

9. 7. 2023

https://industrial-training-master.readthedocs.io/en/melodic/_source/session1/Create-Catkin-Workspace.html

/home/ladak/Desktop/ws_2023

<https://roboticscasual.com/ros-tutorial-how-to-create-a-moveit-config-for-the-ur5-and-a-gripper/>

```
git clone -b noetic-devel https://github.com/ros-industrial/universal_robot.git
```

fatal: Remote branch noetic-devel not found in upstream origin – **NO NOETIC BRANCH**

=> use original folder universal_robot

```
wget https://raw.githubusercontent.com/utecrobotics/ur5/master/ur5_description/urdf/ur5_joint_limited_robot.urdf.xacro
```

.bashrc:

```
#export ROS_MASTER_URI=http://192.168.0.10:11311
#export ROS_IP=192.168.0.100
```

```
export ROS_MASTER_URI=http://localhost:11311
export ROS_HOSTNAME=localhost
```

ladak@ladak-ThinkStation-P330:~/Desktop/ws_2023/src\$ roslaunch moveit_setup_assistant setup_assistant.launch

```
... logging to /home/ladak/.ros/log/97880b22-1e77-11ee-a428-8f23e8d4e878/roslaunch-ladak-ThinkStation-P330-25435.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://localhost:38469/
```

```
SUMMARY
=====
```

```
PARAMETERS
* /rostdistro: noetic
* /rosversion: 1.15.13
```

```
NODES
/
  moveit_setup_assistant (moveit_setup_assistant/moveit_setup_assistant)
```

```
auto-starting new master
process[master]: started with pid [25443]
ROS_MASTER_URI=http://localhost:11311
```

```
...
```

```
/opt/ros/noetic/lib/moveit_setup_assistant/moveit_setup_assistant: error while loading
shared libraries: libmoveit_robot_state_rviz_plugin_core.so.1.1.11: cannot open shared
object file: No such file or directory
=====REQUIRED
process [moveit_setup_assistant-2] has died!
process has died [pid 25456, exit code 127, cmd
/opt/ros/noetic/lib/moveit_setup_assistant/moveit_setup_assistant
__name:=moveit_setup_assistant __log:=/home/ladak/.ros/log/97880b22-1e77-11ee-a428-
8f23e8d4e878/moveit_setup_assistant-2.log].
log file:
/home/ladak/.ros/log/97880b22-1e77-11ee-a428-8f23e8d4e878/moveit_setup_assistant-2*.log
Initiating shutdown!
=====...
```

<https://github.com/ros-planning/moveit/issues/3303>

```
sudo apt install --reinstall "?and(~i,~nros-noetic-moveit-*)"
```

This updated all move_it packages from 1.1.10 to 1.1.12.

--

libsrdfdom.so.0.6.4:

```
sudo apt-get install --reinstall ros-noetic-srdfdom
```

```
sudo apt-get install ros-noetic-geometric-shapes
```

I can run the GUI now!

TODO:

try build NAIL sources (all move_it packages were
reinstalled..)

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NAIL sources build OK; only with warnings on ur_kinematics:

```
Warnings << ur_kinematics:check
/home/ladak/git/nail108-2021/getting_started/logs/ur_kinematics/build.check.017.log
CMake Warning (dev) at CMakeLists.txt:2 (project):
  Policy CMP0048 is not set: project() command manages VERSION variables.
  Run "cmake --help-policy CMP0048" for policy details. Use the cmake_policy
  command to set the policy and suppress this warning.
```

The following variable(s) would be set to empty:

