

Robotics Service Bus - Enhancement #2670

Informer socket transport is shutting down if publish trigger thread is marked as interrupted

10/21/2016 05:25 PM - M. Pohling

Status:	Resolved	Start date:	10/21/2016
Priority:	Normal	Due date:	
Assignee:	J. Wienke	% Done:	100%
Category:	Socket Transport	Estimated time:	0.00 hour
Target version:	rsb-0.16		

Description

If the publish method is called of an informer participant the overall tcp communication is shutting down (SocketClosed) if the caller thread is marked as interrupted.

It would be nice if just the processing of this call is canceled by an InterruptedException without closing the socket. This would provide further communication via the informer.

WARNING: Unable to send notification on connection rsb.transport.socket.BusClientConnection@329b52e7. Removing this connection.

java.nio.channels.ClosedByInterruptException

```
at java.nio.channels.spi.AbstractInterruptibleChannel.end(AbstractInterruptibleChannel.java:202)
at java.nio.channels.Channels$WritableByteChannelImpl.write(Channels.java:460)
at rsb.transport.socket.BusConnectionBase.sendNotification(BusConnectionBase.java:304)
at rsb.transport.socket.BusBase.handleGlobally(BusBase.java:386)
at rsb.transport.socket.BusBase.handleGlobally(BusBase.java:409)
at rsb.transport.socket.BusBase.handleOutgoing(BusBase.java:416)
at rsb.transport.socket.RefCountingBus.handleOutgoing(RefCountingBus.java:118)
at rsb.transport.socket.SocketOutConnector.push(SocketOutConnector.java:117)
at rsb.eventprocessing.DefaultOutRouteConfigurator.publishSync(DefaultOutRouteConfigurator.java:91)
at rsb.Informer$StateActive.send(Informer.java:186)
at rsb.Informer$StateActive.send(Informer.java:195)
at rsb.Informer.publish(Informer.java:337)
```

This error message is not true in this case: "Probably the other end point crashed."

WARNING: Error while reading a new notification from the bus connection. Shutting down. Probably the other end point crashed.

java.net.SocketException: Socket closed

```
at java.net.SocketInputStream.socketRead0(Native Method)
at java.net.SocketInputStream.socketRead(SocketInputStream.java:116)
at java.net.SocketInputStream.read(SocketInputStream.java:170)
at java.net.SocketInputStream.read(SocketInputStream.java:141)
at java.nio.channels.Channels$ReadableByteChannelImpl.read(Channels.java:385)
at rsb.transport.socket.BusConnectionBase.readCompleteBuffer(BusConnectionBase.java:217)
at rsb.transport.socket.BusConnectionBase.readLength(BusConnectionBase.java:239)
at rsb.transport.socket.BusConnectionBase.readNotification(BusConnectionBase.java:255)
at rsb.transport.socket.BusBase$ReceiveThread.doOneNotification(BusBase.java:113)
at rsb.transport.socket.BusBase$ReceiveThread.run(BusBase.java:166)
```

Associated revisions

Revision cced8e22 - 11/23/2016 01:37 PM - J. Wienke

Do not disconnect sockt transport on interrupt

Prevent the socket transport from degrading in case publish is called with an active interruption. This is achieved by sending the outgoing notifications in a worker thread instead of the calling thread.

- src/main/java/rsb/transport/socket/BusConnectionBase.java:
Add a single threaded executor for sending notifications to ignore interruptions for this task
- src/test/java/rsb/transport/socket/BusRoundtripTest.java:
Extract ResultWaiter into a distinct file for reuse
- src/test/java/rsb/transport/socket/ResultWaiter.java:
Extracted from BusRoundtripTest
- src/test/java/rsb/transport/socket/SendInterruptTest.java:
New test for the issue

fixes #2670

Revision 4b700e91 - 11/25/2016 01:51 PM - J. Wienke

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refs #2670

(cherry picked from commit cced8e22f723253b860cbaa42f9ea1668121fb9a)

History

#1 - 11/07/2016 10:31 AM - J. Moringen

- *Tracker changed from Bug to Enhancement*
- *Project changed from RSB Coordinate Transform to Robotics Service Bus*
- *Category set to Socket Transport*
- *Target version changed from rsb-0.13 to rsb-0.16*

#2 - 11/18/2016 12:25 PM - M. Pohling

Any updates so far?

#3 - 11/18/2016 12:34 PM - J. Moringen

M. Pohling wrote:

| *Any updates so far?*

I think we agreed that you should discuss the issue with Johannes.

#4 - 11/18/2016 03:51 PM - J. Wienke

Can you provide a minimalized test case for this behavior? It is quite hard to interrupt something during a usually very short send operation and I don't know how to test this without an example.

#5 - 11/23/2016 10:24 AM - J. Wienke

- *Status changed from New to In Progress*
- *Assignee set to J. Wienke*

#6 - 11/23/2016 01:50 PM - J. Wienke

- *Status changed from In Progress to Resolved*
- *% Done changed from 0 to 100*

Applied in changeset commit:rsb-java|cced8e22f723253b860cbaa42f9ea1668121fb9a.