Robotics Systems Types - Bug #2612
Wrong RST version used in python when building downstream project with setuptools

07/14/2016 04:59 PM - N. Köster

Status:	New	**Start date:**	07/14/2016
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:	python	**Estimated time:**	0.00 hour
Target version:			

Description

Issue

There is a bug which leads to python processes silently using old/not the newest RST version. To reproduce one has to

1. Install RST (eg. rst0.13.3)

- This installs RST but uses custom CMake magic to create the egg file, copy it into the lib folder and also write a **rst$VERSION.pth** file. This does not include crating/updating the **easy-install.pth** in the according lib folder as used by setuptools.

2. Install a downstream python project with setuptools (used setuptools version 18.8.1) that reqires RST in the same prefix

- Setuptools by default checks the **easy-install.pth** file and updates it accordingly if RST is present and writes down the version number (rst0.13.3)

3. Make changes to RST and re-install it (will lead to rst0.13.4)

- Same process as above.

4. Update the downstream python project

- Setuptools will **only** check the **easy-install.pth** and realise that the version number written there (rst0.13.3) is within your provided range (eg. rst>=0.13) and therefore make the installation use this (the old) RST lib instead of the newer and installed version (rst0.13.4)

Possible fix

When using the toolkit, one might add this post build hook:

```
export PYTHONPATH=${toolkit.dir}/lib/python2.7/site-packages:$PYTHONPATH

# dirty hack due to bug in cmake and/or setuptools
chmod -R u+rwx ${toolkit.dir}/lib/python2.7/site-packages/*

cd \\$WORKSPACE/build/python/stable
python2.7 setup.py install --prefix=${toolkit.dir}

cd \\$WORKSPACE/build/python/sandbox
python2.7 setup.py install --prefix=${toolkit.dir}

cd \\$WORKSPACE/build/python/deprecated
python2.7 setup.py install --prefix=${toolkit.dir}
```

This will install over the custom CMake install procedure and update the correct pth file. I would not say that this is a clean way.

How to actually fix this

Separating the languages so that individual install procedures can be done?