
Subject: Re: Structure of Structure

Posted by [thompson](#) on Fri, 20 Mar 1998 08:00:00 GMT

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Stephan Oerder <Oerder@nv.et-inf.uni-siegen.de> writes:

> I have a problem :
> IDL/WAVE informs me that my big structure have too many tags !!!
> So I decided to to devide the big structure into two smaller ones...
> I try to create a structure of a structure :

```
> fr_1 = { STRUCT_1_NAME, $  
>     Test_1:bytarr(12), $  
>     Test_2:bytarr(12), $  
>     Test_3:bytarr(12) $  
> }
```

```
> fr_2 = { STRUCT_2_NAME, $  
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>     Test_b:bytarr(12), $  
>     Test_c:bytarr(12) $  
> }
```

```
> fr = { STRUCT_NAME, $  
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> This is not working !!!!
> How can I create a structure of a structure ???
> Stephan

Your problem is extremely simple. You have a couple of simple typos in the final command. (It happens to the best of us.) If you instead enter in

```
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it should work fine.

Bill Thompson

Subject: Re: Structure of Structure

Posted by [Theo Brauers](#) on Fri, 20 Mar 1998 08:00:00 GMT

create_structure is a build-in function of IDL. It should work on all systems. As far as I remember there was a problem with structures of of structures in IDL3.xx or IDL 4.xx but who cares? I am using IDL 5.0.3 on WinNT.

Theo

Stephan Oerder wrote:

>

> Thanks a lot !!!

> I tried it already on a PC-IDL-System !!!!

> But we need it on a VAX-VMS-System !!!

> Do you (or somebody else) have the PRO-File of "Create_Struct(...)" ???

> Stephan

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> Theo Brauers wrote:

>> You may try:

>>

>> m1 = create_struct('a', 0, 'b', bytarr(12))

>> m2 = create_struct(name='m2_str', 'a', 0, 'c', fltarr(12))

>> ; array of structures

>> m3 = replicate(m2, 3)

>>

>> m = create_struct('a1', m1)

>> m = create_struct(m, 'a2' , m2)

>> m = create_struct(m, 'a3' , m3)

>>

>> Best, Theo

>> -----

>> Dr. Theo Brauers

>> Institut fuer Atmosphaerische Chemie (ICG-3)

>> Forschungszentrum Juelich

>> 52425 JUELICH, Germany

>> Tel. +49-2461-61-6646 Fax. +49-2461-61-5346

--

Dr. Theo Brauers

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Posted by [Theo Brauers](#) on Fri, 20 Mar 1998 08:00:00 GMT

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Subject: Re: Structure of Structure
Posted by [David Foster](#) on Mon, 23 Mar 1998 08:00:00 GMT
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Stephan Oerder wrote:

```
>
> <snip of Bill's solution>
>
>> Bill Thompson
>
> Thanks 1000 * times !!!
>
> This was not the main problem !!!
> My problem is that under IDL 3.xx and IDL 4.xx
> IDL have a problem with Structure of Structure definitions.
```

> I tested your routine under IDL 3.xx and IDL 4.xx (PC, Vax-VMS) and it
> was not working .
> But under IDL 5.0 (Alpha) it works...
> -> let's update...
> Stephan

The problem may not be with the definition of a structure within a structure, but may simply be that IDL prior to version 5.0 had a maximum number of structure tags allowed (don't know the number off the top of my head). Nesting the structures may not help as this was an internal limitation.

Dave

--

~~~~~  
David S. Foster      Univ. of California, San Diego  
Programmer/Analyst   Brain Image Analysis Laboratory  
foster@bail1.ucsd.edu   Department of Psychiatry  
(619) 622-5892      8950 Via La Jolla Drive, Suite 2240  
                    La Jolla, CA 92037  
~~~~~

Subject: Re: Structure of Structure
Posted by [Stephan Oerder](#) on Mon, 23 Mar 1998 08:00:00 GMT
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William Thompson wrote:

>
> Stephan Oerder <Oerder@nv.et-inf.uni-siegen.de> writes:
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> it should work fine.
>
> Bill Thompson

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-> let's update...

Stephan

Subject: Re: Structure of Structure

Posted by [Thomas A. McGlynn](#) on Tue, 24 Mar 1998 08:00:00 GMT

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Stephan Oerder wrote:

```

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> Do you (or somebody else) have the PRO-File of "Create_Struct(...)" ???
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> Theo Brauers wrote:
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```

You might also want to look at a function I wrote a few years ago called MRD_STRUCT. It takes two string array arguments. The first gives the names of the structure columns and the second gives a prototype for what the column should look like.

E.g., A call would might look like:

```

names = ["name_for_col1", "name_for_col2",...]
vals = ["dblarr(10,10)", "0L", "intarr(3,2,4), ...]

str = mrd_struct(names, vals)

```

with additional optional arguments to create an array of structures or to define the structure type. If you request a structure of more than 128 elements, then the routine automatically creates substructures, putting the first 64 elements in the top level structure, the next 64 in a structure as the 65th element and so forth. I believe this has run successfully on VAXes for versions of IDL > 3.6.

It's available in the IDL Astronomy library at:

http://idlastro.gsfc.nasa.gov/ftp/pro/structure/mrd_struct.p ro

Good luck,

Tom McGlynn
tam@silk.gsfc.nasa.gov

Subject: Re: Structure of Structure
Posted by [alpha](#) on Wed, 25 Mar 1998 08:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Thomas A. McGlynn" <am@sil.k.gsfc.nasa.gov> writes:

> Stephan Oerder wrote:
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> for versions of IDL > 3.6.

this is similar to my IDL 5.0 bug i found in idl 4.01 at 23.Dec. 96
which is known to RSI as an internal kernel-Bug of IDL!

i wrote a programm that hung the maschine:

pro fail

```
for te=1,105 do begin
  anzahl=te
  tname=strarr(anzahl)
  for i=0,anzahl-1 do tname(i)='TN_'+strcompress(string(i),/remove_all)

  ttyp=strarr(anzahl)
  ; zum ausuchen / try one of it
  ttyp(*)=""String-test""
  ttyp(*)="fltarr(10)"
  ttyp(*)="dcomplexarr(102)"

  ziel=byte(0)
  estring='ziel={'
  for i=0,anzahl-1 do begin
    if i gt 0 then estring=estring+', '
    estring=estring+tname(i)+':'+ttyp(i)
  endfor
  estring=estring+'}'

  if execute(estring) then begin
    print,' Execute OK: ',te
  endif else begin
    goto,abbruch
  endelse
endfor
```

```
abbruch:
print, ' Execute failed at ',te
end
```

Even worse is the switchng of the data-type every time!

Panther

> It's available in the IDL Astronomy library at:

> http://idlastro.gsfc.nasa.gov/ftp/pro/structure/mrd_struct.p ro

> Good luck,

> Tom McGlynn

> tam@silks.gsfc.nasa.gov

--

Panther in the Jungle

-BELIEVE AND DECEIVE-

<http://www.ang-physik.uni-kiel.de/~hendrik> ((..-' (< _ ;_..__ ;`'` (^))