

## Robotics Systems Types - Bug #1241

### Linking against rst-converters fails on Win7

11/17/2012 07:39 PM - V. Losing

<b>Status:</b>	Resolved	<b>Start date:</b>	11/17/2012
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	J. Wienke	<b>% Done:</b>	100%
<b>Category:</b>	cpp	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	rsb-0.7		
<b>Description</b>			
I didn't find the rst-converter-Project so I post the issue here.			
When I compile against rst-converters and use <code>rst::converters::opencv::IpImageConverter::IpImageDeleter()</code> I get a linking error. class <code>__declspec(dllexport)</code> is missing for the class <code>IpImageDeleter</code> (I've fixed it locally, but it's better to fix it for others too).			

#### Associated revisions

##### Revision 5a6ecfc4 - 11/17/2012 09:55 PM - J. Moringen

Added RST\_CONVERTERS\_EXPORT in cpp/CMakeLists.txt, \*/.h

refs #1241

The project was missing `__declspec(dllimport)` declarations for classes and this produced an unused dll in Windows.

- cpp/CMakeLists.txt: define RST\_CONVERTERS\_EXPORT with `__declspec(dllimport)` on Windows
- cpp/src/rst/converters/boost/TransformationPoseConverter.h: added RST\_CONVERTERS\_EXPORT to class definitions
- cpp/src/rst/converters/boost/TwoDPoseConverter.h: likewise
- cpp/src/rst/converters/naoqi/ALImageConverter.h: likewise
- cpp/src/rst/converters/opencv/IpImageConverter.h: likewise
- cpp/src/rst/converters/rci/JointAnglesConverter.h: likewise
- cpp/src/rst/converters/rci/JointImpedanceConverter.h: likewise
- cpp/src/rst/converters/rci/JointTorquesConverter.h: likewise
- cpp/src/rst/converters/rci/LengthConverter.h: likewise
- cpp/src/rst/converters/rci/PhaseConverter.h: likewise
- cpp/src/rst/converters/rci/PoseConverter.h: likewise
- cpp/src/rst/converters/rci/PressureConverter.h: likewise
- cpp/src/rst/converters/rci/TranslationConverter.h: likewise
- cpp/src/rst/converters/surfimageconverter/SurfImageConverter.h: likewise

##### Revision 1810f615 - 11/17/2012 09:55 PM - J. Moringen

Backport: Added RST\_CONVERTERS\_EXPORT in cpp/CMakeLists.txt, \*/.h

fixes #1241

The project was missing `__declspec(dllimport)` declarations for classes and this produced an unused dll in Windows.

- cpp/CMakeLists.txt: define RST\_CONVERTERS\_EXPORT with \_\_declspec(dllexport) on Windows
- cpp/src/rst/converters/boost/TransformationPoseConverter.h: added RST\_CONVERTERS\_EXPORT to class definitions
- cpp/src/rst/converters/boost/TwoDPoseConverter.h: likewise
- cpp/src/rst/converters/naoqi/ALImageConverter.h: likewise
- cpp/src/rst/converters/opencv/lplImageConverter.h: likewise
- cpp/src/rst/converters/rci/JointAnglesConverter.h: likewise
- cpp/src/rst/converters/rci/JointImpedanceConverter.h: likewise
- cpp/src/rst/converters/rci/JointTorquesConverter.h: likewise
- cpp/src/rst/converters/rci/LengthConverter.h: likewise
- cpp/src/rst/converters/rci/PhaseConverter.h: likewise
- cpp/src/rst/converters/rci/PoseConverter.h: likewise
- cpp/src/rst/converters/rci/PressureConverter.h: likewise
- cpp/src/rst/converters/rci/TranslationConverter.h: likewise
- cpp/src/rst/converters/surfimageconverter/SurfImageConverter.h: likewise

#### Revision 15c77781 - 11/17/2012 11:40 PM - J. Moringen

Backport: Added RST\_CONVERTERS\_EXPORT in cpp/CMakeLists.txt, \*/.h

fixes #1241

The project was missing \_\_declspec(dllexport) declarations for classes and this produced an unused dll in Windows.

