
Subject: Re: Connecting GPC to IDL

Posted by [Haje Korth](#) on Fri, 17 Jun 2011 19:00:54 GMT

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Ok, typically when using visual studio from the command line you need to execute a batch file so set the paths correctly. On my machine this is vsvars32.bat. It is somewhere in the visual studio tree. I copied it to c:\windows so that it is always found. Then try the examples again, and do not attempt to compile gpc until the examples work. The next question I have is whether you wrote the proper wrapper routines to interface from IDL to gpc?

On Jun 17, 10:15 am, kBob <krd...@gmail.com> wrote:

> On Jun 17, 6:46 am, Haje Korth <hajeko...@gmail.com> wrote:

>

>

>

>> Were you able to successfully compile any of the small example
>> programs in the IDL external directory?

>

>> On Jun 16, 5:21 pm, kBob <krd...@gmail.com> wrote:

>

>>> On Jun 14, 3:44 pm, kBob <krd...@gmail.com> wrote:

>

>>>> On Jun 11, 10:07 am, Michael Galloy <mgal...@gmail.com> wrote:

>

>>>> > kBob <krd...@gmail.com> wrote:

>>>> > > On Jun 10, 7:52 am, Haje Korth <hajeko...@gmail.com> wrote:

>>>> > >> Kelly: I have always found using gcc with IDL on Windows to be a

>>>> > >> difficult endeavor. Also, the use of make_dll is optional and in the

>>>> > >> past has made life more difficult rather than easier. I suggest

>>>> > >> grabbing the free edition of Visual Studio Express and creating the

>>>> > >> dll this way. Just remember to export the functions you will be

>>>> > >> accessing from IDL. This is definitely an advanced topic, so start

>>>> > >> with the simple examples in the external directory of the IDL distro.

>>>> > >> Haje

>

>>>> > >> On Jun 9, 10:35 am, kBob <krd...@gmail.com> wrote:

>

>>>> > >>> On Jun 6, 2:11 pm, kBob <krd...@gmail.com> wrote:

>

>>>> > >>>> I would like to use the General Polygon Clipper (GPC) thru IDL.

>

>>>> > >>>> This is a software package written in C that is available from

>>>> > >>>> Manchester that clips polygons.

>

>>>> > >>>> Has anyone implement this in IDL, already?

>

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>>>> > >>>> I assume MAKE_DLL is the way to go.
>
>>>> > >>>> Kelly Dean
>>>> > >>>> Milliken, CO
>
>>>> > >>> I am still looking into this, as time allows.
>
>>>> > >>> I ahve reviewed some different ways to implement this, I have
>>>> > >>> determine that the following routines can be used :
>
>>>> > >>> LINKIMAGE
>>>> > >>> SPAWN
>>>> > >>> MAKE_DLL
>>>> > >>> CALL_EXTERNAL
>>>> > >>> CALL_EXTERNAL/MAKE_DLL
>
>>>> > >>> There is a nice example to use CALL_EXTERNAL/MAKE_DLL, but MAKE_DLL is
>>>> > >>> giving me problems as I am trying to use the gcc compiler. There is a
>>>> > >>> ITTVIS Tech Tip that helps, but another problem appears while dealing
>>>> > >>> with the IDL example.
>
>>>> > >>> There is a GCP DLL provided thru the MatLab Contrib site. I am playing
>>>> > >>> around with this in CALL_EXTERNAL, bypassing the MAKE_DLL.
>
>>>> > >>> Sorry, that this is turning into a blog, but I find it helps to scatch
>>>> > >>> some notes down once in awhile for future reference.
>
>>>> > >>> Kelly Dean
>>>> > >>> Milliken, CO- Hide quoted text -
>
>>>> > >> - Show quoted text -
>
>>>> > > Yes, apparently the ITTVIS example assumes you have Microsoft Visual
>>>> > > installed.
>
>>>> > > Well, I spent most of the day installing Microsoft Visual C++ 10.0 and
>>>> > > regist for the free version.
>
>>>> > > So far, here are the problems I am having :
>
>>>> > > cl.exe : Solution ?
>>>> > > mspdb100.dll pop-up : Solution ?
>>>> > > stdio.h 'no such file' : Solution ?
>
>>>> > > I am sure the problems are related to path, as all these file are
>>>> > > within the new install of MS Visual Studio 10.0.
>
>>>> > > Kelly

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>
>>>> > Make sure to launch IDL from the special command line provided by VS (or
>>>> > set your path and possibly other environment variables accordingly).
>
>>>> > Mike
>>>> > --www.michaelgalloy.com
>>>> > Research Mathematician
>>>> > Tech-X Corporation- Hide quoted text -
>
>>>> > - Show quoted text -
>
>>>> Becoming a little wiser.
>
>>>> Visual Studio Command Prompt is looking for "vcvarsall.bat"
>
>>>> I did install MinGW. From the MinGW shell prompt I was able to make a
>>>> DLL -
>
>>>> gcc -Wall -shared gpc.c -o gpc.dll
>
>>>> However, this is a 32-bit DLL. The IDL 64-bit version using
>>>> CALL_EXTERNAL doesn't like the DLL.
>
>>>> Although, the IDL 32-bit version does like the DLL, but IDL promptly
>>>> crashes.
>
>>>> Progress!
>
>>>> Kelly- Hide quoted text -
>
>>>> - Show quoted text -
>
>>> Still working on it, but starting to lose steam.
>
>>> Tried to use gcc from CYGWIN to compile C source code. Failed. Reports
>>> from
>>> from tech support and other IDL users, avoid doing this.
>
>>> Installed Visual C++ (express) as recommended by tech support and
>>> other IDL
>>> users. Used the Visual Command Prompt, but still unable to make a 32-
>>> bit
>>> DLL without getting some kind of warning or error.
>
>>> Installed MinGW as suggested by tech support and other IDL users. From
>>> their
>>> experience, they have more success with compiling 3rd party packages
>>> with this

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>>> package. I was able to creating a 32-bit DLL with gcc in the MinGW
>>> shell. Used
>>> -shared option to gcc to create a DLL. For example :
>
>>> gcc -Wall -shared gpc.c -o gpc.dll
>
>>> Despite the success of creating a DLL, the 32-bit IDL 6.4 crashes when
>>> CALL_EXTERNAL
>>> is used to access this sharable library. For sure, I didn't use the
>>> compiler properly
>>> to create a sharable DLL.
>
>>> Found a sharable DLL for the General Polygon Clipper at Mathworks
>>> (circa 2005). Needs
>>> a MatLab library to work. I didn't purse this much further, as I no
>>> long have MatLab
>>> on my desktop.
>
>>> New Life! Michael Galloy announced his book is available - Modern IDL.
>>> There is a whole
>>> chapter about this External Development. So, there is lots of new
>>> ideas to try. Even
>>> a Python example. GPC has a Python wrapper.
>
>>> Kelly- Hide quoted text -
>
>> - Show quoted text -
>
> Nope!
>
> I have been working with the ITTVIS example routine SIMPLE_VARS.pro
>
> Common errors are undefine reference, unrecognized commands (CL),
> missing libraries (mispdb100.dll), and cannot find <stdio.h>.
>
> Kelly
```
