

Emulator - Emulator Issues #2338

Zelda Wind Waker - Heat effect rendered horribly

02/20/2010 08:10 PM - spenphil

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	
What steps will reproduce the problem? 1. Going into caves or dungeons that have lava mostly 2. Dragon Roost Cavern 3.	
What is the expected output? What do you see instead? Well the game runs completely fine with no problems until I go into say the first dungeon (Dragon roost cavern). The problem I'm facing is a visual problem where I get this really annoying like smoke/glass that is always in my view. I can't really explain it... I uploaded a video here to give a good example of the problem. http://www.youtube.com/watch?v=TpROvqRNhlw	
What version of the product are you using? On what operating system? I have tried many different builds to see if it would solve the problem but it occurs on all of them... I am currently running SVN R 5091 on windows 7.	
Please provide any additional information below. The only thing I don't quite understand is why this occurs when outside of the dungeons everything is crystal clear with no problems whatsoever. I thank anyone who can help as it is greatly appreciated!	
Related issues:	
Has duplicate Emulator - Emulator Issues #2120: [Wind Waker][EFB] Heat effect...	Duplicate
Has duplicate Emulator - Emulator Issues #3971: Zelda Wind Waker heat/fire gl...	Duplicate
Has duplicate Emulator - Emulator Issues #4766: Zelda Heat Wave Glitches [Win...	Duplicate

History

#1 - 02/20/2010 08:21 PM - Anonymous

An old problem...supposed to be the "heat" effect. Would be interesting to know what exactly makes it look so bad on dolphin though :)

#2 - 02/20/2010 10:30 PM - spenphil

Ah damn, sorry if it's a double :/

So you're saying it's the heat effect hmm... Makes sense but how the heck can I get rid of that lol?

#3 - 02/21/2010 04:12 AM - Sonicadvance1

It's the EFB to copy, its because of not playing at native resolution and the textures not matching up when resizing.

#4 - 02/21/2010 04:13 AM - Sonicadvance1

Either turn off EFB copy or play at native resolution.

#6 - 03/15/2010 10:19 PM - hudsonstadskanaal

Turn off EFB and/or use native resolution doesn't help at all.

Is there a way tot disable the heat effect?

#7 - 12/09/2010 08:08 PM - Anonymous

Please respond if this issue is still valid, or it will be closed.

#8 - 12/10/2010 12:31 AM - Alex.Scott.Thomsen

This issue was valid as of about a month ago using the 2.0 release. I can try and re-verify if it's required.

Running 64-bit Vista
Dolphin 2.0

#9 - 12/10/2010 12:52 AM - Sonicadvance1

Test using latest revision yes.

#10 - 12/10/2010 09:38 PM - xenofears

Yep it's still a problem (SVN 6441 64-bit, as well as 2.0 32-bit & 64-bit, Win7, Geforce GT 230M, i7), and it exists in any fire as well (lanterns, torches, etc), graphics get mirrored/distorted in the smoke. In the lava areas, rather it looks like the screen is getting sliced up rapidly, it's really hard to describe. It's not unplayable, but it's bad.

Using native resolution doesn't help. Turning off EFB causes unplayable graphics issues.

#11 - 12/10/2010 11:50 PM - Anonymous

[issue 2120](#) has been merged into this issue.

#12 - 12/10/2010 11:50 PM - Anonymous

- Status changed from New to Accepted

#13 - 01/20/2011 05:30 PM - maurocds

6880, 23b, dx9, gtx 460
happned too, is not unplayable but it is a little annoying, nothing really important

#14 - 01/22/2011 08:40 PM - skidau

[issue 3971](#) has been merged into this issue.

#15 - 01/22/2011 10:32 PM - Larssdm

so basically this issue seems unsolvable?

#16 - 02/21/2011 01:19 PM - cspj12

This issue is unsolvable for my release, 7128

#17 - 02/21/2011 05:21 PM - hrydgard

Yeah, no one has found a solution yet. It's a problem for everyone. All you can do is to beat the dungeon as quickly as possible and enjoy the rest of the game...

