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Subject: Re: Structures:

Posted by [R.Bauer](#) on Thu, 22 Feb 2001 07:24:33 GMT

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Chris Bull wrote:

>  
> Hi all,  
>  
> A question regarding IDL structures, I have an application that I am  
> writing that I am using a very complex  
> structure as a Uvalue to hold my data in, as this application evolves I am  
> wondering whether it  
> is possible to add 'branches' to a structure after it is defined (and set as  
> a uvalue), from within a separate subroutine?  
>  
> I'm Thinking along the lines of describing an application that can hold many  
> data sets, of different types in memory  
> and load them up separately (much like a imaging program or multiple  
> documents in word) except the data sets are  
> very complex and of differing structures  
>  
> Any Ideas?

Yes it's possible if you have anonymous structure.

the trick is to store all structure levels to a string vector  
and all tagvalues to a vector of pointers.

Then the new values in both are inserted and the structure is  
new generated.

This is quite fast.

For example add\_tag

```
; d = {A: 1, B: {B1: 0, B2: 1}, C: {B1: 0, B2: 1}}
;
;
; help,d,/str
; ** Structure <1331608>, 3 tags, length=10, refs=1
; A      INT      1
; B      STRUCT   -> <Anonymous> Array[1]
; C      STRUCT   -> <Anonymous> Array[1]

; result = add_tag(d, 'ASA', 11, sub = 'B')
; HELP, result.b, /STR
; ** Structure <133ce88>, 3 tags, length=6, refs=1
; B1     INT      0
```

```

; B2      INT      1
; ASA     INT      11

; result = add_tag(d, 'BSB', {C11: INDGEN(3)}, sub = 'B.B3')
; HELP, result.b, /STR
; ** Structure <1357758>, 3 tags, length=10, refs=2:
; B1      INT      0
; B2      INT      1
; B3      STRUCT   -> <Anonymous> Array[1]

```

Please have a look at the following routines.

```

http://www.fz-juelich.de/icg/icg1/idl\_icglib/idl\_source/idl\_html/dbase/download/replace\_tagvalue.tar.gz
http://www.fz-juelich.de/icg/icg1/idl\_icglib/idl\_source/idl\_html/dbase/download/add\_tag.tar.gz
http://www.fz-juelich.de/icg/icg1/idl\_icglib/idl\_source/idl\_html/dbase/download/rename\_tag.tar.gz
http://www.fz-juelich.de/icg/icg1/idl\_icglib/idl\_source/idl\_html/dbase/download/delete\_tag.tar.gz

```

For further routines and licensing please look at  
[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html)

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<http://www.fz-juelich.de/icg/icg1/>

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a IDL library at Forschungszentrum Juelich  
[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html)

<http://www.fz-juelich.de/zb/text/publikation/juel3786.html>

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