

Robotics Service Bus - Enhancement #424

Speed up compilation time by factor 2

07/15/2011 11:50 AM - M. Rolf

Status:	Resolved	Start date:	07/15/2011
Priority:	Normal	Due date:	
Assignee:	J. Wienke	% Done:	100%
Category:	C++	Estimated time:	0.00 hour
Target version:	0.5		
Description			
<p>C++ compilation takes quite some time at the moment. Highly desirable to be faster.</p> <p>Check (for instance) use of forward-declarations and the pimpl idiom ?</p>			

Associated revisions

Revision 85d531e0 - 07/27/2011 08:52 PM - J. Moringen

Split Factory::createConnectors into 3 methods in src/rsb/Factory.{h,cpp}

refs #424 (should speed up compilation)

refs #447 (may fix the issue)

- src/rsb/Factory.{h,cpp}: split template method
Factory::createConnectors into non-template methods
Factory::createInPullConnectors, Factory::createInPushConnectors and
Factory::createOutConnectors; changed
create{Listener,Reader,Informer} accordingly; moved includes and
pairsToMap to Factory.cpp

History

#1 - 09/12/2011 04:54 PM - J. Wienke

I would highly appreciate using pimpl. What do others think about this?

#2 - 09/12/2011 04:55 PM - J. Wienke

This also provides a bit more of ABI / API stability.

#3 - 09/12/2011 09:18 PM - S. Wrede

Lets stick to the procedure also suggested in the given reference:

| Therefore, it's always best to experiment with a few key-classes in a project and learn how this affects your project's build-time.

#4 - 10/18/2011 02:22 PM - J. Wienke

I will do this. Waiting for the windows build is so annoying.

#5 - 10/18/2011 02:23 PM - J. Wienke

- *Status changed from New to In Progress*

#6 - 10/18/2011 05:19 PM - J. Wienke

- *Assignee set to J. Wienke*

r2884 reduced compile time from 7:16 to 5:25 on my laptop, only one build job. Please note that this may break external clients as some things in the public API are now forward-declared.

A major part of the compile time is used by examples and unit tests. Here, gtest is very expensive.

#7 - 10/18/2011 05:38 PM - J. Wienke

Switching off tests and examples this reduces from 3:57 to 2:43.

#8 - 10/19/2011 10:47 AM - J. Wienke

- *Target version set to 0.5*

- *% Done changed from 0 to 40*

Do you see any other possibilities for speed up now which are cheap to implement?

#9 - 10/20/2011 04:01 PM - J. Wienke

- *Status changed from In Progress to Resolved*

- *% Done changed from 40 to 100*

This first speed-up must be enough for version 0.5. If more is required, please add another issue.