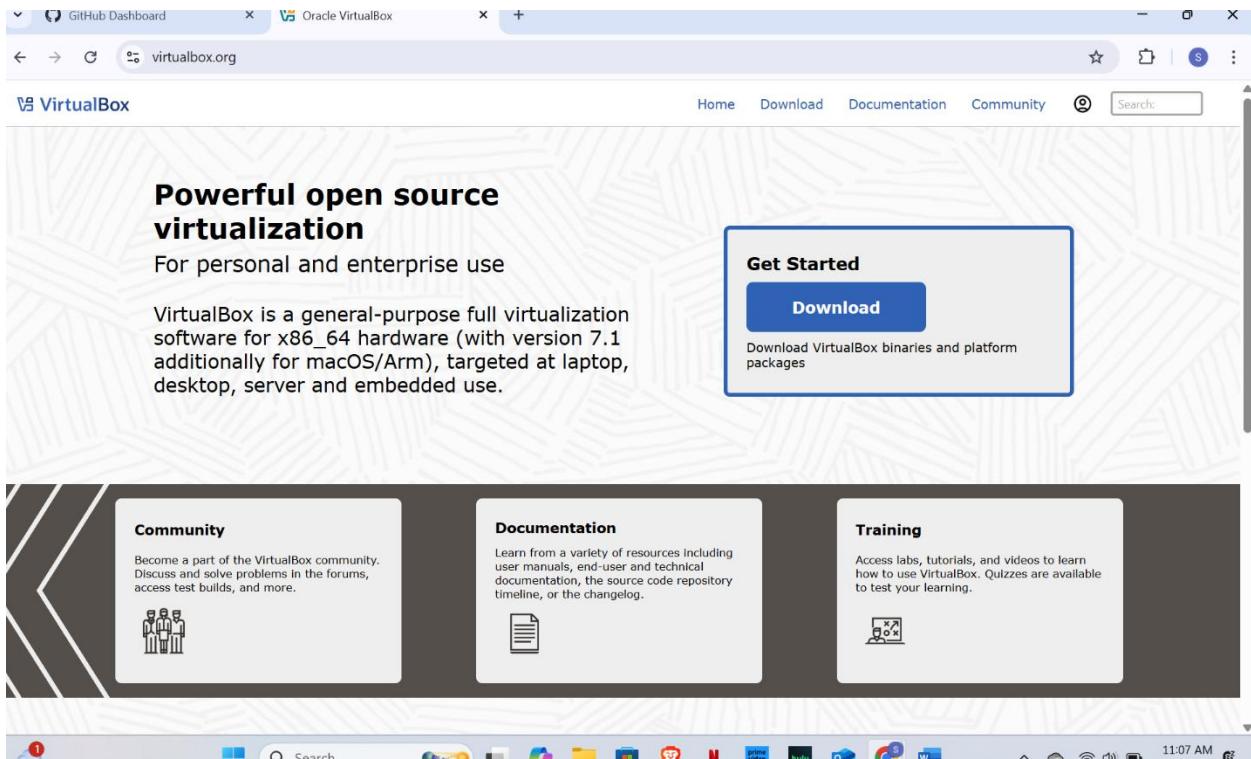


# Desktop Virtualization: Installing a Virtual Machine

## virtual machine using Oracle VM VirtualBox

Go to virutalbox.org and download latest virtual box



Screenshot of a web browser showing the VirtualBox download page and the Microsoft Visual C++ Redistributable download page.

**VirtualBox Download Page:**

The page displays two main sections: "VirtualBox Platform Packages" and "VirtualBox Extension Pack".

- VirtualBox Platform Packages:** Lists platform packages for Windows hosts, macOS / Intel hosts, macOS / Apple Silicon hosts, Linux distributions, Solaris hosts, and Solaris 11 IPS hosts.
- VirtualBox Extension Pack:** Describes the PUEL license and provides links to "PUEL License FAQ" and "PUEL License Text". A button labeled "Accept and download" is present.

**Microsoft Visual C++ Redistributable Version Page:**

The page shows the latest version (14.42.34438.0) and links for download by architecture (ARM64, X86, X64). A setup progress window is shown for the X64 architecture.

**Setup Progress Window:**

The window title is "Microsoft Visual C++ 2015-2022 Redistributable (x64)...". It shows "Setup Progress" with a progress bar at 100%. The status message is "Processing: Microsoft Visual C++ 2022 X64 Minimum Runtime - 14.42.34438". A note below states: "Redistributable package contains both ARM64 and X64 binaries. This package makes it easy to install required Visual C++ ARM64 binaries when the X64 Redistributable is installed on an ARM64 device."

