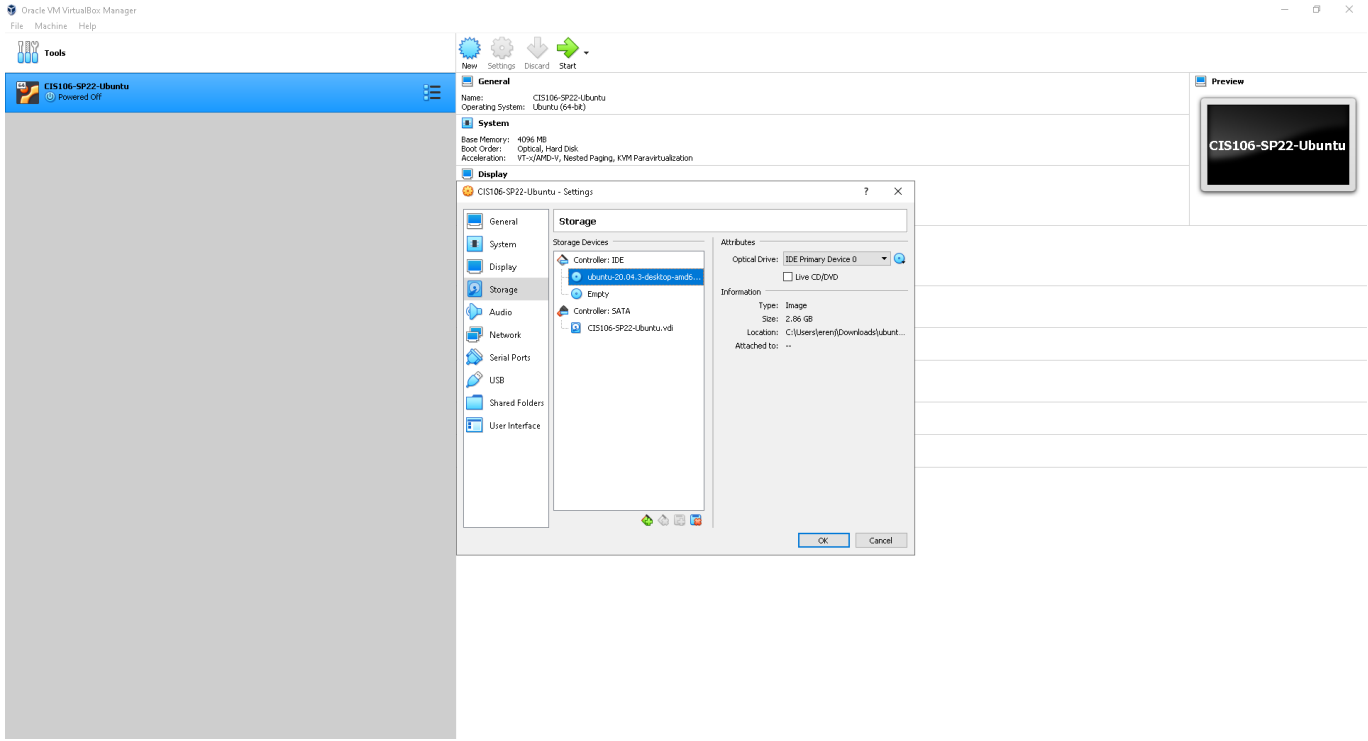
Week Report 2

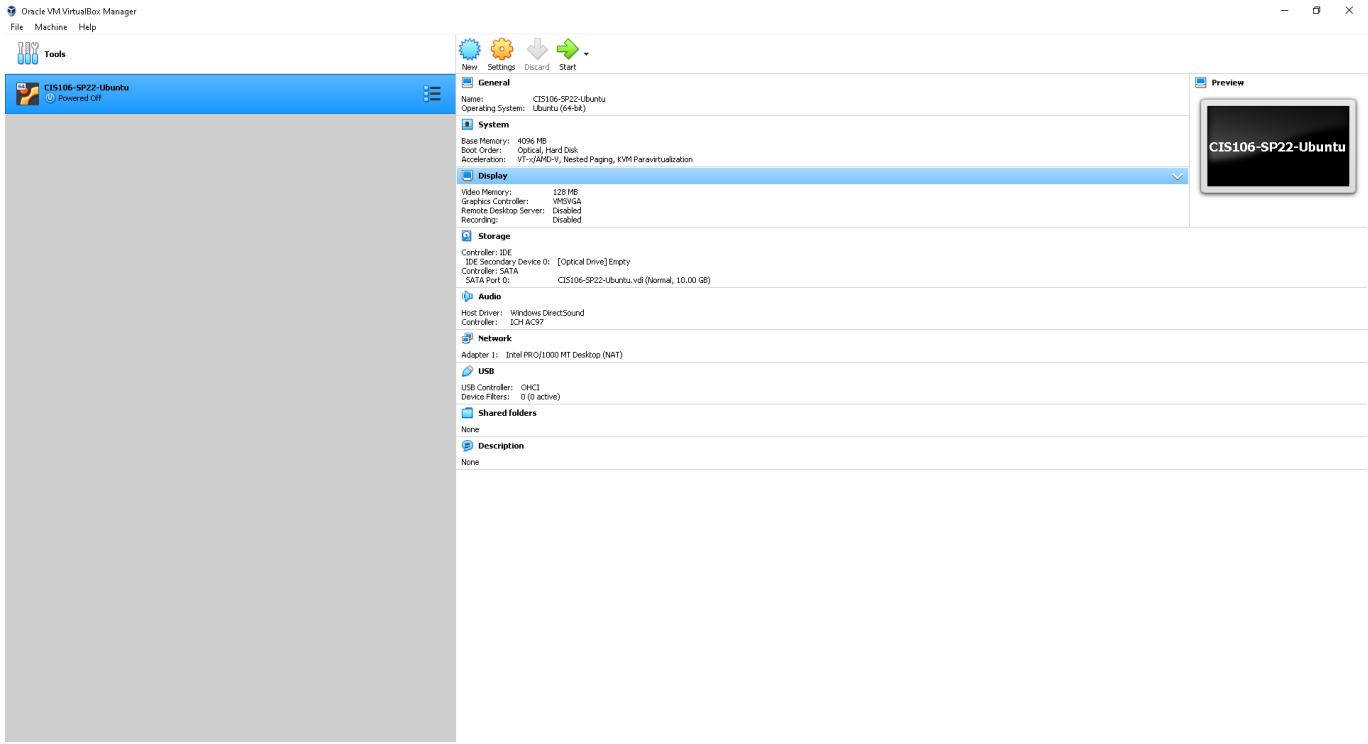
I've learned allot during this week such as a raspberry pi I didn't even know those devices existed I may consider of me buying one because it just amazes how a little device can do allot such as home security or programming.

Summary of Presentations

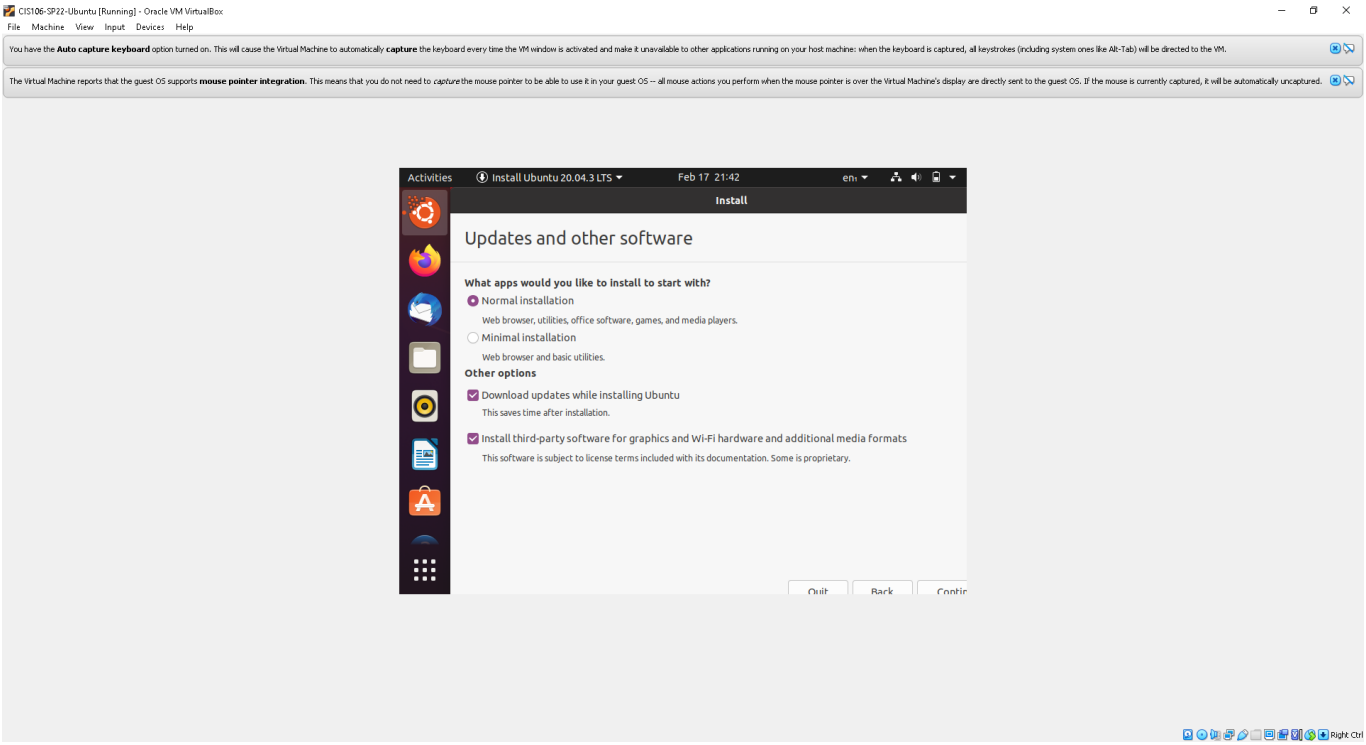
- An desktop that can simulate a virtual machine which leads to being an entirely different computer an software that can be run on a desktop.
- Hypervisor Type 1 Will replace your computer completely and it will be faster compared to Hypervisor Type 2 which is a software installed on the host operating system.
- One thing that I found important about virtualization is that you can test the software to see if that's what you want to replace your OS with that will run faster then windows 10.

