# ROS1 Melodic

```
 1  # 大作业命令执行顺序
 2  catkin_make
 3  roslaunch gazebo_ros empty_world.launch
 4  roslaunch car_model spawn_car.launch
 5  rviz
 6  roslaunch pure_persuit pure_persuit.launch
 7
 8
 9  # -------------------------------------------------------------------------
10  mkdir catkin_ws/src
11  catkin_make                   // catkin_ws下
12  catkin_create_pkg xxx         // src下，然后会多出2个文件，CMakeLists.txt、package.xml
13  # rm -rf build/ devel/
14  # catkin_make clean
15  catkin_make
16  roslaunch gazebo_ros empty_world.launch
17  roslaunch car_model spawn_car.launch
18  # roslaunch waypoint_loader waypoint_loader.launch
19  rviz
20  # car_model rviz config
21  # add path - name"base path" - topic - choice"/base_path"
22  # roslaunch waypoint_updater waypoint_updater.launch
23  roslaunch pure_persuit pure_persuit.launch
24  # -------------------------------------------------------------------------
25  rosrun rqt_gui rqt_gui        # rqt 诊断界面
26  # -------------------------------------------------------------------------
27  roslaunch gazebo_ros mud_world.launch        // 单摆模型
28  roslaunch box spawn_box_urdf.launch
```

| ◀ | 🏠 shenli | catkin_ws | src | car_model | **rviz_config** | ▶ |

Name

📄 smart.rviz
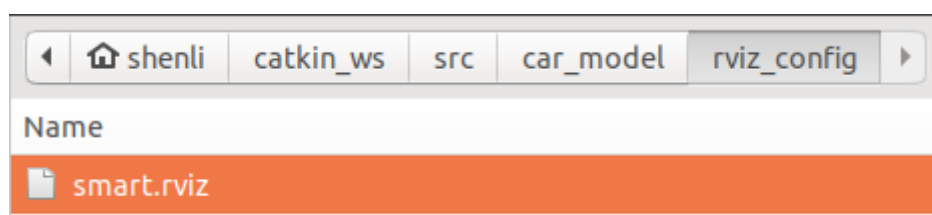
问题一：错误信息表示 `ros1` 在启动 `car_model` 时，无法加载名为 `rear_right_velocity_controller` 的控制器

```
1  [ERROR] [1731597219.721711911, 14.282000000]: Could not load controller 'rear_r
   ight_velocity_controller' because controller type 'velocity_controllers/JointVe
   locityController' does not exist.
2  [ERROR] [1731597219.721800231, 14.282000000]: Use 'rosservice call controller_m
   anager/list_controller_types' to get the available types
3  [ERROR] [1731597220.740488527, 15.265000000]: Could not load controller 'rear_l
   eft_velocity_controller' because controller type 'velocity_controllers/JointVel
   ocityController' does not exist.
4  [ERROR] [1731597220.740671168, 15.265000000]: Use 'rosservice call controller_m
   anager/list_controller_types' to get the available types
5  [ERROR] [1731597221.758851603, 16.247000000]: Could not load controller 'front_
   right_steering_position_controller' because controller type 'effort_controller
   s/JointPositionController' does not exist.
6  [ERROR] [1731597221.759038853, 16.247000000]: Use 'rosservice call controller_m
   anager/list_controller_types' to get the available types
7  [ERROR] [1731597222.788414056, 17.174000000]: Could not load controller 'front_
   left_steering_position_controller' because controller type 'effort_controllers/
   JointPositionController' does not exist.
8  [ERROR] [1731597222.788502329, 17.174000000]: Use 'rosservice call controller_m
   anager/list_controller_types' to get the available types
```

```
1  sudo apt-get install ros-melodic-ros-control ros-melodic-velocity-controllers
2  sudo apt-get install ros-melodic-effort-controllers
```

