

COLA2

Component Oriented Layered-based Architecture for Autonomy

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Girona vehicles



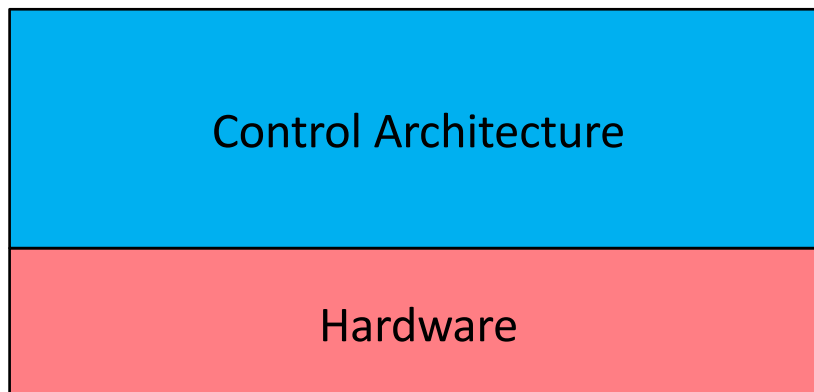
Girona 500 AUV/I-AUV/HROV



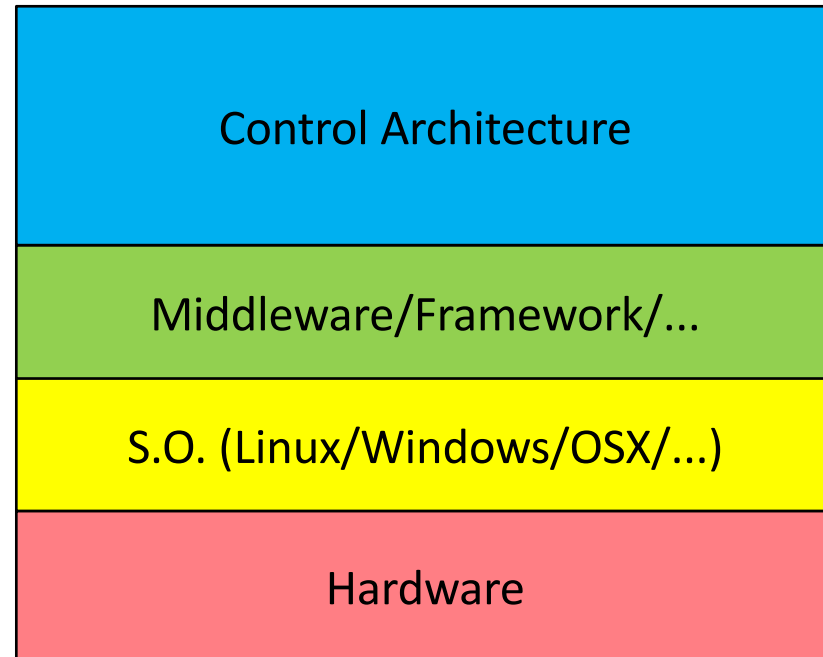
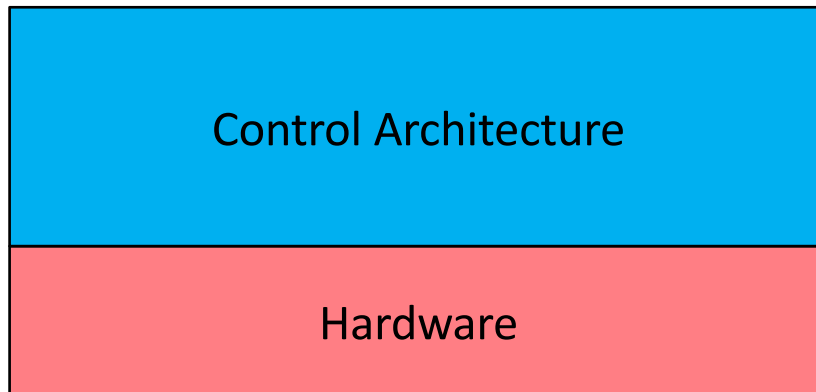
Sparus 2 AUV

