

## ROS 伺服运动使用说明

1. 修改功能包 (jaka\_driver) 的 launch 文件夹下的 robot\_start\_launch.launch 文件中的机器人 IP 地址(与实际机器人 IP 地址保持一致), 如图:

```
<launch>
<param name="ip" value="172.30.2.144" type="str"/>
<node pkg="jaka_driver" type="jaka_driver" name="jaka_driver" output="screen" launch-prefix="xterm -e gdb -ex run --args" />
</launch>
```

2. 修改功能包 (jaka\_driver) 的 src 文件夹下 servo\_j\_INCR.cpp 文件中导入的运动规划路径文件 (j\_INCR.csv) 为绝对路径。

```
ifstream infile("/home/whm/jaka_robot/src/jaka_driver/src/j_INCR.csv", ios::in);
string line;
vector<struct Position> posVector;
// getline(infile, line);
while (getline(infile, line)) {
```

3. 修改功能包 (jaka\_driver) 的 src 文件夹下 jaka\_driver.cpp 文件中 MoveMode 为 INCR 运动。

```
bool servo_j_callback(jaka_msgs::ServoMove::Request &request,
| | | | |jaka_msgs::ServoMove::Response &response)
{
    JointValue joint_pose;
    joint_pose.jVal[0] = request.pose[0];
    joint_pose.jVal[1] = request.pose[1];
    joint_pose.jVal[2] = request.pose[2];
    joint_pose.jVal[3] = request.pose[3];
    joint_pose.jVal[4] = request.pose[4];
    joint_pose.jVal[5] = request.pose[5];
    // int ret = robot.servo_j(&joint_pose, MoveMode::ABS);
    int ret = robot.servo_j(&joint_pose, MoveMode::INCR);
```

4. 在工作空间 (jaka\_robot) 右键打开一个终端, 使用 catkin\_make 编译文件。

```

whm@whm-virtual-machine:~/jaka_robot$ catkin_make
Base path: /home/whm/jaka_robot
Source space: /home/whm/jaka_robot/src
Build space: /home/whm/jaka_robot/build
Devel space: /home/whm/jaka_robot/devel
Install space: /home/whm/jaka_robot/install
####
#### Running command: "make cmake_check_build_system" in "/home/whm/jaka_robot/build"
####
####
#### Running command: "make -j4 -l4" in "/home/whm/jaka_robot/build"
####
[ 0%] Built target std_msgs_generate_messages_nodejs
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_SetUserFrame
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_ServoMoveEnable
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_RobotMsg
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_SetTcpFrame
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_ClearError
[ 0%] Built target _jaka_msgs_generate_messages_check_deps_GetIK

```

- 在工作空间（jaka\_robot）终端添加环境变量。

```
source ./devel/setup.bash
```

```
whm@whm-virtual-machine:~/jaka_robot$ source ./devel/setup.bash
```

- 启动 robot\_start\_launch.launch 文件：

```
roslaunch jaka_driver robot_start_launch.launch
```

```

whm@whm-virtual-machine:~/jaka_robot$ source ./devel/setup.bash
whm@whm-virtual-machine:~/jaka_robot$ roslaunch jaka_driver robot_start_launch.l
aunch
... logging to /home/whm/.ros/log/166caa6e-6556-11ed-a6b2-000c29cf701f/roslaunch
-whm-virtual-machine-40300.log
Checking log directory for disk usage. This may take a while.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.

started roslaunch server http://whm-virtual-machine:39167/

SUMMARY
=====

PARAMETERS
* /ip: 172.30.2.144
* /rostdistro: melodic
* /rosversion: 1.14.13

```

- 在工作空间（jaka\_robot）右键新打开一个终端，然后添加环境变量。

```
source ./devel/setup.bash
```

```
whm@whm-virtual-machine: ~/jaka_robot
文件(F) 编辑(E) 查看(V) 搜索(S) 终端(T) 帮助(H)
whm@whm-virtual-machine:~/jaka_robot$ source ./devel/setup.bash
```

8. 启动 servo\_j\_INCR 文件。

```
roslaunch jaka_driver servo_j_INCR
```

[illegible]