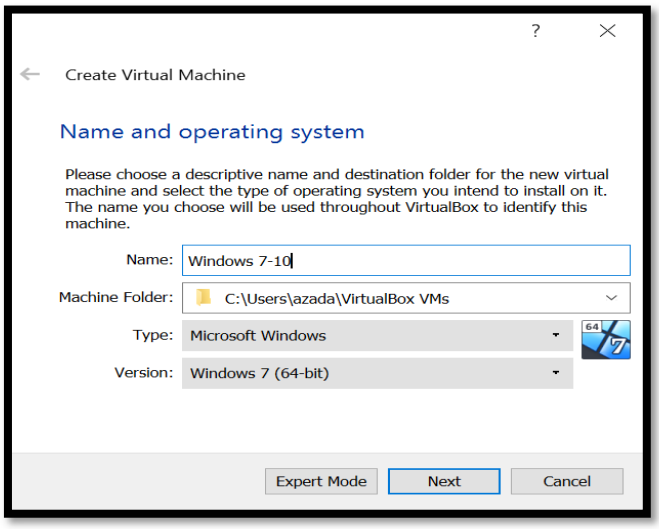
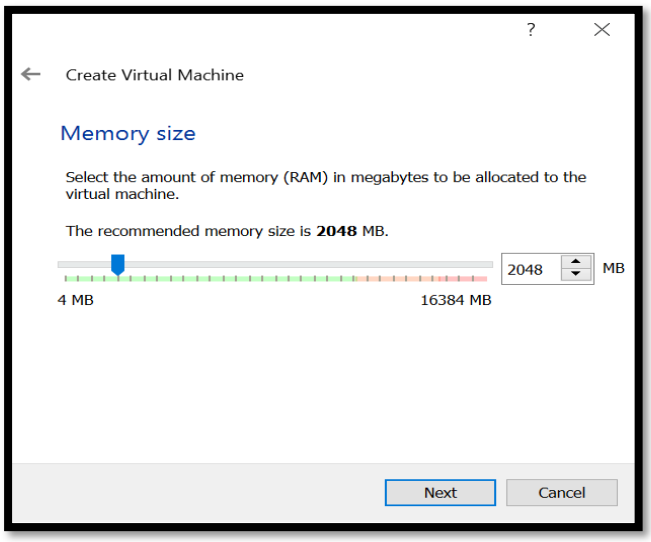
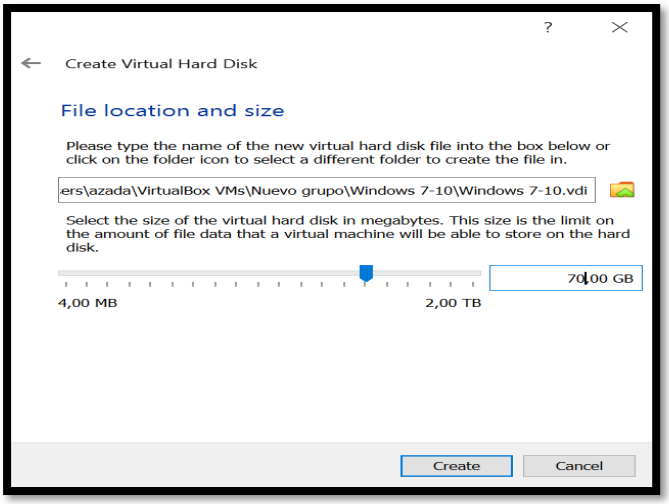
DUAL BOOT

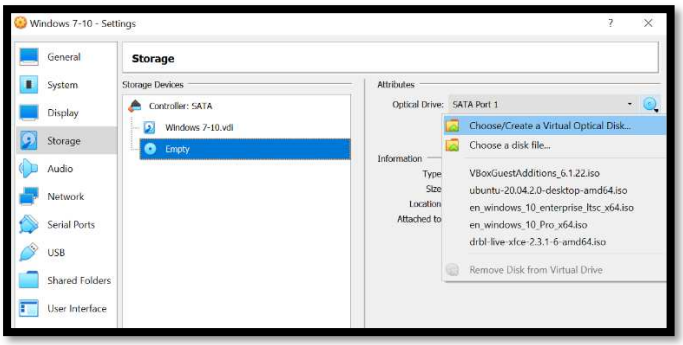
INDEX

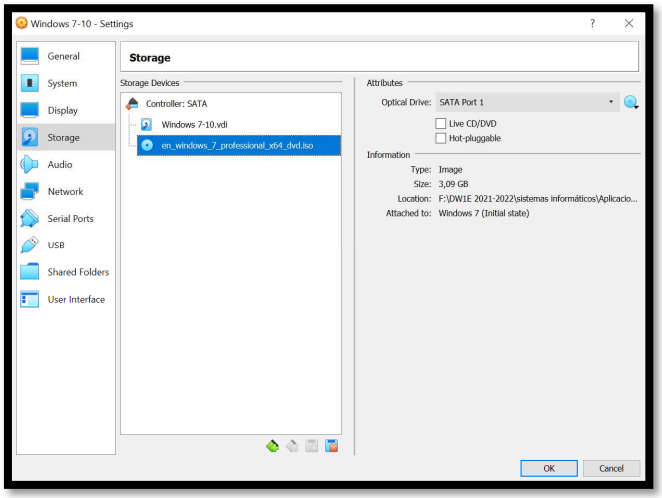
First thing we must do is preparing Windows 7 to install Windows 10 and extend the hard disk untill 70GB

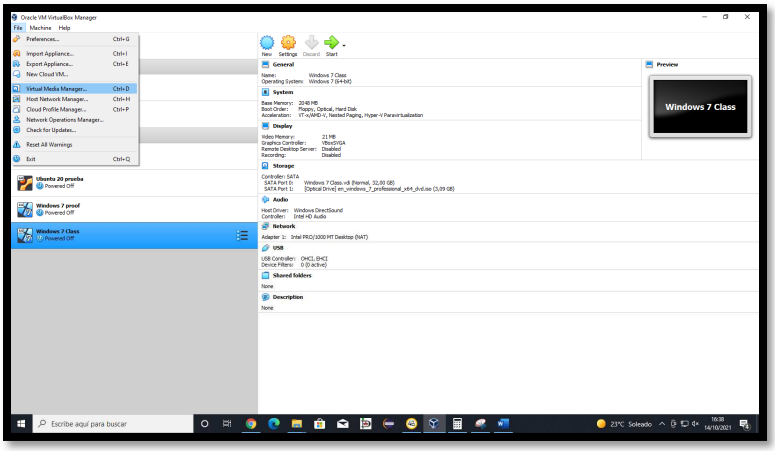


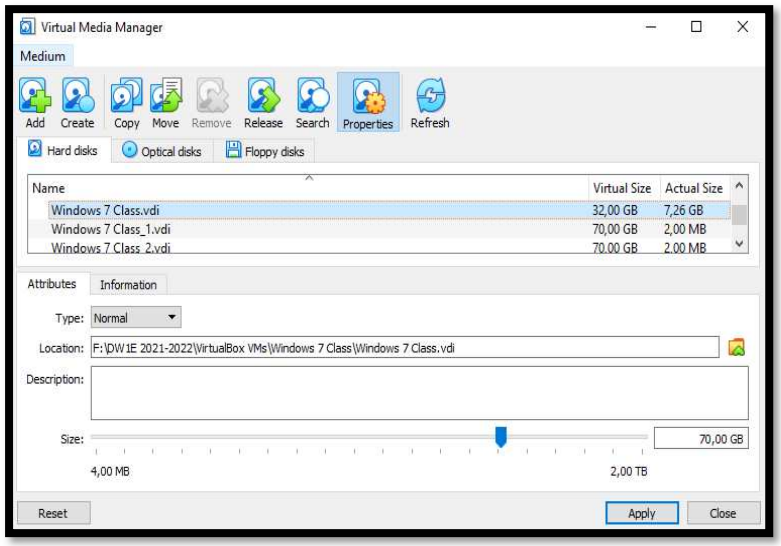


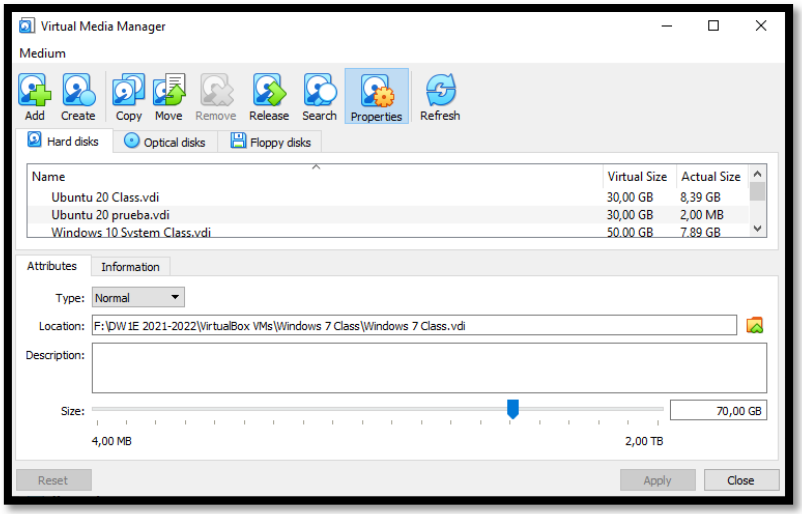

Create Virtual Hard Disk
File location and size
Please type the name of the new virtual hard disk file into the box below or click on the folder icon to select a different folder to create the file in.
ers\azada\VirtualBox VMs\Nuevo grupo\Windows 7-10\Windows 7-10.vdi
Select the size of the virtual hard disk in megabytes. This size is the limit on the amount of file data that a virtual machine will be able to store on the hard disk.
70,00 GB
4,00 MB
2,00 TB
Create
Cancel


Windows 7-10 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 7-10.vdi
Empty
Attributes
Optical Drive: SATA Port 1
Choose/Create a Virtual Optical Disk...
Choose a disk file...
Information
Type
Size
Location
Attached to
VBoxGuestAdditions_6.1.22.iso
ubuntu-20.04.2.0-desktop-amd64.iso
en_windows_10_enterprise_ltsc_x64.iso
en_windows_10_Pro_x64.iso
drbl-live-xfce-2.3.1-6-amd64.iso
Remove Disk from Virtual Drive

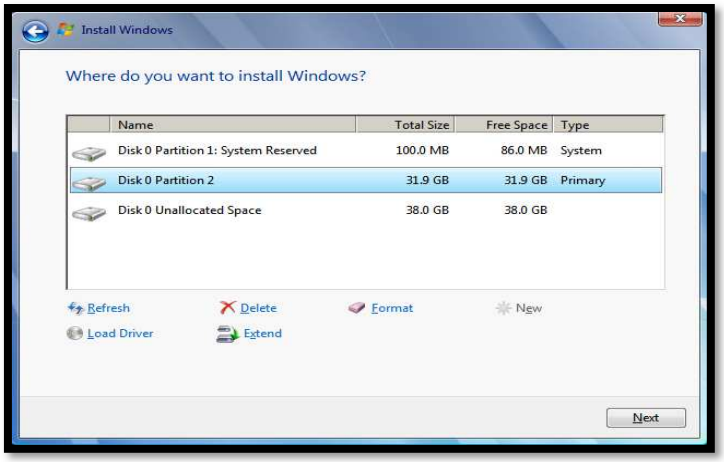

Windows 7-10 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 7-10.vdi
en_windows_7_professional_x64_dvd.iso
Attributes
Optical Drive: SATA Port 1
Live CD/DVD
Hot-pluggable
Information
Type: Image
Size: 3,09 GB
Location: F:\DW1E 2021-2022\sistemas informáticos\Aplicacio...
Attached to: Windows 7 (Initial state)
OK
Cancel

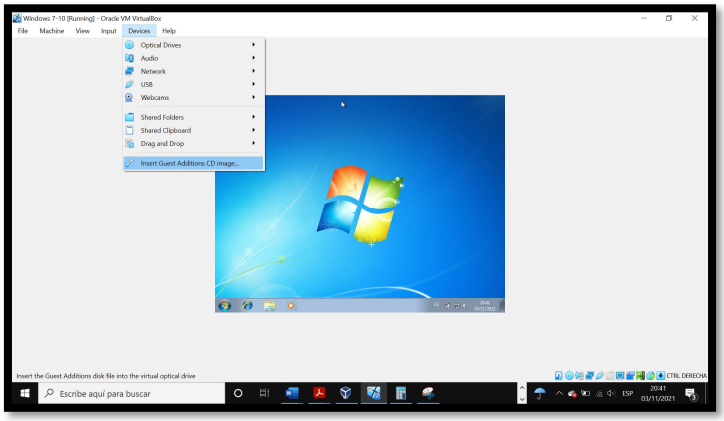

Windows 7 Class


Virtual Media Manager
Medium
Add
Create
Copy
Move
Remove
Release
Search
Properties
Refresh
Hard disks
Optical disks
Floppy disks
Name
Virtual Size
Actual Size
Windows 7 Class.vdi
32,00 GB
7,26 GB
Windows 7 Class_1.vdi
70,00 GB
2,00 MB
Windows 7 Class_2.vdi
70,00 GB
2,00 MB
Attributes
Information
Type:
Normal
Location:
F:\DW 1E 2021-2022\VirtualBox VMs\Windows 7 Class\Windows 7 Class.vdi
Description:
Size:
70,00 GB
4,00 MB
2,00 TB
Reset
Apply
Close


Virtual Media Manager
Medium
Add
Create
Copy
Move
Remove
Release
Search
Properties
Refresh
Hard disks
Optical disks
Floppy disks
Name
Virtual Size
Actual Size
Ubuntu 20 Class.vdi
30,00 GB
8,39 GB
Ubuntu 20 prueba.vdi
30,00 GB
2,00 MB
Windows 10 System Class.vdi
50,00 GB
7,89 GB
Attributes
Information
Type:
Normal
Location:
F:\DW 1E 2021-2022\VirtualBox VMs\Windows 7 Class\Windows 7 Class.vdi
Description:
Size:
70,00 GB
4,00 MB
2,00 TB
Reset
Apply
Close

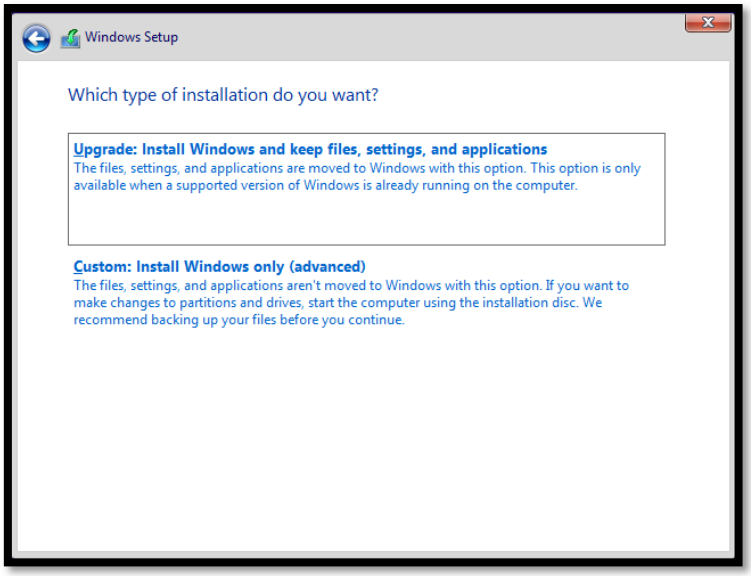

Install Windows
Windows 7
Language to install:
English
Time and currency format:
Spanish (Spain, International Sort)
Keyboard or input method:
Spanish
Enter your language and other preferences and click "Next" to continue.
Copyright © 2009 Microsoft Corporation. All rights reserved.
Next





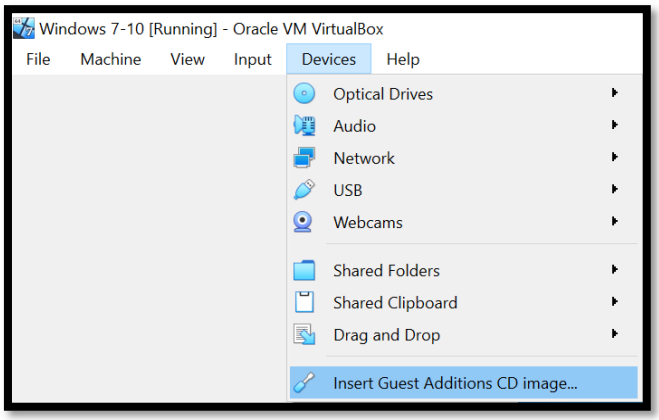
Start and enter

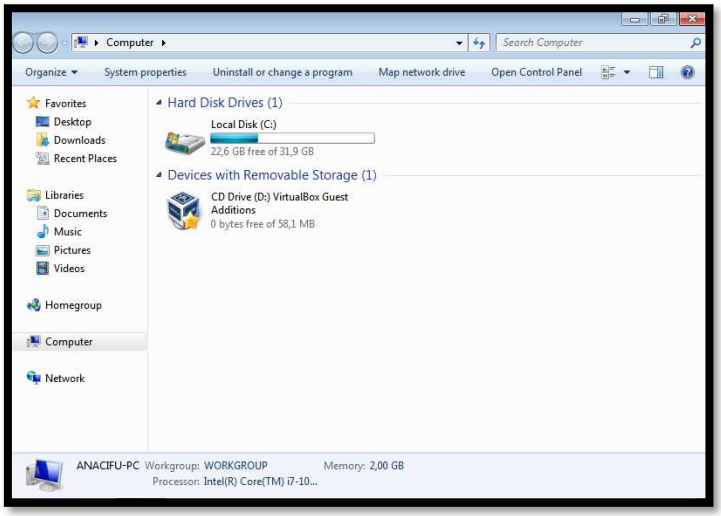
Instalar upgrade, aunque


Windows Setup
Which type of installation do you want?
Upgrade: Install Windows and keep files, settings, and applications
The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.
Custom: Install Windows only (advanced)
The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.

