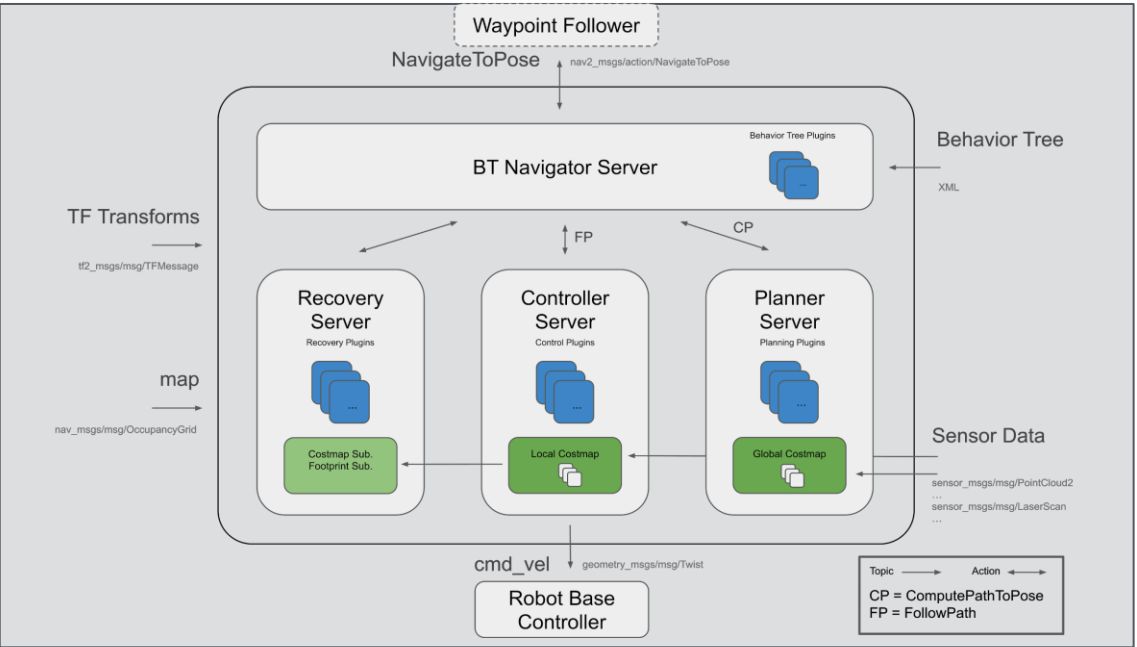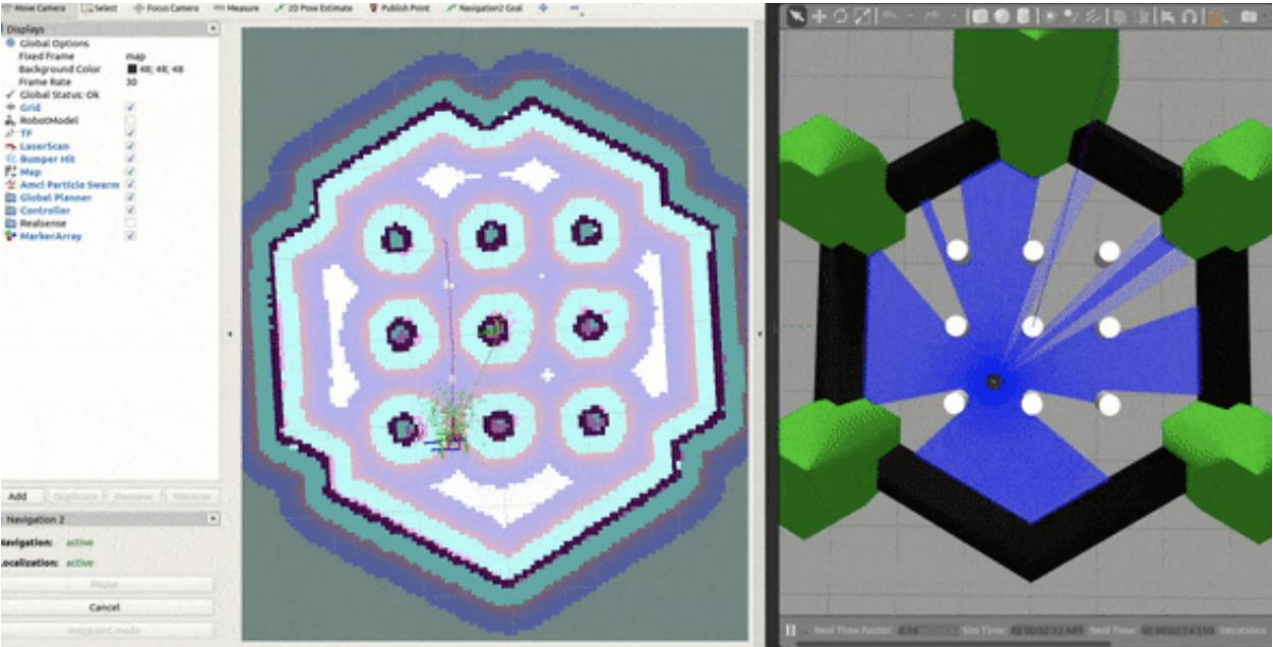# # 赛题 19 #

