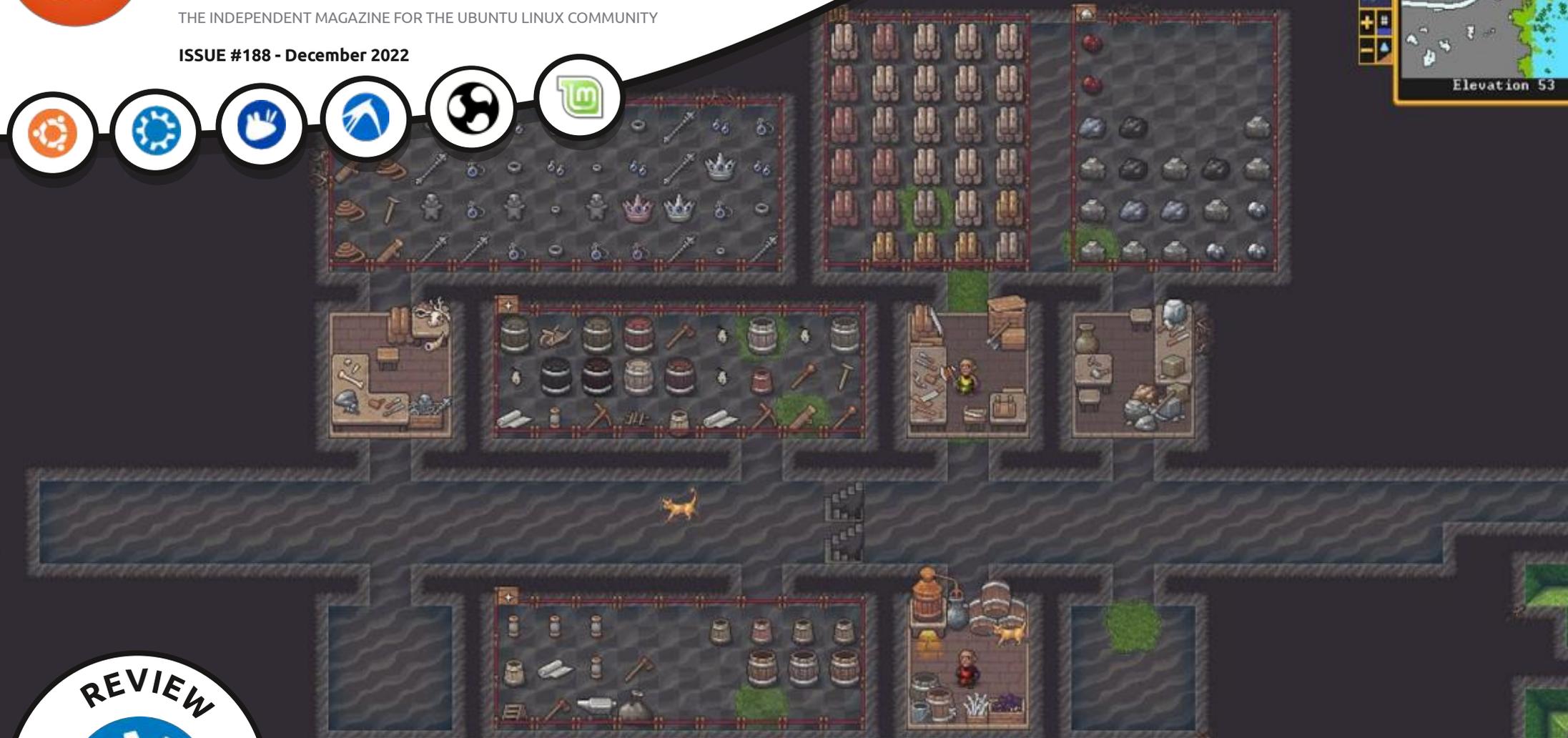




Full Circle

THE INDEPENDENT MAGAZINE FOR THE UBUNTU LINUX COMMUNITY

ISSUE #188 - December 2022

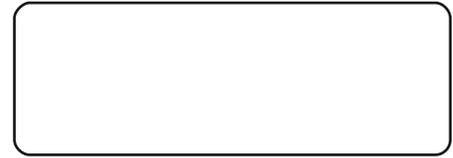


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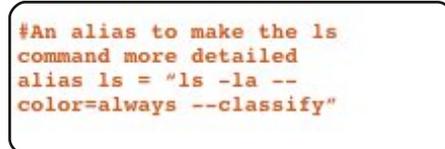
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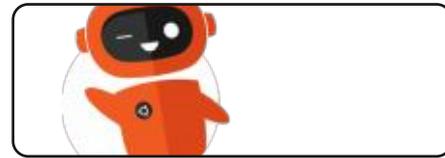


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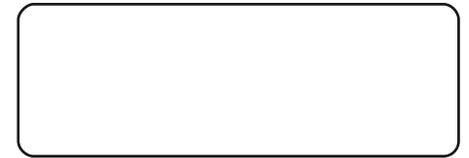
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WELCOME TO THE LATEST ISSUE OF FULL CIRCLE

Happy holidays! We have; Python, Latex, and Inkscape for you this month. No Blender this month, but hopefully next month. We bid farewell to Micro This Micro That for now, but hopefully it'll be back. In distro review's we've got Kubuntu 22.10 and Ubuntu Cinnamon 22.04. Elsewhere, I review Dwarf Fortress. Again? No. Well, not really. The planet's have finally aligned and we have a full GUI Dwarf Fortress available on Steam (and Itch). It's no surprise to say that I love it.

Just as I was uploading FCM#187 OTA-24 for Ubports Touch was released. The release notes for it are in this issue. I was right though in that this is the final major release of this old Ubuntu based Touch. The next big release should be more modern. Still a couple of years behind now, but still better than the current version.

Don't forget: 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.

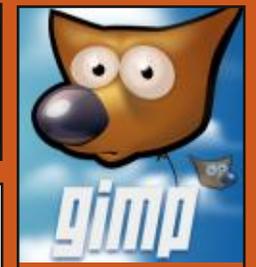
Anyway, all the best for 2023!

Ronnie

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IKKI BOOT 22.12 RELEASED

Version 22.12 of the Live cd and Linux tools compilation for troubleshooting was released on December 8th.

On the menu are updates for SystemRescue, GParted, Clonezilla and Memtest86+.

Also a custom version of Porteus XFCE with Firefox with the Ublock Origin extension, Abiword, KeePassXC, Veracrypt and many other things.

<https://ikkiboot.tuxfamily.org/en/news.html>

GIMP 2.99.14:

20/11/2022

The release GIMP 2.99.14, that continues to develop the functionality of the future stable branch GIMP 3.0, in which the transition to GTK3, with added

standard support Wayland and HiDPI and support for the CMYK color model is implemented, is out. It had a significant cleaning of the code base, a new API for the development of plugins was proposed, the caching of the drawing was implemented and support for the selection of several layers was provided. Flatpak installation is available (org.gimp.GIMP in flathub-beta repository), as well as builds for Windows and macOS.

<https://www.gimp.org/news/2022/11/18/gimp-2-99-14-released/>

SQLITE DBMS 3.40:

21/11/2022

SQLite 3.40, lightweight DBMS, designed as a plug-in library, was released. The SQLite code is distributed as a public domain, i.e. can be used without restrictions and free of charge for any purpose. The financial support for SQLite developers is provided by a

specially created consortium, which includes companies such as Adobe, Oracle, Mozilla, Bentley and Bloomberg.

<https://www.sqlite.org/changes.html>

RELEASE OF ORACLE LINUX 8.7:

21/11/2022

Oracle has released Oracle Linux 8.7, based on Red Hat Enterprise Linux 8.7. To download without restrictions, an installation of 11 GB and 859 MB are distributed, prepared for x86_64 and ARM64 (aarch64) architectures. For Oracle Linux, unlimited and free access to the yum repository with binary update packages with bug fixes (errata) and security problems are open. The separately supported Application Stream modules are also prepared for download.

In addition to the core package

from the RHEL (based on the 4.18 core), Oracle Linux offers its own core Unbreakable Enterprise Kernel 7, based on the Linux 5.15 kernel and optimized for working with industrial software and Oracle equipment. The source of the kernel, including the breakdown into separate patches, are available in the public Oracle Git repository. The Unbreakable Enterprise Kernel core is installed by default, positioned as an alternative to the RHEL kernel package and provides a range of advanced features such as DTrace integration and improved Btrfs support.

In addition to the delivery of the Unbreakable Enterprise Kernel R7 kernel, the functionality of Oracle Linux 8.7 and RHEL 8.7 is completely identical (the list of changes in Oracle Linux 8.7 repeats the list of changes in RHEL 8.7).

<https://blogs.oracle.com/linux/post/oracle-linux-8-update-7>

RELEASE OF KRUSADER 2.8.0:

22/11/2022

After four and a half years of development, the two-panel file manager Kurusader 2.8.0, built using Qt, KDE technology and KDE Frameworks, was released. In Krusader there is support for archives (ace, arj, bzip2, gzip, iso, lha, rar, rpm, tar, zip, 7zip), checking hashes (md5, sha1, sha256-512, crc, etc.), access to external resources (FTP, SAMBA, SFTP, SCP) and mass renaming functions. There are built-in partitions, terminal emulator, text editor and file content viewer. The interface supports tabs, bookmarks, tools for comparing and synchronizing the contents of directories. The code is written in C++ and is distributed under the GPLv2 license.

<https://groups.google.com/g/krusader-devel/c/3xPFnUgJwZY>

RELEASE OF THE ALPINE LINUX 3.17:

22/11/2022

Alpine Linux 3.17, a minimalist distribution built on the Musl system library and a set of BusyBox utilities was released. The distribution features increased security requirements and is assembled with SSP (Stack Smashing Protection). OpenRC is used as an initialization system, and apk own packet manager is used to manage packages. Alpine is used to form official Docker container images and is used in the PostmarketOS project. Loading Iso-images (x86_64, x86, armhf, aarch64, armv7, ppc64le, s390x) are prepared in five versions: standard (166 MB), with core edition, without patches (170 MB), extended (774 MB) and for virtual machines (49 MB).

<https://alpinelinux.org/posts/Alpine-3.17.0-released.html>

RELEASE OF PALE MOON 31.4:

22/11/2022

Pale Moon 31.4, which was branched from the Firefox code base to ensure higher efficiency, protect the classical interface, minimize memory consumption and provide additional customization options, has been released. Pale Moon builds are built for Windows and Linux (x86 and x86_64). The project code is licensed under the MPLv2 (Mozilla Public License).

The project adheres to the classical interface layout, without moving to the integrated in Firefox 29 interface Australis, and providing wide customization opportunities. You can note the removal of DRM, Social API, WebRTC, PDF viewer, Crash Reporter, code for collecting statistics, means for parental control and people with disabilities. Compared to Firefox, support for XUL technology has been returned to the browser and the ability to use both full and lightweight themes.

<https://forum.palemoon.org/viewtopic.php?t=29097&p=233961#p233961>

RELEASE OF PROXMOX VE 7.3:

22/11/2022

The release of Proxmox Virtual Environment 7.3, a specialized Linux distribution based on Debian GNU/Linux, aimed at deploying and maintaining virtual servers using LXC and KVM, and able to replace products such as VwareM vSphere, Microsoft Hyper-V and Citrix Hypervisor is out. Installation size of installing iso-image 1.1 GB.

Proxmox VE provides means to deploy a fully finished system of virtual servers of industrial level with a web-based interface designed to manage hundreds or even thousands of virtual machines. The distribution has built-in tools for backing up virtual environments and available out-of-box support for clustering, including the ability to migrate virtual environments from one node to another without stopping work. Among the features of the web-interface is: support for

secure VNC consoles; control of access to all available objects (VM, storage, nodes, etc.) role-based; support for various authentication mechanisms (MS ADS, LDAP, Linux PAM, Proxmox VE authentication).

<https://forum.proxmox.com/threads/proxmox-ve-7-3-released.118389/>

DRAMA IN THE URHO3D COMMUNITY:

22/11/2022

As a result of contradictions in the community of developers of the game engine Urho3D (with mutual accusations of "toxicity"), the developer 1vanK, who has administrative access to the repository and forum of the project, unilaterally announced the

change of the course of development and reorientation to the Russian-speaking community. Since November 21, the notes in the list of changes began to be published in Russian. The release of Urho3D 1.9.0 is the last English-language release.

The reason for the changes is the toxicity of the English-speaking community members and the lack of those who want to join the development (now all the changes are added by the accompanying person). The company of the project (urho3d.io) continues to belong to the former accompanying person (Wei Tjong), which since 2021 has been detached from development.

In response to the ongoing crisis in the Urho3D community, a more conservative fork - U3D, based on

the latest stable release of Urho3D, was built. In response, the accompanying Urho3D advised to make an fork of an earlier release, as he expressed doubts about the author's ability to independently maintain a newly developed Urho3D binding generator. He also expressed skepticism in the ability to develop a fork in practice, since before that the author of the fork did not participate in the development and published only raw and semi-working changes, shifting them to readiness for others.

<https://discourse.urho3d.io/t/the-last-english-release/7362/>

RELEASE OF REDOX OS 0.8:

22/11/2022

Redox 0.8 operating system developed using the Rust language and the microcore concept was published. The project is distributed under a free MIT license. For testing Redox OS offered demo builds of 768 MB, as well as images with a basic graphical environment (256 MB) and console tools for server systems (256 MB). The builds are for x86_64 architecture and are available for systems with UEFI and BIOS. The demo image in addition to the Orbital graphical environment includes the DOSBox emulator, a selection of games (DOOM, Neverball, Neverputt, sopwith, syobonaction), educational programs, a radioplay music player and text editor Sodium.

The user environment in Redox is based on Orbital's own graphic shell (not to be confused with another Orbital shell using Qt and Wayland) and OrbTk tolkidate, providing an API similar to Flutter, React and Redux. Netsurf is used as a web browser. The project is also developing its own package



DistroWatch.com

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manager, a set of standard utilities (binutils, coreutils, netutils, extrautils), command shell ion, standard Relibc C library, vim-like text editor sodium, network stack and file system. The configuration is via the Toml language.

<https://www.redox-os.org/news/release-0.8.0/>

RELEASE OF SDL 2.26.0:

24/11/2022

The SDL 2.26.0 (Simple DirectMedia Layer) library was released to simplify the writing of games and multimedia applications. The SDL library provides such tools as hardware-reusable 2D and 3D output, input processing, sound reproduction, 3D output via OpenGL/OpenGL ES/Vulkan and many other related operations. The library is written in the C language and distributed under the Zlib license. To use the capabilities of SDL in projects in different programming languages, they provided the necessary bindings.

<https://discourse.libsdl.org/t/announcing-sdl-2-26-0/40373>

TWENTY-FOURTH UPDATE OF UBUNTU TOUCH FIRMWARE:

25/11/2022

The UBports project, which took over the development of Ubuntu Touch, after it was removed by Canonical, published an update to the firmware, OTA-24. The project is also developing an experimental port of Unity 8, which is renamed Lomiri.

The update for Ubuntu Touch OTA-24 is built for BQ E4.5/E5/M10/U Plus smartphones, Cosmo Communicator, F(x) Protec Pro1, Fairphone 2/3, Google Pixel 2/2 XL/3a/3a XL, Huawei Nexus 6P, LG Nexus 4/5, Meizu MX4/Pro 5, Nexus 7 2013, Asus Zenfone Max Pro M1, OnePlus 2/3/5/6/One, Samsung Galaxy Note 4/S3 Neo+, Sony Xperio X/XZ/Z/Z4,/ 4/4X/7, Xiaomi Redmi Note 7/7 Pro. Separately, without the label "OTA-24," there are updates for the Pine64 PinePhone and PineTab. Compared to the previous version, the list of supported devices has not changed.

<https://ubports.com/blog/ubports-news-1/post/ubuntu-touch-ota-24-release-3872>

FORGEJO PROJECT STARTS DEVELOPMENT OF GITEA CO-DEVELOPMENT SYSTEM FORK:

26/11/2022

The Forgejo project established a fork of the joint development platform Gitea. The reason is the failure to commercialize the project and concentrate management in the hands of a commercial company. According to the creators of the fork, the project should remain independent and belong to the community. Forgejo will continue to adhere to the previous principles of independent governance.

October 25, the founder of Gitea (Lunny) and one of the active participants (techknowlogick) without prior consultation with the community announced the creation of a commercial company Gitea Limited, which was transferred the rights to domains and trademarks (the trademarks and domains originally belonged to the founder

of the project). The company announced its intention to develop an expanded commercial version of the Gitea platform, provide paid support services, conduct training and create cloud hosting repositories.

It is noteworthy that the Gitea project in December 2016 was founded as a fork of the Gogs project, created by a group of enthusiasts dissatisfied with the management organization in the project. The main motives for creating a fork was the desire to transfer management to the hands of the community and simplify participation in the development of independent developers. Instead of the model used in Gogs, based on the addition of code only through one main person, which makes decisions alone, Gitea applied a model of separation of powers with the right to add code to the repository to several active developers.

<https://codeberg.org/forgejo/forgejo>

ZERONET-CONSERVANCY 0.7.8:

26/11/2022

The production of the project zeronet-conservancy 0.7.8, which continues the development of the decentralized censor-resistant ZeroNet network, which uses the mechanisms of addressing and verification of Bitcoin in combination with the distributed BitTorrent delivery technologies for the creation of sites. The content of the sites is stored in the P2P network on the visitors' machines and checked by the digital signature of the owner. The fork was created after the disappearance of the original developer ZeroNet and aims to maintain and increase the security of the existing infrastructure, moderation of users and a smooth transition to a new, secure and fast network.

<https://github.com/zeronet-conservancy/zeronet-conservancy/releases/tag/v0.7.8>

RELEASE OF ROCKY LINUX 9.1:

28/11/2022

The release of Rocky Linux 9.1 was aimed at creating a free build of RHEL, capable of taking the place of the classic CentOS. The release is marked as ready for work. The distribution is fully binary compatible with Red Hat Enterprise Linux and can be used as a replacement for RHEL 9.1 and CentOS 9 Stream. Support for Rocky Linux 9 will be available until May 31, 2032. Rocky Linux installation images are prepared for x86_64, aarch64, ppc64le (POWER9) and s390x (IBM Z) architectures. Additionally they offer live-builds with GNOME, KDE and Xfce, published for the x86_64 architecture.

<https://rockylinux.org/news/rocky-linux-9-1-ga-release/>

ISSUE QBITORRENT 4.5:

28/11/2022

A version of the torrent client qBittorrent 4.5, written using Qt toolkit and developed as an open alternative to Utorrent, has been released. Among the features of qBittorrent are: integrated search engine, the ability to subscribe to RSS, support for many BEP extensions, remote control via the web-interface, sequential download mode in a given order, advanced settings for torrents, peers and trackers, bandwidth scheduler and IP filter, torrenting interface, support for UPnP and NATMP. The project code is written in C++ and is distributed under the GPLv2+ license.

<https://www.qbittorrent.org/news.php>

RELEASE OF OPENRGB 0.8:

28/11/2022

After almost a year of development, a new release of OpenRGB 0.8, an open toolkit for

managing RGB-illuminating peripherals, was published. The package supports motherboard brands like ASUS, Gigabyte, ASRock and MSI with RGB subsystem for illumination housing, illumination modules from ASUS, Patriot, Corsair and HyperX motherboards, ASUSura/ROG graphics cards, MSIForce, Sapphire Nitro and Gigate Aorus, various LED ribbon controllers (ThermalTake, Nyar, Ns, and Gigae, and Gigate Aorus, accessories Razer with backlight. Information about the protocols of interaction with devices was mainly obtained through reverse engineering of proprietary drivers and applications. The code is written in C/C++ and is distributed under the GPLv2 license. Ready-made builds are available for Linux (deb, rpm, appimage), macOS and Windows. As before, all builds generated after this release will receive version "0.81".

https://gitlab.com/CalcProgrammer1/OpenRGB/-/releases/release_0.8

OPENSUSE TUMBLEWEED TO STOP OFFICIAL SUPPORT FOR X86-64-V1 ARCHITECTURE:

29/11/2022

The developers of the openSUSE project announced an increase in the requirements for equipment in the openSUSE Factory repository and the openSUSE Tumbleweed distribution, which uses a continuous software update (rolling-release). Package assembly in the Factory will be carried out for the x86-64-v2 architecture, and official support for the x86-64-v1 and i586 architectures will be abolished.

The second version of the x86-64 microarchitecture has been supported by processors since about 2009 (starting with Intel Nehalem) and is characterized by the presence of extensions such as SSE3, SSE4_2, SSSE3, POPCNT, LAHF-SAHF and CMPXCHG16B. For owners of old x86-64 processors, which do not have the necessary capabilities, they plan to create a separate

openSUSE:Factory:LegacyX86 repository, which will be looked after by volunteers. As for the 32-bit packages, the full-fledged repository for the i586 architecture will be abolished, but there will be a small part needed for W.I.N.E.

<https://news.opensuse.org/2022/11/28/tw-to-roll-out-mitigation-plan-advance-microarchitecture/>

OPEN SOURCE ENGINE FROM CAPTAIN BLOOD:

29/11/2022

Now, before you get excited, it is not captain blood from your childhood, rather Age of Pirates: Captain blood some unreleased Xbox game.

