
Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [David Fanning](#) on Tue, 17 Oct 2006 13:09:24 GMT
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Joseph B. Gurman writes:

> We're using a PowerMac G5 Quad with an NVIDIA Quadro 4500 (2 x
> DualLink DVI) video card to drive two Apple 30-inch Cinema HD Displays
> (2560 x 1600 LCD), plus an NVIDIA GeForce 6600 to run a smaller flat
> panel (1280 x 1024 native res. LCD). The two large displays, which will
> be mounted on a hallway wall, are meant to display time-lapse movies
> from the imaging instruments (which have 2048 x 2048 detectors) on the
> twin STEREO spacecraft, due for launch next week; the smaller display
> is for control (e.g. a Terminal window to run IDL).

All I want to know is whether the money for all
of this expensive gear was diverted from the planned
Mars mission? It seems we don't have our priorities
straight here. :-(

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: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [K. Bowman](#) on Tue, 17 Oct 2006 14:29:35 GMT
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In article <2006101709032616807%gurman@gsfcnasagov>,
Joseph B. Gurman <gurman@gsfc.nasa.gov> wrote:

> This one is currently stumping the ITTvis support folks, so I
> thought I'd see if anyone else had stumbled upon it.
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> DualLink DVI) video card to drive two Apple 30-inch Cinema HD Displays
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> a single, large, X11 window that spans the two large displays.
> Animation, however, is slow, so we turned to Apple's X11, which for
> some reason responds to an IDL request of the form:
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> IDL> window, 0, xsize = 4400, ysize = 1500
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> with a considerably smaller window (~ 1200 x 960), on one of the large
> displays. Curiously, the small window can be expanded by dragging on
> the control tab at the lower right corner, but not beyond the
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> (screen-spanning) support, so my suspicion now focuses on X11 limiting
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> one of the large displays. I may remove the GeForce and see if a
> single-card, two-display configuration behaves differently.
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> I realize not many folks on this group are likely to have two
> display cards and two massive displays, but if you do (regardless of
> platform), I'd be interested to hear if you've experienced similar
> issues.
>
> Thanks in advance,
>
> Joe Gurman

There was a thread about this a few years ago.

http://groups.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/cd781aa11aba95e7/f20ed38967b39bb0?lnk=st&q=&num=4&hl=en#f20ed38967b39bb0

It may be that the Mac X11 is limiting itself to the size of the "main" window.
Have you tried rearranging the windows in the Monitors control panel?

Ken Bowman

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [Karl Schultz](#) on Tue, 17 Oct 2006 15:31:04 GMT
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On Tue, 17 Oct 2006 09:03:26 -0400, Joseph B. Gurman wrote:

> This one is currently stumping the ITTvis support folks, so I
> thought I'd see if anyone else had stumbled upon it.

>
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It might be interesting to see the rest of the xdpinfo output. In particular, the number of screens it reports and the dimensions of each screen. Although the XINERAMA extension loaded, it might have failed due to the screen sizes but stayed on as an extension anyway.

Also of interest would be the startup log that might be in /var/log.

Can you drag any window from one screen to the other?

You also might fish around in mac-oriented newsgroups or fora.

Karl

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11

Posted by [Ben Panter](#) on Tue, 17 Oct 2006 17:51:37 GMT

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David Fanning wrote:

> All I want to know is whether the money for all
> of this expensive gear was diverted from the planned
> Mars mission? It seems we don't have our priorities
> straight here. :-(

Hi David,

As soon as you start talking about putting **anything** into orbit, the cost of (even) hardware like this is lost in the noise. In fact, you might say that it's one of the most crucial parts of the mission - relaying data to a public, even if it is only a small public who get to see it in the flesh, to convince them of why they are spending all that cash. The science and understanding of our own planet might mean that our kids have the opportunity to visit Mars - if we get it wrong here then perhaps there won't be an 'us' to make that trip.

That's not to say that I don't think that we should be cancelling all Mars trips, or cancelling astronomy missions, it just means that as an ordinary scientist I'm glad that it's not taking **all** the cash.

Cheers,

Ben

PS: Played conkers the other day. Lost to a seven year old.

--

Ben Panter, Edinburgh, Scotland.

Email false, <http://www.benpanter.co.uk>

or you could try ben at ^^^^^^^^^^^^^^^

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11

Posted by [David Fanning](#) on Tue, 17 Oct 2006 18:03:39 GMT

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Ben Panter writes:

> As soon as you start talking about putting *anything* into orbit,
> the cost of (even) hardware like this is lost in the noise. In fact, you
> might say that it's one of the most crucial parts of the mission -
> relaying data to a public, even if it is only a small public who get to
> see it in the flesh, to convince them of why they are spending all that
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> then perhaps there won't be an 'us' to make that trip.
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> That's not to say that I don't think that we should be cancelling all
> Mars trips, or cancelling astronomy missions, it just means that as an
> ordinary scientist I'm glad that it's not taking *all* the cash.

Hi Ben,

As you know, I was being a little facetious. (Or maybe the feeling I was expressing was envy, I'm not sure.) In any case, I don't begrudge the NASA folks fancy hardware. Lord knows the most exciting experience of my life this year (other than having two state tennis singles champions from our local high school) was being inside that Gemini dome when the big telescope was opened up! Talk about a piece of machinery. *That* feeling was sublime. Like visiting the Astronomy Library in Edinburgh and seeing that first edition of the Principia.

