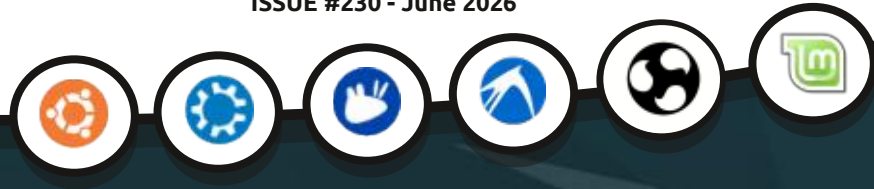




Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #230 - June 2026

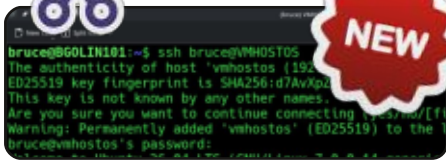


LUBUNTU & XUBUNTU 26.04 LTS REVIEWED

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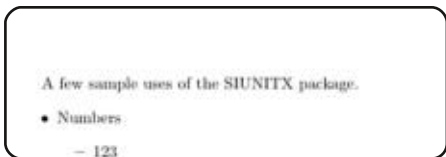
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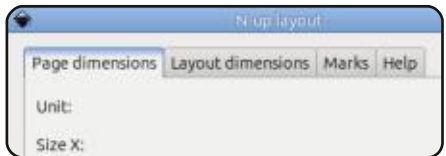
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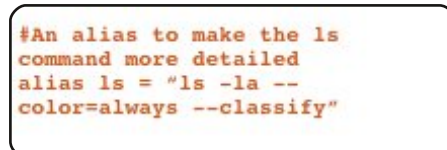


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Full Circle

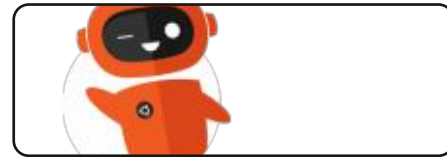
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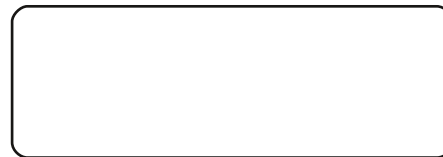
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WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

Once again we bring you some Latex, Godot, Inkscape and the start of a new series. Firstly, though, is the end of the current Godot series. I believe Erik is working on another Godot series, but can't promise anything. Elsewhere, Bruce has started a series of articles on how to build your own Wiki. Why? I'll let him explain in the article.

We have, of course, more distro reviews. This time we have Adam's thoughts on Lubuntu and Xubuntu 26.04. Meanwhile, Erik takes a look at the game, Dot Age.

As ever, I'm still begging for articles, folks. If it wasn't for Bruce writing the series on the Wiki we'd be having a big blank space. So, please, do think about writing something and emailing to me at the address below.

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, and here's to another 19 years!

Ronnie

ronnie@fullcirclemagazine.org



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GENCAD:
18/05/2026

Researchers at the Massachusetts Institute of Technology are developing the GenCAD project, which uses a machine learning model to generate 3D models based on a 2D image or sketch of a part. GenCAD produces not just a 3D model, but a complete parametric CAD program with a history of model construction commands, suitable for import into parametric CAD systems.

An enthusiast joined the discussion of the project, stating that creating CAD models can be accomplished without specialized machine learning models, using standard AI assistants such as Aider,

OpenClaw, and QwenCode, along with standard AI services. As an example, a collection of prompts was published that, based on a description, a list of desired characteristics, and images with visual examples, generate programs for the OpenSCAD platform that create CAD models in STL or OFF format with a parameterized configuration.

<https://news.ycombinator.com/item?id%3D48173429>

MYCOMPANY 6.2:
18/05/2026

MyCompany 6.2, a free ERP system for small and medium-sized businesses built on the lsFusion platform, has been

released. The solution covers inventory and financial accounting, procurement and sales management, manufacturing, retail and services, and more. The MyCompany standard solution is distributed under the Apache 2.0 license and is being developed as an open-source project on GitHub. A demo platform and installation and configuration documentation are available to get started.

<https://github.com/lsfusion-solutions/mycompany/blob/v6/CHANGELOG.md>

INCIDENTRELAY:
19/05/2026

The IncidentRelay project has been published. An open-source

system for on-call management, alert routing, and incident response, running on a self-hosted server. The project is aimed at SREs, DevOps, and infrastructure teams seeking a locally deployable alternative to SaaS services for on-call management, escalation policies, and incident response. The project code is written in Python and distributed under the MIT license.

IncidentRelay receives events from monitoring systems, matches them with routing rules, and delivers notifications to responsible duty officers or teams. The system implements duty schedules, rotations, shift overrides, incident receipt confirmation, incident resolution, reminders, escalations, and silences to suppress known or planned triggers.

<https://incidentrelay.io/>



DistroWatch.com

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FHEROES2 1.1.16:

19/05/2026

The very active fheroes2 project, version 1.1.16, is now available. It recreates the Heroes of Might and Magic II game engine from scratch. The project code is written in C++ and is distributed under the GPLv2 license. To run the game, you need game resource files, which can be obtained from the original Heroes of Might and Magic II. The project includes a script for automatically downloading and extracting resources from the game's demo version, which are sufficient for full functionality.

<https://github.com/iithub/fheroes2/releases/tag/1.1.16>

UBUNTU CORE 26:

19/05/2026

Canonical has released Ubuntu Core 26, a compact version of the Ubuntu distribution optimized for use on Internet of Things (IoT) devices, containers, and consumer and industrial equipment. Ubuntu Core is delivered as a single, monolithic base system image, eliminating the need for

separate .deb packages. Ubuntu Core 26 images, synchronized with the Ubuntu 26.04 package base, are available for x86_64 and ARM64 systems. This release will be supported for 15 years.

Ubuntu Core serves as the foundation for additional components and applications, packaged as self-contained snap packages. Ubuntu Core components, including the base system, the Linux kernel, and system add-ons, are also delivered in snap format and managed by the snapd toolkit. Snap technology allows for the creation of a system image as a single unit, without breaking it down into individual packages. Instead of incremental updates at the level of individual .deb packages, Ubuntu Core uses an atomic update mechanism for snap packages and the base system, similar to Fedora Atomic, ChromeOS, Endless, and openSUSE Leap Micro. When updating the base environment and snap packages, it is possible to roll back to the previous version in case of issues discovered after the update.

The underlying file system is mounted read-only. Data

encryption on the drive is supported using TPM. Updates are released regularly, delivered over-the-air (OTA) and synchronized with Ubuntu 26.04. To minimize traffic, updates are compressed and include only changes since the previous update (delta updates). Automated update installation solves the problem of maintaining system security when used on embedded devices.

<https://canonical.com/blog/canonical-launches-ubuntu-core-26>

ONLYOFFICE 9.4:

20/05/2026

ONLYOFFICE DocumentServer 9.4 has been released, introducing a server for ONLYOFFICE online editors and collaboration tools. These editors can be used for working with text documents, spreadsheets, and presentations. The project's code is distributed under the open source AGPLv3 license. Ready-to-use builds are available for Linux, Windows, and macOS.

The ONLYOFFICE Desktop Editors 9.4 was also released,

sharing the same codebase with the online editors. The desktop editors are designed as desktop applications written in JavaScript using web technologies, but combine client and server components into a single suite designed for self-contained use on the user's local system, without relying on an external service. For on-premises collaboration, users can also use the Nextcloud Hub platform, which provides full integration with ONLYOFFICE .

ONLYOFFICE *claims full compatibility with MS Office and OpenDocument formats, but testing says otherwise.

<https://www.onlyoffice.com/blog/2026/05/onlyoffice-docs-9-4>

OPENBSD 7.9:

21/05/2026

OpenBSD 7.9, a free UNIX-like operating system, has been released. The OpenBSD project was founded by Theo de Raadt in 1995 after a conflict with the NetBSD developers, which resulted in Theo being denied access to the NetBSD CVS repository. The full installation

ISO image of the OpenBSD 7.9 base system is 762 MB.

In addition to the operating system itself, the OpenBSD project is known for its components, which have been widely adopted by other systems and have established themselves as some of the most secure and high-quality solutions. Among them are: LibreSSL (a fork of OpenSSL), OpenSSH, the PF packet filter, the OpenBGPD and OpenOSPF routing daemons, the OpenNTPD NTP server, the OpenSMTPD mail server, the tmux text terminal multiplexer (analogous to GNU screen), the identd daemon with an implementation of the IDENT protocol, mandoc , a BSD alternative to the GNU groff package, the CARP (Common Address Redundancy Protocol) protocol for organizing fault-tolerant systems, a lightweight HTTP server, and the OpenRSYNC file synchronization utility.

<http://www.mail-archive.com/announce@openbsd.org/msg00598.html>

VIVALDI 8.0:

21/05/2026

Vivaldi 8.0, a proprietary browser developed using the Chromium engine by former Opera Presto developers, has been released. The project distributes changes to the Chromium codebase under an open source license. The browser interface is written in JavaScript using the React library, Node.js, Browserify, and various ready-made NPM modules. The interface implementation is available in source code, but under a proprietary license.

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

The new version features a completely unified browser interface – all toolbars are now

located on a single visual plane, covering the entire browser without being divided into frames.

<https://vivaldi.com/ru/blog/desktop/desktop-releases/vivaldi-on-desktop-8-0/>

PUREOS 11:

22/05/2026

Five and a half years after its last major release, PureOS 11 has been released. It's built on Debian, includes only free applications and ships with the GNU Linux-Libre kernel, stripped of non-free binary firmware. PureOS has been recognized as completely free by the Free Software Foundation and is included in its list of recommended distributions. The distribution is being developed by Purism, the company behind the Liberty Phone and Librem 5 smartphones and also produces laptops that ship with this distribution and CoreBoot-based firmware. ISO installation images of GNOME (1.9 GB) and KDE (2.2 GB) are available for download, supporting Live mode booting.

The distribution is committed to

privacy and offers a range of features to protect users' privacy. For example, a set of tools for encrypting data on disk is available, the Tor Browser is included, and the Privacy Badger add-on is pre-installed to protect against web tracking. PureBrowser (a rebuild of Firefox) is used as the default browser.

<https://puri.sm/posts/pureos-crimson-development-report-april-2026-pureos-crimson-released/>

PROXMOX VE 9.2:

22/05/2026

Proxmox Virtual Environment 9.2 has been released. It's a specialized Linux distribution based on Debian, designed for deploying and maintaining virtual servers using LXC and KVM. It can serve as a replacement for products such as VMware vSphere, Microsoft Hyper-V, and Citrix Hypervisor. The ISO installation image is 1.7 GB in size.

Proxmox VE provides the tools for deploying a fully-fledged, industrial-grade virtual server system managed via a web interface, designed to manage

hundreds or even thousands of virtual machines. The distribution features built-in tools for backing up virtual environments and out-of-the-box clustering support, including the ability to migrate virtual environments from one node to another without interruption. Features of the web interface include: support for a secure VNC console; role-based access control to all accessible objects (VMs, storage, nodes, etc.); and support for various authentication mechanisms (MS ADS, LDAP, Linux PAM, Proxmox VE authentication).

<https://proxmox.com/en/about/company-details/press-releases/proxmox-virtual-environment-9-2>

STARTWINE-LAUNCHER 422:

23/05/2026

Release 422 of Startwine-Launcher, an application designed to run Windows-based programs and games on Linux systems, has been published. The primary goal of Startwine-Launcher was to simplify the process for beginners to create Wine prefixes

—sets of libraries and Windows dependencies required for Windows applications to run on Linux. Startwine-Launcher is written in Python and licensed under the GPLv3 license. The interface is based on the GTK library.

<https://startwine-launcher.ru/>

TILEOS 2.0:

23/05/2026

TileOS 2.0 "Sauropod" is now available. It's built on Debian and offers a desktop environment that utilizes tiling. TileOS shares the same goals as the Ubuntu Sway Remix distribution (developed by the same author), offering a ready-to-use interface that requires no additional configuration and is aimed at both experienced Linux users and beginners who want to try out a tiling environment without spending a lot of time setting it up.

Unlike Ubuntu Sway Remix, TileOS is much more open to modifications and customizations and is free of any potential copyright issues (Ubuntu Sway Remix uses Canonical's registered

trademarks, but an official decision regarding its inclusion in the official Ubuntu family has yet to be received). Builds for the amd64 architecture are available for download (support for arm64, particularly Raspberry Pi boards, is planned for the future). The source code for the TileOS components is licensed under the GNU GPLv3 license.

<https://git.tile-os.com/TileOS/tileos/releases>

GNOME COMMANDER 2.0:

23/05/2026

GNOME Commander 2.0, a dual-panel file manager optimized for the GNOME desktop, has been released. GNOME Commander offers features such as tabs, command line access, bookmarks, customizable color schemes, directory skipping when selecting files, access to external data via SFTP and SAMBA, expandable context menus, automatic mounting of external drives, access to browsing history, plugin support, a built-in text and image viewer, search, wildcard renaming, and directory comparison. The code is

licensed under the GPLv3 license.

<https://thisweek.gnome.org/posts/2026/05/twig-250/>

THE OFFICIAL GODOT ASSET STORE:

23/05/2026

After several years of work and several months of beta testing, the official Godot Asset Store, a catalog of assets and plugins for the Godot game engine, has been released. It replaces the Asset Library. The new catalog features full integration with the Godot engine and support for it has already been added to the Godot 4.7 branch, which is currently in beta testing. Currently, the catalog only supports free assets; support for paid products and a donation system are promised to be added later.

Developers are encouraged to begin migrating their assets from the Asset Library to the Asset Store. "We decided not to automatically migrate them due to the need to obtain permission from each author for the migration, the need to transfer files from third-

party resources to our own hosting, and the unwillingness to migrate long-unsupported, outdated assets." Access to the Asset Library catalog will be retained in the future to support older versions of the Godot engine, but will be set to read-only mode.

<https://godotengine.org/article/introducing-the-godot-asset-store/>

MX LINUX 25.2:

25/05/2026

MX Linux 25.2, a mediumweight distribution created through collaboration between the antiX and MEPIS communities, has been released. The release is based on Debian with improvements from the antiX project and packages from its own repository. The distribution offers a choice of sysVinit and systemd init systems. Custom tools for system configuration and deployment are included. Available for download are 64-bit builds (x86_64) with the Xfce desktop (3 GB), builds with the KDE desktop (3.6 GB), and builds (2.4 GB) with the Fluxbox window manager.

<https://mxlinux.org/blog/mx-25-2-infinity-isos-now-available/>

FLATPAK INTENDS TO MAKE SYSTEMD A MANDATORY

DEPENDENCY:

25/05/2026

At the Linux App Summit conference, Sebastian Wick, maintainer of the Flatpak toolchain and Adrian Vovk, creator of the GNOME OS installer and co-developer of systemd-homed and systemd-sysupdate, presented a talk about the future of the Flatpak self-hosted package system. The talk mentioned the intention to create a new process, systemd-appd, for Flatpak, that will provide information about running application instances.

systemd-appd will implement functionality for assigning application identifiers and storing permissions associated with these identifiers. Using systemd-appd will solve issues with secure authentication of running Flatpak applications and identifying which application is attempting to access system resources. Thanks to systemd-appd, it will be possible to

use nested sandbox environments (for example, for additional process isolation in browsers), implement support for the PipeWire multimedia server, and eliminate the D-Bus proxy used to filter access to system services.

https://www.reddit.com/r/linux/comments/1tlwbjy/flatpak_20_seems_to_depend_on_systemd/

LABWC 0.20:

26/05/2026

The labwc 0.20 (Lab Wayland Compositor) project, that develops a compositing server for Wayland with capabilities reminiscent of the Openbox window manager, has been released. The project is presented as an attempt to create an Openbox alternative for Wayland. The project's code is written in C and is distributed under the GPLv2 license. The major increase in version numbering (from 0.9 to 0.20) is due to synchronization with the wlroots library version numbering.

Labwc is used in the graphical

environment of the Raspberry Pi OS distribution and is optionally supported in the Xfce and LXQt desktop environments. The goals of the labwc project include minimalism, a compact implementation, extensive customization, and high performance. Animated effects, gradients, - icons are not supported at all, with the exception of window buttons. It is based on the wlroots library, developed by the the Sway user environment's developers and providing basic functionality for a Wayland-based compositing manager.

<https://github.com/labwc/labwc/releases/tag/0.20.0>

ALMALINUX 9.8 AND 10.2

25/05/2026

The AlmaLinux 10.2 distribution has been released, along with an update to the previous branch, AlmaLinux 9.8. These releases are synchronized with Red Hat Enterprise Linux 9.8 and 10.2 and contain all the changes proposed in those releases. Installation images have been prepared for the x86_64_v3, x86_64_v2, ARM64,

ppc64le, and s390x architectures in the form of a bootable (1 GB), minimal (1.6 GB), and full image (10 GB). Live builds with GNOME, KDE, MATE, and Xfce will be available later, as well as images for Raspberry Pi boards, containers, WSL (Windows Subsystem for Linux), and cloud platforms.

The distribution is binary compatible with Red Hat Enterprise Linux where possible and can be used as a replacement for RHEL 10.2 and CentOS 10 Stream. In addition to rebranding and the removal of RHEL-specific packages

<https://almalinux.org/blog/2026-05-26-almalinux-98-and-102-stable/>

NVIDIA PROPRIETARY DRIVER 610.43.02:

27/05/2026

NVIDIA has published the release of the proprietary NVIDIA driver 610.43.02 (the first stable release of the new 610 branch). The driver is available for Linux (ARM64, x86_64), FreeBSD (x86_64), and Solaris (x86_64). NVIDIA 595.x became the

thirteenth stable branch after NVIDIA open-sourced its kernel-level components. The source code for the kernel modules nvidia.ko, nvidia-drm.ko (Direct Rendering Manager), nvidia-modeset.ko, and nvidia-vm.ko (Unified Video Memory) from the new NVIDIA branch, as well as the common, operating-system-independent components they use, are hosted on GitHub. Firmware and user-space libraries, such as the CUDA, OpenGL, and Vulkan stacks, remain proprietary.

<https://github.com/NVIDIA/open-gpu-kernel-modules/releases/tag/610.43.02>

THE PAVONA PROJECT:

27/05/2026

The GlobalPlatform consortium announced the Pavona project, an open source hardware component distribution that can be used to build production-ready, secure chips based on RISC-V microarchitecture cores. The distribution provides a modular library of IP blocks and reference chip implementations that are ready for certification and tapeout-

proven. By combining elements from this library, users can build custom chips for a variety of applications, from data centers, AI accelerators, and specialized controllers to resource-constrained embedded systems and Internet of Things (IoT) devices. The project's code is licensed under the Apache 2.0 license.

The project's founders included 12 companies and organizations, including Qualcomm Technologies, Meta, Analog Devices, Baochip, SIMPLE Crypto Association, Tenstorrent, Winbond, and ZeroRISC. The project is being developed on a neutral platform, independent of individual manufacturers, and is managed by members of the community that has formed around it.

<https://pavona.org/news/globalplatform-launches-pavona-the-first-open-silicon-distribution-with-production-grade-post-quantum-cryptography>

BLOCKSTOR, AN ALTERNATIVE TO LINSTOR:

28/05/2026

Blockstor, an open-source distributed block storage management system for Kubernetes that provides data replication over DRBD, is now available. It is a REST API-compatible with LINSTOR and can work seamlessly with the existing client ecosystem, including the linstor command-line utility, CSI driver, Piraeus operator, ha-controller, and the golinstor library. It is a clean-room implementation in Go, not using the original source code. The code is distributed under the Apache 2.0 license and is developed within the Cozystack platform (CNCF Sandbox project).

Unlike LINSTOR, Blockstor's architecture is entirely based on the Kubernetes controller-runtime approach. The system's configuration and current state are represented as Kubernetes CRD objects, and the system itself is not designed to operate outside of a Kubernetes cluster.

<https://github.com/cozystack/blockstor>

COZYSTACK 1.4:

28/05/2026

Cozystack 1.4, an open-source PaaS platform built on Kubernetes, is now available. The project aims to provide a ready-to-use platform for hosting providers and a framework for building private and public clouds. The platform installs directly on servers and covers all aspects of infrastructure preparation for delivering managed services. Cozystack allows you to launch and provision Kubernetes clusters, databases, and virtual machines. The platform code is available on GitHub and is distributed under the Apache 2.0 license.

The platform includes an open-source network infrastructure (fabric) based on Kube-OVN and uses Cilium for service mesh organization and MetalLB for service advertising. Storage is implemented on LINSTOR, which offers ZFS as the underlying storage layer and DRBD for replication. A pre-configured monitoring stack based on VictoriaMetrics and Grafana is

included. KubeVirt technology is used to launch virtual machines, enabling the launch of classic virtual machines directly in Kubernetes containers and already includes all the necessary integrations with the Cluster API for launching managed Kubernetes clusters within a bare-metal Kubernetes cluster. Within the platform, Kafka, FerretDB, PostgreSQL, Cilium, Grafana, Victoria Metrics, and other services can be deployed with a single click.

<https://github.com/cozystack/cozystack/releases/tag/v1.4.0>

ROCKY LINUX 9.8:

29/05/2026

Rocky Linux 9.8, a free distribution aimed at creating a free RHEL build capable of replacing the classic CentOS, has been released. The distribution is binary compatible with Red Hat Enterprise Linux and can be used as a replacement for RHEL 9.8 and CentOS 9 Stream. Rocky Linux 9 will be supported until May 31, 2032. Rocky Linux installation ISO images are available for the x86_64, aarch64, ppc64le, and s390x (IBM Z)

architectures. Live builds of the GNOME, KDE, Cinnamon, and Xfce desktops are also available, published for the x86_64 architecture.

Rocky Linux-specific features include a separate Plus repository containing openldap 2.6.8, 7zip 25.01iftp 1.0, and nmon 16q packages. The NFV repository also includes packages for virtualizing network components, developed by the NFV (Network Functions Virtualization) SIG. Rocky Linux also supports the CRB (Code Ready Builder with additional developer packages, replacing PowerTools), RT (real-time packages), HighAvailability, ResilientStorage, SAP and SAPHANA (packages for SAP HANA) repositories. A separate experimental Linux kernel package, kernel-uki, provides a unified kernel image (UKI), certified with a separate key for SecureBoot.

