

greenerthumb Design

fan

fan connects its STDIN to the STDINs of listed out-programs and STDOUTs from listed out-programs to STDINs of listed in-programs.

message

message is where **greenerthumb** messages from the ICD are defined and the bytes-JSON conversion is implemented.

bytes

bytes converts JSON messages from STDIN to bytes written to STDOUT.

json

json converts bytes messages from STDIN to JSON written to STDOUT.

bullhorn

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

publish

publishes data from STDIN to all subscribers.

subscribe

subscribes to a publisher and write data to STDOUT.

sense

sense writes **greenerthumb** JSON messages from sensors to STDOUT. These can be **fanned** into **message/bytes** piped into **bullhorn/publish**. This allows sensors to be excluded (1).

air

air senses the 'Air Status Message' (2a).

soil

soil senses the 'Soil Moisture Status Message' (2b).

log

log JSON messages from STDIN to a file. This can be used with **bullhorn/subscribe** piped into **message/json** to log sensed data. Logs have the time appended to the file name and are rotated each day (4).

plot

plot **greenerthumb** JSON messages from STDIN. This can be used with **bullhorn/subscribe** piped into **message/json** to plot sensed data (5).

process

processes logs to find statistical values.