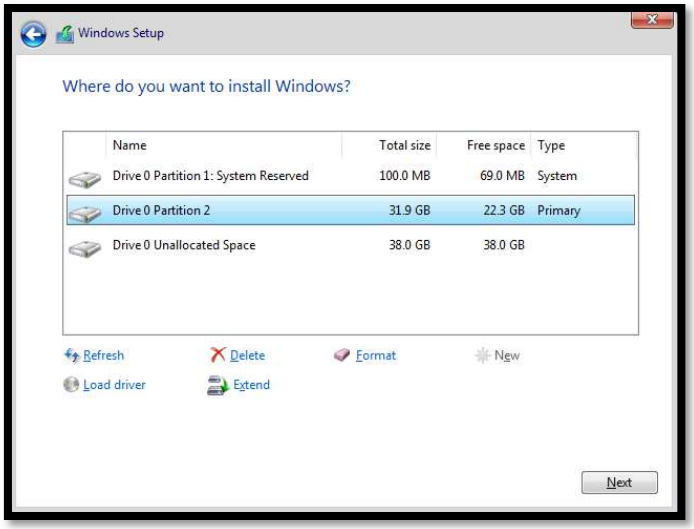

Set Up Windows
Windows 7 Professional
Choose a user name for your account and name your computer to distinguish it on the network.
Type a user name (for example, John):
AnaCifu
Type a computer name:
AnaCifu-PC
Copyright © 2009 Microsoft Corporation. All rights reserved.
Next

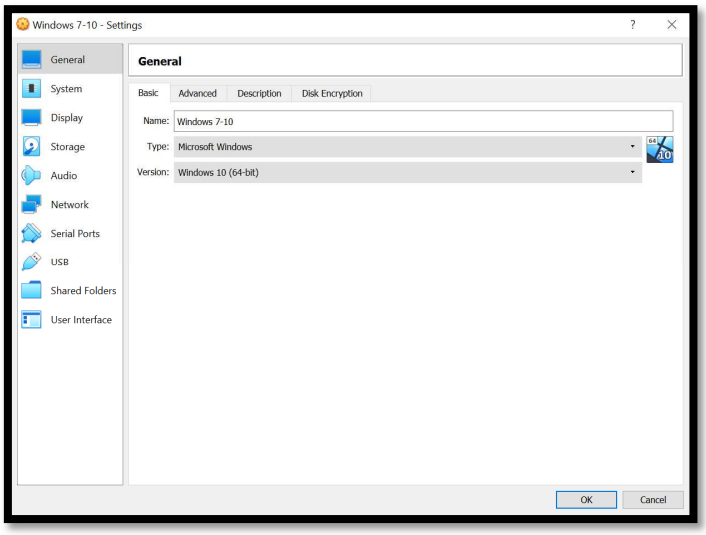

Set Up Windows
Help protect your computer and improve Windows automatically
Use recommended settings
Install important and recommended updates, help make Internet browsing safer, check online for solutions to problems, and help Microsoft improve Windows.
Install important updates only
Only install security updates and other important updates for Windows.
Ask me later
Until you decide, your computer might be vulnerable to security threats.
Learn more about each option
When you use recommended settings or install updates only, some information is sent to Microsoft. The information is not used to identify you or contact you. To turn off these settings later, search for 'Turn off recommended setting' in Help and Support. Read the privacy statement


Windows 7-10 [Running] - Oracle VM VirtualBox
File
Machine
View
Input
Devices
Help
Optical Drives
Audio
Network
USB
Webcams
Shared Folders
Shared Clipboard
Drag and Drop
Insert Guest Additions CD image...

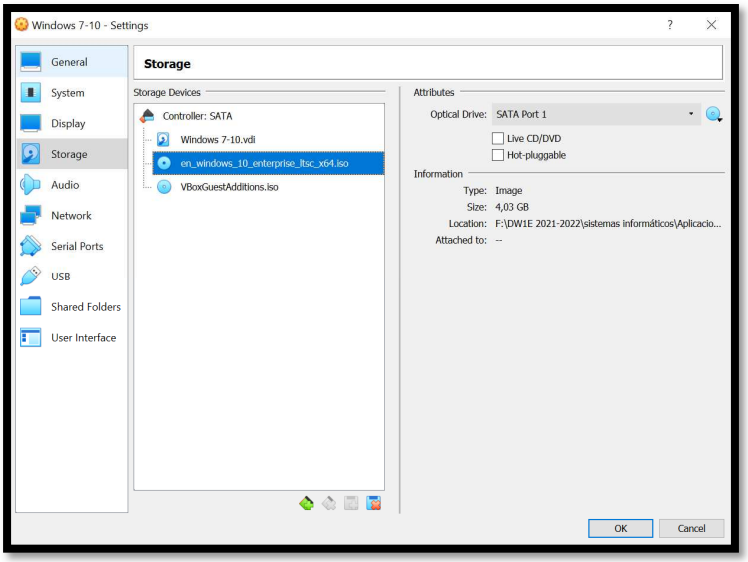

Computer
Search Computer
Organize
System properties
Uninstall or change a program
Map network drive
Open Control Panel
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Homegroup
Computer
Network
Hard Disk Drives (1)
Local Disk (C:)
22,6 GB free of 31,9 GB
Devices with Removable Storage (1)
CD Drive (D:) VirtualBox Guest Additions
0 bytes free of 58,1 MB
ANACIFU-PC
Workgroup: WORKGROUP
Memory: 2,00 GB
Processor: Intel(R) Core(TM) i7-10...

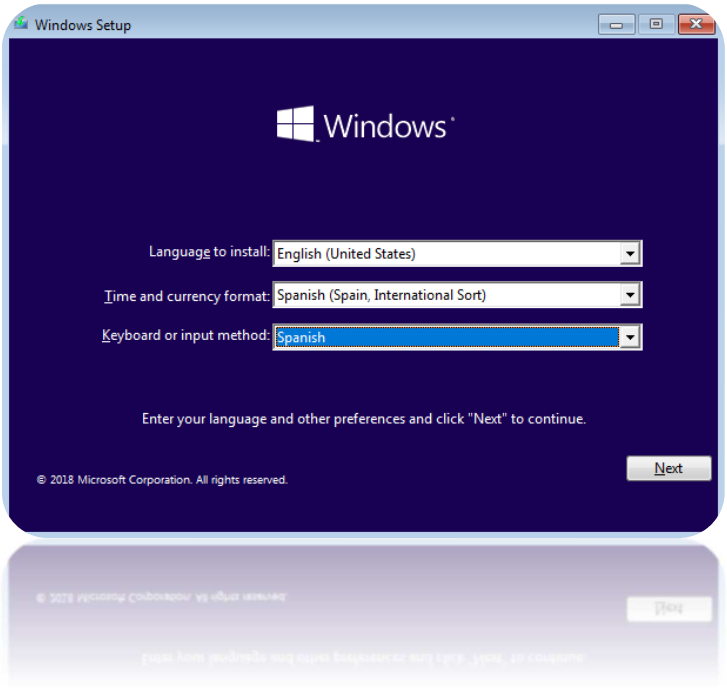
Choose drive 0 unallocated space

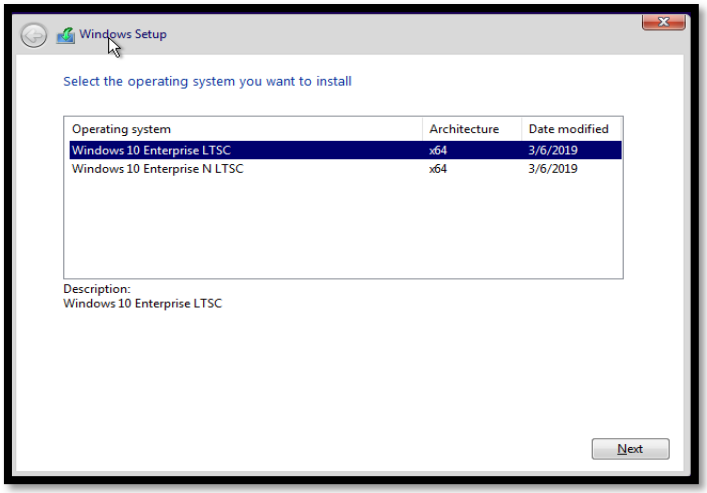


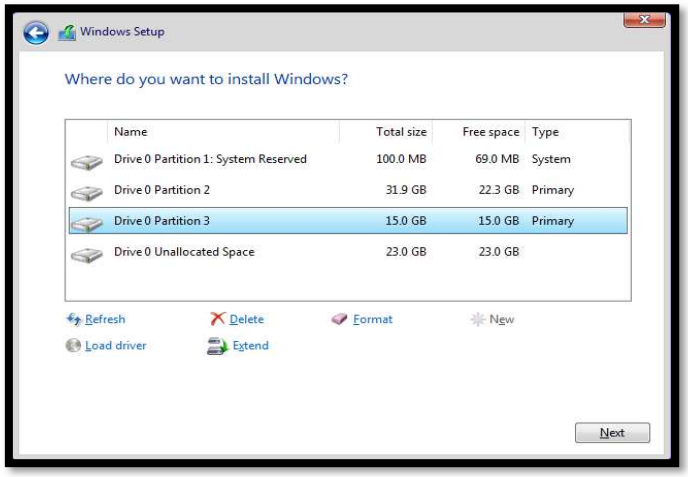


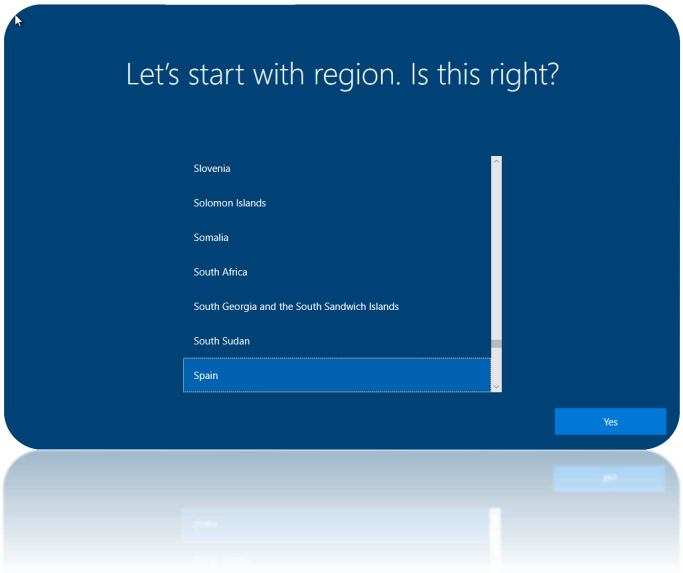
Modificar los puertos SATA para colocar windos 10 en puerto 1

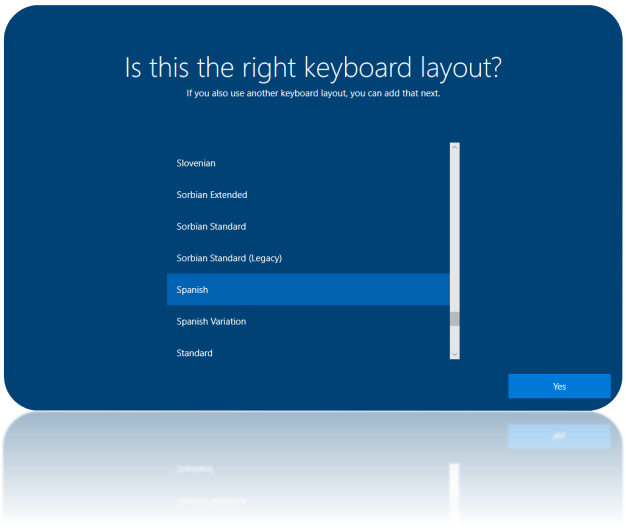

Windows 7-10 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 7-10.vdi
en_windows_10_enterprise_ltsc_x64.iso
VBoxGuestAdditions.iso
Attributes
Optical Drive: SATA Port 1
Live CD/DVD
Hot-pluggable
Information
Type: Image
Size: 4,03 GB
Location: F:\DW1E 2021-2022\sistemas informáticos\Aplicacio...
Attached to: --
OK
Cancel

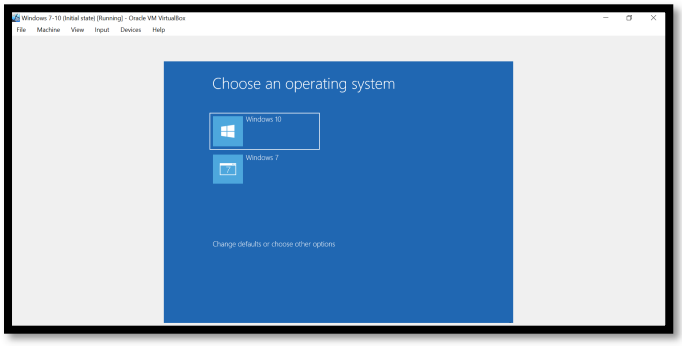

Windows Setup
Windows
Language to install: English (United States)
Time and currency format: Spanish (Spain, International Sort)
Keyboard or input method: Spanish
Enter your language and other preferences and click "Next" to continue.
© 2018 Microsoft Corporation. All rights reserved.
Next

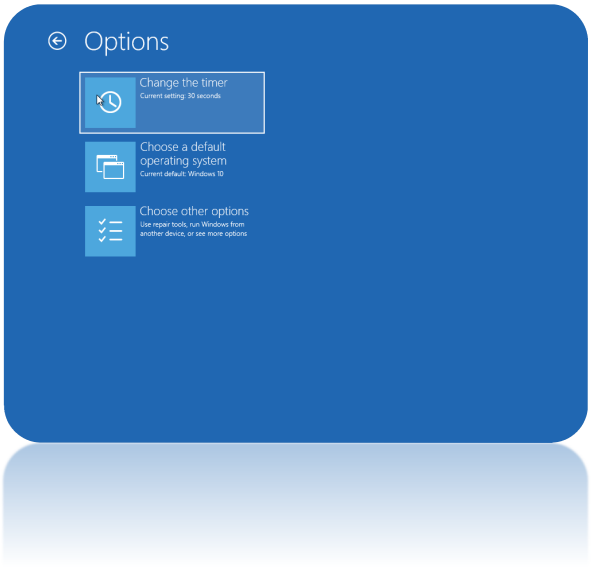

Windows Setup
Select the operating system you want to install
Operating system
Architecture
Date modified
Windows 10 Enterprise LTSC
x64
3/6/2019
Windows 10 Enterprise N LTSC
x64
3/6/2019
Description:
Windows 10 Enterprise LTSC
Next

