

ROS TERMS

Before a beginner even opens a web tutorial or book or sees a ROS video, it is helpful to learn a few terms that pertain to ROS. These terms describe the main components of a ROS system.

Table 1. ROS Useful Terms		
Item	Type	Comment
Repositories	A software repository is a storage location from which software packages may be retrieved and installed on a computer.	http://en.wikipedia.org/wiki/Software_repository GitHub is used to download the ROS packages used by the Baxter system: http://sdk.rethinkrobotics.com/wiki/Workstation_Setup
Packages	Contains files to allow execution of ROS programs	A package typically contains source files and executable scripts that can be BASH, Python, or other code.
Manifest Package.xml	Information about a package	The manifest defines properties about the package such as the package name, version numbers, authors, maintainers, and dependencies on other packages.
ROS Master	Registers the name and location of each node.	Allows nodes to communicate. Nodes can be in different computers.
Parameter Server	Data types that define certain information for nodes.	Certain nodes require parameters to define aspects of the node.
Nodes	Processes that execute commands.	Executable code written in Python or C++ usually. Python nodes use the client library <code>rospy</code>
Topic	Name of a message.	For example, Baxter's cameras "publish" the image they receive as a topic with a name that indicates it is a camera image.
Services	Allows communication between nodes.	Used by nodes to communicate with other nodes and request a response.
Messages	Data sent between nodes.	Messages are "published" by a node and "subscribed to" by another node.
Bags	Data storage for messages.	Used to save and playback data such as sensor data.

Table 1 ROS Terms From Turtlesim Guide Pg 6

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HANDOUT ROS KINETIC CHEATSHEET

https://w3.cs.jmu.edu/spragunr/CS354_S19/handouts/ROSCheatsheet.pdf

<http://wiki.ros.org/ROS/CommandLineTools>