
Subject: Re: Widget Weirdness

Posted by [ben.bighair](#) on Thu, 12 Mar 2009 22:46:14 GMT

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On Mar 12, 6:27 pm, David Fanning <n...@dfanning.com> wrote:

> Folks,
>
> I just ran into this problem on my Linux machine. I wonder
> if someone can help me test. I ran my Coyote program
> PickColorName:
>
> IDL> c = pickcolorname()
>
> This puts a widget up in the center of the display. I
> then move it off to the side and pick a color. As soon
> as I do, the widget jumps back to the center of the
> display. This is decidedly NOT what it is suppose to do!
>
> I've traced the program (believe it or not) to a command
> in which I am changing the text on a label widget. I have
> confirmed this behaviour with an entirely different program.
> It, too, jumps if I try to change a widget label's text.
>
> Is this a function of my window manager (SUSE 10.? and
> KDE 3.5, I believe), or is this a UNIX (possibly Mac)
> problem in general? If it is a general bug, I would
> like to report it.
>

Hi David,

Same weird behavior here.

```
IDL> c = pickcolorname()
% Compiled module: PICKCOLORNAME.
% Compiled module: GET_SCREEN_SIZE.
% Compiled module: XMANAGER.
IDL> print, !version
{ ppc darwin unix Mac OS X 6.3 Mar 23 2006    32    64}
```

Ben

Subject: Re: Widget Weirdness

Posted by [Andrew Cool](#) on Thu, 12 Mar 2009 23:45:50 GMT

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On Mar 13, 8:27 am, David Fanning <n...@dfanning.com> wrote:

> Folks,
>
> I just ran into this problem on my Linux machine. I wonder
> if someone can help me test. I ran my Coyote program
> PickColorName:
>
> IDL> c = pickcolorname()
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> KDE 3.5, I believe), or is this a UNIX (possibly Mac)
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> like to report it.
>
> Thanks,
>
> David
> --
> David Fanning, Ph.D.
> Coyote's Guide to IDL Programming (www.dfanning.com)
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Ditto for IDL6.4 under Mandriva, KDE 3.4.2

Andrew

Subject: Re: Widget Weirdness

Posted by [Michael Galloy](#) on Thu, 12 Mar 2009 23:56:05 GMT

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David Fanning wrote:

> Folks,
>
> I just ran into this problem on my Linux machine. I wonder
> if someone can help me test. I ran my Coyote program
> PickColorName:
>
> IDL> c = pickcolorname()

>
> This puts a widget up in the center of the display. I
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> display. This is decidedly NOT what it is suppose to do!
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> I've traced the program (believe it or not) to a command
> in which I am changing the text on a label widget. I have
> confirmed this behaviour with an entirely different program.
> It, too, jumps if I try to change a widget label's text.
>
> Is this a function of my window manager (SUSE 10.? and
> KDE 3.5, I believe), or is this a UNIX (possibly Mac)
> problem in general? If it is a general bug, I would
> like to report it.
>
> Thanks,
>
> David

Same weird behavior:

```
IDL> print, !version  
{ i386 darwin unix Mac OS X 7.0 Oct 25 2007    32    64}
```

Mike

--

www.michaelgalloy.com
Associate Research Scientist
Tech-X Corporation

Subject: Re: Widget Weirdness

Posted by [David Fanning](#) on Fri, 13 Mar 2009 02:49:51 GMT

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Mike writes:

> Same weird behavior:
>
> IDL> print, !version
> { i386 darwin unix Mac OS X 7.0 Oct 25 2007 32 64}

Well, this is a weird one. I've been able to duplicate the problem with other programs, just by changing the text of a label widget, but--naturally--when I make a simple test case nada. Going to be a long night, probably...

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: Widget Weirdness

Posted by [Allan Whiteford](#) on Fri, 13 Mar 2009 09:58:31 GMT

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David Fanning wrote:

> Folks,

>

> I just ran into this problem on my Linux machine. I wonder

> if someone can help me test. I ran my Coyote program

> PickColorName:

>

> IDL> c = pickcolorname()

>

> This puts a widget up in the center of the display. I

> then move it off to the side and pick a color. As soon

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> display. This is decidedly NOT what it is suppose to do!

>

> I've traced the program (believe it or not) to a command

> in which I am changing the text on a label widget. I have

> confirmed this behaviour with an entirely different program.

> It, too, jumps if I try to change a widget label's text.

>

> Is this a function of my window manager (SUSE 10.? and

> KDE 3.5, I believe), or is this a UNIX (possibly Mac)

> problem in general? If it is a general bug, I would

> like to report it.

>

> Thanks,

>

> David

David,

Running on:

{ x86 linux unix linux 6.2 Jun 20 2005 32 64 }

I don't see the problem but running on:

```
{ x86 linux unix linux 7.0 Oct 25 2007    32    64}
```

the problem exists exactly as other people have confirmed.

Although it could just as easily be the OS (FC4 vs FC8 respectively).

I'm using fvwm95 as my window manager which is about as far from a bloated desktop environment as you can get. This pretty much leaves it with either a fault in X or a fault in IDL.

Perhaps it's related to using `dynamic_resize` in the `widget_label`? That can change the size of the widget which might cause something to think it needs repositioned. Might help in tracking down the issue.

