Models

- Ski Files
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Ski Files

> This information is taken from resources for Perfect World. While Perfect World and other Angelica engine games are very similar there may be some differences. This information needs to be confirmed for Ether Saga.

General File Structure

Offset	Name	Data Size	Typ. Values	Meaning	Comments
0x0000	moxbiksa[8]	CHAR	"MOXBIKSA"	file type identifier	Ski BMOX
0x0008	ski_type	DWORD	8 or 9		Type 9 has bone names listed, type 8 doesn't
0x000C	mesh_count[4]	DWORD	1,0,0,0 or 2,0,0,0	number of meshes	Defines a `vertex_type` as well. (index to mesh_count[]); so `vertex_type` goes (0,1,?,?)
0x001C	tex_count	DWORD	1 or 2	number of textures	
0x0020	mat_count	DWORD	1 or 2	number of materials	
0x0024	num_bips	DWORD	4 or more	number of “bones”	if ski_type=8, always no bips (but num_bips=4)
0x0028	(unknown_2)	DWORD	0		only value 0 spotted currently
0x002C	(type_mask)	DWORD	41 or 43 or ...	num.Bones in *.bon	Seems to identify the type of Avatar; Human_Female= 41, Demon_Female = 43, Human_Male = 35, ...

Offset	Name	Data Size	Typ. Values	Meaning	Comments
0x0030	zero_60	DWORD	0,0,0,...		just 15 zero DWORDs (or 60 zero BYTEs)

IF ski_type == 9:□{{{□□□□

□Bone Names□□□□

0x006C□Repeat [num_bips]:□{{{□□□

□bone_len□DWORD□e.g. 12□string len (bone name)□

□bone_name[len]□CHAR□"Bip01 L Foot"□the bone name string□no trailing /0

□}}}□}}}□□□

□□□□□

□Textures□□□□

0x006C + (bones)□Repeat [tex_count]:□{{{□□□

□tex_len□DWORD□e.g. 16□□number of bytes, not chinese letters

□tex_name[len]□CHAR□□"□□□□.dds"□Texture file name□(maybe unicode)

□□}}}□□□

□Materials□□□□

□Repeat [mat_count]:□{{{□□□

□MatHeader□String-z□"MATERIAL: "/0□Header for Mat.Block□10 bytes + trail-/0

□mat_values[16]□FLOAT□1, 1, 1, 1, 1, 1, 1, 1,□(unknown)□could be a matrix ...

□□□0, 0, 0, 1, 0, 0, 0, 1□(unknown)□... or other float parameters

□scale_param□FLOAT□9.999 or 19,999 or 10.0□a scaling factor?□(a "0" was spotted too)

□is_clothing□BYTE□0x00 or 0x01□if fashion or not?□could be boolean

□□}}}□□□

□Meshes□□□□

□Repeat [mesh_count]:□<<<□□□

□obj_len□DWORD□e.g. 8□string len (mesh_obj)□

□mesh_obj[len]□CHAR□□"_0"□name of the model□no trailing /0

□tex_index□LONG_32□0 or 1 or ...?□index to texture□none if -1

□mat_index□LONG_32□0□index to materials□

IF vertex_type == 1:□{{{□□□□vertex_type: (see "mesh_count[]" above)

□extra_data[4]□BYTE□□(unknown)□

□}}}□□□□

□vertex_count□DWORD□1235□number of vertices□

□faceverts_count□DWORD□6084□number of faceverts□faceverts_count = 3*face_count, because always triangles

□□□□□

□Vertices□□□□

□Repeat [vertex_count]:□{{{□□□

□vertex_position[3]□FLOAT□(0.05, 1.0, -0.234)□vertex coordinate□-X, -Z, Y

IF vertex_type == 0:□{{{□□□□

□vertex_weight[3]□FLOAT□(0.7, 0.3, 0.0)□bone influence ?□seem 2nd value is always between 1st a

3rd

□bone_index[4]□BYTE□(3, 12, 0, 27)□list of 4 “bones”□the order must be kept; don't sort!

□}}}□□□□

□vertex_normal[3]□FLOAT□□vertex normal vector□

□vertex_UV_coord[2]□FLOAT□□u/v-coordinate of vertex□U, 1-V

□□}}}□□□

□Faces□□□□

□Repeat [face_count]:□{{{□□□face_count = faceverts_count / 3

□vertex_index[3]□USHORT_16□(123, 122, 144)□3 indices to vertices□

□□}}}□□□

□(End Meshes)□>>>□□□

□□□□□

□[EOF]

Converting Mounts from other PWE games

Fixing Mount Animations in ESO

If your mount slides instead of walking or running:

1. Open its ".ecm" file in Notepad++.

2. Find the combined-action section.

3. Add these mappings:

- ESO: "□□ " (Run) → Original mount: "□□□□ " (Fast Movement)
- ESO: "□□ " (Walk) → Original mount: "□□□□ " (Slow Movement)

4. Use the existing action-entry format, update the count if needed, then save.

This should fix our mount without editing its model or animation files.