Scene design

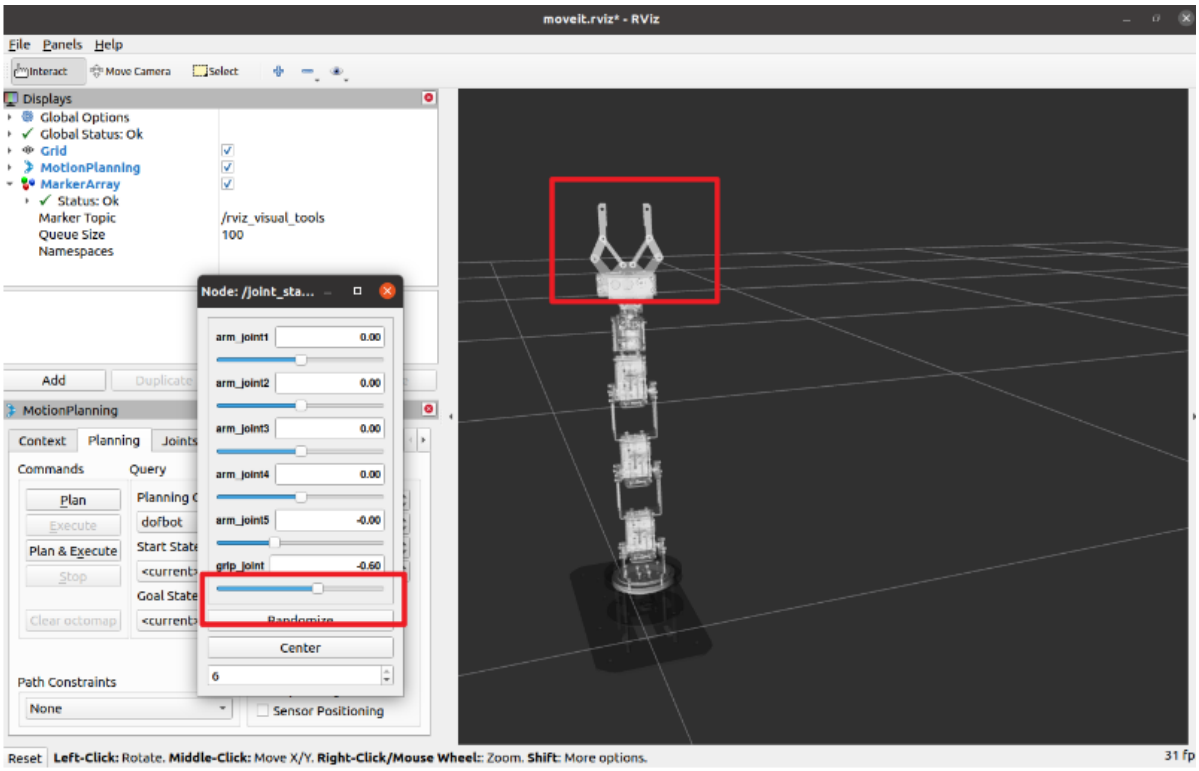
1. Robotic arm rviz simulation movement

- **Virtual machine simulation starts**

Start MoveIT (virtual machine side)

```
roslaunch dofbot_config demo.launch
```

After starting, you need to open the No. 6 servo clamp, otherwise an error will be reported. Set as shown in the picture.



Open another terminal and enter the command line. (This program is simulated in rviz, the real machine will not move) (Virtual machine side)

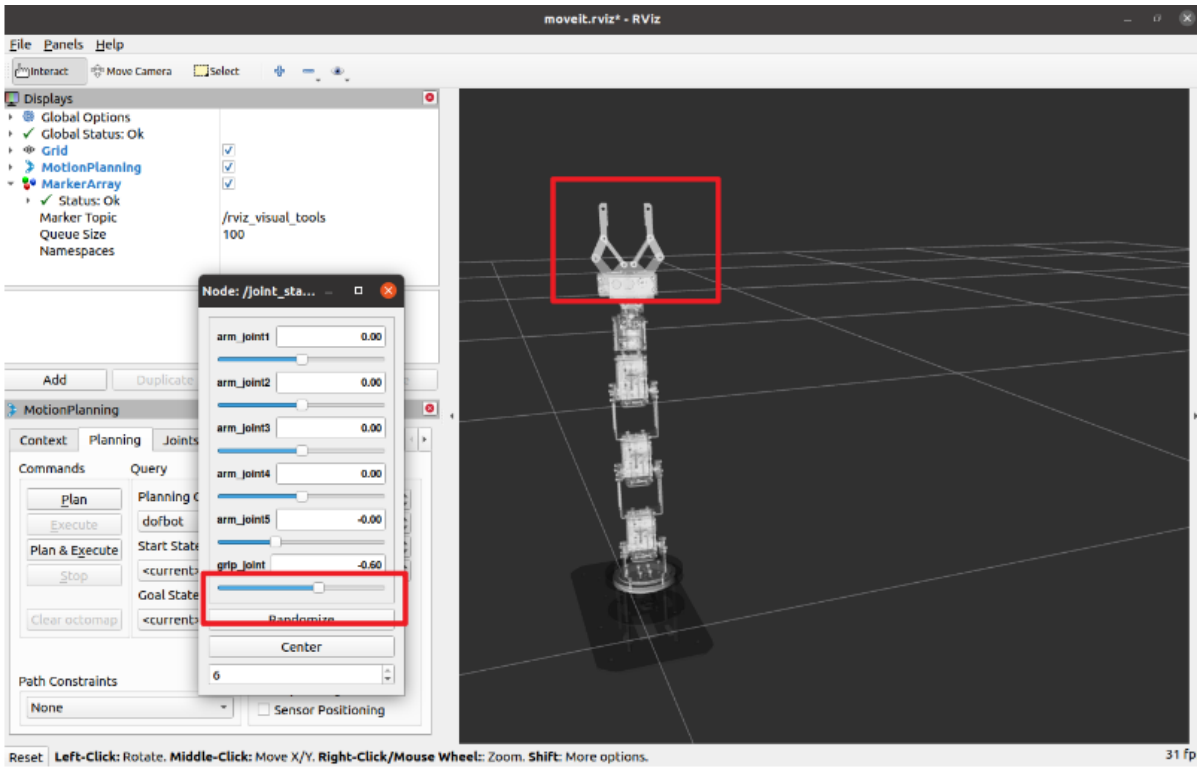
```
cd dofbot_ws/
source devel/setup.bash
rosrun dofbot_moveit 04_Set_Scene.py # python file
```

