
Subject: sec : U Re: widget_control from call_external
Posted by [Andrew Cool](#) on Tue, 06 Mar 2001 00:48:59 GMT
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JD Smith wrote:

>

> David Fanning wrote:

>>

>> dominic@work.com (dominic@work.com) writes:

>>

>>> I have a c/c++ programme that is called from within a
>>> widget hierachy via call_external.

>>>

>>> As the computations made take fairly long, I want to update
>>> a status bar with a 'Percentage complete' from the C-routine,
>>> so the user doesn't get upset and thinks the programme died
>>> on him/her.

>>>

>>> How do I go about that???

>>

>> Well, this will be difficult unless your can call your
>> C program in "chunks", or in some other way interrupt
>> it. It might be easier if you just know, in general,
>> how long it takes. Then you can set a "kitchen timer"
>> sort of progress indicator. As long as the cake is
>> baked by the time the timer goes off, no one seems
>> to care. :-)

>>

>> You can see several ways to build such a progress
>> indicator here:

>>

>> http://www.dfanning.com/tips/show_progress.html

>

> I would use alarm() to throw a SIGALRM every 1 second, say, then update
> a percent complete counter, based on some innate knowledge of the
> calculation. To get this to IDL under call_external is more difficult.
> You *could* then just print it to the terminal, ala:

>

> printf("\r%02d%% complete",percent_complete);

>

> Make sure to:

>

> setbuf(stdout,(char *)NULL);

>

> first, so the updates will appear.

>

> Of course, RSI would frown on this, but if it gets the job done...

>

> If you'd like to do it full blown way, with a snazzy graphical update
> slider, you might have to make a full DLM, and use IDL_Execute to force
> the progress update from the C side. That's a lot of work for a bit of
> eye candy. But everybody likes candy.
>
> Good luck,
>
> JD

How about using the Widget_Stub functionality to pass an event from the
C
routine to a widget?

Under OpenVMS (at least) in IDL_DIR:[External.widstub] there are simple
examples of how to create your own widget type in C, and how to send
events
to it from C.

Comments in the file Widget_ArrowB.pro say :-

"While this code is VMS-centric, the principles apply across
platforms..."

Just another example of VMS leading the way.

I can't find the above directory or the example files in my Windows IDL
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however do a Find in the Online Help for Widget Stub and everything you
need is there.

I've used Widget Stub to animate aircraft positions on a draw widget as
the C code fires off an event.

If a C-dunderhead like me can manage that, anyone can... ;-)

Andrew

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----- * Never trust what a man with half a brain says *-----
