Subject: Re: passing pointers to CALL_EXTERNAL
Posted by hdsfkj on Tue, 24 Mar 1998 08:00:00 GMT
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My limitation is that my dll is itself built by linking in functions provided
by a digital
camera company. Their image acquisition function allocates the memory (up to
2 Meg per image) and returns a pointer to it. Copying 2 million bytes is
going to
cost some time. Oh well, I guess I'll get my system working using the copying
method
and then learn the LINK_IMAGE interface at my leisure (i.e. probably never).
Thanks
for the replies everyone.

Donald.

David Fanning wrote:

> Don't do this. You are headed for ruin. :-)
>
> Call_External is a *simplified* interface to your C program.
> As such it has limitations. One of them is that you MUST
> create the arrays on the IDL side, even if you intend to
> fill them on the C side. I doubt there is much "performance
> cost", especially when you compare it to the "programming
> cost", which in this case will be extremely high.
>
> The explanation for why this limitation exists is too
> long to go into here. If you think you really want to
> become an IDL developer and write all your good code
> in C, learn and use LinkImage as opposed to Call_External.
> It offers all the bells and whistles and allows you
> to do pretty much anything in you C program (within
> certain minor limitations).
>
> Cheers,
>
> David

Subject: Re: passing pointers to CALL_EXTERNAL

Posted by davidf on Tue, 24 Mar 1998 08:00:00 GMT
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Donald Green (dfg@ai.mit.edu) writes:

> Is there a way to return a pointer to an array of bytes from
> CALL_EXTERNAL? My C routine
> creates the array and fills it with values. I would like to just pass a
> pointer to the array back to
> IDL. I found an old post with dejanews that suggests it isn't possible.
> I'm trying to avoid the
> performance cost that goes with creating an array in IDL, passing a
> reference to it to the C routine, and copying the previously created C
> array to the IDL array. Thanks for any help...
>

Don't do this. You are headed for ruin. :-)

Call_External is a *simplified* interface to your C program.
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certain minor limitations).

Cheers,

David

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

Subject: Re: passing pointers to CALL_EXTERNAL
Posted by David Foster on Wed, 25 Mar 1998 08:00:00 GMT
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hdsfkj wrote:
>
> Hi Again,
>
> Is there a way to return a pointer to an array of bytes from
> CALL_EXTERNAL? My C routine
> creates the array and fills it with values. I would like to just pass a
> pointer to the array back to
> IDL. I found an old post with dejanews that suggests it isn't possible.
> I'm trying to avoid the
> performance cost that goes with creating an array in IDL, passing a
> reference to it to the C routine, and copying the previously created C
> array to the IDL array. Thanks for any help...
>
> Donald Green
> dfg@ai.mit.edu

Unless things have changed drastically the last time I looked at
the docs for CALL_EXTERNAL, you must define the array before
passing it to the C routine. An array in IDL is much more complex
than an array in C; I suppose this would be possible if you
knew a lot about the internal structure of variables in IDL, but
I would just create the array first!

Dave
--

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