COLA2: http://bitbucket.org/udg_cirs/cola2_core/wiki

Robot layers



Robot layers



ROS Basics

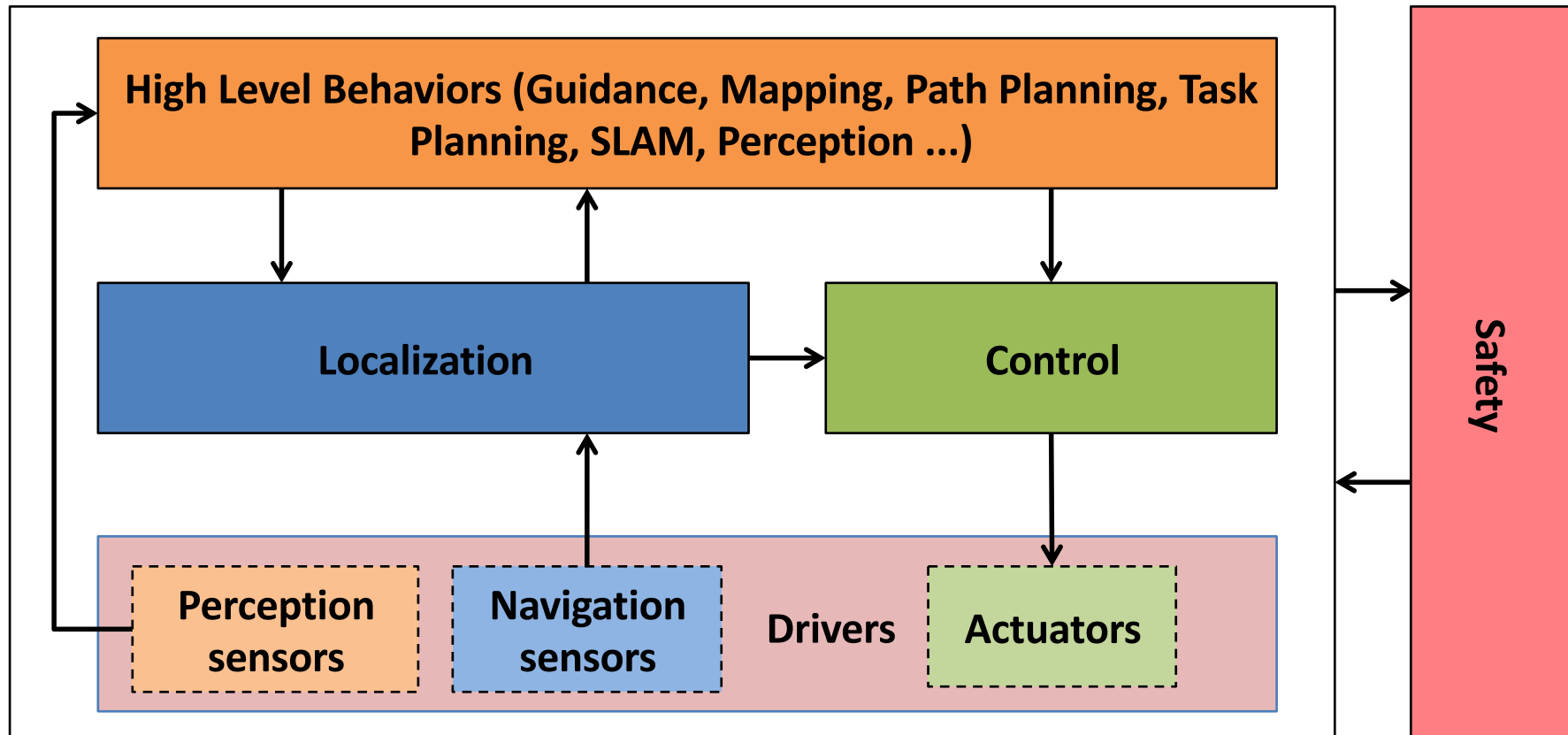
What is ROS?

