Subject: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Joseph B. Gurman on Tue, 17 Oct 2006 13:03:26 GMT

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

   We're using a PowerMac G5 Quad with an NVIDIA Quadro 4500 (2 x
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(2560 x 1600 LCD), plus an NVIDIA GeForce 6600 to run a smaller flat
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from the imaging instruments (which have 2048 x 2048 detectors) on the
twin STEREO spacecraft, due for launch next week; the smaller display
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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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single-card, two-display configuration behaves differently.

   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

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by K. Bowman on Thu, 19 Oct 2006 17:19:52 GMT

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This could be an ugly solution, but have you thought about using Xvfb
(the X virtual frame buffer) to generate the images and then use some
other Mac program (one not limited by monitor size) to display the
images?

I have had good luck with Xvfb on my Mac, but I have not tried
to use it with windows larger than my monitor.

In a script :

```
...
source /usr/local/rsi/idl_6.3/bin/idl_setup                #Set up IDL paths
/usr/X11R6/bin/Xvfb :1 -screen 0 1280x1024x24 -ac -terminate &    #Start X-windows server
setenv DISPLAY :1.0                              #Set X-windows display

(echo GFS_MAKE_MAPS, MAKE_DATE\(${YEAR}, ${MONTH}, ${DAY}, ${HOUR}\) ; \
 echo exit)               | \
idl >>& ~/Projects/wxmaps/gfs_make_maps.log

killall -9 Xvfb                              #Kill X-windows server
```

Ken Bowman

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Rick Towler on Thu, 19 Oct 2006 18:58:38 GMT
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I'm sure this has crossed your mind, and I only mention this as you seem
to have a deadline that Apple might not be able to meet, but have you
considered running a linux based PC instead of your PowerMac? Or <gasp>
a windows PC? Your graphics adapters should work in an x86 box and my
multi-monitor experience on these platforms has been pretty positive.

On Win32 I have run IDL apps on a quad monitor setup very similar to
your 3 monitor setup (3 1600x1200 as display with 1 1280x1024 for
control) w/o issue using nVidia "dualview". On x86-32 linux I have only
worked with a dual monitor nVidia based system . Maybe someone with
experience running 3+ monitors on linux+IDL can post their thoughts.

-Rick

Joseph B. Gurman wrote:
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> I'd see if anyone else had stumbled upon it.

>
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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
>

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by bogdanni on Fri, 20 Oct 2006 10:05:38 GMT
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Hi,
I did some tests and I think I may have a solution:
The problem is that the default window manager, quartz-wm doesn't seem
to allow sizing windows larger than one screen. You could use another
window manager, like twm which comes with the X11 distribution for Mac
OS X. To enable it, copy

/private/etc/X11/xinit/xinitrc to $HOME/.xinitrc and replace the last
line, "exec quartz-wm" with "exec twm".

Since twm cannot interact with normal Mac OS X you have to use X11 in
full screen mode. This is enabled via X11->Preferences->Ouput->Enable
the Enter Full Screen menu. Use Command-Option-A to enter/exit full
screen. If you are unfamiliar to twm, the left mouse button brings up a
menu where you can choose xterm (also, the initial placement of windows
is interactive).

That way, I can open a window wider than one screen from IDL, on my
computer (with two screens attached).
Also OpenGL still seems hardware accelerated, albeit, of course,
slower.

Hope this helps,
Bogdan

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Edd Edmondson on Fri, 20 Oct 2006 10:10:23 GMT
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bogdanni@gmail.com wrote:

> Hi,
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> screen. If you are unfamiliar to twm, the left mouse button brings up a
> menu where you can choose xterm (also, the initial placement of windows
> is interactive).

I'm not sure you have to use full screen mode, but it's probably most
convenient as you'll at least get a consistent interface then.

It's probably not a bad idea to have a 'quartz-wm --only-proxy' line
before the 'exec twm', as this will let you keep the copy and paste
link to the Aqua side of things.

--
Edd

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Edd Edmondson on Fri, 20 Oct 2006 10:15:51 GMT
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Edd <eddedmondson@hotmail.com> wrote:
> bogdanni@gmail.com wrote:

>> Hi,
>> I did some tests and I think I may have a solution:
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>> to allow sizing windows larger than one screen. You could use another
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> convenient as you'll at least get a consistent interface then.

Actually, I see with twm you do need full screen mode because of the
way you place windows when they start, but many other window managers
will work fine mixed in with Aqua.

--
Edd

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by greg michael on Fri, 20 Oct 2006 12:13:40 GMT
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Hi Joseph,

We have two of these same screens hooked up to a linux PC, with two
duallink DVI cards (don't know which, exactly, but I know that they are
two different models), and it works fine with IDL applications making

single windows over both screens. I didn't have to make any code
modifications.

regards,
Greg

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by bogdanni on Fri, 20 Oct 2006 13:47:28 GMT
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Actually, I was not recommending using twm in general. I mentioned it
only for testing purposes, since it's the only other window manager,
besides quartz-wm, installed by Mac OS X.

