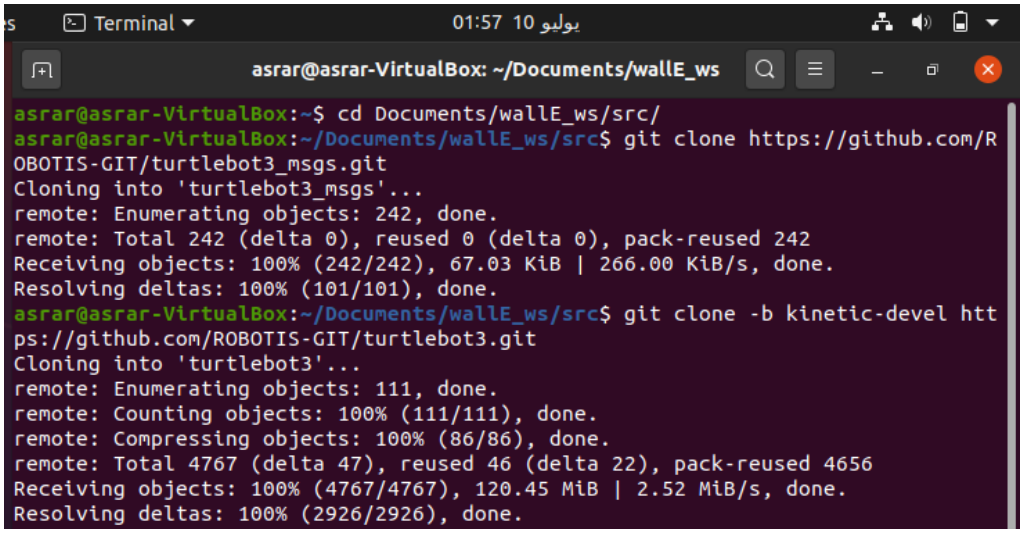
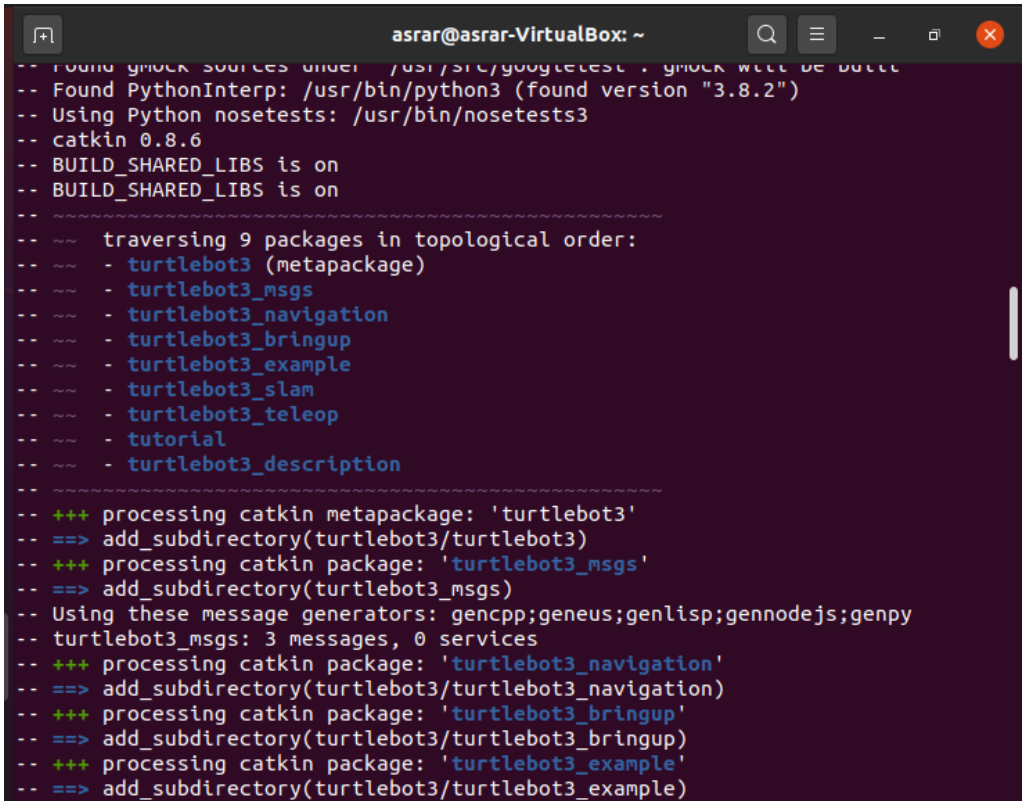