The Robot Operating System (ROS) is a set of software libraries and tools that help you build robot applications. From drivers to state-of-the-art algorithms, and with powerful developer tools, ROS has what you need for your next robotics project. And it's all open source.

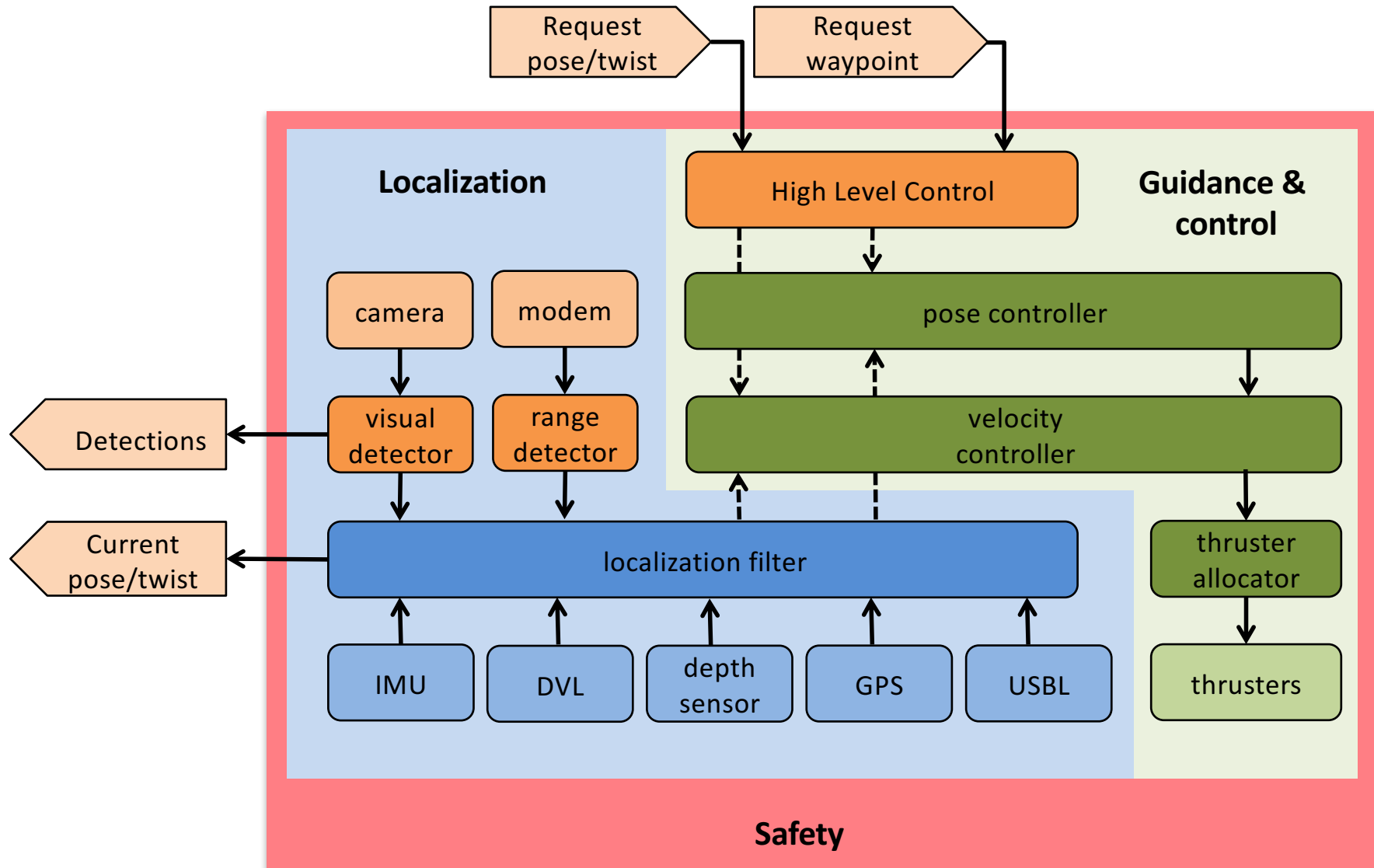
www.ros.org

- Simplifies the creation and the **addition of new components**
