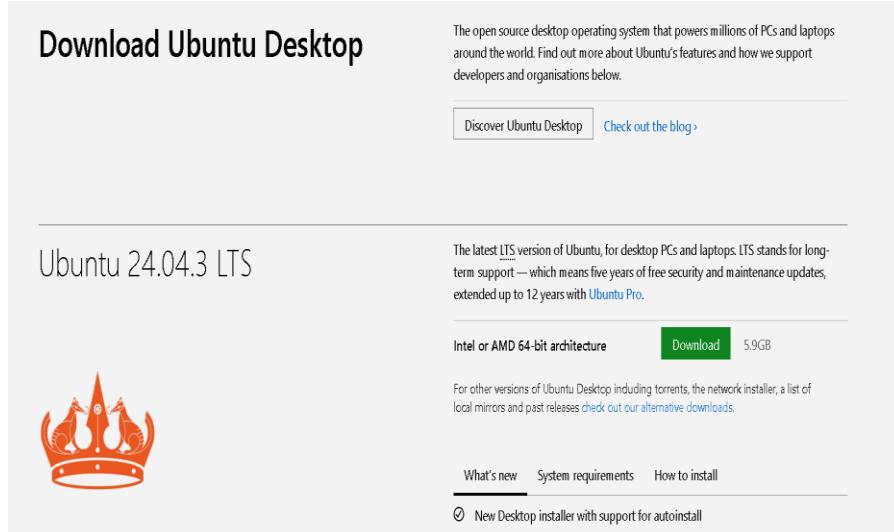


Installing Ubuntu on VirtualBox

This guide will walk you through setting up **Ubuntu Linux** inside **VirtualBox**.

Step 1: Download Ubuntu ISO

- Visit the official [Ubuntu Downloads page](#).
- Download the latest LTS (Long Term Support) version for stability.



The screenshot shows the Ubuntu Desktop download page. At the top, it says "Download Ubuntu Desktop". Below that, a section for "Ubuntu 24.04.3 LTS" is shown, with a note about it being the LTS version. A large orange crown icon is present. In the center, there's a "Download" button labeled "5.9GB". Below the download button, there's a link to "Alternative downloads". At the bottom, there are links for "What's new", "System requirements", and "How to install".

Step 2: Install VirtualBox

- Go to the [VirtualBox official site](#).
- Download and install VirtualBox (works on **Windows, Linux, and macOS**).



The screenshot shows the Oracle VirtualBox 7.1.4 Setup window. It displays a message saying "Oracle VirtualBox 7.1.4 Installation is complete." and instructs the user to click "Finish" to exit the setup. There is also a checkbox option to start VirtualBox after installation. The window has a standard Windows-style interface with a title bar, buttons, and a progress bar at the bottom.

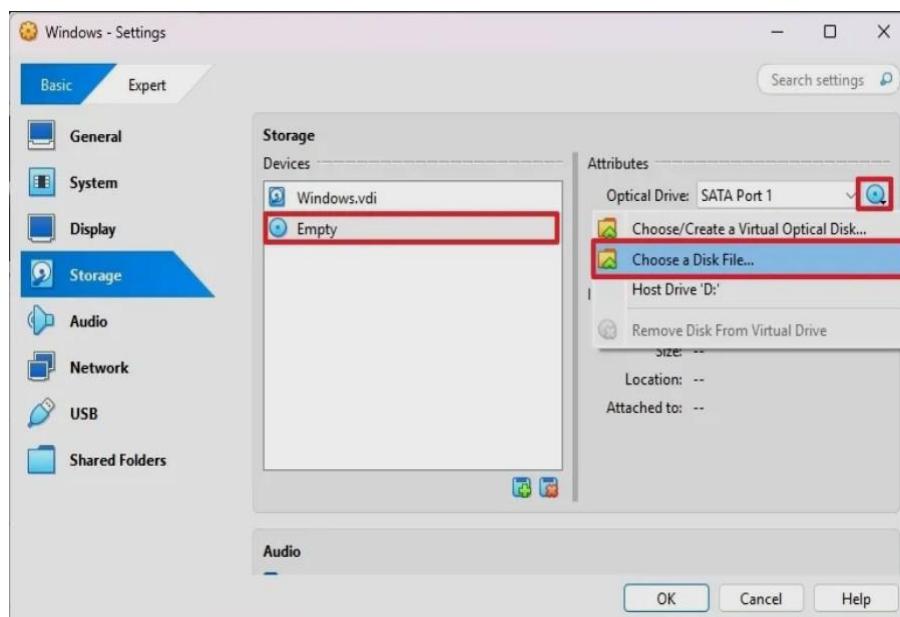
✓ Step 3: Create a New Virtual Machine

1. Open VirtualBox → click **New**.
2. Fill in:
 - **Name:** Ubuntu
 - **Type:** Linux
 - **Version:** Ubuntu (64-bit)
3. Allocate resources:
 - **RAM:** At least 2 GB (4 GB+ recommended).
 - **Disk:** At least 25 GB.