> PS: Played conkers the other day. Lost to a seven year old.

I still have my two sitting here on my desk, to remind me of how expensive it is to live in Munich. :-)

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: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [Karsten Rodenacker](#) on Wed, 18 Oct 2006 10:11:49 GMT
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Perhaps my two cents to this topic too.

I have only one graphicscard with two displays on a PowerPC Dual and on my

powerbook.

Windows can only be opened or resized up to the size of the display where the window resides.

IDLsysmonitorinfo shows two screens.

```
print,o->getrectangles()
      1680      22      1920      1178
      0       73      1680      1050
```

e.g. on my notebook.

xdpyinfo shows one screen 3200x1200 or 3600x1200.

All that is quite interesting for me beside the occasionally hanging system by a lost sync.

Possibly we can await some improvements in MM (Multi-Monitor, but also Mathematical Morphology)!

Regards

Karsten

Am Tue, 17 Oct 2006 15:03:26 +0200 schrieb Joseph B. Gurman
<gurman@gsfc.nasa.gov>:

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- > thought I'd see if anyone else had stumbled upon it.
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- > single-card, two-display configuration behaves differently.

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> Thanks in advance,
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--

Erstellt mit Operas revolutionärem E-Mail-Modul: <http://www.opera.com/m2/>

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [Karl Schultz](#) on Wed, 18 Oct 2006 14:38:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wed, 18 Oct 2006 12:11:49 +0200, Karsten Rodenacker wrote:

> Perhaps my two cents to this topic too.
>
> I have only one graphicscard with two displays on a PowerPC Dual and on my
> powerbook.
> Windows can only be opened or resized up to the size of the display where
> the window resides.

Then, I do not think that your XINERAMA extension is working, and you are in the same position that Joe. And it could also be that the Mac window manager is enforcing this.

If your XINERAMA extension is working properly, then you should be able to do something like:

WINDOW, XPOS=1000

and have the window straddle the monitors.

When you say "Windows", do you mean IDL windows, or any window?

What happens if you open a Finder window, for example, and try to drag it to the other monitor?

> IDLsysmonitorinfo shows two screens.
> print,o->getrectangles()

```
>      1680      22      1920      1178
>        0       73      1680      1050
```

This is expected. The idea here is that this information is useful for a MM-aware IDL application that may wish to lay out several windows across the desktop and avoid straddling the boundary between monitors. If all the info the app has is something like "3200x1200", it cannot tell exactly what part of the desktop is on which monitor.

The IDLSysMonitorInfo object also has a method called IsExtendedDesktop. If this is non-zero, then IDL thinks that you are running a desktop that spans the monitors, which implies that XINERAMA is advertised as working.

Karl

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [Karsten Rodenacker](#) on Thu, 19 Oct 2006 07:39:02 GMT
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What should I say?

Window,0,xpos=1500

does straddle the monitors. Hence xinerama(?) is working. It is shown in the list of X extensions.

isExtendedDesktop() is non-zero.

Still I cannot extend the window by dragging and not by creating it with x/ysize:

IDL> window,0,xpos=1000,xsize=3000

IDL> help,/dev

Available Graphics Devices: CGM HP LJ NULL PCL PRINTER PS REGIS TEK X Z

Current graphics device: X

Server: X11.0, The XFree86 Project, Inc, Release 40400000

Display Depth, Size: 24 bits, (1920,1178)

Visual Class: TrueColor (4)

Bits Per RGB: 8 (8/8/8)

Physical Color Map Entries (Emulated / Actual): 256 / 256

Colormap: Shared, 16777216 colors. Translation table: Bypassed

Graphics pixels: Decomposed, Dither Method: Ordered

Write Mask: 16777215 (decimal) ffffff (hex)

Graphics Function: 3 (copy)

Current Font: <default>, Current TrueType Font: <default>

Default Backing Store: Pixmap.

Window Status: -----

id typ(x, y, backing store) id typ(x, y, backing store)

0: Win(1881, 589, Pixmap)

I think my 2cents tend to be similar to the problem stated with 3 monitors.

Finder Windows can be moved around, resized by dragging over both monitors

and can be enlarged if there is enough space to the right of the monitors.
I don't know how to get info about native mac windows but I think I have
there at least a 5000px width one.

Regards

KR

Am Wed, 18 Oct 2006 16:38:58 +0200 schrieb Karl Schultz
<k_remove_schultz@ittvis.com>:

```
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Erstellt mit Operas revolutionärem E-Mail-Modul: <http://www.opera.com/m2/>

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by [Karl Schultz](#) on Thu, 19 Oct 2006 15:54:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Thu, 19 Oct 2006 09:39:02 +0200, Karsten Rodenacker wrote:

> What should I say?
> Window,0,xpos=1500
> does straddle the monitors. Hence xinerama(?) is working. It is shown in
> the list of X extensions.
> isExtendedDesktop() is non-zero.
> Still I cannot extend the window by dragging and not by creating it with
> x/ysize:

I think the window manager that controls the X windows is not letting you do these things. I believe that the docs for MM support in IDL warn about this. The entire X/Aqua thing on OS X is tricky business. I'm not surprised that there are more restrictions on X windows than on Aqua (e.g., Finder) windows.

Karl
