**Tutorial / Mr. Jingles' Blood Modding**

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| --- | --- | --- | --- |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | Introduction | | |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | This is a tutorial to show you how to make a blood mod from scratch. You could just download one and change it a bit | | |
|  | (which is what I did for my first mod) but you won't learn anything from that. | | |
|  | If you find anything wrong with this tutorial email me at jeff@mastercodes.com and let me know what to fix. | | |
|  | If you spam me or put me in some porn directory - I sware I will personally hunt you down and eat your liver. | | |
|  | Ok, getting on... | | |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | Images | | |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | You'll need either PaintShop Pro (www.jasc.com) or PhotoShop (www.adobe.com) to make the blood images. It's all a | | |
|  | matter of preference on | | |
|  | which one to use. I like PhotoShop where as others like PaintShop Pro. | | |
|  | Go to www.google.com and search for tutorials if you are unaware of how to use these programs. | | |
|  |  | | |
|  | The blood image must be 64 x 64 otherwise it will look all funky in game. | | |
|  | Remember that you must edit the Alpha Channel when making an image. | | |
|  | White = Opague | Black = Transparent | Grey = Translucent | | |
|  |  | | |
|  | All I did was edit already available blood images because I suck with Photoshop. :) | | |
|  | Save your images to the desktop (and not to a temporary directory) as whatever you want. I saved mine as blood.tga, | | |
|  | blood2.tga, and blood3.tga. | | |
|  |  | | |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | Shader Files | | |
|  | ------------------------------------------------------------------------------------------------------------------ | | |
|  | Shaders are short text scripts that tell MoHAA about surfaces and their functions in the game world. Open these | | |
|  | up with a text editor. I use NotePad. | | |
|  |  | | |
|  | Here is the shader (with added comments) of version 2 of my blood mod. | | |
|  | --------------------------------------------------------------------- | | |
|  | // Jingles' Blood - Automatically not read by MoHAA - has // in front | | |
|  | heavy\_blood // This is a shader - defined by below. TIKI files will make reference to this. | | |
|  | { // Beginning of section of shader | | |
|  |  | spritegen parallel\_oriented // Makes objects, in this case blood, shoot out of something - later defined | | |
|  |  |  | //to be shot out of players in the TIKI file | | |
|  |  | cull none // Makes picture be read on both sides | | |  |
|  |  | { // Beginning of section of shader | | |  |
|  |  |  | map textures/effects/blood.tga // Image used for this shader - can be mapped out to where | | |
|  | // ever you put the texture | | |  |  |
|  |  |  | blendFunc blend // Not sure what this does and I'm too lazy to check right now :) | | |
|  |  |  | alphaGen vertex // Makes MoHAA read the Alpha Channel of the image | | |
|  |  |  | rgbGen vertex // Makes the image darker in darker areas, lighter in lighter areas, etc. | | |
|  |  | } // End of section of shader | | |  |
|  | } // End of section of shader | | |  |  |
|  | // | | |  |  |
|  | bodyhitpuff | | |  |  |
|  | { | | |  |  |
|  |  | spritegen parallel\_oriented | | |  |
|  |  | cull none | | |  |
|  |  | { | | |  |
|  |  |  | map textures/effects/blood.tga | | |
|  |  |  | blendFunc blend | | |