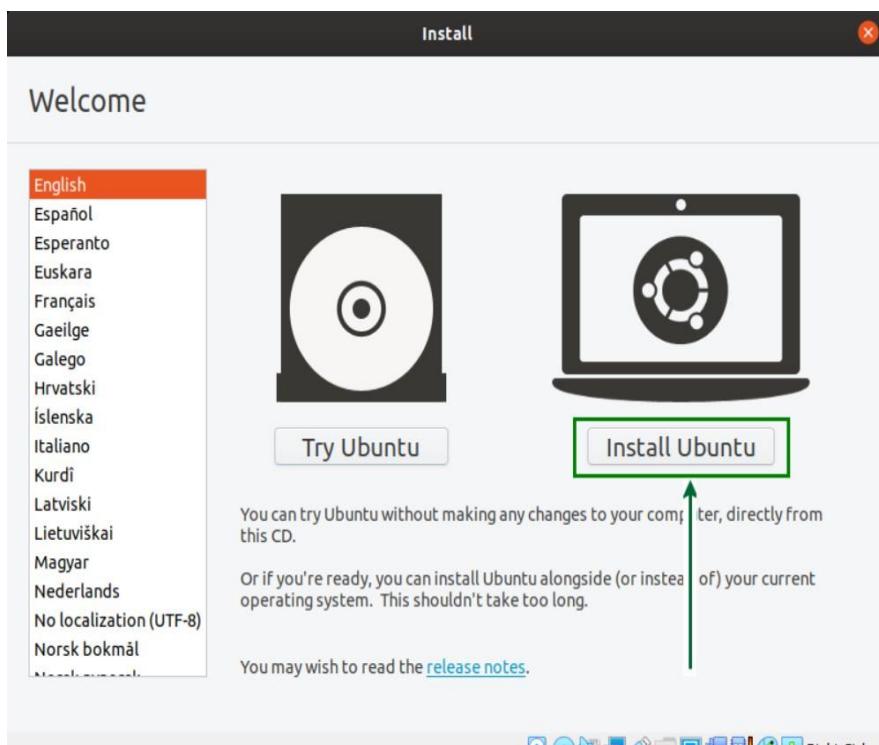
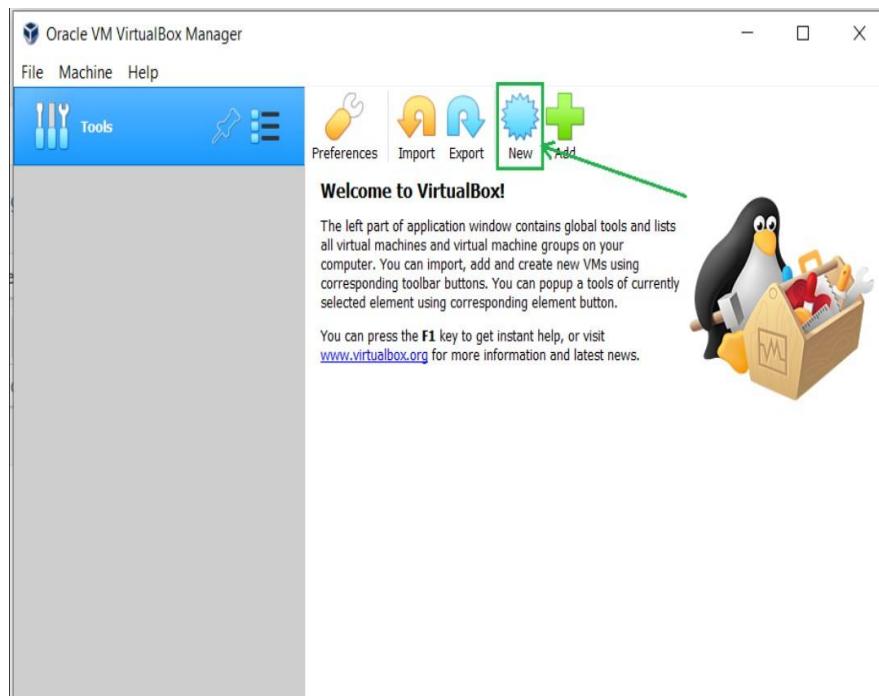
✓ Step 4: Mount the ISO

- Open VM **Settings** → go to **Storage**.
- Under "Controller: IDE", select **Empty** → choose the **Ubuntu ISO** you downloaded.
- Save settings.



