



Nodes and Topics

- **Nodes:** Individual processes that perform computation. In your case, you have nodes like `path_planner` and `turtle1`.
- **Topics:** Channels over which nodes communicate. They publish messages to topics or subscribe to receive messages. Your `path_planner` node publishes velocity commands to the `turtle1/cmd_vel` topic.

Path Planner Node

- **Publisher:** The `path_planner` node creates a publisher for the `turtle1/cmd_vel` topic. It sends commands that dictate how the turtle should move.
- **Timer Callback:** This function gets called periodically. It checks the trajectory parameter and calls the appropriate function (`circle_trajectory`, `square_trajectory`, `infinity_trajectory`, `star_trajectory`) to generate movement commands.