

Emulator - Emulator Issues #12279

Pitfall: The Lost Expedition black screen extending loading screens

09/25/2020 10:15 PM - Raqzas

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:	5.0-14514
Description			
Game Name?			
Pitfall: The Lost Expedition			
Game ID? (right click the game in the game list, Properties, Info tab)			
GPHE52			
MD5 Hash? (right click the game in the game list, Properties, Verify tab, Verify Integrity button)			
ad35176fc7a9fad11c38ec68ddcbb621			
What's the problem? Describe what went wrong.			
<p>Any time the game displays a loading screen, the duration is extended either by a black screen at the end of the normal loading screen, or by a freeze roughly in the middle of the transition's duration (visible by the lack of movement in the loading screen animation). This issue is well-known in the game's speedrunning community, which recommends reverting to an earlier version of dolphin to avoid the punishing extra time. I have confirmed 4.0-9012 to be the last version where loading screens work flawlessly. Starting with 4.0-9017 (the next publically available development version), the loading screens are extended by roughly 1.5-2 times what they would be on console. This delay seems to have increased in more recent versions, as the latest development build 5.0-12670 features loading screens about 2-3 times as long as they would be on console; it is noticeably worse than the delay on 4.0-9017. From what I can tell, this increase is gradual; I have been unable to nail down a specific build where the delay increased that much all at once.</p>			
What steps will reproduce the problem?			
<p>Simply triggering any cutscene or loading screen on affected versions, such as the transition from the first fight of the game to the first story cutscene.</p> <ul style="list-style-type: none">- Start a new game.- Beat the introductory battle against the flaming lion.- A cutscene plays, embellishing the lion's defeat. This cutscene plays with a small delay.- A loading screen occurs, extending by a black screen at the beginning (the "loading..." text takes several seconds to show up) and a freeze in the middle (the "loading..." text stops moving).- A second cutscene plays, introducing the main cast in an airplane.			
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, the issue is present in 5.0-12670.			
Is the issue present in the latest stable version?			

Yes, the issue is present in 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.)

The first broken version was 4.0-9017. However, 9013-9016 are unlisted in the development releases and may thus also be responsible.

If your issue is a graphical issue, please attach screenshots and record a three frame fifolog 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>

[Attach any fifologs if possible, write a description of fifologs and screenshots here to assist people unfamiliar with the game.]

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

Intel i5-4690K @3.5GHz
Nvidia GTX970
Elementary OS 5.1.7 Hera, built on Ubuntu 18.04.4 LTS
Linux Kernel 5.4.0.47

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

<https://youtu.be/MFGplBdTkLM>

Here is a recording of the intro cutscenes on version 5.0-12670. Notice how, at 1:09, the time from skipping the lion defeat cutscene to the first time the plane shows up on screen takes 17 seconds. Compare this to the same sequence on console:

<https://www.youtube.com/watch?v=WKiv18wLcUo&t=29s>

From skipping the lion cutscene to the plane, roughly 3 seconds pass. Dolphin 4.0-9012 behaved near identical to the console shown in this video.

History

#1 - 09/25/2020 10:21 PM - JMC4789

This bisect doesn't make sense. The bisect is pointing to a BBA (Broadband Adapter) change. I think the change *after* that is more likely to cause the issue, which is a disc timing thing.

This is the build I think *could* have caused the issue -> <https://dolphin-emu.org/download/dev/1b37b39d64680148cd72425610d5e532cfe8ceb0/>

This is the build you say caused the issue -> <https://dolphin-emu.org/download/dev/1d07fee3671147a760597fdea850b63c2afd91b1/>

This is the build you say is the last known good build -> <https://dolphin-emu.org/download/dev/a0c51806ec09d149667398fa1c94dd360a37f44f/>

There are no revisions in between those because there are multiple commits to each of those builds. One of those three have to be the culprit imo. If the build I suggested is the actual culprit, then everything makes sense. Otherwise we need to do some more digging.

#2 - 09/26/2020 06:45 AM - Raqzas

I tested the three builds you linked, again taking the same opening cutscene with the lion and airplane as a comparison.

The first build, 4.0-9019, does have the issue. It takes 17 seconds from lion to airplane, and 44 seconds to gain control of the character.

The second build, 4.0-9017, does not have it. It takes 3 seconds to airplane, and 10 to character control.

The third build, 4.0-9012, behaves identically to the second one.

Console behaves like the second and third build do, taking 3 seconds to plane and 11 to character control.

So you're absolutely correct, my bisect was off. I'm still new to git, so I probably messed up somewhere along the way. Sorry about that!

#3 - 09/26/2020 07:14 AM - JMC4789

- *Status changed from New to Accepted*

It's not problem at all! Your bisect was close enough that we were able to immediately determine the bad build at least.

#4 - 11/03/2020 05:37 PM - JosJuice

Putting the logs from JMC here just so that I don't lose track of them: <https://pastebin.com/H98vNM0V>

#5 - 12/04/2020 09:42 PM - Avasam

For what it's worth. Pitfall: The Big Adventure [RPFE52](#) has the exact same issue, with the same Bisect. Despite its different name/branding, The Big Adventure is a straight up Wii port with some QOL improvements.

#6 - 12/04/2020 09:44 PM - Avasam

That was meant to be a Game ID [RPFE52] and a hash (b3a92e0f816d2c2f30bf349bcbec4485)

#7 - 06/27/2021 04:24 PM - JosJuice

- *Status changed from Accepted to Fix pending*

<https://github.com/dolphin-emu/dolphin/pull/9847>

#8 - 06/30/2021 02:03 AM - JMC4789

- *Fixed in set to 5.0-14514*

- *Status changed from Fix pending to Fixed*

Fixed by 5.0-14514 -> <https://dolphin-emu.org/download/dev/04a1c2e1b2d6171bb6dd4c13138d4a4f4a3a9134/>