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Subject: Re: C Alignment/IDL structures

Posted by [Randall Skelton](#) on Wed, 16 Mar 2005 18:07:33 GMT

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I'm not sure I completely understand what you are doing... can you post a snippet of code? I trust that you are passing back an unnamed structure from C as named structures are persistent in a given session. Hence, you should call as:

```
ptr = IDL_MakeStruct(NULL, mytags);
```

This is the reason the following fails:

```
IDL> a = {foo, a: 0, b: ''}
```

```
IDL> b = {foo, c: 0}
```

```
% Wrong number of tags defined for structure: FOO.
```

Once 'foo' is defined, you cannot change its fields.

In general, when I have to pass C structures from existing code back to IDL I do it by creating a shadow structure (in C) that uses all the defined IDL types and copying the data. You really cannot rely on generic C variables having the same size as their IDL counterparts (take a look at the definition of IDL\_ALLTYPES in idl\_export.h). You can cheat a little when initializing arrays as you can point to the memory in your existing structures if the sizes align, but everything in the C structure should be defined with one of the macros given in the EDG. I don't think you should be seeing any structure alignment issues...

Cheers,  
Randall

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