

Movian - Bug #664

Segmentation fault on video playback

08/30/2011 12:55 AM - Robin Nehls

Status:	Fixed	Start date:	08/29/2011
Priority:	Normal	Due date:	
Assignee:	Andreas Smas	% Done:	100%
Category:	GLW	Estimated time:	0.00 hour
Target version:	4.0	Platform:	
Found in version:	3.1.210.g26900		
Description			
<p>I tried to confirm another bug i have on the ps3 and ran into this issue on my laptop. When i try to play a video (it doesn't mater what kind of video) showtime segfaults. Maybe this is an issue of my crapy intel graphics card. To build showtime on my machine i changed the configure script to exept an older version of ffmpeg. By looking at the stacktrace and some debugger output I don't think this is related, but you never know.</p> <p>I use Gentoo Linux amd64.</p> <p>I will monitor this bug in case more feedback is needed.</p> <p>Before submit i did some additional debugging. The Segfault rises in this line in glw_opengl.c</p> <pre>544: glUniform4f(gbr->gbr_current->gp_uniform_color, r, g, b, a);</pre> <p>The problem is, that in my case gbr_current is 0. The compiler translates this part of the code to</p> <pre>MOV RAX, QWORD PTR [RDI+8] <- at RDI+8 is a 0 were should be the pointer to gbr_current MOV RDI, DWORD PTR [RAX+28] <- this trys to get gp_uniform_color but RAX is 0 so it trys to load a value from 001c with is not mapped and causes a segfault.</pre> <p>I tried to find the cause for this, but it seems that opengl code is even harder to read than assembly.</p>			
Related issues:			
Duplicated by Bug # 792: Crash when trying to playback		Fixed	11/26/2011
Duplicated by Bug # 380: When in non-shader mode on X11 Showtime GLW can not ...		Fixed	02/14/2011

Associated revisions

Revision 5ca9af92 - 08/11/2012 08:26 PM - Andreas Smas

glw/opengl: Never use the fixed function pipeline as it cannot play video

fixes #792

fixes #664

fixes #380

History

#1 - 08/30/2011 11:18 AM - Andreas Smas

This is a known issue. :/

#2 - 08/31/2011 02:53 PM - Robin Nehls

I'm sorry i could not find an existing issue for this. Could you post a link so i can participate in case i find something usefull?

#3 - 08/31/2011 07:12 PM - Andreas Smas

Ok sorry I meant that this is a known "problem". I'm not sure if there is a filed issue for it.

#4 - 09/06/2011 12:00 AM - Andreas Smas

- Status changed from New to Accepted
- Target version set to 33

#5 - 09/06/2011 09:55 PM - Robin Nehls

I did some more digging in the code. Looks like the code were the segfault happens is highly dependant on shader stuff, with is disabeld in `glw_opengl_init_context` for Mesa OpenGL drivers. Removing the Mesa check worked for me only once. Videos played, but had smal blue dots in them. After closing showtime I could not make it work again. Strange.

So the problem seems to be an missing implementation for shaderless playback, witch leads me to the conclusion that you already know what i just wrote. Sorry for the nagging.

#6 - 05/02/2012 08:27 PM - Henrik Andersson

I just stumble upon this bug and as mentioned before shaders are disabled if Mesa driver is used and down the rendering code path shaders a expected to work even if disabled as stated in earlier comments.

With about zero knowledge about shaders and Mesa compatibility i just removed the check and got glw ui to work ?!

GLW [INFO]: OpenGL Renderer: 'Mesa DRI Intel(R) G45/G43 ' by 'Tungsten Graphics, Inc'

If the non-shader codepath is "broken" / "uncomplete" it should not take that road especially if there is a possibility the Mesa driver + shaders works, my suggestion is to remove the Mesa check and add some log output that the user is on a experimental road..

```
diff --git a/src/ui/glw/glw_opengl_ogl.c b/src/ui/glw/glw_opengl_ogl.c
index 0b7875b..33409d1 100644
--- a/src/ui/glw/glw_opengl_ogl.c
+++ b/src/ui/glw/glw_opengl_ogl.c
@@ -175,9 +175,6 @@ glw_opengl_init_context(glw_root_t *gr)

     int use_shaders = 1;

-    if(strstr(renderer, "Mesa"))
-        use_shaders = 0;
-
     if(use_shaders) {
         return glw_opengl_shaders_init(gr);
     } else {
```

#7 - 08/11/2012 08:27 PM - Andreas Smas

- Status changed from Accepted to Fixed

- % Done changed from 0 to 100

Applied in changeset commit:5ca9af925e558927e48d5c6e4a29d554c5b8043f.

#8 - 08/16/2012 06:09 PM - Andreas Smas

- Target version changed from 33 to 4.0

Files

segfault.txt	11.8 KB	08/29/2011	Robin Nehls
--------------	---------	------------	-------------