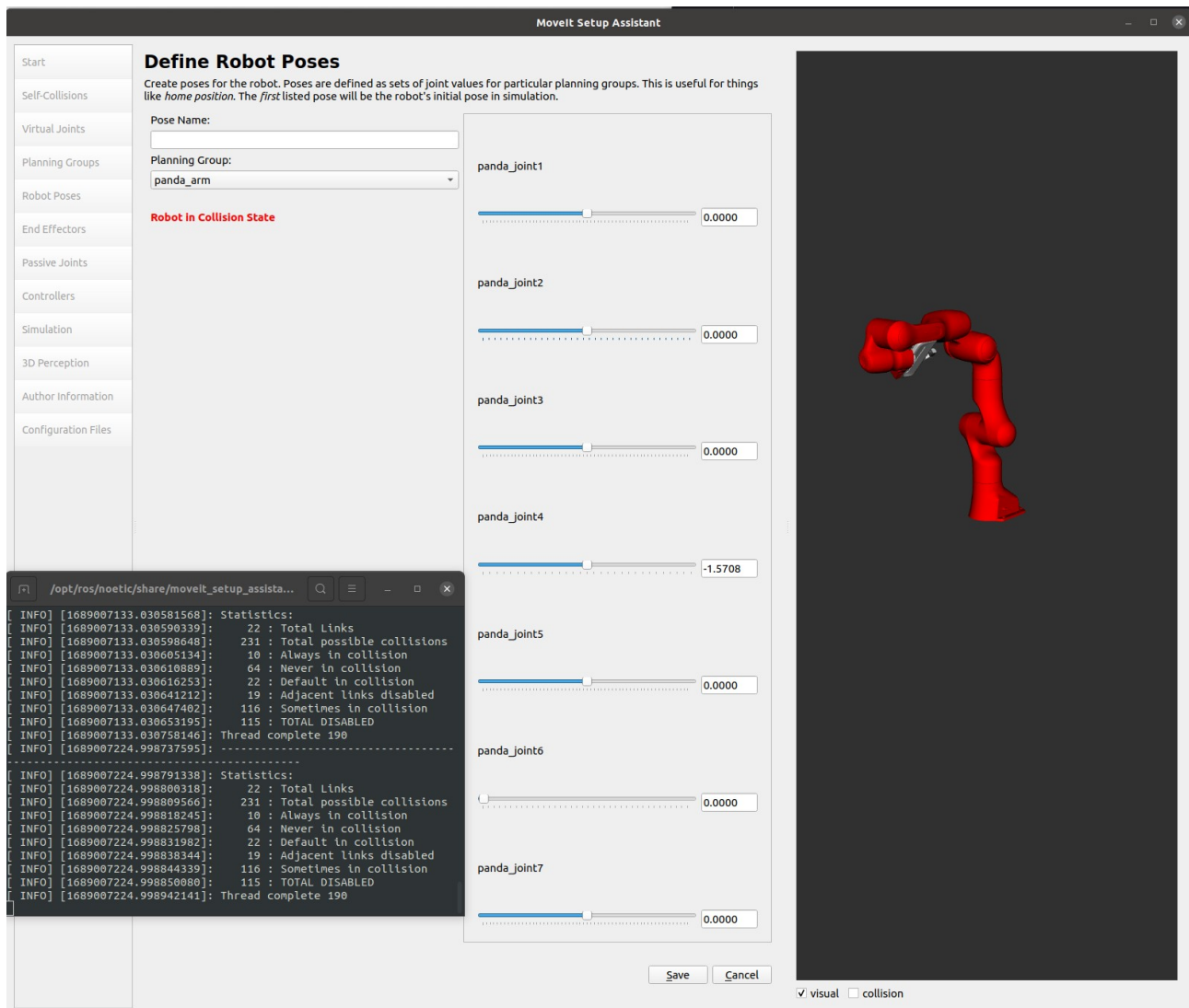
```
CMAKE_PROJECT_VERSION
CMAKE_PROJECT_VERSION_MAJOR
CMAKE_PROJECT_VERSION_MINOR
CMAKE_PROJECT_VERSION_PATCH
```

This warning is for project developers. Use -Wno-dev to suppress it.

setup_assistant_tutorial:

https://ros-planning.github.io/moveit_tutorials/doc/setup_assistant/setup_assistant_tutorial.html

Step 5: Add Robot Poses



<https://github.com/ros-planning/moveit/issues/2332>

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Universal_robot:

No Noetic branch, installed melodic dev:

git clone -b melodic-devel https://github.com/ros-industrial/universal_robot.git

Missing URDF files, cloned from kinetic:

ladak@ladak-ThinkStation-P330:~/Desktop/URDF_KINETIC\$ git clone -b kinetic https://github.com/ros-industrial/universal_robot.git

