[1.4.x] TweakScale v2.3.12(Apr-16)

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By pellinor, March 8, 2015 in Add-on Releases

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pellinor

Miniature Builder

Members

520

935 posts

Posted March 8, 2015 (edited)

Report post

TweakScale lets you change the size of a part. Not just that, but it will figure out how much fuel is in the resized part. And if it's an engine, it will become more powerful by scaling it bigger, or weaker by scaling it smaller.

Download: SpaceDock / Curse

Source: Github

A bit of Documentation

Latest dev version (WIP stuff, might contain bees)

See also the development thread for the latest unreleased tinkering.

TweakScale was originally developed by Goodspeed and Biotronic. [original release thread]
Source: Github
License: WTFPL

Known issues
* stock upgrade mechanic not supported yet
* CrewCapacity: removed seats in the editor sometimes reappear
* CrewCapacity: launch dialog of the pad/runway shows unscaled seats [stock limitation]
* particle effects are not scaled [stock limitation]
* unloaded relay antennas use their unscaled range [stock limitation]
* (see also https://github.com/pellinor0/TweakScale/issues)

Changelog

v2.3.12
* configs for new parts
* fix for exceptions
* fix for solar panels
* recompile for KSP 1.4.2

Reveal hidden contents

Please add TweakScale to your mod!

Reveal hidden contents

Features

Reveal hidden contents

How to use

Reveal hidden contents

Edited April 16, 2018 by pellinor

TheChizzaberry81, bcink, dundun93 and 45 others like this

Space Scumbag

Sr. Spacecraft Engineer

Members
387
331 posts

Posted March 8, 2015

Report post

Yes, finally a new thread. Good luck!

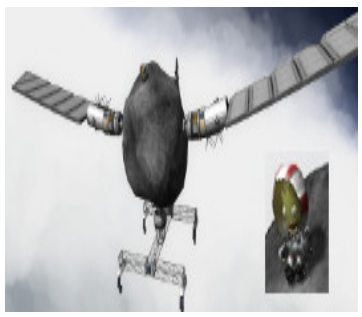
5thHorseman

Members
10,830
11,608 posts
Location: OVER 9 DOTS

Posted March 8, 2015

Report post

Thanks for continuing work on this mod, and for the new thread!



Mission: Jool Mix-Up | **Mods:** WarpEverywhere | Stock Ventral Drill

One man's grind is another man's gameplay.

Eleven

Solid As The Sun

Posted March 8, 2015

Report post

So far so good. No weird anomalies when replacing the old version...and that's ALWAYS a good thing

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Dazpoet

Parser of Metadata

Members
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334 posts

Posted March 8, 2015

Report post

It feels like anywhere I look I get different answers and they all have different ages so... Does this or does it not work with infernal robotics so I can make the *trons bigger and thereby more stable when adding large loads to them?

I like and do what I can to help out with KSP-CKAN

AccidentalDisassembly

Junior Rocket Scientist

Members
165
970 posts

Posted March 8, 2015

Report post

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> It feels like anywhere I look I get different answers and they all have different ages so... Does this or does it not work with infernal robotics so I can make the *trons bigger and thereby more stable when adding large loads to them?

Unfortunately the answer is not all yes or all no.

Yes, it works with IR. No, you cannot scale parts very much bigger. 1.something times original size is the maximum. Why? Apparently because IR parts only work if the node sizes on the parts are size 1 or smaller after being scaled in-game (or something vaguely like that, my explanation is most likely incomplete and wrong). Why? I don't know, because you *can* (I think, anyway, have to check that) make node sizes larger in the configs and the parts maybe still work.

But that means you *can* scale IR parts *smaller* (in-game)

and it doesn't break. So far, anyway. IR includes tweakscale values to do so.

If you want larger IR parts, you'll need to either:

A) Copy the configs for the parts, make new ones scaled up, scale up all values appropriately, or

Use a module manager patch to do the same thing.

This works, I've done it, but not always with all parts for mysterious reasons.

