



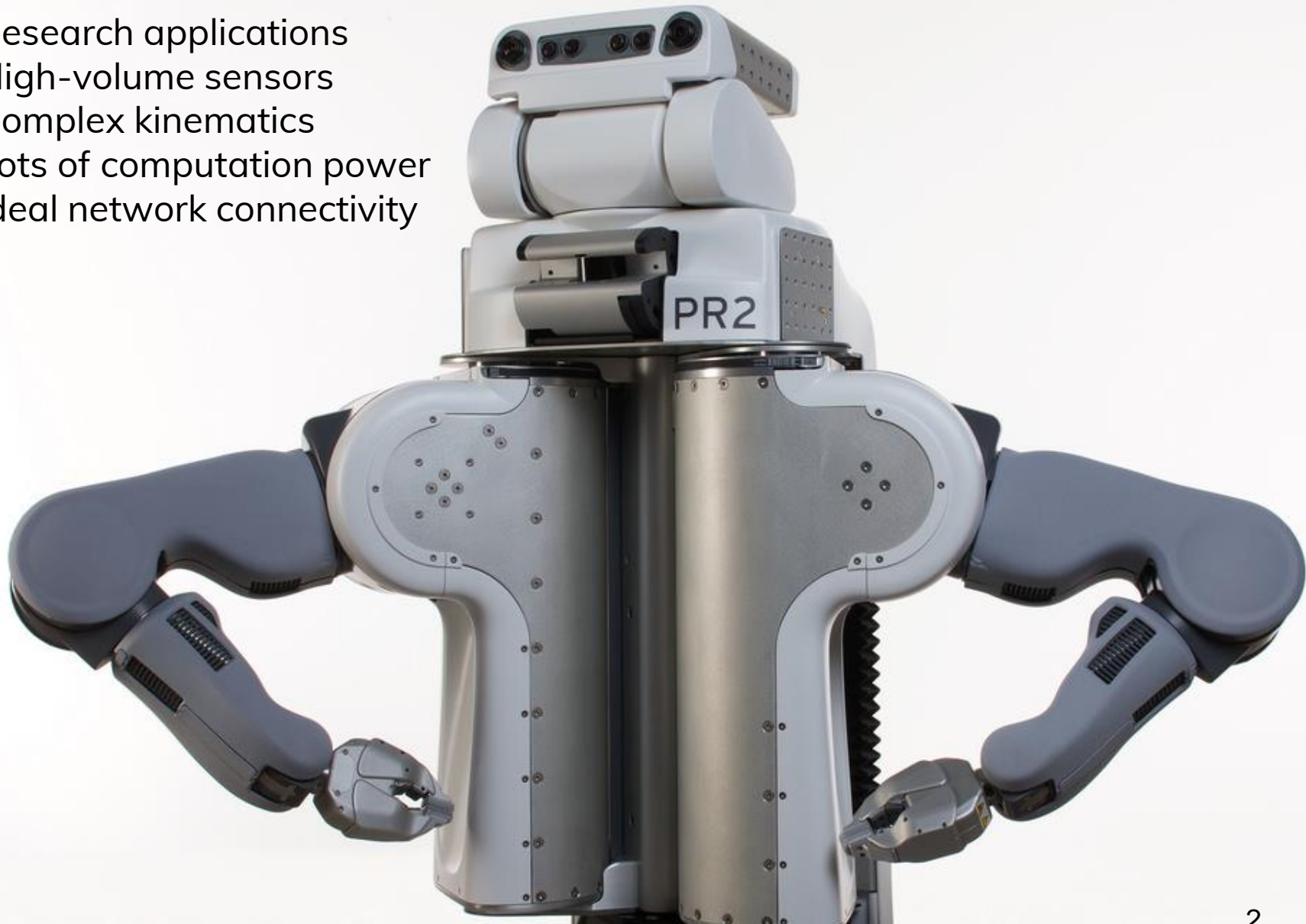
Looking forward to ROS2

Tully Foote, Open Robotics

May 25th, 2017



- Research applications
- High-volume sensors
- Complex kinematics
- Lots of computation power
- Ideal network connectivity





- Multi-robot system
- Small processors
- Battery power
- Unreliable network connectivity



