Documentation

ROS (Robot Operating System) provides libraries and tools to help software developers create robot applications. It provides hardware abstraction, device drivers, libraries, visualizers, message-passing, package management, and more. ROS is licensed under an open source, BSD license.

ROS:

- **Install**
  - Install ROS on your machine.

- **Getting Started**
  - Tutorials, technical overview, and links to getting help. Also, check out the ROS cheatsheet.pdf

- **Contribute**
  - How to contribute to the ROS community, such as submitting your own repository. See the ROS Planet for what others are doing

- **Support**
  - What to do if something doesn't work as expected.

- **MIRRORS**
  - Mirrors of this wiki.
IF YOU SEE SOMETHING
SAY SOMETHING
FIX IT!
Package/Stack Naming

- The wiki has a flat name space
  - Look before you collide
- Be specific
  - Avoid utils, common, etc
- Try not to use acronyms
  - If you insist, document with relevant key words
Documentation

• Fill out the manifest.xml/stack.xml

• Don't create a wiki page if you're not going to create documentation
  • ROS Browse will help others find packages without documentation

• Follow the wiki style guide
  • http://ros.org/wiki/StyleGuide
1. Package Summary

tf is a package that lets the user keep track of multiple coordinate frames over time. It maintains the relationship between coordinate frames in a tree structure buffered in memory, and lets the user transform points, vectors, etc. between any two coordinate frames at any desired point in time.

- Author: Tully Foote, Eitan Marder-Eppstein, Wim Meeussen
- License: BSD
- Repository: wg-kforge
- Source: hg https://kforge.ros.org/geometry/geometry

Package Links

Code API
- diamondback
- electric
- fuerte
- unstable

Msg/Srv API
- diamondback
- electric
- fuerte
- unstable

Tutorials
Troubleshooting
FAQ
Reviews (doc reviewed)

Dependencies (10)
Used by (721)
Wiki Macros

http://ros.org/wiki/WikiMacros

- GetTaggedCode
- Version
- Clearsilver/IncludeCSTemplate
- SeeSaw
- Linking
GetTaggedCode

<<GetTaggedCode(code_uri, code_tag, show_uri, no_tag_newlines, global_lines)>>

In Comment use:
%Tag(TAG)%
%EndTag(TAG)%
Version

<<Version()>>

**win_ros**

- **win_ros**: mingw_cross | msvc_hudson | msvc_runtime | msvc_sdk | win_appupdater | win_boost | win_bzip2 | win_empy | win_patches | win_pym mercury | win_pyyaml | win_ros | win_roscpp_tutorials | win_rosinstall

1. Stack Summary

Setup and utilities for ROS on Windows.

- **Author**: Maintained by Daniel Stonier
- **License**: BSD
- **Repository**: vujin-ros-pkg
- **Source**: git https://github.com/stonier/win_ros.git

Stack Links

- Tutorials
- Roadmap
- Reviews (experimental)

Dependencies (4)
Version

<<Version(release_name)>>

Diamondback Example:

Options:

- `-l, --latch`  
  Enable latch mode. Latching mode is the `default` when using command-line arguments.

- `--rate RATE`  
  Enable `rate` mode. Rate mode is the `default` (10hz) when using piped or file input.

- `-i, --once`  
  Enable `once` mode.

- `--file FILE`  
  Read message fields from YAML file. YAML syntax is equivalent to output of `rostopic echo`. Messages are separated using YAML document separator `---`. To use only the first message in a file, use the `--latch` option.
Clearsilver

#!clearsilver parser_location

example NodeAPI (#!clearsilver CS/NodeAPI):

2. Nodes

2.1 photo_node

The usb camera node interfaces with standard USB cameras (e.g. the Logitech Quickcam) using libusb_cam and publishes images as sensor_msgs::Image.

2.1.1 Services

get_config (photo/GetConfig)

queries the value of a parameter

set_config (photo/SetConfig)

sets the value for a given parameter

capture (photo/Capture)

Image width

http://www.clearsilver.net/
IncludeCSTemplate

<<IncludeCSTemplate(template_location)>>

Tutorial Example:

```
#############################################################
##FILL ME IN
#############################################################
## links to any required tutorials
## note.0= [[ROS/Tutorials/ExaminingPublisherSubscriber|examining the simple
publisher and subscriber]]
## descriptive title for the tutorial
## title = Writing a Simple Service and Client
## multi-line description to be displayed in search
## description = This tutorial covers how to write a service and client node in C++.
## the next tutorial description (optional)
## next =
## links to next tutorial (optional)
## next.0.link= [[roscpp_tutorials/Tutorials/Parameters|Using Parameters in roscpp]]
## next.1.link=
## what level user is this tutorial for
## level= BeginnerCategory
#############################################################

<<IncludeCSTemplate(TutorialCSHeaderTemplate)>>
```
Seesaw

Allows you to toggle content visibility

<<SeeSaw(section="sshhelp1",toshow="(ssh help)")>>

{{{#!wiki seesaw sshhelp1
<<Include(turtlebot/help/ssh)>><<BR>>}}}

ROSCon 2012  15
Linking

<<MsgLink(package/name)>>

<<SrvLink(package/name)>>

<<KforgeTracLink(repo package)>>

<<TracLink(repo package)>>

<<LurkerLink(message/blah)>>
ROS Promotions

Promotions are a feature of Google custom search on the ROS wiki

Search Results
Refine results: All results ros-users ros reps ros api docs ros answers ros wiki docs all ros.org

About 33,700 results (0.16 seconds)

Looking for a transformation library?
If maintains the relationship between coordinate frames in a tree structure buffered in time.
http://www.ros.org/wiki/tf

tf/Tutorials
www.ros.org/wiki/tf/Tutorials/Introduction%20to%20tf
Labeled all ros org ros wiki docs

tf
www.ros.org/wiki/tf
Labeled all ros org ros wiki docs

https://developers.google.com/custom-search/docs/promotions