

```

khulud@khulud-VirtualBox:~$ sudo nano ~/.bashrc
[sudo] password for khulud:
khulud@khulud-VirtualBox:~$ source ~/.bashrc
khulud@khulud-VirtualBox:~$ roslaunch robot_arm_pkg check_motors.launch
... logging to /home/khulud/.ros/log/5d80c7ec-fa02-11ec-952b-080027acffc7/rosl
aunch-khulud-VirtualBox-22747.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://khulud-VirtualBox:33739/

SUMMARY

PARAMETERS

```

* /robot_description: <?xml version="1....
* /rostdistro: kinetic
* /rosversion: 1.12.17

```

NODES

```

/
  joint_state_publisher_gui (joint_state_publisher_gui/joint_state_publisher
_gui)
  robot_state_publisher (robot_state_publisher/robot_state_publisher)
  rviz (rviz/rviz)

```

auto-starting new master

process[master]: started with pid [22758]

ROS_MASTER_URI=http://localhost:11311

setting /run_id to 5d80c7ec-fa02-11ec-952b-080027acffc7

process[rosout-1]: started with pid [22771]

started core service [/rosout]

process[robot_state_publisher-2]: started with pid [22774]

process[rviz-3]: started with pid [22788]

process[joint_state_publisher_gui-4]: started with pid [22790]

[INFO] [1656764864.832856]: Centering

khulud@khulud-VirtualBox: ~/catkin_ws

```

Selecting previously unselected package libshiboken2:amd64.
Preparing to unpack .../libshiboken2:amd64 (2.0.0.dev0-0-202102130129-rev1010-pkg5-ubuntu16.04.1_amd64.deb ...
Unpacking libshiboken2:amd64 (2.0.0.dev0-0-202102130129-rev1010-pkg5-ubuntu16.04.1) ...
Selecting previously unselected package libpyside2:amd64.
Preparing to unpack .../libpyside2:amd64 (2.0.0.dev0-0-202102130129-rev1010-pkg5-ubuntu16.04.1_amd64.deb ...
Unpacking libpyside2:amd64 (2.0.0.dev0-0-202102130129-rev1010-pkg5-ubuntu16.04.1) ...
Selecting previously unselected package libinput-dev:amd64.
Preparing to unpack .../libinput-dev 1.6.3-1ubuntu1-16.04.1_amd64.deb ...
Unpacking libinput-dev:amd64 (1.6.3-1ubuntu1-16.04.1) ...
Selecting previously unselected package qtbase5-private-dev:amd64.
Preparing to unpack .../qtbase5-private-dev 5.5.1+dfsg-1ubuntu7.7_amd64.deb ...
Unpacking qtbase5-private-dev:amd64 (5.5.1+dfsg-1ubuntu7.7) ...
Selecting previously unselected package libqt5multimediawidgets5:amd64.
Preparing to unpack .../libqt5multimediawidgets5 5.5.1-4ubuntu2_amd64.deb ...
Unpacking libqt5multimediawidgets5:amd64 (5.5.1-4ubuntu2) ...
Selecting previously unselected package libqt5tools-p1:amd64.
Preparing to unpack .../libqt5tools-p1 5.5.1-4ubuntu2_amd64.deb ...
Unpacking libqt5tools-p1:amd64 (5.5.1-4ubuntu2) ...
Selecting previously unselected package libqt5multimediaquick-p1:amd64.
Preparing to unpack .../libqt5multimediaquick-p1 5.5.1-4ubuntu2_amd64.deb ...
Unpacking libqt5multimediaquick-p1:amd64 (5.5.1-4ubuntu2) ...
Selecting previously unselected package qtmultimedia5-dev:amd64.
Preparing to unpack .../qtmultimedia5-dev 5.5.1-4ubuntu2_amd64.deb ...
Unpacking qtmultimedia5-dev:amd64 (5.5.1-4ubuntu2) ...
Selecting previously unselected package libqt5opengl5-dev:amd64.
Preparing to unpack .../libqt5opengl5-dev 5.5.1+dfsg-1ubuntu7.7_amd64.deb ...
Unpacking libqt5opengl5-dev:amd64 (5.5.1+dfsg-1ubuntu7.7) ...
Selecting previously unselected package libqt5sculene5:amd64.
Preparing to unpack .../libqt5sculene5 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking libqt5sculene5:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package libqt5designer5:amd64.
Preparing to unpack .../libqt5designer5 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking libqt5designer5:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package libqt5designercomponents5:amd64.
Preparing to unpack .../libqt5designercomponents5 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking libqt5designercomponents5:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package libqt5help5:amd64.
Preparing to unpack .../libqt5help5 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking libqt5help5:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-dev:amd64.
Preparing to unpack .../qttools5-dev 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-dev:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-private-dev:amd64.
Preparing to unpack .../qttools5-private-dev 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-private-dev:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-dev-tools.
Preparing to unpack .../qttools5-dev-tools 5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-dev-tools (5.5.1-3ubuntu0.1) ...

```


config.rviz - RViz

Interact Move Camera Select Focus Camera Measure 2D Pose Estimate 2D Nav Goal Publish Point

Displays

- Global Options
 - Fixed Frame: base
 - Background Color: 48; 48; 48
 - Frame Rate: 30
 - Default Light: ☒
- Global Status: Ok
 - Fixed Frame: OK
- Grid: ☒
- Axes: ☒
 - Status: Ok
 - Reference Frame: <Fixed Frame>
 - Length: 1
 - Radius: 0.0000
- RobotModel: ☒
 - Status: Ok
 - Visual Enabled: ☒
 - Collision Enabled: ☐

Add Duplicate Remove Rename

Views

Type: Orbit (rviz) Zero

Current View	Orbit (rviz)
Near Clip ...	0.1
Invert Z Axis	<input type="checkbox"/>
Target Fra...	<Fixed Frame>
Distance	8.1709
Focal Shap...	0.0
Focal Shap...	<input checked="" type="checkbox"/>
Yaw	1.1004
Pitch	-0.06398
Focal Point	-1.2241; -2.4556; ...

Save Remove Rename

Time

ROS Time: 556766374.22 ROS Elapsed: 1508.81 Wall Time: 1656766374.25 Wall Elapsed: 1508.81 ☐ Experimental

Reset 31 fps

joint_state_publisher

base_joint 1.02

shoulder 0.01

elbow 0.06

wrist 0.43

Randomize

Center

ε

```

Selecting previously unselected package libqt5help5:amd64.
Preparing to unpack .../libqt5help5_5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking libqt5help5:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-dev:amd64.
Preparing to unpack .../qttools5-dev_5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-dev:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-private-dev:amd64.
Preparing to unpack .../qttools5-private-dev_5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-private-dev:amd64 (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qttools5-dev-tools.
Preparing to unpack .../qttools5-dev-tools_5.5.1-3ubuntu0.1_amd64.deb ...
Unpacking qttools5-dev-tools (5.5.1-3ubuntu0.1) ...
Selecting previously unselected package qtdeclarative5-private-dev:amd64.
Preparing to unpack .../qtdeclarative5-private-dev_5.5.1-2ubuntu6_amd64.deb ...

```