Subject: Testers needed for TV benchmark
Posted by billb on Wed, 08 Aug 2001 17:24:05 GMT

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Hi all,

I've been working at trying to get the fastest TV update rate possible and am a little discouraged by my results so far. I developed a short benchmark program and am curious what results might be obtained by other machines. I have a P3-550 and obtained the following:

TV-Device Copy Test: Array Size: 512   13.520000 seconds
=> Frames/sec: 3.6982249   Frame time: 0.27040000
  Video Xfer rate: 2908402.4 bytes/sec

TV Direct Test: Array Size: 512   13.290000 seconds =>
Frames/sec: 3.7622272   Frame time: 0.26580000
   Video Xfer rate: 2958735.9 bytes/sec

If your time permits, I would appreciate knowing anyone else's results and a brief mention of the computer used. My benchmarks were identical for IDL 5.2 and 5.3.1. Thanks in advance.

Bill B.

 ==
=================

```
; Benchmark test for window updating

PRO WIN_TEST, GROUP=Group

set_plot, 'win'
DEVICE, DECOMPOSED = 0  ; New for IDL 5.2

sz = 512

WINDOW, /FREE, /PIXMAP, XSIZE = sz, YSIZE = sz
pixmap0_id = !D.WINDOW
WINDOW, /FREE, XSIZE = sz, YSIZE = sz
pixmap1_id = !D.WINDOW

R = FINDGEN(256)
G = R
B = R

TVLCT, R, G, B  ; Load these vectors into the color table:
```

```
s = 0              ; seed
data = (randomu(s, sz, sz, 3) * 255)  ; create some initial data

; TV to pixmap and copy test ----------------------------

T0 = SYSTIME(1)
FOR I = 0, 49 DO BEGIN
  WSET, pixmap0_id

  ;data = (randomu(s, sz, sz, 3) * 255)
  ;s = s + 1

  TV, data, true = 3

  WSET, pixmap1_id
  DEVICE, COPY = [0, 0, sz-1, sz-1, 0, 0, pixmap0_id]
ENDFOR

T1 = SYSTIME(1)
fps = 50.0 / (t1 - t0)
print, 'TV-Device Copy Test: Array Size: ', sz, ' ',t1 - t0, '
seconds', '  => Frames/sec: ', fps, '   Frame time:', 1.0/fps
print, '   Video Xfer rate: ', DOUBLE(sz) * DOUBLE(sz) * 3D * fps, '
bytes/sec'
print

; TV direct test -----------------------------------------
T0 = SYSTIME(1)
FOR I = 0, 49 DO BEGIN
  WSET, pixmap1_id

  ;data = (randomu(s, sz, sz, 3) * 255)
  ;s = s + 1

  TV, data, true = 3

ENDFOR

T1 = SYSTIME(1)
fps = 50.0 / (t1 - t0)
print, 'TV Direct Test: Array Size: ', sz, ' ',t1 - t0, ' seconds', '
 => Frames/sec: ', fps, '   Frame time:', 1.0/fps
print, '   Video Xfer rate: ', DOUBLE(sz) * DOUBLE(sz) * 3D * fps, '
bytes/sec'

WDELETE, pixmap0_id
WDELETE, pixmap1_id
END
```

Subject: Re: Testers needed for TV benchmark
Posted by david[2] on Thu, 09 Aug 2001 16:29:28 GMT

Karl Schultz writes:

> Even when the X server implementation is better, that is, the
> off-screen pixmaps are faster, this can cause confusing benchmark
> results since the copy times can vary in hard-to-describe ways.

In my experience, nearly everything about pixmaps
is hard to describe. :-(

Certainly it is hard to explain why a program
works on *your* computer, but not your boss's
computer, which was ordered from the supplier
on the same PO and from the same computer
manufacturer.

That's why I always confine any explanation to
small animations and lots of hand-waving.

Cheers,

David

--
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Testers needed for TV benchmark
Posted by Dennis Boccippio on Fri, 10 Aug 2001 16:11:21 GMT

IDL 5.3, MacOS 9.1, Powerbook G3/300:

TV-Device Copy Test: Array Size: 512   6.1833333 seconds
=> Frames/sec:
     8.0862534 Frame time: 0.12366667
  Video Xfer rate: 6359288.5bytes/sec
TV Direct Test: Array Size: 512   5.2666667 seconds
=> Frames/sec:
     9.4936709 Frame time: 0.10533333
  Video Xfer rate: 7466126.6bytes/sec

In article <269b6343.0108080924.2bd48749@posting.google.com>,
 billb@attinet.com (Bill B.) wrote:

> Hi all,
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> benchmark program and am curious what results might be obtained by
> other machines. I have a P3-550 and obtained the following:
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> and a brief mention of the computer used. My benchmarks were
> identical for IDL 5.2 and 5.3.1. Thanks in advance.
>
> Bill B.
>

My results:

Config:
Windows 2000, IDL 5.4, Athlon 1.2 Ghz, 512 Mo Ram

TV-Device Copy Test: Array Size: 512   6.2090000seconds =>
 Frames/sec: 8.0528266 Frame time: 0.12418000
    Video Xfer rate: 6333000.5bytes/sec

TV Direct Test: Array Size: 512   4.9970000 seconds =>
Frames/sec: 10.006004 Frame time: 0.099940000
    Video Xfer rate: 7869041.5bytes/sec

Good luck.