

ROS Noetic Installation

1. Configured Ubuntu repositories to allow "restricted," "universe," and "multiverse."

2. Setup 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'
```

3. Setting up keys:

```
sudo apt install curl
```

```
curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc |
sudo apt-key add -
```

4. Installation:

```
sudo apt update
```

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

5. Environment Setup:

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

Gazebo Installation

1. Install:

```
curl -sSL http://get.gazebosim.org | sh
```

2. Run:

```
gazebo
```