

Kerbal Space Program - Bug #9478

Persistent framerate problems with KSP 1.1.0.1230 (or Unity 5)

04/25/2016 12:49 AM - Saturnine

Status:	Closed	Start date:	04/25/2016
Severity:	Low	% Done:	100%
Assignee:			
Category:	Application		
Target version:			
Version:	1.1.0	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:			

Description

This bug-report might be considered 2-fold:

[primary]

Semi-persistent framerate drops @ unreasonable maxed-out GPU loads:

I've found heavy (semi-)persistent drops in framerate on moments when GPU-load sometimes seems to get maxed-out in unreasonable circumstances, dropping the framerate all the way from 60 FPS to ~20 FPS. Strangely enough causing a (graphical) context switch (by pressing the Win-button) seems to (temporarily) relieve the problem, reducing the max GPU load and returning the framerate to 'normal' values. However, in-game context switches or just in a matter of time, the problem of max-GPU load seems to return and cause the drop in framerate again.

Odd enough, while trying to record the problem using NVidia's ShadowPlay, it did NOT occur. Somehow ShadowPlay seems to 'prevent' the maxing-out of the GPU-load and hence no drops in framerate occur. This is also why I had to record the videos with a handheld camera.

VIDEO 1: Demonstrates the problem with the maxed-out GPU load (using Process Explorer) and the drops in framerate (and how a context switch sometimes restores it)

<https://www.youtube.com/watch?v=vFy3E7L--zI>

VIDEO 2: Demonstrates how the problem is 'gone' when running with ShadowPlay recording enabled (also proving the hardware is working properly and is capable), but does show a secondary framerate problem when a plane/rocket is displaying atmospheric effects along it's hull, as described below in [secondary].

<https://www.youtube.com/watch?v=O8XjT0m-mPY>

[secondary]

Excessive drop in framerate during higher CPU loads when atmospheric effects are visible on the plane's or rockets's hull (framerate drops from 60 to 36). See also video 2 at around 3m30s.

NOTE: Both 32bit and 64bit KSP versions seem to have both problems!!

COPY OF YOUTUBE COMMENTS ON VIDEO PART 1:

I think the videos explain themselves. Unreasonable GPU-loads seem to cause 'persistent' framedrops, which seem to disappear when I force a (graphical) context-switch by pressing the Win-button. A lot of the time, this (temporarily) restored the framerate to original values (usually 60 FPS), however, at the end of the video you can see that my attempts to 'restore' the framerate with a context switch does not seem to work anymore.

Note that this problem occurs in all stages of the game: menus, space center, and during simulations and in both versions (32bit and 64bit).

In Part 2 of this video, you can see me running the game with NVidia ShadowPlay enabled, which somehow seems to be able to 'prevent' the 'persistent' framedrop from happening in the first place. This is also the reason why I had to record the problem with a hand-camera.

NOTE: Running the game properly while recording with NVidia ShadowPlay also proves that my hardware is not malfunctioning, and that it's likely to be a KSP or Unity software problem. Other applications and games run properly.

COPY OF YOUTUBE COMMENTS ON VIDEO PART 2:

While recording with NVidia ShadowPlay, no improper GPU-loads seem to occur and the 'persistent' slow framerates are gone, as shown in this video. This also proves my hardware setup is quite capable of running most of the game @ 60 FPS (except for the part where 'Station One' is visible (there it drops to 34 FPS, but only 22 FPS when GPU-load is maxed out as seen in Part 1).

You would expect running with ShadowPlay to potentially make the persistent framedrop problem worse, but actually, it seems to somehow 'prevent it'.

Besides all this, there is another 'problem' visible in this video. Namely at around 3m30s in this video, you can see CPU load increase when the atmospheric effects are visible on the plane, and framerate drops from 60 to 36... which is quite ridiculous. When the atmospheric effects are gone, the framerate returns to 60.

Related issues:

Related to Kerbal Space Program - Bug #9488: Persistent framerate drops durin...

Needs Clarification 04/25/2016

History

#1 - 04/25/2016 09:10 AM - sal_vager

- Status changed from New to Need More Info

- Severity changed from High to Low

Please provide your game logs as per the wiki recommendations, thank you.

<http://bugs.kerbalspaceprogram.com/projects/ksp/wiki>

#2 - 04/25/2016 02:35 PM - Saturnine

sal_vager wrote:

Please provide your game logs as per the wiki recommendations, thank you.

<http://bugs.kerbalspaceprogram.com/projects/ksp/wiki>

Low? Unless you guys can confirm this to be a graphics driver issue, I do think the first issue should be considered high priority.. As it kind of breaks play-ability of the game.

But sorry, didn't read the wiki properly... will reproduce and try to add the logs. Also I will create 2 proper new issues, as I discuss 2 problems here, with, I can imagine, different priorities. This issue can be closed then.

#3 - 04/25/2016 05:16 PM - Saturnine

Created 2 proper bug-reports for this one: [#9488](#) and [#9489](#)

I'd say this one can be closed.

#4 - 04/25/2016 06:26 PM - sal_vager

- Related to Bug #9488: Persistent framerate drops during unreasonable moments of maxed-out GPU loads added

#5 - 04/25/2016 06:26 PM - sal_vager

- Status changed from Need More Info to Closed

- % Done changed from 0 to 100

Closed because of new report.

Files

DxDiag.txt

73.7 KB

04/24/2016

Saturnine