Subject: confusion around a pointer to an array of structures
Posted by Henry on Tue, 09 Aug 2005 18:42:30 GMT
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I've been beating my head on this and can't find anything on David's web site or here that answers my problem. (Which is usually a sign to me that I am trying to do something really wrong/inefficiently/stupidly, and yet in this instance I persist.)

For reasons that aren't important to my question, I want to have a pointer to an array of structures. I've stripped the problem down to the bare essentials here. (Which was the first thing I did to try to make sure I wasn't making some other larger error.) Making this ptr is no problem. Reading the variables is no problem. It's writing to the variables I'm having a problem with. The best explanation of my problem is a few lines of code:

```
;set up our crazily designed ptr to an array of structures
a = ptr_new( replicate( {x:0d}, 5 ) )
;we *can* set the whole variable at once, e.g.:
(*a).x = dindgen(5)
print,(*a).x    ; print everything
print,((*a)[0]).x   ; print just the first element
;that's all good, but what if you want to set just the first element
equal to something?
((*a)[0]).x = 99d
;this gives the error:          % Attempt to store into an expression:
Structure reference.
```

One way around this is to do something dumb, like:

```
temp = (*a).x
temp[0] = 99d
(*a).x = temp
```

But, I can see no other way around this, aside from redesigning how I'm storing the information. Does anyone see how to do the equivalent of "((*a)[0]).x = 99d" in the above example? (without the awkward three line dumb hack I've shown)
I'm sure I'm just not seeing something simple....

Thanks!
-Henry