

Lee, Seok (S.)

From: Lee, Seok (S.)
Sent: Thursday, June 13, 2019 10:07 AM
To: 'Alan Mosca'
Cc: selfdrivingcar-support@udacity.com; enterprise-support@udacity.com; 'Alicia Rangel'; 'Steve Rogers'; 'william.felker@udacity.com'; 'megan.cody@udacity.com'
Subject: RE: about message on /base_waypoints topic @waypoint_updater.py

Hey Alan,

Conclusion:

Message type definition is not available for styx_msgs/ Lane at Workspace/Simulator.

The snapshot is AFTER the connection is established with this command:

```
cd /home/workspace/CarND-Capstone/ros
catkin_make
source devel/setup.sh
roslaunch launch/styx.launch
```

And it says there's no such message definition for styx_msgs/Lane at simulator side:

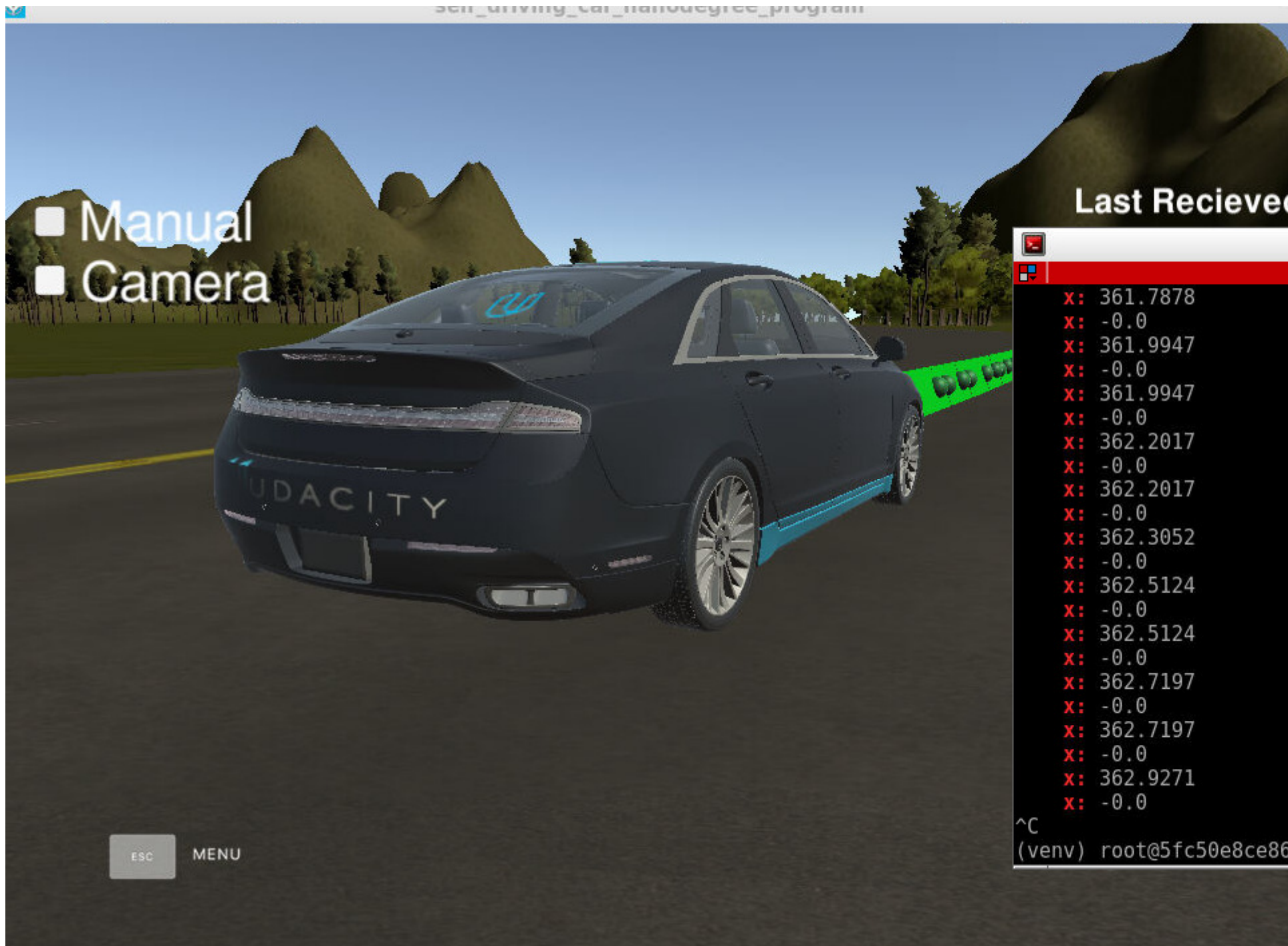
```

Requirement already satisfied, skipping upgrade: six>=1.5 in /opt/carndcapstone/
venv/lib/python2.7/site-packages (from catkin_pkg) (2.2.0)
Requirement already satisfied, skipping upgrade: six>=1.5 in /opt/carndcapstone/
venv/lib/python2.7/site-packages (from python-dateutil->catkin pkg) (1.11.0)
(venv) root@c8873d5535e3:/opt/web-terminal# rosmmsg info styx_msgs/Lane
Unable to load msg [styx_msgs/Lane]: Cannot locate message [Lane]: unknown packa
ge [styx_msgs] on search path [{'rosconsole': ['/opt/ros/kinetic/share/rosconsol
e/msg'], 'roscpp': ['/opt/ros/kinetic/share/roscpp/msg'], 'astra_camera': ['/
/opt/ros/kinetic/share/astra_camera/msg'], 'rocon_python_comms': ['/opt/ros/kine
tic/share/rocon_python_comms/msg'], 'rocon_gateway_utils': ['/opt/ros/kinetic/sh
are/rocon_gateway_utils/msg'], 'tf': ['/opt/ros/kinetic/share/tf/msg'], 'rqt_pub
lisher': ['/opt/ros/kinetic/share/rqt_publisher/msg'], 'smach_ros': ['/opt/ros/k
inetic/share/smach_ros/msg'], 'diagnostic_aggregator': ['/opt/ros/kinetic/share/
diagnostic_aggregator/msg'], 'rocon_service_pair_msgs': ['/opt/ros/kinetic/share
/rocon_service_pair_msgs/msg'], 'moveit_msgs': ['/opt/ros/kinetic/share/moveit_m
sgs/msg'], 'ecl_streams': ['/opt/ros/kinetic/share/ecl_streams/msg'], 'rqt_topi
c': ['/opt/ros/kinetic/share/rqt_topic/msg'], 'joint_trajectory_action_tools': ['/
/opt/ros/kinetic/share/joint_trajectory_action_tools/msg'], 'rocon_semantic_vers
ion': ['/opt/ros/kinetic/share/rocon_semantic_version/msg'], 'rosboost_cfg': ['/
/opt/ros/kinetic/share/rosboost_cfg/msg'], 'rqt_service_caller': ['/opt/ros/kinet
ic/share/rqt_service_caller/msg'], 'freenect_camera': ['/opt/ros/kinetic/share/f
reenect_camera/msg'], 'realsense_camera': ['/opt/ros/kinetic/share/realsense_cam
era/msg'], 'warehouse_ros': ['/opt/ros/kinetic/share/warehouse_ros/msg'], 'yocs_
velocity_smoother': ['/opt/ros/kinetic/share/yocs_velocity_smoother/msg'], 'rqt

