

Emulator - Emulator Issues #12244

Vulkan and Vsync: previous buffer shown when fast forwarding

09/05/2020 09:01 PM - SuperSamus

Status: Questionable	% 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?

Any

What's the problem? Describe what went wrong.

Using the settings below, toggling fast forward by tapping/releasing the TAB button, quickly interrupts the emulation to show the frame that was rendered when going fullscreen.
Video here (recorded on phone because the problem wasn't shown with a screen recorder):
<https://photos.app.goo.gl/yGq4Gf2uGD7rz4Ff6>
(I also set the backlash button to toggle fullscreen for easier recording)

What steps will reproduce the problem?

Video backend: Vulkan;
Vsync: On;
Play any game, toggle fullscreen (both borderless and exclusive have the problem) and press TAB: you will see the problem.
Something is still wrong even on windowed though: mashing TAB slows down the emulation, which doesn't happen with a different backend and/or Vsync off.

Is the issue present in the latest development version? For future reference, please also write down the version number of the latest development version.

Yes (12528).

Is the issue present in the latest stable version?

Didn't test.

If the issue isn't present in the latest stable version, which is the first broken version? (You can find the first broken version by bisecting. Windows users can use the tool <https://forums.dolphin-emu.org/Thread-green-notice-development-thread-unofficial-dolphin-bisection-tool-for-finding-broken-builds> and anyone who is building Dolphin on their own can use git bisect.)

Didn't test.

What are your PC specifications? (CPU, GPU, Operating System, more)
CPU: AMD A10-9700
Video Card: AMD RX 460 2GB (drivers: Adrenalin 20.8.3, the latest)
OS: Windows 10 2004

History

#1 - 09/12/2020 07:17 AM - JMC4789

- Status changed from New to Questionable

I have actually seen this before, and I'm pretty sure I know the cause. I think losing v-sync causes Dolphin to lose exclusive fullscreen for a moment which causes the previous buffer to be shown for a moment.

If this is the case, there isn't anything we can do about it aside from figuring out a way to not lose exclusive fullscreen.

#2 - 09/12/2020 01:15 PM - Pikachu025

Yeah I've seen this too, pretty sure this is a byproduct of losing exclusive fullscreen. Not sure if there is a good way to fix this?

#3 - 09/12/2020 01:24 PM - SuperSamus

Something is still wrong even on windowed though: mashing TAB slows down the emulation, which doesn't happen with a different backend and/or Vsync off.

But why does this happen only on Vulkan?

#4 - 09/12/2020 01:26 PM - JMC4789

I tried Vulkan with Vsync in windowed mode and cannot reproduce it making the emulator slower.

There is a unique issue with Vulkan + non-immediate XFB copies in certain games, but I don't think that's related to vsync. Also, I'm not using dualcore because that's a mess in and of itself with speed changes.

#5 - 09/12/2020 01:42 PM - SuperSamus

Video of the windowed issue: <https://photos.app.goo.gl/rKqVMzfTsMsk42ke7>

Tested with dual core on and off, same with all the XFB options.

I noticed that disabling hacks slows the emulation even more, so maybe it doesn't slow down to you because my hardware is weaker than yours.