



4.3.2

Movelt! Setup Assistant - Part2

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Robot Poses

Robot Poses: Define sets of joint values for particular planning groups.

In this context in MoveIt poses are defined as sets of joint values.

Define two sets of joint values:

Robot 1

Planning Group: robot1

robot1_shoulder_pan_joint: Move the slider slightly (0.4143 rad)

robot1_shoulder_lift_joint: -1.57 rad (90deg turn)

robot1_wrist_1_joint: -1.57 rad (90deg turn)

Pose Name: R1Up

Robot 2

Planning Group: robot2

robot1_shoulder_pan_joint: Move the slider slightly (0.4143 rad)

robot2_shoulder_lift_joint: -1.57 rad (90deg turn)

robot2_wrist_1_joint: -1.57 rad (90deg turn)

Pose Name: R2Up

MSA Units

- **End Effectors:** We can define the set of links and joints. Also, we can let MoveIt plan our end effectors. For now, we leave it empty.
- **Passive Joints:** Specify one or multiple robot joints as passive. MoveIt will then consider these joints as not available for planning.
- **Author Information:** is required as this generates a ROS package.
- **Generate Configuration Files:** Displays files with information about the choices we made in the previous steps so the MoveGroup node can use it:
 - Specify the desired directory:
\$HOME/hrwros_ws/src/hrwros/hrwros_moveit_config
 - Generate Package:
Confirm that no end effectors have been added

Generate package

Let's take a quick look at the generated ROS package.

```
$ cd src/hrwros/hrwros_moveit_config  
$ cd config  
$ cd ../launch
```

We see configuration files and a launch folder containing a lot of launch files. We will focus mostly on `move_group.launch`.