

Using KeePassXC

Welcome

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Introduction



GNU/Linux for Beginners

Brought to you by the

NewLinux Linux Users Group

https://www.newlinux.org/

A Special Interest Group of the

St. Louis Unix Users Group (SLUUG)

https://www.newlinux.org/





All About Me

- I started a beginner friendly user group for Linux newcomers **formerly** known as the Hazelwood Linux Users Group (http://hzwlug.slung.org) in November 2000. Also, I am currently Vice-President of the St. Louis Unix Users Group. Both groups meet monthly. Membership and meetings are free.
- My start centered around hobby computers back in the 1970's while on Active Duty with the U. S. Army Reserve. My interest became professional and over the next 10 years work included networked mini-computer systems, desktop PCs, help desk support for desktop users, data base programming, Unix System Administration, bulletin boards and more. I retired from Active Duty as an Information Systems Chief out of the U. S. Army Reserve Command.
- Contract work followed doing UNIX System Administration for the U. S. Army Material Command, Software Deployment for the U. S. Postal Service, Linux Subject Matter Expert for Wave Technologies International, Senior Security Engineer auditing and evaluating security assessments for the U. S. Veterans Administration.
- I held Linux Professional Institute (LPI) certification Level-1, also Linux +, and Security + from CompTIA (the IT Industry Trade Association). That was many years back.



What

- This will be an **introduction** to using KeePassXC.
- In depth explanations not included.
- Questions answered within limitations of my use.
- Follow the demonstration at end to understand how to use.



History

- Use case...
 - Cross Platform ~ Linux and Microsoft Windows 7
- Transition
 - KeePass original MS Windows Password Manager
 https://keepass.info/ Original
 - KeePassX a Linux port of KeePass
 - https://www.keepassx.org/
 - KeePassXC fork of KeePassX

https://keepassxc.org/









Why Use KeePassXC

- KeePassXC Cross-Platform Password Manager
 https://keepassxc.org/
- * Remember just one password.
- Never have to remember other passwords again.
- Allow using unique passwords everywhere.
- Securely store all those passwords using encryption.
- Quickly auto-type passwords into desktop applications.
- Use browser extension to log into websites.





Tin Foil Hat

Why use KeePassXC?

- Here is a better (very detailed) introduction to KeePassXC: 2020-02-18 The Password Manager Security Experts Use
 - https://www.youtube.com/watch?v=V6xuKoJhpEg
- **★** Off line ~ control and responsibility is yours.
- Demonstration at end may show why you should use it.
- You may see the ease, features, power and usability of it.



Goal

Encourage use of KeePassXC

- A secure vault for keeping passwords.
- An effective method of keeping and using passwords.
- You may see the ease, features, power and usability of it.
- Demonstration at end may get you to use **KeePassXC**.



Usability Features

- https://en.wikipedia.org/wiki/List_of_password_managers
 - Graphical User Interface (GUI)
 - Local installation (requires local backup and syncing)
 - Single master password
 - Password generation
 - Automatic form filling
 - Multi-factor authentication
 - Partial support for time-based one-time password (TOTP)
 - https://en.wikipedia.org/wiki/Comparison_of_OTP_applications



FLOSS

- FLOSS (Free Libre Open Source Software)
- GNU Public License ~ GPL 2.0 and 3.0
- Source code is available on GitHub
- C++
- Free \$0 (cost is least important reason to use)



Multi Platform

- Operating Systems
 - Linux
 - MS Windows
 - Apple macOS
 - BSD



CPU Architectures

- CPU Architectures
 - x64, x86
 - Apple Silicon
 - AArch64 (ARM64)
 - others



Browsers

- Browser plug-in extensions for:
 - Firefox
 - Google Chrome
 - Microsoft Edge



Encryption

- compatible with KeePass Password Safe formats
- using industry standard 256-bit AES.
- password database works offline and
- requires no internet connection.



Apple macOS

- DMG Installer (Intel) Binary bundle (macOS 10.15+)
- DMG Installer (Apple Silicon) Binary bundle (macOS 11.1+)
- Homebrew Cask brew install ...



Linux Packages

- RPM dnf Fedora, Redhat, CentOS Stream
- RPM zypper OpenSUSE
- DEB apt/apt-get Ubuntu, PPAs, LinuxMint, etc.
- Arch packman
- Gentoo emerge





Official cross-distribution packages:

- AppImage
- flatpak install ...
- snap install ...



Microsoft Windows

- Microsoft Store (64-bit, Windows 10/11)
- Installer (64-bit, Windows 10/11)
- Portable (64-bit, Windows 10/11)
- Legacy Installer (64-bit, Windows 7/8/8.1)
- Chocolatey choco install ...
- Windows Package Manager winget install ...



Alternatives

- Bitwarden https://bitwarden.com/
 - VaultWarden https://www.youtube.com/watch?v=mq7n_0Xs1Kg
- 1Password (Scott Granneman March 2021)
 https://www.sluug.org/resources/presentations/media/2021/Main/2021-03-10_SLUUG.mp4
- KeePassX (Ken Johnson April 2019)
 https://www.sluug.org/resources/presentations/2019/KeePassX2.pdf
- pass (CLI only) lightweight directory-based password manager
 - 2019-05-28 Pass-The_Standard_Unix_Password_Manager
 https://www.youtube.com/watch?v=hlRQTj1D9LA
 - 2021-06-03 The Only Password Manager I Can Trust https://www.youtube.com/watch?v=qlJ6U9SQNyQ



References

- https://en.wikipedia.org/wiki/Free_and_open-source_software
- https://en.wikipedia.org/wiki/List_of_password_managers
- https://en.wikipedia.org/wiki/Comparison_of_OTP_applications
- https://en.wikipedia.org/wiki/KeePassX
- https://en.wikipedia.org/wiki/KeePassXC
- ★ Password Managers: KeePassXC VS Bitwarden
- A Presentation on Passwords done in the Year 2001
- Password Strength
- GRC's Passwords Haystacks: How Well Hidden is Your Needle?
- Out of Your Password Minder



SLUUG Sponsored Groups

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STLLINUX ~ Saint Louis Linux User Group

https://stllinux.org



SLACC ~ Saint Louis Area Computer Club

https://slacc.org/



NEWLINUX ~ NewLinux Linux User Group

https://newlinux.org/



Walk-thru and Demonstration

- Duration will depend on remaining available time and interest.
- SCREENSHOTS

https://keepassxc.org/screenshots/

DOWNLOAD:

Sample demo.kdbx file for demonstration

Use password: Monkey123



Questions

Using KeePassXC

What are your Questions?

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