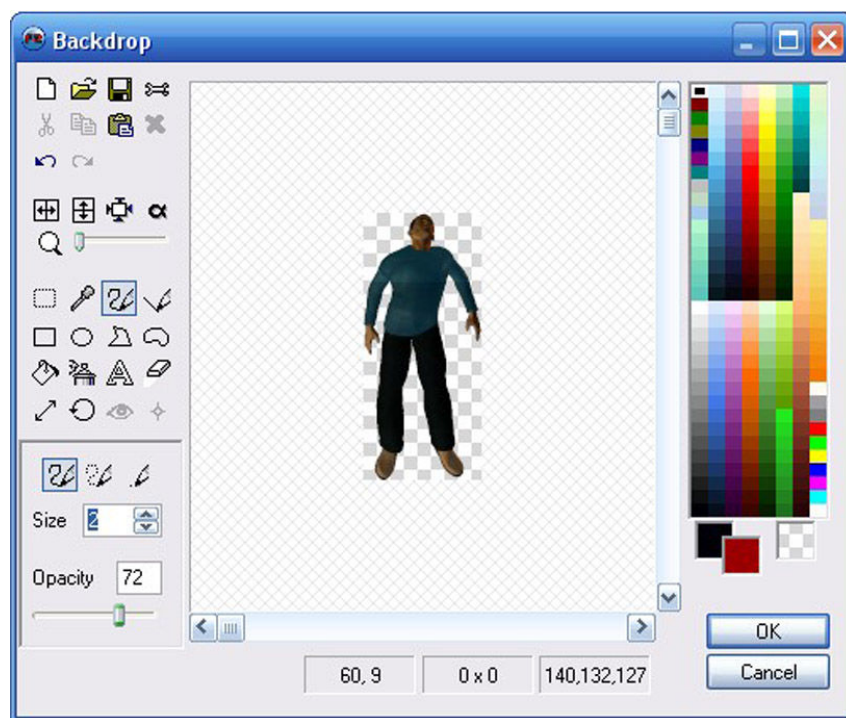


Koobare's *little guide to the* **IMAGE** *editor*



You may not use this tutorial for any other purpose than learning, working or having fun... In other words: You can use this PDF tutorial for anything You'd like, as long as it doesn't involve both a hammer and a squirrel.

Koobare
marchewkowy@gmail.com

Hi there, all!

Welcome to yet another tutorial, teaching you how to effectively and efficiently use the best multimedia authoring tool ever – [Multimedia Fusion 2](#) by Clickteam! This time we'll be focusing on MMF2's user-friendly **Image Editor**, a complete paint package embedded in Multimedia Fusion 2. This groovy little tool can be used to easily create, import and edit all those backgrounds, sprites and other graphical objects that you want to fill your projects with. The main purpose of this guide is to familiarize you with Image Editor's interface, the essential "what's what" and "where can I go with this" stuff. We'll learn some basic skills and theory that you can further develop on your own. Always remember – practice makes perfect, the more you draw, the prettier your drawings get.

If you're already familiar with the Image Editor and you know your ways around all those BMPs, PNGs, alpha-blending and animation importing stuff – you can just skip all of this and go for the other tutorials that can be found on Clickteam's website. If you're totally new to the mesmerizing world of clicking, though, I'd suggest that you give the "Interface Guide" a try first, just to make sure that you know how to create new objects and have a good understanding of how MMF2 works. Anyways, all those remarks and suggestions aside, let's have a glimpse of what we're going to learn here...

What's this tutorial all about:

- We'll start with introducing you to the Image Editor's interface. It's pretty straight-forward and intuitive, so there shouldn't be any problems with this. Once that's done...
- ...we'll play a bit with importing sprites from an exterior file into MMF2.
- ...we'll also see how to easily import a whole animation from multiple files.
- ...we'll see how to effectively use all those drawing tools that can be found in MMF2's Image Editor, such as the Brush tool, the Fill tool or the Text tool.
- ...we'll have an opportunity to talk about Hot spots and Action points.
- ...we'll learn how to import and edit alpha-channelled images.
- ...we'll also learn what alpha-channeling is all about and what's the difference between alpha channels and transparency.

Sounds interesting? I hope so, since we're about to start right now. Let's go!

Created for *Multimedia Fusion 2* & *Multimedia Fusion 2: Developer*

📄 If you have any problems with this tutorial, or notice that there are some mistakes present, please, contact me and I'll do my best to help you and replace all the errors with correct information.

Contact me at: marchewkowy@gmail.com

Koobare's Little Guide to the Image Editor.

MMF2's built-in Image Editor (or – if you wish – Picture Editor) is a raster graphics editor that allows users to import, export, paint and manipulate pictures. Let's open it up – open your Multimedia Fusion 2, create a new application and save it onto your hard drive. Once that's done, go into the Frame Editor, create a new **Backdrop object** (right-click somewhere in your empty frame and select the "Insert Object" command from the menu, then choose the Backdrop object from the list) and open it up in the Image Editor, by either **double-clicking on it**, or right-clicking and choosing the "**Edit**" command.

