Franka_ros2 Installation Guide

> Official documentation can be found here: https://support.franka.de/docs/franka_ros2.html

Prerequisites

1. A working Ubuntu Linux environment
2. Have text editor like *vim* or *nano*

1. Install franka_ros2

1. Update your apt repository caches after setting up the repositories. It is also recommended that you ensure your system is up to date before installing new packages.

```
sudo apt update
sudo apt upgrade
```

2. Install the required list of packages.

```
sudo apt install -y \
ros-humble-control-msgs \
ros-humble-xacro \
ros-humble-angles \
ros-humble-ros2-control \
ros-humble-realtime-tools \
ros-humble-control-toolbox \
ros-humble-moveit \
ros-humble-ros2-controllers \
ros-humble-joint-state-publisher \
ros-humble-joint-state-publisher-gui \
ros-humble-ament-cmake-clang-format \
python3-colcon-common-extensions
```

3. Add the following two lines at the end of *.bashrc* file and then save & close the file.

```
source /opt/ros/humble/setup.bash
export RCUTILS_COLORIZED_OUTPUT=1
```

4. Source the *.bashrc* file.

```
source ~/.bashrc
```

2. Create a ROS 2 Workspace

1. Head to the *project* directory and create the required directories.

```
cd project && mkdir franka_ws
cd franka_ws && mkdir src && cd src
```

2. Clone franka_ros2 repository from GitHub.

```
git clone https://github.com/mcbed/franka_ros2.git
cd franka_ros2 && git checkout humble
```

3. Build packages.

Don't forget to find the **libfraka build directory** and replace the path in the command below.

```
cd project/franka_ws
colcon build --cmake-args -DCMAKE_BUILD_TYPE=Release -DFranka_DIR=/home/<path_to_your_libfranka_folder>
/build
```

4. Source the built project.

```
source /home/<your_usernmae>/project/franka_ws/install/setup.sh
```

3. Verify Installation

1. Execute a dummy example to verify the installation.

```
ros2 launch franka_moveit_config moveit.launch.py robot_ip:=dont-care use_fake_hardware:=true
```