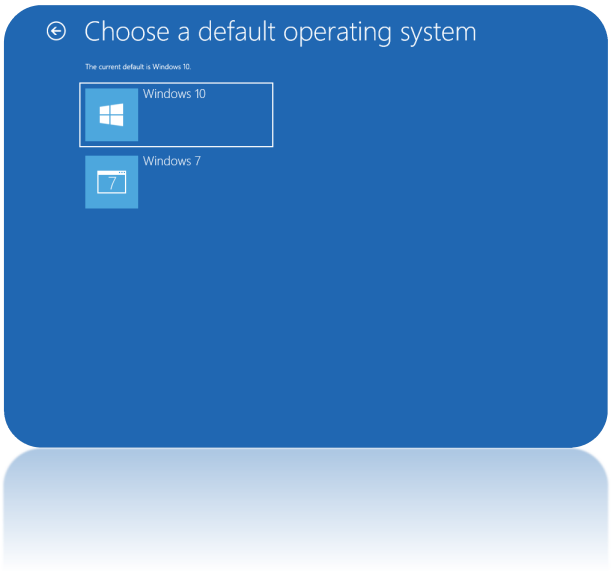

Windows Setup
Where do you want to install Windows?
Name
Total size
Free space
Type
Drive 0 Partition 1: System Reserved
100.0 MB
69.0 MB
System
Drive 0 Partition 2
31.9 GB
22.3 GB
Primary
Drive 0 Partition 3
15.0 GB
15.0 GB
Primary
Drive 0 Unallocated Space
23.0 GB
23.0 GB
Refresh
Delete
Format
New
Load driver
Extend
Next

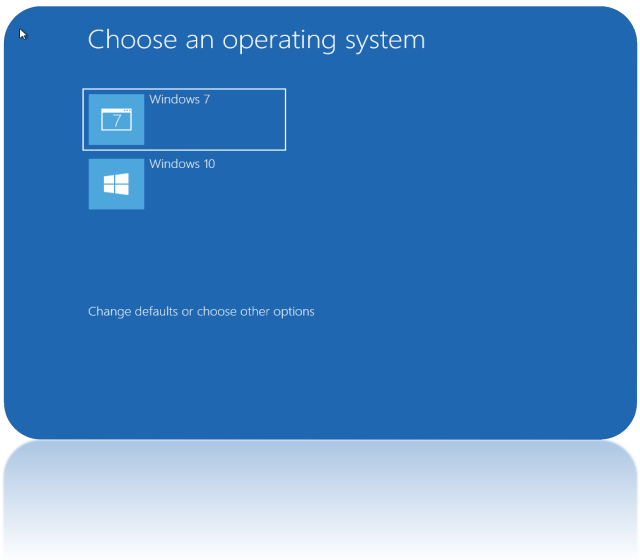

Let's start with region. Is this right?
Slovenia
Solomon Islands
Somalia
South Africa
South Georgia and the South Sandwich Islands
South Sudan
Spain
Yes

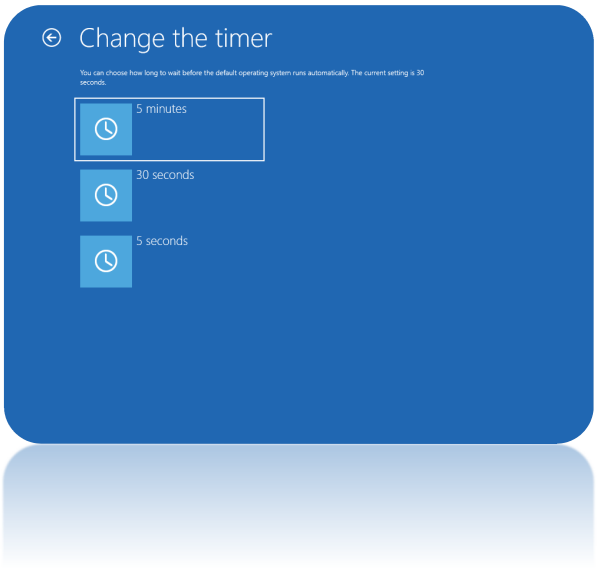

Is this the right keyboard layout?
If you also use another keyboard layout, you can add that next.
Slovenian
Sorbian Extended
Sorbian Standard
Sorbian Standard (Legacy)
Spanish
Spanish Variation
Standard
Yes

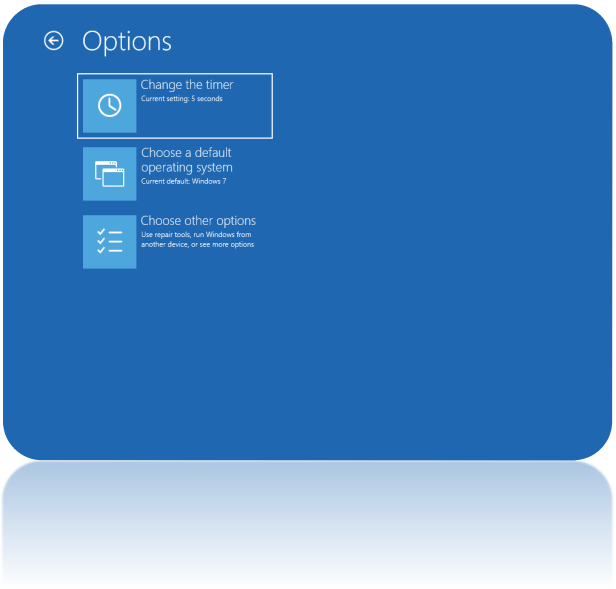

Windows 7-10 (Initial state) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Choose an operating system
Windows 10
Windows 7
Change defaults or choose other options

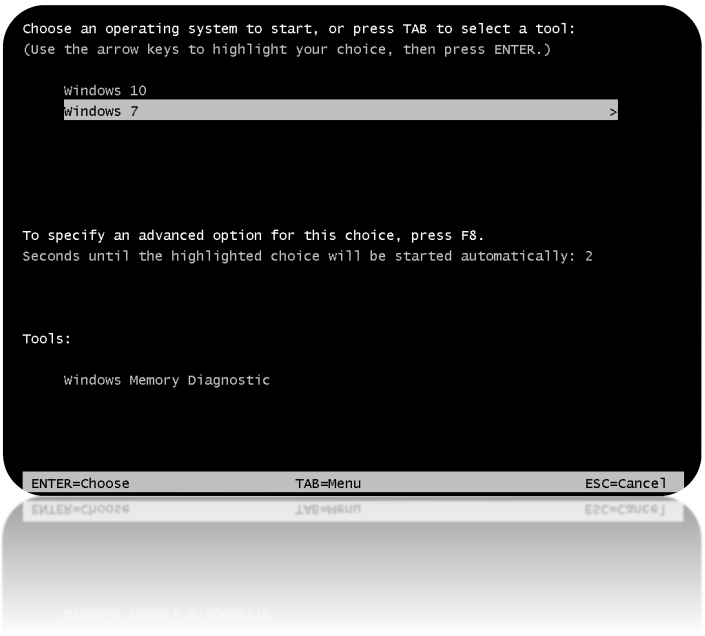

Options
Change the timer
Current setting: 30 seconds
Choose a default operating system
Current default: Windows 10
Choose other options
Use repair tools, run Windows from another device, or see more options

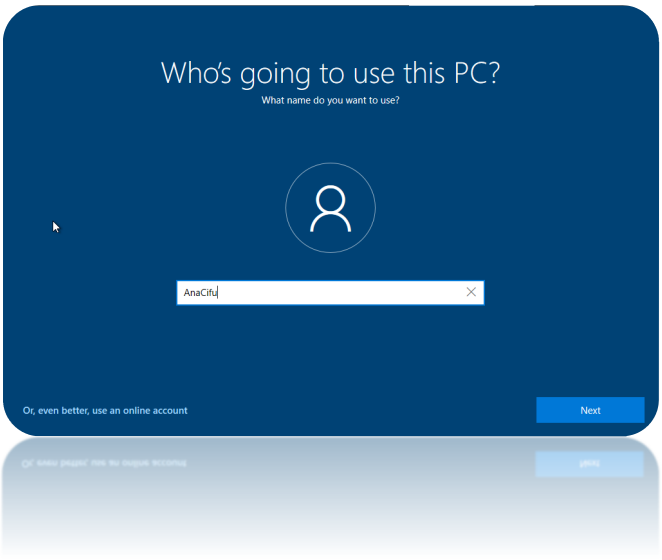

Choose a default operating system
The current default is Windows 10.
Windows 10
Windows 7


Choose an operating system
Windows 7
Windows 10
Change defaults or choose other options

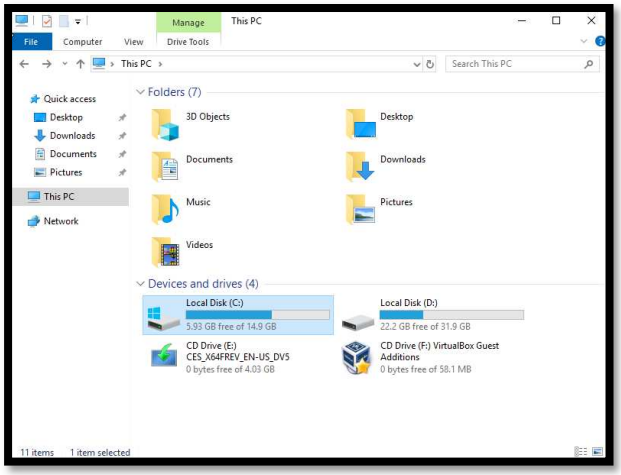

Change the timer
You can choose how long to wait before the default operating system runs automatically. The current setting is 30 seconds.
5 minutes
30 seconds
5 seconds

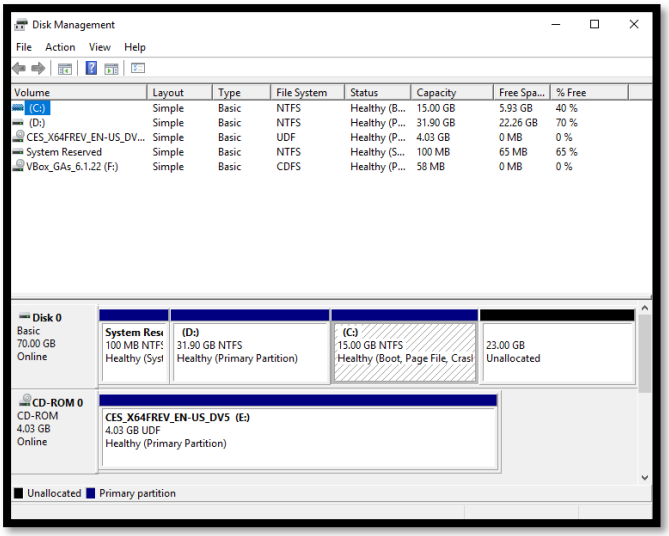

Options
Change the timer
Current setting: 5 seconds
Choose a default operating system
Current default: Windows 7
Choose other options
Use repair tools, run Windows from another device, or see more options



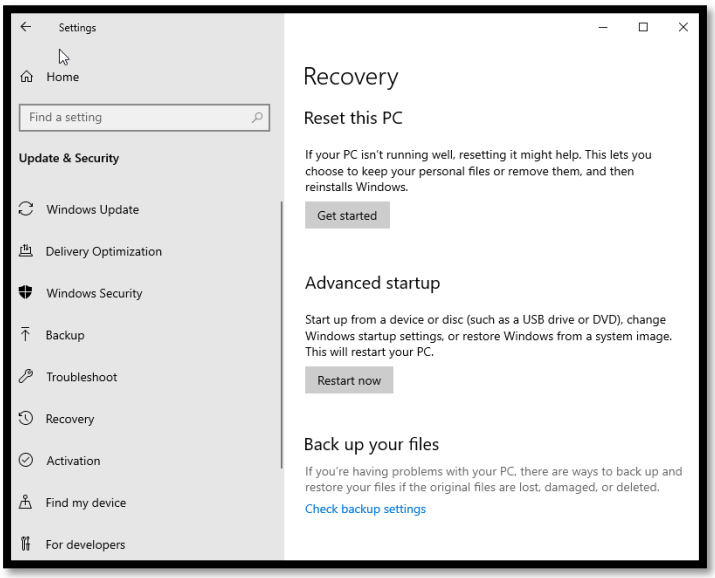


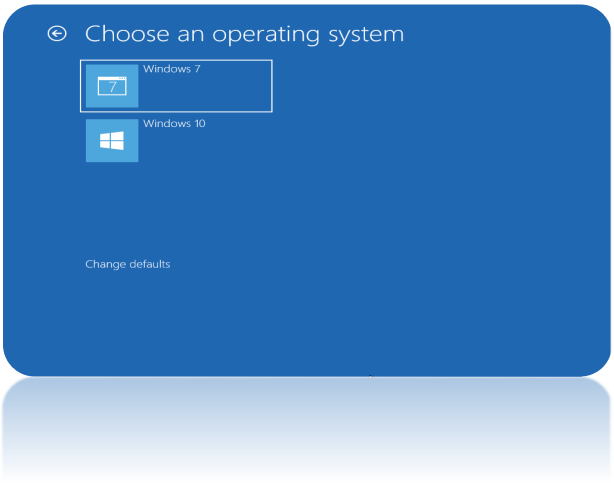
En el disco c y d tenemos la misma información

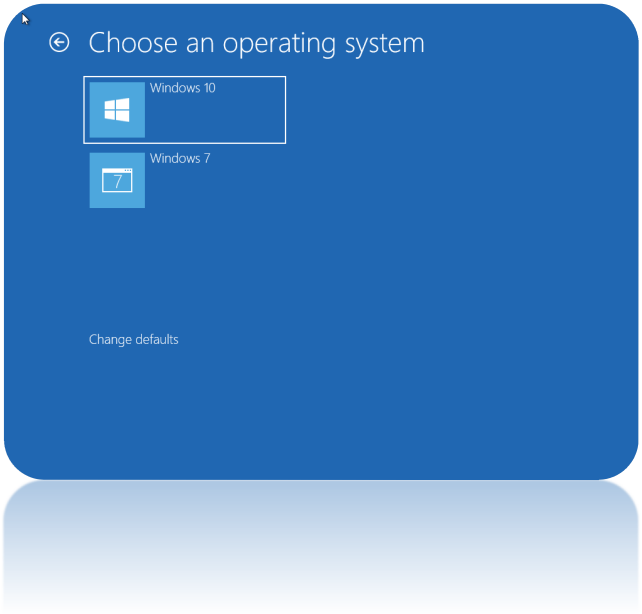

This PC
Manage
File
Computer
View
Drive Tools
Quick access
Desktop
Downloads
Documents
Pictures
This PC
Network
Folders (7)
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Devices and drives (4)
Local Disk (C:)
5.93 GB free of 14.9 GB
Local Disk (D:)
22.2 GB free of 31.9 GB
CD Drive (E:)
CES_X64FREV_EN-US_DV5
0 bytes free of 4.03 GB
CD Drive (F:) VirtualBox Guest Additions
0 bytes free of 58.1 MB
11 items
1 item selected

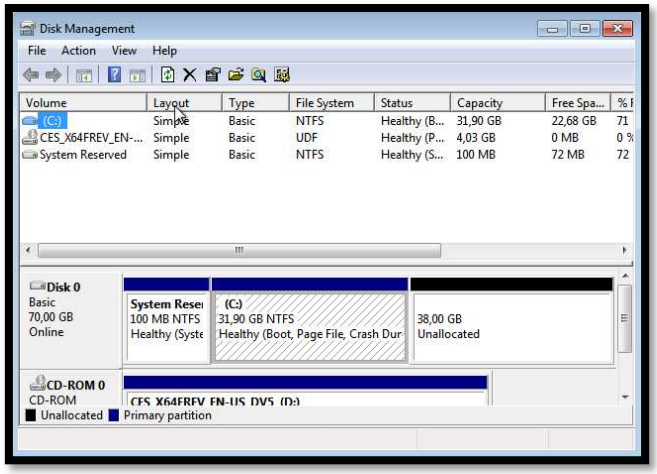

Disk Management
File Action View Help
Volume
Layout
Type
File System
Status
Capacity
Free Spa...
% Free
(C:)
(D:)
CES_X64FREV_EN-US_DV...
System Reserved
VBox_GAs_6.1.22 (F:)
Disk 0
Basic
70.00 GB
Online
System Rese
100 MB NTFS
Healthy (Syst
(D:)
31.90 GB NTFS
Healthy (Primary Partition)
(C:)
15.00 GB NTFS
Healthy (Boot, Page File, Crash
23.00 GB
Unallocated
CD-ROM 0
CD-ROM
4.03 GB
Online
CES_X64FREV_EN-US_DV5 (E:)
4.03 GB UDF
Healthy (Primary Partition)
Unallocated
Primary partition