#18 - 04/29/2011 07:28 PM - marianolcano

Well... i disabled the Fog Effect in that case. Its looks great.

#19 - 06/17/2011 04:34 AM - randomlynessive

i found something of a fix for this

if you enable free camera and move the camera forward past the wavy effect, then its effectively "behind" the camera, so you dont need to look at it. The camera still follows you when you move and everything, so it wont get left behind or anything

not sure if this also works for smoke effects though

#20 - 08/05/2011 08:26 PM - NeoBrainX

[issue 4766](#) has been merged into this issue.

#21 - 12/15/2011 03:38 AM - trickster721

Action replay code 003F6B2A 00000000 switches off the fullscreen heat effect in the fire areas.

#22 - 12/15/2011 11:22 AM - DimitriPilot3

Don't forget to mention which region/version of the game this code was meant for.

#23 - 01/02/2012 07:11 PM - zakaria.dalil1

Hello, can you give me the AR for the PAL version, Thanks

#24 - 01/14/2012 05:31 PM - sameid.usmani

I tried the action replay code... It didn't work.

#25 - 11/09/2012 04:40 AM - Captain.Flemme

Hello

i've tried the AR code and it didn't worked and also Checking "EFB Copies - Disable".

Only the freelook worked but it's not satisfying.

perhaps i don't check the good one.

i'm one the 802 version do we need to restart dolphin ??

what do we need to do for one of those worked ???

Thanw for your responses

#26 - 11/20/2012 10:31 AM - tankie86

i use the PAL version as well, and either disable EFB Copies nor entering the AR-Code works.
is there a fix coming? or at least someone who has the AR-Code for the PAL version? thanks!

#27 - 12/12/2012 12:54 AM - austinohalloran

Hallo
I'm using 3.0-878
With efb copies on ram and all else defaulted.
Heat effect is fine. Now only minor tearing as a result of the effect
But awesome. I tried playing last year and I couldn't do dragon roost at all

#28 - 01/06/2013 01:48 AM - larimeoriginal

code AR - tww PAL (disable Fire and Heat Effects)–
003FE32A 00000000

#29 - 01/13/2013 03:38 AM - Billiard26

- Issue type set to Bug
- Category set to gfx

#31 - 08/08/2013 03:57 PM - NeoBrainX

- Category deleted (gfx)

Issue happens in native dff player, too.

CPU emulation bug?

#32 - 08/08/2013 09:45 PM - hrydgard

Wow, that is unexpected. And what a blast from the past :)

How could there possibly be such serious CPU emulation bugs left, that would affect just a single feature in Zelda? Maybe something is not being recorded, like a screen offset of some sort?

#33 - 08/08/2013 09:55 PM - NeoBrainX

@ hrydgard: fifo logs record everything that is being passed to the GP (excluding flow control registers). Additionally, they records most (if not all) things which are loaded from memory. I'd be surprised if there was anything critical to this issue that we miss when recording fifo logs.

The only semi-relevant thing which is not recorded is VI usage. I was thinking that maybe the game is using interlacing to achieve the effect, but that seems kinda unlikely.

Apart from that, the only thing that I can realistically think of which would be going wrong in fifo logging/playback which would also be wrong in Dolphin is that we somehow manage to mess up some zww-specific oddity with the EFB copy trigger register.

On the other hand, degasus suspected some kind of timing bugs might be possible when graphical glitches show up on native fifo player. I don't think this theory is applicable in this case, however.

We do seem to have CPU emulations bugs left, cf. for example [issue 4922](#). Dolphin sets some fog parameters to infinity there, causing the whole picture to show up as green. The fifo log plays back purely green on my Wii, too.

#34 - 08/10/2013 07:02 PM - phire

I wouldn't be surprised if it was a VI issue, might have a look.

I haven't played this game yet, so could someone post a memory card image that puts you as close as possible to the issue?

#35 - 08/20/2013 09:28 AM - mswith8

I FOUND A FIX!!

