

---

Subject: Help: definition of the structure in COMMON block  
Posted by [VU KHAC Tri](#) on Sun, 28 Mar 1999 08:00:00 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

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,
>
> 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_STRUCTURE(name='dd','name','a','value',24))
```

```

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

```

```

; Copyright (c) 1999, Forschungszentrum Juelich GmbH ICG-1
; All rights reserved.
; Unauthorized reproduction prohibited.
; 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
    s_name=TAG_NAMES(*c[i],/STRUCTURE_NAME)
    IF STRUPCASE(name) EQ s_name THEN RETURN,c[i]
  ENDFOR

```

```

  RETURN,-1
END

```