Subject: Pointers in IDL
Posted by Benjamin Hornberger on Tue, 13 Apr 2004 15:29:45 GMT
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Hi all,

I still don't understand all aspects of pointers in IDL. 2 Questions:

1. What are null pointers for? I read that they can't be dereferenced. What is their purpose then? The Gumley book writes (pg. 61): "Null pointers are used when a pointer must be created, but the variable ... does not yet exist." What would I do then when the variable does exist later and I want the pointer to point to it? Wouldn't I use ptr_new(/allocate_heap) in the first place, i.e. not create a null pointer but a pointer to an undefined variable? Can anyone give an example when I would use ptr_new()?

2. If I point a pointer to a variable (e.g. *ptr=indgen(100)) and later point it to a smaller variable (*ptr=indgen(50)), do I have a memory leak? I.e., do I have to free it before I re-reference it?

I want to write a GUI which can open files which contain arrays of varying size. Is it ok to define a pointer in the GUI to hold these arrays (ptr=ptr_new(/allocate_heap)), and then whenever I open a new file, just dereference to the new array (*ptr=array)? Or do I have to free the pointer when I close one file and open another one?

Thanks for your help,
Benjamin