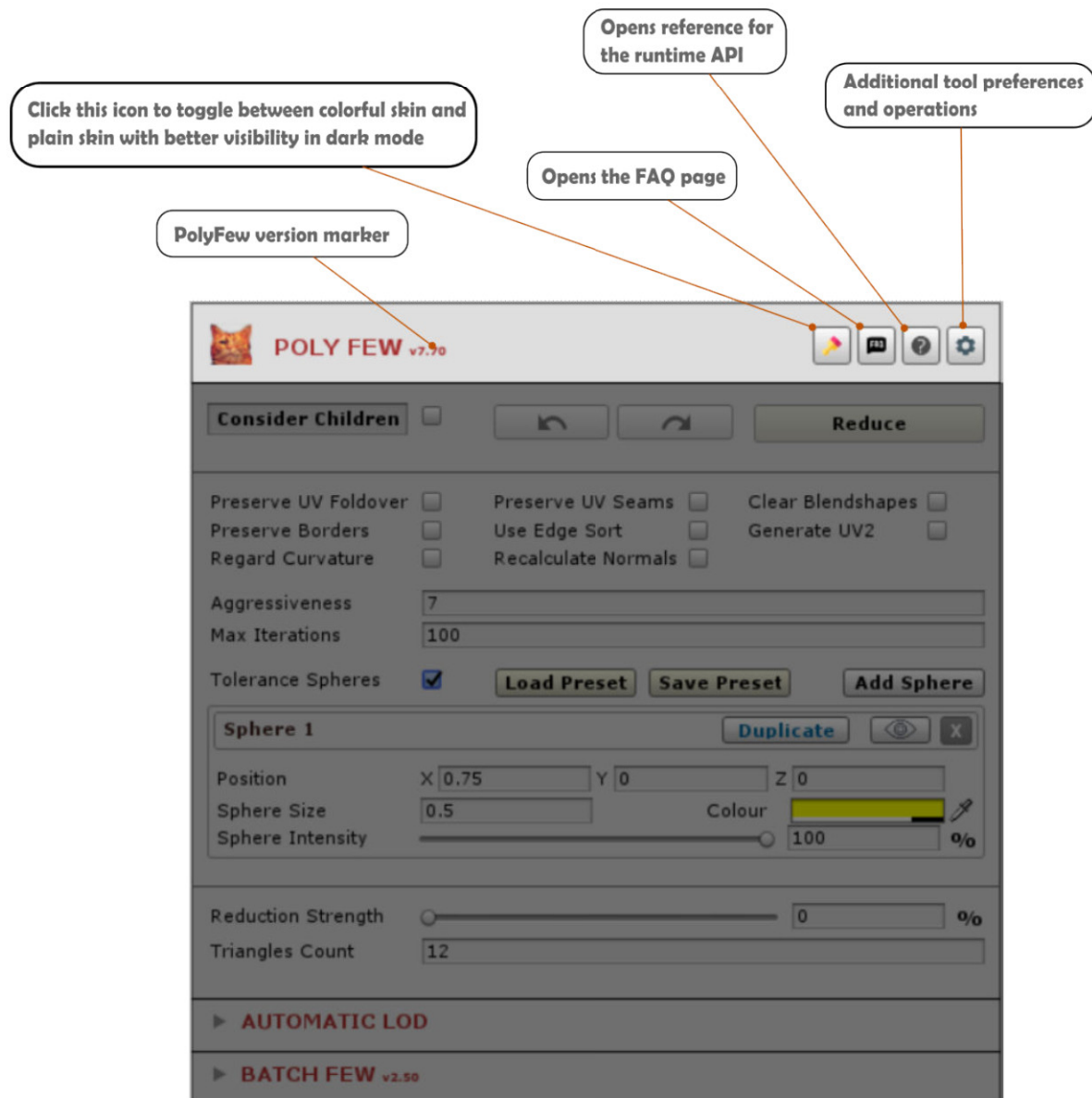


This document describes the setup procedure, usage and various options of this tool. This document is not intended to describe the purpose of this tool. Please read the description on the asset store to understand what this tool does.

