Le Robot Marcheur

Project Robotique industrielle

Sungkur Seekcha

2020

# Table of Contents

[Table of Contents i](#_Toc52827516)

[Partie 2 Ajout des autres jambes 1](#_Toc52827517)

[Question 1 1](#_Toc52827518)

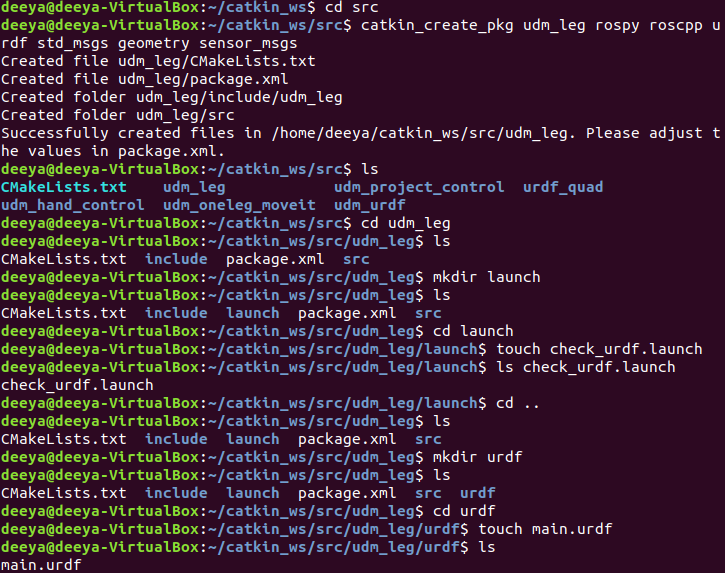
[Question 2 4](#_Toc52827519)

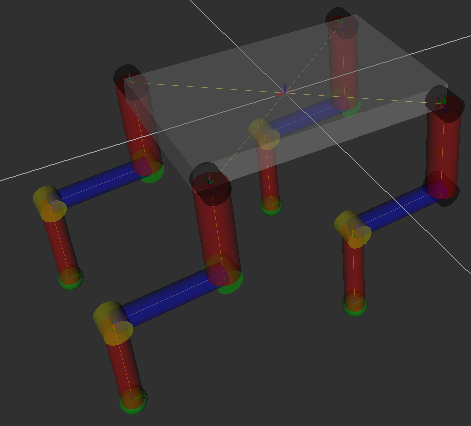
[Annex I](#_Toc52827520)

# Partie 2 Ajout des autres jambes

## Question 1

**1. A partir de l’urdf créé à la partie 1, créer un nouvelle urdf où vous ajouterez le reste des jambes de votre robot.**

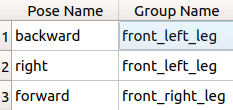




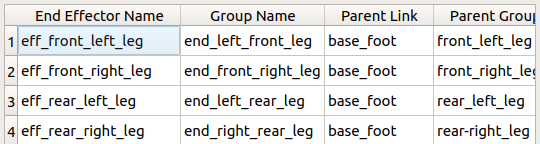
1. Load urdf file in MoveIt.
2. Generate the collision matrix.
3. Add the virtual joint.