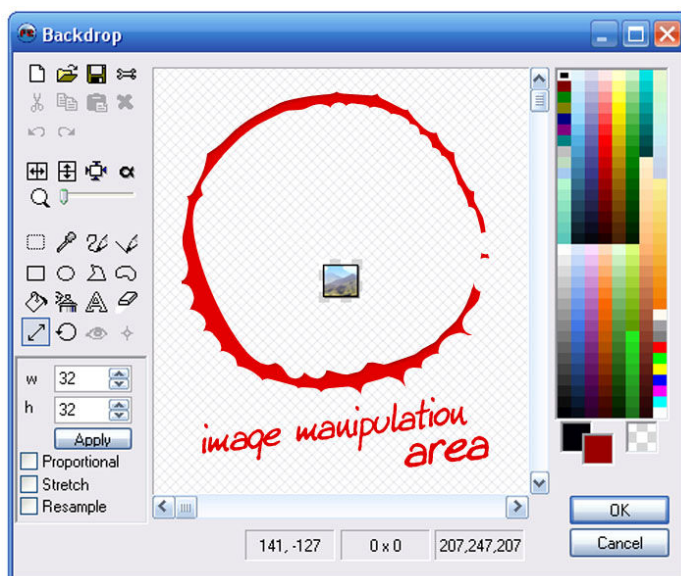


Image Editor's window should open. Notice that it has a rather simple interface, divided into three main areas: the **tool area** (one to the left, the one with all those fancy-looking buttons and check boxes – we'll investigate them later on), the **image manipulation area** (in the center of the window – take a glimpse at the screenshot to the left, it's that red-circled part) and the **color palette area** (one to the right).


How does all of this work? Well, the basic idea is pretty simple: you select a tool from the tool palette (for example, the Brush tool), select an interesting color from the color palette and then use it in the image manipulation area, drawing that fierce creature you wanted to have in your game. Unless you're a natural-born artist it won't be that easy to create a great-looking monster


at the beginning, but don't let that get to you – all of this, and I mean ALL of this, is a matter of practice, if you'll hang on to it for a while you'll eventually get satisfactory results. If not – well then, maybe graphics ain't your thing and you'll need someone to make them for you. But it'll still be a good idea to know how all of this works, in case you'll need to quickly correct something or change a small detail here or there.

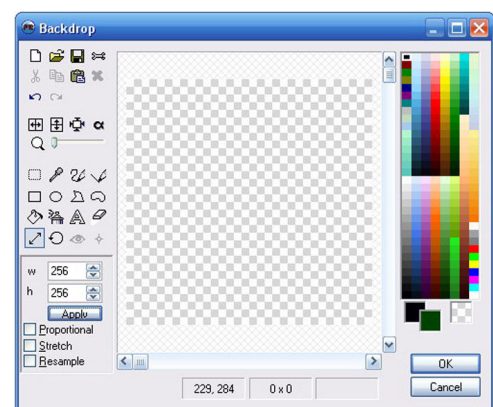
Anyways – let's get back to our Backdrop object and transform it into something more interesting. Let's say... A tree? Yeah, yeah, I know, trees are a bit low on that “woah, that's attention-grabbing” factor, but they can be pretty useful in most of games. You can't have a game about aliens invading New York without a laser shootout in the Central Park, right? And there's lots of trees there... The same goes for a remake of the classic SNES game “Cliffhanger”, or any other game where our hero is relentlessly running through an icy forest – no trees, no fun. Bottom-line: trees are darn useful! So... Let's stop this chit-chat, cut to the chase and make ourselves a simple tree.

Creating a tree


OK, so here we are, geared up & willing, ready to create a spruce, or some other tree that looks similar. Basically, there are two ways of doing this: either the slower one (google up an image of a spruce or go outside with a camera to shoot a picture of one, analyze the photo, keep an attention to details and then draw a nice picture remembering to put some shadows here and there) or the faster one (just find an image of a spruce inside your head and draw it). We're going to take the third road: the “blitz! Oh my, it's already done!” one.

