

## Robotics Service Bus - Bug #1489

### Selection of new fundamental converters breaks existing programs

05/07/2013 01:57 PM - J. Wienke

<b>Status:</b>	Resolved	<b>Start date:</b>	05/07/2013
<b>Priority:</b>	High	<b>Due date:</b>	
<b>Assignee:</b>	J. Moringen	<b>% Done:</b>	100%
<b>Category:</b>	Python	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	rsb-0.9		

#### Description

The new fundamental converters in python break existing programs as the selection is now different, and e.g. communication with bag fails.

Attached is a proposed patch by Jan for this problem.

#### Associated revisions

##### Revision 041a9ed1 - 06/05/2013 08:11 PM - J. Moringen

Register converter subset, choose most specific converter in rsb/converter.py

refs #1489

- rsb/converter.py: when registering builtin converters, skip the ones which would introduce ambiguity into the default converter set; when selecting converters, use most specific one in case of multiple candidates; this guarantees usage of int64 converter (instead of double converter) for integers

##### Revision b8b52ec4 - 06/05/2013 08:17 PM - J. Moringen

Changed converter priority in src/configuration.lisp

refs #1489

- src/configuration.lisp (default-converters): prioritize int64 converter over all other integer converters, all integer converters over all float converters and double float converter over single float converter

#### History

##### #1 - 05/27/2013 06:21 PM - J. Wienke

Verdict: We want the same defaults for all languages. This means there is one int and one float type that is consistently chosen as a default in all languages.

- int: signed 64 bit
- floating point: double

**#2 - 05/27/2013 06:26 PM - J. Wienke**

- For python this means: only register the converters for these types
- For C++: Clients are obliged to use these client types, we could think of removing the registration of all other converters for other types
- Java: no one knows

**#3 - 06/05/2013 03:08 PM - J. Moringen**

- *Status changed from New to In Progress*

**#4 - 06/05/2013 08:26 PM - J. Moringen**

- *Status changed from In Progress to Feedback*

- *% Done changed from 0 to 100*

Should be fixed in rsb-python and rsb-cl.

rsb-python now registers only a subset of the available builtin converters as described above. In addition, more specific converters are prioritized over less specific ones. This is necessary to ensure that integer values are handled by the int64 converter and not the double float converter (which can handle all values which are real numbers).

@Johannes: Please test with a recently built version of the RSBag tools. But note that the tools are currently (2013-06-05) not built for MacOS since the slave is down.

**#5 - 06/17/2013 07:16 PM - J. Moringen**

@Johannes: did you test this already? Please report results once you do.

**#6 - 06/29/2013 11:17 PM - J. Moringen**

@Johannes: you tested in your setup, right? did it work?

**#7 - 07/01/2013 10:20 AM - J. Wienke**

- *Status changed from Feedback to Resolved*

At least python and bag-play talk to each other again. That was the test case I had, which didn't work before.

**Files**

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0001-Fix-dynamic-converter-selection-for-numeric-types.patch	6.68 KB	05/07/2013	J. Wienke
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