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Subject: Re: keyword question

Posted by [davidf](#) on Wed, 23 May 2001 16:18:51 GMT

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Randall Skelton (rhskelto@atm.ox.ac.uk) writes:

> I am trying to have an array \*optionally\* returned using a keyword  
> and I don't know the dimension of the array prior to the call. Why is  
> it that the passed keyword needs to be defined in IDL prior to being used  
> as a keyword?  
>  
> What am I doing wrong here?

You are using the wrong function to check the keyword.  
KEYWORD\_SET should \*only\* be used to test keywords that  
have a binary function. That is, they are either on or off,  
true or false, 0 or 1, etc.

What you want to know is if you keyword is \*defined\* or  
not. You use N\_ELEMENTS to tell you this:

```
IF N_Elements(b) EQ 0 THEN b = FltArr(10)
```

Here is an article containing more information on this  
topic:

[http://www.dfanning.com/tips/keyword\\_check.html](http://www.dfanning.com/tips/keyword_check.html)

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Re: keyword question

Posted by [John-David T. Smith](#) on Wed, 23 May 2001 16:35:44 GMT

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David Fanning wrote:

>  
> Randall Skelton (rhskelto@atm.ox.ac.uk) writes:  
>

```
>> I am trying to have an array *optionally* returned using a keyword
>> and I don't know the dimension of the array prior to the call. Why is
>> it that the passed keyword needs to be defined in IDL prior to being used
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> You are using the wrong function to check the keyword.
> KEYWORD_SET should *only* be used to test keywords that
> have a binary function. That is, they are either on or off,
> true or false, 0 or 1, etc.
>
> What you want to know is if you keyword is *defined* or
> not. You use N_ELEMENTS to tell you this:
>
> IF N_Elements(b) EQ 0 THEN b = FltArr(10)
```

Actually, since he's trying to return something, he should use `arg_present()` (which really should be called `by_reference()` or something). This doesn't check if the keyword is defined or not (presumably you don't care), but just whether its value at the main level can be altered:

```
if arg_present(b) then b = fltarr(10)
```

`Arg_present()` was added some time ago to solve just this type of problem (which RSI did internally with IDL functions quite a bit).

JD

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