|  |  |  | alphaGen vertex | | |
|  |  |  | rgbGen vertex | | |
|  |  | } | | |  |
|  | } | | |  |  |
|  |  | | |  |  |
|  | blood // First blood splat | | |  |  |
|  | { | | |  |  |
|  |  | polygonOffset // Makes an object stick to polygons (MoHAA, as well as other games, are made up of | | |  |
|  |  | //polygons - triangles) | | |  |
|  |  | { | | |  |
|  |  |  | map textures/effects/blood.tga | | |
|  |  |  | blendFunc blend | | |
|  |  |  | rgbGen vertex | | |
|  |  |  | alphaGen vertex | | |
|  |  | } | | |  |
|  | } | | |  |  |
|  |  | | |  |  |
|  | blood2 // Second blood splat | | |  |  |
|  |  | { | | |  |
|  |  | polygonOffset | | |  |
|  |  | { | | |  |
|  |  |  | map textures/effects/blood2.tga | | |
|  |  |  | blendFunc blend | | |
|  |  |  | rgbGen vertex | | |
|  |  |  | alphaGen vertex | | |
|  |  | } | | |  |
|  | } | | |  |  |
|  |  | | |  |  |
|  | blood3 | | |  |  |
|  | { | | |  |  |
|  |  | polygonOffset | | |  |
|  |  | { | | |  |
|  |  |  | map textures/effects/blood3.tga | | |
|  |  |  | blendFunc blend | | |
|  |  |  | rgbGen vertex | | |
|  |  |  | alphaGen vertex | | |
|  |  | } | | |  |
|  | } | | |  |  |
|  | // Jingles' Blood | | |  |  |
|  | --------------------------------------------------------------------- | | |  |  |
|  |  | | |  |  |
|  | \* Remember that if adding a comment, put two slashes in front of the text that you don't want read by the game. | | |  |  |
|  |  | | |  |  |
|  | Feel free to mess around with different commands. A lot of shader commands can be found in the shader files that came | | |  |  |
|  | with the game. You can find most of these in Pak0.pk3 > scripts. | | |  |  |
|  |  | | |  |  |
|  | Once your shader file is done save it to the desktop (and not into a temporary directory) with whatever name you want. | | |  |  |
|  | I saved mine as | | |  |  |
|  | blood.shader. Make sure it's a shader file and not a txt file when it's saved. | | |  |  |
|  |  | | |  |  |
|  | Now that you have your blood images and your shader file set up it's time to move on to the TIKI file. | | |  |  |
|  |  | | |  |  |
|  |  | | |  |  |
|  | ------------------------------------------------------------------------------------------------------------------ | | |  |  |
|  | TIKI Files | | |  |  |
|  | ------------------------------------------------------------------------------------------------------------------ | | |  |  |
|  | TIKIs are script like files that describe the properties and animations of objects in the game. If you look at the | | |  |  |
|  | shader file above you | | |  |  |
|  | will see that the shaders are practically the same. They will gain their biggest differences in the TIKI files. | | |  |  |
|  |  | | |  |  |
|  | TIKIs have a file extension of tik and are opened with a text editor. | | |  |  |
|  |  | | |  |  |
|  | You will need PakScape for this section so go get it: www.mohelite.com in the upper right corner. | | |  |  |
|  | You can do this multiple ways. I will show you how I did it. | | |  |  |
|  |  | | |  |  |
|  | 1. Open Pak0.pk3 with PakScape | | |  |  |
|  | 2. Go into models > fx > and open up bh\_human\_uniform\_lite.tik; bh stands for body hit | | |  |  |
|  |  | | |  |  |
|  | Ahh, now the creativity begins. | | |  |  |
|  |  | | |  |  |
|  | I'll show you my tik but remember that you can experiment all you want. It's pretty much self-explanatory - the main | | |  |  |
|  | thing you will | | |  |  |
|  | ikely want to edit are the decalradius, scale, and image/shader names. | | |  |  |
|  |  | | |  |  |