- cpp/src/CMakeLists.txt: configure file and install file rstconvertersexports.h
- cpp/src/rst/rstconvertersexports.h.in: new file; is configured to produce appropriate value of RST\_CONVERTERS\_EXPORT
- cpp/src/rst/converters/boost/TransformationPoseConverter.h: include rstconvertersexports.h; add RST\_CONVERTERS\_EXPORT to class definitions
- cpp/src/rst/converters/boost/TwoDPoseConverter.h: likewise
- cpp/src/rst/converters/naoqi/ALImageConverter.h: likewise
- cpp/src/rst/converters/opencv/lplImageConverter.h: likewise
- cpp/src/rst/converters/rci/JointAnglesConverter.h: likewise
- cpp/src/rst/converters/rci/JointImpedanceConverter.h: likewise
- cpp/src/rst/converters/rci/JointTorquesConverter.h: likewise
- cpp/src/rst/converters/rci/LengthConverter.h: likewise
- cpp/src/rst/converters/rci/PhaseConverter.h: likewise
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- cpp/src/rst/converters/rci/TranslationConverter.h: likewise
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#### Revision bfd7955f - 11/17/2012 11:40 PM - J. Moringen

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refs #1241

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- `cpp/src/CMakeLists.txt`: configure file and install file `rstconvertersexports.h`
- `cpp/src/rst/rstconvertersexports.h.in`: new file; is configured to produce appropriate value of `RST_CONVERTERS_EXPORT`
- `cpp/src/rst/converters/boost/TransformationPoseConverter.h`: include `rstconvertersexports.h`; add `RST_CONVERTERS_EXPORT` to class definitions
- `cpp/src/rst/converters/boost/TwoDPoseConverter.h`: likewise
- `cpp/src/rst/converters/naoqi/ALImageConverter.h`: likewise
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- `cpp/src/rst/converters/rci/LengthConverter.h`: likewise
- `cpp/src/rst/converters/rci/PhaseConverter.h`: likewise
- `cpp/src/rst/converters/rci/PoseConverter.h`: likewise
- `cpp/src/rst/converters/rci/PressureConverter.h`: likewise
- `cpp/src/rst/converters/rci/TranslationConverter.h`: likewise
- `cpp/src/rst/converters/surfimageconverter/SurfImageConverter.h`: likewise

#### Revision cf0b9053 - 11/17/2012 11:40 PM - J. Moringen

Added `RST_CONVERTERS_EXPORT` in `cpp/CMakeLists.txt`, `*/.h`

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- `cpp/src/rst/converters/rci/TranslationConverter.h`: likewise
- `cpp/src/rst/converters/surfimageconverter/SurfImageConverter.h`: likewise

#### **Revision b9c310cd - 11/17/2012 11:40 PM - J. Moringen**

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- `cpp/src/rst/rstconvertersexports.h.in`: new file; is configured to produce appropriate value of `RST_CONVERTERS_EXPORT`
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- `cpp/src/rst/converters/surfimageconverter/SurfImageConverter.h`: likewise

#### **Revision 5a8b2241 - 11/27/2012 05:33 PM - J. Wienke**

Add a windows build batch file.

refs #1241

#### **Revision 7309d207 - 11/27/2012 05:33 PM - J. Wienke**

Add a windows build batch file.

refs #1241

#### **Revision e8a0f929 - 11/27/2012 05:33 PM - J. Wienke**

Add a windows build batch file.

refs #1241

**Revision 110322c8 - 11/28/2012 11:40 AM - J. Wienke**

Avoid compilation errors on windows.

The preprocessor does not like symbols with a minus character in their name. Therefore:

- CMakeListst.txt:
  - rename rst-converters to rstconverters to avoid minus character
  - add a warning if still a minus characters is found which could be induced through the customization option
- src/rst/rstconvertersexports.h.in: Use #pragma once instead of old include guards

refs #1241

**Revision 77ffb2ea - 11/28/2012 11:40 AM - J. Wienke**

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**Revision 23469f9f - 11/28/2012 11:40 AM - J. Wienke**

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refs #1241

**Revision 86cc4390 - 11/28/2012 11:52 AM - J. Wienke**

Properly include time for windows.

refs #1241

**Revision a1fd91e8 - 11/28/2012 11:52 AM - J. Wienke**

Properly include time for windows.

refs #1241

**Revision e9649ee2 - 11/28/2012 11:52 AM - J. Wienke**

Properly include time for windows.

refs #1241

**Revision fd42a0b7 - 11/28/2012 06:07 PM - J. Wienke**

Backport: Add a windows build batch file.

refs #1241

**Revision e6412444 - 11/28/2012 06:08 PM - J. Wienke**

Backport: Avoid compilation errors on windows.

