

[DuckType] Jiggle 1.1 Quickstart Guide

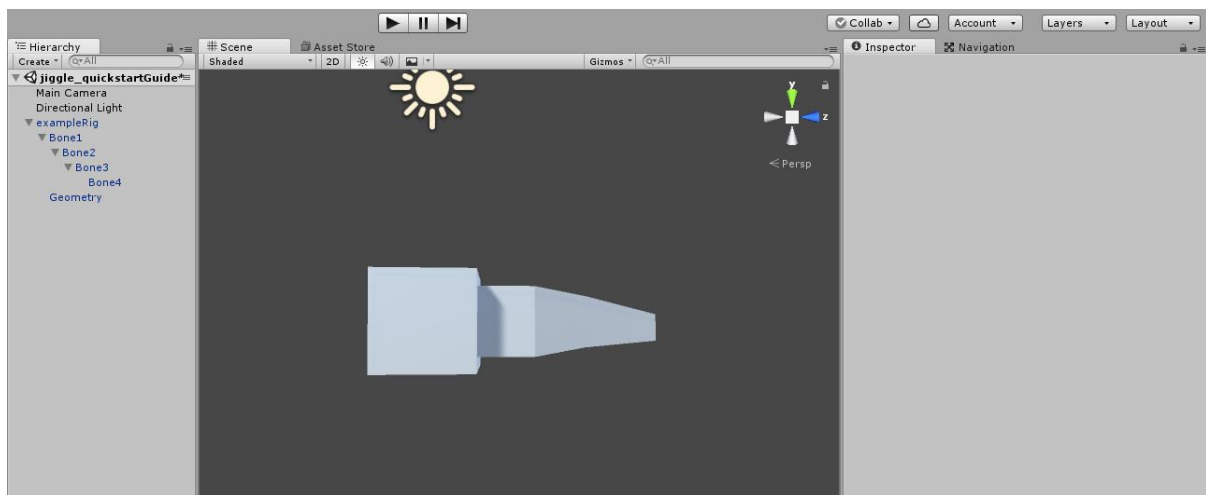
Thank you for choosing Jiggle! Jiggle is a powerful secondary-animation script for Unity that lets you jiggle, shake, wobble and bend things to your heart's content.

This guide will talk you through creating a simple Jiggle setup. For more detailed descriptions of Jiggle's features please check the documentation. For more examples please check the example scene that ship with this asset.

If you find anything unclear or missing, or if you have suggestions for more features please get in touch at ducktypesoftware@gmail.com or via ducktypesoftware.wordpress.com.

A simple Jiggle tail

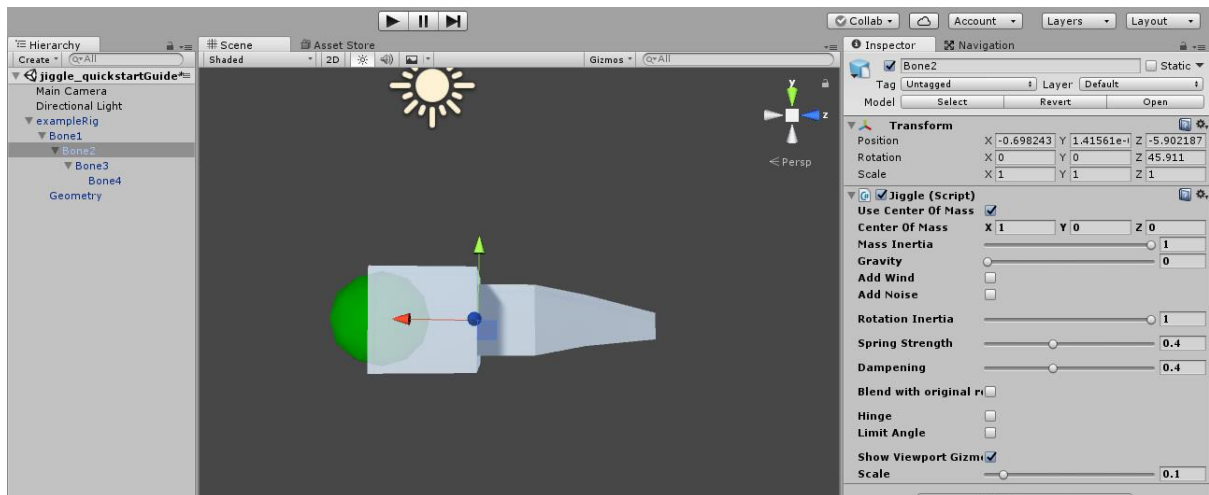
For this example we'll be building a simple tail with 3 bones. We've imported our rig into the scene and you can see how it's set up. There's geometry driven by 4 bones, 3 of which form the tail.



