

# Kubuntu Linux on VirtualBox Installation guide



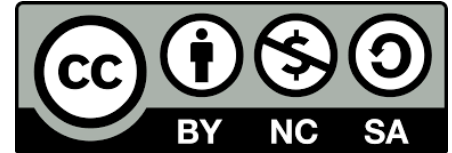
**Giorgio Agugiaro**

Last update: 1 September 2024



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# Brief overview of Oracle VM VirtualBox



## VirtualBox overview

Kubuntu overview  
Stepwise setup  
Software removal

- In a nutshell:
  - It is a virtualiser for x86 hardware: it allows to create and manage guest *virtual* machines running (very often) a different operating system (OS) than the one on the physical host machine
  - It runs on Windows, Linux, macOS, and Solaris hosts
    - <https://www.virtualbox.org/manual/ch01.html#hostssupport>
  - It supports many guest operating systems (Windows, DOS/Windows 3.x, Linux, Solaris and OpenSolaris, OS/2, OpenBSD, NetBSD and FreeBSD)
    - <https://www.virtualbox.org/manual/ch03.html#guestssupport>
  - It is available as open-source software
  - For some guest operating systems, a "Guest Additions" package of device drivers and system applications is available
    - The drivers in the "Guest additions" may be however proprietary/closed-source software
- More details:
  - <https://www.virtualbox.org/wiki/Documentation>
  - <https://en.wikipedia.org/wiki/VirtualBox>

# Some terminology



- **Host operating system (host OS).** This is the OS of the physical computer on which Oracle VM VirtualBox was installed. There are versions of Oracle VM VirtualBox for Windows, macOS, Linux, and Oracle Solaris hosts
- **Guest operating system (guest OS).** This is the OS that is running inside the virtual machine. Theoretically, Oracle VM VirtualBox can run any x86 OS such as DOS, Windows, OS/2, FreeBSD, and OpenBSD
- **Virtual machine (VM).** This is the environment that Oracle VM VirtualBox creates for your guest OS while it is running. In other words, you run your guest OS in a VM. Normally, a VM is shown as a window on your computer's desktop. Depending on which of the various frontends of Oracle VM VirtualBox you use, the VM might be shown in full screen mode or remotely on another computer. Internally, Oracle VM VirtualBox treats a VM as a set of parameters that specify its behavior. Some parameters describe hardware settings, such as the amount of memory and number of CPUs assigned. Other parameters describe the state information, such as whether the VM is running or saved
- **Guest Additions.** This refers to special software packages which are shipped with Oracle VM VirtualBox but designed to be installed inside a VM to improve performance of the guest OS and to add extra features, such as, for example, shared folders, shared clipboard, better video support, etc.

Source: text slightly adapted from <https://www.virtualbox.org/manual/ch01.html#virtintro>



The screenshot shows the VirtualBox.org website in a browser window. The browser's address bar displays "https://www.virtualbox.org". The website features a blue header with the VirtualBox logo on the left and a search bar on the right. Below the header, there is a navigation menu with links for "Start Page", "Index", and "History". The main content area is titled "Welcome to VirtualBox.org!" and contains a detailed introduction to the software, its features, and supported operating systems. A prominent blue button with white text says "Download VirtualBox 7.0". To the right of the main text is a "News Flash" section with a yellow background, listing recent releases and a notice about a login server change. A left sidebar contains links for "About", "Screenshots", "Downloads", "Documentation", "End-user docs", "Technical docs", "Contribute", and "Community".

# VirtualBox

## Welcome to VirtualBox.org!

VirtualBox is a powerful x86 and AMD64/Intel64 [virtualization](#) product for enterprise as well as home use. Not only is VirtualBox an extremely feature rich, high performance product for enterprise customers, it is also the only professional solution that is freely available as Open Source Software under the terms of the [GNU General Public License \(GPL\) version 3](#). See "[About VirtualBox](#)" for an introduction.

Presently, VirtualBox runs on Windows, Linux, macOS, and Solaris hosts and supports a large number of [guest operating systems](#) including but not limited to Windows (NT 4.0, 2000, XP, Server 2003, Vista, 7, 8, Windows 10 and Windows 11), DOS/Windows 3.x, Linux (2.4, 2.6, 3.x, 4.x, 5.x and 6.x), Solaris and OpenSolaris, OS/2, OpenBSD, NetBSD and FreeBSD.

VirtualBox is being actively developed with frequent releases and has an ever growing list of features, supported guest operating systems and platforms it runs on. VirtualBox is a community effort backed by a dedicated company: everyone is encouraged to contribute while Oracle ensures the product always meets professional quality criteria.



### Hot picks:

- Pre-built virtual machines for developers at [Oracle Tech Network](#)
- **Hyperbox** Open-source Virtual Infrastructure Manager [project site](#)

**News Flash**

- New July 16th, 2024 VirtualBox 7.0.20 released!**  
Oracle today released a 7.0 maintenance release which improves stability and fixes regressions. See the [Changelog](#) for details.
- New May 3rd, 2024 VirtualBox 7.0.18 released!**  
Oracle today released a 7.0 maintenance release which improves stability and fixes regressions. See the [Changelog](#) for details.
- New April 16th, 2024 VirtualBox 7.0.16 released!**  
Oracle today released a 7.0 maintenance release which improves stability and fixes regressions. See the [Changelog](#) for details.
- Notice March 21th, 2024 Change of login server.**  
Starting today, Oracle Single Sign On will ask for your account credentials at [signon.oracle.com](#) and the username and password are now have to be entered on separate pages.

# Brief overview of Kubuntu Linux



- It is a Linux distribution based on Ubuntu that uses the KDE Plasma Desktop Environment instead of Ubuntu's default GNOME
  - The underlying system is however the same
  - It follows the same development cycle of Ubuntu
  - Latest LTS version: 24.04 LTS (as of July 2024)
- 
- KDE is generally "closer" to the design of Windows. Therefore, Kubuntu is often preferred by Windows users over Ubuntu's GNOME
  - As the functionalities are basically the same, at the end it is mostly a question of personal taste

**Comparison Ubuntu/Kubuntu**

Software	Ubuntu	Kubuntu
Kernel and core	Linux kernel and Ubuntu core	
Display server	X.Org Server and Wayland	
Sound	PipeWire	
Multimedia	Totem and Rhythmbox	VLC and Elisa
Window manager	Mutter	KWin
Desktop	GNOME	Plasma Desktop
Primary toolkit	GTK	Qt
Browser	Firefox	
Office suite	LibreOffice	
Email and PIM	Thunderbird	

Source: <https://en.wikipedia.org/wiki/Kubuntu>



The screenshot shows the Kubuntu website homepage in a browser. The browser's address bar displays "https://kubuntu.org". The website features a navigation menu with links for "Feature Tour", "Download", "News", "Support", "Contribute", "About", and "Community". The main banner area has a blue gear icon, the text "kubuntu", and "24.04 LTS" over a background image of a mountain. Below the banner are four main sections, each with an icon and a title:

- Download Kubuntu**: Icon of a globe. Subtext: "Get LTS or Latest".
- Feature Tour**: Icon of a computer screen with a play button. Subtext: "What makes Kubuntu awesome".
- Help & Support**: Icon of a blue circle with a white 'i'. Subtext: "Get commercial and community assistance".
- Contribute**: Icon of a globe with a yellow bracket. Subtext: "Help us make Kubuntu better".



# Kubuntu on VirtualBox on Windows

## Requirements

- Reasonably powerful **x86 hardware**. Any recent Intel or AMD processor will do
- **Windows 10 64bit** as host operating system (32bit not supported anymore)
  - Circa 250 MB of disk space for the installation of Oracle VM VirtualBox
  - Circa 50 GB of disk space for the installation of the guest OS (e.g. Kubuntu)
- The latest **Microsoft Visual C++ Redistributable** (ca. 24 MB)
  - <https://learn.microsoft.com/en-us/cpp/windows/latest-supported-vc-redist?view=msvc-170>
- **Oracle VM VirtualBox** installer (ca. 107 MB)
  - <https://www.virtualbox.org/wiki/Downloads>
  - <https://www.oracle.com/virtualization/technologies/vm/downloads/virtualbox-downloads.html>
- **Oracle Guest Additions** .iso file (ca. 52 MB)
  - Generally, already included in the VM VirtualBox installer. Otherwise:
  - <https://www.oracle.com/virtualization/technologies/vm/downloads/virtualbox-downloads.html>
- **Host operating system** .iso file, (e.g. Kubuntu, ca. 4.3 GB)
  - <https://kubuntu.org/getkubuntu>
- Some patience, coffee/tee and some good biscuits...





# Kubuntu on VirtualBox on Windows

The next slides refer to the following hardware and software configuration:

- **Host OS:** Windows 10 64bit, v. 22H2
- **Virtual Machine:** Oracle VM VirtualBox v. 7.20
- **Guest OS:** Kubuntu v. **22.04.4 LTS**  
Beware: the latest Kubuntu **2024.04 LTS** is currently not officially supported by VirtualBox (yet)



**Nota bene:** the overall installation process should work also for Windows 11 as host and other (Ubuntu-like) Linux distributions as guests!

# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download the software (VirtualBox installer, Kubuntu, etc.)
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu
- 4) Initial configuration of Kubuntu

Done! 😊

# Kubuntu on VirtualBox on Windows

## Procedure overview:

**1) Download the software (VirtualBox installer, Kubuntu, etc.)**

2) Install VirtualBox

3) Create a Virtual Machine & install Kubuntu

4) Initial configuration of Kubuntu

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

#### • Download software

• Install VirtualBox

• Create a VM

• Install Kubuntu

• Initial configuration

Software removal

# Kubuntu on VirtualBox on Windows

## Procedure overview:

1) Download the software (VirtualBox installer, Kubuntu, etc.)

**2) Install VirtualBox**

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Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- **Install VirtualBox**
- Create a VM
- Install Kubuntu
- Initial configuration

Software removal

## 2) Install VirtualBox

Before starting, check that:

- You have some 250 MB of disk space for Oracle VM VirtualBox
- You have administrator privileges on the host machine
- Depending on your machine, you *may* need to install the latest **Microsoft Visual C++ Redistributable** version (if so, you will be informed when trying to install VM VirtualBox)
- Other than this, installing VM VirtualBox is rather simple and straightforward, just like any other Windows program.

The following slides show a very quick overview of the installation process.

## 2) Install VirtualBox



If required, download and install the **Microsoft Visual C++ Redistributable**

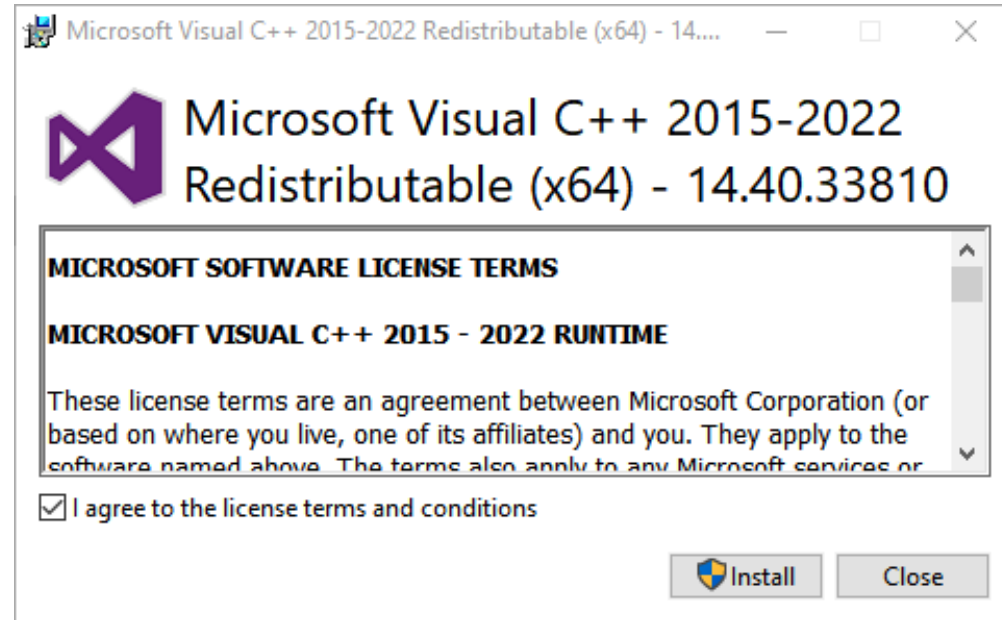
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- **Install VirtualBox**
- Create a VM
- Install Kubuntu
- Initial configuration

Software removal



## 2) Install VirtualBox



Afterwards, simply install Oracle VM VirtualBox and run it.

The **VirtualBox Manager** window will be loaded.

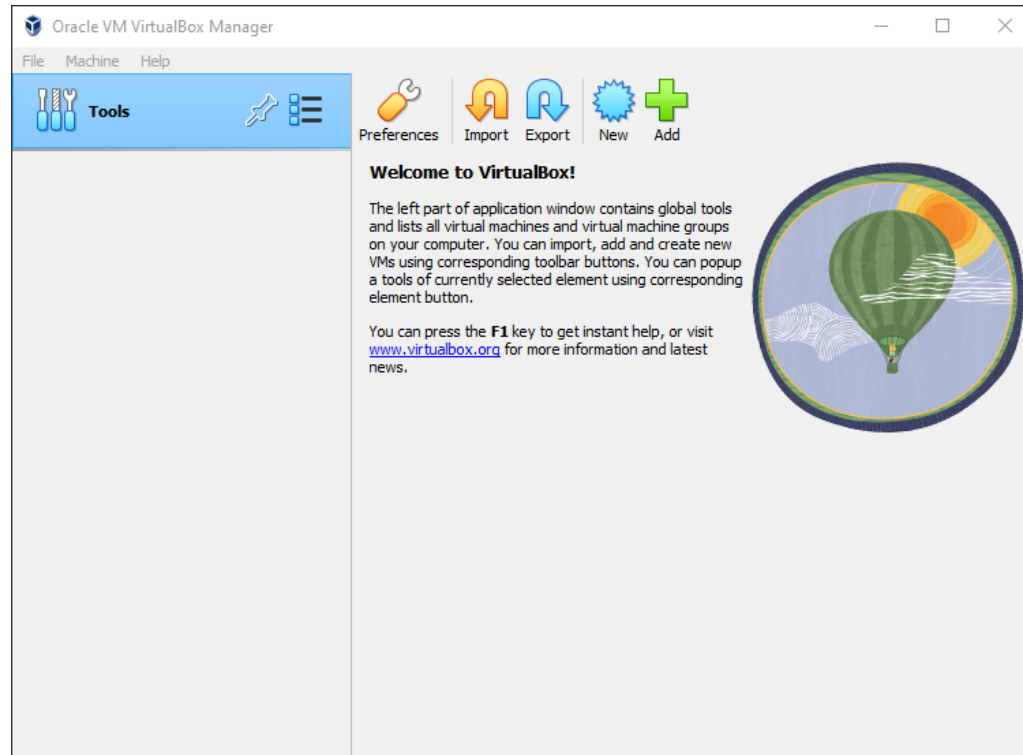
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- **Install VirtualBox**
- Create a VM
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- Initial configuration

Software removal



# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download VirtualBox installer and the Kubuntu ISO
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu**
  - Preliminary notes
  - Automatic approach
  - Manual approach
- 4) Initial configuration of Kubuntu

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration

Software removal



# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download VirtualBox installer and the Kubuntu ISO
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu**
  - [Preliminary notes](#)
  - Automatic approach
  - Manual approach
- 4) Initial configuration of Kubuntu

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration

Software removal

## 3) Create a Virtual Machine

Before starting, check that you have sufficient space to install the Virtual Machine

**Example:** Kubuntu 2022.04 will require circa 20 GB disk drive just for the OS. Hence, 40 to 50 GB of free space for the whole VM is a good starting point.

A Virtual Machine will be contained in a ***virtual hard disk*** (see next slides).

From the point of view of the host machine, you will only see a "big file".

Nothing else needs to be done (e.g. no disk partitioning).

## 3) Create a Virtual Machine

VirtualBox offers **two alternative ways to create a VM** and install the guest OS: automatically (aka "unattended installation"), or manually. The "unattended installation" is the default one.

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
  - Install VirtualBox
  - **Create a VM**
  - Install Kubuntu
  - Initial configuration
- Software removal

During the **unattended installation**:

- The guest OS installation starts automatically and is carried out *without* user intervention
- The user account is created automatically
- The Guest Additions are installed automatically

**BUT:** due to a documented bug in the installation process (the user does not get *sudo* rights), some extra operations must be carried out manually right after the installation to fix the bug.

During the **manual installation**:

- The guest OS installation must be started manually and runs interactively
- The Guest Additions must be installed manually
- **BUT:** the above-mentioned bug does not occur

The following slides show cover **both installation methods**, as well as how to solve the problem during the unattended installation.

# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download the software (VirtualBox installer, Kubuntu, etc.)
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu**
  - Preliminary notes
  - [Automatic approach \(go to next slide\)](#)
  - Manual approach (go to [slide 44](#))
- 4) Initial configuration of Kubuntu

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

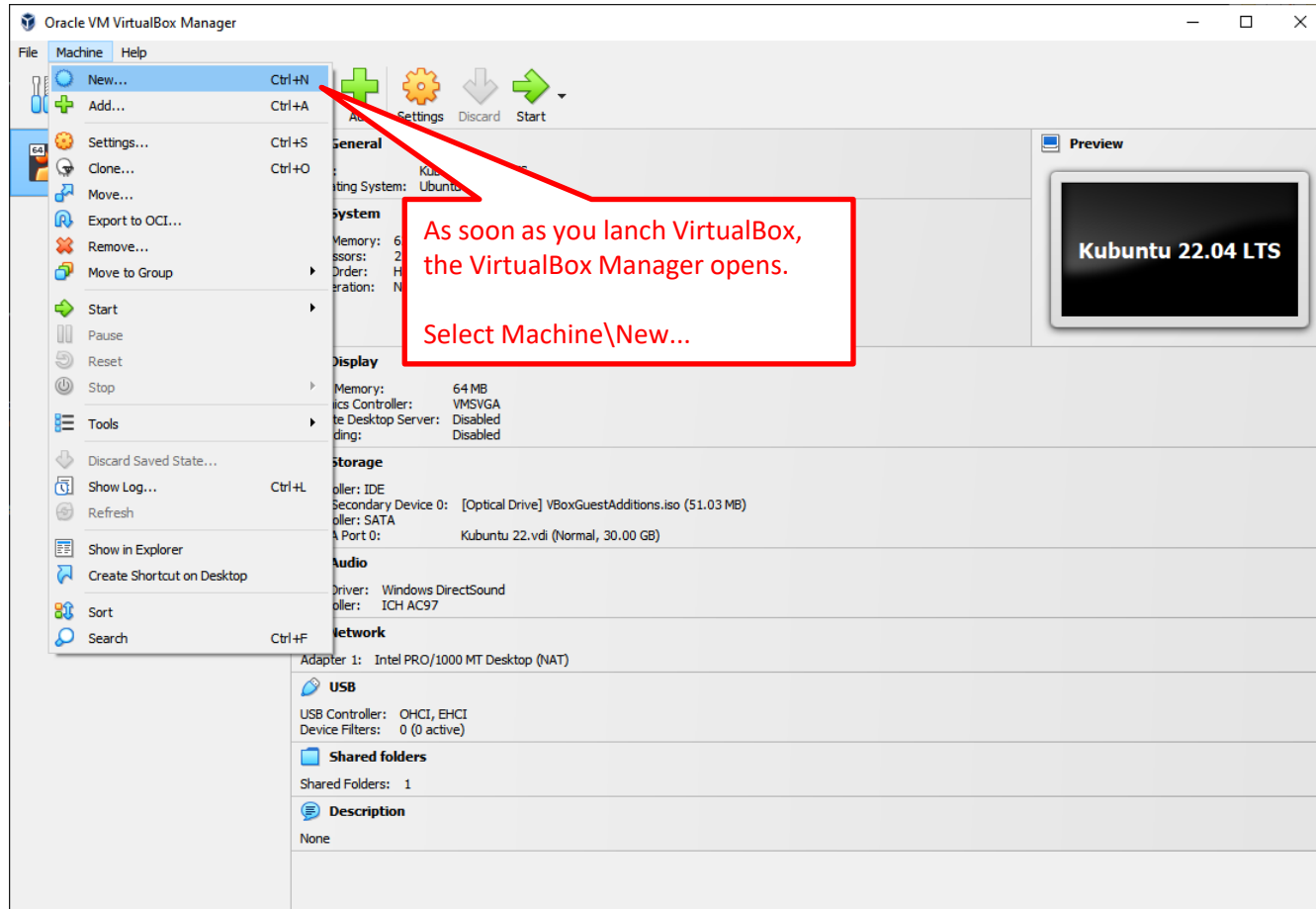
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration

Software removal

# 3) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal



# 3a) Create a Virtual Machine

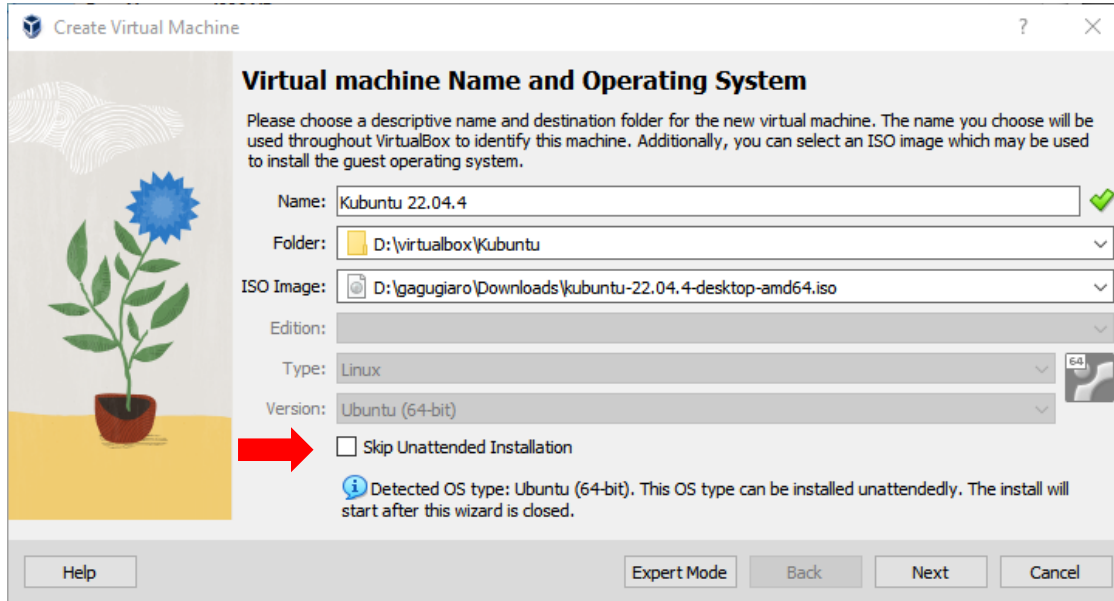


VirtualBox overview

Kubuntu overview

## Stepwise setup

- Download software
  - Install VirtualBox
  - **Create a VM**
  - Install Kubuntu
  - Initial configuration
- Software removal



**Virtual machine Name and Operating System**

Please choose a descriptive name and destination folder for the new virtual machine. The name you choose will be used throughout VirtualBox to identify this machine. Additionally, you can select an ISO image which may be used to install the guest operating system.

Name:  ✓

Folder:

ISO Image:

Edition:

Type:  64

Version:

Skip Unattended Installation

*i* Detected OS type: Ubuntu (64-bit). This OS type can be installed unattendedly. The install will start after this wizard is closed.

Buttons: Help, Expert Mode, Back, Next, Cancel

The Create Virtual Machine window opens.

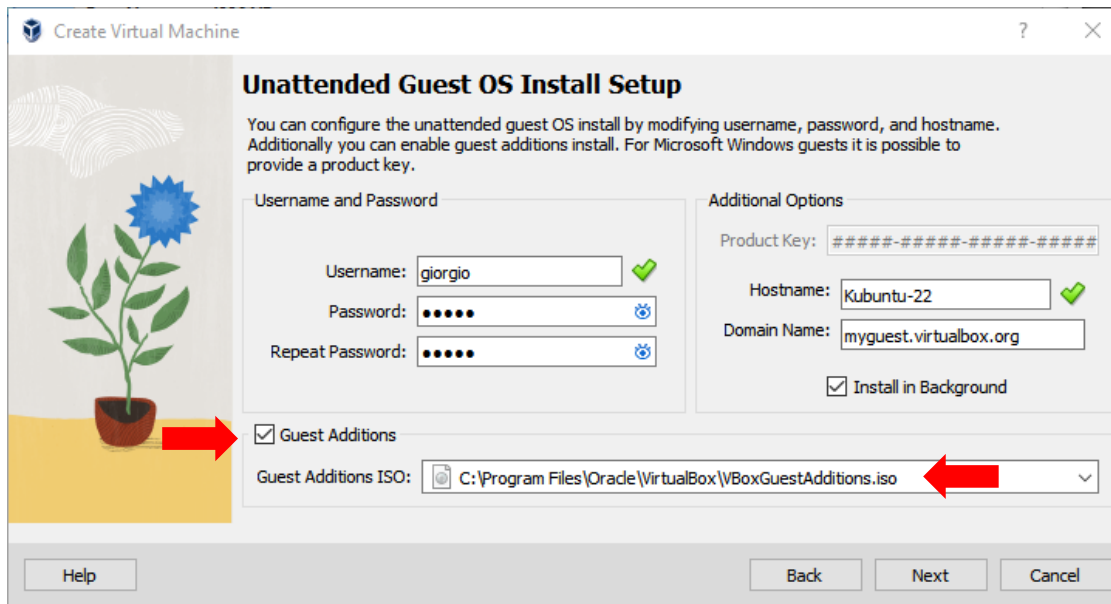
You must enter the name of the Virtual Machine (you choose the name), the installation folder, and the path to the .iso file of the guest OS (here: Kubuntu 2022.04)

Check that the "Skip Unattended Installation" is **NOT** checked

# 3a) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
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- Software removal



Set the **username** and the **password** of your Linux user account (on the left).

You can also define the hostname of the Linux machine, and set the domain name (on the right, if necessary).

Do NOT forget to provide the path to the **VBXGuestAdditions.iso**

The .iso file is shipped with VirtualBox as can be found in its installation folder, generally:  
C:\Program Files\Oracle\VirtualBox

# 3a) Create a Virtual Machine



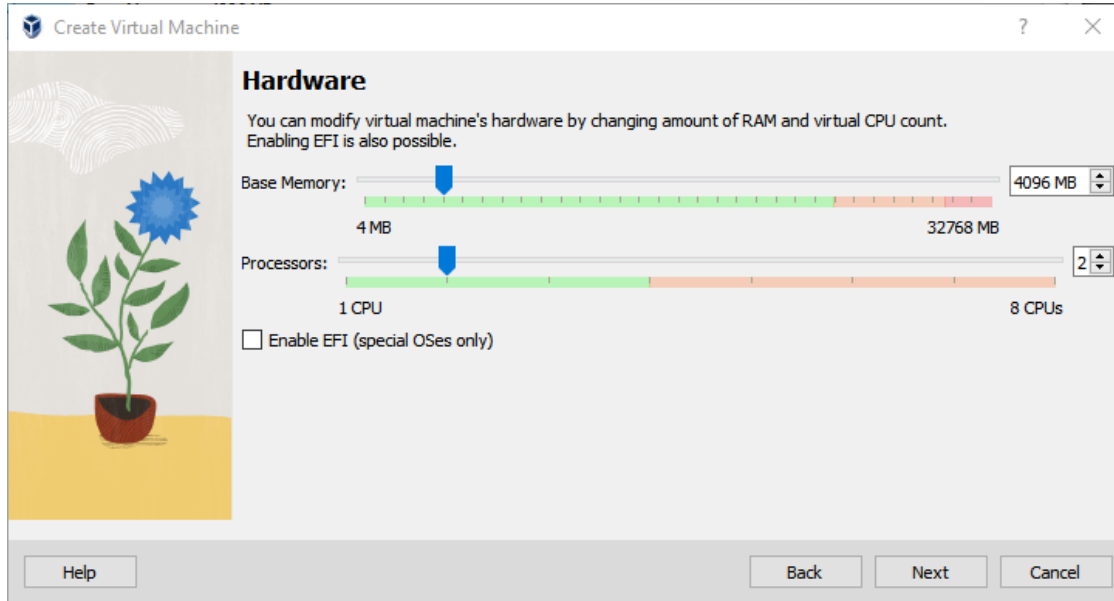
VirtualBox overview

Kubuntu overview

## Stepwise setup

- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration

Software removal



Define the hardware resources to allocate to the new VM, i.e.:

The **memory (RAM)** allocated to the VM

- 4 GB should suffice (minimum is 2 GB)

And the **number of processors**

- 2 should suffice

These settings can be changed, if necessary, also after the VM has been created.



## 3a) Create a Virtual Machine

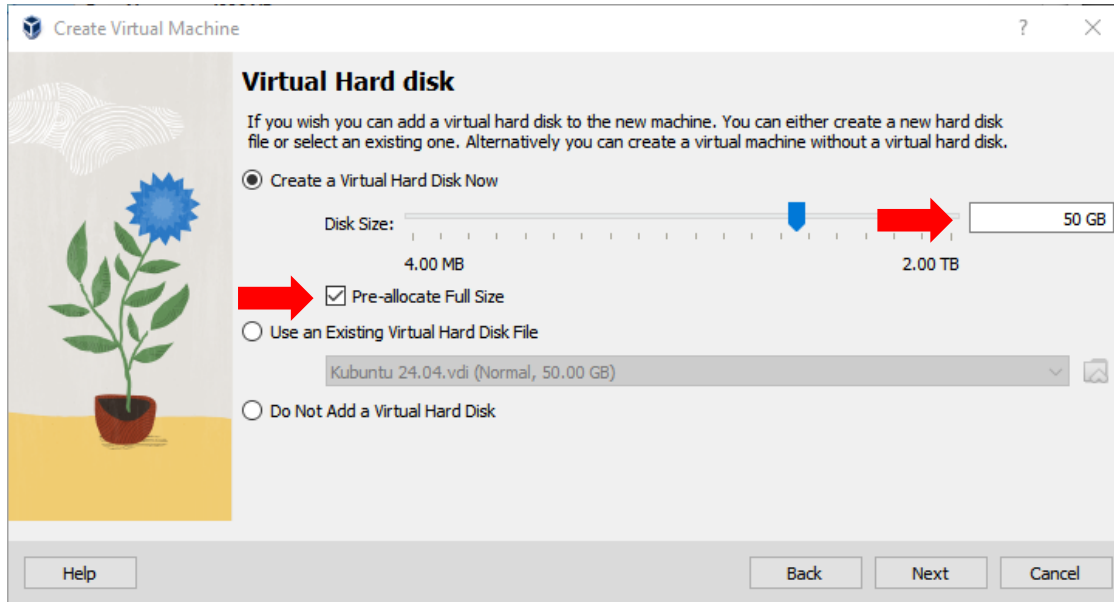


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
  - Install VirtualBox
  - **Create a VM**
  - Install Kubuntu
  - Initial configuration
- Software removal



Define the size of the **virtual hard disk** containing the VM.

From the point of view of the host, the whole VM will be "contained" in that virtual hard disk, which actually is just a big file (see next slides).

For Kubuntu 2022.04, you can set 50 GB.

Suggestion: choose to **pre-allocate the full size**.

