Subject: Help: definition of the structure in COMMON block Posted by VU KHAC Tri on Sun, 28 Mar 1999 08:00:00 GMT

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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.

Subject: Re: Help: definition of the structure in COMMON block Posted by R.Bauer on Tue, 30 Mar 1999 08:00:00 GMT View Forum Message <> Reply to Message

VU KHAC Tri wrote:

```
Hi folks,
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procedure without declaration.
pro A
COMMON SHARE1, X ;how to define x as a structure?
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> 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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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
  VALUE
               INT
                         24
MODIFICATION HISTORY:
 Idea was given by F.Rohrer ICG-3
              R.Bauer (ICG-1), 1999-03-15
   Written by:
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
```