|  | --------------------------------------------------------------------- | | |  |  |
|  |  | | |  |  |
|  | TIKI | | |  |  |
|  | setup | | |  |  |
|  | { | | |  |  |
|  |  | scale 1.0 | | |  |
|  |  | path models/fx/dummy | | |  |
|  |  | skelmodel dummy2.skd | | |  |
|  | } | | |  |  |
|  |  | | |  |  |
|  | init | | |  |  |
|  | { | | |  |  |
|  |  | client | | |  |
|  |  | { | | |  |
|  |  | | |  |  |
|  |  | // Blood Effect | | |  |
|  |  | | |  |  |
|  |  | // Heavy Blood Effect | | |  |
|  |  | cache models/fx/heavy\_blood.tik | | |  |
|  |  | | |  |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model heavy\_blood.spr | | |
|  |  | | |  |  |
|  |  |  | spawnrange 3072 | | |
|  |  |  | spritegridlighting | | |
|  |  |  | alpha 0.8 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | offsetalongaxis random 6 crandom 2 crandom 2 | | |
|  |  |  | count 3 | | |
|  |  |  | velocity 90 | | |
|  |  |  | randvelaxis random 100 crandom 32 crandom 32 | | |
|  |  |  | accel 0 0 -800 | | |
|  |  |  | life 0.5 0.6 | | |
|  |  |  | fadedelay 0.3 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | physicsrate every | | |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Heavy Blood Effect | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model heavy\_blood.spr | | |
|  |  | | |  |  |
|  |  |  | spawnrange 3072 | | |
|  |  |  | spritegridlighting | | |
|  |  |  | alpha .85 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | offset random 2 crandom 2 crandom 2 | | |
|  |  |  | count 2 | | |
|  |  |  | velocity 70 | | |
|  |  |  | randvelaxis random 50 crandom 40 crandom 40 | | |
|  |  |  | accel 0 0 -600 | | |
|  |  |  | life 0.7 0.9 | | |
|  |  |  | fadedelay 0.5 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  | | |  |  |
|  |  |  | physicsrate every | | |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Blood Splat | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model models/fx/heavy\_blood.tik | | |
|  |  | | |  |  |
|  |  |  | align | | |
|  |  |  | alpha 1.0 | | |
|  |  |  | count 1 | | |
|  |  |  | life 1.0 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | velocity 5 | | |
|  |  |  | accel 0 0 -800 | | |
|  |  |  | collision | | |
|  |  |  | dietouch | | |
|  |  |  | bouncedecal | | |
|  |  |  | decalshader blood | | |
|  |  |  | decalradius 75 | | |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Guts | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model models/fx/heavy\_blood.tik | | |
|  |  |  | | |  |
|  |  |  | align | | |
|  |  |  | alpha 1.0 | | |
|  |  |  | count 1 | | |
|  |  |  | life 1.0 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | velocity 5 | | |
|  |  |  | accel 0 0 -800 | | |
|  |  |  | collision | | |
|  |  |  | dietouch | | |
|  |  |  | bouncedecal | | |
|  |  |  | decalshader blood3 | | |
|  |  |  | decalradius 55 | | |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Blood Effect 2 | | |  |
|  |  |  | | |  |
|  |  | // Heavy Blood Effect 2 | | |  |
|  |  | cache heavy\_blood.spr | | |  |
|  |  |  | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  | model heavy\_blood.spr | | |  |
|  |  | | |  |  |
|  |  |  | spawnrange 3072 | | |
|  |  |  | spritegridlighting | | |
|  |  |  | alpha 0.8 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | offsetalongaxis random 6 crandom 2 crandom 2 | | |
|  |  |  | count 3 | | |
|  |  |  | velocity -380 | | |
|  |  |  | randvelaxis random 100 crandom 40 crandom 40 | | |
|  |  |  | accel 0 0 -800 | | |
|  |  |  | life 0.5 0.6 | | |
|  |  |  | fadedelay 0.3 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  | | |  |  |
