

eYRC 2021-22: Agri Bot (AB)

ROS Nodes

- A ROS Node is a piece of software/executable that uses ROS to communicate with other ROS Nodes.
- ROS Nodes are building block of any ROS Application.
- For example, if you have a wall-following robot then one ROS Node could get distance sensor values and another node can control the motors of the robot. So, these two nodes will communicate with each other in order to move the robot.
- You can write your entire ROS Application in a single node but having multiple nodes ensures that if a node crashes it won't crash your entire ROS application.
- In this eYRC Theme your job will be to write suitable ROS Nodes for your ROS Application.
- A ROS package can have multiple ROS Nodes.
- Python and C++ are majorly used to write ROS Nodes.
- In this eYRC Theme we will use Python to write ROS Nodes.

Reference

1. ROS WIki - Undertanding Nodes