
Subject: TLB Widget resizing

Posted by [Craig Markwardt](#) on Tue, 17 Aug 1999 07:00:00 GMT

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In case you can't tell, I'm trying my hand at some more widget programming and I am rusty.

One nice thing about widgets is that you can make them resizable. You can ask for resize events by setting the `TLB_SIZE_EVENTS` keyword to `WIDGET_BASE`. Then you are supposed to get a nice little widget event whenever it changes in size.

Okay, we also know about the bug in IDL's widgets, which can cause funny resizing behavior. I refer the kind reader to David Fanning's nice redux of the situation.

http://www.dfanning.com/idl5_info/tlb_resize_problem.html

I have a different question however. There appear to be times when you can resize a window to *smaller* than it is supposed to be. That is, try to resize a window so that there is no way for all of the component widgets to fit.

In that case, you do get a resize event which describes the size of the new, small window. For a moment on my Linux screen, the window does get smaller. However, IDL smartly decides that the component widgets can't fit inside, and the window "bounces" back to a larger size. It grows to a new size -- BUT a resize event is NEVER SENT.

Who cares right? Well, I have a draw widget that is resized based on the (incorrect) numbers in the resize event. When the window "bounces" to a new size, the resulting draw widget looks pretty goofy. You can reproduce this in David Fanning (and my) `XWINDOW` program, and also with the following `RESIZE` program, based on work by Liam Gumley. Just run it, and resize the window to a very small width.

Can anybody suggest a way to get a new resize event? I have considered requesting a timer event to periodically adjust the draw widget's dimensions.

Craig

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

```

;; ----- BEGIN RESIZE.PRO
;; Adapted from Liam Gumley's routine of the same name
PRO RESIZE_EVENT, EVENT

;- Get info structure

widget_control, event.top, get_uvalue=info

;- Resize the draw widget using one of two methods

case info.fix of

  ;- First method: widget grows vertically

  0 : widget_control, info.drawwid, xsize=event.x, ysize=event.y

  ;- Second method: resizes widget correctly

  1 : begin

    ;- Get current tlb size

    widget_control, event.top, tlb_get_size=result
    tlb_xsize = result[0]
    tlb_ysize = result[1]

    ;- Compute difference between current and old tlb size

    xdiff = tlb_xsize - info.tlb_xsize
    ydiff = tlb_ysize - info.tlb_ysize

    ;- Set new tlb size

    info.tlb_xsize = tlb_xsize
    info.tlb_ysize = tlb_ysize

    ;- Set new draw widget size

    info.draw_xsize = info.draw_xsize + xdiff
    info.draw_ysize = info.draw_ysize + ydiff

    ;- Resize the draw widget

    widget_control, info.drawwid, $
      draw_xsize=info.draw_xsize, draw_ysize=info.draw_ysize

end

```

```

endcase

;- Display a plot

plot, indgen(10)

END

;-----
PRO RESIZE, FIX=FIX

;- Check keywords

if not keyword_set( fix ) then fix = 0

;- Set initial size of draw widget

draw_xsize = 400
draw_ysize = 400

;- Create base widget with menubar and draw widget

tlb = widget_base( title='Resize Example', $
  tlb_size_events=1, mbar=menubase, column=1 )
buttonbar = widget_base(tlb, row=1, /align_left)
button1 = widget_button(buttonbar, value='Button1')
button2 = widget_button(buttonbar, value='Button2')
drawid = widget_draw( tlb, xsize=draw_xsize, ysize=draw_ysize )
widget_control, tlb, /realize

;- Display a plot

plot, indgen(10)

;- Get size of top level base

widget_control, tlb, tlb_get_size=result
tlb_xsize = result[0]
tlb_ysize = result[1]

;- Create and store info structure

info = { fix      : fix, $
        drawid   : drawid, $
        draw_xsize : draw_xsize, $
        draw_ysize : draw_ysize, $
        tlb_xsize  : tlb_xsize, $
        tlb_ysize  : tlb_ysize }

```

```
widget_control, tlb, set_uvalue = info
```

```
;- Manage widget events
```

```
xmanager, 'resize', tlb
```

```
END
```
