

Welcome to SwRI and the ROS-Industrial Consortium Annual Meeting

2024 Annual Meeting



SOUTHWEST RESEARCH INSTITUTE

Southwest Research Institute

Committed to advancing science and applying technology to benefit government, industry, and all of humanity.

About SwRI:

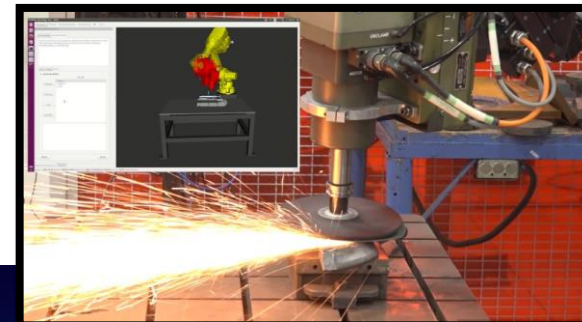
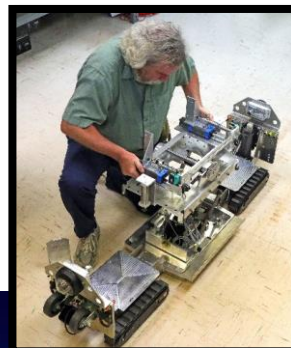
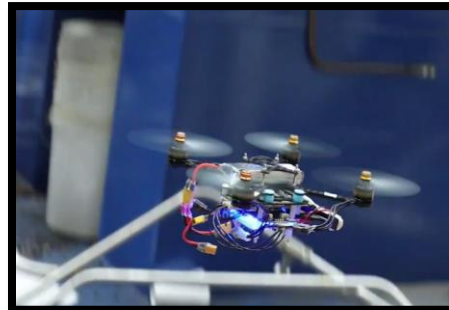
- Est. 1947
- Texas Headquarters
- Independent, Not-for-profit
- Applied RDT&E Services
- Physical Science and Engineering
- Approximately 3,000 staff



Robotics @ SwRI

Robotics Expertise

- Advanced software
- Sensing & Perception
- Autonomy
- Mobility
- Navigation
- Safety
- Learning
- Collaboration
- Security
- Path Planning
- Calibration
- AI and Machine Learning
- System Development
- Customization
- and more...



Robotics Domains

- Manufacturing
- Industrial
- Agriculture
- Inspection
- Mobile Manipulation
- Unmanned Aerial
- Automated Driving
- Autonomous Underwater
- Warehousing & Logistics
- and more...

ROS-Industrial Conceived



SOUTHWEST RESEARCH INSTITUTE® INTERNAL MEMORANDUM

April 6, 2011

TO: Shaun Edwards, Clay Flannigan (10)
FROM: Walt Downing, Administrator
Advisory Committee for Research
SUBJECT: Staff Renewal Proposal 10-61616, "A Senior Staff Renewal IR&D Project at Willow Garage"

I am pleased to inform you that your internal research proposal has been approved effective May 16, 2011.

A Proposal for
A Senior Staff Renewal IR&D Project at Willow Garage

Southwest Research Institute® (SwRI®)
Proposal No. 10-61616

Prepared for:
Advisory Committee for Research
Southwest Research Institute
San Antonio, TX 78238

Prepared by:
Shaun Edwards
Clay Flannigan
March 2, 2011

Approved:

