

# Clayxels Documentation

For support please use one of the following platforms:

discord: <https://discord.gg/Uh3Yc43>

twitter: <https://twitter.com/clayxels>

itch.io: <https://andrea-intg.itch.io/clayxels>

Email: [ainterguglielmi@gmail.com](mailto:ainterguglielmi@gmail.com)

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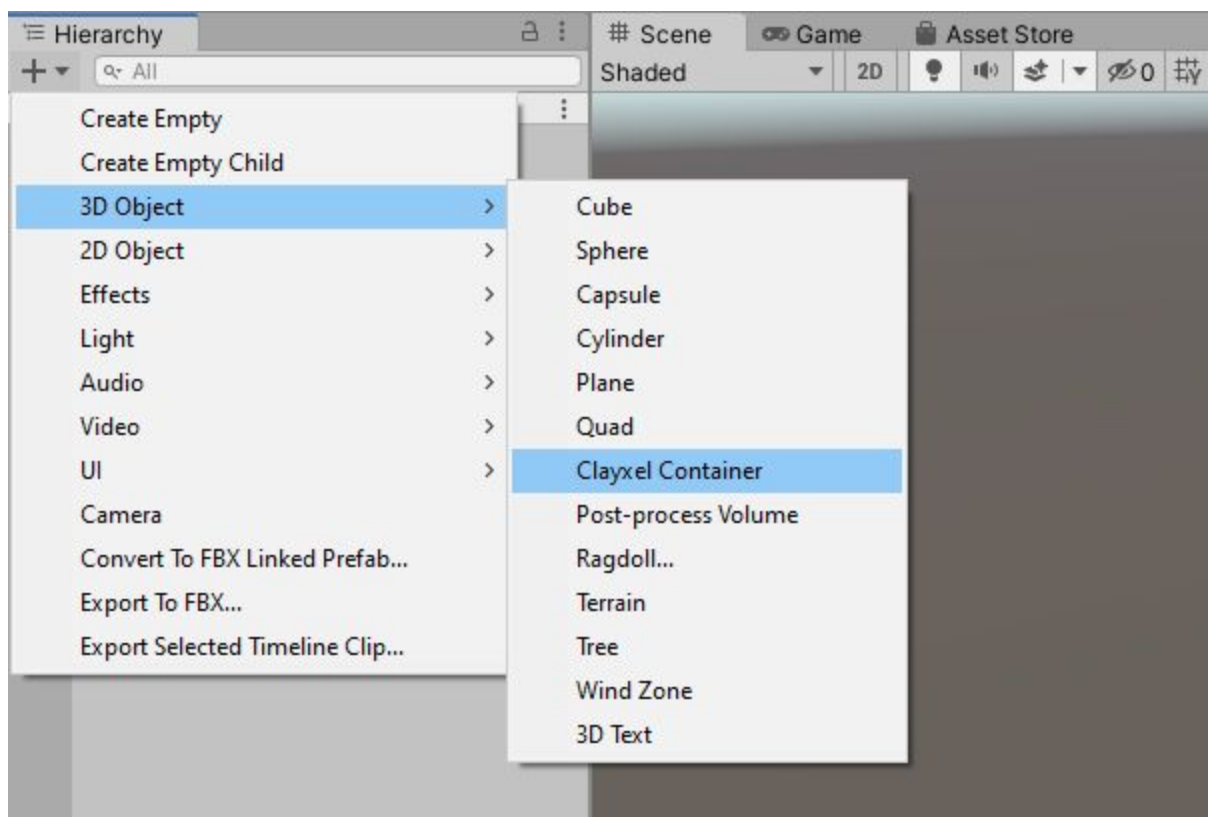
### 1) Introduction

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.