The source code of the engine from the game "The Adventures of Captain Blood." was opened. The game is created as a "hack and slash" based on the works of Raphael Sabatini and tells the tale of the adventures of the main character of these works, Captain Peter Blood. The game takes place in medieval new England.

The game engine is a highly changed version of the Storm 2.9 engine, which was opened in 2021. The engine is written in C++ and currently supports only Windows, the DirectX 9 graphical API and the PhysX 2.8 engine. The code is open under the GPLv3 license.

<https://github.com/storm-devs/captain-blood>

VLC 3.0.18:

29/11/2022

The release of the media player VLC 3.0.18, that fixes four vulnerabilities that can potentially lead to the execution of the attacker's code when processing specially designed files or flows. The most dangerous vulnerability (CVE-2022-41325) can lead to buffer overflow when loading via URL. The remaining vulnerabilities that appear when processing files in mp4 and ogg formats can most likely only be used for service denial.

<https://www.videolan.org/news.html#news-2022-11-29>

ORACLE LINUX 9.1:

30/11/2022

Oracle has released the Oracle Linux 9.1 distribution, based on Red Hat Enterprise Linux 9.1 and fully binary compatible with it. For unrestricted downloads, installation iso-images, 9.2 GB and 839 MB, prepared for x86_64 and ARM64 architectures are proposed. Oracle Linux 9 is unlimited and free access to the yum repository with binary update packages with bugfixes and security updates. For download there is also separately supported repositories with packages for Application Stream and CodeReady Builder packages.

<https://blogs.oracle.com/linux/post/oracle-linux-9-update-1>

RELEASE OF CRYPTSETUP 2.6:

30/11/2022

Cryptsetup 2.6 utilities designed to configure the encryption of disk partitions in Linux using the dm-crypt module has been published. Work with dm-crypt, LUKS, LUKS2, BITLK, loop-AES and TrueCrypt/VeraCrypt partitions are supported. It also includes veritysetup and integritysetup utilities to configure data integrity control tools based on dm-verity and dm-integrity modules.

<https://gitlab.com/cryptsetup/cryptsetup/-/tags>

RELEASE OF THE EURO LINUX 9.1:

12/01/02/2800:44 PM

The release of EuroLinux 9.1, prepared by reassembling the source code packages of Red Hat Enterprise Linux 9.1 (a clone) is available for download. EuroLinux 9 will be supported until 30 June 2032. Installation images, of 8.1 GB

(appstream) and 1.5 GB, were prepared for download. The project provides scripts for migration to EuroLinux 9.1 existing installs based on RHEL 7/8/9, AlmaLinux 8/9, CentOS 7/8, Oracle Linux 7/8/9, Rocky Linux 8/9 and CentOS 9 Stream.

EuroLinux builds are distributed both on a paid subscription and for free. Both options are almost identical, built simultaneously, include a full set of system capabilities and allow for updates. The differences between the paid subscription and the free version is the provision of technical support services, access to errata files and the possibility of using additional packages, including load balancing, provide high availability and create reliable storage.

<https://en.euro-linux.com/blog/eurolinux-9-1-released/>

ARTI 1.1, OFFICIAL TOR IMPLEMENTATION IN RUST:

01/12/2022

The developers of the anonymous network Tor

published the release of Arti 1.1.0. This is a Tor-client written in Rust. The 1.x branch is marked as usable by ordinary users and providing the same level of confidentiality, usability and stability as the main implementation in the C language. The code is distributed under Apache 2.0 and MIT licenses.

Unlike the implementation on C, which was originally designed as a SOCKS proxy, and then fits into other needs, Arti is initially developed in the form of a modular built-in library that various applications can use. In addition, the development of the new project takes into account all past experience in the development of Tor, which allows you to avoid known architectural problems, making the project more modular and efficient.

<https://blog.torproject.org/arti-110-released/>

RELEASE OF MESA 22.3:

01/12/2022

The release of the free implementation of the OpenGL

API and Vulkan - Mesa 22.3.0 has been released. The first release of the Mesa 22.3.0 branch has an experimental status - after the final stabilization of the code, a stable version 22.3.1 will be released.

Mesa also provides full support for OpenGL 4.6 for 965 drivers, iris (Intel), radeonsi (AMD), zink and llvmpipe drivers. Support for OpenGL 4.5 is available for AMD (r600), NVIDIA (nvc0) and Qualcomm Adreno (freedreno), OpenGL 4.3 for virgl (virgl virtual GPU Virgil3D for QEMU/KVM), and OpenGL 4.2 for driver d3d12 (a plug for OpenGL on top of DirectX 12)

<https://lists.freedesktop.org/archives/mesa-dev/2022-November/225898.html>

RELEASE OF NIXOS 22.11:

01/12/2022

The NixOS 22.11 distribution was released, based on the Nix package manager and providing a number of its own developments that simplify the configuration and maintenance of the system. For example, in NixOS, the entire

configuration of the system takes place through a single system configuration file (configuration.nix), the ability to quickly roll the system back to the previous version of the configuration is provided, there is support for switching between different state systems, they support installation of individual packages by individual users, so it is possible to simultaneously use several versions of one program, reproducible builds are provided. The size of the full installation image with KDE 1.7 GB, GNOME - 2.2 GB, abbreviated console version - 827 MB.

<https://nixos.org/blog/announcements.html>

KERNEL DRM-NEXT:

01/12/2022

The Linux compute accelerators subsystem is designed to expose compute accelerators in a common way to user-space and provide a common set of functionality.

These devices can be either

stand-alone ASICs or IP blocks inside an SoC/GPU. Although these devices are typically designed to accelerate Machine-Learning (ML) and/or Deep-Learning (DL) computations, the accel layer is not limited to handling these types of accelerators.

These abstractions were close enough to what is needed for more general support for computational accelerators, so it was decided to supplement the subsystem for computing acceleration devices and rename it to "accel," as some supported devices are not GPUs. For example, Intel, which bought Habana Labs, is interested in using this subsystem for machine learning accelerators

<https://cgit.freedesktop.org/drm/drm/commit?id=795bd9bb21c694ebcee38e8026ebeac4a63929bf>

RELEASE OF BUTTPLUG 6.2???

02/12/2022

The organization Nonpolynomial has released a stable and widely

ready version of the Buttplug 6.2 library, which can be used to control different types of devices using gamepads, keyboards, joysticks and VR devices. Among other things, device synchronization with content played in Firefox and VLC is supported, and plugins are being developed for integration with Unity and Twine gaming engines.

Initially, the library was designed to control only intimate toys, but at the moment work was carried out to control other types of devices, for example, medical and fitness bracelets, thanks to the support of Bluetooth, USB, HID, UART and WebSocket interfaces. The main branch of the library is written in the Rust language and published under the BSD license. There are bindings for JavaScript/Typescript/WASM, C, Python and Dart. Supported devices include products of brands such as Lovense, Kiiroo, WeVibe, The Handy, Hismith and OSR-2/SR-6.

<https://buttplug.io/>

WEBOS OPEN SOURCE EDITION 2.19:

02/12/2022

WebOS Open Source Edition 2.19, which can be used on various portable devices, boards and car infotainment systems, has been published. The Raspberry Pi 4 boards are used as the reference hardware platform. The platform is developed in the public repository under the Apache 2.0 license, and the development is supervised by the community, adhering to a joint development management model.

<https://www.webosose.org/blog/2022/12/02/webos-ose-2-19-0-release/>

RELEASE OF RAWTHERAPEE 5.9:

03/12/2022

After almost three years of development, the release of RawTherapee 5.9, which provides means for editing photos and converting images in RAW format. The program supports a large

number of RAW-format files, including cameras with Foveon and X-Trans sensors, and can also work with the standard Adobe DNG and JPEG, PNG and TIFF formats (up to 32 bits per channel). The project code is written in C++ using GTK+ and distributed under the GPLv3 license. Builds are prepared for Linux (ApplImage) and Windows.

RawTherapee provides a set of tools for color correction, white balance, brightness and contrast balance, as well as the functions of automatically improving the quality of images and eliminating noise. Several algorithms for normalizing the quality of images, correction of lighting, noise suppression, amplification of parts, combating excess shadows, correction of the cost of edges and prospects, automatic removal of broken pixels and changes in exposure, increase in sharpness, removal of scratches and dust traces have been implemented.

<https://discuss.pixls.us/t/rawtherapee-5-9-released/33834>

4MLINUX 41.0:

04/12/2022

The release of 4MLinux 41.0, a minimalistic user distribution that is not based on other projects and uses a graphical environment based on JWM, was announced. 4MLinux can be used not only as a Live environment to play media files and solve user tasks, but also as a system for recovery after failures and a platform for running LAMP servers (Linux, Apache, MariaDB and PHP). Two iso-images with a graphical environment and a selection of programs for server systems have been prepared for download.

<https://4mlinux-releases.blogspot.com/2022/12/4mlinux-410-stable-released.html>

RELEASE OF GRML 2022.11:

04/12/2022

After more than a year of development, the Live

distribution grml 2022.11, based on Debian GNU/Linux, was published. The distribution contains a selection of programs for the processing of text data by means of the texttools package and for executing commands of system administrators (recovery of data after failure, analysis of incidents, etc.). The graphical environment is built using the Fluxbox window manager. The size of the full iso image is 855 MB, the minimal one - 492 MB.

<https://blog.grml.org/archives/410-Grml-new-stable-release-2022.11-available.html>

THE BREW CREATOR NOW INTO TEA?

05/12/2022

Max Howell, the author of the Homebrew package management system, popular on the macOS platform, is developing a new Tea packet manager, positioned as a continuation of the development of the brew, beyond the package manager and offers a unified package management

infrastructure that works with decentralized repositories. The project is initially developing as multi-platform (now supported by macOS and Linux, support for Windows is in development). The project code is written in the TypeScript language and distributed under the Apache 2.0 license (brew was written in Ruby and supplied under the BSD license).

Tea conceptually does not like traditional package managers and instead of the paradigm "I want to install the package" uses the principle of "I want to use the package." In particular, there is no command in Tea as such to install a package, instead creating the environment that is used to perform the contents of a package - that does not intersect with the current system. Packages are placed in a separate directory named ".tea" and are not tied to absolute paths (can be moved).

<https://tea.xyz/>

RELEASE OF FREEBSD 12.4:

06/12/2022

FreeBSD 12.4 is released. Installation images are available for amd64, i386, powerpc, powerpc64, powerpc's, sparc64 and armv6, armv7 and aarch64 architectures. Additionally, images for virtualization systems (QCOW2, VHD, VMDK, raw) and Amazon EC2 cloud environments have been prepared. The FreeBSD 12.4 will be the last update of the 12.x branch, which will last until December 31, 2023. In spring, the FreeBSD 13.2 update will be prepared and the release of FreeBSD 14.0 is scheduled for July 2023.

<https://download.freebsd.org/ftp/releases/ISO-IMAGES/12.4/>

ARMBIAN 22.11:

06/12/2022

The release of the Linux-distributive Armbian 22.11, providing a compact system environment for various single-board computers based on ARM

processors, including various models of Raspberry Pi, Odroid, Orange, Piana Pi, Helios64, pine64, Nanopi and Cubieboard based on Allwinner, Amlogic, Actionsemi, Freescale, MJP, and Marvel.

The project supports more than 30 Linux kernel builds for different ARM and ARM64 platforms. To simplify the creation of their system images, packages and distribution editions, the SDK is provided. When entering via SSH, an option is provided for the use of two-factor authentication. The composition includes the box64 emulator, which allows you to run programs assembled for processors based on the x86 architecture. ZFS can be used as a file system. We offer ready-made packages to launch custom environments based on KDE, GNOME, Budgie, Cinnamon, i3-wm, Mate, Xfce and Xmonad.

<https://www.armbian.com/newsflash/armbian-22-11/>

INKSCAPE 1.2.2:

07/12/2022

Free vector graphic editor, Inkscape 1.2.2 was updated. The editor provides flexible drawing tools and provides support for reading and saving images in SVG, OpenDocument Drawing, DXF, WMF, EMF, sk1, PDF, EPS, PostScript and PNG formats. Ready-made Inkscape builds are prepared for Linux (Applmage, Snap, Flatpak), macOS and Windows.

<https://inkscape.org/news/2022/12/05/download-inkscape-122/>

RELEASE TOR BROWSER 12.0:

07/12/2022

A major release of the specialized browser Tor Browser 12.0, which makes the transition to the ESR-branch of Firefox 102, was announced. The browser is focused on ensuring anonymity, security and privacy, and all traffic is redirected only

FULL CIRCLE WEEKLY NEWS



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through the Tor network. It is impossible to contact anything directly through the regular network connection of the current system, which does not allow you to track the real IP address of the user (in case of a browser hack, the attackers can access the system parameters of the network, so you should use products such as Whonix to completely block possible leaks). Tor Browser builds are prepared for Linux, Windows and macOS. The new version for Android is delayed.

<https://blog.torproject.org/new-release-tor-browser-120/>

RELEASE OF THE DEEPIN 20.8:

08/12/2022

The release of the Deepin 20.8 distribution, based on Debian 10, has been published, but developing its own Deepin Desktop Environment (DDE) and about 40 custom applications, including the DMusic music player, DMovie's messaging system, DTalk messaging system, installer and

installation center Deepin Software Center. The project was founded by a group of developers from China, but transformed into an international project. All code is distributed under the GPLv3 license. Loading size iso-image 4 GB (amd64).

<https://www.deepin.org/en/deepin-20-8-is-officially-released/>

RELEASE OF KALI LINUX 2022.4:

09/12/2022

The release of Kali Linux 2022.4, based off of Debian and designed to test systems for the presence of vulnerabilities, auditing, analysis of residual information and detection of attacks of attackers, is presented. All original code created within the distribution are distributed under the GPL license and are available through the public Git repository. Several variants of iso-images, at about 448 MB, 2.7 GB and 3.8 GB have been prepared for download. Builds are available for i386, x86_64, ARM (armhf and armel,

Raspberry Pi, Banana Pi, ARM Chromebook, Odroid). By default, the Xfce desktop is offered, but the KDE, GNOME, MATE, LXDE and Enlightenment e17 are optionally supported.

<https://www.kali.org/blog/kali-linux-2022-4-release/>

POSTSCRIPT LANGUAGE

CODE OPENED:

12/10/2022 09:36

The Computer History Museum received permission from Adobe to publish the source code of one of the first implementations of PostScript printing technology, released in 1984. PostScript technology is notable for the fact that the printable page is described in a special programming language and the PostScript document is a program interpreted when printing.

The code is written in C and is now available for download (zip-archive) under the CHM Software License Agreement. The implementation, among other things, includes a font quilting code that formed the basis of an

algorithm that provides high quality of font drawings in different resolutions, which has long been Adobe's trade secret, disclosed only in 2010.

<https://computerhistory.org/blog/postscript-a-digital-printing-press/>

RELEASE OF OPENSHOT 3.0:

11/12/2022

After more than a year of development, the release of the free system of non-linear video editing OpenShot 3.0.0 was published. The project code is supplied under the GPLv3 license: the interface is written in Python and PyQt5, the video processing kernel (libopenshot) is written in C++ and uses the capabilities of the FFmpeg package, the interactive timeline is written using HTML5, JavaScript and AngularJS. Ready-made assemblies are prepared for Linux (AppImage), Windows and macOS.

<https://www.openshot.org/blog/2022/12/10/new-openshot-release-300/>

FEDORA 38 WITH BUDGIE DESKTOP:

12/12/2022

Joshua Strobl, a key developer of the Budgie project, has published a proposal to start an official Fedora Linux Spin build with Budgie. The Spin of Fedora with Budgie is planned to be delivered starting with the release of Fedora Linux 38. The proposal has not yet been reviewed by the FESCo (Fedora Engineering Steering Committee), responsible for the technical part of the development of the Fedora distribution.

Initially, Budgie's entourage focused on Solus, but then transformed into a distribution-independent project that further began distributing packages for Arch Linux and Ubuntu. The editorial board of Ubuntu Budgie received official status in 2016, but the use of Budgie in Fedora was not given due attention and official packages for Fedora began to be supplied only starting with the release of Fedora 37. Budgie is based on GNOME technology and its own shell implementation of

GNOME Shell (in the next branch of Budgie 11, they plan to separate the functionality of the desktop from the layer that provides visualization and output of information, which will allow you to abstract from specific graphic tokens and libraries, and implement full support for the Wayland protocol

<https://www.mail-archive.com/devel-announce@lists.fedoraproject.org/msg02946.html>

HTTP SERVER HINSIGHTD, USING THE LINUX SUBSYSTEM IO_URING:

14/12/2022

A compact HTTP server `hinsightd` has been published, notably using the induction/output interface provided in the Linux kernel. The server supports HTTP/1.1 and is designed for low resource consumption with the provision of in-demand functionality. For example, `hinsightd` supports TLS, reverse proxying, caching of dynamically generated content in the local FS, compression on the fly

of the data, restarting without breaking the established connections, connecting dynamic process handlers using FastCGI and CGI mechanisms. The project code is written in C and distributed under the BSD license.

<https://tiotags.gitlab.io/hinsightd/>

PEERTUBE 5.0:

14/12/2022

A decentralized platform for video hosting and video broadcasting PeerTube 5.0 was released. PeerTube offers an independent alternative to YouTube, Dailymotion and Vimeo, an independent of individual providers, using a content distribution network based on P2P communications and linking visitors" browsers. The project is distributed under the AGPLv3 license.

<https://joinpeertube.org/news#release-5.0>

RELEASE OF QEMU 7.2:

15/12/2022

QEMU allows you to run a program built for one hardware platform on a system with a completely different architecture, for example, to execute an application for ARM on an x86-compatible PC. In virtualization mode in QEMU, the performance of code in an isolated environment is close to the hardware system by directly executing instructions on the CPU and the use of the Xen hypervisor or KVM module.

The project was originally created by Fabrice Bellard to enable the launch of x86 Linux executables on architectures other than x86. Over the years, support for complete emulation for 14 hardware architectures has been added, and the number of hardware devices emulated has exceeded 400. In the preparation of version 7.2, more than 1800 changes from 205 developers were made.

<https://lists.nongnu.org/archive/html/qemu-devel/2022-12/msg02209.html>

RELEASE OF XFCE 4.18:

15/12/2022

After two years of development, the Xfce 4.18 desktop was released, aimed at providing a classic desktop requiring minimal system resources. Xfce consists of several interrelated components that can be used in other projects if desired. Among such components are: xfwm4 window manager, application launch panel, display manager, user session management and energy control manager, Thunar file manager, Midori web browser, Parole media player, mousepad text editor and environment settings system.

<https://xfce.org/about/news/?post=1671062400>

RELEASE OF TRUENAS SCALE 22.12:

15/12/2022

ixsystems has published TrueNAS SCALE 22.12, which uses the Linux kernel and the Debian packet base

(previously manufactured products of the company, including TrueOS, PC-BSD, TrueNAS and FreeNAS, based on FreeBSD). Like TrueNAS CORE (FreeNAS), TrueNAS SCALE can be downloaded and used for free. The size ISO-image is 1.6 GB. The original code for TrueNAS SCALE build scripts, web-interfaces and layers are published on GitHub.

TrueNAS CORE products based on FreeBSD and TrueNAS SCALE based on Linux develop in parallel and complement each other, using a common code base of the toolkit and a typical web interface. The provision of an additional edition based on the Linux kernel is explained by the desire to implement some ideas that are unattainable when using FreeBSD. It is noteworthy that this is not the first such initiative - in 2009, FreeNAS has already separated the distribution of OpenMediaVault, which was transferred to the Linux kernel and the Debian packet base.

<https://www.truenas.com/blog/truenas-scale-bluefin-is-released-into-the-wild/>

PROJECT PINE64 INTRODUCED PINETAB2:

16/12/2022

The Pine64 community, announced the start of production, next year of the new PineTab2 tablet PC, built on a SoC (Rockchip RK3566) with a quad processor ARM Cort-A55 (1.8 GHz) and GPU ARM Mali-G52 EE. The cost has not yet been determined, the only thing known is that the first copies for testing by the developers will begin to be produced after the Chinese new year (January 22). The first PineTab tablet model was available at \$120, and the PineNote e-book on the same SoC was sold for \$399.

Like the first PineTab model, the new tablet is equipped with a 10.1-inch screen (IPS) and is equipped with a detachable keyboard that allows you to use the device as a regular laptop. The parameters of the cameras are the same: rear 5MP, 1/4" (LED Flash) and front 2MP (f/2.8, 1/5), as well as battery characteristics (6000 mAh). Depending on the configuration, the amount of RAM will be 4 or 8 GB, and the persistent memory

(eMMC flash) - 64 or 128 GB (for comparison, the first PineTab was supplied with 2 GB of RAM and 64 GB Flash). From the connectors mentioned was two USB-C (USB 3.0 and USB 2.0), micro HDMI, microSD and 3.5mm headphone connector.

It is not yet clear which Wi-Fi and Bluetooth modules will be used in the device. Also, it has not yet been announced which of the Linux distributions will be preinstalled. In the first PineTab, the default was Ubuntu Touch from the UBport project, and the options were additionally offered images from Manjaro Linux, PostmarketOS, Arch Linux ARM, Mobian and Sailfish OS.