# 3a) Create a Virtual Machine



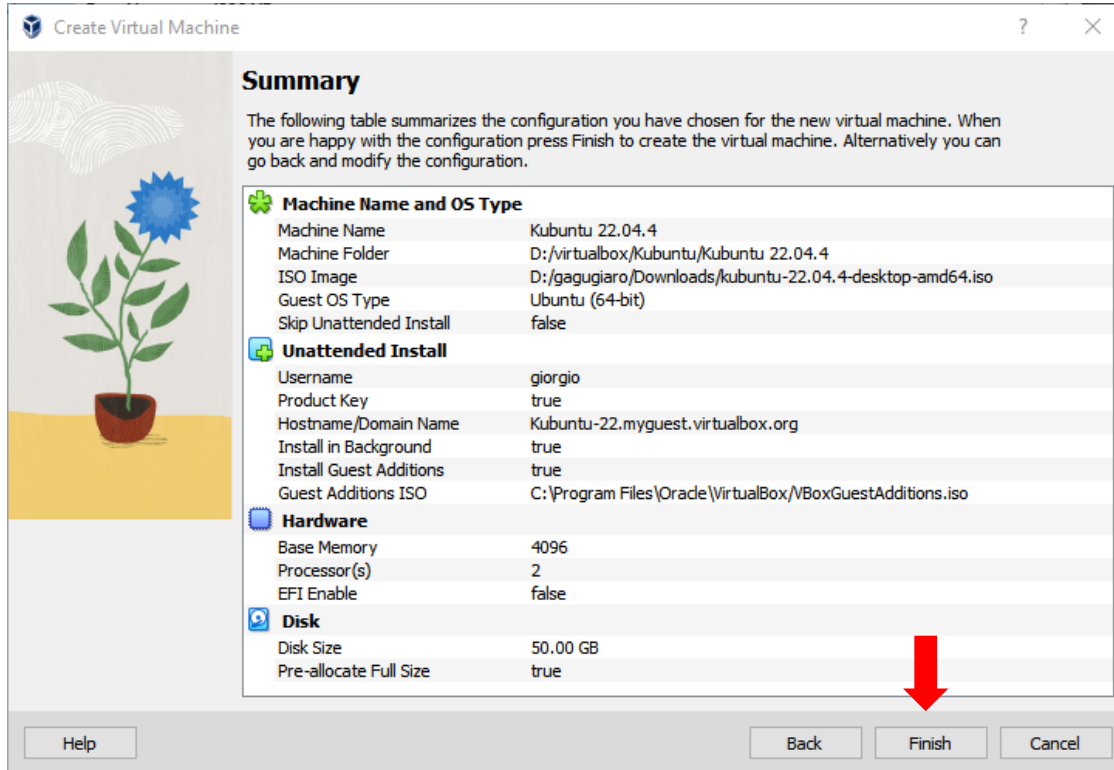
VirtualBox overview

Kubuntu overview

## Stepwise setup

- Download software
- Install VirtualBox
- **Create a VM**
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Software removal



**Summary**

The following table summarizes the configuration you have chosen for the new virtual machine. When you are happy with the configuration press Finish to create the virtual machine. Alternatively you can go back and modify the configuration.

Machine Name and OS Type	
Machine Name	Kubuntu 22.04.4
Machine Folder	D:/virtualbox/Kubuntu/Kubuntu 22.04.4
ISO Image	D:/gagugiaro/Downloads/kubuntu-22.04.4-desktop-amd64.iso
Guest OS Type	Ubuntu (64-bit)
Skip Unattended Install	false
Unattended Install	
Username	giorgio
Product Key	true
Hostname/Domain Name	Kubuntu-22.myguest.virtualbox.org
Install in Background	true
Install Guest Additions	true
Guest Additions ISO	C:\Program Files\Oracle\VirtualBox\BoxGuestAdditions.iso
Hardware	
Base Memory	4096
Processor(s)	2
EFI Enable	false
Disk	
Disk Size	50.00 GB
Pre-allocate Full Size	true

Buttons: Help, Back, **Finish**, Cancel

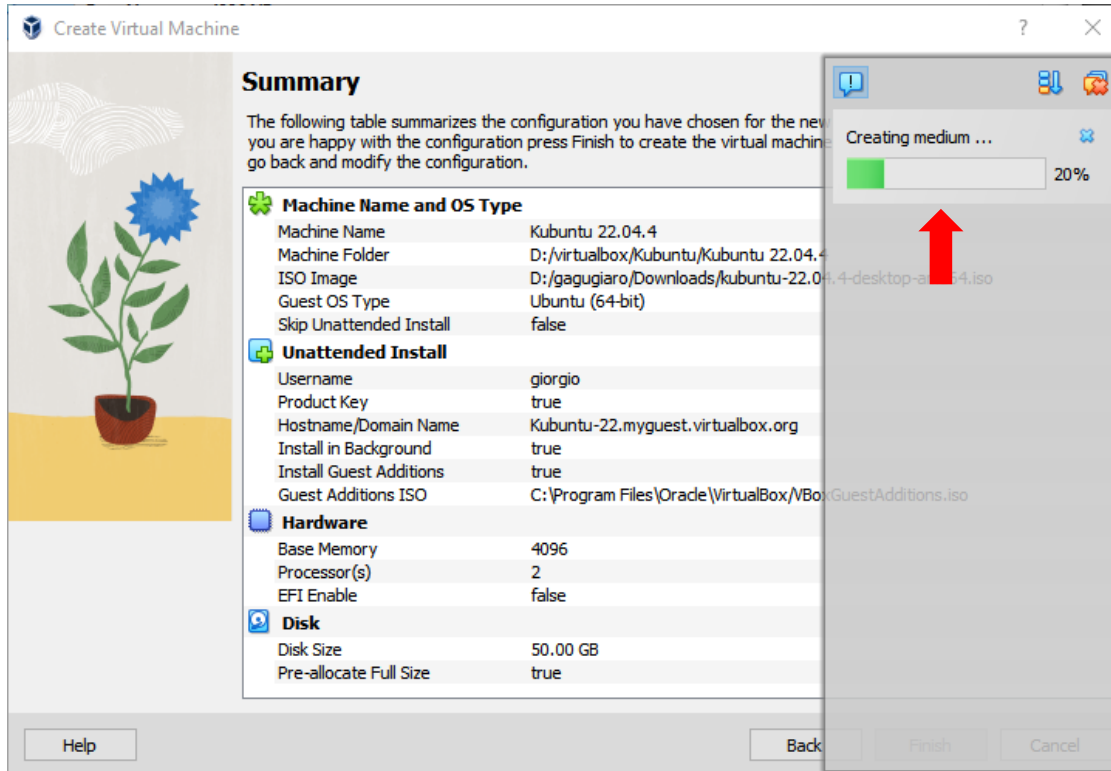
Before continuing with the installation of the guest OS, you are offered a summary.

Check that all is fine, then simply click on "Finish"

# 3a) Create a Virtual Machine



- VirtualBox overview
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- Software removal



**Summary**

The following table summarizes the configuration you have chosen for the new virtual machine. If you are happy with the configuration press Finish to create the virtual machine. If you are not happy, you can go back and modify the configuration.

Machine Name and OS Type	
Machine Name	Kubuntu 22.04.4
Machine Folder	D:/virtualbox/Kubuntu/Kubuntu 22.04.4
ISO Image	D:/gagugiaro/Downloads/kubuntu-22.04.4-desktop-amd64.iso
Guest OS Type	Ubuntu (64-bit)
Skip Unattended Install	false

Unattended Install	
Username	giorgio
Product Key	true
Hostname/Domain Name	Kubuntu-22.myguest.virtualbox.org
Install in Background	true
Install Guest Additions	true
Guest Additions ISO	C:\Program Files\Oracle\VirtualBox\BoxGuestAdditions.iso

Hardware	
Base Memory	4096
Processor(s)	2
EFI Enable	false

Disk	
Disk Size	50.00 GB
Pre-allocate Full Size	true

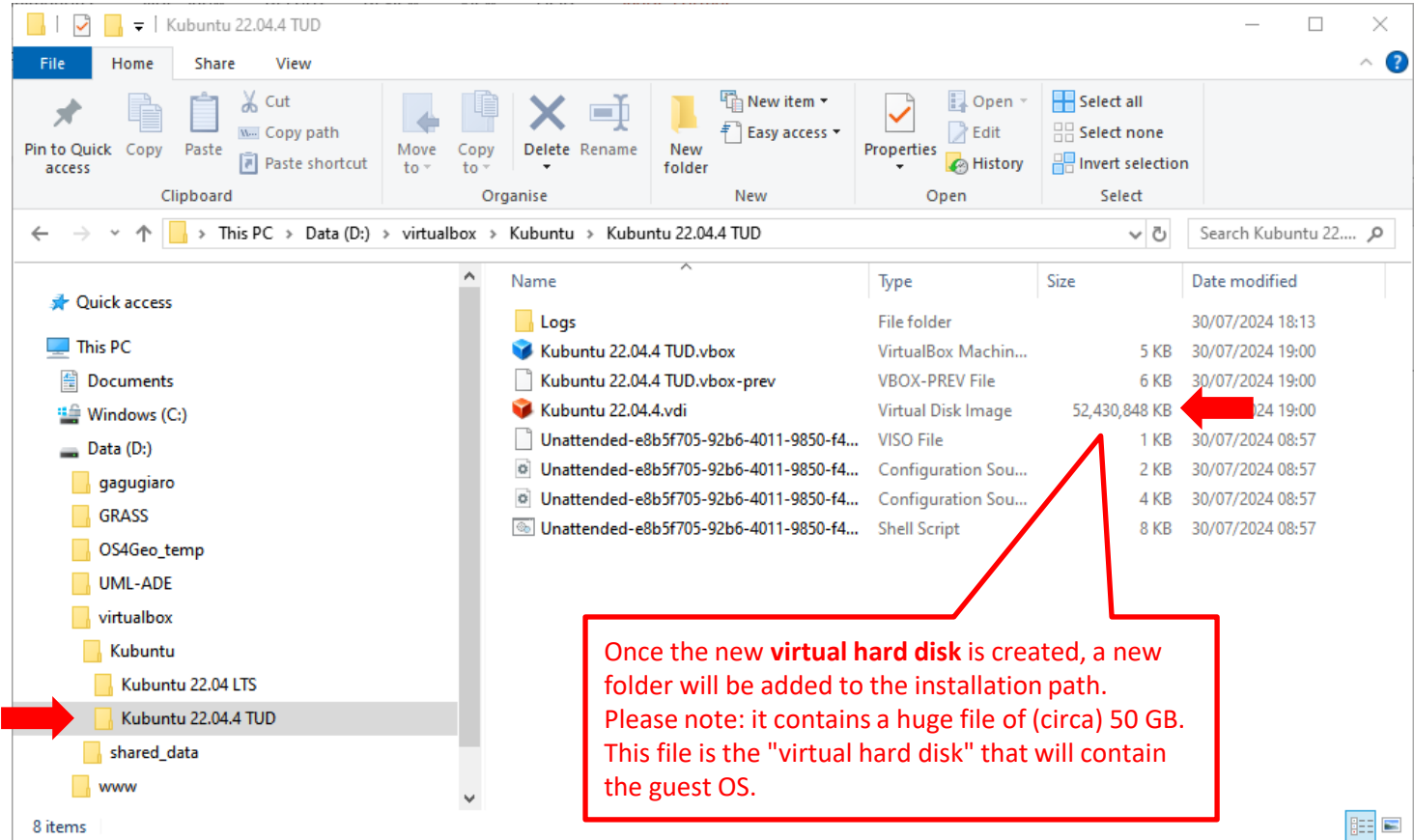
Buttons: Help, Back, Finish, Cancel

The creation process of the new **virtual hard disk** starts.

# 3a) Create a Virtual Machine



- VirtualBox overview
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- Stepwise setup**
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File Explorer window showing the directory path: This PC > Data (D:) > virtualbox > Kubuntu > Kubuntu 22.04.4 TUD.

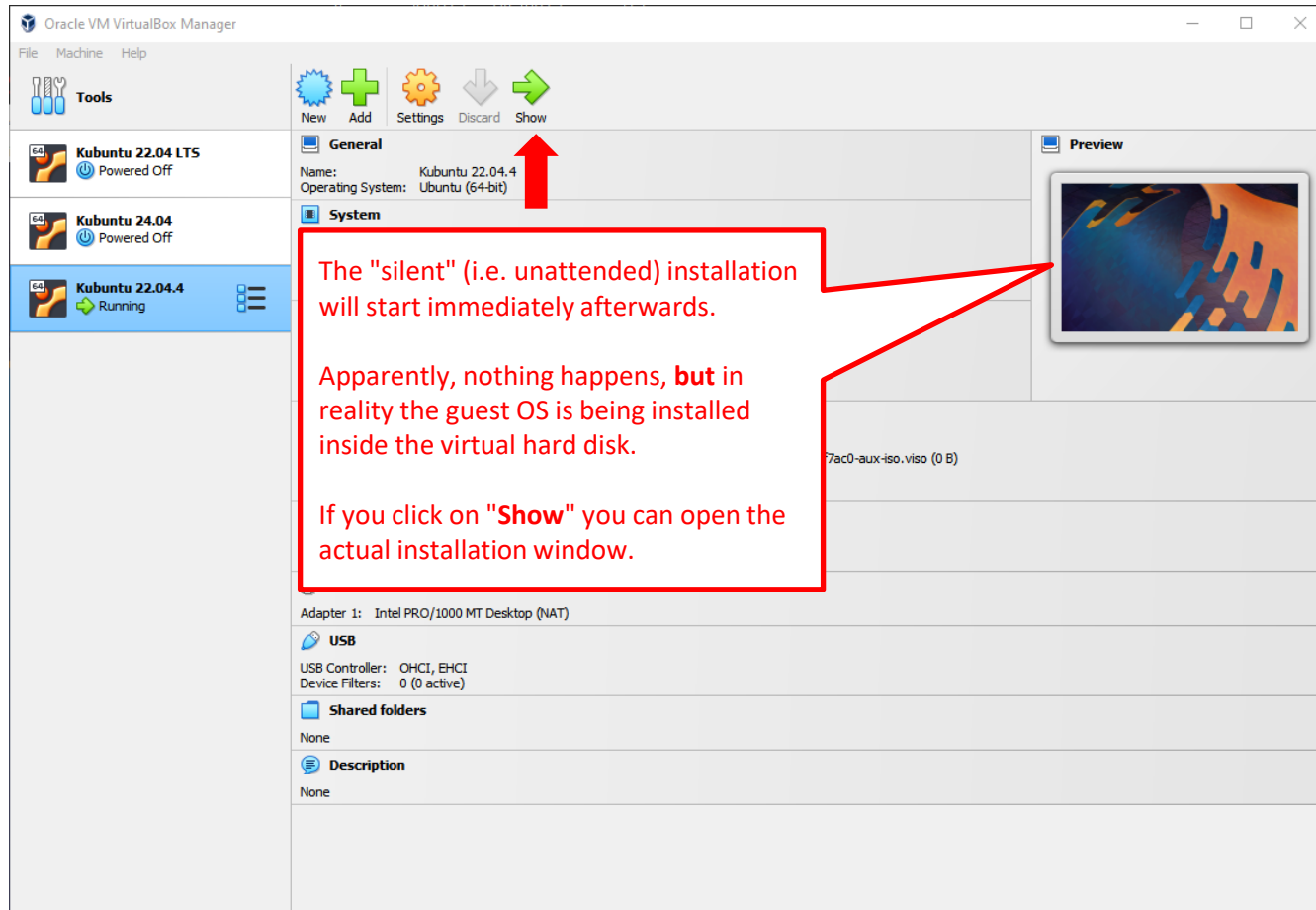
Name	Type	Size	Date modified
Logs	File folder		30/07/2024 18:13
Kubuntu 22.04.4 TUD.vbox	VirtualBox Machin...	5 KB	30/07/2024 19:00
Kubuntu 22.04.4 TUD.vbox-prev	VBOX-PREV File	6 KB	30/07/2024 19:00
<b>Kubuntu 22.04.4.vdi</b>	Virtual Disk Image	<b>52,430,848 KB</b>	<b>30/07/2024 19:00</b>
Unattended-e8b5f705-92b6-4011-9850-f4...	VISO File	1 KB	30/07/2024 08:57
Unattended-e8b5f705-92b6-4011-9850-f4...	Configuration Sou...	2 KB	30/07/2024 08:57
Unattended-e8b5f705-92b6-4011-9850-f4...	Configuration Sou...	4 KB	30/07/2024 08:57
Unattended-e8b5f705-92b6-4011-9850-f4...	Shell Script	8 KB	30/07/2024 08:57

8 items

# 3a) Create a Virtual Machine



- VirtualBox overview  
 Kubuntu overview  
**Stepwise setup**
- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



The "silent" (i.e. unattended) installation will start immediately afterwards.

Apparently, nothing happens, **but** in reality the guest OS is being installed inside the virtual hard disk.

If you click on "**Show**" you can open the actual installation window.

## 3b) Install Kubuntu

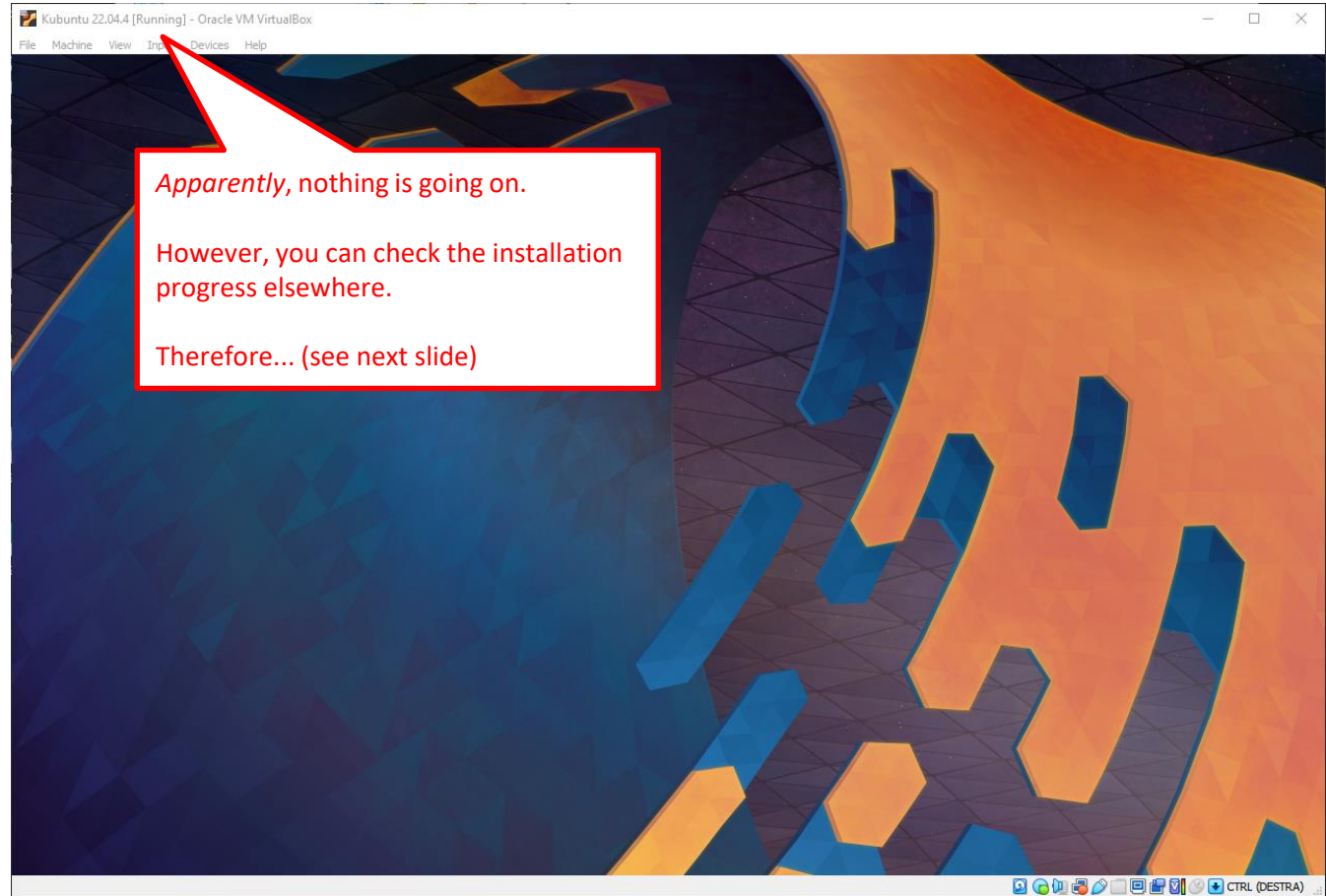


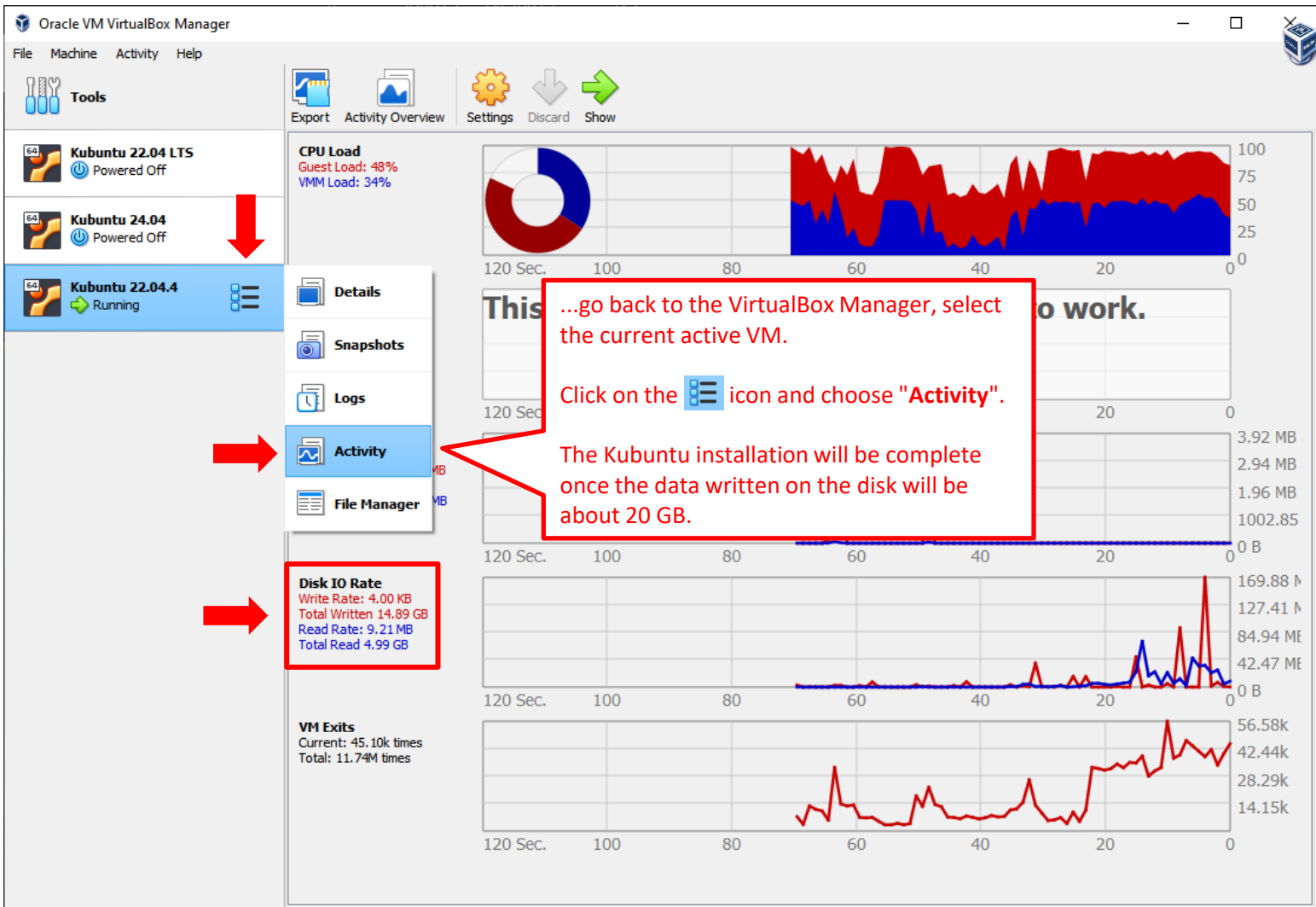
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
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Oracle VM VirtualBox Manager

File Machine Activity Help


Tools Export Activity Overview Settings Discard Show

**Kubuntu 22.04 LTS** Powered Off  
**Kubuntu 24.04** Powered Off  
**Kubuntu 22.04.4** Running

**CPU Load**  
 Guest Load: 48%  
 VMM Load: 34%

**Disk IO Rate**  
 Write Rate: 4.00 KB  
 Total Written 14.89 GB  
 Read Rate: 9.21 MB  
 Total Read 4.99 GB

**VM Exits**  
 Current: 45.10k times  
 Total: 11.74M times

...go back to the VirtualBox Manager, select the current active VM.  
 Click on the  icon and choose "Activity".  
 The Kubuntu installation will be complete once the data written on the disk will be about 20 GB.

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
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- **Install Kubuntu**
- Initial configuration

Software removal

## 3b) Install Kubuntu



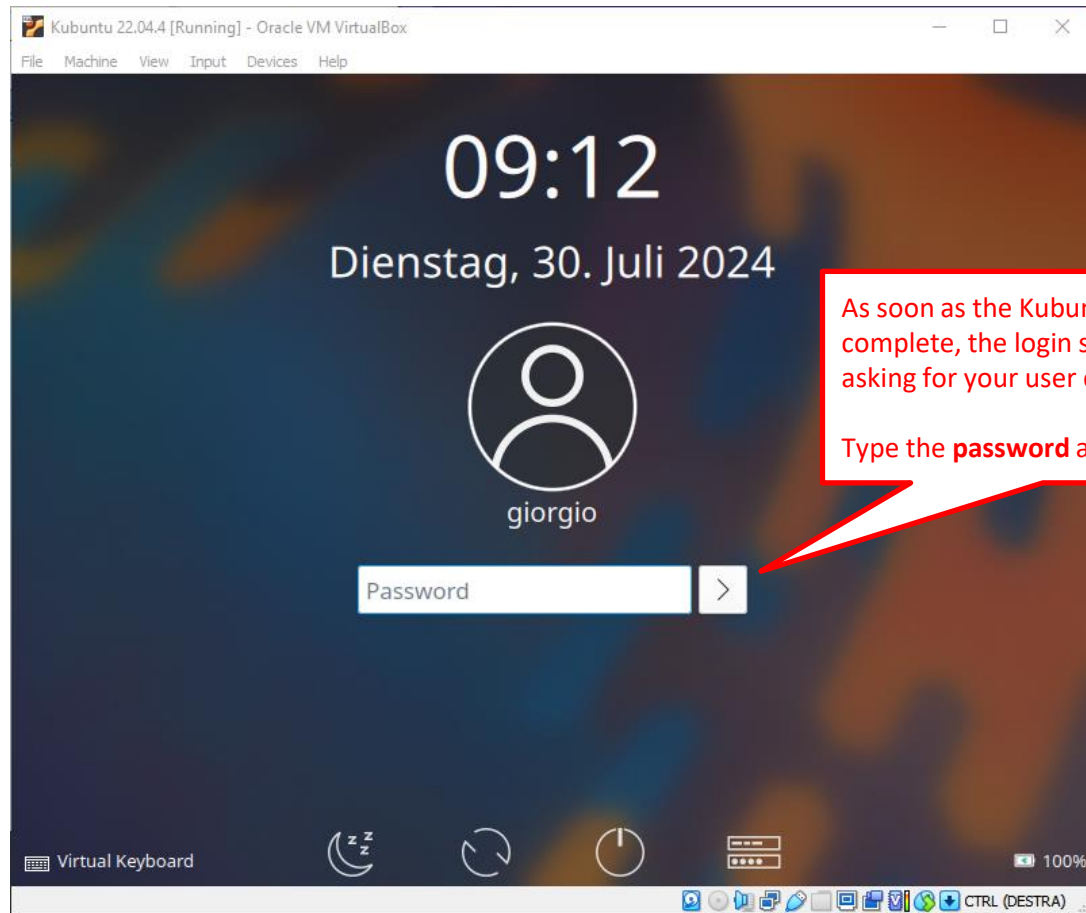
VirtualBox overview

Kubuntu overview

### Stepwise setup

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Software removal





## 3b) Install Kubuntu: Installation bug

- **The problem:** As a result of the **unattended installation**, the user (e.g. "giorgio") cannot use the *sudo* command to perform root operations. The reason is that the user does not belong to the sudo group
- This bug is documented here, as well as the solution
  - [https://www.techrepublic.com/article/virtualbox-unattended-installation-feature/#That\\_darned\\_caveat](https://www.techrepublic.com/article/virtualbox-unattended-installation-feature/#That_darned_caveat)
- **The solution:** see next slides! 😊



