

LEGEND:	
Run on-board	(HW): Communication with connected Hardware
Run on ground station	
Run on either	

camera_projo
 I: camera_compressed
 O: local modified stream

camera_node
 I: camera feed (HW)
 O: camera_raw, camera_compressed

sensors_thrusters
 I: props_commands, electromagnets_state and all the I2C actuators and sensors (HW)
 O: sonars, IMU, compass, motors_info, battery_logic

Tryphonrosweb
 I: user html input
 O: ctrl #, path #, path, gains, maxthrust, desired_state, state_trajectory

ps3_ctr
 I: ps3 input (HW)
 O: desired_state, electromagnet

Command
 I: keyboard input (HW)
 O: desired_state

androidrosaccel
 I: phone orientation (HW)
 O: desired_state

aubionode
 I: sung triplets (HW)
 O: desired_state

From another Tryphon camera_relay node.

mutual localization node (You see Me, I see You)
 I: camera_compressed (2x)
 O: relative position of the cubes

camera_relay
 I: camera_compressed
 O: camera_compressed

link_imubuff target_ip
 I: package of IMU data
 O: standard IMU stamped messages

mcptam target_ip
 I: camera_compressed
 O: pose stamped

state_estimator target_ip input_#
 I: sick pose or sonars or mcptam
 O: state

sick_pose
 I: sick (HW)
 O: poseStamped

trajectory target_ip
 I: path #, path, state
 O: state_trajectory

control_node target_ip
 I: state, ctrl #, path #, path, gains, maxthrust, desired_state, state_trajectory
 O: wrench (1x6), state

force_distribution
 I: wrench (1x6)
 O: props_commands (1x8)

Two Tryphon set-up

External device nodes