

Industrial Robotics

ROS Installation

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Installation

ROS Noetic Ninjemys

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Latest LTS, supported until May, 2025

Recommended for Ubuntu 20.04



Installation

Setup your sources.list

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

Set up your keys

```
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 -
```

Installation

```
sudo apt update
```

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

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

Environment setup

You must source this script in every **bash** terminal you use ROS in.

```
source /opt/ros/noetic/setup.bash
```

Dependencies for building packages

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

Initialize rosdep

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

```
sudo rosdep init  
rosdep update
```

Catkin Tools

First you must have the ROS repositories which contain the **.deb** for **catkin_tools**:

```
sudo sh \  
-c 'echo "deb http://packages.ros.org/ros/ubuntu `lsb_release -sc` main" \  
> /etc/apt/sources.list.d/ros-latest.list'  
wget http://packages.ros.org/ros.key -O - | sudo apt-key add -
```

Once you have added that repository, run these commands to install **catkin_tools**:

```
sudo apt-get update  
sudo apt-get install python3-catkin-tools
```

<https://catkin-tools.readthedocs.io/en/latest/installing.html>