Subject: Re: Error in concatenating structure arrays
Posted by davidf on Wed, 30 Apr 1997 07:00:00 GMT
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Paul van Delst <paulv@airs2.ssec.wisc.edu> writes:

```
> The following code :

> pro test
>   as_state = { x0:-1L, y0:-1L, x1:-1L, y1:-1L, select:-1L, color:-1L }
>   info = { as_state : as_state }
>   dummy = { x0:2L, y0:2L, x1:2L, y1:2L, select:2L, color:2L }
>   info = { as_state : [ info.as_state, dummy ] }
>   help, info.as_state
> end
>
> gives the result :
>
> % Conflicting data structures: DUMMY,MISSING.
>
> i.e. when I try to concatenate the structures, it fails.
> The following code defines the dummy structure differently:
>
> pro test
>   as_state = { x0:-1L, y0:-1L, x1:-1L, y1:-1L, select:-1L, color:-1L }
>   info = { as_state : as_state }
>
>   dummy = info.as_state
>   dummy.x0 = 2L
>   dummy.y0 = 2L
>   dummy.x1 = 2L
>   dummy.y1 = 2L
>   dummy.select = 2L
>   dummy.color = 2L
>   info = { as_state : [ info.as_state, dummy ] }
>   help, info.as_state
> end
>
> and works as expected with the result:
>
> <Expression>    STRUCT    = -> <Anonymous> Array(2)
>
> My question is: Why does the first method, where the dummy structure to
> be concatenated is explicitly defined, not work? What does the error
> message actually mean?
```

I think what this message means is that two anonymous
structures, even though they are defined similarly, are

not the same. That is, an anonymous structure when it is
defined is given a "defined" identity internally. In other words, IDL
has some way of "knowing" about it. To prove that this
must be the case, consider this:

```
  a = { array:FltArr(10) }
  b = FltArr(20)
  a.array = b
```

This code causes the same (unhelpful) error message as above:

```
  % Conflicting data structures: B,MISSING.
```

The reason being, I think, that IDL "knows" about the structure A,
knows that the field array is 10 elements in length, and can't allow
something bigger to fit into the space that has been allocated in
memory. In some sense, the structure A is defined internally
as a specific entity. (This would have to be the case if you
think about it.)

Arrays, of course, must be composed of *identical* elements.
In your first example, info.as_state and dummy are two
different entities (even though they are defined alike) and
cannot be put into the same array.

In the second case, dummy is an *instance* of info.as_state
and, hence, is *identical* to it from an internal structure
definition or entity point of view. Thus, you can put dummy into an
array with the info.as_state structure.

Cheers!

David

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Subject: Re: Error in concatenating structure arrays
Posted by alpha on Thu, 01 May 1997 07:00:00 GMT
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davidf@dfanning.com (David Fanning) writes:
> Paul van Delst <paulv@airs2.ssec.wisc.edu> writes:

```
>    a = { array:FltArr(10) }
>    b = FltArr(20)
>    a.array = b
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> This code causes the same (unhelpful) error message as above:
> % Conflicting data structures: B,MISSING.
> The reason being, I think, that IDL "knows" about the structure A,
> knows that the field array is 10 elements in length, and can't allow
> something bigger to fit into the space that has been allocated in
> memory. In some sense, the structure A is defined internally
> as a specific entity. (This would have to be the case if you
> think about it.)

ok, but think about this in 4.0.1b:

```
 a = { array: fltarr(1) }
        help,/struct,a



        help,/struct,a

        or b = fltarr(1)
        a.array=b

        %error!
```

so we waiting for IDL 5.0b6 and the 24. Tagname.... (error is
now in the official buglist at RSI)

greetings to coyote

Panther

```
--
Panther in the Jungle          __..--''``\--....___   _..,_
-BELIEVE AND DECEIVE-      _.-'    .-/";  `        ``<._  ``-+'~=.
http://www.ang-physik  _.-' _..--.'_    \                    `(^) )
.uni-kiel.de/~hendrik ((..-'    (< _     ;_..__               ; `'
```