
Subject: Re: CALL_EXTERNAL and C++ code
Posted by [Mathieu Malaterre](#) on Tue, 02 Aug 2005 17:31:33 GMT
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Sorry, I forgot to mention the compile lines:

```
$ c++ -o wtd_lg.o -I/usr/local/rsi/idl_6.1 -c wtd_lg.cpp
$ c++ -shared -o lib3D_wtd.so wtd_lg.o
$ c++ --version
      c++ (GCC) 3.3.5 (Debian 1:3.3.5-13)
```

Mathieu

Mathieu Malaterre wrote:

```
> Hello,
>
> I am trying to get an idl application that used to work on win32 to
> work on my linux (debian) box. Unfortunately I am getting:
>
> % XMANAGER: Caught unexpected error from client application. Message
> follows...
> % CALL_EXTERNAL: Error loading sharable executable.
> Symbol: watershed, File =
> /home/mathieu/Projects/FarSight/bin/bin/lib3D_wtd.so
>
> /usr/local/rsi/idl_6.1/bin/bin.linux.x86/libidl.so.6.1: undefined
> symbol: watershed
> % Execution halted at: WTDSEG      3207
> /home/mathieu/Projects/FarSight/FarSight.pro
> %      GUI_EVENT      8550
> /home/mathieu/Projects/FarSight/FarSight.pro
> %      XMANAGER_EVLOOP_STANDARD 478
> /usr/local/rsi/idl_6.1/lib/xmanager.pro
> %      XMANAGER      708
> /usr/local/rsi/idl_6.1/lib/xmanager.pro
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> /home/mathieu/Projects/FarSight/FarSight.pro
> %      $MAIN$
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>
> If I checked for the symbol:
> $ nm /home/mathieu/Projects/FarSight/bin/bin/lib3D_wtd.so | c++filt
> grep watershed
> 0000519c T watershed(int, void**)
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>
> I am reading in parallel the document: External Development Guide
```

> (edg.pdf), but there is no mention of problem *before* calling the
> function.
>
> Does anyone knows what compile flags to use and which compiler to use on
> linux, and if I can use shared lib ? I could not find much in the
> newsgroup except:
>
> http://groups-beta.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/57d81859e3d3a502/191ac3c2f11d2bb8
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> But again this refer to C not C++ which has a completely different name
> mangling...
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> Thanks for your help,
> Mathieu

Subject: Re: CALL_EXTERNAL and C++ code
Posted by [Mathieu Malaterre](#) on Tue, 02 Aug 2005 18:07:27 GMT
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Ok and the easy solution is to build you C++ library but then define the entry point with a C function:

```
extern "C"  
int IDL_STDCALL watershed( int argc, void* argv[] )
```

Sorry for the noise -again- :)
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Subject: Re: CALL_EXTERNAL and C++ code
Posted by [Robert Barnett](#) on Tue, 02 Aug 2005 23:25:26 GMT
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If only IDL could bind using that wonderous GCC-XML thing.

On Tue, 02 Aug 2005 14:07:27 -0400
Mathieu Malaterre <mathieu.malaterre@kitware.com> wrote:

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--

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