

Vertex Animation Tools quick start guide

Full documentation:

https://polyflow.studio/VertexAnimationToolsDocumentation/VertexAnimationTools30_Documentation.html

Example scenes:

- **7 example scenes and 3ds max sources** <https://polyflow.studio/Downloads/vat-3.41-2017.4.3-7-example-scenes.unitypackage> (255 mb)
- **2 portable example scenes** <https://polyflow.studio/Downloads/vat-3.41-2017.4.3-portable-examples.unitypackage> (11 mb)

Google drive mirror downloads:

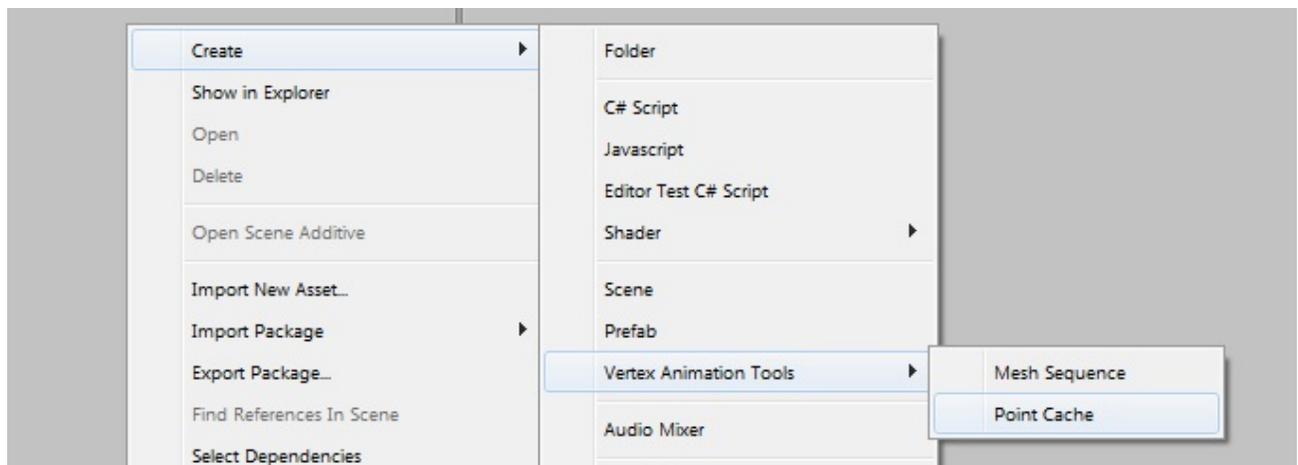
https://drive.google.com/open?id=1nedsXffo_yy2Pr_p4QLMoxZyRAPQKnPs

How to export vertex animation from my 3d software?

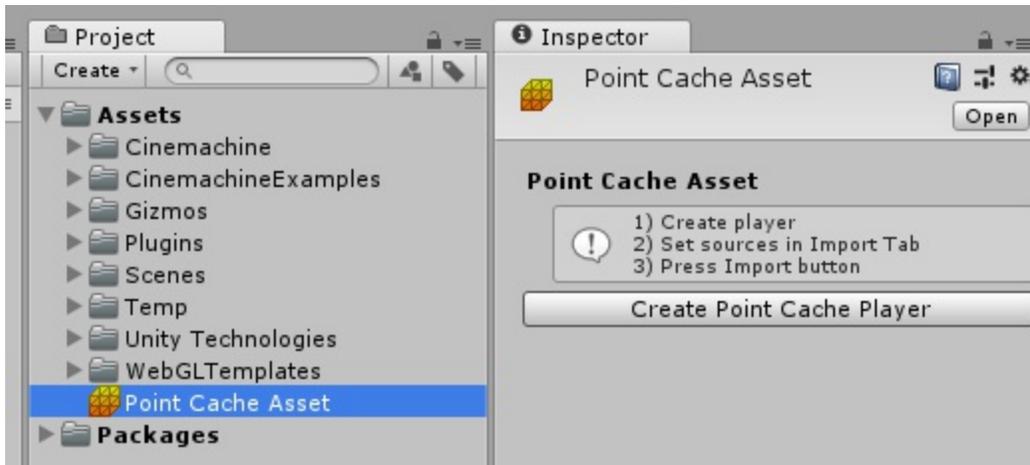
- **Blender** select animated object , go to *File/Export/Wavefront (.obj)* , enable *Animation* toggle
- **Maya** use this script for export .obj sequence <https://www.highend3d.com/maya/script/obj-i-o-obj-sequences-import-export-for-maya>
- **3ds Max** use this script https://polyflow.studio/Downloads/3dsMax_VertexAnimation_exporter.ms or use PointCache modifier to export .pc2 file.
- **Cinema R18** use this script https://polyflow.studio/Downloads/C4d_ObjSequenceExporter_r18.py
- **Cinema R20 and above** use this script https://polyflow.studio/Downloads/C4d_ObjSequenceExporter_r20.py
- **Marvelous Designer** export cloth to .obj and file animation to .pc2 file
- **Other software** if your software not support for .obj sequence or .pc2 files export please contact polyflow3d3d@gmail.com

