ROS-Industrial:
An Open Source Case Study

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Presentation Goals

• Motivate others to start open source efforts/programs that build on or are related to ROS

• Encourage developers to actively participate
Agenda

• Emergence of multiple programs out of the ROS community
• ROS-Industrial: case study
• Importance of these programs
• Conclusions
Emergence of Programs

• ROS’ greatest strength is community
• Programs are larger than a single package, organized, and maintained
• Most are technology focused, ROS-Industrial is market focused

• Sampling of programs
  – SIGs
  – Webtools
  – MoveIt
  – PCL
  – Ecto
  – ROS-Industrial
  – Embedded
  – More (I want to know about them)
ROS Industrial Case Study
ROS-Industrial program aims to leverage ROS for industrial applications

Primary objectives:
- Developing technology (software)
- Creating a community of researchers and developers
- Engage robotics and automation industry

More detailed info:
http://www.youtube.com/channel/UCXyGVRiCwUTMc1gav-G7z2ew
One Year Video

- http://www.youtube.com/watch?v=Ek8GKqmJ7n0&feature=youtu.be
Benefits to SwRI

- Increased name recognition in the area of industrial automation R&D
- Dozens of new contacts (potential clients and collaborators around the world)
- Several R&D project awards
- Initiation of the ROS-Industrial Consortium (potential for more funded R&D)
- European ROS-Industrial effort led by Fraunhofer IPA
- Attracting top talent
Recipe for Success

• Inception
• Build it
• Brand it
• Promote early
• Document it
• Get others involved
• Fund it
• Benefit
Importance of Programs

- Establish multiple lines of support for a package (capability)
- Provide concrete/tangible opportunities for investment (especially market focused projects)
- Program needs can drive core ROS development
- Forces collaborators to consider broader applications
Conclusions

• Everyone should consider starting/joining a program (especially market focused programs)
  – Autonomous vehicles
  – Micro air vehicles
  – Medical robotics

• Programs can benefit the participants and the community

• All programs should work harder encourage greater involvement of all participants
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