Susan B. Crumrine
Vice President
Automation and Data Systems Division

ROS-I Repository Established

SwRI ESTABLISHES ROS-INDUSTRIAL SOFTWARE REPOSITORY

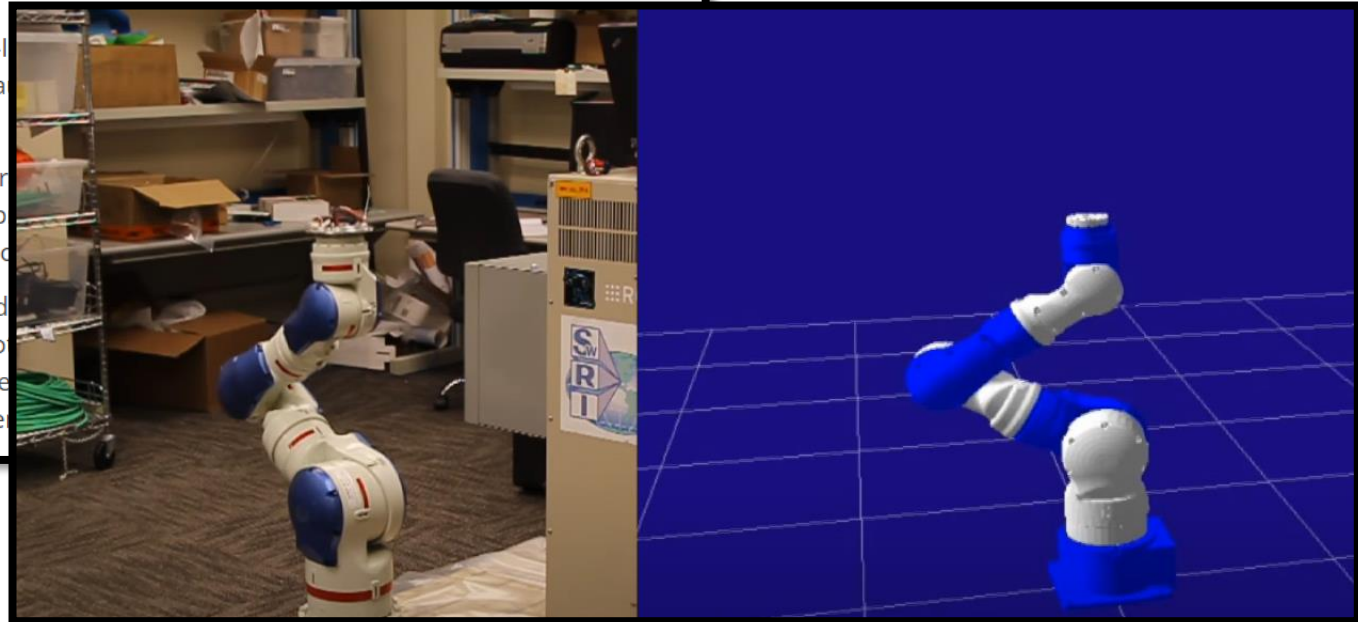
Home » Newsroom » Press Releases » SwRI establishes ROS-Industrial Software Repository

For immediate release

San Antonio — January 19, 2012 — Southwest Research Institute recently established the ROS-Industrial Repository, a BSD-licensed ROS stack that will contain libraries, tools and drivers for industrial applications. ROS-Industrial resources can be found at <http://code.google.com/p/swri-ros-pkg/>.

ROS (Robot Operating System) is an open-source project providing a common framework of libraries and tools for a wide range of applications, including service and research robotics. The goal of ROS-Industrial is to provide a framework to leverage the ROS framework to enable cutting-edge research in industrial applications, using a common set of tools and libraries.

Working with Motoman Robotics (a division of Yaskawa America Inc.) and Willow Garage, SwRI developed and released the first application for ROS-Industrial – a preliminary interface that provides robot collision-free path planning for the Motoman SIA10D robot arm using the DX100 robot controller. The interface works with actual hardware as well as a simulated robot in "rviz," the ROS 3-D visualization environment.



