

Emulator - Emulator Issues #11617

Vulkan/macOS: Framerate tanks if render surface is completely covered by another window

03/14/2019 05:42 PM - Pizuz

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

Game ID? (right click the game in the game list, properties, info tab)

Any

MD5 Hash? (right click the game in the game list, properties, info tab, MD5 Hash: Compute)

Any

What's the problem? Describe what went wrong.

If you select Vulkan as a backend on macOS, starting emulation and covering the render window completely by moving another window over it makes the framerate drop to single digits. This also happens in Stenzek's experimental Metal build [#6385](#). Interestingly, expanding and moving the Dolphin main window over the render surface doesn't produce this bug with Qt builds, however in the older Wx builds (such as the aforementioned [#6385](#)) it does.

Selecting OpenGL as backend doesn't produce this issue.

What steps will reproduce the problem?

1. Select Vulkan as backend.
2. Run any game.
3. Open Finder (or any other app) and resize the window to be bigger than Dolphin's render window.
4. Move the window to cover the render window completely (leaving no single pixel uncovered).

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

5.0-0743

Is the issue present in the latest stable version?

Doesn't apply, because Vulkan support via MoltenVK has been introduced after 5.0.

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.)

5.0-9173 (Vulkan support for macOS was introduced)
Also PR#6385 (Stenzek's abandoned Metal backend PR)

If your issue is a graphical issue, please attach screenshots and record a three frame gif of the issue if possible. Screenshots showing what it is supposed to look like from either console or older builds of Dolphin will help too. For more information on how to use the fifoplayer, please check here: <https://wiki.dolphin-emu.org/index.php?title=FifoPlayer>

Doesn't apply

What are your PC specifications? (CPU, GPU, Operating System, more)

iMac (21.5-inch, Late 2013)
CPU: 3,1 GHz Intel Core i7
Graphics: NVIDIA GeForce GT 750M 1024 MB
OS: macOS 10.14.3 (18D109) Mojave

Is there anything else that can help developers narrow down the issue? (e.g. logs, screenshots, configuration files, savefiles, savestates)

Can't think of anything.

History

#1 - 03/14/2019 06:08 PM - JMC4789

- Status changed from New to Questionable

Maybe this is just some power saving feature of macOS/Metal?

#2 - 03/14/2019 06:36 PM - Pizuz

I have no idea, honestly. By the way, trying to do this with the Apple Mail or iTunes window doesn't reproduce this issue. Calendar, Contacts, Finder, Chrome or Terminal do.

#3 - 03/17/2019 12:58 PM - Pizuz

Looks like you're right. There seems some power saving mechanism in place, because along with the framerate, CPU and GPU usage drops to single digits, as well.

#4 - 10/10/2019 08:50 AM - Pizuz

Updating to macOS Catalina fixed this issue. You can close it if you like.