Subject: Re: JAVA Bridge Problem
Posted by David Fanning on Tue, 07 Apr 2009 01:26:47 GMT
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David Fanning writes:

- > I am going to make another plea for information or help. We are
- > writing a large JAVA program to serve up data. We are hoping
- > to use IDL objects to produce "analysis plots" of the data.
- > We have had absolutely NO luck getting the IDLEXBR_Assistant,
- > which is used to write the JAVA wrapper program that can
- > access the IDL object to work.

Oh, dear. This article should have been entitled "JAVA Bridge Problem: A Cautionary Tale".

Thanks to Jim Pendleton at ITTVIS, who gave me some fresh ideas which enabled me to track this problem down. I'm almost embarrassed to tell you what it was. For nearly twenty years I've preached the mantra of IDL file naming conventions: Put the "command" module last in the file, give the file the name of the command module, and if you have other modules in the file, they should ONLY be utility routines for the command module. Do something else, and you will surely invite a world of frustration and pain.

I should attend one of my own classes one of these days.

Anyway, about a year ago I wrote PS_START and PS_END, which were easy ways to set up your PostScript output, get nice looking PNG files for seminar presentations, and the like. Very nice programs (especially with recent changes) and I use them often.

But, as it happened, I thought, well, there is no point calling PS_END unless you first called PS_START, so what's the harm in putting them in the same file, with PS_END ahead of PS_START in the file? When you call PS_START, PS_END will by necessity get compiled, so all will work as expected and this will be a convenience for the user.

I can't tell you how many hours I've spent tracking this problem down, but "convenience" is not a word I've been familiar with lately.

Anyway, as near as I can tell, the IDLExBr_Assistant has a different way of compiling IDL code than the rest of IDL,

because this turned out to be a compilation order problem. At least I think it is. The error handling in the Bridge Assistant is, uh, not very helpful, so I can't tell you exactly what the problem was, only how I fixed it.

The solution, in my case, was to create separate files for PS_END and for a structure definition that I used in both PS_START and PS_END. Once I did that, the Bridge Assistant had no trouble opening the object file.

I'll be updating my files later tonight, and *finally* moving on to some more pleasant tasks. Maybe I'll even take that book, IDL Programming Techniques, to bed with me tonight. I hear it has some good IDL programming tips. :-)

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")