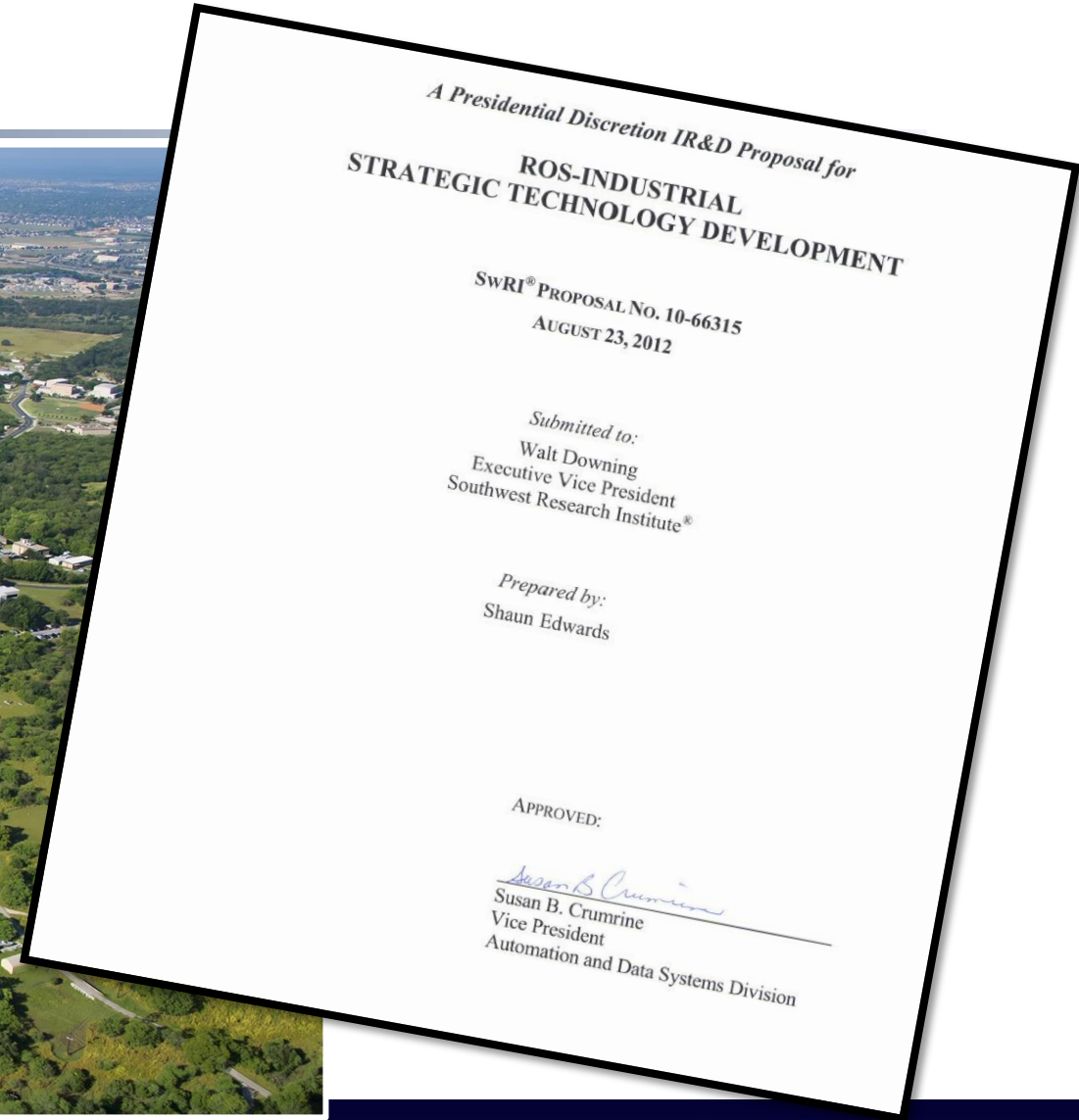
SwRI Investment in ROS-I



The screenshot shows a webpage for the ROS-Industrial Americas Kickoff Meeting Review. At the top, there is a navigation bar with links: ABOUT, BLOG, CONSORTIUM, DEVELOPER, EVENTS, TUTORIALS, VIDEOS. Below the navigation bar is a header with the ROS-Industrial logo and a row of images showing various industrial robots. The main content area features the title "ROS-Industrial Americas Kickoff Meeting Review" and a paragraph of text: "The ROS-Industrial Consortium launched with a kickoff meeting on March 6 and 7 at Southwest Research Institute® (SwRI®) in San Antonio, TX. The meeting began the afternoon of the 6th with an open house that covered introductions to SwRI, ROS, MoveIt!, ROS-Industrial, and the Consortium. Participants, who were mostly from industry, were enthusiastic about the potential for ROS-I and for one of its upcoming motion planning applications called MoveIt!, which was presented by Dr. Sachin Chitta from Willow Garage. A highlight of the open house meeting was a virtual appearance by Erik Nieves, Technology Director for Motoman Robotics America, who used his VGo telepresence robot to deliver a compelling presentation about the value of ROS-Industrial to robot Original Equipment Manufacturers (OEMs). Concluding his remarks he summarized, "... ROS-Industrial is an important work. It is true: we do need to have a hard and stable version of ROS from which we can proceed. So Yaskawa has thrown our hat in with the ROS-Industrial Consortium, and we're glad that you have too!"

