

1-Download virtual Box by using this link:

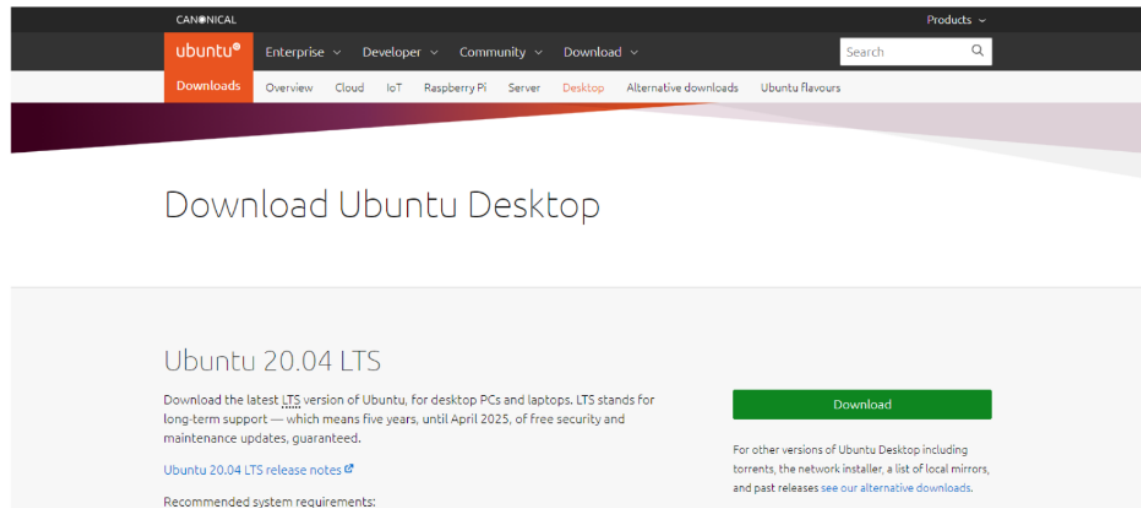
<https://www.virtualbox.org/wiki/Downloads>



The screenshot shows the VirtualBox website's download page. At the top left is the VirtualBox logo. The main heading is "VirtualBox". Below it, the section "Download VirtualBox" states: "Here you will find links to VirtualBox binaries and its source code." The "VirtualBox binaries" section explains that by downloading, users agree to the terms and conditions of the respective license. It provides links for the latest VirtualBox 6.0 packages (VirtualBox 6.0 builds) and VirtualBox 5.2 packages (VirtualBox 5.2 builds). The "VirtualBox 6.1.10 platform packages" section lists links for Windows hosts, OS X hosts, Linux distributions, and Solaris hosts. A note mentions that the binaries are released under the terms of the GPL version 2. Another note advises checking the changelog. A section for "VirtualBox 6.1.10 Oracle VM VirtualBox Extension Pack" lists a link for all supported platforms. At the bottom, there is a note about support for USB 2.0 and USB 3.0 devices, VirtualBox RDP, disk encryption, NVMe and PXE boot for Intel cards, and a link to the User Manual. The page also features a sidebar with links to About, Screenshots, Downloads, Documentation, End-user docs, Technical docs, Contribute, and Community. A search bar and login/prefences links are in the top right. A taskbar at the bottom shows a file named "VirtualBox-6.1.10-...exe".