<http://www.youtube.com/watch?v=fIGEZlvWycU>

Here are instructions for the fix: right click wind waker game in dolphin. go to properties. click "AR Codes". click "add". type "003F6B2A 00000000" in the description or whatever, and name it. i named mine "Disable Heat". be sure that the newly created box is checked. close that window. go back to dolphin. options > configure > enable cheats. you are done.

#36 - 08/20/2013 09:29 AM - NeoBrainX

That's not a fix, it's a workaround that has been known for ages. Read the game wiki.

#38 - 09/12/2013 11:04 AM - kostamarino

I don't know how much this info might help but i remember that the heat effect problem in dragon roost cavern was apparent even if i switched to wireframe. Also the smoke produced by torches seemed to appear properly if viewed by certain camera angles close to a wall in a cave for example.

#39 - 09/12/2013 11:11 AM - kostamarino

<http://www.mediafire.com/view/tt2cmp6uy107u7b/GZLE01-1.png>

A pic of what i mean that smoke would appear properly if viewed by certain angles close to a wall.

#40 - 09/21/2013 09:10 AM - phire

I did some experimentation and got a test image which allows us to understand the issue more easily.

<http://i.imgur.com/tlipW9D.png>

As you can see, the efb copy (or it's uv coordinates when it's rendered back) are simply offset by 24 pixels in both the vertical and horizontal directions.

This explains why kostamarino can get it rendered correctly when standing near a wall, as the offset efb copy now contains almost the correct image of a wall from the wall he is standing next to.

#41 - 09/21/2013 10:35 AM - rodolfoosvaldobogado

please can yo test the tev-fixes-performance branch as it have heavy work on fixing texture coordinates generation and can potentially affect this issue

#42 - 09/21/2013 10:37 AM - NeoBrainX

@Rodolfo: It can't be anything TEV related. It wouldn't render incorrectly when running the fifo log on hardware if it was the case.

I'm still suspecting missing interlacing emulation to be the cause for this issue; it's not implemented in Dolphin and fifo logs don't record VI calls yet.

#43 - 09/21/2013 10:45 AM - phire

I checked anyway. No, tev-fixes-performance doesn't fix this.

You know what does fix it; Enabling free-look and shift-right-click dragging until the effect aligns.

#44 - 01/05/2014 10:39 AM - delroth

- Status changed from Accepted to Fixed

This issue was closed by revision ed67d1ae2f96.

#45 - 01/05/2014 12:53 PM - NeoBrainX

For reference, native fifo player was also affected by this because the fifo logs were broken. This was because the FifoRecorder uses the previously broken register values to determine which memory to save in the log. So indeed, it wasn't saving the proper memory to load later on.

Guess I trusted my fifo player stuff a bit too much this time :(

#46 - 01/12/2014 01:02 AM - delroth

This issue was closed by revision 9ac46aad6e26.

#47 - 09/03/2014 06:52 PM - Antoine.Pelissou

Here are instructions for the fix: right click wind waker game in dolphin. go to properties. click "AR Codes". click "add". type "003F6B2A 00000000" in the description or whatever, and name it. i named mine "Disable Heat". be sure that the newly created box is checked. close that window. go back to dolphin. options > configure > enable cheats. you are done.

This works great!!

#48 - 09/03/2014 06:57 PM - Anonymous

AR codes aren't fixes, ya dingus.

#49 - 12/06/2014 01:13 AM - jorge.dlvp

Hello I'm using the latest revision and I tried 4.0-593 that solves this issue but I couldn't get that heat effect work right.

That rev fixes the issue without putting and AR code right? Cause I was reading and it was a problem of a pair of lines of code. Am I doing something wrong?

Note: It only happens with the widescreen hack checked like everybody knows, I think (I'm new here jeje)

#50 - 12/06/2014 02:04 AM - pauldacheez

Widescreen hack breaks things all the damn time, it shouldn't be a surprise to you. Uncheck it and use the much-less-problematic widescreen AR code listed here instead: <https://wiki.dolphin-emu.org/index.php?title=GZLE01>

Direct any other questions and support requests to the forums. This bug has been fixed for a while now, stop touching it. <https://forums.dolphin-emu.org/>