
Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Thu, 16 Jun 2011 21:21:38 GMT
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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) thur IDL.
>
>>>> >> This is a software package written in C that is available from
>>>> >> Manchester that clips polygons.
>
>>>> >> 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.

>

>>> 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 -
>
> - 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
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