<https://rockylinux.org/news/rocky-linux-9-8-ga-release>

INSTALLER-SH 2.8:

29/05/2026

As if in response to Flatpak's announcement, a new version of the Installer-SH software distribution format has been released. It was created to address the issue of software distribution in Linux and FreeBSD (desktop segment) distributions. Installer-SH was initially developed for internal use within the Chimbalix distribution, but as it evolved, it evolved into a universal installation package for Linux distributions. Later, it added support for the FreeBSD platform and the ability to deliver builds for different processor architectures in a single package.

Compared to using standard archives or the Applmage format, Installer-SH features optimized compression algorithms, reducing network transfer traffic and reducing the space taken up on local drives. (Yay!) By default, the package runs in the home directory and does not require root privileges for installation and removal. However, the user can select the "for all users" installation mode, which uses system directories and

requires root privileges. By default, Installer-SH stores configuration files and cache in a separate directory next to the program to avoid configuration file conflicts when installing different versions of the same program. However, the user can revert to the traditional installation mode, which uses the main home directory to store the configuration, cache, and other files.

The first multiplatform installation package with the game "2048" in the Installer-SH 2.8 format supports the x86, x86_64, amd64 architectures and the Linux and FreeBSD platforms. The size of the installation file is only 2.1 megabytes. This package has been successfully tested on the following distributions: Debian 7 (GNOME, x86_64), Fedora 20 (Xfce, x86_64), Gentoo (i686), Manjaro 20 (x86_64), openSUSE 13.1 (KDE, i686), Slackware 15 (x86_64), FuryBSD 12.1 (amd64), and NomadBSD 14.1 (i386).

<https://github.com/Shedou/Installer-SH>

FIRST RELEASE OF QSTICKYNOTES:

30/05/2026

The first release of QStickyNotes, a note-taking program similar in functionality to indicator-stickynotes, has been released. The project is written in C++ and licensed under the GPLv3 license.

<https://github.com/ivnish/QStickyNotes/releases/tag/0.1>

MARIADB 12.3:

30/05/2026

MariaDB 12.3.2 has been released, marking it as the first stable release of the 12.3 branch. MariaDB 12.3 is designated as a long-term support release and will be supported until June 2029.

The MariaDB project develops a fork of MySQL that maintains backward compatibility and features the integration of additional storage engines and advanced features. MariaDB's development is overseen by the independent MariaDB Foundation, following an open and transparent development process independent

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

<https://mariadb.com/resources/blog/mariadb-community-server-12-3-lts-how-it-scales-ai-workloads-and-delivers-4x-write-performance/>

REACTOS ARM64

SUPPORT:

31/05/2026

The ReactOS project has developed a unified BootCD, replacing the previously separate installation media and LiveCD images. The new image combines the traditional text-based installer and LiveCD mode on a single media. Within the unified BootCD, the updated LiveCD mode now includes the option to launch a fully graphical system installer. The graphical interface is intended to make installation more accessible to new users compared to the long-standing text-based setup process, especially when using USB drives.

Additionally, a new ATA storage driver, which has been in development since early 2024, has been added to the ReactOS codebase. The storage stack supports PnP (plug-and-play) technology and works with SATA, PATA, ATAPI, AHCI, and even SCSI devices, potentially expanding the range of hardware on which ReactOS can successfully boot.

ReactOS also adds experimental support for the ARM64 architecture. The project, which has focused on the i586 and AMD64 architectures for decades, can now boot on 64-bit ARM systems—for example, the Raspberry Pi 5 or QEMU with an Apple ARM64 processor.

<https://www.phoronix.com/news/ReactOS-Unified-ISO>

NIXOS 26.05:

31/05/2026

The NixOS developers presented the release of NixOS 26.05 "Yarara" – another stable version of the distribution built around the declarative configuration of the

system and the Nix package manager. The release will receive bug fixes and security updates until December 31, 2026 and the previous NixOS 25.11 branch of is outdated and will reach the end of support on June 30, 2026.

The production of the release was attended by 2842 developers, who made 59 703 changes since the previous release. Nixpkgs added 20 442 new packages, updated 20 641 packages, removed 17 532 outdated packages. In NixOS itself, 85 new modules and 1547 new configuration parameters have appeared.

<https://nixos.org/blog/announcements/2026/nixos-2605/>

AUDACIOUS 4.6:

01/06/2026

Audacious 4.6, which at one time branched off from the Beep Media Player (BMP) project, which is a fork of the classic XMMS player, is out. The release comes with two user interfaces: GTK-based and Qt-based. Ready builds will be available soon, prepared for various Linux distributions (snap, flatpak, PPA)

and for Windows.

<https://audacious-media-player.org/news/64-audacious-4-6-released>

86Box 6.0 EMULATOR:

01/06/2026

86Box 6.0, a system emulator based on the x86 architecture, with which you can run old operating systems and applications, including those used in the early 1980s on IBM PC 5150 and IBM PS/2 computers, has a new release. Accurate low-level system emulation is supported, starting with 8086 processors and ending with Intel Celeron Mendocino. The project code is written in C and is licensed under GPLv2.

For control, a graphical interface is provided with the ability to configure virtual machines. Emulation of various peripheral devices such as video adapters, sound cards, network cards and hard drive controllers is available. Supported operating systems include: MS-DOS, Windows 3.11/95, OS/2, various Linux distributions, BeOS, NEXTSTEP and other older operating systems.

<https://86box.net/2026/05/31/86box-v6-0.html>

X.ORG SERVER 21.1.23:

02/06/2026

Corrective releases of X.Org Server 21.1.23 and the DDX component (Device-Dependent X) xwayland 24.1.12, which runs X.Org Server for the execution of X11 applications in Wayland-based environments, is out. They eliminated 9 vulnerabilities. Some vulnerabilities could potentially be exploited to escalate privileges on systems where the X server is running with root privileges, as well as remote code execution in configurations that use SSH-assisted X11 session redirection for access.

<https://lists.x.org/archives/xorg-announce/2026-June/003703.html>

CANONICAL HAS PUBLISHED

A NEW UTIL:

02/06/2026

Canonical presented "workshop",

allowing one team to quickly create isolated environments in Ubuntu for use in software development and solving problems related to machine learning and the involvement of AI agents. The environment is defined in one configuration file in YAML format, which allows you to accurately reproduce the described environment on any computer. It is assumed that thanks to this workshop, the developer can focus on what he wants to get without wasting his time sorting out dependencies and setting up the fillers. The toolkit is installed in the form snap package. The project code is written in Go and is licensed under GPLv3.

<https://ubuntu.com/blog/introducing-workshop-sandboxed-development-environments>

UBUNTU SWAY REMIX 26.04 LTS:

03/06/2026

Ubuntu Sway Remix 26.04 LTS, providing a pre-configured and ready-to-use desktop based on a mosaic composite Sway manager, is ready for download. The

distribution is an unofficial edition of Ubuntu 26.04, created with an eye on both experienced GNU/Linux users and beginners who want to try the environment of mosaic window managers without the need to configure them for a long time. For download prepared builds for amd64, arm64 architectures and Raspberry Pi computers.

The distribution environment is built on the basis of Sway - a composite manager that uses the Wayland protocol and is fully compatible with the i3 mosaic window manager, as well as the Waybar panel, the Thunar file manager, and utilities from the NWG-Shell project, such as the desktop wallpaper manager Azote, full screen application menu nwg-drawer.utilities for displaying script content on the screen nwg-wrapper (used to display the hotkey tooltip on the desktop), GTK theme customization manager, cursor and fonts nwg-look and a script Autotiling, automatically composes open application windows in the manner of dynamic mosaic window managers.

Another feature of the distribution is the complete

abandonment of the use of the Snap package manager; all programs are supplied in the form of regular deb packages, including the Firefox web browser, which is installed using the official Mozilla Team PPA repository. The distribution installer is based on the Calamares framework.

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

SYSTEM MEMORY EXPANSION VIA SWAP IN NVIDIA VIDEO MEMORY:

03/06/2026

Nbd-vram, which allows you to place your swap area in video memory of your NVIDIA graphics card, is available. This makes it possible to virtually increase the memory size in a system running on laptops with soldered non-expandable RAM and NVIDIA GPU. The code is written in C and falls under the MIT license.

For example, on a laptop with 16 GB of RAM and an NVIDIA GeForce RTX 3070 graphics card with 8 GB of VRAM, you can use an additional 7 GB of memory through the swap

section. One would use a zram kernel module to compressively store the swap partition and connect an additional swap partition on the SSD drive, the total size of the addressable memory in the test configuration is then increased to 46 GB (if there is a lack of RAM, video memory begins to be used, then zram compression is used and at the last stage swap on the SSD is used). Performance with video memory in sequential reading is estimated to be approximately 1.3 GB/s and delays below that of NVMe due to GPU access via the PCIe bus.

<https://news.ycombinator.com/item?id=48377404>

PRIVOXY 4.2.0:

04/06/2026

A new release of Privoxy 4.2.0, designed to create personal filters for web content, is out. Using Privoxy, you can cut ads, discard tracking cookies, delete pop-up dialogues, block the download of third-party JavaScript code, and make arbitrary changes to web pages that the user needs. Privoxy supports installation on both

individual users' local systems and servers to create a centralized content filtering infrastructure on the local network. The project code is written in C and is spreading licensed under GPLv2+. Ready builds prepared for Linux (deb) and Windows.

Privoxy's advanced features include: the ability to bind tags to change the behavior of filters depending on individual client and server HTTP headers; HTTPS inspection mode, which allows you to filter HTTPS requests and responses; use of regular expressions in configuration files; the ability to replace animated gifs with stripped-down static pictures. Privoxy can be used to block ads and unwanted content on devices that cannot install the appropriate browser add-ons.

<https://www.privoxy.org/announce.txt>

OPEN CODE REVIEW TOOLKIT FOR CODE REVIEW?

05/06/2026

Alibaba, one of the largest Chinese IT companies

published the open platform Open Code Review with the implementation of a hybrid peer review architecture that combines rigorous review methods with the flexibility of large language models. The project is based on the code of Alibaba's internal change review system, written in Go and is licensed under Apache 2.0.

The system supports integration with various large language models, allows comments to be linked to specific lines in the code, and contains built-in sets of rules to identify common problems and vulnerabilities, such as thread synchronization errors, cross-site scripting, and SQL substitution. Rule-based validation is provided for Java, TypeScript, Go, Python, Kotlin, C++, and C.

<https://news.ycombinator.com/item?id=48406358>

Roku LT OS:

05/06/2026

Roku, that produces TVs, set-top boxes and smart home devices, presented the open operating system Roku LT OS, aimed at specialized engineering projects and embedded systems. Roku LT OS allows you to create your own solutions that can work in environments with limited resources and strict requirements for delays and predictable execution times. The project code is written in C and is licensed under Apache 2.0. It supports creating firmware for ESP32 and STM32 microcontrollers, as well as running Roku LT OS on top of Linux.

To develop solutions based on Roku LT OS, an SDK and firmware examples are supplied. You are offered a training guide video course too. The minimum

equipment requirement is a 100Mhz processor and 64 KB of RAM. Applications running on Roku LT OS are collected in the form of dynamically loaded shared libraries. There is support for the TCP/IP stack lwIP, MP4 and Opus codecs, encryption and TLS. Drivers are supplied for various sensors, Bluetooth, USB, input devices, Wi-Fi, SD cards, NPU, SPI, I2C.

<https://blog.roku.com/developer/roku-lt-os>

T2 SDE 26.6:

06/06/2026

The meta distribution T2 SDE 26.6, which provides an environment for creating your own distributions, cross-compiling and keeping package versions up to date, is available. Popular distributions built on the T2 system, include Puppy Linux. The project

provided 10 ready-made bootable iso images with a KDE-based graphical environment, built for the arm64, ia64, ppc64, ppc64le, riscv64, riscv64 rva23, i686 and x86-64 architectures.

T2 provides support for 20 hardware architectures used on both modern embedded systems and legacy equipment. For example, support is provided for Nintendo Wii U and Sony PS3 game consoles, SGI, Sun and HP workstations. Most architectures can be loaded in environments with 128 MB of RAM. Architectures supported include Alpha, Arc, ARM64, HPPA64, IA64, Loongarch64, M68k, Microblaze, MIPS64, Nios2, OpenRISC, PowerPC 64, RISC-V 64, s390x, SPARC 64, SuperH, i486, i686, i786, x86-64 and x32.

<https://t2linux.com/#news-2026-06-01>

OPENGRAM:

06/06/2026

A community of enthusiasts develops Opengram — open implementation of the Telegram



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messenger backend. The project is a standalone server that implements the MTPProto protocol, which can be used to replace the official Telegram server infrastructure when deployed on your own equipment. Official Telegram clients (Telegram Desktop, mobile applications) are supported after changing their data center address and public RSA server key.

Opengram is a fork of the project mytelegram. The code for Opengram is written in C# (.NET 9) and has source code without specifying a license. The original mytelegram project was delivered under the Apache 2.0 license, which, in accordance with paragraph 4 a, requires the inclusion of a copy of the license text when distributing derivative works. However, some of mytelegram's functionality is not open, for example is missing code of components related to session management and file transfer.

<https://github.com/opengram-server/opengram>

OUTWIKER 4.0:

07/06/2026

Almost two years since the last stable version was released, we have a new version of a program for storing notes OutWiker 4.0. A special feature of the program is that notes are stored in the form of catalogs with text files, an arbitrary number of files can be attached to each note, the program allows you to write notes using various notations: HTML, wiki, Markdown (if the corresponding plugin is installed). Also, using plugins, you can add the ability to place formulas in LaTeX format on wikipages and insert a block of code with syntax highlighting for various programming languages. The program is written in Python (interface in wxPython), is licensed under the GPLv3 license and available in builds for Linux (snap and flatpak) and Windows.

<https://github.com/Jenyay/outwiker/releases/tag/4.0.0-stable>

STABLE RELEASE OF XLIBRE XSERVER 25.1:

07/06/2026

Exactly one year from the start, the fork of X.Org Server presented version 25.1.6. The release marked the transition of branch 25.1 to stable (past updates were beta quality and intended for testing). XLibre is used by default in the Artix Linux, GhostBSD, OpenMandriva and Vende foul Wolf distributions. For Arch Linux, Debian, DragonFly BSD, Fedora, FreeBSD, Gentoo Linux, GNU Guix, Linux Mint, MX Linux, RHEL, Slackware, Ubuntu and Void Linux, the community supports packages to replace X.Org Server with XLibre.

<https://mastodon.social/@XLibreDev/116699943714165335>

UBUNTU DESKTOP ROADMAP: BUILDING TOWARD UBUNTU 28.04 LTS

07/06/2026

Jean Baptiste Lallement, director of engineering at Canonical

published plans on the development of the functionality of the desktop environment, which they intend to implement in the autumn release of Ubuntu 26.10. Four key areas of work are highlighted:

Hello Ubuntu Desktop community,

With Ubuntu 26.04 LTS "Resolute Raccoon" now shipped and settling in, the Desktop Engineering team is already deep into the next development cycle.

Ubuntu 26.10 "Stonking Stingray" arrives in October 2026. While non-LTS releases often focus on delivering new capabilities, they also play another important role: laying the foundation for the next LTS release.

Much of the work happening in Ubuntu 26.10 is part of a broader vision for Ubuntu 28.04 LTS. That vision is centered around four goals:

A robust platform built on GNOME

Simple by default, flexible by design

A context-aware desktop

A trusted and integrated platform

Every major investment in this cycle contributes to one or more of these objectives.

This deserves full reading at the below address and we'd rather not try to sum up a summary.

<https://discourse.ubuntu.com/t/ubuntu-desktop-26-10-stonking-stingray-roadmap-building-toward-ubuntu-28-04-lts/83751>

FLATPAK 1.18.0:

08/06/2026

After a year and a half of development, the new stable branch of Flatpak 1.18 has been released. This toolkit provides a system for building self-contained packages that are not tied to specific Linux distributions and run in a special container that isolates

the application from the rest of the system. Support for running Flatpak packages is provided for lots of Linux distro's. Flatpak packages are included in the Fedora repository and are supported in the default GNOME and KDE application managers.

<https://github.com/flatpak/flatpak/releases/tag/1.18.0>

CODE 26.04:

09/06/2026

Collabora has released CODE 26.04 (Collabora Online Development Edition) for quickly deploying Collabora Online (formerly LibreOffice Online) on its servers to enable remote collaboration with the office suite via the web and achieve functionality similar to Google Docs and Office 365. CODE is available as a pre-configured Docker container,

a virtual machine image and a set of packages for popular Linux distributions. The project code is distributed under the MPLv2 license.

CODE is presented as a developer-friendly version of the Collabora Online platform, incorporating the latest developments and suitable for use in small teams or for introductory testing. Collabora Office, a separate product designed to run Collabora Online on users' local systems rather than on servers, is being developed separately. In 2025, Collabora employees contributed 45 % of all changes to LibreOffice, but this year, a conflict escalated between Collabora and The Document Foundation (TDF) over the development of the cloud edition of LibreOffice Online, resulting in the exclusion of Collabora from the TDF.

<https://www.collaboraonline.com/blog/code-26-04-release/>

EURO-OFFICE 1.0:

09/09/2026

An open office package for joint editing of documents, tables and presentations. The project is developing as a European and sovereign alternative to Microsoft Office, Google Docs and other cloud office solutions, and its code is open on GitHub under the AGPLv3 license.

Euro-Office is based on the ONLYOFFICE code database, but is developed as a separate project with the participation of European companies and organizations, including NextCloud, IONOS, Eurostack, XWiki, OpenProject, Soverin, Abilian, BTactic, Open-Xchange and Office.eu. The first stable release is already production ready and integrates into the NextCloud Hub 26 Spring, as one of the options for the office editor in the NextCloud Office.

<https://nextcloud.com/blog/euro-office-general-availability-set-for-june-9/>



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ASTERINAS 0.18

09/09/2026

Asterinas 0.18.0 is an experimental operating system and kernel written on Rust and focused on compatibility with Linux ABI. The project is positioned as an attempt to create a “production-grade” alternative to Linux with a focus on memory security, performance and launch of a regular Linux user environment. The Asterinas code is open and posted on GitHub, the main license of the project is MPL 2.0.

The kernel provides full support for the x86-64 architecture, partial support for RISC-V 64 and x86-64 with Intel TDX-based isolation and initial support for the LoongArch 64 architecture. Priority application areas include systems tied to the Linux ABI but requiring a higher level of security. For example, Asterinas is proposed for use in creating a system environment for secure virtual machines, which utilize technologies such as ARM CCA, AMD SEV, and Intel TDX for isolation, as well as on the host system side, enabling container

launches.

<https://www.phoronix.com/news/Asterinas-0.18>

UBUNTU MATE

DEVELOPMENT IS REVIVED:

09/09/2026

Thomas Ward, the Ubuntu project leader and a member of the Ubuntu Technical Council, announced the formation of a new Ubuntu MATE development team, which has taken over the project following the departure of its founder. While there will be no formal release of Ubuntu MATE 26.04, the MATE desktop packages for Ubuntu 26.04 will continue to be shipped and properly supported. The new development team has begun addressing and fixing bugs accumulated over several years of project stagnation and is also working on updating MATE to the 1.28 branch from the outdated MATE 1.26 release, formed in 2021.

Users of previous Ubuntu MATE branches can upgrade to the Ubuntu 26.04 package base by installing updates, but a separate Ubuntu MATE installation image

based on Ubuntu 26.04 will not be published. On new systems, you can install any Ubuntu 26.04 edition, then deploy the MATE desktop by running "sudo apt install ubuntu-mate-desktop." The fall builds of Ubuntu MATE 26.10 are planned to be released as a full release.

<https://discourse.ubuntu.com/t/mate-no-26-04-release-how-does-that-affect-you-and-what-is-the-future-of-ubuntu-mate/83877>

OPENPROJECT 17.5

09/09/2026

OpenProject 17.5.0 - open project management system, tasks, road maps, agile planning, meetings, documentation and joint work of teams, is out. The project code is distributed under the GPLv3 license, the code is available GitHub.

The main change of OpenProject 17.5 is the appearance of project identifiers of working packages, while in the status of Beta. Previously, tasks in OpenProject received a single numerical number within the framework of the entire

installation, for example, #2385. Now the administrator can choose the mode in which the identifier includes the context of the project, for example, PROJ-01. This simplifies work in organizations with a large number of projects and helps with migration with Jira, where teams are often accustomed to the project keys of tasks.

<https://www.openproject.org/blog/openproject-17-5-release/>

ALPINE LINUX 3.24:

10/09/2026

Alpine Linux 3.24 is now available . It is a minimalist distribution built on the Musl system library and the BusyBox utility suite . The distribution has enhanced security requirements and is built with SSP (Stack Smashing Protection). OpenRC is used as the initialization system, and a proprietary apk package manager is used for package management. Alpine is used to generate official Docker container images and is used in the PostmarketOS project. Bootable ISO images (x86_64, x86, armhf, aarch64, armv7, ppc64le, s390x,

riscv64, and loongarch64) are available in six flavors: standard (352 MB), network bootable (374 MB), extended (1 GB), virtual machine (66 MB), minirootfs (4 MB), and Xen hypervisor (1 GB).

<https://alpinelinux.org/posts/Alpine-3.24.0-released.html>

GENTLEOS:

10/09/2026

The first release of GentleOS , an operating system for older 32-bit PCs and laptops, has been published . Developed by a hobbyist, the project aims to provide a simple platform for retro enthusiasts with a classic graphical interface. It supports computers with an i386 CPU, 4 MB of RAM, and a VGA graphics card with a resolution of 640x480. The project code is written in C and distributed under the GPLv2 license. An 8 MB disk image and a 1.4 MB floppy disk image have been created for launch .

The OS is built on a monolithic architecture and is configured during the build process. Drivers are available for VGA/SVGA video

cards, keyboard, mouse (PS/2 and serial ports), and built-in speaker. GentleOS functionality is marked as complete; future plans include the creation of additional applications, optimization, and bug fixes. It can run both in QEMU and on real hardware.

