
Subject: Re: fast magnification routine needed
Posted by [knipp](#) on Mon, 13 Jun 1994 08:06:07 GMT
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In article eml@news.service.uci.edu, vshvetsk@fourier.oac.uci.edu (Victor Shvetsky) writes:

>
> I have a 20x20 array that I would like to magnify to 200x200
> It works like this- as my cursor moves around the picture, that part of the picture is magnified in
real time in a second window by a factor of ten (20->200)
> Right now I am using the REBIN routine,, and I was wondering if there is anything FASTER
than that. Is it possible to STORE THE WHOLE image magnified into the memory and just display
a part of it in the window- wouldn't be faster?
> If so, what is the command that SAVES the image into the memory, because
> I know to retrieve, I have to type: tvrd
> Thanks in advance
>

If you have got enough memory try the following:

```
; ima: original image  
; mag: magnified with factor 10
```

```
window, /free, xsize=cols, ysize=rows ; window for original image  
w_ori = !d.window
```

```
window, /free, xsize=200, ysize=200 ; window to display zoom  
w_zoom = !d.window
```

```
mag = rebin(ima, 10*cols, 10*rows)  
window, /free, xsize=10*cols, 10*rows, /pixmap ; window for mag. image  
; in case the keyword /pixmap is  
; NOT working in your environment,  
; simply position the window  
; outside your screen  
; p.e., xpos=1536, ypos=1024  
;  
w_mag = !d.window
```

```
finitum = 0 ; control repeat-loop
```

```
repeat begin
```

```
  wset, w_ori  
  cursor, xc, yc, /change, /device  
  if !mouse.button eq 4 then finitum = 1 ; to exit loop
```

```
  wset, w_zoom
```

```
xc_z = xc * 10 - 100 ; test here for inside image
yc_z = yc * 10 - 100
```

```
DEVICE, COPY=[xc_z, yc_z, 200, 200, xc-10, yc-10, w_mag]
```

endrep until finitum

Hope it works,

Karlheinz

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Subject: Re: fast magnification routine needed
Posted by [peter](#) on Mon, 13 Jun 1994 16:34:38 GMT
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Victor Shvetsky (vshvetsk@fourier.oac.uci.edu) wrote:

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Victor,

By far the fastest way to copy images around is to let the X server take care of it. Assuming you have a displayed image, use TVRD to read the screen, then magnify the whole image with REBIN and display it in a hidden pixmap (see the /pixmap keyword to WINDOW). Then, use DEVICE, /COPY to copy sections of the pixmap to your displayed window. You should get real time performance this way.

Peter

Subject: Re: fast magnification routine needed
Posted by [velt](#) on Mon, 13 Jun 1994 20:15:23 GMT
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In article eml@news.service.uci.edu, vshvetsk@fourier.oac.uci.edu (Victor Shvetsky) writes:

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Try pixmaps and device,copy=[]. That works absolutely fabulous. I flip through
various (large) images very fast.

Robert Velthuisen
velt@rad.usf.edu
