

# Robot Operating System – uruchomienie robota firmy Universal Robots

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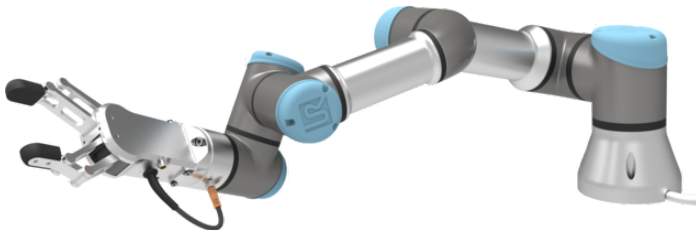


- ROS Master:

```
$ roscore
```



# Sterowniki producenta

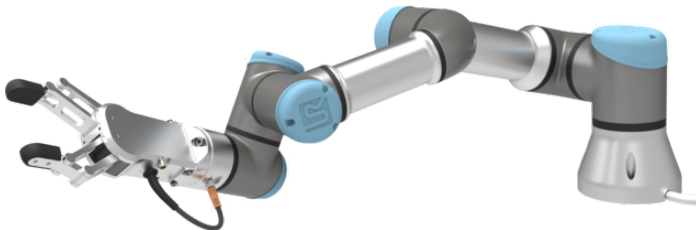


```
$ cd ~/catkin_ws/src
```

```
$ git clone https://github.com/ros-industrial/universal_robot
```



# Rozszerzony Sterownik

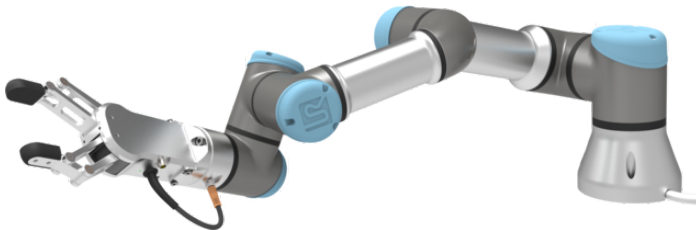


```
$ cd ~/catkin_ws/src
```

```
$ git clone https://github.com/ThomasTimm/ur_modern_driver
```



# Rozszerzony Sterownik - patch

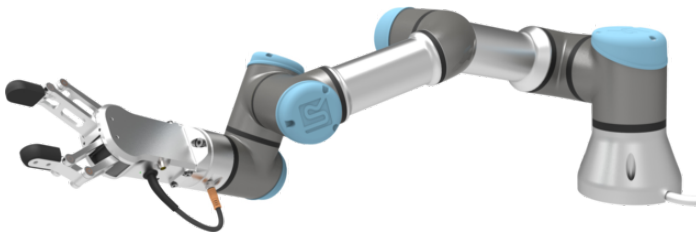


[https://github.com/ThomasTimm/ur\\_modern\\_driver/issues/58](https://github.com/ThomasTimm/ur_modern_driver/issues/58)

Zamiana 'controller\_it->hardware\_interface' na  
'controller\_it->claimed\_resources.at(0).hardware\_interface' w  
pliku 'ur\_modern\_driver/src/ur\_hardware\_interface.cpp'



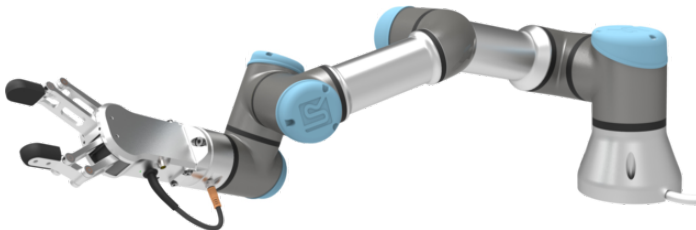
# Niezbędne wtyczki do Gazebo i kompilacja



```
$ sudo apt-get install ros-kinetic-gazebo-ros-pkgs ros-kinetic-gazebo-ros-control  
$ sudo apt-get install ros-kinetic-moveit-ros ros-kinetic-moveit-plugins  
$ sudo apt-get install ros-kinetic-moveit-planners ros-kinetic*controller*  
$ cd ~/catkin_ws  
$ catkin_make
```



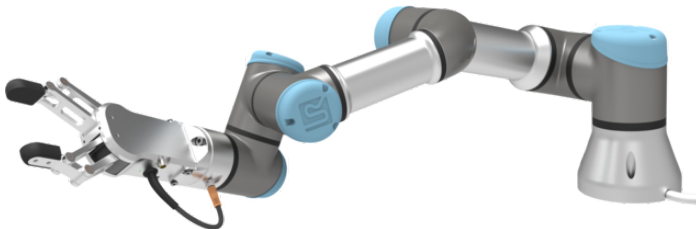
# Uruchomienie Gazebo (w nowym terminalu)



```
$ cd ~/catkin_ws  
$ source devel/setup.bash  
$ roslaunch ur_gazebo ur3.launch
```



# Uruchomienie MoveIt! (w nowym terminalu)



```
$ cd ~/catkin_ws
```

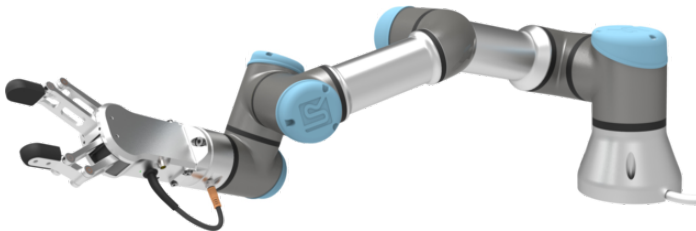
```
$ source devel/setup.bash
```

```
$ roslaunch ur3_moveit_config ur3_moveit_planning_execution.launch sim:=true limited:=true
```





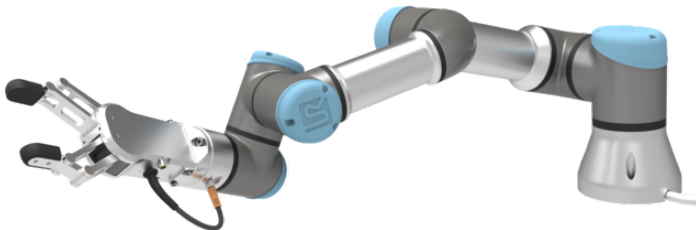
# Uruchomienie RViz (w nowym terminalu)



```
$ cd ~/catkin_ws  
$ source devel/setup.bash  
$ roslaunch ur3_moveit_config moveit_rviz.launch config:=true
```



# Przykładowy program



```
$ cd ~/catkin_ws  
$ git clone https://github.com/dominikbelter/control_ur3sim  
$ rosrn control_ur3sim control_ur3sim
```





[irm.put.poznan.pl](http://irm.put.poznan.pl)  
[www.monoscience.com](http://www.monoscience.com)

