

Note: This tutorial assumes that you have completed the previous tutorials: writing a simple publisher and subscriber (python) (/ROS/Tutorials/WritingPublisherSubscriber%28python%29) (c++) (/ROS/Tutorials/WritingPublisherSubscriber%28c%2B%2B%29).

💡 Please ask about problems and questions regarding this tutorial on answers.ros.org (<http://answers.ros.org>). Don't forget to include in your question the link to this page, the versions of your OS & ROS, and also add appropriate tags.

Examining the Simple Publisher and Subscriber

Description: This tutorial examines running the simple publisher and subscriber.

Tutorial Level: BEGINNER

Next Tutorial: Writing a simple service and client (python) (/ROS/Tutorials/WritingServiceClient%28python%29) (c++) (/ROS/Tutorials/WritingServiceClient%28c%2B%2B%29)

Contents

1. Running the Publisher
2. Running the Subscriber

1. Running the Publisher

Make sure that a roscore is up and running:

```
$ roscore
```

catkin specific If you are using catkin, make sure you have sourced your workspace's setup.sh file after calling catkin_make but before trying to use your applications:

```
# In your catkin workspace
$ cd ~/catkin_ws
$ source ./devel/setup.bash
```

In the last tutorial we made a publisher called "talker". Let's run it:

```
$ rosrun beginner_tutorials talker      (C++)
$ rosrun beginner_tutorials talker.py  (Python)
```

You will see something similar to:

```
[INFO] [WallTime: 1314931831.774057] hello world 1314931831.77
[INFO] [WallTime: 1314931832.775497] hello world 1314931832.77
[INFO] [WallTime: 1314931833.778937] hello world 1314931833.78
[INFO] [WallTime: 1314931834.782059] hello world 1314931834.78
[INFO] [WallTime: 1314931835.784853] hello world 1314931835.78
[INFO] [WallTime: 1314931836.788106] hello world 1314931836.79
```

The publisher node is up and running. Now we need a subscriber to receive messages from the publisher.

2. Running the Subscriber

In the last tutorial we made a subscriber called "listener". Let's run it:

```
$ rosrun beginner_tutorials listener    (C++)
$ rosrun beginner_tutorials listener.py (Python)
```

You will see something similar to:

```
[INFO] [WallTime: 1314931969.258941] /listener_17657_1314931968795I heard hello world 1314931969.26
[INFO] [WallTime: 1314931970.262246] /listener_17657_1314931968795I heard hello world 1314931970.26
[INFO] [WallTime: 1314931971.266348] /listener_17657_1314931968795I heard hello world 1314931971.26
[INFO] [WallTime: 1314931972.270429] /listener_17657_1314931968795I heard hello world 1314931972.27
[INFO] [WallTime: 1314931973.274382] /listener_17657_1314931968795I heard hello world 1314931973.27
[INFO] [WallTime: 1314931974.277694] /listener_17657_1314931968795I heard hello world 1314931974.28
[INFO] [WallTime: 1314931975.283708] /listener_17657_1314931968795I heard hello world 1314931975.28
```

Now that you have examined the simple publisher and subscriber, let's write a simple service and client (python) (/ROS/Tutorials/WritingServiceClient%28python%29) (c++) (/ROS/Tutorials/WritingServiceClient%28c%2B%2B%29).

Except where otherwise noted, the ROS wiki is licensed under the Creative Commons Attribution 3.0 (<http://creativecommons.org/licenses/by/3.0/>) | Find us on Google+ (<https://plus.google.com/113789706402978299308>)

Wiki: ROS/Tutorials/ExaminingPublisherSubscriber (last edited 2016-09-27 14:15:32 by yoyekw (/yoyekw))

Brought to you by:  Open Source Robotics Foundation

(<http://www.osrfoundation.org>)