ROS-Industrial Origins and Vision

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Origin Story

- Willow Garage releases ROS 1.0 (January 2010)
- Initial use of ROS at SwRI (March 2010)
- Shaun starts as a visiting researcher at Willow Garage (October 2011)

- First robot (Motoman) under ROS-Industrial control (December 2011)
- Second robot (Adept) under ROS-Industrial control (January 2012)
- ROS-Industrial Consortium Kickoff (March 2013)
Origin Story

ROS Industrial
Shaun Edwards, Guest Researcher

Hardware in the Loop Visualization
Origin Story
What We Thought in the Beginning:

**Right**
- Broad exposure to the research robotics community by association with ROS
- Source of a disruptive technology in the industrial robotics market
- Core ROS quality matches or exceeds that of industrial software

**Wrong**
- ROS was not original and would suffer the same fate other efforts and eventually fail or be supplanted
- Industrial companies would follow the lead of tech companies in their adoption of open source
Why Start a Consortium?
Why start a Consortium?

- Support ROS-Industrial:
  - Organize the community
  - Add functionality to ROS-I
  - Provide technical support
  - Provide training
  - Test with industrial hardware
  - Grow the community
  - Emulate Willow Garage

Growth of Public ROS Repositories

July 2012 ROS Stats:
- ROS Wiki Users: 2015
- Wiki Edits/day: 47.4
- ROS Answers Users: 2761
- Wiki pg. views/day: 24,559
- Unique IP. downloads: 1,139

Paul Hvass - SwRI
RIC Program Manager
Add Functionality to ROS-I

- 66 ROS-I Repos
- 26 Consortium Repos
Grow the Community

2014 Members

2020 Members
Impact: Advanced Robotics for Industry
Future
ROS-Industrial Software Package?

- Where's the "Download" button
- Lots capabilities, but no packaging
- ROS-Industrial as a Product
  - Documentation
  - Demos
  - Support
  - Frontends
  - Training
Open Source Manufacturing Organization

- Organization in support of open source software for manufacturing (not just robotics)
- Financial support to host, organize, and incubate software
- Manufacturing functions: ERP, MRP, CAD, PLM, etc.
- Automation functions: CAM, PLCs, CNCs, SCADA, etc.
- IP holding organization
Questions?