

Lab # 02

INSTALLING MICROSOFT WINDOWS OPERATING SYSTEM

Objective:

To understand and perform a clean installation of Microsoft Windows (e.g., Windows 10/11) on a PC.

Required Materials:

- A PC or virtual machine (e.g., VirtualBox / VMware)
- Windows Installation Media (ISO file or bootable USB)
- Valid Windows product key (if required)
- Keyboard, mouse, monitor
- Internet connection (optional but recommended)

Theory:

Windows is a popular operating system developed by Microsoft. A clean installation involves erasing the current operating system and installing Windows from scratch. This ensures better performance and removes any existing software issues.

Pre-Installation Steps:

1. **Backup Data** – Ensure important data is backed up.
2. **Check System Requirements** – Verify minimum hardware requirements.
3. **Create Bootable Media** – Use tools like Rufus to create a bootable USB or use an ISO in a VM.
4. **BIOS/UEFI Settings** – Set boot priority to USB/DVD.

Installation Steps:

Step 1: Boot from Installation Media

- Insert the bootable USB/DVD or start the VM with ISO.
- Restart the PC and enter BIOS/UEFI (commonly F2, F10, DEL).
- Set the boot device priority to USB/DVD.
- Save and exit BIOS.

Step 2: Begin Installation

1. A “Press any key to boot from USB or DVD...” message appears. Press any key.
2. The Windows Setup screen appears. Choose:
 - Language to install
 - Time and currency format
 - Keyboard or input method
 - Click **Next**

Step 3: Install Now

1. Click **Install Now**
2. Enter product key (or click **I don't have a product key**)
3. Select the edition of Windows (e.g., Home, Pro) if prompted
4. Accept the license terms and click **Next**

Step 4: Choose Installation Type

- Select **Custom: Install Windows only (advanced)**

Step 5: Partitioning the Drive

1. Choose the disk/partition to install Windows
2. You may:
 - Delete all existing partitions (for clean install)
 - Create a new partition (click **New**)
3. Select the partition and click **Next**

Step 6: Installing Windows

- Windows setup will copy files, install features, and reboot several times.

Step 7: Initial Setup

After reboot:

1. Select Region, Keyboard Layout
2. Connect to a network (optional)
3. Choose setup type:
 - **Personal use** or **Organization**
4. Sign in with a Microsoft account or create a local account
5. Set privacy settings and preferences

Post-Installation Steps:

1. Install drivers and updates via Windows Update
2. Install antivirus and necessary software
3. Activate Windows (if not already activated)
4. Create a system restore point

Installation Windows 10: <https://www.youtube.com/watch?v=Hav4fYoG0vA>

Assignment:

1. Perform a clean installation of Windows 10/11.
2. Take screenshots at key steps.
3. What is the purpose of a product key?
4. Why is partitioning important during installation?