
Subject: Re: IDL removes dimensions of size 1 automatically

Posted by [btt](#) on Fri, 24 Sep 2004 20:16:41 GMT

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Paul Van Delst wrote:

> Benjamin Hornberger wrote:

>

>> Hi all,

>>

>> I had a hard time finding a bug which came from IDL's behaviour to

>> remove dimensions of size 1 automatically sometimes.

>>

>> IDL> a=[[1u,1u]]

>> IDL> help,a

>> A UINT = Array[2]

>> IDL> ;; IDL doesn't even let me specify this (2,1) element array

>> IDL> a=reform(a,2,1)

>> IDL> help,a

>> A UINT = Array[2, 1]

>> IDL> b=fix(a)

>> IDL> help,b

>> B INT = Array[2]

>> IDL> ;; IDL removed my second dimension even though I just wanted to

>> change the type

>> IDL> c=2*a

>> IDL> help,c

>> C INT = Array[2]

>> IDL> print,c

>> 2 2

>> IDL> ;; again IDL kicked out my second dimension

>>

>> I found this very annoying. Does anyone know more about it? Why is it

>> like that? In which situations will IDL do that?

>

>

> Only trailing dimensions of size 1 are removed.

>

> IDL> x=fltarr(20,1,1,1,1)

> IDL> help, x

> X FLOAT = Array[20]

> IDL> x=fltarr(1,1,1,1,20)

> IDL> help, x

> X FLOAT = Array[1, 1, 1, 1, 20]

> IDL> x=fltarr(20,1,3,1,1)

> IDL> help, x

> X FLOAT = Array[20, 1, 3]

>

> This has always been the case (in my experience) - much to the

> consternation of some IDL users, and to the joy to others. YMMV.
>

And,... when you think that the trailing dimension is important then use REFORM liberally...

```
IDL> a = reform(intarr(2,1),2,1)
IDL> help, a
A          INT      = Array[2, 1]
IDL> dim = SIZE(a, /dim)
IDL> b = REFORM(a,dim)
IDL> help, b
B          INT      = Array[2, 1]
IDL> b = REFORM(a*2,dim)
IDL> help, b
B          INT      = Array[2, 1]
```

Ben