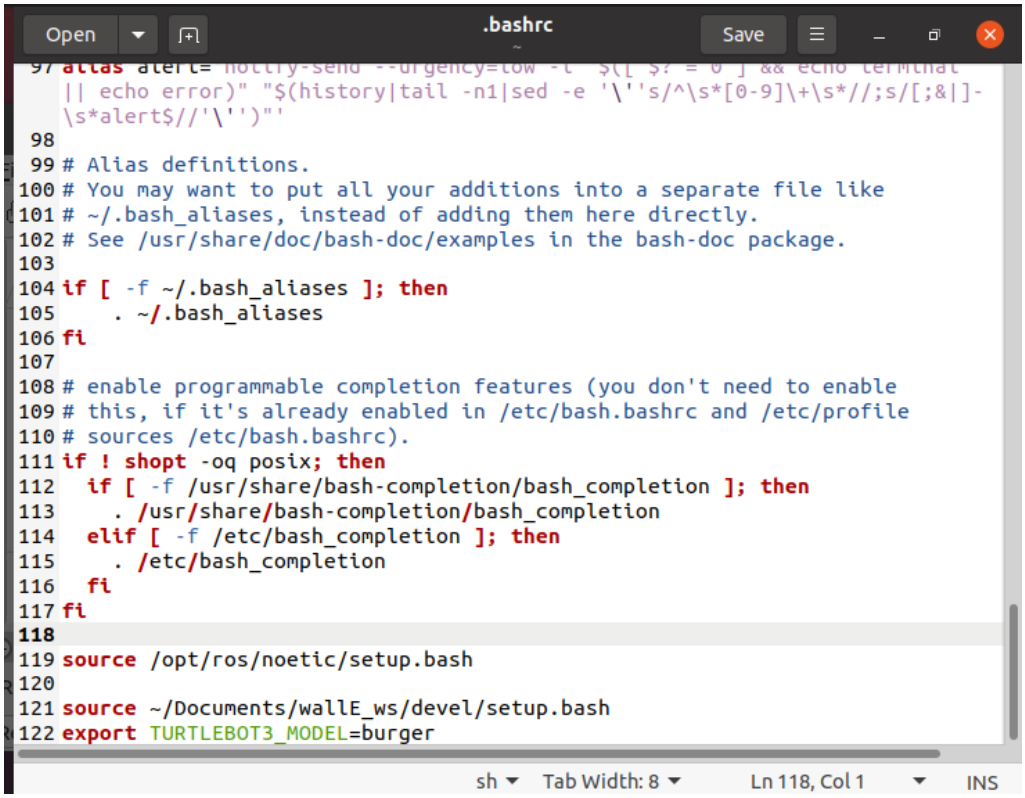
Install tutlebot3

