MOOS Utilities Overview

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1 Overview

MOOS distributed by the Oxford Mobile Robotics Group, contains a number of utility applications. Each of these apps and their documentation was written by Paul Newman. The below is a short summary of app functionality for four of the most common apps used by MOOS-IvP users.

- pShare: Implementes communication between MOOS communities. This app is a successor to pMOOSBridge. pShare offers UDP communication between communities. It can share data over multicast channels. It allows renaming of variables as they are shared. It supports wildcard sharing so you can specify a simple regular expression describing what should be shared. It supports dynamic configuration via MOOS of sharing, forwarding and renaming. It supports both command line configuration and via a .moos file. One instance of pShare is needed per community.
- pLogger: The logger is the primary logging utility used by many MOOS and MOOS-IvP users. It records the activity of a MOOS and may be configured to record a fraction of or every publication of any number of MOOS variables. There are also a number of tools written to analyze and reply the data for post-mission analysis.
- pantler: The pantler utility is a common tool for starting up a set of processes all of which share a single configuration file. It is used to launch/create a MOOS community. One of the ideas underlying MOOS is the one mission file one mission paradigm. A single mission file contains all the information required to configure all the processes needed to undertake the task (mission) in hand.
- iRemote: This application allows the user to inject commands into a community and also to query the status of certain commonly used variables from a terminal. iRemote was designed to be a control terminal for a deployed vehicle. It is really nothing more than a long switch statement based on characters input from the keyboard. One of its many functions is to allow remote control of the actuators of the vehicle. This is an invaluable asset for land and sub-sea vehicles alike.