

# Computer Operating Systems

## Practice Session 1: Linux Installation

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Today

## Operating Systems, PS 1

Different Ways of Installing Linux

Creating a Virtual Machine Using VirtualBox

## 1- Installing on hard drive

- ▶ Linux distribution is installed on PC's hard disk.
- ▶ Provides high performance usage.
- ▶ Installation alongside with another OS (such as Windows + Ubuntu).
  - ▶ <https://help.ubuntu.com/community/WindowsDualBoot>

## 2- Installing on a USB flash drive

- ▶ Linux distribution is installed on a USB flash drive using a tool such as Universal USB installer or RUFUS
  - ▶ <https://www.pendrivelinux.com/universal-usb-installer-easy-as-1-2-3>
  - ▶ <https://www.webtekno.com/rufus-windows-ubuntu-usb-surucusu-h79080.html>

### 3- Installing on a virtual machine

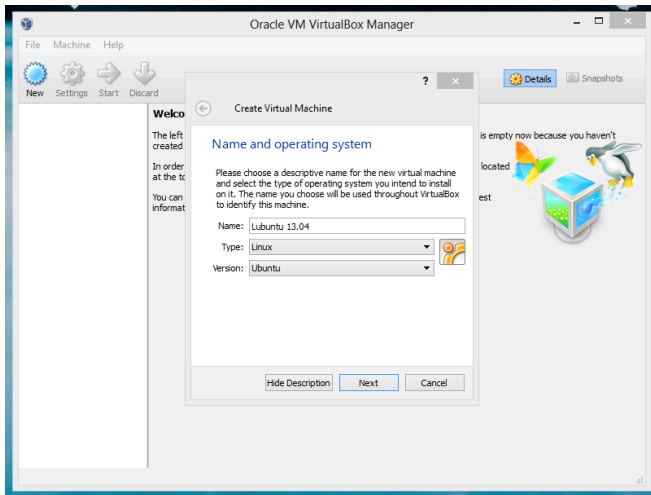
- ▶ Linux distribution is installed on a virtual machine (using a virtualization tool such as VirtualBox).

# Oracle VM VirtualBox

- ▶ Download VirtualBox from <https://www.virtualbox.org/wiki/Downloads>
  - ▶ Select appropriate version for the host operating system you use.
- ▶ Finish the installation of VirtualBox.
- ▶ Download .iso file for the Linux distribution to be installed.
  - ▶ Ubuntu 16.04.1: <http://cdimage.ubuntu.com/lubuntu/releases/16.04/release>

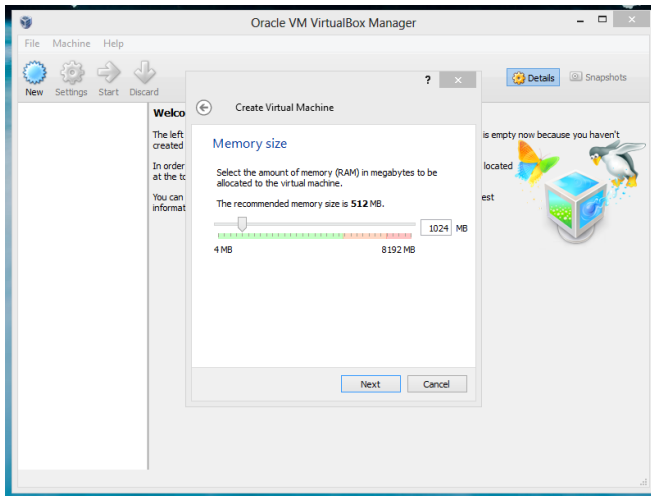
## Step 1

- ▶ Open VirtualBox and select "New" from the menu above.
- ▶ The type must be set as "Linux" and the appropriate Linux version must be determined (e.g., "Ubuntu").



## Step 2

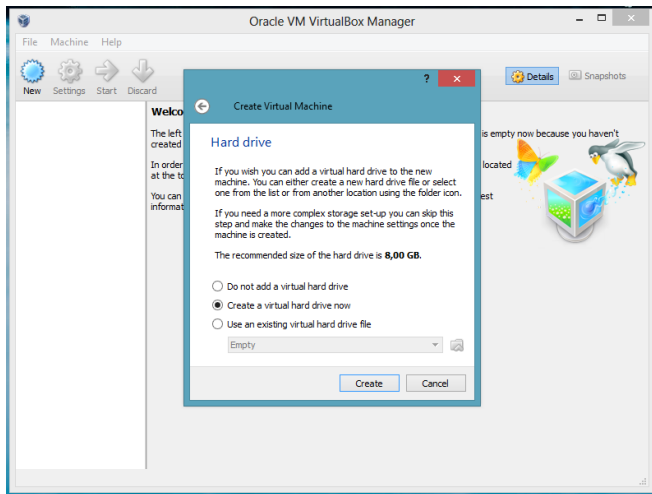
- Determine the amount of maximum memory (RAM) available for the virtual machine.





