Subject: Re: X window display sizes

Posted by Liam Gumley on Fri, 19 Nov 1999 08:00:00 GMT

View Forum Message <> Reply to Message

David Fanning wrote:

- > I don't know. I think the realize-the-upmapped-
- > draw-widget method used in GET_SCREEN_SIZE should
- > work everywhere. There is even a keyword that will
- > enquire of a remote display, I think.

You're right. I could not get the get_screen_size function to work (IDL 5.1), but extracting the relevant parts worked fine:

base = widget_base(display='redback:0', map=0)
draw = widget_draw(base, xsize=10, ysize=10, graphics_level=2)
widget_control, base, /realize
widget_control, draw, get_value=owindow
owindow->getproperty, screen_dimensions=dims
print, dims
1024.00 768.000
obj_destroy, owindow
widget_control, base, /destroy

Cheers, Liam.

--

Liam E. Gumley
Space Science and Engineering Center, UW-Madison
http://cimss.ssec.wisc.edu/~gumley

Subject: Re: X window display sizes
Posted by davidf on Fri, 19 Nov 1999 08:00:00 GMT
View Forum Message <> Reply to Message

Liam Gumley (Liam.Gumley@ssec.wisc.edu) writes:

- > I don't know of any way to do this using IDL commands. The only
- > information you can return about a widget on a remote display seems to
- > be the geometry of the widget itself, e.g.

I don't know. I think the realize-the-upmappeddraw-widget method used in GET_SCREEN_SIZE should work everywhere. There is even a keyword that will enquire of a remote display, I think.

Cheers.

```
David
```

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: X window display sizes
Posted by Liam Gumley on Fri, 19 Nov 1999 08:00:00 GMT

View Forum Message <> Reply to Message

your name wrote:

- > There was an earlier question about finding the size of the display
- > screen. I am familiar with David's answer:-

>

DEVICE, GET_SCREEN_SIZE = My_screen_size

>

- > However, I am running under OpenVMS, CDE, Motif with X-windows. In my
- > application, I create displays on a number of display devices using the
- > DISPLAY NAME keyword to WIDGET BASE.

>

- > Does anyone know how I can find the size of these (remote) displays?
- > Some of these displays are PCs with an X-window emulator, so the
- > resolution may be changed by the users without the knowledge of the
- > system.

I don't know of any way to do this using IDL commands. The only information you can return about a widget on a remote display seems to be the geometry of the widget itself, e.g.

```
base = widget_base(display_name='merlin.gecm.com:0')
text = widget_text(base, value='Hello world')
widget_control, base, /realize
info = widget_info(base, /geometry)
print, info
```

However you can find the remote display dimensions using a spawn command, e.g.

```
display = 'merlin.hp.com:0'
command = string(display, $ ; csh syntax
format='("setenv DISPLAY ", a, "; xdpyinfo | fgrep dimensions")')
command = string(display, $ ; ksh syntax
format='("export DISPLAY=", a, "; xdpyinfo | fgrep dimensions")')
spawn, command, result
```

print, result

dimensions: 1280x1024 pixels (361x288 millimeters)

I'll leave it as an exercise for the reader to extract the dimension values from the result string.

Caveats:

- (1) This only works if your host system (where IDL is running) is UNIX.
- (2) If you don't have permission to create graphics on the remote display, the spawn command hangs (at least it does on my Linux box, where the remote display is an NT box running XWin-32). Cheers,

Liam.

Liam E. Gumley Space Science and Engineering Center, UW-Madison http://cimss.ssec.wisc.edu/~gumley