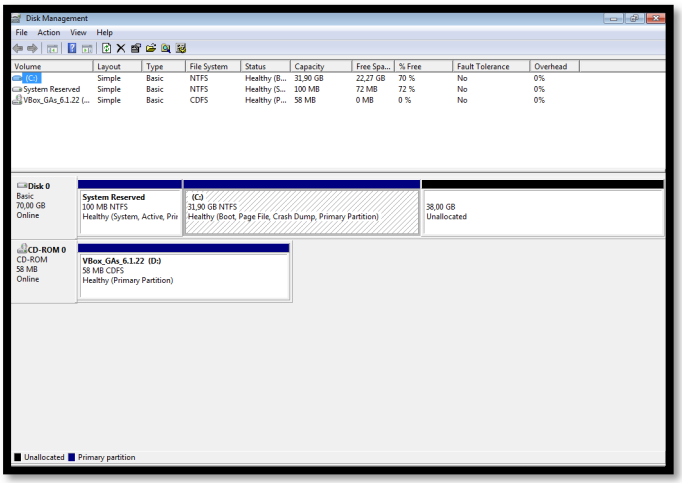
Restart now


Settings
Home
Find a setting
Update & Security
Windows Update
Delivery Optimization
Windows Security
Backup
Troubleshoot
Recovery
Activation
Find my device
For developers
Recovery
Reset this PC
If your PC isn't running well, resetting it might help. This lets you choose to keep your personal files or remove them, and then reinstalls Windows.
Get started
Advanced startup
Start up from a device or disc (such as a USB drive or DVD), change Windows startup settings, or restore Windows from a system image. This will restart your PC.
Restart now
Back up your files
If you're having problems with your PC, there are ways to back up and restore your files if the original files are lost, damaged, or deleted.
Check backup settings


Choose an operating system
Windows 7
Windows 10
Change defaults


Choose an operating system
Windows 10
Windows 7
Change defaults

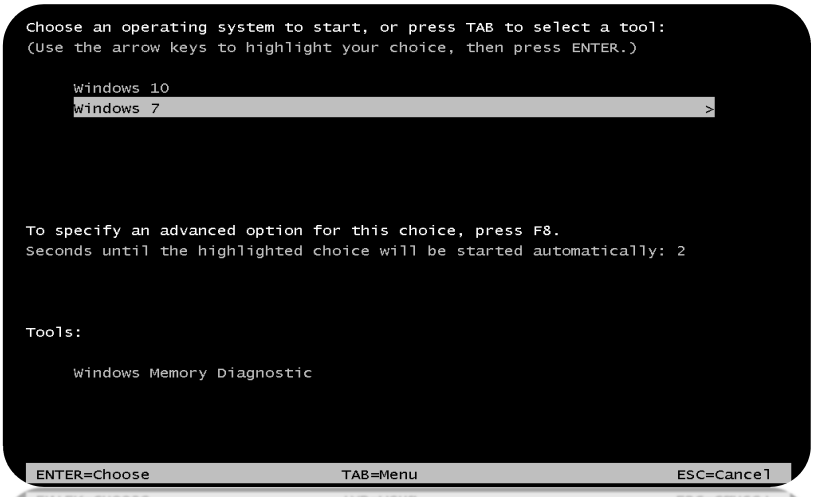




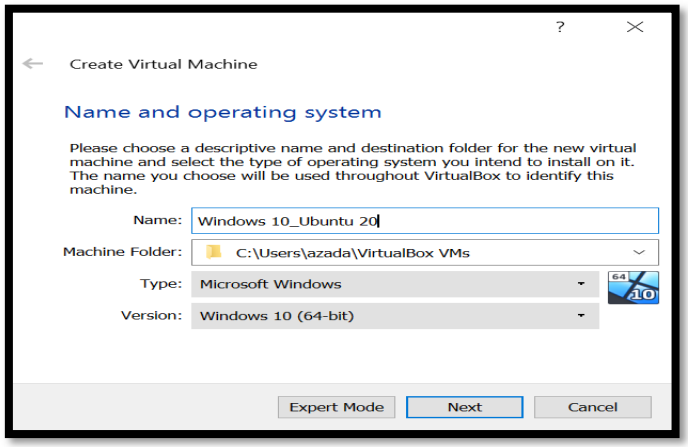
Change defaults or choose other options:

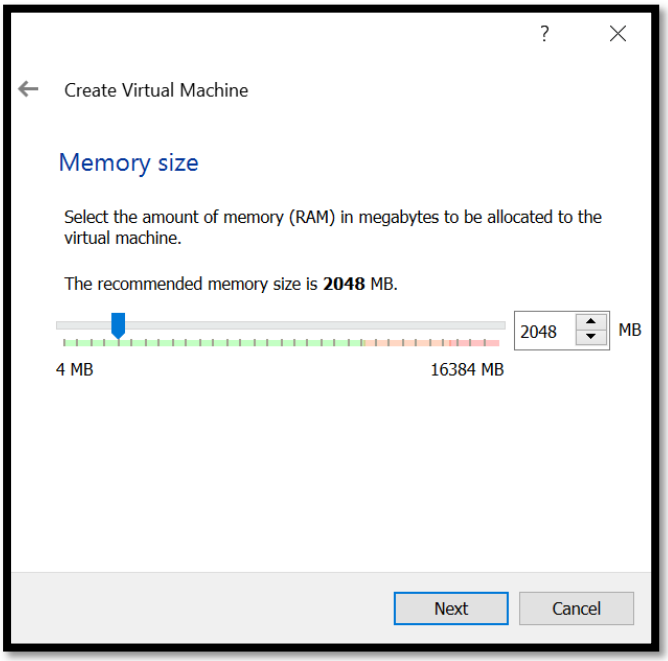

Starting Windows
© Microsoft Corporation

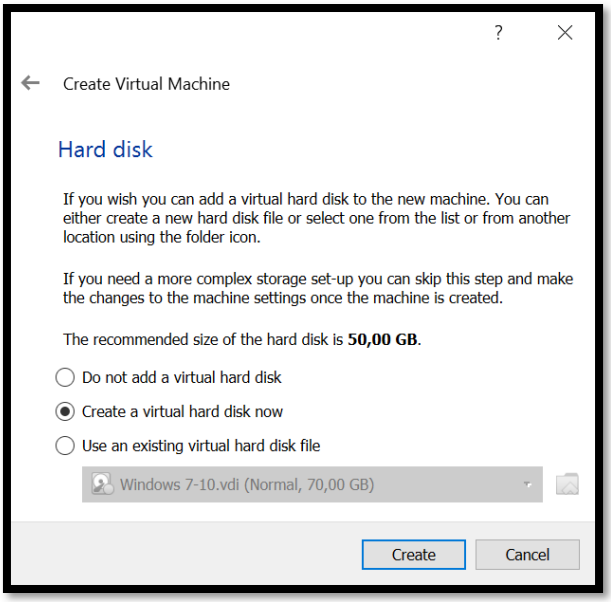

student
Password
Windows 7 Professional

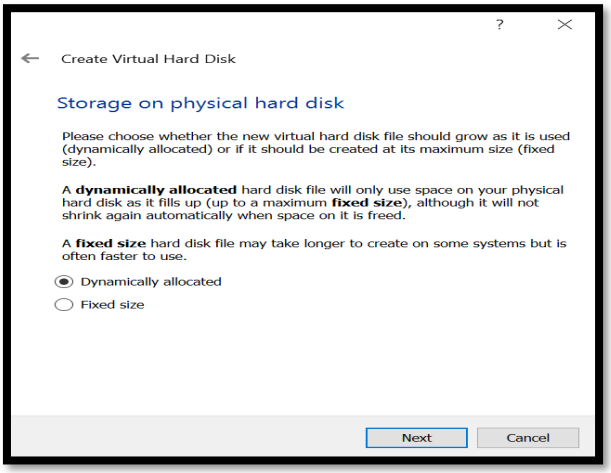

Choose an operating system to start, or press TAB to select a tool:
(Use the arrow keys to highlight your choice, then press ENTER.)
Windows 10
Windows 7
To specify an advanced option for this choice, press F8.
Seconds until the highlighted choice will be started automatically: 2
Tools:
Windows Memory Diagnostic
ENTER=Choose
TAB=Menu
ESC=Cancel

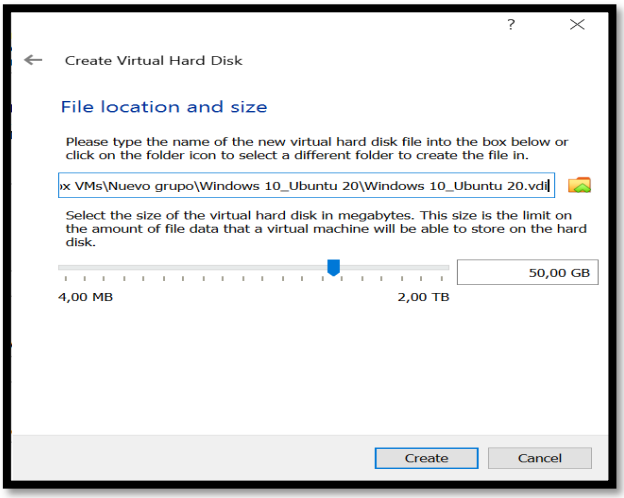
Exercise 2

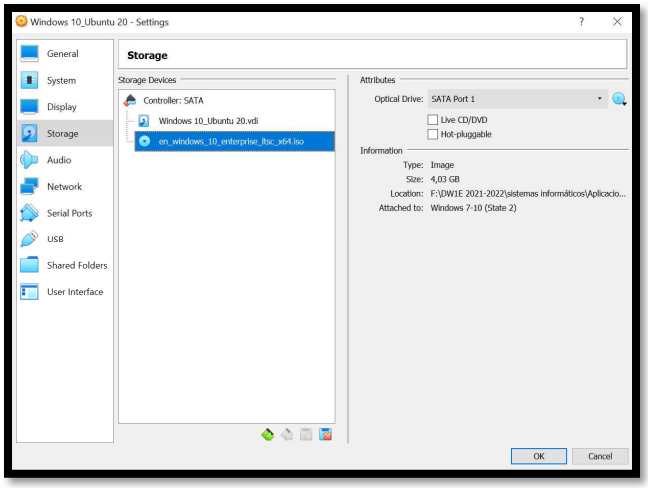

Create Virtual Machine
Name and operating system
Please choose a descriptive name and destination folder for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.
Name:
Windows 10_Ubuntu 20
Machine Folder:
C:\Users\azada\VirtualBox VMs
Type:
Microsoft Windows
Version:
Windows 10 (64-bit)
Expert Mode
Next
Cancel

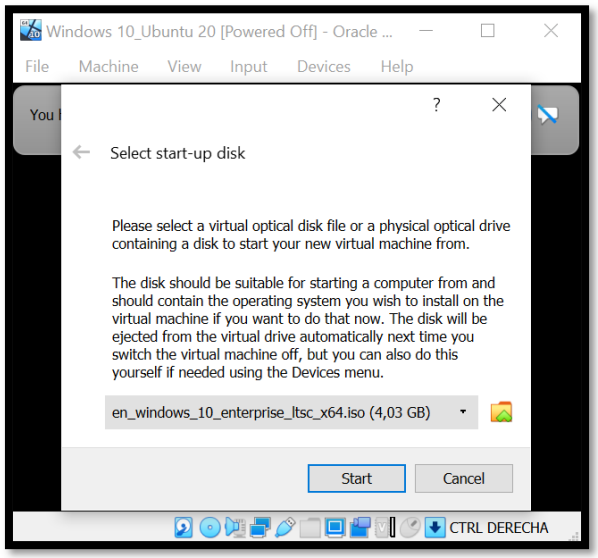

Create Virtual Machine
Memory size
Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.
The recommended memory size is 2048 MB.
2048
MB
4 MB
16384 MB
Next
Cancel

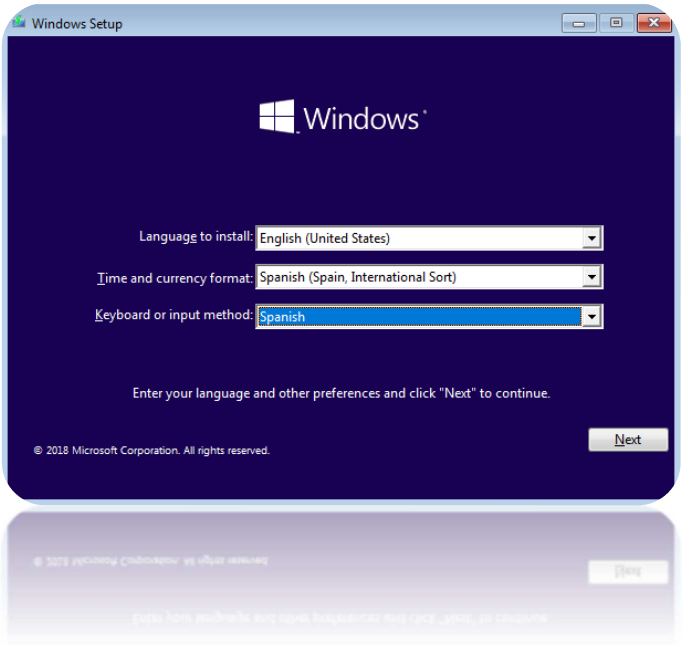

Create Virtual Machine
Hard disk
If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select one from the list or from another location using the folder icon.
If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.
The recommended size of the hard disk is 50,00 GB.
Do not add a virtual hard disk
Create a virtual hard disk now
Use an existing virtual hard disk file
Windows 7-10.vdi (Normal, 70,00 GB)
Create
Cancel

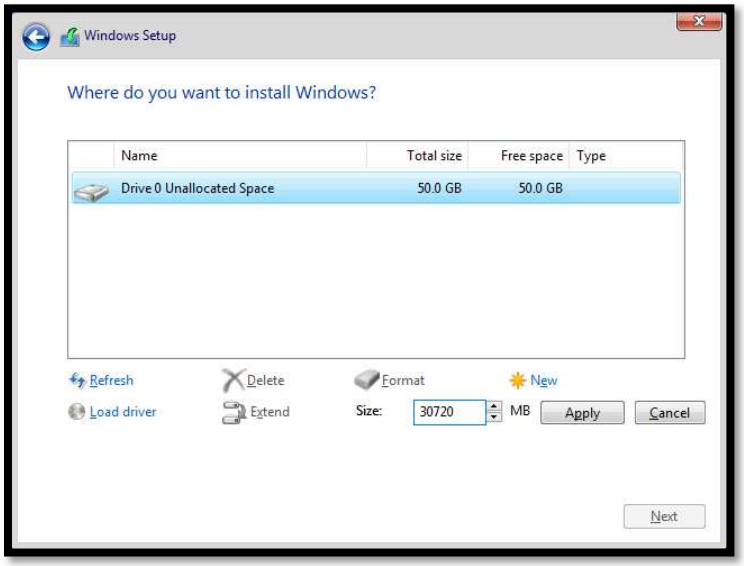

Create Virtual Hard Disk
Storage on physical hard disk
Please choose whether the new virtual hard disk file should grow as it is used (dynamically allocated) or if it should be created at its maximum size (fixed size).
A dynamically allocated hard disk file will only use space on your physical hard disk as it fills up (up to a maximum fixed size), although it will not shrink again automatically when space on it is freed.
A fixed size hard disk file may take longer to create on some systems but is often faster to use.
Dynamically allocated
Fixed size
Next
Cancel

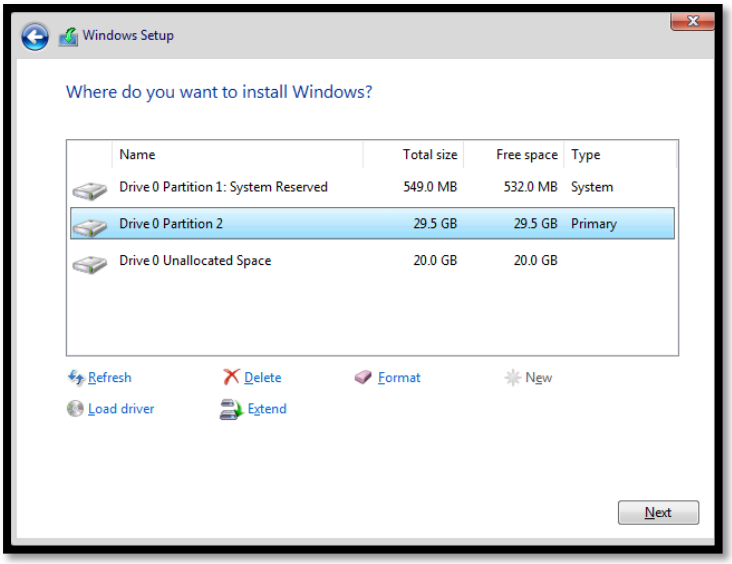

Create Virtual Hard Disk
File location and size
Please type the name of the new virtual hard disk file into the box below or click on the folder icon to select a different folder to create the file in.
x VMs\Nuevo grupo\Windows 10_Ubuntu 20\Windows 10_Ubuntu 20.vdi
Select the size of the virtual hard disk in megabytes. This size is the limit on the amount of file data that a virtual machine will be able to store on the hard disk.
50,00 GB
4,00 MB
2,00 TB
Create
Cancel