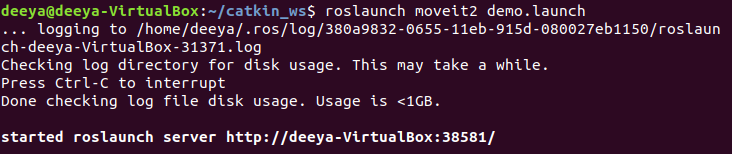


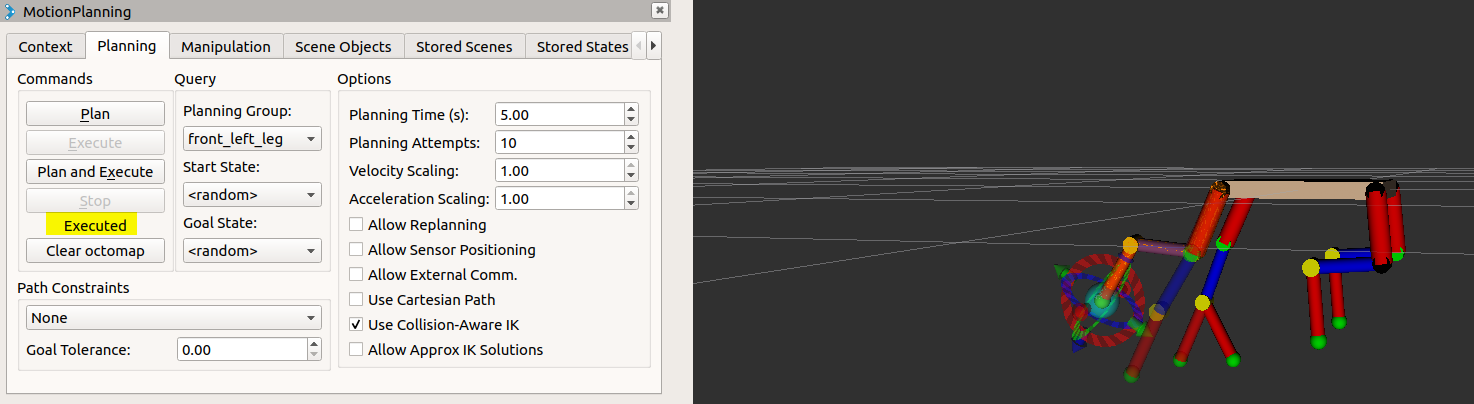
1. Add new Planning groups
   1. Add group name
   2. Kniematic Solver : kdl\_kinematics\_plugin/KDLKinematicsPlugin
   3. Group Default Planner: RRT
   4. Add joint.
2. Add robot pose.



1. Add end effectors.



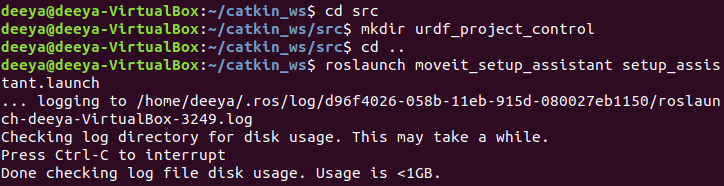
1. Setup ROS Controllers > Auto Add\_FollowJointsTrajectory
2. Simulate with gazebo > generate URDF
3. Add Author info
4. Generate Package
5. Open demo.launch  
   



## Question 2

**2.** **Dans udm\_project\_control créer un service permettant de déplacer le robot en ligne droite, à gauche, à droite ou en arrière.**

*Note: Instead of udm\_project\_control used urdf\_project\_control.*



1. Launch roscore



1. Launch move\_group.launch in moveit2.



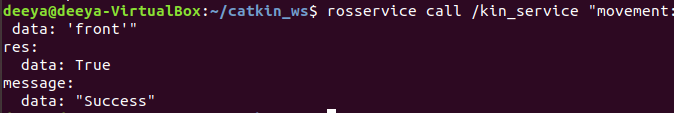
1. Launch demo.launch in moveit2.



1. Launch service.launch in urdf\_project\_control.

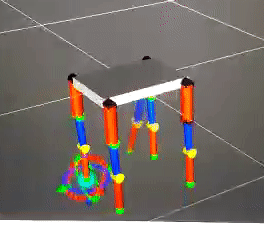


1. Call function ‘front’.



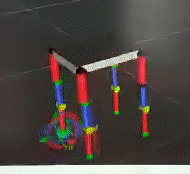
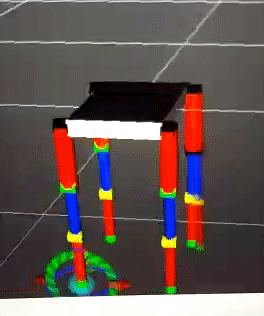
View front.git

*Click on the image to see the movement*

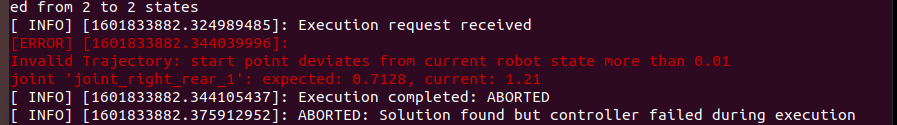


1. Call function ‘right’ or ‘left’ or ‘back’.

*Click on the image to see the movement*

# Annex

1. Error: Invalid Trajectory   
   

Solution : Change 1.21 to 0.7128

