Subject: Re: C-->IDL / FORTRAN-->IDL searched Posted by Tim Patterson on Wed, 14 Aug 1996 07:00:00 GMT

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Stein Vidar (UiO) wrote:

>

- > In article <32106E36.11DF863A@phim.unibe.ch>, Simon Hefti <hefti@phim.unibe.ch> writes:
- > |> Hi,
- > |>
- > |> has anyone written a C to IDL and/or FORTRAN to IDL converter
- > |> similar to p2c or f2c?
- > |>
- > |> If not I think this might be a very nice tool to have ...

>

- > Indeed, but I wouldn't spend much time searching for one,
- > it's quite unlikely that any such creature exists.
- > Going from a "low-level" to a "high-level" language is not
- > an easy task to do automatically -- it's just about impossible.
- > Going the other way, from IDL->C or IDL->FORTRAN is feasible,
- > though, but I haven't heard about any program that actually does
- > it.

>

> Stein Vidar

Going from C -> IDL might be impossible unles somebody wanted to handle pointers anbd pinters to pointers etc.

But Fortran -> IDL should be easier. At least, i can think of anything in F77 that can't be done in IDL. Optimizing the IDL code would be the hard part if you wanted to make an efficient translation.

Tim

Subject: Re: C-->IDL / FORTRAN-->IDL searched Posted by steinhh on Wed, 14 Aug 1996 07:00:00 GMT

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In article <32106E36.11DF863A@phim.unibe.ch>, Simon Hefti <hefti@phim.unibe.ch> writes:

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Indeed, but I wouldn't spend much time searching for one, it's quite unlikely that any such creature exists.

Going from a "low-level" to a "high-level" language is not an easy task to do automatically -- it's just about impossible. Going the other way, from IDL->C or IDL->FORTRAN is feasible, though, but I haven't heard about any program that actually does it.

Stein Vidar

Subject: Re: C-->IDL / FORTRAN-->IDL searched Posted by steinhh on Thu, 15 Aug 1996 07:00:00 GMT

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In article <32127A95.41C6@raptor.lpl.arizona.edu>, Tim Patterson <tim@raptor.lpl.arizona.edu> writes:

|>

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- |> But Fortran -> IDL should be easier. At least, i can think of
- > anything in F77 that can't be done in IDL. Optimizing the
- > IDL code would be the hard part if you wanted to make an efficient
- l> translation.

|>

Yes, you're right about that. I guess you could *almost* convert an f77 program to IDL through some simple search-and-replace macros/functions in emacs, but then you'd essentially have a slow f77 program, with f77 programming style but with IDL syntax/semantics. Much better then, to either use call_external fortran subroutines, or to use IDL as an RPC server from f77. Both methods allow mixing of f77 for speed and IDL for e.g., plotting.

I don't program in Fortran so don't take the above statement about f77->IDL by search-and-replace statements too seriously.

Stein Vidar