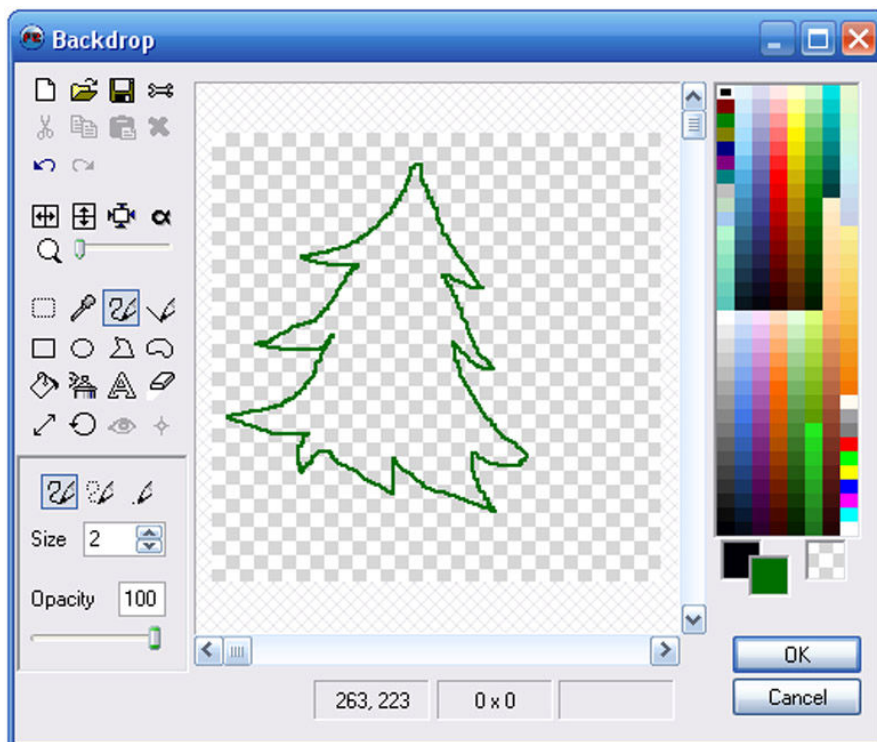
Step one: having the Image Editor still opened, **clear the picture** by either pressing **CTRL+N** on your keyboard or by clicking on the blank-sheet button (looks like this: ) , situated in the top-left corner of the window. Now we've got ourselves a blank image to play with.

Step two: let's make ourselves some more space to draw that beloved tree of ours: open up the **Size** tool. To do so, either press the **W** (as in “Width”) on your keyboard or click the resize button (here's how it looks like: ). Notice that some new options appeared under the standard tool palette – and, amongst them, there are resize-fields, enabling you to input new width and height values. Change both of them to **256**,

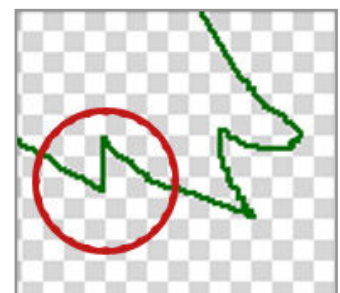



so that our image has the size of **256x256**, then click the **Apply** button. Shazaam! Our image has gotten bigger. Pure magic.

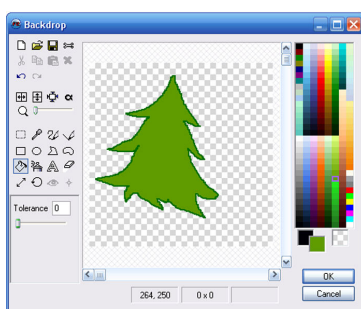
Step three: OK, let's do it! Let's draw the tree! Firstly, select the **Brush tool** (press the "D" key on your keyboard or click on this button: ) and increase it's size to 2 (you can find the "Size" setting in the bottom part of the tool area, once you've selected the proper apparatus). Now, select a green color from the color palette area and... Start painting the outline of your tree. Here's what I've got after twelve seconds of hard work:




Doesn't look too good, but it'll suite our needs. There's only a small defect I'd like to repair. Here, take a look, I've circled the part I don't particularly like:

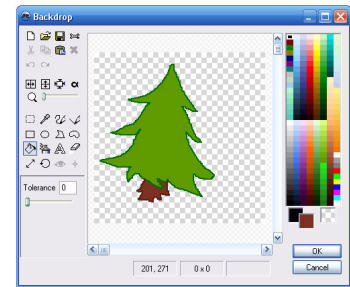



What should we do with it? Here's where the **Eraser tool** comes in handy - select  or press "U" on your keyboard. Now, change it's size to 6 and erase the area we didn't like, once again "drawing" with your left mouse button. Once that's done, select your Brush tool once more and fill in the blanks in your tree's outline.



