Subject: Re: Pointer syntax and IDL 4.0: summary
Posted by tam on Thu, 20 Dec 2001 17:39:19 GMT
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tam wrote:

>
...

> Is there any way of addressing this, i.e., dereferencing a pointer
> in a way that will not cause a syntax error for earlier versions of IDL?
> Thanks,
> Tom McGlynn
> tam@lheapop.gsfc.nasa.gov
>

Thanks to all who wrote responses. I'm not sure any do quite what I want but I now have a set of options...

1. I can just forget about backwards compatibilility with the old code -- figure v4 users can use earlier versions of my code.

2. Use library routines, like Liam Gumley's, which hide the derefenence in a single function call and hope that V4 users don't explicitly try to compile that function. In Liam's code the Pointer_setgetv5 routine has the dereference syntax. It means that the user has to download at least two separate files.

3. Use execute to do all dereferences in run-time compiled code. This works fine but may be inefficient in some cases since the routines may be called millions of times. It's not as bad as I originally thought though... Millions would be a rare case and I seem to get about 20K execute calls per second which would mean the overhead would be negligible most of the time.

4. Use run-time compilation (a la 3) but compile a function (as in 2) to do the dereference. This would be nice since it would combine efficiency and common v4/v5 code. Alas I can't get execute to compile a function, so this requires creating
a temporary file -- and that's a real pain. Does anyone know how/if you can compile a function in execute (or more generally without reference to a physical file)? I'm hoping there's some devious route around the limits that IDL seems to have here.

Thanks for the help,

Regards,
Tom McGlynn