Subject: Re: UNIX Resize Problem

Posted by liamgumley on Fri, 31 Oct 2008 14:04:34 GMT

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On Oct 31, 8:40 am, David Fanning <n...@dfanning.com> wrote:

- > I have an image in a resizeable top-level base widget.
- > The idea here is that when the window is resized, the
- > window should retain the same aspect ratio as the image.
- > So, for example, when the user hits the button that will
- > force the TLB to fill the display, I will get that event
- > and instead of making the draw widget holding the image
- > that size, I will constrain it, and the TLB should shrink
- > naturally to the size of the draw widget.

### David,

I write a GUI demo for my book (described in Chapter 9) where an image is displayed in a resizable widget. If you resize the GUI window, the window retains the size you selected, and the image is redrawn inside the window while maintaining the image aspect ratio. I'm not sure if this is what you want, but in any case the demo program is imgui.pro, and it is contained in

http://gumley.com/PIP/Sample\_Programs/PIP\_programs.zip

The relevant code section from the main program is

```
tlb = widget_base(column=1, mbar=mbar, title=title, $ /tlb_size_events)
```

and from the event handler

```
;- Get change in size of top level base if (info.version lt 5.4) then begin xchange = event.x - info.base_size[0] ychange = event.y - info.base_size[1] endif else begin widget_control, event.id, tlb_get_size=base_size xchange = base_size[0] - info.base_size[0] ychange = base_size[1] - info.base_size[1] endelse
```

```
;- Set new size of draw window
info.draw_xsize = (info.draw_xsize + xchange) > 200
info.draw_ysize = (info.draw_ysize + ychange) > 200
widget_control, info.draw_id, $
xsize=info.draw_xsize, ysize=info.draw_ysize
```

Liam.
Practical IDL Programming http://www.gumley.com/

Subject: Re: UNIX Resize Problem

Posted by David Fanning on Fri, 31 Oct 2008 14:11:52 GMT

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## liamgumley@gmail.com writes:

- > I write a GUI demo for my book (described in Chapter 9) where an image
- > is displayed in a resizable widget. If you resize the GUI window, the
- > window retains the size you selected, and the image is redrawn inside
- > the window while maintaining the image aspect ratio

Well, it's not what I want, but it may be what I end up with if I don't solve this problem soon. I do know how to display an image in a way that keeps it's aspect ratio. What I'm trying to do is keep all that extra space in the window out of the equation. :-)

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.")

Subject: Re: UNIX Resize Problem

Posted by pgrigis on Fri, 31 Oct 2008 14:21:38 GMT

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This thread makes me wonder, does java (just picking another cross platform programming language with widgets) have the same problems? I mean, is it really difficult making this things work across platforms, or it is just ITTVIS that doesn't care about fixing these issues?

Ciao, Paolo

## David Fanning wrote:

> liamgumley@gmail.com writes:

>

- >> I write a GUI demo for my book (described in Chapter 9) where an image
- >> is displayed in a resizable widget. If you resize the GUI window, the
- >> window retains the size you selected, and the image is redrawn inside
- >> the window while maintaining the image aspect ratio

>

- > Well, it's not what I want, but it may be what
- > I end up with if I don't solve this problem soon.
- > I do know how to display an image in a way that
- > keeps it's aspect ratio. What I'm trying to do is
- > keep all that extra space in the window out of
- > the equation. :-)

>

> 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.")

Subject: Re: UNIX Resize Problem

Posted by David Fanning on Fri, 31 Oct 2008 14:32:36 GMT

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# pgrigis@gmail.com writes:

- > This thread makes me wonder, does java
- > (just picking another cross platform programming
- > language with widgets) have the same problems?
- > I mean, is it really difficult making this things work
- > across platforms, or it is just ITTVIS that doesn't care
- > about fixing these issues?