<https://www.pine64.org/2022/12/15/december-update-merry-christmas-and-happy-new-pinetab/>

VALVE PAYS FOR MORE THAN 100 OPEN SOURCE DEVELOPERS:

17/12/2022

Pierre-Loup Griffais, one of the creators of the Steam Deck and Steamoter Linux distribution, in an

interview with The Verge, said that Valve, in addition to employing 20-30 employees involved in the Steam Deck product, directly pays more than 100 open source developers involved in the development of Mesa drivers, a package for launching Windows games, drivers for the graph, such as the graphs.

<https://www.theverge.com/23499215/valve-steam-deck-interview-late-2022>

XEN 4.17:

17/12/2022

After a year of development, the free hypervisor Xen 4.17 was released. The new release involved companies such as Amazon, Arm, Bitdefender, Citrix, EPAM Systems and Xilinx (AMD). Updates for the Xen 4.17 branch will last until June 12, 2024, and the publication of vulnerabilities fixes until December 12, 2025.

<https://xenproject.org/2022/12/14/xen-project-releases-version-4-17-with-enhanced-security-higher-performance-improved-embedded-static-configuration-and-speculative-mitigation-support/>

UPDATE OF DEBIAN 11.6:

17/12/2022

This is the sixth corrective update of Debian 11, which includes the accumulated packet updates and fixes of the shortcomings in the installer. The release includes 69 updates with troubleshooting stability issues and 78 updates with the elimination of vulnerabilities. From the changes in Debian 11.6, you can note the update to the latest stable versions of the packages mariadb-10.5, nvidia-graphics-drivers, postfix and postgresql-13.

Installation builds, as well as live iso-hybrid with Debian 11.6 will be prepared for download and install "from scratch." Installed systems receive updates present in Debian 11.6 through the standard update system. Security fixes included in the new Debian releases are available to users as updates released via security.debian.org.

<https://www.debian.org/News/2022/20221217>

RELEASE OF FREE CAD LIBRECAD 2.2:

18/12/2022

After six years of development, the free computer-aided design system LibreCAD 2.2 is available. The system is aimed at performing 2D design tasks, such as the preparation of engineering and construction drawings, diagrams and plans. Imports of drawings in DXF and DWG formats are supported, and exports to DXF, PNG, PDF and SVG formats. The LibreCAD project was created in 2010 as an offshoot from QCAD. The project code is written in C++ using the Qt framework and distributed under the GPLv2 license. Ready-made builds are prepared for Linux (ApplImage), Windows and macOS.

The LibreCAD interface is notable for providing wide customization options - the contents of the menu and panels, as well as style and widgets can change arbitrarily depending on the user's preferences.

<https://blog.librecad.org/2022/12/stable-librecad-2-2-0-released/>

RELEASE OF SPAMASSASSIN 4.0.0:

18/12/2022

The release of SpamAssassin was announced. SpamAssassin offers an integrated approach in blocking decisions: In the beginning, there are a number of checks (context analysis, black and white DNSBL lists, Bayesian classifiers, checking on signatures, authentication of the sender by SPF and DKIM, etc.). After evaluating the message by different methods, a certain weight factor is assigned. If the calculated coefficient exceeds a certain threshold, the message is blocked or marked as spam. Automatic filtering rules are updated. The package can be used on both client and server systems. The SpamAssassin code is written in Perl and distributed under the Apache 2.0 license.

<https://lists.apache.org/list.html?announce@spamassassin.apache.org>

A NEW POSTMARKETOS 22.12:

19/12/2022

The release of postmarketOS 22.12, that develops a Linux distribution for smartphones, based on Alpine Linux, the standard Musl C-library and the BusyBox utility suites, has been published. The goal of the project is to provide a Linux distribution for smartphones, independent of the life cycle support of official firmware and not tied to the standard solutions of the main industry players who set the development vector. The builds are prepared for the PINE64 PinePhone, Purism Librem 5 and 29 community-supported devices, including the Samsung Galaxy A3/A5/S4, Xiaomi Mi Note 2/Redmi 2, OnePlus 6, Lenovo A6000, ASUS MeMo Pad 7 and even the Nokia N900. Limited experimental support is provided for more than 300 devices.

<https://postmarketos.org/blog/2022/12/18/v22.12-release/>

THE OVERTURE MAPS FOR OPEN MAPPING DATA:

19/12/2022

The Linux Foundation announced the creation of a non-profit association, Overture Maps Foundation, aimed at creating a neutral and company-consistent platform for the joint development of tools and a unified map data storage scheme, as well as maintaining a collection of open maps, which can be used in its own mapping services. The founders included Amazon Web Services (AWS), Meta, Microsoft and TomTom.

The data will be distributed under the ODbL (Open Database Licence, used in the OpenStreetMap project) and under the CDLA (Community Data License Agreement), developed for data in the Linux Foundation. The licenses are created specifically for the distribution of databases and in comparison with the Creative Commons licenses take into account a number of legal subtleties and nuances associated with the mixing of data from different sources and abstracting

the database structure to maintain the licensing conditions when changing the structure or order of the records. The original texts of the Overture Maps tools will be supplied under the MIT license.

<https://www.linuxfoundation.org/press/linux-foundation-announces-overture-maps-foundation-to-build-interoperable-open-map-data>

RELEASE OF ENDEAVOUROS 22.12:

20/12/2022

The release of the EndeavourOS 22.12 project, that replaced the Antergos distribution, is available. The development was discontinued in May 2019 due to the lack of free time for the remaining maintainers to maintain the project at the proper level. The size of the installation image is 1.9 GB (x86_64, the assembly for ARM develops separately).

Endeavour OS allows the user to install Arch Linux with the necessary desktop without unnecessary complications in the form that it is conceived in its

standard filling offered by the developers of the selected desktop, without additional pre-installed programs. The distribution offers a simple installer to install the basic Arch Linux environment with the Xfce desktop by default and the ability to install from the repository one of the typical desktops based on Mate, LXQt, Cinnamon, KDE Plasma, GNOME, Budgie, as well as mosaic window managers i3, BSPWM and Sway. Work is underway to add support to Qtile and Openbox window managers, UKUI, LXDE and Deepin desktops. One of the developers of the project is developing his own window manager "Worm".

<https://endeavouros.com/news/cassini-packed-with-new-features-is-here/>

RELEASE OF LINUX MINT 21.1:

20/12/2022

The release of the Linux Mint 21.1 distribution is presented, which continues to develop a branch based on Ubuntu 22.04 LTS. The distribution is fully compatible

with Ubuntu, but is significantly different from the approach to the user interface and the selection of default applications. Linux Mint developers provide a desktop environment that meets the classic canons of desktop layout, which is more familiar to users who do not accept new methods of the GNOME 3 interface. DVD images based on MATE 1.26 (2.1 GB), Cinnamon 5.6 (2.1 GB) and Xfce 4.16 (2 GB) are available for download. The Linux Mint 21 is included in the long-term releases (LTS), which will be updated until 2027.

<http://blog.linuxmint.com/>

RELEASE OF GNUPG 2.4.0:

21/12/2022

After five years of development, the release of the GnuPG 2.4.0 (GNU Privacy Guard) toolkit, compatible with OpenPGP (RFC-4880) and S/MIME standards, and provides data encryption, electronic signatures, key management and access to keys, was announced.

GnuPG 2.4.0 is positioned as the first release of a new stable branch, which absorbed the changes accumulated in the preparation of the 2.3.x. The 2.2 branch is transferred to the category of an old stable branch, which will be maintained until the end of 2024. The GnuPG 1.4 branch continues to be accompanied as a classic series that consumes minimal resources suitable for embedded systems and compatible with outdated encryption algorithms.

<https://gnupg.org/>

FEDORA 38 PLANS TO IMPLEMENT SUPPORT FOR UNIVERSAL CORE IMAGES:

21/12/2022

With the release of Fedora 38, they propose to implement the first stage of the transition to the upgraded download process, previously proposed by Lennart Pottering for a full verified download, covering all the stages from the firmware to the user's space, and not only the core and bootloader. The proposal has not yet been reviewed by the FESCo

(Fedora Engineering Steering Committee), responsible for the technical part of the development of the Fedora distribution.

Due to the significant upcoming changes, the implementation is planned to be divided into several stages. At the first stage, UKI support will be added to the downloader and the publication of an optional UKI image will begin, which will focus on downloading virtual machines with a limited set of components and drivers, as well as associated with installing and updating the UKI toolkit. In the second and third stages, they plan to avoid transferring settings in the command line of the kernel and stop storing keys in the initrd.

<https://www.mail-archive.com/devel-announce@lists.fedoraproject.org/msg02954.html>

THE SECOND PROTOTYPE OF THE ALP PLATFORM:

22/12/2022

SUSE has published the second prototype of the ALP platform "Punta Baretti" (Adaptable Linux Platform), positioned as a continuation of the development of the distribution of SUSE Linux Enterprise. The key difference between ALP is the division of the distribution into two parts: a trimmed "host OS" to work on top of the hardware and a layer for application support, focused on launching containers and virtual machines. The builds are prepared for x86_64 architecture. ALP is initially developed using an open development process in which intermediate builds and test results are publicly available to everyone.

<https://www.suse.com/c/alp-punta-baretti/>

ICEWM 3.3.0:

22/12/2022

IceWM provides full control through keyboard combinations, the ability to use virtual desktops, task bar and application menus. The window manager is configured through a fairly simple configuration file, you can use themes. The unification of windows in the form of tabs is supported. Available built-in applets for monitoring CPU, memory, traffic are at your fingertips. Separately, several third-party GUIs are developing for customization, desktop implementations and menu editors. The code is written in C++ and is distributed under the GPLv2 license.

<https://github.com/ice-wm/icewm/releases/tag/3.3.0>

RELEASE OF BATCH FILTER NFTABLES 1.0.6:

23/12/2022

There was a release of the packet filter nftables 1.0.6, unifying packet filter interfaces for

IPv4, IPv6, ARP and network bridges (targeted to replace iptables, ip6table, arptables and ebtables). The nftables package includes packet filter components that work in the user's space, while at the kernel level it is provided by the nf_tables subsystem, which is part of the Linux kernel - starting from release 3.13. At the kernel level, only a common interface is provided, independent of a specific protocol and providing basic functions to extract data from packets, perform data operations and flow control.

<https://netfilter.org/projects/nftables/>

INTEL HAS PUBLISHED XE, A NEW LINUX DRIVER FOR ITS GPU:

24/12/2022

Intel has published an initial version of the new driver for the Linux kernel - Xe, designed for use with integrated GPUs and discrete graphics cards based on the Intel Xe architecture, which is used in integrated graphics from Tiger Lake processors and in individual

graphics cards of the Arc family. The goal of the driver is to provide a basis for providing support for new chips not tied to the code to support old platforms. They also announced more active sharing of Xe code with other components of the DRM subsystem (Direct Rendering Manager).

The code is originally designed to support various hardware architectures and is available for testing on x86 and ARM systems. The implementation is still being considered as an experimental option for discussion by the developers, which is not yet ready for integration into the core. Work on the old i915 driver did not stop and its accompaniment will continue. They plan to bring the new Xe driver to readiness, some time within 2023.

<https://lists.freedesktop.org/archives/dri-devel/2022-December/384345.html>

RELEASE OF THE MESON 1.0:

24/12/2022

The Meson 1.0.0 build system has been released, which is used to build projects such as X.Org Server, Mesa, Lighttpd, Systemd, GStreamer, Wayland, GNOME and GTK. The Meson code is written in Python and comes under the Apache 2.0 license.

The key goal of Meson's development is to provide high build speed combined with convenience and ease of use. Instead of the make utility, the Ninja toolkit is used by default, but other backends such as xcode and VisualStudio are possible. The system is built into a multi-platform dependency handler, which allows you to use Meson to build packages for distributions

<https://github.com/mesonbuild/meson/releases/tag/1.0.0>

RELEASE OF OPEN GAME ENGINE VCMI 1.1.0:

24/12/2022

The VCMI 1.1 project, that develops an open game engine compatible with the data format used in Heroes of Might and Magic III games, is available. You may recall fheroes, for HOMM2, but his is for HOMM3. An important goal of the project is also to support mods, which make it possible to add new cities, heroes, monsters, artifacts and spells to the game. The original code is distributed under the GPLv2 license. Supported in Linux, Windows, macOS and Android.

<https://vcmi.eu/news/vcmi-1.1.0-release/>

RELEASE OF MANJARO LINUX 22.0:

24/12/2022

Manjaro Linux 22.0 distribution, built on Arch Linux and oriented towards novice users, was released. The distribution is notable for the presence of a

simplified and user-friendly installation process, support for the automatic identification of hardware and installation of drivers necessary for its operation. Manjaro comes as live-builds with graphical environments KDE (3.6 GB), GNOME (3.5 GB) and Xfce (3.5 GB). With the participation of the community, builds with Budgie, Cinnamon, Deepin, LXDE, LXQt, MATE and i3 are additionally developed.

To manage repositories in Manjaro, the BoxIt toolkit, designed to be like Git, is used. The repository is one of continuous updates (rolling), but new versions pass an additional stage of stabilization. In addition to its own repository, there is support for the use of the AUR (Arch User Repository). The distribution is equipped with a graphical installer and a graphical interface for system configuration.

<https://forum.manjaro.org/t/manjaro-22-0-sikaris-released/129983>

HAIKU R1 OPERATING SYSTEM BETA:

25/12/2022

After a year and a half, the fourth beta-release of the Haiku R1 operating system was published. The project was originally created as a reaction to the closure of the BeOS OS and developed under the name OpenBeOS, but was renamed in 2004 due to claims related to the use of the BeOS trademark. To evaluate the work of the new release, several loading Live images (x86, x86-64) have been prepared. The initial Haiku OS is distributed under a free MIT license, exemption is made by some libraries, media codecs and components borrowed from other projects.

<https://www.haiku-os.org/news/2022-12-23-haiku-r1-beta4/>

RELEASE OF DARKTABLE 4.2:

25/12/2022

Darktable acts as a free alternative to Adobe Lightroom and specializes in non-destructive work with raw images. Darktable provides a large selection of modules for performing all kinds of photo processing operations, it allows you to maintain a database of original photos, carry out visual navigation on available shots and, if necessary, perform operations of correction of distortions and quality improvement, while maintaining the original image and the entire history of operations with it. The project code is written in C and distributed under the GPLv3 license. The interface was built using the GTK library. The binary builds are prepared for Linux (OBS, flatpak), Windows and macOS.

<https://www.darktable.org/2022/12/darktable-4.2.0-released/>

THE

VIRTUALBOX NETWORKING PRIMER

Connecting and Configuring
Virtual Machines



Robin Catling

The VirtualBox Networking Primer

Connecting and Configuring Virtual Machines

The VirtualBox Networking Primer is a no-nonsense guide for the VirtualBox user taking their next steps into virtual networks.

While Oracle VM VirtualBox is a great free tool, the real power of virtualisation comes when you start connecting virtual machines to each other and to the wider world. Software development, sales, education and training are just some of the areas in which network access to virtual machines offers endless opportunities. But the world of computer networks is filled with complex technical jargon.

Complete with principles, practice, examples and glossary, The VirtualBox Networking Primer takes the frustration and confusion out of connecting real-world projects.

Author: **Robin Catling**

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Amazon US link:

[https://www.amazon.com/dp/1916119484?
ref=pe_3052080_397514860](https://www.amazon.com/dp/1916119484?ref=pe_3052080_397514860)

Amazon UK link:

[https://www.amazon.co.uk/VirtualBox-Networking-Primer-Connecting-Configuring/dp/1916119484/ref=sr_1_1?
dchild=1&keywords=virtualbox+networking+primer&qid=1600253699&s=books&sr=1-1](https://www.amazon.co.uk/VirtualBox-Networking-Primer-Connecting-Configuring/dp/1916119484/ref=sr_1_1?dchild=1&keywords=virtualbox+networking+primer&qid=1600253699&s=books&sr=1-1)

Kobo:

<https://www.kobo.com/us/en/ebook/the-virtualbox-networking-primer>



COMMAND & CONQUER

Written by Erik

In this issue, I would like to talk about something that will improve your quality of life. As much as manpages help, I am not a neckbeard and I cannot say that I am a fan. It's one of those things that get forced on you whether you like it or not. However, your Linux journey at home does not need to suffer.

Enter mcfly (<https://github.com/cantino/mcfly>) and TL;DR (<https://tldr.sh/>)

LET'S START WITH TL;DR FIRST:

INSTALLATION

On the web page, they offer npm, but most of you will not have npm installed:

- If you do, it is as simple as: `npm install -g tldr`
- Or you can just use built-in Python: `pip install tldr-man`
- The rest, like me, simply type: `sudo apt install tldr`

Now, the very first thing you

need to do, once installed, is update that command list with:

```
tldr -u
```

Once you have done that, you simply type tldr followed by a space and the command you need an example of – if you do not update it, you will not get anything out of it.

Honestly, this tool has saved me hours! Sometimes, you just want to see an example, and not be

bombarded by things nobody uses. It is not perfect, there are still a few commands missing, but what there is, is great!

NOW LET'S MOVE ON TO MCFLY... NOT MARTY.

This is a complete replacement for CTRL+R. It basically stores your shell history to track command exit status, timestamps, and execution directory, in a SQLite database of its own. It has not reached a v1.0

yet, but it is as close as dammit is to swearing of being useful.

INSTALLATION

- The preferred method is via homebrew or Linuxbrew, with:
- brew tap cantino/mcfly <https://github.com/cantino/mcfly>
 - brew install mcfly

However, I don't use Linuxbrew, so I installed it via Curl.

This way requires root access, so be very careful!

```
sudo -s
```

```
curl -LSfs https://raw.githubusercontent.com/cantino/mcfly/master/ci/install.sh | sh -s -- --git cantino/mcfly
```

This will grab the latest version and install it for you.

You want to add it to your bashrc, so it is available every time you log in:

```
nano ~/.bashrc
```

```
File Edit View Terminal Tabs Help
ed@Dropped:~$ tldr ssh
ssh
Secure Shell is a protocol used to securely log onto remote systems.It can be used for logging or executing commands on a remote server.More information: https://man.openbsd.org/ssh.

- Connect to a remote server:
  ssh {{username}}@{{remote_host}}

- Connect to a remote server with a specific identity (private key):
  ssh -i {{path/to/key_file}} {{username}}@{{remote_host}}

- Connect to a remote server using a specific port:
  ssh {{username}}@{{remote_host}} -p {{2222}}

- Run a command on a remote server with a [t]ty allocation allowing interaction with the remote command:
  ssh {{username}}@{{remote_host}} -t {{command}} {{command_arguments}}

- SSH tunneling: Dynamic port forwarding (SOCKS proxy on localhost:1080):
  ssh -D {{1080}} {{username}}@{{remote_host}}

- SSH tunneling: Forward a specific port (localhost:9999 to example.org:80) along with disabling pseudo-[T]ty allocation and executio[N] of remote commands:
```

COMMAND & CONQUER

and simply add the following to the end:

```
eval "$(mcfly init bash)"
```

Save, and you can run an in-line refresh with:

```
source ~/.bashrc
```

Now wait for it to complete.

Try it out with:

```
mcfly search apt
```

Linode has some awesome documentation I can recommend: <https://www.linode.com/docs/guides/using-mcfly-to-search-bash-or-zsh-history/>

As you can also 'train' the mcfly AI.

FS, FD:

As a bonus, I want to tell you about searching on the command-line. In the GUI, I simply use fs, and

on the command-line I use fd.

You can find it here: <https://github.com/sharkdp/fd>

INSTALLATION

Download the .deb-file and use your favourite installer.

To use, simply type fd and your query; it is lightning fast.

And just like that, you can search for help, search your history, and search for files on that server you just reloaded.

Hopefully you found our short 'n sweet article useful.

What are your favourites? misc@fullcirclemagazine.org

```
File Edit View Terminal Tabs Help
ed@Dropped:~$ fd .mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/01. Praise the Lamb.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/02. Start a Cult.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/03. Temple.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/04. Work and Worship.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/05. Faith Up.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/06. Sacrifice.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/07. Saviour.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/08. Darkwood.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/09. Amdusias.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/10. Leshy.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/11. Knucklebones.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/12. Pilgrim's Passage.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/13. The Night.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/14. Anura.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/15. Eligos.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/16. Heket.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/17. Shop.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/18. Sozo.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/19. Anchordeep.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/20. Saleos.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/21. Kallamar.mp3
Downloads/games/Cult of the Lamb + 2 DLC + OST/OST/MP3/22. Followers of the Old
Faith.mp3
```



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.



Back in FCM#181, I talked about Themes and Styles and how I was trying to create a style map for the ttk TNotebook. That was just back in May. Here it is, December, and my “work life” has been busy with writing my PAGE book, trying to do support for PAGE with Don Rozenberg, and trying to live with the medical issues that I’ve been “blessed” with.

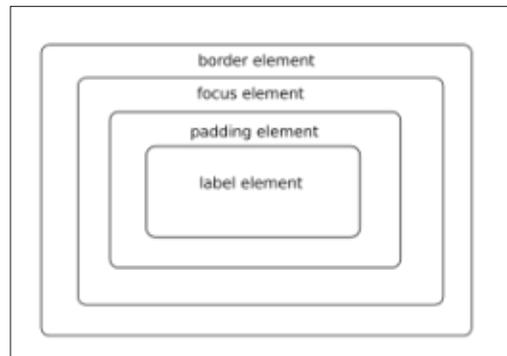
I have gotten to the chapter in my book about the ttk widget set, and I wanted to try to explain the complicated concept of Themes and Styles.

