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Subject: Re: call\_external with PASCAL calling convention

Posted by [rivers](#) on Tue, 06 Oct 1998 07:00:00 GMT

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In article <3614D696.8B3EDE4C@mssl.ucl.ac.uk>, "E. Breeveld" <erb@mssl.ucl.ac.uk> writes:

> Any call\_external gurus out there?

>

> We have a windows DLL that interfaces with a PC card and  
> we'd like it to be incorporated (via call\_external) into IDL, but  
> can't make it work. The equivalent C program does work however!  
> We are using IDL Version 5.1 Win32 (x86) with windows 98.

...

> The test idl program is:

>  
> card = 0b ; Byte  
> basadd2 = 0 ; Int  
> irq1 = 0b ; Byte  
> ; test without cdecl  
> result = call\_external('7200.dll', 'W\_7200\_Initial', \$  
>     card, basadd2, irq1, val=[1, 0, 0])  
> help, result, basadd2, irq1  
> end  
>

> The C program that works looks like:

>  
> #include <windows.h>  
> #include <stdio.h>  
> #include "c:\7200\include\7200.h"  
>  
> unsigned char irq1;  
> unsigned short base\_address2;  
> long status4;  
>  
> void main(void)  
> {  
> status4 = W\_7200\_Initial(0, &base\_address2, &irq1);  
> printf("Status= %ld\n"  
>     "Base Address= 0x%X\n"  
>     "IRQ= %d\n", status4, base\_address2, irq1);  
> }

...

> We could write a C wrapper for 7200.dll, but this is messy. Is there  
> any other solution, or is there a bug in IDL with the /cdecl switch?

The problem here is clear: you cannot call this function W\_7200\_Initial directly from IDL because it does not use the (argc, argv) argument passing mechanism which IDL uses with CALL\_EXTERNAL. You must write a wrapper routine to convert IDL's (argc, argv) calling convention to the parameter list your

function needs.

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