

Emulator - Emulator Issues #7132

Odd timing issues in Conduit 2

03/28/2014 11:38 AM - muonsoftware

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?
Conduit 2
Game ID?
SC2P8P

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

- Game runs at a fraction of normal speed despite high FPS
- FPS is often > VPS
- As FPS goes down, VPS goes up.
- Increasing GPU rendering load (EFB->RAM, antialiasing, 4xscaling etc) makes the FPS go down but increases game speed
- Frame Skipping has no effect
- Idle Skipping needs to be turned OFF for single player to work
- VBeam Hack needs to be turned ON to stop sound crackling, but game runs at around 90% speed

What did you expect to happen instead?

- Normal relationship between VPS and FPS (as VPS goes down so does FPS and vice versa)
- To be able to play game at full speed on appropriate hardware as it isn't that CPU nor GPU demanding

What steps will reproduce the problem?

1. Run Game, any mode - note slow speed/high FPS
2. Set idle skipping to OFF, VBeam to ON, IR to 4x and EFB->Ram, frame limiter to audio
3. Play Game again but at constant ~90% speed.

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?
Every SVN revision between 4.0-1126 and 4.0-1304, 3.5-1124 and 3.0

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

No - 3.5 and 3.0 do not seem to be able to achieve full speed with any settings and the vbeam hack causes strange behaviour

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

Q6600 o/c 3ghz, Radeon 6850 o/c 850/1200, 4gb DDR2 SDRAM, Windows 7x64 latest drivers

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

64-bit

Is there any other relevant information? (e.g. logs, screenshots, configuration files)

Forum thread here: <https://forums.dolphin-emu.org/Thread-conduit-full-speed-on-old-build>

History

#1 - 03/28/2014 12:25 PM - JMC4789

- Status changed from New to Questionable

It going full speed on an older processor like that isn't a huge priority for me. But your issues are interesting enough to warrant some investigation.

Turn off vbeam hack and tell me if that normalizes the numbers.

#2 - 03/28/2014 12:57 PM - muonsoftware

Assuming all other settings remain constant and only vbeam is changed, in 4.0-1304 I get the following results:-

2-player splitscreen - ~20fps ~40vps, low gamespeed

1-player invasion mode - ~20fps ~50vps, normal/ too fast gamespeed

1-player campaign - 10-30fps 20-50vps, low/normal gamespeed

I can find scenes where the game runs 100% fullspeed in single player but the sound always crackles without vbeam on no matter what. Setting framelimiter to audio helps.

#3 - 03/28/2014 12:58 PM - muonsoftware

Actually, that's a lot better than previous revisions I tried with. A lot better, in fact - even just a few days ago it wasn't running as well as that.

#4 - 03/28/2014 01:00 PM - JMC4789

- Status changed from Questionable to New

Okay, thank you for confirming that it isn't just the vbeam speedhack. Moving back to new.

#5 - 03/28/2014 01:05 PM - muonsoftware

What's good fun is trying the same settings in 3.5 - if I put the vbeam speed hack on in 3.5 the game will render at a constant 50% of full speed with the same graphics/idle skipping settings. Without it, the performance is similar (but much worse) than in 4.0-1304

#6 - 03/28/2014 01:09 PM - JMC4789

Try the sync gpu option in game properties and see if that helps. It'll probably be slower, but the VPS/FPS should be right.

#7 - 03/28/2014 01:21 PM - muonsoftware

Doesn't get past the wiimote safety reminders with sync gpu set - 105 fps and 1 (yes, 1) vps.

Doesn't respond to input.

#8 - 03/28/2014 01:23 PM - JMC4789

What about using single core? Will that at least make this make sense?

#9 - 03/28/2014 01:39 PM - muonsoftware

No such luck. FPS still higher than VPS - sometimes three times higher (so 15 fps, 5 vps for example)

#10 - 03/28/2014 01:40 PM - JMC4789

Okay, if you can do that again, with absolutely no hacks on (Like, no hacks, no vbeam hack, etc.) and it's still like that, I'll accept this issue based on your testing 'cause I don't know anyone else who has it.

#11 - 03/28/2014 01:49 PM - JMC4789

- Status changed from New to Accepted

#12 - 03/28/2014 01:50 PM - muonsoftware

I removed my custom settings file and got the following results:-

2 player splitscreen - 33 fps 23 vps
2 player invasion - 35 fps 21 vps
1 player invasion - 54 fps 21 vps
1 player campaign - 45 fps 16 vps

and yes I am reading those the right way around :-)

With hacks I get a near constant 20 fps 75 vps and ~90% of actual gamespeed in all game modes except in heavy scenes

#13 - 03/31/2014 08:08 PM - muonsoftware

Discovered something neat today - in Radeon Pro I can lock any game to 30fps with the double vsync tweak. When Dolphin is locked to 30fps, I no longer need to overload the GPU to produce the same results I had before in Conduit 2. So long as I have idle skipping OFF (to make single player work), vbeam ON and frame limit=audio (stops audio crackles) I get a smooth playable game (albeit with low FPS).

Works on Nvidia too with the appropriate option in the driver's control panel.

#14 - 09/30/2014 08:40 AM - muonsoftware

OK - new graphics card (Nvidia 750TI), new version of Dolphin (4.0-3469)

- idle skipping off
- EFB->RAM + cache
- enough EFB scale + AA to slow the rendering down

...gives constant 100% speed in game, but quite a low frame rate depending on the scene (15-20).

Audio is distorted however, constant drop outs/wrong pitch

#15 - 09/30/2014 08:42 AM - JMC4789

Have you tried using RealXFB on this?

#16 - 09/30/2014 08:57 AM - muonsoftware

Using real XFB causes the display to become distorted and offset. Reduces FPS to 30, but VPS hovers around 80% in the scene I tested. No effect on Audio.

With virtual XFB it looks better but doesn't run any faster, no effect on audio either.

Best way to play this game is with the settings as I described above and just turn off the sound.

#17 - 09/30/2014 08:58 AM - JMC4789

Umm, can you get a screenshot of how it looks with RealXFB. That should never make it look distorted.

#18 - 09/30/2014 09:35 AM - muonsoftware

Here you go

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

#19 - 10/17/2014 05:35 AM - JMC4789

Well then. I have no idea.

#20 - 04/10/2019 01:47 PM - shatteredlites

whats the status on this it seems to run at normal speed for me only dropping in certain areas. sound is the only issue along with bloom in HD

#21 - 11/01/2020 08:07 PM - Zinx

I cant even boot this game without it soft locking dolphin from the start on 5.0-12731...
Tried only on Linux though..