Superstock





Goals of ROS 2



Support multi-robot systems involving unreliable networks



Remove the gap between prototyping and final products



"Bare-metal" micro controller



Support for real-time control



Cross-platform support





Disambiguating ROS





Disambiguating ROS



 **DDS** + ROS usability



Tools



Capabilities



Ecosystem

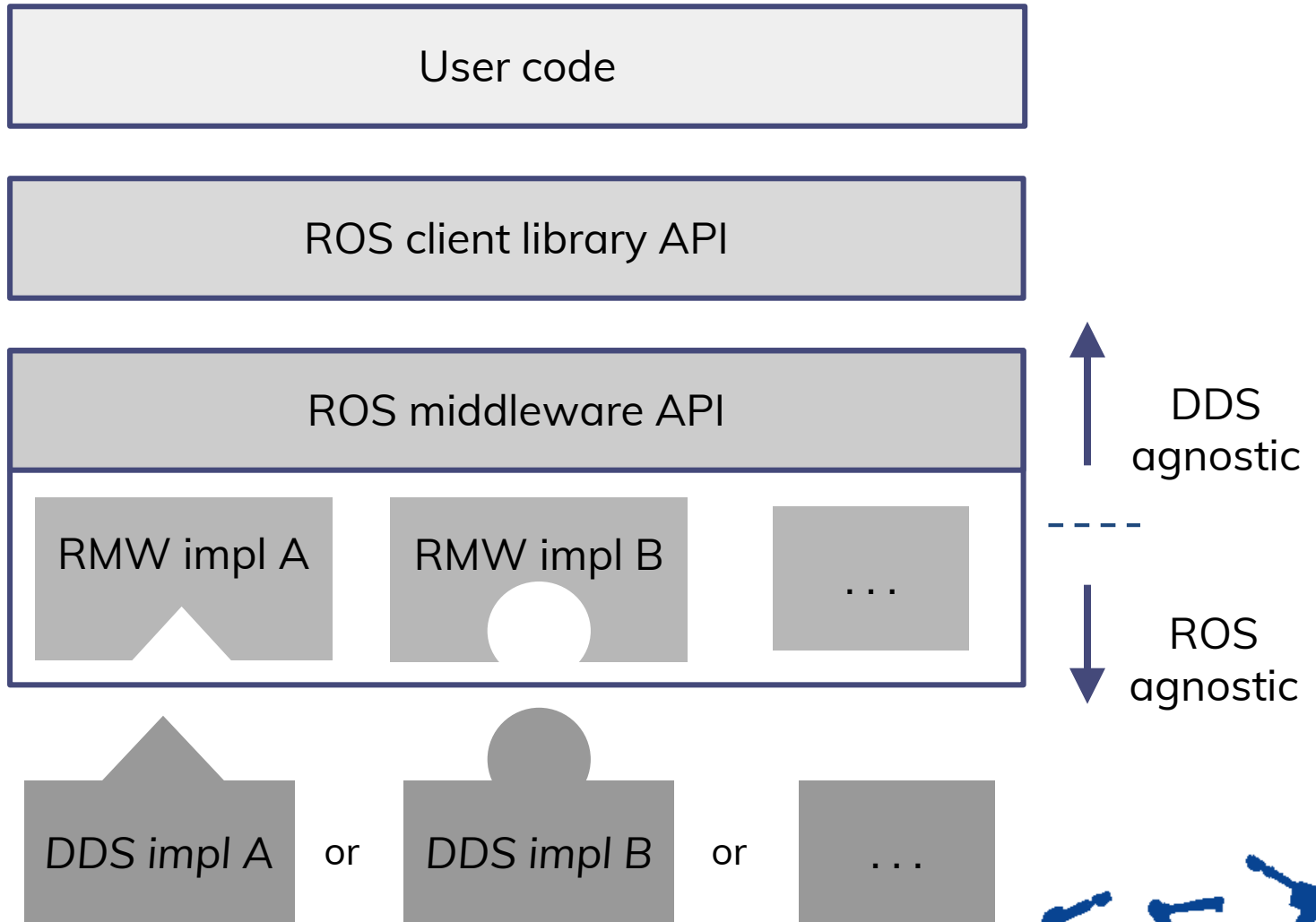
less time
spent here

means

more time to
spend here

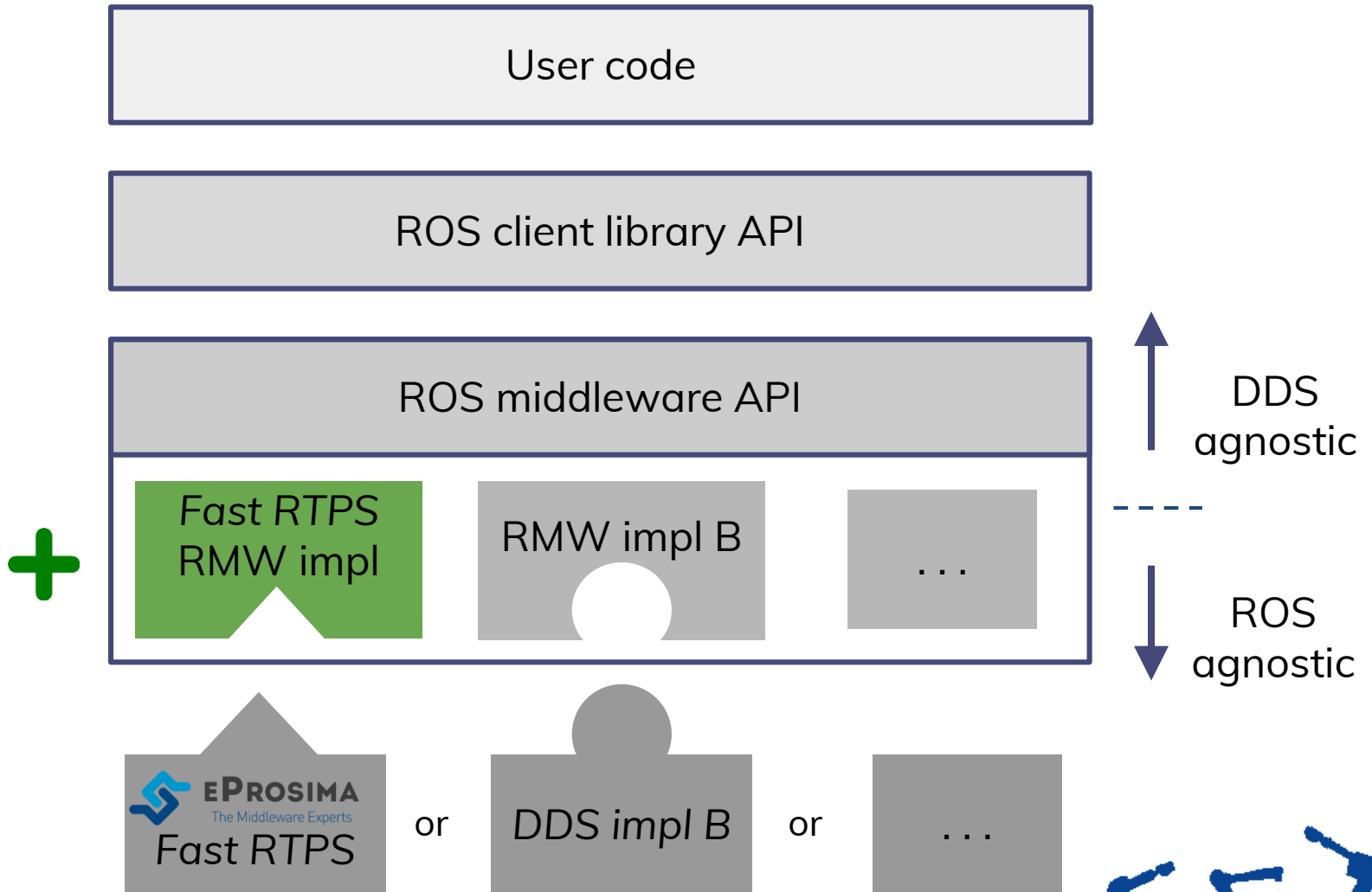


Architectural overview



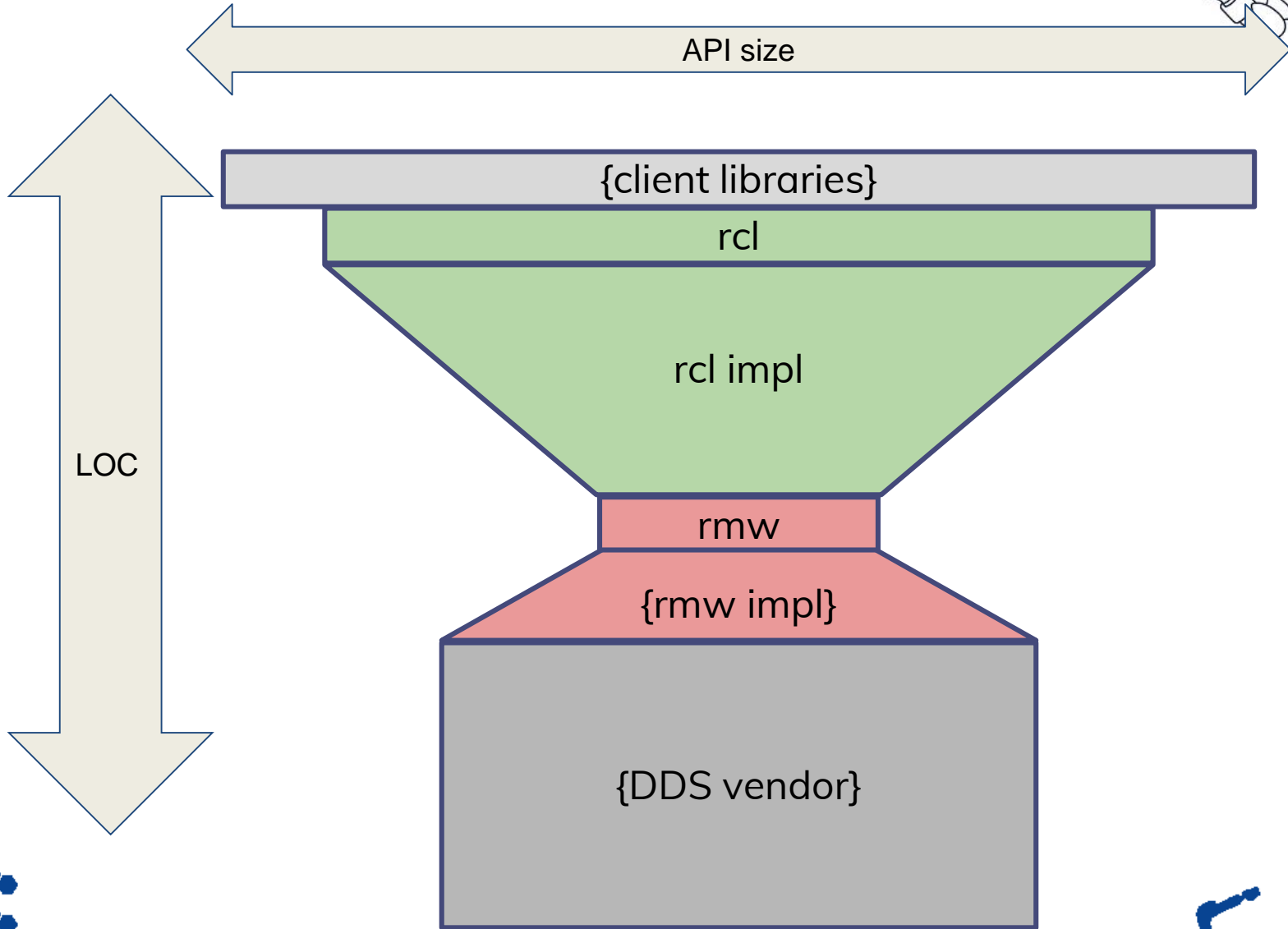


Architectural overview



