greenerthumb Design

fan

`fan` connects STDOUTs from listed out-programs to STDINs of listed in-programs.

bullhorn

Allows data to be sent on a network from publishers to subscribers (3).

publish

Publishes data from STDIN to all subscribers.

subscribe

Receives data from a publisher to STDOUT.

sense

Sensors write messages from the `greenerthumb` ICD to STDOUT. These are fanned into a `bullhorn/publisher` with `fan/in`. This allows sensors to be seamlessly excluded (1). Testing is also simplified since emulators that print to STDOUT can replace sensors or `bullhorn/subscriber`.

air

Senses the 'Air Status Message' (2a).

soil

Senses the 'Soil Moisture Status Message' (2b).

emulate

Emulators allow simple testing the by excluding the network and sensors.

`air`

Emulates the 'Air Status Message'.

`soil`

Emulates the 'Soil Moisture Status Message'.

`log`

Logs data from STDIN to a file. This can be used with `bullhorn/subscriber` and `fan/out` to log sensed data (4).

`plot`

`replay`

Plots ICD messages stored in a log file (5).