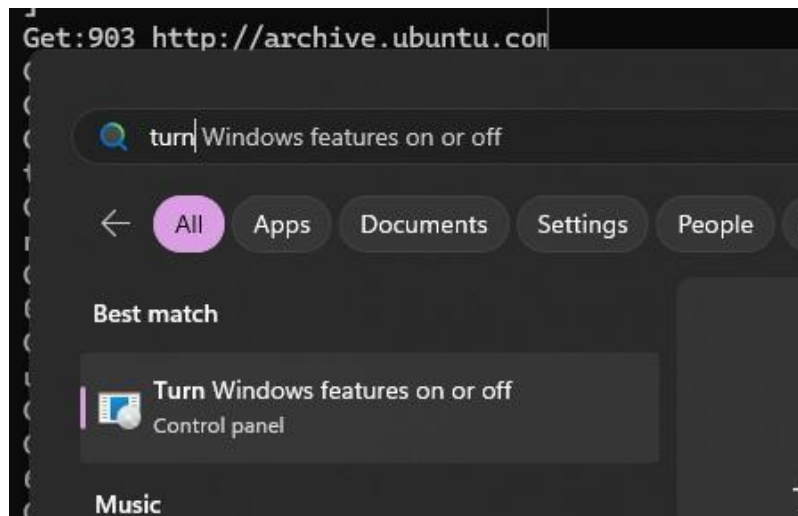


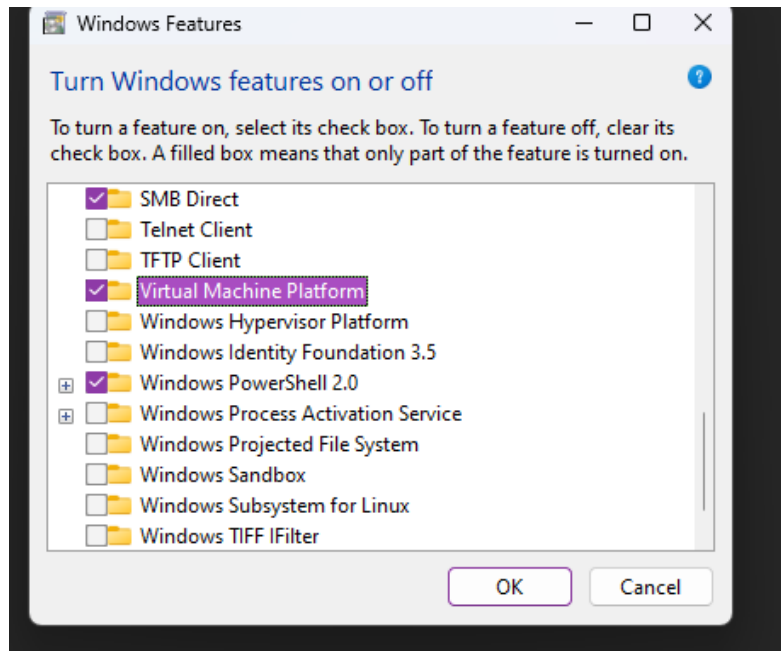
Tutorial Instalasi ROS di Ubuntu 20.04 pada WSL2

Oleh : Guntur Eka Wardana (1103174102)

1. Mencari “Turn Windows features on or off” pada start menu.



2. Menghidupkan fitur “Virtual Machine Platform” dan melakukan restart pada PC/laptop.



3. Membuka Windows Terminal dan memasukkan perintah “wsl” untuk memastikan bahwa WSL telah terinstall.

```
robotika@nazRIN: ~
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements
https://aka.ms/PowerShellLatest

PS C:\Users\NAZ.RIN> wsl
Windows Subsystem for Linux has no installed distributions.

Use 'wsl.exe --list --online' to list available distributions
and 'wsl.exe --install <Distro>' to install.
```

4. Mengecek distro yang tersedia dengan menggunakan perintah “wsl -list -online”, dan melakukan instalasi Ubuntu 20.04 pada WSL menggunakan perintah “wsl -install -d Ubuntu-20.04”.

```
PS C:\Users\NAZ.RIN> wsl --list --online
The following is a list of valid distributions that can be installed.
Install using 'wsl.exe --install <Distro>'.

NAME                                FRIENDLY NAME
-----                                -
Ubuntu                              Ubuntu
Debian                              Debian GNU/Linux
kali-linux                          Kali Linux Rolling
Ubuntu-18.04                        Ubuntu 18.04 LTS
Ubuntu-20.04                        Ubuntu 20.04 LTS
Ubuntu-22.04                        Ubuntu 22.04 LTS
Ubuntu-24.04                        Ubuntu 24.04 LTS
OracleLinux_7_9                     Oracle Linux 7.9
OracleLinux_8_7                     Oracle Linux 8.7
OracleLinux_9_1                     Oracle Linux 9.1
openSUSE-Leap-15.5                  openSUSE Leap 15.5
SUSE-Linux-Enterprise-Server-15-SP4 SUSE Linux Enterprise Server 15 SP4
SUSE-Linux-Enterprise-15-SP5        SUSE Linux Enterprise 15 SP5
openSUSE-Tumbleweed                 openSUSE Tumbleweed
PS C:\Users\NAZ.RIN> wsl --install -d Ubuntu-20.04
Installing: Ubuntu 20.04 LTS
Ubuntu 20.04 LTS has been installed.
```