Upcoming Events:

- ROS-Industrial Consortium Americas 2024 Annual Meeting
Mar 27, 2024 - Mar 28, 2024
- ROS-Industrial Developers Meeting (Apr) - 2024 (Americas)
Apr 9, 2024



A Presidential Discretion IR&D Proposal for
ROS-INDUSTRIAL
STRATEGIC TECHNOLOGY DEVELOPMENT

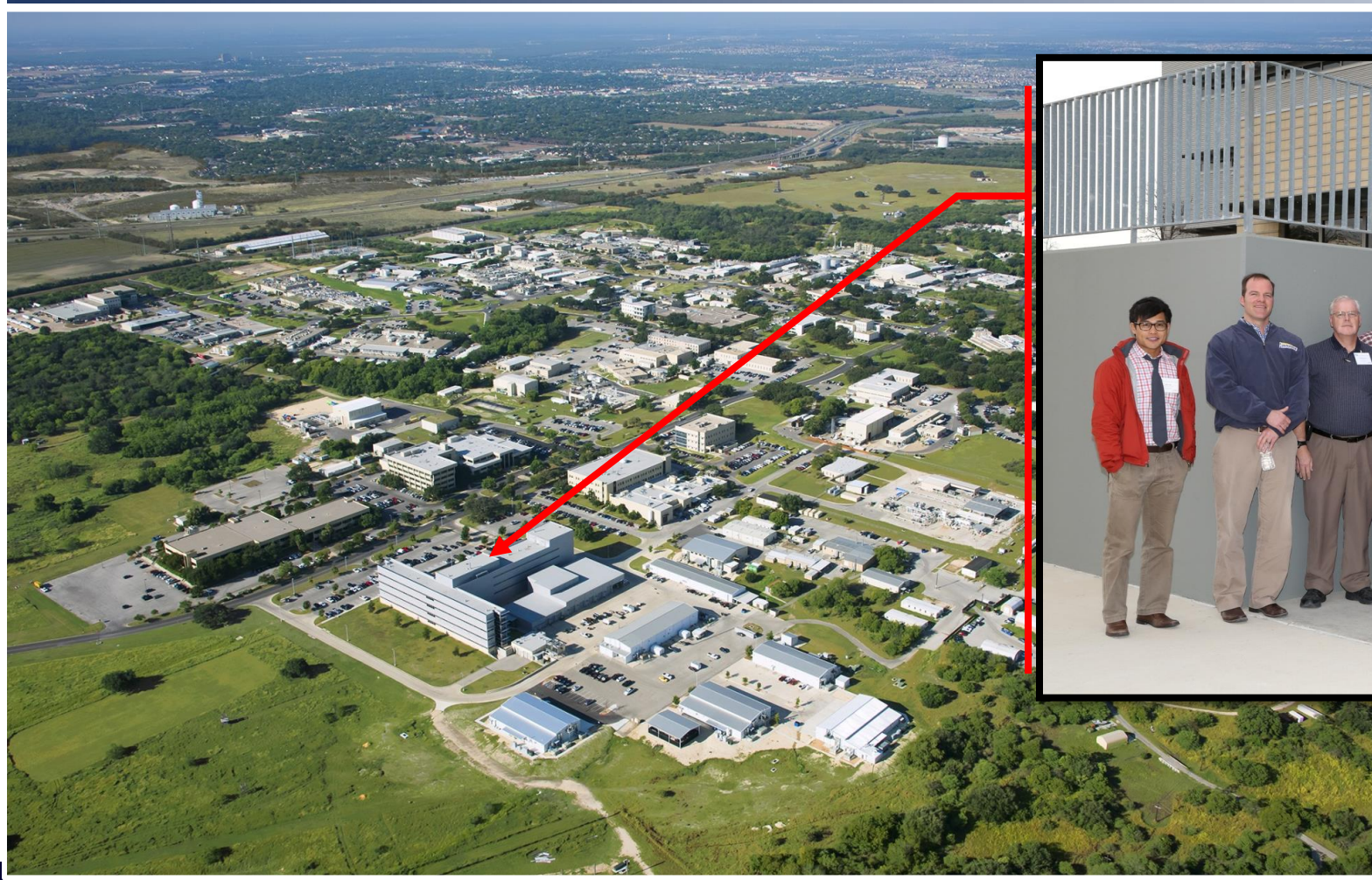
SWRI® PROPOSAL NO. 10-66315
AUGUST 23, 2012