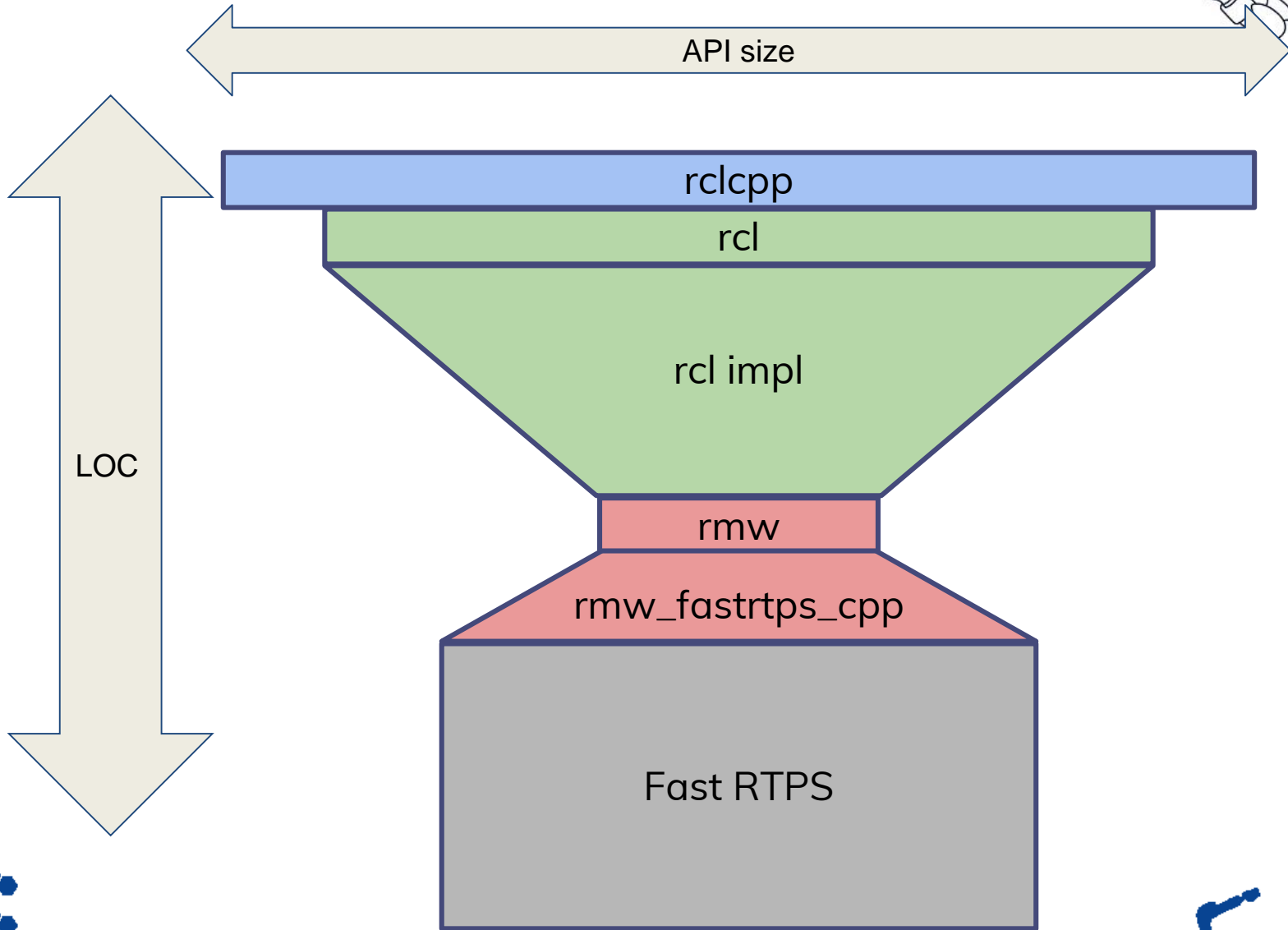


“Hour Glass” Pattern



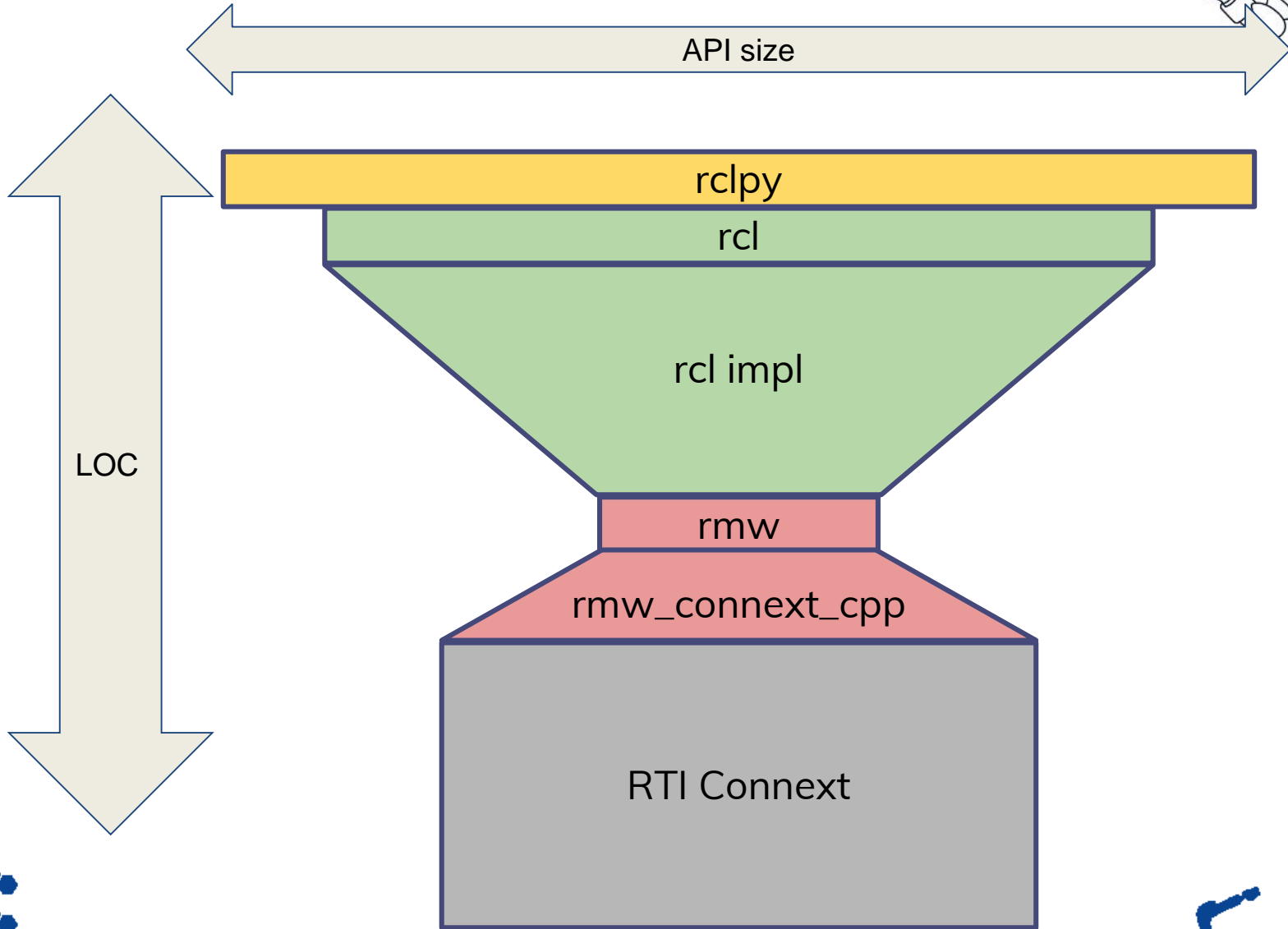


"Hour Glass" Pattern





“Hour Glass” Pattern



- Beta 2 Highlights - June 2017
 - Namespaces
 - Static Remapping
 - TurtleBot2 Demo
 - Debian packaging
 - Console logging
 - think “rosconsole”
 - ROS \Leftrightarrow ROS2 bridge
 - rviz, rosbag demos





Pointers

- ROS 2 wiki: <https://github.com/ros2/ros2/wiki>
 - Installation instructions
 - Tutorials
 - How to contribute
 - Current status
 - Roadmap
- Developer docs (work in progress):
 - http://docs.ros2.org/alpha8/developer_overview.html
 - Architecture overview
 - Links to API docs
- Design documents: <http://design.ros2.org/>
 - Articles about various subjects
 - On going discussions on the issue tracker:
<https://github.com/ros2/design>





Contact Information



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