Clayxels Documentation

For support please use one of the following platforms:
twitter: https://twitter.com/clayxels
itch.io: https://andrea-intg.itch.io/clayxels
discord: https://discord.gg/Uh3Yc43

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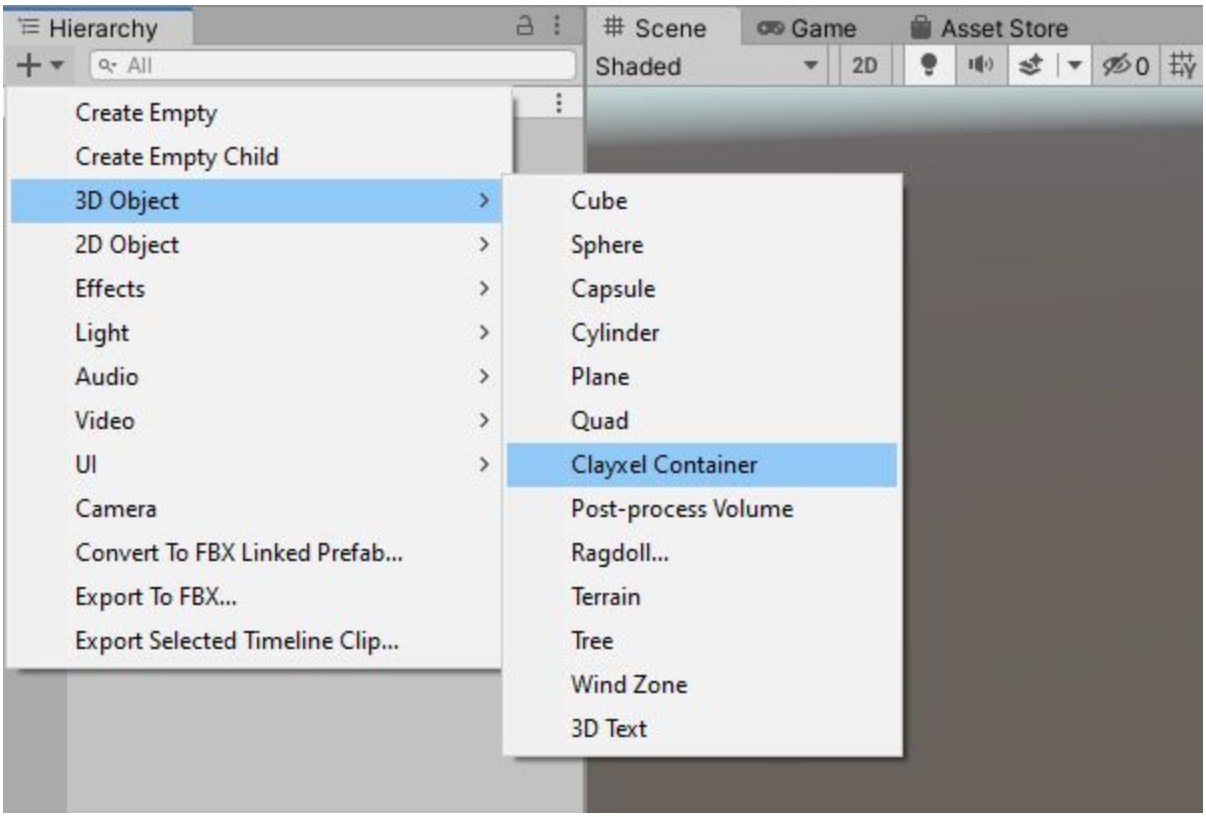
1) Introduction

Clayxels is an interactive volumetric toolkit that doesn't rely on per-pixel ray-marching. Instead it produces a compact and lightweight point-cloud that can be used in a whole bunch of different ways. Both in editor and in game.

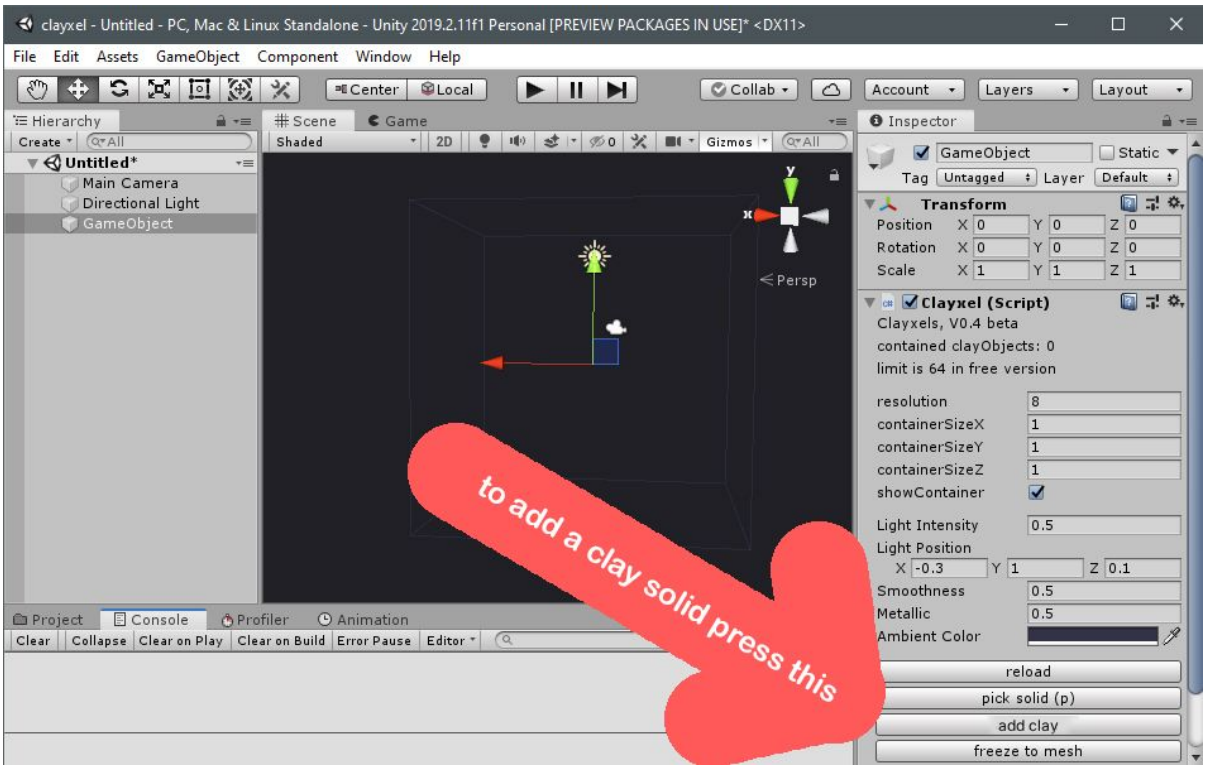
Clayxels will work on all render pipelines in Unity 2019.

