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 54

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

Andrew D. Cool .->-

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