

Ryzom - Bug # 1109

Status:	Closed	Priority:	Normal
Author:	flocke	Category:	Build
Created:	09/30/2010	Assignee:	rti
Updated:	04/13/2011	Due date:	
Subject:	archlinux libwww linker error		
Description	because archlinux libwww package doesn't follow some link convention, the build of ryzom core failes with a libxmlparse linker error. i added a patch to fix it (add libexpat directly to the linker command for ryzom_client)		
Related issues:	blocked by Ryzom - Feature # 1114: Add a check for boost includes directory Closed 10/02/2010		

History

#1 - 09/30/2010 02:35 pm - Krolock

same issue on opensuse :(

#2 - 09/30/2010 03:04 pm - kervalala

Please could you tell me what libwww library is depending on expat ?

I don't like overlinking so I will search a way to detect dependencies with tools like objdump.

#3 - 09/30/2010 03:20 pm - kervalala

Or better, could you type:

```
objdump -T <full path of your lib> | grep "**UND**"
```

#4 - 09/30/2010 03:25 pm - Krolock

i'm not sure if this changes the situation, but I get some "unresolved symbols" errors about XML parsing after client compilation. So I think on other distributions libexpat is linked by some libwww libraries. But this is not working on opensuse and archlinux. The solution is to manually link it in the cmake script.

#5 - 09/30/2010 03:32 pm - kervalala

Overlinking is not the the solution:

<http://wiki.mandriva.com/en/Overlinking>

And Lintian will complain about this.

To prevent "unresolved symbols" you need to link all your libs with --no-undefined, we did that for Ryzom and NeL but 3rd-party libs don't always make that.

Example: If libpng is using libz, it must be linked to, an application which uses libpng shouldn't need to link to libz.

Some distributions always compile all their packages with --as-needed and/or --no-undefined, so they avoid this kind of errors.

#6 - 09/30/2010 05:02 pm - Krolock

```
objdump -T /usr/lib/libxml2.so | grep "**UND**"
```

<http://pastebin.com/vci4NykY>

#7 - 09/30/2010 05:11 pm - Krolock

gnaahh, sorry, perhaps this was the wrong lib :/

#8 - 10/01/2010 09:35 am - flocke

I think it was libxmlparse which produced the linker error without linking to expat.

```
objdump -T /usr/lib/libxmlparse.so | grep "**UND**"
```

<http://paste.pocoo.org/show/269778>

#9 - 10/01/2010 09:44 am - kervalala

Yep, you're right :)

I made a CMake macro yesterday and it can detects if we need to manually link to it or not :)

So it should fix all your problems :)

#10 - 10/01/2010 10:03 am - flocke

Is it in the hg repo already ?

Because there seem to be no changes since my (failed) last try yesterday :)

#11 - 10/02/2010 07:49 pm - kervalala

No, I need to do more checks :(

I put there another link for reference :

<http://wiki.mandriva.com/en/Underlinking>

#12 - 10/02/2010 07:54 pm - kervalala

- *Category set to Build*

- *Status changed from New to Validated*

#13 - 10/03/2010 12:14 am - kerval

After checking libwww code, it seems like libwwwxml.so should be linked to libxmlparse.so which belongs to libwww package :) libxmlparse.so is similar to expat (it uses most of its code).

#14 - 10/03/2010 11:38 am - kerval

- Status changed from Validated to Assigned
- Assignee set to kerval

#15 - 10/03/2010 11:05 pm - kerval

Please could you try with last changes ?

It should work but perhaps it needs some little tweaks.

#16 - 10/04/2010 05:18 pm - flocke

I would like to test it but now it fails at 79% with this msg:

```
[ 79%] Building CXX object ryzom/client/src/CMakeFiles/ryzom_client.dir/interface_v3/view_text.cpp.o
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp: In member function 'void CViewText::setupDefault()':
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:80:21: error: 'numeric_limits' is not a member of 'std'
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:80:45: error: expected primary-expression before '>' token
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:80:52: error: no matching function for call to 'max()'
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp: In member function 'void CViewText::disableStringSelection()':
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:1798:21: error: 'numeric_limits' is not a member of 'std'
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:1798:45: error: expected primary-expression before '>' token
/home/flocke/build/ryzom/code/ryzom/client/src/interface_v3/view_text.cpp:1798:52: error: no matching function for call to 'max()'
make[2]: *** [ryzom/client/src/CMakeFiles/ryzom_client.dir/interface_v3/view_text.cpp.o] Error 1
make[1]: *** [ryzom/client/src/CMakeFiles/ryzom_client.dir/all] Error 2
```

#17 - 10/04/2010 05:56 pm - kerval

Thanks, it's fixed now :)

#18 - 10/04/2010 05:57 pm - ddougher

I notice that the error reported here is the same as the one reported in error 1113. A reported fix there was to add

```
#include <limits>
```

to the top of the file at the bottom of the other includes. Perhaps you could add that line to view_text.cpp at the top of the code after the other include lines and see if it then compiles - or at least gets past those errors...