Installation procedure:

- >> Download and import the package from the asset store. Make sure you import everything in the package.
- >> Make sure you don't delete or modify anything that is newly imported and related to the package.
- >> Click on any game object. You will see the PolyFew inspector in the bottom of the components hierarchy.

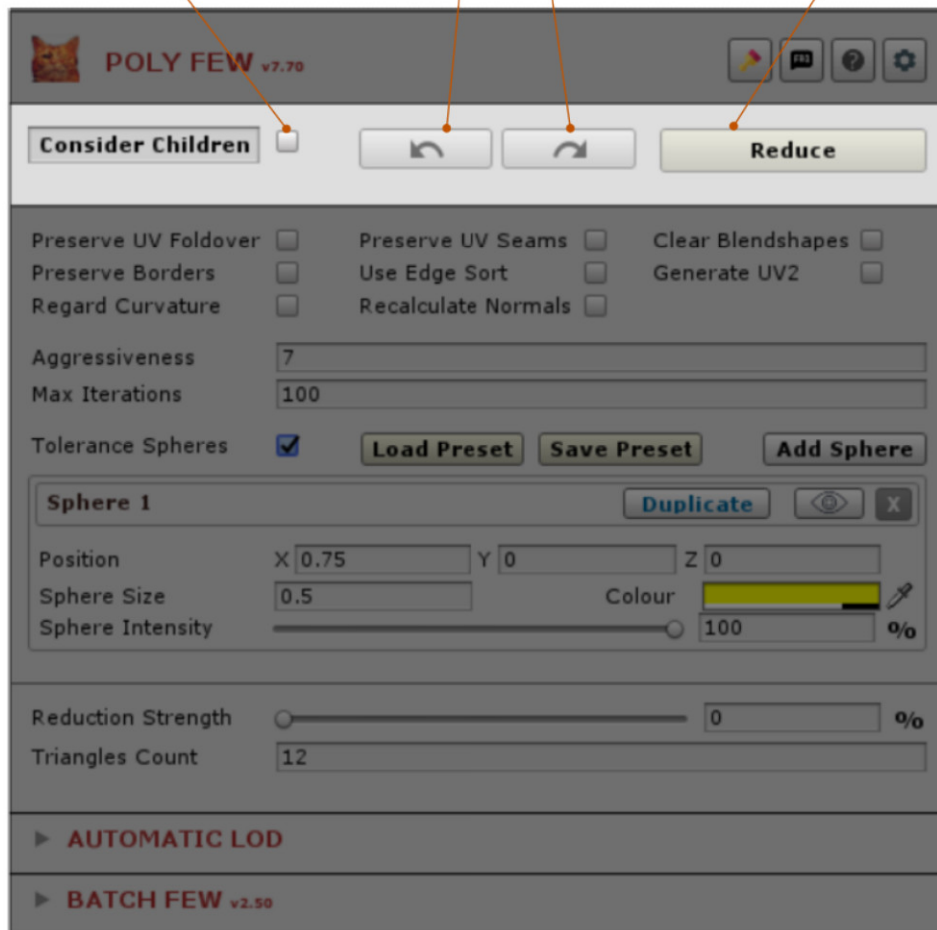
Options Description:



Undo or redo the last reduction operation.
Please note that you will have to save the scene
to keep these changes persistent

Check this option to consider the deep nested child
hierarchy during reduction and other operations. If this
option is unchecked then an operation only considers
the currently selected object. This might be slow for
complex object hierarchies containing lots of meshes

Applies reduction to this object with the current
settings. If you don't reduce the object the
changes will be lost when this object gets out
of focus. Please note that you must save this
scene after reducing the object otherwise the
reduce operation will be reset on Editor restart



Preserves the mesh areas where the UV seams are made. These are the areas where different UV islands are formed. Usually the shallow polygon congested areas

