
Subject: Re: XSTRETCH in P.Multi - is it efficient?

Posted by [David Fanning](#) on Sat, 06 Apr 2002 15:21:32 GMT

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Reno Choi (K.Y.Choi@soton.ac.uk) writes:

- > Now, I am trying to make widget program that contains two plot with a
- > image. I also would like to include mouse-oriented indication bar in
- > both plot area, which synchronise with the position of the image. I
- > guess it would be based on something like XSTRETCH.pro from D.Fanning.
- >
- > Question are, if I put those plots and image in a single Widget_Draw,
- > would it become much slower while interactive moving lines on plots
- > are moving? I wonder this is one of reason why XSTRETCH.pro has two
- > windows, i.e. two TLB.

No, it would not become much slower. The reason for two windows had to do with ease of resizing. At the time the program was written the reliability of the widget geometry and cross-platform sizing issues were worse than they are now. I wished to avoid such problems in an example program.

- > In fact, since I tend to include loop that scans through the data
- > range, approximately 5000 steps within 1 or 2 minutes, speed really
- > matters to me. XSTRETCH continuously uses PIXMAP while moving lines
- > with mouse, and I guess such processing is possibly slower in, for
- > instance, 800-by-800 Widget_Draw.

No, an 800-by-800 window is piddly for modern computers. (I'm not sure about OpenVMS computers.) And, anyway, you don't have to copy the entire window with the Device Copy technique, just the part of the window that needs repair.

- > Alternatively, I thought three different Widget_Draws in a single TLB.
- > Problem again comes when resize windows. Also, I am not sure how much
- > difference in processing speed with comparison to the pervious method,
- > and which method would be less complicate and more economical in
- > programming-wise.

Separating three functions into three draw widgets rather than one greatly simplifies the event handling code, because you don't have to figure out whether the user started in this part of the draw widget and dragged to the other, etc. (You can think "no user would be stupid enough to do something like that", but such thinking is sure to doom your code.)

Resizing a window with more than one thing in it is more complicated, but it is not onerous. You just divide the total size up into proportional "thing" sizes and size each thing in turn. Problems sometimes arise when some "things" are not suppose to resize, etc. But these things can always be worked out with intelligent design.

Cheers,

David

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Subject: Re: XSTRETCH in P.Multi - is it efficient?
Posted by [Craig Markwardt](#) on Sat, 06 Apr 2002 15:49:09 GMT
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K.Y.Choi@soton.ac.uk (Reno Choi) writes:

- > Now, I am trying to make widget program that contains two plot with a
- > image. I also would like to include mouse-oriented indication bar in
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I think the advantage to have two draw widgets is that you can select coordinates in both plots simultaneously. There can only be one active coordinate system in a single direct graphics window, so if you have two plots, a la !P.MULTI, then only one of them will be interactive.

Craig

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