#19 - 10/04/2010 07:01 pm - flocke

Ok with the newest hg version it works until the linking:

```

Linking CXX executable ../bin/ryzom_client
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwgopher.so: undefined reference to `HTIcon_alternative'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addDir'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTStreamToChunk'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTFWriter_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_add'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwmime.so: undefined reference to `HTPipeBuffer'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwnews.so: undefined reference to `HTBuffer_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTSaveLocally'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwhttp.so: undefined reference to `HTTee'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwgopher.so: undefined reference to `HTIcon_find'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwgopher.so: undefined reference to `HTIcon_url'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwfile.so: undefined reference to `HTDir_free'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTSaveAndExecute'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwfile.so: undefined reference to `HTDir_addElement'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTGuess_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addParent'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwfile.so: undefined reference to `HTDir_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwmime.so: undefined reference to `HTMerge'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addBlank'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.1/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addUnknown'
collect2: ld returned 1 exit status
make[2]: *** [bin/ryzom_client] Error 1
make[1]: *** [ryzom/client/src/CMakeFiles/ryzom_client.dir/all] Error 2
make: *** [all] Error 2

```

#20 - 10/04/2010 08:24 pm - flocke

This is the part of the cmake output about libwww stuff

```

-- Warning: Libwww: Library not found: LIBREGEX_LIBRARY
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwcache.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwcache.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwftp.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwftp.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwgopher.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwgopher.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwnews.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwnews.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwtelnet.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwtelnet.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwxml.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwxml.so
-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libwwwzip.so but is not linked to, manually linking...
-- Linking with /usr/lib/libwwwzip.so
-- Underlinking found: /usr/lib/libwwwxml.so needs /usr/lib/libxmlparse.so but is not linked to, manually linking...
-- Linking with /usr/lib/libxmlparse.so
-- Underlinking found: /usr/lib/libwwwxml.so needs /usr/lib/libexpat.so but is not linked to, manually linking...
-- Linking with /usr/lib/libexpat.so
-- Underlinking found: /usr/lib/libwwwhttp.so needs /usr/lib/libmd5.so but is not linked to, manually linking...

```

```
-- Linking with /usr/lib/libmd5.so
-- Found LibWWW:
/usr/lib/libwwwapp.so;/usr/lib/libwwwcore.so;/usr/lib/libwwwfile.so;/usr/lib/libwwwhtml.so;/usr/lib/libwwwhttp.so;/usr/lib/libwwwmime.so;/usr/lib/libwwwtrans.so;
wwwtrans.so;/usr/lib/libwwwutils.so;/usr/lib/libwwwcache.so;/usr/lib/libwwwftp.so;/usr/lib/libwwwgopher.so;/usr/lib/libwwwnews.so;/usr/lib/libwwwtelnet.so;/us
telnet.so;/usr/lib/libwwwxml.so;/usr/lib/libwwwzip.so;/usr/lib/libxmlparse.so;/usr/lib/libexpat.so;/usr/lib/libmd5.so
```

It seems that libwwwstream is missing and this is causing the linker error.

#21 - 10/04/2010 08:51 pm - kervala

Thanks a lot for providing us all the necessary details :)

Thanks to you, I will be able to add more checks for undefined symbols :)

#22 - 10/04/2010 09:02 pm - flocke

No problem :)

I'm glad I can help you.

Just ask if you need some more details or logs

#23 - 10/04/2010 09:11 pm - kervala

- Status changed from Assigned to Resolved

- % Done changed from 0 to 100

Applied in changeset r915.

#24 - 10/04/2010 09:55 pm - flocke

I just compiled it and everything worked fine, thanks a lot :)

#25 - 10/04/2010 10:04 pm - kervala

- Target version set to Version 0.8.0

#26 - 01/08/2011 06:47 pm - kervala

- Status changed from Resolved to Closed

#27 - 03/15/2011 01:06 am - LinuxDonald

I have now this problem on my latest ryzom hg version:

```
[ 83%] Built target ryzom_entities_game_service
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTLoadFTP'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTLoadCache'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTNewsList'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addDir'
```

```
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTCacheMode_enabled'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTStreamToChunk'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTLoadGopher'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTXML_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTFWriter_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_add'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTPipeBuffer'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTSaveLocally'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTNewsGroup'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTCacheWriter'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwhttp.so: undefined reference to `HTTee'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwhttp.so: undefined reference to `MD5Init'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwfile.so: undefined reference to `HTDir_free'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTLoadTelnet'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTSaveAndExecute'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwhttp.so: undefined reference to `MD5Final'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwfile.so: undefined reference to `HTDir_addElement'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTGuess_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwhttp.so: undefined reference to `MD5Update'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addParent'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwfile.so: undefined reference to `HTDir_new'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTMerge'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addBlank'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTIcon_addUnknown'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTLoadNews'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTCache_addHit'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTCache_name'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTZLib_inflate'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwmime.so: undefined reference to `HTCache_find'
/usr/lib/gcc/x86_64-unknown-linux-gnu/4.5.2/../../../../lib/libwwwapp.so: undefined reference to `HTCacheAppend'
```