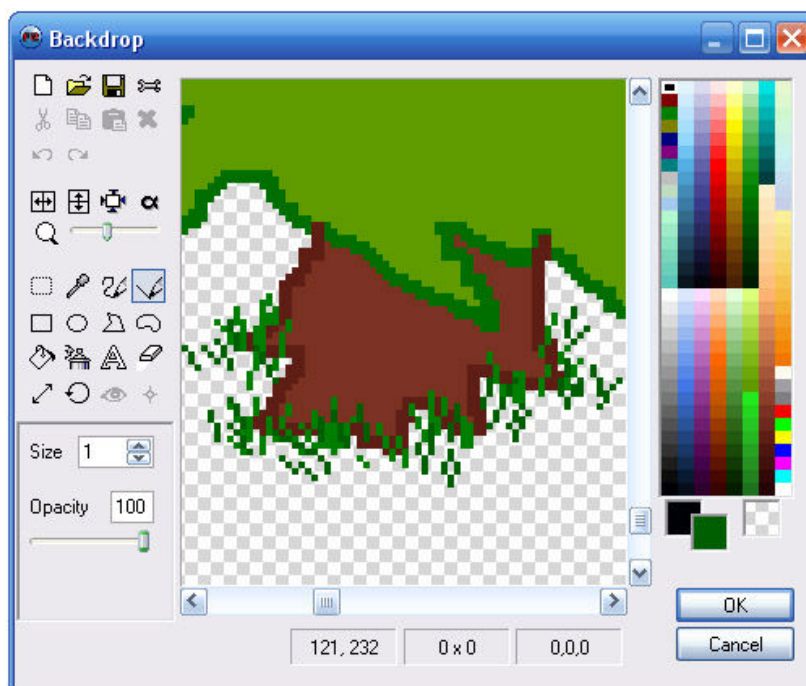
Now, select the **Fill tool** ("F" or ) , select another greenish color – a bit different than the one we selected earlier – and click inside our outline to fill it up with green paint. Heck, it starts to look like a tree, right? But don't get too happy about it, since there's still much to do. What's most important right now is that we still need to add a trunk.

You know what to do next, right? Click on the **Brush tool**, select a dark brown color, draw the trunk's outline, select the Fill tool, change the color to a lighter one and fill everything's that's meant to be filled. Hmm... Doesn't look bad, does it? It's no masterpiece, but let's not forget that we're using the "blitz! Oh my, it's already done!" method here.




Having said that, there's always time for some quick improvements. Zoom in a bit on your image, by using the **Zoom slider** (located right above your Brush tool) and center your image on our tree's trunk. Now, select the **Line tool** (the "L" key or ) , choose another green color (it

would be best if it was a bit different then the ones selected earlier) and create some grass blades here and there, by dragging & dropping small lines around the trunk. You'll get the best effect if you'll change your color selection once or twice during this operation. Take a look at the image to the left if you're looking for some visual guidance.



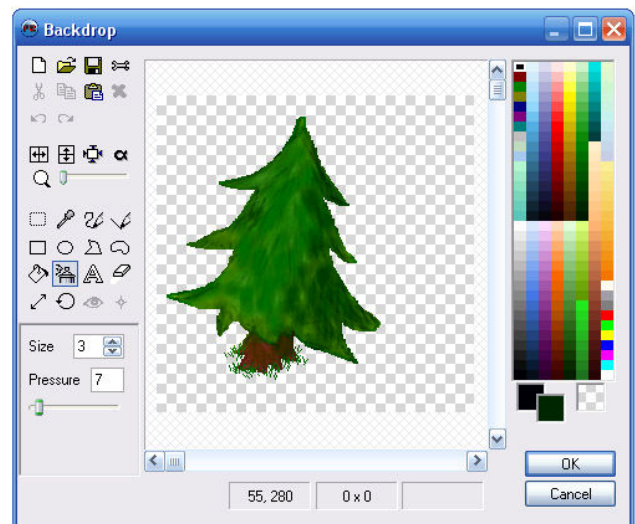
Time to add some details to the tree itself...


Zoom out and select the **Spray tool** ("S" key or ) , change it's Size to 10, play a bit with the Pressure setting and start spraying, changing the selected color from time to time.

