

Name: Fiorella Alarcon  
 Semester: Fall 22  
 Course: cis106

## Week Report 2

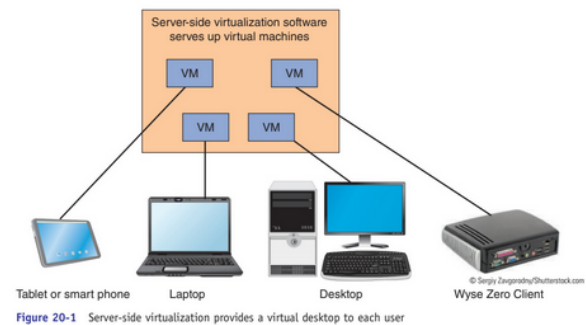
### The basics of Virtualization

1. **What is virtualization** Replication of hardware to simulate a virtual machine inside a physical machine
2. **Types of virtualization**
  - Server Side Virtualization Virtual Desktop infrastructure(VDI)

***Server-side virtualization***

Virtual Desktop Infrastructure (VDI).

- Thick client or fat client
- Thin client
- Zero client



- Client-side Virtualization Software installed on a computer to manage virtual machines with its own operating system installed. A hypervisor and certain hardware requirements are needed.

# Client-side virtualization

- Software installed on a computer to manage virtual machines
- Each VM has its own operating system installed
- For client-side virtualization, the computer needs:
  - A hypervisor (Software that allows the management of virtual machines)
  - Hardware support
    - capable CPU
    - Enough RAM
    - Enough storage



## Type 1 VS Type 2 Hypervisor

### Type 1

Runs on the hardware

Examples are:

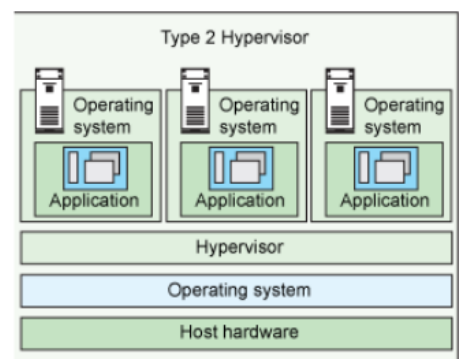
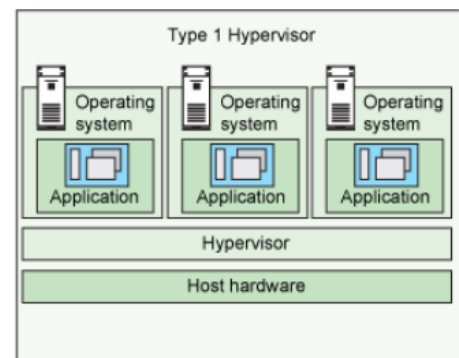
VMware ESX and ESXi  
Citrix XenServer

### Type 2

Runs on a Host Operating System

Examples are:

