

Robotics Service Bus - Feature #44

Implement basic introspection support

08/18/2010 01:33 AM - S. Wrede

Status:	Resolved	Start date:	03/24/2014
Priority:	High	Due date:	03/24/2014
Assignee:	J. Moringen	% Done:	100%
Category:	Introspection	Estimated time:	0.00 hour
Target version:	rsb-0.11		

Description

Basic introspection will allow:

- Being notified of created and destroyed participants ☐
- Querying the currently existing participants ☐
- Obtaining some information about participants such as id, scope, type, containing process, host ☐
 - Periodically re-querying participants to detect crashed processes ☐
- Maintaining a list of remote processes ☐
- Maintaining a list of remote hosts ☐
 - Maintaining estimated clock offsets for remote hosts ☐
 - Maintaining estimated communication latency for remote hosts ☐

Not sure about this old requirement statement:

It should be possible to subscribe to this kind of internal meta events in the same manner as we do for all other events.

It will certainly be possible to receive introspection events like ordinary events but that would entail knowing and sometimes (at least partially) implementing the introspection protocol. I (jmoringe) think a client API is more convenient and less error-prone.

Subtasks:

Feature # 1736: Implement participant creation and destruction hooks	Resolved
Feature # 1737: Implement participant creation and destruction hooks	Resolved
Feature # 1738: Implement participant creation and destruction hooks	Resolved
Feature # 1739: Implement participant creation and destruction hooks	Resolved
Feature # 1740: Implement introspection event sender	Resolved
Feature # 1741: Implement introspection event sender	Resolved
Feature # 1742: Implement introspection event sender	Resolved
Feature # 1743: Implement introspection event sender	Resolved
Feature # 1744: Implement introspection event receiver and client API	Resolved
Feature # 1748: Add introspection messages to protocol	Resolved
Feature # 1749: Specify introspection protocol	Resolved
Feature # 1750: Test introspection as part of integrationtest	Resolved
Feature # 1751: Create introspection tool	Resolved
Tasks # 1752: Document introspection tool	Resolved
Tasks # 1822: Add method classes	Resolved
Feature # 1823: Transmit start-time of processes in introspection messages	Resolved
Feature # 1827: Initial support for participant hierarchies	Resolved
Feature # 1828: Initial support for participant hierarchies	Resolved
Feature # 1829: Initial support for participant hierarchies	Resolved
Feature # 1830: Initial support for participant hierarchies	Resolved
Feature # 1833: Remove crashed processes from database after a (configurable) while	Resolved
Feature # 1837: Include RSB version in process introspection information	Resolved
Feature # 1869: Realize ProcessInfo and HostInfo Backend in Java	Resolved
Feature # 1978: Include machine and (operating system) software types and versions in h...	Resolved

Feature # 2036: Include id of executing user in process information		Resolved
Feature # 2037: Estimate clock offset and commucation latency of remote hosts and proceses		Resolved
Related issues:		
Related to Robotics Service Bus - Feature # 197: Generate events for changes ...	Closed	02/18/2011
Related to Robotics Service Bus - Enhancement # 1876: Use service-provider sy...	Resolved	05/11/2014
Related to Robotics Systems Commons - Feature # 1966: Add interface and imple...	Resolved	08/27/2014
Related to Robotics Service Bus - Tasks # 1994: Specify JSON format for infor...	Resolved	09/14/2014
Related to Robotics Service Bus - Feature # 340: Implement Distributed Naming...	Feedback	05/30/2011
Related to Robotics Service Bus - Enhancement # 1976: Web interface for intro...	Resolved	09/14/2014
Blocks Robotics Service Bus - Feature # 228: Introspection / Nameservice Inte...	Closed	03/18/2011
Follows Robotics Service Bus - Tasks # 1820: Remove "request" and "reply" com...	Resolved	03/22/2014

History

#1 - 08/18/2010 09:58 AM - J. Wienke

- Category set to C++

#2 - 10/21/2011 05:11 PM - S. Wrede

- Target version set to rsb-0.7

#3 - 10/25/2011 06:11 PM - J. Moringen

- Subject changed from Implement Basic Intropection Support to Implement Basic Introspection Support

#4 - 06/29/2012 12:49 PM - J. Moringen

- Target version changed from rsb-0.7 to rsb-0.9

#5 - 12/20/2012 05:28 PM - J. Moringen

- Target version changed from rsb-0.9 to rsb-0.10

#6 - 12/10/2013 11:47 PM - J. Moringen

- Target version changed from rsb-0.10 to rsb-0.11

#7 - 02/06/2014 06:22 PM - J. Moringen

- Category changed from C++ to Introspection
 - Status changed from New to In Progress
 - Assignee set to J. Moringen
 - % Done changed from 0 to 10

#8 - 02/06/2014 07:02 PM - J. Moringen

- Description updated

#9 - 03/05/2014 12:50 AM - J. Moringen

- Subject changed from Implement Basic Introspection Support to Implement basic introspection support

#10 - 03/05/2014 12:55 AM - J. Moringen

- Description updated

#11 - 03/31/2014 10:28 PM - J. Moringen

- Description updated

#12 - 08/13/2014 09:28 AM - J. Moringen

- Related to Enhancement #1876: Use service-provider system for participant classes added

#13 - 08/13/2014 11:39 PM - J. Moringen

- Description updated

#14 - 08/27/2014 02:17 PM - J. Moringen

- Related to Feature #1966: Add interface and implementations for gathering information about the current host and process added

#15 - 10/01/2014 05:43 AM - J. Moringen

- Related to Tasks #1994: Specify JSON format for information exchange between Javascript-client and introspection server added

#16 - 10/13/2014 12:20 PM - J. Moringen

- Related to Enhancement #1976: Web interface for introspection added

#17 - 12/19/2014 07:40 PM - J. Moringen

- Related to Feature #340: Implement Distributed Namingservice added

#18 - 12/29/2014 04:27 PM - J. Moringen

- Status changed from In Progress to Resolved

#19 - 07/25/2016 07:30 PM - J. Moringen

- Related to deleted (Enhancement #1976: Web interface for introspection)

#20 - 07/25/2016 07:32 PM - J. Moringen

- Related to Enhancement #1976: Web interface for introspection added