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Subject: Re: Automatic button pressing:is there a way?

Posted by [rivers](#) on Sun, 01 Oct 1995 07:00:00 GMT

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In article <30SEP199520411554@siva.bris.ac.uk>, phtmh@siva.bris.ac.uk (TOM HILLER) writes:

> I want to have my widget press one of its own buttons  
> at regular intervals, about once a second. Is this possible  
> in PV-WAVE 5.00b, on a SGI Power Challenge XL?  
>  
> The reason I want to do this; I have a complicated data set which  
> can be fitted by a model. The fitting takes a good fraction  
> of a second, and I want to be able to vary parameters with sliders,  
> watch how the fitting looks on the screen, and get a number for the  
> fit as I go along. I have set up the sliders, the data display, and  
> the redrawing of the fit, but the widget is unuseable if I get it  
> to re-calculate the fit on every slider event. At the moment I use  
> a button to get the fit number, but this is a pain. Can I get it  
> to calculate the fit once a second, i.e. press its fit button  
> itself?  
>  
> P.S. We also have IDL 3.6.1a on a DEC Alpha, should I use this? I  
> have not tried to program IDL widgets yet.

In IDL there are two ways you might achieve what you want to do:

- Use widget timer events. You can get a timer event delivered to your event handler every 1 second. You can recalculate your fit on receipt of these events.
- Use the cw\_fslider widget, asking only for mouse release events. This way you don't get all of the events as the user drags the slider, only when he releases it. This cuts down the number of times the fit would be calculated.

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|                    |                                      |
|--------------------|--------------------------------------|
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| Chicago, IL 60637  | rivers@cars3.uchicago.edu (Internet) |

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Subject: Re: Automatic button pressing:is there a way?

Posted by [peter](#) on Mon, 02 Oct 1995 07:00:00 GMT

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TOM HILLER (phtmh@siva.bris.ac.uk) wrote:

: I want to have my widget press one of its own buttons

: at regular intervals, about once a second. Is this possible  
: in PV-WAVE 5.00b, on a SGI Power Challenge XL?

: The reason I want to do this; I have a complicated data set which  
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: a button to get the fit number, but this is a pain. Can I get it  
: to calculate the fit once a second, i.e. press its fit button  
: itself?

: Thanks for your help,

WTTIMER will generate timed events. Setting keyword drag=0 in the  
WWCONTROLSBOX call that creates the sliders will cause the slider to  
generate events only on button transitions.

-----  
Peter Webb, HP Labs Medical Dept  
E-Mail: peter\_webb@hpl.hp.com  
Phone: (415) 813-3756

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Subject: Re: Automatic button pressing:is there a way?  
Posted by [knighton](#) on Mon, 02 Oct 1995 07:00:00 GMT  
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In <DFqv4I.K60@midway.uchicago.edu> rivers@cars3.uchicago.edu (Mark Rivers) writes:

> In article <30SEP199520411554@siva.bris.ac.uk>, phtmh@siva.bris.ac.uk (TOM HILLER)  
writes:

>> I want to have my widget press one of its own buttons  
>> at regular intervals, about once a second. Is this possible  
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snip, snip

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> - Use widget timer events. You can get a timer event delivered to your event  
> handler every 1 second. You can recalculate your fit on receipt of these  
> events.

snip, snip

Some things to consider when using timer events:

1. A timer event only goes off once; therefore, the event handler must issue another one to have a recurring timer.
2. As far as I know, there is no way to turn the timer event off once it has been issued. Therefore, your event handler(s) must be able to deal with an event occurring after you decide to stop the timer. This can be done by setting up a "timer off " flag and checking it when timer events are processed.
3. Timer events are not particularly accurate, especially in a networked environment.

On a more general note, I have used timer events to do some cool things such as giving a blink attribute to text and making an alarm widget that flashes on the screen. I have been able to set numerous timers at once under HP-UX and X-windows in a networked environment and they work great.

Ken Knighton, knighton@gav.gat.com, knighton@cts.com  
Fusion Division  
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San Diego, CA

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Subject: Re: Automatic button pressing:is there a way?  
Posted by [zawodny](#) on Mon, 02 Oct 1995 07:00:00 GMT  
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In article <30SEP199520411554@siva.bris.ac.uk> pthmh@siva.bris.ac.uk (TOM HILLER) writes:

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> at regular intervals, about once a second. Is this possible  
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> to calculate the fit once a second, i.e. press its fit button  
> itself?  
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> Thanks for your help,  
>

> Tom.

>

> P.S. We also have IDL 3.6.1a on a DEC Alpha, should I use this? I

> have not tried to program IDL widgets yet.

I do not know about PV-WAVE, but IDL has a .drag field in the event structure for slider widgets. Use this to process only the "button release" slider events.

You can send your own events to the Xmanager using the WIDGET\_CONTROL,SEND\_EVENT=event\_structure call.

Best of luck,

--

Dr. Joseph M. Zawodny    KO4LW  
E-mail: J.M.Zawodny@LaRC.NASA.gov

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