It all starts with a style. Styles control the appearance of a widget. A Theme “packages” all the widget styles into a group. Hopefully all the styles work together so that all the widgets in the Theme have the same look and feel.

Since it all begins with a style for the widgets, we’ll look at a single class of widget to start. We’ll start with the ttk Button class. The style of this widget class is called “TButton”.

Now, each widget style is made up of one or more elements. A typical Button has four elements:

- The border around the outside of the Button,
- A focus element that changes color when the Button has input focus,
- A padding element, and
- A label element. This element contains the label text, image or both.



Every widget has a style that is controlled by the Theme. Now here is where it gets somewhat frustrating. Each Operating System has its own built-in themes, and some Operating Systems have more built-in themes than others. Since we are a Linux-based magazine, I’ll give them to you now, and then

```
import plotext as plt
y = plt.sin() # sinusoidal test signal
plt.scatter(y)
plt.title("Scatter Plot") # to apply a title
plt.show() # to finally plot
```

give you the ones for the other Operating Systems.

It’s fairly obvious that Linux got the short end of the stick when it comes to the sheer number of themes that come with the OS. You should also notice that the four themes that are “native” to Linux are also available on the other two Operating Systems. This makes it nice – if you are planning on running your application under the three OS systems, you should really stick with one of those four.

When you decide to start working on your own styles, and get ready to wrap them all up in a theme, you should base everything

on one theme. For Linux users like us, the simplest theme to start with would be the default theme. Not only does every OS have the default theme built in, but each OS has a different “default” theme that, if you don’t set a specific theme, it will be used by “default”. A logical person would think that that would be default. And you are right, if you are talking about Linux. For Windows, the default theme is winnative, not default and for Mac OS X it is aqua. Talk about confusion!

Anyway, we’ll use the ttk Button – to see what our styles can do. Now, remember back a few paragraphs, we touched on the

Operating System	Themes							
	clam	alt	default	classic	aqua	winnative	vista	xpnative
Linux	X	X	X	X				
Mac OS X	X	X	X	X	X			
Windows	X	X	X	X		X	X	X

HOWTO - PYTHON

Elements. So for the ttk Button class, the style name is TButton. The elements are assembled into an “empty box”. For a Button under the default theme, they are assembled from the outside in using this order. Border, focus, padding, and, finally, label. Just like the diagram above.

Each of the elements has a “sticky” attribute that defines which of the sides of the “box” that it will stick to. If, for example, an element has the sticky attribute of ‘ew’, it would expand and stretch in order to reach the right and left sides of our imaginary box. Since there are no definitions for the north or south, it doesn’t have to stretch to the top and bottom of the box. Any of the four points may be defined, it is not necessary for all four to be defined.

Most of the ttk styles have a layout that organizes the different layers that make up the widget style. Some widget classes don’t have a layout. As long as the widget

has a layout, you can use the following commands in the Python REPL to get information on the layout. (shown top right).

Now that is as clear as mud, isn’t it? When a widget class has a layout, it will be returned as a list of tuples which have the element name and a dictionary that describes that element. (I just added a bunch more mud, didn’t I!).

Think of it this way. The outermost element is the border. It has its sticky attribute which is, in this case, north, south, east and west (so the border will expand to all sides of the widget), and a border attribute that has a width of 1 pixel. It also has a child element. In this case, it’s the focus element. It has a sticky attribute that also expands north, south, east and west. The focus element doesn’t have a border, but it does have a child, which is the padding element. That has only one attribute – as you might guess, it’s the sticky attribute, and again it’s north,

```
>>> import tkinter as tk
>>> import tkinter.ttk as ttk
>>> style=ttk.Style()
>>> style.layout('TButton')
[('Button.border', {'sticky': 'nsw', 'border': '1',
'children': [('Button.focus', {'sticky': 'nsw', 'children':
[('Button.padding', {'sticky': 'nsw', 'children':
[('Button.label', {'sticky': 'nsw'})]})]})]})]

>>>
```

south, east and west, and it ALSO has a child element – the label element. It has a sticky attribute as well and, yet again, it is ‘nsw’.

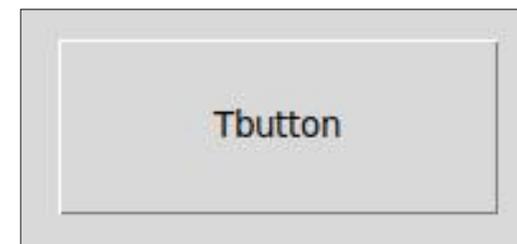
Now, it’s time for me to pull on my “Wellies” (Rubber Boots for those who aren’t Brits, either in family, or location, or heart), and stomp around a little bit more. Each of those elements can (but don’t have to) have options. I’m just going to dump out the options for each of the elements (below).

These are the easiest things that we can change to make our style look the way we want. Notice that I said the easiest things. There can also be images, but that is a

discussion for another article. For now, we’ll go back to the element options.

Before we start changing things, let’s take a look at how the TButton looks on a “normal day” under the default Linux theme.

Very bland. It looks just like you’d imagine a button would look.



Now, in order to set anything, we would use the general scheme of `stylename.configure(option=value)` to set things our way. So let’s set the options so we can have a “dark theme” TButton (top right).

Nothing fancy. First we set up a

```
Button.border options: ('background', 'borderwidth', 'relief')
Button.focus options: ('focuscolor', 'focusthickness')
Button.padding options: ('padding', 'relief', 'shiftr relief')
Button.label options: ('compound', 'space', 'text', 'font', 'foreground', 'underline',
'width', 'anchor', 'justify', 'wraplength', 'embossed', 'image', 'stipple', 'background')
```

custom style for a specific TButton, then set (in this case) the foreground, background and font. Then, when we place the TButton, we can use the standard configure method to set the text, and the style to our Custom.TButton style.

Not hard at all. Now let's customize some TRadiobuttons and TCheckbuttons. Here they are in



their "native" state.

You can customize the indicators so that they use your own



customized graphics. At a minimum, you'll need to have three images for each class. One for unselected, one for selected, and one for disabled.

Here is a quick reference image of all six of the indicators that I used to customize the

TRadiobuttons and the TCheckbuttons. Remember, I never presented myself as an artist!

Now we need to code the element style and the element



layouts.

First, let's create image objects – keeping a global version – so that Python's garbage collection doesn't wipe our images out of existence. Here we are setting up the TRadiobuttons (bottom right).

I used the shared module scheme in order to keep from having to declare a tonne of global variables. The shared module is an empty file in the project folder – that all modules can read and write to. The file can be named anything, as long as it has the extension of ".py", and that you import it into any other Python files that will use it. By using the shared module scheme, it is much easier. Now that we have all of the Radiobutton images set into image objects, we

```
style.configure(
    "Custom.TButton",
    foreground="white",
    background="gray44",
    font=('Calibri 16 bold italic'),
)
_w1.TButton1.configure(style="Custom.TButton", text="I
am a TButton")
```

then can create the element that we will use (below).

Once you get used to the idea, it's not that hard, but it is the first time. So we define a new element with element_create and give it a name 'custom.RbIndicator'. We declare the type of element, which is image, and then we define the image name for the unselected state. Then, we define the selected

and disabled states, and assign the images to them.

Finally, we need to create the layout and replace the standard indicator element with our custom one (next page, top right).

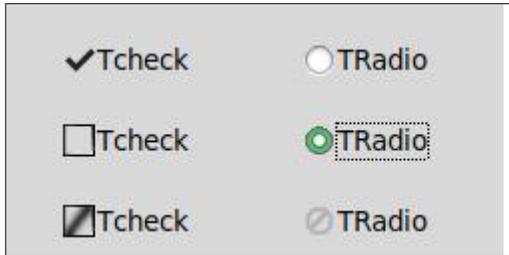
That's it for the TRadiobuttons. Follow the same steps for the TCheckbuttons, and when you are all done, and run the program, it

```
style.element_create(
    'custom.RbIndicator',
    'image',
    shared.off_image3,
    ('selected', shared.on_image3),
    ('disabled', shared.dis_image2),
)
```

```
shared.on_image3 = tk.PhotoImage(
    file=os.path.join(_location, 'images/radio-nc.png'))
shared.off_image3 = tk.PhotoImage(
    file=os.path.join(_location, 'images/radio-nu.png'))
shared.dis_image2 = tk.PhotoImage(
    file=os.path.join(_location, 'images/radio-
disable16.png'))
```

should look something like this.

It's pretty daunting the first time or two you do it, but it gets



easier as you go along.

Every widget has different elements and options that you can and probably should look at setting. Once you have a template for the layouts, it starts to become much easier.

In wrapping up, I thought I'd leave you with a number of resources to help you out, if you become brave and try to create your own style sets. In a later article, I'll show you how to create your own theme – once you've gotten the style sets for all the ttk widgets.

Given that there are so many options that so many don't know about, I'm going to provide two generic links and a specific one. The first one is to the New Mexico Tech Tkinter 8.5 Manual.

<https://anzeljg.github.io/rin2/book2/2405/docs/tkinter/index.html>

Next is a good starting place for the “official” ttk toolkit man page, direct from the tcl group's “horses mouth”. It's supposed to be that if it isn't here, it can't be done.

<https://www.tcl.tk/man/tcl/TkCmd/contents.html>

Finally, I'm going to give you the link to the “official” ttk Button man page. To find out what all the options and settings (and what many of them mean), you can get it here.

https://www.tcl.tk/man/tcl/TkCmd/ttk_button.html

(One word of warning. If you look back at the Button.label options, you will see one named ‘embossed’. I've NEVER been able to find out what this is supposed to do. It's not in the documentation, and if you try to set it to something, it is merrily ignored. Go figure.)

I will leave you with a theme that is created in Python, not tcl. This is a port of the Plastik theme which is part of the ttkwidgets Python library, which, like most themes, is written in Tcl and is

```
style.configure('TRadiobutton', )
style.layout('TRadiobutton', [('Radiobutton.padding', {
    'sticky':
    'nsw',
    'children': [('custom.RbIndicator', {
        'side': 'left',
        'sticky': ''
    }),
    ('Radiobutton.focus', {
        'side': 'left',
        'sticky': '',
        'children': [('Radiobutton.label', {
            'sticky': 'nsw'
        })]
    })]
}))
})])
```

pretty difficult to port to Python unless you are familiar with both languages. You can get the Plastik-python file at https://android.googlesource.com/toolchain/python/+243b47fbef58ab866ee77567f2f52affd8ec8d0f/Python-2.7.3/Demo/tkinter/ttk/plastik_theme.py

Since I mentioned the ttkwidgets package, you can get it from: <https://github.com/TkinterEP/ttkthemes>.

Follow the documentation on how to install it and how to get them into your own program projects. The docs are at <https://ttkthemes.readthedocs.io/en/latest/>.

Until next time, as always; stay safe, healthy, positive and creative!



Greg Walters is a retired programmer living in Central Texas, USA. He has been a programmer since 1972 and in his spare time, he is an author, amateur photographer, luthier, fair musician and a pretty darn good cook. He still is the owner of RainyDaySolutions a consulting company and he spends most of his time writing articles for FCM and tutorials. His website is www.thedesignatedgeek.xyz.



HOW-TO

Written by Erik

BACK NEXT MONTH



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.



We have learned a lot about individual tools and techniques. It is time to practice some of those tools and techniques (and learn some new ones) to make things. This issue's project is a small poster. It could be used to advertise a garage sale, or a lost pet, or announce a community meeting, or whatever you like. We will include an image, use different font sizes, and play with other settings.

Remember what we are going to generate is a standard PDF file. It can be printed on your own printer or given to someone else to print. Instant print shops will often accept PDF files on USB sticks as input for their work. This is one way to get around Microsoft Word's domination of text files.

Of course, the first thing we need to do is design the poster. I suggest you do that with paper and pencil, without the use of a computer. Ideas seem to flow faster when there is a direct physical connection between hand and paper. Our poster is going to have the photo of our lost pet at

the top, taking up about one-third of the page. There will be a large heading centred on the page, maybe above the photo, maybe below the photo. Then there will be some text describing the animal: name, color, collar, etc.

Here is the code for the first attempt (shown right).

And here is the result.



Our family pet Petey is lost. He has been missing since Saturday. Petey is about knee high, heavy set, generally dark brown with some white on his muzzle and neck. He had a brown leather collar with his address tag and rabies tag. If found please call 416-555-1212. We will come and get him.

The image is okay but the text is much too small. We need the title to be very large, and the rest of the text large enough to fill the page. For help in instances like this, I do not turn to CTAN. CTAN is wonderful if you want to know if there is a package that will do some task or if you need help to use a particular package. What we need to know is how to change font sizes. For task-oriented help, I start with The Not So Short Introduction to

```

\documentclass[letterpaper]{article}
%Need graphicx so image displays where we want it
\usepackage{graphicx}
%Set various lengths
\setlength\voffset{-1in}
\setlength\hoffset{-1in}
\setlength\topmargin{1cm}
\setlength\oddsidemargin{1cm}
\setlength\textheight{25.94cm}
\setlength\textwidth{19.59cm}
\begin{document}
{\centering
Lost -- Petey
\par}
\begin{figure}
\centering
\includegraphics[width=10cm,height=10cm]{dog.png}
\end{figure}
\bigskip
Our family pet Petey is lost. He has been missing since
Saturday.
Petey is about knee high, heavy set, generally dark brown
with some white on his muzzle and neck. He had a brown
leather collar with his address tag and rabies tag.
If found please call 416-555-1212. We will come and get him.
Reward for the safe return of Petey. We all miss him very
much.
\end{document}

```

Latex by Oetiker, Partl, Hyna and Schlegl.

When I did a search for "font size", I discovered there are a few ways to set the font size. The first way is to set the base font size in the documentclass instruction. However, only three sizes are

available for documentclass - article: 10pt, 11pt and 12pt. Looking further, we come to Section 5.2: "LATEX chooses the appropriate font and font size based on the logical structure of the document (sections, footnotes, . . .). In some cases, one might like to change fonts and sizes

by hand.” This looks promising. Here is our poster text with the font size keyword Huge added (top right).

We could also establish a “Huge” environment with `\begin{document} \begin{Huge}` and then add `\end{Huge}` before `\end{document}`. Both of these changes increase the size of the type to about 25pt. This is an improvement, but it is not large enough. We need the text to be larger.

When I went online and asked about larger font sizes, some people suggested using the “beamer” document class instead of “article”. Beamer is an old document class for producing slides for presentations, very useful, but not what we want. In addition, changing document classes also changes many other things than just font size. Others suggested using the memoir document class. It looks more promising. However there is a 615-page book for this class, not something I want to tackle while I am trying to put this project together. From Stefan Kottwitz at linux.org comes this simple and elegant solution.

```
\documentclass[a4paper,10pt]{article}
\usepackage{fix-cm}
\begin{document}
\fontsize{60}{70}\selectfont
Huge text
\end{document}
```

When I tried the `fontsize{48}{60}` property without `usepackage{fix-cm}`, I got a warning saying the default font does not have that size (60pt), the largest available (24.9pt) was used. Adding the `fix-cm` package means a variety of Type 1 fonts can be used. Their sizes can be adjusted as needed. The `selectfont` property must be used after any font property is changed, or there will be an error when compiling. Incorporating these two lines into our poster code gives us what we want.

I tried several font size values in order to get the text to fill the page. The full code for the poster becomes (shown right).



Lost – Petey

Our family pet Petey is lost. He has been missing since Saturday.

Latex. In the meantime,

```
{\Huge Our family pet Petey is lost. He has been missing
since Saturday.
Petey is about knee high, heavy set, generally dark brown
with some white on his muzzle and neck. He had a brown
leather collar with his address tag and rabies tag.
If found please call 416-555-1212. We will come and get him.
Reward for the safe return of Petey. We all miss him very
much.}
```

```
\documentclass[letterpaper]{article}
%Need graphicx so image displays where we want it
\usepackage{graphicx}
\usepackage{fix-cm}
%Set various lengths to position contents
\setlength\voffset{-1.5in}
\setlength\hoffset{-1in}
\setlength\topmargin{1cm}
\setlength\oddsidemargin{1cm}
\setlength\textheight{25.94cm}
\setlength\textwidth{19.59cm}
\begin{document}
\begin{center}
\fontsize{48}{60}\selectfont Lost -- Petey
\end{center}
\par
\begin{figure}
\centering
\includegraphics[width=10cm,height=10cm]{dog.png}
\end{figure}
%\bigskip Optional, adds space below graphic
\fontsize{28}{34}\selectfont
Our family pet Petey is lost. He has been missing since
Saturday.
Petey is about knee high, heavy set, generally dark brown
with some white on his muzzle and neck. He had a brown
leather collar with his address tag and rabies tab.
If found please call 416-555-1212. We will come and get him.
Reward for the safe return of Petey. We all miss him very
much.
\end{document}
```

experiment with making single page posters. One suggestion is to play with the `setlength` properties

in the preamble to discover what they do – singly, and in combination with each other.

KILOBYTE MAGAZINE

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

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



After months of looking at the features added and changed in Inkscape 1.1.x, it's finally time to move on to the 1.2.x series. As I write, the project has just announced the second point release in this series, which features a number of bug-fixes. Inkscape 1.2.2 can be downloaded from the project's website (<https://inkscape.org/>) as usual, with Linux versions available as an AppImage, Snap, or via a PPA. I like to keep multiple versions installed – which is a must if you write a monthly column about the program – so for the past few releases, I've tended to use the AppImage. In theory, however, it shouldn't make much difference which you use.

This month, I'm going to take a look at a couple of the more

significant UI changes that have taken place with version 1.2. First, however, I'm going to mention a part of the UI that, unfortunately, hasn't changed at all: a problem with the icon sets.

When icon themes were added to Inkscape, it seemed like a great opportunity to provide a symbolic icon set for those people who prefer stark simplicity, while keeping the older, more colourful images for users who find it easier to distinguish between different icons if they're not all similarly coloured. I fall into the latter category, so was disappointed when 1.1 presented me with a mixture of flat, symbolic icons alongside the colorful ones – replacing some of the old standards in the process. Unfortunately, version 1.2

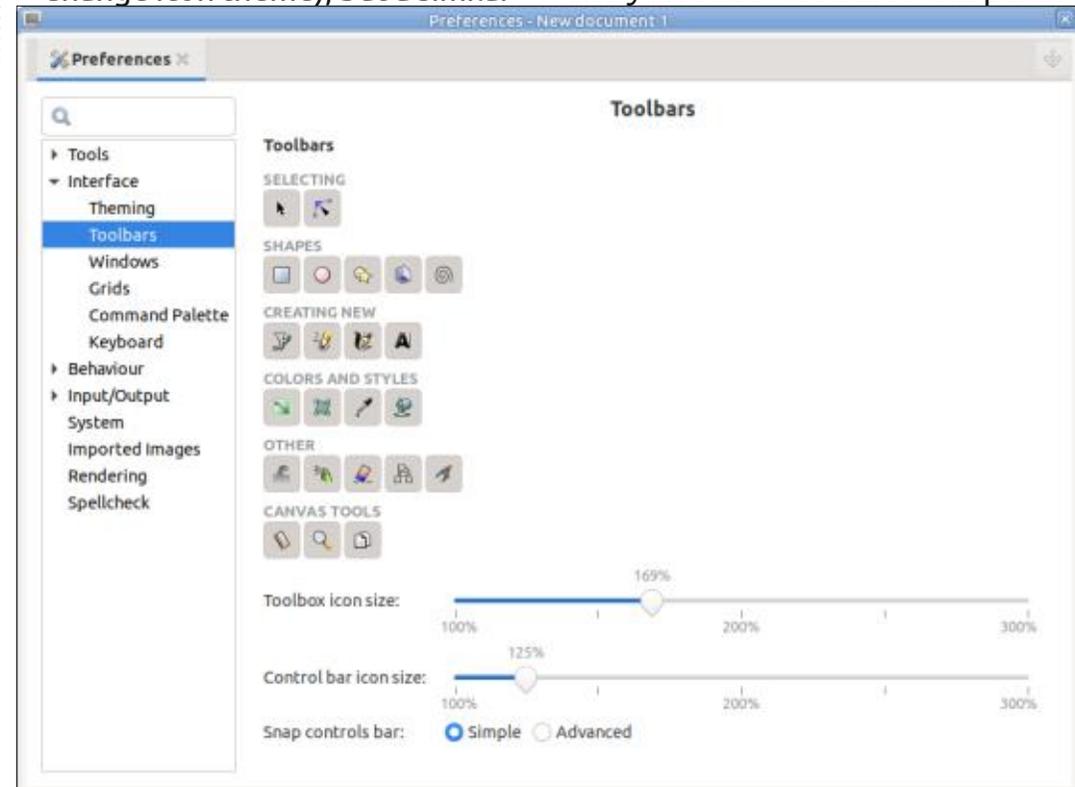


continues in the same manner (top left)

As you can see, the system-level operations – loading, saving, printing, and clipboard – all appear as flat symbolic icons, while other tools and buttons get the more colourful icons of the past. This screenshot was taken with the 'Hicolor' theme selected (Edit > Preferences > Interface > Theming > Change icon theme), but a similar

problem occurs with the 'Tango' theme. If you find yourself in a similar situation, then try switching to the 'Use system icons' option: on my Ubuntu Mate 20.04 box, this has allowed me to return to a consistently colourful set of icons in the toolbars (bottom left)

On the subject of icons, following the Theming section in the Inkscape preferences is a new entry labelled 'Toolbars'. This panel



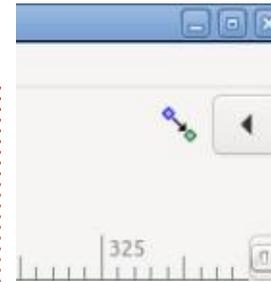
provides a number of extremely welcome controls for changing the size and content of the main toolbars in Inkscape.

