

Emulator - Emulator Issues #12429

DSU Controllers Get Broken After Ending Emulation

02/21/2021 06:51 PM - tunsay

| | | | |
|--|---------|------------------------------------|-----------|
| Status: | Fixed | % Done: | 0% |
| Priority: | High | | |
| Assignee: | | | |
| Category: | | | |
| Target version: | | | |
| Operating system: | Windows | Relates to performance: | No |
| Issue type: | Bug | Easy: | No |
| Milestone: | | Relates to maintainability: | No |
| Regression: | Yes | Regression start: | 5.0-13461 |
| Relates to usability: | No | Fixed in: | 5.0-13790 |
| Description | | | |
| Hello, I have a problem with DSU that I did not have with the others updated (before version 13500 I would say). Everything is functional when I launch a game, the controller works perfectly, everything is recognized. But as soon as I start to close a game, DSU is no longer usable. | | | |

History

#1 - 02/21/2021 07:34 PM - Miksel12

I recently noticed that after closing a game or fifolog for a second time, the log would start spamming:
InputCommon\ControllerInterface\DualShockUDPCClient\DualShockUDPCClient.cpp:240 E[SI]: DualShockUDPCClient HotplugThreadFunc send failed
Disabling and enabling the UDPCClient doesn't fix it, restarting Dolphin seems to be the only solution. I haven't seen this before so this seems to be recent regression.

#2 - 02/21/2021 07:36 PM - JMC4789

If someone could figure out when this started, we could try to get it hotfixed.

#3 - 02/21/2021 07:51 PM - Miksel12

5.0-12412 doesn't have the issue and is the latest DSU specific change. Don't have enough time to do more bisecting right now.

#4 - 02/21/2021 08:05 PM - iwubcode

Miksel12 wrote:

5.0-12412 doesn't have the issue and is the latest DSU specific change. Don't have enough time to do more bisecting right now.

Actually 5.0-13430 is the latest targeted change. Haven't done any testing to say if it's the issue though

#5 - 02/21/2021 08:10 PM - Miksel12

5.0-13430 also has no issue.

#6 - 02/21/2021 08:26 PM - Miksel12

I bisected it to 5.0-13461, I double checked as it seems completely unrelated but 5.0-13459 shows no weird behaviour.

#7 - 02/24/2021 05:49 PM - JMC4789

My bisect ended up on 5.0-13430, which makes a lot more sense?

Unsure how you guys got a different bisect.

#8 - 02/24/2021 05:50 PM - JMC4789

- Regression start set to 5.0-13430
- Regression changed from No to Yes
- Priority changed from Normal to High
- Status changed from New to Accepted
- Subject changed from Problem witch DSU to DSU Controllers Get Permanently Broken After Ending Emulation Twice

#9 - 02/24/2021 06:21 PM - filoppi

It's actually enough to end the emulation once.

This should be fixed in my branch, there was a bunch of bad threads code.

<https://github.com/dolphin-emu/dolphin/pull/9489>

Unless it was broken after I last merged with master, but you said it was fine before 5.0-13430? Which was my first change to DSU.

#10 - 02/24/2021 06:23 PM - JosJuice

- Subject changed from DSU Controllers Get Permanently Broken After Ending Emulation Twice to DSU Controllers Get Broken After Ending Emulation

Could you split out the fix? That is a very large PR.

#11 - 02/24/2021 06:27 PM - filoppi

No this problem doesn't happen neither on 5.0-13430 nor on 5.0-13428 on my machine, but it does happen on current latest. Though not on my build. So it could have been something in between the last time I merged with master that broke it. I will merge and try again as soon as I can, because there were a few fixes I made that could have helped with this.

#12 - 02/24/2021 06:46 PM - JMC4789

I will test again if I have to, but I double checked this bisect because it collided with someone else's bisect.

#13 - 02/24/2021 07:45 PM - JMC4789

- Regression start deleted (5.0-13430)

Due to inconsistencies with the bug appearing, I'm no longer confident in my bisect. More people seem to be saying it doesn't occur in this build. It may be a race condition unrelated, but I still maintain that it can happen in that build.

#14 - 02/25/2021 01:36 PM - Miksel12

I retested to be sure, 5.0-13430 and 5.0-13459 show no message in the log. 5.0-13461 does, always after closing a game for a second time. I didn't actually test if DSU worked or not but just looked at the log.

#15 - 03/02/2021 11:52 PM - filoppi

I've just updated my branch to master and this indeed has started happening. I'm gonna investigate tomorrow.

#16 - 03/03/2021 12:41 AM - filoppi

I can confirm the problem is here, in DualShockUDPClient.cpp:

```
if (server.m_socket.send(&list_ports, sizeof list_ports, server.m_address, server.m_port) != sf::Socket::Status::Done)
```

```
ERROR_LOG_FMT(CONTROLLERINTERFACE, "DualShockUDPClient HotplugThreadFunc send failed");
```

that starts failing after we stop the emulation for the first time, but even if we comment out the code that calls PopulateDevices() when changing the dolphin main window, it will still break.

I've commented out pieces of code at random, tried to disable and re-enable the server, restarted DS4Windows, removed a server and added a new one with a new IP address. None of these worked.

It seems like UDP out communication is completely broken after emulation first stops, even if . The SMFL external (UDP) hasn't been changed in 7 months. The only other code that uses UDP is NetPlay and some wiimote stuff.

What is even more amazing is that if we start dolphin with DS4 UDP Client off, start the emulation, stop the emulation, then start the UDP Client, THE SOCKET SEND FUNCTION WILL STILL FAIL immediately!!!

Given that the UDP client thread isn't even started when it's off, and literally none of its code runs, it means this bug is NOT related to the DS4 UDP code, but to some other parts of Dolphin.

Possibly NetPlay does not uninitialize some stuff correctly? That doesn't really make sense I know, but it's really hard to make sense out of this, and the socket doesn't even send any specific error message. It just says ERROR.

This didn't happen before I merged with master, and I was on this commit:

<https://github.com/Filoppi/dolphin/commit/4cdcbb6ab28596653635ab91b1ccd0332629925a>

So the breaking change must come between that, and ~9 days ago. Which isn't much honestly.

#17 - 03/03/2021 08:56 PM - filoppi

Can confirm the first broken version is 5.0-13461, commit:

<https://github.com/dolphin-emu/dolphin/commit/59fa6130207a263718368999612a5fcb59d1c004>

which does seem to mess with sockets. Will investigate.

#18 - 03/03/2021 11:18 PM - filoppi

Fixed by <https://github.com/dolphin-emu/dolphin/pull/9557/>

#19 - 03/05/2021 10:33 AM - JosJuice

- Fixed in set to 5.0-13790

- Regression start set to 5.0-13461

- Status changed from Accepted to Fixed

- Operating system Windows added

- Operating system deleted (N/A)

<https://dolphin-emu.org/download/dev/fc86e554e03916c8f9144f8dba9048977fb21300/>