For all I know, this could be a KDE Window Manager problem. (The latest version of SUSE is causing all kinds of havoc around here as people's computers are updated.) But, given what I know about the vagaries of IDL widgets, I have a feeling there is a good chance the blame can be shared.

Cheers.

#### David

P.S. I don't know about JAVA. It's a pretty hard problem, I will give them that. And if you stick to basics, things work pretty well. It's always when I try to do something clever that I run into problems. "Meat and potatoes" should be our motto, always. :-)

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: UNIX Resize Problem
Posted by liamgumley on Fri, 31 Oct 2008 15:06:55 GMT
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On Oct 31, 9:11 am, David Fanning <n...@dfanning.com> wrote:

- > liamgum...@gmail.com writes:
- >> I write a GUI demo for my book (described in Chapter 9) where an image
- >> is displayed in a resizable widget. If you resize the GUI window, the
- >> window retains the size you selected, and the image is redrawn inside
- >> the window while maintaining the image aspect ratio

>

- > Well, it's not what I want, but it may be what
- > I end up with if I don't solve this problem soon.
- > I do know how to display an image in a way that
- > keeps it's aspect ratio. What I'm trying to do is
- > keep all that extra space in the window out of
- > the equation. :-)

Fair enough. I just like the idea that if I resize the window, it stays at the size I selected, rather than jumping to some other size. That's the way my Safari web browser works when I'm looking at an image, so it's a familiar behavior.

Liam.

Subject: Re: UNIX Resize Problem

Posted by David Fanning on Fri, 31 Oct 2008 15:15:16 GMT

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liamgumley@gmail.com writes:

- > Fair enough. I just like the idea that if I resize the window, it
- > stays at the size I selected, rather than jumping to some other size.
- > That's the way my Safari web browser works when I'm looking at an
- > image, so it's a familiar behavior.

Yeah, I'm beginning to think you are absolutely right about this. I was being too clever. Back to basics, I think. :-)

It appears I can get it to work "correctly" if I don't try to resize the TLB after it has been resized to fill the display. (Of course, I mean by "correctly" taking into account the \*MANY\* differences between Windows and UNIX machines with respect to how their sizes are reported! This, it seems to me, \*is\* something ITTVIS could correct.)

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.")

Subject: Re: UNIX Resize Problem
Posted by David Fanning on Fri, 31 Oct 2008 15:20:42 GMT
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## David Fanning writes:

- > It appears I can get it to work "correctly" if I don't
- > try to resize the TLB after it has been resized to fill
- > the display. (Of course, I mean by "correctly"
- > taking into account the \*MANY\* differences between
- > Windows and UNIX machines with respect to how their
- > sizes are reported! This, it seems to me, \*is\* something
- > ITTVIS could correct.)

Although, God knows, if they did, probably every decently written IDL program on the planet, including ENVI, would break. :-)

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.")

Subject: Re: UNIX Resize Problem
Posted by David Fanning on Fri, 31 Oct 2008 21:41:51 GMT
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liamgumley@gmail.com writes:

- > Fair enough. I just like the idea that if I resize the window, it
- > stays at the size I selected, rather than jumping to some other size.
- > That's the way my Safari web browser works when I'm looking at an
- > image, so it's a familiar behavior.

OK, I finally surrendered and gave up my quixotic quest to create windows with the correct aspect ratio. Three days is enough time spent. This version of my IMGWIN program appears to work on my SUSE machine, running KDE, but my confidence level is not terribly high for other flavors of UNIX or for the Macintosh, which I have not been able to check yet.

Would someone be kind enough to give it a quick once-over and sent me a report. It is probably best if you download a fresh version of the Catalyst Library (there have been a few minor changes). The IMGWIN program is in the applications sub-directory of that library:

http://www.dfanning.com/programs/catalyst.zip

Or, if you have a relatively recent version of the library, you can just download the ImgWin program:

http://www.dfanning.com/programs/catalyst/imgwin.pro

Thanks for your help.

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.")