

indigo

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Documentation Status

Package Links

- **Code API** (<http://docs.ros.org/indigo/api/pocketsphinx/html>)
- **FAQ** (<http://answers.ros.org/questions/scope:all/sort:activity-desc/tags:pocketsphinx/page:1/>)
- **Changelog** (<http://docs.ros.org/indigo/changelogs/pocketsphinx/changelog.html>)
- **Change List** (</pocketsphinx/ChangeList>)
- **Reviews** (</pocketsphinx/Reviews>)

Dependencies (5)

Jenkins jobs (9)

Package Summary

✓ Released ✓ Continuous Integration ✓ Documented


This package is a simple wrapper around the pocketsphinx speech recognizer, using gstreamer and a Python-based interface.


- Maintainer status: maintained
- Maintainer: Michael Ferguson <mike AT vanadiumlabs DOT com>
- Author: Michael Ferguson
- License: BSD
- Source: git <https://github.com/mikeferguson/pocketsphinx.git>
(<https://github.com/mikeferguson/pocketsphinx>) (branch: indigo-devel)

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1. Overview

This package provides access to the  CMU Pocket Sphinx (<http://cmusphinx.sourceforge.net/>) speech recognizer. It uses gstreamer to automatically split the incoming audio into utterances to be recognized, and offers services to start and stop recognition.

Currently, the recognizer *requires* a language model and dictionary file. These can be automatically built from a corpus of sentences using the  Online Sphinx Knowledge Base Tool (<http://www.speech.cs.cmu.edu/tools/lmtool.html>). Example launch files, language models, and dictionary files can be found in the *demo* directory of the package. The *voice_cmd* example controls a mobile base using commands such as "*move forward*" or "*stop*". The *robocup* example uses some of the standard items and names from the RoboCup (/RoboCup)@Home contest, for instance, it should recognize "*hello, my name is Michael*" or "*Bring me the Original Pringles*".

2. Installing

2.1 Ubuntu Users

```
sudo apt-get install ros-indigo-pocketsphinx
```

2.2 Non-Ubuntu Users

There is nothing to build, however, to install pocketsphinx itself we will need to run rosdep. In a directory under your ROS package path, do the following:

```
git clone https://github.com/mikeferguson/pocketsphinx
sudo apt-get install gstreamer0.10-pocketsphinx
```

3. Nodes

3.1 recognizer.py

Interface to pocket sphinx.

3.1.1 Published Topics

~output (std_msgs/String (http://docs.ros.org/api/std_msgs/html/msg/String.html))
Complete utterance as heard by pocket sphinx.

3.1.2 Services

~start (std_srvs/Empty (http://docs.ros.org/api/std_srvs/html/srv/Empty.html))
Connect the audio stream to the speech recognizer and start listening.

~stop (std_srvs/Empty (http://docs.ros.org/api/std_srvs/html/srv/Empty.html))
Disconnect audio stream from speech recognizer.

3.1.3 Parameters

`~lm` (str, default: required)

Location of language model file.

`~dict` (str, default: required)

Location of dictionary file.

Except where otherwise

noted, the ROS wiki is

Wiki: pocketsphinx (last edited 2016-03-06 09:11:29 by AustinHendrix (/AustinHendrix))

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