First of all are a group of toggle buttons that allow you to turn each of the individual drawing tool icons on and off in the main toolbox. This is great news for anyone on a small screen who wishes to slim down the number of icons to something that better fits the available space. It's also useful as a means to hide infrequently used tools more generally – at last I can prevent that pesky 3D Box tool from taking up space, and I can hide the Pen and Calligraphy tools to stop me inadvertently clicking them when I meant to choose the Bézier tool. When hiding icons, make sure you know which tool is which, as they all share the same generic tooltip in this dialog. If you do choose to turn off some icons, those tools aren't lost to you: you can still access them via their keyboard shortcuts. It's a shame, however, that there's not a shortcut to temporarily display all the icons, which would let you pare the toolbox down to the most commonly used features while still giving you an easy way to get to the less frequently used ones.

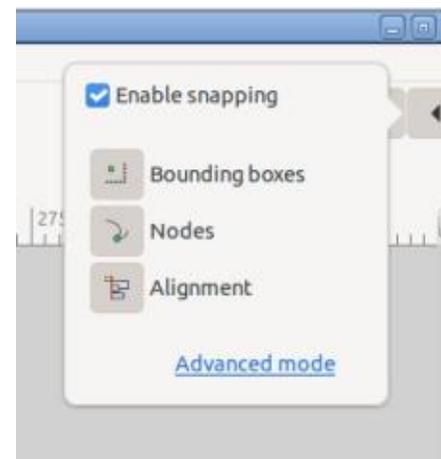
Below these toggles are separate sliders for adjusting the size of the Toolbox (the one on the left, with the tools in), and the Control bar (the two-row toolbar along the top of the window). Being able to adjust these independently is a nice touch.

Finally, there's a control to switch between 'Simple' and 'Advanced' modes for the Snap controls bar – but this really isn't the place you want to visit if you want to toggle that option... at least not until version 1.3 comes out. But to understand that statement, we first need to look at what's happened with the Snap controls in Inkscape 1.2.

The snap toolbar has been a part of Inkscape since the beginning of the project. By default, it appeared on the right-hand side of the window in the past few releases, but selecting View > Custom would place it at the top. This option has been removed from version 1.2 because the toolbar itself no longer exists. Instead, the snap controls are now hidden in a pop-up menu at the top-right of the Inkscape window.

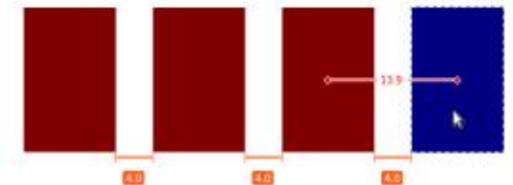


The controls themselves are so unremarkable in appearance that I've had to include the window border and the end of the horizontal ruler in that screenshot, to help you orient yourself as to where these UI elements appear. The button on the left is a simple toggle to turn snapping on and off as a whole – the same effect as using the '%' keyboard shortcut. To the right of that is a pop-up menu for choosing which options should apply when snapping is enabled, and it's here that things get a little more interesting. Let's look at this menu in its default, 'Simple' mode:



First, we have a checkbox that duplicates the functionality of the snapping toggle, or the '%' shortcut. Also having this option in the menu itself means one less mouse-click if you need to enable snapping and adjust the options at the same time. But the options you can modify are clearly somewhat limited: you can just turn various classes of snapping on and off – for snapping to bounding boxes, nodes, and 'alignment' – but you're not given any details about which snap targets are actually enabled for each of those three entries.

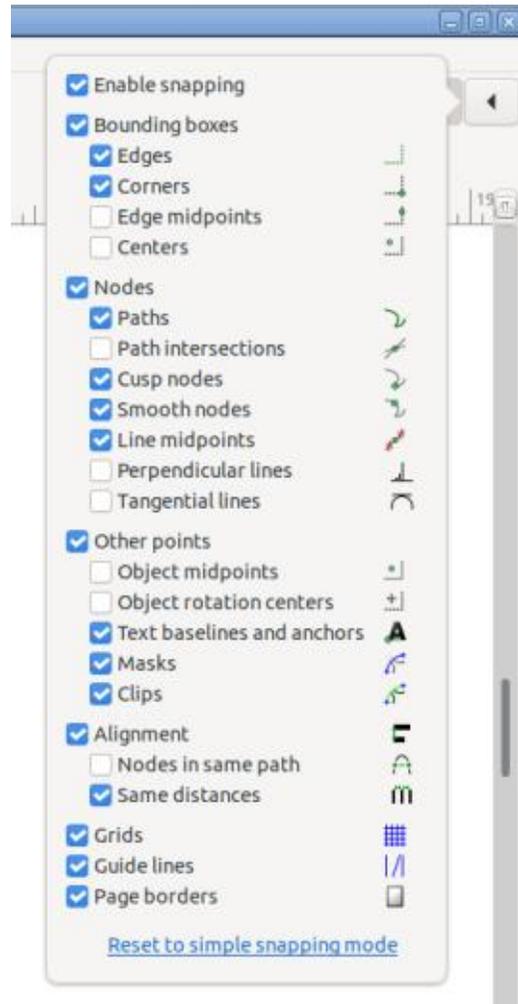
The 'alignment' option is a new addition, which makes it easier to position objects relative to others by displaying temporary alignment guides and optional dimensions as you drag objects around the canvas.



Note that the dimensions aren't enabled by default – usually you just get the orange and red guides shown in the screenshot. For users

HOWTO - INKSCAPE

who just want things to align neatly but aren't worried about the specific dimensions, that's fine. But if you do want to see the numbers as well, you need to enable the 'Show snap distance in case of alignment or distribution snap' option in Edit > Preferences > Behaviour > Snapping. Excuse the pun, but couldn't the developers have come up with a more 'snappy'



title for that option?

You've undoubtedly noticed the 'Advanced Mode' link at the bottom of the pop-up. Clicking that reveals something more like the snap controls bar from versions past (shown left), with many, many snapping options to choose from.

I won't describe all these options – most of them have been covered previously in this series. If you want complete control over what parts of your drawing should act as snap targets, then this is the place to come. And if you just want to return to the more straightforward (and limited) set of three toggle buttons, the 'Reset to simple snapping mode' link at the bottom of the pop-up will do that.

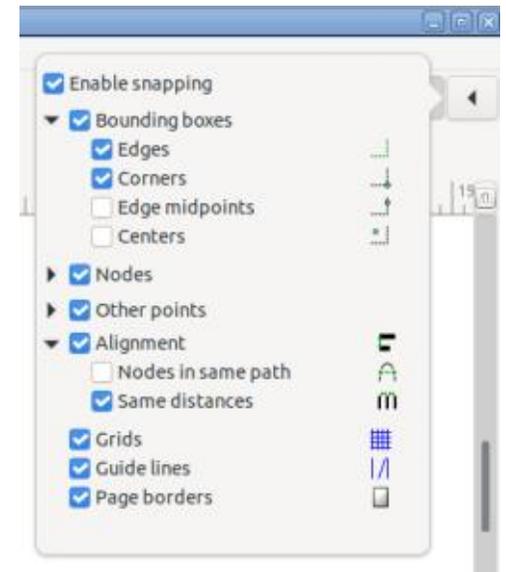
But that's where the first of my issues with this UI arises. Clicking that link doesn't just switch you back to the simpler view, it also resets your snap settings. You may have spent some time setting up just the right combination of snap targets for the way you work, but switch back to simple mode and all your selections are thrown away. You might assume that toggling, say, the Nodes button in simple mode would do the same thing as

toggling the Nodes checkbox in advanced mode – i.e. just turn your entire combination of options on or off. But that's not the case: as soon as you switch back to Simple mode your individual combination of choices is lost entirely and replaced with whatever defaults the developers have chosen.

Simple mode also fails to offer options for snapping to 'Grids', 'Guide lines' and 'Page borders' – all fairly common snap targets that beginners might find useful, but which have to be accessed via the advanced mode. This means that, for many users, a trip to advanced mode will sometimes be a necessity, without it being obvious that returning to simple mode for day-to-day use will lose their settings.

I quite like the idea of a pop-up for snapping options. It's certainly a lot clearer to have a title alongside each option, rather than the slow hover-for-a-tooltip that was often required over almost every option in the toolbar from earlier versions. But I feel a better UI would have been to make the sections in the advanced mode collapsible. That would allow users to reduce the list down to the main toggles for a

simpler interface, but let them expand each section out for full control when needed. Here's a quick mock-up of how it might appear in practice, with a couple of the sections expanded.



With what's currently in Inkscape 1.2, however, I really can't recommend the use of Simple mode at all. If you need to use snapping then it's almost inevitable that you'll need at least one option from the Advanced menu at some point, so my advice at the moment is to only use the Advanced mode, and never switch back to Simple mode at all. It may seem more complex initially, but it still beats having your selections thrown away without warning.

So, back to the conundrum of the 'Snap controls bar' option in Edit > Preferences > Interface > Toolbars. I'd pretty much ignore it, use the link at the bottom of the pop-up snap menu to enable advanced mode, and then leave things alone. But if you don't like the new pop-up menu at all, it's worth knowing that the option to switch back to an old-fashioned snap toolbar is probably coming in version 1.3 – at that time the setting in the preferences dialog will gain a third option to let you use the toolbar rather than the pop-up.

While talking about snapping, it's worth pointing out a few more snap-related changes that have taken place in 1.2. One relatively minor difference is that the snap settings are no longer stored as part of the document itself, but are stored globally for Inkscape as a whole. To be honest I doubt this change will really affect anyone in any practical way, and it makes sense to take that Inkscape-specific metadata out of the SVG file.

One less well-known feature that has been removed is the ability to set snap tolerances for some

individual snap types. It used to live in the 'Snap' tab of the Document Preferences dialog, but given that snapping is no longer a per-document feature, that entire tab has been removed. In theory it was nice to be able to prioritise certain snap types, by giving them a larger target radius so that they would kick in as your pointer wandered towards the target without requiring too much accuracy in your aim. In practice, however, it was likely a rarely used feature that won't really be missed.

On the plus side, the removal of that tab has also meant that a couple of rather hidden snap target types have now been promoted into the pop-up menu instead. Previously the options for snapping perpendicularly and tangentially were in the Document Preferences, but now live as part of the 'Nodes' section in the Advanced pop-up. But that adds yet another reason to only use the Advanced mode, and skip the Simple option entirely.

Next month, I'll continue to look at – and offer an opinion on – some of the other UI changes that have taken place in the program with this release.

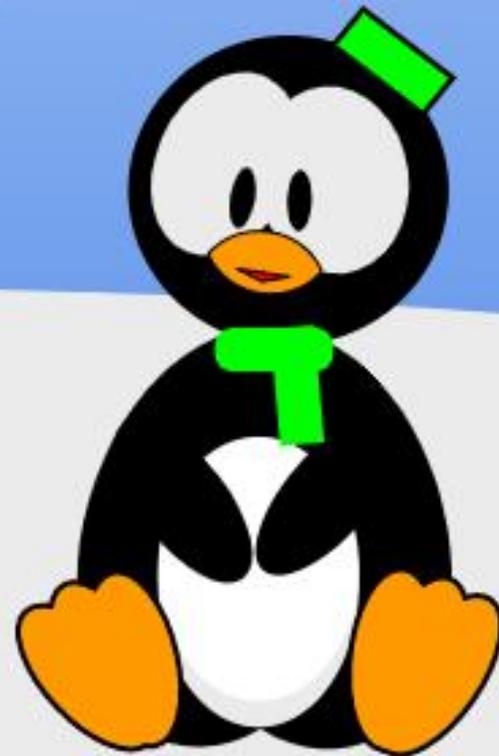


Mark uses Inkscape to create comics for the web (www.peppertop.com/) as well as for print. You can follow him on Twitter for more comic and Inkscape content: [@PeppertopComics](https://twitter.com/PeppertopComics)

The daily waddle

YOUR CV SAID YOU WERE A
DRAG AND DROP SPECIALIST?

YEAH, I DRAG THE KIDS OUT
OF BED EVERY MORNING AND
DROP THEM AT SCHOOL.



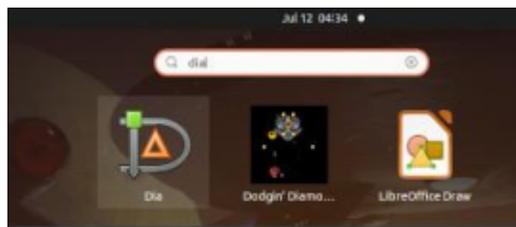


Last month, we installed OpenMW and transferred over the game's assets from a Windows 10 machine to our Linux setup in order to play Morrowind. This month, we'll complete the setup and actually start exploring the sleepy little seaside town of Seyda Neen.

GRAPHICS SETUP

click the App Drawer (9 white boxes in a grid, bottom left of your screen).

Type OpenMW at the top of the screen in the search box:



Click OpenMW Launcher and the application will launch (shown bottom left)

Click 'Graphics' at the top (shown bottom right).

Choose whatever resolution works for you, and decide if you want to run the application in a window or full screen.

STARTING THE ADVENTURE IN OPENMW

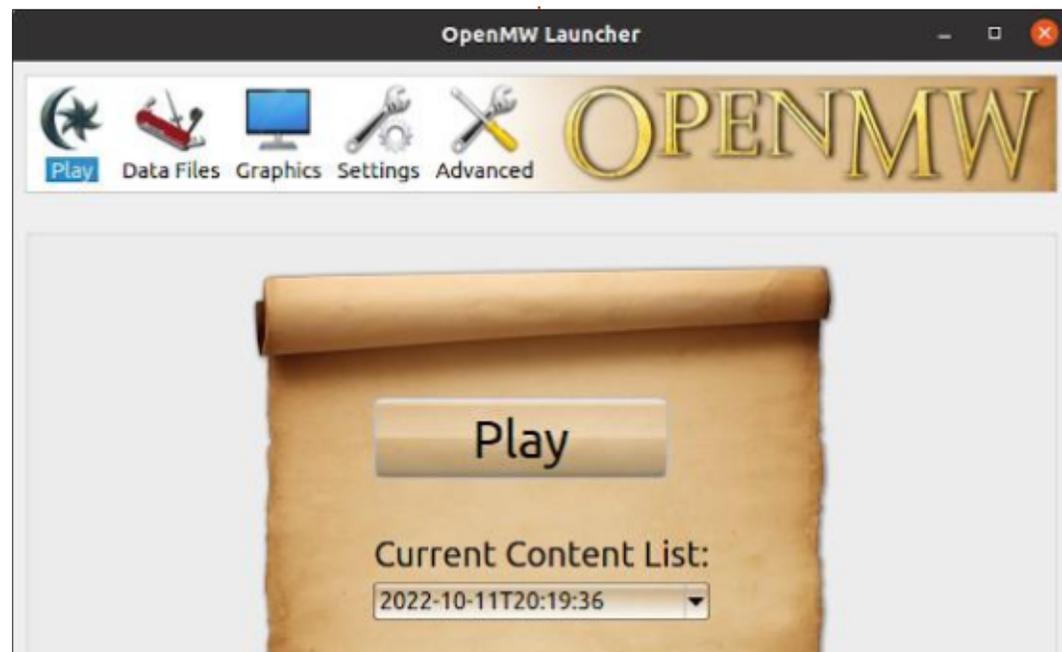
Click 'Play' at the top, then click 'Play' on the scroll in the middle of the screen. Enjoy the concept art on the loading screens.

Soon, you'll hear the stirring theme music by Jeremy Soule, and

the intro screen will come up.



Click New to start a new game. Enjoy some more concept art and a brief intro sequence. A peculiar looking fellow will greet you.



BASIC MOVEMENT

Use W and S to move forward and back, A and D to move side-to-side, and use your mouse to 'aim' yourself more precisely in a given direction. Follow the guard who will take you to the hatch while making some unnecessary comments about keeping things "civil". Get positioned so the hatch is in the center of the screen, then hit the Spacebar to 'Use' the hatch. You will find yourself on deck (shown below).

To the port side, you will see a gangplank. Use your newfound mad movement skillz to negotiate it

without falling into the water, and you will disembark onto a pier. A friendly guard, much more "civil" than the one who just snidely advised you to be civil, will welcome you to Seyda Neen:



Take a quick glance to your right and you will see a Silt Strider, the weird cross-town buses of Tamriel:



After choosing your race, appearance, and land of provenance, follow the friendly guard to the Customs and Excise Office:



'Use' the front door in the same way you just 'used' the hatch, and you'll be asked about your avocation. Select the way you wish your trade to be chosen or determined. Now, select the Zodiac sign you were born under.

You will now be able to see your stats and inventory by right-clicking the screen:

The Customs Officer will advise you to take your papers, which you will first read by 'using' them.

Click 'Take' in the upper left corner, then move to the next room as instructed to complete your release. Enjoy the ambience of the office for a moment.

You will see a dagger on a table. 'Use' it to pick it up, then hit the 'F' key to equip it. Now you're ready to start exploring Seyda Neen and the nearby environs!

There you have it! Enjoy your new adventure in Tamriel!



Richard 'Flash' Adams lives in rural north Alabama and has been a computer support technician, a business analyst, a software salesman, a sales analyst, a QC team lead, and is now disabled/retired. He enjoys reading, NFL football, computer and video games, cooking, and playing with Baby, his cockatiel. Feedback and suggestions are welcome at acer11kubuntu@gmail.com.



Hello again, my friends. I'm afraid that I'm going to have to put MicroThisMicroThat on the shelf for a few months. I REALLY hate doing it, but between the lack of money, time, energy, and medical problems, I just don't have any choice.

This, however, does not mean that MTMT is going away for ever. With a little bit of luck, I will be back sometime in 2023. My current workload with the book is horrid and I'm constantly behind my schedule, which makes my publisher very unhappy. Things around the house are not getting done and the pain just keeps me tired and in bed too much to be productive.

So, PLEASE keep your fingers crossed that it won't be too long before I can start concentrating on creating projects with Microcontrollers sooner than later.



Greg Walters is a retired programmer living in Central Texas, USA. He has been a programmer since 1972 and in his spare time, he is an author, amateur photographer, luthier, fair musician and a pretty darn good cook. He still is the owner of RainyDaySolutions a consulting company and he spends most of his time writing articles for FCM and tutorials. His website is www.thedesignatedgeek.xyz.



Linux on Your iPad

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





UBPORTS DEVICES

Written by UBports Team

Ubuntu Touch (<https://ubuntu-touch.io/>) is the privacy and freedom-respecting mobile operating system by UBports.

Today, we are happy to announce the release of Ubuntu Touch OTA-24, the very latest update to the system! OTA-24 will become available for the following supported Ubuntu Touch devices (<https://devices.ubuntu-touch.io/>) over the next week:

- Asus Zenfone Max Pro M1
- BQ E4.5 Ubuntu Edition
- BQ E5 HD Ubuntu Edition
- BQ M10 (F)HD Ubuntu Edition
- BQ U Plus
- Cosmo Communicator
- F(x)tec Pro1
- Fairphone 2
- Fairphone 3
- Google Pixel 2 and 2 XL
- Google Pixel 3a and 3a XL
- Huawei Nexus 6P
- LG Nexus 4
- LG Nexus 5
- Meizu MX4 Ubuntu Edition
- Meizu Pro 5 Ubuntu Edition
- Nexus 7 2013 (Wi-Fi and LTE models)
- OnePlus One

- OnePlus 2
- OnePlus 3 and 3T
- Oneplus 5 and 5T
- OnePlus 6 and 6T
- Samsung Galaxy Note 4 (910F, 910P, 910T)
- Samsung Galaxy S3 Neo+ (GT-I9301)
- Sony Xperia X
- Sony Xperia X Compact
- Sony Xperia X Performance
- Sony Xperia XZ
- Sony Xperia Z4 Tablet (LTE or Wi-fi only)
- Vollaphone and Vollaphone X
- Xiaomi Mi A2
- Xiaomi Mi A3
- Xiaomi Mi MIX 3
- Xiaomi Poco F1
- Xiaomi Poco M2 Pro
- Xiaomi Redmi 3s/3x/3sp (land)
- Xiaomi Redmi 4X
- Xiaomi Redmi 7
- Xiaomi Redmi Note 7 and 7 Pro
- Xiaomi Redmi 9 and 9 Prime
- Xiaomi Redmi Note 9, 9 Pro, 9 Pro Max and 9S

The Pine64 PinePhone and PineTab are updated independently of the rest of these devices. The stable channel for the PinePhone

and PineTab will not receive an update labelled "OTA-24".

WHAT'S NEW?

