
Subject: Mingw/GCC 4.4.0 linker warnings

Posted by [ncompoop](#) on Fri, 17 Jul 2009 09:16:46 GMT

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After I upgraded the compiler from 4.2.1 to 4.4.0, I started experience numerous linker warnings on the Windows platform only, Linux platform is fine. So it is probably a GCC and Windows thing, but I would like if anybody could offer me an explanation to why?

Here comes the warnings:

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/RichText/MINGW.Gui\RichText.a(TxtData.o): warning:  
g: duplicate section `._rdata$_ZTSN3Upp14DeepCopyOptionINS_7RichTxt4ParaENS_10Empt  
yClassEEE[typeinfo name for Upp::DeepCopyOption<Upp::  
RichTxt::Para, Upp::EmptyClass>]' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/RichText/MINGW.Gui\RichText.a(TextData.o): warning:  
ng: duplicate section `._rdata$_ZTSN3Upp14DeepCopyOptionINS_7RichTxt4ParaENS_10Empt  
yClassEEE[typeinfo name for Upp::DeepCopyOption<Upp:  
:RichTxt::Para, Upp::EmptyClass>]' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/RichText/MINGW.Gui\RichText.a(TxtPaint.o): warning:  
ng: duplicate section `._rdata$_ZTSN3Upp14DeepCopyOptionINS_7RichTxt4ParaENS_10Empt  
yClassEEE[typeinfo name for Upp::DeepCopyOption<Upp:  
:RichTxt::Para, Upp::EmptyClass>]' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Convert.o): warning: dupli  
cate section `._rdata$_ZTSN3Upp8MoveableINS_6StringENS_7AStringINS_7String  
0EEEEEE[typeinfo name for Upp::Moveable<Upp::String, Upp::ASt  
ring<Upp::String0> >]' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Convert.o): warning: dupli  
cate section `._rdata$_ZTSN3Upp8MoveableINS_7String0ENS_10EmptyClassEEE[ty  
peinfo name for Upp::Moveable<Upp::String0, Upp::EmptyClass>  
' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Stream.o): warning: duplic  
ate section `._rdata$_ZTVN3Upp7FileOutE[vtable for Upp::FileOut]' has different size
```

