**Routing**

publish_wp

sailing_behaviours

**IN**
**OUT**

High level

Low level

**Highlevel Control**

heading_control
position[latitude degrees, longitude degrees]
next_wp[latitude degrees, longitude degrees]
wind_direction[degrees]
heading[degrees]
goal_heading[degrees]
sailing_state[string]

tack
sailing_state[string]
tack_sail[degrees]
tack_rudder[degrees]

**Sensor Analysis**

wind_estimates

speed_estimate

compass
heading[degrees]
magnetometer[string]

**Lowlevel Control**

sail_lookup
wind_direction_localKS [degrees]
PoS_control[degrees]

rudder_pid
goal_heading[degrees]
heading
rudder_control[degrees]

**Sensors**

gps
latitude [degrees]
longitude [degrees]

imu
accx,y,z [float32]
gyrox,y,z [float32]
magnetometer []

wind
apparent wind direction, local KS [degrees]

**Actuators**

sail_servo
PoS_control[degrees]
tack_sail[degrees]
sailing_state[string]

rudder_servo
rudder_control[degrees]
tack_rudder[degrees]
sailing_state[string]