```

Troubleshooting:

1. Why not checking other messages real time? (i.e. vehicle position of x while running simulation):
 - 1.1. Command: `rostopic echo /current_pose | grep x`:
 - 1.2. Result: as shown below snapshot, it works well.



2. What about /base_waypoints topic? Is Lane message available? However, I am getting below error for the inquiry of real time message traffic:

```
root@5fc50e8ce867: /opt/web-terminal
root@5fc50e8ce867: /opt/web-terminal 99x33
x: -0.0
x: 362.9271
x: -0.0
^C
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic echo /styx_msg
WARNING: topic [/styx_msg] does not appear to be published yet
^C(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic list
/base waypoints
/current_pose
/current_velocity
/final_waypoints
/image_color
/rosout
/rosout_agg
/tf
/tf_static
/traffic_waypoint
/twist_cmd
/vehicle/brake_cmd
/vehicle/brake_report
/vehicle/dbw_enabled
/vehicle/lidar
/vehicle/obstacle
/vehicle/obstacle_points
/vehicle/steering_cmd
/vehicle/steering_report
/vehicle/throttle_cmd
/vehicle/throttle_report
/vehicle/traffic_lights
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic echo /base waypoints
ERROR: Cannot load message class for [styx_msgs/Lane]. Are your messages built?
(venv) root@5fc50e8ce867:/opt/web-terminal#
```


3. What about final_waypoints topic? Because it has same message type on the topic.
3.1. Command: rostopic info /final_waypoints
3.2. Result: no message because the message type is not available.

```
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic info /final_waypoints
type: styx_msgs/Lane

Publishers:
* /waypoint_updater (http://5fc50e8ce867:33053/)

Subscribers:
* /styx_server (http://5fc50e8ce867:45657/)
* /pure_pursuit (http://5fc50e8ce867:33431/)
```

4. Does message is transmitted on the topic of final_waypoints?
4.1. Command: rostopic echo /final_waypoints
4.2. Result: no message because the message type is not available.

```
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic echo /base_waypoints
ERROR: Cannot load message class for [styx_msgs/Lane]. Are your messages built?
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic echo /final_waypoints
bash: rostopic: command not found
(venv) root@5fc50e8ce867:/opt/web-terminal# rostopic echo /final_waypoints
ERROR: Cannot load message class for [styx_msgs/Lane]. Are your messages built?
(venv) root@5fc50e8ce867:/opt/web-terminal#
```

Regards,
Seok

From: Alan Mosca <alan.mosca@udacity.com>
Sent: Thursday, June 13, 2019 9:11 AM
To: Lee, Seok (S.) <SLEE194@ford.com>
Cc: selfdrivingcar-support@udacity.com; enterprise-support@udacity.com
Subject: Re: about message on /base_waypoints topic @waypoint_updater.py

I'm not entirely sure, but my guess would be that maybe it gets loaded when you launch the simulator? Maybe someone from support can pitch in here.