Center Of Mass

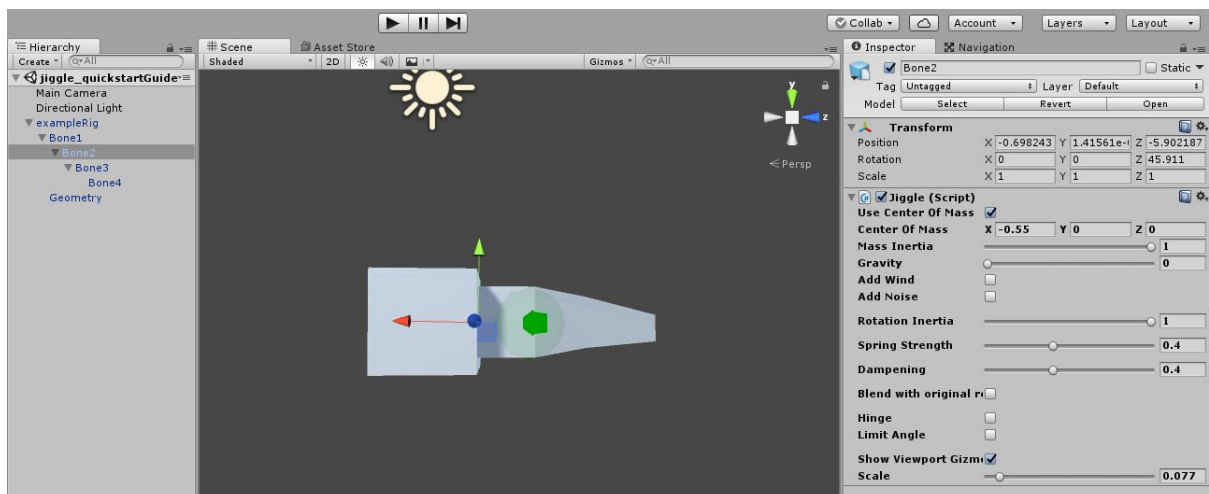
Our tail begins at Bone2, so that's where we'll set up our first Jiggle script. You can either drag the file "Jiggle.cs" from Unity's project browser onto the bone, or you can click on "Add Component" in the bone's inspector and select Jiggle.

Once you've added it you'll see Jiggle's interface in the inspector, and you'll see a green sphere in the viewport. This sphere represents Jiggle's "Center Of Mass".

