Subject: Problems with draw widget scrolling in IDL 5.0 Posted by Roberto Racca on Mon, 11 Aug 1997 07:00:00 GMT View Forum Message <> Reply to Message

I have encountered a few puzzling quirks in the Draw widget under IDL 5.0 (first full release) running on a Windows 95 platform. They have to do with the scrolling of the viewport over a larger drawing area.

- 1) I need to resize the underlying drawing area at run time. I use the widget_control procedure with the parameters draw_xsize and draw_ysize. Everything works properly if the viewport is located at the top left corner of the image. Otherwise, IDL appears to 'lose track' of the location of the viewport and starts displaying bands of grey background at the edges of the image, or in worst cases no image at all. The effect is cumulative over repeated resizings, and there is no way of restoring the proper positioning.
- 2) As a stopgap measure, I tried to have IDL reposition the viewport to the top left corner of the image before doing the resizing, only to discover that using widget_control with the set_draw_view parameter works erratically and sometimes not at all. It seems that IDL cannot shift the viewport toward smaller origin values than the current ones.

I enclose below a sample file which generates a small draw widget application. Clicking on the 'Toggle size' button will change the draw area from having the same size as the viewport to being twice as big, and back again. If the viewport is repositioned when the draw area is enlarged, and the size is then toggled, the problem described in point 1) above appears quite obviously.

I would sincerely appreciate having someone's opinion on this. I very much need the resizing feature for a critical application, and I cannot find a work-around. Does anyone know whether the problem been addressed in 5.0.2?

Many thanks, Roberto Racca
SAMPLE CODE. CUT HERE
pro testdraw_event, event
widget_control, event.id, get_uvalue = tag case tag of "EXIT": widget_control, event.top, /destroy "TOGGLE": begin erase, !p.background

```
widget_control, event.top, get_uvalue = Draw
  geometry = widget info(Draw, /geometry)
  if geometry.draw_xsize eq 200 then begin
   widget_control, Draw, draw_xsize = 400, draw_ysize = 400
   tvscl, dist(400)
  endif else begin
   widget_control, Draw, draw_xsize = 200, draw_ysize = 200
   tvscl, dist(200)
  endelse
 end
endcase
end
pro testdraw
Base1 = widget_base(title = "Test of draw widget", /column)
Base2 = widget base(Base1, /row)
But1 = widget_button(Base2, value="Toggle size", uvalue = "TOGGLE")
But2 = widget_button(Base2, value="Exit", uvalue = "EXIT")
Draw = widget draw(Base1, xsize=200, ysize=200, $
           x_scroll_size=200, y_scroll_size=200)
widget_control, Base1, set_uvalue = Draw
widget_control, Base1, /realize
loadct, 5
tvscl, dist(200)
xmanager, "testdraw", Base1
end
----- END OF SAMPLE CODE. CUT HERE -----
```