|  |  |  | physicsrate every | | |
|  |  |  |  |  |  |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Heavy Blood Effect 2 | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model heavy\_blood.spr | | |
|  |  | | |  |  |
|  |  |  | spawnrange 3072 | | |
|  |  |  | spritegridlighting | | |
|  |  |  | alpha 0.5 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | offset random 2 crandom 2 crandom 2 | | |
|  |  |  | count 2 | | |
|  |  |  | velocity -340 | | |
|  |  |  | randvelaxis random 50 crandom 50 crandom 50 | | |
|  |  |  | accel 0 0 -600 | | |
|  |  |  | life 0.7 0.9 | | |
|  |  |  | fadedelay 0.5 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | | |  |
|  |  |  | physicsrate every | | |
|  |  | ) | | |  |
|  |  |  | | |  |
|  |  | // Blood Splat 2 | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model models/fx/heavy\_blood.tik | | |
|  |  |  |  | | |
|  |  |  | align | | |
|  |  |  | alpha 1.0 | | |
|  |  |  | count 1 | | |
|  |  |  | life 1.0 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | velocity -328 | | |
|  |  |  | accel 0 0 -3000 | | |
|  |  |  | collision | | |
|  |  |  | dietouch | | |
|  |  |  | bouncedecal | | |
|  |  |  | decalshader blood2 | | |
|  |  |  | decalradius 55 | | |
|  |  | ) | | |  |
|  |  | | |  |  |
|  |  | // Guts 2 | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model models/fx/heavy\_blood.tik | | |
|  |  |  | | |  |
|  |  |  | align | | |
|  |  |  | alpha 1.0 | | |
|  |  |  | count 1 | | |
|  |  |  | life 1.0 | | |
|  |  |  | scalemin .5 | | |
|  |  |  | scalemax .55 | | |
|  |  |  | scalerate 2 | | |
|  |  |  | velocity -328 | | |
|  |  |  | accel 0 0 -3000 | | |
|  |  |  | collision | | |
|  |  |  | dietouch | | |
|  |  |  | bouncedecal | | |
|  |  |  | decalshader blood3 | | |
|  |  |  | decalradius 55 | | |
|  |  | ) | | |  |
|  |  |  | | |  |
|  |  | // Body Hit Puff | | |  |
|  |  |  | | |  |
|  |  | cache bodyhitpuff.spr | | |  |
|  |  |  | | |  |
|  |  | // Allows for you to hear the body hit sound | | |  |
|  |  | sfx sound snd\_bh\_flesh auto 1.5 128 0.8 0.2 | | |  |
|  |  |  | | |  |
|  |  | // First Puff | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model bodyhitpuff.spr | | |
|  |  |  | scalerate 10 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | avelocity 0 0 crandom 360 | | |
|  |  |  | life .167 // amount of smoke | | |
|  |  |  | scale .4 // radius | | |
|  |  |  | alpha .7 // density | | |
|  |  |  | color 0.7 0 0 // RBG color of the smoke | | |
|  |  |  | velocity 160 // base velocity away from the surface | | |
|  |  |  | randvelaxis random 2 2 2 // velocity offset | | |
|  |  |  | offsetalongaxis 2 crandom 1 crandom 1 // positional offset | | |
|  |  | ) | | |  |
|  |  | // Second Puff | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model bodyhitpuff.spr | | |
|  |  |  | scalerate 10 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | avelocity 0 0 crandom 180 | | |
|  |  |  | life .333 // amount of smoke //.25 //.5 | | |
|  |  |  | scale .2 // radius | | |
|  |  |  | color 0.7 0 0 // RBG color of the smoke | | |
|  |  |  | velocity 80 // base velocity away from the surface | | |
|  |  |  | randvelaxis random 2 2 2 // velocity offset | | |
|  |  |  | offsetalongaxis 2 crandom 1 crandom 1 // positional offset | | |
|  |  |  | fade | | |
|  |  | ) | | |  |
|  |  |  | | |  |
|  |  | // Third Puff | | |  |
|  |  | sfx originspawn | | |  |
|  |  | ( | | |  |
|  |  |  | model bodyhitpuff.spr | | |
|  |  |  | scalerate 10 | | |
|  |  |  | angles 0 0 random 360 | | |
