

Password Managers



Jere Minich

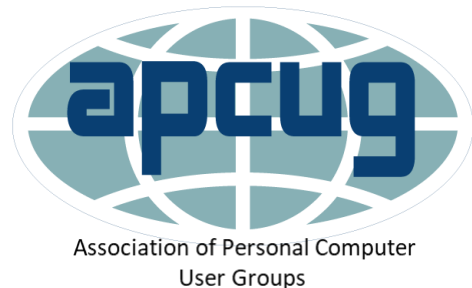
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Screenshots are from my Windows 10 PC,
iPad Air 2, iPhone Pro Max 12, Apple Watch series 6.

No Copyright issues.

Jere's Tech Tips



Consumer Reports says: about Password Managers (PWM)

- One of the top safety practices recommended by security experts.
- These services help defend against criminals by;
 - generating and storing a different user ID and password,
 - one that's long and complicated,
 - for each of the internet accounts.
- Tips for Better Passwords
 - In an era of botnets and data breaches,
 - it's more important than ever to use strong passwords.
 - Here's how to do that. <https://bit.ly/3gu6QuL> May 2021

Password managers (PWM)

What do they Do?

Main Task

- Store login information for all the websites in use.
 - **User ID**
 - **Password.**
- Automatic log-in to Web Sites.
- Encrypt the password stored database:
 - with a master password.
 - the **only** one to remember.

How safe are PWM's

- More secure than the alternatives.
- Protect the passwords vault with strong encryption (AES-256);
 - even while it's stored in the cloud.
 - AES-256 is Advanced Encryption Standard 256 Bits,
 - cipher might turn "Apple" into "2e\$5kv7fg*=v#."
- AES-256, there are 2^{256} possible combinations.
 $2^{256} = 115792089237316195423570985008687907853269984665640564039457584007913129639936$
- It'd take longer than the age of our universe to crack this number.

How PWM work.

The steps I take to make my PWM work.

1. Open-up my Browser. (Mozilla Firefox)
2. Open-up my PWM. (click-on LASTPASS icon in Address bar)
3. Enter the master Pass Word.
4. Go to a Website that requires Log-in. (Amazon.com)
 - A. User ID & Password.
5. PWM fills in the required data.
6. Website available.



What PassWord Managers Do



Sign-In

Email or mobile phone number

By continuing, you agree to Amazon's [Conditions of Use](#) and [Privacy Notice](#).

► [Need help?](#)

New to Amazon?

Create your Amazon account

1-Click

Sign-In

[redacted]@gmail.com [Change](#)

Password

[Forgot your password?](#)

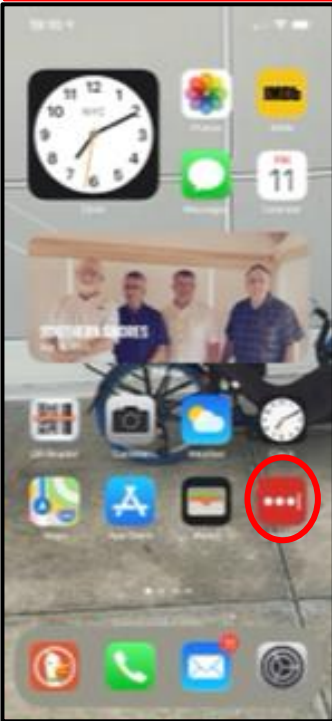
Keep me signed in. [Details](#)

2-Click

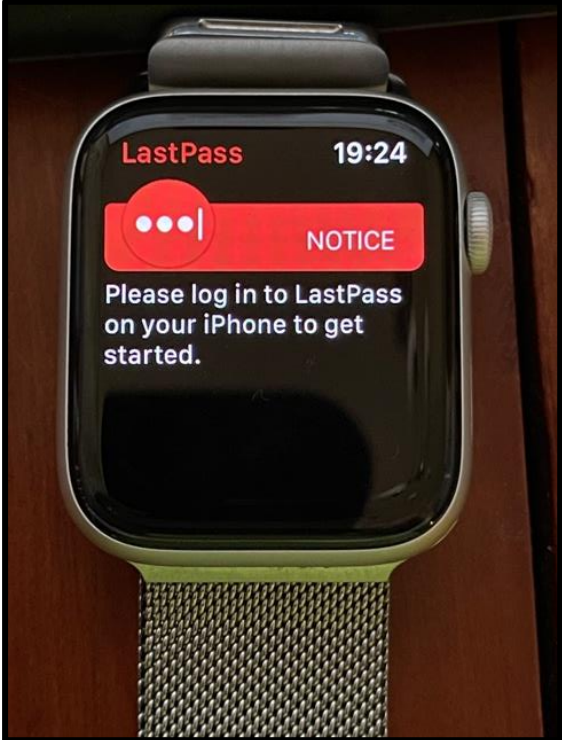
LastPass Free versions would be usable on only desktop or mobile devices, rather than both.

Can a password manager work on multiple devices?

iPhone 12 Pro Max



Apple Watch series 6



iPad Air 2



An Important Question when picking a PassWord Manager Program.

~~Password Managers in Browsers.~~

PWM 3 Types

- **Locally installed or offline password managers.**
 - Installed on the device.
- **Web-based or online password manager services.**
 - store passwords in the cloud.
- **Stateless or token-based password managers**
 - a local piece of hardware, (flash USB device)
 - contains a key to unlock your Pass Word account.

Offline Password Managers

- Place that information in a single file on the PC.
 - encrypt the file.
- How to get access to the password manager data?
 - a master password.
- The password manager will require creation of a password that's needed to decrypt the file,
 - may be known as a vault or a database,
 - that contains all of the other passwords/data.

Online Password Managers

- Online Password Manager store the data online;
 - usually in the Cloud,
 - A building somewhere full of storage devices.
 - can access them from more than one device,
 - internet required.
- If the computer crashes - won't lose stored data.

Stateless token-based password managers Devices.



Numerous third-party tokens available

Consider these features when looking for a top password manager:

- Unlimited password storage.
- Unlimited devices.
- Security center / audit service; (built into the S/W)
 - to help analyze existing passwords.
- Backup services;
 - will help restore if there are any issues.
- Cloud services;
 - auto syncing across devices.
- Auto save new passwords;
 - saves as typed or created.

Consider these features when looking for a top password manager:

- Auto change passwords;
 - to change a password, the software can do it in house.
- Import / export;
 - to save manually entering each one.
- Password generator;
 - creates a completely random and secure password.
 - may look a bit like this;
 - a#Vb35kjbsdffv\$486jh*Dsafo (26 Characters)
- Allows user to generate the Password;
 - Use a phrase (thehoUseisr%dandt@eshutters?regreen)

Best PWM Free

list changes frequently

- **Keepass**
- **StickyPassword**
- **DashLane Password Manager**
- **LogMeOnce**
- **LastPass**

- **PC magazine reference. <http://bit.ly/3bwSalj>**



Association of Personal Computer
User Groups

The End or Just the Beginning



Association of Personal Computer
User Groups

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Thanks for the opportunity to share with you.



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