Create a Configuration Assistant (Analog to MoveIt)

直播导师：巨震

ROS(Navigation2) 赛题介绍

Servers
- Planner
- Controller
- Recovery

Map
- Costmap
- Layers
- Filters

Misc
- Map Server
- Plugins
- Behavior Tree

Steve Macenski
github.com/Steve Macenski

19. Create a Configuration Assistant (Analog to MoveIt)

Background
Moveit has long has a QT configuration assistant. This setup assistent helps the user configure their UDRF and needs to setup MoveIt configuration files. A configuration assistant could be extremely beneficial to Navigation2 users as a way to minimize friction.

Project
We should provide a GUI tool to cover the following configurations:
• the broad strokes with the costmap, with a visualizer to show the user what it will look like
• Select configurable costmap layers
• Select recovery behavior parameters
• URDF, footprint, and frame selection to make sure the options comply with standards, planner, and controller
• Set minimum and maximum speed and other kinematic parameters
• Select from a dropdown of possible planners and controllers
• Helpful notes throughout the prompts to aid in selecting appropriate parameters
• Selecting at behavior tree
After the items are configured, there should be a preview to see how the parameters effect the robot.

Project output requirements
• A QT based GUI configuration assistant that support the parameters listed above
• A preview panel to display the parameters' effects on the robot
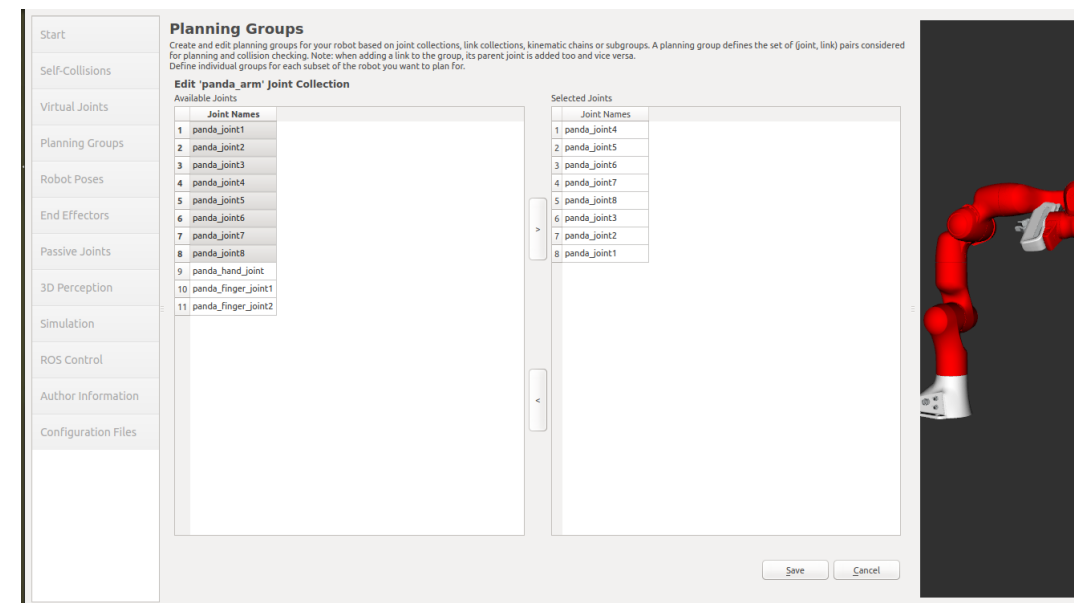
Ref:

MoveIt! Setup Assistant Tutorial