
Subject: Re: IDL Structures

Posted by [thompson](#) on Thu, 10 Feb 1994 22:35:13 GMT

[View Forum Message](#) <> [Reply to Message](#)

acdmi@kirk.giss.nasa.gov (Daniel M. Israel) writes:

> I've noticed that IDL seems to treat all structures as arrays of
> structures.

> Example:

> IDL> a={ new_structure, x : 1e0, y : 1e0 }

> IDL> help, /structure, a

> A STRUCT => Array(1)

> No matter what I do, I can't get a structure that doesn't think it is part
> of an array of one element. Now I do some things that require
> distinguishing between scalars and arrays, where structures should be
> scalars. But IDL thinks all my structures are arrays of one elements. Is
> this a bug in my version? Or is it a bug in IDL? Or is there some reason
> why this notation is useful? (Because I have to kludge around it, it is
> definitely not useful for me.)

As far as I know, this is true of all versions of IDL. I don't know why this
is.

Actually, I'm not sure that it's really important to distinguish between
scalars and arrays that only have one element. It used to be important, but
later versions of IDL have been breaking down the distinctions. I've been
simply using the N_ELEMENTS() function lately to distinguish between arrays and
"scalars", rather than using the first element of the SIZE() function as I used
to do.

Of course, your mileage may vary. :^)

Bill Thompson

Subject: Re: IDL Structures

Posted by [stl](#) on Fri, 11 Feb 1994 07:38:50 GMT

[View Forum Message](#) <> [Reply to Message](#)

In article <2je7gn\$1kn@kirk.giss.nasa.gov> crdmi@vulcan.giss.nasa.gov writes:

>

> I've noticed that IDL seems to treat all structures as arrays of
> structures.

>

> Example:

> IDL> a={ new_structure, x : 1e0, y : 1e0 }

```
> IDL> help, /structure, a
> A          STRUCT  = ->  Array(1)
>
```

Actually this is kind of nice that they are all treated like arrays. If you need to use the scalar of this, just use `a(0)`, or actually like the other person just mentioned, something like `a.x` should just return you a scalar (otherwise use `a(0).x`)

The advantage of this is that when you use `replicate` on the structure, you don't change from a scalar to an array, ie, very little code change (if any at all)

-stephen

--

Stephen C Strebel / SKI TO DIE
stl@maz.stl.ch / and
Swiss Meteorological Institute, Zuerich / LIVE TO TELL ABOUT IT
01 256 93 85 / (and pray for snow)