<https://github.com/luke8086/gentleos32/releases/tag/2026-06-07>

YSERVER 1.0.0

11/09/2026

The first major release of the yserver (X11) server has been published . It was written from scratch in Rust and supports current X11 protocol extensions. The project does not aim to replicate all the features of Xorg Server and is limited to the functionality necessary for running modern desktop environments, window managers, applications, and graphical libraries (GTK, Qt, SDL, GLFW). Tested environments include MATE, Xfce, and Cinnamon, as well as the FVWM3, e16, and wmaker window managers. The project code is distributed under the MIT license.

yserver has decided not to support legacy and specific features, such as handling multiple X11 screens in a single server (multi-monitor output is supported), color modes other than TrueColor, indirect rendering (indirect GLX), DDX driver APIs, legacy font handling, and connecting clients with different byte order (big-endian/little-endian translation).

Graphics output is provided via DRM/KMS and Mesa Vulkan drivers. The libseat library is used for session management and access to shared input and output devices . In addition to a dedicated X server, ynest is supplied—a backend for nested execution that supports running from Xwayland or another X11 server.

It has been tested on systems with AMD Ryzen 9 6900HX GPUs (Rembrandt, RDNA2, RADV mesa driver), AMD RX580 (Polaris/GCN4, RADV), Intel i5-7200U (Kaby Lake, ANV mesa driver), NVIDIA GTX 1050, Snapdragon X1 X1E80100 (Adreno X1, Turnip), Apple M1 MBA, M2 MBP, as well as on virtualized systems with virtio-gpu

and the Venus virtual GPU . Currently, only Linux is supported, but FreeBSD support is planned.

https://www.reddit.com/r/linux/comments/1u31shc/yserver_a_modern_x11_server_writes_ten_from_scratch/

REACTOS MILESTONE:

11/09/2026

The developers of ReactOS , an open-source operating system designed to ensure compatibility with Microsoft Windows programs and drivers, announced that they were able to run the game Half-Life. The launch was achieved using ReactOS installed on real hardware – a Dell OptiPlex 990 PC with an Intel Core i5-2400 CPU, 1 GB of RAM, and an NVIDIA GeForce 8400 GS graphics card. A few days earlier, ReactOS successfully ran Unreal Tournament 2004. This comes on the back of FL Studio running on ReactOS in March.

<https://x.com/reactos/status/2064839936059011207> && https://lobste.rs/s/matdjp/reactos_open_source_windows_reaches

VERACRYPT 1.26.29:

12/09/2026

After a year of development, VeraCrypt 1.26.29 has been released . It is a fork of the defunct TrueCrypt partition encryption system . VeraCrypt is notable for replacing TrueCrypt's RIPEMD-160 algorithm with SHA-512 and SHA-256, increasing the number of hashing iterations, simplifying the build process for Linux and macOS, and fixing issues identified during the TrueCrypt source code audit . The code developed by VeraCrypt is distributed under the Apache 2.0 license, while its derivatives from TrueCrypt continue to be distributed under the TrueCrypt License 3.0. Binaries are created for Linux, FreeBSD, Windows, and macOS.

https://github.com/veracrypt/VeraCrypt/releases/tag/VeraCrypt_1.26.29

COZYSTACK TRANSFER:

12/09/2026

The etcd-operator toolkit, which helps deploy and maintain etcd clusters in Kubernetes, has been transferred to the Cozystack project . Along with the transfer, a new implementation of etcd-operator was published, written from scratch and using the API at etcd-operator.cozystack.io/v1alpha2 instead of the previous etcd.aenix.io/v1alpha1. The new implementation was written by Timofey Larkin, one of the maintainers of the previous codebase. The old version is preserved in the v1alpha1 branch . The code is written in Go and distributed under the Apache 2.0 license. Cozystack is a sandbox project of the non-profit organization CNCF.

The main change in the new etcd-operator is the removal of StatefulSet for node management. Now, etcd-operator works directly with etcd's native Membership API (MemberAdd, MemberPromote, and MemberRemove) and automatically adds members, promotes learners to voting nodes, and removes nodes from quorum,

giving etcd-operator complete control over cluster membership.

In parallel, the etcd project developers are developing their own official etcd-operator from scratch . In terms of functionality, the official etcd-operator is currently inferior to the version from the Cozystack project. Since the previous implementation of etcd-operator already works in production environments and is used in Cozystack and Kamaji , its development was continued separately from the official etcd project implementation.

<https://cozystack.io/blog/2026/06/etcd-operator-joins-cozystack/>

GTK 2-BASED APPLICATIONS WITH DARK THEME SUPPORT:

13/09/2026

The latest KDE weekly development report has been published , presenting a batch of changes for the KDE Plasma 6.8 branch, scheduled for release on October 14, as well as the KDE Plasma 6.7 branch, which is currently in beta testing ahead of its release on June 16. Window

actions that involve the mouse wheel no longer respect your “natural scrolling” preference; we reasoned that in this situation, up should always mean up and down should always mean down. The screensaver now honors the timeout specified in the system via PAM (Pluggable Authentication Modules) settings without adding any additional delays. An indicator has also been added indicating that accessibility mode is enabled, which increases the amount of time a key must be held down to trigger a keypress.

<https://blogs.kde.org/2026/06/13/this-week-in-plasma-6.7-is-very-close/>

AUR MALWARE:

14/09/2026

Despite measures taken by Arch Linux developers, malicious code insertion into the AUR (Arch User Repository) has not been stopped. Several hours ago, malicious code was inserted into another 54 packages left without maintainers (see the history of malicious edit reversals). Unlike the attacks the day before yesterday ,

this time, the bun platform is used instead of the npm package manager to install malicious dependencies. To bypass implemented filters, an obfuscated string is inserted into the post_install function, calling the "bun add" command to install packages with malicious code that scans and sends keys, tokens, and credentials to an external server.

<https://lists.archlinux.org/archives/list/aur-general@lists.archlinux.org/thread/FGXPCB3ZVCJIV7FX323SBAX2JHYB7ZS4/>

CURL WILL STOP ACCEPTING VULNERABILITY REPORTS FOR A MONTH:

15/06/2026

Daniel Stenberg, author of the curl utility for sending and receiving network data, announced a suspension of accepting and processing vulnerability reports from July 1 to August 3. An exception will be made only for those who subscribe to paid support. The reason cited is the need for a break and rest after a significant increase in vulnerability

report processing over the past four months.

Reports submitted via the Hackerone form and emailed to security@curl.se during the specified time will not be reviewed by maintainers. Pull requests and issue reports via GitHub will remain available, but the backlog of vulnerability reports will only be reviewed after August 3.

<https://daniel.haxx.se/blog/2026/06/15/curl-summer-of-bliss/>

LINUX LIBRE KERNEL 7.1:

15/06/2026

The Free Software Foundation of Latin America has published a completely free version of the Linux 7.1 kernel, Linux-libre 7.1-gnu, stripped of firmware and driver elements containing non-free components or code sections with manufacturer-restricted scope. Linux-libre also disables kernel functions for loading external non-free components not included in the kernel distribution, and references to the use of non-free components have been removed from the documentation.

To clean the kernel of non-free components, the Linux-libre project created a universal shell script containing thousands of patterns for detecting binary injects and eliminating false positives. Ready-to-use patches created using the aforementioned script are also available for download. The Linux-libre kernel is recommended for use in distributions that meet the Free Software Foundation's criteria for building completely free GNU/Linux distributions. For example, Linux-libre is used in distributions like Trisquel, GNU Guix System, Dragora Linux, Dyne:Bolic, gNewSense, Parabola, Musix, and Kongoni.

<https://www.fsfla.org/pipermail/linux-libre/2026-June/003663.html>

KDE PLASMA 6.7:

16/06/2026

After four months of development, the KDE Plasma 6.7 desktop environment has been released. To evaluate the new KDE releases, you can use builds from the KDE Linux, KDE Neon, and openSUSE projects (Argon, based

on openSUSE Leap, and Krypton, based on openSUSE Tumbleweed). It contains some changes a lot of people have been waiting for, like: The print output control widget now displays the number of active and queued print jobs separately for each printer. The print output widget placed on the panel now displays labels indicating the number of active and queued jobs.

<https://kde.org/announcements/plasma/6/6.7.0/>

FREEBSD 15.1:

16/06/2026

After six months of development, FreeBSD 15.1 has been released. Installation builds are available for the amd64, aarch64, armv7, powerpc64, powerpc64le and riscv64 architectures. Also note that builds are available for virtualization systems (QCOW2, VHD, VMDK, raw) and cloud environments such as Amazon EC2, Google Compute Engine, and Vagrant. FreeBSD 15.1 will be supported until April 2027, and updates for the 15.x branch will be released until December 31,

2029.

<https://www.freebsd.org/releases/15.1R/announce/>

NGINX 1.31.2:

17/06/2026

The main nginx 1.31.2 branch has been released, continuing development of new features. A parallel stable branch, nginx 1.30.3, has also been released, which includes only changes related to fixing serious bugs and vulnerabilities. (These updates address three vulnerabilities.) In addition to vulnerability fixes, nginx 1.31.2 adds the `$ssl_sigalgs` variable, which contains the digital signature algorithms declared by the client in the ClientHello message during TLS connection negotiation. The SipHash-2-4 hashing algorithm is used to generate the identifier passed via the `$request_id` variable.

<https://nginx.org/news.html>

CANONICAL UNVEILS MYNA:

17/06/2026

Jean-Baptiste Lallement, Director of Engineering at Canonical, presented the Myna project, which is a speech recognition application intended for use in voice input and natural language command recognition in Ubuntu Desktop. The project is licensed under the GPLv3, but the repository currently contains only sketches describing the project's modular architecture and its integration with Ubuntu.

Myna will utilize a locally running AI model for speech recognition. Requirements for the app include: the ability to operate offline; enabling the microphone only after explicitly activating dictation mode with a hotkey; processing audio in memory, which is cleared after each use; and prohibiting the transfer of audio recordings to external services.

<https://discourse.ubuntu.com/t/introducing-myna-speech-to-text-for-ubuntu-desktop/84251>

STEAMOS 3.8:

18/06/2026

Valve has released SteamOS 3.8.10, marking the first stable release in the 3.8 branch. SteamOS ships with Steam Deck devices and has recently been used in gaming consoles from several other manufacturers, such as the Lenovo Legion Go S and ASUS ROG Ally. To install, select the "Steam Deck Preview" channel in the update settings under "Settings > System > System Update Channel."

The platform is based on Arch Linux, uses the Gamescope composite server based on the Wayland protocol to accelerate game launches, comes with a read-only root filesystem, uses an atomic update mechanism, supports Flatpak packages, uses the PipeWire multimedia server, and provides two interface modes (Steam shell and KDE Plasma desktop).

<https://steamcommunity.com/games/1675200/announcements/detail/697641379212298073>

RULE CHANGES FOR OFFICIAL UBUNTU EDITIONS:

18/06/2026

Canonical has tightened its release guidelines for official Ubuntu editions, including Lubuntu, Kubuntu, Ubuntu Budgie, Ubuntu Studio, Xubuntu, Ubuntu Kylin, Ubuntu Mate, Ubuntu Unity, Edubuntu, and Ubuntu Cinnamon. These changes were introduced to ensure the editions are ready for final release, which will now only be approved if a beta version is successfully completed within the planned timeframe. Changes to packages between the beta and final release must be minimal and may only include bug fixes.

<https://lists.ubuntu.com/archives/ubuntu-release/2026-June/006814.html>

RASPBIAN:

19/06/2026

The Raspberry Pi project has released a new version of the Raspberry Pi OS distribution, 2026-06-18 (Raspbian). The distribution is based on Debian 13 and contains approximately 35,000 packages in

its repository. The desktop environment is based on the labwc composite server, which uses the wlroots library from the Sway project. Three builds are available for download: a slimmed-down version (537 MB) for server systems, a basic desktop version (1.2 GB), and a full version with an additional set of applications (1.9 GB). Builds are available for 32- and 64-bit architectures. An update for the older Raspberry Pi OS release (Legacy) has also been created, built on Debian 12.

<https://www.raspberrypi.org/downloads/raspbian/>

QT CREATOR 20:

19/06/2026

Qt Creator 20, an integrated development environment for creating cross-platform applications using the Qt library, has been

released. It supports both classic C++ development and QML, a language that uses JavaScript to define scripts and CSS-like blocks to define the structure and parameters of interface elements. Ready-to-use builds are available for Linux, Windows, and Mac OS.

<https://www.qt.io/blog/qt-creator-20-released>

BCACHEFS MILESTONE:

20/06/2026

Kent Overstreet released the Bcachefs 1.38.6 filesystem and announced the official removal of the experimental development label from the project. The number of problem reports has decreased recently, and the bugs encountered have become less severe and subtle.

The release includes two

packages: bcacheefs-kernel-dkms, which contains a kernel module built using the DKMS (Dynamic Kernel Module Support) system, and bcacheefs-tools, which contains the user-space bcacheefs utility, which implements commands for creating (mkfs), mounting, restoring, and verifying file systems. The packages are available for Debian, Ubuntu, and Arch Linux, and are expected for Fedora, openSUSE, and NixOS. The DKMS module supports Linux kernels starting from 6.16.

Despite the unremarkable version number due to the lack of changes to the on-disk format, release 1.38.6 includes a number of major performance optimizations. Around 200 performance-improving changes have been made to the code for working with btree structures, journaling, and file system support. Transaction commit logic has been compressed

into 4 KB of machine code, optimizations have been added to eliminate contention when working with btrees, and the journal flush process is completely lock-free.

<https://www.patreon.com/bcachefs/posts/1-38-6-release-161366372>

OPENMW 0.51:

21/06/2026

OpenMW 0.51, a free implementation of the engine for the fantasy role-playing game The Elder Scrolls 3: Morrowind, has been released. Compared to the original engine, OpenMW features a modernized user interface, improved graphics, a native OpenMW-CS editor for creating new games and mods, the Bullet physics simulation engine, support for macOS and Linux, and improved bot behavior.

The project code is written in C++ and distributed under the GPLv3 license. The OpenMW-CS editor and launcher interface uses Qt, while the in-game interface utilizes MyGUI. SDL is used for input devices, and OpenAL is used for



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audio output. Pre-built binaries are available for Linux (flatpak), Windows, and macOS. To run, you must have the game resource files from the original Morrowind or install an alternative resource pack.

<https://openmw.org/2026/openmw-0-51-0-released/>

SYSTEMD 261:

21/06/2026

After three months of development, the system manager systemd 261 is now available. Key changes include preparation for API support for age verification, support for the Kexec Handover and Live Update Orchestration subsystems for stateless restarts, the IMDS (Instance Metadata Service) subsystem, functionality for boot protection on systems without a physical TPM (Trusted Platform Module), and the systemd-sysinstall component with an installer implementation.

<https://github.com/systemd/systemd/releases/tag/v261>



This is my attempt at explaining <https://networkmanager.dev/docs/api/latest/nmcli.html>

I hate man pages, but since there is nothing else... and if you are like me, I have this CnC article for you, the beginner. I'll add examples, promise, plus screenshots, however, I encourage you to type the commands in your own terminal.

So why would you want to know about nmcli? Well, if you ssh into headless servers or vm's or if the desktop is just not available, you will need it on Ubuntu to configure or troubleshoot network connections.

Let's simplify the man page:

```
nmcli [OPTIONS] OBJECT
COMMAND [ARGUMENTS]
```

notice I said OBJECT and not DEVICE or HARDWARE.

A simple table working down that list of lower case words.

1. general

nmcli general status

An overview of state, connectivity, radio state.

2. networking

nmcli networking connectivity

Does this computer have no, limited, (captive-)portal, or full connectivity.

3. radio

nmcli radio all

Wi-Fi and WWAN radio switch states, the last time nmcli checked.

4. connection

nmcli connection show

Saved NetworkManager connections, active ones in colour and inactive ones in white including the UUID.

5. device

nmcli device status

Any interfaces that are live, including loopbacks & dummy connections.

6. monitor

nmcli monitor

Basically a live event watcher.

```
edd@gift:~$ nmcli general status
STATE      CONNECTIVITY  WIFI-HW  WIFI    WWAN-HW  WWAN
connected  full          enabled  enabled missing  disabled
edd@gift:~$
```

```
edd@gift:~$ nmcli networking connectivity
full
edd@gift:~$
```

```
edd@gift:~$ nmcli radio all
WIFI-HW  WIFI    WWAN-HW  WWAN
enabled  enabled missing  disabled
edd@gift:~$
```

```
ed@base01:~$ nmcli connection show
NAME          UUID                                     TYPE      DEVICE
netplan-enp0s3 1eef7e45-3b9d-3043-bee3-fc5925c90273  ethernet enp0s3
lo             05048f2a-5046-495d-8d95-68b995f9f87b  loopback  lo
ed@base01:~$
```

```
ed@base01:~$ nmcli device status
DEVICE TYPE      STATE      CONNECTION
enp0s3 ethernet  connected  netplan-enp0s3
lo      loopback  connected (externally) lo
ed@base01:~$
```

```
edd@gift:~$ nmcli monitor
NetworkManager is running
```

So your homework is to run these commands again, but insert `-p` right after the command `nmcli` and compare the output against what I have show in the images on the previous page.

Though I'm not one for naming things correctly, I know what I mean when I say thing-a-majig, but I do find that others struggle to grasp what is obviously the thing-a-majig. So when we talk about a connection in `nmcli`, we are talking about the whole enchilada. It is the configuration profile, if you will, that `nmcli` will use to configure the device, be it WiFi, WWAN, or LAN. This means that we can have multiple "connections" on the same device, but like Highlander, when it comes to being active, there can be only one. This is handy if you move around a lot.

Some of the above commands in the list can be altered a bit, like number four, if you were to tack on `--active` after the word "show" you will not see all of the unused connections. (now that we are clear on what a connection is)

Like general status above, we can also have a 'device' status, let me turn on airplane mode and show you what that looks like.

As you may have noticed, a lot of the time, all the information you may need is in the "main" queries and the sub-queries, no matter how fancy, still give you the same information. Just be aware, that when you tack on options in other commands, you can string them together, like for instance, "netstat -tupln" if you tried that with `nmcli`, you would get an error. For instance, if we wanted to make the

following terse or pretty:

```
nmcli -f DEVICE,STATE device status
```

we cannot say `-tf` or `-pf`, you would need to space them out as `-t -f` or `-p -f`, in this case, so beware of that.

OK, so now you know how to list connections and devices on the command line, let's talk about actively controlling them.

Let's look to see if you have a WiFi connection that we can mess with:

```
nmcli radio wifi
```

```
nmcli device status
```

If you have, let's look at what is available in your vicinity:

```
nmcli device wifi list
```

(I'm sure most of you know this off by heart, but bear with the newbies)

To connect to one, we use the SSID, like so:

```
nmcli --ask device wifi connect "batLAN"
```

Be aware that SSID's listed as "--" are hidden networks. To connect to a hidden network, you need to put forth:

```
nmcli --ask device wifi connect "wifly" hidden yes
```

When you are prompted for a password on the command line, it will be the WiFi password, and if you are working in a terminal on a machine with a DE, you may get

```

edd@gift: ~
└─$ nmcli device show
Status of devices
=====
DEVICE          TYPE      STATE      CONNECTION
-----
lo              loopback  connected (externally)  lo
mpqemubr0      bridge   connected (externally)  mpqemubr0
wlp0s20f3      wifi     unavailable  --
p2p-dev-wlp0s20f3  wifi-p2p  unavailable  --
vboxnet0       ethernet unmanaged   --
edd@gift:~$

```

```

edd@gift: ~$ nmcli device show "vboxnet0"
GENERAL.DEVICE:       vboxnet0
GENERAL.TYPE:         ethernet
GENERAL.HWADDR:       0A:00:27:00:00:00
GENERAL.MTU:          1500
GENERAL.STATE:        10 (unmanaged)
GENERAL.CONNECTION:   --
GENERAL.CON-PATH:     --
WIRED-PROPERTIES.CARRIER: off
IP4.GATEWAY:          --
IP6.GATEWAY:          --
edd@gift:~$

```

prompted to add the current user password in the GUI.

Should something go wrong, we can drill down a bit deeper and see if nmcli can actually do anything with the connection, consider:

If you look carefully, you will see that the general state is (code 10) “unmanaged”, meaning that nmcli does not control this connection. In this case it is our virtualbox network and nmcli has nothing to do with it. If you don’t remember codes, remember that 1 is good and 10 is bad.

Now I want you to type that same command, and replace it with *your interface name. Now try it with the loopback interface. See? You are getting the hang of it!

OK, now that you know it is all easy, I want you to head on back to <https://networkmanager.dev/docs/api/latest/nmcli.html> and see if you can do any of the other commands listed, like up or down. If you want us to dig the hole a bit deeper, you know where to write to: misc@fullcirclemagazine.org



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



HOW-TO

Written by Bruce Goodman



Build Your Own Wiki - Part 1

At my old Microsoft centric workplace I used Microsoft's OneNote application a lot. It was ideal for capturing little knowledge snippets that I might need again or temporary information I wanted to keep handy for just the lifetime of a project. I liked OneNote because it can be organised into books, sections and pages easily, and it has very good, and fast, search capability.

That was at work - in my Linux home environment though I try and avoid having to use anything Microsoft. But I do want some way of quickly recording useful tips and tricks, as well as the build configurations of the five or six machines on my Local Area Network (LAN). As we all do, I like to look at new distros in the never-ending search for perfection, and I want to keep notes on my likes and dislikes on each one I try out as well as keeping track on whether something I wasn't keen on in version x has been changed in version y. I want this information to be available on any device, and I want to be able to update it easily,

and from any machine. Further, as my LAN setup evolves I want to be able to relocate or migrate the entire collection of knowledge without fuss, and of course it needs to be easily backed up and restored if something goes wrong.

We know Linux is awash with choices of note taking programs, but as they all require software installation on each machine I build or test and they have the challenge of data synchronisation, I didn't pursue those options. Something that presents the information in a browser would be ideal, so I tried an intranet. That was good for presentation, but adding or updating existing data was a pain. I couldn't find a simple, cross-platform, easily installed application for updating the content.

In my travels I'd seen that a wiki could satisfy my criteria of ease of access and simple update, and wikis have great search capabilities. I had also seen that MediaWiki is both free and open source. My needs for simple backup and relocation could be met if I had a wiki running in a

Virtual Machine (VM) - I could back up my data collection by copying off the VM files, and if a hardware failure occurred I could restore a backup of the VM to another machine.

So, why not? All I need is an 'always-on' machine with enough available grunt to host a VM, and the steps to putting it all together.

