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1. Creating a workspace for catkin

Description: This tutorial covers how to setup a catkin workspace in which one or more catkin packages can be built.

Keywords: catkin workspace

Tutorial Level: BEGINNER

Next Tutorial: Creating catkin packages (</catkin/Tutorials/CreatingPackage>)

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1. Prerequisites

2. Prerequisites

This tutorial assumes that you have [installed catkin](http://www.ros.org/wiki/catkin?distro=indigo#Installing_catkin) (http://www.ros.org/wiki/catkin?distro=indigo#Installing_catkin) and sourced your environment. If you installed catkin via apt-get for ROS Indigo, your command would look like this:

```
$ source /opt/ros/indigo/setup.bash
```

Let's create a catkin workspace (</catkin/workspaces>):

```
$ mkdir -p ~/catkin_ws/src
$ cd ~/catkin_ws/src
$ catkin_init_workspace
```

Even though the workspace is empty (there are no packages in the 'src' folder, just a single CMakeLists.txt link) you can still "build" the workspace:

```
$ cd ~/catkin_ws/
$ catkin_make
```

The `catkin_make` (`/catkin/commands/catkin_make`) command is a convenience tool for working with catkin workspaces (`/catkin/workspaces`). If you look in your current directory you should now have a 'build' and 'devel' folder. Inside the 'devel' folder you can see that there are now several `setup.*sh` files. Sourcing any of these files will overlay this workspace on top of your environment. To understand more about this see the general catkin documentation: `catkin` (`/catkin`). Before continuing source your new `setup.*sh` file:

```
$ source devel/setup.bash
```

To make sure your workspace is properly overlayed by the setup script, make sure `ROS_PACKAGE_PATH` environment variable includes the directory you're in.

```
$ echo $ROS_PACKAGE_PATH
/home/youruser/catkin_ws/src:/opt/ros/indigo/share:/opt/ros/indigo/stacks
```

Next you should go ahead and learn how to use the workspace (`/catkin/Tutorials/using_a_workspace`).

If you are following the ROS tutorials series instead of the catkin tutorials, please continue with `Creating a ROS Package` (`/catkin/Tutorials/CreatingPackage`).

Except where

otherwise noted, Wiki: `catkin/Tutorials/create_a_workspace` (last edited 2015-05-20 22:07:47 by DirkThomas (/DirkThomas))

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