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Muscle System (version 1.0.1)

This script utilizes the Bezier ICE compound to create a muscle between two objects.

(For this reason the ICE_Kinematics workgroup has to be set, see instructions bellow)

The muscle can be used a muscle, spine, roll division or other type of deformer.

ICE KINEMATICS WORKGROUP:

Open the plug in manager, got to the workgroups tab and click on Connect. Browse for *your installation path* + \Application\Workgroups\ICE_Kinematics\Data\Compounds\Spines\ select ICE_Kinematics folder and **restart Sotimage**.

USE:

To apply, copy the script to the script editor in Softimage and run it.

A pick session will start, you need to select two objects. A base from which the muscle is created and a tip to where the muscle aims.

Then you need to enter a prefix for your muscle that will be used for all elements. And the number of division that you want your muscle to have.

SYSTEM:

You can manipulate the newly created muscle base and tip objects as their transforms are free, and un-frozen for rigging purposes.

A property page with all the options will be opened once the muscle has been created, but in case you close it you can get from the ICE container's ICE compound.

The ICE container object is in base object/youPrefix_MusParent/_ICEcont (yourModel.yourPrefix_ICEcont), once you access it's ICE tree, open the Bezier node.

The length of the bones can also be modified from the custom parameter in youPrefix_MusParent.

This is a stable system that will interpolate rotations from base to tip, add squash and stretch, softness and other features.

The script tries to be clever and identify the model you are working within. The structure will be created inside the base object, but the muscle tip will live under the original tip object. This so you can have a simple hierarchy to start with.

LIMITATIONS:

However the Softimage command Application.CreateGroup("", "", "")'s third parameter should be the model you want your group to be created under. This does not work, so groups have to later be copied to the proper model. The repercussion of this, is that if you have a muscle called "a" in the scene root, and you create a new muscle called "a" in model "x", the "a" group will get renamed to "a1", but the elements of the muscle will retain the prefix "a". The only real problem about this, is that it might lead to confusion. It is therefore advised to use different prefixes for each muscle.