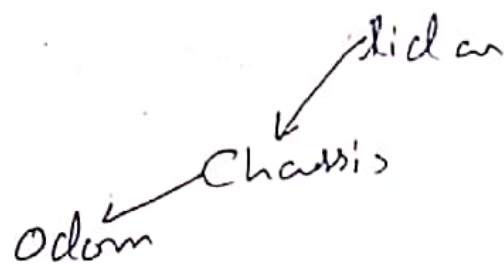


Mapping

→ Using this you can create 2D occupancy grid map from laser and pose data collected by a mobile robot.

Hardware requirement

- Horizontally mounted fixed laser range finder.
 - It will publish laser scan data.
- Odometry data
- tf



⇒ It builds a map (nav_msgs/OccupancyGrid)

Subscribed topic

- ① tf (tf/Message)
- ② scan (sensor_msgs/LaserScan)

Published topic

- ① map_metadata (nav_msgs/MapMetaData)
- ② map (nav_msgs/OccupancyGrid)
- ③ ~entropy (std_msgs/Float64)

Service

① dynamic_map (nav_msgs/GetMap)

⇒ To Save a map :-

```
rosrun map_server map_saver  
-f <map-name>
```



d)