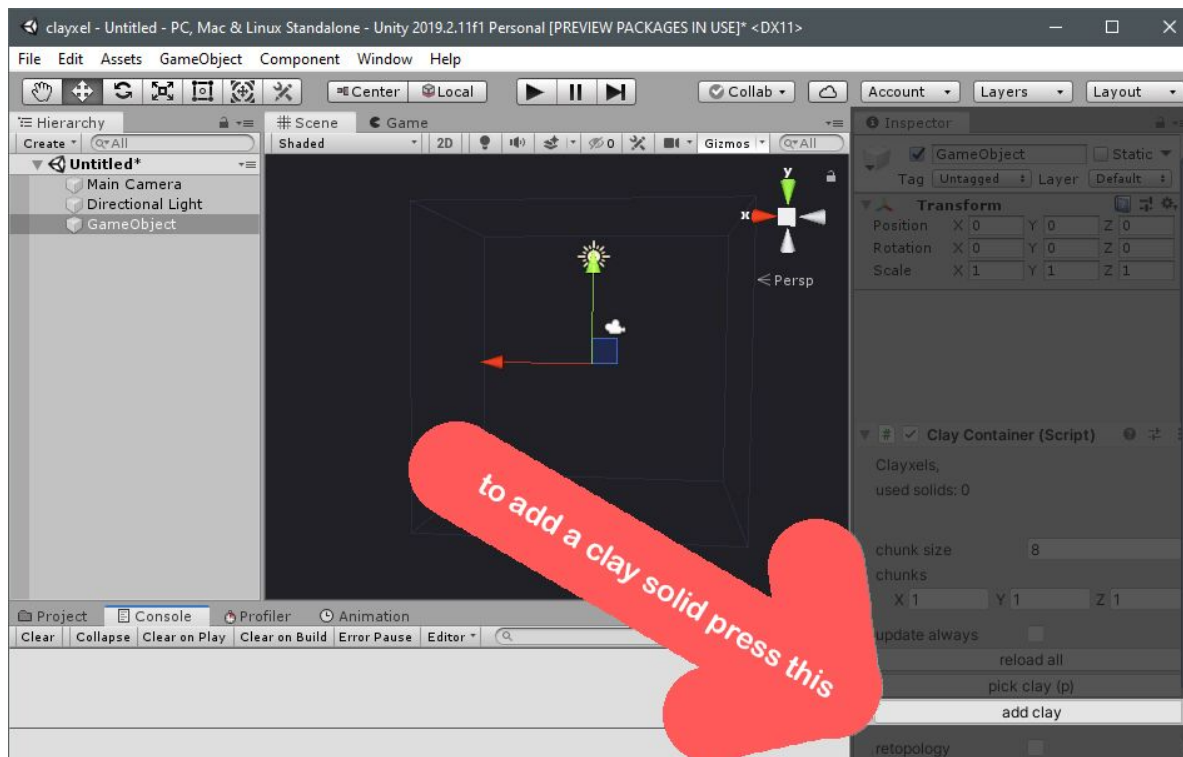
Clayxels will work on all render pipelines in Unity 2019.3 and up.

### 2) Getting Started

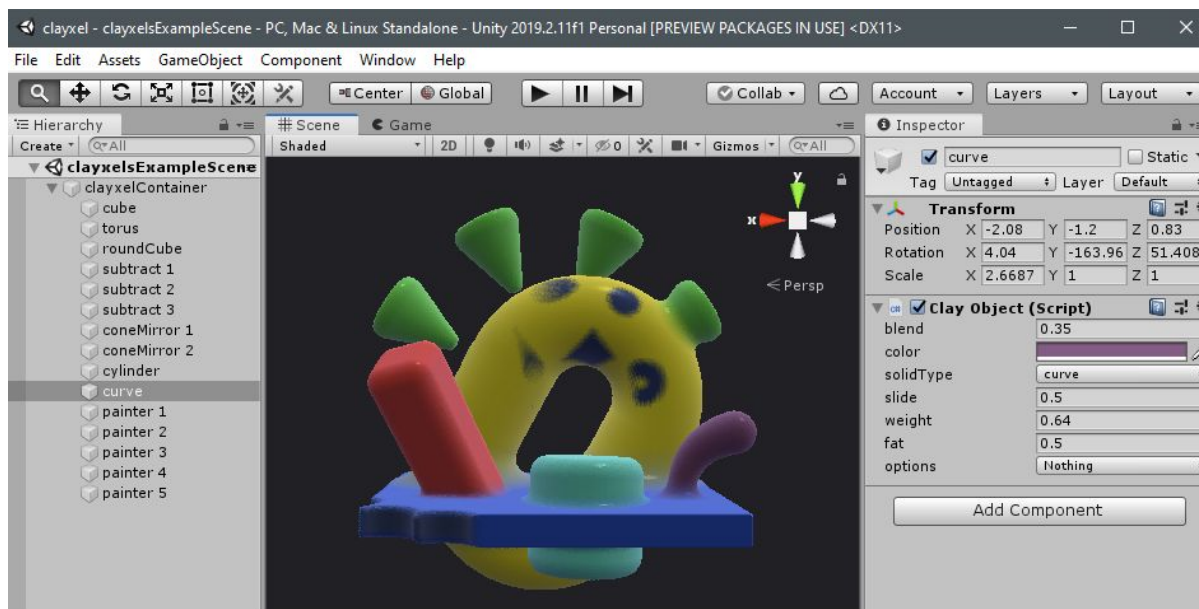
Getting started with Clayxels is simple, first create a Clayxel Container using the sub-menu located under 3D Objects.



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;