Install turtulebot3 package



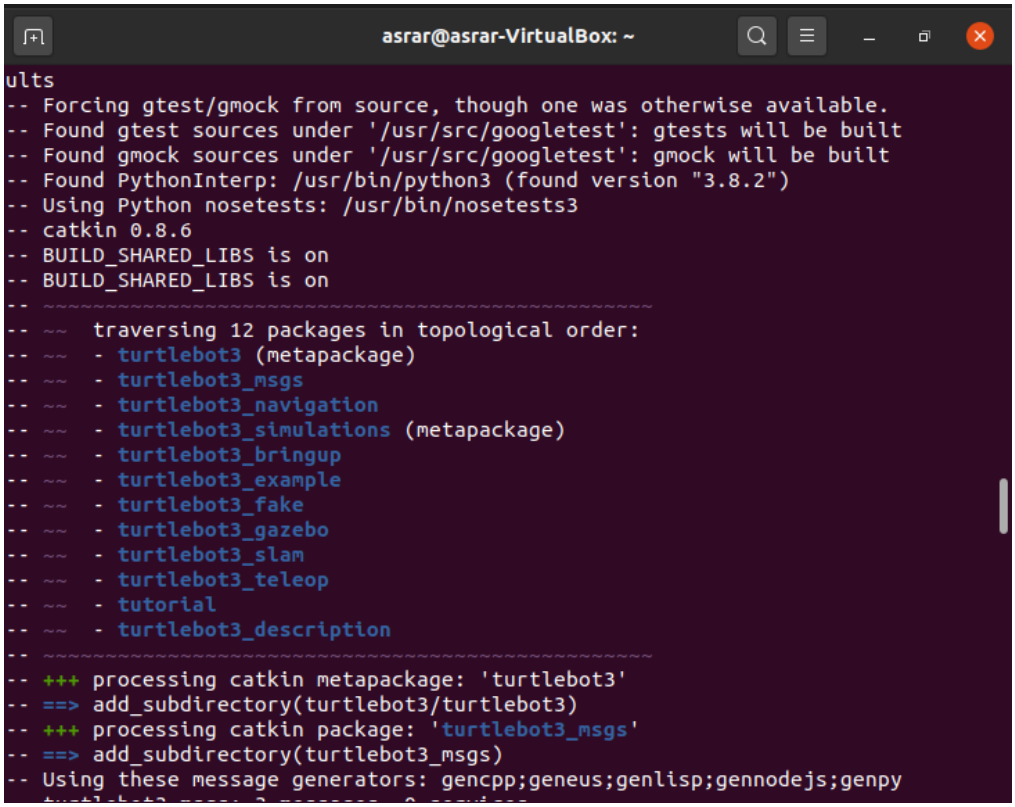



```
asrar@asrar-VirtualBox:~/Documents/wallE_ws$ gedit ~/.bashrc
asrar@asrar-VirtualBox:~/Documents/wallE_ws$ source ~/.bashrc
```