## 3b) Install Kubuntu



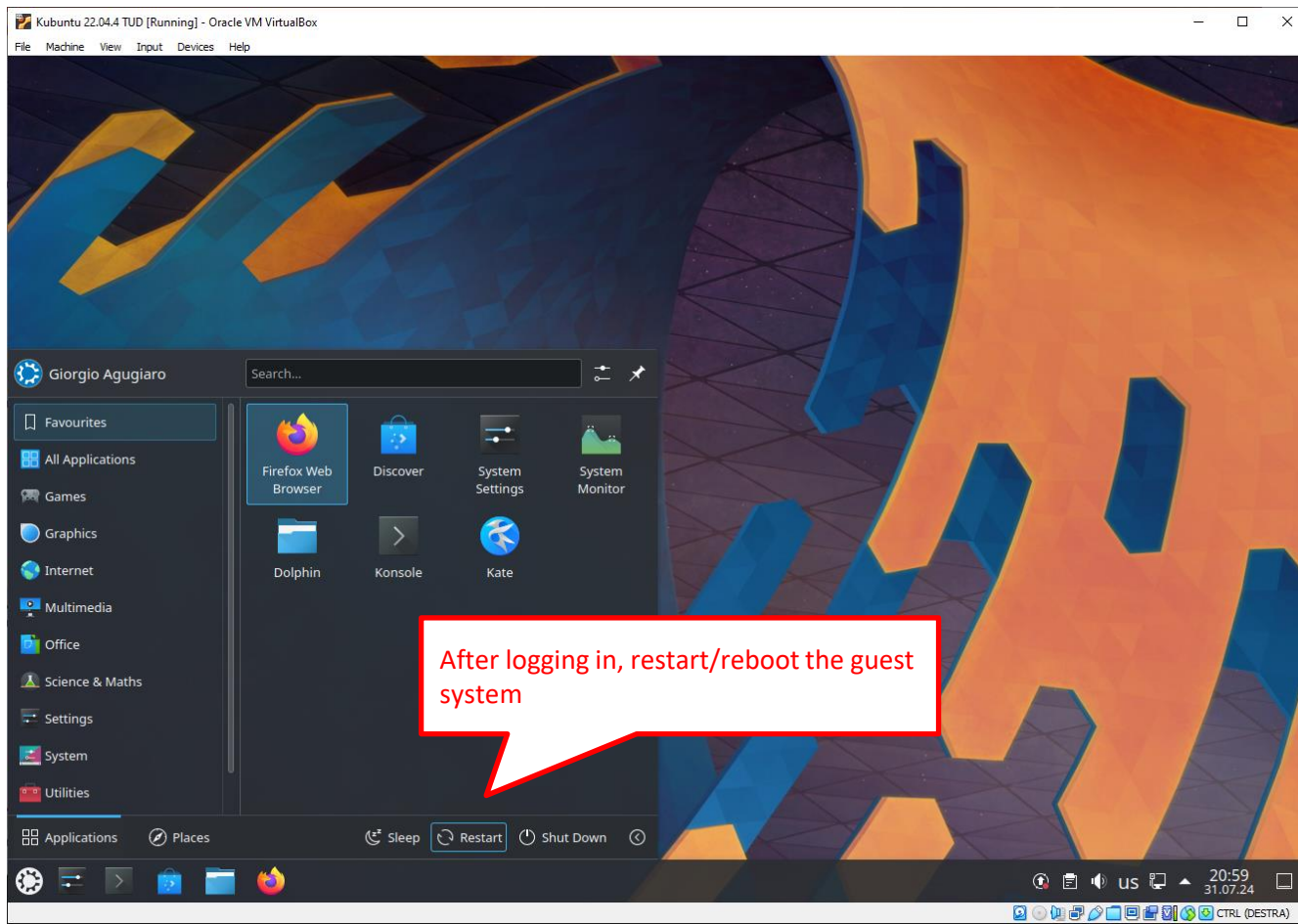
VirtualBox overview

Kubuntu overview

### Stepwise setup

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Software removal



## 3b) Install Kubuntu

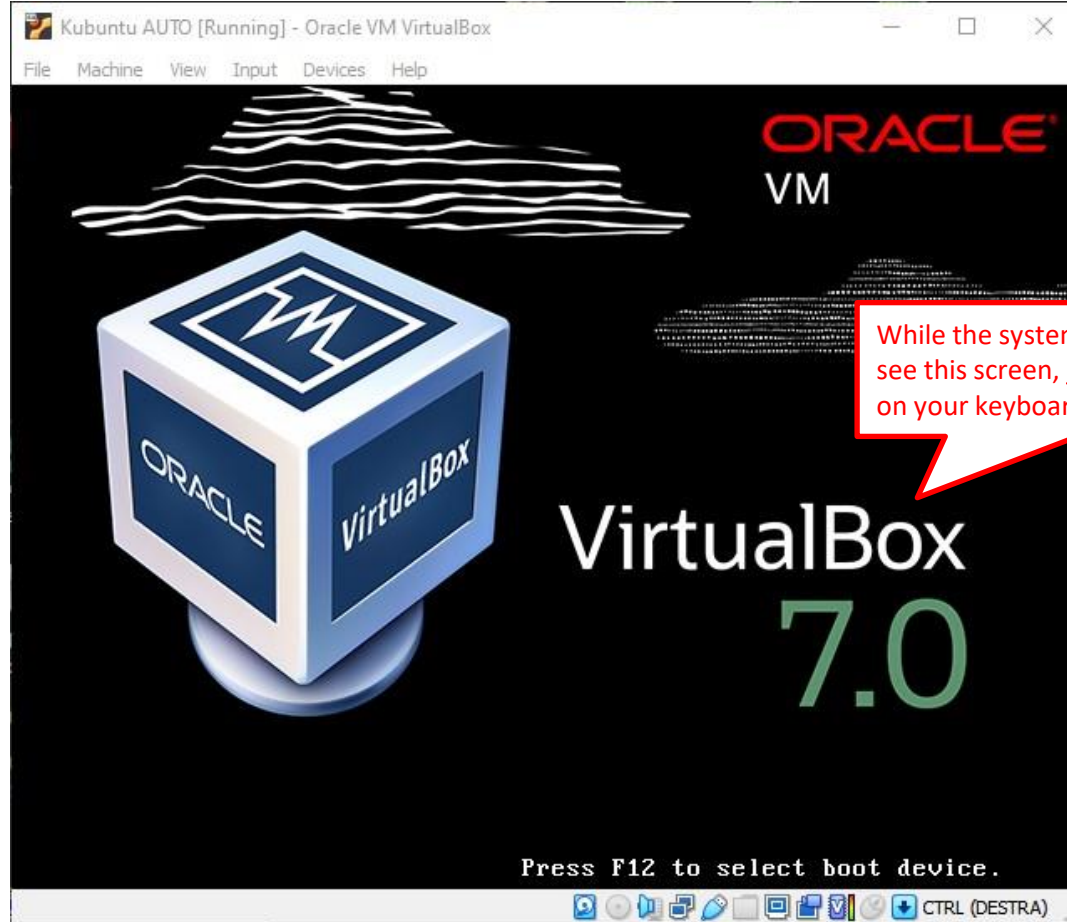


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



## 3b) Install Kubuntu

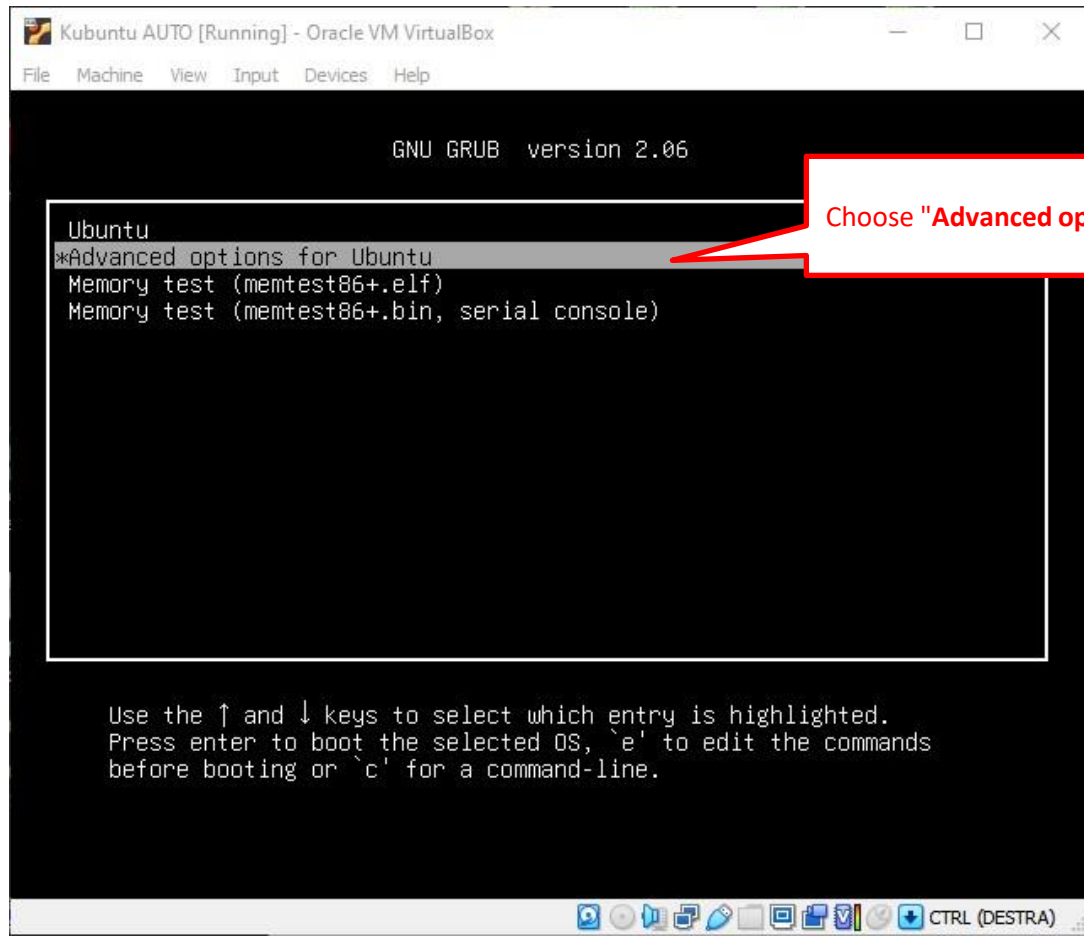


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



Choose "Advanced options for Ubuntu"

## 3b) Install Kubuntu



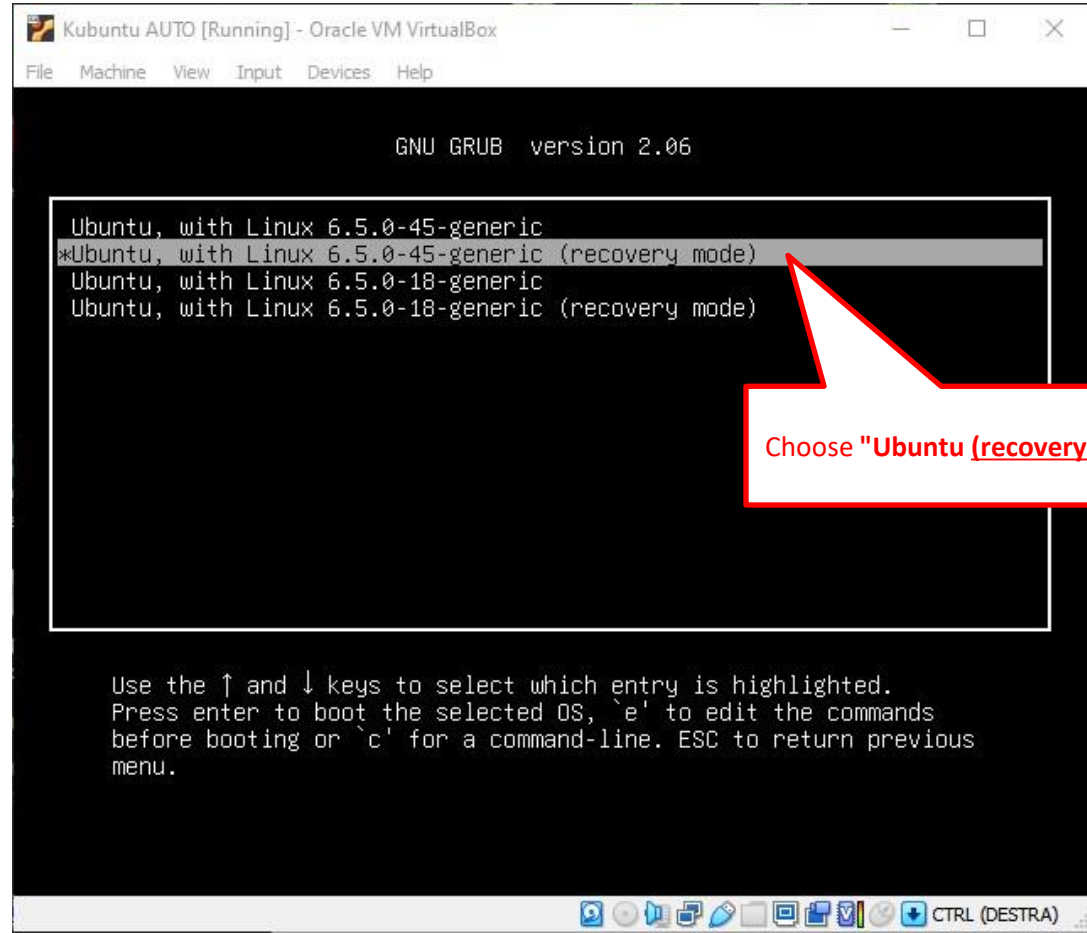
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

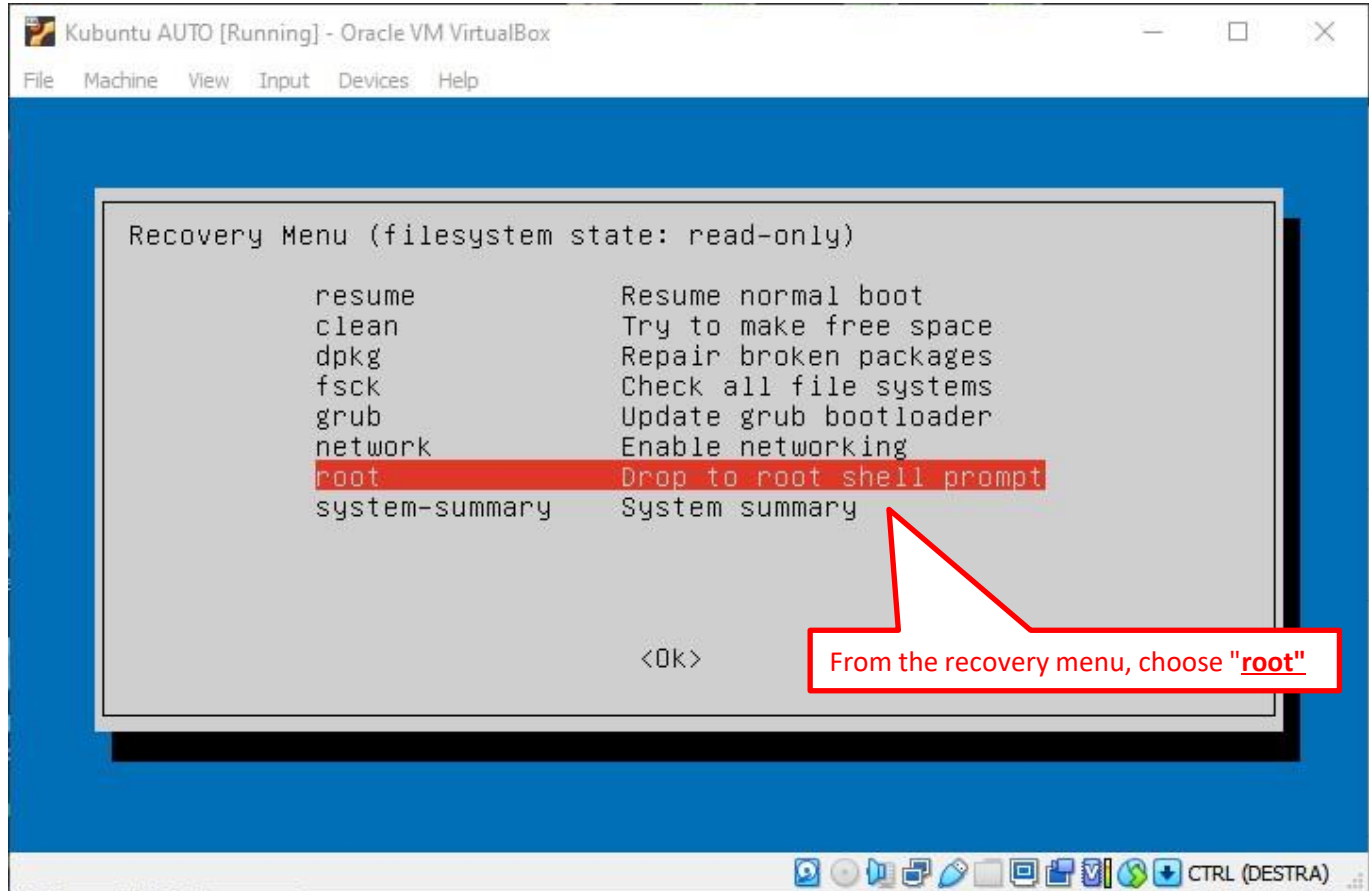
Software removal



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



Kubuntu AUTO [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

```

Recovery Menu (filesystem state: read-only)

      resume           Resume normal boot
      clean            Try to make free space
      dpkg            Repair broken packages
      fsck            Check all file systems
      grub            Update grub bootloader
      network        Enable networking
      root           Drop to root shell prompt
      system-summary  System summary
  
```

<Ok>

From the recovery menu, choose "root"

CTRL (DESTRA)

## 3b) Install Kubuntu



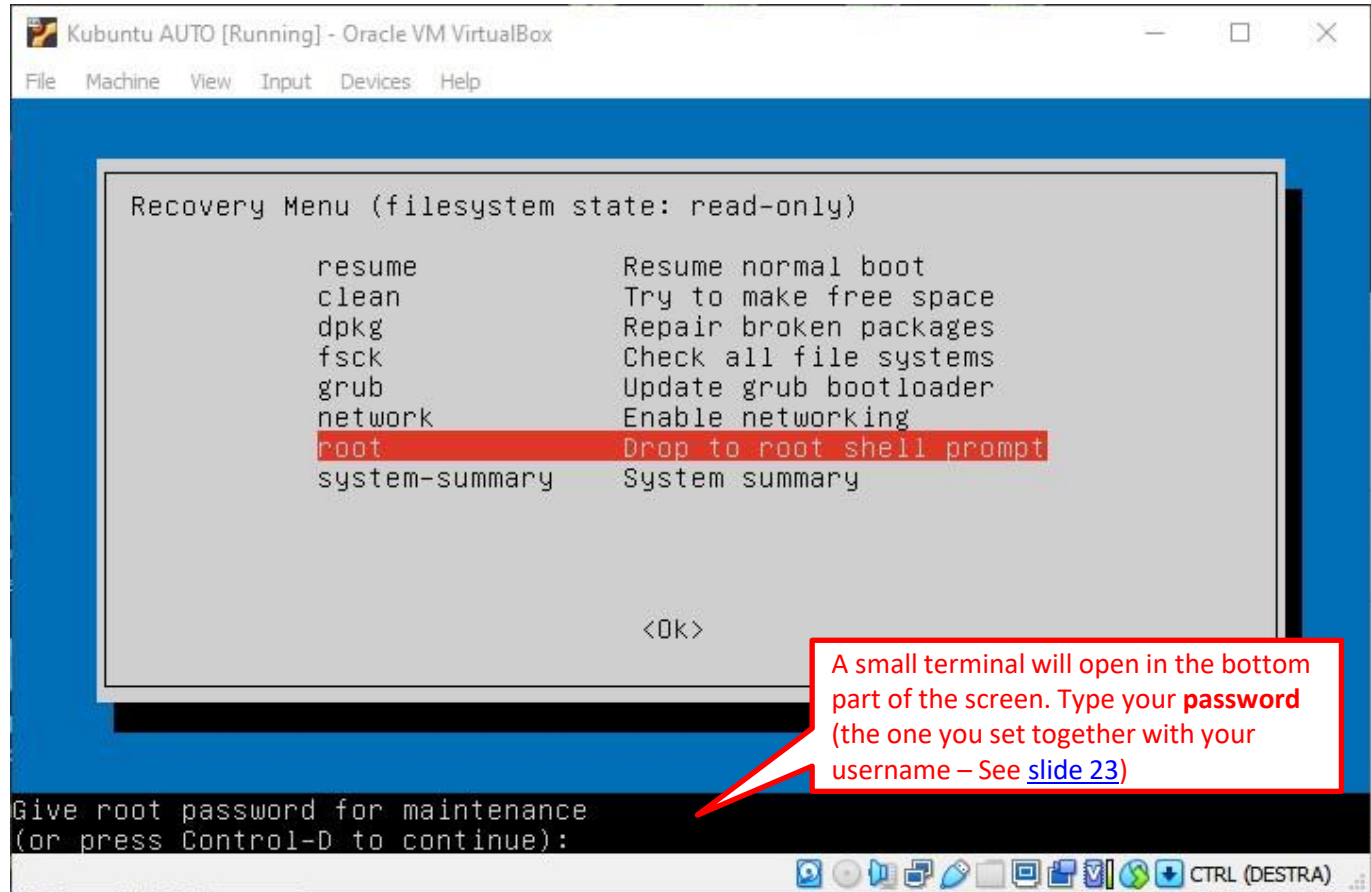
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



Kubuntu AUTO [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

```

Recovery Menu (filesystem state: read-only)

      resume                Resume normal boot
      clean                 Try to make free space
      dpkg                 Repair broken packages
      fsck                 Check all file systems
      grub                 Update grub bootloader
      network              Enable networking
      root                  Drop to root shell prompt
      system-summary       System summary

                                <Ok>
  
```

Give root password for maintenance  
(or press Control-D to continue):

CTRL (DESTRA)

A small terminal will open in the bottom part of the screen. Type your **password** (the one you set together with your username – See [slide 23](#))

## 3b) Install Kubuntu



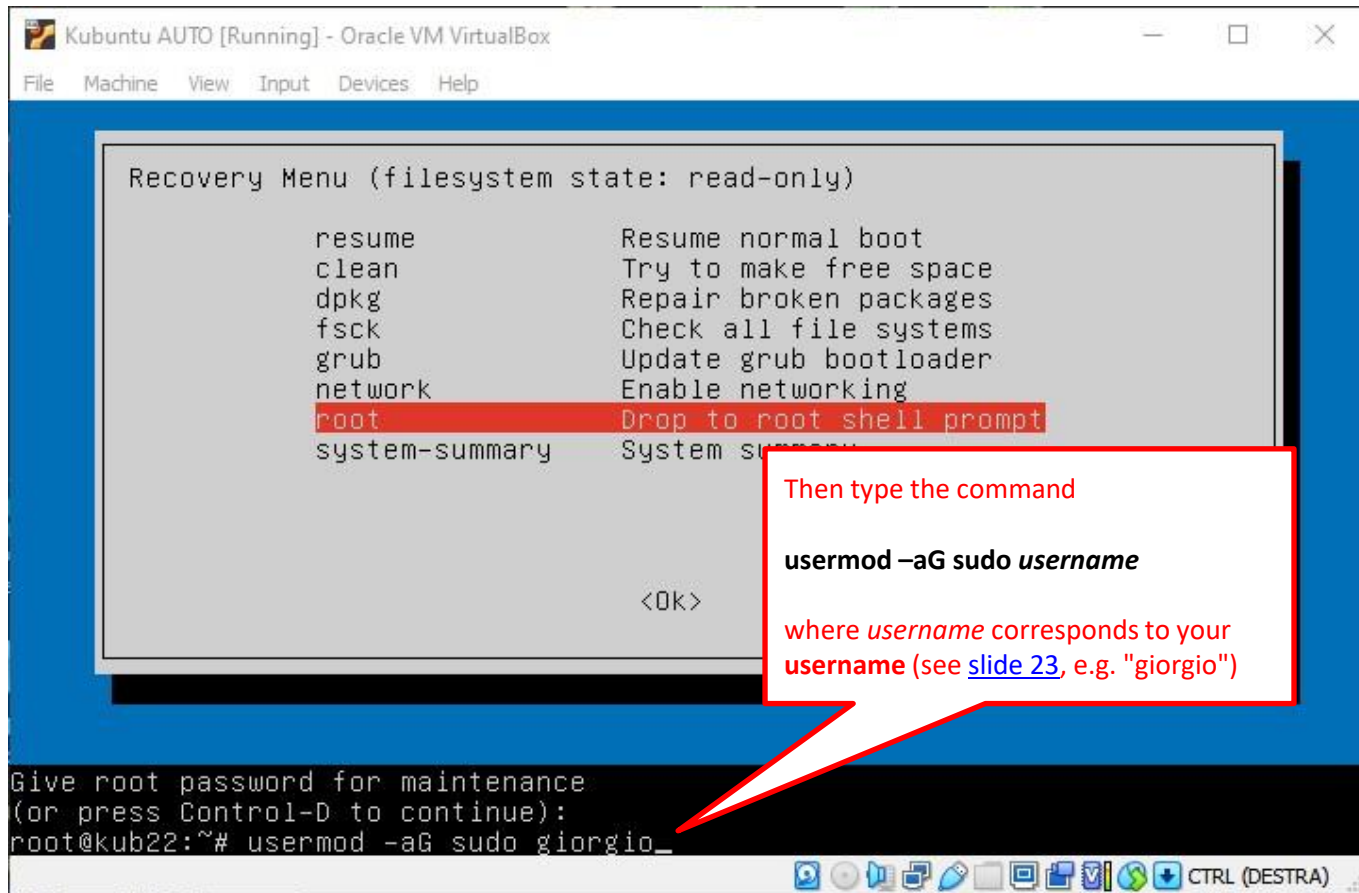
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



Kubuntu AUTO [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

```
Recovery Menu (filesystem state: read-only)

resume           Resume normal boot
clean            Try to make free space
dpkg            Repair broken packages
fsck            Check all file systems
grub            Update grub bootloader
network        Enable networking
root            Drop to root shell prompt
system-summary  System summary

<Ok>
```

Then type the command

**usermod -aG sudo *username***

where *username* corresponds to your **username** (see [slide 23](#), e.g. "giorgio")

```
Give root password for maintenance
(or press Control-D to continue):
root@kub22:~# usermod -aG sudo giorgio_
```

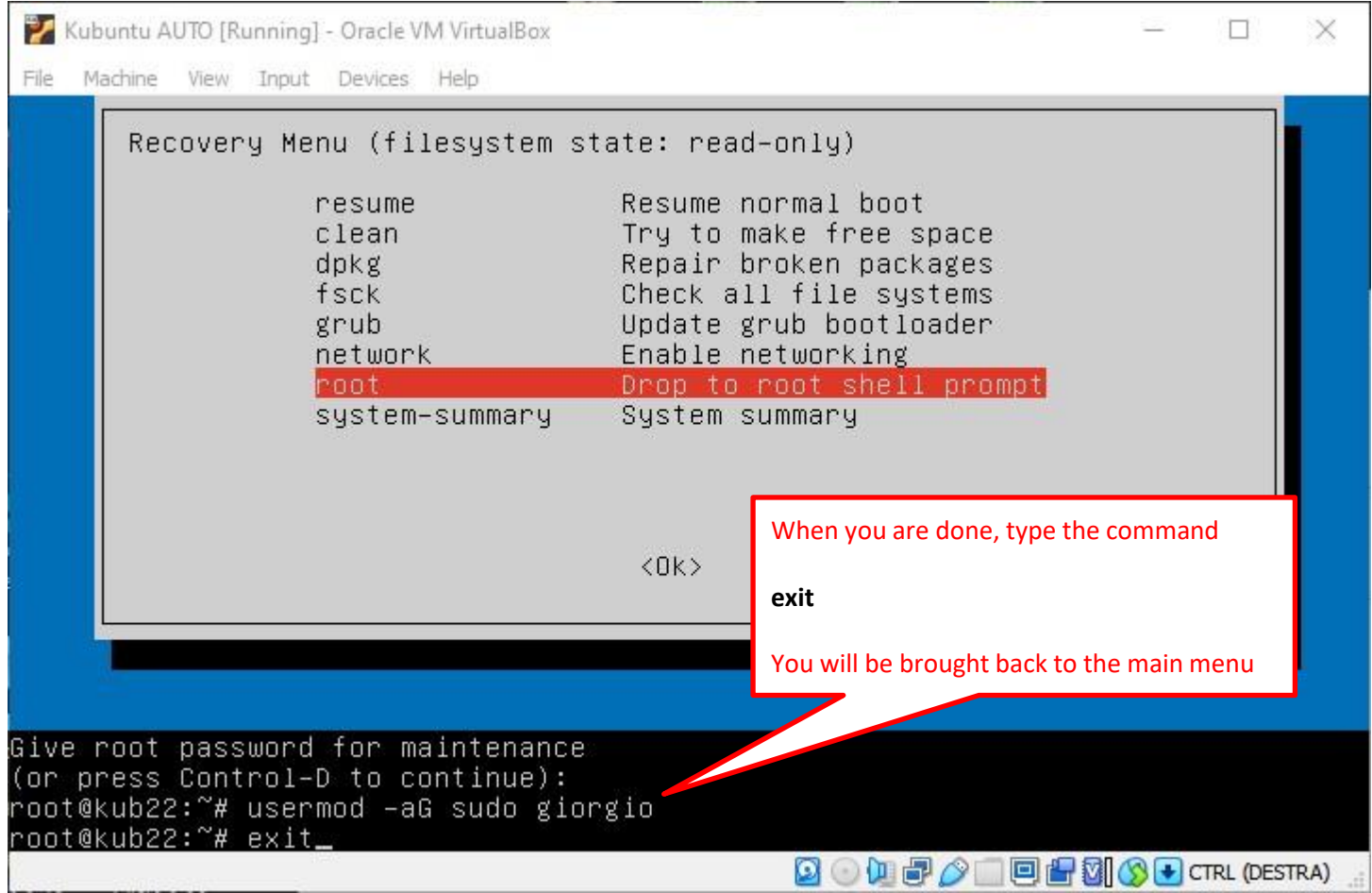
CTRL (DESTRA)



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



Kubuntu AUTO [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

```

Recovery Menu (filesystem state: read-only)

        resume           Resume normal boot
        clean            Try to make free space
        dpkg             Repair broken packages
        fsck             Check all file systems
        grub             Update grub bootloader
        network          Enable networking
        root             Drop to root shell prompt
        system-summary   System summary

                                <OK>
    
```

When you are done, type the command  
**exit**  
You will be brought back to the main menu

```

Give root password for maintenance
(or press Control-D to continue):
root@kub22:~# usermod -aG sudo giorgio
root@kub22:~# exit_
    
```

CTRL (DESTRA)

## 3b) Install Kubuntu



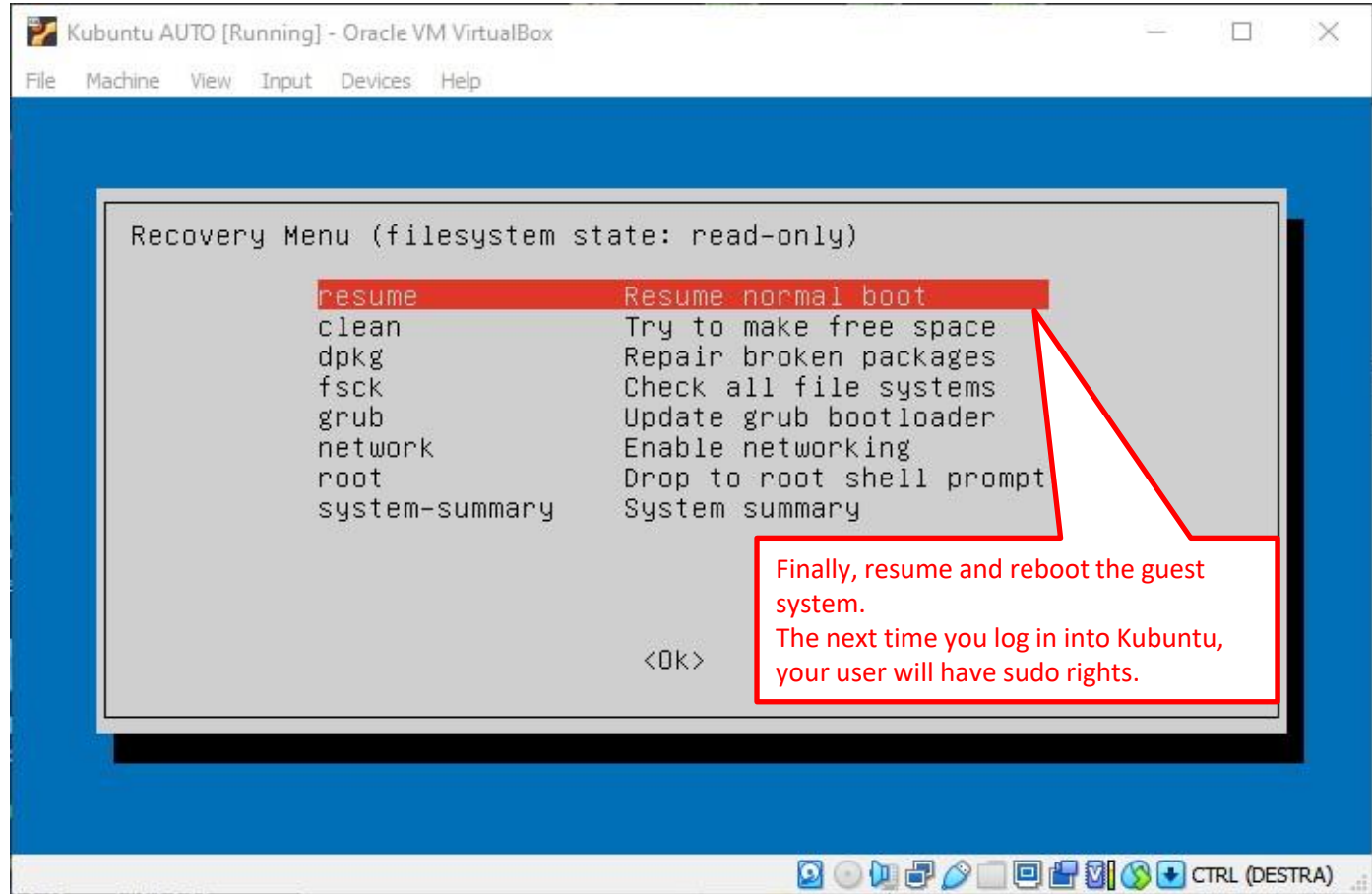
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



## 3b) Install Kubuntu

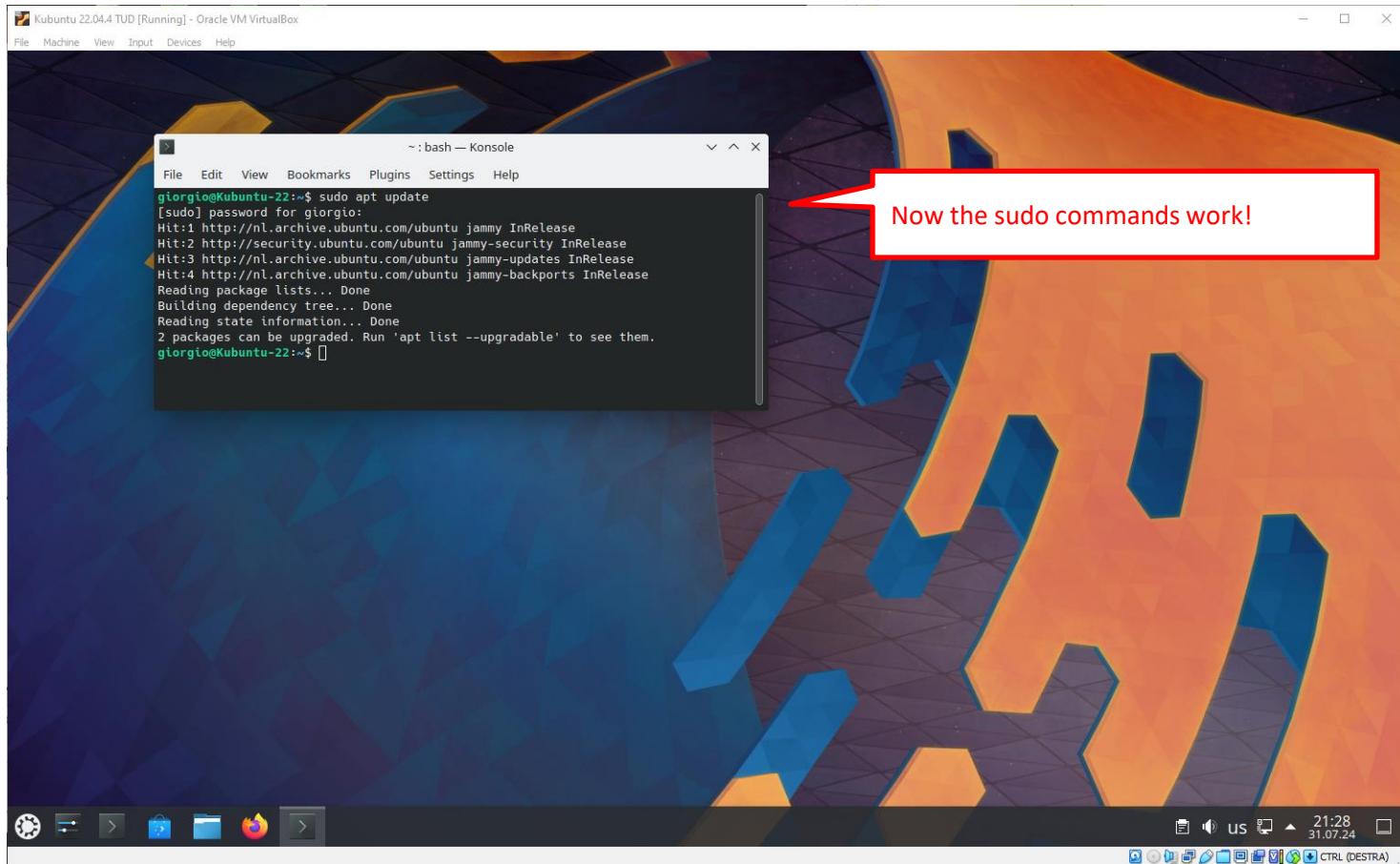


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



Kubuntu 22.04.4 TUD [Running] - Oracle VM VirtualBox

```
File Machine View Input Devices Help
```

```
~: bash — Konsole
```

```
File Edit View Bookmarks Plugins Settings Help
```

```
giorgio@Kubuntu-22:~$ sudo apt update
[sudo] password for giorgio:
Hit:1 http://nl.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:3 http://nl.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:4 http://nl.archive.ubuntu.com/ubuntu jammy-backports InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
2 packages can be upgraded. Run 'apt list --upgradable' to see them.
giorgio@Kubuntu-22:~$
```

Now the sudo commands work!

# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download the software (VirtualBox installer, Kubuntu, etc.)
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu**
  - Preliminary notes (go to [slide 17](#))
  - Automatic approach
  - [Manual approach](#)
- 4) Initial configuration of Kubuntu

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

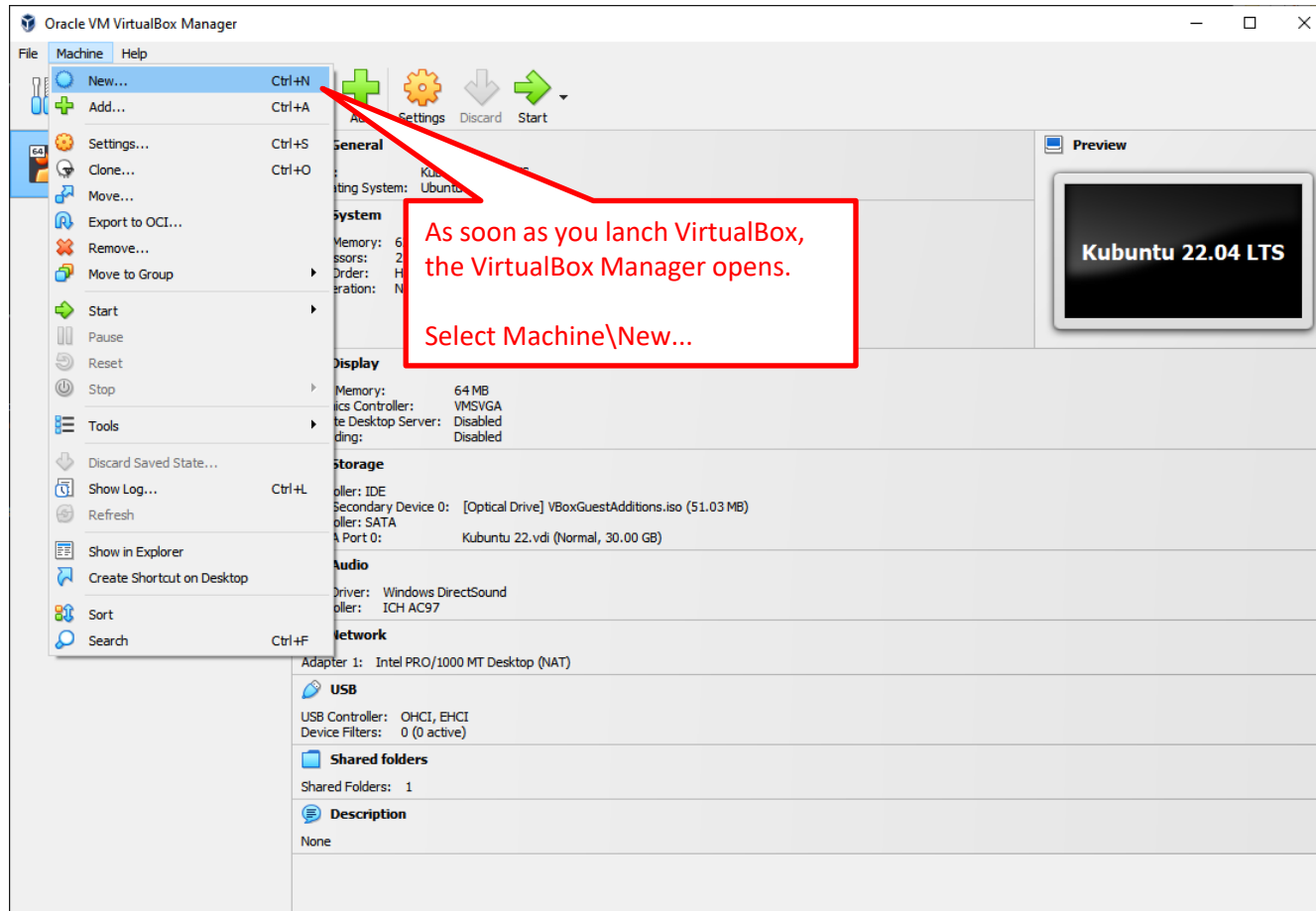
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration

Software removal

# 3) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal



# 3a) Create a Virtual Machine

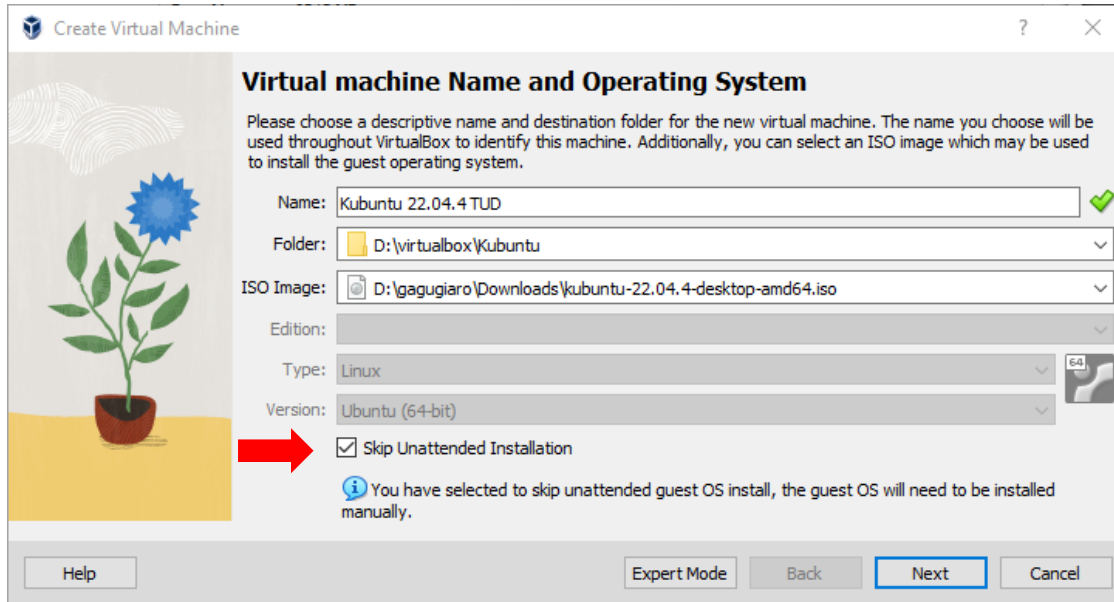


VirtualBox overview

Kubuntu overview

## Stepwise setup

- Download software
  - Install VirtualBox
  - **Create a VM**
  - Install Kubuntu
  - Initial configuration
- Software removal



The Create Virtual Machine window opens.

You must enter the name of the Virtual Machine (you choose the name), the installation folder, and the path to the .iso file of the guest OS (here: Kubuntu 2022.04)

Check that the "Skip Unattended Installation" **IS CHECKED**

# 3a) Create a Virtual Machine

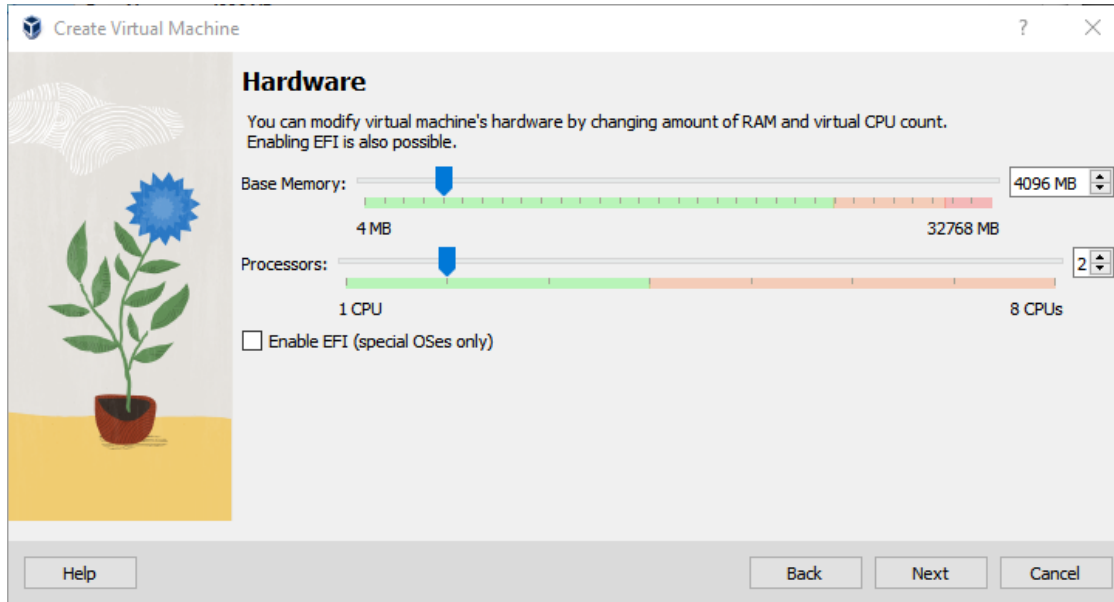


VirtualBox overview

Kubuntu overview

## Stepwise setup

- Download software
  - Install VirtualBox
  - **Create a VM**
  - Install Kubuntu
  - Initial configuration
- Software removal



Define the hardware resources to allocate to the new VM, i.e.:

The **memory (RAM)** allocated to the VM

- 4 GB should suffice (minimum is 2 GB)

And the **number of processors**

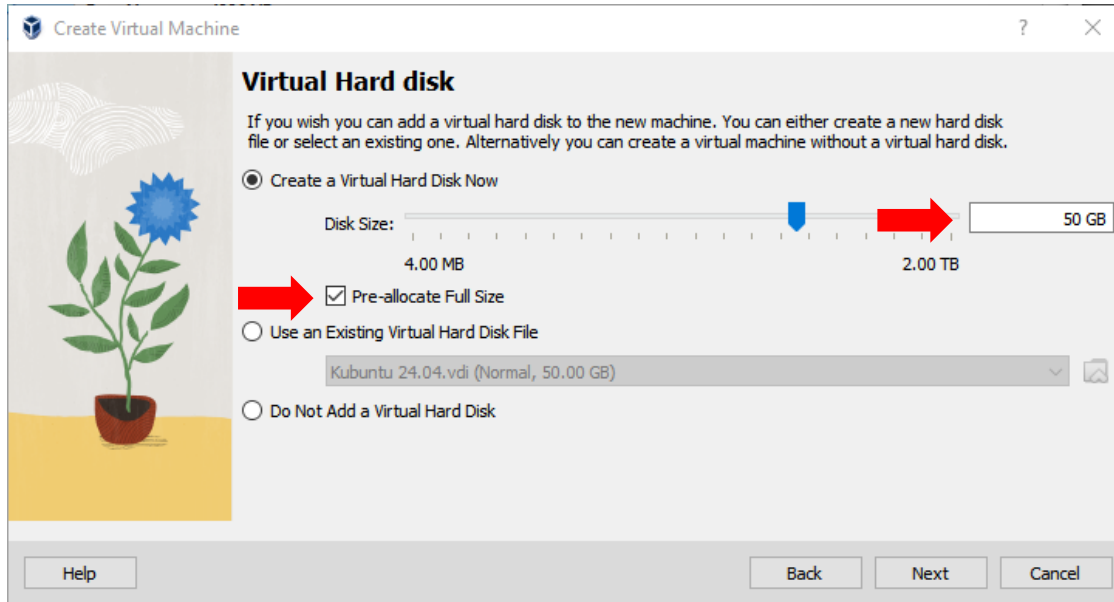
- 2 should suffice

These settings can be changed, if necessary, also after the VM has been created.

# 3a) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal



Define the size of the **virtual hard disk** containing the VM.

From the point of view of the host, the whole VM will be "contained" in that virtual hard disk, which actually is just a big file (see next slides).

For Kubuntu 2022.04, you can set 50 GB.

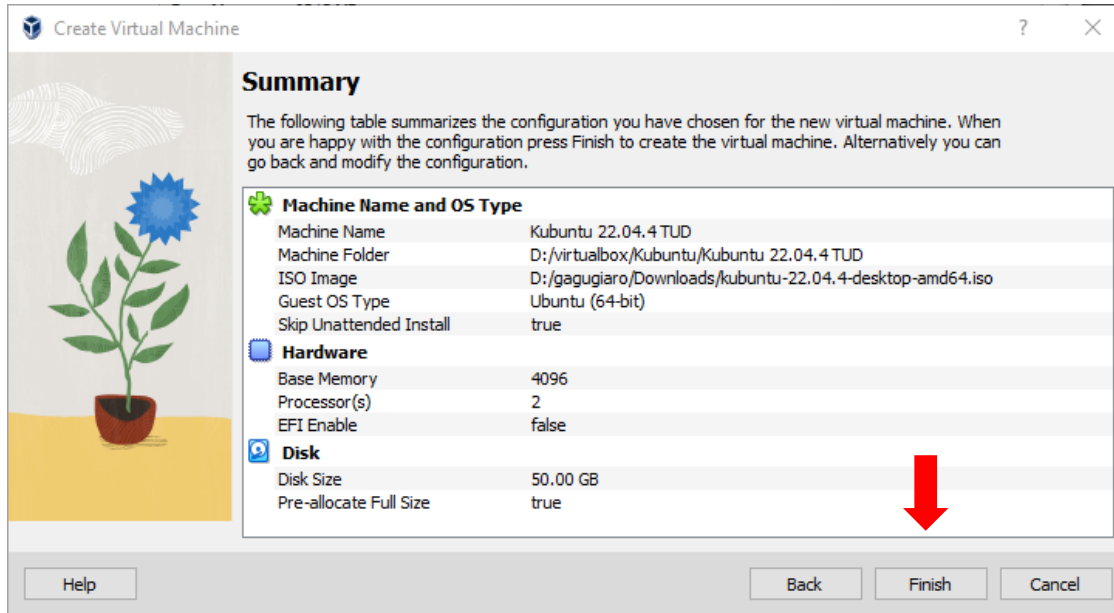
Suggestion: choose to **pre-allocate the full size**.



# 3a) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal



**Create Virtual Machine**

**Summary**

The following table summarizes the configuration you have chosen for the new virtual machine. When you are happy with the configuration press Finish to create the virtual machine. Alternatively you can go back and modify the configuration.

Machine Name and OS Type	
Machine Name	Kubuntu 22.04.4 TUD
Machine Folder	D:/virtualbox/Kubuntu/Kubuntu 22.04.4 TUD
ISO Image	D:/gagugiaro/Downloads/kubuntu-22.04.4-desktop-amd64.iso
Guest OS Type	Ubuntu (64-bit)
Skip Unattended Install	true
Hardware	
Base Memory	4096
Processor(s)	2
EFI Enable	false
Disk	
Disk Size	50.00 GB
Pre-allocate Full Size	true

Buttons: Help, Back, **Finish**, Cancel

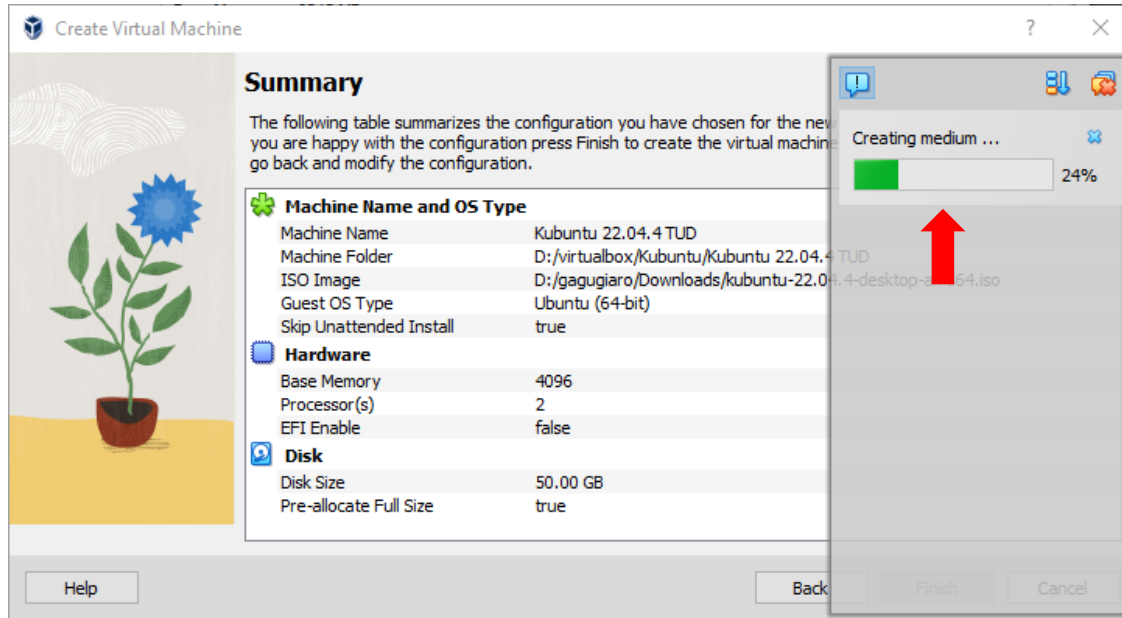
Before continuing with the installation of the guest OS, you are offered a summary.

Check that all is fine, then simply click on "Finish"

# 3a) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal



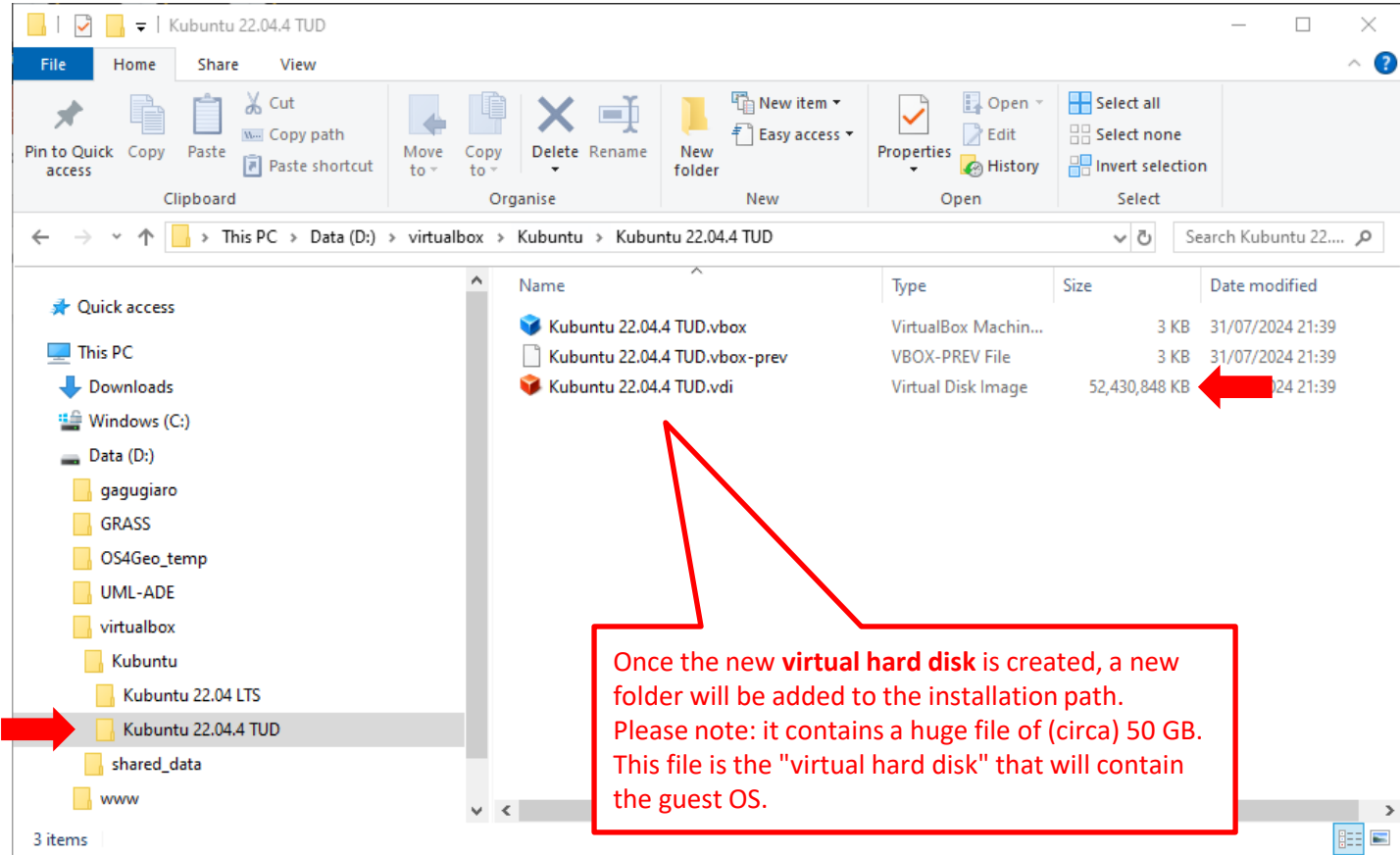
Machine Name and OS Type	
Machine Name	Kubuntu 22.04.4 TUD
Machine Folder	D:/virtualbox/Kubuntu/Kubuntu 22.04.4 TUD
ISO Image	D:/gagugiaro/Downloads/kubuntu-22.04.4-desktop-amd64.iso
Guest OS Type	Ubuntu (64-bit)
Skip Unattended Install	true
Hardware	
Base Memory	4096
Processor(s)	2
EFI Enable	false
Disk	
Disk Size	50.00 GB
Pre-allocate Full Size	true

The creation process of the new **virtual hard disk** starts.

# 3a) Create a Virtual Machine



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- **Create a VM**
- Install Kubuntu
- Initial configuration
- Software removal

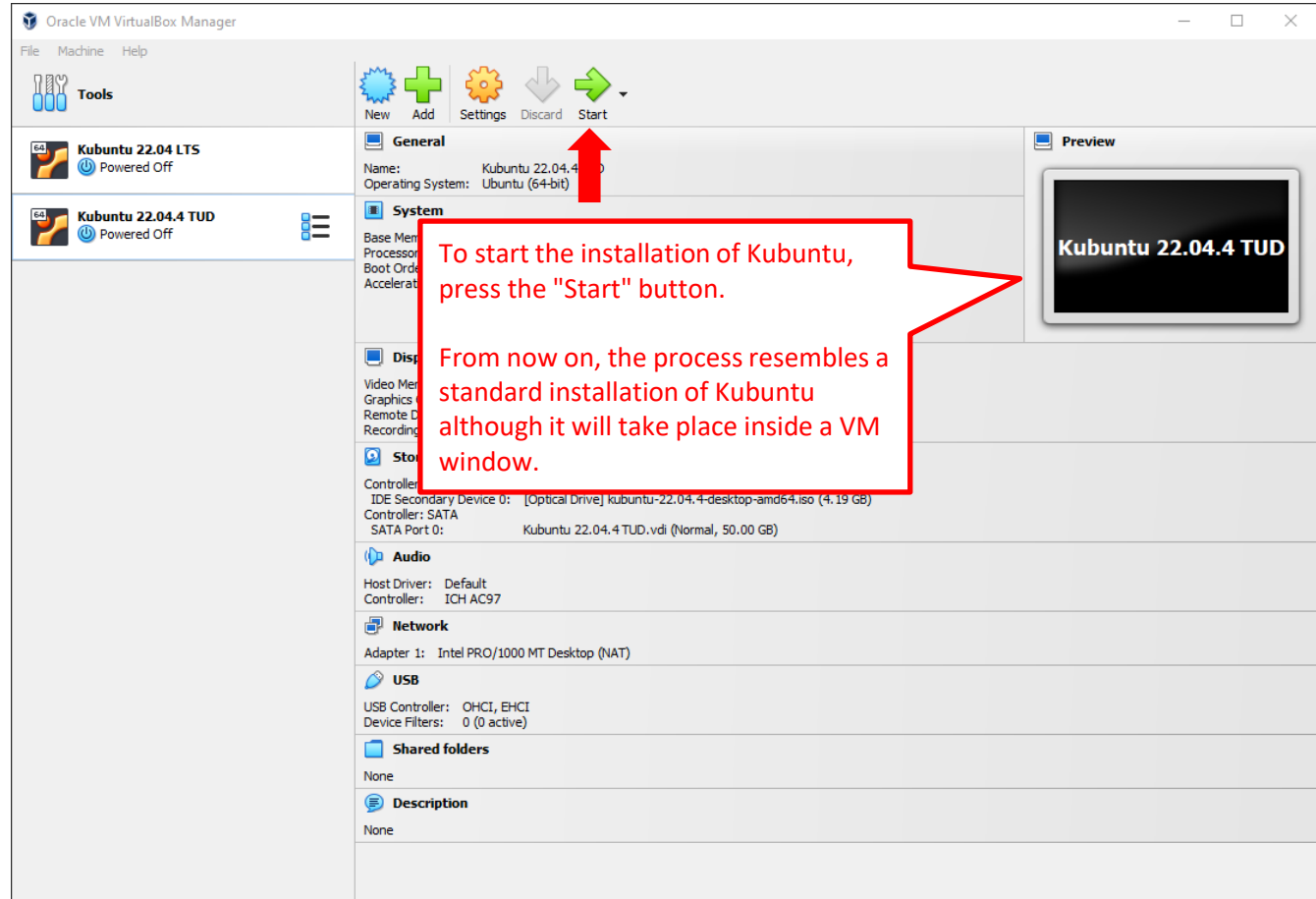


## 3a) Create a Virtual Machine



### VirtualBox overview Kubuntu overview Stepwise setup

- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



Oracle VM VirtualBox Manager

File Machine Help

Tools

New Add Settings Discard Start

**Kubuntu 22.04 LTS**  
Powered Off

**Kubuntu 22.04.4 TUD**  
Powered Off

**General**  
Name: Kubuntu 22.04.4 TUD  
Operating System: Ubuntu (64-bit)

**System**  
Base Memory: 2048 MB  
Processor: 2  
Boot Order: 1: Hard Disk, 2: Optical Drive, 3: Floppy  
Acceleration: Enabled

**Display**  
Video Memory: 128 MB  
Graphics Controller: VBoxSVGA  
Remote Display: Disabled  
Recording: Disabled

**Storage**  
Controller: SATA  
IDE Secondary Device 0: [Optical Drive] kubuntu-22.04.4-desktop-amd64.iso (4.19 GB)  
Controller: SATA  
SATA Port 0: Kubuntu 22.04.4 TUD.vdi (Normal, 50.00 GB)

**Audio**  
Host Driver: Default  
Controller: ICH AC97

**Network**  
Adapter 1: Intel PRO/1000 MT Desktop (NAT)

**USB**  
USB Controller: OHCI, EHCI  
Device Filters: 0 (0 active)

**Shared folders**  
None

**Description**  
None

**Preview**  
Kubuntu 22.04.4 TUD

To start the installation of Kubuntu, press the "Start" button.

From now on, the process resembles a standard installation of Kubuntu although it will take place inside a VM window.