Install Microsoft Visual C++ Redistributable driver to install virtual box

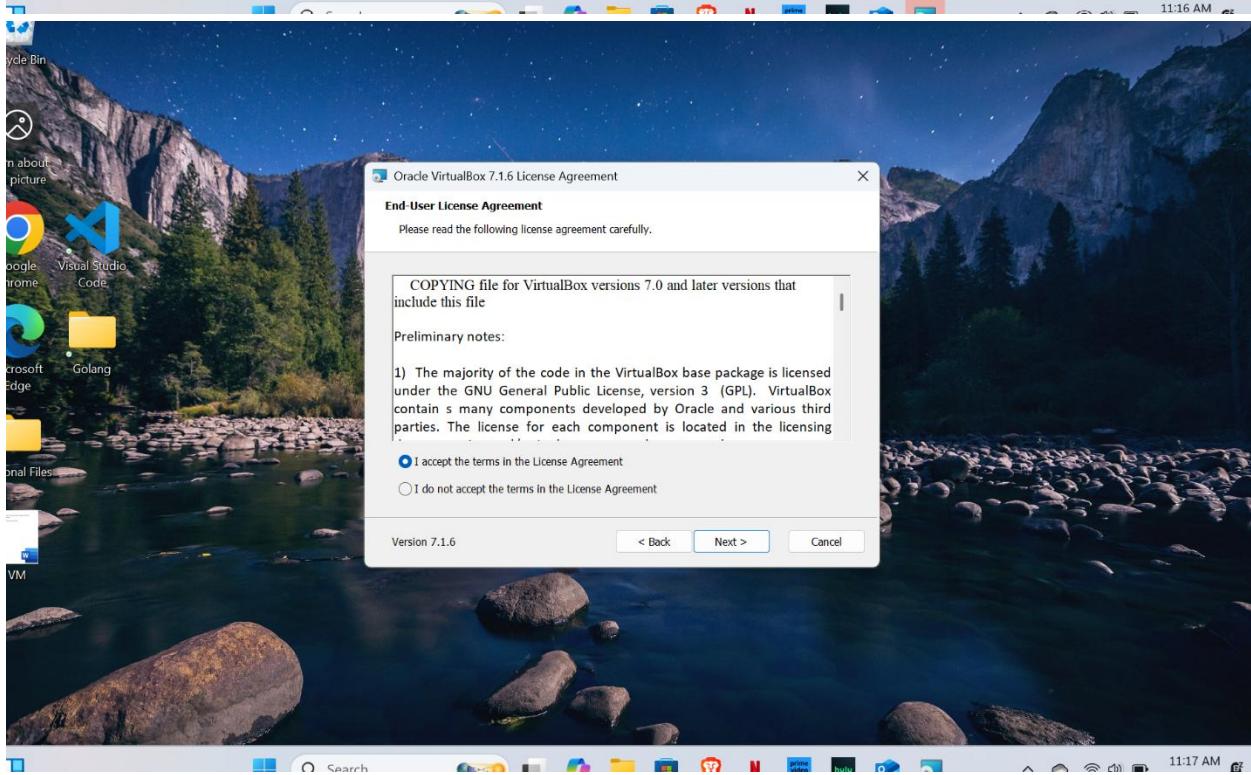
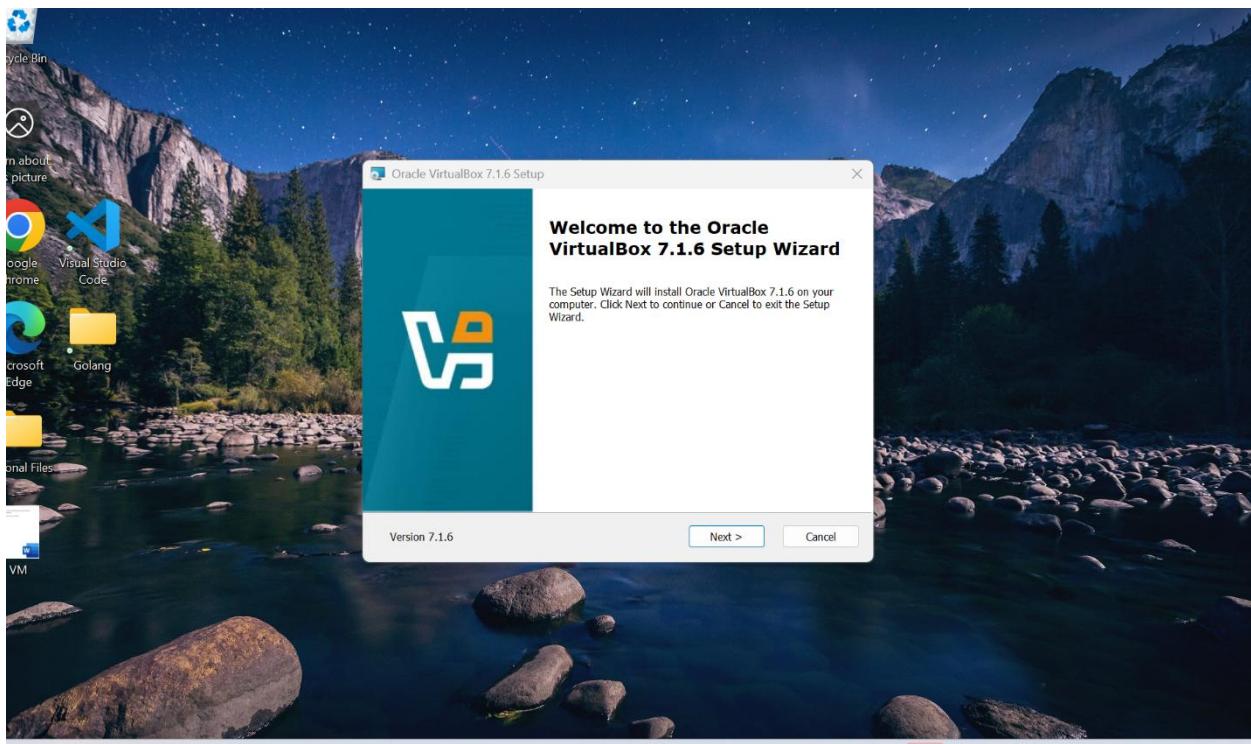
VirtualBox is developed in C++ and **depends on these runtime components** to function correctly. Without them, certain core functions—such as loading kernel modules, rendering the UI, or running virtual machines—may fail or produce errors like:

