

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

----- ---- 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 swear 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 = Opaque | 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

likely 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
decals shader 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
    decals shader 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