## 3b) Install Kubuntu

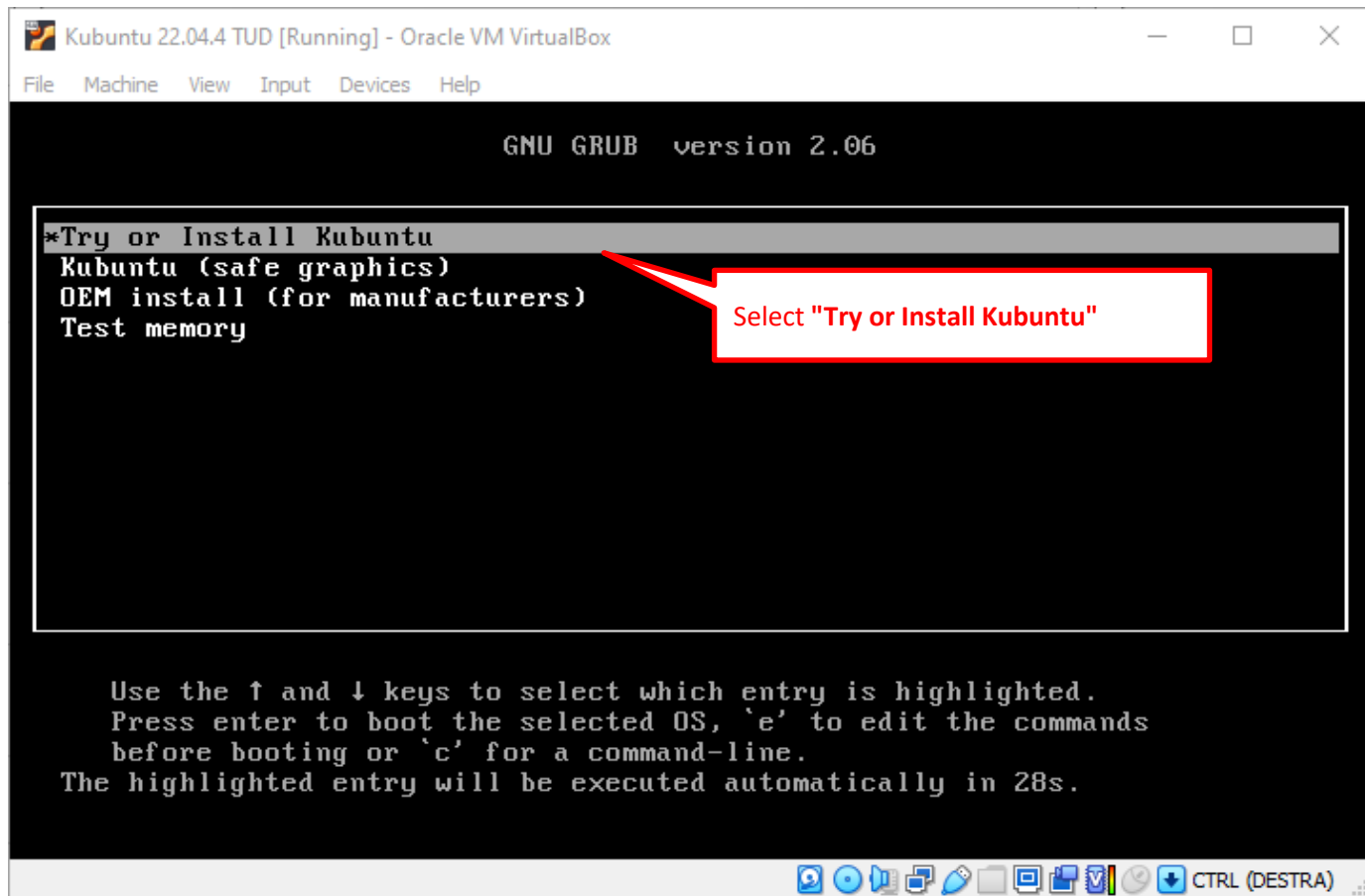


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



## 3b) Install Kubuntu



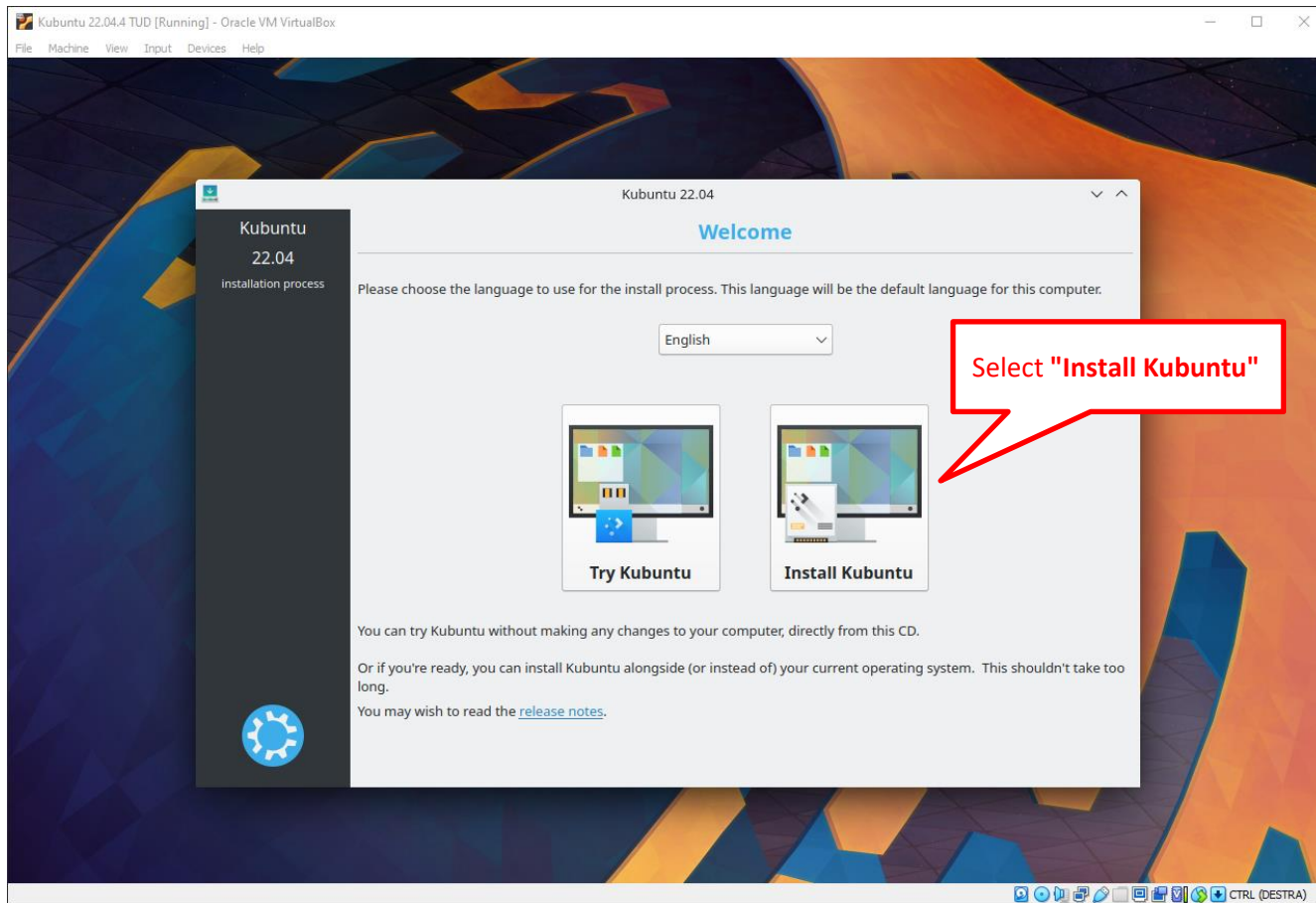
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

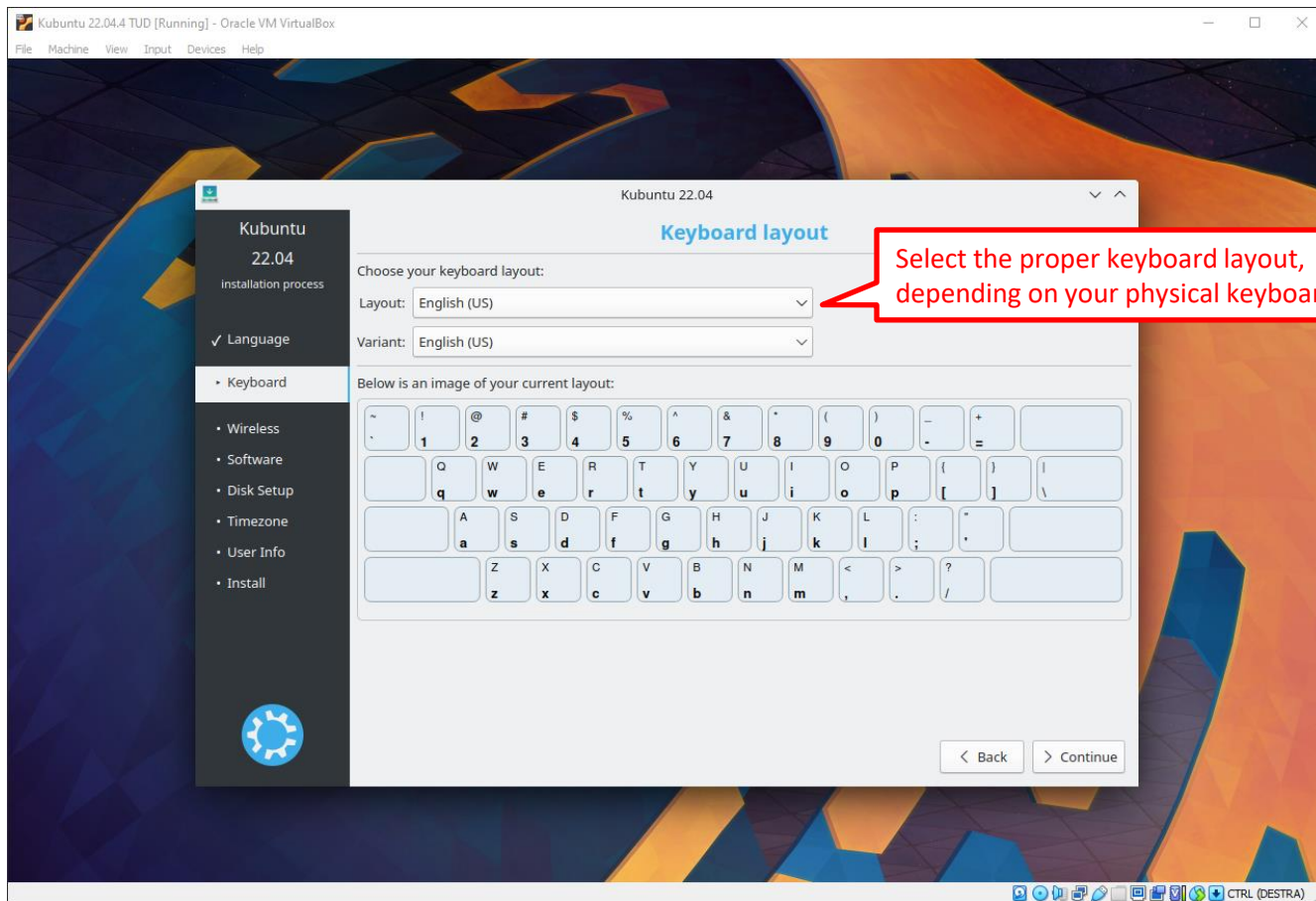
Software removal



# 3b) Install Kubuntu



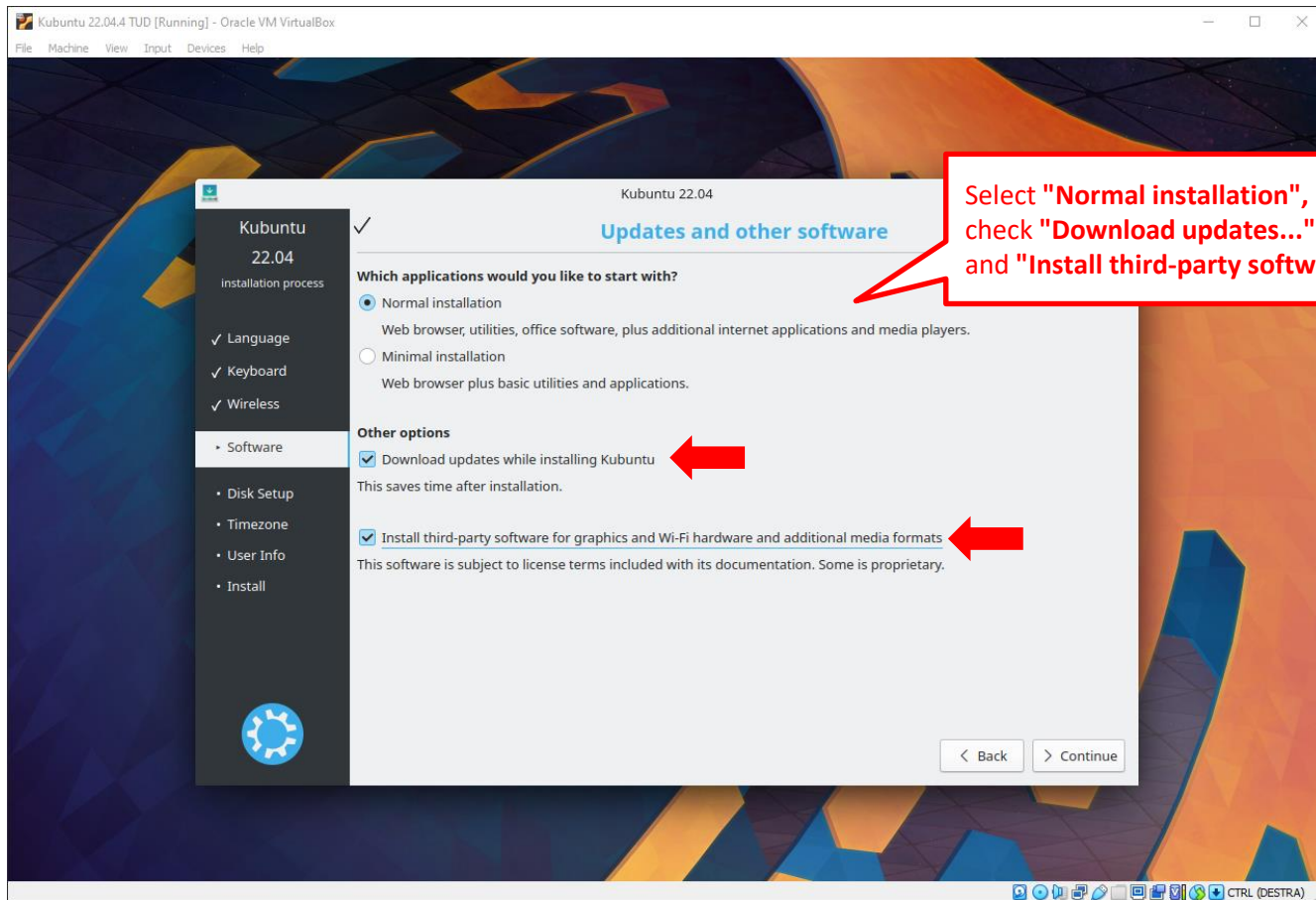
- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal





## 3b) Install Kubuntu

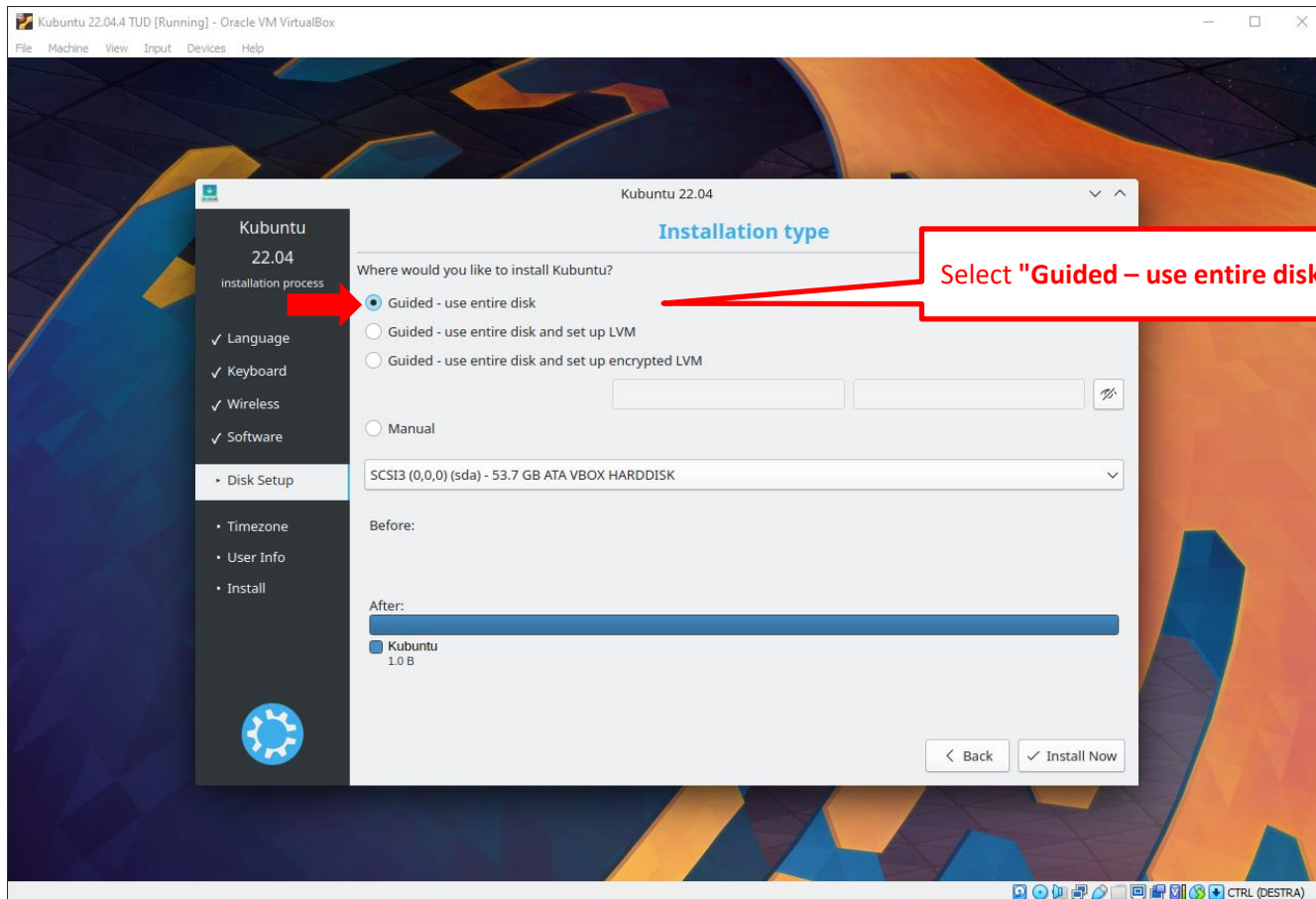


VirtualBox overview

Kubuntu overview

### Stepwise setup

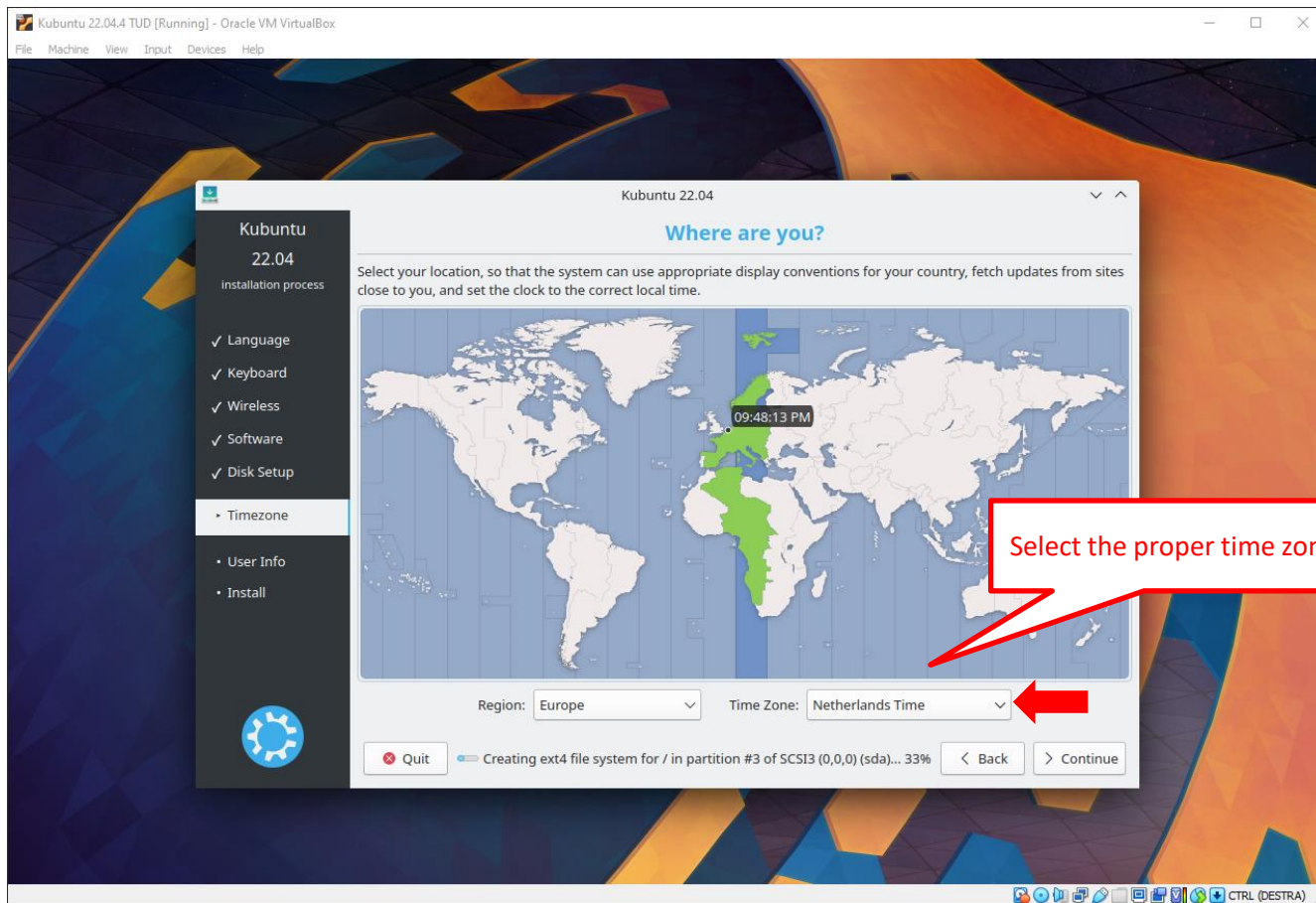
- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



# 3b) Install Kubuntu



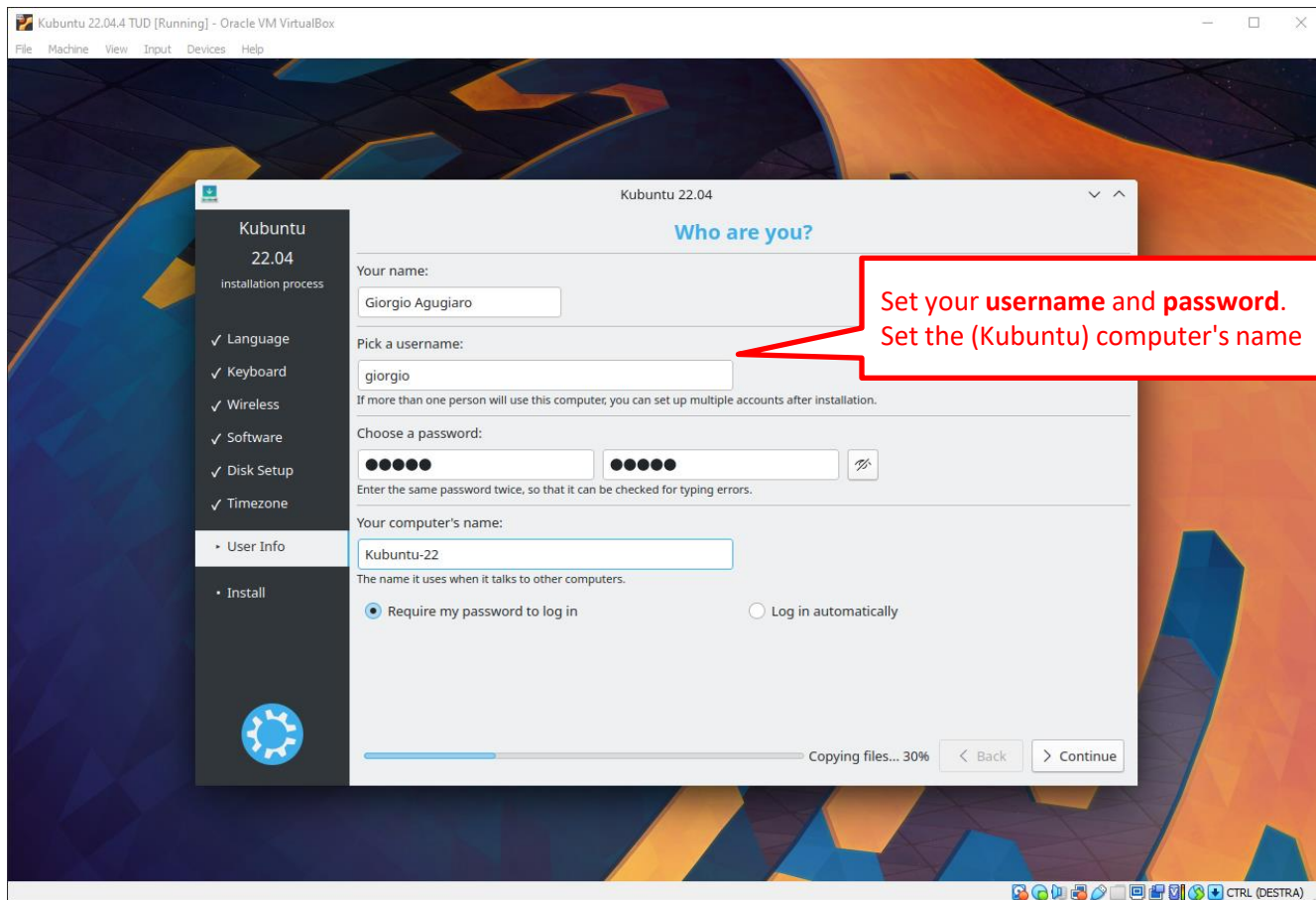
- VirtualBox overview  
 Kubuntu overview  
**Stepwise setup**
- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
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Kubuntu 22.04 TUD [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Kubuntu 22.04

Who are you?

Your name: Giorgio Agugiario

Pick a username: giorgio

If more than one person will use this computer, you can set up multiple accounts after installation.

Choose a password:

Enter the same password twice, so that it can be checked for typing errors.

Your computer's name: Kubuntu-22

The name it uses when it talks to other computers.

Require my password to log in  Log in automatically

Copying files... 30% < Back > Continue

Set your **username** and **password**.  
Set the (Kubuntu) computer's name

## 3b) Install Kubuntu



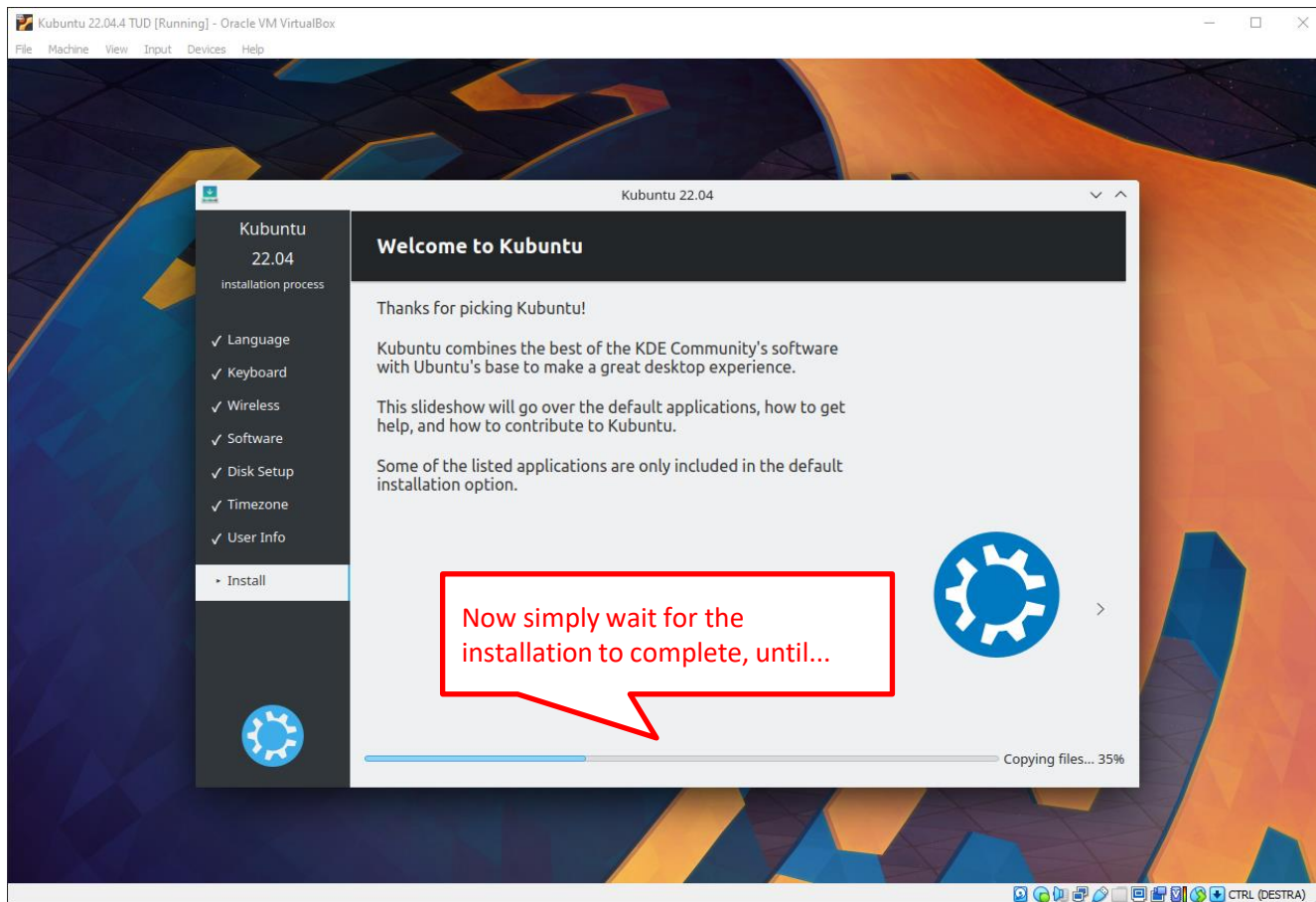
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



## 3b) Install Kubuntu



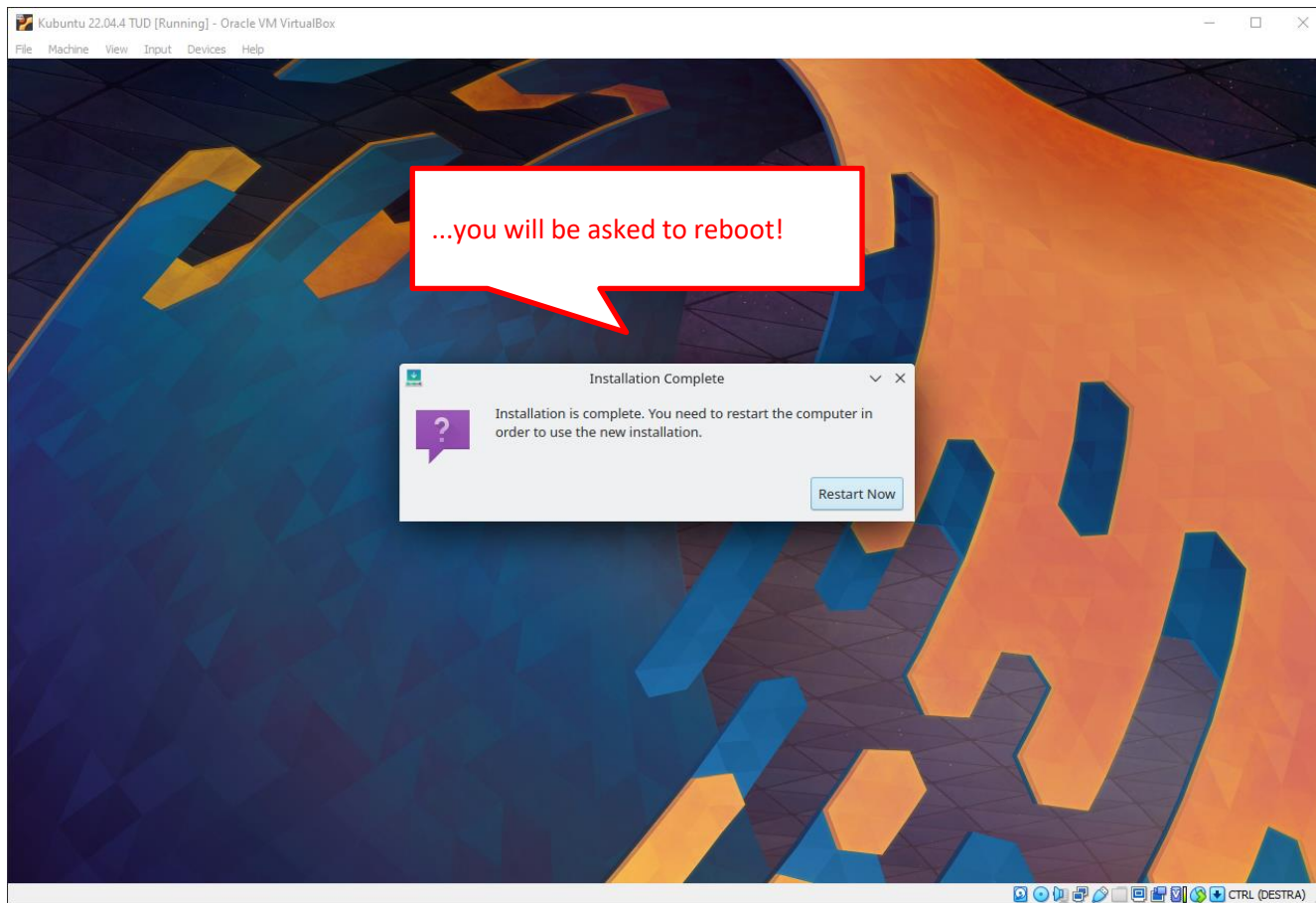
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



