
Subject: Re: Reentrant API/IDL_KW_OFFSETOF() issue
Posted by [Rick Towler](#) on Wed, 17 Mar 2004 00:07:54 GMT
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"Rick Towler" wrote in message...

> I have run into a problem with the IDL_KW_OFFSETOF() macro and the new
> keyword processing API. Starting with a functioning .cpp dlm, I set about
> to add a few keywords. Along the way I decided to switch the keyword
> processing to use the new API. A fine way to spend an afternoon...
>
> The problem is that the compiler chokes on the return value from
> IDL_KW_OFFSETOF() macro. It expects "char *" and gets "void *". I can
> recast everything but the EDG (and Ronn's book) make no mention of this
> and
> my C/C++ skills are such that I don't really trust myself and assume that
I
> am in the wrong.
>
> I see IDL_KW_V_OFFSETOF() returns "char *" but again, no mention in the
EDG
> or Ronn's book.

I'm no Barnaby Jones, but looking at the following from the export.h file
(5.5-6.0):

```
#define IDL_KW_OFFSETOF2(s, m) ((void *)&(((s *)0)->m))  
#define IDL_KW_V_OFFSETOF2(s, m) ((char *)&(((s *)0)->m))  
#define IDL_KW_S_OFFSETOF2(s, m) ((int *)&(((s *)0)->m))  
  
#define IDL_KW_OFFSETOF(m) IDL_KW_OFFSETOF2(KW_RESULT, m)  
#define IDL_KW_V_OFFSETOF(m) IDL_KW_V_OFFSETOF2(KW_RESULT, m)  
#define IDL_KW_S_OFFSETOF(m) IDL_KW_S_OFFSETOF2(KW_RESULT, m)
```

The names lead me to believe that IDL_KW_V_OFFSETOF2() would return void and
(by default, as it would be the most common use) IDL_KW_OFFSETOF2() would
return char. But if this were the case I am sure someone would have run
into this?

-Rick

Subject: Re: Reentrant API/IDL_KW_OFFSETOF() issue
Posted by [Rick Towler](#) on Wed, 17 Mar 2004 00:59:21 GMT
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> I'm no Barnaby Jones, but looking at the following from the export.h file

```
> (5.5-6.0):
>
> #define IDL_KW_OFFSETOF2(s, m) ((void *)&(((s *)0)->m))
> #define IDL_KW_V_OFFSETOF2(s, m) ((char *)&(((s *)0)->m))
> #define IDL_KW_S_OFFSETOF2(s, m) ((int *)&(((s *)0)->m))
>
> #define IDL_KW_OFFSETOF(m) IDL_KW_OFFSETOF2(KW_RESULT, m)
> #define IDL_KW_V_OFFSETOF(m) IDL_KW_V_OFFSETOF2(KW_RESULT, m)
> #define IDL_KW_S_OFFSETOF(m) IDL_KW_S_OFFSETOF2(KW_RESULT, m)
>
>
> The names lead me to believe that IDL_KW_V_OFFSETOF2() would return void
and
> (by default, as it would be the most common use) IDL_KW_OFFSETOF2() would
> return char. But if this were the case I am sure someone would have run
> into this?
```

Alas, there is no conspiracy here.

A helpful bird pointed out that C will tolerate such void pointers and convert them but C++ will not. So IDL_KW_V_OFFSETOF() is the macro I should use in my case.

Many thanks to those knowledgeable lurkers out there!

-Rick
