
Subject: dereferencing a pointer to a complex structure?
Posted by zuzucat@gmail.com on Mon, 11 Apr 2005 15:14:18 GMT
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I have a trouble dereferencing a pointer to a complex structure.

```
multidata = replicate({ grds:ptr_new(findgen(nx, ny))}, n_level)
data = replicate({time:0, level:multidata}, obs)
|
DL> print, (*data[3].level[3].grds)[0,4]
      4.00000
```

```
ptr_data = ptr_new(data)
```

I tried (*(data[3].level[3].grds))[0,4], but it doesn't work.

Any help would be appreciated.
best,

Nobuki Matsui
CDC/NOAA

Subject: Re: dereferencing a pointer to a complex structure?
Posted by [David Fanning](#) on Tue, 12 Apr 2005 19:18:32 GMT
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zuzucat@gmail.com writes:

> I've read this page, but I couldn't apply the info to this particular
> example.

Yeah, never could I. :-(

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: dereferencing a pointer to a complex structure?
Posted by [David Fanning](#) on Tue, 12 Apr 2005 19:26:05 GMT
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David Fanning writes:

> Yeah, never could I. :-(

Say, what!? I'm getting ready to return to Germany for another couple of months. This must be what happens when the ol' German language CDs get the dust brushed off them. :-(

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: dereferencing a pointer to a complex structure?

Posted by [Benjamin Hornberger](#) on Tue, 12 Apr 2005 19:30:04 GMT

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David Fanning wrote:

> David Fanning writes:

>

>

>> Yeah, never could I. :-(

>

>

> Say, what!? I'm getting ready to return to Germany for another
> couple of months. This must be what happens when the ol' German
> language CDs get the dust brushed off them. :-(

Oh, I can't wait to read more about your adventures!

Benjamin

Subject: Re: dereferencing a pointer to a complex structure?

Posted by zuzucat@gmail.com on Tue, 12 Apr 2005 19:57:46 GMT

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Mr. Chris Torrence at RSI kindly phoned my supervisor to tell us the answer.

Thank you very much, all.

```
print, ((*ptr_data)[3].level[3].grds)[0,4]
```

best,

Nobuki Matsui

Subject: Re: dereferencing a pointer to a complex structure?
Posted by [David Fanning](#) on Tue, 12 Apr 2005 20:19:24 GMT
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zuzucat@gmail.com writes:

> Mr. Chris Torrence at RSI kindly phoned my supervisor to tell us the
> answer.
>
> Thank you very much, all.
>
> print, ((*ptr_data)[3].level[3].grds)[0,4]

Yeah, but unless I'm missing something, this doesn't
answer the original question. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Subject: Re: dereferencing a pointer to a complex structure?
Posted by [David Fanning](#) on Tue, 12 Apr 2005 20:24:56 GMT
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David Fanning writes:

> Yeah, but unless I'm missing something, this doesn't
> answer the original question. :-)

Or, maybe it does. Let's just say *I* won't be building
any data structures that look like this anytime soon. :-)

Cheers,

David

--

David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: dereferencing a pointer to a complex structure?
Posted by [JD Smith](#) on Tue, 12 Apr 2005 22:48:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Tue, 12 Apr 2005 12:57:46 -0700, zuzucat@gmail.com wrote:

> Mr. Chris Torrence at RSI kindly phoned my supervisor to tell us the
> answer.
>
> Thank you very much, all.
>
> print, ((*ptr_data)[3].level[3].grds)[0,4]
> best,

This is exactly how the tutorial tells you to do it (even though this isn't the question you had asked).

The easy to remember, basic rule from the tutorial: group with (*xxx) all "xxx" which are pointers, unless the () would then occur on the "outside" of the expression (it wouldn't hurt, it's just a waste).

So in your case the pointer "ptr_data" must be treated this way:

```
(*ptr_data)
```

as must the pointer "(*ptr_data)[3].level[3].grds":

```
(*ptr_data)[3].level[3].grds)[0,4]
```

if you didn't want to subscript the final FINDGEN, you could just use:

```
(*ptr_data)[3].level[3].grds
```

JD