---

pellinor

Miniature Builder

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Posted March 8, 2015 (edited)

Report post

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> It feels like anywhere I look I get different answers and they all have different ages so... Does this or does it not work with infernal robotics so I can make the *trons bigger and thereby more stable when adding large loads to them?

Sure, and there is no need to create new parts. The simplest way is to add larger scaleFactors to IR's scaleTypes with a MM config (so you replace the 'scaleFactors' list with a new list that contains the old ones plus the ones you want to add). This will make both the parts and their nodes bigger, so all is fine from TweakScale's side.

This is a config I used in one of my old saves for adding a smaller stack size:

```
@SCALETYPE[stack]:Final
{
    @scaleFactors = 0.3125, 0.625,
1.25, 2.5, 3.75, 5.0
    @scaleNames = 31cm, 62.5cm, 1.25m,
2.5m, 3.75m, 5m
}
```

However, I heard that IR tends to have problems with very large nodes, and I suspect that this has to do with the instant acceleration that IR does. Just like in real life, heavy things do not like to have their speed changed instantly (simple example: driving a car against a brick wall). It happens that this is also an area where I am tinkering at the moment.

Edited March 8, 2015 by pellinor

AccidentalDisassembly

Junior Rocket Scientist

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Posted March 8, 2015 (edited)

Report post

Hey Pellinor,

Question about tweakscale + the tech tree. I was wondering if it would be possible to implement something like this. Hopefully my description will make some sense-ish. But I'm working under some assumptions that might not be true, so please correct me if they're not.

I'm using "Tech node 2.5m" and "Tech Node 3.75m" and whatnot to refer to whatever tech node would unlock those sizes, just for the sake of generic argument.

Assumptions: are these true?

1) Right now, the way tech tree + scaling works is that particular scaleFactors in a SCALETYPE{} are connected to particular nodes in the tree, right? Assuming that scaletype has factors 0.625, 1.25m, 2.5, 3.75, and 5 only:

2) So, for example, if you have a 1.25m part, you wouldn't be able to unlock scaling it to 2.5m until you research Tech Node 2.5m. Then, you can scale it to 5m when you unlock Tech Node 5m, etc.

3) But, if you have a 3.75m part from the outset, it cannot be scaled down to 2.5m until you unlock Tech Node 2.5m, and then, later, it too can scale to 5m when you unlock Tech Node 5m.

So, if that's actually how it works:

Would it be possible instead to implement a relationship to tech nodes like this:

1) Let's assume you start with a 2.5m part, and that its SCALETYPE has major increments at 0.625m, 1.25, 2.5, 3.75, 5.0.

2) When you unlock the first tech node that allows scaling up or down, it allows you to go one "notch" (one scaleFactor) in either direction of the part's defaultScale. So the 2.5m part could, at first, only be scaled to 1.25 or 3.75m. Likewise, a part that starts at 3.75m could only be scaled to 2.5m or 5m after this first tech node.

3) The second node in the research tree that has to do with scaling allows you to scale things *two* scaleFactors in either direction of the default scale - so now, the 2.5m part can be scaled anywhere from 0.625m to 5m. But a part that starts at 1.25m could only be scaled up to 3.75m.

4) The third related tech node allows moving three increments in either direction of original scale, the fourth four, and so forth. Or, it could allow plus or minus a particular percent of the part's original scale, since everything is FreeScale - that might make it more flexible... Or some other system to figure out how much larger/smaller any given part can be made after a particular technology.

Then, of course, the real question is whether that kind of system would even make sense. My thinking is that progression in the tech tree should allow *greater and greater manipulation of part size*, no matter what size a part starts at. But maybe that's not a good way to do it... thoughts?