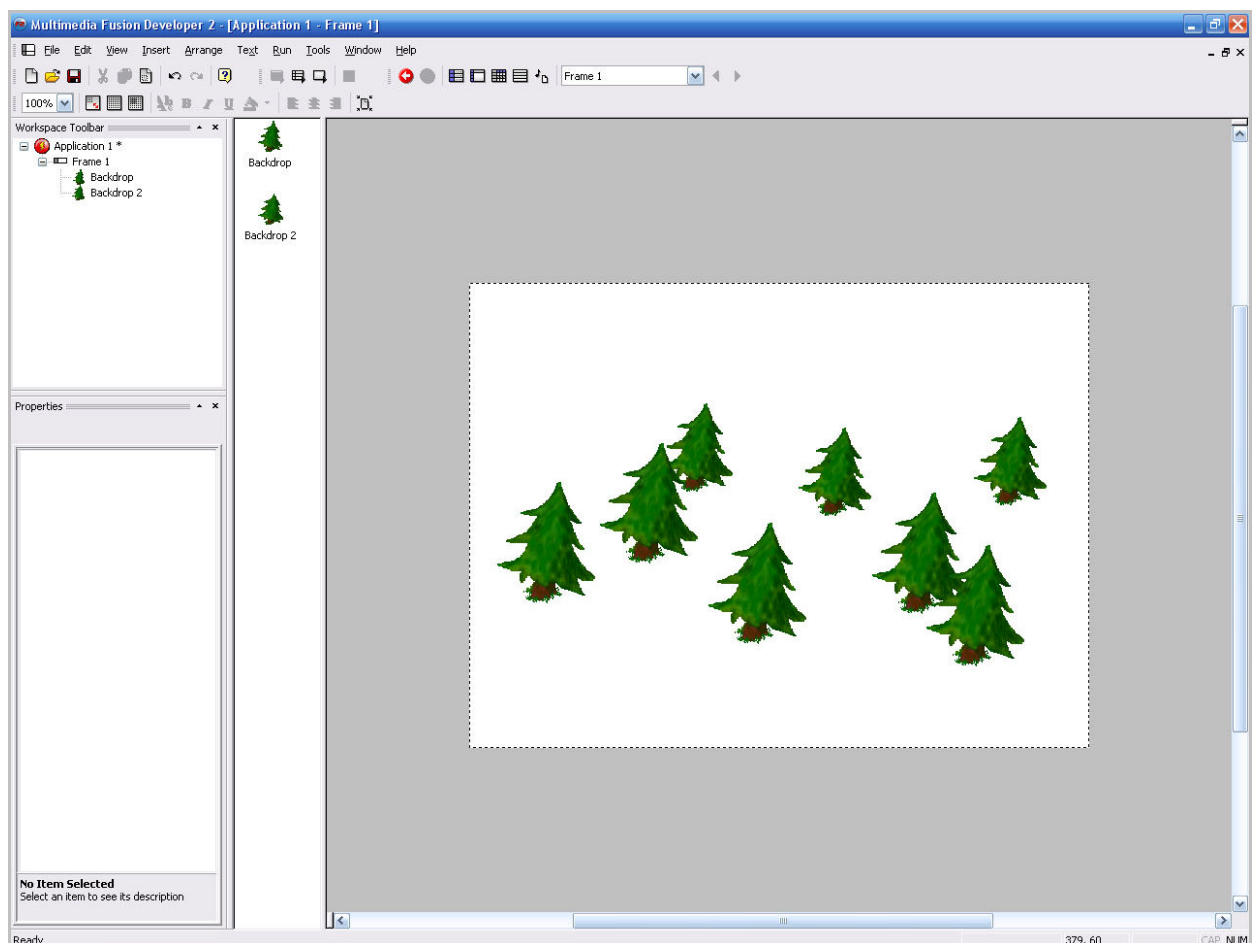
Notice how the Spray tool only draws on the image we created earlier, using the Fill and Brush tools – it doesn't add new pixels to your drawing, it just recolors the ones that were already there. This is some pretty neat stuff, as it enables us to create some cool effects and repaint jobs. Anyways – try to add some more detail to our tree, change both the Size and Pressure settings of the Spray tool to achieve some nice-looking results. Oh, and don't forget to change the color, it'll enable you to add some shading effects to our image.

Take a look at the image to the right to see what I've got after a single minute of repainting. As it was said before – it surely ain't a masterpiece. But it already looks a bit better than the outline we started with, right?

Now, let's say that this image is a bit too big for us – we want a smaller tree. Select the **Size tool**, check all its additional settings on (Proportional, Stretch & Resample), change the size to **150x150** and press Apply.



Yup, that's exactly what we wanted to achieve. Last thing to do here... Let's eliminate all the blank space by using the **Crop tool** (just click  or press CTRL+K and everything will be done for you – MMF2's Image Editor will eliminate the blank area around the image automatically). Got it? Great! We're done with our tree. Click OK to exit the Image Editor and start planting those trees around your levels!



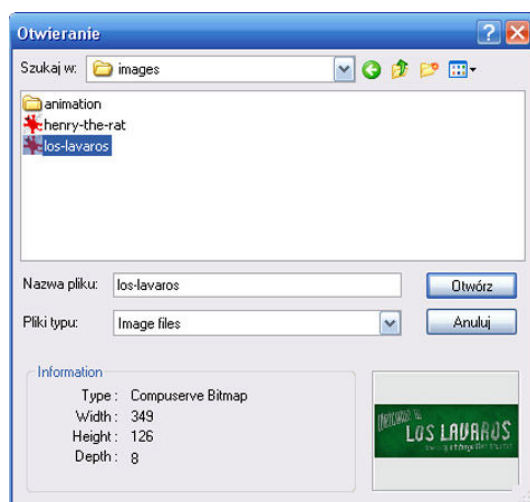
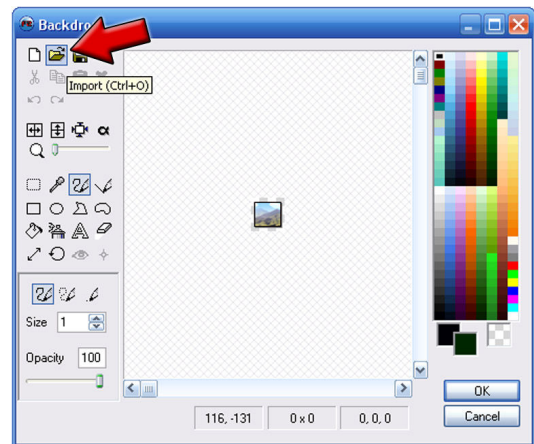
Importing sprites

