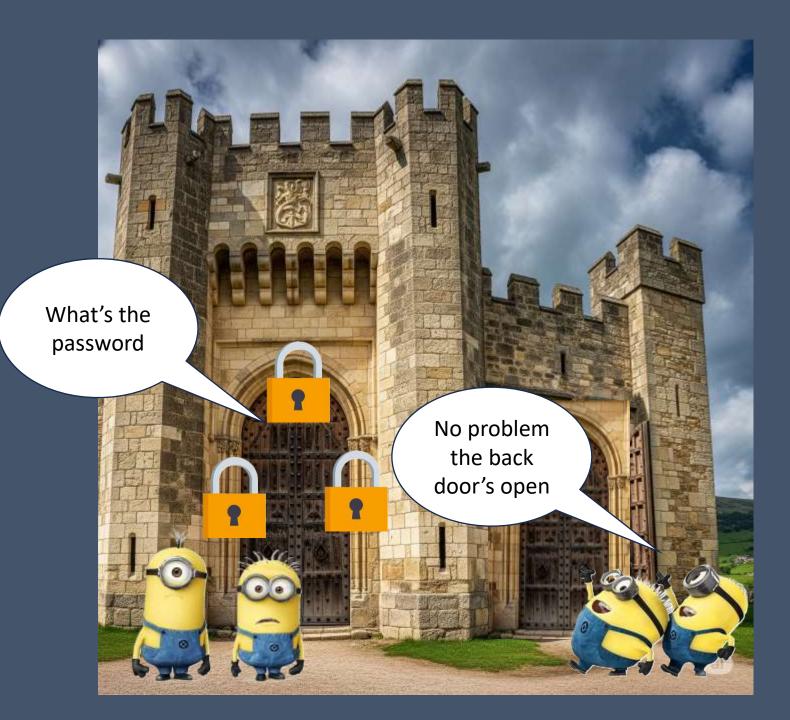
Password management

Andy Shaw U3A Computer Group 8th July 2025



Important Note

 At the end of this presentation, you will understand passwords and what the risks are.
Also how to better manage your online security.



Content

- 1. Background
- 2. Options for storing passwords
- 3. 2-Factor authentication
- 4. SIM swap fraud
- 5. Password managers and their features
- 6. Passkeys small intro to the future of passwords



Some background

- Passwords are a trade-off between being easy to remember and hard to guess.
- People tend to use words they know like children and pet names
- People often use the same password for many things.
- This means if the weakest web site is hacked all your systems are at risk.

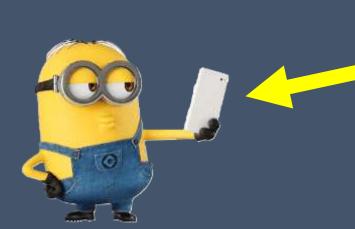
Some options

- Use longer passwords or start swapping numbers for characters
 - (demo password checker)<u>https://www.passwordmonster.com/</u>
- Passphrases are a better option
 - How many can you remember?
- Web browsers (Google, Apple, Microsoft) offer to store passwords
 - Pros and cons
- Password managers
 - Generally, a recommended option for managing lots of passwords

2 Factor Authentication 2FA

User=Dave password=Minion123





Text message "Your one-time code is 9648"