Check this option to preserve UV foldover areas. Usually these are the areas where sharp edges, corners or dents are formed in the mesh or simply the areas where the mesh folds over

Using edge sort can result in very good quality mesh simplification in some cases but can be a little slow to run

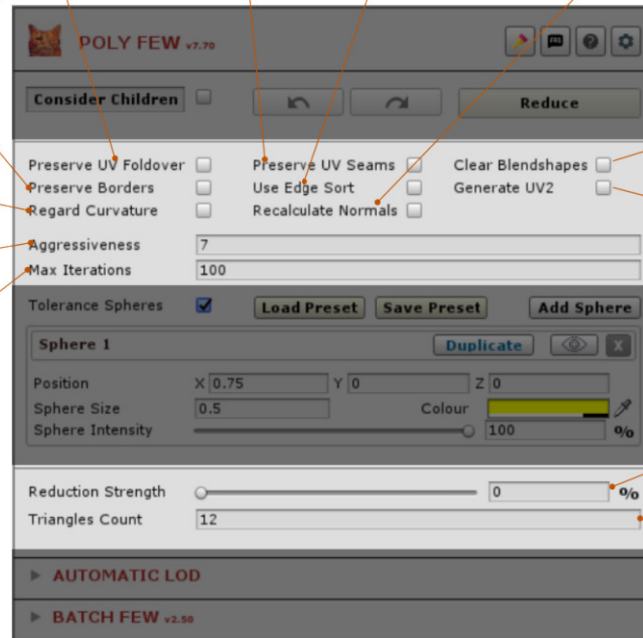
Recalculates mesh normals after simplification in this LOD level. Use this option if you see incorrect lighting or dark regions on the simplified mesh(es). This also recalculates the tangents afterwards

Check this option to preserve border edges of the mesh. Border edges are the edges that are unconnected and open. Preserving border edges might lead to lesser polygon reduction but can be very helpful where you see mesh distortions

Check this option to take into account the discrete curvature of mesh surface during simplification. Taking surface curvature into account can result in very good quality mesh simplification, but it can slow the simplification process significantly

The aggressiveness of the reduction algorithm. Higher number equals higher quality, but more expensive to run. Lowest value is 7

The maximum passes the reduction algorithm does. Higher number is more expensive but can bring you closer to your target quality. 100 is the lowest allowed value



Clears all blendshapes data in the simplified meshes for this LOD level

Generates uv2 with default settings for each mesh and fills them in. Note that generating uv2 can cause the mesh simplification process to get slow

The intensity of the reduction process. This is the amount in percentage to reduce the model by

The current number of triangles in the selected mesh. If "Reduce Deep" option is checked then this shows the total number of triangles considering the nested meshes as well.

Loads an already saved tolerance sphere preset

Saves these tolerance sphere settings as a new preset which can be loaded later on

Creates a duplicate of this tolerance sphere

Adds a new tolerance sphere

Check this option to enable the tolerance spheres. Adding a tolerance sphere allows you to encompass specific areas of the Mesh that you want to preserve polygons of during the reduction process. This can leave such areas of the mesh with the original quality by ignoring them during the reduction process. Please note that reduction with preservation spheres might get slow

