
Subject: Re: A strange behaviour of parameters passing
Posted by [Vapuser](#) on Fri, 04 Jun 1999 07:00:00 GMT
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Daniel SAGE <daniel.sage@epfl.ch> writes:

Yeah, the answer is don't pass expressions into routines if you want the routine to change the value of its parameters.

In the first call you make to 'one' (e.g. one, a[*]) the parameter is passed by `_value_` since it's not a variable but an expression (I think the completely proper way to say this is that what gets passed is a reference to a temporary variable that is destroyed when the routine 'one' exits) The second time you call 'one' the parameter is passed by reference, since you are passing a named variable and not a temporary one. In that case, you can change the contents of the parameter and have that change persist after return.

There's nothing wrong with passing expressions, unless you want to change the value of the parameter inside a routine. It would be nice if they gave us some way of checking whether an expression, rather than a named variable, had been passed in. I am unaware of any such capability.

I don't think you can call this is a bug; I think it's a feature.

William

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> Hi,  
> Who can explain me the strange behaviour when I passed my parameters ?  
> I create a small and stupid example to see the disfunctioning of IDL.  
> Why the first call of the procedure 'one' returns 1 and the second call  
> return 2 ? According the documentation of IDL, the second calling is  
> correct but  
> not the first calling.  
> Thank you  
>  
> pro one, b  
> b[0] = 2  
> end  
>  
> pro two  
> a = intarr(1)  
> a[*] = 1
```

```
> one, a[*]
> print, a
> one, a
> print, a
> end
>
> % Compiled module: ONE.
> % Compiled module: TWO.
> IDL> two
>   1
>   2
>
> -----
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