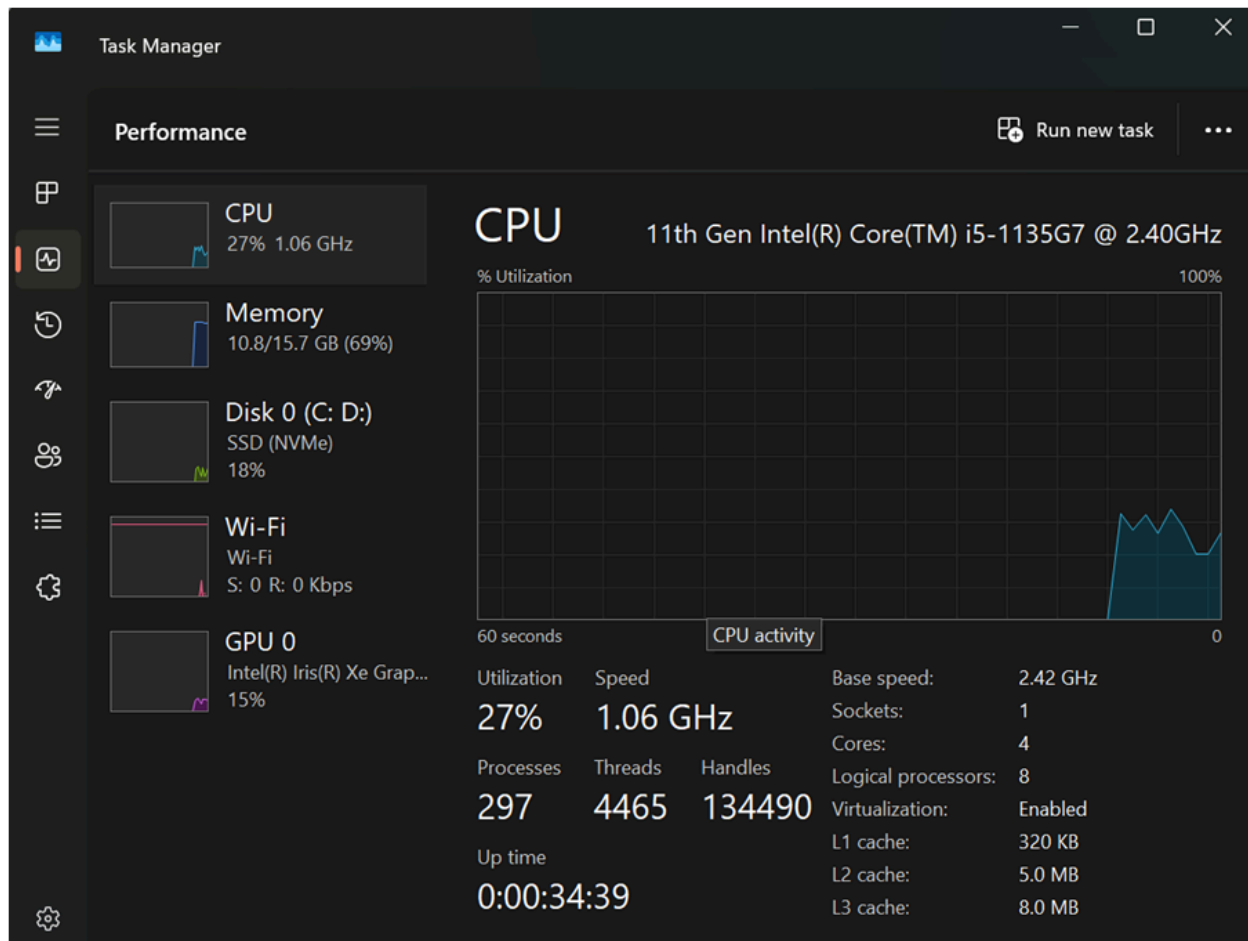# Ubuntu Installation Guide (Windows 10/11 – WSL2)

1. Prerequisites

- **Windows Version:** Windows 10 (2004, Build 19041+) or Windows 11.
  Check version → Press Win + R, type 'winver', press Enter.
 - **Windows Update:** Ensure latest updates are installed.
 - **Disk Space:** At least 5–10 GB free on C: drive.

 - **Virtualization Enabled:** Check in Task Manager → Performance → CPU.
   Virtualization should be enabled.

If Disabled → Enable in BIOS (Intel VT-x / AMD-V).

To enable virtualization in the BIOS, you need to access the BIOS settings during startup and then locate and enable the virtualization option. The specific steps and hotkeys vary by manufacturer and motherboard, but generally involve restarting your computer, pressing a function key (like F2, F10, F12, or Delete) to enter BIOS, navigating to CPU or Advanced settings, and then finding and enabling virtualization (often labeled as VT-x, VT-d, or SVM mode).

