Subject: Re: Linking multiple files... Posted by David Fanning on Tue, 23 Jul 2002 00:20:16 GMT View Forum Message <> Reply to Message

Bob (squad@hotmail.com) writes:

- > Hey everyone... maybe I'm just really dumb, but for some reason I
- > can't get IDL to properly link several files together. What I mean by
- > link is the following:

>

- --- In one file, I have a function called "FINDROOTS" which finds the
- roots of a quadratic equation (Function FindRoots, a, b, c).

>

- --- In one file I have a procedure "PRINT_TO_FILE", which calls
- > FindRoots with a very short list of different a's and b's and c's, and
- > then outputs it to a text file.

>

- > I open both of these files up in IDL and tell it to "Compile All". In
- > the event log it says:

- > % Compiled module: FINDROOTS
- > % Compiled module: PRINT TO FILE

>

- > So, I run the procedure PRINT_TO_FILE. I immediately get the following
- > error:
- % Variable is undefined: FINDROOTS

>

- > The strange thing is that if I recompile both yet again (without any
- > changes), the error goes away and everything is fine. However, this is
- > incredibly annoying. Also, my problem isn't *this simple*, and this
- > happens again and again and again

>

> Any help would be greatly appreciated.

Put FINDROOTS in a file named "findroots.pro". Put PRINT TO FILE in a file named "print to file.pro". Make sure both of those modules are the *last* module in their respective files. Put the files somewhere in your !PATH.

Now you don't have to compile anything and everything will magically "work". :-)

Cheers,

David

David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Linking multiple files...

Posted by Craig Markwardt on Tue, 23 Jul 2002 02:35:07 GMT

View Forum Message <> Reply to Message

squad@hotmail.com (Bob) writes:

- > Hey everyone... maybe I'm just really dumb, but for some reason I
- > can't get IDL to properly link several files together. What I mean by
- > link is the following:

>

- > --- In one file, I have a function called "FINDROOTS" which finds the
- > roots of a quadratic equation (Function FindRoots, a, b, c).

>

- > --- In one file I have a procedure "PRINT_TO_FILE", which calls
- > FindRoots with a very short list of different a's and b's and c's, and
- > then outputs it to a text file.

David's solution is the correct one. The quick and dirty solution is to put:

forward_function findroots

within PRINT_TO_FILE, before the first reference to FINDROOTS() is made.

The problem is that IDL doesn't know whether you are referring to an function or an array, since both are accessed using the () notation. Since you didn't keep FINDROOTS in its own self-named file, IDL won't know about it and assume that references to FINDROOTS are array references. The above hint helps IDL decide.

Good luck,
Craig

-Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: Linking multiple files...

Posted by Pavel A. Romashkin on Tue, 23 Jul 2002 15:26:39 GMT

View Forum Message <> Reply to Message

Assuming a fairly late version of IDL, you can specify Compile opt IDL2 inside your routines, which will force strict definitions of arrays using []. This way, ambiguity of using () is avoided and you routines will execute every time. HTH, Pavel

Bob wrote:

>

- > I open both of these files up in IDL and tell it to "Compile All". In
- > the event log it says:

>

- > % Compiled module: FINDROOTS
- > % Compiled module: PRINT_TO_FILE

>

- > So, I run the procedure PRINT_TO_FILE. I immediately get the following
- > error:
- > % Variable is undefined: FINDROOTS