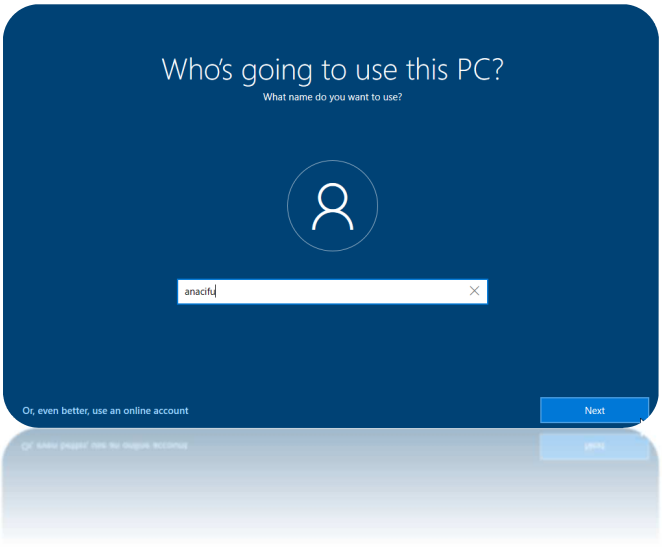

Windows 10_Ubuntu 20 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 10_Ubuntu 20.vdi
en_windows_10_enterprise_ltsc_x64.iso
Attributes
Optical Drive: SATA Port 1
Live CD/DVD
Hot-pluggable
Information
Type: Image
Size: 4,03 GB
Location: F:\DW1E 2021-2022\sistemas informáticos\Aplicacio...
Attached to: Windows 7-10 (State 2)
OK
Cancel

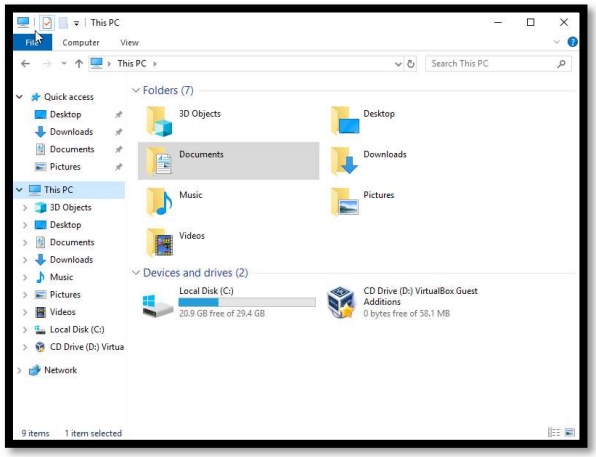

Windows 10_Ubuntu 20 [Powered Off] - Oracle ...
File
Machine
View
Input
Devices
Help
Select start-up disk
Please select a virtual optical disk file or a physical optical drive containing a disk to start your new virtual machine from.
The disk should be suitable for starting a computer from and should contain the operating system you wish to install on the virtual machine if you want to do that now. The disk will be ejected from the virtual drive automatically next time you switch the virtual machine off, but you can also do this yourself if needed using the Devices menu.
en_windows_10_enterprise_ltsc_x64.iso (4,03 GB)
Start
Cancel
CTRL DERECHA

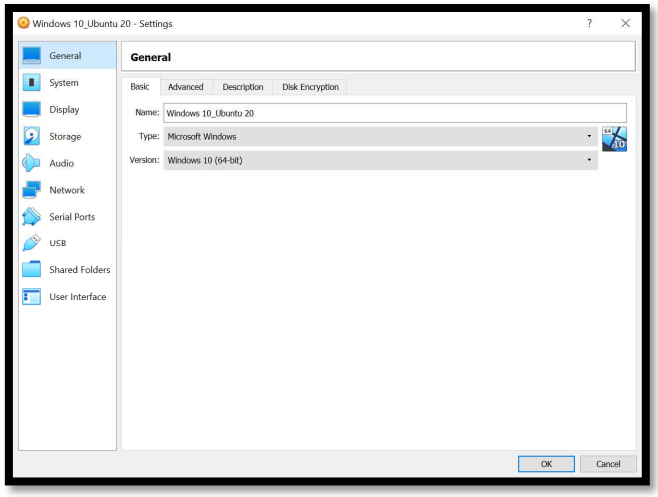

Windows Setup
Windows
Language to install: English (United States)
Time and currency format: Spanish (Spain, International Sort)
Keyboard or input method: Spanish
Enter your language and other preferences and click "Next" to continue.
© 2018 Microsoft Corporation. All rights reserved.
Next

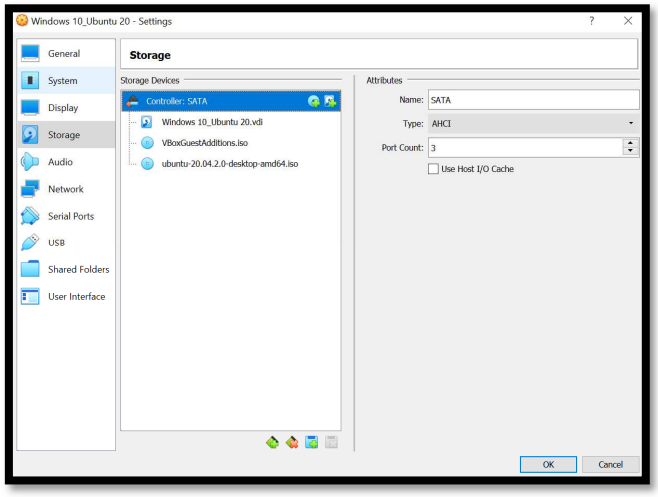

Windows Setup
Where do you want to install Windows?
Name
Total size
Free space
Type
Drive 0 Unallocated Space
50.0 GB
50.0 GB
Refresh
Delete
Format
New
Load driver
Extend
Size:
30720
MB
Apply
Cancel
Next

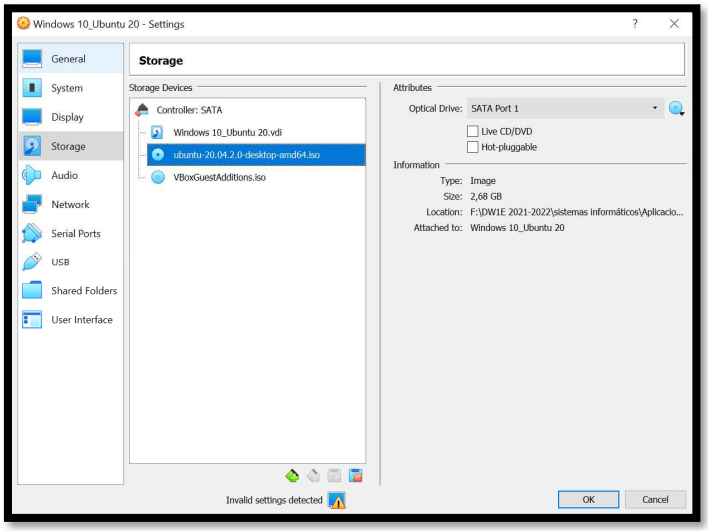

Windows Setup
Where do you want to install Windows?
Name
Total size
Free space
Type
Drive 0 Partition 1: System Reserved
549.0 MB
532.0 MB
System
Drive 0 Partition 2
29.5 GB
29.5 GB
Primary
Drive 0 Unallocated Space
20.0 GB
20.0 GB
Refresh
Delete
Format
New
Load driver
Extend
Next

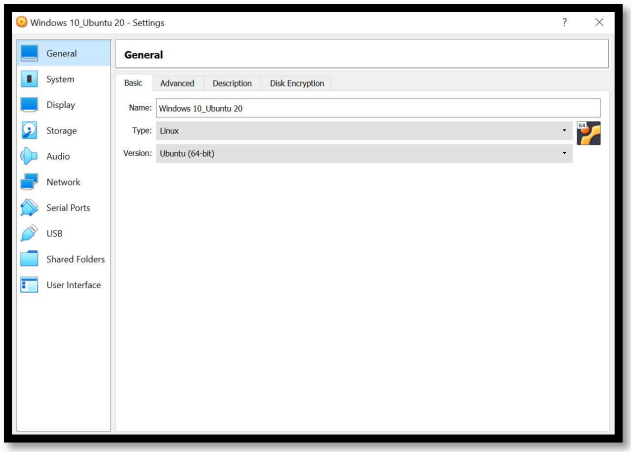

Who's going to use this PC?
What name do you want to use?
anacifu
Or, even better, use an online account
Next


This PC
Computer
View
Search This PC
Quick access
Desktop
Downloads
Documents
Pictures
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
CD Drive (D:) Virtua
Network
Folders (7)
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Devices and drives (2)
Local Disk (C:)
20.9 GB free of 29.4 GB
CD Drive (D:) VirtualBox Guest Additions
0 bytes free of 58.1 MB
9 items
1 item selected

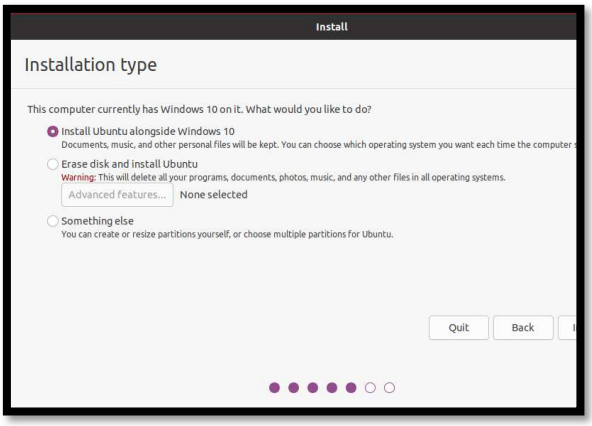

Windows 10_Ubuntu 20 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
General
Basic
Advanced
Description
Disk Encryption
Name: Windows 10_Ubuntu 20
Type: Microsoft Windows
Version: Windows 10 (64-bit)
OK
Cancel

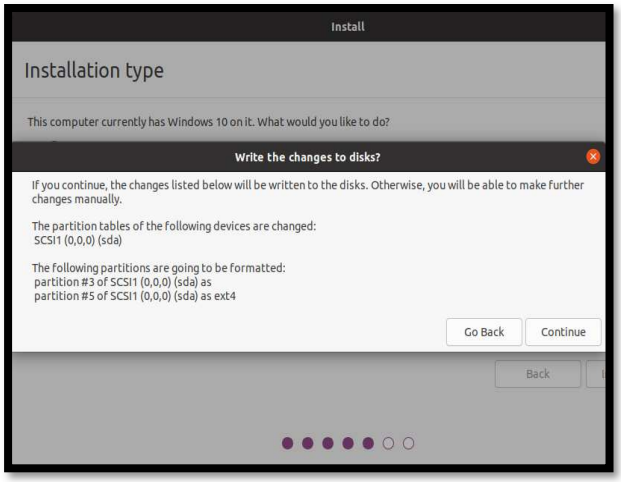

Windows 10_Ubuntu 20 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 10_Ubuntu 20.vdi
VBoxGuestAdditions.iso
ubuntu-20.04.2.0-desktop-amd64.iso
Attributes
Name: SATA
Type: AHCI
Port Count: 3
Use Host I/O Cache
OK
Cancel

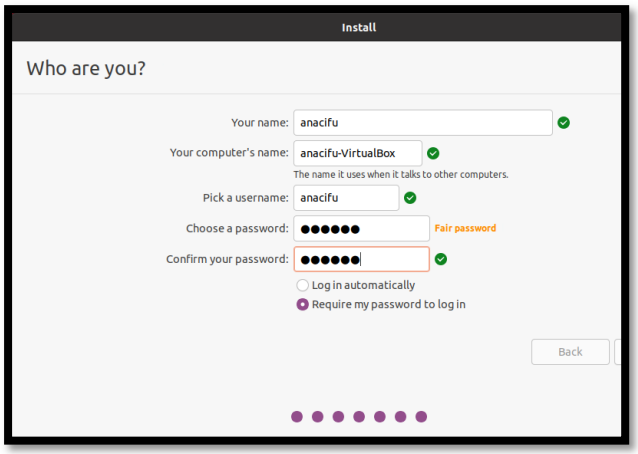

Windows 10_Ubuntu 20 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
Storage
Storage Devices
Controller: SATA
Windows 10_Ubuntu 20.vdi
ubuntu-20.04.2.0-desktop-amd64.iso
VBoxGuestAdditions.iso
Attributes
Optical Drive: SATA Port 1
Live CD/DVD
Hot-pluggable
Information
Type: Image
Size: 2,68 GB
Location: F:\DW1E 2021-2022\sistemas informáticos\Aplicacio...
Attached to: Windows 10_Ubuntu 20
Invalid settings detected
OK
Cancel

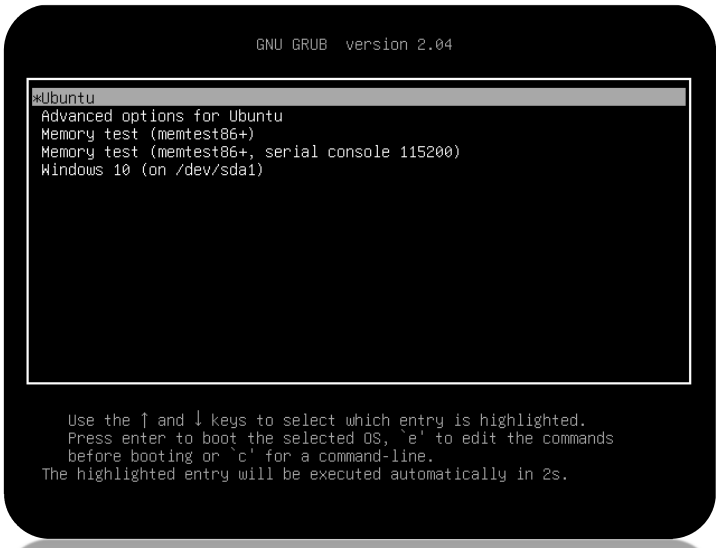

Windows 10_Ubuntu 20 - Settings
General
System
Display
Storage
Audio
Network
Serial Ports
USB
Shared Folders
User Interface
General
Basic
Advanced
Description
Disk Encryption
Name: Windows 10_Ubuntu 20
Type: Linux
Version: Ubuntu (64-bit)


Checking disks: 5% complete
Checking ./pool/main/l/linux-oem-5.6/linux-oem-5.6-headers-5.6.0-1047_5.6.0-1047.51_all.deb
Press Ctrl+C to cancel all filesystem checks in progress
ubuntu


Install
Installation type
This computer currently has Windows 10 on it. What would you like to do?
Install Ubuntu alongside Windows 10
Documents, music, and other personal files will be kept. You can choose which operating system you want each time the computer
Erase disk and install Ubuntu
Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems.
Advanced features...
None selected
Something else
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.
Quit
Back

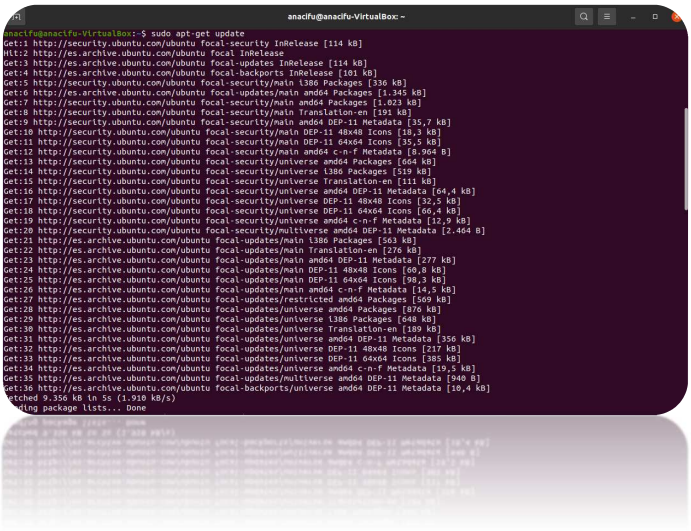

Install
Installation type
This computer currently has Windows 10 on it. What would you like to do?
Write the changes to disks?
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #3 of SCSI1 (0,0,0) (sda) as
partition #5 of SCSI1 (0,0,0) (sda) as ext4
Go Back
Continue
Back

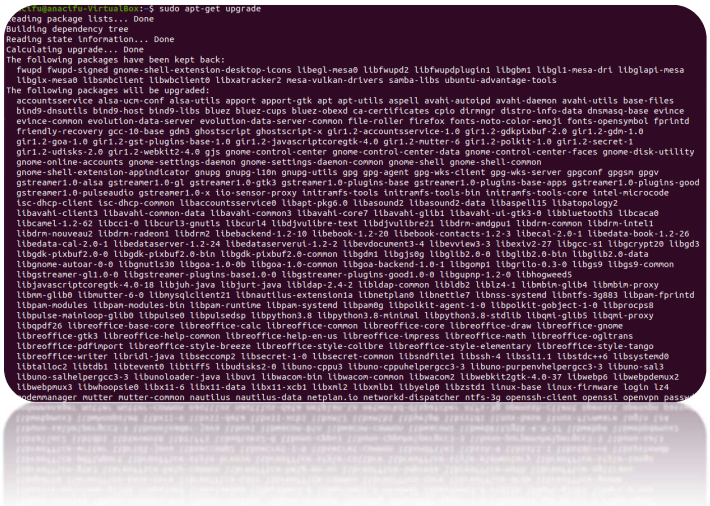

Install
Who are you?
Your name:
anacifu
Your computer's name:
anacifu-VirtualBox
The name it uses when it talks to other computers.
Pick a username:
anacifu
Choose a password:
Fair password
Confirm your password:
Log in automatically
Require my password to log in
Back


GNU GRUB version 2.04
*Ubuntu
Advanced options for Ubuntu
Memory test (memtest86+)
Memory test (memtest86+, serial console 115200)
Windows 10 (on /dev/sda1)
Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, `e' to edit the commands
before booting or `c' for a command-line.
The highlighted entry will be executed automatically in 2s.