As much as I like to play with MMF2's inbuilt Image Editor, I really must confess that I've never seen a graphical editor more comfy and powerful than Photoshop (and I've tried a lot of them in my past). Perhaps that's just the way my mind has been bent after spending hundreds of hours in PS, but once you've tried it and got some first-hand Photoshop-experience – nothing really tastes the same.

Anyways, annoying anecdotes aside: I often use other programs than MMF2's Picture Editor to draw my graphics. And after I'm done playing with all those layers and different brushes, I always stop for a second to thank Clickteam for making it reaaaaally easy to import images from exterior files into Multimedia Fusion. All it takes are a few clicks...

Let's learn by practice, shall we...?

Open up a new frame, create a new Backdrop object, open it up in MMF2's Image Editor. Now, select the **Import** option, either by pressing **Ctrl+O** on your keyboard (easy way to remember this pretty useful shortcut: it's "*Control plus Open*") or clicking on the "Open folder" icon (📁). Notice the "Export" button right by it's side (📁).

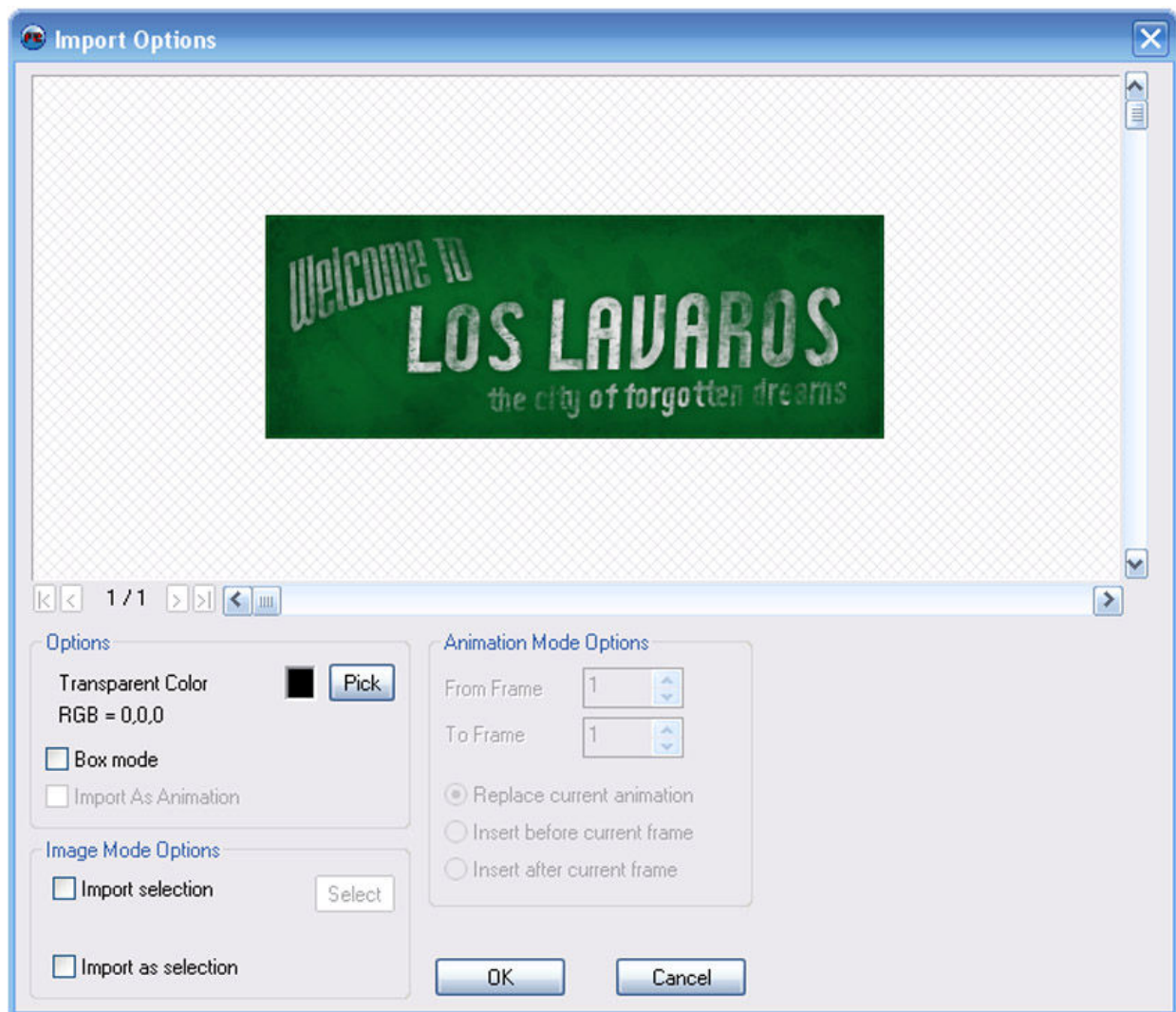


The "Open image" window should appear – a standard Windows Explorer tool that'll always help you find and choose all the pictures you wish to import into your game.

Now, browse to the "**images**" folder supplied with this tutorial (it should be in the same directory you've unzipped this PDF document to) and select the "**los-lavaros.gif**" file. Click on the "Open" button.

A new window will appear – the **Import Options** window, one of the things you'll see a lot if you're doing your graphics in Photoshop, GIMP, Paint Shop Pro or any other bitmap graphics editor. It's pretty easy to use, so you shouldn't have any problems with this.

Here's a small sneak-peak of how this window looks like:



As you can see, the image being imported is displayed in the top section of the window. If the picture is bigger than the window, it can be easily scrolled with those two attractive scrollbars (also, do remember that this window can be easily resized in the traditional Windows way – by grabbing it's corner and stretching it out a bit).

Below the display section you can find a nice collection of useful checkboxes and buttons. Use these thingies to set the **Transparent color** (pretty handy, but always remember that it doesn't really work with images that are alpha-blended), import just a part of the image (if you'd like to do that, select **Import selection**) or import it as a second layer (the **Import as selection** check box will enable you to do so – you'll be able to paste the imported picture onto an image you already have in your Image Editor). There's also the **Box mode** option – which enables you to easily import multiple frames of animation stored in a single file (the only requirement is that all