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by swisswuff on Sun, 22 Oct 2006 11:03:56 GMT
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I like icewm. You can have the windows larger than the screen by
tweaking /sw/lib/X11/icewm/preferences and setting LimitSize to 0
(instead of the default 1).

icewm is installed using Fink; you can get fink from fink.sf.net. Then
you'd type fink install icewm into the terminal and then you'd replace
your exec command in xinitrc or .xinitrc (whichever you have setting
your X11 preferences) with exec icewm.

You also get a nice little workspace bar. I map some of the window
commands to keys with Quickeys.

bogdanni@gmail.com schrieb:

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> only for testing purposes, since it's the only other window manager,
> besides quartz-wm, installed by Mac OS X.

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Karl Schultz on Tue, 07 Nov 2006 00:41:14 GMT
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On Tue, 17 Oct 2006 09:03:26 -0400, Joseph B. Gurman wrote:

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I read today in the Apple x11-users newsgroup that the recent Software
Update for X11, the one that fixes the PPC-binary X11 clients, also fixes
this problem with windows spanning displays.

I didn't try it (yet) myself, but it may be worth looking into.

Karl

Am Tue, 07 Nov 2006 01:41:14 +0100 schrieb Karl Schultz
<k_remove_schultz@ittvis.com>:

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> Update for X11, the one that fixes the PPC-binary X11 clients, also fixes
> this problem with windows spanning displays.
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> I didn't try it (yet) myself, but it may be worth looking into.
OK, what I tried in my previous mail works now as expected.
MacOSX Version X11 1.1.3 - XFree86 4.4.0 which replaces just today the
1.1.2 version.
Karsten

--
Erstellt mit Operas revolutionï¿œerem E-Mail-Modul: http://www.opera.com/m2/

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by Jeff Hester on Sun, 19 Nov 2006 00:45:50 GMT
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Rick Towler wrote:

> I'm sure this has crossed your mind, and I only mention this as you seem
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> considered running a linux based PC instead of your PowerMac? Or <gasp>
> a windows PC? Your graphics adapters should work in an x86 box and my
> multi-monitor experience on these platforms has been pretty positive.
>

A similar issue exists in the Linux world. Older WMs like twm and
sawfish allow creation of windows that are larger than the display.
Unfortunately these are no longer supported. The "native" window
manager in Fedora, MetaCity, will allow you to manually adjust a window
to whatever size you like, and manages those windows just fine, but will
not allow you to CREATE a window that does not fit on the screen. This
is a large pain in your southern extremities when you are working with
4000 x 4000 images and have a few tens of thousands of lines of code
built around the assumption that when you open a window with a specified
xsize and ysize, you GET a window with that xsize and ysize. (This
seems to be part of a general move in the Linux world away from the sort
of flexibility that prevents off-the-street users from being happy.)

A very sharp student of mine tried to hack MetaCity, but threw up his

hands in the maze of conditionals inside the code. And when he asked
one of the developers about it, the answer was a very predictable, "Open
windows larger than the screen? You aren't supposed to want to do that.
  What kind of an idiot are you, anyway?"

I'd be interested in hearing the outcome of peoples' experience with
window managers and multiple displays in OS X. As of a day ago I have a
PowerMAC, a 20 inch display, and a 30 inch display sitting in my lab. I
would be perfectly happy if I could run X11 full screen on the 30 inch
display with some reasonable window manager (reasonable = let's me
create absurdly large windows), while running aqua in the 20 inch display.

I'm kind of afraid of taking the hardware out of the box because I know
that when I do, I'm going to get sucked into issues like this for a month.

Cheers,
Jeff

Subject: Re: Issue with 6.3, Mac OS X 10.4, 3 displays, X11
Posted by David Fanning on Sun, 19 Nov 2006 00:55:05 GMT
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Jeff Hester writes:

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> that when I do, I'm going to get sucked into issues like this for a month.

I wondered what all these long (and interesting) articles
were about. :-)

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 Jeff Hester on Sun, 19 Nov 2006 01:14:51 GMT
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David Fanning wrote:

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>
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>> that when I do, I'm going to get sucked into issues like this for a month.
>
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> were about. :-)
>
> Cheers,
>
> David

Well, I bought the MacBook first to get my feet wet, only to find myself
dripping from head to toe. ;-)

To be truthful, I'm starting to like the environment, but am a LONG way
from feeling at home. Although I am already far happier on my MacBook
than I ever was with a Windoze laptop.

Anyone know of a piano teacher who can help me get all those time-saving
keystrokes into muscle memory...

Cheers,
Jeff