

RSB Performance Test API - Bug #2408

Create tests for exemplary components

10/14/2015 03:19 PM - J. Wienke

Status:	Resolved	Start date:	10/14/2015
Priority:	Normal	Due date:	
Assignee:	H. Oestreich	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	0.1		

Description

As a first real-world test, please create test scripts for realistic components from the robocup system. Unfortunately, there is no easy component which only requires a single stream. So we need an implementation to provide inputs in parallel. Therefore, the most usable candidate is:

objectbuilder

This component creates person percepts from detected legs and the global position of the robot.

To start the component:

```
/vol/robocup/faults-nightly/bin/ObjectBuilderAM -i 1 --rsb --debug
```

It receives two input streams:

/ros4rsb/slampose/

rst.geometry.Pose, 10 Hz

Exemplary messages for this channel look like (Common Lisp tools notation for the protocol buffers message):

```
#<POSE {100DC6BBD3}>
Translation: #<TRANSLATION {100DC6BC13}>
  X   : 1.0241012971738617d0
  Y   : -0.33306173012149587d0
  Z   : 0.0d0
  Frame-Id: ""
Rotation : #<ROTATION {100DC6BC93}>
  Qw   : 0.4331377223006606d0
  Qx   : 0.0d0
  Qy   : 0.0d0
  Qz   : 0.9013277503329162d0
  Frame-Id: ""
```

/hri/percepts/legs/

rst.hri.LegsList, 60 Hz

Exemplary messages for this channel look like (Common Lisp tools notation for the protocol buffers message):

```
#<LEGS-LIST {100F934653}>
List:
  #<LEGS {100F9346F3}>
    Angle       : -2.9764585
    Angle-Variance : 0.008
    Distance    : 3335.995
    Distance-Variance: 250.0
    Pair       : T
```

```
#<LEGS {100F9347A3}>
Angle      : -2.7562222
Angle-Variance : 0.008
Distance   : 1482.7239
Distance-Variance: 250.0
Pair       : T
#<LEGS {100F934863}>
Angle      : 0.12211111
Angle-Variance : 0.008
Distance   : 3055.0627
Distance-Variance: 250.0
Pair       : T
#<LEGS {100F9348E3}>
Angle      : -2.232889
Angle-Variance : 0.008
Distance   : 3729.7957
Distance-Variance: 250.0
Pair       : <empty sequence>
#<LEGS {100F9349C3}>
Angle      : 0.47536114
Angle-Variance : 0.008
Distance   : 6156.0
Distance-Variance: 250.0
Pair       : NIL
#<LEGS {100F934A43}>
Angle      : 0.5451389
Angle-Variance : 0.008
Distance   : 4903.0005
Distance-Variance: 250.0
Pair       : NIL
#<LEGS {100F934AC3}>
Angle      : 0.9289167
Angle-Variance : 0.008
Distance   : 7598.0005
Distance-Variance: 250.0
Pair       : NIL
#<LEGS {100F934B43}>
Angle      : 3.0702224
Angle-Variance : 0.008
Distance   : 3733.4966
Distance-Variance: 250.0
Pair       : NIL
```

The number of Legs in each message varies.

Please provide a test program which varies the rates as well as the number of legs in the leg messages.

Related issues:

Related to RSB Performance Test API - Tasks # 2412: Extract component tests i...

Resolved

10/23/2015

History

#1 - 10/15/2015 05:55 PM - H. Oestreich

- Status changed from New to In Progress

- % Done changed from 0 to 20

First test program implemented and tested successfully.

TODD: The actual data is randomly generated. Perhaps implement a more reasonable data generation.

#2 - 10/23/2015 11:46 AM - J. Wienke

- Related to Tasks #2412: Extract component tests in individual examples added

#3 - 10/23/2015 05:39 PM - H. Oestreich

- *Status changed from In Progress to Resolved*

- *% Done changed from 20 to 100*

Test has been seperated. More reasonable data generation can be done in the future but does not seem necessary at the moment.