
Subject: Re: Pointers and Structures and Loops - oh my!
Posted by [David Fanning](#) on Sat, 03 Dec 2011 18:38:15 GMT
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Avian writes:

> I'm looking for an elegant way to read in data with different formats into one array. In other words, every record will have a (slightly) different structure, which is easily calculated within the loop for each record.
>
> Is there a way to tell IDL to redefine a structure within a loop, but still somehow keep it so I can point to it? or... What is the best way to store the structure in a way where I can use pointers to it to access it in a single array? I can't seem to get the magic combination of pointers and structures to do this.

You need a pointer array.

```
ptrs = PtrArr(n)
FOR j=0,n-1 DO BEGIN
    ...
    struct = Create_Struct(...)
    ptrs[j] = Ptr_New(struct)
    ...
ENDFOR
```

Then, later, you can access a field in your structure like this:

```
data = (*ptrs[j]).fieldwhatever
```

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Pointers and Structures and Loops - oh my!
Posted by [Avian](#) on Sat, 03 Dec 2011 18:42:54 GMT
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Hi David,

Thanks for your response! That's what I tried at first. However, in the for loop, the struct will be

redefined in every iteration, leading to instant unhappiness within IDL.

Subject: Re: Pointers and Structures and Loops - oh my!

Posted by [Avian](#) on Sat, 03 Dec 2011 18:48:17 GMT

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Ah, maybe I misinterpreted something in your last post.

I've been defining a structure ahead of time, then creating it that way. But if I use `create_struct` directly, I'm betting that should get around the whole problem of different structures!

Subject: Re: Pointers and Structures and Loops - oh my!

Posted by [Avian](#) on Sat, 03 Dec 2011 19:04:24 GMT

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and thanks! that solved the problem!
