

ROS Melodic Installation

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1. Update the Ubuntu 18.04

1. Ctrl + Alt + t -----> Open the Terminal

@ the Terminal

1. \$ sudo apt update

let's have a cup of tea

2. \$ sudo apt upgrade

let's have a cup of tea

2. Install some packages that needed by ROS

@the same Terminal

1. `$ sudo apt install curl gnupg2 lsb-release git meld build-essential libfontconfig1 mesa-common-dev libglu1-mesa-dev`
2. `$ cd`

3. Add ROS's packages source into Ubuntu

1. `$ sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'`
2. `$ sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654`
3. `$ sudo apt update -y`

Add ROS2's packages source into Ubuntu

1. `$ sudo locale-gen en_US en_US.UTF-8`
2. `$ sudo update-locale LC_ALL=en_US.UTF-8 LANG=en_US.UTF-8`
3. `$ export LANG=en_US.UTF-8`
4. `curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc | sudo apt-key add -`
5. `$ sudo sh -c 'echo "deb [arch=amd64,arm64] http://package.ros.org/ros2ubuntu `lsb_release -cs` main" > /etc/apt/sources.list.d/ros2.latest.list'`
6. `$ sudo apt update -y`

4. ROS Melodic Install

1. `$ sudo apt install ros-melodic-desktop-full`
2. `$ sudo apt install python-wstool python-catkin-tools`
3. `$ sudo apt install ros-melodic-perception ros-melodic-urdf-tutorial
ros-melodic-moveit`
4. `$ sudo apt install ros-melodic-openni-camera
ros-melodic-openni-launch ros-melodic-openni2-camera
ros-melodic-openni2-launch`
5. `sudo apt install pcl-tools`

ROS2 (dashing) Install

1. `$ sudo apt install ros-dashing-desktop`
2. `$ sudo apt install python3-colcon-common-extensions
python3-argcomplete`

5. ROS Dependency Setup

1. `$ sudo rosdep init`
2. `$ rosdep update`
3. `$ echo "source /opt/ros/melodic/setup.bash" >> ~/.bashrc`
4. `source ~/.bashrc`

WIFI : Turtlebot5
Turtlebot2.4
Password : BURLBURL