

# Computer Operating Systems, Practice Session 1

## Linux Installation

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Today

## Computer Operating Systems, PS 1

Different ways of using Linux

Creating a virtual machine using VirtualBox

# Installing on hard drive

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

# Installing on a usb flash drive

- ▶ Linux distribution is installed on a usb flash drive using a tool such as Universal USB installer  
(<http://www.pendrivelinux.com/universal-usb-installer-easy-as-1-2-3/>)

# Installing on a virtual machine

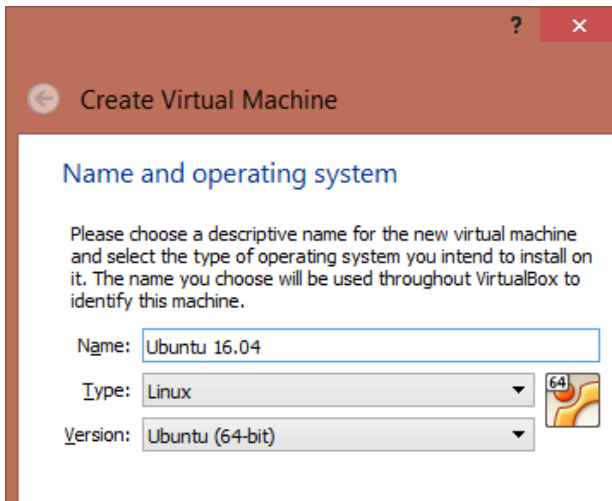
- ▶ Linux distribution is installed on a virtual machine (using a virtualization tool such as VirtualBox).

# Oracle VM VirtualBox

- ▶ Download VirtualBox from <https://www.virtualbox.org/wiki/Downloads>
  - ▶ Select appropriate version for the host operating system you use (e.g., Windows).
- ▶ Install VirtualBox.
- ▶ Download .iso file for the Linux distribution to be installed (**Ubuntu 16.04 64-bit**).

# VirtualBox 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 selected (i.e., Ubuntu 64-bit).



The screenshot shows the 'Create Virtual Machine' window in Oracle VM VirtualBox. The window has a title bar with a question mark and a close button. Below the title bar is a header bar with a back arrow and the text 'Create Virtual Machine'. The main content area is titled 'Name and operating system' in blue. It contains a paragraph of instructions: 'Please choose a descriptive name for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.' Below this text are three input fields: 'Name:' with the text 'Ubuntu 16.04', 'Type:' with a dropdown menu showing 'Linux', and 'Version:' with a dropdown menu showing 'Ubuntu (64-bit)'. To the right of the 'Type' and 'Version' dropdowns is a small icon of a 64-bit processor.

Create Virtual Machine

### Name and operating system

Please choose a descriptive name for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.

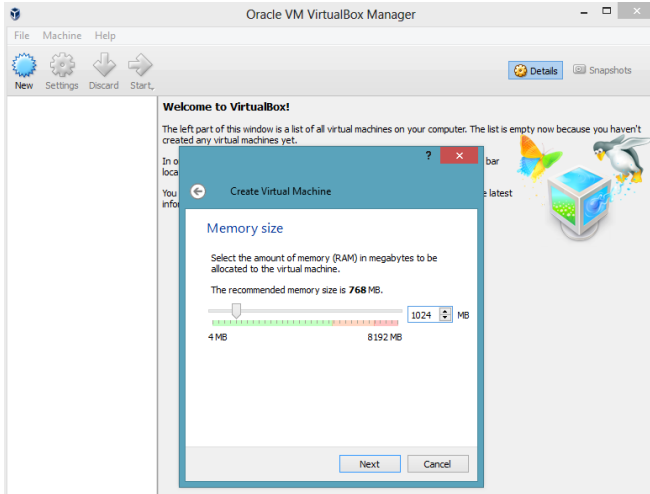
Name:

Type:

Version:

## VirtualBox Step 2

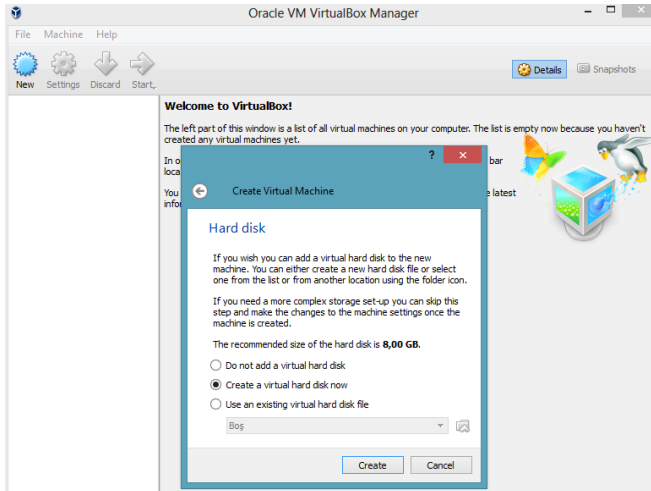
- Determine the amount of maximum memory (RAM) available for the virtual machine.





