



ROS: A (Very) Quick Overview

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What is ROS?

- Build and packaging system
 - organize and maintain large projects
 - “Robot Filesystem”
 - debugging and visualization tools

What is ROS?

- Build and packaging system
- Inter-process communication middleware
 - publish-subscribe
 - allows multiple languages
 - * C++, Python supported from Day 1
 - * community support: JS, Lisp, etc.
 - “Robot Computation Graph”

What is ROS?

- Build and packaging system
- Inter-process communication middleware
- Community
 - Huge collection of software, algorithms, robot capabilities, hardware drivers, etc.
 - Documentation, mailing lists, knowledge repositories, events, etc.

What ROS is **not**?

- **Not** a computer Operating System
 - Ubuntu Linux officially supported
- **Not** any one package, program, website, etc.
 - 100s of repos and 1000s of packages

Getting Started

Go to <http://www.ros.org/wiki>

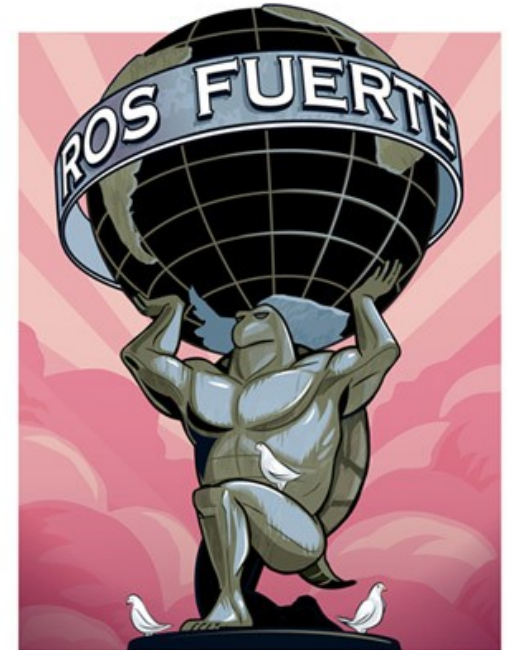
- Installation of core ROS tools
- “Getting Started” tutorials

Examples

- Installation from debian release
- Command line tools
- Package creation and dependencies
- **rosmake**
- ROS Master and **roscore**
- Publish and subscribe
- Topics and Actions

What does Willow Garage do?

- Build and maintain core ROS tools
- Contribute to collection of robot software
- Open documentation (www.ros.org/wiki) and Q&A (answers.ros.org) websites
- Release standardized distributions every 6 months
 - collection guaranteed to run together
 - current: ROS Fuerte
 - coming soon: ROS Groovy



What does Willow Garage **not** do?

- We do **not** write, maintain, or own “all” of ROS
 - community effort
- We do **not** “approve” ROS packages or apps
 - there is no approval process

What license is ROS?

- Core ROS tools are under BSD license
 - allows use in commercial applications
- Most Willow Garage contributions are also BSD
- Community contributions: up to owners