Subject: Re: Help: definition of the structure in COMMON block Posted by R.Bauer on Tue, 30 Mar 1999 08:00:00 GMT

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VU KHAC Tri wrote:

```
> Hi folks,
> I want to define a structured variable as global variable. So I think
> about using the COMMON block to share this variable with others
> procedures. However, IDL does not enable to use this variable in a
> procedure without declaration.
>
> pro A
> COMMON SHARE1, X
                             ;how to define x as a structure?
> X.a = 1
> X.b = 2
> end
> pro B
> COMMON SHARE1
> X.a = 4
              ; this is not permitted
> X.b = 5
> end
> Does anyone know how to resolve this problem?
> Thanks for your help.
> Best regards,
> Tri.
> PS. Thanks also all of you for all your precedent responses.
```

You should think about on using an heap variable too. With those kind of variables you got more flexibility as with a common block.

This heap variable has to be defined only once and you can use it in each routine without any declaration.

```
heap=PTR NEW(CREATE STRUCT(name='dd', 'name', 'a', 'value', 24))
```

```
pro test
b=get pointer('dd')
help,*b,/str
print,(*b).name
; ptr_free,b ;remove pointer
end
```

```
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; 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:
                STRING
  NAME
                          'a'
                           24
  VALUE
                INT
 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
  s_name=TAG_NAMES(*c[i],/STRUCTURE_NAME)
   IF STRUPCASE(name) EQ s_name THEN RETURN,c[i]
 ENDFOR
 RETURN,-1
END
```