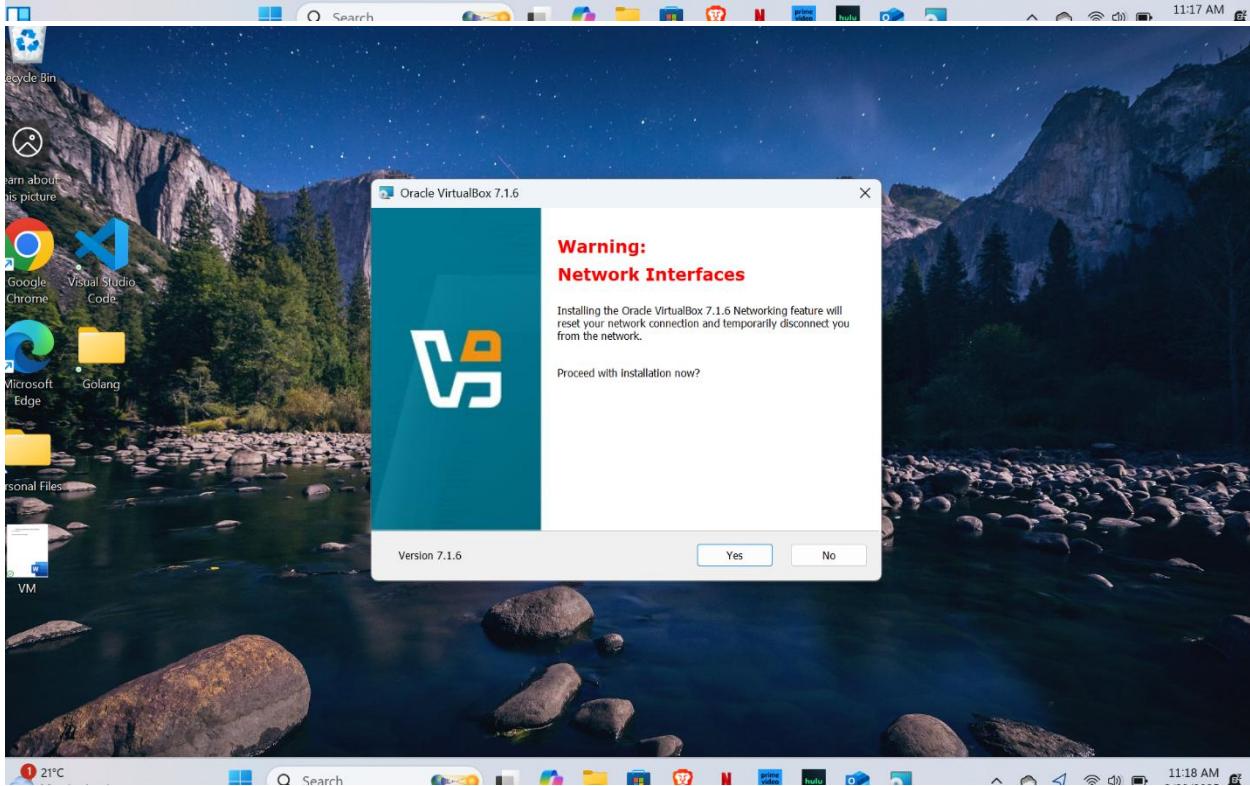
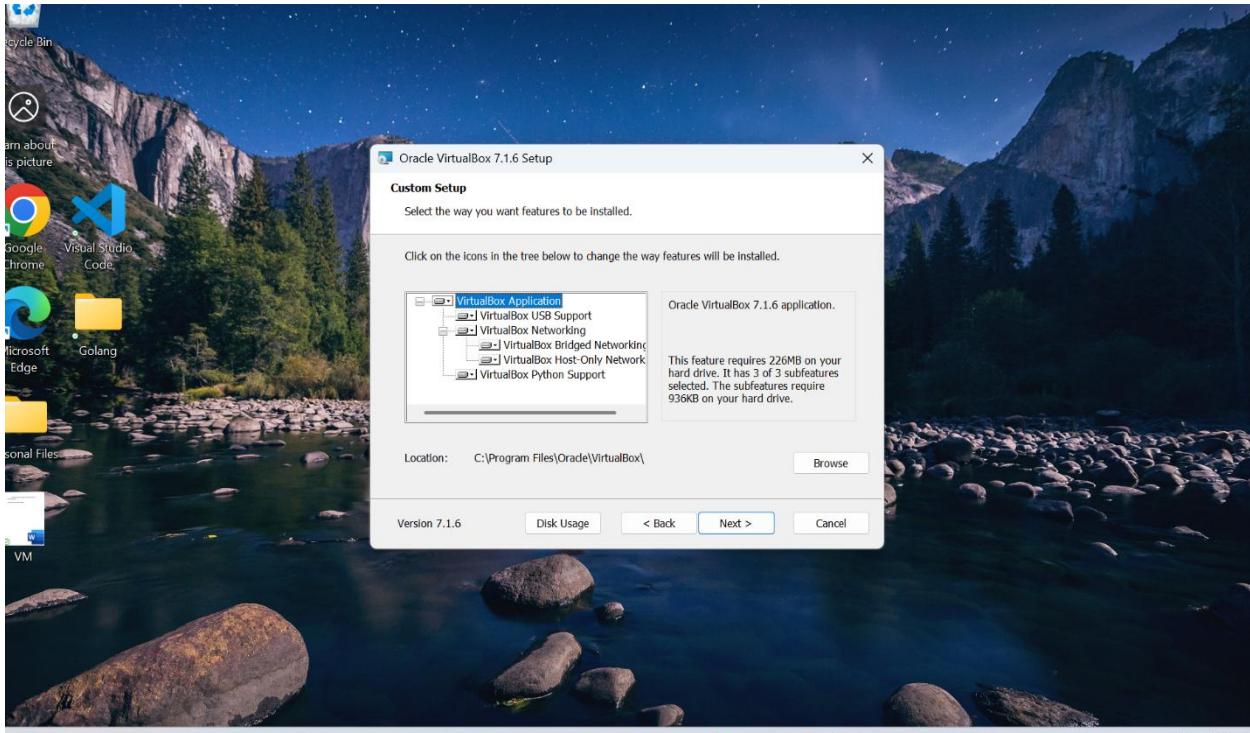
- SUPR3HardenedWinRespawn
- “Kernel driver not installed”
- Unexpected crashes when launching the VM