## 3b) Install Kubuntu

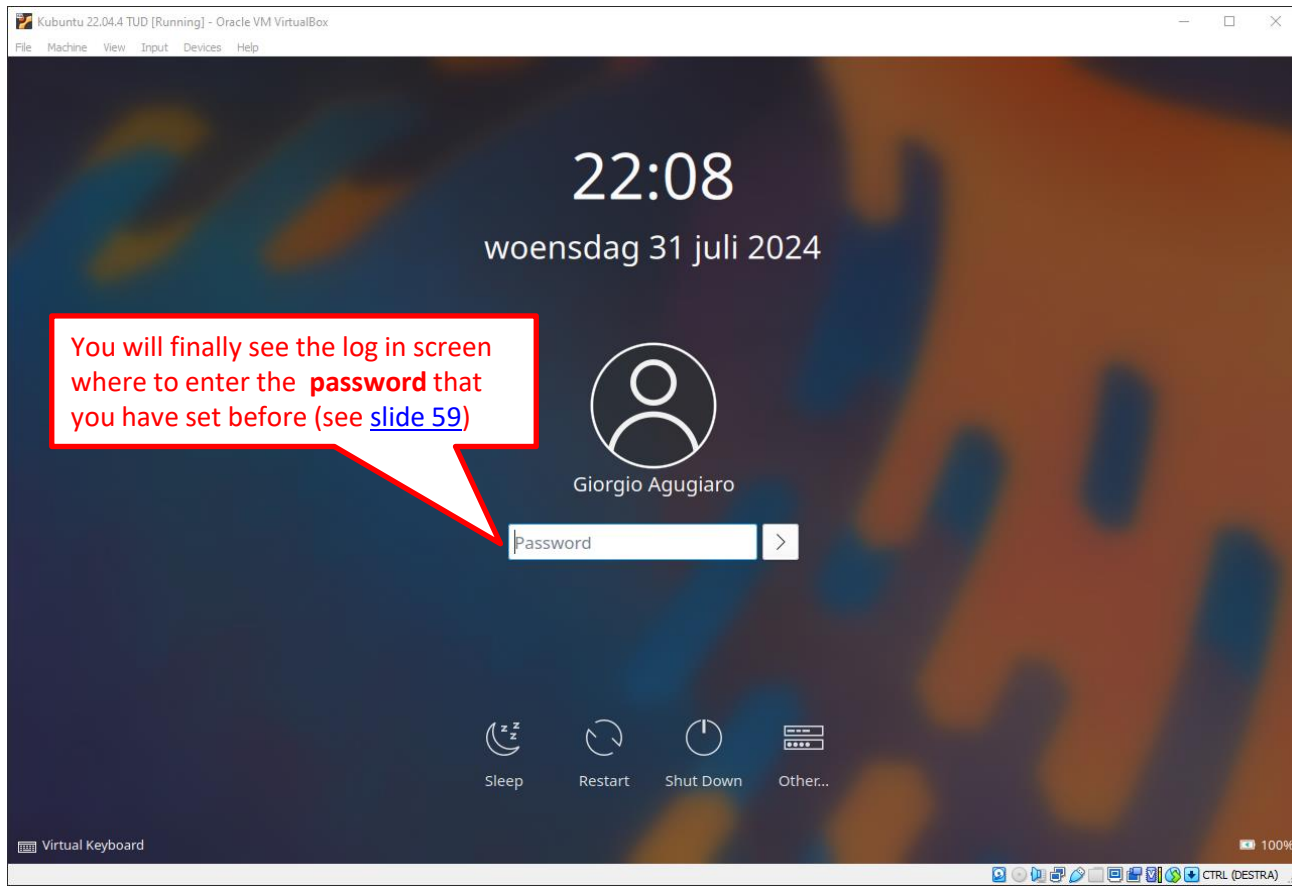


VirtualBox overview

Kubuntu overview

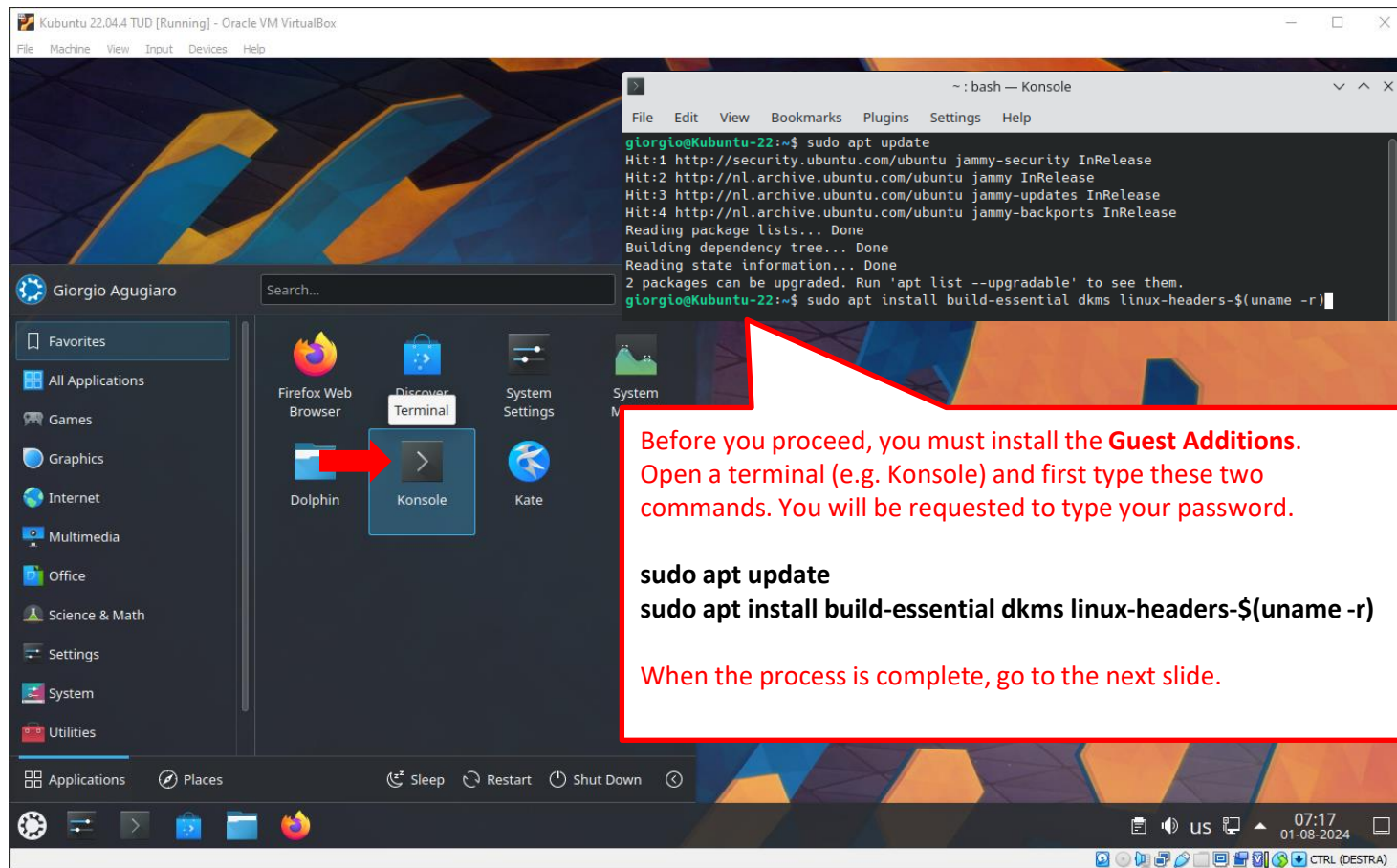
### Stepwise setup

- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



# 3b) Install Kubuntu

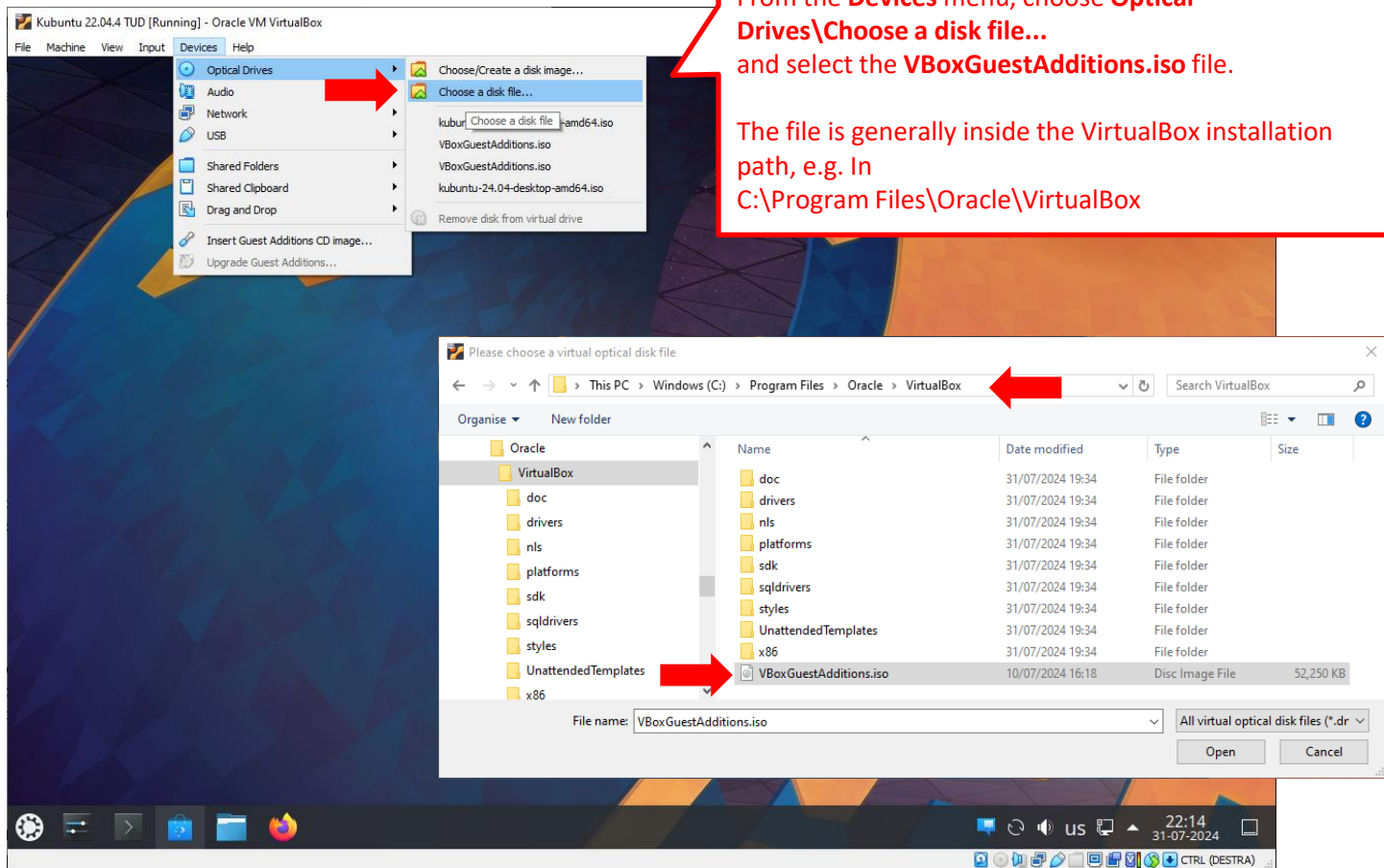
- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



The screenshot shows the Oracle VM VirtualBox interface with the 'Devices' menu open. A red arrow points to the 'Optical Drives' option, which has a sub-menu open showing 'Choose a disk file...'. Another red arrow points to the 'VBoxGuestAdditions.iso' file in the list.

A red callout box contains the following text:

From the **Devices** menu, choose **Optical Drives\Choose a disk file...** and select the **VBoxGuestAdditions.iso** file.

The file is generally inside the VirtualBox installation path, e.g. In **C:\Program Files\Oracle\VirtualBox**

The file selection dialog shows the path: This PC > Windows (C:) > Program Files > Oracle > VirtualBox. A red arrow points to this path. The file 'VBoxGuestAdditions.iso' is selected in the list.

Name	Date modified	Type	Size
doc	31/07/2024 19:34	File folder	
drivers	31/07/2024 19:34	File folder	
nls	31/07/2024 19:34	File folder	
platforms	31/07/2024 19:34	File folder	
sdk	31/07/2024 19:34	File folder	
sqldrivers	31/07/2024 19:34	File folder	
styles	31/07/2024 19:34	File folder	
UnattendedTemplates	31/07/2024 19:34	File folder	
x86	31/07/2024 19:34	File folder	
VBoxGuestAdditions.iso	10/07/2024 16:18	Disc Image File	52,250 KB

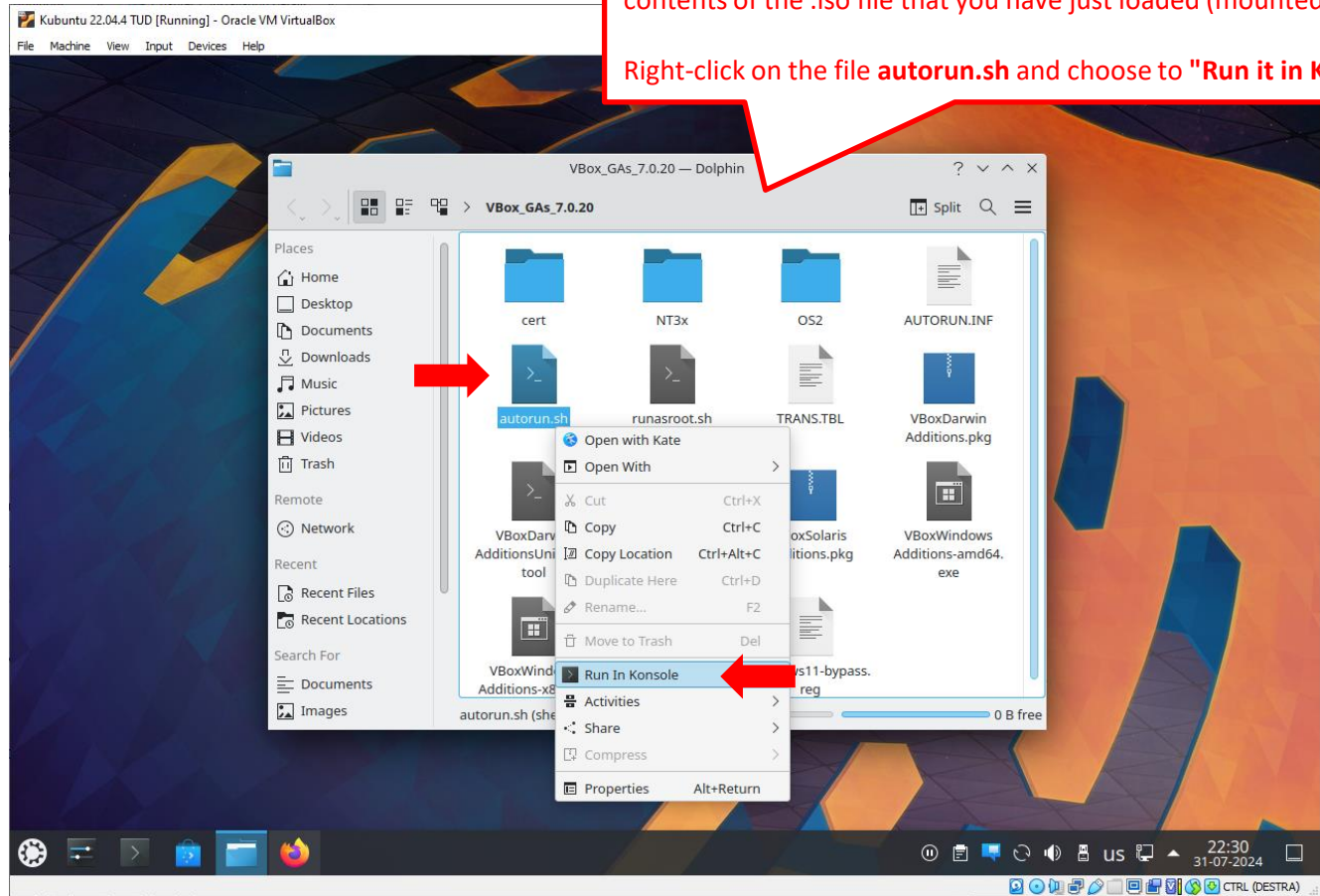


# 3b) Install Kubuntu



In Kubuntu, a Dolphin window will automatically open, showing the contents of the .iso file that you have just loaded (mounted).

Right-click on the file **autorun.sh** and choose to "Run it in Konsole"



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal

## 3b) Install Kubuntu

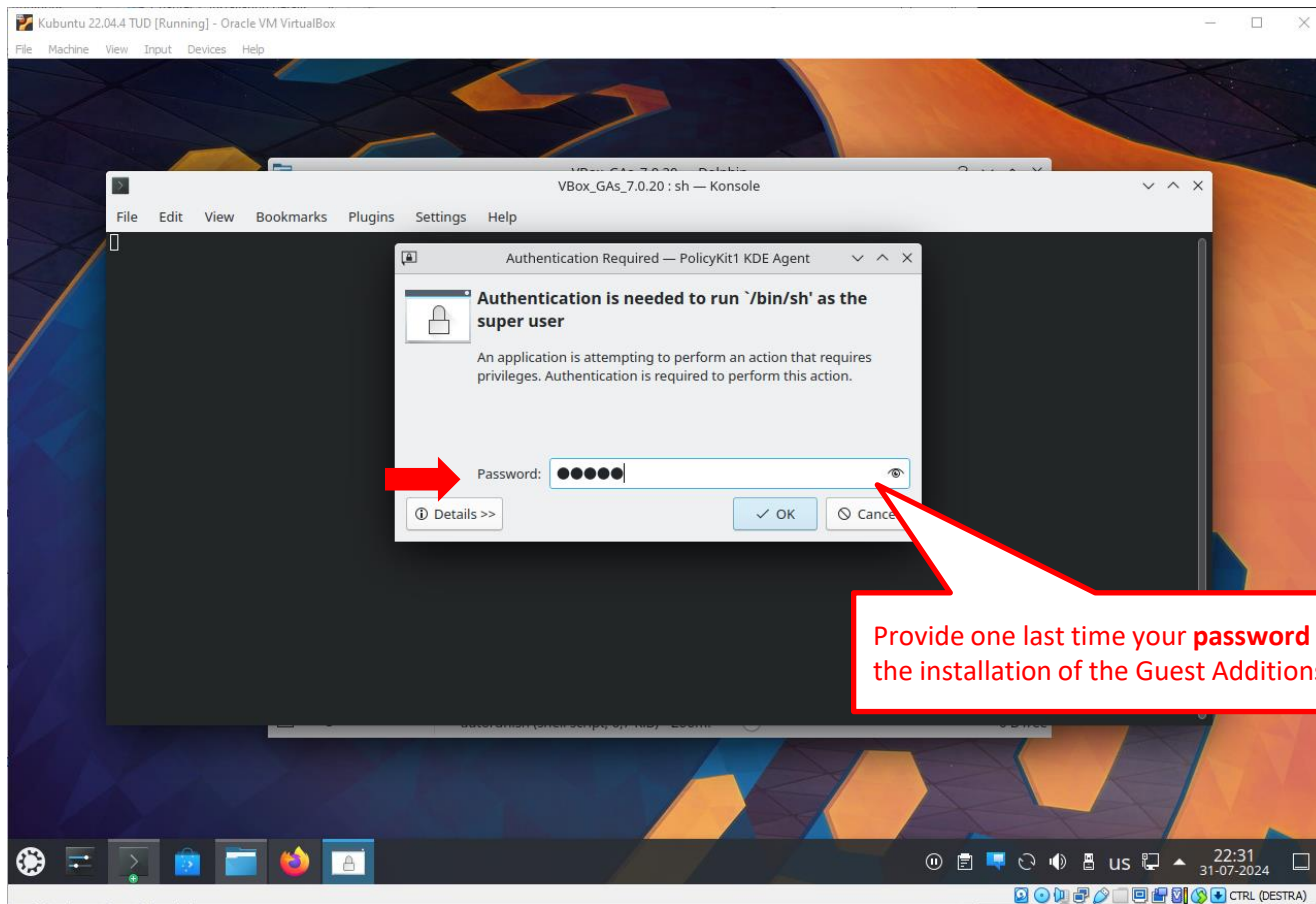


VirtualBox overview

Kubuntu overview

### Stepwise setup

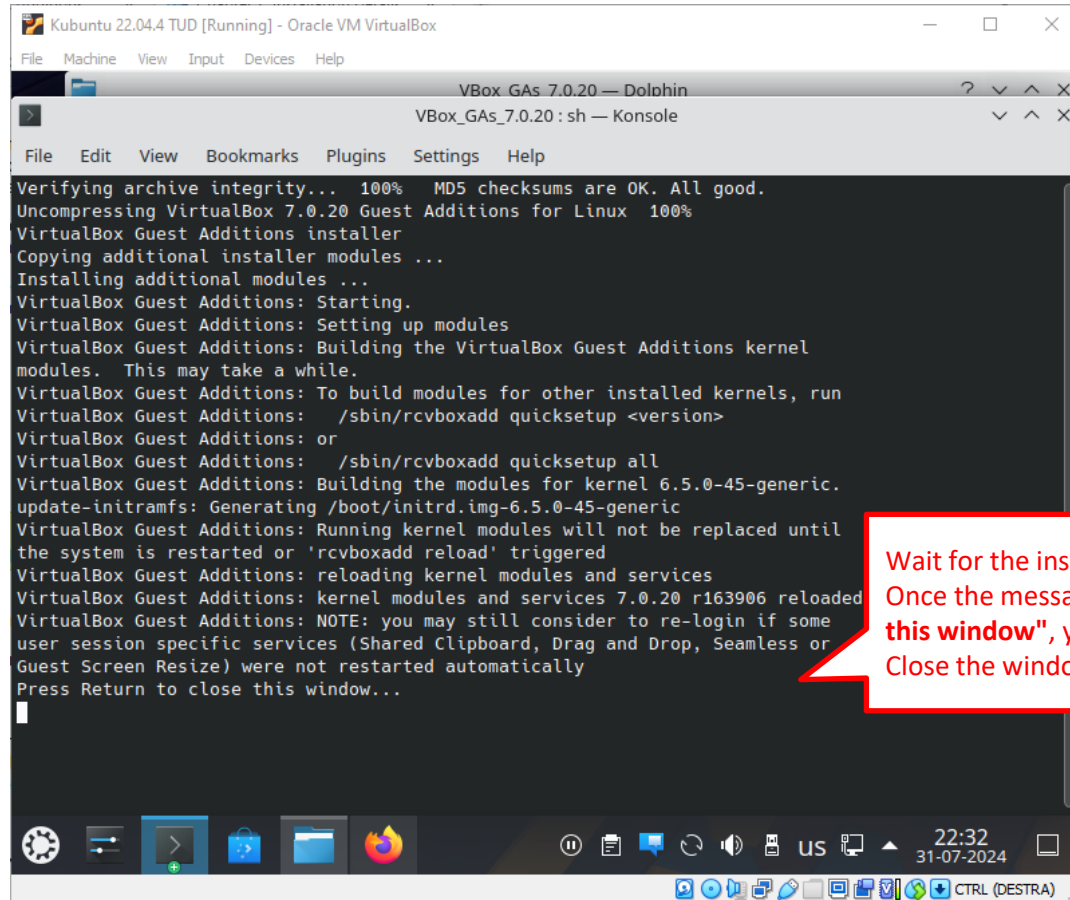
- Download software
  - Install VirtualBox
  - Create a VM
  - **Install Kubuntu**
  - Initial configuration
- Software removal



# 3b) Install Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration
- Software removal



```

Kubuntu 22.04.4 TUD [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
VBox_GAs_7.0.20 — Dolphin
VBox_GAs_7.0.20: sh — Konsole
File Edit View Bookmarks Plugins Settings Help
Verifying archive integrity... 100% MD5 checksums are OK. All good.
Uncompressing VirtualBox 7.0.20 Guest Additions for Linux 100%
VirtualBox Guest Additions installer
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Setting up modules
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel 6.5.0-45-generic.
update-initramfs: Generating /boot/initrd.img-6.5.0-45-generic
VirtualBox Guest Additions: Running kernel modules will not be replaced until
the system is restarted or 'rcvboxadd reload' triggered
VirtualBox Guest Additions: reloading kernel modules and services
VirtualBox Guest Additions: kernel modules and services 7.0.20 r163906 reloaded
VirtualBox Guest Additions: NOTE: you may still consider to re-login if some
user session specific services (Shared Clipboard, Drag and Drop, Seamless or
Guest Screen Resize) were not restarted automatically
Press Return to close this window...
  
```

Wait for the installation process to finish. Once the message **"Press return to close this window"**, you can proceed. Close the window.

## 3b) Install Kubuntu



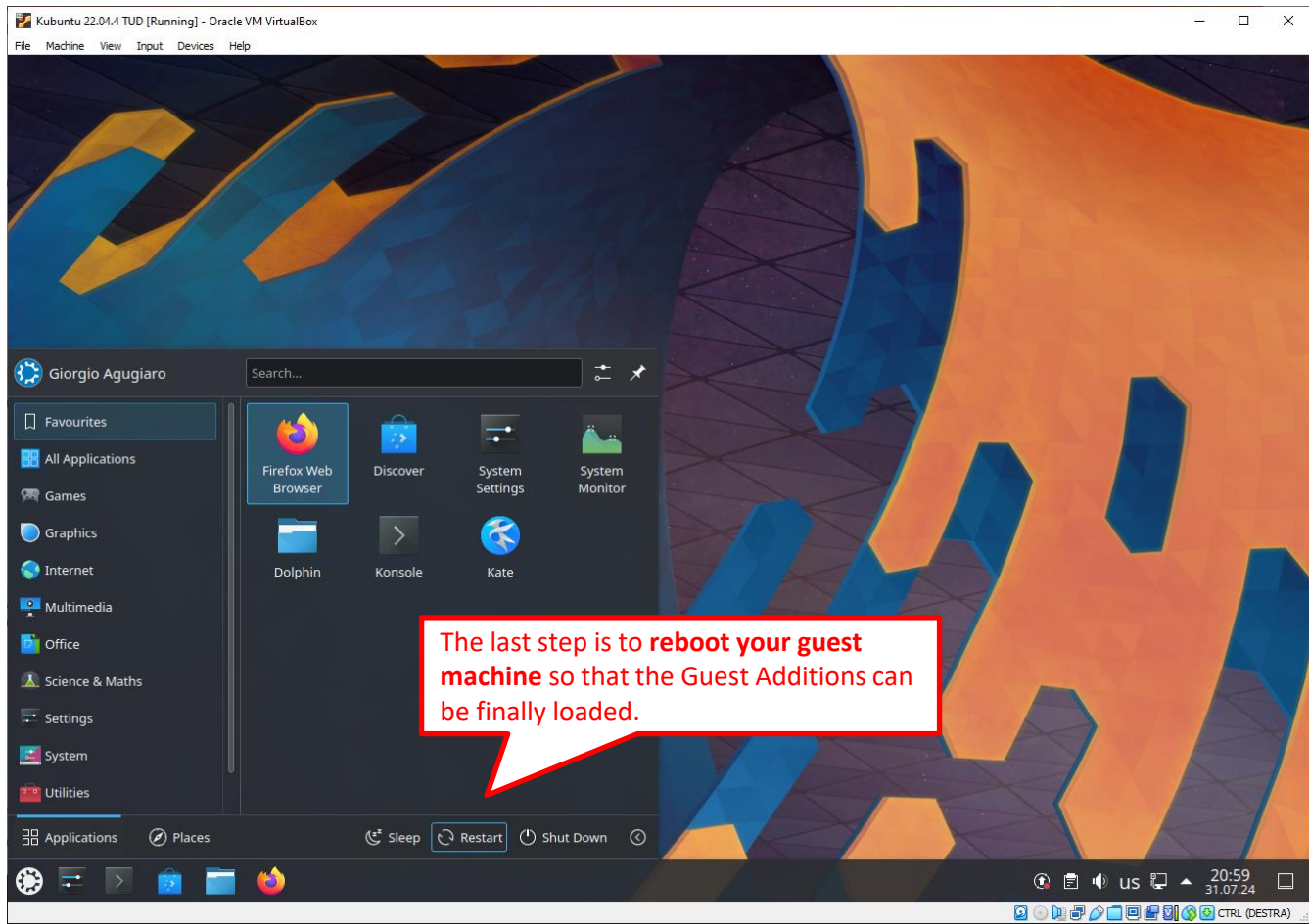
VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- **Install Kubuntu**
- Initial configuration

Software removal



# Kubuntu on VirtualBox on Windows

## Procedure overview:

- 1) Download the software (VirtualBox installer, Kubuntu, etc.)
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu
- 4) Initial configuration of Kubuntu**

Done! 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**

Software removal

## 4) Initial configuration of Kubuntu

Once Kubuntu has been installed, you can log in using your credentials.

