Subject: Re: Help with interactive cursor and the draw widget (long)
Posted by Benjamin Hornberger on Wed, 15 Dec 2004 22:13:46 GMT
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bgarwood wrote:
> I have a simple problem I can't seem to figure out how to solve.
> Essentially, I want to have the functional equivalent of CURSOR in a
> draw widget embedded in a larger widget. Seems simple enough. The
> trouble is that everything I've tried so far seems to queue up the
> events - including expose events, so that when the widget is fully
> exposed it isn't being redrawn in the previously exposed regions -
> while my function is waiting and nothing happens.
>
> The documentation I've read says not to use CURSOR with draw widgets.
> Okay (and when I do try and use it, it works, except for the nasty
> problem of not redrawing the un-exposed parts when they are exposed
> before the cursor click is seen). So I've tried do something else -
> mostly involving having the widgets existing event handler set a common
> block or global value and, in my cursor-replacement function, watch for
> that value to change. Only problem, the loop to watch for that value
> to change in my function seems to prevent the actual events from
> reaching the event handler and so the state never changes.
>
> Sure, I could do it all inside the GUI. My problem is that we have
> users who want to be able to also interact with that GUI from commands,
> i.e.
>
> start_my_gui
> ; stuff happens, GUI fires up
> cursor, x, y
> ; do something with x and y after the user clicks on it.
>
> How do I make that work? It works just fine with a simple PLOT window.
> Why won't it work with an embedded draw widget?
>
> Thanks.
> Bob Garwood
>

If I understand it right, your problem of unexposed parts of the draw window is a matter of backing store. Try "retain=2" as a keyword to widget_draw.

To use mouse clicking in draw widgets, set the "/button_events" keyword to widget_draw. The draw widget will then create an event whenever you click into the window. See "Widget Events Returned by Draw Widgets" in the online help to widget_draw on how to distinguish between different mouse buttons and button down and up events.

If you want to interact with your GUI from the IDL command line, I would recommend writing the GUI as an object and then calling object methods on the GUI from the command line. An alternative might be exporting the variables from the GUI to the IDL main level with the SCOPE_VARFETCH() function.

Good luck,
Benjamin
