
Subject: Re: Global Variable

Posted by [R.Bauer](#) on Tue, 02 Oct 2001 15:47:43 GMT

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Martin Downing wrote:

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>
> "Reimar Bauer" <r.bauer@fz-juelich.de> wrote in message
> news:3BB85BEB.45BD9C5D@fz-juelich.de...
>> Martin Downing wrote:
>>>
>>> "Reimar Bauer" <r.bauer@fz-juelich.de> wrote in message
>>> news:3BB83D11.5A58FC00@fz-juelich.de...
>>>>
>>>> The fourth way is to use Pointers
>>>>
>>>>
>>>> value=10
>>>> ptr=ptr_new(value)
>>>>
>>>> help, *ptr
>>>>
>>>> Reimar
>>>>
>>>
>>> Reimar,
>>>
>>> If this is to be a global variable, do you have a cunning method of
> locating
>>> and identifying this variable off the heap?
>>>
>>> Martin
>>
>> - locating is be done by ptr_valid()
>>
>> - identifying is a bit more complicated.
>>
>> At the moment I am only able to identify named structures as pointers.
>> We are using them as global variable in some of our widgets with
>> external communication
>> between some of our widgets.
>>
>>
> http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/downl
> oad/get_pointer.tar.gz
>>
>
> Thanks Reimar, thats really very useful. I have added the line
> to the function so that it can still work if there are non-structure
```

```

> pointers on the heap.
> cheers
>
> Martin
>
> FUNCTION get_pointer,name
> ...
> ...
>   FOR i=0,N_ELEMENTS(c)-1 DO BEGIN
>     if type(*c[i]) ne 8 then continue  ; only test structure pointers
>     s_name=TAG_NAMES(*c[i],/STRUCTURE_NAME)
>     IF STRUPCASE(name) EQ s_name THEN RETURN,c[i]
>   ENDFOR
> ...
> ...
> END
>

```

Dear Martin,

your type function could be replaced by size() with it's keyword /type.

I will include this into my routine, thanks.

regards
Reimar

```

>>
>> Reimar
>>
>>
>> --
>> Reimar Bauer
>>
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>> email: R.Bauer@fz-juelich.de
>> http://www.fz-juelich.de/icg/icg1/
>> =====
>> a IDL library at ForschungsZentrum Juelich
>> http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml
>>
>> http://www.fz-juelich.de/zb/text/publikation/juel3786.html
>> =====

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>>
>> read something about linux / windows
>> http://www.suse.de/de/news/hotnews/MS.html
>
> ; FUNCTION: TYPE
> ;
> ; Purpose: Returns the data type of a variable as defined in the size() function
> ; May be used on undefined variables also (data type = 0)
> ;
> ; Example:
> ; IDL> print, type(s)
> ; 0
> ; IDL> s = { a:1, b:2}
> ; IDL> print, type(s)
> ; 8
> ;
> ; Author: Martin R Dowining 1996
> FUNCTION Type , x
>
>     var_info = size(x)
>
>     RETURN, var_info( N_ELEMENTS( var_info ) - 2)
>
> END
>
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> ; This software may be used, copied, or redistributed as long as it is not
> ; sold and this copyright notice is reproduced on each copy made. This
> ; routine is provided as is without any express or implied warranties
> ; whatsoever.
> ;+
> ; NAME:
> ; get_pointer
> ;
> ; PURPOSE:
> ; This routine gets a defined pointer over the structure name
> ;
> ; CATEGORY:
> ; PROG_TOOLS
> ;
> ; CALLING SEQUENCE:
> ; a=get_pointer(name)
> ;
> ; INPUTS:
> ; name : the name of the pointer
> ;

```

```

> ; OUTPUTS:
> ; the pointer or -1 if it is not defined
> ;
> ; EXAMPLE:
> ; a=PTR_NEW(CREATE_STRUCT(name='dd','name','a','value',24))
> ; b=get_pointer('dd')
> ; HELP,*b,/str
> ; ** Structure DD, 2 tags, length=12:
> ; NAME          STRING   'a'
> ; VALUE         INT      24
> ;
> ;
> ; MODIFICATION HISTORY:
> ; Idea was given by F.Rohrer ICG-3
> ; Written by:   R.Bauer (ICG-1), 1999-03-15
> ;
> ;
> FUNCTION get_pointer,name
>   c=PTR_VALID()
>
>   errvar=0
>   catch,errvar
>   if errvar ne 0 then return,-1
>
>   FOR i=0,N_ELEMENTS(c)-1 DO BEGIN
>       ; only test structure pointers
>       if type(*c[i]) ne 8 then continue
>       s_name=TAG_NAMES(*c[i],/STRUCTURE_NAME)
>       IF STRUPCASE(name) EQ s_name THEN RETURN,c[i]
>   ENDFOR
>
>   RETURN,-1
> END

```

--

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<http://www.fz-juelich.de/icg/icg1/>

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a IDL library at Forschungszentrum Juelich

http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html

<http://www.fz-juelich.de/zb/text/publikation/juel3786.html>

=====

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