Config generated with error msg in log (no error in GUI); instructions from <https://roboticscasual.com/ros-tutorial-how-to-create-a-moveit-config-for-the-ur5-and-a-gripper/>

[ERROR] [1689432372.251036431]: Failed to generate entire configuration package

The image shows a terminal window on the left and the MoveIt Setup Assistant GUI on the right. The terminal output shows the process of cloning the universal_robot repository and running the MoveIt Setup Assistant. The GUI shows the 'Generate Configuration Files' step, where a list of files to be generated is displayed, including CMakeLists.txt, config/ur5.urdf, and various planning and control files. The status bar at the bottom of the GUI indicates 'Configuration package generated successfully!'.

```
ladak@ladak-ThinkStation-P330:~/Desktop/URDF_KINETIC$ git clone -b kinetic https://github.com/ros-industrial/universal_robot.git
Cloning into 'universal_robot'...
remote: Enumerating objects: 1234, done.
remote: Compressing objects: 100%, done.
remote: Total 1234 (delta 1234), reused 0 (delta 0), 1234 new objects.
ladak@ladak-ThinkStation-P330:~/Desktop/URDF_KINETIC$ cd universal_robot
ladak@ladak-ThinkStation-P330:~/Desktop/URDF_KINETIC/universal_robot$ catkin_init_workspace
ladak@ladak-ThinkStation-P330:~/Desktop/URDF_KINETIC/universal_robot$ catkin build
--catkin-build-internal--
[INFO] [1689432372.251036431]: Failed to generate entire configuration package
```

MoveIt Setup Assistant

Generate Configuration Files

Create or update the configuration files package needed to run your robot with MoveIt. Unchecked files to disable them from being generated - this is useful if you have made custom changes to them. Files in orange have been automatically detected as changed.

Configuration Package Save Path

Specify the desired directory for the MoveIt configuration package to be generated. Overwriting an existing configuration package directory is acceptable. Example: `/g/robot/ros/pendo_moveit_config`

Check files you want to be generated:

- ☒ CMakeLists.txt
- ☒ config/ur5.urdf
- ☒ config/gazebo_ur5.urdf
- ☒ config/ompl_planning.yaml
- ☒ config/chomp_planning.yaml
- ☒ config/stomp_planning.yaml
- ☒ config/kinematics.yaml
- ☒ config/joint_limits.yaml
- ☒ config/cartesian_limits.yaml
- ☒ config/rake_controllers.yaml
- ☒ config/simple_moveit_controllers.yaml
- ☒ config/gazebo_controllers.yaml
- ☒ config/ros_controllers.yaml
- ☒ config/sensors_3d.yaml
- ☒ launch/launch
- ☒ launch/move_group.launch
- ☒ launch/planning_context.launch
- ☒ launch/moveit_rviz.launch
- ☒ launch/ompl_planning_pipeline.launch.xml
- ☒ launch/joint_industrial_motion_planner_planning_pipeline.launch.xml
- ☒ launch/chomp_planning_pipeline.launch.xml
- ☒ launch/stomp_planning_pipeline.launch.xml
- ☒ launch/ompl-chomp_planning_pipeline.launch.xml
- ☒ launch/planning_pipeline.launch.xml
- ☒ launch/warehouse_settings.launch.xml
- ☒ launch/warehouse.launch
- ☒ launch/default_warehouse_db.launch
- ☒ launch/run_benchmark_ompl.launch
- ☒ launch/sensor_manager.launch.xml
- ☒ launch/ur5_moveit_sensor_manager.launch.xml
- ☒ launch/trajectory_execution.launch.xml
- ☒ launch/rake_moveit_controller_manager.launch.xml
- ☒ launch/simple_moveit_controller_manager.launch.xml
- ☒ launch/ros_control_moveit_controller_manager.launch.xml
- ☒ launch/demos.launch
- ☒ launch/ur5_gazebo.launch
- ☒ launch/ur5xhe.launch

Configuration package generated successfully!

Exit Setup Assistant ☒ visual ☐ collision