NOTE: This is the last OTA for Ubuntu 16.04 (xenial) with major features. The next OTA-25 will be mainly security fixes and long-term support updates for xenial. Ubuntu 20.04 (focal) base has progressed quite far and so we are preparing everything for the switch. This also means that we will prepare OTA support for 20.04!

- Fingerprint unlock: More backoff time between read retries (flohack)
- Initial gesture support with double-tap to wake for selected devices (amartinz)
- Handle sms:// URL scheme to open messaging-app properly (lduboeff)
- Aethercast: 1080p support, various other fixes (fredldotme)
- messaging-app and sms/mms middleware: Various fixes (lduboeff, jezek)
- Media buttons on headsets work for most devices
- Mir-Android-Platform performance tweaks, configurable

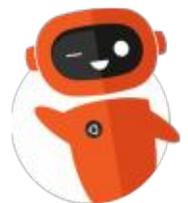
(fredldotme)

KNOWN ISSUES

Gesture support does not remember last state after reboot – will be fixed later

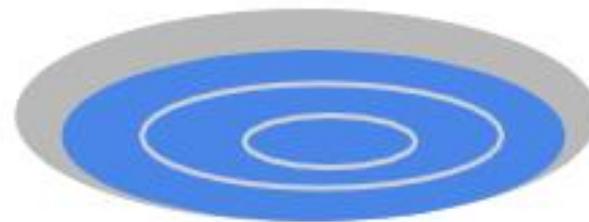
BUGS AND ISSUES FIXED:

- Messaging app freeze randomly after back button is pressed on conversation (lduboeff)
- Desktop wallpaper shows rotated images taken with device camera (flohack)
- Google Pixel 3a: A/V desync during video recording (fredldotme)
- Improve interactive drawer blur performance (fredldotme)
- “Reset Launcher” freezes lomiri-system-settings (jami)
- Bluetooth with volla phone broke beginning of April



The daily waddle

*SYNC THE PHONE
NOT SINK IT!*





MY OPINION

Written by Erik

I originally wrote this for black Friday, but circumstances meant it never went. It is also still very valid.

Open and free WiFi is good and well, but do not do any shopping on one. If you can, avoid using them all together. If you think of a gift at McDonalds, by all means, look it up, but do not enter any info into your browser. Make sure you have all the latest OS updates, and maybe invest in Clam AV. Do not let your device out of your sight, if you need to do something, lock it, as you never know when the cat will buy you that new BMW. If you are going to shop, make sure your browser uses SSL everywhere. If there is no SSL, don't buy there.

This brings me to another point, if it's too good to be true... it's a scam. Look up any website you have never dealt with first. Something like helloworld can also give you an idea of what you are dealing with. If you use a credit card, why not load up a virtual credit card first, before you buy? No matter what you may think, a cellphone is never safe, be

sure to read your bank's, or Apple's, or whoever's terms of service when it comes to the payment app. Some do not refund you if you get scammed.

Be mindful of payment/refund emails. The main trend of the outgoing year has been malicious mail disguised as the genuine article. They want you to open an attachment or download a linked file. Malware is often placed in an encrypted archive, the password is then given in the body of the message. If you were not expecting an encrypted archive, delete the email. (You can always find it in your deleted items if it was genuine.) You can always call the other party if in doubt. However, NEVER use the number provided on the email.

Always check the headers of an email you were not expecting. Even if you receive an email from your mom, you need to make sure there are no clicky shenanigans. The top prize for a criminal is sending emails from one friend to another and taking advantage of that trust.

If you are willing to make the effort, the best way to see who is compromised or selling your information is to compartmentalize. Create a different email address for your dentist, your optician, your bank, etc. Keep an eye on that bottom line while you are shopping and it may also tell you if someone absconded with some of your hard earned dosh.

This may seem like weird advice, but when you leave home, turn off bluetooth and WiFi on your phone. If you used the guest house's WiFi, remove that network when you leave. I know you all are lazy, because I can prove it by checking your phone and finding tens of networks. Don't just install apps for the kids to play with, I know it is tempting, but the less apps you have on your phone, the smaller the chance that one of them is malicious. Most people don't know their phones are compromised. Even app store apps get compromised, so don't be lulled into a false sense of security.

Do not buy anything on a shared

computer. You can look up why you have spots in your vision on WebMD, but never enter any information or passwords on one. Even if you have multi-factor authentication, don't. Multi-Factor authentication just means the criminal has to wait while you provide both passwords for him, then he just jacks your session.

Do not trust others with your passwords, if your sister/brother wants to use your computer, make an account for them.

You may laugh, but it happens, never photograph or photocopy your credit card. Don't let it lay on the table waiting for your waitress, or play with it while you wait, cameras are getting better by the day. The same goes for your identification documents.

Just keep this little article in mind when you are looking online for my pressie.

As always, misc@fullcirclemagazine.org if there are errors.





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 800 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.



Out on 20 October, 2022, Kubuntu 22.10 kicked off a new development cycle for this distribution with the KDE Plasma desktop.

Kubuntu 22.10 is the first interim release of this cycle, to be followed by two more interim releases and then the long term support (LTS) version – which will be Kubuntu 24.04 LTS, due out in April 2024.

Most of the Ubuntu-based “flavors” are now well-established projects and that means that each release usually brings just small refinements, not big changes. Kubuntu 22.10 is the distribution’s 36th release and the 15th with the Qt-based Plasma 5 desktop. Being an interim release, it is supported for only nine months, until July 2023.

Most Kubuntu desktop users skip the interim releases and stick with the LTS versions which come out every two years and are supported for three years.

INSTALLATION

I downloaded the ISO file from the official source by BitTorrent. Once completed, I ran an SHA256 sum check on it to make sure I had a good download.

This Kubuntu download is a record size at 4.3 GB. That is 27% larger than the last Kubuntu release, and 39% bigger than the one before that. Kubuntu 22.10 is even bigger than Ubuntu 22.10 which weighs in at 3.8 GB. This same bloat effect seems to be happening to all the Ubuntu

derivatives over the last year or so, but there has been no official explanation for it.

I tested Kubuntu 22.10 by dropping it onto a USB stick equipped with Ventoy 1.0.81. Ventoy takes care of all the unpacking at boot up, and the stick can hold several different distributions, with Ventoy offering a choice of which one to try out at boot up. It is an efficient tool for reviewers, but also for anyone trying out multiple distributions for their own use.

SYSTEM REQUIREMENTS

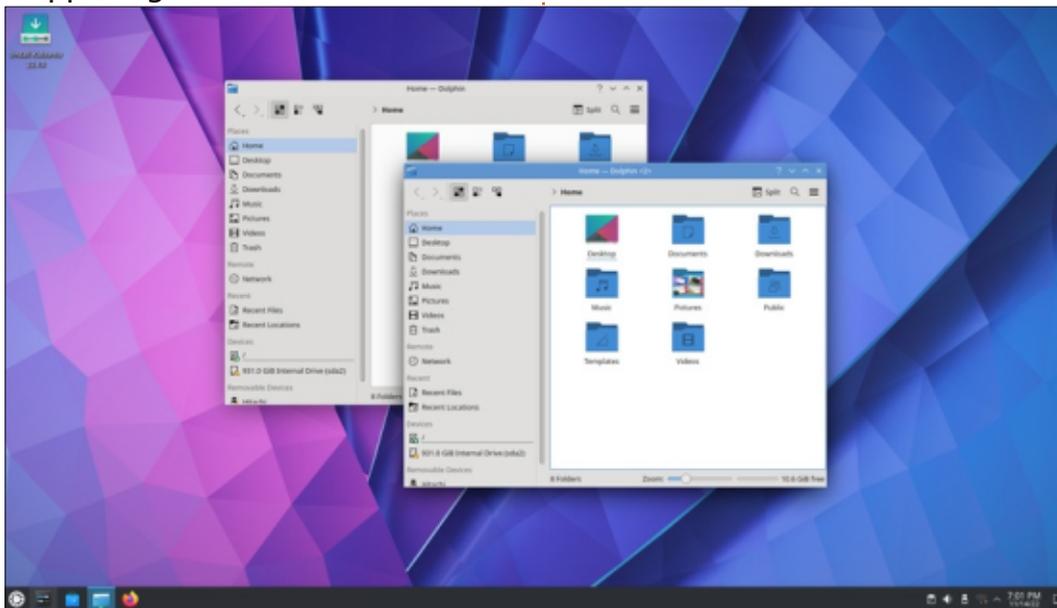
The recommended minimum system requirements for Kubuntu 22.10 are the same as for Ubuntu and have not changed for this release:

- 2 GHz dual-core processor
- 4 GB RAM
- 25 GB of hard-drive, USB stick, memory card, or external drive space
- Screen capable of 1024x768 pixel screen resolution
- Either a CD/DVD drive or a USB port for the installation media
- Internet access is useful, but not essential

The recommendation of 4 GB of RAM is probably a bit light these days, given how much RAM modern web browsers consume with only a few tabs open. 8 GB of RAM is probably a more realistic minimum for decent performance.

NEW

The only really substantive change incorporated in Kubuntu



REVIEW

22.10 is the switch of the audio controller from PulseAudio to PipeWire, following the lead of Ubuntu on this move, although most users probably will not notice the difference. PipeWire is supposed to be less buggy, support more hardware, use less CPU power, and give better audio performance, especially over Bluetooth and for video conferencing.

Kubuntu 22.10 uses the Qt 5.15.6 toolkit, KDE Frameworks 5.98, and applications from KDE Gear 22.08. It has the Plasma 5.25.5 desktop which brings a collection of minor improvements.

The newer Plasma 5.26 desktop

had just been made available when Kubuntu 22.10 came out, but it was too close to the deadline to be included. Plasma 5.26 will probably turn up in the next interim Kubuntu version which will be Kubuntu 23.04, due out in April 2023.

There have been no changes to the mix of applications included in this release, just version updates to the KDE Gear 22.08 versions.

Like all Kubuntu releases, 22.10 comes with fresh wallpaper for a new look. This wallpaper is entitled Safe Landing and is by Luis Durrant. Most recent wallpapers have been rather toned-down abstract designs, but this one is whimsical, bright, and rather busy. As in the

previous release, there are 31 other wallpapers to choose from, many favorites from recent Kubuntu releases. Of course, you can always use your own wallpaper, too.

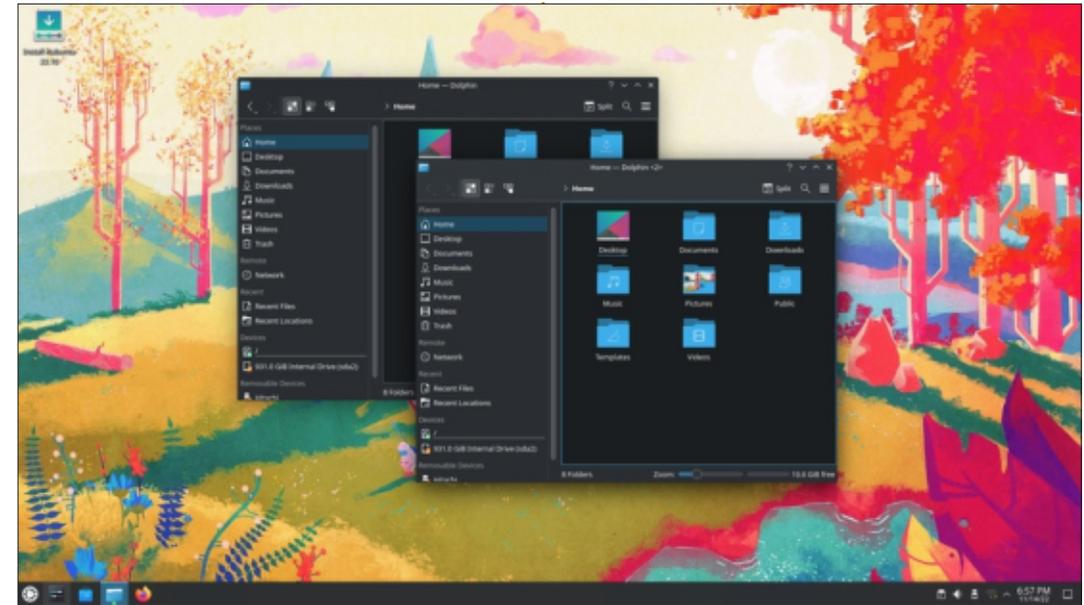
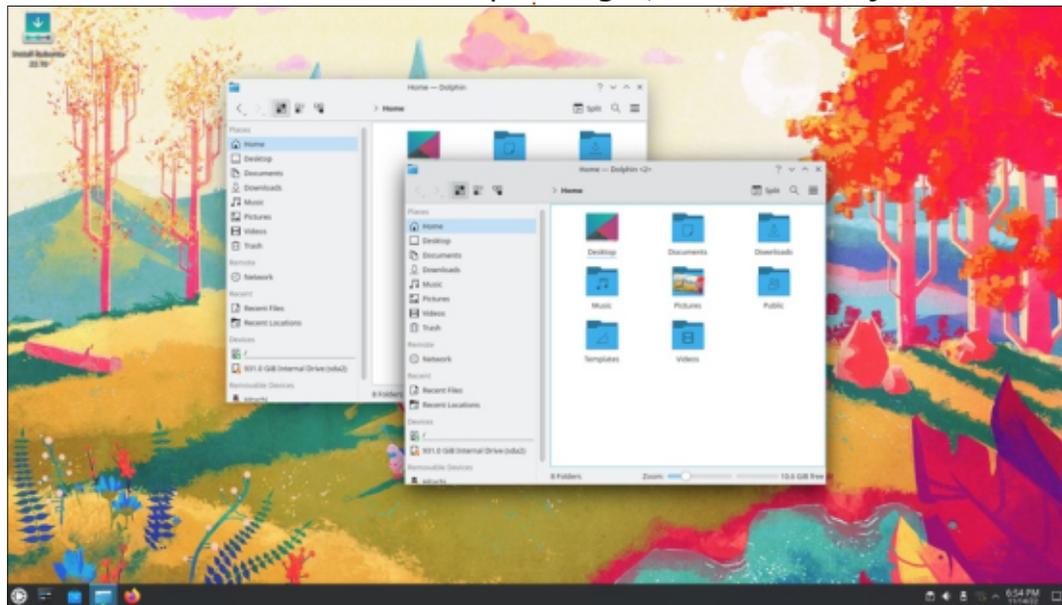
SETTINGS

Kubuntu continues to be the most customizable of the Ubuntu flavors, with a myriad of user settings provided, to really make it look and work the way you want. In talking to Kubuntu users, many mention the high degree of customization available as a big reason why they are fans.

Kubuntu 22.10 offers users four global themes, four application

styles, six Plasma styles, five window colors, two window decoration styles, eight icon sets, and eight cursor styles. And, that is just the list of installed options. Most of the settings pages offer a one-button download and installation of a plethora of more options, right from each of the settings windows.

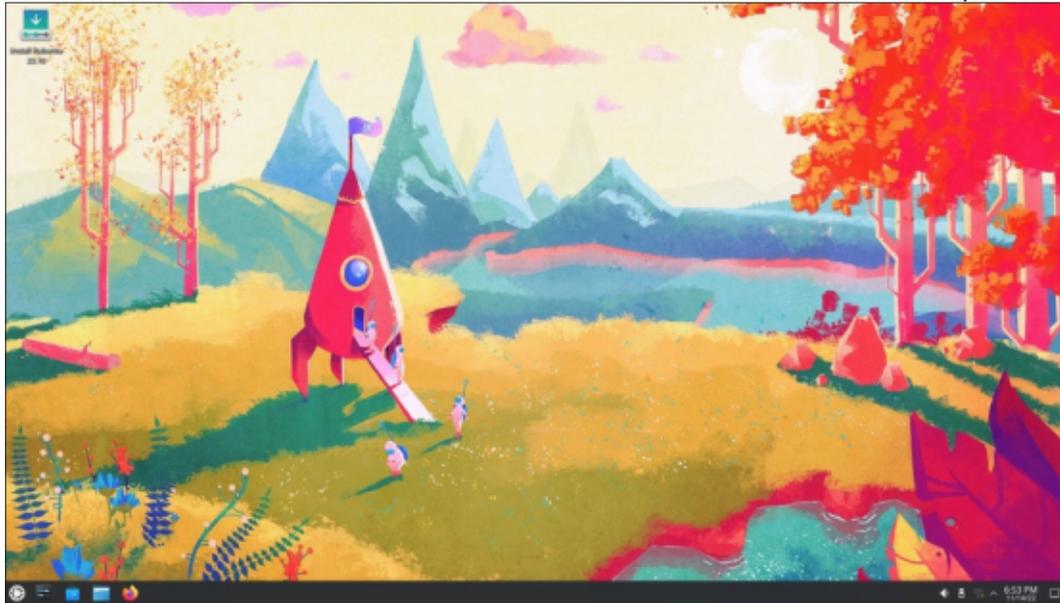
Kubuntu 22.10 also has a choice of 68 pre-installed desktop widgets. These are small applications that can be added to your desktop like clocks and weather reports. Hundreds more widgets can be downloaded, as well. You will probably need a bigger screen if you plan to install more than a handful of them.



The KDE Plasma desktop panel (task bar) can be easily relocated to anywhere on the screen, including left, right, top and bottom, or even in the middle. You can even have more than one panel. By default, the panel is found on the bottom of the screen but, when moved, it changes its icons to its new orientation. The panel can also be made wider or narrower, and the icons resize automatically to fit.

The KDE main menu continues to work well. Since Plasma 5.21, the menu has been smoother and more functional than in earlier versions.

APPLICATIONS



Some of the applications included with Kubuntu 22.10 are:

- Ark 22.08.4 archive manager
- Discover 2.1.2 software store*
- Dolphin 22.08.2 file manager
- Elisa 22.08.2 music player
- Firefox 106.0 web browser**
- Gwenview 22.08.3 image viewer
- Kate 22.08.2 text editor
- Kcalc 22.08.1 calculator
- KDE Partition Manager 22.08.1 partition editor
- Konsole 22.08.2 terminal emulator
- Kmahjongg 22.08.1 game
- Kmines 22.08.1 game
- Konversation 22.08.1 IRC client
- Kpatience 22.08.1 game
- Ksudoku 22.08.1 game
- Ktorrent 22.08.1 BitTorrent client
- LibreOffice 7.4.1 office suite, less

only LibreOffice Base database
Muon 5.8.0 package manager*
Okular 22.08.1 PDF viewer
PipeWire 0.3.58 audio controller
Plasma System Monitor 5.25.5 system monitor
Skanlite 22.04.3 scanning utility
Spectacle 22.08.1 screenshot tool
Startup Disk Creator 0.3.15 (usb-creator-kde) USB ISO writer
Thunderbird 102.3.3 email client
VLC 3.0.17 media player

* indicates same application version as used in Kubuntu 22.04 LTS
** supplied as a snap so the version depends on the upstream package manager

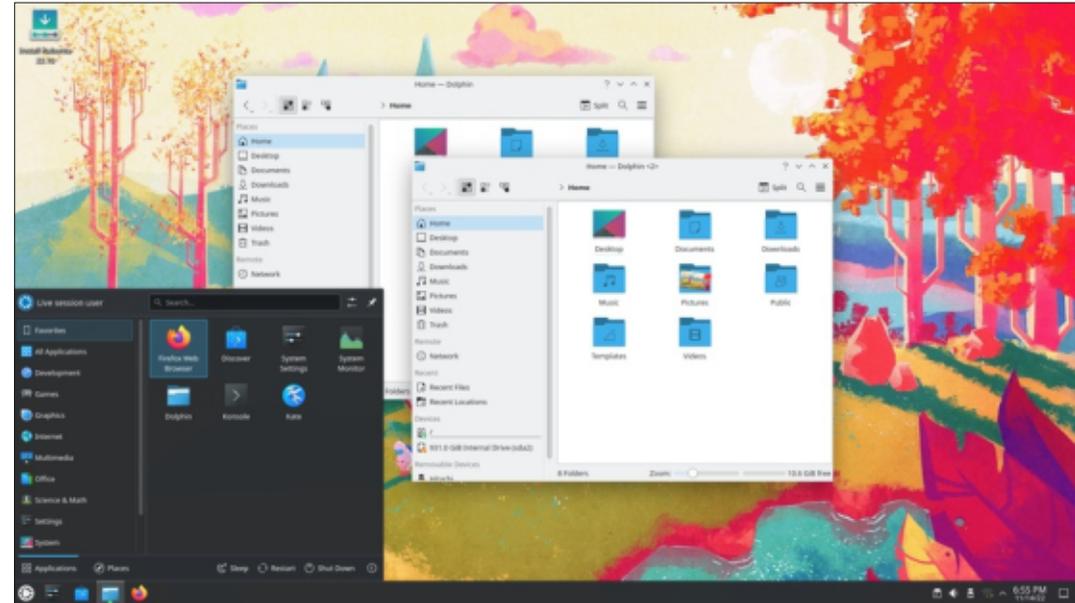
As can be seen from the lack of asterisks, most of the applications

included are updated application versions from KDE Gear 22.08 collection with only the optical scanner, Skanlite, leftover from KDE Gear 22.04. The Gear 22.08 versions of the KDE applications include many small improvements but no major changes.

Kubuntu 22.10 continues to provide Firefox as a snap package for the default browser.

