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Subject: Re: Passing zero as a Parameter/ NOT KEYWORD\_SET

Posted by [J.D. Smith](#) on Tue, 29 Jun 1999 07:00:00 GMT

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Martin Schultz wrote:

>  
> J.D. Smith wrote:  
>>  
>>  
>> That's a bit dangerous. [...]  
> Indeed ;-)  
>>  
>> The best way to proceed is pretend keyword\_set() was really  
>> named is\_defined\_and\_non\_zero(). Forget that it's called  
>> keyword\_set().  
> In fact it is "is\_defined\_and\_uneven" !  
> Just try to pass var=2 into a routine and print keyword\_set(var). Hope,  
> David will take notice of this in his article.

I get 1 printed if var is anything but zero or undefined. This sounds like a bug on your version/system, if it's really occurring. So I'll stick with is\_defined\_and\_non\_zero(): a bit of a mouthful, but much less misleading.

> Another marginal point about setting default values: I recently learned  
> from someone's code (cannot remember whose), to use  
> if (n\_elements(var) ne 1) then var=default  
> instead of  
> if (n\_elements(var) eq 0) then var=default  
>  
> The advantage being that you can prevent program crashes when someone  
> passes a vector or array in what is supposed to be a scalar.  
>

Unless, of course, you *are* interested in a vector or array. You're mixing two types of checks here: "is the argument there at all?", vs. "is the argument of the type I want?"... (n\_elements(var) eq 0) will work for any type of expected variable; (n\_elements(var) ne 1) only works if you expect a scalar. You are of course free to do this type of mixing where appropriate (though you don't have to), but for the benefit of those just learning, I thought I should try to make this clear.

> And, finally: Use keyword\_set when you want to make sure the value of a  
> boolean flag is defined:  
> flag = keyword\_set(flag)  
> Then, later in the code, it's just  
> if (flag) then ...  
> Or value = x+y\*(flag), etc. which would crash otherwise.

Yes, another good use of keyword `_set()`.

JD

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