Emulator - Emulator Issues #8747

Remove 1.5x and 2.5x Internal Resolution Options

07/05/2015 01:31 AM - sgh.hockey

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:**	5.0-5097

Description
These internal resolutions have additional graphical glitches when enabled and add complexity to the options menu. Does the performance improvement of using a non-native internal resolution multiple make these options still necessary?

Related issues:		
Has duplicate Emulator - Emulator Issues #9487: Internet Channel - Keyboard g...		**Duplicate**

History

#1 - 07/05/2015 01:32 AM - JMC4789

I agree, but every time we make a move to remove them the users on really awful Intel HD graphics cards come out of the woodworks to block it.

#2 - 07/05/2015 01:37 AM - sgh.hockey

It could be argued that on such performance constrained systems that using a lower internal resolution would give a higher framerate and more stable experience.

#3 - 07/05/2015 01:42 AM - sgh.hockey

What about changing the auto internal resolution to only be a multiple of native resolutions?

#4 - 07/05/2015 10:46 PM - PEmu

I support removing the 1.5x and 2.5x options. The current resolution list is a bit of a mess. If integrated users don't like it they can just bump down to 1x and 2x.

#5 - 07/06/2015 05:41 AM - hosode

The IR 1.5x option makes all the difference on my Intel HD 4600 between 1x native (and unnecessarily blocky for lighter games) and 2x (super sharp but almost always suffering from <60fps even in lighter games, at least occasionally).

1.5x is just right for me on lighter games, and it really is better looking than 1x. I'd say it's *one of the biggest steps* in visual enhancements as it is, proportionally much bigger than from 3x to 4x, for example.

Besides, PC gamers are more than likely used to selecting their preferred resolution from a list of 10+ options (all the resolutions supported by 1) GPU 2) monitor 3) both), this really is just two more options in the UI. And they really make the Dolphin experience better for some.

coming out of the woodworks

#6 - 07/07/2015 02:54 AM - ClaytondAF

I don't have integrated graphics, but a considered really old graphics card by some (GeForce 9600GT) and 1.5x makes all the difference not only graphically, but on performance for me. I can only use the D3D backend, since my card is only OpenGL 3.3 and Dolphin seems to be OpenGL 4.4, and it's really slow on it, but besides that, for some reason D3D has anti-aliasing greyed out for me, so 1.5x IR is kind of my anti-aliasing solution for games that I can't bear 1x native (Wind Wakers a great example). And in the games that I play, I never ever saw any graphical glitches using 1.5x, whereas using 2x IR (if the system could handle) there are some odd lines in Mario Kart Wii menus and Wind Waker's "bottle content" animation on the text box when you put something in the bottles. So please don't ever remove those clever alternatives. Thank you.

#7 - 07/07/2015 06:22 AM - sgh.hockey

JMC4789 I ask that you mark this as milestone future as people still use it. Is there any other reasons for its removal besides the cosmetics and graphical bugs in some games?

#8 - 07/08/2015 03:11 AM - JMC4789

I told you this would happen :P

#9 - 07/08/2015 05:34 AM - hosode

The visual difference between 2x and 3x is not as huge as 1x and 2x. And the user pool choosing between 2x and 3x is even smaller, as (I suppose) every discrete GPU can handle 3x nowadays. So the suggestion to just recommend using 2x instead of 2.5x is somewhat more understandable.

And removing only 2.5x would remove much of the complexity this issue is about.

I would like to hear someone defending 2.5x (which GPU's have it as the absolute sweet spot, for example?), as my (and [#6](#)'s)arguments and views only stand for keeping 1.5x.

#10 - 07/08/2015 09:06 PM - rukariosake

That, and x5, x7 The difference is negligible.

#11 - 07/11/2015 05:15 AM - Helios

Hi,

I removed 2.5x here: https://github.com/dolphin-emu/dolphin/pull/2734

Feel free to provide your input so the powers that be can decide the fate of the 2.5x option.