LibreOffice 7.4.1 is once again provided complete except for LibreOffice Base, the office suite's database application. Base is not widely used, but it can be added from the repositories, if desired.

As in past releases, Kubuntu



REVIEW

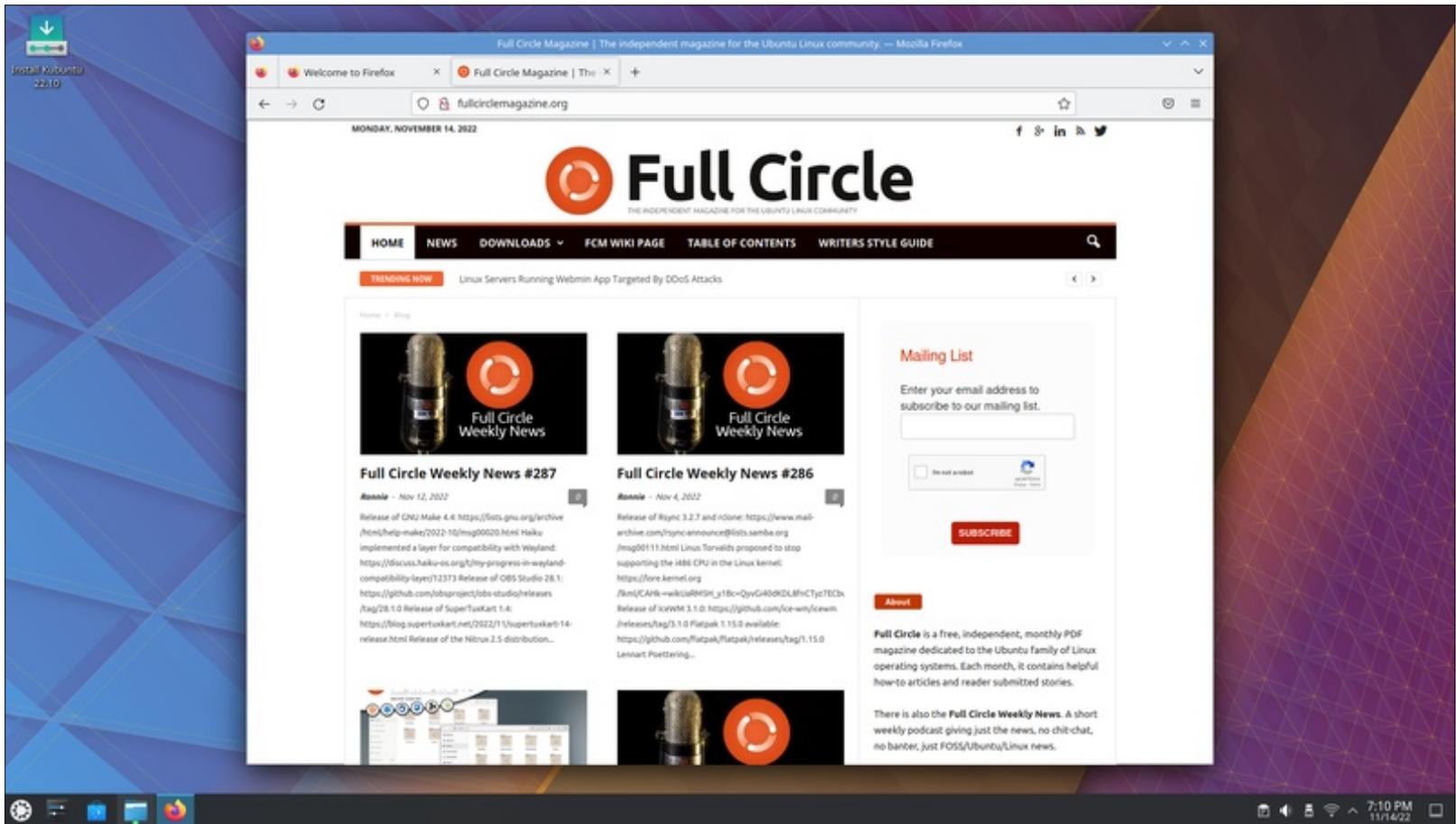
22.10 does not include a webcam application, image editor or video editor by default, although there are many options for each in the repositories for easy installation using Muon, Discover, or with APT from the command-line. KDE's Qt-based Kdenlive remains probably the best choice in a video editor, plus it fits on the KDE desktop nicely.

CONCLUSIONS

If this first interim release is a good indication of the direction for this development cycle, then it looks like we can expect just some minor refinements on the path to the next LTS release due out in April 2024. I think that, after 36 releases, most Kubuntu users like the way it works and don't see any great need for changes.

EXTERNAL LINKS

Official website:
<https://kubuntu.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.



Website: <https://ubuntucinnamon.org/>

Blurb: "Community-driven, featuring Linux Mint's Cinnamon Desktop with Ubuntu at the core, packed fast and full of features, here is the most traditionally modern desktop you will ever love."

I actually wanted to try Ubuntu GnuStep 22.04 – but it did not work, so on the same download page at Sourceforge I found this gem. I can say from the onset that it is visually stunning, but that is where the excellence ends. I installed this on my test laptop, not a virtual machine. I replaced Ubuntu Budgie 22.04 that actually worked great.

Ubuntu Cinnamon ships with Nemo and Thunar, Nemo set as default. Thunar is included for its excellent bulk renaming capabilities, and I honestly prefer Thunar. From the operation side, it all seemed to be in order; however, the laptop had a 160GB, 5400rpm drive, and I knew that opening Firefox would be slow. I was

prepared for this and asked my girlfriend if she wanted a quickie, she opted for the full thirty seconds, and afterwards I looked at the screen, still nothing! We played a quick game of Rummy, and made lunch, still waiting. Just as I was about to reboot, Firefox appeared. This was not on. As this was a fresh install, with updates as well, it was odd to see more updates, but I did them too, just to have more after the first restart. Fine, let me search DuckDuckGo for speed-up tips. There was more nothing. I closed

and reopened Firefox to see if it would now be faster... It never opened again.

Troubleshooting, I was greeted with this cheerful message (below)

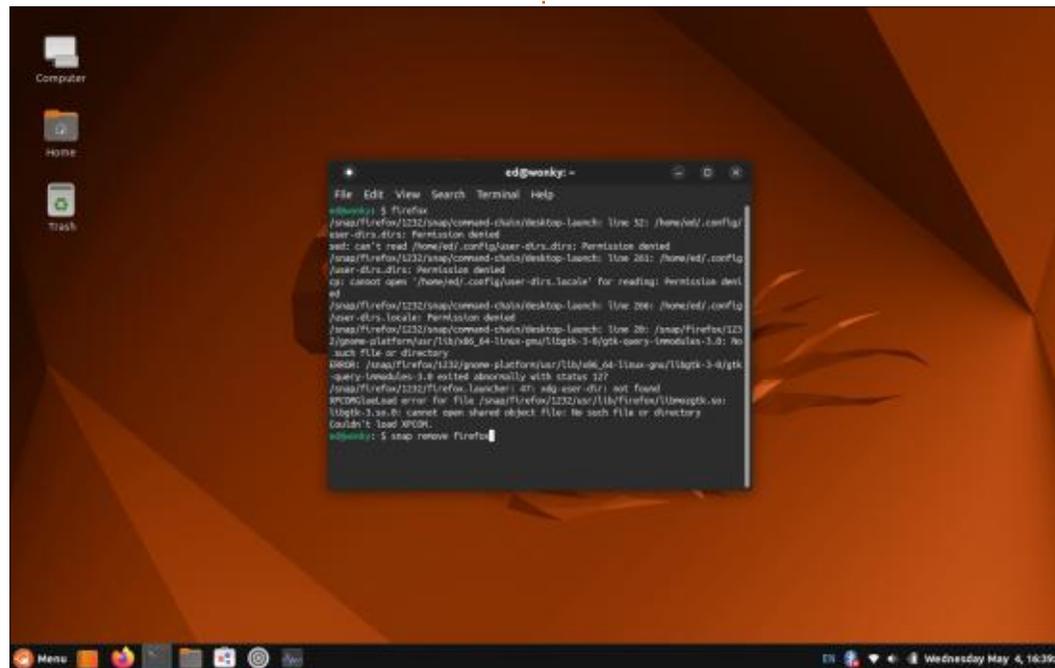
(In case you cannot read it in the magazine, it gives a permission denied error to its own snap folder)

I know what, I will uninstall it. Just to find that I could not uninstall many of the pre-installed applications. (This may be due to

Gnome in a Snap). If this mildly irritates me, what about the poor kid taking his first steps with Ubuntu?

The frustration got real at this point and I reached for the terminal. I installed web for browsing in the interim and removed Firefox. I installed the .deb from PPA and... bliss. I tried Office and found I had to scroll through pages and pages of spaghetti fonts. I did my usual removal script and still found lots and lots. I don't want to scroll through pages and pages of spaghetti fonts to find one I could not remember the name of, not sure about you? To be fair, I tried the OEM install as I wanted to install a system and mail it to someone, so it may have been that. For future reference, OEM install is off the cards.

The software seemed to be my biggest gripe with something like Lazarus showing 8.6 MB in the Snap store, yes, this distribution ships with 2 software centres - and installing 150MB. To put the cherry



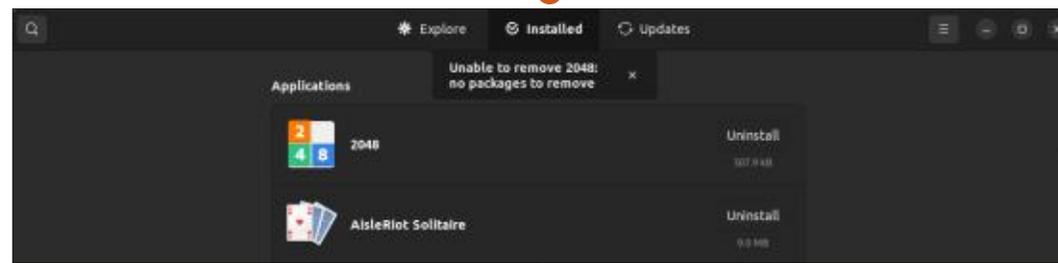
REVIEW

on the cake, it did not work, citing a missing executable. So I installed Lazarus IDE from the command-line, to get a "downgrade" message when launching it afterwards, with both being version 2.2.0.

Uninstalling the snap store version caused the command-line installed one to work flawlessly. Now imagine what a newbie to Linux would say? This is junk! and promptly go back to Bill Gates' wallet.

I tried installing some QT applications to test, just to find them frozen on the screen.

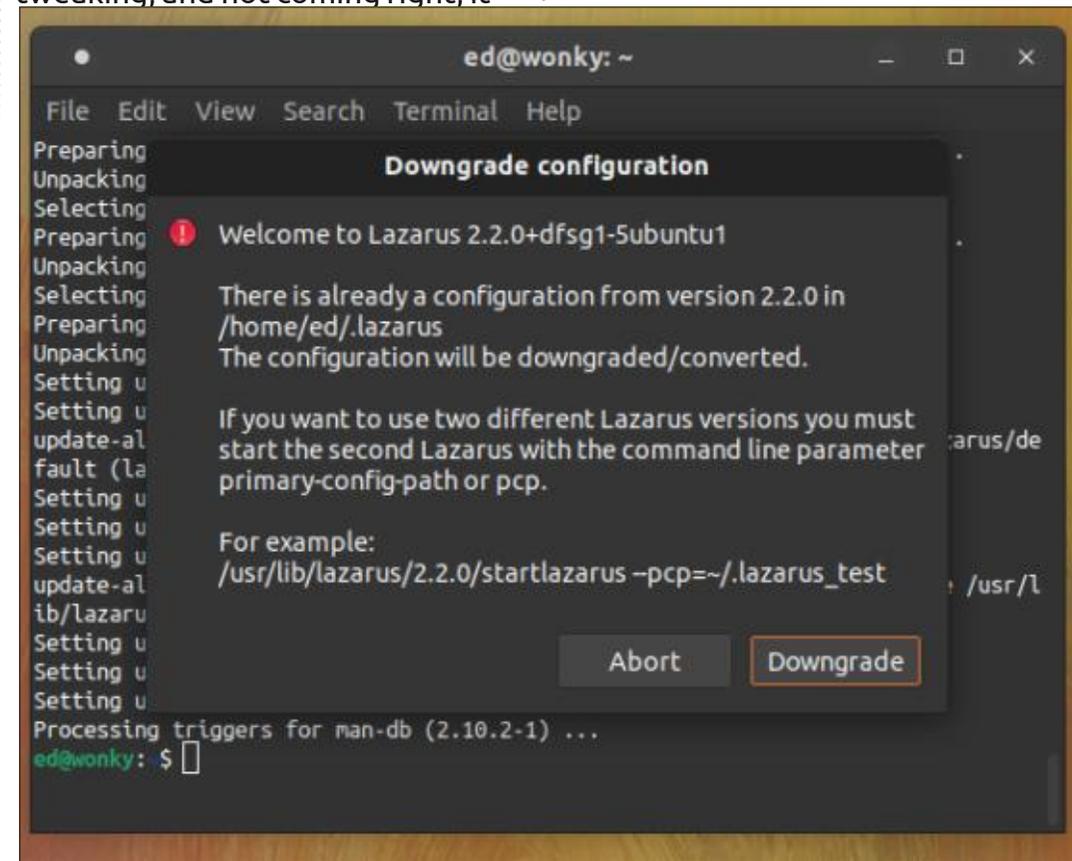
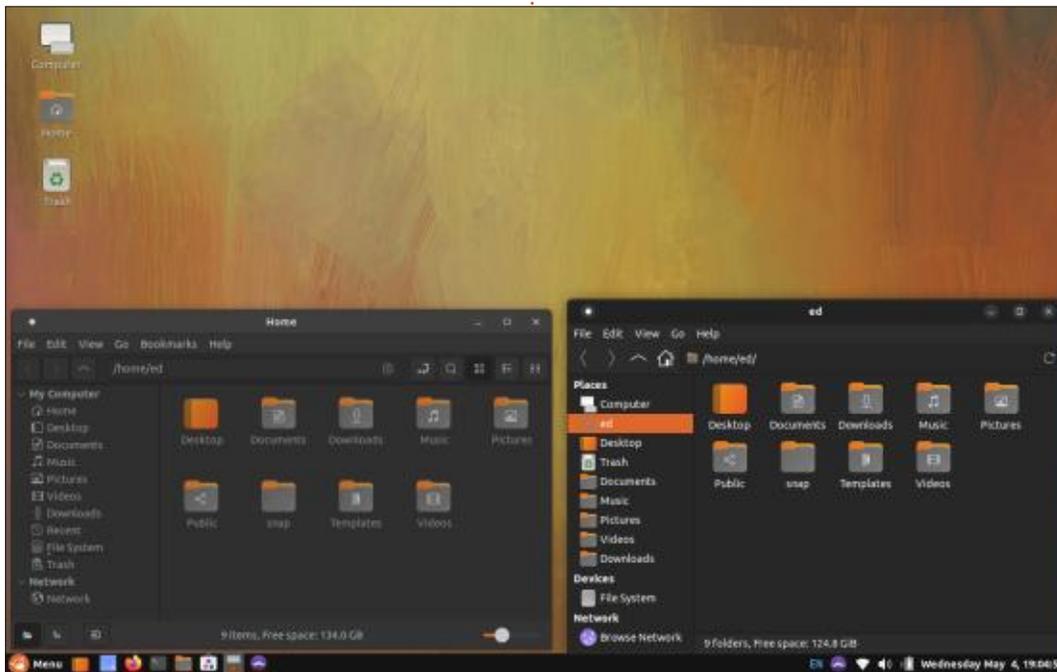
Then there was the hardware. I



ran the driver tool, but it informed me there were no proprietary drivers. If so, why was my WiFi indicator having a disco party without me? On-off-on-off twice per second! I decided to try the media keys and touch-bar. Though my touch-bar worked, there was about a one-to-two second delay, with a speed-up. Again, not ideal, but not a deal breaker. To put it into perspective, these worked fine on

Ubuntu Budgie 20.4. Then I tried a lid suspend, nope did not work either. Shut down? Neither. It just flashes the screen off and on. Log off. Same story. Reboot, that worked. After fiddling with power settings and forced disk checks and tweaking, and not coming right, it

froze and I had to remove the battery. (Stability, check...). Thereafter, it was golden, rebooting, logging out, etc. For some or other reason, I found apt to hang even through a reboot, say what now? I am unsure if it was the auto update, as it happened four times in one evening, preventing me from installing software. With that said, it was also a lot slower than the aforementioned installation.



REVIEW

Snapd being the culprit, I suspect for the boot process, adding more loop devices. One would think, that, as my laptop has a dedicated ATI graphics card, the system would offload some of the work to it and it should be faster than my other identical laptop without dedicated GFX... but alas, no. (I mean, it's 2022 for crying in a bucket!).

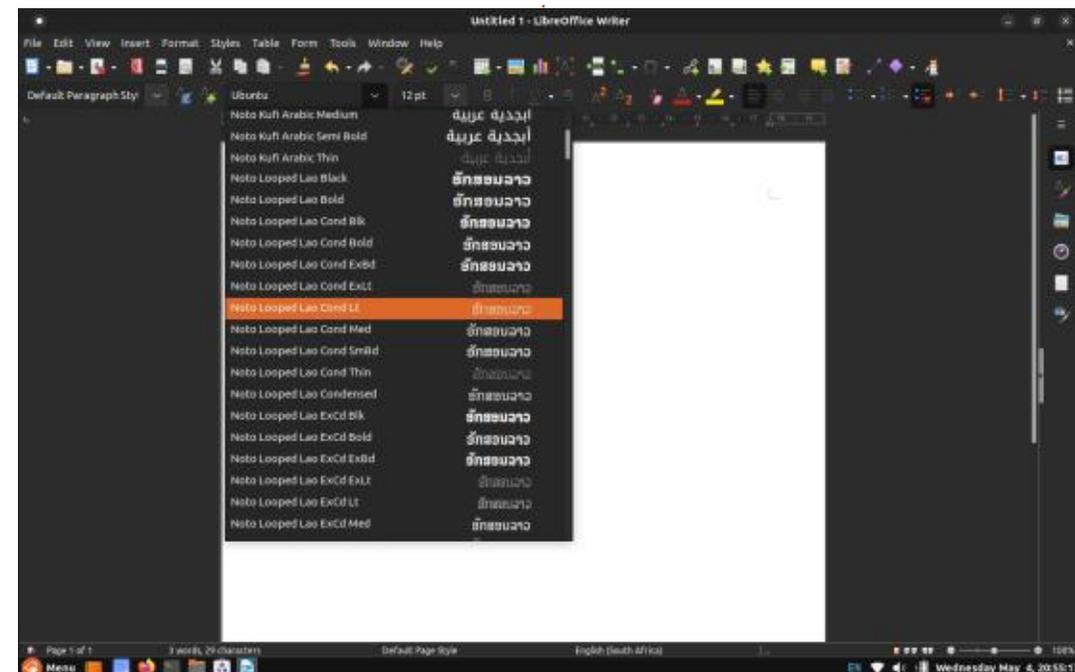
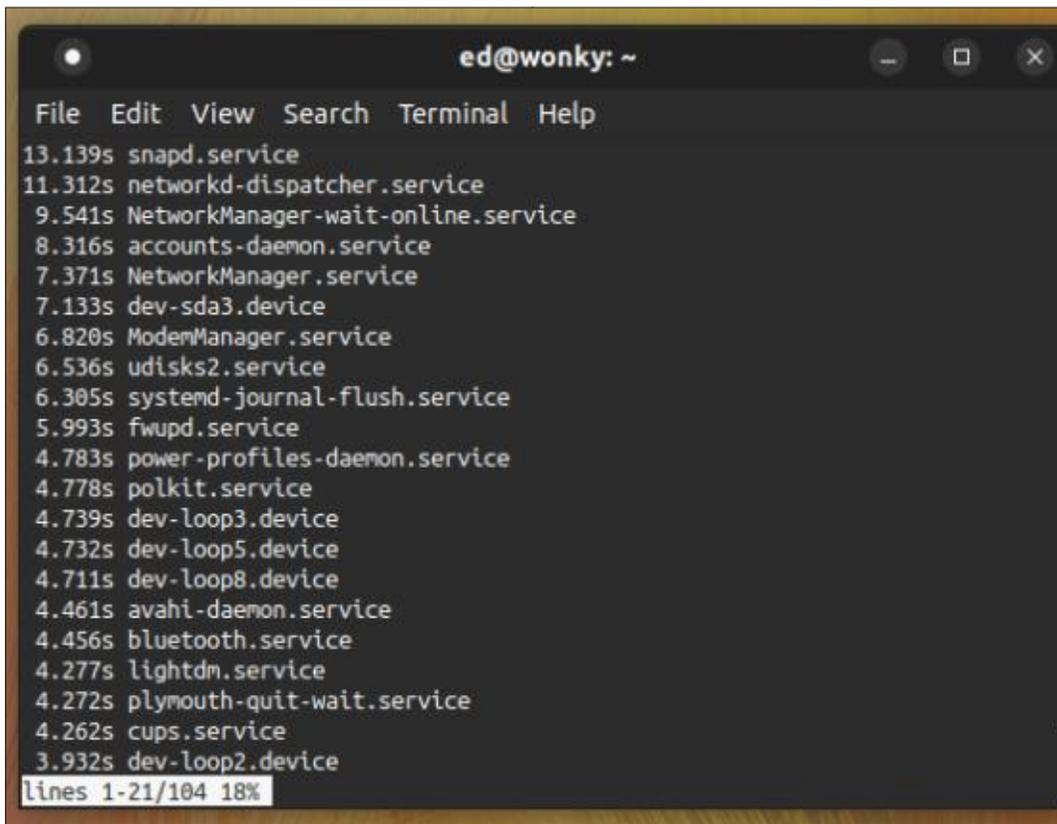
This brings me to my other issue, my laptop got hot, very hot, and the fan tried its best to cool it

for a long time. It did settle eventually when the evening became cool, suddenly the laptop decided to calm down too. Jumping into Mint's speed-up guide, it also helped to cool down the little dragon breathing fire on my lap. The new Gnome screenshot tool is really cool, I just wish it did not "remember" the last setting when using the PrtSc-key, but I am sure I am just being a noob with this good looking new tool. Though Cinnamon does give you the option to create more panels, it is no match for XFCE

in that space, only allowing you to make a picture frame around your desktop, instead of dock-like panels. The plus point is all the applets you can add here, like JIRA and Docker integration. Also, with 160GB of disk space, giving up 11% to an installation is starting to feel like Windows... just putting it out there.