Edited March 8, 2015 by AccidentalDisassembly

Dazpoet

Parser of Metadata

●●●

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Report post

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Members
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334 posts

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Thank you! I'm preparing a new save to play around with and Tweakscale + IR is one of the things I really want. I don't plan on using humongous IR parts, just want them 1 size larger than they are now, so I'm hoping I won't have problems with very large nodes 

Saving the MM patch for future use 

I like and do what I can to help out with KSP-CKAN

AccidentalDisassembly

Posted March 8, 2015

Report post

Junior Rocket Scientist

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>
> Saving the MM patch for future use

Please report back on what happens if you scale an IR part more than 1.999x (in most cases, I think) its original size! I'd be curious to know if it really does somehow work now...

Joshwoo70

Retired KSPer [Maybe?]

Posted March 8, 2015

Report post

Members
98
786 posts
Location: Heimdallr, Tir Na Nog

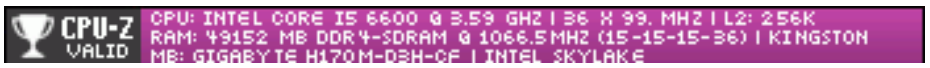
Yay new thread!

good luck!

(Needs to update)

~~Retired KSP Player. Might come back again.. someday...~~

And the Day is TODAY! [8/2/2018]



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pellinor

Miniature Builder

Posted March 8, 2015

Report post

Honestly, I've never used the tech limitations myself, so I do not have much feeling for how it should be. My career game usually develops from stock at the beginning to more and more mods towards the end. TweakScale comes into play when docking is available and I'd like stuff like very weak RCS thrusters.

Members
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I like the old system for its simplicity. scaleFactors may have a tech requirement attached. In the editor, the scaleFactors list is simply filtered by removing the ones which are not researched. Your system has the advantage that you can not end up with a part that is forbidden to have its defaultScale.

For the moment I'd like to avoid changing things until there is a need for change and the new version is clearly better (just be aware that such a change would break existing configs). Actually I have no idea how many people or mods use this system at all. (For the old free scaling feature my impression was that it was hardly used at all because of the bad usability)

futrtrubl

Rocket Scientist

Members
121
673 posts

Posted March 8, 2015

Report post

> **AccidentalDisassembly said:**
>
> Then, of course, the real question is whether that kind of system would even make sense. My thinking is that progression in the tech tree should allow *greater and greater manipulation of part size*, no matter what size a part starts at. But maybe that's not a good way to do it... thoughts?

This can already be done. In the tweakscale section of the part cfg you can specify tech nodes that certain scaling options become available.

AccidentalDisassembly

Junior Rocket Scientist

Posted March 8, 2015

Report post

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>
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Members
165
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I see you didn't actually read anything I wrote except for that one line.

futrtrubl
Rocket Scientist

Posted March 8, 2015

Report post

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>
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Actually I did. Maybe I misunderstood what you were saying but thanks for the sarcasm.

Looking more I think I have a better idea of what you want, but the problem is how does the system know what scale a part is? What scale is a certain solar panel? You would still have to add information to the cfg for each part telling it what size it is and what to base it's size options on. Pretty much how the current system works.

If I am still misunderstanding then please tell me, non-confrontationally.

Members
121
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AccidentalDisassembly
Junior Rocket Scientist

Members
165
970 posts

Posted March 8, 2015

Report post

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>
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Sorry, I have just had a string of people not actually read the contents of my posts, lately, then respond to what they insisted I must have been saying without taking the time to read all of the plain language of what I wrote. It has made attempting to contribute to anything on these forums rather frustrating.

Anyway, the code for knowing what scale a part is and the limits on its scaling must already exist, since tech limits are already in. TS knows that a part starts (for its purposes, doesn't really matter what size the part really is in game) at defaultScale X, and, knowing this, won't let it scale up to Y (or whatever) until you've researched a tech node.

My proposal is simply a *relative* limit on scaling (to the original size of the part, as determined by defaultScale in its TS module, I assume) rather than an absolute one like it (apparently) is now.

Mecripp

Flight Director

Members

1,003

5,100 posts

Posted March 8, 2015 (edited)

Report post

Has anyone using Linux got this tweakscale to work ? keep having to go back to the old one this work just locks the game up when, I pick a part.

