MoveIt Random Move

1. Usage Environment

Motherboard: Jetson Orin Nano/Nx

ROS2: Humble

2. Driving the Real Machine

Driving the real machine is to convert the joint state information of the robot arm into the control of the real robot arm by subscribing to the `/joint_states` topic of Moveit2.

Note: Since the real robot arm does not have an obstacle avoidance function, some positions may hit obstacles; so the planned robot arm movements should be as reasonable as possible and avoid obstacles

(It is recommended to use preset positions to drive the real machine demonstration)

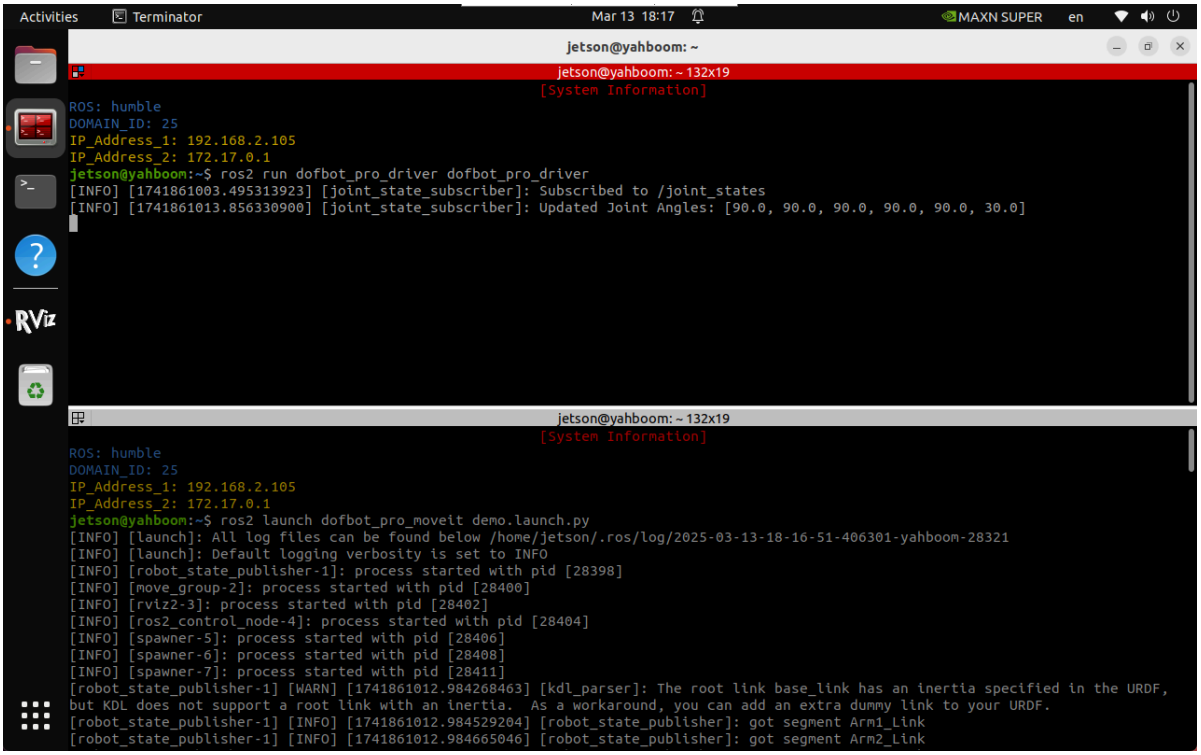
2.1. Start the real machine

If you do not drive the real machine, simulate the robot arm movement in MoveIt:

```
ros2 run dofbot_pro_driver dofbot_pro_driver
```

2.2. Start MoveIt2

```
ros2 launch dofbot_pro_moveit demo.launch.py
```



3. Random movement

It is not recommended to drive the real machine in the random movement demonstration case. Some positions may hit obstacles or hit the motherboard!

Start command

The robot needs to be successfully loaded in MoveIt and `You can start planning now!` appears. Run the following command: The robot will randomly plan an action by itself

```
ros2 run dofbot_pro_moveit random_move
```