## **Apptastic Mirror Weights Plug-in**

### **Background**

The mirror weights plug-in was designed for modo 601 to allow weight map values to be mirrored from one side of a mesh to another. This is particularly useful when weighting characters for deformation.

The plug-in was inspired by Matt Cox's mirror weights python script. Although very useful for many cases, due to the limitations of python scripts in modo 601 the performance could be slow for complex meshes.

The Apptastic mirror weights plug-in was written in C++ using the SDK for fast performance.

For a video demonstration, go to: <a href="http://youtu.be/BNB0iBragVE">http://youtu.be/BNB0iBragVE</a>

#### **Installation**

- 1. Unzip the Apptastic\_MirrorWeights.zip file you downloaded
- 2. Go to your modo **User Configs Folder**. You can find this folder by running modo, going to the **System** menu, and selecting **Open User Configs Folder**.
- 3. If you already have a previous version of "Apptastic\_MirrorWeights" installed, delete the old directory.
- 4. Copy the new **Apptastic\_MirrorWeights** directory (that you unzipped in step #1) into your modo **User Configs Folder**.

Note: Make sure you copy the *whole* "Apptastic\_MirrorWeights" directory, and not just the contents of it, into your User Configs folder.

- 3. Quit modo (if it is running)
- 4. Run modo

# <u>Using Apptastic Mirror Weights</u>

In order to mirror weights, your mesh geometry must be perfectly symmetrical across the desired global axis.

For example, if you want to mirror a character's right hand joint weight to the left hand joint weight across the X axis - then your character's mesh geometry must be centered in world X axis.

To center the geometry, choose an element selection mode (Vertices, Edges, or Polygons) for the mesh and from the "Edit" menu choose "Center Selected" and the axis (or axes) you wish to use.

Note: There is a difference between centering a mesh in Item mode versus element mode. Using an Item level transform to center the mesh will not allow the mirror weight command to work correctly. See modo's documentation for more details about the difference between Item and Element modes.

To use the mirror weight command:

- 1. Select the vertices for which you want weight to be mirrored.
- 2. Select the source weight map from Lists->Weight Maps.
- 3. Select the destination weight map from the Lists->Weight Maps.
- 4. With the vertices, source, and destination weight maps all selected, in the Command line type **apptastic.mirrorWeights**

By default, the command mirrors across the X axis. But you can specify the axis across which to mirror as follows:

apptastic.mirrorWeights x apptastic.mirrorWeights y apptastic.mirrorWeights z

To speed up the workflow, from the Command History window you can right-click on the apptastic.mirrorWeights command you just issued and assign it to a quick key.

Alternatively, you can also use the Form editor to create buttons in modo's UI for the commands (please see modo's documentation for more details).

#### **Feedback**

If you have any problems with the "Apptastic Mirror Weights" plug-in, you can leave comments in the thread on the modo forums or email us at <a href="mailto:audioape@apptastic-games.com">audioape@apptastic-games.com</a> and we'll do our best to help.

If you encounter any bugs, please describe to us in as much detail as possible the steps leading to the issue.

Happy mirror weighting!