Subject: X window requirement for batch jobs: not just for plotting
Posted by MarioIncandenza on Wed, 23 Nov 2011 06:26:40 GMT

So, we all know that if you have a job that generates a plot, and you
need it to run automated, you have to either:
1) use the Z buffer for everything;
2) use the X virtual frame buffer to "spoof" an X terminal;

But this requirement is clearly triggered by commands that have
nothing to do with plotting. The obvious example is widgets, but I am
currently dealing with a piece of code that has no plotting and no
widgets, but at a certain point in the code it insists on having an X
terminal available, and crashes if there is none.

Tomorrow's job is to identify exactly what call is the culprit (I'm
wondering if it isn't maybe READ_TIFF), and figure out a solution
along the lines of #1 above, but I thought I'd ask:

What other types of commands, that I wouldn't expect, might be asking
for an X terminal?

--Edward H.

Subject: Re: X window requirement for batch jobs: not just for plotting
Posted by David Fanning on Wed, 30 Nov 2011 20:57:21 GMT

Ed Hyer writes:

> OK, I have done some debugging, and found that what is happening is
> that a call to MESSAGE wants, for some reason, to use DIALOG_MESSAGE,
> and it wants an X window despite an upstream call in the same routine,
> with no graphics in between, to SET_PLOT,'Z'. Has anyone seen this
> problem before?

I've seen the problem many times, but not this particular
manifestation of it. I'm not terribly surprised, though,
are you? This is a graphics program that is designed to
be run on a graphics computer. Why wouldn't you assume
there might be a graphics window around when you needed
one?

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: X window requirement for batch jobs: not just for plotting
Posted by Kenneth P. Bowman on Wed, 30 Nov 2011 21:34:09 GMT

View Forum Message <> Reply to Message

In article <MPG.2940469d26adf5b6989913@news.giganews.com>,
 David Fanning <news@dfanning.com> wrote:

> Ed Hyer writes:
>
>> OK, I have done some debugging, and found that what is happening is
>> that a call to MESSAGE wants, for some reason, to use DIALOG_MESSAGE,
>> and it wants an X window despite an upstream call in the same routine,
>> with no graphics in between, to SET_PLOT,'Z'. Has anyone seen this
>> problem before?
>
> I've seen the problem many times, but not this particular
> manifestation of it. I'm not terribly surprised, though,
> are you? This is a graphics program that is designed to
> be run on a graphics computer. Why wouldn't you assume
> there might be a graphics window around when you needed
> one?
>
> Cheers,
>
> David

I don't know. This seems like a bug to me. When I call MESSAGE
I expect it to print a message on the command line. I can't find
anything in the MESSAGE man page about calling DIALOG_MESSAGE.

Ed, are you calling MESSAGE yourself, or is this in a built-in
routine?

Ken

Subject: Re: X window requirement for batch jobs: not just for plotting
Posted by Craig Markwardt on Thu, 01 Dec 2011 00:48:07 GMT

On Nov 30, 3:10 pm, Ed Hyer <ejh...@gmail.com> wrote:
> Hi folks,
>
> OK, I have done some debugging, and found that what is happening is
> that a call to MESSAGE wants, for some reason, to use DIALOG_MESSAGE,
> and it wants an X window despite an upstream call in the same routine,
> with no graphics in between, to SET_PLOT,'Z'. Has anyone seen this
> problem before?

If you're trying to do something in batch mode, (unattended without an
X-window server attached), I will wager that executing this command
  unsetenv DISPLAY
(or it's equivalent in whatever shell you use), will prevent most of
these kinds of X-window problems.

Craig

Subject: Re: X window requirement for batch jobs: not just for plotting
Posted by MarioIncandenza on Thu, 01 Dec 2011 23:44:30 GMT

On Nov 30, 4:48 pm, Craig Markwardt <craig.markwa...@gmail.com> wrote:
> If you're trying to do something in batch mode, (unattended without an
> X-window server attached), I will wager that executing this command
>   unsetenv DISPLAY

Craig,

Yes! As I learned, from doing a longer search that yielded the LAST
time you came up with this correct answer:
 http://groups.google.com/group/comp.lang.idl-pvwave/browse_t
hread/thread/dad37fe63c582ea0/e1e6afcde66b9503?hl=en&lnk
=gst&q=runtime+silent+bowman#e1e6afcde66b9503

For everyone's reference, the key here is that the RUNTIME invocation
of IDL "-rt" changes the behavior of MESSAGE and calls DIALOG_MESSAGE
instead. This behavior is not anywhere in the IDL documentation, as
far as I can tell.

Thanks for your help, both then and now!

--Edward H.