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The image shows a Linux desktop environment with a dark theme. On the left is a vertical dock with icons for various applications. The main workspace contains two windows. The window on the left is titled 'Gazebo Sim (on rosbox.softblue-13)' and displays the Gazebo GUI. The GUI has a top toolbar with icons for file operations, simulation control, and viewing. The main 3D view shows a maze-like environment with blue walls and a white floor. A small blue sphere is positioned in the center of the maze. To the right of the 3D view is a panel with two tabs: 'World' and 'Entity Tree'. The 'World' tab is active, showing a list of world properties such as 'World Sdf', 'Physics', 'Magnetic Field', 'Render Engine Gui Plugin', 'Physics Solver' (set to 'DantzigBoxedLcpSolver'), 'Render Engine Server Plugin', 'Name' (set to 'maze'), 'Scene', 'Render Engine Server Headless', 'Gravity', 'System Plugin Info', 'Physics Engine Plugin', 'Physics Collision Detector' (set to 'ode'), and 'Atmosphere'. The 'Entity Tree' tab is also visible, showing a list of entities: 'ground\_plane', 'vehicle\_blue', 'border', 'obstacles', and 'sun'. The 'vehicle\_blue' entity is highlighted. The bottom status bar of the Gazebo window shows a pause button, a play button, and a progress indicator at 96.64%. The window on the right is a terminal window titled 'softblue@rosbox: ~/gazebo\_ws'. It displays the output of a command, showing a list of 'intensities' values (all 0) and a 'header' block containing 'stamp' (sec: 16, nsec: 401000000) and 'data' (key: 'frame\_id', value: 'vehicle\_blue::chassis::gpu\_lidar'). Below the header, there is a 'frame' block for 'vehicle\_blue::chassis::gpu\_lidar' containing 'world\_pose' (position: x: 0.8, y: 0.5, z: 0.5) and 'orientation' (w: 1). The terminal also shows a list of 'ranges' values, including 'angle\_min', 'angle\_max', 'angle\_step', 'range\_min', 'range\_max', 'count', 'vertical\_angle\_step', 'vertical\_count', and a list of 'ranges' values.

The screenshot shows a ROS2 environment with a terminal window and a RViz window.

**Terminal Window:** The terminal displays a series of log messages from the `rviz2` process. The messages indicate that the message filter is dropping messages because the queue is full. The messages are as follows:

```
[INFO] [1684585943.336889766] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.201 for reason 'discarding message because the queue is full'
[INFO] [1684585943.432578473] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.300 for reason 'discarding message because the queue is full'
[INFO] [1684585943.561026010] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.402 for reason 'discarding message because the queue is full'
[INFO] [1684585943.655937799] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.501 for reason 'discarding message because the queue is full'
[INFO] [1684585943.752867737] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.600 for reason 'discarding message because the queue is full'
[INFO] [1684585943.800372191] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.702 for reason 'discarding message because the queue is full'
[INFO] [1684585943.976931620] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.801 for reason 'discarding message because the queue is full'
[INFO] [1684585944.104684972] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1449.900 for reason 'discarding message because the queue is full'
[INFO] [1684585944.200508090] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.002 for reason 'discarding message because the queue is full'
[INFO] [1684585944.328295784] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.101 for reason 'discarding message because the queue is full'
[INFO] [1684585944.456649550] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.200 for reason 'discarding message because the queue is full'
[INFO] [1684585944.552260058] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.302 for reason 'discarding message because the queue is full'
[INFO] [1684585944.681346942] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.401 for reason 'discarding message because the queue is full'
[INFO] [1684585944.776371210] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.500 for reason 'discarding message because the queue is full'
[INFO] [1684585944.872875446] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.602 for reason 'discarding message because the queue is full'
[INFO] [1684585945.000144948] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.701 for reason 'discarding message because the queue is full'
[INFO] [1684585945.129362274] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.800 for reason 'discarding message because the queue is full'
[INFO] [1684585945.224929406] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1450.902 for reason 'discarding message because the queue is full'
[INFO] [1684585945.321321478] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.001 for reason 'discarding message because the queue is full'
[INFO] [1684585945.448950347] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.100 for reason 'discarding message because the queue is full'
[INFO] [1684585945.577084556] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.202 for reason 'discarding message because the queue is full'
[INFO] [1684585945.705022161] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.301 for reason 'discarding message because the queue is full'
[INFO] [1684585945.833247896] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.400 for reason 'discarding message because the queue is full'
[INFO] [1684585945.961602816] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.502 for reason 'discarding message because the queue is full'
[INFO] [1684585946.089142611] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.601 for reason 'discarding message because the queue is full'
[INFO] [1684585946.217310736] [rviz]: Message Filter dropping message: frame 'vehicle_blue/chassis/gpu_lidar' at time 1451.700 for reason 'discarding message because the queue is full'
```

**RViz Window:** The RViz window displays a 3D model of a vehicle chassis. The `LaserScan` display is selected, showing a grid of points representing the laser scan data. The `Global Options` panel shows the `Fixed Frame` set to `world` and the `Frame Rate` set to `30`. The `Grid` display is also selected, showing a grid of points representing the laser scan data. The `Current View` panel shows the `Orbit (rviz)` view selected, with the `Target Frame` set to `<Fixed Frame>`. The `Distance` is set to `10`, the `Focal Shap...` is set to `0.05`, the `Yaw` is set to `0.765398`, the `Pitch` is set to `0.535398`, and the `Focal Point` is set to `0, 0, 0`.

```
(base) softblue@rosbox:~/gazebo_ws$ ros2 run tf2_ros static_transform_publisher "0" "0" "0" "0" "0" "0"
"world" "vehicle_blue/chassis/gpu_lidar"
[WARN] [1684586286.919449079] []: Old-style arguments are deprecated; see --help for new-style arguments
[INFO] [1684586286.941044741] [static_transform_publisher_xnQuSjcFeSw7GzEi]: Spinning until stopped -
publishing transform
translation: ('0.000000', '0.000000', '0.000000')
rotation: ('0.000000', '0.000000', '0.000000', '1.000000')
from 'world' to 'vehicle_blue/chassis/gpu_lidar'
```