Subject: antialiased image from IDLgrWindow::Read() ?? Posted by Sean Dettrick on Fri, 26 Apr 2002 23:53:13 GMT

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Hi,

I want to read an antialiased image from IDLgrWindow. Rick Towler suggested this is possible on recent mid-high end video cards. I have tried, but without success. Does anyone have advice?

I have an NVIDIA GeForce 3 Ti 200, which, sifting through the superlatives, purports to have a patented High Resolution Anti Aliasing (HRAA) system.

However, using
oImage = oWindow -> Read()
oImage -> GetProperty, data=image_data
write_bmp,'test.bmp',image_data,/rgb
produces an aliased image.

Furthermore, I notice that all of my output is aliased. This is true on both my linux and windows partitions (I have the latest NVIDIA driver on the windows partition).

Any suggestions would be greatly appreciated...

Thanks, Sean Dettrick

Subject: Re: antialiased image from IDLgrWindow::Read() ?? Posted by Rick Towler on Sat, 27 Apr 2002 17:17:05 GMT View Forum Message <> Reply to Message

Hi Sean,

Is AA turned on? (desktop properties -> settings -> advanced -> GF3 -> Additional Properties -> 3d antialiasing settings) With your GF3 you should be able to set 2x, Quincunx, and 4x. Make sure IDL's renderer is set to hardware. Restart IDL after you make any changes.

I don't know if the linux drivers have AA enabled. I would stick to windows for now.

I have had problems with different driver versions, IDL, and AA. Until recently I had to use my video card vendors driver since the nVidia reference driver failed to produce AA output with IDL (but it would work with other OpenGL applications). I am currently running the latest nVidia reference drivers and IDL 5.5 and AA works great. What version of IDL are you running?

You should see the difference in the window so don't bother grabbing images and checking them until you get AA working.

-Rick

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"Sean Dettrick" <dettrick@uci.edu> wrote in message
news:aacp9m$ckm$1@news.service.uci.edu...
> Hi.
> I want to read an antialiased image from IDLgrWindow. Rick Towler
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> this is possible on recent mid-high end video cards. I have tried, but
> without success. Does anyone have advice?
> I have an NVIDIA GeForce 3 Ti 200, which, sifting through the
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     olmage = oWindow -> Read()
     olmage -> GetProperty, data=image data
>
     write_bmp,'test.bmp',image_data,/rgb
> produces an aliased image.
> Furthermore, I notice that all of my output is aliased. This is true on
> both my linux and windows partitions (I have the latest NVIDIA driver on
the
 windows partition).
>
 Any suggestions would be greatly appreciated...
> Thanks.
> Sean Dettrick
>
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Subject: Re: antialiased image from IDLgrWindow::Read() ?? Posted by Sean Dettrick on Sat, 27 Apr 2002 21:33:56 GMT View Forum Message <> Reply to Message

Hi Rick,

thanks again so much. AA now works on my home computer (Radeon 8500 chip) via OpenGL. Not surprisingly it doesn't work with the proprietary Radeon

"Smoothvision" (which I guess is AA). Presumably I'll get it functioning on my at-work Nvidia as well. If not I'll let you know in case you're interested. I have IDL5.5 by the way. Sean

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"Rick Towler" <tsehai@attbi.com> wrote in message
news:l2By8.14698$ao1.8340@rwcrnsc54...
> Hi Sean,
>
> Is AA turned on? (desktop properties -> settings -> advanced -> GF3 ->
> Additional Properties -> 3d antialiasing settings) With your GF3 you
should
> be able to set 2x, Quincunx, and 4x. Make sure IDL's renderer is set to
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> recently I had to use my video card vendors driver since the nVidia
> reference driver failed to produce AA output with IDL (but it would work
> with other OpenGL applications). I am currently running the latest nVidia
> reference drivers and IDL 5.5 and AA works great. What version of IDL are
> you running?
>
> You should see the difference in the window so don't bother grabbing
images
> and checking them until you get AA working.
>
> -Rick
>
  "Sean Dettrick" <dettrick@uci.edu> wrote in message
> news:aacp9m$ckm$1@news.service.uci.edu...
>> Hi.
>> I want to read an antialiased image from IDLgrWindow. Rick Towler
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>> without success. Does anyone have advice?
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>> both my linux and windows partitions (I have the latest NVIDIA driver on
> the
>> windows partition).
>>
>> Any suggestions would be greatly appreciated...
>>
>> Thanks.
>> Sean Dettrick
>>
>>
>>
>
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Subject: Re: antialiased image from IDLgrWindow::Read() ?? Posted by Rick Towler on Mon, 29 Apr 2002 18:16:43 GMT View Forum Message <> Reply to Message

"Sean Dettrick" <dettrick@uci.edu> wrote

- > Presumably I'll get it functioning on my at-work Nvidia as well.
- > If not I'll let you know in case you're interested.

Keep me posted. I am curious how other hardware/software combinations work out. For animation anti-aliasing is a big bonus but I haven't heard of anybody's experiences with it beyond yours.

-Rick

Subject: Re: antialiased image from IDLgrWindow::Read() ?? Posted by Sean Dettrick on Tue, 30 Apr 2002 04:10:27 GMT View Forum Message <> Reply to Message

Rick, FYI, the NVidia antialiasing worked just as you suggested. I liked the Quincunx method the best for my plots, better than the methods available on the Radeon. Am now using Windows XP.

However, I found my Radeon computer 5-10 times faster than my

NVidia computer! At a wild guess I suppose that Nvidia OpenGL "extensions" don't help IDL much. It may be a hardware difference, but you wouldn't guess it looking at the two systems:

- 1) Nvidia G3 Ti200, dual Athlon MP1800, ASUS motherboard and
- 2) Radeon 8500, single 2GHz Pentium 4, ASUS motherboard.

Both of these cards are appalling on their respective linux partitions. Radeon 8500 is completely unsupported (ie software rendering) and the linux NVidia driver somehow won't do direct rendering for me.

Later in the week I'll send a detailed post for the edification of the list.

Sean

>

"Rick Towler" <rtowler@u.washington.edu> wrote in message
news:aak2m8\$1jhu\$1@nntp6.u.washington.edu...

> "Sean Dettrick" <dettrick@uci.edu> wrote
>
> Presumably I'll get it functioning on my at-work Nvidia as well.
>> If not I'll let you know in case you're interested.
>
> Keep me posted. I am curious how other hardware/software combinations work
> out. For animation anti-aliasing is a big bonus but I haven't heard of
> anybody's experiences with it beyond yours.
>
> -Rick
>

Subject: Re: antialiased image from IDLgrWindow::Read() ?? Posted by Rick Towler on Tue, 30 Apr 2002 18:04:18 GMT View Forum Message <> Reply to Message

"Sean Dettrick" <dettrick@uci.edu> wrote

- > However, I found my Radeon computer 5-10 times faster than my
- > NVidia computer!
- > 1) Nvidia G3 Ti200, dual Athlon MP1800, ASUS motherboard
- > 2) Radeon 8500, single 2GHz Pentium 4, ASUS motherboard.

This isn't too much of a surprise (although historically ATI has had poor OpenGL support beyond Quake based engines). The Radeon 8500 tends to better the GF3 Ti200 in OpenGL but I haven't seen it run thru a suite of professional OpenGL benchmarks. The processor is influincing your results as well. Object graphics tend to be very processor dependent and there may be P4 optimizations involoved too (driver level and IDL).

When we get things together and write an OG benchmark we might be able to quantify this. But until then it is fun to speculate:)

-Rick