Robotics Competition 2021-22

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eYRC 2021-22: Agri Bot (AB)

ROS Services

- The publish/subscribe model is a very flexible communication paradigm, but its many-to-many one-way transport is not appropriate for request/reply interactions, which are often required in a distributed system.

- Request/reply is done via a Service, which is defined by a pair of messages: one for the request and one for the reply.

- A providing ROS node offers a service under a string name, and a client calls the service by sending the request message and awaiting the reply.

- Client libraries usually present this interaction to the programmer as if it were a remote procedure call.

- Services are defined using `srv` files, which are compiled into source code by a ROS client library.

- Like topics, services have an associated service type that is the package resource name of the `.srv` file.

Reading Assignment

1. ROS Wiki - Services

2. AGITR - Services