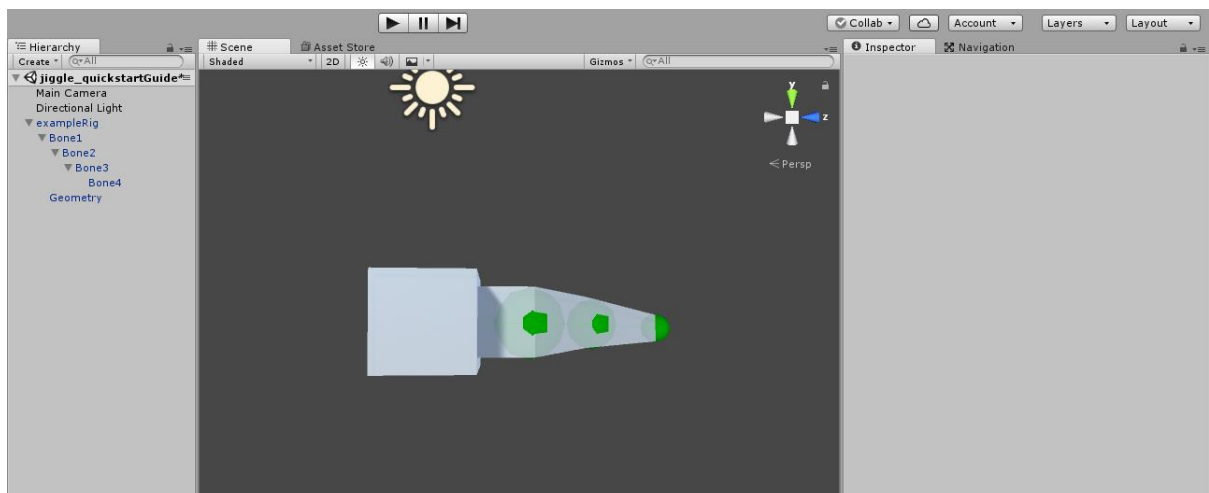


The center of mass tells Jiggle which way it should be, well, jiggling. You can think of it as the weight at the end of a pendulum. If the Jiggle object moves, the pendulum will start to swing.

The first thing we'll do is adjust the center of mass by moving it towards the end of Bone2.



Now we'll do the same for Bone3 and Bone4 by adding a Jiggle to each and adjusting the center of mass to sit at the end of each bone.



Adjusting Values Live

With our most basic setup complete, we can test Jiggle to see what our result will be. Hit the “Play” button in Unity. You’ll notice that our tail droops down immediately, and it’ll probably bounce a bit as it settles.

While the game is running you can adjust Jiggle’s settings to change its behaviour. Let’s try changing “Gravity”, which affects how strongly each Jiggle’s pendulum is pulled downwards. Select one or more Jiggles (you can select all of them to edit at once!) and change the gravity slider. You’ll see as you lower the gravity the tail will straighten out and as you raise gravity the tail will droop more.

Other good values to play around with at this stage are:

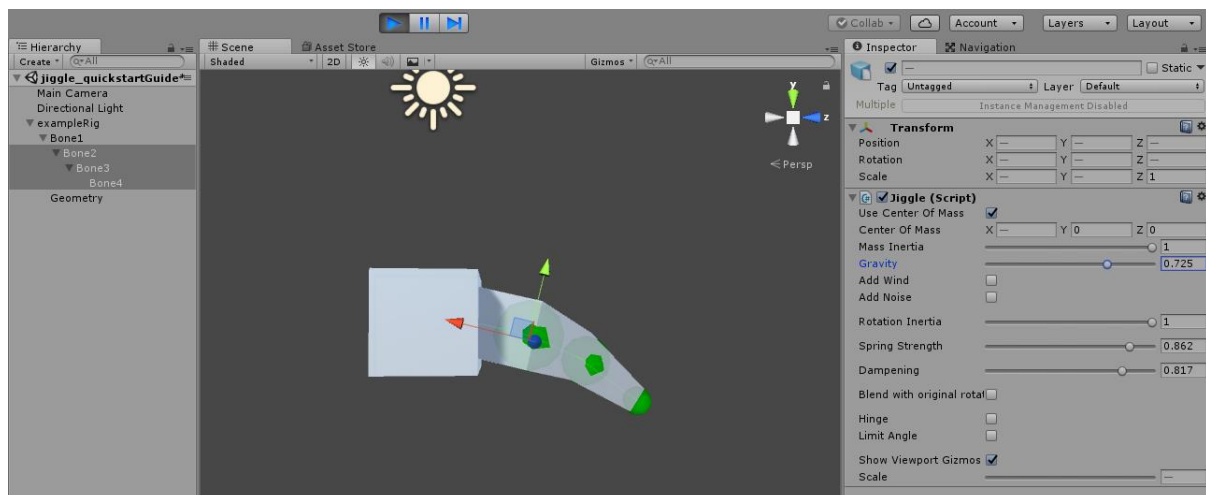
“Wind” - pushes the tail in a certain direction.