those sprites from your file must be contained inside a table with rectangular cells, with a single-colored border). Oh, there's also the **Import As Animation** option, which makes importing from multiple files pretty easy – but we'll deal with it a bit later on.

As for now – let's just import that "Welcome to Los Lavaros" sign, shall we? That's not gonna' be too complicated... Actually, all we need to do is to click a single button. We don't want to change any of the default settings, we don't want to add a transparent color to our image – so let's just click that OK button and get back to the Picture Editor. See? There's that sign of ours! Just click on the OK button and let's move on.




About those alpha channels...

There is a time in every clicker's life, when he must decide whether he's ready or not to learn a secret that can change his clicking ways forever. That moment has arrived, my dear apprentice. I will now expose a secret that my sensei learned from his sensei, whom learned it from his sensei, whom learned it from the papa bear of all senseis. A lesson passed down from generation to generation, always shrouded in mists of mystery... The lesson of ultimately smooth corners and borders. The lesson of blending the transparent and the opaque. The lesson of **alpha channels**.

What's this all about? Well... Alpha channels represent image transparency information on a per-pixel basis. Doesn't sound simple enough? Try this: the alpha channel enables you to control which of the pixels in your image are transparent and to what degree. Sounds cool, right? Sure it does. But it's not only cool. It's darn useful, if you ask me.

Thanks to the alpha channel you can keep all your games at the highest graphical level – it enables you to change those blocky, pixelized borders into smooth object transitions. Just take two alpha-blended objects and throw them one on another – and they'll look like they belong exactly there, like two pieces of a puzzle that really fit. It's really hard to explain with just words – bear with me for a moment, and you'll see what I mean for yourself.

Let's import a picture with an embedded alpha channel. Create a new Backdrop object, select Import and choose the "**shadow-robot.png**" file from the "images" folder. Don't mess with any of the settings – just click OK. Once that little PE67 Multi-Task Enforcer Droid is added to your Image Editor, crop the picture (CTRL+K or ) and press OK.


Now, at the Frame editor, drag the robot in front of the previously created "Welcome to Los Lavaros" sign. See what's happened? His shadow automatically adjusted its color to the underlying object. It looks like both the robot



