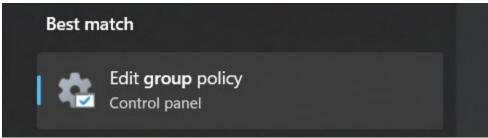
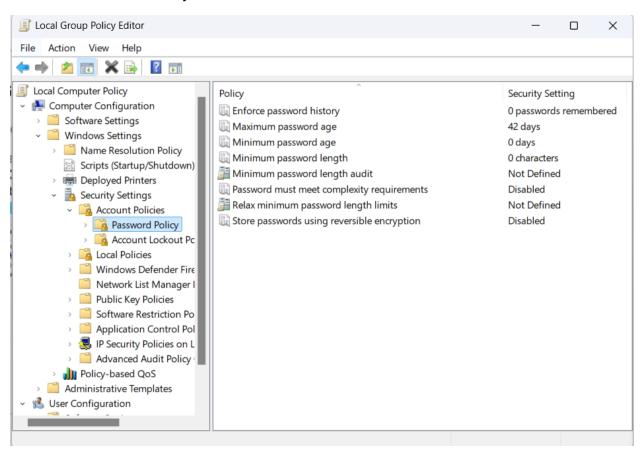
System Hardening Fundamentals

1. ENABLING STRONG PASSWORDS

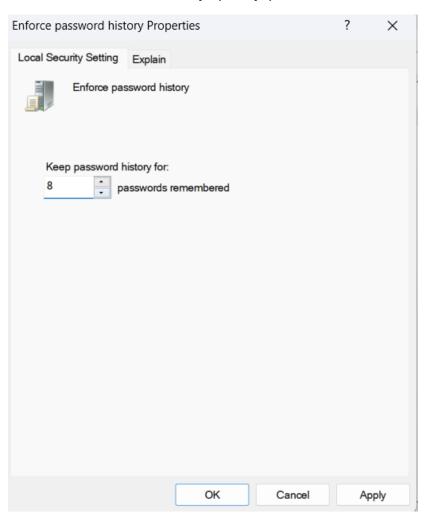
[1] Open Local Group Policy Editor



[2] navigated to Computer Configuration > Windows Settings > Security Settings > Account Policies > Password Policy



[3] Click on Enforce password history and set it to enabled to require password changes after a certain number of days (8 days)

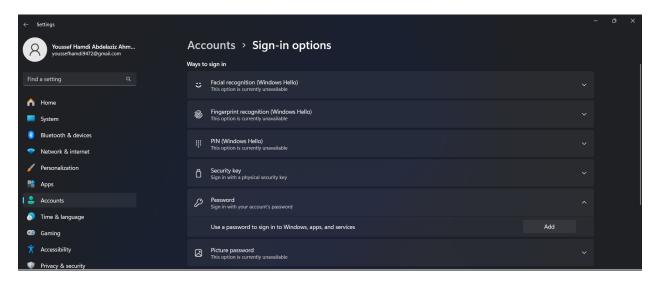


[2]Set the minimum password length to 12 characters & Enable Password Complexity Minimum password length Properties Password must meet complexity requirements Properties Χ Local Security Setting Explain Local Security Setting Explain Minimum password length Password must meet complexity requirements Enabled Password must be at least: Disabled characters OK Cancel Apply Cancel Apply

2.ENABLING MULTI-FACTOR AUTHENTICATION

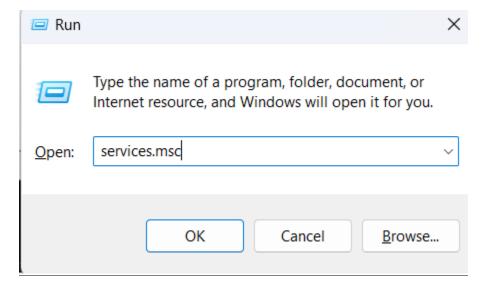
Open sign-in settings

Add a login Password to pc using my Microsoft account also enable Multi-factor authentication

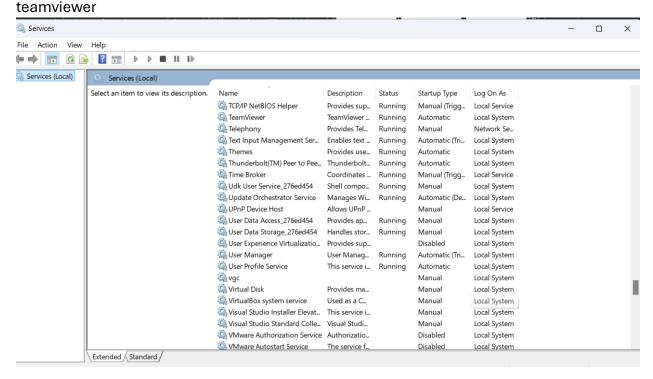


3. DISABLING UNNECESSARY SERVICES AND APPLICATIONS

Open Services > (Win + R) and write services.msc



[2] check list of running services and disable those that are not necessary, such as:



4.KEEPING SOFTWARE UPDATED WITH THE LATEST SECURITY PATCHES

[1] Open Settings > Update & Security > Windows Update

Enable auto checking for update



Overview

• Enforcing Strong Password Policies

- Implementation: Set requirements for password length, complexity, and history.
- Advantage: Defends against brute-force attacks and prevents unauthorized access.

• Using Multi-Factor Authentication (MFA)

- Implementation: Activated MFA on user accounts.
- Advantage: Provides an additional layer of security to prevent account breaches.

• Disabling Unnecessary Services

- Implementation: Turned off non-essential services like unused apps
- Advantage: Minimizes the attack surface by removing potential vulnerabilities.

• Performing Regular Updates

- Implementation: Enabled automatic updates and ensured systems are up to date.
- Advantage: Addresses security flaws, protecting against exploits and malware.