

greenerthumb Design

fan

Fans connects multiple programs' STDOUTs and STDINs.

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).