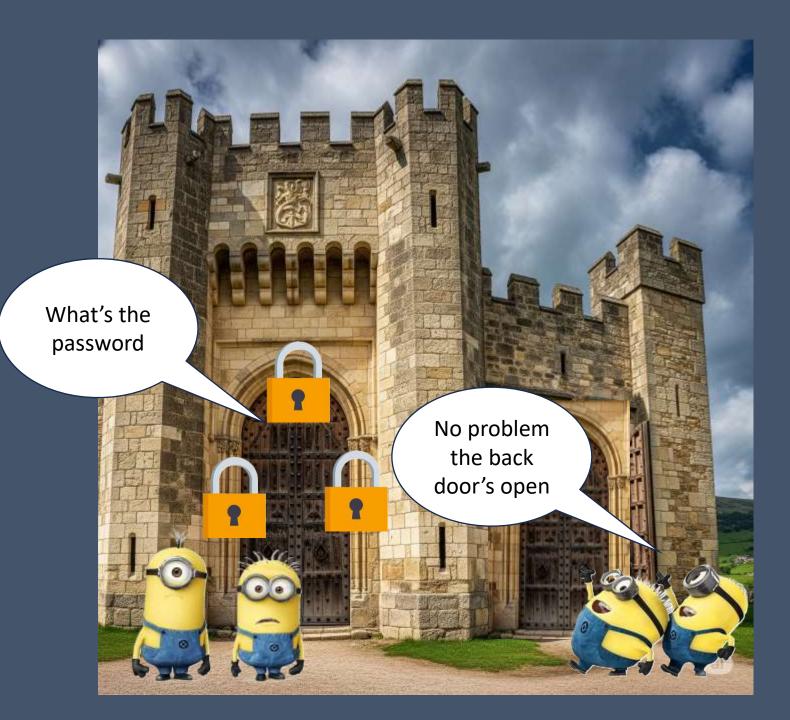
## Password management

Andy Shaw U3A Computer Group 8<sup>th</sup> 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.

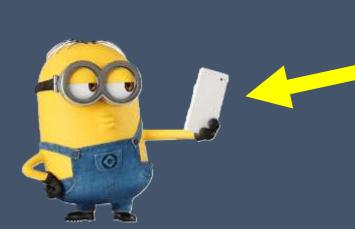
## Some options

- 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

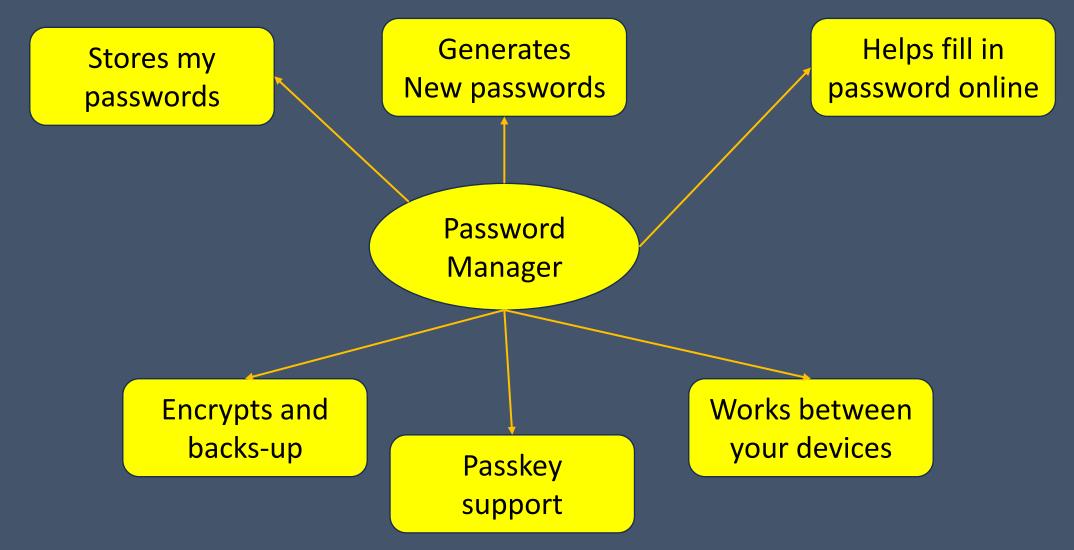




#### 1. Dave's loses his phone

- 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

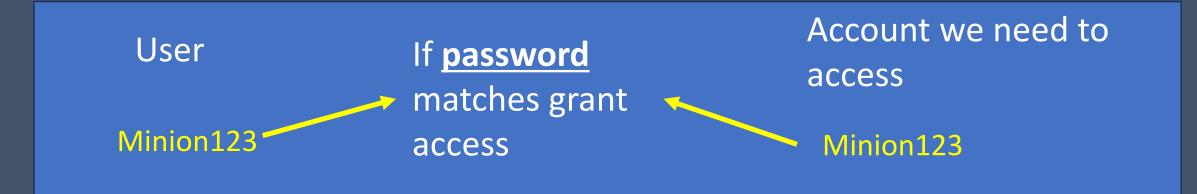
Downloads

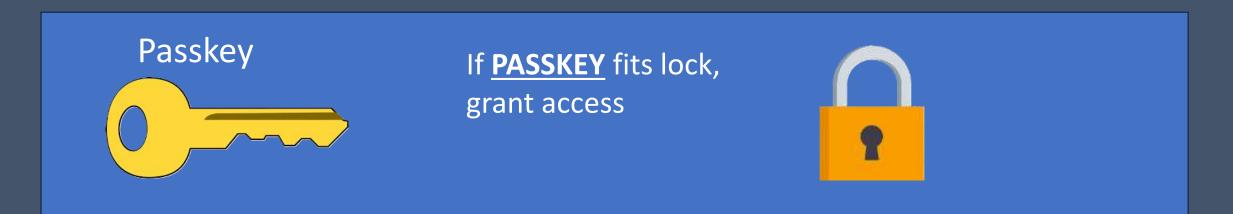
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## Passkeys – a new solution





## 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

