
Subject: Using CALL_EXTERNAL with C++ Code
Posted by [ebertf](#) on Thu, 29 Jan 2004 13:49:33 GMT
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Hello,

I have a problem compiling and linking a DLL in C++ and integrate it into IDL via CALL External. Everything works fine with C in this way using a wrapper function:

C-Code of wrapper function:

```
#include "stdio.h"
#include "idl_export.h"
#include "myDLL.h"

_declspec(dllexport) IDL_INT IDL_CDECL mydllquest(int argc, void
*argv[])
{
return (dllquest(((IDL_INT) argv[0])));
}
```

compiling and linking were done from the DOS Console (VC6 is installed):

```
cl -DLL -DWIN32 -D_MT /nologo /I"C:\RSI\IDL60\external\include" /c
mydllglue.c /Fomydllglue.obj
```

```
link /out:mydllglue.dll /nologo /nodefaultlib /dll mydllglue.obj
"C:\RSI\IDL60\bin\bin.x86\idl32.lib" dll.lib msvcrt.lib kernel32.lib
```

The call in IDL works like this:

```
res=call_external(<path of
mydllglue.dll>,'mydllquest',1,/cdecl,value=[0])
```

Compiling with C is working fine, but when the ending of the wrapper file is *.cpp or if you use the option /Tp (means: compile this as C++) then IDL is causing an error.

Can anybody give me a hint, what could be wrong or need to be changed when switching to c++?

Florian

Subject: Re: Using CALL_EXTERNAL with C++ Code
Posted by [the_cacc](#) on Wed, 04 Feb 2004 04:08:35 GMT
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eberf@gmx.de (Florian Meyer) wrote in message
news:<14e53261.0402030142.1a7147a8@posting.google.com>...

- > I got a solution for my problem. For anyone, who might be interested:
- > When using the C++ Compiler the names in the EXPORT LIST are decorated
- > with funny tags.
- >
- > An example:
- > An entry in your DLL, lookin like this:
- >
- > _declspec(dllexport) IDL_INT IDL_CDECL dllquest(int argc, void
- > *argv[])
- > {
- > <your C++ code>
- > }
- >
- > is causing a name in the exportlist like this:
- >
- > ?dllquest@@YAFHQAPAX@Z
- >
- > With CALL_EXTERNAL you need to call the second one, then it works and
- > you can process C++ Code in IDL. Using C-Compiler (option /Tc with cl)
- > the names are equal.
- > How the the Compiler changed the names can be obtained with a command
- > from the DOS Prompt on the OBJECT File the compiler created:
- >
- > DUMPBIN <*.obj-File> /SYMBOLS
- >
- > There you can find both names.
- >
- > I think there are other ways to work around this problem (not to call
- > this weird decorated names) with a *.def File. But I don't know how
- > to do that. If anybody can give a little 'manual' how to create such a
- > DLL I were very grateful.
- >
- > Florian

I'm not clear whether you've "solved" the problem or merely hacked in
the weird function names in place of the ones you expected.

A less evil hack is compiling with the /TC flag (NB. not /Tc - that's

different). It may mean you can't overload your functions though, since C++ uses the extra tags to specify argument types so functions you give the same name are (internally by C++) given different names.