#12 - 07/12/2015 01:04 AM - sgh.hockey

mimimi085181 has suggested that we remove the fractional IR options from the gui. With this change users will still be able to set a fractional IR in the ini.

#13 - 07/12/2015 07:46 AM - adiffin502

One example that immediately comes to mind where half-stepping causes problems is SB:BFBB:

Native: http://i.imgur.com/UhayM84.png
1.5x : http://i.imgur.com/ua9O5rs.png
2x   : http://i.imgur.com/VvNHZXW.png

Notice the red shapes at 1.5x, which don't occur at 2.5x for some reason. The box at the top-right occurs on console, so it's not the problem (you just don't see it because the GC runs at native res, anyway. In fact, they only occur in the GC version.

This is why I like PCSX2's custom resolution option. Also (maybe I'm being crazy, but...) what would √2x be like?

#14 - 07/12/2015 08:24 PM - Helios

new PR because reasons: https://github.com/dolphin-emu/dolphin/pull/2743

#15 - 07/15/2015 03:19 AM - ClaytondAF

A complaint of sorts, but I've been reading the comments in that PR, and it seems 1.5x and 2.5x will be removed from the GUI, but left in the INI configuration if wished to change anyways. The complaint is that if set in the INI, it cannot be changed in the GUI in real time, and I guess not using the hotkeys as well, as I didn't say before, but if I set the game in a fractional IR, I don't play it in that IR for the whole gameplay session, I tend to change to higher or lower values depending on the performance. In Wind Waker for example, I can play it using 2x IR just fine, until I get to Dragon Roost dungeon, where there is all that distortion effects, which drop the FPS to about 25, so hitting decrease IR (a commodity that I kindly asked not long ago, and was glad to get) to 1.5x, I don't get lost FPS and the image isn't bad, like it would be on native. I tend to increase it to 2.5x or even 3x when sailing, because that also improves the resolution of the far away islands, and the draw distance of the sea "spume" which is very nice. That being said, if it is really that "ugly" to see 2 measly options in the resolution drop down list, or concerning that noob people detect graphical defects on their favorite games (which by the list shown in the PR, aren't that many, and if the "popular" game is SSBM, that can be played even on celeron), and come complain, please at least leave it the hotkeys options for those IR at least. Thanks again.

#16 - 07/15/2015 06:02 AM - pauldacheez

It seems that the plan is now to just warn users that the two options are shit. Removing them from the UI is unnecessary, really, considering that they cause no issues 90% of the time. (Hell, I don't even know of any actual examples.)

#17 - 07/15/2015 06:07 AM - mimimi

Hmm, i think the problems should come from odd texture sizes that are upscaled to fractional texture sizes. So width 101 becomes 151.5, and Dolphin can choose to either make it 1 pixel too big or 1 pixel too small.

Actually that could be made optional. Round up or round down. This might reduce or fix some of those issues. Just a theory, i don't know an example, this is pure guesswork.

#18 - 07/24/2015 01:26 PM - Fog

PR 2743 has been merged with the warning instead of actually removing the options.

#19 - 07/25/2015 05:51 AM - sgh.hockey

Please leave this issue open as adding a warning is not really a fix.

#20 - 08/02/2015 11:08 PM - amykenady

I have a 1600 x 900 monitor (900p) isn't that 2.5x?

#21 - 08/08/2017 10:20 AM - JMC4789

- Status changed from Questionable to Fix pending

Fix Pending - https://github.com/dolphin-emu/dolphin/pull/5744

#22 - 08/09/2017 12:47 AM - JMC4789

- Has duplicate Emulator Issues #9487: Internet Channel - Keyboard glitching at non-integer internal resolutions (Direct3D 11) added

#23 - 08/10/2017 09:13 AM - JosJuice

- Status changed from Fix pending to Fixed

- Fixed in set to 5.0-5097

https://dolphin-emu.org/download/dev/e41a9905c01db496b6a4c2756e1814c7a4cffab0/