

## Security and Passwords — Notes

**Passwords** are still crucial for almost everything we do. Biometrics can simplify things if you can use it, but it's not always possible. Use it if you can. When using passwords, there are some simple rules to follow:

- The longer the better — but some situations won't let you
- Mix uppercase, lowercase, numbers and special characters — if allowed
- Do not re-use the same password for different things
- Do not tell other people your passwords
- Do not use 'normal words'
- Do not use anything that can be personally identified, such as your birthday or address

### How can you find out if your password is any good?

- <https://www.security.org/how-secure-is-my-password/>

### How can you find out if your credentials have been compromised?

- <https://haveibeenpwned.com/>

If your details *have* been compromised, it is **essential** that you change the passwords used.

### Password Managers

The best way to handle multiple passwords that are complex are *password managers* — but they need you to have a *really secure master password*.

- **LastPass** — <https://www.lastpass.com/>

The best in my opinion, after having used it for years. If you want to use it on *mobile* devices as well as *computers*, you need to pay for the **Premium** package (*currently £31.20*). If you only need one type of device, the **free** package is excellent. All told, LastPass is unbeatable.

- **Zoho Vault** — <https://www.zoho.com/vault/free-password-manager.html>

If you cannot manage with LastPass or don't want to pay for the Premium package, the best fully free password manager for personal use is Zoho Vault. It can be used for *mobile* devices and *computers* although it doesn't allow for web form filling, and the password generator isn't as versatile as in LastPass.

**Storing your passwords in a browser isn't as good as a dedicated password manager.** Modern browsers store the passwords more securely but then tie you to that one browser, and can make cross-device exchanges difficult.