In this series of articles I'll describe the steps to get a wiki running in the VirtualBox application. I'll use Kubuntu 26.04 as the VirtualBox host machine, and I'll use Ubuntu Server 26.04 as the 'guest' operating system in the VM, with MediaWiki installed on that. I'll offer my thoughts on that choice for the host OS rather than a purpose-built server one, and I'll introduce some basic use and operation of MediaWiki - hopefully just enough to whet your appetite. Further along I'll give a simple way to back up the VM files, and I'll show how to relocate the VM, and thus move the entire wiki to another host machine.

My machine of choice for this exercise is a 9 year old Dell laptop. It has 16GB RAM and a 256GB SSD - more than enough power to run Kubuntu 26.04 as well as a VM. We don't need anywhere near that much computer for this job - we'll look at what this little project consumes in computer resources later; I just happen to be rather fond of this Dell.

You don't have to dedicate a machine to the VM host role though. If your 'daily drive' machine can spare the CPU cycles, RAM, and disk space needed for the wiki you can simply add the VirtualBox application and the VM to the existing computer and all devices on your LAN will have access to the wiki whenever the main machine is powered on. When I get the wiki running on my laptop I will see the approximate RAM and disk space it requires.

You may be wondering about my credentials to be writing on such a topic. None!! I'm neither a guru nor a power user. By day I was a tech support person in a wholly

Microsoft environment and a Linux tinkerer after hours. Since retiring I enjoy more time in Linux and while I still have a Windows partition or two I'm now 99% Microsoft free – my one remaining Windows task is to periodically update the software on a GPS watch I use on the golf course. I listen to a couple of Linux podcasts, read a couple of distro related magazines (including this one of course), and I browse some Linux news sites and a couple of reddit communities. I'm just a hobbyist who saw Editor Ronnie's call for articles a while back and wondered if there was anything I could submit, and here we are.

So given my lack of expertise it's very likely there will be more efficient or elegant, or at least different ways to do the things I will describe here. I invite those with better knowledge or differing perspectives to contribute to the topic via the My Opinion or Letters pages of FCM.

Enough preamble. The steps we'll go through are:

- Build the host machine,
- Install and configure VirtualBox,
- Install the guest OS,
- Go through some VM housekeeping,

- Install MediaWiki,
- Configure and use MediaWiki,
- Back up the wiki, and
- Relocate the wiki.

Build the Host Machine

My host machine installation is a vanilla Kubuntu 26.04. I gave it the computer name "VMHOSTOS".

Now is probably as good a time as any to talk about why I chose a desktop OS instead of a classical server OS for the host setup. There are some things that need to be done that I find easier in a GUI rather than a stark CLI. I'm not afraid of the command line, but things like relocating a VM are easier in the GUI. If you ever have to move your VM between machines there may well come a time when you'll be glad of a GUI – more on that later.

Once we're done setting things up and testing, and we're ready to go into our 'production' mode we can make the host look and behave like a server OS, by turning off the KDE GUI suite. The purists may quibble with this approach, and point to excess disk and memory consumption, but for a home

installation that is isolated from the outside world this approach serves the purpose, and lets us meander around in a comfortable graphical environment as we like. As well, if we get to the end and don't like or want the wiki, we'll still have a Kubuntu 26.04 laptop equipped with VirtualBox – and that's a good thing.

My default Kubuntu installation consumes 10 GB of disk space. When I run it complete with its KDE environment "htop" reports it using 1.1 GB RAM, and idling at 3% CPU.

When I start it without KDE – as a poor man's server – it consumes 500 MB RAM and 1% CPU at idle.

To start a desktop machine without the GUI running enter this command and reboot;

```
sudo systemctl set-default multi-user.target
```

To launch into the GUI on start up enter this command and reboot;

```
sudo systemctl set-default graphical.target
```

Next I'll make sure my system is up to date – I need to run these terminal commands in succession;

```
sudo apt update
```

```
sudo apt list --upgradable
```

```
sudo apt upgrade
```

```
sudo apt autoremove -y
```

```
sudo apt autoclean -y
```

I'll string them together separating each by "&&", to have a single command that looks like this;

```
sudo apt update && sudo apt list --upgradable && sudo apt upgrade && sudo apt autoremove -y && sudo apt autoclean -y
```

so the next time I need to manually patch I can open a terminal, type "Ctrl-R" then type "-upgr" and my complete command will return for me to press enter and let it run. Ctrl-R in the terminal is brilliant!

When we have our wiki up and running it's likely we'll position the host machine out of the way – just letting it whir away in a corner somewhere. If that happens we will need a way of periodically logging in to both the host and guest OS's - to manually run patch updates, or to check that any we automated are completing as planned. The Linux way for that is "ssh". We need to

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install the ssh server components on both the host and guest, and the way to do that is;

```
sudo apt install ssh
```

We want the ssh service components to start when the machine powers on so we have to enable the service, by running this command in a terminal;

```
sudo systemctl enable ssh
```

We have enabled ssh to start with each machine boot. If we want it to start now, without rebooting, we can, with this command;

```
sudo systemctl start ssh
```

and we can check its status with this one – see image bottom left.

```
sudo systemctl status ssh
```

With ssh installed and configured we should verify that it's working; we do this from another machine on our LAN – see image bottom right.

The top few lines in Fig 02 show only on the first ssh connection to the target machine. Once the connection is made you see the command prompt changes to indicate that subsequent commands will be executed on the remote computer. To end our ssh session type "exit" at the prompt.

The ability to ssh into our hostOS, and later our guest, using the "ssh name@computer name" format, is essential. If we can't ssh in using the computer name of the target - in my example above "VMHOSTOS" there is no value in going on until the situation is either resolved or a work-around is in place. The topic of "name resolution" - resolving a computer name to its IP Address - is well beyond the scope of this article series. If you are afflicted with this issue though all may not be lost - there's a good introduction to the subject on the LinuxVox.com site, at <https://linuxvox.com/blog/hostname-resolution-linux/>.

Next we install and configure the firewall. In a perfect world we wouldn't need a firewall on this machine given that it will spend its entire life behind the firewall provided by our internet provider. In my area internet providers are obliged to supply modem/routers with installed firewalls that 'block all' incoming – I don't know if that requirement exists elsewhere but it should. Even if it is, we Linux users have access to free firewalls, so again, why not? A few minutes spent here will give us another layer that may help us should bad things happen in the future. The Ubuntu world favours the "Uncomplicated Firewall" so that's

```
bruce@VMHOSTOS:~$ sudo systemctl enable ssh
Synchronizing state of ssh.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable ssh
Created symlink '/etc/systemd/system/ssh.service' -> '/usr/lib/systemd/system/ssh.service'.
Created symlink '/etc/systemd/system/multi-user.target.wants/ssh.service' -> '/usr/lib/systemd/system/ssh.service'.
bruce@VMHOSTOS:~$ sudo systemctl start ssh
bruce@VMHOSTOS:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/usr/lib/systemd/system/ssh.service; enabled; preset: enabled)
   Active: active (running) since Sat 2026-04-25 19:17:40 AEST; 18s ago
     Invocation: 7132d00eb7b4d2685bd9ba922b7bf62
   TriggeredBy: ● ssh.socket
     Docs: man:sshd(8)
           man:sshd_config(5)
    Process: 3913 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
   Main PID: 3915 (sshd)
     Tasks: 1 (limit: 16501)
    Memory: 1.4M (peak: 2.1M)
       CPU: 30ms
     CGroup: /system.slice/ssh.service
            └─3915 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Apr 25 19:17:40 VMHOSTOS systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Apr 25 19:17:40 VMHOSTOS sshd[3915]: Server listening on 0.0.0.0 port 22.
Apr 25 19:17:40 VMHOSTOS sshd[3915]: Server listening on :: port 22.
Apr 25 19:17:40 VMHOSTOS systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
bruce@VMHOSTOS:~$
```

```
bruce@BGOLIN101:~$ ssh bruce@VMHOSTOS
The authenticity of host 'vmhostos (192.168.3.142)' can't be established.
ED25519 key fingerprint is SHA256:d7AvXpZUG/5jrp5fBi+hj16u/I3uo0EKa93xoyJfx0.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'vmhostos' (ED25519) to the list of known hosts.
bruce@vmhostos's password:
Welcome to Ubuntu 26.04 LTS (GNU/Linux 7.0.0-14-generic x86_64)

 * Documentation:  https://docs.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

bruce@VMHOSTOS:~$
```

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what we'll use, and we'll also add the GUI application, "gufw" so we can easily configure the ssh access we need. We run this command to install both;

```
sudo apt install ufw gufw
```

The "Firewall Configuration" shortcut appears in the "Setting" start menu folder, and not surprisingly requires root access on launch. We first enable the firewall by dragging the "Status" switch to the right and after a few seconds the shield will illuminate – see image right.

We see that all incoming traffic is denied while all outgoing is allowed. We need to enable an exception for ssh incoming to this machine, so making sure the "Rules" tab is highlighted click on the "+ sign" lower left to get the dialogue shown on the right in Fig 03. We want to Allow, In, SSH which is listed under Network and Services, and click on "+ Add", then our new rule information shows in the main dialogue pane.

Firewall setup is one of those tasks that can be done in the CLI, but for those of us that don't configure and maintain firewalls for

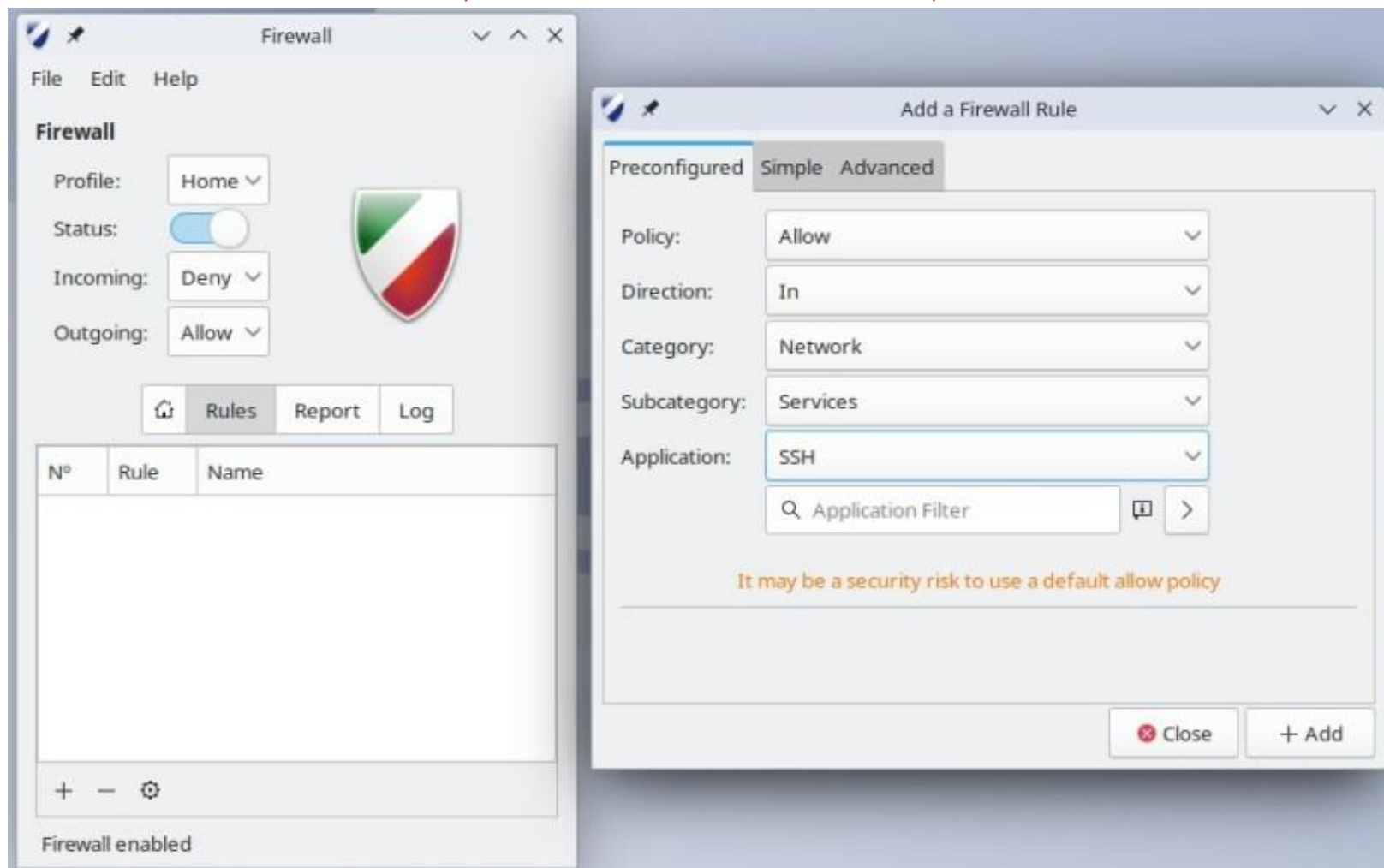
a living it's easier in a GUI. That said, I will use a server OS for the VM so we will have to configure its firewall from the command line.

That's all for this month. In the next installment we'll add the VirtualBox application to the host machine, configure it to our needs, and go through the steps of

installing the guest OS.



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



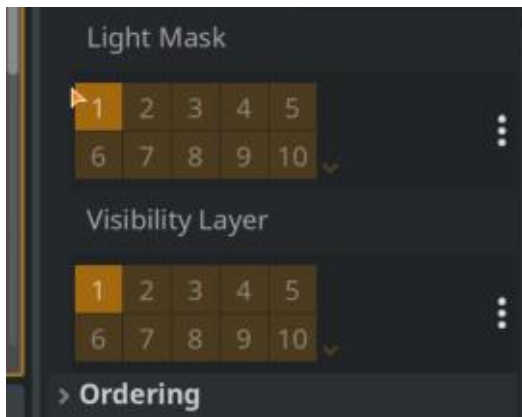


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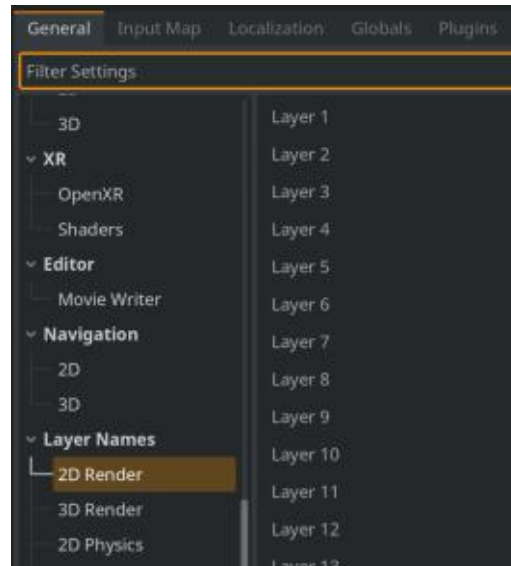
Written by Erik

Godot Intro Finale

There is no substitute for playing, so if, between issues, you do not fiddle around a bit, yourself, you may be missing out. Feel free to mess about with mass distribution, or whatever takes your fancy. Since we are not making anything you cannot re-create in 5 minutes, you cannot mess anything up. If you have OCD like me, you can simply save a copy of your project elsewhere, as a backup, but I encourage you to make mistakes and do it all again, as it is a learning experience. This time around though, I want to talk about some other bits-and-bobs that we will be talking about in the “beginner” series. I want to be able to say something like, “turn off the visibility of the canvas item” and you must know where that is.



The first item on our agenda is this: you will see these numbered blocks in more than one place. Pay attention to the heading. Also I want you to notice the vertical ellipses next to the items. You can rename the layers in your project. When you click on rename, however, it will open up your settings. Depending on the type of project you are creating, your layers will be displayed. If you are in a 3D project and you just start renaming layers and nothing seems to have happened, it may be that 2D was selected in the left-hand side of your settings.



If you look at the image of the settings, you will see that it has “2D Renderer” highlighted, but there are six (6) sub-headings listed. These six places are also not even the only places you will see the numbered blocks, so don’t get confused as a newbie. Pay attention and read the headings! I will leave you to play with the inspector. (by this time I expect you to know where to find the inspector)

Now on to something my proof reader brought up from the last issue. When you create objects that interact with each other, the sprite does not matter, only the collision shapes. If your collision shapes are larger than your sprite, for instance, your “ball” may never touch the ground, but it may bounce above the ground. The same goes for when they are too small, objects may overlap each other. While this is not important for our project at this stage, it becomes important later on, when you make your own project. You don’t want to shoot an enemy and the bullet passes through the enemy as the hit boxes

do not line up. The same goes for moving up and down slopes. It is preferable to use a circle or capsule collision shape for a character that has to traverse slopes, for instance, as this prevents the player from getting stuck, when the corner of one collision shape catches on the other. I’m sure that almost all of you have played a game where you get stuck or run into an invisible wall sometimes. This is the result of bad collision shapes. We will cover all of this in the next part of this series, but for now, it is important for you to be aware of this only. To see them in action, go to your menu, “Debug” -> “visible collision shapes”. This will allow you to see why your sprite is getting stuck somewhere.

The other issue my proof reader ran into was not paying attention to the tabs at the top of the screen. One can become so engrossed in what you are trying to do that you do not realise you are on the wrong tab. It is easy to do at the beginning of a project. You have a world or level scene and an object scene, you drag your object into the empty

HOWTO - GODOT INTRO

world scene. So now you have two scenes, the world and the object scene, that look exactly the same. Let's say you created an empty world scene and a ball scene, you drag the ball onto the world, now both scenes contain a ball and look identical, it is easy to get a bit lost. The current scene you are in is not only highlighted, but it should have an accent colour as well, while the rest are dull.

The other thing I need to highlight is your filesystem tab. Dragging things into and out of this tab, creates a copy inside your project tab. If you were to drag assets into that, the file or folder will be created inside your project tab. This becomes more apparent later, but you are free to make new folders in there to keep things neat and tidy. You can do this by right clicking anywhere (as long as it is free space) inside said tab. Do not get too creative with the file names though, as you may need to reference the path in code later and it is easier to type "assets" than "my_labubu_bobblehead_blue" - and if you plan on exporting to other devices than your own, remember that certain operating systems and certain filesystems have character limits for file and

folder names.

A longer way, but safe way, if you are new to all of this is, that if someone says a tab name, say, "import" and you do not see it, or you have re-arranged your tabs and cannot find a tab, you can go to the menu, click on "editor" -> "editor docks" -> "import" and the tab will be brought to the top of the stack. I will keep my interface stock standard throughout the series - and I suggest you do too, until you are a more advanced user and need to optimize your workflow.

The last thing I want to point out is that you have a "reload project" option, if your project was saved and you made a boo-boo. In the menu, go to "project" -> "reload current project" and all unsaved changes will be undone. I will hopefully see you in the "beginner" series, if we get enough feedback. If you did not like this, let us know: misc@fullcirclemagazine.org



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



HOW-TO

Written by Robert Boardman

Once more unto the breach, dear friends, once more" (Henry V Act 3, Sc.1) Here we go, another month has flown and another issue of FCM is ready. This month I will examine some of the macros available in topics starting with U (excluding Ukrainian, Urdu languages)

There are thirteen packages in the Underline topic. The lead author of The Latex Companion, Frank Mittelbach, wrote a package called dashundergaps. He wrote it "offers the possibility to replace material in running text with white space in order to build up forms that can be filled in at a later time." This package could be useful any time someone needs to produce a fill in the blanks quiz or an order form or anything similar. There is a teacher

mode (off by default) in which the blanks are filled in, good for tests and learning but not for forms. It is also possible to widen the gap or space to allow for handwritten responses instead of typeset responses. The "gap" can be filled with a solid line, a dashed or dotted or wiggly line. Gaps can also be numbered if desired (useful for long quizzes). The six pages of documentation are well laid out and easy to understand. There is a nice example with blanks or gaps. The blanks are filled in at the end of the document.

I have set up a little quiz for a History of England course. The first example uses the uline command to underline the first two blanks. The second example uses the simplest form of the gap command, the first

blank or gap is numbered (default) or not numbered (gap*). The next few examples show the same sentences using different styles with the gap command. There are a number of other possibilities described clearly in the documentation. This is an easy to use package for anyone who needs these features even occasionally.

There are more than thirty packages dealing with Unicode or

requiring Unicode. There may be some readers not familiar with Unicode. Every character displayed on a computer screen or printed by a computer-driven printer must have a specific and unique code. These codes are stored in a code table in the computer. Forty years ago each language had its own code table. That made it difficult to use the same computer to display or print two or more different languages. Unicode describes a

```

William the Conqueror defeated Harold at the Battle of Hastings in
1066.
William the Conqueror defeated Harold at the _____ (1)
in the year _____.
William the Conqueror defeated Harold at the _____ (2)
in the year _____.
William the Conqueror defeated Harold at the _____ (3)
in the year _____.
William the Conqueror defeated Harold at the _____ (4)
in the year .....

```

```

\documentclass[11pt, letterpaper]{article}
\usepackage{dashundergaps}
\begin{document}
William the Conqueror defeated Harold at the \uline{Battle of Hastings } in \uline{1066}.
William the Conqueror defeated Harold at the \gap{Battle of Hastings } in the year \gap*{1066}. %Using the asterisk
cancels numbering of item.
William the Conqueror defeated Harold at the \gap[d]{Battle of Hastings } in the year \gap*{1066}.
William the Conqueror defeated Harold at the \gap[b]{Battle of Hastings } in the year \gap*[w]{1066}.
William the Conqueror defeated Harold at the \gap[-]{Battle of Hastings } in the year \gap*[.]{1066}.
\end{document}

```

HOWTO - LATEX

system of codes stored in one table so most characters of most written human languages are available. As of 2025 September that included 172 scripts and more than 159,000 characters including many ancient and obsolete characters like Egyptian hieroglyphics. In addition to languages there are currently 3,790 emojis available using Unicode The packages available in this topic are mainly to do with converting Unicode codings to use in Latex or for adding new Latex character codes to the private code areas in Unicode. I will move to another topic.

A package of interest in the Units topic is cooking-units. As is often the case the author

developed the package for their own use and then submitted it to ctan.org for wider distribution. I have not said it in many issues so here is the reminder: Latex is free, completely free. All of the Latex packages are also completely free, and there are thousands of packages. Cooking-units is just one of many. What does it do? It makes for a consistent look for quantities in a cookbook. You can imagine how many recipes there might be in a regular cookbook. Each one has its own list of ingredients and instructions. Each ingredient and most instructions will have some quantity (mass, volume, temperature, time) attached to it. If you were a cookbook author would you be able to format each mass

quantity or volume quantity the same way? Would you use the same temperature scale consistently? In addition this package also allows for unit conversions.

