

## Introduction to ROS

### Setting Up Your ROS Workspace

Go to [http://wiki.ros.org/catkin/Tutorials/create\\_a\\_workspace](http://wiki.ros.org/catkin/Tutorials/create_a_workspace) . Select “*indigo*”. Follow the instructions to create and configure your catkin\_ws.

### Creating a ROS Package

Create a ROS package : <http://wiki.ros.org/ROS/Tutorials/CreatingPackage> . When you run “catkin\_create\_pkg”, use the -m option:  
`catkin_create_pkg -m [your name] [pkg name] roscpp rospy std_msgs`

### ROS “Hello World”

Now you will create basic publisher and subscriber nodes:

Got to <http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28python%29> (Python) OR to <http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28c%2B%2B%29> (C/C++)

### Running Nodes

Go to <http://wiki.ros.org/ROS/Tutorials/ExaminingPublisherSubscriber> to run your nodes. Experiment with them.

- What happens if you run “rostopic list”?
- How about “rostopic hz /chatter”?
- What happens if you [CTRL]-C the publisher while the subscriber is still running?
- What if you shut down the roscore while the other nodes are running?