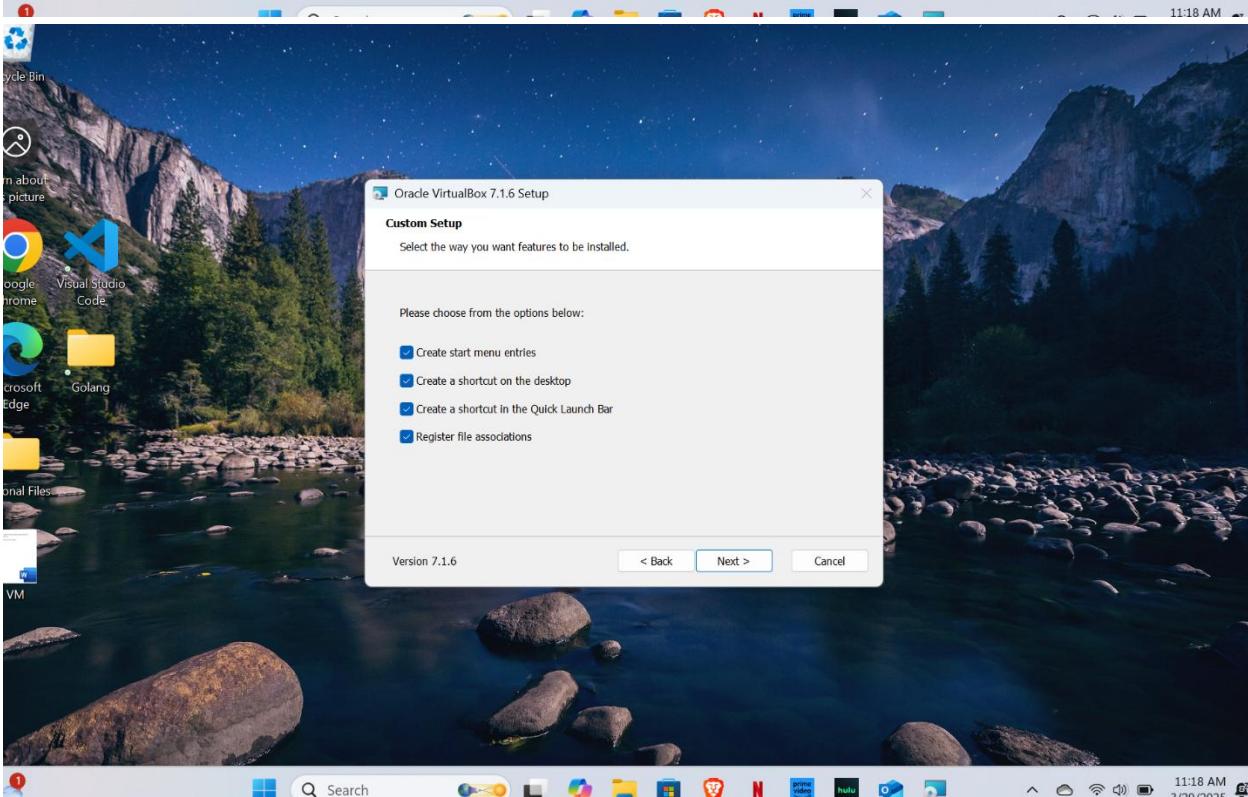
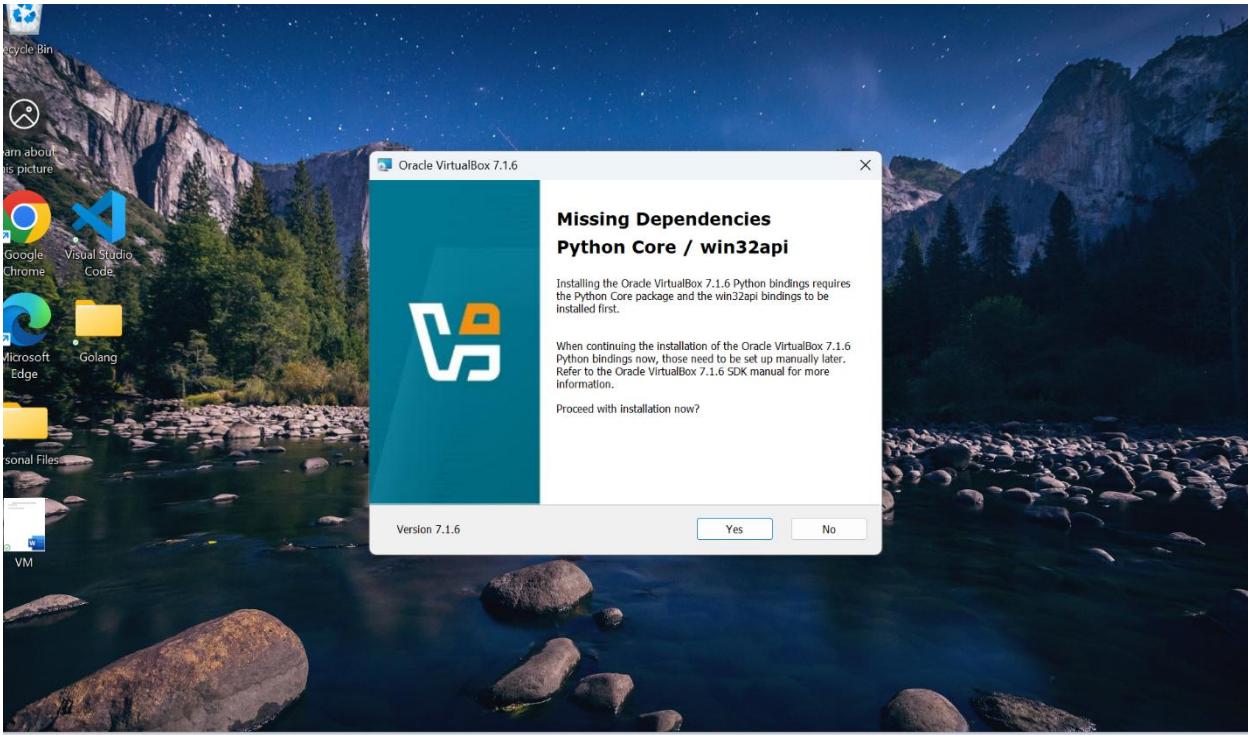


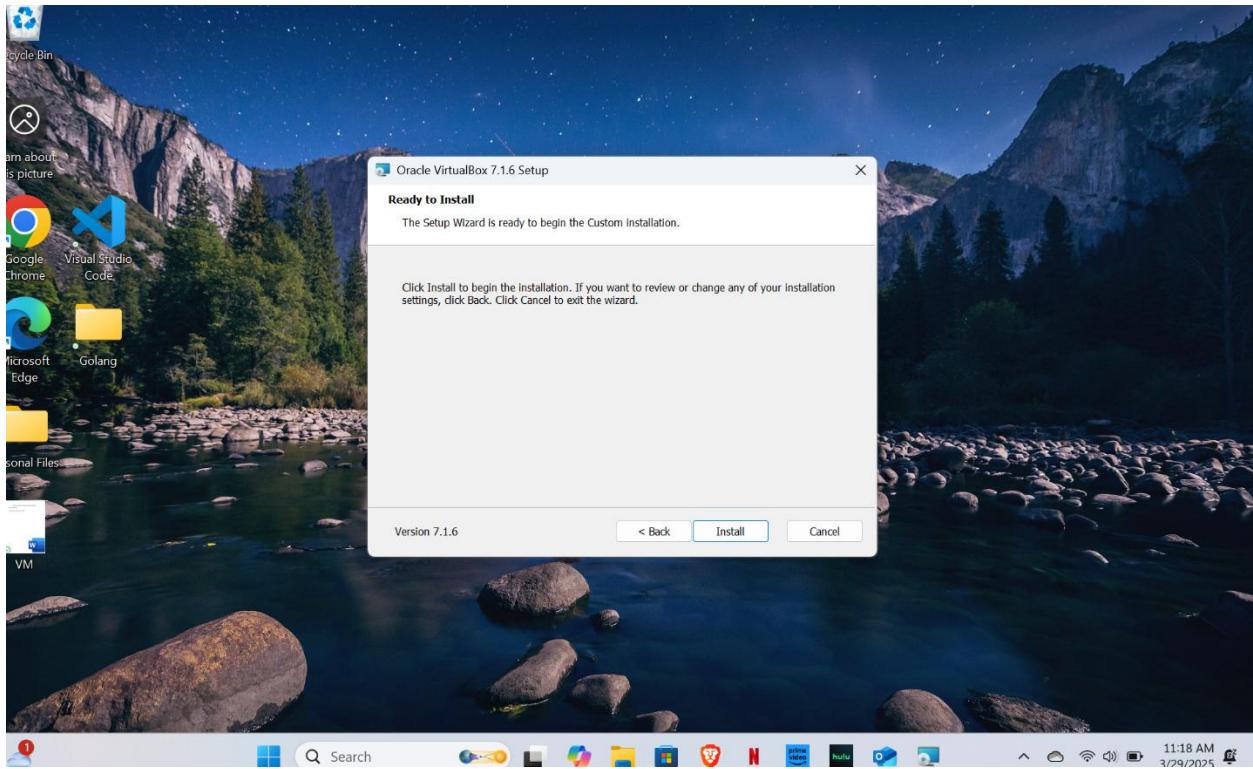
### Key Points:

