

## Robotics Service Bus - Feature #1827

Feature # 44 (Resolved): Implement basic introspection support

### Initial support for participant hierarchies

04/01/2014 01:13 AM - J. Moringen

<b>Status:</b>	Resolved	<b>Start date:</b>	04/01/2014
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	J. Moringen	<b>% Done:</b>	100%
<b>Category:</b>	C++	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	rsb-0.11		
<b>Description</b>			

#### Associated revisions

##### Revision 9ac95e11 - 09/03/2014 06:26 PM - J. Moringen

Support participant hierarchies in `src/rsb/**/*.{h,cpp}`

fixes #1827

Each `Factory::create*` method accepts a parent participant as an optional parameter. If supplied, this parent is passed to the `SignalParticipantCreated` and thus available to the introspection subsystem.

- `src/rsb/Factory.{h,cpp}` (`SignalParticipantCreated`): added parent parameter
  - (`Factory::createInformer`): added parent participant parameter; pass to `signalParticipantCreated`; extended documentation comment
  - (`Factory::createListener`): similar
  - (`Factory::createReader`): similar
  - (`Factory::createLocalServer`): similar
  - (`Factory::createServer`): similar
  - (`Factory::createRemoteServer`): similar
- `src/rsb/introspection/Model.{h,cpp}` (`ParticipantInfo::parentId`): new member variable; store id of parent participant
  - (`ParticipantInfo::getParentId`): new method; return id of parent participant
  - (`ParticipantInfo::ParticipantInfo`): added `parentId` parameter
- `src/rsb/introspection/IntrospectionSender.{h,cpp}`
  - (`IntrospectionSender::addParticipant`): added parent participant parameter; store its id in the created `ParticipantInfo` object
  - (`IntrospectionSender::sendHello`): send id of parent participant if any
- `src/rsb/introspection/Plugin.cpp` (`handleParticipantCreated`): added parent participant parameter; pass to `IntrospectionSender::addParticipant`
- `src/rsb/patterns/Server.{h,cpp}` (`Method`): added `Handler` and `enable_shared_from_this` base classes
  - (`Method::makeListener`): pass `shared_ptr` to this as parent to `Factory::createListener`
  - (`Method::makeInformer`): similar
- `src/rsb/patterns/LocalServer.{h,cpp}` (`LocalMethod`): removed `Handler` and `enable_shared_from_this` base classes

- (LocalServer): added enable\_shared\_from\_this base class
- (LocalServer::registerMethod): pass shared\_ptr to this as parent to signalParticipantCreated
- src/rsb/patterns/RemoteServer.{h,cpp} (RemoteMethod): removed Handler and enable\_shared\_from\_this base classes
- (RemoteServer): added enable\_shared\_from\_this base class
- (RemoteServer::getMethod): pass shared\_ptr to this as parent to signalParticipantCreated

#### Revision 08de50ad - 09/05/2014 01:28 AM - J. Moringen

Support participant hierarchies in src/rsb/\*\*/.\*.{h,cpp}

fixes #1827

Each Factory::create\* method accepts a parent participant as an optional parameter. If supplied, this parent is passed to the SignalParticipantCreated and thus available to the introspection subsystem.

- src/rsb/Factory.{h,cpp} (SignalParticipantCreated): added parent parameter
- (Factory::createInformer): added parent participant parameter; pass to signalParticipantCreated; extended documentation comment
- (Factory::createListener): similar
- (Factory::createReader): similar
- (Factory::createLocalMethod): similar
- (Factory::createLocalServer): similar
- (Factory::createServer): similar
- (Factory::createRemoteMethod): similar
- (Factory::createRemoteServer): similar
- src/rsb/introspection/Model.{h,cpp} (ParticipantInfo::parentId): new member variable; store id of parent participant
- (ParticipantInfo::getParentId): new method; return id of parent participant
- (ParticipantInfo::ParticipantInfo): added parentId parameter
- src/rsb/introspection/IntrospectionSender.{h,cpp}
- (IntrospectionSender::addParticipant): added parent participant parameter; store its id in the created ParticipantInfo object
- (IntrospectionSender::sendHello): send id of parent participant if any
- src/rsb/introspection/Plugin.cpp (handleParticipantCreated): added parent participant parameter; pass to IntrospectionSender::addParticipant
- src/rsb/patterns/Server.{h,cpp} (Method): added Handler and enable\_shared\_from\_this base classes
- (Method::makeListener): pass shared\_ptr to this as parent to Factory::createListener
- (Method::makeInformer): similar
- src/rsb/patterns/LocalServer.{h,cpp} (LocalMethod): removed Handler and enable\_shared\_from\_this base classes
- (LocalServer): added enable\_shared\_from\_this base class
- (LocalServer::registerMethod): pass shared\_ptr to this as parent to

Factory::createLocalMethod

- src/rsb/patterns/RemoteServer.{h,cpp} (RemoteMethod): removed Handler and enable\_shared\_from\_this base classes  
(RemoteServer): added enable\_shared\_from\_this base class  
(RemoteServer::getMethod): pass shared\_ptr to this as parent to  
Factory::createRemoteMethod

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## History

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**#1 - 09/03/2014 06:39 PM - J. Moringen**

- Status changed from *In Progress* to *Resolved*
- % Done changed from 80 to 100

Applied in changeset commit:rsb-cpp|9ac95e11ddd3d0876a1bce53393b054b2ad7e5ff.