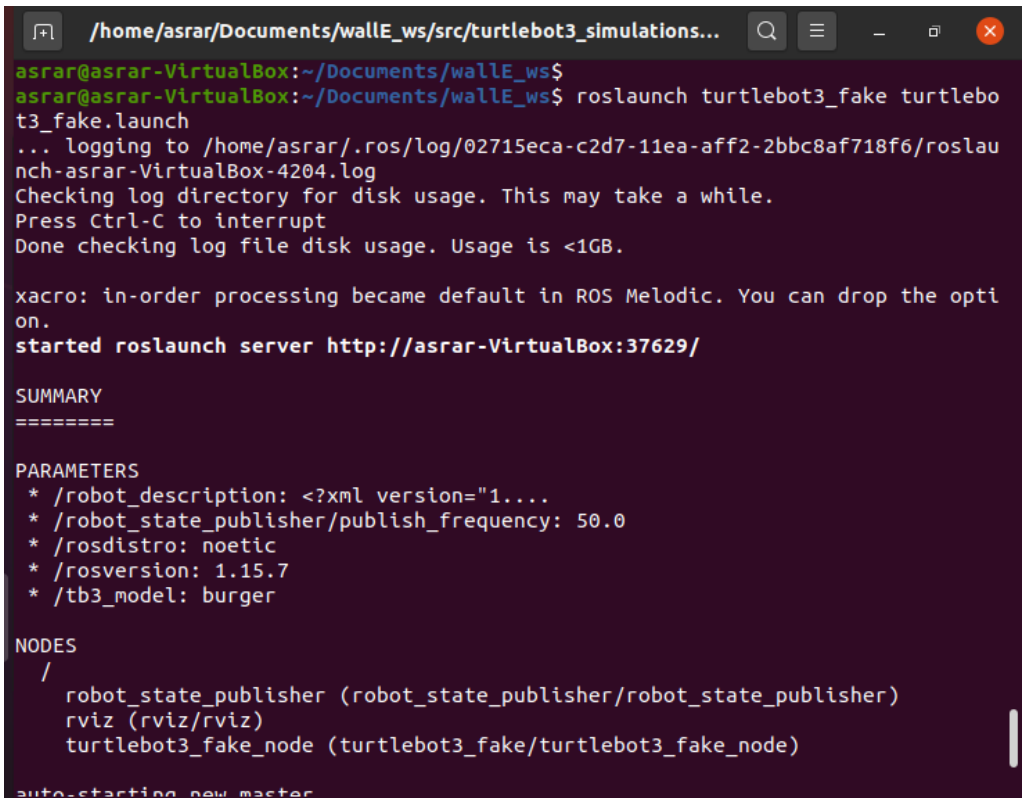


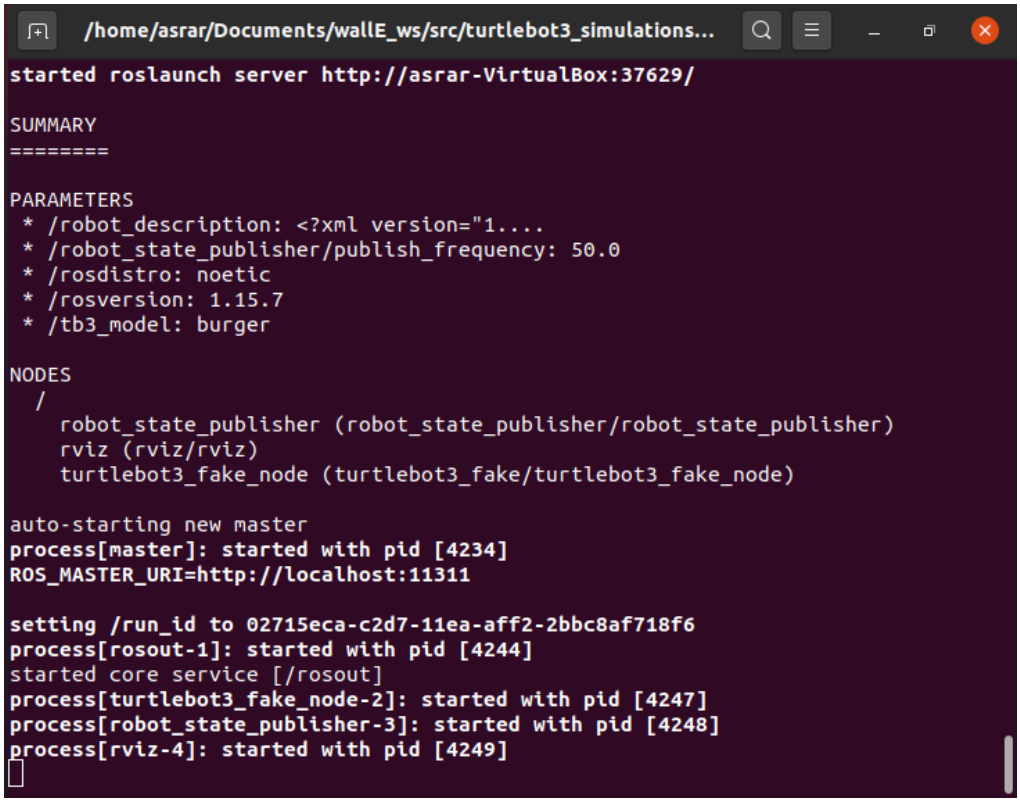
Install turtulebot3_simulation package

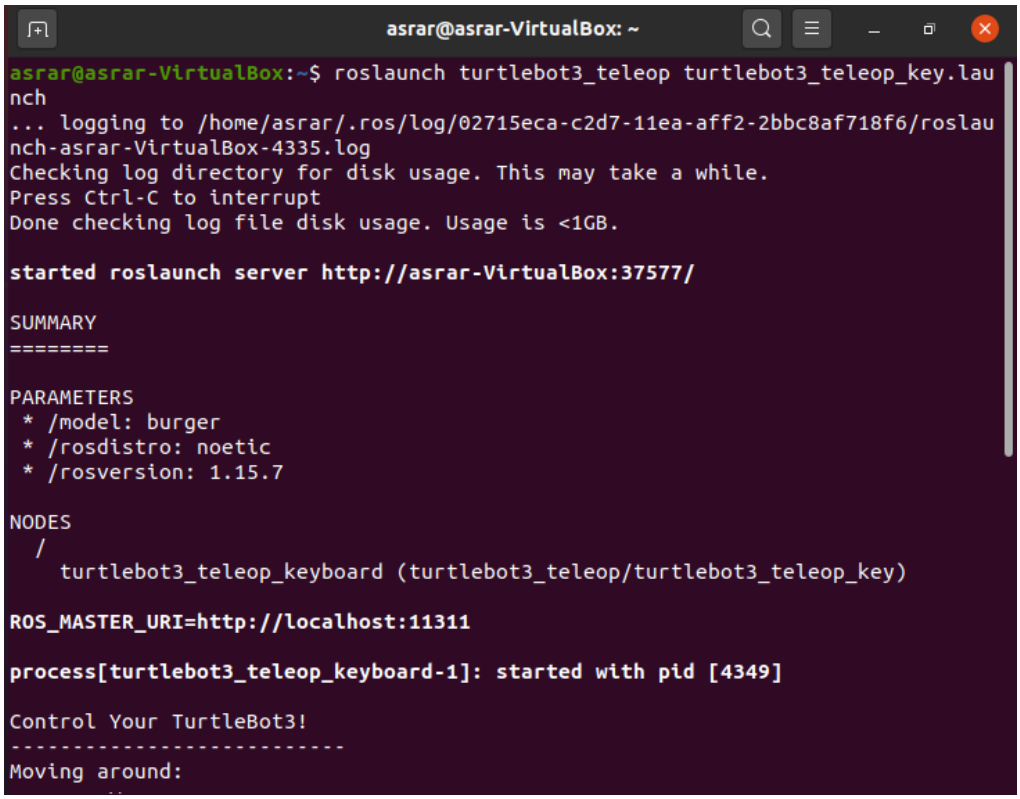
```
asrar@asrar-VirtualBox:~/Documents/wallE_ws$ cd ~/Documents/wallE_ws/src/
asrar@asrar-VirtualBox:~/Documents/wallE_ws/src$ git clone https://github.com/R
OBOTIS-GIT/turtlebot3_simulations.git
Cloning into 'turtlebot3_simulations'...
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 2178 (delta 0), reused 0 (delta 0), pack-reused 2177
Receiving objects: 100% (2178/2178), 15.24 MiB | 4.00 MiB/s, done.
Resolving deltas: 100% (1224/1224), done.
Updating files: 100% (186/186), done.
asrar@asrar-VirtualBox:~/Documents/wallE_ws/src$ source /opt/ros/noetic/setup.b
ash
asrar@asrar-VirtualBox:~/Documents/wallE_ws/src$ cd
asrar@asrar-VirtualBox:~$ cd ~/Documents/wallE_ws && catkin_make
Base path: /home/asrar/Documents/wallE_ws
Source space: /home/asrar/Documents/wallE_ws/src
Build space: /home/asrar/Documents/wallE_ws/build
Devel space: /home/asrar/Documents/wallE_ws/devel
Install space: /home/asrar/Documents/wallE_ws/install
####
#### Running command: "cmake /home/asrar/Documents/wallE_ws/src -DCATKIN_DEVEL_
PREFIX=/home/asrar/Documents/wallE_ws/devel -DCMAKE_INSTALL_PREFIX=/home/asrar/
Documents/wallE_ws/install -G Unix Makefiles" in "/home/asrar/Documents/wallE_w
s/build"
```