Submitted to:
Walt Downing
Executive Vice President
Southwest Research Institute®

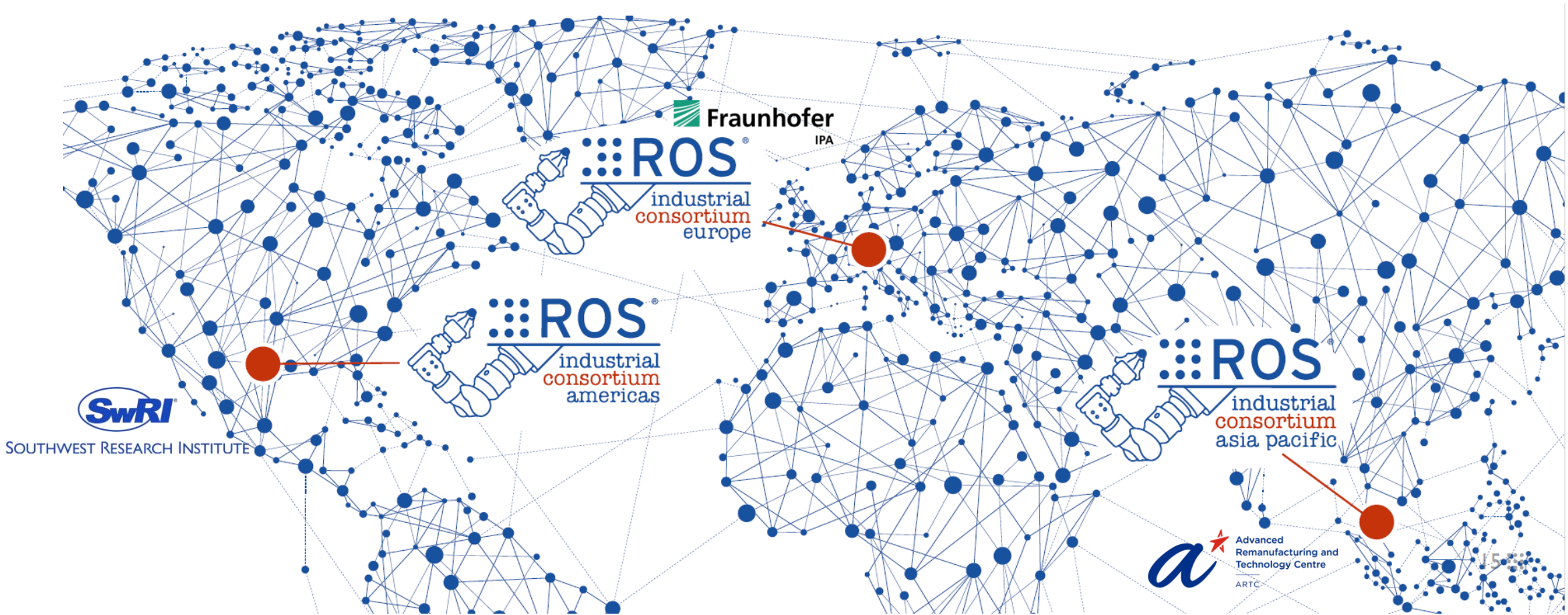
Prepared by:
Shaun Edwards

APPROVED:
Susan B. Crumrine
Susan B. Crumrine
Vice President
Automation and Data Systems Division

First ROS-I Consortium Meeting in March 2013



Collaboration for Global Engagement



10 Years of Industry Guidance

Spring 2014



Fast Forward

Spring 2024



Welcome and Thank You!

ROS-Industrial is supported by you, a vibrant community of developers, researchers, and industry partners.

Collaboration within this community helps to drive innovation, share best practices, and contribute to the development of new features and capabilities.

Thank You

- Paul Evans
Director – R&D
Southwest Research Institute
Paul.Evans@SwRI.org
1.210.286.1153