To log in, requires both Dave's password and his phone

SIM swap fraud

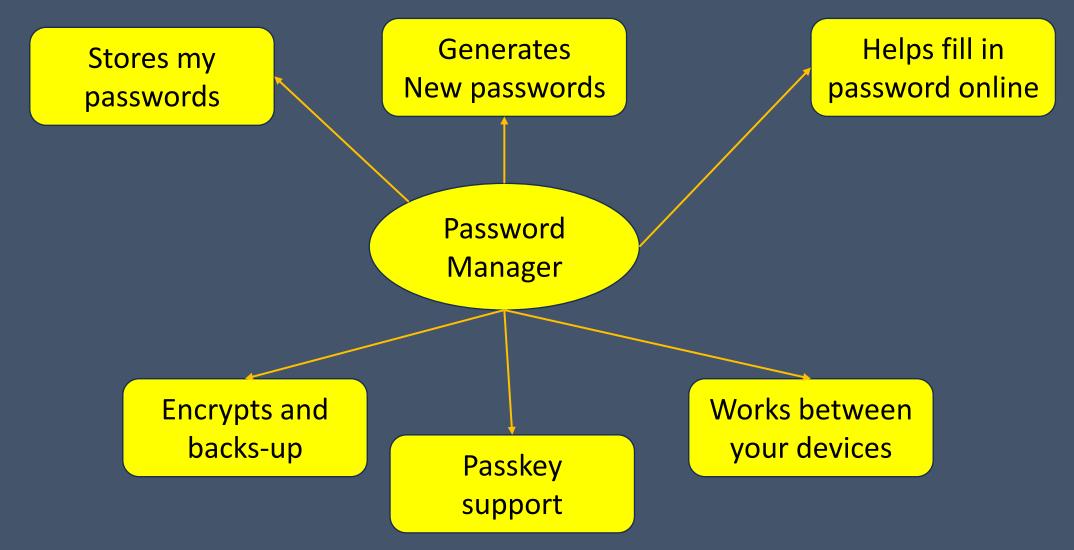




1. Dave's loses his phone

- 2. Vector takes the SIM card and inserts it into his own phone.
- This bypasses PIN ,biometric and 2FA checks because it uses Vector's phone security now.
- 4. Vector can now access all Dave's banking apps

Password managers – An app or program to manage passwords



Example Password Safe Pro

- Stores passwords
- Generates passwords
- Backup
- Export to Excel spreadsheet
- Very simple
- Does not work cross device
- Offline only system



Password Safe and Manager Robert Ehrhardt

In-app purchases

4.7★ 53K reviews ①

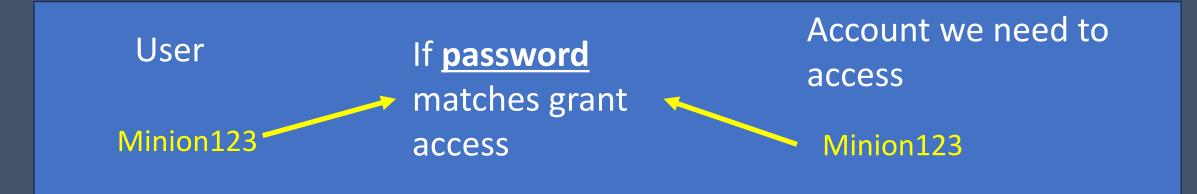
Downloads

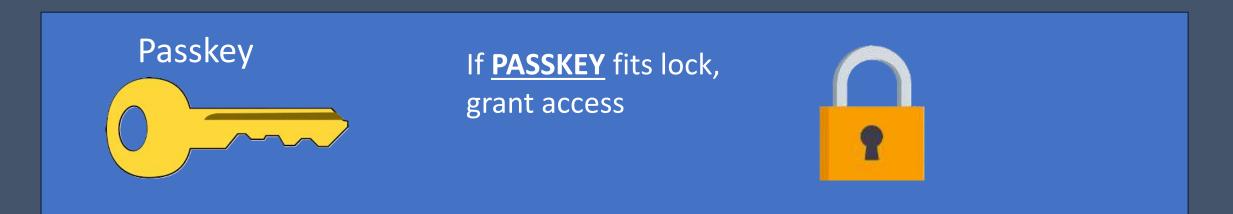
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Passkeys – a new solution





3 types of Passkeys

- 1. Local device only

2. Synchronised to other devices



3. Security key





Sign in to your Syncfu	sion account
G Sign in with Google	Sign in with Microsoft
0	r
Email	
Password	
Remember me	Forgot password?
SIGN	N IN

Here are the key advantages of Passkeys

- Your Passkey is never stored by the web sites you access
- The Passkey is linked to the device, so a copy will not work on another device.
- Passkey can be shared across your devices
- An additional PIN or biometric is required to access your Passkey

<u>Disadvantages</u> More complex to set up Some sites still use 2FA in addition No export yet, so you are are locked into your Passkey sync provider