And @AccidentalDisassembly I hope they don't add that to this plugin it would just be a file, I have to hunt and zip up or delete.

EDIT- Thanks for the feedback Eleven maybe, I have a bad cfg somewhere didn't think to look at the log tell, I put the old one back in and started the game then to later over-ride the file ouch will try again.

Edited March 9, 2015 by Mecripp2

Eleven

Solid As The Sun

Members

34

569 posts

Posted March 9, 2015

Report post

> **MeCripp said:**
>
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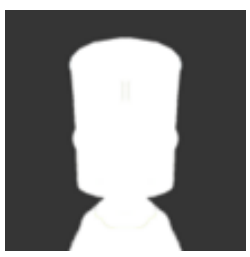
>
> And @AccidentalDisassembly I hope they don't add that to this plugin it would just be a file, I have to hunt and zip up or delete.

I'm using Mint 17.1 with the 64bit client. I haven't had any issues with TweakScale so far.

pellinor

Miniature Builder



Members

520

935 posts

Posted March 9, 2015

Report post

> **MeCripp said:**
>
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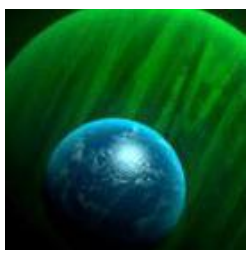
Yes, I am developing on linux. Haven't started the windows version for weeks (i prefer it for playing though, because of antialiasing).

Northstar1989

Capsule Communicator



Posted March 9, 2015

Report post

OK, so does TweakScale 1.52 adjust node-sizes in accordance to re-scaling?

I.e. if I increase the size of a 2.5 meter diameter part to 3.75 meters diameter, the node size should increase from size 2 to size 3. Or if I decrease it to 1.25 or 0.625 meters,

Members
649
2,530 posts

it should decrease to size 1 or 0, respectively...

Node sizes have serious consequences for rocket construction in KSP because they affect the strength of attachment between two parts, and how wobbly/strong a connection between those parts is...

Regards,

Northstar

Offworld Refueling Guide for new players

Discussion of In-Situ Resource Utilization Reactions

Northstar's **Netherdyne Mass Driver mod**

KSP-Interstellar Extended (co-founder and occasional

pellinor

Miniature Builder

Members
520
935 posts

Posted March 9, 2015

Report post

> **Northstar1989 said:**
>
> OK, so does TweakScale 1.52 adjust node-sizes in accordance to re-scaling?

Of course, node size scales linearly, so the default stack sizes should behave just as you would expect.

OmegaCenti

Bottle Rocketeer

Members
0

Posted March 9, 2015 (edited)

Report post

I think there might be a problem Pellinor in TweakScale. In career mode, part costs are being zero'd out (example parts include the 3 man capsule and the skipper engine) but does not exclude many others. I noticed after installing your mod that many of my crafts became impossibly cheap. uninstalled TweakScale and the prices came back. I am on windows 7 (updated) KSP 0.90 . I hope this helps!

12 posts

Also the TweakScale version affected by this is Major 1 minor 52

Edited March 9, 2015 by OmegaCenti

NihilRex

Spacecraft Engineer

Members

12

95 posts

Posted March 9, 2015

Report post

Same issues as OmegaCenti for part costs on Linux x64.

AccidentalDisasse

mbly

Junior Rocket Scientist

Members

165

970 posts

Posted March 9, 2015

Report post

Huh, now that you mention it, I'm also getting some funny part costs in career since the 1.52 update. I had assumed it was something else I did, but now that I think about it, it may have been just TS that had been updated when prices in the VAB/SPH started going a little wonky.

---

pellinor

Miniature Builder

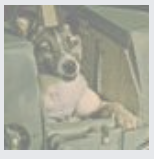
Members

Posted March 10, 2015

Report post

Fix is up! Please grab the new version v1.52.1 !

520
935 posts



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