collect2: ld gab 1 als Ende-Status zurück

make²: * [bin/ryzom_client] Fehler 1

make¹: [ryzom/client/src/CMakeFiles/ryzom_client.dir/all] Fehler 2

make: ** [all] Fehler 2

#28 - 03/15/2011 10:19 am - kervala

Please what warnings do you have when CMake is checking for libwww ?

#29 - 03/15/2011 11:19 am - HDStephan

I have the same error as LinuxDonald. I use Archlinux 64bit.

```
[[-- Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libssl.so;/usr/lib/libcrypto.so but is not linked to, manually linking...
```

```
-- Linking with /usr/lib/libssl.so;/usr/lib/libcrypto.so
```

```
-- Found LibWWW:
```

```
/usr/lib/libwwwapp.so;/usr/lib/libwwwcore.so;/usr/lib/libwwwfile.so;/usr/lib/libwwwhtml.so;/usr/lib/libwwwhttp.so;/usr/lib/libwwwmime.so;/usr/lib/libwwwcache.so;/usr/lib/libwwwche.so;/usr/lib/libwwwstream.so;/usr/lib/libwwwtrans.so;/usr/lib/libwwwutils.so;/usr/lib/libssl.so;/usr/lib/libcrypto.so
```

```
]]
```

#30 - 03/15/2011 11:31 am - flocke

Seems like all the libs from my post #20 that should be detected manually are missing in this list.
Maybe there is something wrong with the script that detects the underlinking.

#31 - 03/15/2011 11:38 am - kerval

Underlinking found: /usr/lib/libwwwapp.so needs /usr/lib/libssl.so;/usr/lib/libcrypto.so but is not linked to, manually linking...

That's not normal.

It should list only one lib not two separated by a semi-column.

#32 - 03/15/2011 12:26 pm - flocke

This is the value of OPENSSL_LIBRARIES after you called "FIND_PACKAGE(OpenSSL QUIET)" in FindLib[www.cmake](#).

I just started the build after I made some minor changes in CheckDepends.cmake, I will report if it worked soon.

#33 - 03/15/2011 12:45 pm - flocke

- *File checkdepends_bool.patch added*

Ok, my build was successful.

I just switched some BOOL values in CheckDepends.cmake (patch is attached).

You need to check the Windows/Mac parts, I only changed the Unix stuff.

#34 - 03/15/2011 12:48 pm - flocke

- *File checkdepends_bool_v2.patch added*

Damn, wrong patch, the one I uploaded reverts my changes :D

#35 - 03/15/2011 01:03 pm - HDStephan

i can confirm. with the last patch from flocke all works great :)

#36 - 04/10/2011 03:46 pm - LinuxDonald

It works for me too :) Thank you :)

#37 - 04/11/2011 06:58 pm - rti

- *File deleted (checkdepends_bool.patch)*

#38 - 04/11/2011 07:02 pm - rti

It indeed needs some rethinking for windows. After your patch it reads:

```
[...]  
SET(${SYMBOL_FOUND} FALSE)  
IF(WIN32)  
  # Always TRUE under Windows because we are using static libraries  
ELSEIF(APPLE)  
[...]
```

... which might lead to problems.

#39 - 04/11/2011 07:11 pm - sfb

- Status changed from Closed to Assigned
- Assignee changed from kervala to rti

Re-opening for rti.

#40 - 04/12/2011 08:11 pm - rti

Could you please recheck if the current version (r1423) works for you without patching?

#41 - 04/12/2011 08:13 pm - rti

- Status changed from Assigned to Feedback
- % Done changed from 100 to 90

#42 - 04/13/2011 12:43 am - flocke

It works for me, I just compiled it without the patch!

#43 - 04/13/2011 11:20 am - rti

Ok thanks for reporting back!
And thanks a lot for your patch. Is was a great inspiration :)

#44 - 04/13/2011 01:27 pm - flocke

No problem, I don't play Ryzom anymore but I 'm glad I can help.
You can always ask me if you need some testing on an Archlinux system ;)

#45 - 04/13/2011 01:31 pm - rti

- Status changed from Feedback to Closed
- % Done changed from 90 to 100

Sad to hear that. But thanks for your offer!

#46 - 04/13/2011 01:45 pm - flocke

I think I will start playing again in the future, right now I don't have the money and time ;)

Files

archlinux_libwww_xml.patch	496 Bytes	09/30/2010	flocke
checkdepends_bool_v2.patch	1.7 kB	03/15/2011	flocke