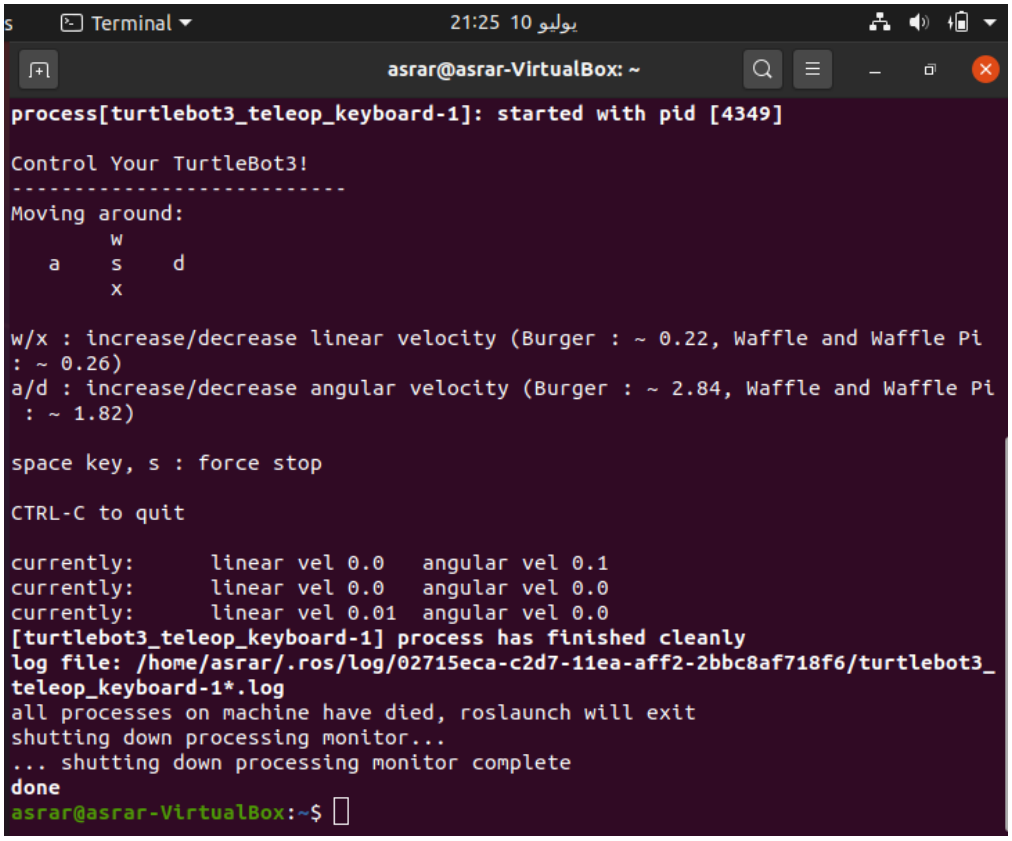
TurtleBot3 simulation Using RViz



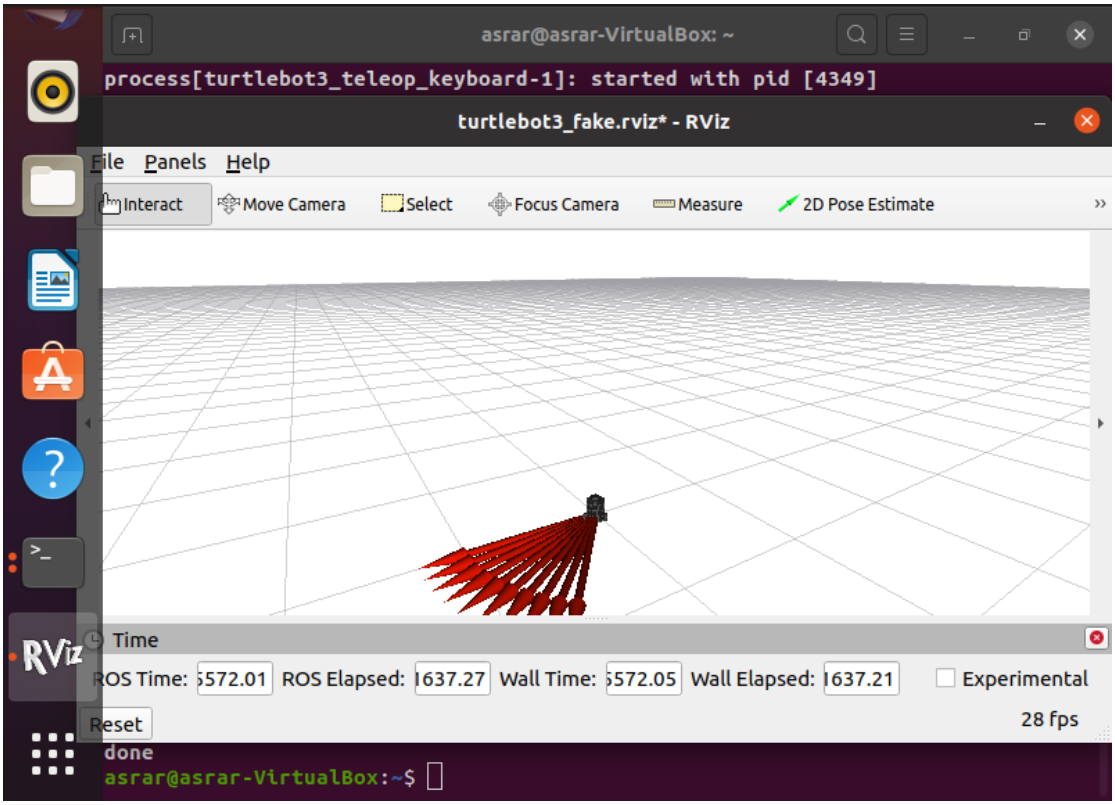

/home/asrar/Documents/wallE_ws/src/turtlebot3_simulations...
started roslaunch server http://asrar-VirtualBox:37629/
SUMMARY
========
PARAMETERS
* /robot_description: <?xml version="1....
* /robot_state_publisher/publish_frequency: 50.0
* /rosdistro: noetic
* /rosversion: 1.15.7
* /tb3_model: burger
NODES
/
robot_state_publisher (robot_state_publisher/robot_state_publisher)
rviz (rviz/rviz)
turtlebot3_fake_node (turtlebot3_fake/turtlebot3_fake_node)
auto-starting new master
process[master]: started with pid [4234]
ROS_MASTER_URI=http://localhost:11311
setting /run_id to 02715eca-c2d7-11ea-aff2-2bbc8af718f6
process[rosout-1]: started with pid [4244]
started core service [/rosout]
process[turtlebot3_fake_node-2]: started with pid [4247]
process[robot_state_publisher-3]: started with pid [4248]
process[rviz-4]: started with pid [4249]

