

## Robotics Systems Types - Tasks #631

### Make revisions for each IDL file available at runtime

10/14/2011 05:18 PM - J. Wienke

|  |              |                        |                   |
|--|--------------|------------------------|-------------------|
| <b>Status:</b>   | Feedback     | <b>Start date:</b>     | 10/14/2011        |
| <b>Priority:</b>   | Normal       | <b>Due date:</b>       |                   |
| <b>Assignee:</b>   |              | <b>% Done:</b>         | 0%                |
| <b>Category:</b>   | Build System | <b>Estimated time:</b> | 0.00 hour         |
| <b>Target version:</b>   | rsb-1.0      |                        |                   |
| <b>Description</b>   |              |                        |                   |
| Also as:   |              |                        |                   |
| - preprocessor declarations for C++  |              |                        |                   |
| - XML file or comparable for use outside of target languages or in external tools. |              |                        |                   |
| <b>Related issues:</b>   |              |                        |                   |
| Related to Robotics Systems Types - Tasks # 601: Consolidate RST Types             |              | <b>Resolved</b>        | <b>09/30/2011</b> |

### History

#### #1 - 10/08/2012 06:58 PM - J. Wienke

I think this is not necessary anymore now that we have a complete project versioning scheme. Any objections to close this?

#### #2 - 10/08/2012 08:46 PM - J. Moringen

+1

#### #3 - 10/08/2012 08:49 PM - J. Moringen

Another argument against relying on RST to do its own versioning may be the following RETF recommendation which may not yet be publicly available (@Ingo: or is it?):

RD: 8

Title: Uniform referencing of Robot Data Message Types

Date:

Author: Ingo Lütkebohle

Type: General

Content-Type: text/x-rst

Created: 2012-07-07

#### #4 - 10/09/2012 09:46 AM - S. Wrede

Even if we have a versioning scheme for a complete RST library, I'd still argue for keeping versioning information in or with the IDL files. An exemplary, IMHO non-esoteric use case, for this is working with serialized recorded data where one may need to know the exact IDL version or to build generic tools which may operate on RST types but independent of a specific RST library version.

#### #5 - 10/09/2012 09:52 AM - J. Moringen

Sebastian Wrede wrote:

04/25/2024

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Even if we have a versioning scheme for a complete RST library, I'd still argue for keeping versioning information in or with the IDL files. An exemplary, IMHO non-esoteric use case, for this is working with serialized recorded data where one may need to know the exact IDL version or to build generic tools which may operate on RST types but independent of a specific RST library version.

I thought the agreement for these cases was unconditionally including the **content** of the relevant type definitions (as opposed to their **versions**) and using the above mentioned RETF recommendation for compatibility checks.

**#6 - 10/09/2012 09:54 AM - S. Wrede**

@Jan: Can you shortly explain what the role of the RETF "recommendation" would be here?

**#7 - 10/09/2012 10:14 AM - J. Moringen**

Sebastian Wrede wrote:

@Jan: Can you shortly explain what the role of the RETF "recommendation" would be here?

The recommendation describes how the content of type definitions can be reduced to something like

magnet:?xt=urn:sha1:6FQLLAPYV6I6L5FJ7UINUWGGHEM5PBHA&dn=Twist.msg

Such a hash could be used for compatibility checks when exactly identical versions of a type definition are required.

Regarding my argument above: if the recording/replay tools need to store/retrieve the complete type definition anyway, they can generate these hashes on the fly as needed. Thus, in the recording/replay case, having a version is not necessary.

The situation would be different if we decided to rely on e.g. Protocol Buffer's backwards compatible schema changes. But I think we decided against that option.

**#8 - 02/19/2014 02:32 PM - J. Wienke**

- Status changed from New to Feedback

Since we have versions now: is this still required at all?

**#9 - 02/19/2014 02:45 PM - J. Moringen**

For easier debugging, it could make sense to somehow attach git commits to data type definitions as part of the build process. With respect to the above discussion, this would allow generating URIs like:

magnet:?xt=urn:sha1:6FQLLAPYV6I6L5FJ7UINUWGGHEM5PBHA&dn=Twist.msg&v=7988b329

instead of just

magnet:?xt=urn:sha1:6FQLLAPYV6I6L5FJ7UINUWGGHEM5PBHA&dn=Twist.msg

In any case, we should probably think about these issues as part of the (potential eventual) conversion to project:rosetta.

**#10 - 02/19/2014 02:51 PM - J. Moringen**

- *Category set to Build System*

- *Target version set to rsb-1.0*