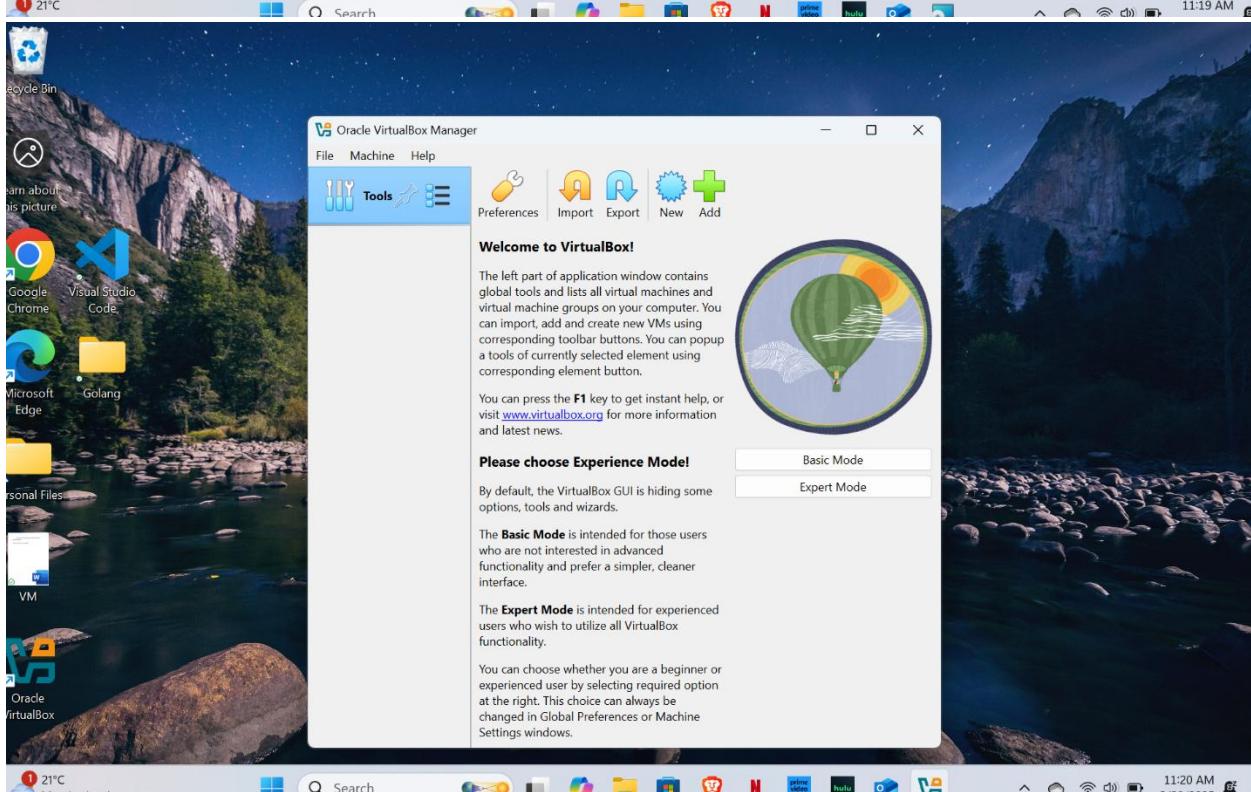
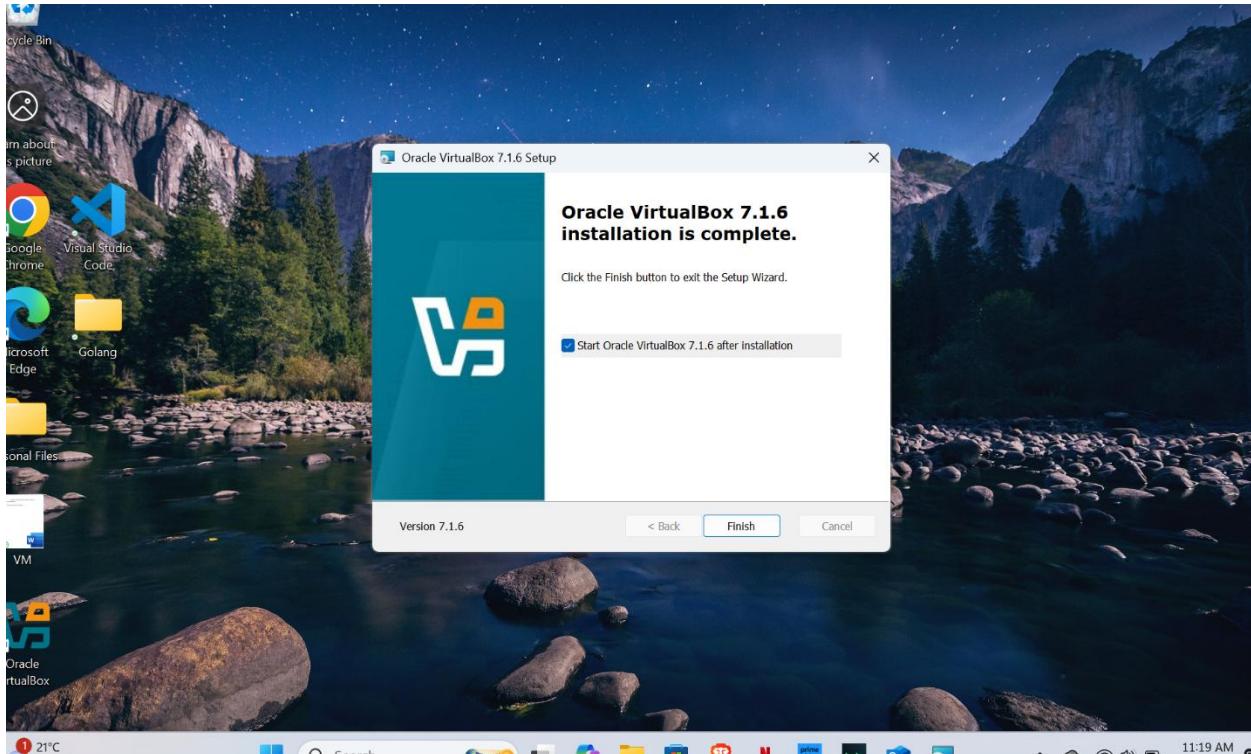
- It provides required **DLLs and runtime components** like MSVCP140.dll, VCRUNTIME140.dll, etc.
- These are needed for **VirtualBox services and UI** to work smoothly on Windows.
- The installer ensures that your system has the correct version of the C++ runtime for compatibility.