- Provides simple mechanisms for **communication between the components** in a network
- Provides **logging (and replay) features** to save (and replay) precious information in a safe and persistent way
- Provides **extra tools**, such as visualizers, simulators and much more
- **Open source**: Uses as a preferred license BSD

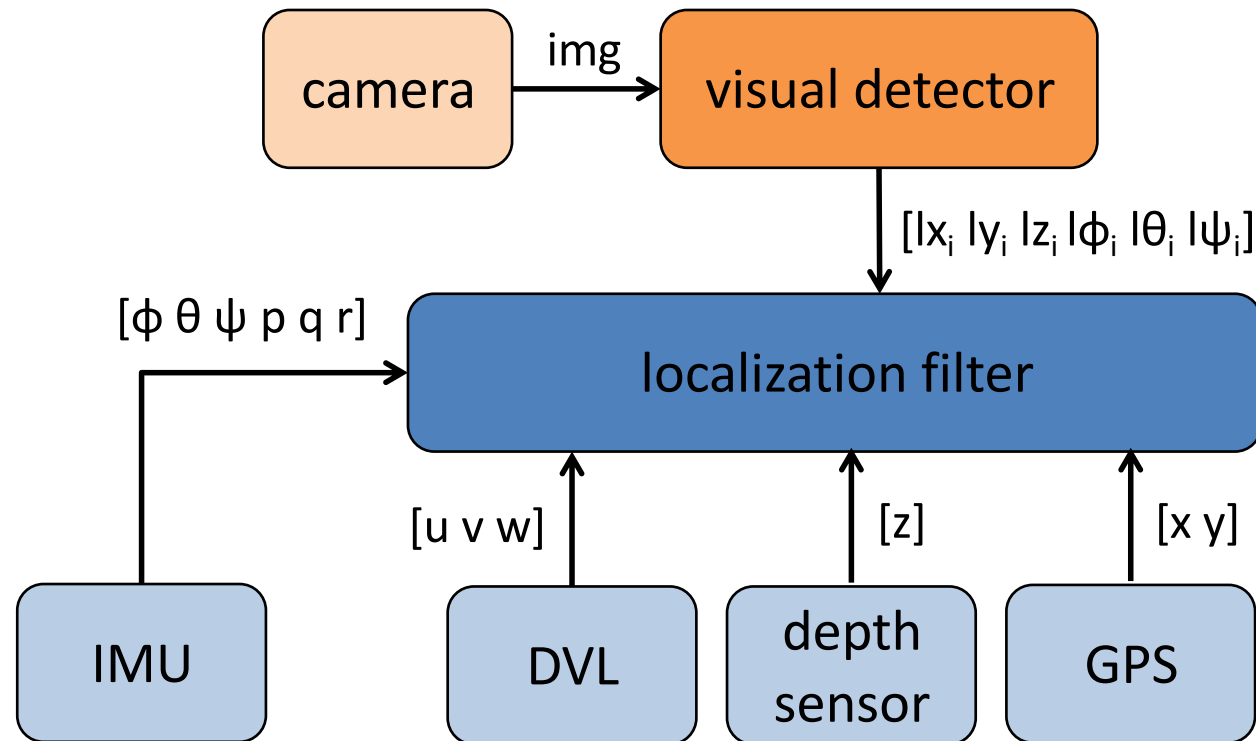
COLA2 Software architecture



Architecture core



Localization schema



Control schema

