

RRTPlanner

```
-node_handle_:ros::NodeHandle  
-onstacle_map_:std::vector<bool>  
-costmap_ros_: -costmap_ros_:costmap_2d::Costmap2DROS*  
-costmap_:costmap_2d::Costmap2D*  
-max_iterations_:int  
-current_interations_: int  
-world_model_: -base_local_planner::WorkdModel*  
-initialized_: bool  
-goal_radius_: float  
-step_size_: float  
-x_origin_: float  
-y_origin_: float  
-x_goal_: float  
-y_goal_: float  
-map_width_cells_: int  
-map_height_cells: int
```

```
+RRTPlanner()  
+initialize(string,costmap_ros_:costmap_2d::Costmap2DROS*):  
void  
+makePlan(const start, const goal): bool  
+getObstacleMap(): std::vector<bool>  
+getVertexTree():std::vector<int>  
+getClosestVertex(std::pair<float,float>): float  
+BuildPlan(int, int):std::vector<float>
```