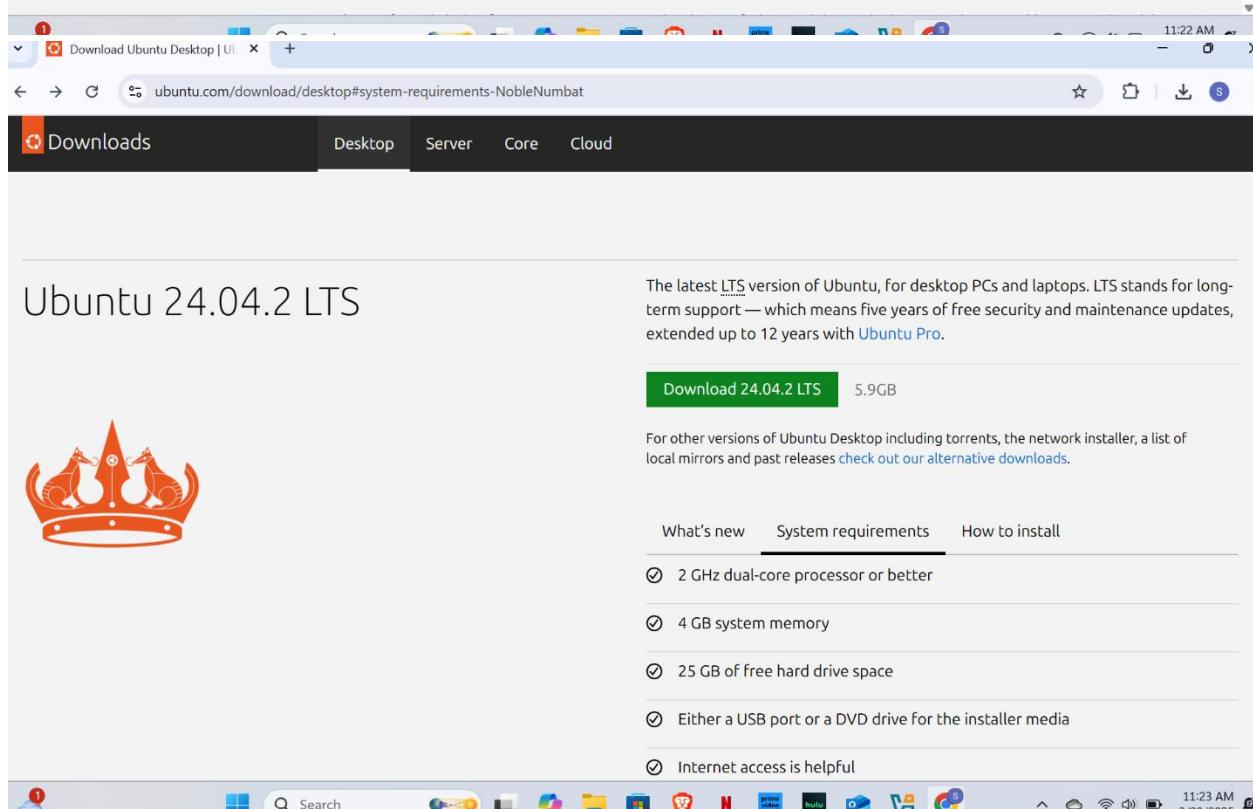
Screenshot of a web browser showing the Ubuntu Desktop website ([ubuntu.com/desktop](https://ubuntu.com/desktop)). The page features a large video player at the top right displaying a video about Ubuntu 24.04 LTS. Below the video, there's a section titled "Ubuntu for desktops" with a "Download Ubuntu Desktop" button.

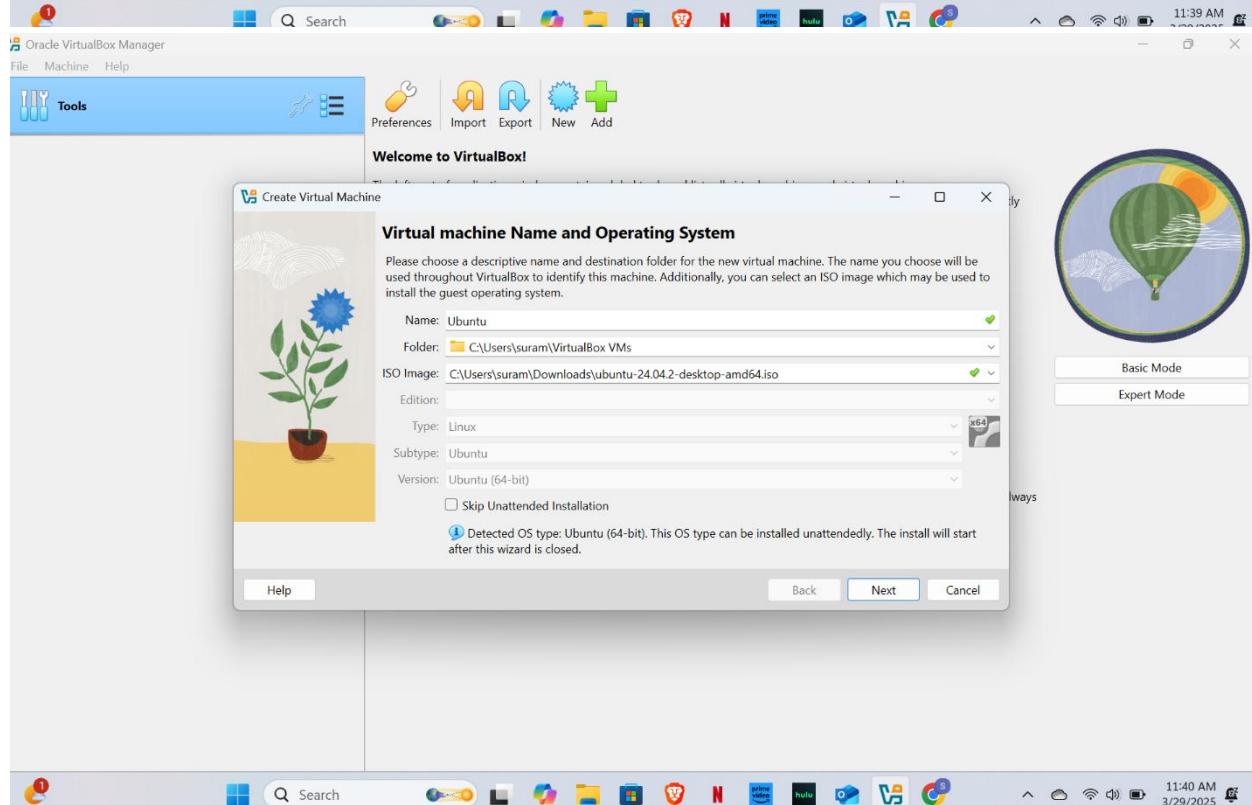
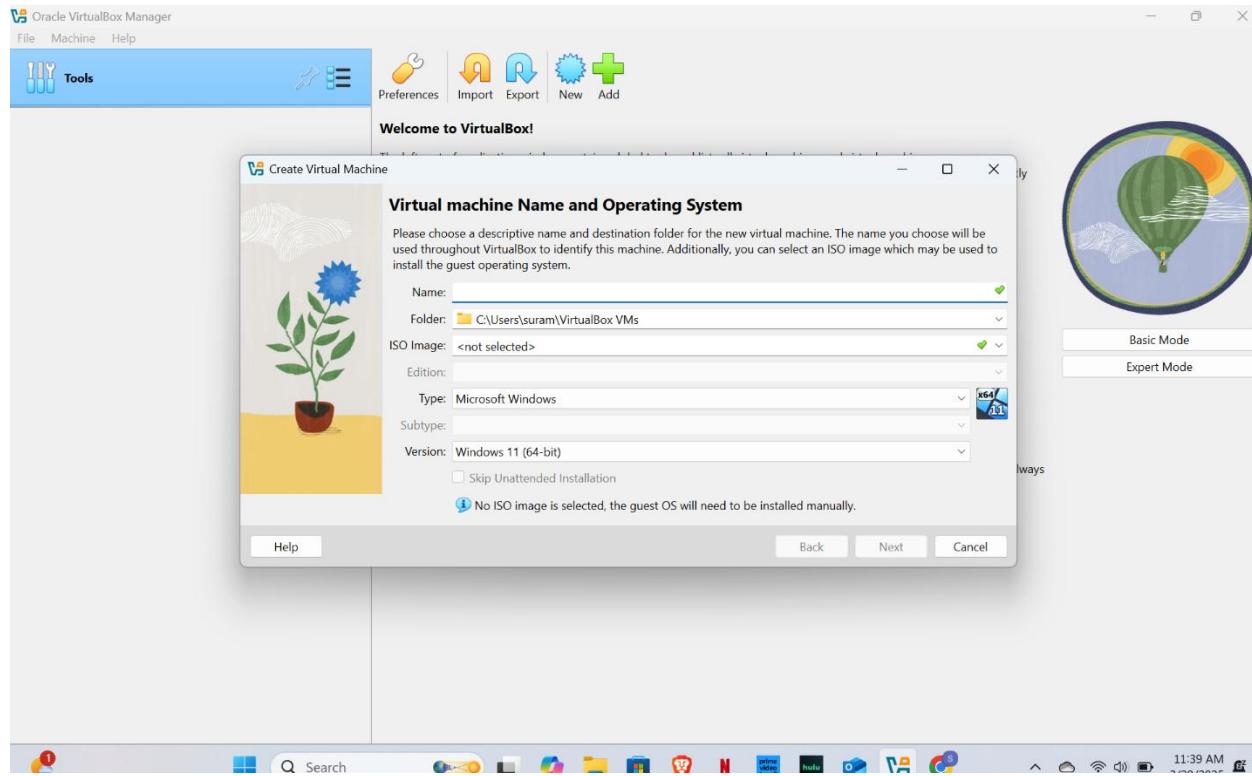