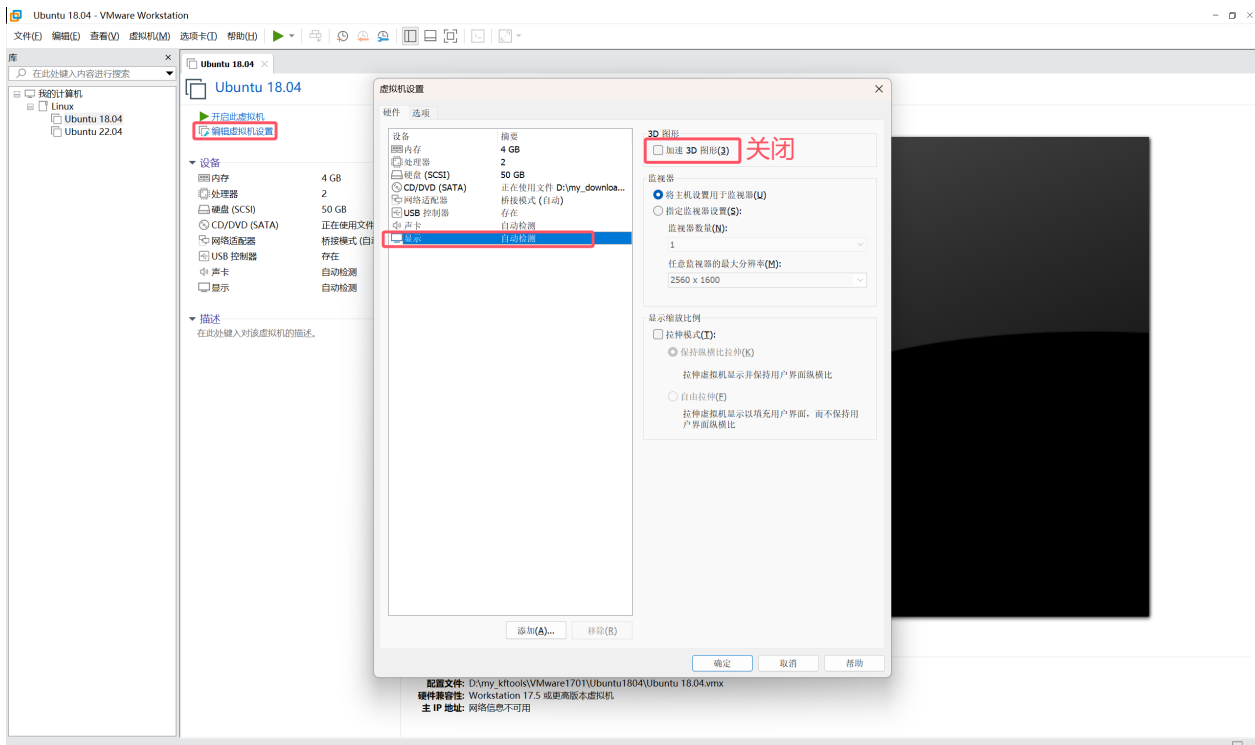## 问题二： （ROS）RLException: [display_mrobot_with_camera.launch] is neither a launch file

编辑后，再source重启生效

🌲 解决：

1.在终端先运行 `sudo gedit ~/.bashrc`

2.然后在打开的文档最后添加 `source ~/catkin_ws/devel/setup.bash` 和 `export ROS_PACKAGE_PATH=${ROS_PACKAGE_PATH}:~/catkin_ws/`

3.在终端运行 `source ~/.bashrc`

4.在终端运行 `echo $ROS_PACKAGE_PATH` 可以在屏幕上看到你添加的路径

问题三：gazebo启动失败

```
1  shenli@shenli-virtual-machine:~$ gazebo
2  VMware: vmw_ioctl_command error Invalid argument.
3  escalating to SIGKILL on server
```


问题四：文件没权限

```
1  chmod a+r ~/.ignition/fuel/config.yaml
2  sudo -i              // 切换用户到 root
```

问题五：切换Python版本，选择Python 3 作为默认

```
1  sudo ln -sf /usr/bin/python3 /usr/bin/python
```