ROS 调试常见问题

在编译指令前遇到的问题,应为是环境报错,也就是安装问题,需要检查 ROS 的安装是否完整给。

常用指令: catkin_make 编译指令 roslaunch 运行指令

以下为技术处理报错

- 一、编译报错
- 1. 根据编译情况来看,是编译的地址缺少示例程序,需要做下程序文件 copy 的过程。详细 阅读 Readme 文件里面是有说明的,麻烦检查步骤。

```
ur@ursim:~/catkin_ws$ roslaunch dh_gripper_driver dh_gripper.launch
[dh_gripper.launch] is neither a launch file in package [dh_gripper_driver] nor
is [dh_gripper_driver] a launch file name
The traceback for the exception was written to the log file
```

2. 项目加入后,同样指令运行报错。是由于加入的程序,没有 catkin_make 编译。重新 catkin_make 编译,roslaunch 运行下指令就可以了。

```
ur@ursim:-/catkin_ws$ roslaunch dh_gripper_driver dh_gripper.launch
... logging to /home/ur/.ros/log/5f5d0566-3eb5-11ec-a504-000c299efa08/roslaunch-ursim-
1304.log
Checking log directory for disk usage. This may take awhile.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.

started roslaunch server http://ursim:36345/

SUMMARY
=======

PARAMETERS
* /dh_gripper_driver/BaudRate: 115200
* /dh_gripper_driver/Gripper_ID: 1
* /dh_gripper_driver/Gripper_ID: 1
* /dh_gripper_driver/Gripper_Model: PGE
* /dn_gripper_driver_test/Gripper_Model: PGE
* /dosdistro: kinetic
* /rosdistro: kinetic
* /rosversion: 1.12.17

NODES
/
dh_gripper_driver (dh_gripper_driver/dh_gripper_driver)
dh_gripper_driver_test (dh_gripper_driver/dh_gripper_driver_test)
auto-starting new master
process[master]: started with pid [1315]
ROS_MASTER_URI=http://localhost:11311

setting /run_id to 5f5d0566-3eb5-11ec-a504-000c299efa08
process[rosout-1]: started with pid [1328]
started core service [/rosout]
ERROR: cannot Lounch node of type [dh_gripper_driver/dh_gripper_driver]: can't locate node [dh_gripper_driver] in package [dh_gripper_driver]</pre>
```

3. 运行成功,软件没有获取到串口。一般是串口没有权限访问,请配置一下,或者查看接入设备。

```
[dh_gripper_driver-2] restarting process
process[dh_gripper_driver-2]: started with pid [23355]
[ INFO] [1636450555.840470511]: Gripper_ID : 1
[ INFO] [1636450555.843963716]: Gripper_model : PGE
[ INFO] [1636450555.848625557]: Connect_port: /dev/ttyUSB0
[ INFO] [1636450555.848694323]: BaudRate : 115200 (In TCP/IP Mode , BaudRate is unuse)
Error opening /dev/ttyUSB0: No such file or directory
DH_Modbus_Gripper open failed
[ERROR] [1636450555.848916813]: Unable to open commport to /dev/ttyUSB0
[dh_gripper_driver-2] process has died [pid 23355, exit code 255, cmd /home/ur/catkin_ws/devel/lib/dh_gripper_driver/dh_gripper_driver __name:=dh_gripper_driver __log:=/home/ur/.ros/log/67b142c6-4140-11ec-a504-000c299efa08/dh_gripper_driver-2*.log].
log file: /home/ur/.ros/log/67b142c6-4140-11ec-a504-000c299efa08/dh_gripper_driver-2*.log
```

4. 正常运行,夹爪没有反应。检查接线上电,重新运行即可。

```
dh_gripper_Test (dh_gripper_driver/dh_gripper_driver_test)
    dh_gripper_driver (dh_gripper_driver/dh_gripper_driver)
auto-starting new master
process[master]: started with pid [28496]
ROS_MASTER_URI=http://localhost:11311

setting /run_id to d444da64-41e1-11ec-a504-000c299efa08
process[rosout-1]: started with pid [28509]
started core service [/rosout]
process[dh_gripper_driver-2]: started with pid [28512]
process[dh_gripper_Test-3]: started with pid [28513]
[ INFO] [1636519874.119242135]: Gripper_ID : 1
[ INFO] [1636519874.14391193980]: Gripper_model : PGE
[ INFO] [1636519874.143911919]: Connect_port: /dev/ttyUSB0
[ INFO] [1636519874.143973926]: BaudRate : 115200 (In TCP/IP Mode , BaudRate is unuse)
DH_Modbus_Gripper open successful
Send grip init
wait grip initialized
```

5. Gazebo 版本不对应,把 gazebo 相关文件禁用

```
CMake Error at /opt/ros/kinetic/share/catkin/cmake/catkinConfig.cmake:83 (find_
package):
    Could not find a package configuration file provided by "control_toolbox"
    with any of the following names:
        control_toolboxConfig.cmake
        control_toolbox-config.cmake

    Add the installation prefix of "control_toolbox" to CMAKE_PREFIX_PATH or
    set "control_toolbox_DIR" to a directory containing one of the above files.
    If "control_toolbox" provides a separate development package or SDK, be
    sure it has been installed.
    Call Stack (most recent call first):
    dh_robotics_ag95_gripper/dh_robotics_ag95_simulation/roboticsgroup_gazebo_plu
gins/CMakeLists.txt:5 (find_package)

-- Configuring incomplete, errors occurred!
See also "/home/ubuntu1604/catkin_ws/build/CMakeFiles/CMakeOutput.log".
See also "/home/ubuntu1604/catkin_ws/build/CMakeFiles/CMakeError.log".
Invokting "cnake" failed
```