
Subject: Re: forcing variable definition in IDL?

Posted by [William Daffer](#) on Tue, 01 May 2001 20:26:29 GMT

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

"Liam E. Gumley" <Liam.Gumley@ssec.wisc.edu> writes:

> William Daffer wrote:

>>

>> davidf@dfanning.com (David Fanning) writes:

>> [...]

>>

>>> Don't bother. IDL scalars *are* single element arrays:

>>>

>>> IDL> a=5

>>> IDL> a[0] = 6 & Print, a

>>>

>>

>> Um... Not true.

>>

>> IDL> a=['foo|bar']

>> IDL> print, strsplit(a, '|', /extract)

>> % STRTOK: Expression must be a scalar in this context: STRING.

>> % Execution halted at: STRSPLIT 24

>> /usr/local/rsi/idl_5.3/lib/strsplit.pro

>> % \$MAIN\$

>> IDL> retall

>> IDL> print, strsplit(a[0], '|', /extract)

>> foo bar

>> IDL>

>>

>> There are some other RSI supplied code where one sees this behavior.

>>

>> By the way, this is idl 5.3. I haven't checked idl 5.4.

>

> An array with one element is an *array*, i.e., it has one dimension:

>

> IDL> a = [25]

> IDL> help, a

> A INT = Array[1]

> IDL> print, size(a, /n_dimensions)

> 1

>

> A single subscripted array element is a *scalar expression*, i.e., it

> has no dimensions:

>

> IDL> a = [1, 2, 3, 4, 5]

> IDL> help, a[0]

> <Expression> INT = 1

```
> IDL> print, size(a[0], /n_dimensions)
>      0
>
> A scalar may be treated as though it were a single subscripted array
> element. However, as shown above, a scalar expression has no dimensions:
>
> IDL> a = 100
> IDL> help, a
> A      INT      =      100
> IDL> help, a[0]
> <Expression> INT      =      100
> IDL> print, size(a, /n_dimensions)
>      0
> IDL> print, size(a[0], /n_dimensions)
>      0
>
> The implementer of STRTOK (which is called by STRSPLIT) is therefore
> checking for an input argument which has no dimensions.
>
> Cheers,
> Liam.
> http://cimss.ssec.wisc.edu/~gumley/
```

Um... so you're agreeing with me when I say that David's remark is untrue?

whd

--

Outside of a dog a book is man's best friend.

Inside of a dog it's too dark to read

Groucho Marx