Most of the world uses the metric system. If you do not care to sell your cookbook in the U.S. then there is no need to convert. However there are also some important countries where both the metric system and the older system are used. In Canada metric units are used for many things but many items used in households, food and drink for example, still retain the use of the older system. If a cookbook sold in Canada uses only metric units it will have far fewer sales than if it has both. In

the U.S. a cookbook with only metric units will not sell. Cooking-units lets the author use both systems for each ingredient or instruction if you wish.

The forty-eight page documentation has many examples to guide authors. For users of the old units there are a few problems. The predefined units are almost all metric. Using "cup," "tablespoon," "teaspoon" generates errors. (The unit "pound" already exists in cooking-units.) The errors can easily be eliminated by defining "new" units. If the author wants to convert these old units into metric units the conversions need to be entered in the preamble as well. I put some examples in the

```
\documentclass[11pt, letterpaper]{article}
\usepackage{cooking-units}
\newcookingunit[cups]{cup} %Defining new unit
\cuaddtokeychain{ml}{250}{cup}{1} %Defining new conversion
\newcookingunit[Tbsp]{tablespoon}
\cudefinekeychain{ml}{15}{tablespoon}{1}
\newcookingunit[tsp]{teaspoon}
\cudefinekeychain{ml}{5}{teaspoon}{1}
\begin{document}
  \section*{Simple Bread Recipe}
  \subsection*{Ingredients}
  \cuam{1} package active dry yeast %Use cuam because no unit
  \cunum {3_1/2--4}{cup} or \cunum[cup=ml]{3.5}{cup} -- \cunum[cup=ml]{4}{cup} regular flour
  \cunum {1_1/4} {cup} or \cunum[cup=ml]{1.25}{cup} water
  \cunum{2} {tablespoon} or \cunum[cup=ml]{1.25}{cup} cooking oil
  \cunum{1/4} {teaspoon} or \cunum[teaspoon=ml]{0.25}{teaspoon} sugar
  \cunum{1}{teaspoon} or \cunum[teaspoon=ml]{1}{teaspoon} salt
\end{document}
```

Simple Bread Recipe

Ingredients

1 package active dry yeast
3½–4 cups or 875 ml – 1000 ml regular flour
1¼ cups or 312.5 ml water
2Tbsp or 312.5 ml cooking oil
¼ tsp or 1.25 ml sugar
1 tsp or 5 ml salt

illustration with this column.

Of course there are other areas of study or work which require consistency in units. The scientific disciplines come to mind. There is a package called “siunitx” which will assist with consistency in math and science. It is based upon the SI system of units and allows for some variations based on the requirements for particular journals, publishers, universities etc. There are eighty-nine pages of documentation to guide authors. There is also a second document available called a Code Guide in

case you wish to explore or alter the package code.

A few sample uses of the SIUNITX package.

- Numbers
 - 123
 - 0.123
 - 0.123
 - 3.1415×10^{-3}
 - -10^8
- Lists, Products, Ranges
 - 1, 1, 2, 3, 5 and 8
 - 4 metre, 6 metre, 8 metre and 10 metre
 - 4×5
 - 4 to 10

There is a short summary of the

```
\documentclass[letterpaper,11pt]{article}
\usepackage{siunitx}
\begin{document}
A few sample uses of the SIUNITX package.
\begin{itemize}
\item Numbers
\begin{itemize} % list inside list
\item \num{123}
\item \num{0.123}
\item \num{0,123}
\item \num{3.1415d-3}
\item \num{-e8}
\end{itemize}
\item Lists, Products, Ranges
\begin{itemize} %another list inside list
\item \numlist{1;1;2;3;5;8}
\item \qtylist{4;6;8;10}{metre}
\item \numproduct{4x5}
\item \numrange{4}{10}
\end{itemize}
\end{itemize}
\end{document}
```

capabilities of siunitx on p. 4 of the documentation. It says “numbers are processed with understanding of exponents or using additional commands for products and complex numbers...system can interpret units given as text or as macro-based units...simple lists and ranges of numbers can be handled...a wide range of options are available to control the behaviour of the package.” Samples are visible in the image and in the sample code.

All standard SI prefixes from 10⁻³⁰ to 10³⁰ can be used. (I remember telling my networking students over and over to memorize all the prefixes from pico to tera.) There is an extensive list of common abbreviations using these prefixes on pp. 12 to 14. plus a small table of binary prefixes in common use. The author notes new units, new prefixes and new powers (i.e. exponents) can be defined if an author desires them.

Aligning values in columns in tables can range from awkward to difficult. This package introduces a new kind of column, the S column which aligns values using a variety of strategies. Values with decimal points are aligned on the decimal

point. Values without decimal points are centred in the column. Colours may be used to highlight values. There are even tools to control the printing of values independent of the text in a document. I can only brush the surface of this package. If you work with values and SI units especially when preparing documents for publication I recommend you explore this package.

I thought dividing the code for the siunitx package into lists made the compiled result easier to read. However the extra code to make the lists may hide the actual siunitx code. The first list uses the command \num to display various numbers. The second list uses four different commands to generate the output in the image: \numlist, \qtylist, \numproduct and \numrange. The command \item along with the begin and end list commands all belong to the default Latex unordered list commands.

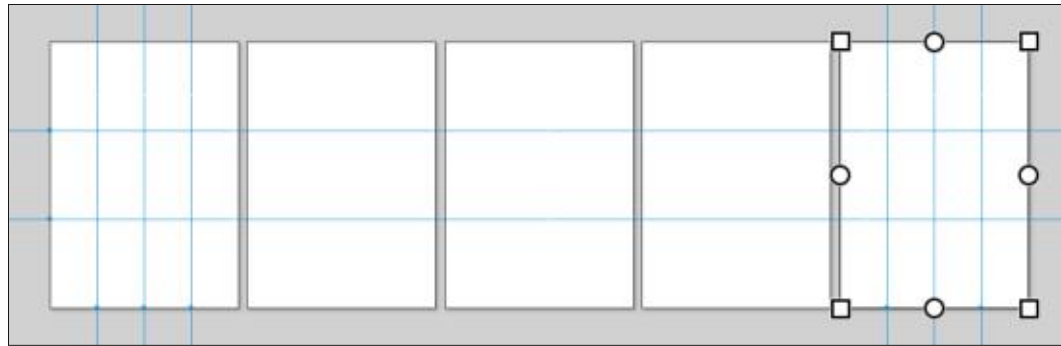
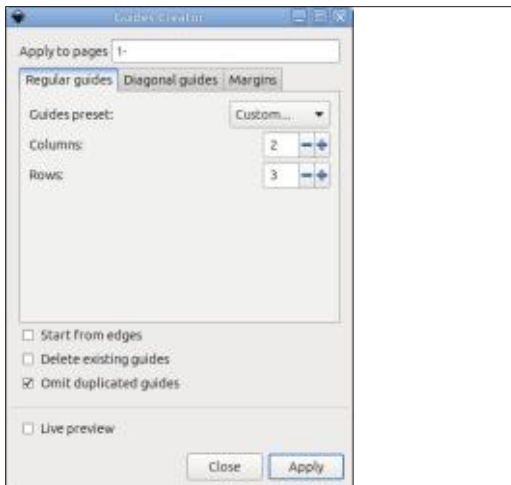
That is all for this issue of FCM. I hope you learned something new about Latex. Next issue I will play with some more packages from the end of the alphabet.



Once again, this month we're continuing our tour of the extensions that ship with Inkscape by default, with the remaining entries in the Documents sub-menu.

Document > Guides Creator...

As the name suggests, this extension provides some shortcuts for creating guides in your document. These are real Inkscape guides, which extend to infinity rather than regular lines in your document that you can snap to, as you get with some of the other extensions we'll look at later.

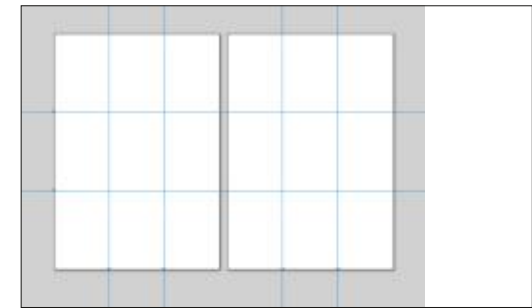


The first field defines which pages the new guides should apply to. With nothing in this box, or the '1-' string that mine defaulted to, it will create new guides for all pages. Alternatively you can specify a comma-separated list of page numbers or ranges (two numbers separated by a hyphen). You can even omit one of the numbers in a range to specify "from the start up to page n" or "from page n to the end". In other words, something like this: "-3, 5, 7-9, 11-" which will add guides to pages 1, 2, 3, 5, 7, 8, 9 as well as 11, 12, 13 and onwards to the end of the document. There's no shorthand syntax for "all odd pages" or "all even pages", however, which could be a bit of a problem, as we'll see later.

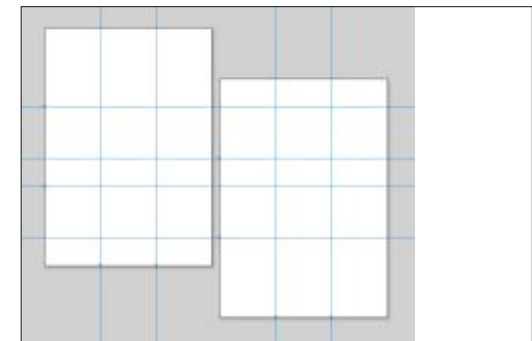
As useful as this multi-page feature sounds, it's not without its pitfalls. As mentioned above, guides in Inkscape extend to infinity, so they don't stop at the edge of a page and can extend onto adjacent pages, even if they were omitted from the list. For example, in a 5-page document, using the string "1,5" to apply to only the first and last pages can result in guides passing through the intermediate ones.

When creating guides for multiple pages you really, really want to have the 'Omit duplicate guides' option enabled at the bottom of the dialog. In the example above, this results in only two horizontal guides being created, rather than four (two for each of pages 1 and 5).

Creating guides for multiple pages can be useful when all the pages are the same size and orientation, and are lined up neatly in a row or column. For example, with this two-page document I've used the "Rule-of-thirds" preset to visually split each page into nine sections.



If the pages aren't so neatly aligned, however, those infinite guides result in something far less usable.



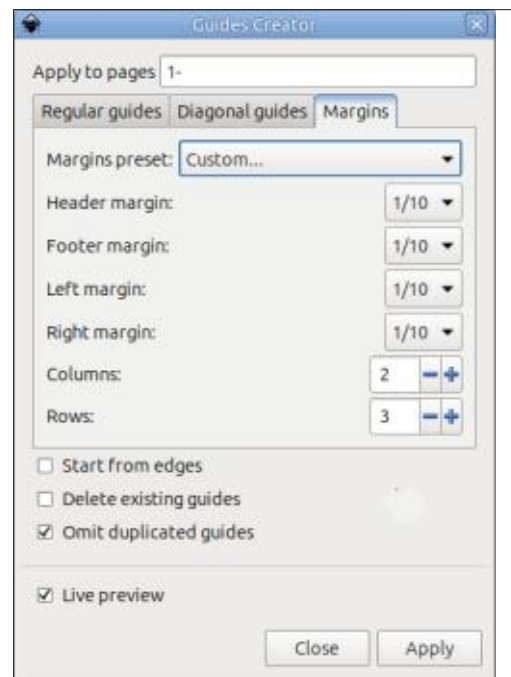
One solution to help with this would have been for the extension to use different colors for the guides of each page but, unfortunately, that's not a feature it offers. Nor does it provide the option of creating real lines, rather than guides, which might actually be more useful in this scenario – though I can't really fault a "Guides creator" extension for only creating guides.

In terms of actually creating the guides, you have three options spread across separate tabs. Whichever tab is active when you click the 'Apply' button will dictate the type of guides that are created.

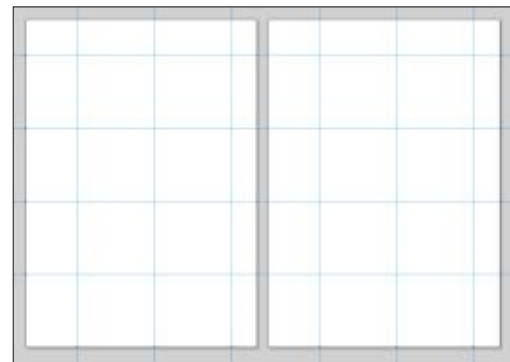
The first tab is for simple, regularly spaced horizontal and vertical guides. Using the 'Guides preset' pop-up lets you select between a couple of defaults ("Rule-of-thirds" and "Golden ratio") which will create guides that split your page into three rows and three columns, regardless of the values in the 'Columns' and 'Rows' fields. If you want to use those fields to define your guide positions, you have to select the 'Custom...' option in the pop-up.

The 'Diagonal guides' tab is a little disappointing. All it allows you to do is to create up to four 45° guides anchored at the corners of the page. There's no way to change the angle in this dialog, and there's also no way to create something like a grid of angled guides, as might be useful for drawings based on an isometric or oblique projection.

The final tab, 'Margins', is the most complex of the three. This allows you to create guides based on page layouts that have margins around the content, such as to allow for the binding edge in a book.



If you select any preset other than 'Custom...' from the pop-up, many of the remaining fields are ignored – but this time the 'Rows' and 'Columns' spinboxes do still work. The other options let you set all the selected pages to a left or right book page layout, or will create alternating sets of guides on the selected pages, starting with a left or right layout. Because these layouts are fixed, however, you're stuck with whatever margin sizes have been defined – and for me, the bottom margin in particular is too far up the page for most publications.



If you decide that the defaults don't suit your needs, you can use the 'Custom...' option to set all the margin sizes. These are defined as fractions of the page width (for vertical guides) or height (for horizontal guides). There's no way

to define specific millimetre or inch values which is not very helpful if you're trying to follow a print guide that provides such specifics.

Within the middle area defined by the margin guides, the space is split in the same way as for the 'Regular guides' tab in 'Custom...' mode. What if you want the 'Rule-of-thirds' placement, but for use in a book with margins on all sides? Unfortunately, this extension doesn't offer that level of flexibility. And if you want to use custom margins (perhaps to avoid that deep bottom one), but with alternating side margins for binding, you'll have to use this extension twice: once for the odd pages, and once for the even ones. Remember how I mentioned that there's no shortcut syntax for defining odd or even pages? You'll have to list them as '1,3,5,7...' and so on, and hope that your document isn't too long.

As for the remaining checkboxes: 'Start from edges' simply includes additional guides around the page, though not for the 'Diagonal' mode. You can get the same effect for an individual page using the 'Edit > Create Guides Around the Current Page' menu

HOWTO - INKSCAPE

entry, though the checkbox in the extension is more useful if you're using it to add guides to multiple pages.

The 'Delete existing guides' checkbox causes the extension to delete all the existing guides in the document before creating the new ones. This can be useful if you need to replace a lot of guides – such as from a previous use of this extension. But be aware that it will also delete any guides you may have manually created – including those that you have explicitly locked, which is rather annoying.

Finally, I should also point out that Inkscape's Page tool provides a means of setting margins on each page, including separate values for each side. See part 136 of this series, in FCM #196, for a more detailed run-down of the pros and cons of this feature. These margins can also be used as snap targets, and don't extend to infinity, which may make them more useful for some situations.

Document > Layout > N-up layout...

While Inkscape now offers a

Page tool for creating multi-page documents, the way in which it works lends itself primarily to designs where each 'page' is a separate piece of paper, or perhaps a screenful of content in a PDF. What it's not quite so useful for is the situation where you want to print multiple 'pages' on a single sheet. Think, for example, of printing multiple copies of a business card or leaflet onto a single A4 or A3 page to be cropped out as separate items, or of a three panel design for a folded leaflet.

This extension can help with such situations. The 'N-up' refers to the use of '2-up' to indicate two pages on a sheet, or '4-up' to indicate four pages per sheet. 'N' in this case is almost any integer, so the title simply means 'any number-up', or 'any number of pages to a

sheet.'

This extension presents a dialog with three tabs (shown below) for controlling the result, plus a fourth with some extremely terse help text.

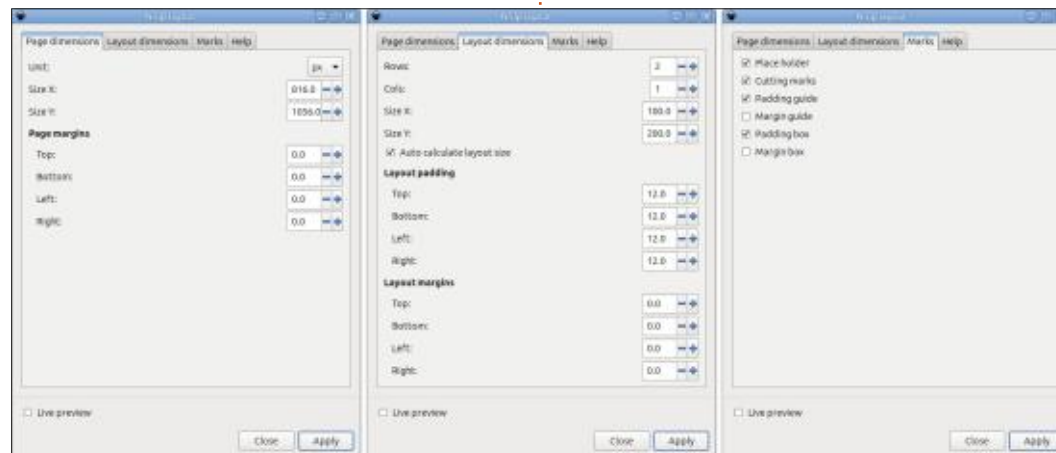
The first tab is used to define the overall page size. It doesn't matter what your page size is currently set to, this extension will ignore it. Instead you have to define your page size by its width and height (or 'Size X' and 'Size Y' as the extension describes them). Thankfully you can select between various units, but there's no shortcut list of standard sizes to choose from. If you want to print on an A4 sheet, for example, then you need to know (or look up) that it's 210mm × 297mm.

The 'Page margins' fields are used to reduce the available area for the next tab – typically useful if your printer can't print right to the edge of the page.

The combination of page size and margins from the first tab results in a rectangular area that can now be divided into smaller sections via the second tab. Set the number of rows and columns (labelled as 'Cols'), and ensure the 'Auto calculate layout size' checkbox is enabled to have the extension automatically subdivide the available space, taking into account any margins or padding you've defined in the lower parts of this tab.

Alternatively you can uncheck the checkbox and define the size of each subsection using the 'Size X' and 'Size Y' controls. The extension will lay out rows and columns of boxes, each of the size you've specified, taking the margins and padding into account once more. This approach is useful if you need the sections to be a specific size, as when creating business cards or stickers, for example.

In theory there's a third way to use this tab. According to the Help



tab, if you leave one of 'Size X' or 'Size Y' as zero, its value will be auto-calculated (based on the Rows/Cols fields, presumably). In my testing I was unable to set these fields to zero, so the auto-sizing didn't work at all.

The third tab consists of checkboxes to determine what parts are actually drawn. Note that the cutting guides are extremely faint so, depending on your zoom level, the effect of that checkbox might not be immediately obvious.

This is definitely an extension for which I recommend enabling the live preview and twiddling the controls. It's hard to predict how the various margins and padding will interact, but seeing the effect in real-time makes it much easier to get to the layout you want.

Do note, however, that this extension creates real objects in your document, rather than guides. My suggested approach is just to enable the 'Padding guide' and, optionally, the 'Margin guide' checkboxes, then select all the rendered padding guide rectangles and use 'Object > Objects to Guides' to convert them into real guides that can more easily be toggled off

and won't accidentally result in borders being printed where you didn't mean to.

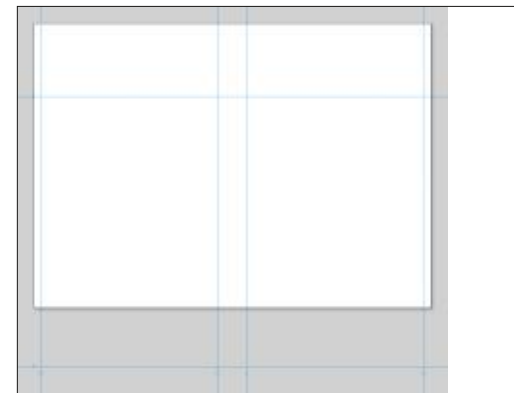
Document > Layout > Perfect Bound Cover Template...

This is a slightly specialised extension for creating guides that correspond to the cover for a book that is 'perfect bound'. You set the size of the book, the number of pages, and the thickness of the paper used for the pages and cover. The resultant guides indicate the width of the spine and of the front and back covers, with an outer pair of vertical lines indicating the bleed area. This should help you to lay out your book cover, ensuring that the text is correctly placed on the spine, for example.

Unfortunately there are a few issues with this extension, in my experience. The first is its insistence that all dimensions are in inches. If you've only got the book dimensions in metric (e.g. from a print bureau's template), you'll have to do some arithmetic by hand. Similarly, for the thickness of the pages you have the option to

provide a 'bond weight #' which is used to approximate the thickness – but no option for 'GSM' (grams per square metre), which is a widely used equivalent measurement in Europe. If you'd rather directly measure the thickness of a sheet using digital calipers, make sure to set them to Imperial mode, as this extension expects a value in decimalised inches.

Then there are the guides themselves. While the vertical ones seem to be correctly placed, the horizontal guides – which I presume should be inset from the page border by the bleed value – are placed too far down, to the extent that the bottom one resides well below the lower edge of the page.

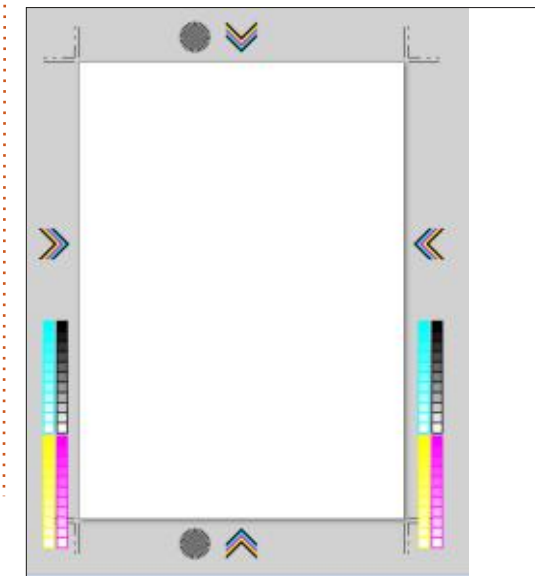


If you do need to create a 'perfect bound' book cover it's probably worth dealing with the

units issues (if they affect you), and just manually setting up the horizontal guides. At least it will save you having to work out the correct placement for the spine. But for most users, this is an extension to skip.