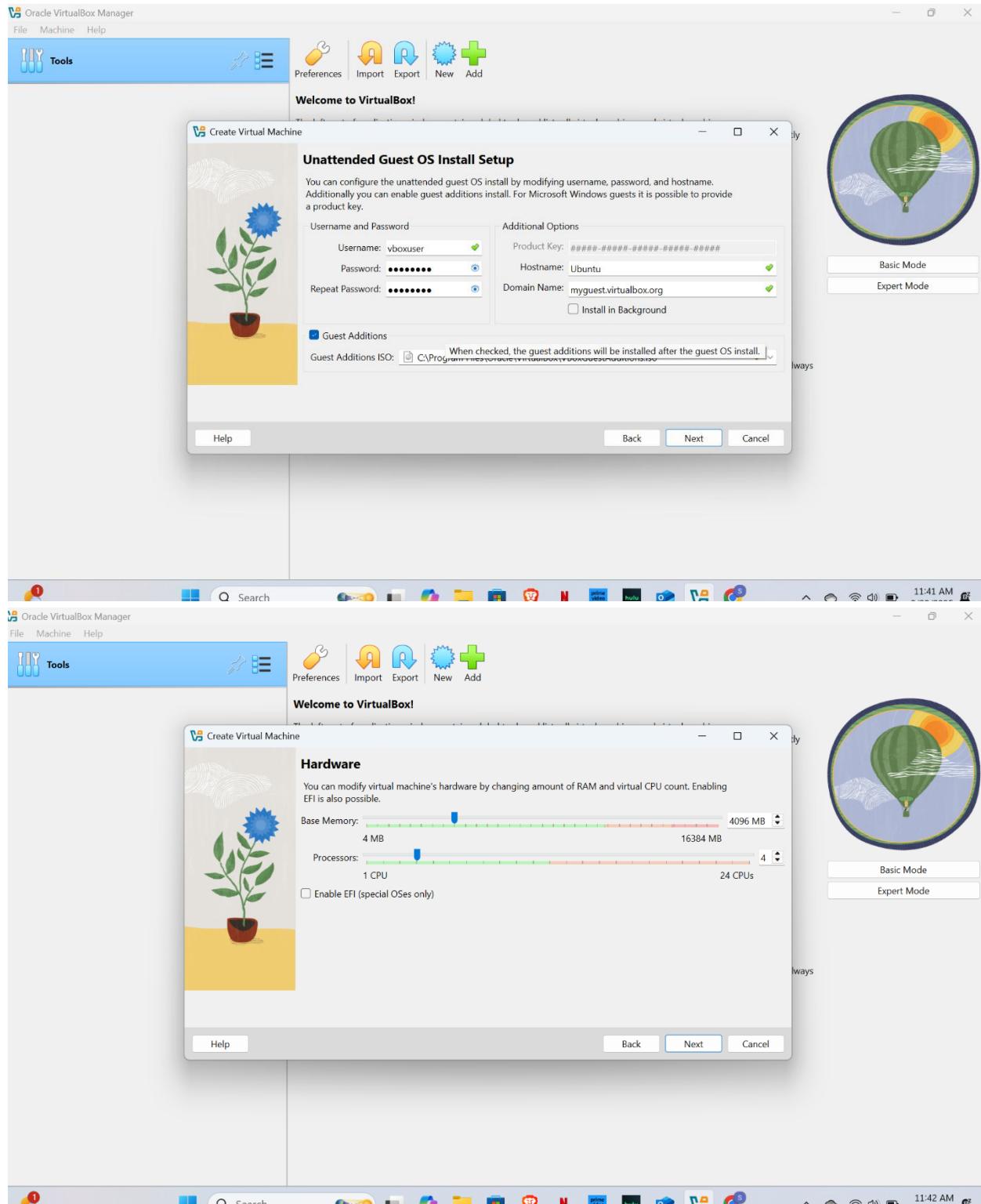
The secure, modern operating system used by millions

