

## Robotics Service Bus - Feature #1737

Feature # 44 (Resolved): Implement basic introspection support

### Implement participant creation and destruction hooks

02/06/2014 06:29 PM - J. Moringen

<b>Status:</b>	Resolved	<b>Start date:</b>	03/24/2014
<b>Priority:</b>	Normal	<b>Due date:</b>	03/24/2014
<b>Assignee:</b>	J. Wienke	<b>% Done:</b>	100%
<b>Category:</b>	Java	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	rsb-0.11		
<b>Description</b>			

#### Associated revisions

##### Revision c390bb00 - 05/07/2014 05:36 PM - S. Wrede

realized observer pattern as hook for participant creation and destruction, initially implemented for Listener objects, refs #1737

##### Revision 9d56ed13 - 11/23/2014 07:19 PM - S. Wrede

extended factory code to notify about LocalServer, RemoteServer and Informer creation and destruction  
added test case for the factory observer mechanism  
added call to deactivate method of the Participant class to Informer and Server classes  
refs #1737

##### Revision 03ce183e - 11/28/2014 05:39 PM - J. Wienke

Observer pattern for participant changes

Adds an observer pattern to Factory to be notified whenever participants are created or destroyed. This will enable the introspection to hook into the creation and destruction process.

- src/rsb/Factory.java:  
Added management of observers in a new child class called ParticipantObserverManager; pass the observer manager instance to newly created participants so that they can notify observers when they are deactivated
- src/rsb/Participant.java:  
accept a ParticipantObserverManager and call it on deactivation
- src/rsb/Informer.java: ensure superclass deactivation
- src/rsb/Listener.java: likewise
- src/rsb/patterns/Method.java: likewise
- src/rsb/ParticipantObserver.java: new observer interface
- src/rsb/patterns/Server.java:  
ensure superclass deactivation; notify ParticipantObservers of new methods, which are not constructed by the Factory
- test/rsb/ParticipantObservationTest.java:  
new test case for observer pattern

Based on original patch by Sebastian Wrede

<[swrede@techfak.uni-bielefeld.de](mailto:swrede@techfak.uni-bielefeld.de)>.

fixes #1737

Signed-off-by: Jan Moringen <[jmoringe@techfak.uni-bielefeld.de](mailto:jmoringe@techfak.uni-bielefeld.de)>

## History

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### #1 - 03/26/2014 01:36 AM - J. Moringen

- Assignee set to S. Wrede

### #2 - 04/10/2014 02:35 PM - J. Moringen

- Assignee changed from S. Wrede to S. Sharma

### #3 - 04/30/2014 06:22 PM - S. Wrede

- Status changed from New to In Progress

- Assignee changed from S. Sharma to S. Wrede

- % Done changed from 0 to 20

Realized infrastructure and tested for Listener participants.

### #4 - 11/23/2014 07:22 PM - S. Wrede

- Status changed from In Progress to Feedback

- % Done changed from 20 to 100

Basic implementation for all participant types done and initial test available.

### #5 - 11/28/2014 12:03 PM - J. Wienke

- Status changed from Feedback to In Progress

- Assignee changed from S. Wrede to J. Wienke

### #6 - 11/28/2014 05:47 PM - J. Wienke

- Status changed from In Progress to Resolved

Applied in changeset commit:rsb-java|03ce183e9ecf85b27ceb07cb9df55276d0ae626a.