

ROS+Gazebo Quadrotor Simulator



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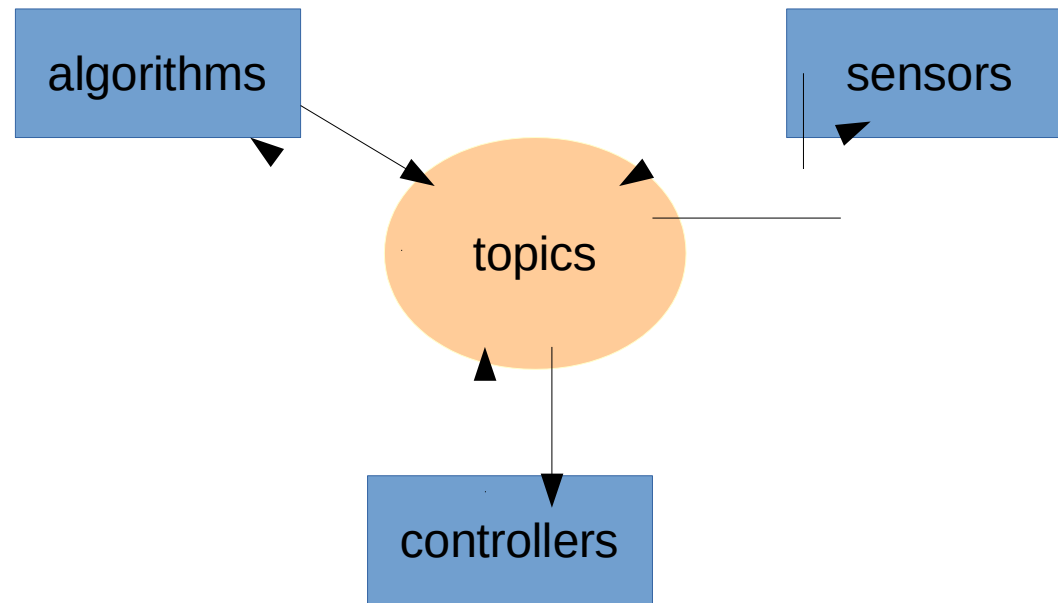
ROS+Gazebo Quadrotor Simulator

- About ROS
- About Gazebo
- **sjtu_drone simulator**
- **sjtu_drone as a testbed**

About ROS

- ROS : Robot Operating System
 - A collection of
 - Tools
 - Libraries
 - Conventions

Why ROS ?



ROS distributions

- Dead distributions
 - Box Turtle
 - C Turtle
 - Diamondback
 - Electric Emys
 - Fuerte Turtle
- Current Distributions
 - **Groovy** Galapagos
 - **Hydro** Medusa
- Nest Distribution
 - **Indigo** Igloo

ROS distributions V.S. Linux versions

ROS	Ubuntu	Linux Mint
Indigo	14.04 Trusty Thur	17 Qiana
Hydro	12.04 Precise Pangolin	15 Olivia
Groovy	12.04 Precise Pangolin	15 Olivia

Recommend: Linux Mint 17 + ROS indigo

Learning ROS

- Tutorials : <http://wiki.ros.org/ROS/Tutorials>
- Quick concepts:
 - Workspace
 - Package
 - Node (Executable : binaries / scripts)
 - Topics (Publisher & Subscriber)
- Advance :
 - Services
 - Launch file

Basic tools

- `catkin_init_workspace`
- `catkin_create_pkg`
- `catkin_make`
- `roscore`
- `roslaunch`
- `rostopic`
- `roscat`
- `rostopic`

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/477162200046006045>