It is now time to carry out the first set-up operations from within Kubuntu, such as:

- Installing updates
- Checking that the Guest Additions have been installed correctly
- Changing (if necessary) Kubuntu's display resolution
- Setting up (if necessary) date, time, and time zone
- Adding (if desired) a new language for the GUI
- Adding (if desired) a new keyboard layout
- Setting up a shared folder to exchange files between the host and the guest machines
- Installing some useful packages
- Additional custom settings

VirtualBox overview

Kubuntu overview

### Stepwise setup

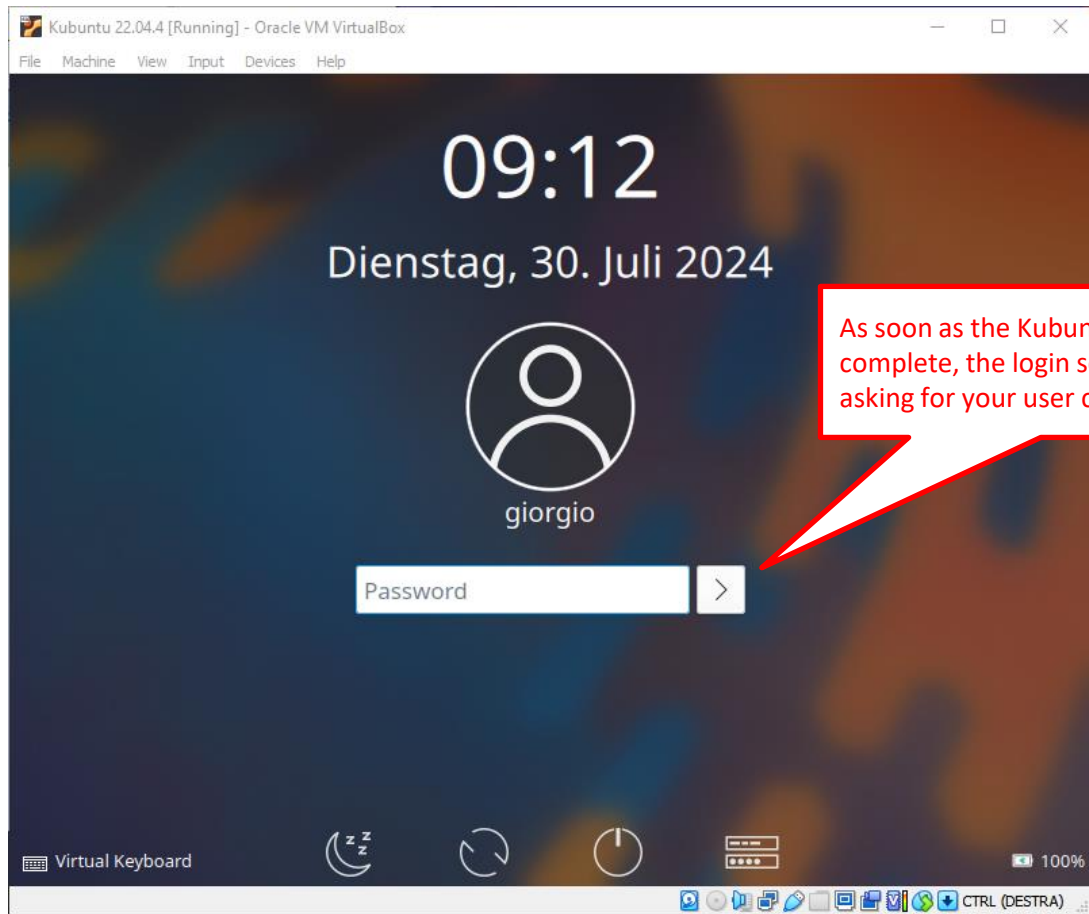
- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**

Software removal

## 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**
- Software removal



## 4) Initial configuration of Kubuntu

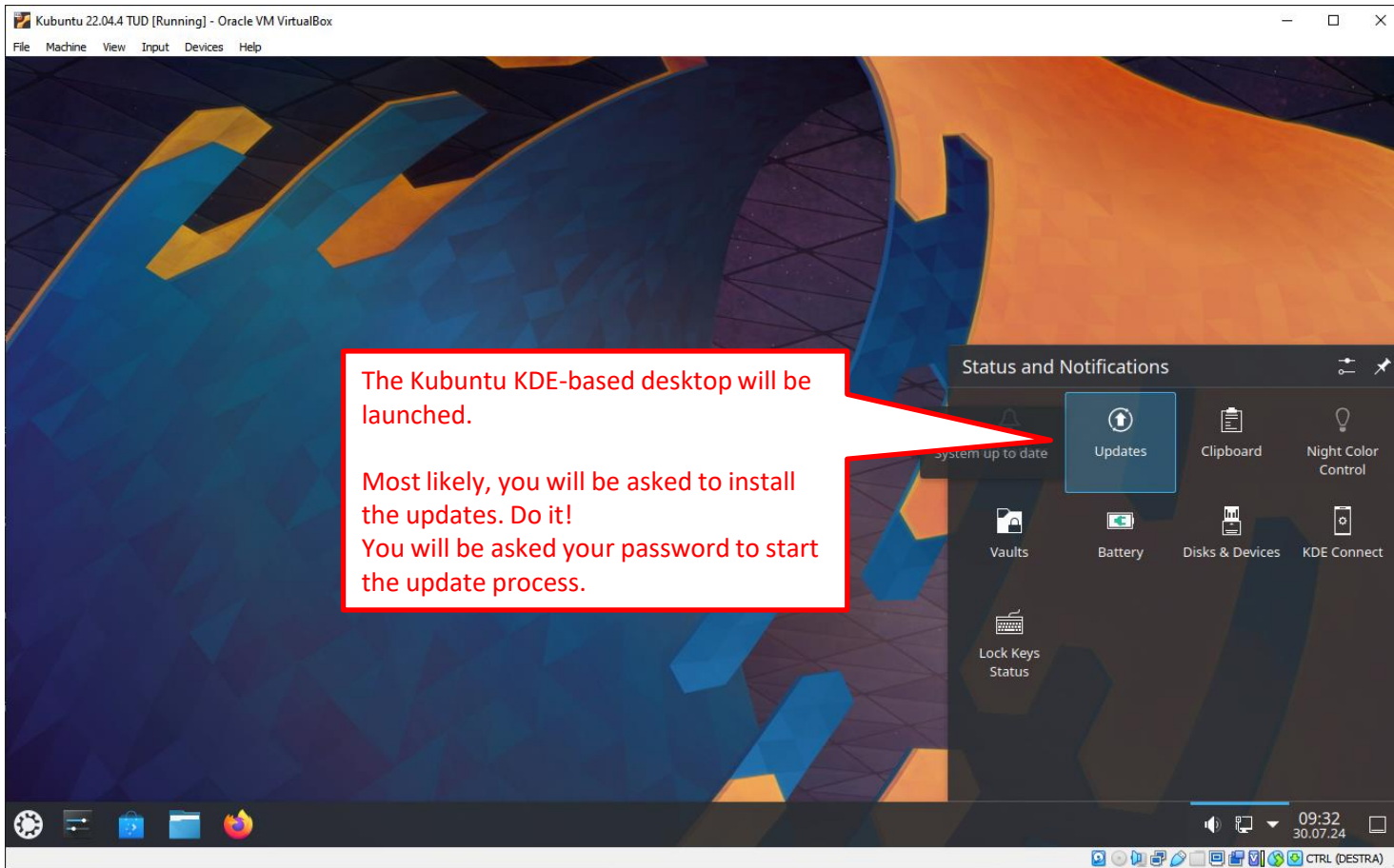


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**
- Software removal

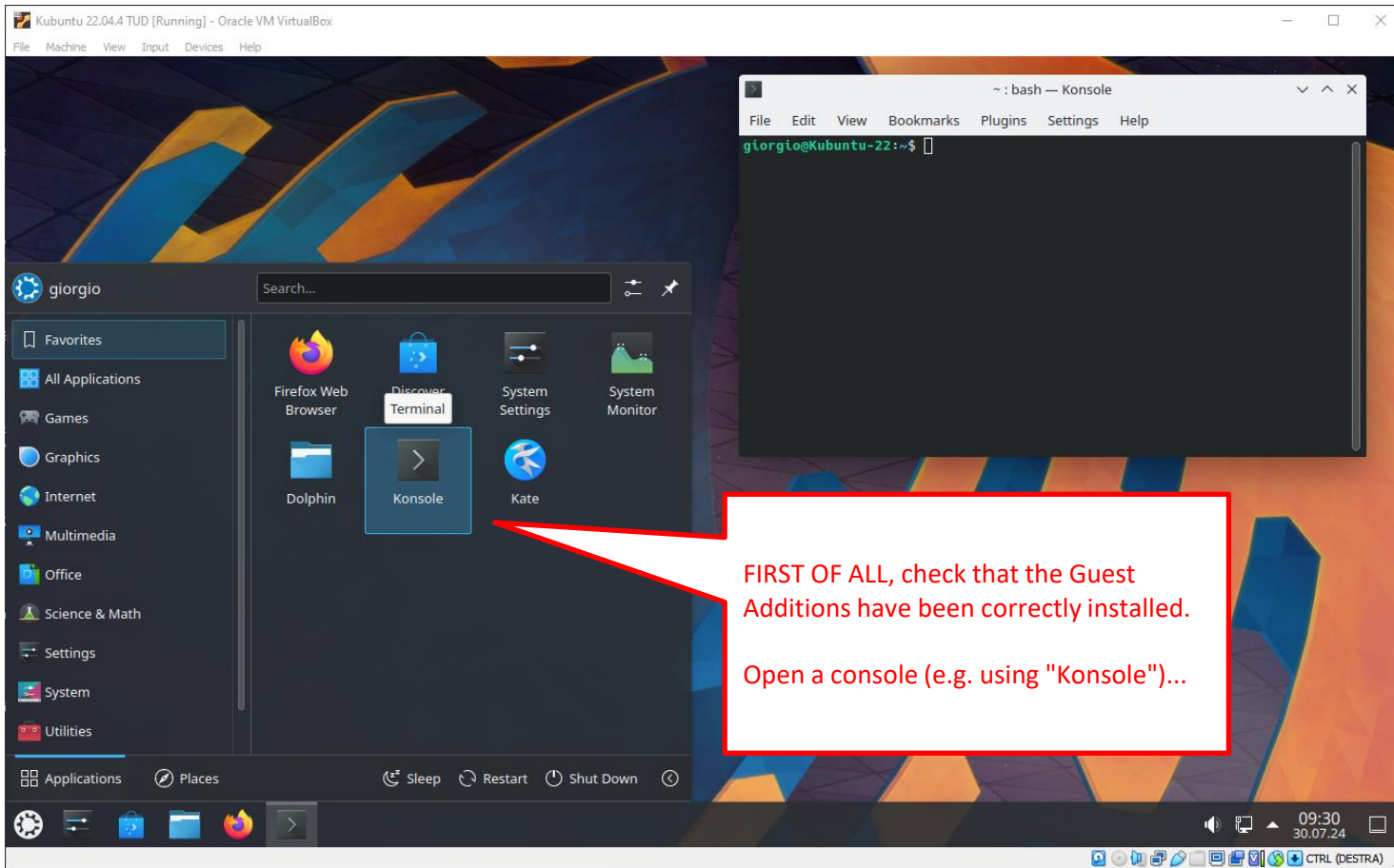




## 4) Initial configuration of Kubuntu



- VirtualBox overview  
Kubuntu overview  
**Stepwise setup**
- Download software
  - Install VirtualBox
  - Create a VM
  - Install Kubuntu
  - **Initial configuration**
- Software removal



Kubuntu 22.04.4 TUD [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

giorgio

Search...

Firefox Web Browser Discover Terminal System Settings System Monitor Dolphin Konsole Kate

Applications Places Sleep Restart Shut Down

09:30 30.07.24 CTRL (DESTRA)

~: bash — Konsole

File Edit View Bookmarks Plugins Settings Help

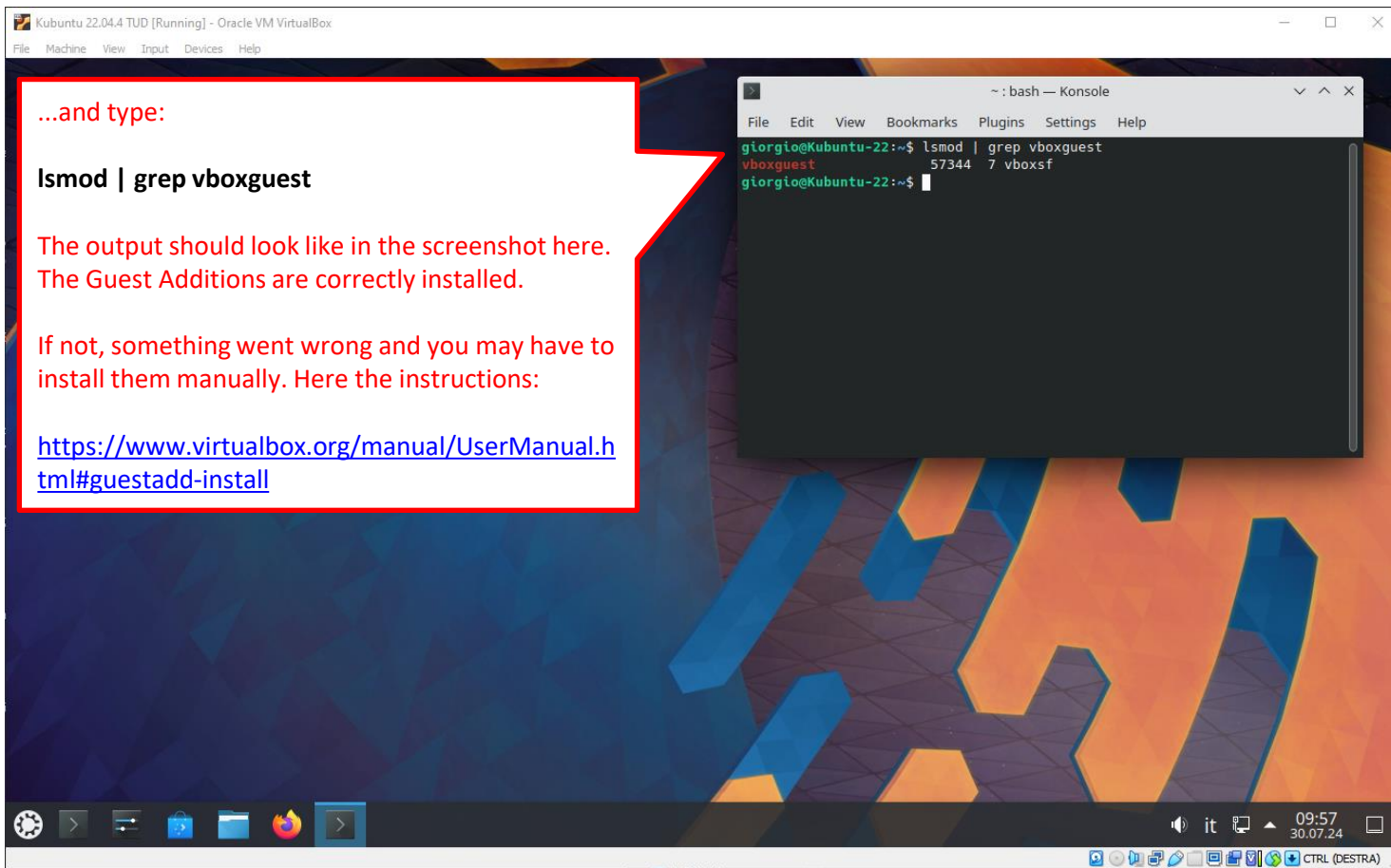
giorgio@Kubuntu-22:~\$

FIRST OF ALL, check that the Guest Additions have been correctly installed.  
Open a console (e.g. using "Konsole")...

# 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
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- Create a VM
- Install Kubuntu
- **Initial configuration**
- Software removal



**...and type:**

**lsmod | grep vboxguest**

The output should look like in the screenshot here.  
The Guest Additions are correctly installed.

If not, something went wrong and you may have to install them manually. Here the instructions:

<https://www.virtualbox.org/manual/UserManual.html#guestadd-install>

```

~: bash — Konsole
File Edit View Bookmarks Plugins Settings Help
giorgio@Kubuntu-22:~$ lsmod | grep vboxguest
vboxguest 57344 7 vboxsf
giorgio@Kubuntu-22:~$
    
```

## 4) Initial configuration of Kubuntu

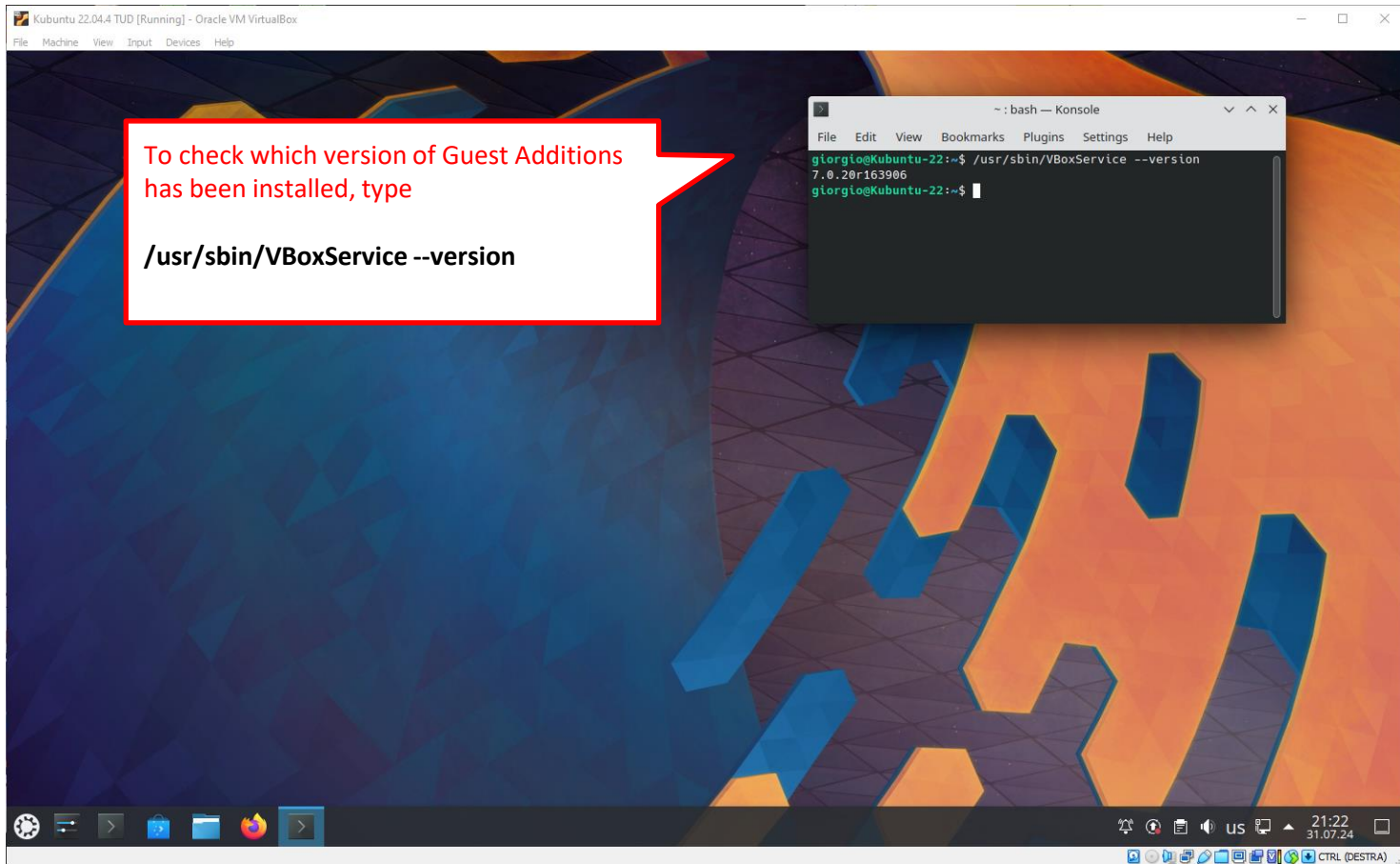


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
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- Install Kubuntu
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To check which version of Guest Additions has been installed, type

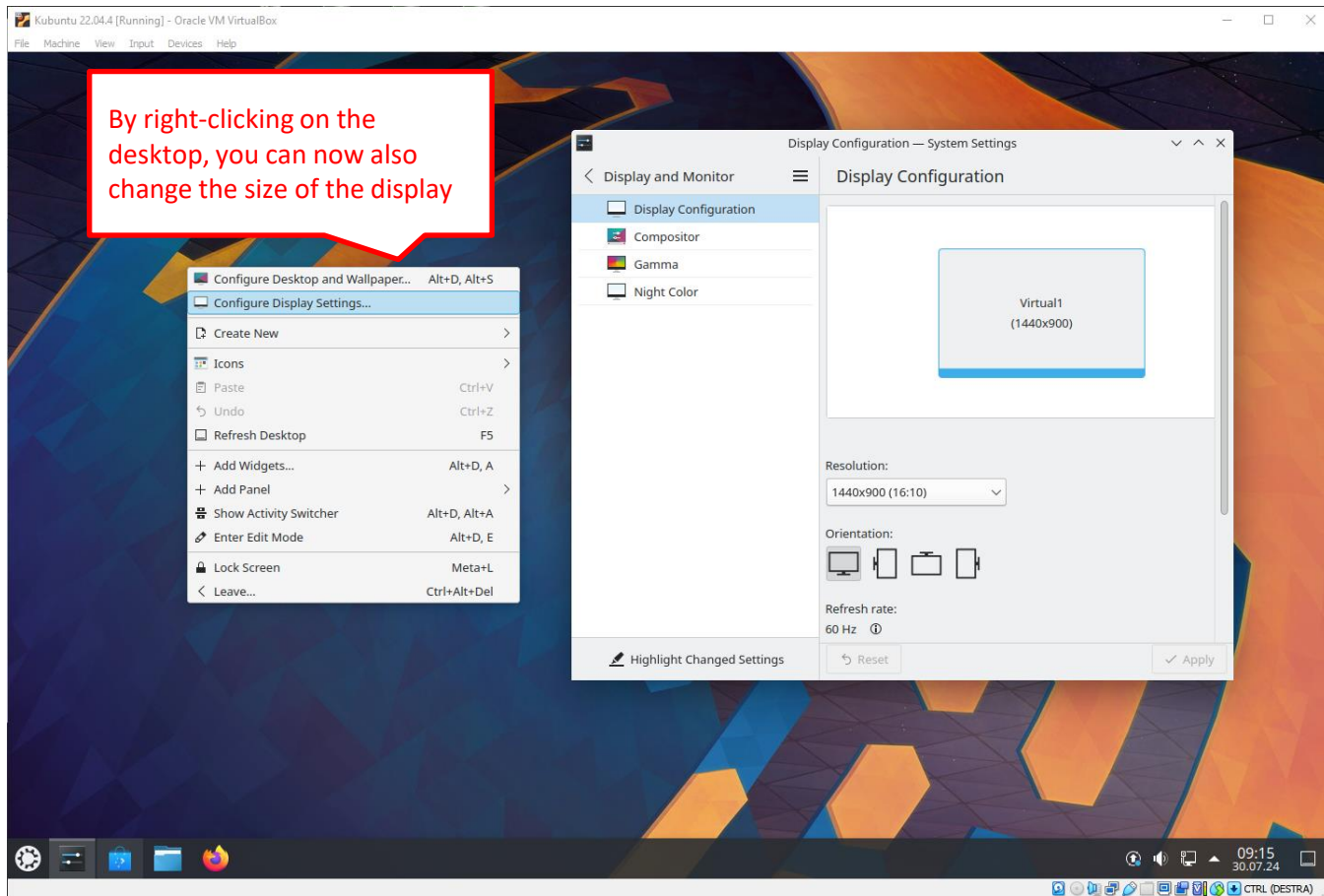
```
/usr/sbin/VBoxService --version
```

```
giorgio@Kubuntu-22:~$ /usr/sbin/VBoxService --version
7.0.20r163906
giorgio@Kubuntu-22:~$
```

# 4) Initial configuration of Kubuntu



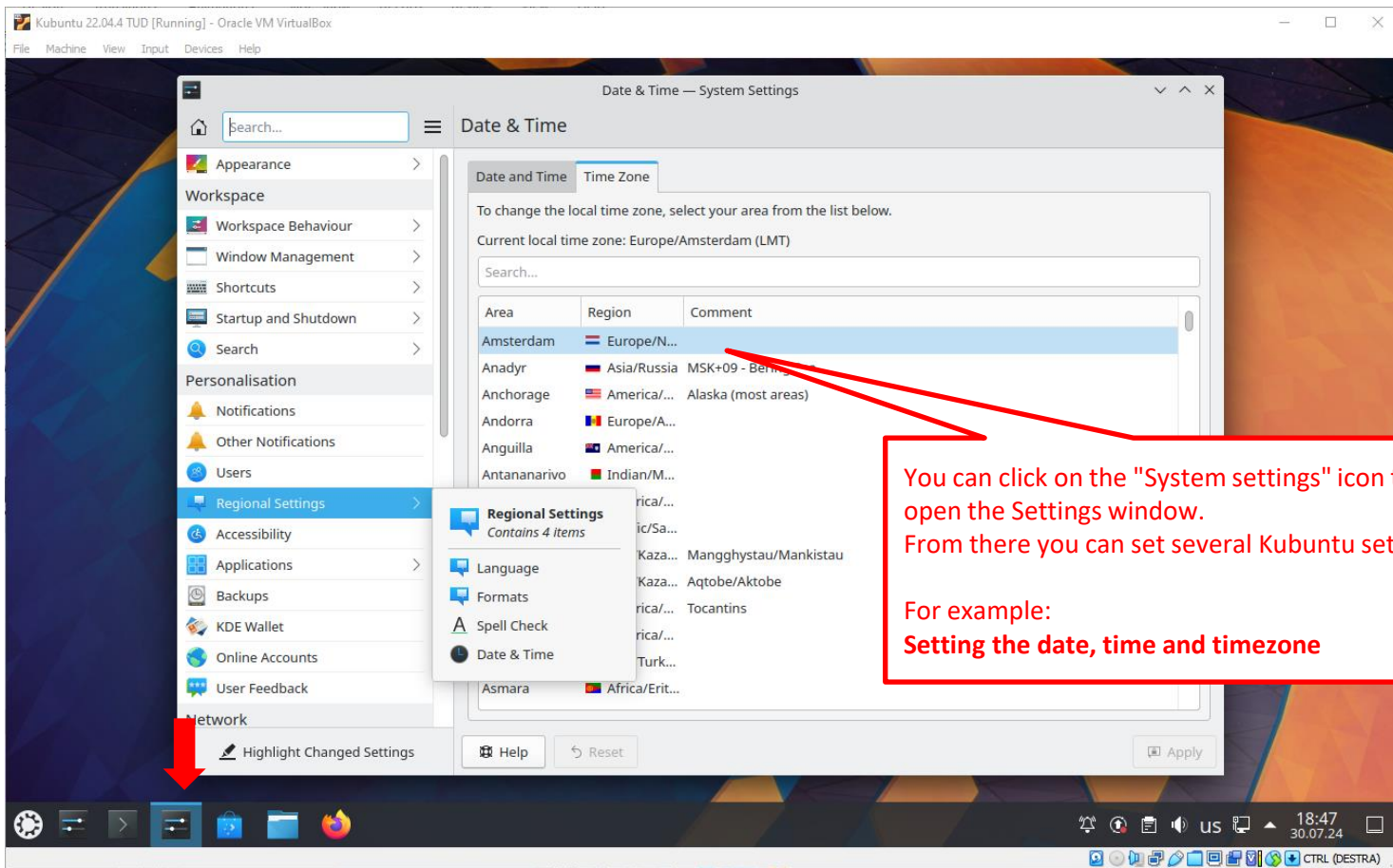
- VirtualBox overview  
 Kubuntu overview  
**Stepwise setup**
- Download software
  - Install VirtualBox
  - Create a VM
  - Install Kubuntu
  - **Initial configuration**
- Software removal



# 4) Initial configuration of Kubuntu



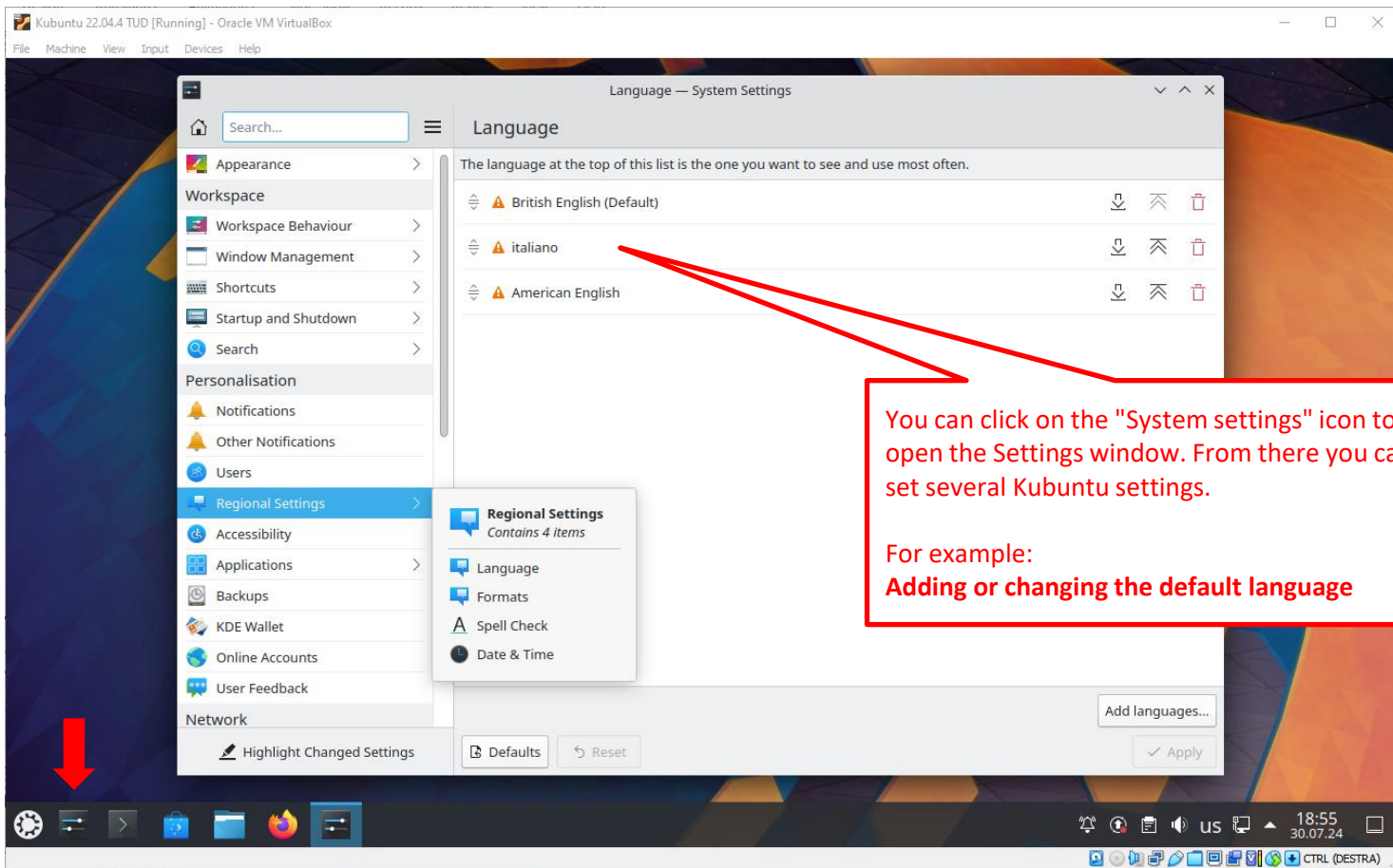
- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**
- Software removal



# 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
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- Install Kubuntu
- **Initial configuration**
- Software removal



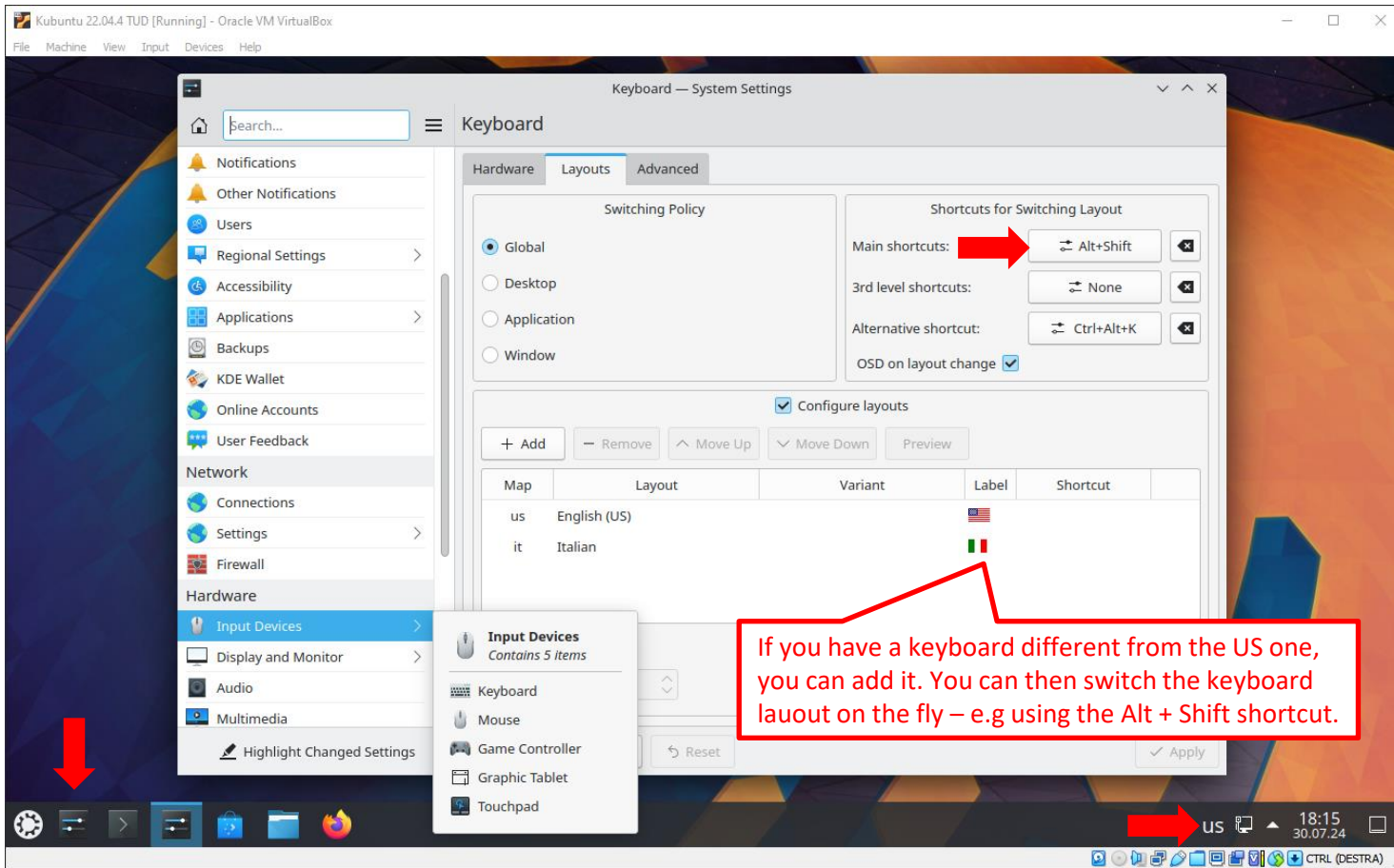
You can click on the "System settings" icon to open the Settings window. From there you can set several Kubuntu settings.

