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Subject: Re: Connecting GPC to IDL

Posted by [KRDean](#) on Mon, 20 Jun 2011 16:00:59 GMT

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On Jun 17, 1:00 pm, Haje Korth <hajeko...@gmail.com> wrote:

> 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.

>

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

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>
>>>> > > > Kelly
>
>>>> > > 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 -
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>>>> > - 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

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>>>> experience, they have more success with compiling 3rd party packages
>>>> with this
>>>> 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 pursue 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 (mspdb100.dll), and cannot find <stdio.h>.
>
>> Kelly- Hide quoted text -
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> - Show quoted text -

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Will the vsvarall.bat file work? It is in the Visual C++ 10.0 directory.

The vsvar32.bat is in the VC /bin directory.

I moved the vsvarall.bat (as well as the vsvar32.bat) to the C:\windows directory and the same problems persist. You move it there to be found

by what app? I assume MAKE\_DLL is starting a administrator command prompt.

I have yet to work on the IDL wrapper for GPC. I am still working to get the ITTVIS examples to work.

Kelly

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