WeightPro 3ds max plugin



System requirements:

- 1. 3ds Max versions:
 - 2013 32-bit
 - 2013 64-bit
 - 2014 64-bit
 - 2015 64-bit
 - 2016 64-bit

2. Operation System:

- Windows XP (32 & 64 bit)
- Windows Vista (32 & 64 bit)
- Windows 7 (32 & 64 bit)
- Windows 8 (32 & 64 bit)
- 3. NET Framework 4.0

To install the WeightPro plugin you need to run the WeightProSetup.exe with the administrator rights. Close the 3ds max before the installation if it is currently running.

After you have properly installed the plugin you can find it on the Create/Geometry panel under "KM-3D Tools" category.

To uninstall the plugin go to the path "3ds Max\plugins", delete those 3 files: **vSkin.dlo**, **WeightPro_Bone.ms**, **WPColor.dlm** and the whole "weightpro" directory.

Sometimes your antivirus can take over the processes the plugin executes and scan them causing delay, but it happens only on the first use.

WeightPro plugin parameters

- 1. Pick button to pick an object with the Skin modifier applied.
- **2. Referenced frame** shows the time you've picked the object, it should be the frame with the initial, undeformed mesh state.
- **3.** Method method of the distances calculation, linear is very fast, good for the preview or objects without the volume. Voxel grid is slower, great for objects with volume, like a character.
- **4. Grid subdivs** resolution of the voxel grid, the higher subdivs you set the more voxel is creating and the result is more accurate.
- **5.** Show grid displays the voxel grid, it looks like a subdivided bounding box at the referenced frame time.
- **6.** Voxelization preview it creates the voxelization result as an editable mesh so that you can check if it's well defined.
- 7. Calculate distances the main button which performs the calculation for weighting. Make sure that each envelope is at least partially inside the mesh. The voxelization can be uncorrect if your mesh has visible flipped faces (backfaces). The mesh shouldn't have separate elements without connection (not in the topology meaning, two intersecting, separated elements are fine). Weights are set based on the distances between the vertex and the envelope. After that each bone has a new modifier "Weight Pro Bone" to adjust the weights for each bone separately.
- 8. Set as the longest axis button it looks for the longest axis of the bone's bounding box and sets the envelope along it.
- **9.** Set as points it transforms the envelope into a point which is the center of the bone's bounding box. It is helpful when the "bone" is a Point, Dummy, Sphere etc. when you do a face skinning for example.
- **10.** Adjust envelopes enables the "Edit Envelopes" mode. You can adjust the envelopes, but remember the thickness of it has no influence on the calculations result.
- **11. Global Falloff** it sets fixed falloff to each Weight Pro Bone modifier. It also resets the "Distance grow" parameter. It is mostly used for the initial, overall weights blending.
- **12. Max bones influence** it means how many bones (maximally) are influencing one vertex.
- **13. Colored preview** enables or disables vertex color preview for the bone weights using a modifier Weight Pro Color, which is always added just above the Skin modifier.
- **14. Select and edit** selects the bone from the list above and enables 3ds max edit mode, where you can set the parameters of the Weight Pro Bone modifier.
- 15. Icon show display the plugin's icon in the Viewport.
- **16. Finish and clean up** you should use this if you think your weighting is finished. It deletes all the plugin's stuff like modifiers, callbacks etc. You shouldn't finish your weighting just by deleting the plugin's node. You can't undo this operation, it may crash 3ds Max.



WeightPro Bone modifier parameters

- 1. **Tip Falloff** it sets the falloff individually for the 1 or 2 tip (endpoint) of the bone's envelope. With the falloff value you basically increase or decrease the smoothness of the transitions between weights.
- Tip grow it sets the distance grow individually for the 1 or 2 tip (endpoint) of the bone's envelope. With the distance grow value you basically increase or decrease the area of the bone influence.

When the Lock button is pressed, then you control both endpoints at once.

| - Bone Parameters | | | |
|--------------------|----------------|------|----|
| Falloff | | | |
| | Tip 1 Falloff: | 0,16 | ÷ |
| 1 | Tip 2 Falloff: | 0,16 | ÷ |
| | | Lo | ck |
| Distance grow | | | |
| 2 | Tip 1 grow: | 0,0 | ÷ |
| | Tip 2 grow: | 0,0 | ÷ |
| | | Lo | ck |
| Source | | | |
| Node: WeightPro001 | | | |

WeightPro 3ds Max plugin If you have any questions - email me <u>kamil@km-3d.com</u>