2-download Ubuntu linux from this link:

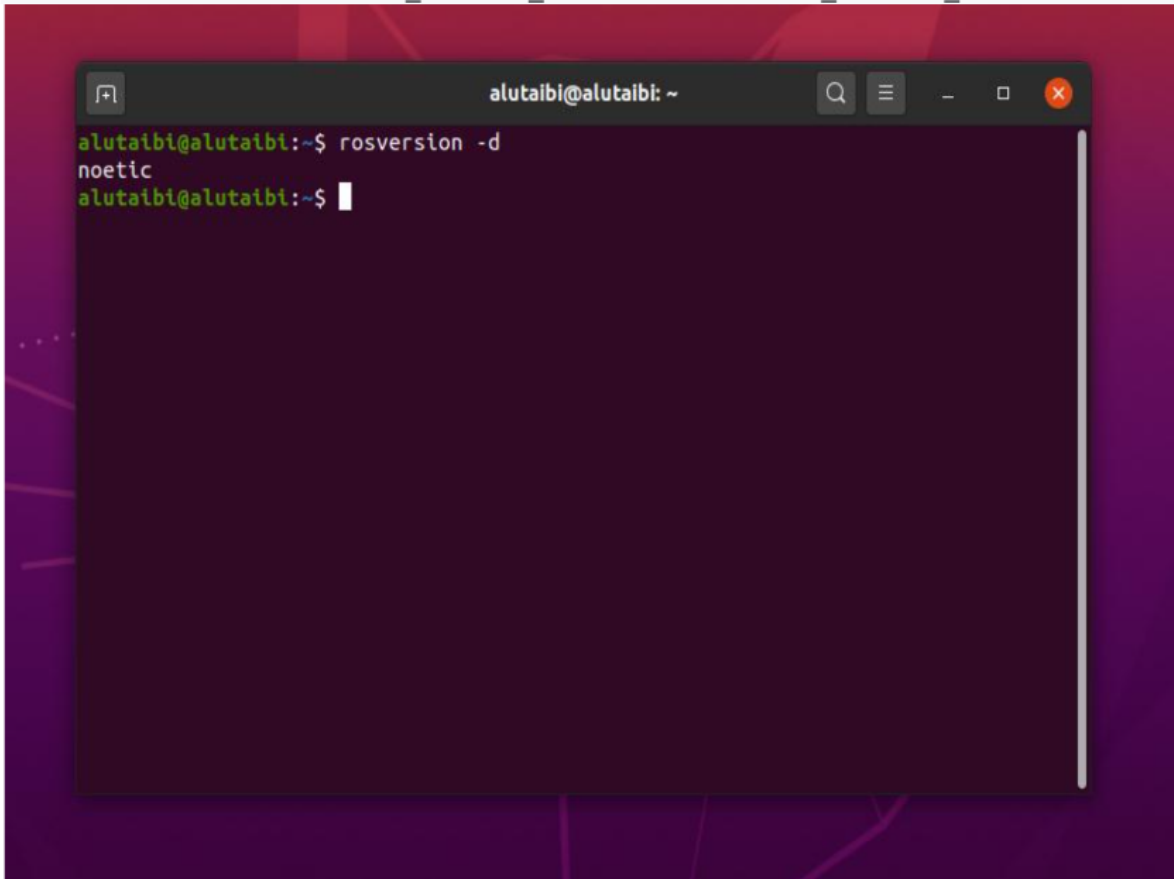
<https://ubuntu.com/download/desktop>



The screenshot shows the Ubuntu website's desktop download page. The header features the Canonical logo, the Ubuntu logo, and navigation links for Enterprise, Developer, Community, and Download. A search bar is also present. The main heading is "Download Ubuntu Desktop". Below this, the section "Ubuntu 20.04 LTS" describes the latest LTS version of Ubuntu, for desktop PCs and laptops, with long-term support (LTS) meaning five years of free security and maintenance updates, guaranteed. A link to the "Ubuntu 20.04 LTS release notes" is provided. A green "Download" button is prominently displayed. To the right of the button, a note mentions other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors, and past releases, with a link to "our alternative downloads". The page also includes a section for "Recommended system requirements".

### 3- Install the ROS on ubuntu 20.04

```
wget -c  
https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh && chmod +x ./ros_install_noetic.sh && ./ros_install_noetic.sh
```



Step:

- 1- download virtual box
- 2- download ubuntu
- 3- download ROS