

---

Subject: Re: widget\_control from call\_external  
Posted by [John-David T. Smith](#) on Thu, 01 Mar 2001 16:55:08 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

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](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

---