

5.8.5.3 Modeling - Modifiers - Deform - Corrective Smooth Modifier

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Corrective Smooth

This modifier is used to reduce highly distorted areas of a mesh by smoothing the deformations.

This is typically useful *after* an armature modifier, where distortion around joints may be hard to avoid, even with careful weight painting.

To use this modifier effectively, it’s useful to understand the basics of how it works.

Rest State

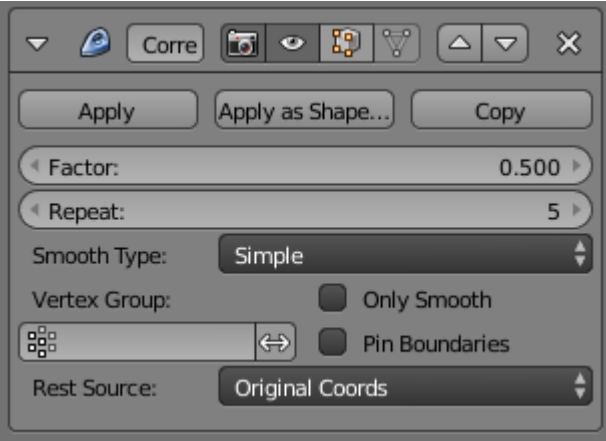
Used as a reference to detect highly distorted areas.

The original vertex locations are used by default.

Smoothing

Many options for this modifier relate to smoothing which is used internally to correct the distorted regions.

Options



Corrective smooth modifier

The modifier also uses a *Rest* state, to use as a reference Internally this modifier uses smoothing, so some of the options adjust the kind of smoothing.

Factor

The factor to control the smoothing amount. Higher values will increase the effect. Values outside this range (above 1.0 or below 0.0) distort the mesh.

Repeat

The number of smoothing iterations.

Higher values generally improve the quality of the smoothing but slow down the operation also.

Smooth Type

Select the smoothing method used.

Simple

This simply relaxes vertices to their connected edges.

Length Weight

Uses a method of relaxing that weights by the distance of surrounding vertices.

Can give higher quality smoothing in some cases, better preserving the shape of the original form.

Vertex Group

Use to manually select regions to smooth.

Only Smooth

This option is included to preview the smoothing used, before correction is applied.

Pin Boundaries

Prevent boundary vertices from smoothing.

Rest Source

Select the source for reference vertex positions that defines the undeformed state.

Original Coords

Use the original input vertex positions.

This relies on the original mesh having the same number of vertices as the original mesh

Bind Coords

Optionally you may bind the modifier to a specific state.

This is required if there are constructive modifiers such as subsurf or mirror being applied before this modifier in the stack.

Example

Here is an example of a character using a simple rig using only bone envelopes (*no weight painting*).

Armature Only	Armature & Corrective Smooth