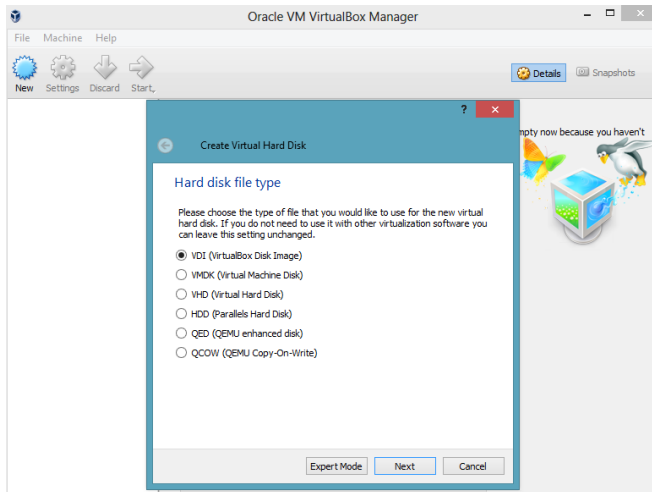
## VirtualBox Step 3

- Create a virtual hard drive for the machine.



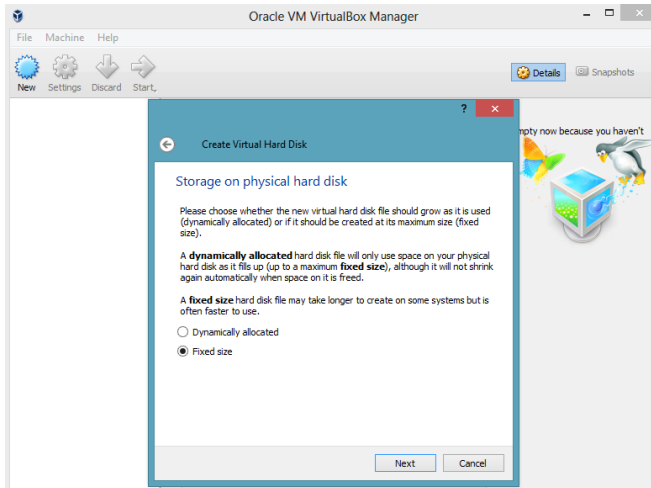
## VirtualBox Step 3

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



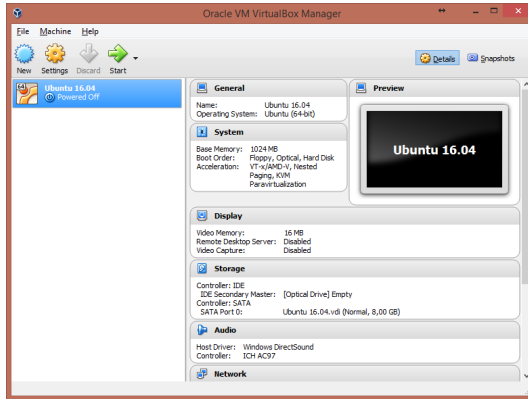
## VirtualBox Step 3

- Determine the type of storage (fixed size vs. dynamically allocated).



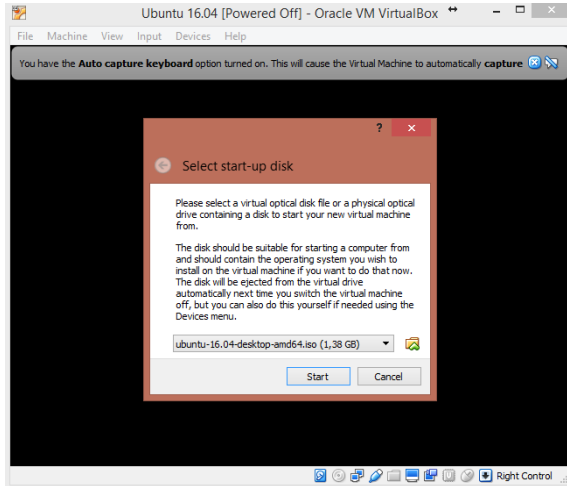
## VirtualBox Step 4

- ▶ Virtual machine is installed.



## VirtualBox Step 5

- ▶ Press "Start" from the menu above.
- ▶ Select the .iso file for the Linux distribution for installation.



## VirtualBox Step 6

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