✓ Step 5: Start the VM and Install Ubuntu

- Launch the VM.
- Select **Install Ubuntu**.
- Follow the installer:
 - Choose **Language & Keyboard layout**.
 - Connect to **Wi-Fi (optional)**.
 - Choose **Normal Installation**.
 - Partition disk (use defaults for VM).
 - Create a **username and password**.
- Wait for installation → reboot when done.



✓ Step 6: Post-Installation Setup

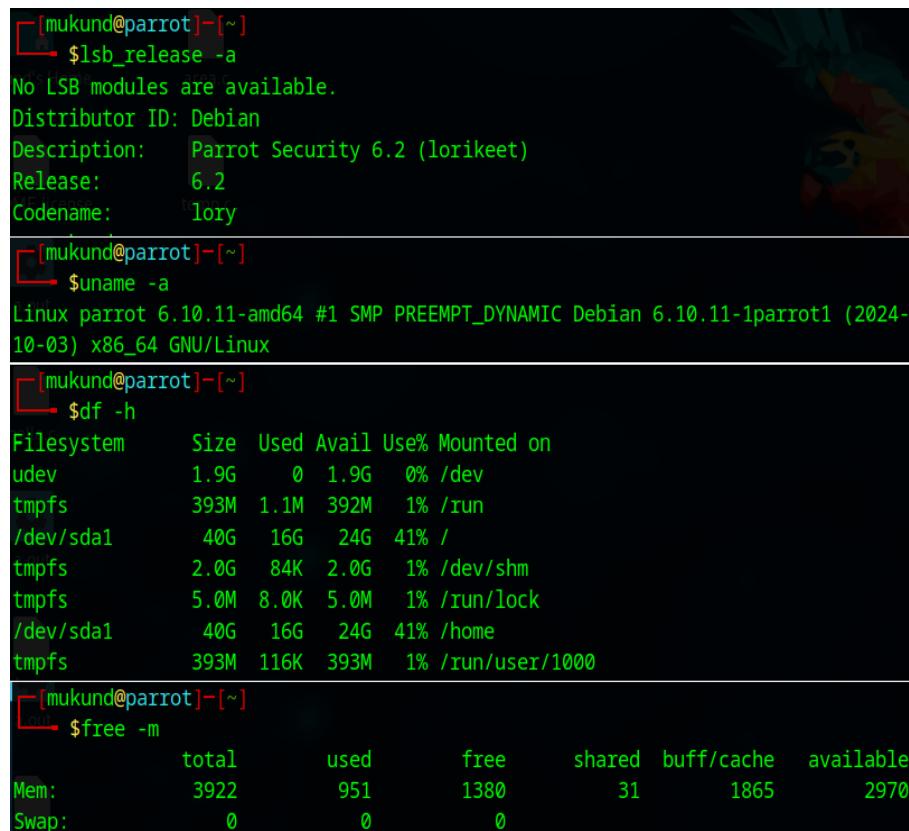
- Remove the ISO from **Storage** to avoid boot loops.
- Start VM again → log in to Ubuntu.
- Update system:

```
sudo apt update && sudo apt upgrade -y
```

Useful Commands After Installation

Once Parrot OS is installed, open a terminal and try these commands:

```
# Show OS release information  
lsb_release -a  
  
# Show kernel version and system architecture  
uname -a  
  
# Show disk usage in human-readable format  
df -h  
  
# Show free and used memory in MB  
free -m
```



The screenshot shows a terminal window with four command outputs:

- lsb_release -a**: Shows the OS is Parrot Security 6.2 (lorikeet) with a Release of 6.2 and Codename lory.
- uname -a**: Shows the kernel version as Linux parrot 6.10.11-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.10.11-1parrot1 (2024-10-03) x86_64 GNU/Linux.
- df -h**: Shows disk usage for various filesystems like udev, tmpfs, /dev/sda1, and /home.
- free -m**: Shows memory usage for Mem and Swap.

	total	used	free	shared	buff/cache	available
Mem:	3922	951	1380	31	1865	2970
Swap:	0	0	0			

⚡ Common Challenges & Fixes

Challenge	Cause	Quick Fix
Slow performance	Too little RAM/CPU	Increase VM resources
ISO not detected	Incorrect mount	Recheck storage settings
Black screen / boot error	Missing Guest Additions	Enable EFI or reinstall Guest Additions
No internet	Network adapter issues	Switch to "Bridged Adapter" or "NAT"

❓ Questions & Answers

Q1: What are 2 advantages of installing Parrot OS in a VM?

1. 🔒 **Safety:** Experiment freely without harming your main OS.
 2. 🔄 **Flexibility:** Snapshots, rollbacks, and easy removal make it beginner-friendly.
-

Q2: What are 2 advantages of dual booting instead of using a VM?

1. ⚡ **Performance:** Full access to CPU, RAM, and GPU → smoother and faster.
 2. 🛠️ **Hardware Access:** Better compatibility with Wi-Fi adapters, GPUs, and external devices.
-

