Thinks to be noted while using obstacle pebble planner

The local planner Integrated with stop at zone with the pebble_local_planner as a new local planner planner with a name of obsctacle obstacle_pebble_planner

Functionality are same as pebble but obstacle check add as extra with an enable and disable option
The enable and disable can be called with the service topic /move_base/enable_stop_obstacle" Command
rosservice call /move_base/enable_stop_obstacle "data: false"

The stop at obstacle fail cases:

The stop at obstacle feature depends on 3 parameter of move_base
move_base/planner_frequency
move_base/oscillation_timeout
move_base/global_costmap/obsctacle_layer/enable

move_base/planner_frequency
This parameter is responsible for the replanning of the global path. When it set 0 replanning will not happen. The planner will go with an old plan.

move_base/oscillation_timeout
This parameter is responsible for the aborting the move_base goal. When a goal is not reachable the oscillation_timeout parameter will change the state from controller to recovery It will try 3 types of recovery as per out given recoveries. If the recoveries failed it will throw a abort message and stop the goal.
When the parameter set zero the goal will not stop and move_base will not go for recoveries.

move_base/global_costmap/obsctacle_layer/enable
This parameter will include the dynamic obstacle caught on the lidar in the global costmap and make a plan around the dynamic obstacle.
If this parameter changes to disable then it will generate a plan inside the dynamic obstacle

Values to be set
move_base/planner_frequency - 1.0
move_base/oscillation_timeout - 0.0
move_base/global_costmap/obsctacle_layer/enable - 1/0 (this will control the stop at obstacle function on/off depends on the ui button initial state , if the button is “on” initially then we can set the parameter to “disable” and vice versa)

Working Principle

When The stop at obstacle enable and the local planner receives a plan it will disable the global_costmap obstacle layer so that the global plan will not reroute.
The stop at obstacle feature will check the obstacle was on the path if true then it will make the robot stop.

when the stop at obstacle was disabled then global_costmap obstacle layer will be enabled so that the replanning will occurs even though there is an obstacle.