A: I'm not sure about your question, if it is about OEM installs or do you mean speed wise? Shoot me later, but unless you have a dedicated disk cloner, it may be easier to clone a bunch of USB thumb drives and have the PC's on the desks at school, or network clone them. Plugging drives in and out of a machine and then unscrewing the next machine to remove the drive is generally slower?

Q: Can I load Ubuntu 26.04 on my Raspberry Pi 3B+ ? I have not seen anything about it on Google.

A: Honestly, you can, but I wouldn't. Also Google is not the only search engine. (I tried running Ubuntu MATE on one a while ago and it was like turtles stampeding through peanut butter) It depends on your use case, but I'd recommend Raspbian or some such.

Q: My PC screen is a Proline 800x600 square display, but it can go to 1024x768. In Ubuntu 26.04, when I set it to the maximum resolution, it goes all funny. It is a VGA screen, but it can use DVI, I just don't have a cable for that.

A: I'd opt for the DVI cable as it would set your refresh rate correctly. I'm not sure about PC screens, but in the past on laptop screens, if you set the refresh rate to 59Hz instead of 60, they sometimes stabilise.

Q: I really want to upgrade Kubuntu on my core2quad machine. However it is a very old version, probably like 20.04. the repositories are not working any more and therefore I can't do a dist-upgrade on it. Can I try with Ubuntu CD's?

A: My first question is why. Why do you want to upgrade? If you want the latest version, the best way would be to do a backup and install fresh. That way you leave behind any baggage of outdated software on your machine. If there is software holding you back, install the latest version in a virtual machine and test it. The short answer is that you can, but the effort will be enormous. (specially with dependencies)

Q: I use Obsidian on Android and I was hoping for a decent markdown editor for Lubuntu that would integrate properly. I'm not looking to make an account anywhere, I'm done with that nonsense. What should I do?

A: Ooof... I hate these, if you like Obsidian, stick to Obsidian, as for integrating with Lubuntu, look what integrates well with KDE as it is QT-based. It all comes down to personal preference and what you like, I cannot know what you like. A personal favourite is ghostwriter, but it is not for everyone. Maybe try Marknote? (please don't e-mail us with "but why did you not recommend markdown3000 super Lubuntu version?")

Q: I want to install the latest Ubuntu, but I have forgotten my Ubuntu one account details. I don't even remember which e-mail I used for it. How do I continue to Ubuntu pro now?

A: Install Ubuntu, navigate to Ubuntu Pro, sign up for a new account, connect it to a new e-mail account. It does not matter, it is only used for registration.

Anvira: Forge Defense

Website:
https://anvira.sakrsoft.com

Price: TBA

Blurb: "*Turn the battlefield into lava. Fill the sky with meteors. Raise an army of shuriken-throwing ninja golems. Anvira: Forge Defense is a tower defense roguelite about crafting absurd golem builds — and watching endless goblin waves break against them.*"

This one shows up on steam as Windows only. However, the developers at Skarsoft have reached out to us, to let us know that the final product will be available for Linux as well. This already puts these fine fellows in my good books, before even seeing the game! :) - And no, our reviews are our own, they do not tell us what to write. The game will also be available in quite a few languages; English, French, German, Spanish (Spain and Latin America), Portuguese (Brazil and Portugal), Italian, Russian, Simplified Chinese, Arabic and Vietnamese

The game launches soon, as you can see, so get in there for the release day discount!

Warning, this game is a sleeper, under the simple exterior there hides a game meant for fierce competition!

So let's test this bad boy on Ubuntu 24.04.

Installation:

We installed the game from Steam, and it installed without a hitch.

Sound.