The **apt-get** command is responsible for installation, removal, and updating of software in our system.

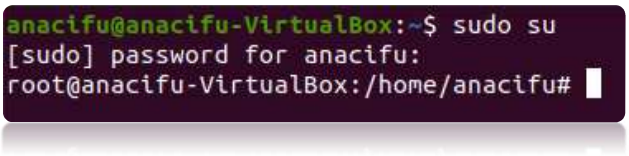
sudo apt-get install command is used to download the latest version of your desired application from an online software repository pointed to by your sources.list configuration file and and install that application on your Linux machine.





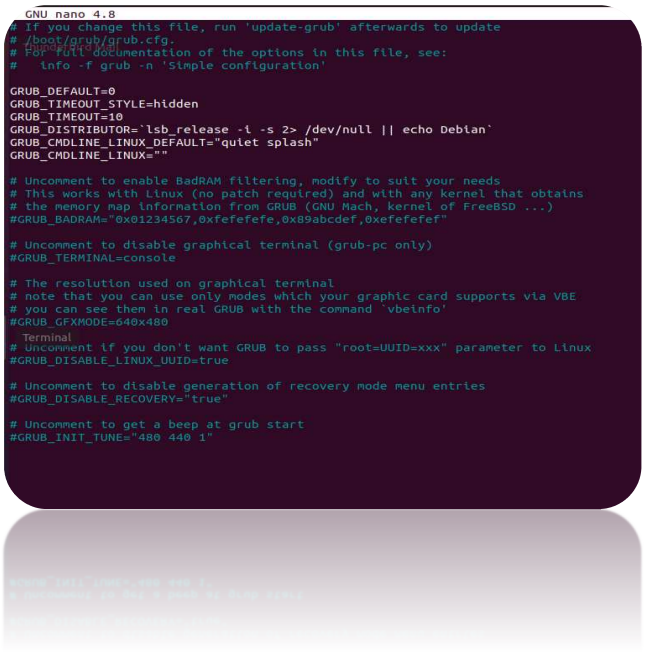
Actualizando Grub2

In order to do this exercises it is necessary to work into root:



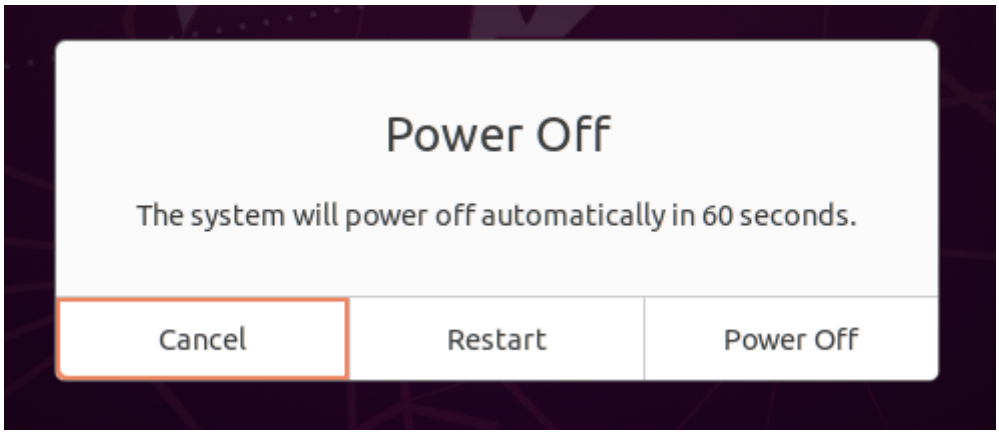
a. Set Windows as default entry and boot after 15 seconds if the user does not select another option in the menu.
   You must modify the /etc/ file using nano that is an easy to use command line text editor for Unix and Linux operating systems. It includes all the basic functionality you'd expect from a regular text editor, like syntax highlighting, multiple buffers, search and replace with regular expression support, spellchecking, UTF-8 encoding, and more.

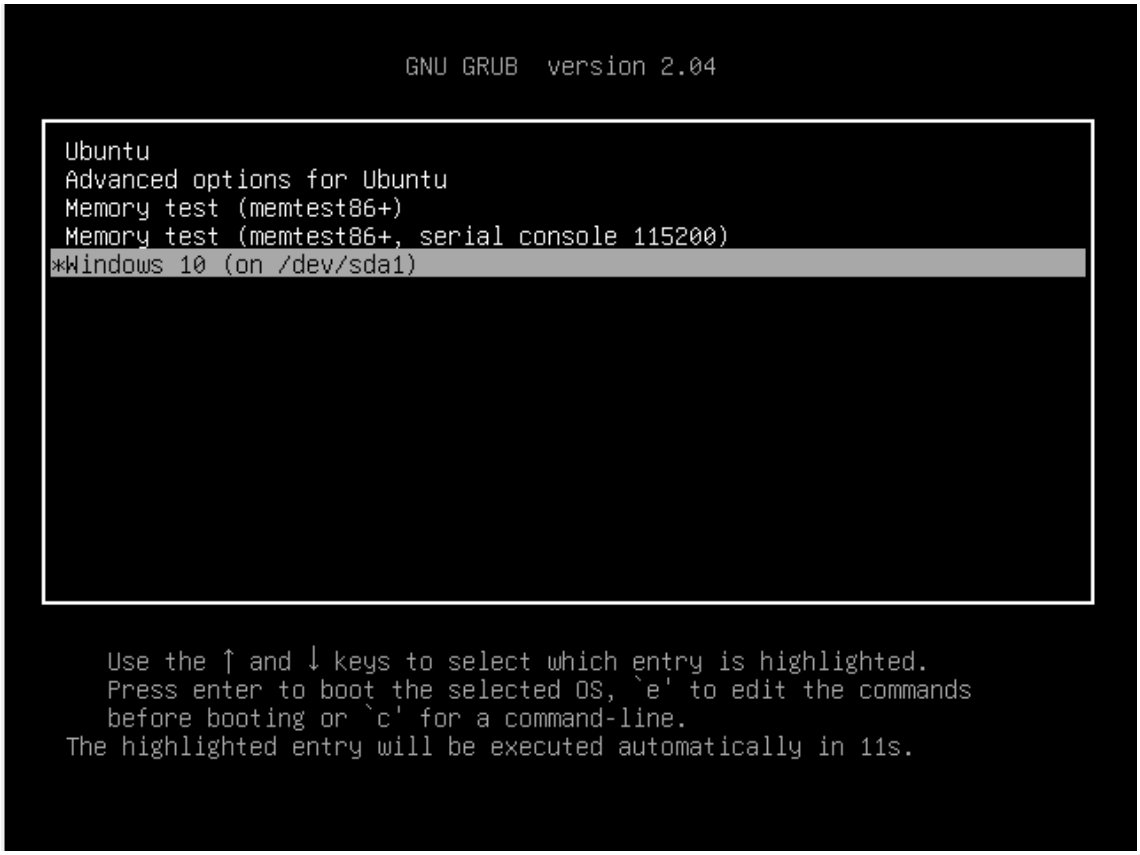
   This is the file you must use by default:

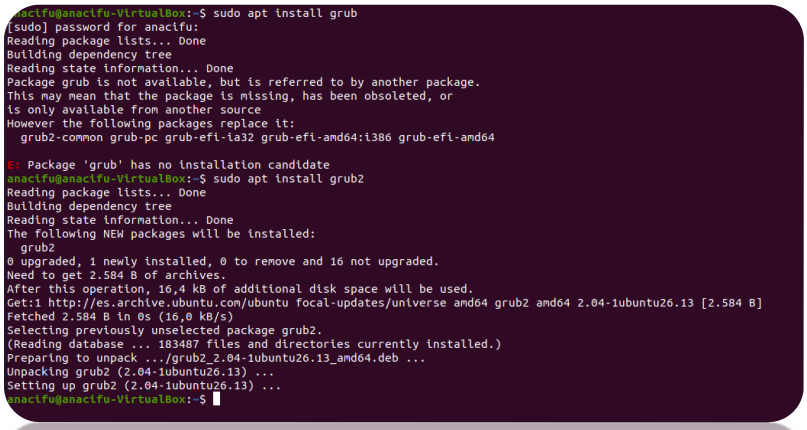



```
anacifu@anacifu-VirtualBox:~$ sudo su
[sudo] password for anacifu:
root@anacifu-VirtualBox:/home/anacifu# nano /etc/default/grub
root@anacifu-VirtualBox:/home/anacifu# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-40-generic
Found initrd image: /boot/initrd.img-5.11.0-40-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
Found Windows 10 on /dev/sda1
done
root@anacifu-VirtualBox:/home/anacifu#
```

Why 4? Because grub starts to count from 0 and windows 10 is the fifth option.







b. Boot Ubuntu without displaying the menu after showing a 10 seconds countdown.

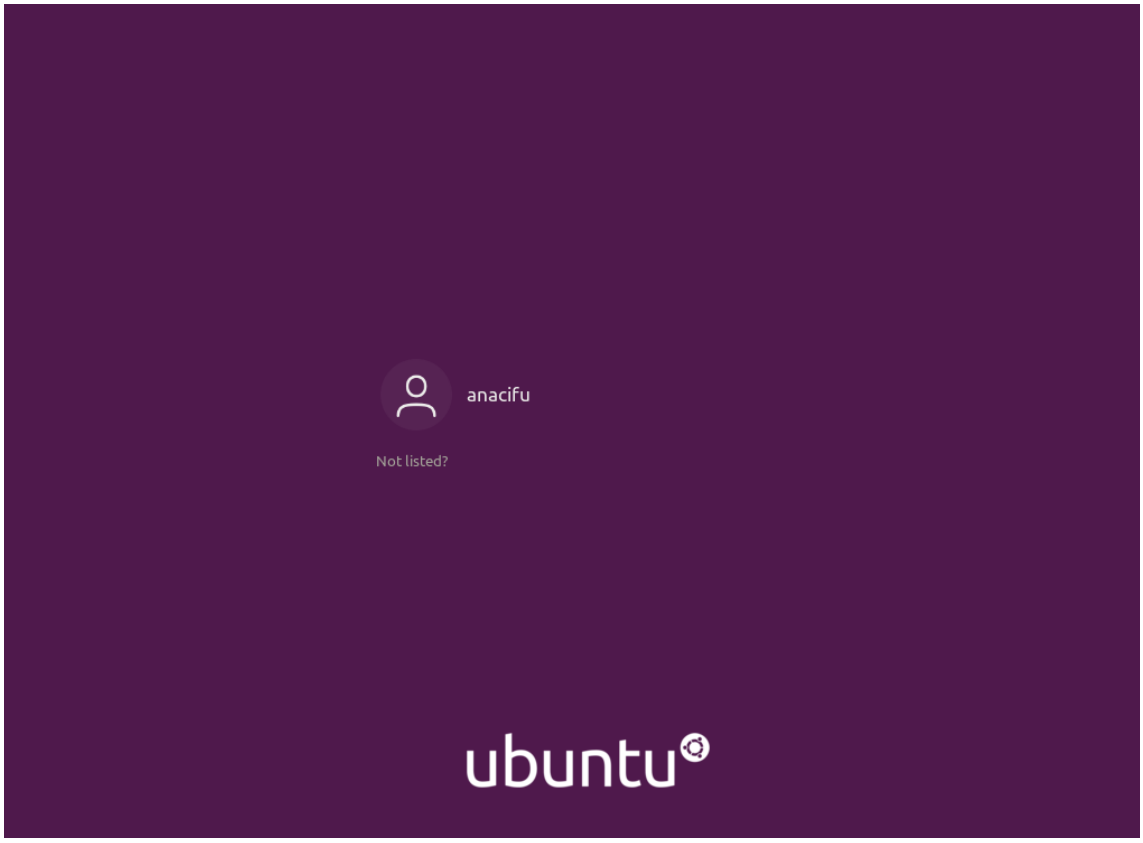
```
  GNU nano 4.8                          /etc/default/grub                          Modified
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
GRUB_TIMEOUT_STYLE=countdown
GRUB_TIMEOUT=10
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""
```

```
root@anacifu-VirtualBox:/home/anacifu# tail -n 1 /etc/grub.d/30_os-prober
#adjust_timeout
root@anacifu-VirtualBox:/home/anacifu#
```

```
  GNU nano 4.8                       /etc/grub.d/30_os-prober                      Modified
        *)      hurd_fs="${grub_fs}fs" ;;
      esac
      cat << EOF
        multiboot /boot/gnumach.gz root=device:${mach_device}
        module /hurd/${hurd_fs}.static ${hurd_fs} --readonly \\
                        --multiboot-command-line='\${kernel-command-line}' \\
                        --host-priv-port='\${host-port}' \\
                        --device-master-port='\${device-port}' \\
                        --exec-server-task='\${exec-task}' -T typed '\${root}' \\
                        '\$(task-create)' '\$(task-resume)'
        module /lib/ld.so.1 exec /hurd/exec '\$(exec-task=task-create)'
}
EOF
    ;;
    minix)
        cat << EOF
menuentry "${LONGNAME} (on ${DEVICE}, Multiboot)" {
EOF
        save_default_entry | sed -e "s/^/\t/"
        prepare_grub_to_access_device ${DEVICE} | sed -e "s/^/\t/"
        cat << EOF
        multiboot /boot/image_latest
}
EOF
    ;;
    *)
      # TRANSLATORS: %s is replaced by OS name.
      gettext_printf "%s is not yet supported by grub-mkconfig.\n" "  ${LONGNAME}" >&2
    ;;
  esac
done

#adjust_timeout
```

```
anacifu@anacifu-VirtualBox:~$ sudo su
[sudo] password for anacifu:
root@anacifu-VirtualBox:/home/anacifu# nano /etc/default/grub
root@anacifu-VirtualBox:/home/anacifu# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-40-generic
Found initrd image: /boot/initrd.img-5.11.0-40-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
done
root@anacifu-VirtualBox:/home/anacifu# exit
exit
anacifu@anacifu-VirtualBox:~$
```


