Subject: Re: Named and Anonymous structures ? Posted by rivers on Mon, 09 Oct 1995 07:00:00 GMT

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In article <DG1EBF.FrJ@rivm.nl>, robk@rivm.nl (Rob Koopman) writes:

- > I could use a refreshing idea to get me out of a problem related to
- > structures in IDL:

>

- > I must read binary data with variable format and had no problem to
- > write an extraction programme that reads one file per IDL session,
- > but my main problem now is that named structures cannot be changed once
- > defined, and at the same time, anonymous structures (which can be
- > changed) cannot be part of other anonymous structures.

I just ran a test under IDL 4.0.1 and created an anonymous structure which contained another anonymous structure. I seem to recall that that limitation was lifted some time ago. I think you need to upgrade to a more recent release of IDL.

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Subject: Re: Named and Anonymous structures ? Posted by steinhh on Mon, 09 Oct 1995 07:00:00 GMT View Forum Message <> Reply to Message

```
In article <DG1EBF.FrJ@rivm.nl>, robk@rivm.nl (Rob Koopman) writes:
|>
[snip]
> struc3 = { made to measure struc,
                first_array: fltarr(number_of_rows, 10), $; dynamic
|>
                another_arr: intarr(number_of_rows, 25), $; arrays
|>
|>
        };
1>
|> array_of_struc3s = replicate({file_specific_struc},struc2.nmbr_o_records)
> readu,unit,array of struc3s
|> free lun,unit
|> struc_back_to_main = { pret_a_porter_struc
                 first: struc1
1>
                 secnd: struc2
|>
                                 , $
                  (3): .....
|>
                                 , $
                  (4): .....
|>
                 fifth: array_of_struc3s,$
```

```
(6): .....
                                  $
|>
|>
        };
> end
|>
|>
|> But here's my problem. I can make "struc_back_to_main" an anonymous
|> structure, and this allows me to read files with different "nmr_o_records"
|> but as soon as there's a file with a different "number of rows" I'm in
> trouble: "struc3" should then also be anonymous, but unfortunately
> anonymous structures cannot be part of other anonymous structures
> as I've just found out after writing several main programs that call
|> this procedure :-(
> Once this struc_back_to_main is passed to the caller, struc3
> can be destroyed, as far as I'm concerned, but the only way I've
> managed to do that, is by exiting the IDL session.
|>
|> Is there another way to destroy named structures?
```

As far as I can tell (haven't had too much experience with version 4.0), there's only one solution (other than rewriting your code substantially with your own storage allocation system):

Use:

```
dymmy=execute( $
   "struc3={made_to_measure_" + trim(number_of_rows) + "," +$
        "first_array: fltarr(number_of_rows, 10),"+ $; dynamic
        "another_arr: intarr(number_of_rows, 25) }" $; arrays
)
```

where trim(N) \equiv strcompress(string(N),/remove_all)

This will give you named structures e.g., "MADE_TO_MEASURE_100" for storing 100 rows, and "...._200" for storing 200 rows.

Stein Vidar