Subject: Re: C/C++ conversion to IDL
Posted by Craig Markwardt on Mon, 30 May 2005 08:18:04 GMT
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nasalmon@onetel.net.uk writes:
> Would anybody know if there is there software available to convert
> programs in C into IDL (i know you can link in C programs to running
> under IDL)? However, i am more interested in getting shorter, more
> transparent code which is easier to work with. I obviously want the
> minimum of hassel in converting the C code into IDL, so i dont want to
> trawl through this myself converting it.

I've always done it painstakingly, by hand. Usually I do a as direct
a translation as possible, word for word, line for line. FORTRAN is
the best for this since FORTRAN and IDL are more similar (than say, C
and IDL). After that, I look for optimization opportunities.

Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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Subject: Re: C/C++ conversion to IDL
Posted by Michael Wallace on Tue, 31 May 2005 15:57:32 GMT
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Craig Markwardt wrote:
> nasalmon@onetel.net.uk writes:
>
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> and IDL). After that, I look for optimization opportunities.

I don't think there are any translation tools available. Even some of

the simplest C code can do crazy things with memory access, pointers, shared libraries, etc. It'd be really hard to write a program that could handle things beyond the basics and make a decent translation from C to IDL. It'd be hard enough to write a decent C compiler. In this case the compiler output would be IDL code rather than a binary, but I digress. The best approach is to painstakingly and thoroughly translate the code line by line as has already been said. With this you should have an IDL program that works. Then go back and take care of optimizations.

-Mike

Subject: Re: C/C++ conversion to IDL
Posted by Matt Feinstein on Tue, 31 May 2005 17:16:34 GMT
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On 29 May 2005 03:13:06 -0700, nasalmon@onetel.net.uk wrote:

> Would anybody know if there is there software available to convert
> programs in C into IDL (i know you can link in C programs to running
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Syntax aside, the unsovable problem in translating X to Y, where X and Y may be Pascal, C, IDL, Matlab, Python, Fortran or what-have-you, is the library of functions available in each language. They all do (more or less) the same things, but they all do the same things a little differently.

Matt Feinstein

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There is no virtue in believing something that can be proved to be true.

Subject: Re: C/C++ conversion to IDL
Posted by nasalmon on Sun, 05 Jun 2005 12:07:11 GMT
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Many thanks for your useful comments.

Basically i wanted to increase the speed of my IDL programs by calling certain time consuming modules compled in C or C++. I do a lot of calling of routines recursively and working with binary trees.

Would there be any prefererence for C or C++, as i am not really that familar with either and dont really have the time to learn one and realise later that the other one is more appropriate?

Neil
