Emulator - Emulator Issues #7193

EA Videos are still somewhat broken (Intel/NVIDIA)

04/18/2014 11:34 PM - JMC4789

Status:	Accepted		**% Done:**	0%
Priority:	Normal			
Assignee:				
Category:				
Target version:				
Operating system:	N/A		**Relates to performance:**	No
Issue type:	Bug		**Easy:**	No
Milestone:			**Relates to maintainability:**	No
Regression:	No		**Regression start:**	
Relates to usability:	No		**Fixed in:**	

Description

Game Name?

MVP Baseball 2005 - GV4E69
NHL 2003 - GH3E96
Any mediocre EA Sports title that uses that one video format.
Several other EA games.
Do note this does not affect all EA games

What's the problem? Describe what went wrong in few words.

They appear to have vertical lines all over them
https://dl.dropboxusercontent.com/u/484730/GV4E69-6.png

What did you expect to happen instead?

On my Radeon graphics card, the videos look fine, but other games (especially NES ones) have horizontal/vertical lines like this.

What steps will reproduce the problem?
[Don't assume we have ever played the game and know any level names. Be as
specific as possible.]
1.Regrettably possess an EA Title
2.Possess a NVIDIA graphics card, be currently using it in your PC
3.Start Game

Dolphin 3.5 and 3.5-367 are old versions of Dolphin that have
known issues and bugs, so don't report issues about them and test the
latest Dolphin version first.
Which versions of Dolphin did you test on?

4.0-1430

Does using an older version of Dolphin solve your issue? If yes, which
versions of Dolphin used to work?

No versions of Dolphin work on NVIDIA graphics cards for the videos.

What are your PC specifications? (including, but not limited to: Operating
System, CPU and GPU)

Core i5 3570K, GTX 760, Windows 7 x64

Are you using the 32 or the 64 bit version of Dolphin?

64bit

Screenshot again: https://dl.dropboxusercontent.com/u/484730/GV4E69-6.png

Related issues:

Has duplicate Emulator - Emulator Issues #8457: Red Steel 2: Horizontal Lines...	**Duplicate**
Has duplicate Emulator - Emulator Issues #8792: SSX3 weird graphical bars	**Duplicate**
Has duplicate Emulator - Emulator Issues #9222: Problem playing bik files in ...	**Duplicate**
Has duplicate Emulator - Emulator Issues #9314: Need for Speed: Most Wanted -...	**Duplicate**
Has duplicate Emulator - Emulator Issues #6714: EA SPORTS Active, problem wit...	**Duplicate**
Has duplicate Emulator - Emulator Issues #10632: DJ Hero: Opening cutscene ar...	**Duplicate**
Has duplicate Emulator - Emulator Issues #11543: Asterix at the Olympic Games...	**Duplicate**

History

#1 - 04/18/2014 11:37 PM - JMC4789

Fifo: https://dl.dropboxusercontent.com/u/484730/EASPORTS.7z

#2 - 04/21/2014 04:36 AM - Jason.G.Gorman

Same here and it is with all Bink compressed videos. The lines are affected by using different anti-aliasing types and different internal resolutions.

#3 - 06/03/2014 03:09 AM - pkmnred887

Can confirm that the video at the beginning of FIFA 07 also has issues.

#4 - 07/10/2014 04:42 PM - JMC4789

- Status changed from New to Accepted

Accepting.

#5 - 08/03/2014 09:11 PM - kostamarino

Could issue 7393 be related to this one? The fix for those ea videos by delroth came after the merge of tev fixes new to double check it, but the situation seems similar, videos with lines and nvidia gpus.

#6 - 09/14/2014 04:47 AM - Vhonan11

I have the same issue. Mvp baseball has vertical lines and when you get past the start menu the graphics are all screwed up

#7 - 10/29/2014 10:25 PM - mbc07

If it helps, Just Dance 1/2/3/4, Michael Jackson The Experience and ABBA: You Can Dance also use Bink videos and suffer from the same issue...

