
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

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In article <DG1EBF.FrJ@rivm.nl>, robk@rivm.nl (Rob Koopman) writes:
>
[snip]
> struc3 = { made_to_measure_struct,
> first_array: fltarr(number_of_rows, 10), \$; dynamic
> another_arr: intarr(number_of_rows, 25), \$; arrays
> };
>
> array_of_struc3s = replicate({file_specific_struct},struc2.nmbr_o_records)
> readu,unit,array_of_struc3s
> free_lun,unit
> struc_back_to_main = { pret_a_porter_struct \$
> first: struc1 , \$
> 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