The current position values of this tolerance sphere in world space

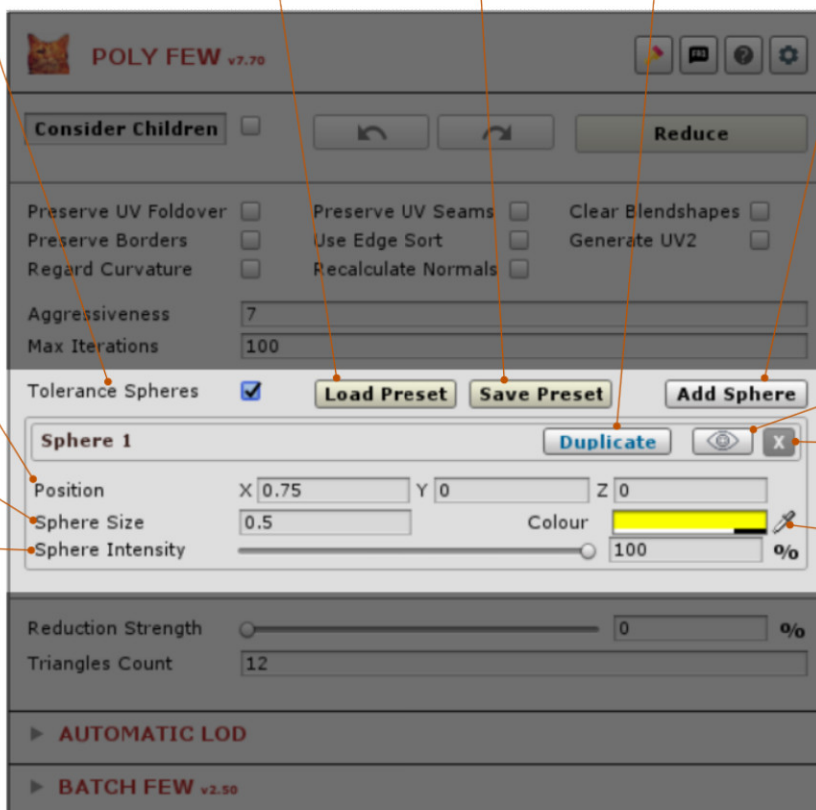
The diameter of this tolerance sphere

The percentage of triangles to preserve in the region enclosed by this preservation sphere

Hides this tolerance sphere

Removes this tolerance sphere

Changes the color of the tolerance sphere



AUTOMATIC LOD

Change Save Path Add Generate LODs
 Set Extra Options Copy Preview Destroy LODs

Level 1 (Base)

Transition Height 0.6

Level 2

Reduction Strength 30
 Transition Height 0.4
 Reduction Options
 Regard Tolerance ☐

Adds an LOD level

Generates LODs for this mesh with the settings specified. Please note that you must save the scene after successful generation of LODs

Destroys the generated LODs for this mesh. This will also delete the mesh files that were created for this object during the LOD generation process. Please note that you will have to delete the empty folders manually

Deletes this LOD level

The intensity of the reduction process. This is the amount in percentage to reduce the model by in this LOD level. The lower this value the higher will be the quality of this LOD level

The screen relative height controls how far the viewing camera must be from the object before a transition to the next LOD level is made

Copies all the settings from the preview above into each LOD level

Change the path where the generated LODs mesh assets will be saved. If you don't select a path the default path will be used

Set extra options for the LOD generation process

This is the base lod level or LOD 0 as unity calls it. This would be the actual renderers of the current object. So, in this level the object renders at the highest quality

Expand this section to see further options for simplifying the meshes in this LOD level

Check this option if you want this LOD level to regard the tolerance sphere and retain the original quality of the mesh area enclosed within the tolerance sphere. Please note that the LOD generation for an LOD level with "Regard Tolerance" checked can get slower

Combines all the materials in the selected objects and generate Texture Atlases with the settings specified. Materials that don't use the Standard Shader or it's variants (Standard Specular etc) will be ignored. Please note that you must save the scene after successful operations and apply changes to any prefabs manually

Changes the path where the new combined meshes, texture atlases and materials will be saved. If you don't select a path the default path will be used. Please note that the chosen path will be used for saving such assets in the future, unless changed

Set extra options for the mesh combiner and material merger

Converts skinned meshes to non skinned/static meshes in the selected object. Please note that all animation data and bones hierarchy from the skinned mesh(es) will be lost. If "Consider Children" option in "Set Extra Options" is checked then all the deep nested skinned meshes under this object will also be converted, otherwise only the skinned mesh renderer if any attached to this particular object is considered