Document > Layout > Printing Marks...

As the name suggests, this one just creates various printing marks which may be used for alignment and calibration. These may be useful when sending work for printing at a professional bureau, but aren't necessary for most users. You'll know – or be told – if you need to add any of these to your work.



Unfortunately this extension lacks a 'Live Preview' option, so a bit of trial and error may be required, especially when adjusting the placement of the crop marks and the size of the bleed margin on the second tab. I'm going to go out on a limb and suggest that you almost certainly don't need to enable the 'Page Information' checkbox: it just results in a line of text being added with the page dimensions. If you do want to include this, however, make sure to set the units on the second tab, as those are the ones used for the text, regardless of your Document Properties settings. Oh, and if you do change the units, note that the values don't scale accordingly – that 5mm bleed you've allowed for could suddenly become 5 inches if you're not careful!

Document > Layout > Process Illustrator SVG...

If you have an SVG file exported from Adobe Illustrator, this extension may help with mapping some of the proprietary Illustrator data to proprietary Inkscape data.

Or it may not. It very much depends on the specifics of your Illustrator file.

If you have some control over the export from Illustrator, run this extension to see the help information in the dialog. This provides some tips as to the best document structure and export settings to use for this extension to work effectively.



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

The Daily Waddle

DOES COLD CALLING
ACTUALLY WORK?

IN THE ARCTIC, EVERY
CALL IS COLD ...

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Linux on Your iPad

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

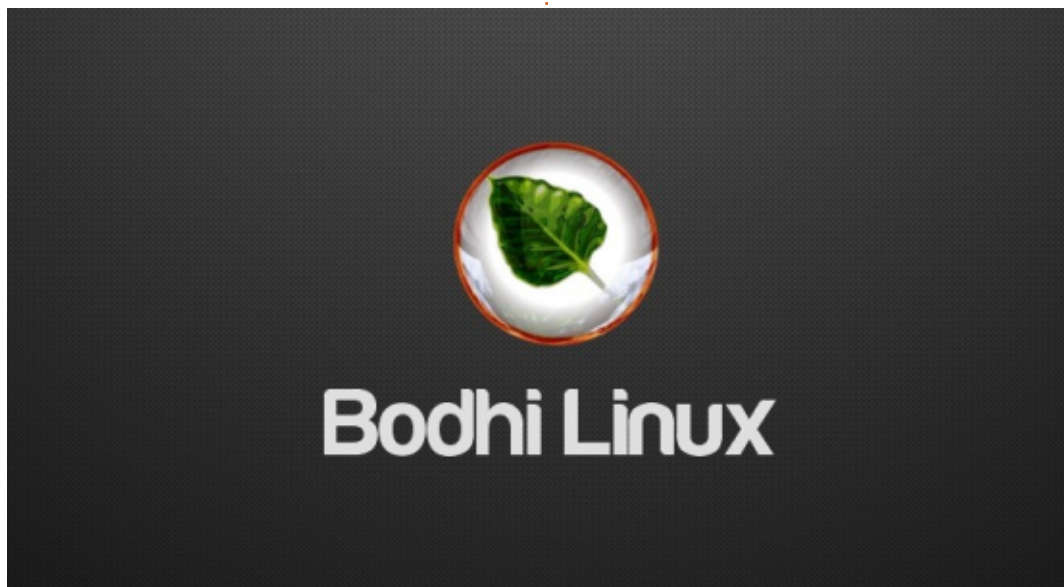




BODHI CORNER

Written by Joseph "Flux-Abyss" Wiley

BACK NEXT MONTH





UBPORTS DEVICES

Written by UBports Team

BACK NEXT MONTH



The Daily Waddle

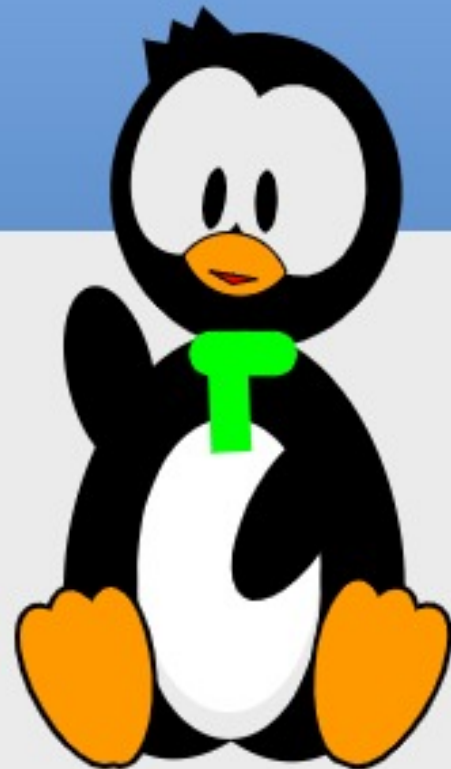
CAN I HAVE SOME ALL NATURAL,
GRASS-FED, FAT-FREE ICE, PLEASE?

YOU'RE FROM THE
CITY, AINT YA?

ICE



\$1





MY STORY

Written by Volker Klemm

Garmin Oregon GPS and Ubports Touch

Out of the Ubuntu bubble to save our privacy and sovereignty

I'm not a nerd or a geek, but over the last 30 years, I've only had sporadic contact with Unix/Linux, and the machines I worked with were increasingly monitored or even controlled by computers.

Now I'm retired and still use my more than 20-year-old Nokia 6300 because I somehow foresaw the disastrous developments that Android/iOS smartphones have brought.

Unfortunately, my old Garmin Oregon GPS device from 2011 is increasingly suffering from intermittent connection problems. That's why I went looking for a good offline navigation device and ended up in the Ubuntu community.

It was fortunate that Microsoft kicked me out with Windows 11. My laptop now runs Mint. That fits in well with my plans. UBPorts helped me get my new navigation device. It's now a Pixel 3a running Ubuntu Touch. LineageOS runs in the Waydroid container.

I'm almost in love with my new

navigation device. Maybe one day I'll put a SIM card in it and make phone calls with it too.

First, however, I helped the Easter Bunny protect his privacy by taking him on two GPS tours. I reported on this on an Austrian website (gps-tour 184323 - <https://www.gps-tour.info/de/touren/detail.184332.html> and gps-tour

184346 - <https://www.gps-tour.info/de/touren/detail.184346.html>).

Maybe I'll help Santa Claus soon, too. But there are still billions of people in the world who unknowingly give away their privacy. I think the Ubuntu community should get out there and shake these people out of their





HOW-TO

Written by Ronnie Tucker

Write For Full Circle Magazine

GUIDELINES

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

RULES

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

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

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

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

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

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

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

When you are ready to submit your article please email it to: articles@fullcirclemagazine.org

TRANSLATIONS

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

REVIEWS

GAMES/APPLICATIONS

When reviewing games/applications please state clearly:

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

HARDWARE

When reviewing hardware please state clearly:

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

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



REVIEW

Written by Adam Hunt

Lubuntu 26.04 LTS

Arriving on schedule on 23 April, 2026, along with the other Ubuntu flavors, Lubuntu 26.04 LTS is a good release, but with not a lot that is new. Overall, in a Long Term Support (LTS) release, that is not a bad thing, as they normally prioritize stability and reliability over new features.

So here is what you do get: Lubuntu 26.04 LTS comes with support for three years, running until April 2029. It is the 16th Lubuntu release with the LXQt desktop, the 30th since Lubuntu became an official Ubuntu flavor and the 33rd overall Lubuntu release since the very first one, Lubuntu 10.04. Once again, the official release announcement does not take credit for the first three Lubuntu releases prior to it becoming an official flavor, but those of us who were early Lubuntu users remember.

Not Wayland

The biggest news in this release is what is not here and that is a

Wayland protocol display server. In fact, Lubuntu missed its own developer's Wayland goals for the second release in a row and is still using the legacy X11 display server!

A year ago, the official announcement for Lubuntu 25.04 promised that Lubuntu 25.10 would ship with Miriway as the default Wayland compositor, but due to a shortage of developers that did not happen. Lubuntu developer, Aaron Rainbolt, then went on to explain in the 25.10 release announcement that they would use the easier-to-implement labwc Wayland

compositor instead and the plan was for it to be the default in 26.04. The key issue was a lack of developers with experience implementing Miriway, and a shortage of developers on the project in general. More help is being sought!

Lubuntu 26.04 LTS is now here, but with no Wayland protocol display server: labwc, Miriway or otherwise. On 27 March 2026 in the 26.04 beta release notes, Aaron Rainbolt wrote that while Lubuntu was generally Wayland-ready, the work to include labwc did not get

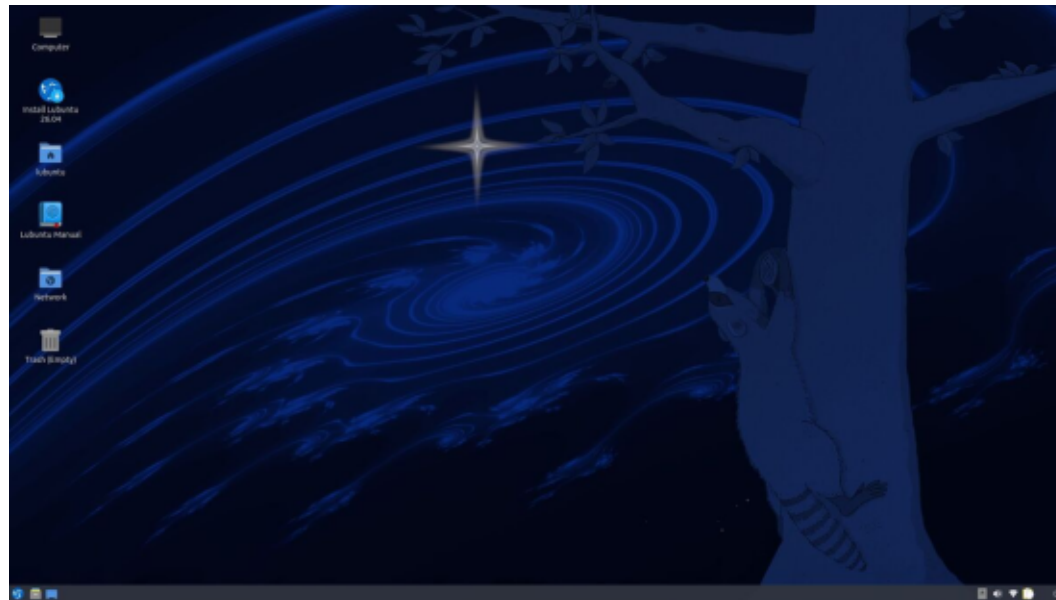
done in time for the LTS release. He also indicated that it might be made available later as a Personal Package Archive (PPA) and, if so, there would be an announcement on the Lubuntu website so users could test it out.

I will add that the legacy X11 still works fine, but at some point soon Lubuntu will have to make the move to Wayland. The last fresh release of X11 was made in 2012.

Ubuntu and Kubuntu completely switched to Wayland display servers a while back, but Lubuntu is just not there yet. Ubuntu has had a Wayland option since 17.10 and it has been the default since 21.04. In Kubuntu's case it was first an option with the 18.10 release and has been the default since 24.10.

Installation

I downloaded Lubuntu 26.04 LTS by BitTorrent using Transmission from the official source. I did a command line SHA256 sum check on it to make sure it was a good



REVIEW

download, then dropped it onto a USB stick equipped with Ventoy 1.1.12 and booted it to a live session from there. Lubuntu is officially listed as supported by Ventoy and it worked perfectly.

The Lubuntu 26.04 LTS ISO file is 3.9 GB in size, 400 MB larger than the last release, Lubuntu 25.10. Lubuntu 26.04 LTS is just over half the download size of the mainstream Ubuntu 26.04 LTS which is now 6.5 GB.

System requirements

Since the release of Lubuntu 18.10, the project announced that it would no longer publish any

minimum system requirements.

New

This release uses the LXQt 2.3.0 desktop (up from 2.2.0 in the last release) and Qt toolkit version 6.10.2. It still uses the Kvantum theming engine, which was introduced in Lubuntu 24.10.

Like all of the Ubuntu 26.04 LTS family of releases, it uses Linux kernel 7.0 and systemd 259.5 as its initialization system. It continues to use rust-coreutils and sudo-rs, as introduced in Lubuntu 25.10.

This release also employs the LXQt Fancy Menu which is a refined

version of the previous menu system. It looks better and works well.

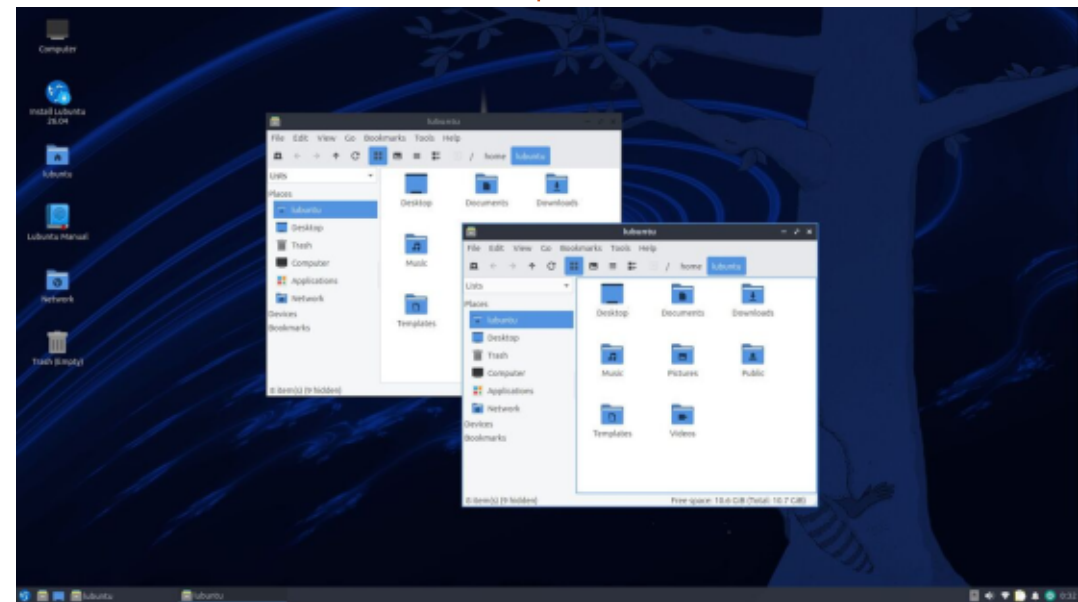
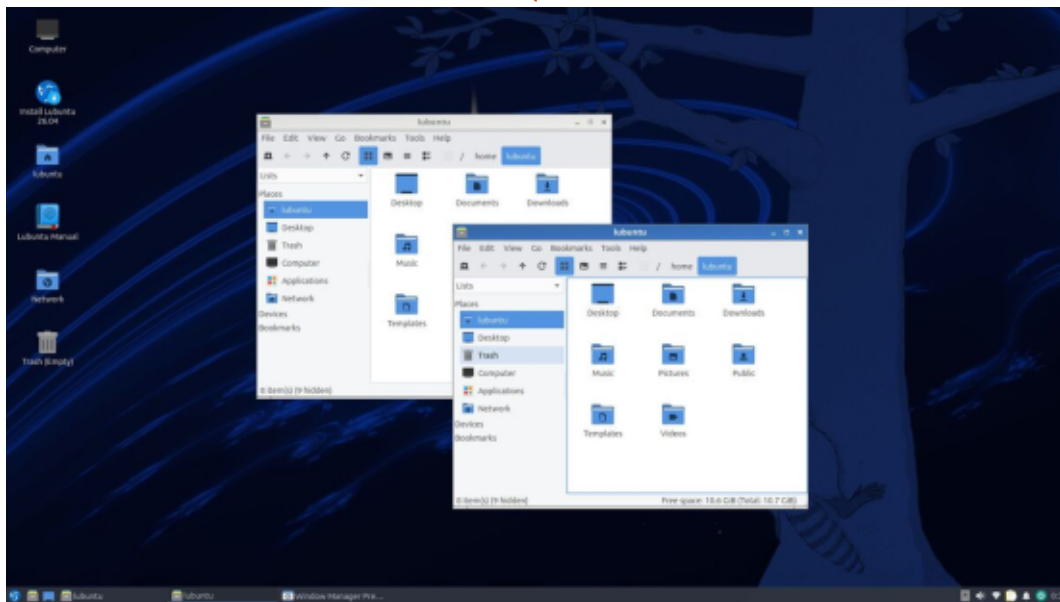
One unwelcome “feature” in Lubuntu 26.04 LTS is that the live session will not mount drives, an issue that it shares with Ubuntu Cinnamon 26.04 LTS and Xubuntu 26.04 LTS. This annoyance first showed up a year ago in Lubuntu 25.04. It makes Lubuntu fairly useless as a rescue disk and also makes doing screenshots for reviews and getting them off the live session much more difficult. At least, unlike Xubuntu 26.04 LTS, the WiFi still works in live sessions.

Settings

Lubuntu 26.04 LTS carries the code name “Resolute Raccoon” and comes with a new dark and rather subtle raccoon-themed default wallpaper. There are 26 different wallpapers provided, including many wallpapers from past Lubuntu releases, plus some landscapes and some general Lubuntu wallpapers.

Other settings include:

19 window themes (none of which are dark themes): Artwiz-boxed, Bear2, Beeze-ob, Clearlooks, Clearlooks-3.4, Clearlooks-Olive, Lubuntu Arc, Lubuntu Breeze, Lubuntu Round, Mikachu, Natura, Nightmare, Nightmare-01,



REVIEW

Nightmare-02, Nightmare-03, Onyx, Onyz-Citrus, Orang & Syscrash

10 icon themes: Humanity, Humanity-Dark, Loginicons, Papirus, Papirus-Dark, Papirus-Light, GNOME, Oxygen, Ubuntu-Mono-Dark, Ubuntu-Mono-Light

16 LXQt themes (which determine the panel and menu colour scheme): Ambiance, Arch-Colors, Clearlooks, Dark, Frost, Graphite, KDE-Plasma, Kvantum, Leech, Light, Lubuntu Arc, Silver, Sombre-et-rond, System, Valendas & Win-eleven-dark

2 cursor themes: Breeze Dark & Breeze Light

10 GTK3 themes: Adwaita, HighContrast, HighContrastInverse, Adwaita-dark, Arc, Arc-Dark, Arc-Darker, Arc-Lighter, Breeze & Breeze-Dark

2 GTK2 themes: Adwaita & Adwaita-dark

This adds up to a lot of scope for user customization, unless you really wanted a dark theme.

Applications

Some of the applications included with Lubuntu 26.04 LTS are:

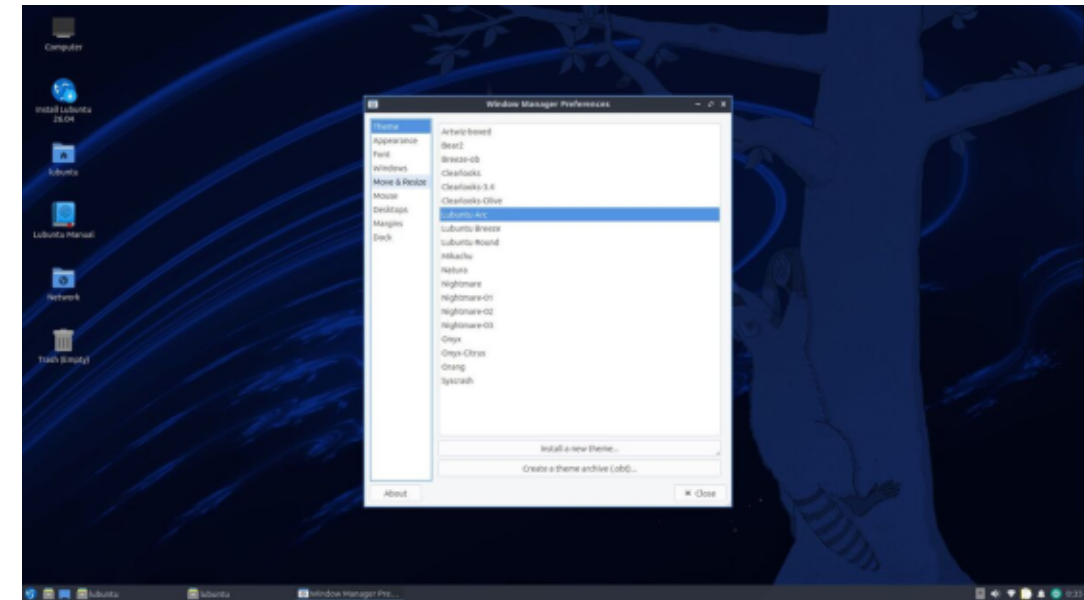
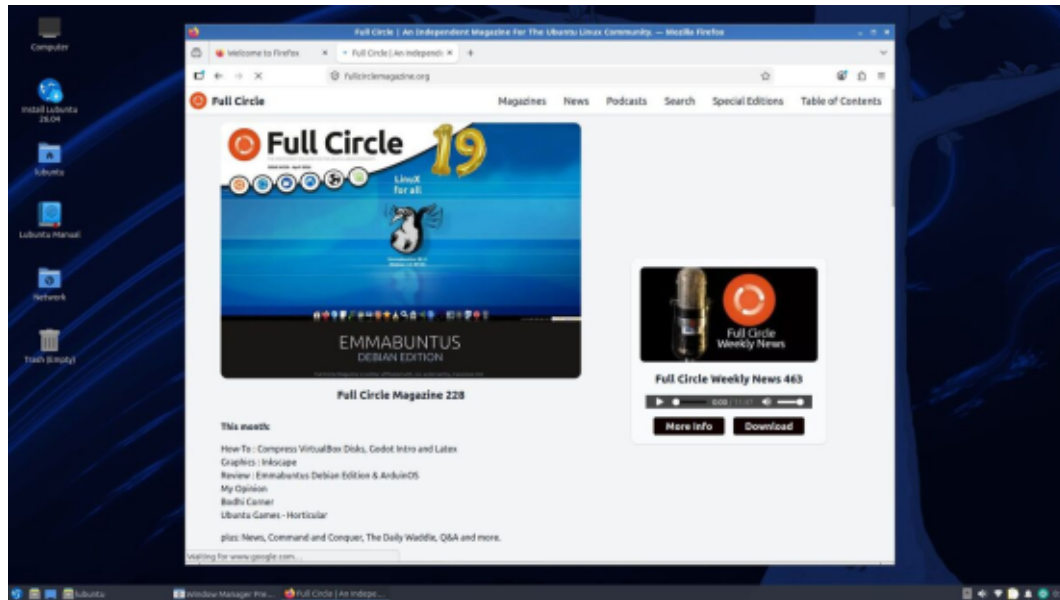
Alacrity 0.16.1 terminal emulator

Blueman 2.4.4 bluetooth connector*
CUPS 2.4.16 printing system
Discover Software Center 6.6.4 package management system
FeatherPad 1.6.3 text editor
Firefox 149.0.2 web browser**
KDE partition manager 25.12.3 partition manager
KWallet Manager 25.12.3 keyring
LibreOffice 26.2.2.2 office suite, Qt interface version
Lubuntu Update 1.1.1 software update notifier*
LXImage-Qt 2.3.0 image viewer
LXQt Archiver 1.3.0 archive manager
Noblenote 1.4.0 note taker*
PCManFM-Qt 2.3.0 file manager
PipeWire 1.6.2 audio controller
Qalculate! 5.9.0 calculator

qPDFview 0.5.0 PDF viewer*
Qlipper 5.1.2 clipboard manager*
QTerminal 2.3.0 terminal emulator
Qtransmission 4.1.1 BitTorrent client, Qt interface version
ScreenGrab 3.1.0 screenshot tool
Skanlite 25.12.3 scanning utility
Startup Disk Creator 0.4.1 (usb-creator-kde) USB boot disk maker*
VLC 3.0.23 media player
Wget 1.25.0 command line webpage downloader
XScreenSaver 6.08 screensaver and screen locker*

* Indicates the same version as used in Lubuntu 25.10

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



REVIEW

Lubuntu used to include one game, but it has been dropped in this release. 2048-qt was no longer working right and was not being maintained, so the developers decided to just remove it and not include any games by default. That is not a bad call, as neither Ubuntu nor Kubuntu include any default games, although some flavors like Xubuntu and Ubuntu Cinnamon do. If you want games, there are lots in the repositories which can be easily installed.

