
Subject: Backing store

Posted by [thompson](#) on Thu, 11 Sep 1997 07:00:00 GMT

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I run IDL on DEC Alpha Workstations running OSF/Digital Unix. I've noticed that the newer machines give me more problems with backing store. In other words, if a graphics window is covered up and then brought back to the foreground, then the parts of the image that were obscured are lost, unless one uses RETAIN=2. This is not a problem on the older Alpha workstations.

It seems to me that there are two possibilities. Either the problem is associated with the newer Alpha hardware, or with the newer version of the Operating System. So far, we have not upgraded our older machines to OSF 4.0, so maybe that's why those machines do not give any problems.

I could put DEVICE, RETAIN=2 into the IDL startup script, but according to the online help:

Pixmap is a precious resource in the X server, so backing pixmaps should only be requested for windows with contents that must absolutely be preserved.

Has anyone else noticed this behavior under Digital Unix? Is there anything to do to tune the system to keep this from happening?

Thank you,

William Thompson

Subject: Re: backing store

Posted by [davidf](#) on Wed, 04 Mar 1998 08:00:00 GMT

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Steven DiMarco (dimarco@aquaman.tamu.edu) writes:

> I am running PV-WAVE CL Version 6.10 (sgi IRIX mipseb) on
> an SGI O2 and would like to set the graphics window to
> automatically restore the latest graphic after closing/opening
> the window. Any suggestions?

Humm, a lot of variables here. Have you tried setting RETAIN=2 on the window when you create it? (Or, alternatively, if you want this for all your windows, you can try setting RETAIN=2 with the DEVICE command.)

David

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

Subject: Re: backing store
Posted by [K. Bowman](#) on Tue, 28 Jun 2005 14:15:33 GMT
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In article <1119954111.811784.322640@f14g2000cwb.googlegroups.com>,
"KK T" <mailbox_cw-tech@yahoo.com.sg> wrote:

> Good day,
>
> Does anyone know what is a backing store ?
> I had encountered a couple of prompt where I load a huge array (20000
> by 20000) of data to draw_widget and using TV command
>
> "unable to allocate memory for backing store. Window closing"
>
> Is there any way for to increase the size of backing store?
>
> Kok Kiang

Backing store is where the graphics device stores copies of windows (bitmaps).
Backing store makes it possible to cover and uncover windows quickly.

You are requesting about 400 MB of backing store.

You should start by looking at the RETAIN keyword to the DEVICE procedure or
look up backing store in the documentation index.

Ken Bowman

Subject: Re: backing store
Posted by [Rick Towler](#) on Tue, 28 Jun 2005 15:27:08 GMT
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Kenneth Bowman wrote:

> "KK T" wrote:
>
>> Good day,
>>
>> Does anyone know what is a backing store ?

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> You are requesting about 400 MB of backing store.
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> You should start by looking at the RETAIN keyword to the DEVICE procedure or
> look up backing store in the documentation index.

And I might add that I doubt that the backing store is your real issue
since most graphics devices will not be able to draw a 20000x20000
bitmap regardless of what you backing store is set to.

You will need to either break this image up or down sample using REBIN
or CONGRID.

-Rick

Subject: Re: backing store
Posted by [KK T](#) on Wed, 29 Jun 2005 08:45:02 GMT
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Good day,

Will I lose the details of the bitmap using CONGRID or REBIN if I zoom
my view to an area smaller than the orginial image?
ENVI provides image, scroll and zoom window. However, those windows
take up too much space on the desktop and I will like to combine all
features in one window. That is, when I zoom in to the maximun, I can
see the finest details of the bitmap, when I zoom out to the maximun, i
can see the overall view of the bitmap. At the same time, i should be
able to view the whole area of the bitmap at that zoom level with
scroll bar activated.

Am I too ambitious?

Kok Kiang

Subject: Re: backing store

Posted by [Rick Towler](#) on Wed, 29 Jun 2005 15:50:11 GMT

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KK T wrote:

- > Will I lose the details of the bitmap using CONGRID or REBIN if I zoom
- > my view to an area smaller than the orginial image?
- >
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- > features in one window. That is, when I zoom in to the maximun, I can
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- > can see the overall view of the bitmap. At the same time, i should be
- > able to view the whole area of the bitmap at that zoom level with
- > scroll bar activated.
- >
- > Am I too ambitious?

I'm not an image guy, nor do I act like one on the internet, but I would use a combination of REBIN and WIDGET_DRAW with the /APP_SCROLL keyword set. You'll keep the original image in memory and REBIN that image for display, altering the dimensions according to your zoom level.

I have no idea if this is feasible performance wise, but it is where *I* would start. Maybe someone else can come up with a better approach.

-Rick