“Noise” - pulls the tail around in random directions.

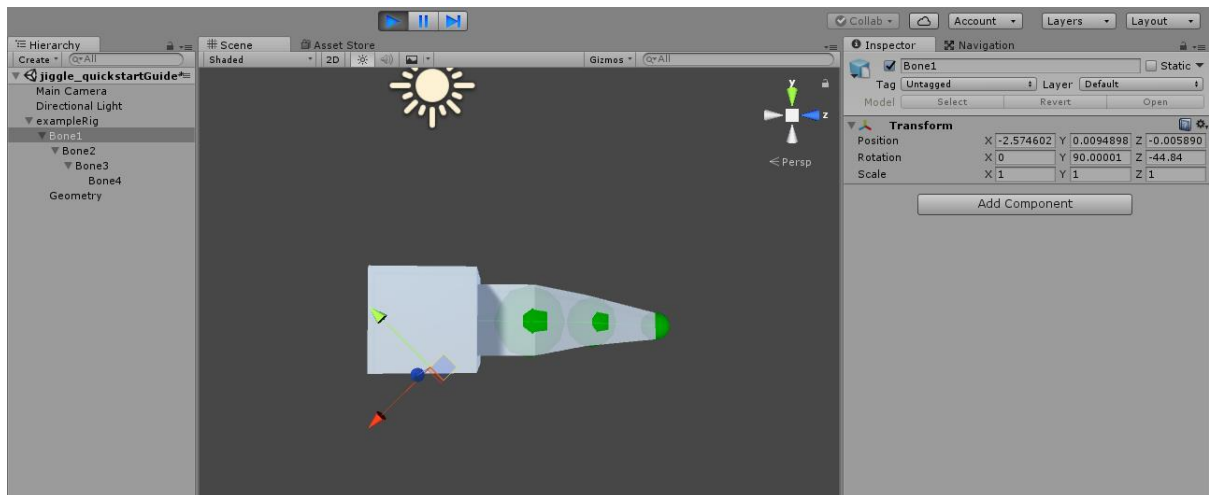
“Spring Strength” – affects the rigidity of Jiggle’s pendulum. The higher the value the more rigid the tail will be, and the lower it is the more floppy it will be.

“Dampening” – affects how smooth Jiggle’s pendulum swings. Low values create twitchy motion, high values create smooth, floaty motion.

IMPORTANT: While you can edit these values while Unity is running to see the results in real-time, Unity will reset them once you stop playback! Unity does that to avoid messing up your scene by stamping in-game values over everything, but it does mean that once you have found a value that you’re happy with, you then need to set it again after you’ve stopped playback.