- **Real device startup**

```
roslaunch dofbot_config demo.launch #Virtual machine side
rosrun dofbot_moveit 00_dofbot_move.py #Host side
rosrun dofbot_moveit 04_Set_Scene.py #Virtual machine side
```

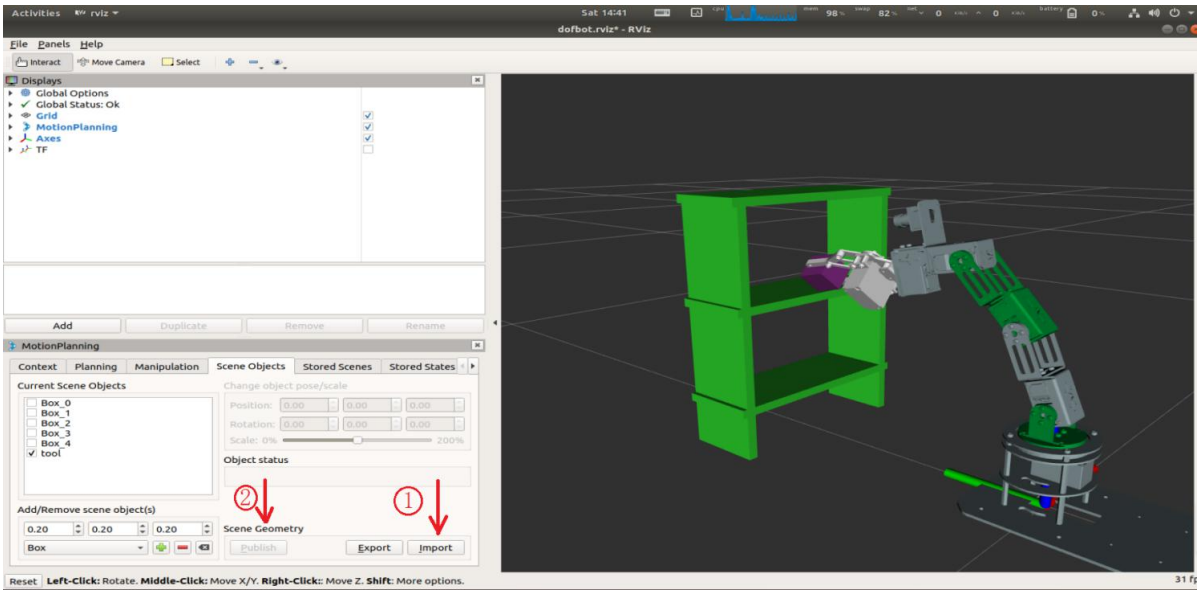
The corresponding relationship between the robotic arm servo and the joints: from the lowest end of the robotic arm to the end of the gripper.

After starting, you need to open the No. 6 servo clamp, otherwise an error will be reported. Set as shown in the picture.



Close case: [ctrl+c] to close. If it cannot be closed, execute [ctrl+z] again.

To use, first import the pre-planned scene. The import method is as shown in the figure: The first step is to click [Import] and select the scene dofbot_ws/src/dofbot_config/scene/shape.scene; the second step is to complete the previous step. Yes, click [Publish] to take effect



Close case: [ctrl+c] to close. If it cannot be closed, execute [ctrl+z] again. To clear obstacles, click [x] to delete all obstacles. For detailed code, please see dofbot_ws/src/dofbot_moveit/scripts/04_Set_Scene.py

Experimental phenomenon: The robot arm performs sorting collision detection movement in rviz as shown in the figure above.