

# install ros on linux:

1. Download VB

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

2. Download Ubuntu

<https://releases.ubuntu.com/20.04/>

3. Install ubuntu on VB

<https://youtu.be/LZviTjQExv0>

4. After downloading, open ubuntu, enter the firefox browser, then choose the appropriate version for the ros version <https://www.ros.org/>

After choosing, a page will open showing the download steps.

<http://wiki.ros.org/noetic/Installation/Ubuntu>

5. Configure your Ubuntu repositories: Open the terminal

I copy the code from the site and paste it in the terminal (ctrl + Alt + t).

6. Setup your sources.list: In the terminal copy and paste the following code or rewrite,

```
• sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
```

7. Set up your keys: Then paste the following code in the terminal

```
• sudo apt install curl # if you haven't already installed curl
• curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc | sudo apt-key add -
```

8. Installation: Then paste the following code in the terminal

```
• sudo apt update
```

then

```
sudo apt install ros-noetic-desktop-full
```

9. Environment setup: In the terminal, complete the setup and paste the following comment:

```
echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc  
source ~/.bashrc
```

10. Dependencies for building packages:

In the terminal, complete the dependencies and paste the following comment:

```
sudo apt install python3-rosdep python3-rosinstall python3-rosinstall  
-generator python3-wstool build-essential
```

Then the following code

```
sudo apt install python3-rosdep
```

you can initialize rosdep.

```
sudo rosdep init  
rosdep update
```

Sources:

<https://youtu.be/IUyxJajyKaQ>

<https://youtu.be/POhKxEhT3LA>

[http://wiki.ros.org/ROS/Tutorials/InstallingandConfiguringROSEnvironment#Create a ROS Workspace](http://wiki.ros.org/ROS/Tutorials/InstallingandConfiguringROSEnvironment#Create_a_ROS_Workspace)

<http://wiki.ros.org/noetic/Installation/Ubuntu>

Follow the steps on the site to install ros on jaston nano in ubuntu20.04:

<https://qengineering.eu/install-ubuntu-20.04-on-jetson-nano.html>

<https://arabicprogrammer.com/article/3659684574/>

<https://www.stereolabs.com/blog/ros-and-nvidia-jetson-nano/>