
Subject: Reentrant API/IDL_KW_OFFSETOF() issue
Posted by [Rick Towler](#) on Tue, 16 Mar 2004 23:47:11 GMT
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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.

The relevant code:

```
typedef struct {
  IDL_KW_RESULT_FIRST_FIELD;
  IDL_VPTR oAngle;
  IDL_VPTR oInIDX;
  IDL_VPTR oLocation;
  IDL_VPTR oOutIDX;
} KW_RESULT;

static IDL_KW_PAR keywords[]={
  IDL_KW_FAST_SCAN,

  {"ANGLE",IDL_TYP_UNDEF,1,IDL_KW_OUT|IDL_KW_ZERO,0,IDL_KW_OFFSETOF(oA ngle)},

  {"INIDX",IDL_TYP_UNDEF,1,IDL_KW_OUT|IDL_KW_ZERO,0,IDL_KW_OFFSETOF(oI nIDX)},

  {"LOCATION",IDL_TYP_UNDEF,1,IDL_KW_OUT|IDL_KW_ZERO,0,IDL_KW_OFFSETOF(oL
ocati
on)},

  {"OUTIDX",IDL_TYP_UNDEF,1,IDL_KW_OUT|IDL_KW_ZERO,0,IDL_KW_OFFSETOF(oO
utIDX)}
,
  {NULL}
};
```

The error:

FAR_Echosounder.cpp(286) : error C2440: 'initializing' : cannot convert from
'void *' to 'char *'
Conversion from 'void*' to pointer to non-'void' requires an explicit cast

Of course, this error is generated for every call to IDL_KW_OFFSETOF().

What am I missing?

-Rick
