
Subject: Re: IDL- variable variable names
Posted by [davidf](#) on Thu, 07 Nov 1996 08:00:00 GMT
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I wrote in a previous article:

```
> But..., I got about this close:
>
> FUNCTION MAGIC, file
>   number = 0
>   ok = EXECUTE(file + ' = 0')
>   RESTORE, file
>   RETURN, number
> END
>
> IDL> a = 10
> IDL> number = a
> IDL> Save, a, number, Filename='a'
> IDL> b = 'a'
> IDL> c = Magic(b)
> IDL> IF c EQ 10 THEN Print, "It's magic!"
>
>     It's magic!
```

Here is an obvious modification that I overlooked that nudges it even closer. And I added some help for the 8.3 crowd! :-)

```
FUNCTION MAGIC, file
number = 0
RESTORE, file + '.sav'
RETURN, number
END

IDL> a = 10
IDL> number = a
IDL> Save, number, Filename='a.sav'
IDL> b = 'a'
IDL> c = Magic(b)
IDL> IF c EQ 10 THEN Print, "It's magic!"

    It's magic!
```

This almost borders on the useful now. What do you have in mind for this, Hendrik?

David

* David Fanning, Ph.D.
* 2642 Bradbury Court, Fort Collins, CO 80521
* Phone: 970-221-0438 Fax: 970-221-4762
* E-Mail: davidf@dfanning.com
*
* Sometimes I go about pitying myself, and all along my
* soul is being blown by great winds across the sky.
* -- Ojibway saying

Subject: Re: IDL- variable variable names
Posted by [davidf](#) on Thu, 07 Nov 1996 08:00:00 GMT
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Hendrik Roepcke <alpha@jungle.toppoint.de> writes:

```
> i want to play with IDL Variable names.....Look:  
  
> a=10  
> b="a"  
> c=print,MAGIC("b")  
> if c eq 10 then print," its magic!"  
>  
> So: How to programm this function MAGIC????
```

This looks like deja vu all over again. Here is the
answer: Ain't no way, no how!

But..., I got about this close:

```
FUNCTION MAGIC, file  
  number = 0  
  ok = EXECUTE(file + ' = 0')  
  RESTORE, file  
  RETURN, number  
END
```

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IDL> a = 10  
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It's magic!

David

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Subject: Re: IDL- variable variable names
Posted by [MICHEL KRUGLANSKI](#) on Fri, 08 Nov 1996 08:00:00 GMT
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Try:

```
a = 10
b = 'a'
c = 0
r = execute('c='+b)
print,r,c
```

Michel K.

Subject: Re: IDL- variable variable names
Posted by [alpha](#) on Sun, 10 Nov 1996 08:00:00 GMT
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davidf@fortnet.org (David Fanning) writes:
> I wrote in a previous article:
> Here is an obvious modification that I overlooked that nudges it
> even closer. And I added some help for the 8.3 crowd! :-)

yes... this ugly 8.3 guys.... sometimes they even 8.203 packets...

```
> FUNCTION MAGIC, file
> number = 0
> RESTORE, file + '.sav'
> RETURN, number
> END
```

```
> IDL> a = 10
> IDL> number = a
```

```

> IDL> Save, number, Filename='a.sav'
> IDL> b = 'a'
> IDL> c = Magic(b)
> IDL> IF c EQ 10 THEN Print, "It's magic!"
>
>     It's magic!

```

> This almost borders on the useful now. What do you have
> in mind for this, Hendrik?

hmmm OK, it seems it does not suffer on the 131-problem!

i will do some meditation on that...

Panther (alias Hendrik)

--

Panther in the Jungle
-BELIEVE AND DECEIVE-
<http://www.ang-physik.uni-kiel.de/~hendrik> ((. . .) (< _ ; _ . _ _ ; ' ^))

Subject: Re: IDL- variable variable names
Posted by [meron](#) on Sun, 10 Nov 1996 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article <davidf-ya023080000711961510130001@news.frii.com>, davidf@fortnet.org (David Fanning) writes:

> I wrote in a previous article:

>

>> But..., I got about this close:

>>

```

>> FUNCTION MAGIC, file
>>   number = 0
>>   ok = EXECUTE(file + ' = 0')
>>   RESTORE, file
>>   RETURN, number
>> END
>>

```

```

>> IDL> a = 10
>> IDL> number = a
>> IDL> Save, a, number, Filename='a'
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```

```

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>
> Here is an obvious modification that I overlooked that nudges it
> even closer. And I added some help for the 8.3 crowd! :-)
>
>  FUNCTION MAGIC, file
>  number = 0
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>  IDL> a = 10
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>
> This almost borders on the useful now.  What do you have
> in mind for this, Hendrik?
>
Oh, you can get useful stuff using EXECUTE, and there is no need to go
through saving and restoring.  Here is an example

```

Function One_of, v_0, v_1, v_2, v_3, v_4, v_5, v_6, v_7, value = val

```

;+
; NAME:
; ONE_OF
; PURPOSE:
; Called with up to 8 variables V_0 through V_7 , ONE_OF checks which
; variable is defined (only one is supposed to be).
; CATEGORY:
; Programming.
; CALLING SEQUENCE:
; Result = ONE_OF( V_0 [,V_1, ... V_7] [, VALUE = VAL])
; INPUTS:
;   V_0 through V_7
; Arbitrary, all are optional.
; OPTIONAL INPUT PARAMETERS:
; See above.
; KEYWORD PARAMETERS:
;   VALUE
; Optional output, see below.
; OUTPUTS:
; Returns the serial number (range 0 through 7) of the defined variable,

```

```

; or -1 if none is defined. If more than one variable is defined, ONE_OF
; issues an error message and returns to the main level.
; OPTIONAL OUTPUT PARAMETERS:
;   VALUE
; The name of the variable to receive the value of the single defined
; variable, or a null string if none is defined.
; COMMON BLOCKS:
; None.
; SIDE EFFECTS:
; None.
; RESTRICTIONS:
; Currently ONE_OF is restricted to a maximum of 8 variables. If needed,
; the number can be increased.
; PROCEDURE:
; Straightforward.
; MODIFICATION HISTORY:
; Created 15-JUL-1991 by Mati Meron.
; Modified 30-JUL-1991 by Mati Meron. The dependence of the original
; code on the EXECUTE system routine has been eliminated in order to
; assure compatibility with the OUTPUT routine.
; Modified 15-NOV-1993 by Mati Meron. Since IDL now allows for recursive
; calls to EXECUTE, the original code has been restored.
;-

```

```

on_error, 1
vnams = ['v_0','v_1','v_2','v_3','v_4','v_5','v_6','v_7']
exlist = lonarr(8)
exind = -1
val = ""

for i = 0, n_params() - 1 do idum = $
execute('exlist(i) = n_elements(' + vnams(i) + ')')
wex = where(exlist gt 0, nex)
if nex eq 1 then begin
exind = wex(0)
idum = execute('val = ' + vnams(exind))
endif else if nex gt 1 then message, 'Only one variable may be defined!'
return, exind
end

```

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"