Thanks,

Allan

Subject: Re: Widget Weirdness

Posted by [David Fanning](#) on Fri, 13 Mar 2009 15:45:22 GMT

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David Fanning writes:

> Well, this is a weird one. I've been able to duplicate
> the problem with other programs, just by changing
> the text of a label widget, but--naturally--when
> I make a simple test case nada. Going to be a long
> night, probably...

Yikes! Talk about weird.

I finally got my little test widget program to exhibit the symptoms of this problem. It turns out that two things are necessary for the problem to show itself.

Just to recap the problem. I have a centered widget. If I move the widget off-center (on the display), then create an event that changes the text of a label widget, the entire widget jumps back to the center of the display. This happens ONLY on UNIX machines.

As I say, there are two requirements for this to occur.

First, I have to locate the widget on the display using the [XY]OFFSET keywords.

```
Widget_Control, tlb, XOFFSET=400, YOFFSET=400
```

It doesn't matter if I do this before or after the widget is realized, or if I do it as shown or if I do it in the TLB creation routine. It only matters that I assign a location to the widget. It doesn't matter if the widget is centered necessarily. The widget will pop back to this original offset location, whatever it happens to be.

Second, I have to use the UPDATE keyword to turn updates off and on for the top-level base. In my test program, the code looks like this:

```
Widget_Control, event.top, Update=0  
Widget_Control, event.top, Update=1  
Widget_Control, labelID, Set_Value=newText
```

If I don't do **both** of these things, my widget acts like it is suppose to.

Do you think there is any chance anyone at ITTVIS will believe me?

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Widget Weirdness
Posted by [David Fanning](#) on Fri, 13 Mar 2009 18:53:44 GMT
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David Fanning writes:

- > I finally got my little test widget program to exhibit
- > the symptoms of this problem. It turns out that two
- > things are necessary for the problem to show itself.
- >
- > Just to recap the problem. I have a centered widget.
- > If I move the widget off-center (on the display), then

> create an event that changes the text of a label widget,
> the entire widget jumps back to the center of the display.
> This happens ONLY on UNIX machines.
>
> As I say, there are two requirements for this to occur.
>
> First, I have to locate the widget on the display using
> the [XY]OFFSET keywords.
>
> Widget_Control, tlb, XOFFSET=400, YOFFSET=400
>
> It doesn't matter if I do this before or after the
> widget is realized, or if I do it as shown or if I
> do it in the TLB creation routine. It only matters
> that I assign a location to the widget. It doesn't
> matter if the widget is centered necessarily. The
> widget will pop back to this original offset location,
> whatever it happens to be.
>
> Second, I have to use the UPDATE keyword to
> turn updates off and on for the top-level base. In my
> test program, the code looks like this:
>
> Widget_Control, event.top, Update=0
> Widget_Control, event.top, Update=1
> Widget_Control, labelID, Set_Value=newText
>
> If I don't do *both* of these things, my widget acts
> like it is suppose to.

Wait a minute! It is not this simple.

OK, I am still positioning my widget with offsets,
as before, but I have removed ALL updating from my
widget.

NOW what happens is that the widget jumps back to
its starting position, but only *SOME* of the time.
This is unreal!! Apparently now there is some interaction
going on, such that if the text of the label widget changes
its length "appreciably" then this jumpy behavior occurs,
but if the text is the same length as the previous text,
the jumpy behavior doesn't occur.

I feel like I am in some kind of twilight zone episode!

Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming (www.dfanning.com)

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Widget Weirdness

Posted by [David Fanning](#) on Fri, 13 Mar 2009 19:49:43 GMT

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David Fanning writes:

> *NOW* what happens is that the widget jumps back to
> its starting position, but only *SOME* of the time.
> This is unreal!! Apparently now there is some interaction
> going on, such that if the text of the label widget changes
> its length "appreciably" then this jumpy behavior occurs,
> but if the text is the same length as the previous text,
> the jumpy behavior doesn't occur.

OK, I think I have a handle on this now. On UNIX,
if you position a TLB widget on the display with
XOFFSET and YOFFSET keywords, and that widget program
has a label widget rendered in its "natural" size
(ie., you have not specified a size), and the label widget
has the DYNAMIC_RESIZE keyword set for it, then if you
change the text on that label widget to an appreciably
different size, the TLB widget will jump back to its
original starting position.

One way around the problem is to assign a size to the
label widget. Another way around the problem is
to not position the TLB widget on the display (ugly).

If you think I have gone completely off my rocker,
you can have a look yourself. You can find my test
program here:

<http://www.dfanning.com/misc/jumpywidget.pro>

Run it like this:

```
IDL> void = jumpywidget()
```

Or, to see it work correctly:

```
IDL> void = jumpywidget(/NoJumping)
```


Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming (www.dfanning.com)

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Widget Weirdness

Posted by [Robert Moss, PhD](#) on Wed, 18 Mar 2009 22:24:37 GMT

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On Mar 13, 3:49 pm, David Fanning <n...@dfanning.com> wrote:

> David Fanning writes:

>> *NOW* what happens is that the widget jumps back to
>> its starting position, but only *SOME* of the time.
>> This is unreal!! Apparently now there is some interaction
>> going on, such that if the text of the label widget changes
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> if you position a TLB widget on the display with
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> Run it like this:

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> IDL> void = jumpywidget()

>
> Or, to see it work correctly:
>
> IDL> void = jumpywidget(/NoJumping)
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> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
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I beleive you, but I still think you are off your rocker :P
