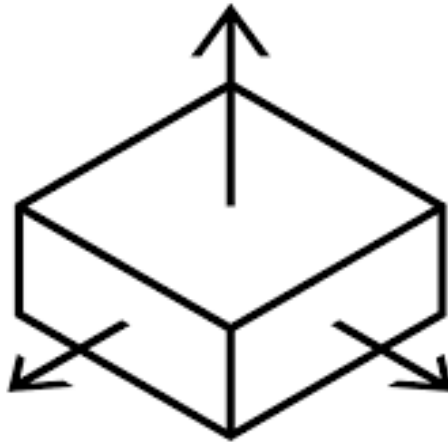


Architecture documentation for Hello IMU

Group 4: Rik van Velzen, Melissa van Leeuwen, Burhan Topaloglu



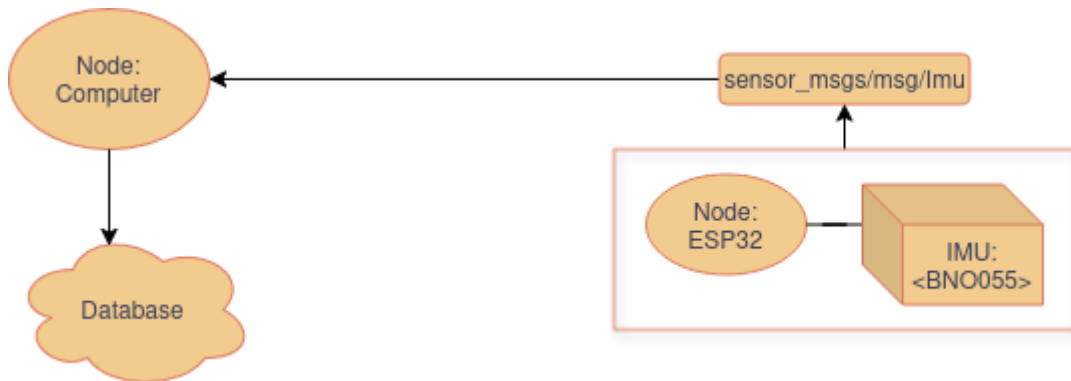
This documentation shows the architecture for “Hello IMU”.
For node documentation, check the designated files per node in the “node-documentation”
folder.

CONTENTS

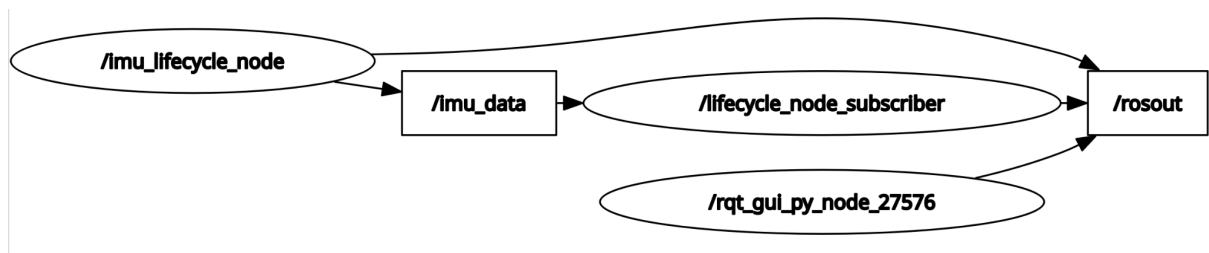
Architecture	2
Flowchart	2
rqt_graph	2
Messages	3
Nodes	3

Architecture

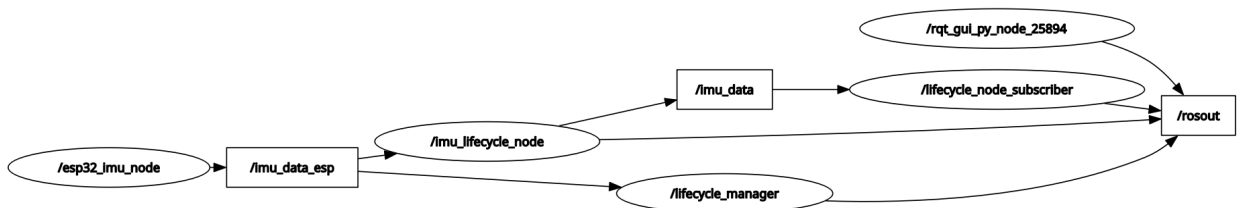
Flowchart



rqt_graph



RQT_Graph for the Wireless implementation.



RQT_Graph for the Wired implementation.

Messages

sensor_msgs/msg/Imu

```
# ...
std_msgs/Header header
  builtin_interfaces/Time stamp
    int32 sec
    uint32 nanosec
  string frame_id

geometry_msgs/Quaternion orientation
  float64 x 0
  float64 y 0
  float64 z 0
  float64 w 1
float64[9] orientation_covariance # Row major about x, y, z axes

geometry_msgs/Vector3 angular_velocity
  float64 x
  float64 y
  float64 z
float64[9] angular_velocity_covariance # Row major about x, y, z axes

geometry_msgs/Vector3 linear_acceleration
  float64 x
  float64 y
  float64 z
float64[9] linear_acceleration_covariance # Row major x, y z
```

Nodes

Check the “node-documentation” folder.