Subject: Question about the MDL format

Posted by asmcint on Tue, 10 Sep 2013 16:28:40 GMT

View Forum Message <> Reply to Message

Are the MDL files for Fable III related in any way aside from the file extension to the Autodesk MDL format?

Subject: Re: Question about the MDL format

Posted by Keshire on Tue, 10 Sep 2013 16:59:34 GMT

View Forum Message <> Reply to Message

Superficially. I wrote a blender script to import static models into blender that I still need to upload. But I was having problems with the math to figure out bone rotations to grab animated models.

Subject: Re: Question about the MDL format

Posted by asmcint on Tue, 10 Sep 2013 17:22:33 GMT

View Forum Message <> Reply to Message

But, were I to use that script, would I be able to import a normal Autodesk MDL as well as a Fable III MDL?

Subject: Re: Question about the MDL format

Posted by Keshire on Tue, 10 Sep 2013 20:48:07 GMT

View Forum Message <> Reply to Message

asmcint wrote on Tue, 10 September 2013 10:22But, were I to use that script, would I be able to import a normal Autodesk MDL as well as a Fable III MDL?

Nope. There's enough differences that that would not be possible.

Subject: Re: Question about the MDL format

Posted by asmcint on Tue, 10 Sep 2013 21:13:13 GMT

View Forum Message <> Reply to Message

Damn. That sucks, I was kinda hoping I could use your work with that plugin to make an Autodesk plugin for Blender. Oh well, I can still take a crack at making an export plugin once you've uploaded your work.

Subject: Re: Question about the MDL format

Posted by Artofeel on Wed, 11 Sep 2013 05:54:37 GMT

maybe this is DotXSI format?

Quote:art\characters\fable 3 characters\children\dotxsi\au\_fchild\_hat\_01\au\_fchild\_hat\_01.mdl somebody tried to add a header?

Subject: Re: Question about the MDL format

Posted by asmcint on Wed, 11 Sep 2013 06:02:22 GMT

View Forum Message <> Reply to Message

If it's a DotXSI format, then this SHOULD help in being able to import and export the models.

Link to code from an XSI import/export plugin, hopefully works.

Subject: Re: Question about the MDL format

Posted by Keshire on Sat, 02 Nov 2013 18:14:42 GMT

View Forum Message <> Reply to Message

asmcint wrote on Tue, 10 September 2013 23:02If it's a DotXSI format, then this SHOULD help in being able to import and export the models.

Link to code from an XSI import/export plugin, hopefully works.

XSI itself is plain text ascii. They used their own in-house plugin to export from dotxsi to their binary model format. .MDL is pretty much just a generic extension for models. Kind of like how .bsp is the generic format for quake/unreal levels.

Once I figure out what the unknowns do, and which data is used and not used, I can write an exporter for blender to get models back into Fable 3. There's really only a few things left that I need to make that possible.

The bulk of my work right now consists of figuring out what the second Verts[nVerts][8] stucture does. And then I still need to check if Unknown2 is used. If it is, I need to figure out what it's doing.

After that, it's material/texture stuff. But that should be vastly easier to deal with.

Subject: Re: Question about the MDL format

Posted by asmcint on Sun, 03 Nov 2013 00:49:46 GMT

View Forum Message <> Reply to Message

That bit having to do with illumination might be glow strength. v1/2/3 is probably handled by the game's quality settings so that it knows what texture resolution to use for given settings.

Dago 2 of 4 Conomated from Eable 2mod

## Subject: Re: Question about the MDL format Posted by Keshire on Sun, 03 Nov 2013 01:59:08 GMT

View Forum Message <> Reply to Message

asmcint wrote on Sat, 02 November 2013 17:49That bit having to do with illumination might be glow strength. v1/2/3 is probably handled by the game's quality settings so that it knows what texture resolution to use for given settings.

Nah, there's a texture that controls that.

Material28

DiffuseMap

art\inventory\multimeshweapons\pictures\hammer\_head\_auroran\_medium\hammer\_head\_auroran medium diff.tex

SpecularMap

art\inventory\multimeshweapons\pictures\hammer\_head\_auroran\_medium\hammer\_head\_aurora n\_medium\_spec.tex

NomralMap

art\inventory\multimeshweapons\pictures\hammer\_head\_auroran\_medium\hammer\_head\_auroran medium norm.tex

EnvironmentMap

art\inventory\multimeshweapons\pictures\\_sharedtextures\rifle\_barrel\_base\_env.tex IlluminationMap

art\inventory\multimeshweapons\pictures\hammer\_head\_auroran\_medium\hammer\_head\_aurora n\_medium\_illum.tex

I this has more to do with self lit mesh. So that it doesn't need a lightsource to see the texture. At least from what I saw. I've had a ton of problems testing changes so I'm not too sure.

Interestingly enough, Fable 3 will completely skip over files it doesn't like and use the retail/earlier DLC version instead. It's caused me quite a few headaches today.

The second array is 8 floats. And it's per vertex, so I doubt it's doing anything quality wise (I think the steaming.bnk handles that with .gmd).

My best guess is that normals and possibly smoothing groups are being stored there. Since Blender can't import normals I'll have to write the exporter and just guess which ones they are until I get it right...

Subject: Re: Question about the MDL format

Posted by Keshire on Mon, 04 Nov 2013 04:51:07 GMT

View Forum Message <> Reply to Message

Keshire wrote on Sat, 02 November 2013 11:14

And then I still need to check if Unknown2 is used. If it is, I need to figure out what it's doing.

I still have some checking to do, but it looks like that unknown is total verts used for faces. I found a couple easy ones that made it obvious. 3 verts per face = unknown2.

00000396 uint32 nTris 2 02000000 4 00000400 uint32 Unknown2 6 06000000 4 00000404 uint32 nVerts 4 04000000 4

00000601 uint16 Tris[nTris][3] 12

00000379 uint32 nTris 80 50000000 4 00000383 uint32 Unknown2 240 F0000000 4 00000387 uint32 nVerts 90 5A000000 4

00005071 uint16 Tris[nTris][3] 480