How to import Point Cache animations?

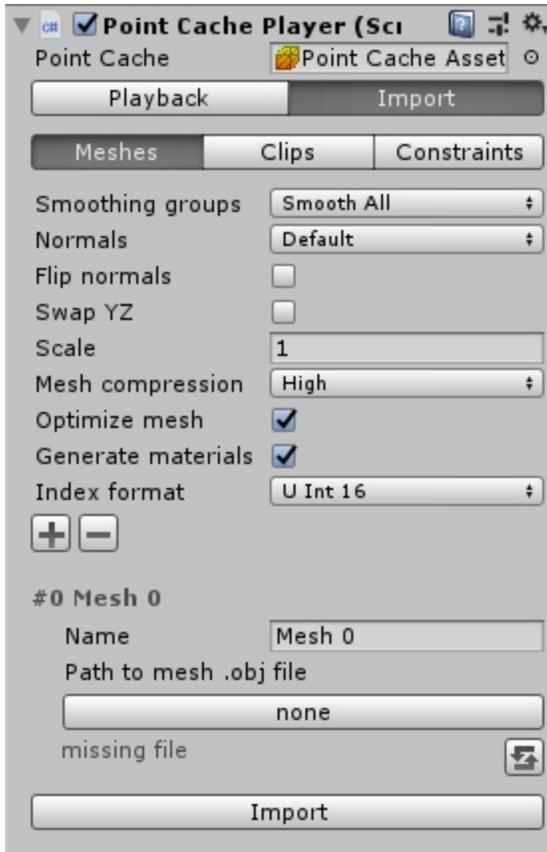
- Right click on Project tab *Create/Vertex Animation Tools/Point Cache* . A new empty Point Cache asset will be created.



- Select *Point Cache* asset and press *Create Point Cache Player* button. Gameobject with *Point Cache Player* component will be created.



- Select Point Cache Player, in *Import/Mesh tab* select source .obj file



- In *Import/Clips tab* select .obj sequence or .pc2 file
- press *Import* button



- Go to *Playback* tab for control animations speed and other options.
- Once import parameters is defined, simple press import button after source files was changed.

Which difference between Point Cache and Mesh Sequence?

- *Point Cache Player* uses for topologically identical animations were a mesh vertices's count unchanged during animations (for example: skeletal animations, morphs, deformations, cloth simulations). Using Point Cache animation you can operate up to 8 different clips, change frames count, make clip looping, motion smooth and normalize speed.
 - *Mesh Sequence Player* uses for non uniform mesh sequences such as fracturing, slicing, fluid simulations.

Which difference between Point Cache/Mesh Sequence and Point Cache Player/Mesh Sequence Player?

- *Point Cache Player* and *Mesh Sequence Player* is an runtime MonoBehaviour components
- *Point Cache* and *Mesh Sequence* is an Scriptable Objects that storing serialized animation data and last used import settings.

What is Portable animations?

Portable animations are a .mesh asset and regular animation .clips that you can use in Animator even without VertexAnimationTools installed. Please see portable animation example scenes.

How can i put my animation in Timeline?

- Create Animation (.anim).
- Create track for desired *Point Cache Player* clip (for example for clip 0 use property *Clip 0 Normalized Time*).
- Make linear curve with two keys [value =0, time =0], [value = 1, time = your animation length]
- Drag GameObject into Timeline

Known issues

- In 2018 due editor bug meshes are distorted. To solve this disable *GPU blendshapes* flag in Project settings.
- In 2019.3 editor crashes when Point Cache asset is used in scene and deleted in project tab. Solving: perform asset deleting on empty scene.

Feel free to ask any support polyflow3d3d@gmail.com or write a review <http://u3d.as/1iJP>