# Firmware Security (BIOS/UEFI Password)

- 1. Restart your PC.
- 2. **Enter BIOS/UEFI Setup**: Press F2, DEL, or ESC during startup (varies by manufacturer).
- 3. Navigate to Security Settings:
  - o Look for "Supervisor Password", "Administrator Password", or similar.
  - o Set or verify that a password is configured.
- 4. Ensure Boot Order is Locked (optional, for added protection).
- 5. Exit and save settings.

# BIOS settings cannot be accessed from Windows.

# **Operating System Access Control**

#### 1. Genuine Windows Activation

- Go to Settings  $\rightarrow$  Update & Security  $\rightarrow$  Activation.
- Confirm: "Windows is activated" is displayed.

## 2. Strong User Passwords

- Open Control Panel → User Accounts → Manage User Accounts.
- Ensure:
  - o Each user account has a non-blank password.
  - o Remove any unnecessary user accounts.

### 3. Screen Saver Lock

- Right-click Desktop  $\rightarrow$  Personalize  $\rightarrow$  Lock screen  $\rightarrow$  Screen saver settings.
- Enable:
  - o A screensaver.
  - o Check: "On resume, display logon screen".

### 4. Password Policy

- Press Win + R  $\rightarrow$  type secpol.msc  $\rightarrow$  press Enter.
- Go to Account Policies → Password Policy:
  - Minimum password length
  - Password complexity
  - Password history
  - o Maximum/Minimum password age

# 5. Account Lockout Policy

- In secpol.msc, go to Account Lockout Policy:
  - o Set Account Lockout Threshold (e.g., 3 attempts).
  - Set Lockout Duration and Reset Counter time.

# 6. Security Audit Policy

- In secpol.msc, go to Local Policies → Audit Policy.
- Enable:
  - o Audit logon events (Success/Failure)
  - o Audit object access (Success/Failure)
  - Audit policy change (optional)

#### 7. NTFS File Permissions

- Right-click any important folder  $\rightarrow$  Properties  $\rightarrow$  Security tab.
- Review permissions for:
  - o Users
  - o Groups (Administrators, Everyone, etc.)

#### 8. Share Permissions

- Right-click folder  $\rightarrow$  Properties  $\rightarrow$  Sharing  $\rightarrow$  Advanced Sharing  $\rightarrow$  Permissions.
- Review who has access and their permissions (Read, Change, Full Control).

## 9. Windows Updates

- Go to Settings → Update & Security → Windows Update.
- Click Check for updates.
- Ensure system is **fully updated**.

### 10. USB Port Access Control

#### **Option A: Device Manager**

- Press Win  $+ X \rightarrow$  Device Manager  $\rightarrow$  Expand Universal Serial Bus controllers.
- Disable unwanted ports/devices.

## **Option B: Group Policy**

- Press Win + R  $\rightarrow$  gpedit.msc  $\rightarrow$  Enter.
- Navigate to:

Computer Configuration  $\rightarrow$  Administrative Templates  $\rightarrow$  System  $\rightarrow$  Removable Storage Access

• Configure access restrictions to USB mass storage.

# **Network Access Control**

### 1. Host Firewall

- Go to Control Panel → Windows Defender Firewall.
- Ensure it's **ON for all network profiles** (Domain, Private, Public).

#### 2. Antivirus

- Open Windows Security  $\rightarrow$  Virus & threat protection.
- Verify:
  - o Antivirus is **enabled** and **up-to-date**.
  - Last scan was recent.

## 3. Browser Security

#### Chrome/Edge:

- Go to Settings → Privacy and Security.
- Enable features like:
  - o Safe Browsing
  - o Do Not Track
  - o Review Site Permissions (location, camera, notifications).

# **Physical Security Control**

#### 1. Cabinet Locks

: Verify physically (manual inspection).

## 2. Biometric Device

- Go to Settings  $\rightarrow$  Accounts  $\rightarrow$  Sign-in Options.
- Check for Fingerprint / Facial Recognition setup.

## 3. Smart Card Logon

- Open Control Panel  $\rightarrow$  Administrative Tools  $\rightarrow$  Local Security Policy.
- Navigate to **Public Key Policies** → **Smart Card** options.

# 4. Entry Logs

- If integrated: Check system-generated access logs.
- If not: Use **manual logbooks** or access-control software.

# **Asset Management Control**

# 1. Inventory Devices

- Open **System Information** (msinfo32) shows hardware/software summary.
- Or use tools like:
  - o Spiceworks Inventory
  - o Belarc Advisor

# **Change Management Control**

## 1. App & Hardware Compatibility

- Confirm compatibility of apps and drivers with OS.
- Check on official vendor websites before major updates.

## 2. Backup and Restore Plan

- Go to:
  - o Control Panel → Backup and Restore (Windows 7)
  - o Or Settings → Update & Security → Backup
- Configure:
  - Backup location
  - o Automatic schedule

# **User Awareness Control**

# 1. Cybersecurity Training

- Ensure employees have undergone training.
- Check:
  - o Certificates
  - o LMS logs
  - Participation records

# **Disaster Recovery Control**

# 1. Backup & Restore Schedule

- Verify automated backup schedule.
- Confirm:
  - o Backup history
  - o Restore points set in:
    - Control Panel  $\rightarrow$  System  $\rightarrow$  System Protection