If I am being honest, I like the cut of its jib, and I will be watching its progress with an eager eye. As it stands, though, Ubuntu Cinnamon is that pretty blonde in your chemistry class that is dumber than mud. Sure, you are going to play with it, but you are not going to

keep it.



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.



LETTERS

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



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-  ubuntuforums.org/forumdisplay.php?f=270

PRIVACY

My wife and I are home desktop Linux users, and have been since 2007, when we both ditched Microsoft. We're in our late 60s and early 70s. We've used Ubuntu, LinuxMint (of several varieties, even LMDE), tried Zorin and Elementary, and live-loaded a few others (hurray for Ventoy!). We both currently use Debian.

I decided to go paranoid a while ago. I started looking into de-Googling and blocking Pixels and other anti-tracking crap. I was also looking at system and browser fingerprinting, footprinting, when I decided to see if there were any aids from the repos. Holy crap! There were, and several!

I found the webext- section. There are system based versions of Privacy Badger, Ublock, and a bit more that automatically incorporate into any browser they're compatible with. Slick! I don't have to mess with finding and installing those add-ons any more. They just appear by magic.

I dug a bit deeper and found Privoxy and DNSS. I installed both, then promptly uninstalled DNSS. It's not neighbor friendly with Privoxy, and I ran into network connectivity issues. From the writeups, I think I prefer Privoxy over DNSS anyway.

I then stumbled upon PortMaster, which bolsters ufw, which I do have enabled. It tells me things I never knew, and shows me how to allow, limit or void those things. Whoop! I also wanted to know that nothing was hindering my ability to BOINC. Yes, at my age, I BOINC, and nearly 24/7 (Berkeley Open Infrastructure for Network Computing). There is no connectile dysfunction here.

Now, when we log into Facebook, Goggle, YouTube, or Amazon (and a couple others), we get security warning emails from them saying "OMG! We've seen a login attempt from someone not in your exact location from our records and from someone we don't recognize. Is that really you?"

Tickles the spit out of me. OK, at my age, some things do excite me and I drool a bit, but you know what I mean, right?

I thought with the growth of Linux desktop use, and the explosion of concerns over desktop privacy and security, you might want to drop a note to some of your regular writers about this. I'm not a writer. I'm not a nerd, geek, dork, dweeb, or guru. I'm a retired HVAC service tech with too much time on his hands.

Blaine

OLD COMPUTERS

In the recent issue of FCM, you wrote: "[...] in the HowTo section is an interesting piece on which distro to look at for a 32-bit machine. Gone are the days when Ubuntu used to run on anything. Unfortunately, 32-bit machines, which are still capable, are being ignored by most distros. Which is a shame. As it almost encourages people to dump them." - I

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.

absolutely agree with you!

Ten years ago I started out with Linux: Ubuntu, Xubuntu, Kubuntu, and many others (Suse, Manjaro, and, yes, Linux Mint). In 2015, I tried MX-Linux. I still have several 32-bit machines and run MX-Linux on them no problem. I would recommend MX-Linux.

Thanks to Alan German for his article, and a big THANK YOU to all who make FCM possible!

HD

VENTOY : A SOLUTION?

Hello. I enjoyed a lot reading the Ventoy article and letters in Full Circle Magazine #187. Some days later, I downloaded the latest Ventoy .tar.gz (ventoy-1.0.82-linux.tar.gz) to update my USB stick (64 GB with 27 ISO images of Linux distributions and rescue files) from version 1.0.79.

I extracted Ventoy and looked in the README file. This includes a lot of information about Ventoy files and especially a note that caught my attention. Some files allow the

use of a Ventoy GUI, with a suffix that relates to the CPU. I launched VentoyGUI.x86_64, and a GUI window opened (see picture # 187 page 46). First, I think I read (see attached image) the Ventoy version number of the one installed in my stick and the downloaded version. Hurrah! The question "how to know the Ventoy version in my stick?" is solved :)

At the bottom of the window, an "update" button; I used it to update my USB stick. On the menu bar, "Language" allows the user to select a language other than default English. And... last but not least, in the "Option" submenu, a line is "Clear Ventoy". Is it the solution to erase the whole Ventoy structure from the stick? When pressing "Clear Ventoy", twice a pop-up message informs me that the device will be formatted and requests my agreement. Seconds later, the second message, I was informed that Ventoy has been suppressed from the stick. To be checked!

I opened gparted to find detailed information about the USB stick. Answer: not allocated. The stick seemed void. Was it true? As Adam and AE discussed the

opposite.

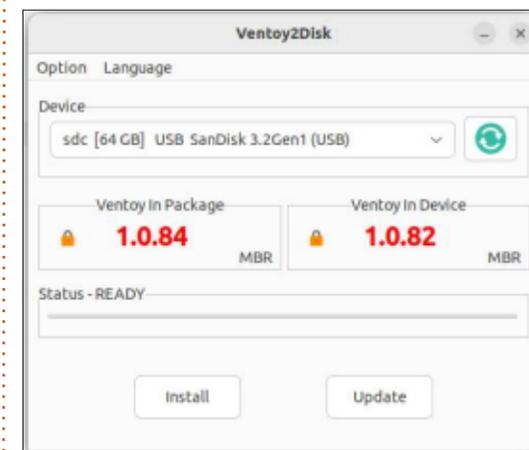
I unplugged, then plugged the stick in again. But nothing happened. The stick is not visible in Files. A lsusb in the command-line didn't show more. Opening gparted again, I didn't see the stick. But, it was visible on the Ventoy GUI. Gparted closed. I tried to re-install Ventoy in the stick using the Ventoy GUI; after the 2 warning message popups, another message informed me that "a problem occurs". I unplugged, then replugged the stick, and tried again. It was then successful, and the stick appeared in Files.

I opened gparted, saw the stick. Trying to launch a total erase, I unmount the exfat partition, the one that could contain ISO and data files and suppressed it. Successful operation! I went to the fat16 partition, the one containing the Ventoy executable. Launch a partition suppress process. Success! Unplug and re-plug. With gparted, I tried to create a new partition table (msdos). Success! Then an EXT4 format. Success! After closing gparted, the stick was visible in Files. There, I needed to change mode to 777 (sudo chmod 777

{Stickname}) to be able to write files on the stick.

I loaded some various files (images, Libreoffice files, ISO images, txt files), unplugged it and plugged it on my TV box. I tried to read the contents. Success! I succeeded in opening a .jpg file on the TV. Then, to finish, I downloaded the last Ventoy .tar.gz file (ventoy-1.0.84-linux.tar.gz) and applied a sha256sum on it. With Ventoy GUI - this in the sub-directories of Ventoy 1.0.84, I re-installed Ventoy on the USB stick and re-loaded the ISO files. Success!

d52fr
French translation team





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 is such a lot, and I do them, first-come-first-served.

Guys, I only have access to my old Telegram account via one old laptop, the new "owner" of the phone must have done something, so if I do not get back to you immediately, find me on the FCM telegram group.

There is nothing as frustrating as a government employee telling you that they cannot assist you know because the "computers are down" and then proceeds to play solitaire. Would you believe that a

Monkey-pality did a trial run of Ubuntu on their machines as they were using Red Hat mail servers that were running for almost 15 years that were never rebooted? The staff rejected the OS as being "too hard to learn" on the questionnaire after the trial run. Whilst in the office one day repairing a machine, I overheard them talking in the break room, how they all got together and rejected the idea as there was no solitaire installed. Yes, it blew my mind too, as I was looking forward to them running Hardy Heron (I think it was) at the time. This is always what comes to mind when I hear about places like Munich switching to Linux, then rejecting it again. (It also has NOTHING to do with all the crappy Microsoft merchandise that keeps getting handed out, I'm sure!).

Q: On Jammy, I ran `sudo apt autoremove` and cleaned my PC with Stacer. I broke bluemail. How can I know if it is safe in the future, and how can I know what it removed? I am really nervous now

as this has never happened to me before with Linux.

A: If you do not use Chrome/Chromium based browsers, it probably killed that – because bluemail is Chromium based. Just re-run the installer and you should be good. If you need confirmation of the reason, navigate to `/var/lib/systemd/coredump/` and look for bluemail in the filename. The apps in Linux are generally safe, but they come with no warranty.

Q: I just saw oracle had official vagrant images on their site for unbreakable, but isn't vagrant dead?

A: I had a look now and I see no new images on their hub; however, it still works just fine and you can create your own images where Vagrant can still save you lots of time. There are updates on the blog (<https://www.hashicorp.com/blog>), and their github is still very active (<https://github.com/hashicorp/vagrant>).

Q: Whenever I close my laptop, I notice when I open it, that it didn't shut down, but asks for a password? Sorta dangerous in one's backpack. Do you think it has anything to do with 'light locker'? Which, btw, has no real settings.

A: Light locker is a Mint application as far as I know and though Ubuntu and Mint share a common backbone, the deb's are not 100% interchangeable. I suggest you not do that unless you have 100% confidence in your abilities.

Q: In XFCE, I cannot add or remove items from my session and startup. Any changes I make are immediately reverted on reboot. I can't find an answer on google as to why, but I realise that I may be asking the wrong question as google is as dumb as mud if you don't say the right thing, English being my second language probably does not help either.

Q&A

A : English is not mine either, but here we are. There is an `.config/autostart/` folder you need the right permissions for, in your home folder. Sometimes it gets owned by root (maybe some software changes it), so use `chown` to make it your user's folder.

Q : I just can't get VLC to run on Jammy since updating to the latest version, it doesn't show the main window any more. Could you please assist here?

A : A good way to fault find, is usually to start the application via the terminal; it will tell you what is wrong as output. I had a similar issue before, where a skin was causing the issue. If you are using custom skins, rename the skins folder, create an empty one, and try again.

Q : What is the best way to record my terminal?

A : Best is subjective, but if it is size and speed you value, I'd suggest `asciinema`; <https://asciinema.org/>

Q : On my Mac, I can grab stupid DRM videos with `cmd+shift+5`; how do I do that on Xubuntu?

A : Yes DRM video is extremely stupid. Unfortunately, that is not baked into Ubuntu as far as I know, but you can use a tool like 'simple screen recorder', without a problem.

Q : What is the main cause of slow OS when running from USB thumb drive?

A : Slow USB thumb drives? I run NomadBSD from a fast USB-3 drive in a USB-3 port and it is fine, but I see the difference immediately on an old laptop, with USB-2 ports and limited RAM.

Q : What is the best way to bulk rename files for downloaded series on Deepin, please?

A : Deepin is no longer based on Ubuntu.

Q : I made a boo-boo in my `sudoers` file to the point where I can no longer run anything with `sudo`. What can I do now except

reinstall?

A : No need to panic, use `pkexec visudo` and fix that file.

Q : Thanks for your help, my 'temporary failure in name resolution' was not due to any error in Ubuntu, it turned out that I had a faulty SFP in my router.

A : You are most welcome.

Q : What does `journalctl -xef` do? They asked me to run this in a forum, but I don't quite trust randoms. Ubuntu 22.04, 8GB memory, 480GB SSD.

A : You can educate yourself here, it is a good opportunity! See: <https://www.digitalocean.com/community/tutorials/how-to-use-journalctl-to-view-and-manipulate-systemd-logs>

Q : I installed `Code::blocks` for school on our old home computer, but it looks ugly and the tabs are too glossy. Is there a way to fix that?

A : I'm not sure, it could be something in your theme overriding it, you never told me what flavour of Ubuntu you are using (this makes a difference).

You can try settings -> Environments -> Notebooks appearance, then on the first dropdown, choose simple tabs?

Q : So, I'm new to Ubuntu and struggling with the command-line a bit. I'm missing something on install, I think, but I'm missing the installer to install, if that makes sense. I run `sudo pacman -Syu` and it fails.

A : OK, when someone sends you to the Arch documentation, it is because it is well written. You are only supposed to read them, not copy commands from them. Pacman is an Arch package manager, on Ubuntu we use `apt`, or `apt-get` (it's really easy, eg; `sudo apt update`). Here is an exhaustive list of ways to install software on Ubuntu: <https://askubuntu.com/questions/307280/how-do-i-install-applications-in-ubuntu>

Q&A

Q: Lubuntu is my poison, but ytdlp is not working. I know it is python related and get this instead of a version: python -v Command 'python' not found, did you mean: command 'python3' from deb python3 command 'python' from deb python-is-python3

A: If that clue was a snake, it would have bitten you. Try:

```
sudo apt install python-is-python3
```

reboot, and try again.

Q: Can I run Kubuntu on this: <https://www.takealot.com/lenovo-ideapad-3-15-6-fhd-celeron-portland-15-6-slim-laptop-back/PLID91603724> please?

A: Yes, but I would not. Rather save your Christmas money and get something with upgradeable RAM, your future self will be very happy you did. Soldering memory to the mainboard is just bad news, forcing you to upgrade in a year-or-so's time. If that memory should fail in 7 months, you need to buy a

whole new laptop as that is usually the lowest quality memory they can find.

Q: Is there any reason to choose Chromium over Chrome for Ubuntu Budgie?

A: It all comes down to your preferences, Chromium does not automatically sign you into websites with your Google account, so you will get less spam, it also will open multiple windows in one if the website / application supports it,

for instance. This helps cut down on lots of tabs for the same page. It also does not update every day. See: <https://itsfoss.com/chrome-vs-chromium/>

Q: My laptop would last like 30 min before just turning off. I thought it may be fixed in Ubuntu 22.10, but it still runs for only 30 min, and the battery still shows half way. TLP does nothing, I have tried it too. <removed>

A: Usually that indicates a bad cell in your battery or a faulty battery controller (circuit board inside the battery). If your machine is still under warranty, have it replaced, or get another battery yourself.

Merry Christmas everyone!



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.





TABLETOP UBUNTU

Written by Josh Hertel



BACK NEXT MONTH



Josh Hertel is a husband, father, mathematics educator, tabletop gamer, techie, and geek.

<https://twitter.com/hertelj1>



UBUNTU GAMES

Written by Ronnie Tucker

Dwarf Fortress (Steam Edition)

That's right. Finally, after about 3 years of work, it's here. Dwarf Fortress is now on Steam. Not the old version on Steam. No. This is a complete rewrite, and with a friendly GUI.

So what is Dwarf Fortress? Well, you should first realise that it is often billed as being 'the most complex video game ever made'. Which, I'd say, is true. It was the inspiration for a little game called Minecraft. And was the inspiration for many a 'rogue-like' game such as RimWorld, and any other game where you mine, craft, and manage a colony.

Basically, you manage a fort, which you build, using your initial seven dwarves. From there, you try to stop your fort falling apart, fight off sieges, see dwarves doing silly things, and see how long your fort can last. There's no end goal. It's completely open ended.

INSTALLATION

Way back in FCM#132 I discussed how to install Dwarf

Fortress, but, this time, we're using Steam. Full disclosure here: it's not officially out yet for Linux, but it is coming. So although I'm all for the mantra of 'no tux, no bucks', I know Linux is coming, and that's good enough for me to give these guys \$30.

First, load up Steam and go into the menu Steam > Settings. In the window that pops up, click 'Steam Play' on the left and (on the right) check both boxes for Steam Play. Done.

Now, after you purchase Dwarf

Fortress, you'll get the option to install it, and it'll install Proton and Dwarf Fortress.

ON FIRST RUN

Once it's all installed and you click to run Dwarf Fortress, I urge you to go into the Settings and click to make DF windowed. I found that if you leave it full-screen, it'll run fine, but if it loses focus (you ALT+Tab to something), it'll freeze. This doesn't happen in windowed mode.

STRIKE THE EARTH!

You begin the game by creating a random map with about 100 years of history. And that's not just junk history. That's history that'll be referenced in the game and can be browsed in Legends mode.

Once you have a map you need to find a place to set up a fort. You can use the handy search function for certain areas. Once you have a place chosen, it's time to embark.

You can either choose to set off with preconfigured dwarves, or you can fine tune them to bring certain things. I usually go with the preconfigured stuff.

DIGGY DIGGY

You'll see the map, your wagon, dwarves, and any animals you have with you. It's time to get to work. From here you'll chop down trees, gather plants, dig down or into the side of a mountain, and start your fort.



There's no set way to do things, so from the outset it's up to you how you want to go. This is the first new big thing in DF. A tutorial? Yes, for the first time DF will guide you through the basics of mining, gathering, and whatnot. Not everything, but enough that by the end of the tutorial, you have a teeny tiny little fort that's functioning.

The other big thing is, of course, having a GUI! Previously DF was all keyboard driven and looked... well... dated. Here it looks much nicer, and the GUI is easy to learn after a few minutes. Popup windows are closed with a right-

click, and everything from the old DF is in there somewhere. All the madness of goblin sieges, necromancers, tavern fights, moody dwarves, accidental floods... you name it.

Needless to say, I love it.

!!FUN!!

I urge you to do yourself a favour and buy this. These two brothers deserve the money. They've worked tirelessly on this game for the best part of fifteen years! And they've never charged a penny for it.

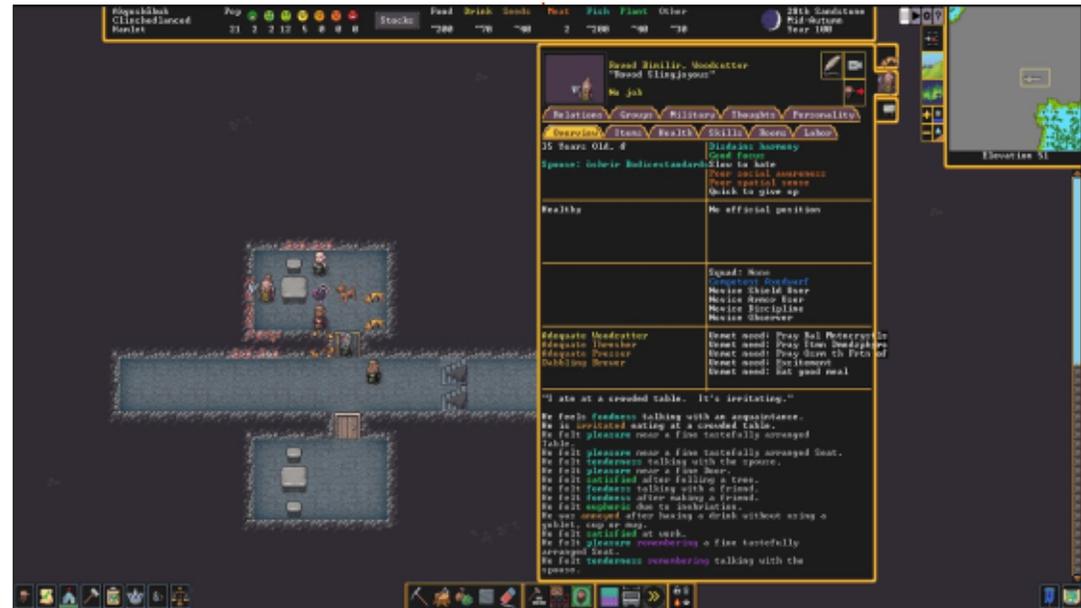
There's so much story to read

too. You can check the thoughts and history of every character in the game. You can read through the insane battles where a dwarven baby will rip apart a beast with its bare hands. Marvel at the random thong artefacts they create. Gasp in horror as a dead dwarf returns to haunt their spouse who is rather annoyed at the fact.

As I write this (early December 2022), there are nearly 13,000 reviews for it and it is listed as 'overwhelmingly positive'. This warms the cockles of my heart.

I'm giving this 6 dwarves out of 5.

Make that 5 out of 5. That sixth dwarf was launched into space by another dwarf closing the drawbridge while he was on it. **Fun!**





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The current site was created thanks to **Lucas Westermann** (ex-Command & Conquer) who took on the task of completely rebuilding the site, and scripts, from scratch, in his own time.

The Patreon page is to help pay the domain and hosting fees. The yearly target was quickly reached thanks to those listed on this page. The money also helps with the new mailing list that I set up.

Several people have asked for a PayPal (single donation) option, so I've added a button to the right side of the website

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



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