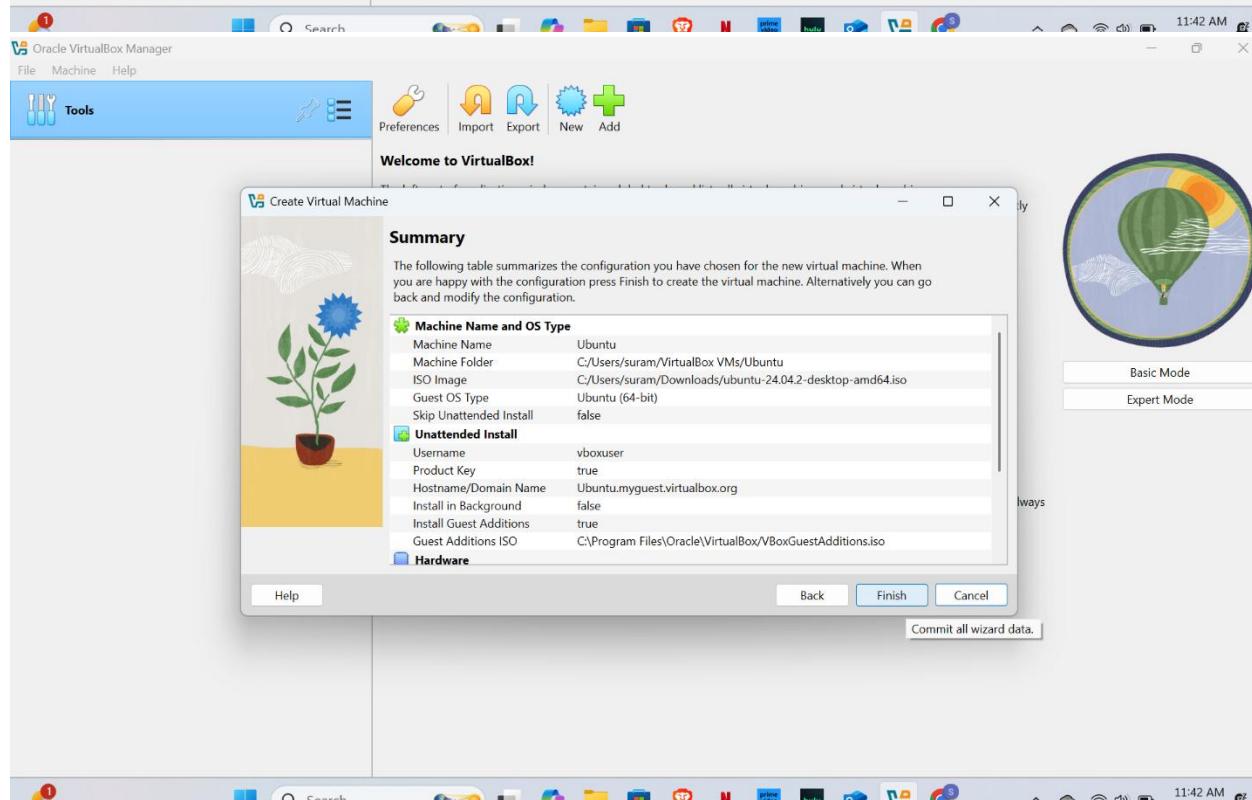
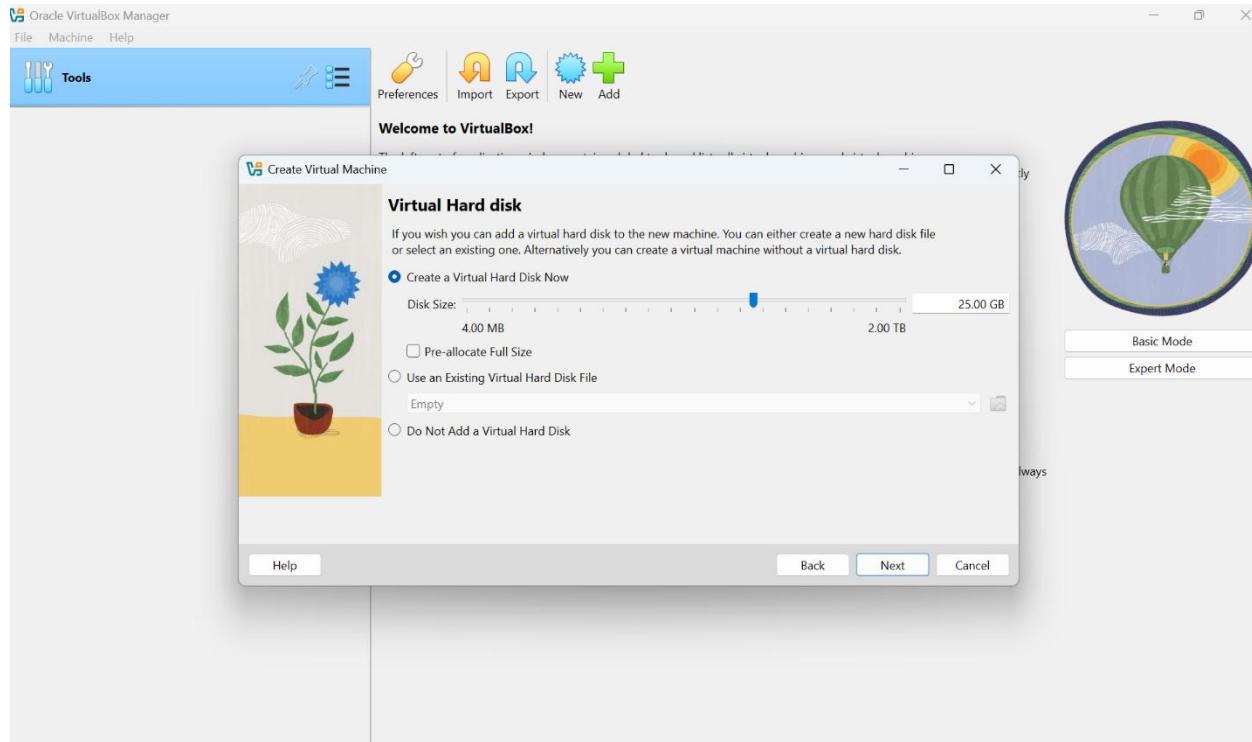
Screenshot of a web browser showing the Ubuntu download page ([ubuntu.com/download/desktop#system-requirements-NobleNumbat](https://ubuntu.com/download/desktop#system-requirements-NobleNumbat)). The page highlights "Ubuntu 24.04.2 LTS". It includes a detailed list of system requirements:

- 2 GHz dual-core processor or better
- 4 GB system memory
- 25 GB of free hard drive space
- Either a USB port or a DVD drive for the installer media
- Internet access is helpful









I used Oracle VM VirtualBox on my Windows system. However, during the first attempt, I encountered an error called '**'SUPR3HardenedWinRespawn'**'. This error usually happens when VirtualBox's kernel drivers fail to load properly, often due to permission issues or interference from antivirus software.

To overcome this error, I followed these steps:

1. **Uninstalled VirtualBox completely** and removed leftover files.
2. **Disabled my antivirus temporarily**, as it can block driver installations.
3. **Reinstalled VirtualBox as an administrator**, ensuring all features like USB and networking drivers were selected.
4. **Ran VirtualBox with admin privileges** and confirmed that the kernel modules were installed successfully.

After taking these steps, the error was resolved, and I was able to launch the virtual machine and install Ubuntu successfully.