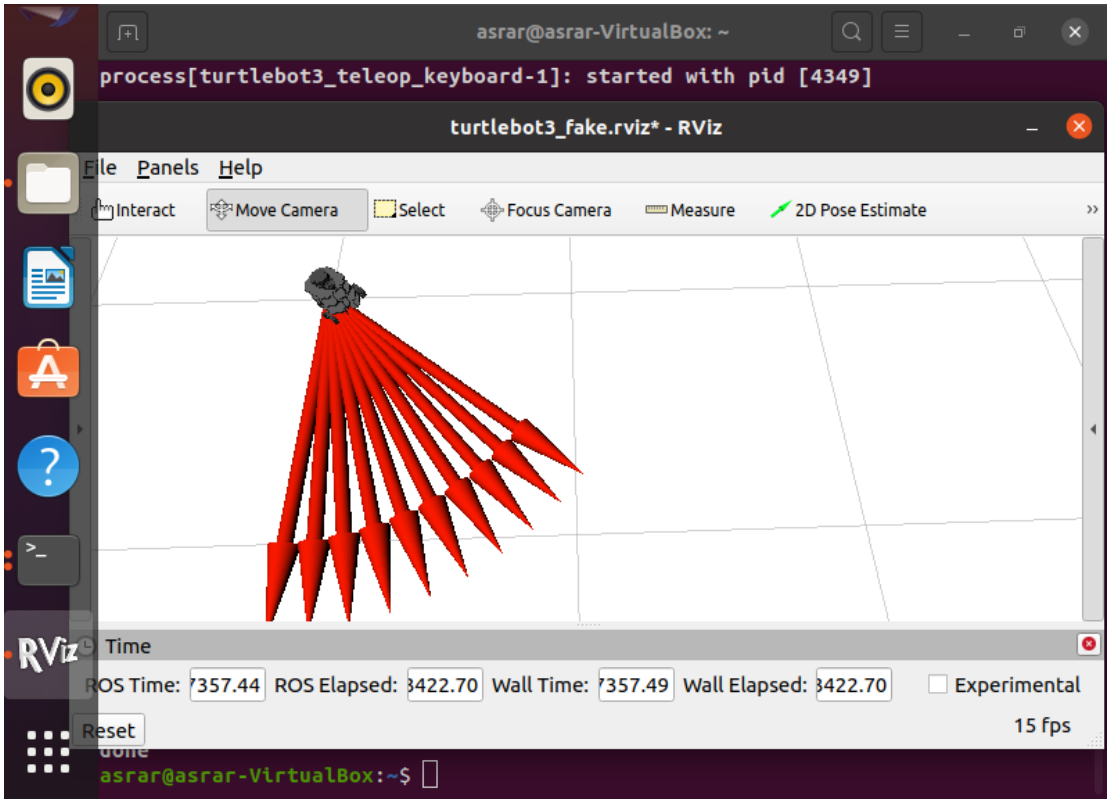

asrar@asrar-VirtualBox: ~
asrar@asrar-VirtualBox:~$ roslaunch turtlebot3_teleop turtlebot3_teleop_key.launch
... logging to /home/asrar/.ros/log/02715eca-c2d7-11ea-aff2-2bbc8af718f6/roslaunch-asrar-VirtualBox-4335.log
Checking log directory for disk usage. This may take a while.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.
started roslaunch server http://asrar-VirtualBox:37577/
SUMMARY
========
PARAMETERS
* /model: burger
* /rosdistro: noetic
* /rosversion: 1.15.7
NODES
/
turtlebot3_teleop_keyboard (turtlebot3_teleop/turtlebot3_teleop_key)
ROS_MASTER_URI=http://localhost:11311
process[turtlebot3_teleop_keyboard-1]: started with pid [4349]
Control Your TurtleBot3!

Moving around:


Terminal
21:25 10 يوليو
asrar@asrar-VirtualBox: ~
process[turtlebot3_teleop_keyboard-1]: started with pid [4349]
Control Your TurtleBot3!

Moving around:
w
a s d
x
w/x : increase/decrease linear velocity (Burger : ~ 0.22, Waffle and Waffle Pi : ~ 0.26)
a/d : increase/decrease angular velocity (Burger : ~ 2.84, Waffle and Waffle Pi : ~ 1.82)
space key, s : force stop
CTRL-C to quit
currently: linear vel 0.0 angular vel 0.1
currently: linear vel 0.0 angular vel 0.0
currently: linear vel 0.01 angular vel 0.0
[turtlebot3_teleop_keyboard-1] process has finished cleanly
log file: /home/asrar/.ros/log/02715eca-c2d7-11ea-aff2-2bbc8af718f6/turtlebot3_teleop_keyboard-1*.log
all processes on machine have died, roslaunch will exit
shutting down processing monitor...
... shutting down processing monitor complete
done
asrar@asrar-VirtualBox:~$


asrar@asrar-VirtualBox: ~
process[turtlebot3_teleop_keyboard-1]: started with pid [4349]
turtlebot3_fake.rviz* - RViz
File Panels Help
Interact
Move Camera
Select
Focus Camera
Measure
2D Pose Estimate
Time
ROS Time: 572.01 ROS Elapsed: 1637.27 Wall Time: 572.05 Wall Elapsed: 1637.21
Experimental
Reset
28 fps
done
asrar@asrar-VirtualBox:~$


asrar@asrar-VirtualBox: ~
process[turtlebot3_teleop_keyboard-1]: started with pid [4349]
turtlebot3_fake.rviz* - RViz
File Panels Help
Interact
Move Camera
Select
Focus Camera
Measure
2D Pose Estimate
Time
ROS Time: 7357.44 ROS Elapsed: 3422.70 Wall Time: 7357.49 Wall Elapsed: 3422.70
Experimental
Reset
15 fps
asrar@asrar-VirtualBox:~$