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Subject: Re: widget\_control and event generation  
Posted by [pdoherty](#) on Sun, 15 Apr 2007 19:43:44 GMT  
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On Apr 15, 4:15 pm, David Fanning <n...@dfanning.com> wrote:

```
> pedom...@earthlink.net writes:  
>> When I use the following code to switch the currently selected tab in  
>> a widget_tab:  
>  
>> widget = widget_info(info.tlb, find_by_uname='plot_tab')  
>> oldtab = widget_info(widget, /tab_current)  
>> widget_control, widget, set_tab_current=7  
>  
>> Do I generate an event?  
>  
> No, you don't generate an event. But I could believe that  
> if you are using a button click to switch tabs that you  
> may not be accounting for both the button DOWN and the button  
> UP event in your event handler.
```

That's what I thought. The general idea is that if I press the right mouse button the plot\_tab switches to a different tab, makes some plots as I move the cursor around, and then when I release the right button the tab switches back to the original tab. Here's the relevant code (edited) :

```
; handle right button press events  
if ((event.type EQ 0) AND (event.press EQ 4)) then begin  
    info.mouse_right_down = 1  
    widget = widget_info(info.tlb, find_by_uname='plot_tab')  
    info.oldtab = widget_info(widget, /tab_current)  
    widget_control, widget, set_tab_current=7  
endif
```

```
; handle right button release events  
if ((event.type EQ 1) AND (event.release EQ 4)) then begin  
    info.mouse_right_down = 0  
    widget = widget_info(info.tlb, find_by_uname='plot_tab')  
    widget_control, widget, set_tab_current=info.oldtab  
endif
```

I think I have taken into account DOWN vs UP events. What's strange is that when I push the button DOWN, and before I release, my event handler catches an event for the widget with the uvalue = 'plot\_tab', as in

```
widget_control, event.id, get_uvalue=widget
case widget of
  'plot_tab' : ccd_plots, info
etc...
```

It's as if the system thinks I have clicked on one of the tabs even though all I have done is selected a new tab using widget\_control.

No doubt, it's my fault. Computers always do what we tell them to do (the bas\*\*\*\*s). It's just that I don't understand that I've told it to do this.

- Peter Doherty

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Subject: Re: widget\_control and event generation  
Posted by [David Fanning](#) on Sun, 15 Apr 2007 20:15:40 GMT  
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pedoherty@earthlink.net writes:

```
> I won't describe the problem I'm having here in any great detail, it
> would take
> too many lines of text. I think (though I may be wrong) that I've
> narrowed the
> problem down. Here's my question:
>
> When I use the following code to switch the currently selected tab in
> a widget_tab:
>
>     widget = widget_info(info.tlb, find_by_uname='plot_tab')
>     oldtab = widget_info(widget, /tab_current)
>     widget_control, widget, set_tab_current=7
>
> Do I generate an event?
```

No, you don't generate an event. But I could believe that if you are using a button click to switch tabs that you may not be accounting for both the button DOWN and the button UP event in your event handler.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: widget\_control and event generation  
Posted by [David Fanning](#) on Mon, 16 Apr 2007 00:52:59 GMT  
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pdoherty writes:

> It's as if the system thinks I have clicked on one of the tabs even  
> though all I have done is selected a new tab using widget\_control.

On closer inspection, this looks like what does in fact happen.  
When I switch to a new tab programmatically with WIDGET\_CONTROL  
I \*do\* get a tab widget event in the event handler.

I guess this makes sense because I would like to know  
when I switch to another window, generally, so I can  
update the window contents, etc.

I do notice in my example, at least, I can suppress  
the tab event if I do something like this:

```
widget_control, widget, set_tab_current=7  
widget_control, widget, /clear_events
```

I thought I might need a short wait between commands,  
so I didn't clear the stack before the event was placed  
on it, but at least on my machine, it doesn't appear to  
be needed.

Cheers,

David

--

David Fanning, Ph.D.  
Fanning Software Consulting, Inc.  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: widget\_control and event generation  
Posted by [pdoherty](#) on Mon, 16 Apr 2007 04:00:54 GMT  
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On Apr 15, 8:52 pm, David Fanning <n...@dfanning.com> wrote:

> pdoherty writes:

>> It's as if the system thinks I have clicked on one of the tabs even

>> though all I have done is selected a new tab using widget\_control.

>

> On closer inspection, this looks like what does in fact happen.

> When I switch to a new tab programmatically with WIDGET\_CONTROL

> I \*do\* get a tab widget event in the event handler.

>

> ...

>

> I do notice in my example, at least, I can suppress

> the tab event if I do something like this:

>

> widget\_control, widget, set\_tab\_current=7

> widget\_control, widget, /clear\_events

That's exactly what I have found, and what I have done to solve the "problem". I also agree with what you wrote about it making some sense in that it might be nice for the event handler to know that the window has changed, in case there's something that needs doing. So, while the behavior is logical enough, it was a little bit of a surprise and took me a while to figure out.

Thank you for your help on this.

Peter Doherty

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