
Subject: Making an array of structures containing pointers

Posted by [bowman](#) on Thu, 13 May 1999 07:00:00 GMT

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I'm trying to create a data structure to store a number of variable-length 1-D arrays that I am reading from a file.

I have tried something like this

```
OPENR, iunit, filename, /GET_LUN    ;Open file
n = 0L                               ;Initialize n to LONG
READU, iunit, n                      ;Read number of points
temp = {n: n, $                      ;Create structure containing pointer
        x: PTR_NEW(FLTARR(n))}
READU, iunit, *temp.x                ;Read 1-D array
list = temp                           ;Copy to list
WHILE (NOT(EOF(iunit))) DO BEGIN
    READU, iunit, n                  ;Read number of points
    temp = {n: n, $                 ;Create structure containing pointer
            x: PTR_NEW(FLTARR(n))}
    READU, iunit, *temp.x            ;Read 1-D array
    list = [list, temp]              ;Add temp to list  <---- FAILS HERE
ENDWHILE
```

```
FREE_LUN, iunit
```

IDL will not let me do the concatenation to concatenate the new structure (temp) onto the (would be) array of structures, list. It fails with

% Conflicting data structures: TEMP,concatenation.

I can do this successfully

```
list = [list, list]
```

to make an array of structures.

List and temp are identical stuctures, why can't I do

```
list = [list, temp] ?
```

How do I do what I need to do?

Thanks, Ken

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Replace AT with @

Subject: Re: Making an array of structures containing pointers
Posted by [Andrew Kraus](#) on Thu, 13 May 1999 07:00:00 GMT
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I am thinking that IDL is looking for a named structure. I know that you have set LIST=TEMP, but I am wondering if IDL isn't going so far as identify LIST as the same structure type as TEMP. Try the named structure approach.

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