

Kerbal Space Program - Bug #2007

OSX hangs in VAB when using symmetry a certain way [.23]

12/29/2013 05:46 PM - interslice

Status:	Duplicate	Start date:	12/29/2013
Severity:	High	% Done:	100%
Assignee:			
Category:	Parts		
Target version:			
Version:	0.24	Language:	English (US)
Platform:	OSX	Mod Related:	No
Expansion:			

Description

thread of issue on forums: <http://forum.kerbalspaceprogram.com/threads/62781-KSP-23-VAB-stealth-crashes-game>

What happens: In VAB: when placing 1-m aerodynamic nose cone that is in non-symmetry mode onto a fuel tank or object that's in symmetry mode, and then switching the nose cone to symmetry mode, the game hangs indefinitely.

How to reproduce:

- From VAB, place fuel tanks in symmetry mode around a center axis (i.e. another fuel tank).
- Select 1-m Aerodynamic Nose Cone (the one with the blue tip) and change to non-symmetry mode.
- Reactivate symmetry mode while placing the nosecone on top of one of the symmetrical fuel tanks.
- All instances of the nose cone spawn on top of only the selected fuel tank - game hangs and does not generate a crash log.

Notes:

- does not happen with every part. nose cone is 100%, issues gets much worse when using kw rocketry and b9 (many of those parts seem to trigger the issue just as the nosecone does)
- happens stock or modded
- happens on 10.7.5, 10.8.5 and 10.9.1 including on 10.9.1 fresh install with nothing but stock ksp installed
- happens on both my mac pro which has a radeon 5770 and on my macbook pro using intel graphics 3000. (radeon seems similar to issue [#1005](#), but macbook pro has same issue with intel graphics)
- happens in windowed and full screen mode
- issue does NOT happen in .22 just .23

this is not a massive issue in stock but makes my modded game practically unplayable.

Related issues:

Related to Kerbal Space Program - Bug #3916: Repeatable Crash in Vehicle Asse...

Duplicate

12/30/2014

History

#1 - 01/17/2014 11:15 PM - m4v

I can confirm in a Linux machine, exact same crash.

#2 - 04/18/2014 07:34 AM - madbadger2742

Confirmed OSX .23.5 as well. (It's not just nosecones, either.)

I seem to have the most trouble with it when the VAB symmetry is trying to figure out what level of symmetry to use for the new part. e.g.: If I have 4x symmetry on the vehicle, but 2x selected with the new part, the game is much more likely to hang than if I had selected 4x before approaching the vehicle with the new part.

#3 - 07/25/2014 03:00 PM - Master_Tao

- Status changed from New to Confirmed

- % Done changed from 0 to 10

Confirmed in OS X 10.9.4 with stock KSP 0.24.1 (Build 557). Workaround is to always change symmetry mode while the part is not in contact with the vessel.

Game hangs and player.log reports an unhandled NRE:

Receiving unhandled NULL exception

Obtained 31 stack frames.

```
#0 0x000000007b092c in ConvexMeshRuntime::ProjectHull(NPhaseContext&, float&, float&, IceMaths::Point const&, IceMaths::Matrix4x4 const&) const
#1 0x000000007b0755 in non-virtual thunk to ConvexMeshRuntime::ProjectHull(NPhaseContext&, float&, float&, IceMaths::Point const&, IceMaths::Matrix4x4 const&) const
#2 0x000000007a1b21 in TestSepAxis(NPhaseContext&, IceMaths::Point const&, ConvexMeshInterface const&, ConvexMeshInterface const&, IceMaths::Matrix4x4 const&, IceMaths::Matrix4x4 const&, float*)
#3 0x000000007a3294 in contactHullHull(Shape const*, Shape const*, ConvexMeshInterface const*, ConvexMeshInterface const*, ClosestPolygonMap const*, ClosestPolygonMap const*, IceMaths::Matrix4x4 const&, IceMaths::Matrix4x4 const&, NPhaseContext&)
#4 0x000000007a3a93 in triggerConvexConvex(Shape const*, Shape const*, TriggerCache&, NPhaseContext&)
#5 0x00000000797aeb in CollisionMap::findTriggerContacts(Shape const*, Shape const*, TriggerInteraction&, NPhaseContext&) const
#6 0x000000007e32cd in NPhaseCore::findTriggerContacts(TriggerInteraction*, NPhaseContext&)
#7 0x000000007e46f1 in NPhaseCore::narrowPhase()
#8 0x000000008034f8 in Scene::runSubstep()
#9 0x0000000080427f in Scene::simulate(unsigned int, unsigned int)
#10 0x000000008ecb65 in NpScene::executeScene()
#11 0x000000004999c4 in PhysicsManager::FixedUpdate()
#12 0x000000004983ba in PhysicsManager::InitializeClass():PhysicsFixedUpdate::Forward()
#13 0x000000002fe113 in PlayerLoop(bool, bool, IHookEvent*)
#14 0x00000000663c1c in -[PlayerAppDelegate UpdatePlayer]
#15 0x0000009840876b in __NSFireTimer
```

Log ends there.

#4 - 09/10/2014 12:09 PM - JVS

I think the problem as you described it is only a sub-case. Rather than the problem being changing symmetry mode while a part is hovering on top of the tank, it's a general problem of mis-matched symmetry modes. For example, if you have tanks in a 3x mode and attempt to place nosecones when you're in 2x symmetry mode, you'll get the same bug.

Nosecones do seem to be the worst offenders, and I often get it with radial decouplers as well and occasionally with many other parts.

A particularly annoying manifestation which is hard to avoid is when you have different groups of parts on a craft with different symmetry modes. For example a 4x set of parts above a 3x set of parts. If I opt+click to copy the 4x parts while in 4x mode, and then on the way to my desired location I mouse-over the 3x parts, this can cause the crash. Building complicated craft can feel like walking in a mine field.

The bug also manifests in the SPH, but is harder to describe given that there are only two modes.

#5 - 09/10/2014 02:24 PM - jonny

Edit - can reproduce now on 0.24.2

#6 - 09/10/2014 02:45 PM - jonny

- Version changed from 0.23 to 0.24

#7 - 02/04/2015 04:21 PM - jonny

- Status changed from Confirmed to Duplicate

- % Done changed from 10 to 100

Duplicate of #1912

Files

Screen Shot 2013-12-29 at 5.25.18 PM.png	1.6 MB	12/29/2013	interslice
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