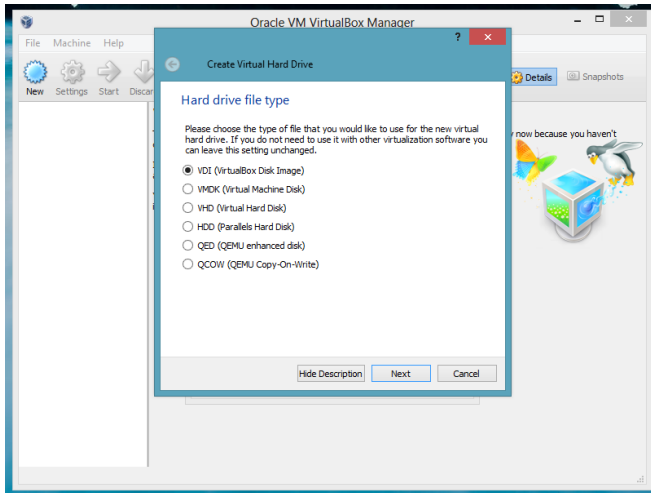
## Step 3

- ▶ Select "Create a virtual hard drive for the machine.", and press "Create".



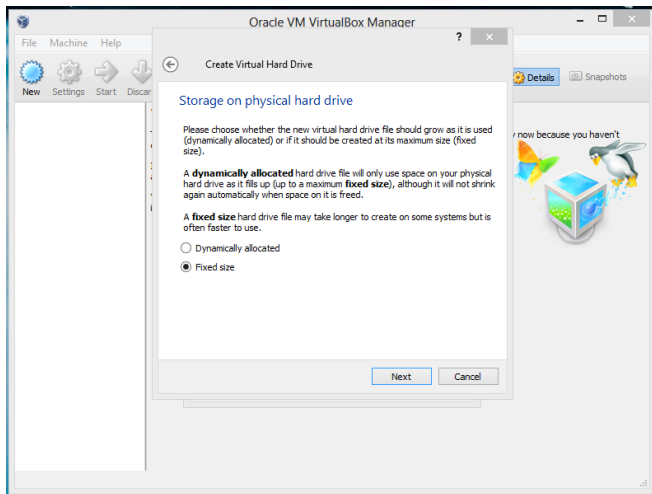
## Step 4

- ▶ Select "VDI (VirtualBox Disk Image)" from the list of options.



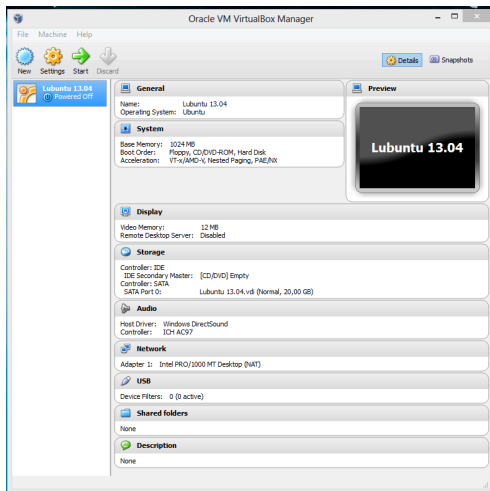
## Step 5

- Determine the type of storage as fixed size.



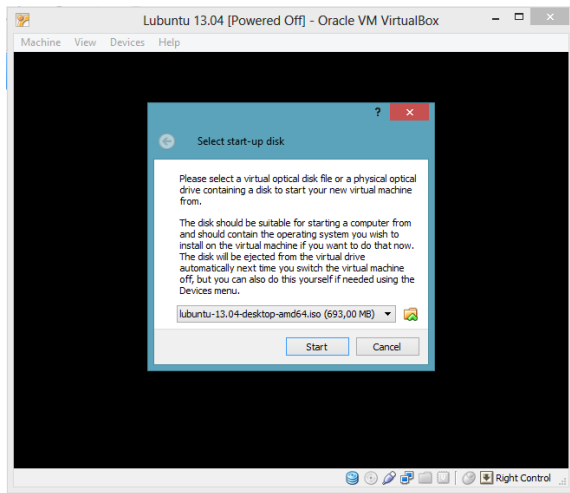
## Step 6

- ▶ Virtual machine is successfully installed.
- ▶ Press "Start" from the menu above.



## Step 7

- ▶ Select the .iso file you downloaded before.



## Step 8

- ▶ Set the language (F2).
- ▶ Set the keymap (F3).
- ▶ Select "Install Ubuntu" for starting installation.
- ▶ The rest of the installation is straightforward.