```
c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:  
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Stream.o): warning: duplic  
ate section `._rdata$_ZTVN3Upp6FileInE[vtable for Upp::FileIn]' has different size
```

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(t.o): warning: duplicate section `._rdata\$_ZTSN3Upp8MoveableINS_6StringENS_7AStringINS_7String 0EEEEEE[typeinfo name for Upp::Moveable<Upp::String, Upp::AString<Up p::String0> >] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(t.o): warning: duplicate section `._rdata\$_ZTSN3Upp8MoveableINS_7String0ENS_10EmptyClassEEE[typeinfo name for Upp::Moveable<Upp::String0, Upp::EmptyClass>] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Value.o): warning: duplicate section `._rdata\$_ZTVN3Upp5Value4VoidE[vtable for Upp::Value::Void] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Gtypes.o): warning: duplicate section `._rdata\$_ZTVN3Upp5Value4VoidE[vtable for Upp::Value::Void] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Gtypes.o): warning: duplicate section `._rdata\$_ZTVN3Upp12RichValueRepINS_5Rect_liEEEE[vtable for Upp::RichValueRep<Upp::Rect_<int> >] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Gtypes.o): warning: duplicate section `._rdata\$_ZTSN3Upp12RichValueRepINS_5Rect_liEEEE[typeinfo name for Upp::RichValueRep<Upp::Rect_<int> >] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Gtypes.o): warning: duplicate section `._rdata\$_ZTSN3Upp11RawValueRepINS_5Rect_liEEEE[typeinfo name for Upp::RawValueRep<Upp::Rect_<int> >] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Gtypes.o): warning: duplicate section `._rdata\$_ZTVN3Upp11RawValueRepINS_5Rect_liEEEE[vtable for Upp::RawValueRep<Upp::Rect_<int> >] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Color.o): warning: duplicate section `._rdata\$_ZTVN3Upp12RichValueRepINS_5ColorEEE[vtable for Upp::RichValueRep<Upp::Color>] has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Color.o): warning: duplicate

te section `._rdata\$_ZTSN3Upp12RichValueRepINS_5ColorEEE[typeinfo name for Upp::RichValueRep<Upp::Color>]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Color.o): warning: duplicate section `._rdata\$_ZTVN3Upp11RawValueRepINS_5ColorEEE[vtable for Upp::RawValueRep<Upp::Color>]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Color.o): warning: duplicate section `._rdata\$_ZTVN3Upp5Value4VoidE[vtable for Upp::Value::Void]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Util.o): warning: duplicate section `._rdata\$_ZTVN3Upp6FileInE[vtable for Upp::FileIn]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(Uuid.o): warning: duplicate section `._rdata\$_ZTVN3Upp5Value4VoidE[vtable for Upp::Value::Void]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(parser.o): warning: duplicate section `._rdata\$_ZTSN3Upp8MoveableINS_6StringENS_7AStringINS_7String0EEEEEE[typeinfo name for Upp::Moveable<Upp::String, Upp::AString<Upp::String0>>]' has different size

c:/p/mingw4/bin/..../lib/gcc/mingw32/4.4.0/..../..../mingw32 /bin/ld.exe:
C:/p/upp2009/out/Core/MINGW.Gui\Core.a(parser.o): warning: duplicate section `._rdata\$_ZTSN3Upp8MoveableINS_7String0ENS_10EmptyClassEEE[typeinfo name for Upp::Moveable<Upp::String0, Upp::EmptyClass>]'
has different size

Subject: Re: Mingw/GCC 4.4.0 linker warnings
Posted by [koldo](#) on Fri, 17 Jul 2009 11:20:34 GMT
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Hello ncompoop

I have just downloaded MinGW gcc-4.4.0 from SourceForge and the last Upp available (upp-x11-src-1422.tar.gz), and I have compiled Thelde with MinGW-Speed.

I have not found any warning.

I enclose the compiler output.

Best regards
Koldo

PD. I have chosen Thelde as it is a big program. In fact Thelde compiled with MinGW is not usable.

File Attachments

1) [MinGW_Output.txt](#), downloaded 509 times

Subject: Re: Mingw/GCC 4.4.0 linker warnings

Posted by [ncompoop](#) on Fri, 17 Jul 2009 18:14:24 GMT

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That is because you used Optimize for speed. I used Optimal (sounded nice). After your message I have also tried Optimize for size and it also generates many warnings, so it is probably an alignment thing, where something in UPP relies on a 32bit boundary?

Subject: Re: Mingw/GCC 4.4.0 linker warnings

Posted by [ncompoop](#) on Fri, 17 Jul 2009 18:22:49 GMT

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Oh, yes I almost forgot.

You say that Thelde compiled with Mingw is not usable. Not true.

It works very well, thank you very much. Under compiler version 4.2 the -O3 option did not work correctly, and I must admit that I still use "-O2 -ffunction-sections" only for optimize for speed in my build method, and it generates a nice and very usable Thelde.

Subject: Re: Mingw/GCC 4.4.0 linker warnings

Posted by [koldo](#) on Fri, 17 Jul 2009 19:54:32 GMT

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Hello ncompoop

Well, really Thelde compiled with MinGW works well with MinGW but not with MSC.

The reason is in post <http://www.ultimatepp.org/forum/index.php?t=msg&goto=21957>. You get

an "Error invoking gdb !", when compiling with MSC.

To be concise, in Debug.cpp there is:

```
void Ide::BuildAndDebug(bool runto)
{
...
#ifndef COMPILER_MSC
    debugger = builder == "GCC" ? GdbCreate(host, target, runarg) : PdbCreate(host, target, runarg);
#else
    debugger = GdbCreate(host, target, runarg);
#endif
```

So it seems Thelde compiled with MinGW uses Gdb always although you have chosen to compile your project with MSC.

Best regards
Koldo