(not reproducible in JD2014/2015, apparently these games uses a new engine)

#8 - 10/29/2014 10:26 PM - delroth

Bink videos? That's different, are you sure you haven't enabled "Force texture filtering"?

EA videos are VP6, not Bink.

#9 - 10/29/2014 10:34 PM - mbc07

Force Texture Filtering cause issues too, but disabling it and messing with anisotropic filtering and IR causes the same artifacts from the screenshot JMC47 posted in OP. At least in Just Dance 1 disc I can see a lot of .bik video files, so I'm assuming it's bink. In JD 2/3/4 they're packed in .bf0/.bf1 files so I can't confirm the video format.

However, I definitely can reproduce this issue with bink videos too...

#10 - 10/29/2014 10:42 PM - kostamarino

Any type of texture filtering can mess up dolphin videos, this issue happens regardless of having texture filters enabled or not.

#11 - 11/27/2014 12:16 PM - ZephyrSurfer

I'm working on this now. I think I've got the solution but I'll need a couple days :P

#12 - 11/27/2014 12:17 PM - JMC4789

It's broken on AMD GPUs under their newer drivers now.

#13 - 12/08/2014 06:28 PM - megarockexe

I will "me too" on this one too.
The videos like in the intro of Rock band 3 use Bink and have these artifacts. It only happens when I try to use a natively-sized window on auto window size resolution. It makes everything else sharper, but videos look like that. I've extracted the bink and of course it doesn't have the lines going through it. Even on newer builds, this happens.

#14 - 12/09/2014 10:18 AM - ZephyrSurfer

@megarock
What's your Hardware?

#15 - 01/08/2015 07:26 PM - megarockexe

Intel Core i5 2500k 3.3. Ghz
8GB RAM
Windows 8.1 64-bit
Nvidia GTX 650

Running on Open GL.

#17 - 05/09/2015 09:55 PM - JMC4789

issue 8457 has been merged into this issue.

#18 - 07/14/2015 11:40 PM - JMC4789

issue 8792 has been merged into this issue.

#19 - 12/31/2015 12:05 AM - JMC4789

- Has duplicate Emulator Issues #9222: Problem playing bik files in Just Dance games added

#20 - 12/31/2015 12:05 AM - JMC4789

- Subject changed from EA Videos are still somewhat broken (NVIDIA) to EA Videos are still somewhat broken (Intel/NVIDIA)

#21 - 01/26/2016 03:44 AM - endrift

This is a result of an indirect texture lookup accuracy bug, it seems. https://github.com/dolphin-emu/dolphin/pull/3570 fixes it for Intel on OS X, but not Nvidia. Tweaking indirect texture lookup stuff can make it better or worse, depending, it seems.

#22 - 02/03/2016 03:19 PM - JosJuice

- Has duplicate Emulator Issues #9314: Need for Speed: Most Wanted - Cutscene screen tearing added

#23 - 02/18/2016 02:03 AM - shellashock

Looks like "Asterix and Obelix at the Olympic Games" (PAL - RQXP70) suffers from this issue as well. Only happens to videos in-game (all videos are .vid on disk; extracting them and playing in VLC will not show the lines) and is affected by Wii Aspect Ratio (4:3 or 16:9), Pal60 mode on or off, IR, and AA. Affects Intel HD Graphics and Microsoft Basic Render Driver for all videos (cinematic, menu videos, etc) and does not affect Radeon R7 240 at all. Software Renderer is not affected. Link to folder JMC47 requested with FIFO logs + screenshots:
https://www.mediafire.com/folder/28d78ttqz7h0w/JMC47_Request_Folder

Hope this helps.