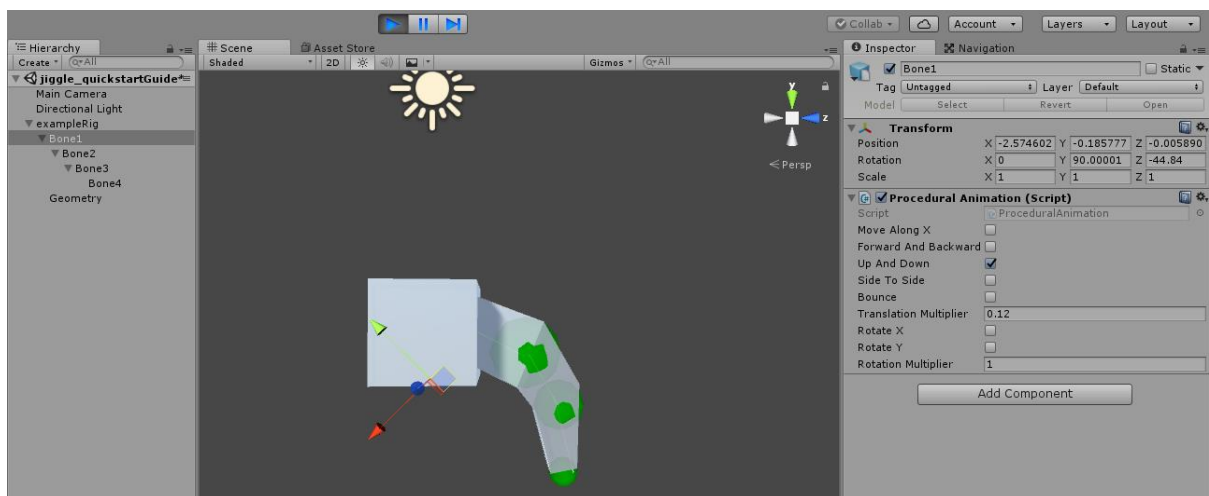
While Unity is running you can also grab Jiggle’s parent object, or the Jiggle object itself and move it around. If we select Bone1 and move it around in the viewport we can see the tail follow our motion.



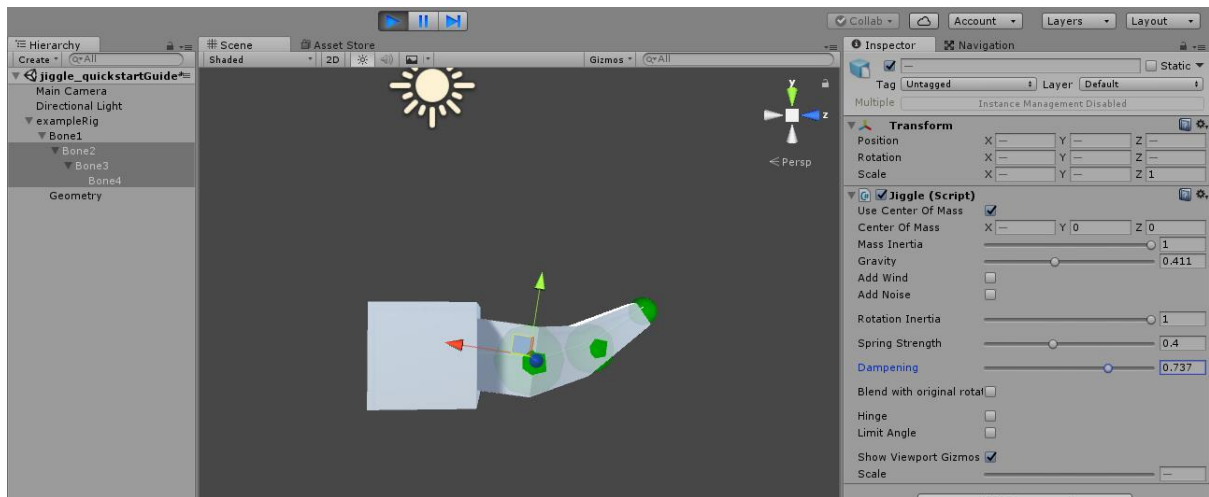
Test Animations

To make testing Jiggle’s settings a bit easier, the asset package comes with a little helper script called “Procedural Animation”. It applies very simple animation to any object it’s attached to.

In this case we’ve added the script to Bone1, which is the root of our skeleton. We’ve selected “Up And Down” motion in the settings and set a translation multiplier to affect how far it moves. Now as we run Unity, the root bone will automatically bounce up and down and we can see the effect on the tail in real-time.



Now that the root bone moves automatically we can focus on testing our Jiggle settings and see what the results are without having to manually move the base object.



That's all that's involved in creating a very simple Jiggle setup. Please check out the documentation for full descriptions of each feature, and the example scene for lots of different setups. And of course please get in touch with us if you have any questions!