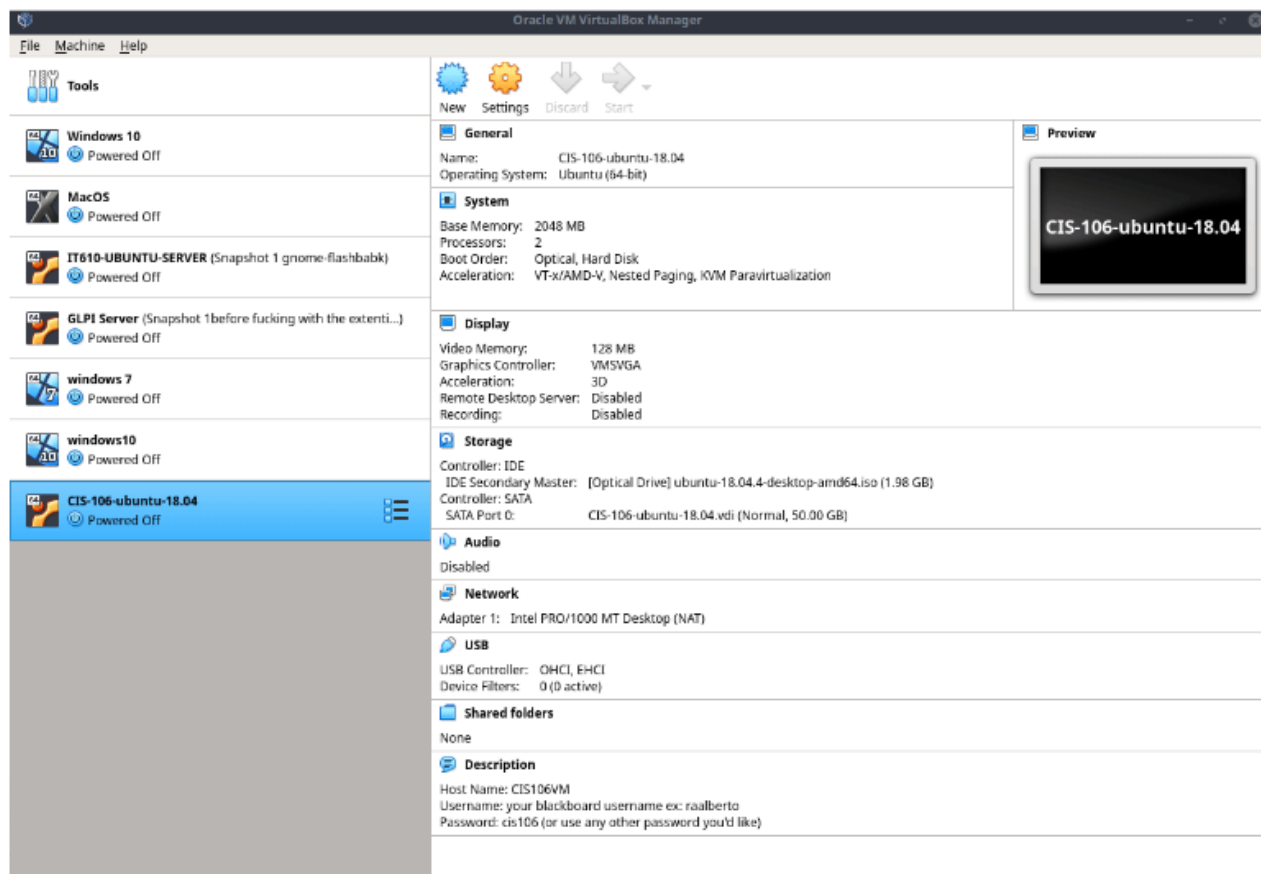
VMware Workstation Player/Pro  
Oracle VirtualBox



≡ [HTTPS://VAPOUR-APPS.COM/WHAT-IS-HYPERVISOR/](https://vapour-apps.com/what-is-hypervisor/) FOR MORE INFORMATION

## Installing Ubuntu in Virtualization

- Settings

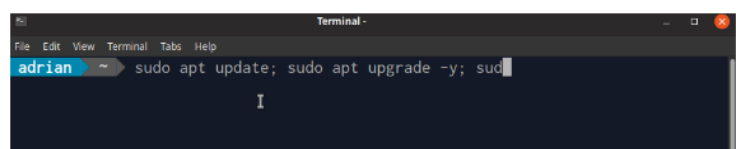
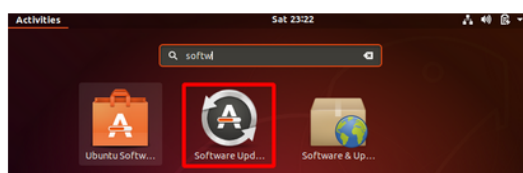


- Update

## Update Ubuntu 20.04

- Two ways:
  - Using Ubuntu Software Update
  - Using the command line
    - Command:

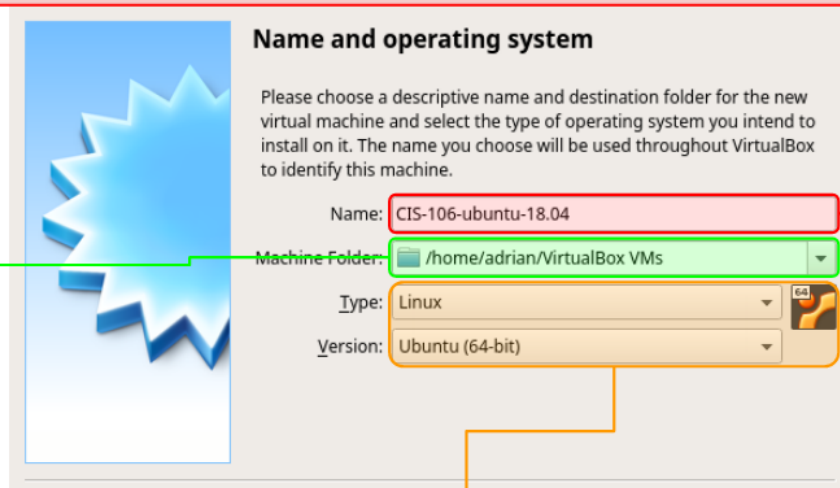
```
sudo apt update; sudo apt upgrade -y; sudo apt full-upgrade -y
```



- Name and Operating System

You can name your vm however you want but it is good practice to name it something that indicates what OS is being installed or the purpose of the vm.

This indicates where the virtual machine is located in your host machine.



