
Subject: Connecting GPC to IDL
Posted by [KRDean](#) on Mon, 06 Jun 2011 20:11:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

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

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Fri, 10 Jun 2011 19:49:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

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 have 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 GPC 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 scratch
>> 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

Subject: Re: Connecting GPC to IDL

kBob <krdean@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 scratch
>>> 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

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Tue, 14 Jun 2011 21:44:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

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

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Thu, 16 Jun 2011 21:21:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

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

Subject: Re: Connecting GPC to IDL
Posted by [Haje Korth](#) on Fri, 17 Jun 2011 12:46:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

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) 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

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Fri, 17 Jun 2011 14:15:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

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) 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- 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

Subject: Re: Connecting GPC to IDL

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

[View Forum Message](#) <> [Reply to Message](#)

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?

>

>>>> > >>>> 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- 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
```

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Mon, 20 Jun 2011 16:00:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

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.
- >
- >>>> > > >>>> 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- 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 -
>
> - Show quoted text -

```

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 an 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

Subject: Re: Connecting GPC to IDL
Posted by [KRDean](#) on Mon, 20 Jun 2011 21:19:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Jun 20, 10:00 am, kBob <krd...@gmail.com> wrote:
> 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) 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- 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 -
>
>> - Show quoted text -
>
> 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- Hide quoted text -
>
> - Show quoted text -
```

Well this works (ITTVIS example) ...

Start up a Command Prompt ...

Drag-n-drop the vsvarall.bat from the Visual Studio C++ 10.0 VC
directory into the command prompt ...

```
"C:\Program Files (x86)\Microsoft Visual Studio 10.0\VC
\vcvarsall.bat"
```

Drag-n-Drop the (IDL 6.4) idlde.exe into the same Command Prompt ...

```
"C:\Program Files\ITT\IDL64\bin\bin.x86\idlde.exe"
```

Hit return in the active command prompt and the IDL DE starts up.

Now you can running the ITTVIS CALL_EXTERNAL examples work just fine.

However, is this a viable solution?

Maybe for a quick and dirty - get-it-done - option.

Kelly

Subject: Re: Connecting GPC to IDL

Posted by [Michael Galloy](#) on Fri, 24 Jun 2011 16:35:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

On 6/20/11 3:19 PM, kBob wrote:

> On Jun 20, 10:00 am, kBob<krd...@gmail.com> wrote:

>> 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.
>>
>>>> >>>>>>> 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- 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 -
>>
>>>> - Show quoted text -
>>
>> 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 persit. 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- Hide quoted text -
>>
>> - Show quoted text -
>
> Well this works (ITTVIS example) ...
>
> Start up a Command Prompt ...
>
> Drag-n-drop the vsvarall.bat from the Visual Studio C++ 10.0 VC
> directory into the command prompt ...
>
> "C:\Program Files (x86)\Microsoft Visual Studio 10.0\VC
> \vcvarsall.bat"
>
> Drag-n-Drop the (IDL 6.4) idlde.exe into the same Command Prompt ...
>
> "C:\Program Files\ITT\IDL64\bin\bin.x86\idlde.exe"
>
> Hit return in the active command prompt and the IDL DE starts up.
>
> Now you can running the ITTVIS CALL_EXTERNAL examples work just fine.
>
> However, is this a viable solution?
>
> Maybe for a quick and dirty - get-it-done - option.
>
> Kelly

```

For Windows, what I have done (haven't done this for awhile, though) was to just set the environment variables that vcvarsall.bat sets. I don't remember clearly, but I think this was a bit of a hassle. But then CALL_EXTERNAL, MAKE_DLL, etc. "just work" all the time.

Mike

--

Michael Galloy
www.michaelgalloy.com