Combines all renderers and meshes nested under the selected object(s). Select a top level parent root object to begin with

Choose a Texture map to adjust its generated Texture Array's settings

The resolution of each texture in the selected Texture Map Array. Every texture in the selected Texture Map Array will be resized to this resolution. Texture Arrays have this inherent limitation that they must have same resolution textures in them

The filtering mode for the textures in the selected Texture Map Array

The filtering mode for the textures in the selected Texture Map Array

Drag and drop existing texture arrays here to change their properties

Expand this to see the added texture arrays and their properties which can be changed

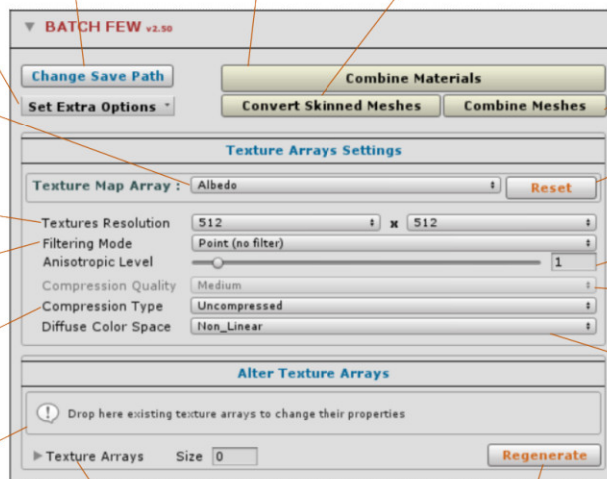
Regenerates the added texture arrays with the new properties

Resets all settings to default

The level of the anisotropic filtering for the textures in the selected Texture Map Array

The compression quality for the textures in the selected Texture Map Array. This option is only valid if the compression type selected is "ASTC RGB"

The color space diffuse maps are in. This should only be changed to "Linear" if you're generating Texture arrays on a platform where linear rendering mode can cause diffuse maps to be too dark, Oculus Quest is an example of such a platform



NOTES

- ▶ To ensure proper functionality of this tool please don't modify the package contents in any way.
- ▶ As stated in the tool requirements on the asset store, this asset requires unity version 2017 and above. Otherwise the tool won't work as expected.
- ▶ There are various operations that will prompt you to save the scene after completion. If the scene is not saved in such cases before exiting the Unity Editor the changes might get lost.

THIRD PARTY CREDITS:

🌀 Special thanks to Mattias Edlund for his work on Unity Mesh Simplifier project. Poly few would not have been possible without his existing work.

<https://github.com/Whinarn/UnityMeshSimplifier>

🌀 Thanks to gpvigano and all other people involved in the development of for Asynchronous Importer and run-time Loader for Unity. The runtime API for importing wavefront OBJ files is based on top of this project.

<https://github.com/gpvigano/AsImpl>

🌀 Thanks to Dummiesman for Scene OBJ Exporter for Unity. The runtime API for exporting wavefront OBJ files is based on top of his work.

<https://assetstore.unity.com/packages/tools/utilities/scene-obj-exporter-22250>

🌀 Thanks to Silvano Junior for his great artwork on the Cave Troll. The asset's introduction video made use of this 3D model for demonstration purposes.

<https://assetstore.unity.com/packages/3d/characters/creatures/creature-cave-troll-115707>

🌀 Thanks to AdvancedSkeleton for his great piece of art the Barbarian Warrior. The asset's WebGL demomakes use of this 3D Model.

<https://assetstore.unity.com/packages/3d/characters/humanoids/barbarian-warrior-75519>

🌀 Thanks to Unity Technologies Japan for sharing their skills in the form of a cute looking anime girl, the Unity Chan Model is used in the asset's demonstration video.

<https://assetstore.unity.com/packages/3d/characters/unity-chan-model-18705>

**If you have any problems refer to the FAQ page here
<https://brainfailpro.github.io/polyfewhome/>
or contact me at:
kbawar555@gmail.com**