The only other change is the inclusion of KWallet Manager 25.12.3 as a new keyring, replacing the previous gnome-keyring.

As in the past, LibreOffice

26.2.2 is supplied complete, less only LibreOffice Base, the office suite's database application. Base is probably the least used component (does anyone use databases any more?), but it can be added from the repositories, if desired.

Lubuntu 26.04 LTS does not come with an email client, image editor, video editor or webcam client, although there are choices for each of these in the repositories, if needed. The decision to not provide an email client was made a few releases back, due to the increased use of webmail.

Conclusions

Even though it lacks a Wayland display server and runs X11 instead, Lubuntu 26.04 LTS is still a good release, although it has very little that is new. It does have three years of support, until April 2029.

It will be interesting to see if and when Wayland does appear in Lubuntu. Once again, the release announcement includes a plea for more developer help. A couple of other Ubuntu flavors have missed releases recently, including Ubuntu MATE 26.04 LTS and Ubuntu Unity 25.10, although Unity did make a 26.04 release, but not as an official LTS. Will Lubuntu find the support it needs to keep going or not? I guess we will see in the next development cycle, starting with Lubuntu 26.10,

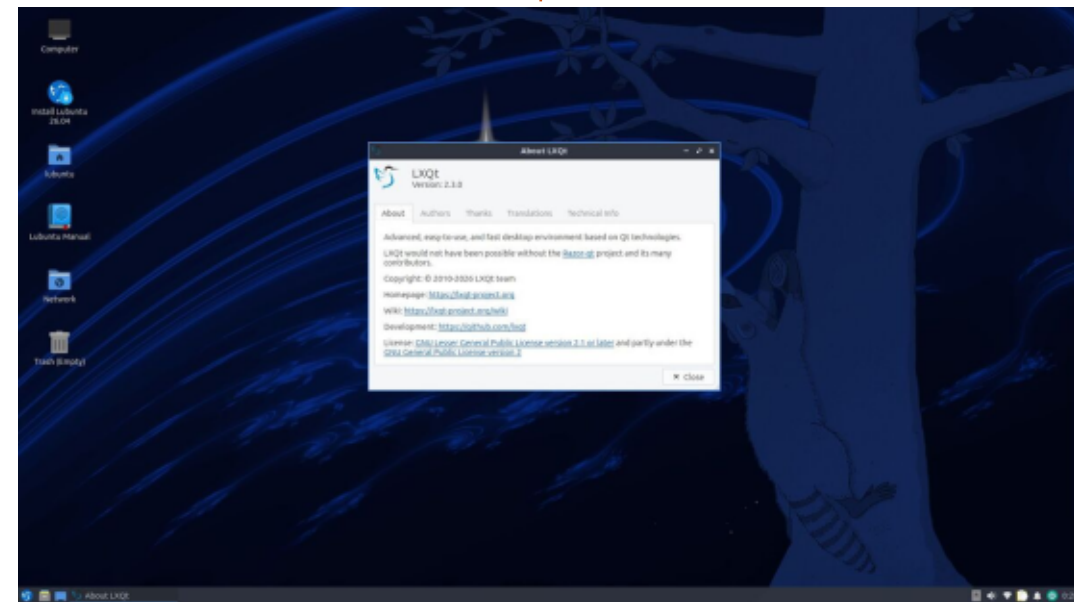
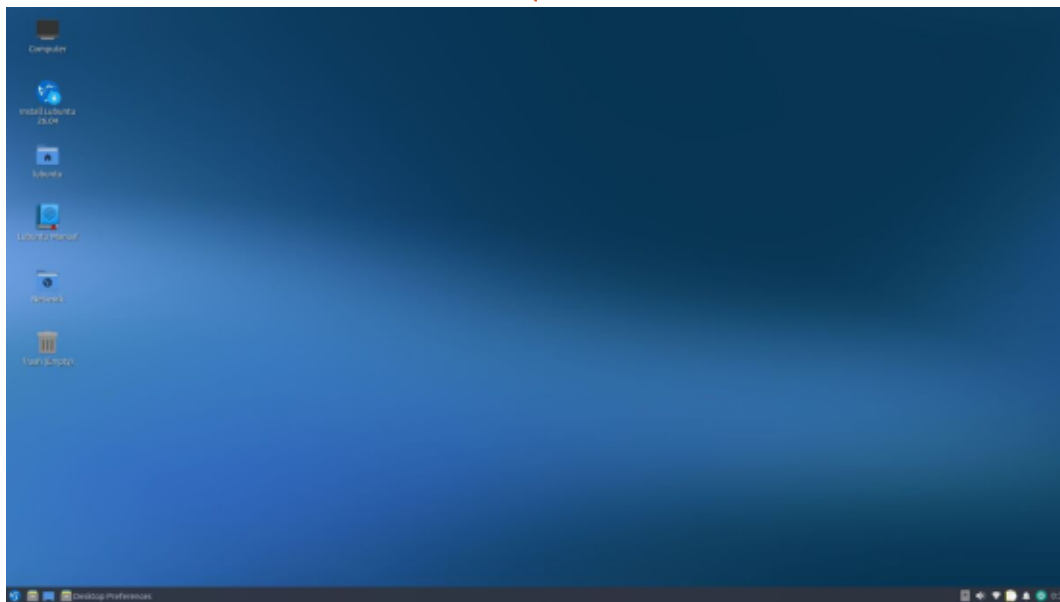
due out on 15 October, 2026.

External links

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



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





This latest long term support (LTS) version of Xubuntu arrived with the other Ubuntu flavors on 23 April, 2026.

Xubuntu 26.04 LTS is the 41st Xubuntu release. It marks the 20th anniversary for Xubuntu, which first appeared as version 6.06. Interestingly enough, this first version was scheduled for release in April, 2006 but did not come out until 23 June. That year, the only off-schedule release of Ubuntu ever occurred as Ubuntu 6.04 was just not ready. This delayed the two other flavors based on Ubuntu, Kubuntu and Xubuntu, then in existence, which all came out as 6.06 releases instead.

Being a long term support release, Xubuntu 26.04 LTS comes with three years of support, running until April 2029.

Xubuntu continues to provide a choice of two separate user downloads. Xubuntu Desktop has a full suite of applications, while Xubuntu Minimal has only a minimum of applications, allowing

users to add what they want. I think that providing two different downloads is a better approach than the one Ubuntu uses. Ubuntu has the same two options bundled into one really big ISO file, with the choice of versions coming at installation, instead of at download.

Xubuntu has always been a conservatively-managed distribution, so its transition from X11 to a Wayland protocol display server has not been as quick or complete as with Ubuntu or Kubuntu, both of which are already Wayland-only.

Installation

I downloaded Xubuntu 26.04 LTS Desktop from the official source, using the Transmission BitTorrent client and carried out a command line SHA256 sum check to ensure the download was good.

The ISO file was 5.2 GB, which is 500 MB larger than the previous Xubuntu 25.10 release. Xubuntu is now a bigger download than Kubuntu 26.04 LTS (5.2 GB versus 5.1 GB). The Xubuntu Minimal ISO file is a 3.25 GB download, making it

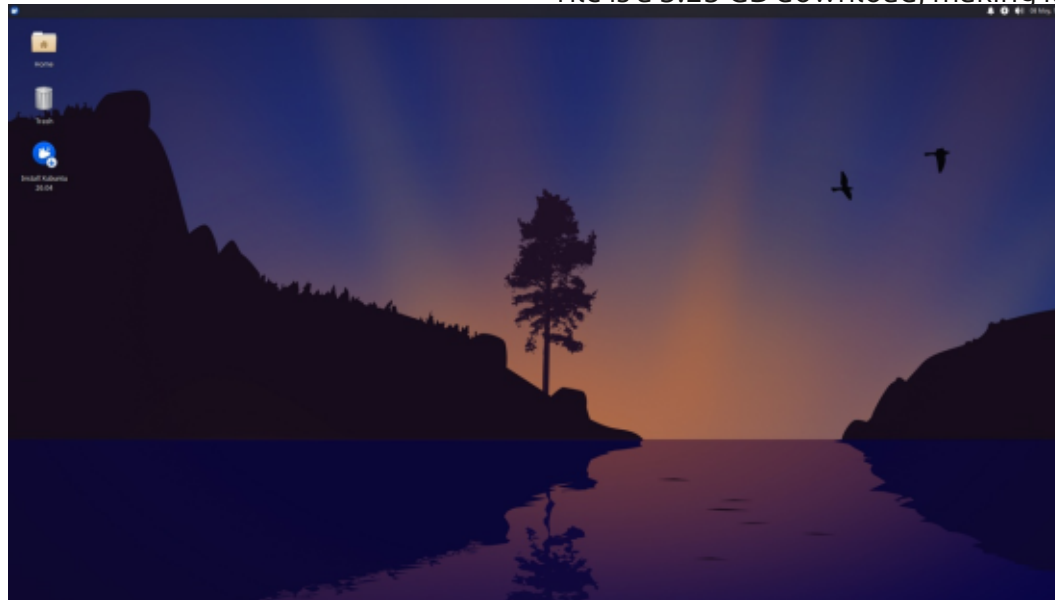
63% of the full version.

I tested Xubuntu 26.04 LTS Desktop over a series of live sessions, using a USB stick equipped with Ventoy 1.1.12, by just dropping the ISO file onto the stick and booting it up from there. Ventoy officially lists Xubuntu as supported so it worked perfectly, as expected.

About Those Live Sessions

The Xubuntu Team developers must really hate their users and especially people like me trying to do reviews of Xubuntu 26.04 LTS, because they continue to sabotage the Xubuntu live sessions which are a feature of the ISO.

In the recent past, they disabled mounting external drives in live sessions, which makes it hard to use Xubuntu as a rescue disk and also makes it difficult to take the screenshots needed for reviews and get them off the live session, since the obvious and simple



REVIEW

method of using a USB drive does not work, as it will not mount. In the past, I was forced to sign into a cloud service and upload my screenshots over WiFi. Now, in Xubuntu 26.04 LTS the developers have disabled WiFi in the live sessions as well, unless you catch the prompt in the first two seconds after boot-up. After that there is no WiFi connection tool available and, of course, none can be downloaded either. This reduced me to plugging in an Ethernet cable, which actually did connect, to upload my screenshots to a cloud service. I suppose in the next release they will disable Ethernet as well.

I cannot imagine why the Xubuntu Team is doing this as it

serves no purpose and, aside from making it useless as a rescue disk, it is jamming reviewers and, I will add, not disposing them to be charitable to Xubuntu in their reviews.

I will add that most of the other Ubuntu flavor's live sessions do not do this, as it is pointless, accomplishing nothing and it just annoys users.

My advice to the Xubuntu Team would be this: "knock it off".

System requirements

In the past, the Xubuntu Team has always published recommended system requirements, but the page

was deleted from their website in late 2025 and there does not seem to be any new guidance provided in its place.

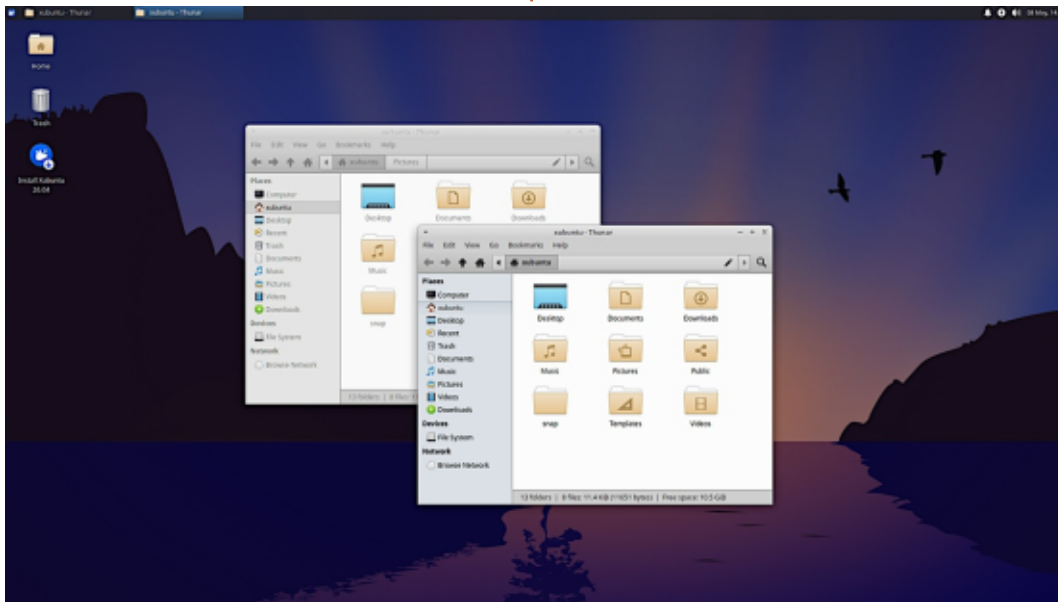
Not providing system requirements is not unique to Xubuntu. The Lubuntu project intentionally stopped publishing them eight years ago, although the Lubuntu developers did at least announce at that time that they would not be providing them anymore.

New

This Xubuntu release uses the Xfce 4.20 desktop, with applications mostly from the GNOME 49 and

MATE 1.28 desktop collections. There are also some minor version upgrades to some of the core Xfce utilities included, such as the Xfce4 Panel going from version 4.20.4-1 to 4.20.7-1.

Because Xubuntu is still by default using the old X11 display server, it cannot use the latest GNOME application versions which are now Wayland-only since GNOME 50 came out. Wayland is still available in Xubuntu 26.04 LTS only as a test option at boot-up and the release announcement says Wayland is "for those adventurous enough to use it", as it said in the last release announcement. While it doesn't sound like any progress is being made in the transition to



Wayland, it is not a move expected in an LTS release where stability is normally prioritized over introducing new features. Perhaps the Wayland display server will become the default in the next two-year development cycle. If so, we can expect to see movement in that direction in the next interim release kicking off the new development cycle, Xubuntu 26.10, due out on 15 October, 2026. In many ways, the Xubuntu developers don't have a lot of choice in the matter. Their reliance on GNOME applications which no longer support X11 will result in Xubuntu using increasingly old applications, unless they make the move to Wayland.

Settings

Xubuntu 26.04 LTS continues to use Greybird as its default window theme, which is now at Greybird version 3.23.4, bumped one decimal place from the last release. The current Greybird theme has evolved quite a bit over time and is a distinct improvement over earlier versions.

As in past releases, there are still six window themes provided in the "Appearance" manager: Adwaita, Adwaita-dark, Greybird, Greybird-dark, High Contrast and Numix.

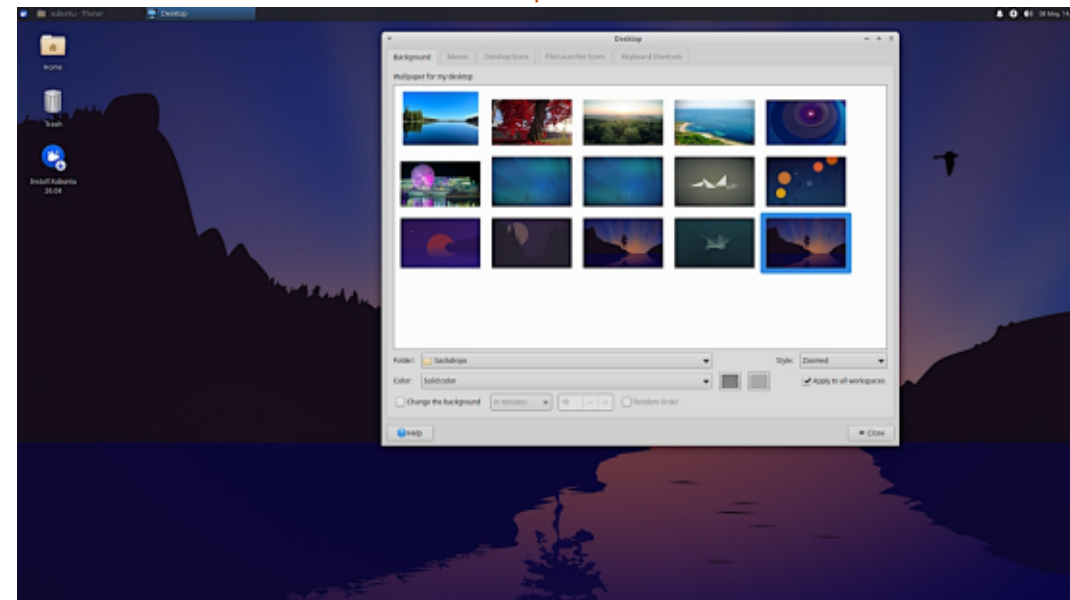
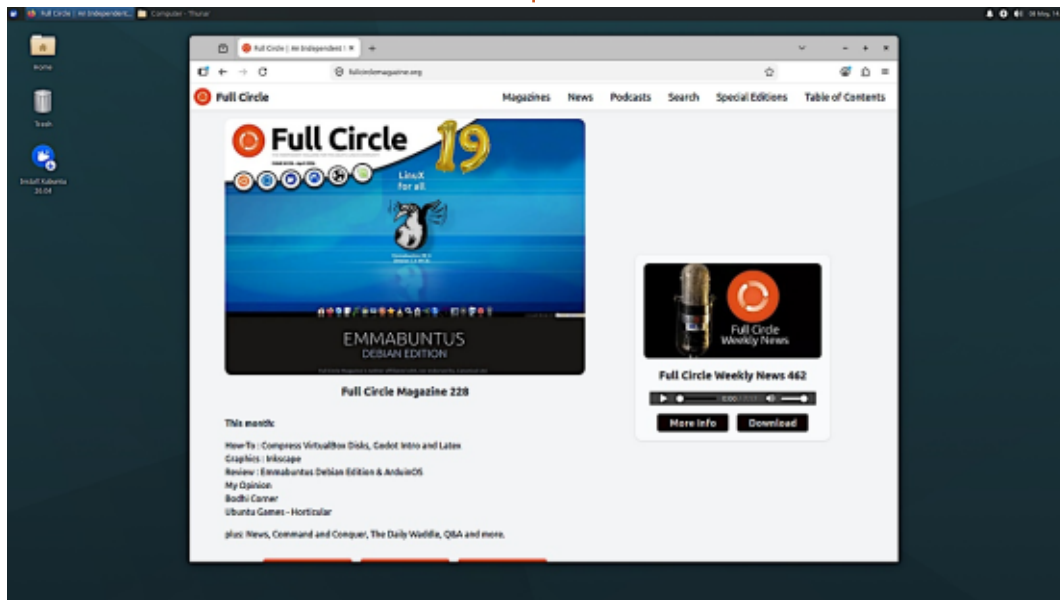
The separate Window Manager also has 12 window title bar themes: Default (which is, oddly,

not the default, as Greybird is), Daloa, Default-hdpi, Default-xhdpi, Greybird, Greybird-accessibility, Greybird-compact, Greybird-dark, Greybird-dark-accessibility, Kokodi, Moheli and Numix.

There are five icon themes in "Appearance". These are GNOME, HighContrast, elementary Xfce (HiDPI), elementary Xfce dark and elementary Xfce as the default. Oddly, elementary Xfce dark is marked right on the interface as "deprecated, please use elementary Xfce". Even stranger, GNOME, HighContrast and elementary Xfce dark are tagged with warnings that say they are incomplete. Something is missing here! These sorts of rough edges really detract from the

user experience. They might be forgivable in a beta or even in an interim release, but really should not be present in an LTS release!

Xubuntu and the Xfce desktop are often criticized as looking increasingly dated and they do have a sort of "Windows 98 aesthetic". Whether you like it or not is really a matter of personal taste, though. Xfce does lack the clean, modernist look of today's GNOME 50 desktop and even KDE these days, but there are certainly users who feel that Xfce's rather "retro" look is so far out of style that it is "in". Mostly it is hard to argue with since it works well and the lack of anything equivalent to the GNOME 2 to GNOME 3 transition means that



REVIEW

upgrading your Xubuntu version involves almost no learning curve. It is worth mentioning that over the 20 years since 6.06 came out, Xubuntu has never changed desktops unlike Lubuntu (LXDE to LXQt) and Ubuntu (GNOME 2 to Unity to modified GNOME 3). For users there is value in consistency.