Windows 11: https://youtu.be/qTAQTctn4Es?si=NjqLhneVkeJkqOGF
Windows 10: https://youtu.be/_59VZMPUikc?si=7qKlPtcN-mAzmwYf

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2. Installation Steps

1. Open PowerShell as Administrator (Start → Search 'PowerShell' → Right-click → Run as administrator).

2. Run the command: wsl --install

3. Windows will automatically enable features, set WSL2 as default, and install Ubuntu.


```
PS C:\Users\Client> wsl --install
Downloading: Ubuntu
Installing: Ubuntu
Distribution successfully installed. It can be launched via 'wsl.exe -d Ubuntu'
Launching Ubuntu...
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: cdac
New password:
Retype new password:
passwd: password updated successfully
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

4. Depending on your Windows build, you may see one of these flows:

Case 1 – Restart Required

• System asks for a restart.
 • After reboot, open Ubuntu App from Start Menu.
 • It will then ask you to create a Username (cdac) and Password (cdac123).

Note: password will be invisible while typing, so don't make any mistake.

<u>**Case 2 – Direct Setup in PowerShell**</u>

• No restart needed.
 • Ubuntu setup continues right inside PowerShell/Windows Terminal.
 • You'll be asked to create a Username (cdac) and Password (cdac123).
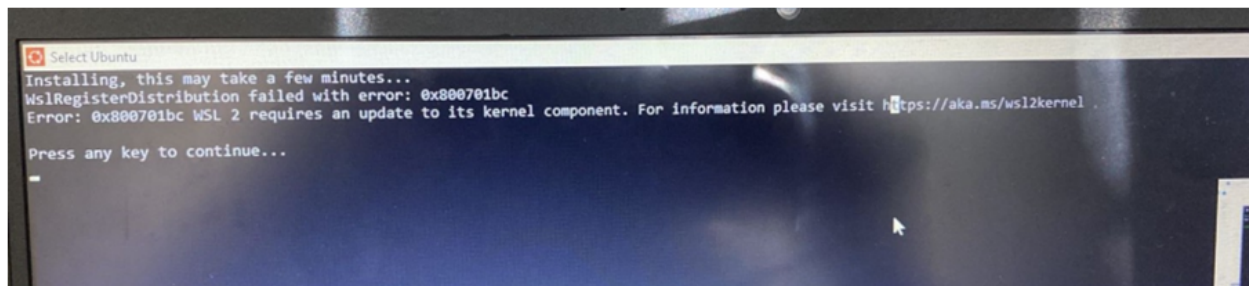
 <u>**Case 3 – Ubuntu App Provisioning**</u>

• After installation, no immediate prompt.
 • You must manually open Ubuntu App from Start Menu.
 • On first launch, it will ask for Username (cdac) and Password (cdac123).

5. Once done → You will see 'password updated successfully' and land inside the Ubuntu shell.

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3. Common Errors & Solutions
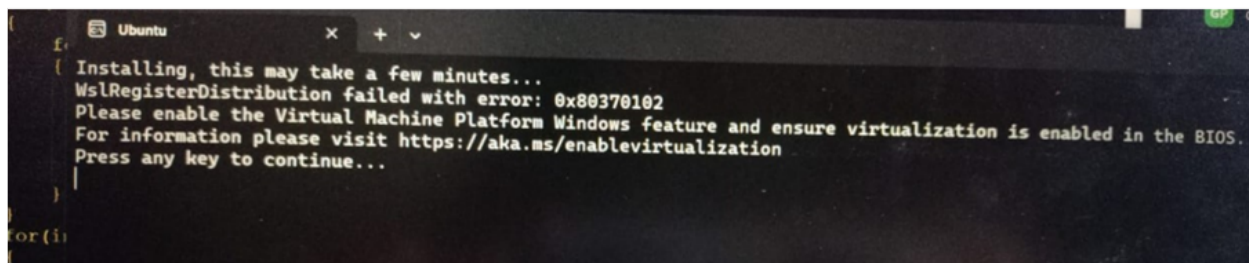
- **Error 0x800701bc – WSL2 requires kernel update**

Solution: Download and install the kernel update from
https://wslstorestorage.blob.core.windows.net/wslblob/wsl_update_x64.msi

Restart and run Ubuntu again.

- **Error: Virtualization Disabled**

Solution: Already mentioned in prerequisites

- **Error: Broken Ubuntu Installation**

```
The system cannot find the file specified.
Press any key to continue...
```

Solution: Reset WSL using commands:
 wsl --shutdown
 wslconfig /unregister Ubuntu
 wsl --install --distribution Ubuntu

4. After Installation (First Commands)

Open Ubuntu from windows search -> Run inside Ubuntu

Command: whoami

Result:

```
cdac@CMKL-adityakansana:/mnt/c/Users/Client$ whoami
cdac
cdac@CMKL-adityakansana:/mnt/c/Users/Client$
```

DONE CONGRATULATIONS