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Subject: Re: Newbie Questions

Posted by [Geoff Herbyinchuk](#) on Tue, 15 May 2001 17:17:58 GMT

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On Tue, 15 May 2001, Geoff Herbyinchuk wrote:

> Hi,  
>  
> Was just wondering if IDL can have pointers to structures. I'm trying to  
> access a variable in the structure with:  
>  
> if (\*info).active\_cursor EQ 1) then .....  
>  
> And I keep getting an error which says "Expression must be a structure in  
> this context: <PtrHeapVar57>."  
>  
> Does anyone know what I'm doing wrong?  
>  
> Thanks,  
> Geoff Herbyinchuk  
>  
Oh, oops...in the actual code, the brackets do match up correctly  
for that "if" statement when I get this error. I just made a typo  
when writing this message.

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Subject: Re: Newbie Questions

Posted by [Ben Tupper](#) on Tue, 15 May 2001 18:51:21 GMT

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Geoff Herbyinchuk wrote:

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>  
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>> this context: <PtrHeapVar57>."  
>>  
>

Hello,

If the active\_cursor tag represents the pointer within the structure, then you  
will want to dereference it as follows:

```
if *(info.active_cursor) EQ 1 then .....
```

As JD has pointed out to the us pointer-challenged, you can also go the lazy route:

```
if *info.active_cursor EQ 1 then .....
```

The way you have written (\*info).active\_cursor indicates that info is a pointer to a structre that conatins the active\_cursor rather than being a structure containing a field defined as pointer.

Ben

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Subject: Re: Newbie Questions  
Posted by [Craig Markwardt](#) on Tue, 15 May 2001 19:21:41 GMT  
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Geoff Herbyinchuk <gherbyn@irus.rri.on.ca> writes:

```
> Hi,  
>  
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> access a variable in the structure with:  
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> if (*info).active_cursor EQ 1) then .....  
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> this context: <PtrHeapVar57>."  
>  
> Does anyone know what I'm doing wrong?
```

Umm, are you sure that INFO points to a structure? I tried it and it worked fine. (see below). Why not put a "HELP, \*INFO, /STRUCT" right before this statement and see what pops up?

```
IDL> struct = {active_cursor: 1}
```

```
IDL> info = ptr_new(struct)
IDL> help, (*info).active_cursor
<Expression>  INT      =      1
IDL> help, info
INFO          POINTER   = <PtrHeapVar1>
```

Craig

--

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Craig B. Markwardt, Ph.D.      EMAIL:  craigmnet@cow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: Newbie Questions  
Posted by [Geoff Herbyinchuk](#) on Thu, 17 May 2001 12:15:06 GMT  
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Thanks for the help guys, got that problem fixed. I'm hoping you can help me with one more thing with IDL pointers.  
When we do something like:

```
foo_ptr = ptr_new(foo)
```

foo\_ptr points to a memory location in the heap memory that contains foo's value, correct? So, am I safe to assume it copys whatever the value of foo is into the heap variable that foo\_ptr is pointing too?

And, if we do:

```
bar_ptr = ptr_new(bar, /no_copy)
```

bar\_ptr will now just point to the memory location where bar is stored (not copy it to a heap location)? We can then update the bar, or the components of bar(if bar is a structure) by dereferencing bar\_ptr, right? For example:

```
*bar_ptr.name = 'Geoff'
```

Thanks for everyone's help. I've only worked with pointers in C/C++ before, and I'm getting the impression that these don't work exactly the same way. =)

Geoff Herbyinchuk

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