New Xubuntu releases almost always come with a new default wallpaper and Xubuntu 26.04 LTS is no exception and this one has another minimalist night landscape, very similar to the Xubuntu 25.04 and Xubuntu 25.10 wallpapers. Xubuntu 26.04 LTS also provides 14 other wallpapers, including some nice landscapes and even a new and fairly attractive Xfce mouse

wallpaper. Alternatively, you can easily download any of the old Xubuntu release wallpapers or just use your own. Even though this release is code named "Resolute Raccoon", the developers ducked it, not including any raccoon-themed wallpapers.

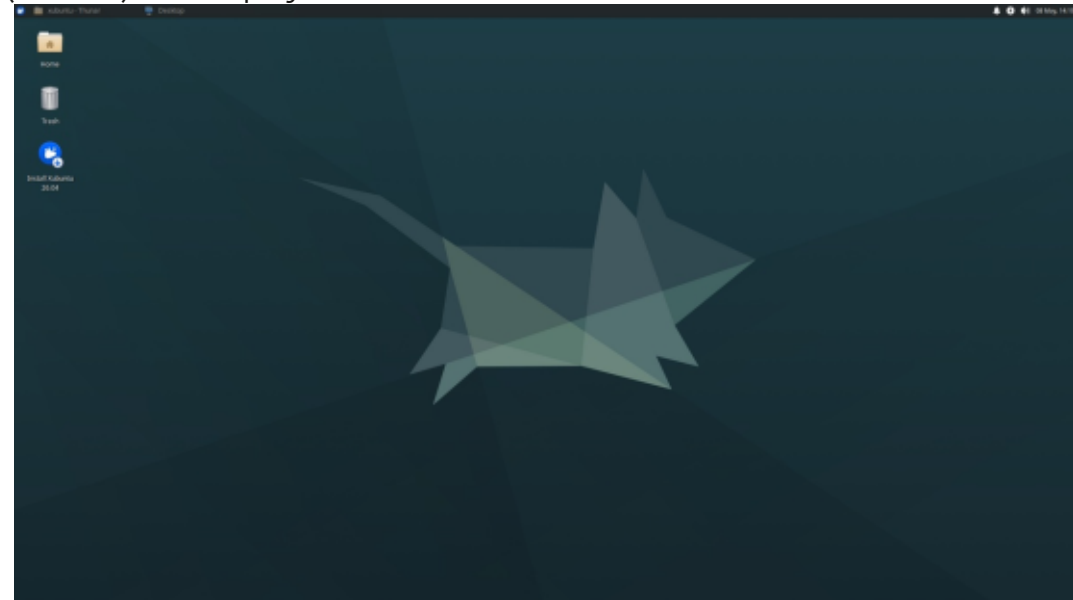
Just like all the Xubuntu releases since 14.04 LTS, this one employs the Whisker Menu as its menu system, replacing the standard Xfce menu. The Whisker Menu can be resized and includes search, both of which are nice to have. Whisker is better in every way than the original menu.

Applications

Some of the applications and utilities included with Xubuntu 26.04 LTS Desktop are:

- Atril 1.268.2 PDF viewer
- Blueman 2.4.4 bluetooth connector*
- CUPS 2.4.16 printing system
- Catfish 4.20.0 desktop search*
- Engrampa 1.28.2 file archiver
- Firefox 149.0.2 web browser**
- Firmware Updater 0+git.5645b80 firmware updater**
- Gdebi 0.9.5.8 application installer*
- Gigolo 0.6.0 remote file mounter
- GIMP 3.2.2 graphics editor
- GNOME Disks 46.1 disk space and health monitor*
- GNOME Disk Usage Analyzer 49.1 (baobab) disk display

- GNOME Document Scanner 48.1 (simple-scan) optical scanner*
- GNOME Mines 49.0.1 game
- GNOME Sudoku 49.3 game
- Gparted 1.8.0 partition editor
- Hexchat 2.16.2 IRC client*
- LibreOffice 26.2.2.2 office suite
- MATE Calculator 1.28.0 calculator
- Mousepad 0.7.0 text editor
- Parole 4.20.0 media player
- Pipewire 1.6.2 audio controller
- Ristretto 0.13.4 image viewer
- Rhythmbox 3.4.9 music player
- Software Updater 26.04.5 (update-manager) software update manager
- Synaptic 0.91.7 package management system*
- Systemd 259.5 init system
- Thunar 4.20.7 file manager
- Thunderbird 140.9.1 ESR email

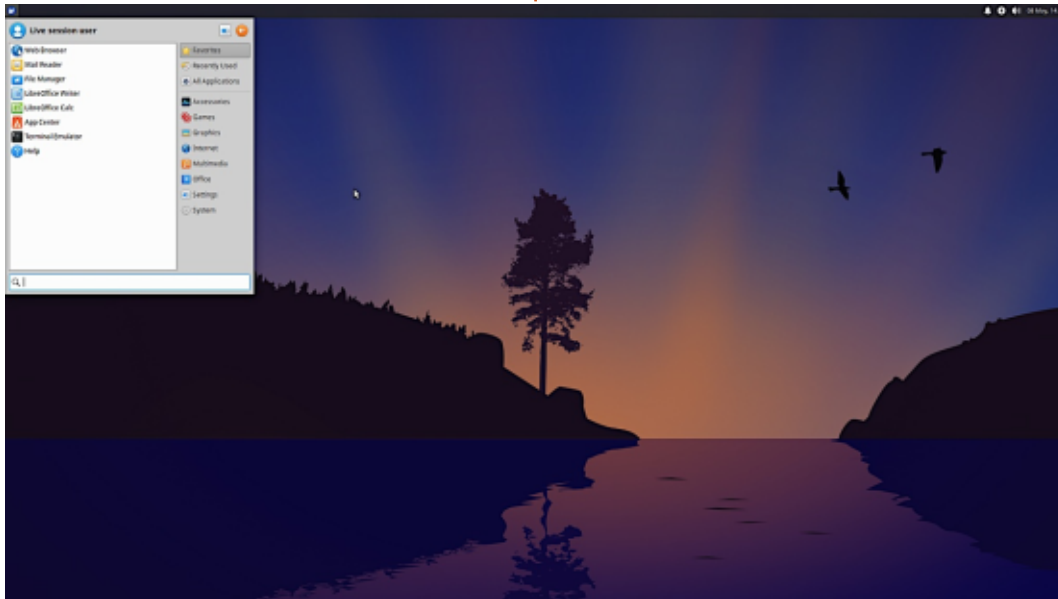


client**
Transmission 4.1.1 BitTorrent client
Ubuntu App Center package
management system**
Wget 1.25.0 command line
webpage downloader*
Xfburn 0.7.2 CD/DVD burner*
Xfce4 Panel 4.20.7 desktop panel
Xfce4 Power Manager 4.20.0
system power manager*
Xfce4 Screensaver 4.20.1
screensaver*
Xfce4 Screenshotter 1.11.1
screenshot tool*
Xfce4 Terminal 1.1.5 terminal
emulator
Xfce4 Whisker Menu 2.10.1 menu
system

* indicates same application version
as used in Xubuntu 25.10.

The default mix of applications
in Xubuntu 26.04 LTS has not
changed in this release. It remains a
very extensive list, with just about
everything a desktop user might
want except perhaps a video editor
or a webcam client. If this list has a
bunch of detritus you think you may
want to remove after installation,
you can always use the Xubuntu
Minimal ISO instead and then add
what you do want. In general, the
full Xubuntu Desktop ISO may be
better suited to new users and the
Xubuntu Minimal ISO for more
experienced ones who know what
they want.

Xubuntu and Ubuntu Cinnamon
remain the last two Ubuntu official



flavors that still have a default CD/
DVD burning application. Optical
drives started disappearing on new
laptops in about 2011, which is now
15 years ago, so you will not only
need an old computer to make use
of this but also a supply of CDs or
DVDs. At one time, these burning
applications were included with all
the Ubuntu flavors but since USB
drives supplanted CD/DVDs the rest
have dropped them. I am still
waiting to see when the Xubuntu
Team makes that same move, but it
has not happened yet.

Conclusions

Xubuntu 26.04 LTS is generally a
good solid release, with some
updated applications and utilities,
but with very little that is new
otherwise. There are a few rough
edges in some of the settings,
though, that really shouldn't be in
an LTS release.

Most Xubuntu users seem to like
its consistency from release to
release, as it makes it predictable
and reduces any potential learning
curve to nearly zero. Even though
its interface does look rather dated
these days, it does have a sort of
"retro appeal" and continues to

work efficiently.

One item that will need
addressing over the next two-year
development cycle is the transition
to a Wayland protocol display
server. The ideal time to make this
move would be in the next interim
release, Xubuntu 26.10, which will
begin the new development cycle
and is due out on 15 October, 2026.
That would allow enough testing to
be confident in using Wayland in
the next LTS release, Xubuntu 28.04
LTS, expected in April, 2028.

On a personal note, I am hoping
that the Xubuntu Team will stop
messing with the Xubuntu ISO live
sessions and restore its ability to
mount USBs and access WiFi.

External links

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



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



LETTERS

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ubuntuforums.org/forumdisplay.php?f=270

FULL CIRCLE NEEDS YOU!



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

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

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



Q&A

Compiled by EriktheUnready

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

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

The only certain thing is change and greed. Companies were quick to get rid of staff and computer hardware to move to the cloud, seeing only dollar signs, as they chased after the perceived savings. However once you give up your "children" to the "enemy", like they did in ancient times, they had you by the short and curlies. This also happened with companies loading their data into the cloud, where cloud providers made it

impossible for you to get your data out again. Those same people would praise cloud services in what can only be described as Stockholm syndrome. SMH... It is now even worse when every cloud client is expected to pay for the next cash cow, AI. Just do an internet search for "cloud provider price increases since 2016" and look at the jump in 2025. Prices keep going up and it all runs on Linux, software you do not pay for. Do these companies give even 10% of the profit back to Linux? Of course not! Even electricity for the average Joe has gone up to fund the AI goldmine. How much of that is given to the Linux Foundation? But when Microsoft knocks, everyone pays up, don't you find that strange?

Q: I am a bit scared to add PPAs to Ubuntu as I have heard bad things. That said, I need a program I can only find in there, https://launchpad.net/ubuntu/+archive/primary/+files/librespeed-cli_1.0.11-1_amd64.deb and I'd like to install it. What are my options?

A: Install it. You did not say what version or flavor of Ubuntu you are using, but simply install it once you download it. I did notice that there was a newer version, <https://github.com/librespeed/speedtest-cli/releases/tag/v1.0.12> and I suggest grabbing that. You can look in places like the index of /kali/pool/main/libr/librespeed-cli/ too. If you are asking about the command line, `sudo dpkg -i` or even `sudo apt install` will work.

Q: I need a Ubuntu rolling release as the packages are getting stale. How can I fix that? Ubuntu 24.04.01 already.

A: Then Ubuntu is not what you want. I suggest looking up Rhino Linux, as the idea around these older packages being kept is the stability of the system is taken into account. I understand that it is frustrating, I recall "needing" a newer version of VLC to play my training video's faster without the sound going postal, before learning

about SMPlayer. Bleeding edge is fine and well, but you need to step up your game then.

Q: So this,
`sudo apt search godot`
`[sudo] password for barry:`
`Sorting... Done`

`Full Text Search... Done`
`godot3/noble-apps-security`
`3.5.2-stable-`
`2ubuntu0.24.04.1~esm1 amd64`
`Full 2D and 3D game engine`
`with editor`

`godot3-runner/noble-apps-`
`security 3.5.2-stable-`
`2ubuntu0.24.04.1~esm1 amd64`
`Godot game engine run-time`

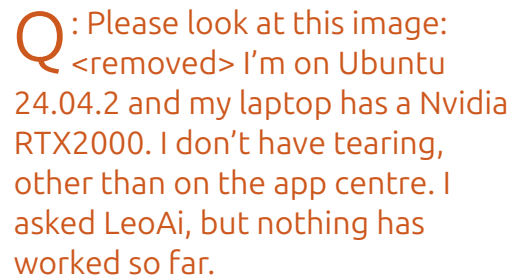
`godot3-server/noble-apps-`
`security 3.5.2-stable-`
`2ubuntu0.24.04.1~esm1 amd64`
`Headless Godot game engine`
`run-time`

Why can't I get version 4?

A: Good question! You can just grab the latest version as a Snap, or directly from the website as a portable version or even install it via Steam.

Q: Hi! I have been faithfully upgrading versions of Ubuntu since 16.04, and now I wanted to add Ubuntu Pro to it, but that option is just not available in the upgraded version of my OS. If I boot with a live ISO image, the option is the last tab in software and updates, however, this is just missing in the upgraded OS.

A: I'm not saying it will work, as this is the first time I have come across the question, but I'd say, look here: <https://oneuptime.com/blog/post/2026-03-02-switch-ubuntu-server-to-ubuntu-pro/view>

Q: Please look at this image:  I'm on Ubuntu 24.04.2 and my laptop has a Nvidia RTX2000. I don't have tearing, other than on the app centre. I asked LeoAi, but nothing has worked so far.

A: I did a quick google search and found this: <https://askubuntu.com/questions/1566523/screen-tearing-and-artifacts-when-using-ubuntu-app-center-on-an-nvidia-rtx-2000>

Q: I am having an issue with the Nvidia driver and when the laptop goes to sleep. Once I open the lid and start to work, I can open a terminal window and type `nvidia-smi`, and instead of displaying the information, instead I get: "nvidia-smi failed because it couldn't communicate with the nvidia driver. Make sure that the latest driver is installed and running." After I restart, all is well again. What is all that about then?

A: My suggestion is to run `nvidia-detect` from the command line and see what is installed. If you don't see anything, you would need to install your driver again. That said, even if you do, I'd suggest reverting to an older version and rebooting, before installing your current version again. I suspect that it would fix your error.

Q: I'm new to Ubuntu, coming from Windows 7,8,10,11. My question is, how do I install drivers on Ubuntu? My soundcard and Wifi are ancient and still came with CD's that don't work on Windows 11. Ubuntu is said to make my old

hardware work, but I don't know how to install these drivers.

A: Ubuntu is not Windows. Drivers are baked in, (mostly) and if you need additional drivers, hit your start menu and start typing "add" for additional drivers and see if there are drivers that you need to load. Those CD's *may only be needed should you use WINE.

Q: Why do I keep seeing restart Firefox to continue using this tab? It's kinda frustrating. I don't turn my computer off, I only turn off the screen, as I keep my socials and comms open all the time. I'm still using Ubuntu 22 as my system will not upgrade to 24. It needs some updated software that is not getting updated. Not sure what that is all about. I'll probably have to reload this summer, but it is a pain.

A: My best guess is that the Snap/Flatpak/deb updated in the background and requires you to restart the application to update. I'd need a bit more information if I were to try and diagnose something like that. As to the second part, sometimes you need

to sign up for Ubuntu Pro (it's free) to update certain files that are not offered directly in the updates as they may have been .deb-files that Ubuntu now uses snap files for.

Q: Every time I log into Runtu, I get "System Program Problem Detected. Do you want to report the problem now? Cancel or Report" I don't know what is wrong. I did not change any settings recently, but it just started and won't go away. Can you assist me here?

A: Runtu is a heavily redacted/modified version of Ubuntu. It could be that some software that recently updated, needs something that Runtu is not providing. Your best bet would be to hit "report" and then you should be able to see what is wrong. You could even schedule a disk check for your next reboot, just to be safe. You could also install a log reader to see what has been happening (try `lnav`, <https://github.com/tstack/lnav>) – I'm not sure what Runtu ships with.

Q&A

Q: What version of Ubuntu is closest to Mac OS?

A: You can make Ubuntu look just like Mac OS, but Mac OS is closer to BSD under the hood. If it's purely aesthetic and you don't want to do it yourself, consider Pearl OS (although it is a highly political OS). You might also consider Elementary OS.

Q: Kubuntu is getting really slow to boot on my old Dell T20 server. It is my workhorse and I don't want to get rid of it. It SHOULD not take this long for Linux to start!! KDE is not heavy at all. I want to turn on my computer and work.

A: The latest KDE is sort of the problem, but a bigger issue is snaps. For every snap installed, Ubuntu takes a few seconds to mount them as a drive and it adds up quite quickly. It is very noticeable on spinning rust. (a bit less on an SSD) I have done a comparison a while back with an older version of SUSE, that was still the previous version of KDE and it started in half the time, so plasma is

not blameless. You could try Debian 13 Trixie KDE respin if you are attached to KDE, or if you feel brave, install FUN OS and install the KDE desktop from there to keep Ubuntu, sans snaps. Feren OS may also be a solution.



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



Website: <https://www.michelepirovano.com/portfolio/dotage.php>

Price: +-\$4

Blurb: *"We thought we were alone in this world... but I just remembered that different Pipfolks lived in these lands! Were they friend or foe? We will find out!"*

Meet the various Pipfolks that live at the outskirts of the village, try to get them to join your village and start populating it with their kin, or keep them at bay by making sure you do not anger them with your actions. Pipfolks bring with them unique bonuses, special food and promotion requirements, dedicated events, and dedicated buildings for dwelling and for production.

From the mysterious Fishpips, to the industrious Dwarves, to the unreliable Cats and more, meet the various folks that make up the inhabitants of this strange world!"

The dlc for Dotage (.age) released. For those wondering why it is dot age not dotage, even though it is written as dotage, it is because they tell you so. (I know English is quirky, with words like 'live', but dot age and dotage are nowhere near, but I digress) It is not a large dlc by any stretch of the imagination.

Once installed it shows up on the main screen, but you cannot control it from there, clicking on it will do nothing.

However, you can change this once you start the game, and get to the elder choice screen, the "fish" icon comes up again on the right and you can click it off if you only want the base game. The dlc is on the right under "Expansions"

Installation:

I had the GOG version and the install went smoothly and took a whole two seconds. :) The game runs via .exe-file, so I'm assuming

translation, but it works well on Ubuntu and Mint.

Gameplay:

I cannot recall if we talked about the base game in FCM before, but if we have not, the QRD is that it is a "sim" game, that simulates a board game. You can make any moves that you like during the day and once you click the "sun" (turn over) in the bottom right, the day is over and the actions you performed during the day are locked in and added or subtracted. (You are allowed to change actions as many times as you like during the "day", but only the ones that are active when you click the turn-over "sun", are locked in.)

As you play, you "unlock memories", as your elder suddenly remembers how to do something. Once the old git remembers something, you can research it. The game is filled with a lot of humour, but it is still a serious game. Be prepared to lose... a lot. Though you can set the difficulty down to casual, the game is still the same,



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the resources are just more plentiful.

As you play, you will unlock elders, each elder has different starting bonuses, and “know” certain buildings from the get-go. There are three new elders in the dlc. (explained at the end) They were not available for selection on my installation, so I went ahead and installed a fresh copy on my “work” laptop and they were not selectable in a fresh install either, so I’m assuming that I need to unlock them somehow. Anything dlc-related has a fish icon affixed to it.

Graphics:

The main game is still the same, with the 8-bit aesthetic, which sort-of works, as it is a board game by heart, though if I’m being honest, I would have preferred if it was one “generation” up, as the blocky thing gets a bit much. That said, the game has a colourful and happy palette that is easy on the eyes. The “pips” (as in board gaming) look cartoonish and they will aimlessly wander or work, until “turn over” when there are clever animations that will extract food from your resources in the top left and assign one of it to each pip. The other animations feel a bit stiff, with too few frames (know what I mean?). Since you

interact with the elder, you will see his animations the most. I do not see any changes in the graphics with the dlc on or off.

This is a personal observation, I don’t really like cookie-cutter, I like a bit of variety. I’ll include a screenshot of the main gameplay screen so you can see that all the berry bushes and all the green trees, for instance, are the same rubber-stamped copy. I was really hoping the dlc would introduce a bit more variety, but it did not.

Sound:

Though Dotage is a board game

at heart, it is also a love letter to the 8-bit era, with some “speech” on the tile screen and nowhere else. The pips and the elder speak simlish. This is not a bad thing and I’m not saying it in a bad way, but I know there are people out there who do not like simlish. As to the background music, words like calming and soothing come to mind. Have a listen here: https://www.youtube.com/watch?v=rMFbltJMpAY&list=PLsXZBsGp_sUQIJc3TWcqfhUXT4BQ6BQkl&index=1

With the folkways dlc update being so small, it is obvious no new music was added. The combination



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of relaxing music and bright colours make this a favourite of many, but don't let the relaxing music fool you, underneath is a crafty game that will not just give you the win. I suppose it can even fall into the roguelike category, which I know will make some of you happy.

The game does not exhaust your resources and the fan on my laptop did not even rev up. CPU use was about 15% for the .exe file, with about 1Gb of memory and the dlc made no difference.

OK We've talked about what the

game is all about, let's look at the dlc a bit closer.

Pipfolks system – Villages can now host different pipfolks, each with distinct cultural requirements, special bonuses, and exclusive events.

Expanded village management – New introduction of moral dilemmas and choices with things like prisons, cages, gallows, and butchers.

More than a hundred new buildings – From gold mines and koi

ponds to aqua parks and inkwells, each structure introduces unique mechanics and quirks.

More events, resources, VIPs, and ailments – Including new boons that add more gameplay possibilities.

Three new elders with unique traits:

Trisavolo, the Dwarf king – Rule the mountains, mine precious minerals, and construct a stone fortress.

Ronomy, the old wise cat – Lead a village of cats, hunt and herd mice,

and keep them entertained with yarn and ropes.

Dad, the Jack-of-all-trades – Build unique structures, deploy pipbots, and prepare for survival by deforestation.

If you have not played Dotage, now is a good time to buy the combination pack and save a few dollars. We know things are tight.

The developer is a PHD student from Italy, so I'm assuming these games are towards her degree and since they are very reasonably priced, I say give a student a hand if you can. (iirc, the dlc launched at \$8, so \$4 is 50% off!) The game is fun and frustrating sometimes, making for an all-round experience, with enough clever mechanics to keep you guessing and some meta-progression to keep you coming back for more.



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.

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



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