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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:

>  
> 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  
>  
> 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  
>> -----  
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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 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.pro](http://idlastro.gsfc.nasa.gov/ftp/pro/structure/mrd_struct.pro)

Good luck,

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