

# Linux

## Day 0 — Installing Linux on Windows Using Oracle VirtualBox

### 1. Introduction

This is my Day 0 Linux setup guide. The goal is to run Linux on my Windows system using Oracle VirtualBox. This will help me practise commands, scripting, networking, permissions, and every Linux concept in a real environment.

### 2. Download Requirements

- Oracle VirtualBox
- Download the latest version of Oracle VirtualBox for Windows from the official website.

### 3. Installing VirtualBox

1. Run the VirtualBox installer.
2. Keep the default settings and click Next.
3. Allow network driver installations.
4. Finish and open VirtualBox.

### 4. Creating a New Virtual Machine

1. Click New in VirtualBox.
2. Name: Ubuntu Linux
3. Type: Linux
4. Version: Ubuntu (64-bit)

### 5. Allocating Memory (RAM)

- Recommended: 4096 MB
- Minimum: 2048 MB

## 6. Creating Virtual Hard Disk

1. Choose "Create a virtual hard disk now".
2. Choose VDI.
3. Choose Dynamically allocated.
4. Disk size: 25–40 GB.

## 7. Attaching the Ubuntu ISO

1. VM → Settings → Storage.
2. Select Empty → disk icon → Choose a disk file.
3. Select Ubuntu ISO.
4. Click OK.

## 8. Installing Ubuntu

1. Start the VM.
2. Select Install Ubuntu.
3. Choose Normal installation.
4. Enable Install third-party software.
5. Select Erase disk and install Ubuntu (inside VM only).
6. Enter name, username, and password.
7. Install → Restart Now → Press Enter.

## 9. Post-Install Recommended Settings

- **Display**
  - Video Memory: 128 MB
  - Graphics Controller: VMSVGA
- **Processor**
  - Set CPU cores to 2 if available.
- **Clipboard Integration**
  - Shared Clipboard: Bidirectional
  - Drag & Drop: Bidirectional
- **Guest Additions**
  - Devices → Insert Guest Additions CD image → install → reboot.

## 10. After First Boot

1. Run system updates:
2. `sudo apt update`
3. `sudo apt upgrade -y`
4. `sudo apt install build-essential -y`