7


anacifu
Not listed?
ubuntu

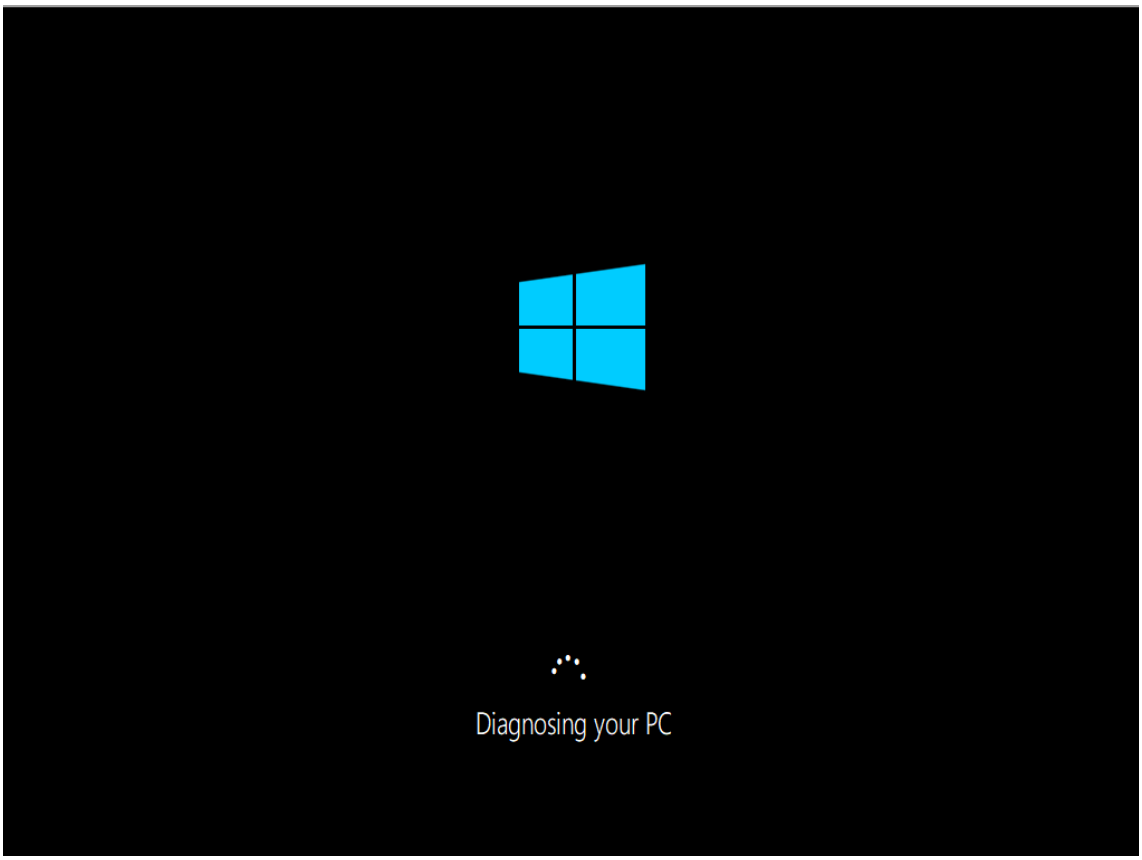
c. Boot Ubuntu without displaying the menu.

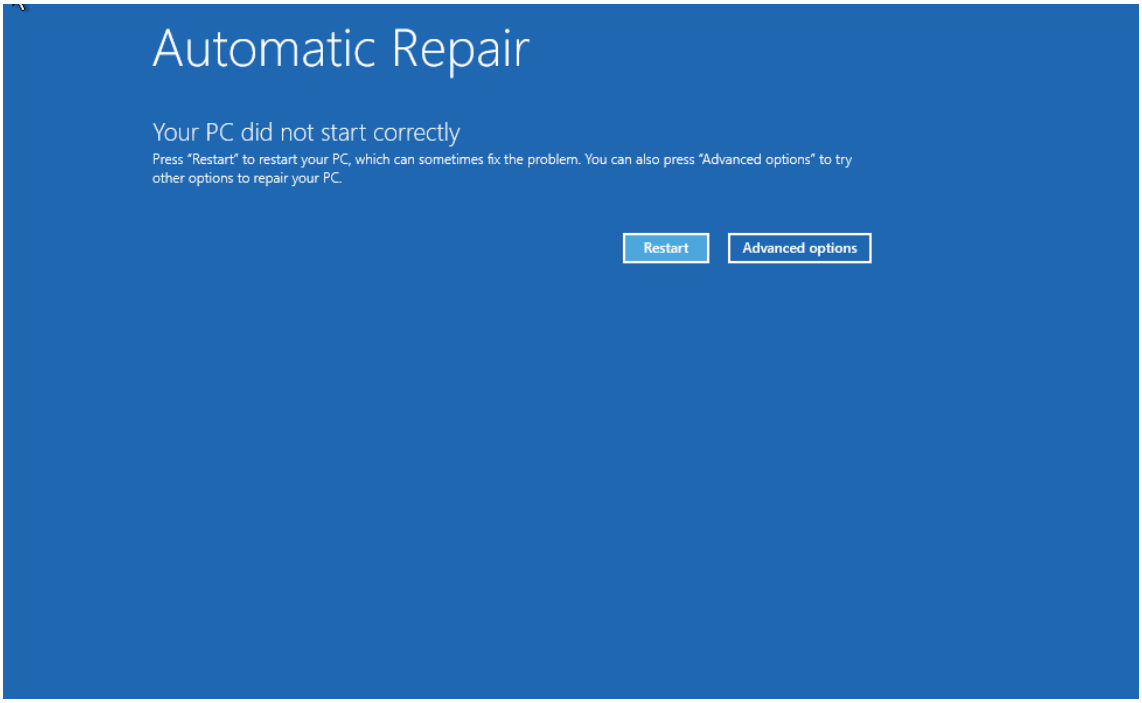
```
  GNU nano 4.8                          /etc/default/grub                       Modified
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""
```

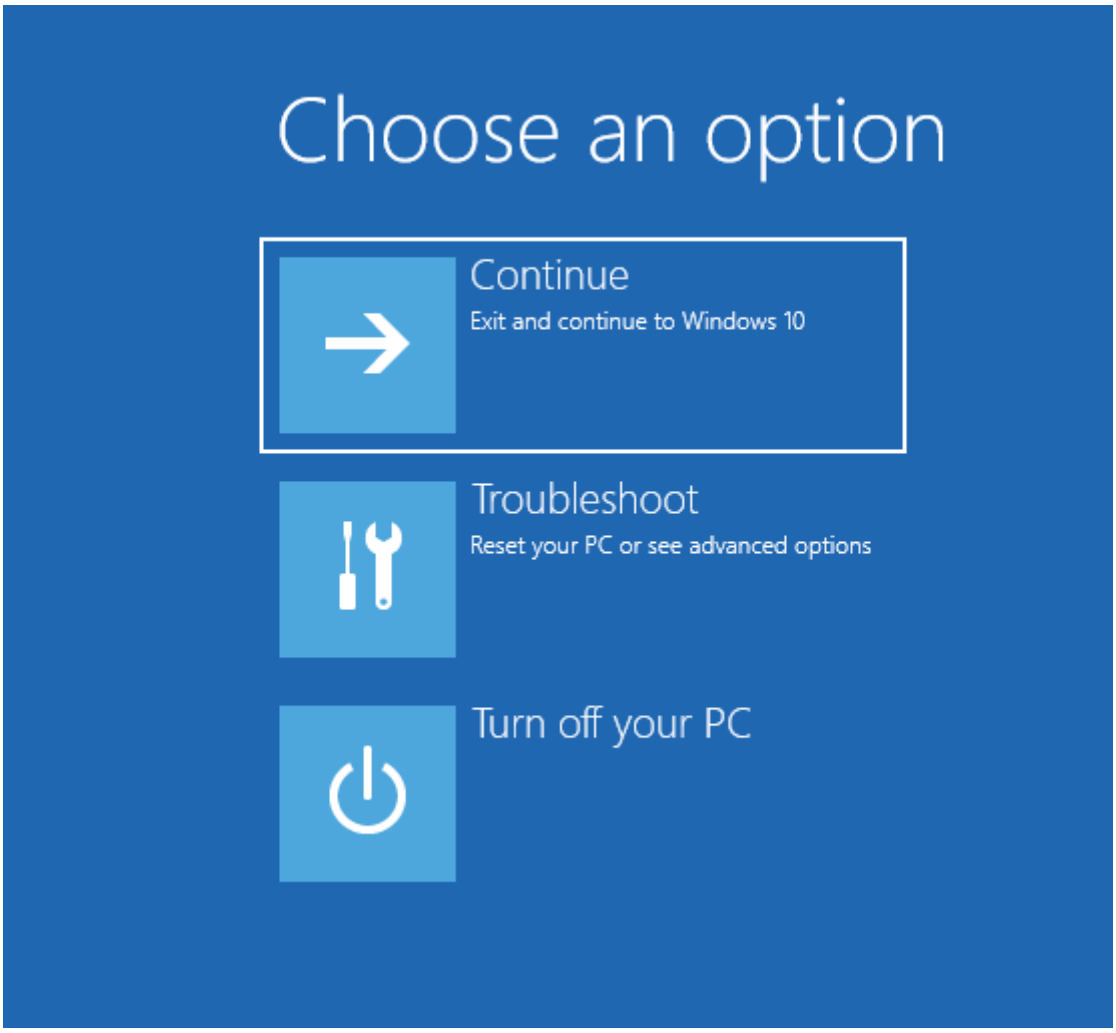
```
anacifu@anacifu-VirtualBox:~$ sudo su
[sudo] password for anacifu:
root@anacifu-VirtualBox:/home/anacifu# nano /etc/default/grub
root@anacifu-VirtualBox:/home/anacifu# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-40-generic
Found initrd image: /boot/initrd.img-5.11.0-40-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
done
root@anacifu-VirtualBox:/home/anacifu# exit
exit
anacifu@anacifu-VirtualBox:~$
```

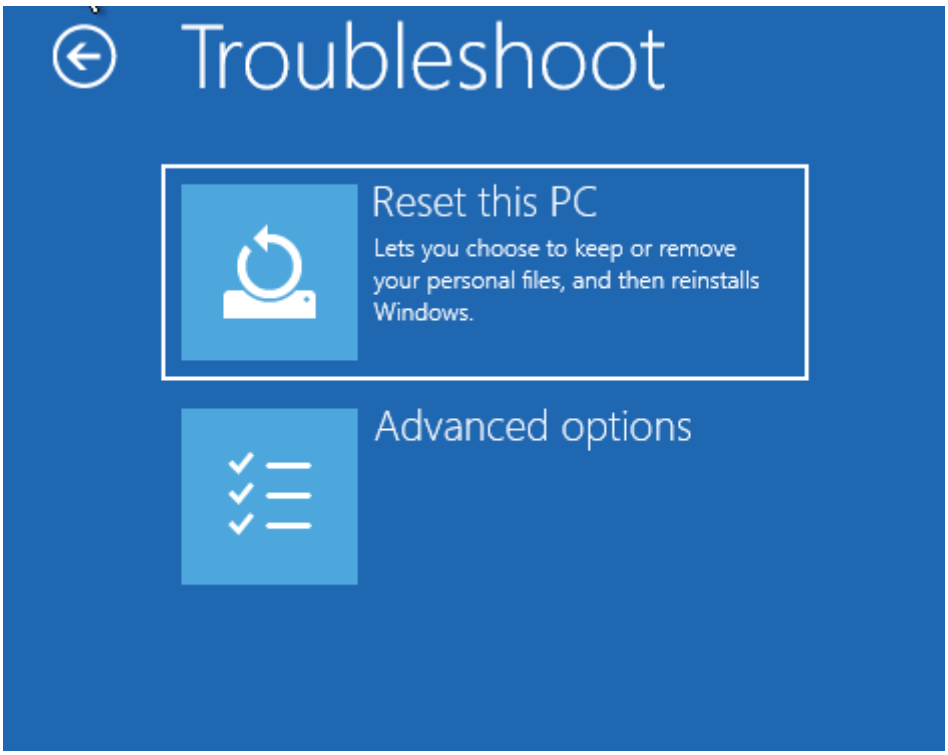
```
  GNU nano 4.8                                  /etc/default/grub
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
#   info -f grub -n 'Simple configuration'

GRUB_DEFAULT=4
GRUB_TIMEOUT_STYLE=hidden
GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
GRUB_CMDLINE_LINUX_DEFAULT="quiet splash"
GRUB_CMDLINE_LINUX=""
```

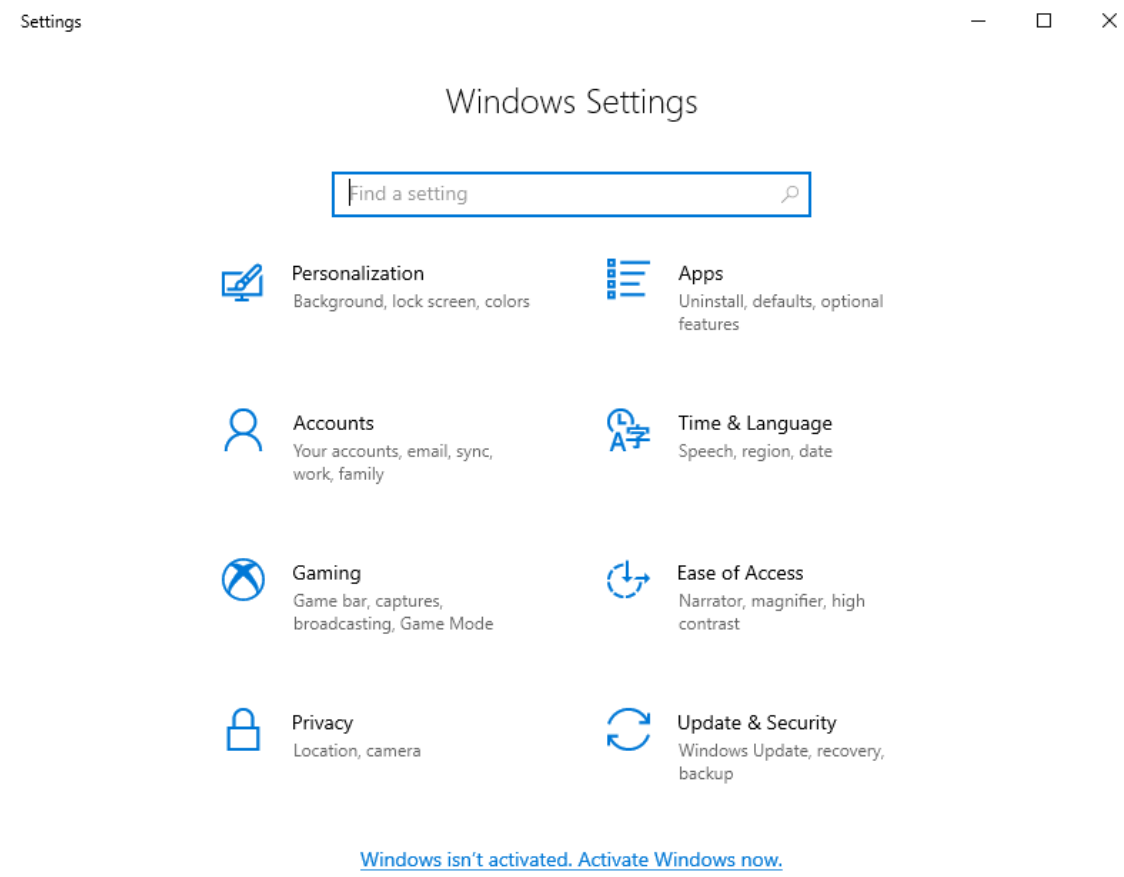
```
anacifu@anacifu-VirtualBox:~$ sudo su
[sudo] password for anacifu:
root@anacifu-VirtualBox:/home/anacifu# nano /etc/default/grub
root@anacifu-VirtualBox:/home/anacifu# update-grub
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-5.11.0-40-generic
Found initrd image: /boot/initrd.img-5.11.0-40-generic
Found linux image: /boot/vmlinuz-5.8.0-43-generic
Found initrd image: /boot/initrd.img-5.8.0-43-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
Found Windows 10 on /dev/sda1
done
root@anacifu-VirtualBox:/home/anacifu# exit
exit
anacifu@anacifu-VirtualBox:~$
```