Installing Ubuntu In Virtualbox


Oracle VM VirtualBox Manager
File Machine Help
Tools
CIS106-SP22-Ubuntu
Powered Off
New Settings Discard Start
General
Name: CIS106-SP22-Ubuntu
Operating System: Ubuntu (64-bit)
System
Base Memory: 4096 MB
Boot Order: Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization
Display
Preview
CIS106-SP22-Ubuntu
CIS106-SP22-Ubuntu - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: IDE
ubuntu-20.04.3-desktop-amd6...
Empty
Controller: SATA
CIS106-SP22-Ubuntu.vdi
Attributes
Optical Drive: IDE Primary Device 0
Live CD/DVD
Information
Type: Image
Size: 2.86 GB
Location: C:\Users\eren\Downloads\ubunt...
Attached to: --
OK
Cancel


Oracle VM VirtualBox Manager
File Machine Help
Tools
CIS106-SP22-Ubuntu
Powered Off
New Settings Discard Start
General
Name: CIS106-SP22-Ubuntu
Operating System: Ubuntu (64-bit)
System
Base Memory: 4096 MB
Boot Order: Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization
Display
Video Memory: 128 MB
Graphics Controller: VMSVGA
Remote Desktop Server: Disabled
Recording: Disabled
Storage
Controller: IDE
IDE Secondary Device 0: [Optical Drive] Empty
Controller: SATA
SATA Port 0: CIS106-SP22-Ubuntu.vdi (Normal, 10.00 GB)
Audio
Host Driver: Windows DirectSound
Controller: ICH AC97
Network
Adapter 1: Intel PRO/1000 MT Desktop (NAT)
USB
USB Controller: OHCI
Device Filters: 0 (0 active)
Shared folders
None
Description
None
Preview
CIS106-SP22-Ubuntu


CIS106-SP22-Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
You have the Auto capture keyboard option turned on. This will cause the Virtual Machine to automatically capture the keyboard every time the VM window is activated and make it unavailable to other applications running on your host machine: when the keyboard is captured, all keystrokes (including system ones like Alt-Tab) will be directed to the VM.
The Virtual Machine reports that the guest OS supports mouse pointer integration. This means that you do not need to capture the mouse pointer to be able to use it in your guest OS -- all mouse actions you perform when the mouse pointer is over the Virtual Machine's display are directly sent to the guest OS. If the mouse is currently captured, it will be automatically uncaptured.
Checking disks: 52% complete
Checking ./pool/restricted/n/ Checking ./casper/filesystem.squashfs).144-0ubuntu0.20.04.1_i386
Press Ctrl+C to cancel all filesystem checks in progresssss
ubuntu
Right Ctrl