2) Getting Started

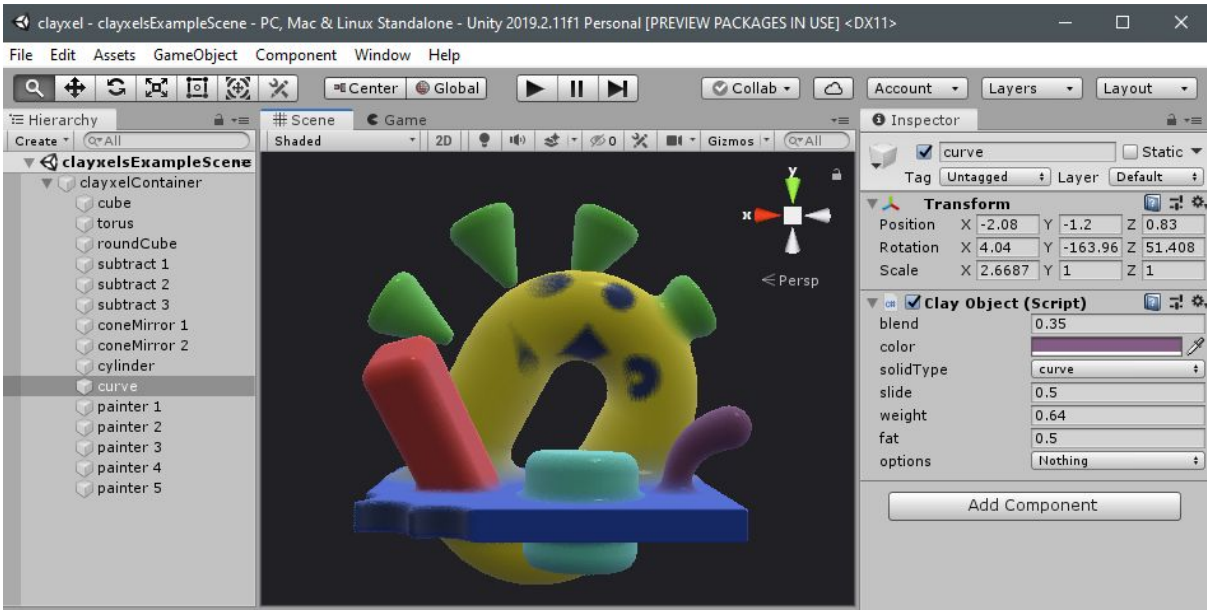
Getting started with Clayxels is simple, first create a Clayxel Container using the sub-menu located under 3D Objects.



Now that you have a GameObject with a ClayContainer component, you can start nesting ClayObjects under its hierarchy. To add a ClayObject press the "add clay" button, it's located in the custom inspector that shows up whenever you select a ClayContainer.



ClayObjects have a few options of their own showing in the inspector. You can change their shape, the blend value to add or subtract shapes together, change their color and their custom attributes.



3) Usage Tips

- hit "p" on your keyboard to pick-select clay objects from the viewport
- Drag solids up and down the hierarchy to isolate negative blends
- Split clayxels into many containers to make large and complex models
- If you plan to interact with ClayObjects at runtime, try and keep the “chunks” attribute to [1,1,1] for optimal performance. Increasing the number of chunks will cause the underlying compute shader to do more work at each update.

4) Troubleshooting

- To allow lower-end integrated graphic cards to work with clayxels you might need to specify a lower amount of maximum threads.

To do that, open the text file Clayxels/Resources/claySDF.compute and change #define MAXTHREADS to a value of 4.

- Some older video cards will feel particularly slow even with just one clayObject in scene, if that's the case go to Project Setting -> Player -> Other Settings -> Scripting Define Symbols, then add:
CLAYXELS_GPU_FIX1;

- On Mac Os X, Clayxels will need full Metal support in editor, please ensure you enable Metal support as indicated here: https://docs.unity3d.com/Manual/Metal.html (look for the "Enabling Metal" section).