Emulator - Emulator Issues #9276

Graphical artefacts in "Spyro - A Hero's Tail" if ignore format changes are off

01/19/2016 02:37 PM - DolphinZocker

Status:	Fixed	**% 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?
Spyro - A Hero's Tail

Game ID?
G5SP7D

MD5 Hash?
f007472216f3cc10ab68d991f441216c

What's the problem? Describe what went wrong.
If i **disable** "ignore format changes" you can see sometimes graphical artefacts on rocks when you are in holes (see screenshot 1). If I enable "ignore format changes" the artefacts are less (see screenshot 2).
Tested in Direct3D and OpenGL.

Which versions of Dolphin did you test on? Does using an older version of Dolphin solve your issue? If yes, which versions of Dolphin used to work?
4.0-8631
Tested in old Version 4.0-5670. The error still occures here.

What are your PC specifications? (CPU, GPU, Operating System, more)
i7-3770K, ATI Radeon HD 5870, Windows 7 64-Bit

History

#1 - 01/19/2016 02:39 PM - JMC4789

This really looks like something that could be in the actual game.

#2 - 01/19/2016 02:53 PM - DolphinZocker

Ah ok, you mean that this is a "bug" of that game? That would be funny :)

#3 - 01/19/2016 03:03 PM - JMC4789

These games play at 480i for the most part, so it'd be extremely hard for anyone to see a bug like this. Maybe a loss in quality from changing formats?

#4 - 01/21/2016 12:34 PM - JMC4789

- Status changed from New to Working as intended

I checked on my GameCube, it appears to be part of the game itself and not a defect in Dolphin. I did not check the exact area you are referencing, but it appears little blotches like that are all throughout hte game.

#5 - 01/24/2016 12:28 PM - DolphinZocker

unbelievable, but why are there no artefacts if i ignore format changes? i will update the wiki page for this game the next time, to document this behaviour.

#6 - 02/13/2016 05:55 PM - kolano

Did we close this one too quickly?

Even if the blotchy image is how the game rendered (I'm a bit questionable of that looking at the images), why would an option that reduces emulation accuracy "Ignore Format Changes" fix it?

Also, if the blotchy state is how it's supposed to render we apparently need to disable "Ignore Format Changes" via ini for this title.

#7 - 02/13/2016 06:02 PM - kolano

The issue looks like what happens when a 24b color images is reduced to 16b/8b, perhaps we aren't handling color depth information correctly somewhere.

#8 - 02/13/2016 06:16 PM - JMC4789

- Status changed from Working as intended to New

That's possible; feel free to reopen, but I did check this on console (albeit in a different area because I was testing another issue...) and I'm sure I saw blotchy. I'll reopen so a second person can investigate.

I'm mainly opening this because that sounds like something Dolphin could screw up.

#9 - 02/13/2016 07:19 PM - phire

> The issue looks like what happens when a 24b color images is reduced to 16b/8b, perhaps we aren't handling color depth information correctly somewhere.

And suspiciously the "Ignore Format Changes" option deals with conversions between a 24 bit framebuffer and a 18 bit framebuffer.

#10 - 02/13/2016 07:58 PM - phire

JMC47 is right, the "glitch" is correct emulation. This is actually two bugs:

1. Dolphin has an enhancement which is impossible to disable (forces RGBA6666 color to RGBA8888). We really should add more accurate behavior and a checkbox on the enhancements page to disable it.
2. When the "Ignore Format Changes" is not checked, certain behaviors of the game can occasionally force slightly more correct behavior. It probably shouldn't.

#11 - 02/02/2017 11:03 PM - JMC4789

- Status changed from New to Fixed

We added 16 and 24bit color modes. We haven't added the dithering yet.

Files

spyro_ignore_format_changes_off_graphical_artefacts.png	392 KB	01/19/2016	DolphinZocker
spyro_ignore_format_changes_on_no_graphical_artefacts.png	583 KB	01/19/2016	DolphinZocker