CIS106-SP22-Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
You have the Auto capture keyboard option turned on. This will cause the Virtual Machine to automatically capture the keyboard every time the VM window is activated and make it unavailable to other applications running on your host machine: when the keyboard is captured, all keystrokes (including system ones like Alt-Tab) will be directed to the VM.
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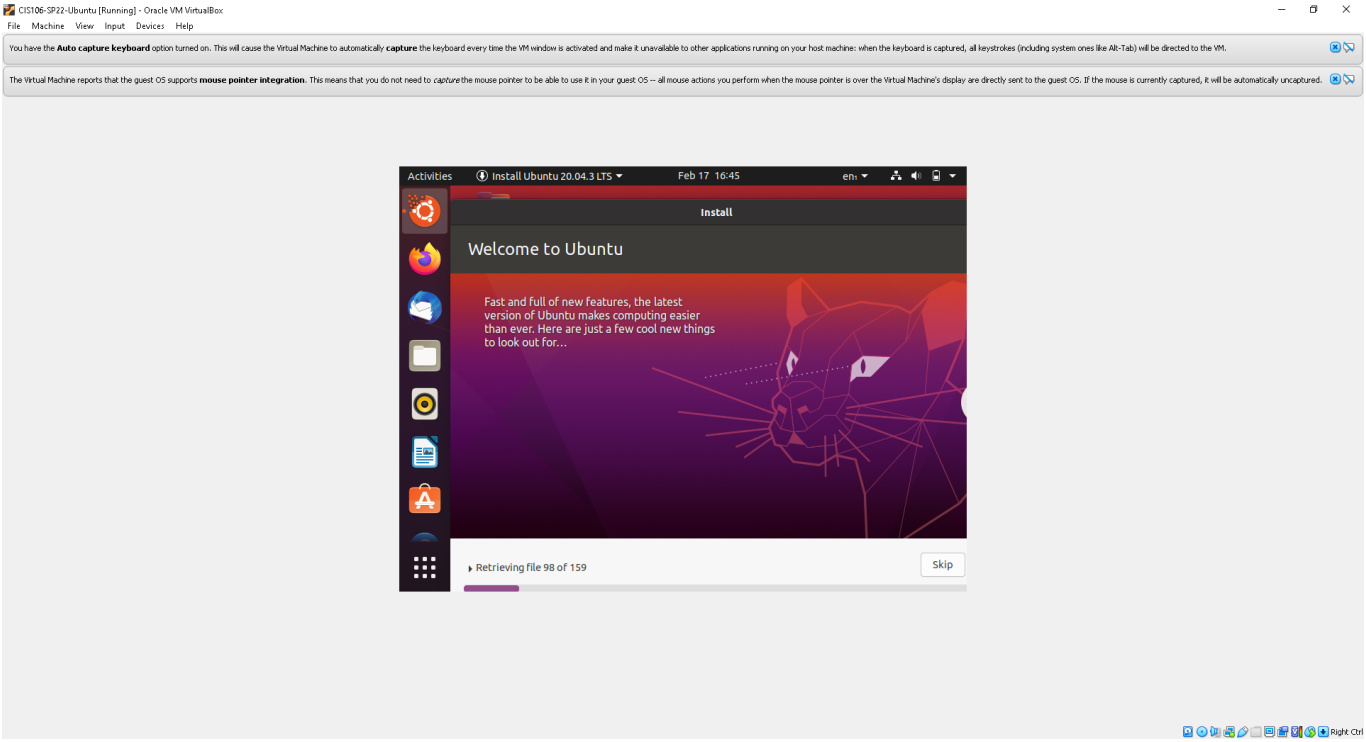
Activities
Install Ubuntu 20.04.3 LTS
Feb 17 21:42
Install
Updates and other software
What apps would you like to install to start with?
Normal installation
Web browser, utilities, office software, games, and media players.
Minimal installation
Web browser and basic utilities.
Other options
Download updates while installing Ubuntu
This saves time after installation.
Install third-party software for graphics and Wi-Fi hardware and additional media formats
This software is subject to license terms included with its documentation. Some is proprietary.
Quit
Back
Right Ctrl



What is the raspberry pi

An raspberry pi is a small computer card like a mother board but the size as a phone and the raspberry pi haves no screen.

A bulleted list of different models

- Raspberry PI 4
- Raspberry PI 3
- Raspberry PI Model B
- Raspberry PI Zero W
- Raspberry PI 3 A+
- Raspberry PI 400

Specs of the latest Raspberry PI model

Raspberry PI 4

Specifications

Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
2GB, 4GB or 8GB LPDDR4-3200 SDRAM (depending on model)
2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE
Gigabit Ethernet
2 USB 3.0 ports; 2 USB 2.0 ports.
Raspberry Pi standard 40 pin GPIO header (fully backwards compatible with previous boards)
2 × micro-HDMI ports (up to 4kp60 supported)
2-lane MIPI DSI display port
2-lane MIPI CSI camera port
4-pole stereo audio and composite video port
H.265 (4kp60 decode), H264 (1080p60 decode, 1080p30 encode)
OpenGL ES 3.1, Vulkan 1.0
Micro-SD card slot for loading operating system and data storage
5V DC via USB-C connector (minimum 3A*)
5V DC via GPIO header (minimum 3A*)
Power over Ethernet (PoE) enabled (requires separate PoE HAT)
Operating temperature: 0 – 50 degrees C ambient

* A good quality 2.5A power supply can be used if downstream USB peripherals consume less than 500mA in total.

List of 5 Projects you can do with the raspberry PI

- You can make your own security system.
- Make your own Film stop motion.
- Make your own Raspberry PI Computer.
- Home Automation System.
- Make a Social Media Bot.