Tested using Intel Core B940 (2.0 GHz) with Intel HD Graphics (driver: 9.17.10.4229) and Microsoft Basic Render Driver.
Tested on Dolphin 4.0-8860
OS: Windows 10 (x64) Home

Tested using AMD Athlon II x2 B24 (3.0 GHz) with ASUS Radeon R7 240 2GD3-L (driver: 15.300.1025.1001).
Tested on Dolphin 4.0-8860
OS: Windows 10 (x64) Professional

#24 - 04/26/2016 10:20 PM - JMC4789

From endrift:

I noticed that, on systems where this is broken, adjusting anisotropic filtering will cause smudging effects that are segmented along the lines in the ea-vp6.dff FIFO. Antialiasing and render size did not appear to affect it though. I don't know how anisotropic filtering works in Dolphin, but it's kind of suspect that this only causes smudging on systems where it's broken

#25 - 04/30/2016 03:27 PM - endrift

It looks like the problem is a rounding error. I have a patch I'm extremely unsatisfied with, as I think it's a pretty high risk patch and just says "epsilons are the answer!" which is uh, false.

```
diff --git a/Source/Core/VideoCommon/PixelShaderGen.cpp b/Source/Core/VideoCommon/PixelShaderGen.cpp
index dafed0d..0353873 100644
--- a/Source/Core/VideoCommon/PixelShaderGen.cpp
+++ b/Source/Core/VideoCommon/PixelShaderGen.cpp
@@ -836,7 +836,7 @@ static void WriteStage(T& out, pixel_shader_uid_data* uid_data, int n, API_TYPE
        uid_data->SetTevindrefTexmap(i, texmap);

        out.Write("\ttextemp = ");
-       SampleTexture<T>(out, "float2(tevcoord.xy)", texswap, texmap, ApiType);
+       SampleTexture<T>(out, "(float2(tevcoord.xy) + 0.05)", texswap, texmap, ApiType);
     }
     else
     {
```

The real fix for this is to integerize texture lookups, but wow that is out of my realm of expertise.

#26 - 01/08/2017 11:07 AM - lmello

Dolphin 5.0, linux, Red Steel 2, using an AMD Radeon R7 250E (Mesa 13, OpenGL 4.3) playback video is still a bit buggy (especially the training lady showing how to use your sword during the tutorials)

#27 - 02/02/2017 10:30 PM - JMC4789

- Has duplicate Emulator Issues #6714: EA SPORTS Active, problem with colors and videos added

#28 - 11/11/2017 11:02 AM - JMC4789

- Has duplicate Emulator Issues #10632: DJ Hero: Opening cutscene artifacts at 1x IR added

#29 - 02/03/2018 02:03 PM - Lettendo

Screenshot link is invalid.

#30 - 04/20/2018 01:58 PM - peter_parker

- File ea_sports-2018-04-20_10.47.53-edited.mp4 added

endrift, while your patch works for most of the videos, in Fifa 07 the "EA Sports it's in the game" intro video will show other glitches than the previous bars.

Without the fix, this intro will have the same bars glitches like other videos. I've attached a small video with the intro (patch applied).

#31 - 04/21/2018 01:45 AM - peter_parker

More testing: in above comment, I checked using branch (5.0) (because I'm on Ubuntu 16.04, which has gcc 5 as default. Installing gcc6 and using master branch, even the EA intro is fine with endrift patch.

#32 - 08/16/2018 01:50 AM - danileon95

I just want to add that Need for Speed Most Wanted videos are still broken on Windows, with a GTX 1070 and latest drivers

#33 - 01/04/2019 04:26 PM - benitez

danileon95 wrote:

> I just want to add that Need for Speed Most Wanted videos are still broken on Windows, with a GTX 1070 and latest drivers

Same here, with the same graphics card. It also happens in other EA games such Fifa Street 2.

#34 - 01/04/2019 04:27 PM - benitez

Same here, with the same graphics card. It also happens in other EA games such as Fifa Street 2.

#35 - 01/31/2019 04:26 PM - JosJuice

- Has duplicate Emulator Issues #11543: Asterix at the Olympic Games video glitchs added

Files

ea_sports-2018-04-20_10.47.53-edited.mp4	799 KB	04/20/2018	peter_parker