

---

Subject: Re: C-->IDL / FORTRAN-->IDL searched  
Posted by [Tim Patterson](#) on Wed, 14 Aug 1996 07:00:00 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

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 unless somebody wanted  
to handle pointers and pointers 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  
[View Forum Message](#) <> [Reply to Message](#)

---

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

---

---

Subject: Re: C-->IDL / FORTRAN-->IDL searched  
Posted by [steinhh](#) on Thu, 15 Aug 1996 07:00:00 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

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

|>  
|> Going from C -> IDL might be impossible unless somebody wanted  
|> to handle pointers and pointers 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.  
|>

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

---