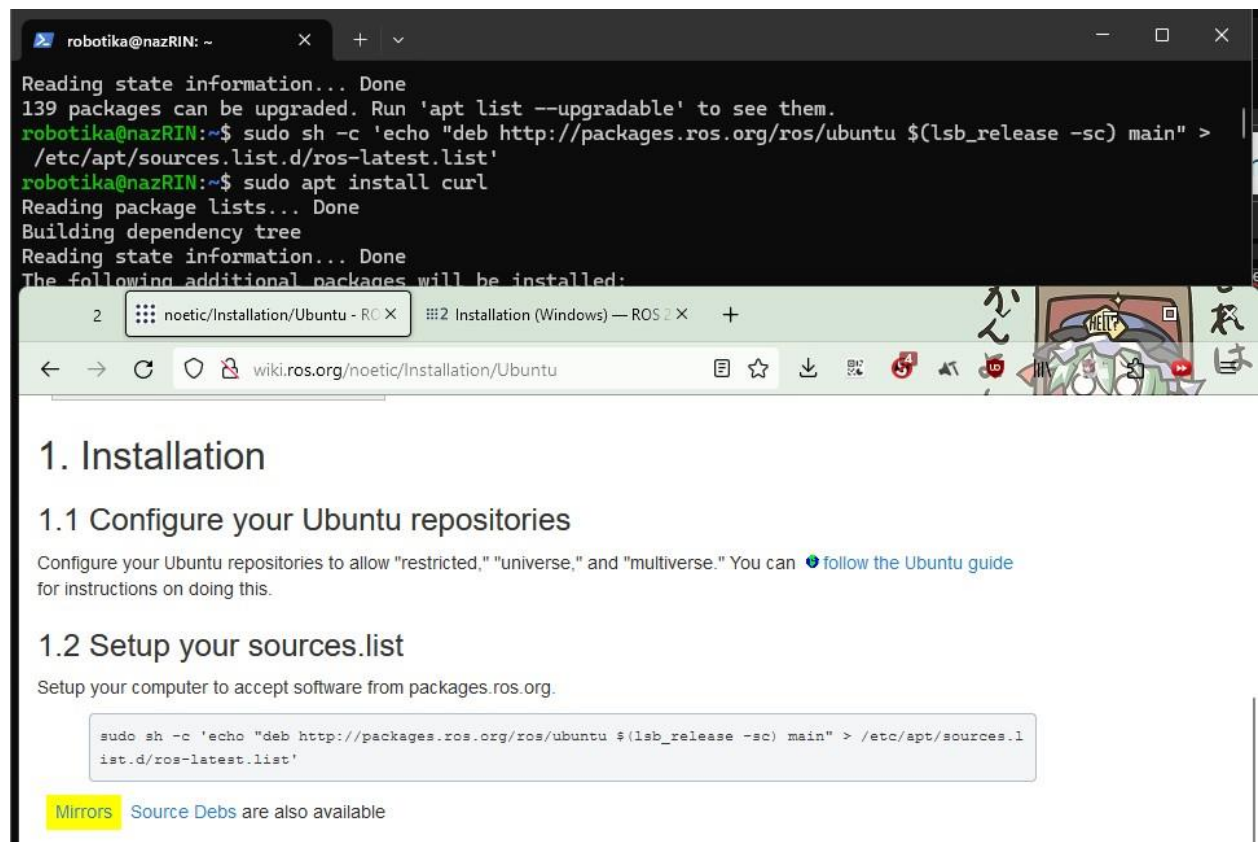
5. Memasukkan kredensial untuk linux seperti username dan password.

```
Launching Ubuntu 20.04 LTS...
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: robotika
New password:
Retype new password:
passwd: password updated successfully
Installation successful!
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
```

6. Ubuntu berhasil diinstal dan langsung masukkan perintah “sudo apt update”

```
This message is shown once a day. To disable it please create the
/home/robotika/.hushlogin file.
robotika@nazRIN:~$ sudo apt update
[sudo] password for robotika:
Hit:1 http://archive.ubuntu.com/ubuntu focal InRelease
```

7. Melakukan instalasi ROS seperti menginstal di Ubuntu 20.04 biasa mengacu pada dokumentasi resmi instalasi ROS di Ubuntu.



The screenshot shows a terminal window and a web browser. The terminal window displays the following commands and output:

```
robotika@nazRIN:~$ sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
robotika@nazRIN:~$ sudo apt install curl
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
```

The web browser shows the ROS installation page for Ubuntu, titled "1. Installation". The page includes sections for "1.1 Configure your Ubuntu repositories" and "1.2 Setup your sources.list". The "1.2 Setup your sources.list" section provides the command to add the ROS repository to the sources list:

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
```

Below the code block, there is a yellow box with the text "Mirrors" and a link to "Source Debs are also available".

8. ROS pun siap dipakai di Windows. Roscore dan Rviz pun jalan dengan sempurna.