The first thing that came to mind, after launching the games, was, Lord of the Rings, the drums in the deep. The game music was this steady march of drums. I first tested it on the almost gaming laptop and I thought that the fans were going nuts, but there is a sound of fire burning, that when turned down, sounded like fan noise. Then when you win a round, there is this awesome upbeat sound that feels very satisfying, like you really accomplished something. When a game gives you that ka-ching sound when there are coins you immediately perk up, well, this is the same, when you defeat a level, more dopamine. Currently there is no OST, but this is a small indie studio and these things may come later. A nice surprise was the change in soundscape when changing to the jungle biome, for instance - and there were the sounds of birds and that "calming" drones that you often hear in YouTube videos that "help" you fall asleep. Quite a stretch from the initial drum beat, I suspected the developers were trying to lull me into a false sense of ease...



Graphics.

The characters seem hand drawn, giving it that quaint homey feeling and the overworld map is gorgeous. I say this, as there is, (looks to be) no rubber stamping of the trees and so forth. They say the devil is in the details, but it is small

things like these that make you appreciate the effort that went into making your own game and the overworld map usually suffers. There is, rubber stamping in the units. The golems are all the same. This makes the game feel like a mobile game, rather than a PC game. The golems all rocked at the same timings too. I understand that this is a game you play against other players on global leaderboards and you are aiming at speed-running, but some variety would be nice. Some golems with random eye colour, for instance. Just to break the monotony. The same goes for the goblins, they all look and behave the same – maybe different colour loin cloths? Honestly, that was my only complaint with the graphics, the repeats. The background repeats, and you can see it, the marks on the floor repeat and you can see it. I understand that this is a small team and developers are not artists, so they get a pass.

Gameplay.

You place your golems in columns and the enemy attacks along the rows. Luckily for us, there are short-cut keys, allowing you to place your units quickly and have your battlefield deployed in seconds. As one would expect there are different abilities you can assign to different units and these range in strength. You also need to think about what you add, and not just add abilities for adding's sake. There is no use adding 25% further sight to melee units, as ranged units attack need further sight lines. So you will need to read a bit and put some effort in, to learn the game. That said, the tutorial does a fine job teaching you the ins-and-outs of this title. The twist in the tale is this build system, where you do not rely on towers, but you invent seriously overpowered builds <insert maniacal laughter> and have your power fantasy. You can have rapid firing units (bring on the brrrappers!) with some spells for backup, oh, I did not mention the spells? Well this game is deeper than you think. After each wave you get a report of what happened, which units took the most damage, how much damage you dealt and so forth, helping you make informed choices. You can speed up waves too, there are controls for this located at the top of the screen, helping you get your build just right, to knock off JollyPirate442, off the first place in the leaderboards. Each stage has a difficulty level and that determines your bonus points, so choose carefully!





There are a few things that need cleanup before launch, in a few days. Things that stood out was superfluous language, like “ranged enemies attack from range”, instead of something like “ranged enemies attack from outside of the reach of your melee units” or whatever. That said, this is a solid little title that I expect is going to really have players chase leaderboards.

The graphics and the gameplay remind me of a game many years ago, where you trained a fighter with different abilities and had him fight other random people on the internet. This is that same concept, but you fight the computer and your score is what you battle others with. This can be a very addictive game loop. The game as it stands now, though seeming very simple, had my laptop fans spinning at full taps. (OK, maybe 80%) but there were no real stressful animations taking place. I suspect this will need some tightening up before launch too.



Is the game worth your time? Even if you are not competitive, the game still provides you with ample single player gameplay. (actually it is very cleverly devised), so I’d say yes. Is it worth your money? I cannot say that yet as pricing is not available. Is it fun? Yes, I should be working on trimming the weekly news right now, that is 60% longer than usual and I’m playing this title, trying to understand the builds. I like it when a game engages my brain!

If you think we were unfair, misc@fullcirclemagazine.org



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

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

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

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

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Full Circle Team

Editor - Ronnie Tucker
ronnie@fullcirclemagazine.org

Webmaster -
admin@fullcirclemagazine.org

Editing & Proofreading
Bert Jerred, Bruce Goodman, Gord Campbell, Jim Dyer, Matthew Bailey, Matthew Bulfinch, Mike Kennedy, Moss Bliss, Roy Milner, Sam Daniel, Sony, Theo Van Oosten, Victor Moisey and Wayne Solberg

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