Kerbal Space Program - Bug #532

Demo version (18.3) sometimes crashes with null pointer error when transitioning dominant gravatational bodies.

04/10/2013 01:26 AM - Ruedii

Status:	Closed	**Start date:**	04/10/2013
Severity:	Unworthy	**% Done:**	100%
Assignee:			
Category:	Gameplay		
Target version:	0.22		
Version:	0.18.4	**Language:**	English (US)
Platform:	Linux	**Mod Related:**	No
Expansion:			

Description

On the demo version I experienced a null reference exception crash on Linux when transitioning bodies.

Tail of "Player.log":

Unpacking Kerbel 10

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

Event Type Ignored: EnterNotify
Event Type Ignored: EnterNotify
Packing Kerbel 10 for orbit

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

Event Type Ignored: EnterNotify
Event Type Ignored: EnterNotify
Event Type Ignored: EnterNotify
Event Type Ignored: Expose
Event Type Ignored: EnterNotify
Unpacking Kerbel 10

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

Packing Kerbel 10 for orbit

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

Event Type Ignored: EnterNotify
recalculating orbit for mk1pod (Kerbel 10): Kerbin
rPos: [10163352.6262968, -61610.004658819, -9302915.71524919] rVel: [-490.13539286891, -6.66417636888139, 33.8490004513692] |491.348012533879|

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

recalculated orbit for mk1pod (Kerbel 10): the Mun
rPos: [2409895.52990161, -144100.122163255, -61610.0043656737] rVel: [-904.344203552851, 33.8490004513692, -356.994108221406] |972.84581853241|

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

setting new dominant body: the Mun
FlightGlobals.mainBody: Kerbin

(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

[Orbit Targeter]: Target is null

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(Filename: /BuildAgent/work/812c4f5049264fad/Runtime/ExportGenerated/LinuxStandalonePlayer/UnityEngineDebug.cpp Line: 43)

NullReferenceException: Object reference not set to an instance of an object
at FlightGlobals.FixedUpdate () [0x00000] in <filename unknown>:0

(Filename:  Line: -1)
```

History

#1 - 04/10/2013 02:04 AM - Ruedii

OK, I replicated the bug. The cause is when you have the object that is becoming the new gravitational body, being the target object. This apparently causes the target object to clear improperly into NULL instead of "None".

#2 - 04/12/2013 10:27 PM - Ruedii

Bug appears on the latest full version too. Replication is still 100% possible.

#3 - 04/16/2013 04:25 PM - Ruedii

- File Player.20130313-01.log added

I forgot to attach the log file for 0.19.1

#4 - 05/14/2013 12:01 AM - Ruedii

Since this bug is present in 19.1 I would like to request increasing it's priority if it isn't already fixed in the latest testing releases.

Since there is a workaround, I wouldn't still wouldn't give it high priority.

#5 - 05/27/2013 07:24 PM - Ruedii

bug is still present in 20.0.

I've tested it on several gravitational bodies in the previous release.

#6 - 07/14/2013 09:56 AM - Ruedii

- File Bugtest-TargetSOI.ogg added

- File Player.log added

Still present in 0.20.2 release

Attached is video and log.

#7 - 07/14/2013 11:57 AM - Ruedii

- File Bugtest-TargetSOI-hq.ogg added

The first video wasn't exactly high enough quality to see what was gong on, so I recorded a new one.

#8 - 07/24/2013 07:51 PM - Ruedii

Still exists in 0.21

#9 - 08/16/2013 11:12 AM - Ted

- Category set to Gameplay

Thanks for updating it, it all sounds like it's related to a core issue with the game crashing on Linux when encountering NREs. Most odd, I'll look into it here.

#10 - 08/16/2013 12:29 PM - Ruedii

Yes I recently traced the issue to the fglrx driver. It doesn't occur on the Mesa/Gallium driver.

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You may want to look into that.
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#11 - 10/23/2013 07:16 PM - Ruedii

This is linked to bug #1182

As a note, I have not been able to replicate the null-reference exception on 0.22 I will retry again. This null-reference bug may be fixed.

#12 - 10/23/2013 07:30 PM - Ted

- Status changed from New to Ready to Test

- % Done changed from 0 to 80

Apologies, this was fixed in 0.22. Hopefully it has fixed the flgrx drivers causing crashes during that transition as well.

#13 - 10/23/2013 07:30 PM - Ted

- Target version set to 0.22

#14 - 10/26/2013 04:53 PM - Ruedii

The fault is no longer present.

Unfortunately, I'm currently not using a Radeon graphics card, so I can't verify if it fixes the crash. However, it likely is fixed, because I found at least 3 other circumstances when a similar fault caused a crash on the FGLRX driver, and not on the Mesa-Galium driver (one was not reported because it was due to a plugin, and thus solely considered part of the main bug.)

Once I get my old motherboard working for my Media Center computer I will test again on there.

#15 - 12/07/2014 11:44 AM - Ted

- Status changed from Ready to Test to Closed

- % Done changed from 80 to 100

Files

Player.20130313-01.log	340 KB	04/16/2013	Ruedii
Bugtest-TargetSOI.ogg	817 KB	07/14/2013	Ruedii
Player.log	354 KB	07/14/2013	Ruedii
Bugtest-TargetSOI-hq.ogg	2.3 MB	07/14/2013	Ruedii