Subject: Is System Dependent Compilation Possible?
Posted by Tim Patterson on Wed, 24 Apr 1996 07:00:00 GMT

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I have a tool written in IDL/Fortran and C that needs to
run on both Unix and VMS systems. I have a few system
dependent IDL procedures that I use as wrappers for the
CALL_EXTERNALS.

What I would like to do is have a batch file, say
compile.pro, which can be invoked with @compile.pro
and will compile the correct version of wrappers
depending upon the OS, e.g.

IF !version.os EQ 'vms' then begin

 .run vms_version.pro

ENDIF ELSE BEGIN

 .run unix_version.pro

ENDELSE

Unfortunately, I can't seem to come up with anything
that even approaches this.

 IF !version.os EQ 'vms' then .run vms_version.pro

produces an error.

Anybody got any ideas?

 Thanks

 Tim

Subject: Re: Is System Dependent Compilation Possible?
Posted by Ken Knighton on Fri, 26 Apr 1996 07:00:00 GMT

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> Making the branch in the IDL code itself would work
> for a small number of routines. Unfortunately I
> have to have wrappers for around 50+ Fortran routines

> and it becomes very tedious editing every routine
> in that manner :)

I'm not going to guarantee that this will work, but on Unix, you
may be able to use cpp (the C preprocessor) or m4 to preprocess your
batch files that build the executable. You would have to do your
builds on Unix though. I have never done this myself, but have
seen cpp used for purposes other than preprocessing C code.

I hope this helps.

Ken Knighton   kknighton@qualcomm.com   knighton@cts.com
San Diego CA   ^^^^^^^^^^^^
          Note new address

P.S. - I have changed employers and will be doing non-idl related
stuff such as C++/embedded systems on the job. I will still be
lurking though. What can I say, they gave me an offer I couldn't
refuse. $-)

Subject: Re: Is System Dependent Compilation Possible?
Posted by David Foster on Mon, 29 Apr 1996 07:00:00 GMT
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Tim Patterson <tim@raptor.lpl.arizona.edu> wrote:
>
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> run on both Unix and VMS systems. I have a few system
> dependent IDL procedures that I use as wrappers for the
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> Unfortunately, I can't seem to come up with anything
> that even approaches this.
>
> IF !version.os EQ 'vms' then .run vms_version.pro
>
> produces an error.
>

I have always wanted to use the .run executive command within
procedures. Seems strange that you can't. I tried using the
@routine.pro syntax but had problems.

You might find a work-around for this, but I would suggest
putting the system-dependent code inside your wrapper functions,
since that's more consistent with the purpose of using a
wrapper function in the first place. Or you might have a
"master" wrapper function that calls other "sub-" wrapper
functions according to the value of !VERSION.OS .

The second approach would have the same effect as your
previous attempt ... only the sub-wrapper that gets called would
be compiled.

Dave Foster
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