|  |  |  | avelocity 0 0 crandom 90 | | |
|  |  |  | life .666 // amount of smoke //.5 //1 | | |
|  |  |  | scale .3 // radius | | |
|  |  |  | alpha 0.3 // density | | |
|  |  |  | color 0.7 0 0 // RBG color of the smoke | | |
|  |  |  | velocity 40 // base velocity away from the surface | | |
|  |  |  | randvelaxis random 2 2 2 // velocity offset | | |
|  |  |  | offsetalongaxis 2 crandom 1 crandom 1 // positional offset | | |
|  |  |  | fade | | |
|  |  | ) | | |  |
|  |  | } | | |  |
|  | } | | |  |  |
|  |  |  | | |  |
|  | // This section is just needed to be a valid tiki file | | |  |  |
|  | animations | | |  |  |
|  | { | | |  |  |
|  |  | idle dummy2.skc | | |  |
|  | } | | |  |  |
|  |  | | |  |  |
|  | --------------------------------------------------------------------- | | |  |  |
|  | Hope you at least understand a little bit of that. Remember that you can pretty much anything in there. Don't be | | |  |  |
|  | afraid to experiment. | | |  |  |
|  |  | | |  |  |
|  | Save this to the desktop, make a copy of it, and call it bh\_human\_uniform\_heavy.tik. | | |  |  |
|  |  | | |  |  |
|  | Now this is the heavy\_blood.tik that I was making reference to in the previous tik. | | |  |  |
|  | This one isn't nearly as long. | | |  |  |
|  | --------------------------------------------------------------------- | | |  |  |
|  |  | | |  |  |
|  | TIKI | | |  |  |
|  | setup | | |  |  |
|  | { | | |  |  |
|  |  | scale 0.75 | | |  |
|  |  | path models/fx/splinter | | |  |
|  |  | skelmodel splinter.skd | | |  |
|  |  | surface material1 shader blood | | |  |
|  | } | | |  |  |
|  | animations | | |  |  |
|  | { | | |  |  |
|  |  | idle splinter.skc | | |  |
|  |  | } | | |  |
|  |  | | |  |  |
|  | --------------------------------------------------------------------- | | |  |  |
|  | This basically tells the game to use a certain animation when shooting the blood out - splinter.skd | | |  |  |
|  |  | | |  |  |
|  | Save that to the desktop and your ready to pack everything up. | | |  |  |
|  |  | | |  |  |
|  | Sorry that I didn't explain this tik area a bit more - but it would have taken me a long time... | | |  |  |
|  | Besides you need to do some work for yourself you know. :) | | |  |  |
|  |  | | |  |  |
|  |  | | |  |  |
|  | ------------------------------------------------------------------------------------------------------------------ | | |  |  |
|  | Packing with PakScape | | |  |  |
|  | ------------------------------------------------------------------------------------------------------------------ | | |  |  |
|  | By far the easiest part of the job. | | |  |  |
|  |  | | |  |  |
|  | Put bh\_human\_uniform\_lite.tik, bh\_human\_uniform\_lite.tik, and heavy\_bloody.tik (if you made a heavy\_blood.tik) into | | |  |  |
|  | folder arranged like | | |  |  |
|  | this: | | |  |  |
|  | models > fx | | |  |  |
|  |  | | |  |  |
|  | Put your blood images in folders arranged like this - unless you mapped it out differently in the shader file: | | |  |  |
|  | textures > effects | | |  |  |
|  |  | | |  |  |
|  | Put your shader file in a folder called scripts | | |  |  |
|  |  | | |  |  |
|  | Now save it as user-Whatever You Want To Call It.pk3 and put it into MOHAA\main and your good to go. | | |  |  |
|  |  | | |  |  |
|  | \* Make sure there are no other blood mods in your main folder - MOHAA reads files alphabetically - zzz will get read | | |  |  |
|  | but aaa will not get | | |  |  |
|  | read | | |  |  |
|  |  | | |  |  |
|  | Jeff - Mr. Jingles | | |  |  |