For example:  
**Adding or changing the default language**

# 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
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Keyboard — System Settings

Hardware | **Layouts** | Advanced

Switching Policy

- Global
- Desktop
- Application
- Window

Shortcuts for Switching Layout

Main shortcuts: **Alt+Shift**

3rd level shortcuts: None

Alternative shortcut: Ctrl+Alt+K

OSD on layout change

Configure layouts

+ Add - Remove ^ Move Up v Move Down Preview

Map	Layout	Variant	Label	Shortcut
us	English (US)			
it	Italian			

Input Devices  
Contains 5 items

- Keyboard
- Mouse
- Game Controller
- Graphic Tablet
- Touchpad

If you have a keyboard different from the US one, you can add it. You can then switch the keyboard layout on the fly – e.g using the Alt + Shift shortcut.

18:15 30.07.24 us

## 4) Initial configuration of Kubuntu

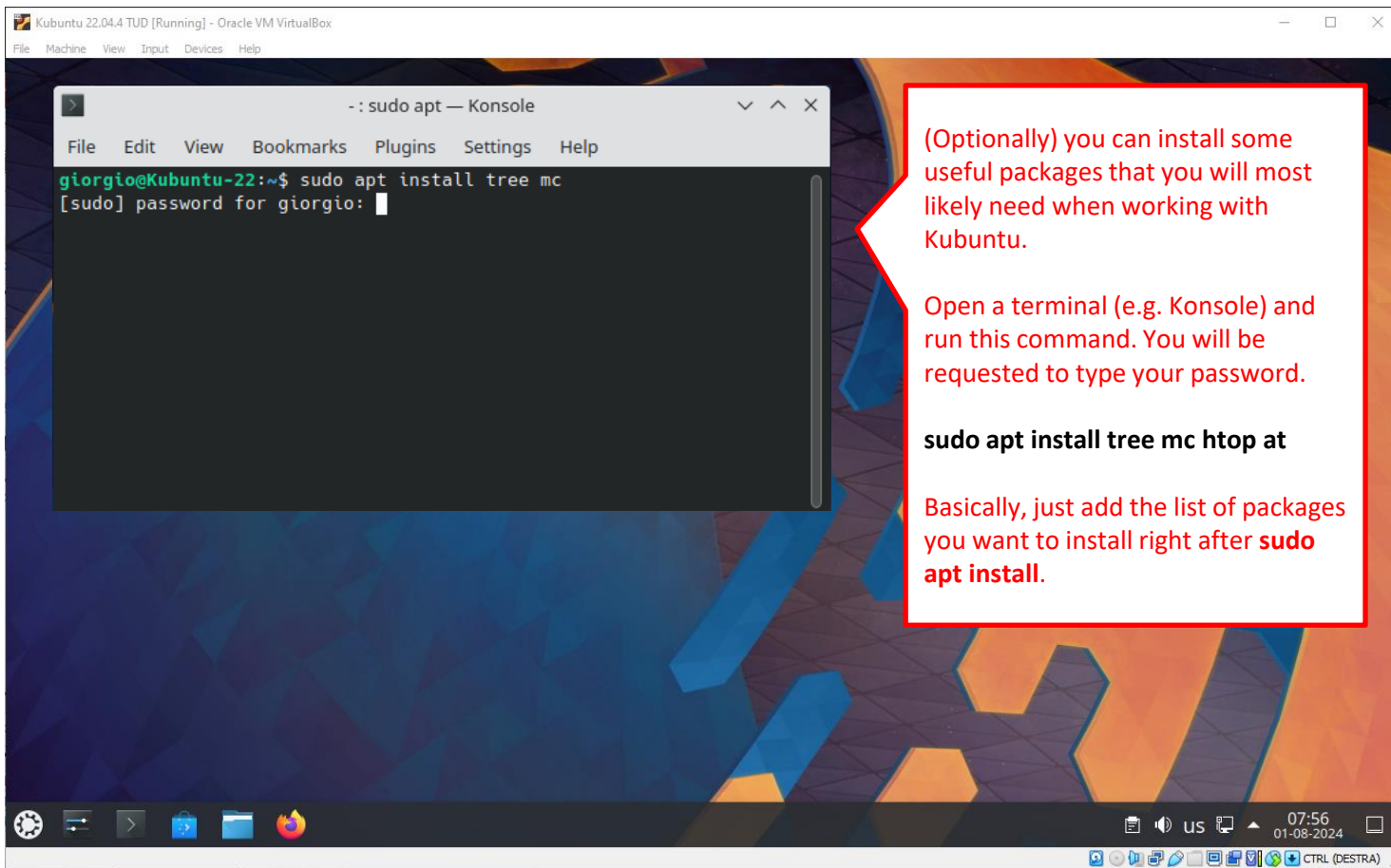


VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
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- **Initial configuration**
- Software removal



```
giorgio@Kubuntu-22:~$ sudo apt install tree mc
[sudo] password for giorgio:
```

(Optionally) you can install some useful packages that you will most likely need when working with Kubuntu.

Open a terminal (e.g. Konsole) and run this command. You will be requested to type your password.

**sudo apt install tree mc htop at**

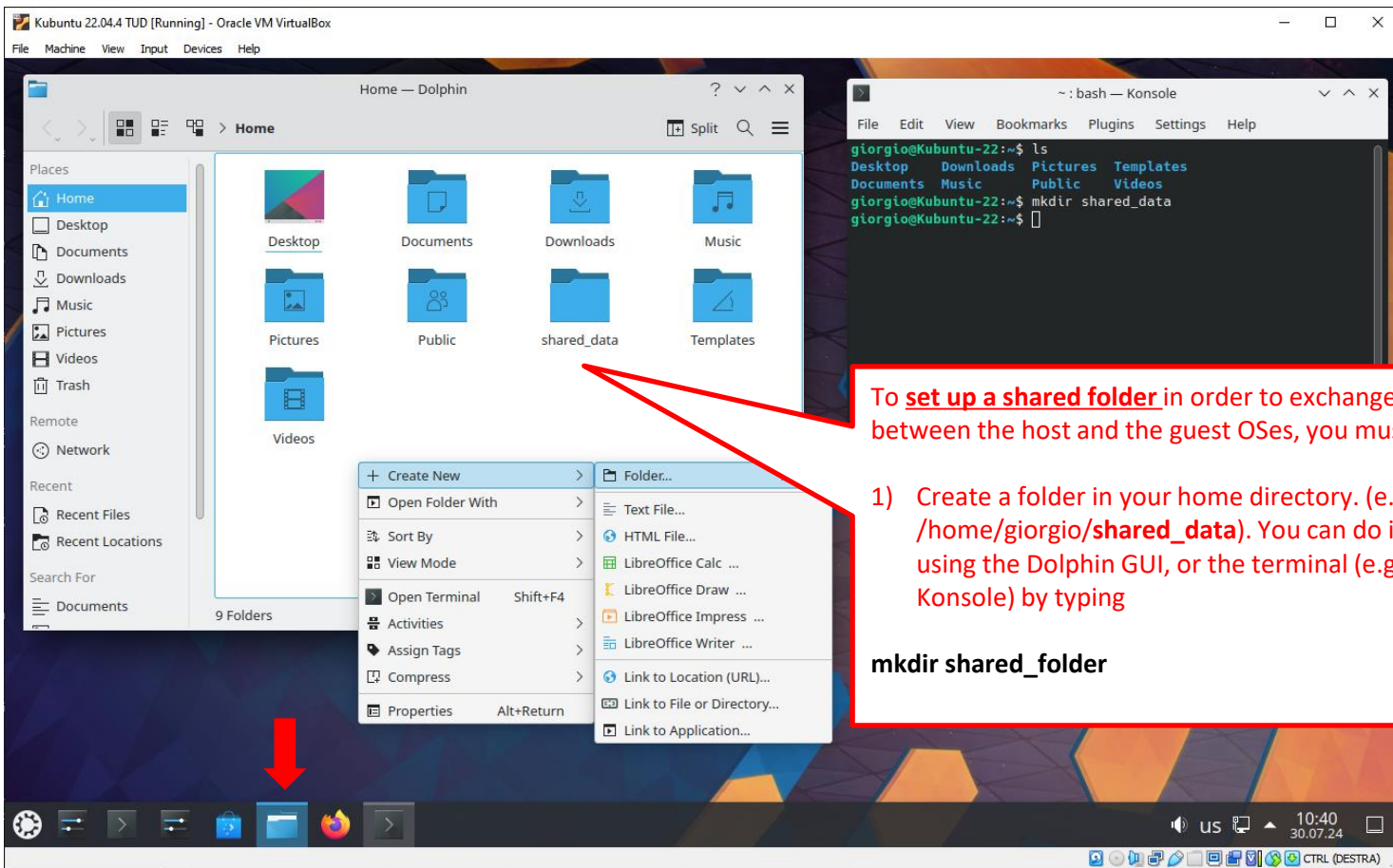
Basically, just add the list of packages you want to install right after **sudo apt install**.



# 4) Initial configuration of Kubuntu



- VirtualBox overview  
 Kubuntu overview  
**Stepwise setup**
- Download software
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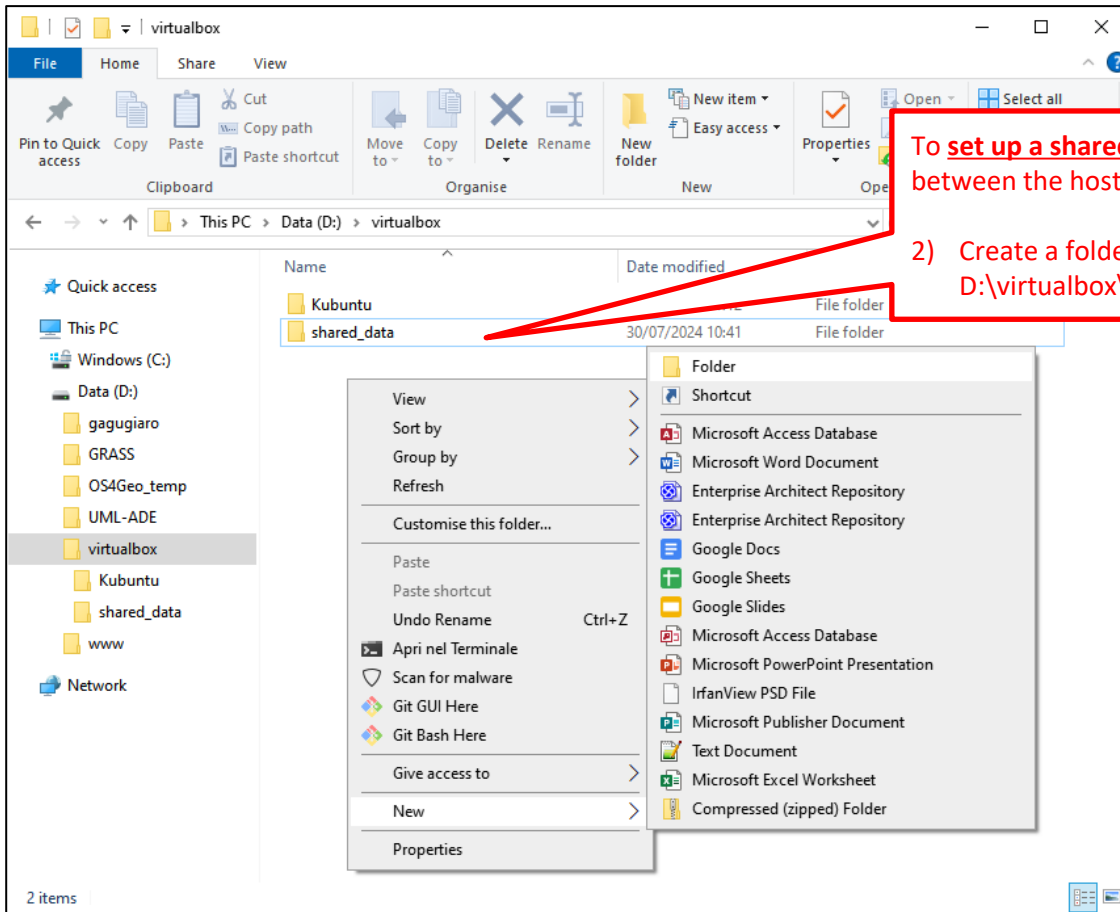
To **set up a shared folder** in order to exchange files between the host and the guest OSES, you must:

- 1) Create a folder in your home directory. (e.g. /home/giorgio/**shared\_data**). You can do it using the Dolphin GUI, or the terminal (e.g. In Konsole) by typing **mkdir shared\_folder**

# 4) Initial configuration of Kubuntu



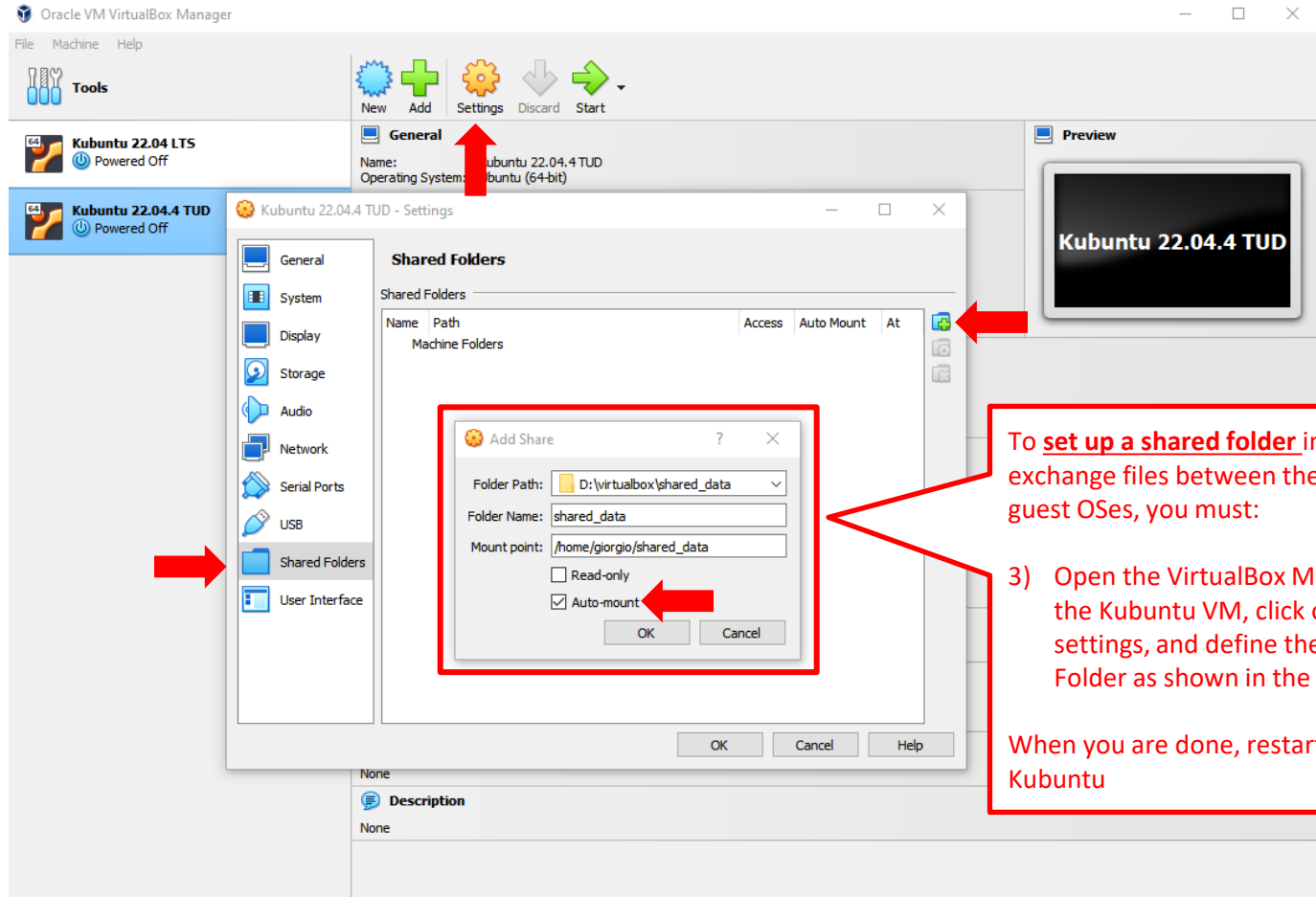
- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- **Initial configuration**
- Software removal



# 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
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Oracle VM VirtualBox Manager

File Machine Help

Tools

New Add Settings Discard Start

General

Name: Kubuntu 22.04.4 TUD  
Operating System: Kubuntu (64-bit)

Preview

Kubuntu 22.04.4 TUD

Kubuntu 22.04.4 TUD - Settings

General

System

Display

Storage

Audio

Network

Serial Ports

USB

Shared Folders

User Interface

Shared Folders

Name	Path	Access	Auto Mount	At
Machine Folders				

Add Share

Folder Path: D:\virtualbox\shared\_data

Folder Name: shared\_data

Mount point: /home/giorgio/shared\_data

Read-only

Auto-mount

OK Cancel

OK Cancel Help

Description

None

To **set up a shared folder** in order to exchange files between the host and the guest OSe, you must:

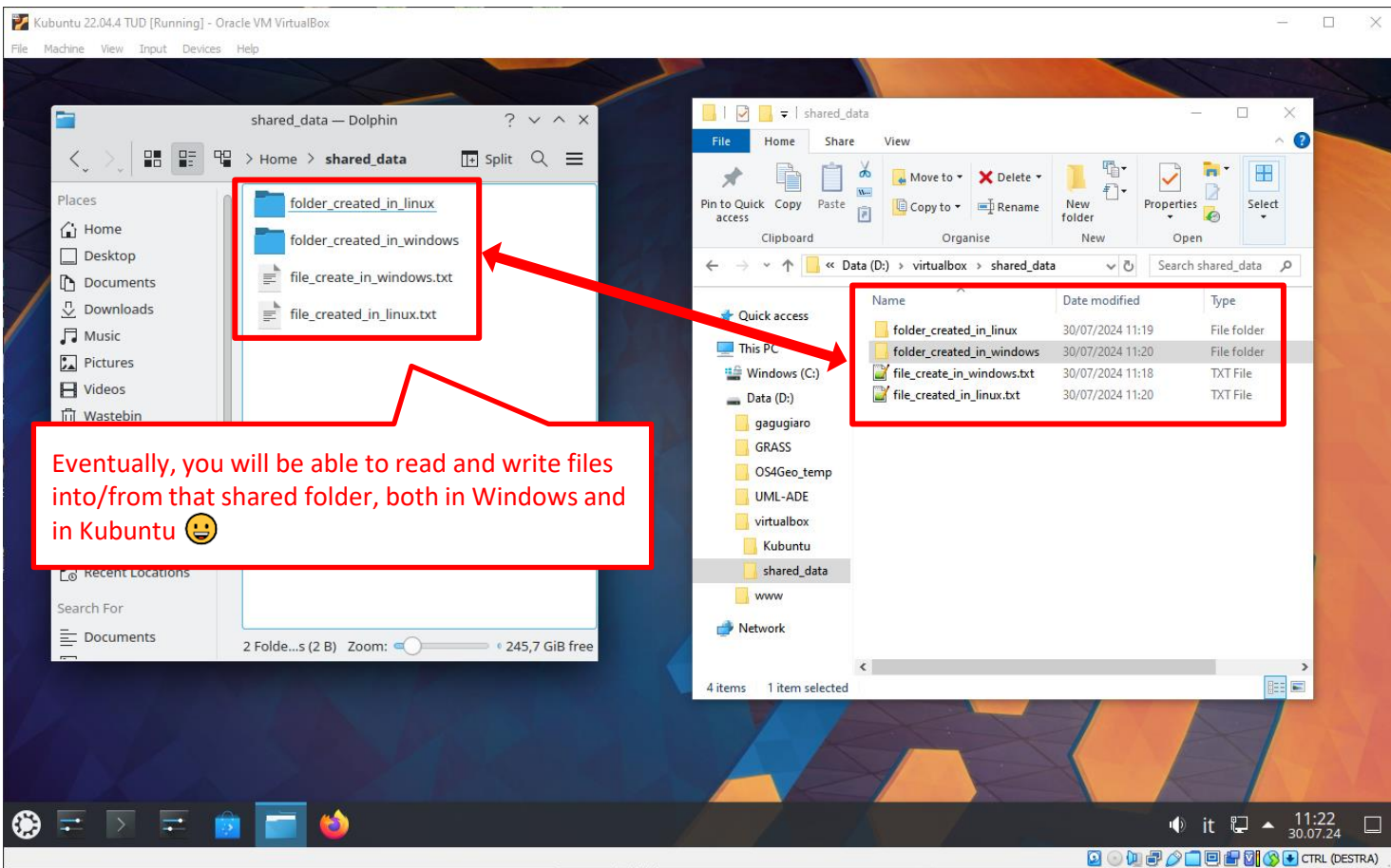
3) Open the VirtualBox Manager, select the Kubuntu VM, click on the settings, and define the Shared Folder as shown in the figure.

When you are done, restart/reboot Kubuntu

# 4) Initial configuration of Kubuntu



- VirtualBox overview  
Kubuntu overview  
**Stepwise setup**
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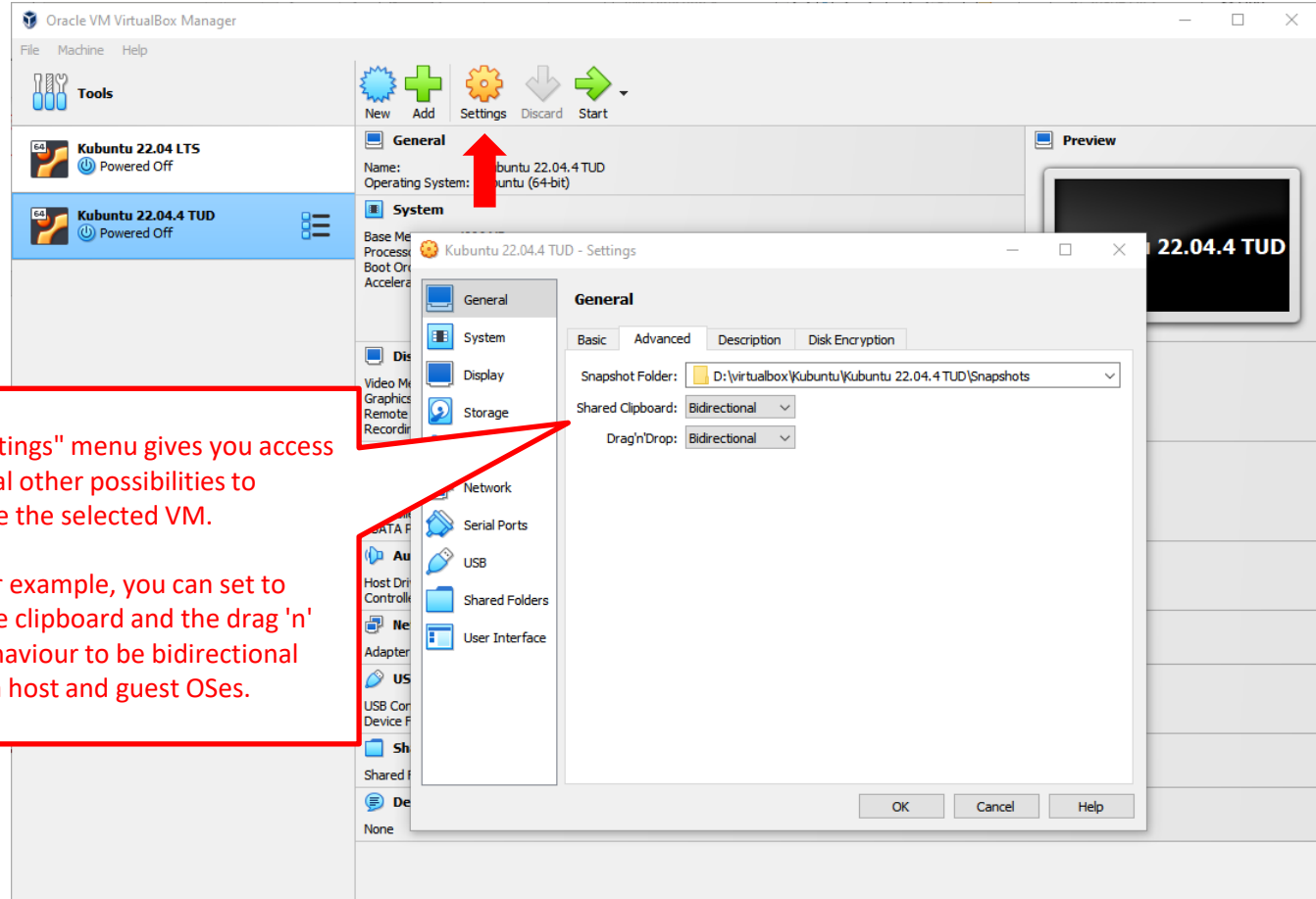
Eventually, you will be able to read and write files into/from that shared folder, both in Windows and in Kubuntu 😊

Name	Date modified	Type
folder_created_in_linux	30/07/2024 11:19	File folder
folder_created_in_windows	30/07/2024 11:20	File folder
file_create_in_windows.txt	30/07/2024 11:18	TXT File
file_created_in_linux.txt	30/07/2024 11:20	TXT File

# 4) Initial configuration of Kubuntu



- VirtualBox overview
- Kubuntu overview
- Stepwise setup**
- Download software
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- Create a VM
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- **Initial configuration**
- Software removal



The "Settings" menu gives you access to several other possibilities to configure the selected VM.

Here, for example, you can set to share the clipboard and the drag 'n' drop behaviour to be bidirectional between host and guest OSes.

# Kubuntu via VirtualBox on Windows

## Procedure overview:

- 1) Download the software (VirtualBox installer, Kubuntu, etc.)
- 2) Install VirtualBox
- 3) Create a Virtual Machine & install Kubuntu
- 4) Initial configuration of Kubuntu

**Done!** 😊

VirtualBox overview

Kubuntu overview

### Stepwise setup

- Download software
- Install VirtualBox
- Create a VM
- Install Kubuntu
- Initial configuration

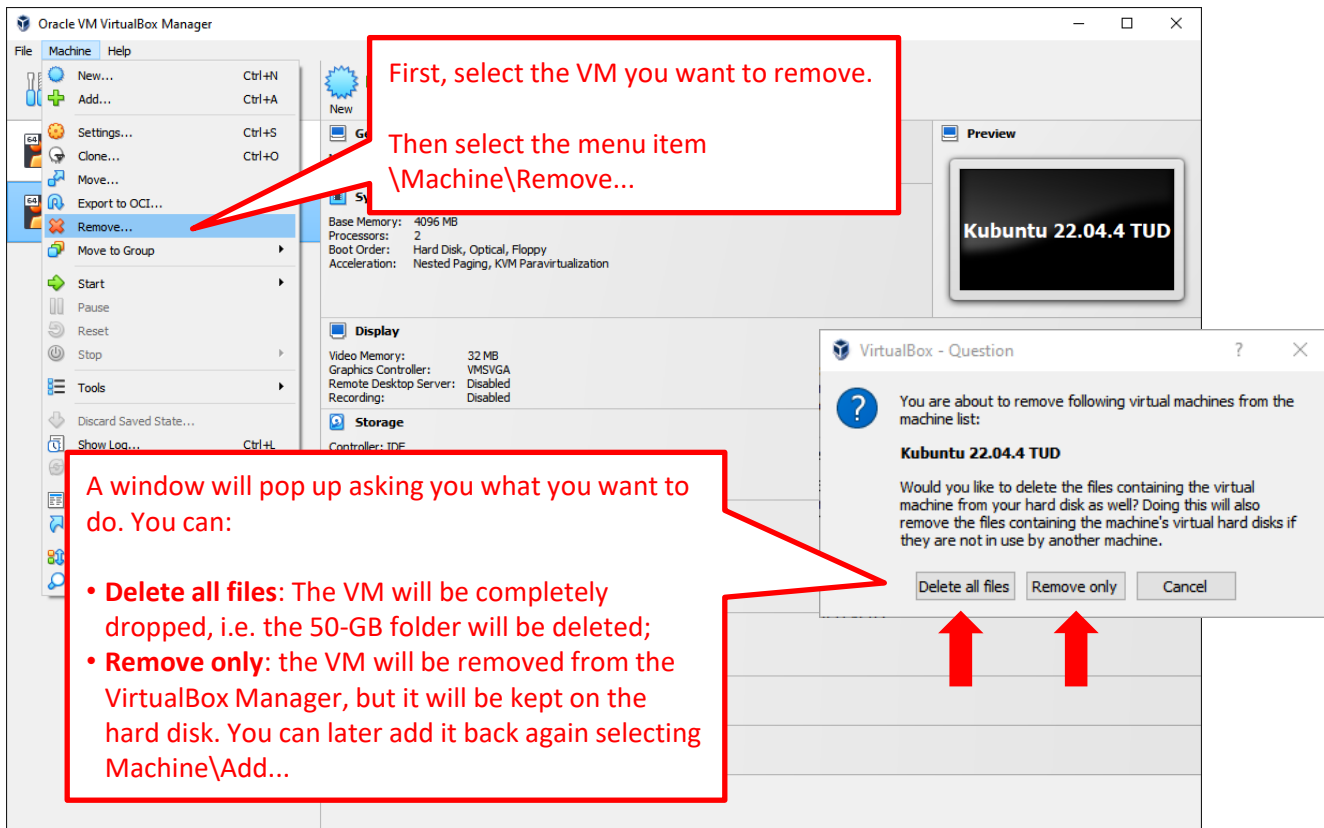
Software removal

# Software removal



You can remove any previously created Virtual Machine using the VirtualBox Manager

VirtualBox overview  
Kubuntu overview  
Stepwise setup  
**Software removal**



First, select the VM you want to remove.

Then select the menu item `\Machine\Remove...`

A window will pop up asking you what you want to do. You can:

- **Delete all files:** The VM will be completely dropped, i.e. the 50-GB folder will be deleted;
- **Remove only:** the VM will be removed from the VirtualBox Manager, but it will be kept on the hard disk. You can later add it back again selecting `Machine\Add...`

VirtualBox - Question

You are about to remove following virtual machines from the machine list:

**Kubuntu 22.04.4 TUD**

Would you like to delete the files containing the virtual machine from your hard disk as well? Doing this will also remove the files containing the machine's virtual hard disks if they are not in use by another machine.

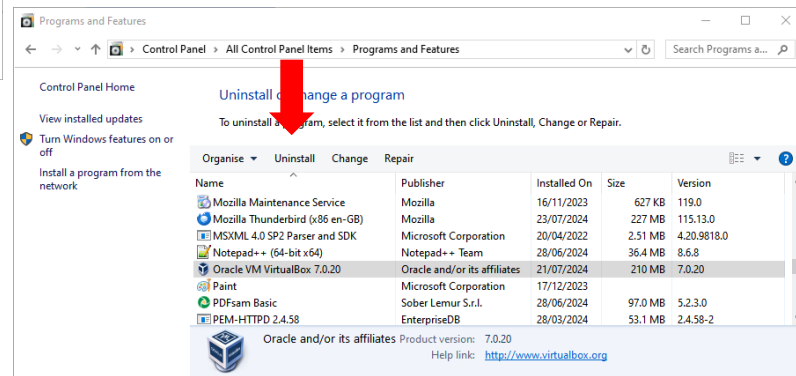
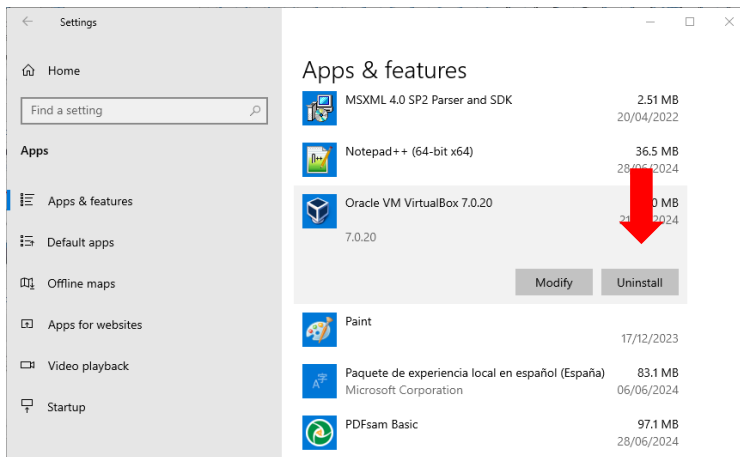
Delete all files Remove only Cancel

# Software removal



To **uninstall Oracle VirtualBox**, you proceed as usual via Window's Control Panel\Programs and Features or, alternatively, Settings\Apps to uninstall it.

VirtualBox overview  
Kubuntu overview  
Stepwise setup  
**Software removal**







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