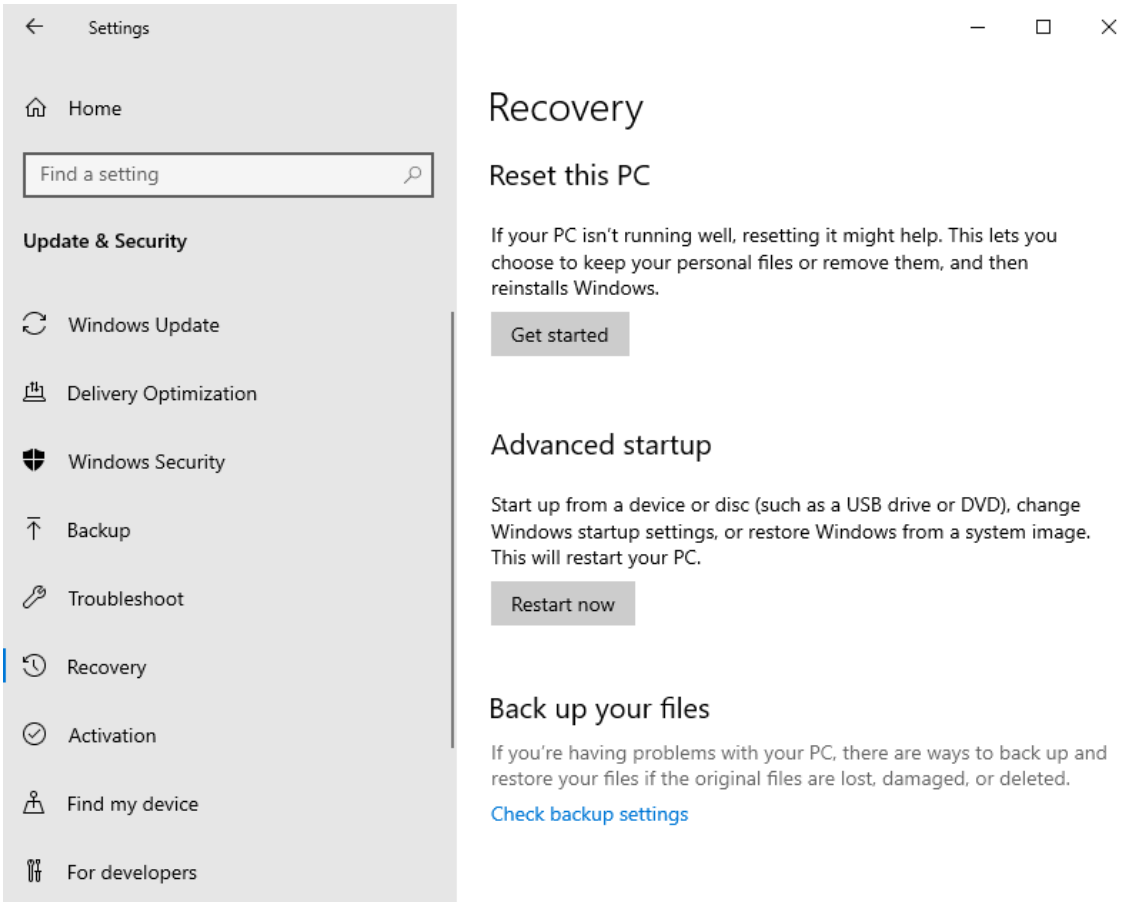

Diagnosing your PC

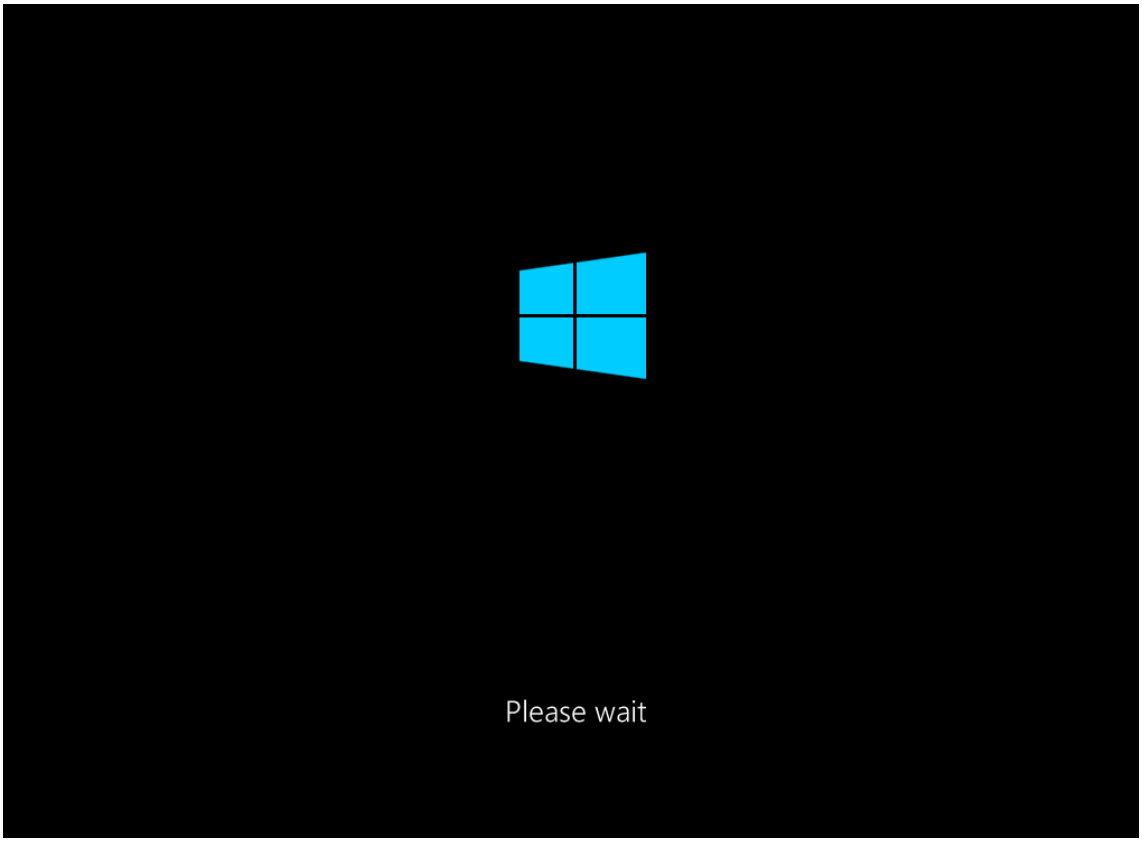

Automatic Repair
Your PC did not start correctly
Press "Restart" to restart your PC, which can sometimes fix the problem. You can also press "Advanced options" to try other options to repair your PC.
Restart
Advanced options

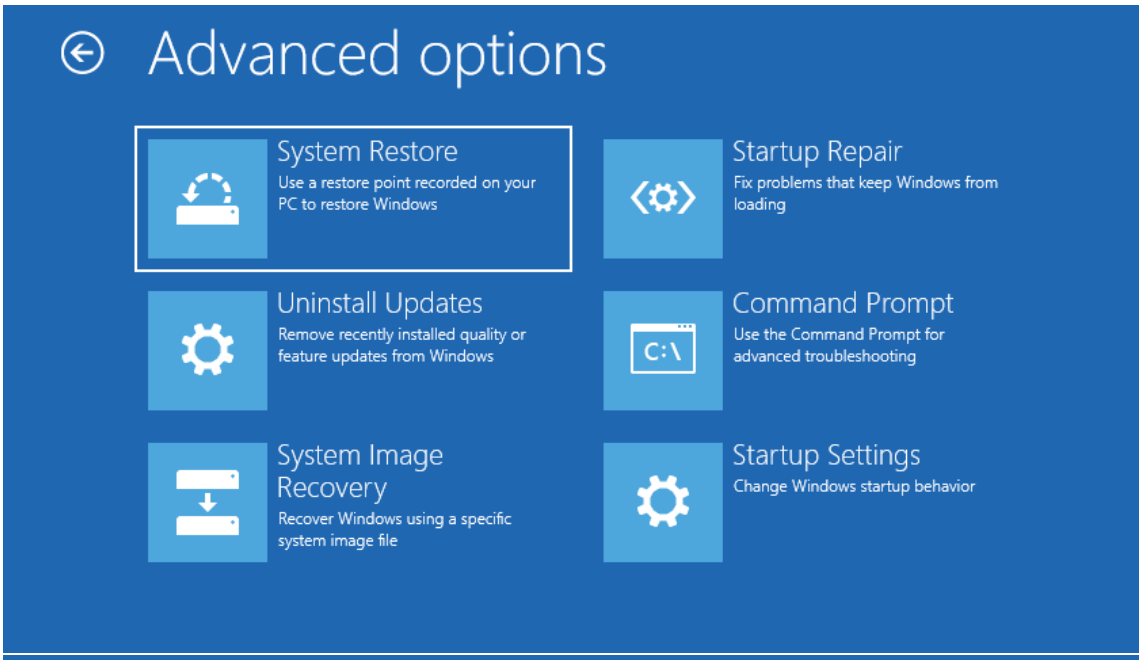

Choose an option
Continue
Exit and continue to Windows 10
Troubleshoot
Reset your PC or see advanced options
Turn off your PC

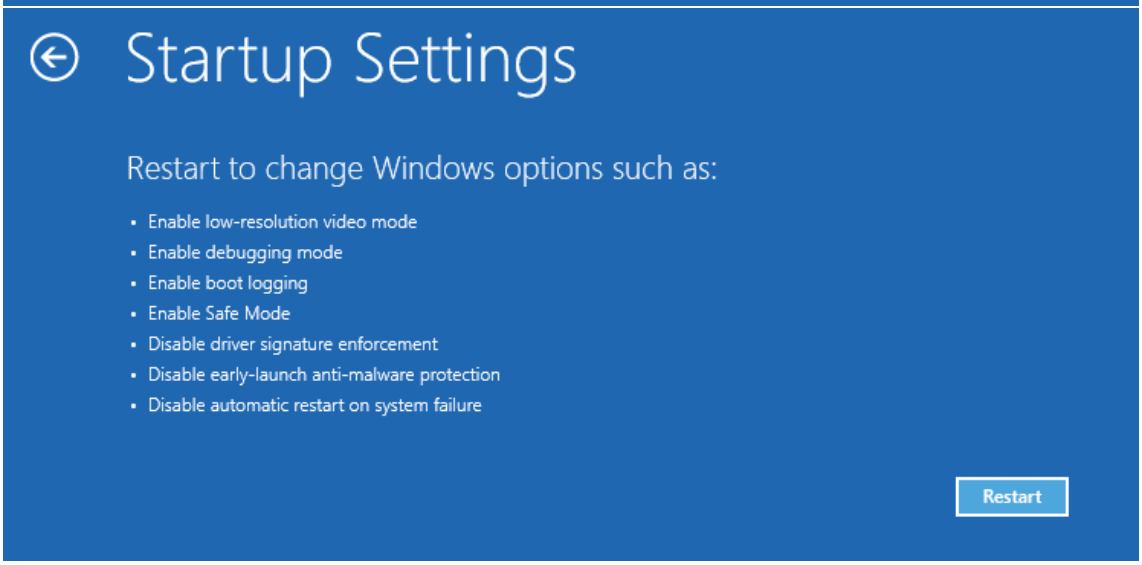

Troubleshoot
Reset this PC
Lets you choose to keep or remove your personal files, and then reinstalls Windows.
Advanced options

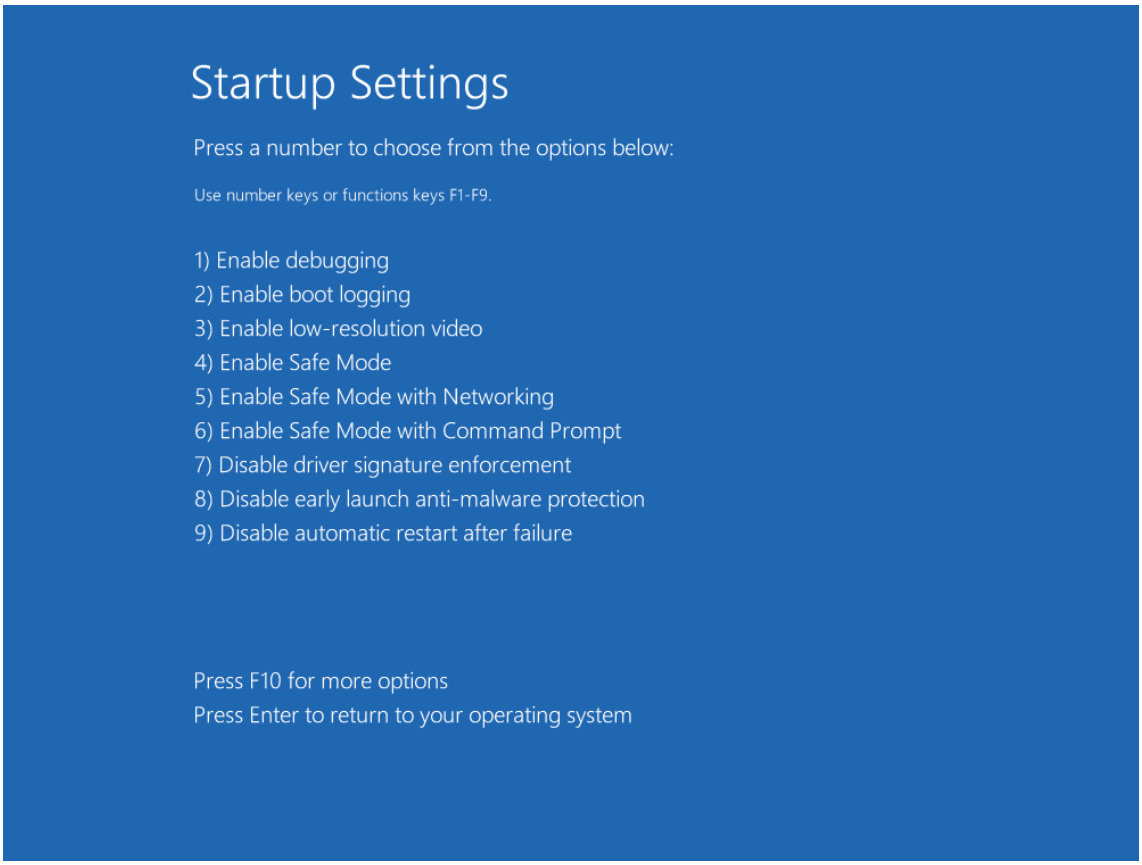

Settings
Windows Settings
Find a setting
Personalization
Background, lock screen, colors
Apps
Uninstall, defaults, optional features
Accounts
Your accounts, email, sync, work, family
Time & Language
Speech, region, date
Gaming
Game bar, captures, broadcasting, Game Mode
Ease of Access
Narrator, magnifier, high contrast
Privacy
Location, camera
Update & Security
Windows Update, recovery, backup
Windows isn't activated. Activate Windows now.


Settings
Home
Find a setting
Update & Security
Windows Update
Delivery Optimization
Windows Security
Backup
Troubleshoot
Recovery
Activation
Find my device
For developers
Recovery
Reset this PC
If your PC isn't running well, resetting it might help. This lets you choose to keep your personal files or remove them, and then reinstalls Windows.
Get started
Advanced startup
Start up from a device or disc (such as a USB drive or DVD), change Windows startup settings, or restore Windows from a system image. This will restart your PC.
Restart now
Back up your files
If you're having problems with your PC, there are ways to back up and restore your files if the original files are lost, damaged, or deleted.
Check backup settings


Please wait


Advanced options
System Restore
Use a restore point recorded on your PC to restore Windows
Startup Repair
Fix problems that keep Windows from loading
Uninstall Updates
Remove recently installed quality or feature updates from Windows
Command Prompt
Use the Command Prompt for advanced troubleshooting
System Image Recovery
Recover Windows using a specific system image file
Startup Settings
Change Windows startup behavior


Startup Settings
Restart to change Windows options such as:
Enable low-resolution video mode
Enable debugging mode
Enable boot logging
Enable Safe Mode
Disable driver signature enforcement
Disable early-launch anti-malware protection
Disable automatic restart on system failure
Restart


Startup Settings
Press a number to choose from the options below:
Use number keys or functions keys F1-F9.
1) Enable debugging
2) Enable boot logging
3) Enable low-resolution video
4) Enable Safe Mode
5) Enable Safe Mode with Networking
6) Enable Safe Mode with Command Prompt
7) Disable driver signature enforcement
8) Disable early launch anti-malware protection
9) Disable automatic restart after failure
Press F10 for more options
Press Enter to return to your operating system