

Doomsday Engine - Bug #296

sky hall-of-mirrors

2006-06-02 03:22 - keleus

Status:	Closed	Start date:	2006-06-02
Priority:	Normal	% Done:	100%
Assignee:			
Category:			
Target version:	1.9.0-beta4		
Description I am running Ubuntu 6.06. After compiling Doomsday 1.9.0-beta4 and installing to my home directory (and copying over the WADs and the music pk3s (the OGG ones in normal quality hot mastering) everything seemed to be working fine. However, once I started playing I noticed the skys were not being displayed. It was as if there was no wall where the sky should be (hall of mirrors effect you get when using noclip in the original, but slightly different) I tried turning on the option to always render the full skybox, but that didn't help any. screenshot is available here: http://keleus.freeshell.org/doomsday-screenshot.png console log is available here: http://keleus.freeshell.org/doomsday-dump.txt If you need more information from me please fire me an email to (preferably) pbransford@gmail.com or keleus@sdf.lonestar.org Labels: Graphics			

History

#1 - 2006-06-02 11:37 - zachkeene

Logged In: YES
user_id=1103163

Did this just start for you with beta4? Because it sounds like a long-standing problem that, as best as anyone can figure, is an xorg driver problem with no known fix.

Best you can do is issue "skyrows 0" in the console, which will replace the HOM with a mostly single-colored sky.

For further reading:

<http://forums.newdoom.com/showthread.php?t=24012>
<http://forums.newdoom.com/showthread.php?t=26297>

#2 - 2006-06-02 16:55 - yagisan

Logged In: YES
user_id=1248824

Could not reproduce this with nvidia binaries drivers. Will try again on my ATI 7500 system after it completes it's dapper upgrade.

BTW, there are Ubuntu packages available at
<http://eyagi.bpa.nu/eyagi/community-projects/yagisan-s-doomsday-for-debian-ubuntu/>

#3 - 2006-06-02 16:55 - yagisan

Ubuntu Dapper + Nvidia Binary Driver. No HOM

Attachments:

- http://sourceforge.net/p/deng/bugs/_discuss/thread/b98ede5f/285e/attachment/doom1-ultimate-000-nvidia.jpg

#4 - 2006-06-02 20:59 - keleus

Logged In: YES
user_id=1532965

I wouldn't know if this would be an issue in previous versions, this is the first time I'm running it under linux (and from source as well).

I should note that it DOES work fine in windows under OpenGL and D3D, so it is not a hardware specific issue I think.

#5 - 2006-08-07 05:54 - ga1

Logged In: YES
user_id=614730

In rend_sky.c, in function SkyVertex(int r, int c), replace

```
gl.Color4f(1, 1, 1, 0);
```

by

```
gl.Color4f(1, 1, 1, 1);
```

Part of the sky was rendered with alpha set to 0, which means that it was totally transparent...

#6 - 2006-08-07 20:53 - danij

Logged In: YES
user_id=849456

RE: Part of the sky was rendered with alpha set to 0, which means that it was totally transparent...

This is as intended. The top row of the sky is designed to be transparent so that the sky texture blends into the sky colour.

If your "fix" does indeed fix the problem for you then something else is not working correctly.

#7 - 2006-08-08 12:54 - ga1

Logged In: YES
user_id=614730

RE: If your "fix" does indeed fix the problem for you then something else is not working correctly.

Of course you're right, with my "fix" the sky texture doesn't blend nicely into the untextured top of the sky. But the original code is

```
if(r == 0)
gl.Color4f(1, 1, 1, 0);
else
gl.Color3f(1, 1, 1);
```

gl.Color3f doesn't reset the alpha channel, and that appears to be the problem, since the alpha channel is not reset between drawing the r0 vertices and drawing the other rows (or I'm too dumb to find the reset and something else is wrong). I now changed it to

```
if(r == 0)
```

```
gl.Color4f(1, 1, 1, 0);  
else  
gl.Color4f(1, 1, 1, 1);
```

and the blending from texture to color works.

#8 - 2006-08-08 14:02 - skyjake

Logged In: YES
user_id=717323

From the OpenGL specification: "The Color command has two major variants: Color3 and Color4. The four value versions set all four values. The three value versions set R, G, and B to the provided values; A is set to 1.0."

So if glColor3f(r,g,b) is not functionally equivalent to glColor4f(r,g,b,1.0), the OpenGL implementation in question does not conform to the specification.

What driver/graphics card are you using? (ATI?)

#9 - 2006-08-09 08:21 - ga1

Logged In: YES
user_id=614730

My OS is Linux,

my graphics device:
Intel Corporation 82852/855GM Integrated Graphics Device
(rev 02)

OpenGL driver:
OpenGL vendor string: Tungsten Graphics, Inc
OpenGL renderer string: Mesa DRI Intel(R) 852GM/855GM
20050225 x86/MMX/SSE2
OpenGL version string: 1.3 Mesa 6.4.2

#10 - 2006-09-24 16:23 - yagisan

Logged In: YES
user_id=1248824

This was reported as bug here
https://bugs.freedesktop.org/show_bug.cgi?id=8410

I'd suggest that perhaps we use only Color4 values in future to avoid driver bugs like this (yes it's a workaround - but one that should have no ill affects)

#11 - 2006-09-25 14:03 - yagisan

Logged In: YES
user_id=1248824

Reported fixed in MESA svn. Closing bug as technically it is not Doomsday at fault. MESA bug
https://bugs.freedesktop.org/show_bug.cgi?id=8410