
Subject: Re: saving variables between calls to a procedure?
Posted by [Paul Van Delst\[1\]](#) on Thu, 01 Aug 2002 18:38:45 GMT
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JD Smith wrote:

>
> On Thu, 01 Aug 2002 07:45:52 -0700, Paul van Delst wrote:
>
>>
>> I'm not worried about extending arrays like a=[a,b], but pointers ala
>> *ptr=[*ptr,10]. If ptr is pointing to some data structure (scalar or
>> array), it seems feasible to me that the next position in memory could
>> be occupied by something else. If one then does a *ptr=[*ptr,10], what
>> happens to what was in that memory? Is it "protected" somehow so that
>> the value "10" is then placed in the next "free" spot in memory giving a
>> non-contiguous array [not efficient, but safe], or are the contents
>> clobbered and replaced by the value "10" [very very bad], or are the
>> contents moved to some other memory location so that the original
>> position can be used to store the value "10" [relatively efficient(?)
>> and safe].
>
> The best way to think of pointers in IDL is to forget what you know from
> other languages like C, and regard them as special unnamed, but otherwise
> perfectly normal IDL variables which live in a global heap available
> everywhere, and thus aren't created/destroyed when you enter or exit
> routines.

Ahh. Fair enough.

> Here we see we can recall the pointer heap variable off the heap. And
> just as for normal IDL variables, you can arbitrarily reassign them,
> extend them, change the data type of, etc.:

I did not know you could do that with pointers in IDL.

> Of course, this ease of type/size/layout changing hides lots of
> behind-the-scenes memory-juggling, some of which may be rather
> inefficient, so it pays to have a little more familiarity with the methods
> these operations use internally.

Yeah.... apart from inspecting data files, I use IDL mostly to prototype code for Fortran 90/95 so I tend to avoid (or, as in this case, not even know about <ehem>) the neato power-user type of tricks.

paulv

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Paul van Delst

CIMSS @ NOAA/NCEP/EMC
Ph: (301)763-8000 x7274
Fax:(301)763-8545

Beer is good.
My wife.