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  - add a warning if still a minus characters is found which could be induced through the customization option
  - src/rst/rstconvertersexports.h.in: Use #pragma once instead of old include guards

refs #1241

**Revision 4fa72715 - 11/28/2012 06:09 PM - J. Wienke**

Backport: Properly include time for windows.

refs #1241

## History

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**#1 - 11/17/2012 09:19 PM - J. Moringen**

- *Project changed from Robotics Service Bus to Robotics Systems Types*
- *Category set to cpp*
- *Status changed from New to In Progress*
- *Assignee set to J. Moringen*
- *Target version set to rsb-0.7*

**#2 - 11/17/2012 10:02 PM - J. Moringen**

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

Applied in changeset rst-converters|commit:1810f6152cb4dba586ea733bd100a9c80eaf0538.

**#3 - 11/17/2012 10:04 PM - J. Moringen**

I tried to solve this without actually testing on Windows. Reopen, if the problem persists.

**#4 - 11/17/2012 10:11 PM - J. Moringen**

- Status changed from Resolved to In Progress

I don't think, the fix is correct. I will try to correct it later.

**#5 - 11/17/2012 11:41 PM - J. Moringen**

- Status changed from In Progress to Resolved

Applied in changeset rst-converters|commit:15c777819c4440939ef37187452e33c7d7e74f9c.

**#6 - 11/21/2012 12:50 PM - J. Moringen**

@Viktor: did you try the fix?

**#7 - 11/27/2012 11:42 AM - V. Losing**

Yes i tried it, but i can't even compile the converters anymore. Seems there is a problem with the macro `rst_converters_export...` that's the compiler message i get:

```
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): error C2004: expected 'defined(id)'
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): fatal error C1012: unmatched parenthesis : missing ')'
2> TransformationPoseConverter.cpp
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): error C2004: expected 'defined(id)'
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): fatal error C1012: unmatched parenthesis : missing ')'
2> TwoDPoseConverter.cpp
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): error C2004: expected 'defined(id)'
2>C:\test\Building\debug\myconverters2\cpp\build\src\rst\rstconvertersexports.h(34): fatal error C1012: unmatched parenthesis : missing ')'
2> Generating Code...
```

**#8 - 11/27/2012 12:20 PM - J. Moringen**

- Status changed from Resolved to In Progress

- Assignee deleted (J. Moringen)

@Johannes: can you have a look? I don't have the patience for this stuff.

**#9 - 11/27/2012 12:22 PM - J. Wienke**

@Jan: From a rough look I don't see a problem. However, can you first fix the trunk build so that I have a basis for further testing? ;) On Linux it is broken, too due to plugin changes.

**#10 - 11/27/2012 01:27 PM - J. Moringen**

rst-converters-trunk builds again

**#11 - 11/27/2012 05:43 PM - V. Losing**

could you please fix it in the isy-project repository too ?

<https://isyprojects.techfak.uni-bielefeld.de/isy-svn/rst/rst-converters>

**#12 - 11/27/2012 05:45 PM - J. Wienke**

In the end we can generate a patch, which will be easy to apply to the rst-converters there.

**#13 - 11/27/2012 05:47 PM - J. Wienke**

- Assignee set to J. Wienke

**#14 - 11/27/2012 07:31 PM - J. Wienke**

- % Done changed from 100 to 60

Ok, after some upstream fixes we now have a job on the CI server (for trunk though) to reproduce the problem. Now we can work on a fix in a reliable way.

**#15 - 11/28/2012 11:28 AM - J. Wienke**

So, the error does not appear if I change the libraryname from rst-converters to rstconverters. Any minus in the name results in the visible error. It seems that windows doesn't like minus characters in preprocessor symbol names and sometimes interprets them as a mathematical operator. Hence, we need to change the library name, which is not so nice, because for the 0.7 release it changes the external interface of the library.

@Jan: Should I add a logic which removes the - only on windows for 0.7 to preserve the interface?

**#16 - 11/28/2012 06:36 PM - J. Wienke**

- % Done changed from 60 to 80

Viktor, I have backported the changes to the official 0.7 branch of rst-converters. Can you please once test whether this works now for you? If so, I will port these changes also to the ISY branch.

**#17 - 11/29/2012 10:17 AM - V. Losing**

Works for me now. Good job!

**#18 - 11/29/2012 10:41 AM - J. Wienke**

- % Done changed from 80 to 90

Great, I have merged the changes to the isy SVN version. Can your try this once again. Afterwards, I can close this issue.

**#19 - 12/04/2012 11:43 AM - J. Wienke**



ping

**#20 - 12/10/2012 03:19 PM - V. Losing**

Works there, too :D

**#21 - 12/10/2012 03:25 PM - J. Wienke**

- *Status changed from In Progress to Resolved*

- *% Done changed from 90 to 100*