**Name and operating system**

Please choose a descriptive name and destination folder 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: CIS-106-ubuntu-18.04

Machine Folder: /home/adrian/VirtualBox VMs

Type: Linux

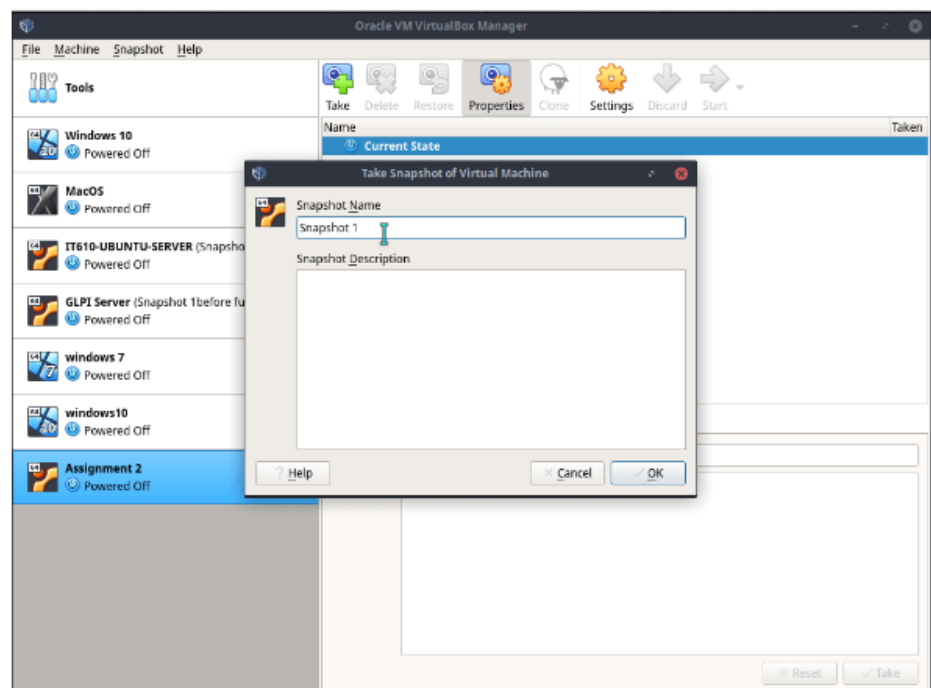
Version: Ubuntu (64-bit)

This indicates the type of operating systems and the versions available. If you do not see a 64 bit version of the OS available is probably because virtualization is not enabled in your computer

- Snapshot

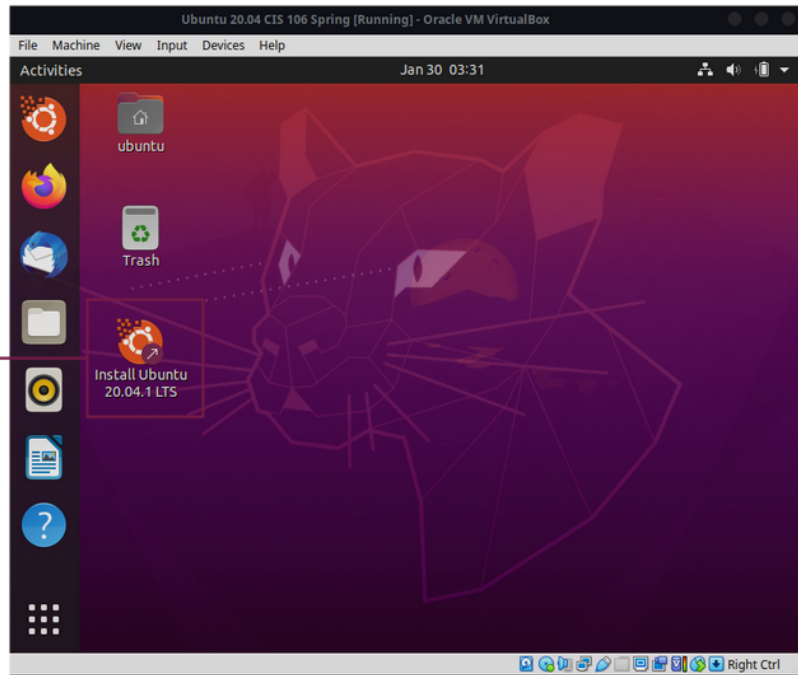
## Take a snapshot of a virtual machine

Always take snapshots of your virtual machine turned off to reduce the size of the snapshot.



- Live

To start Ubiquity, double click on the “**Install Ubuntu 18.04.4 LTS**” icon. This will launch the installation wizard.



You can use the live environment as a regular computer. All ubuntu's default applications are available in this environment. However, any changes will not remain as well as any data saved in this environment