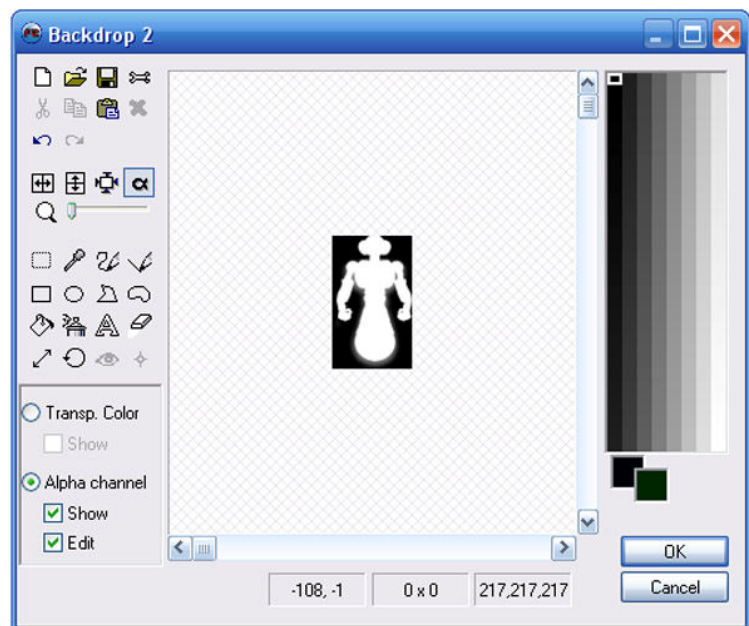
and the sign are a single picture, cleverly connected in Photoshop. The truth is that they are two totally separate objects, which you could control on runtime, ordering them to move into two separate directions (the only thing to remember here is that to do so they should be Active objects, not Backdrops, to be able to move). Ain't that wicked?

Yeah, yeah, I know. Some of you have already asked themselves "what the heck is he so excited about? This ain't no revolutionary stuff"... Well, to me IT IS. I wouldn't exchange the ability to use alpha-channels for any other thing in the clickiverse! As Darth "I need a mint" Vader once said: "The ability to destroy a planet is insignificant next to the power of the alpha-channels". You won't argue with Vader, right? And don't try to tell me that you can do the same with transparency – because you can't. Transparency adds another color to your palette – the transparent one – and let's you decide whether the chosen pixel should be visible or not (1 or 0). The alpha channel gives you the possibility to decide how much visible should it be – and it preserves the original color, so you can experiment as much as you want without the fear that all the goblins in your game will eventually have huge blank spots instead of eyes.

Alpha channels – with all the smooth transitions, cool shadows, stars, lights and other stuff I use them for – give me the possibility to make my games the way I want them to be. To look exactly as I want them to look. To... Oh, never mind, you get the picture. Bottom-line: using alpha-blended images makes you more popular, solves digestive disorders and turns the world into a truly happy place.

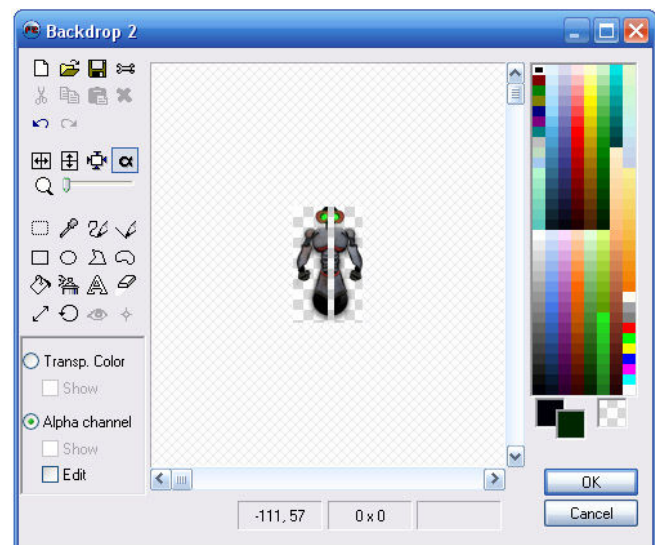
Oh, before we move on... There's still one thing about the alpha-blending I haven't told ya', cadet. You still have to learn how to edit the alpha channel without the necessity to alter your image outside of MMF2. So... Right-click on our robot and select Edit. Once you're in the Image Editor, press "Y" on your keyboard or click on this button:  - now you can alter the settings to Show and Edit the alpha channel in your Picture Editor. Check both boxes on.

Woah! What just happened?! Our joyful, colorful robot turned into a black & white mess! Oh, let's not panic. This is supposed to look like this. The alpha channel is basically an additional layer added to your image – it can use 256 shades of gray, white and black to determine how much transparency should be added to the specific pixel. The darker the alpha-channel is “behind” the given pixel, the more see-through it becomes. Check out the image



to the right – the black areas are entirely (100%) transparent. The white areas are fully solid, oblique, without any transparency. Between them you can catch a glimpse of a few pixels displayed in different variants of grey – these little rectangles make sure that our robot has smooth borders, that he composes nicely with any object that we put behind him.

Let's see how it works, shall we? Select the Line tool, set it's size to 5 and choose the darkest color in your palette. Now draw a line directly from the top to the bottom of the robot, right through the middle. Once your done, select the Transparency tool again and uncheck both the Show alpha channel and Edit alpha channel boxes. Woah! What happened here? Seems that our robot just lost a few pounds... He's sliced in half! But... Actually, he didn't loose



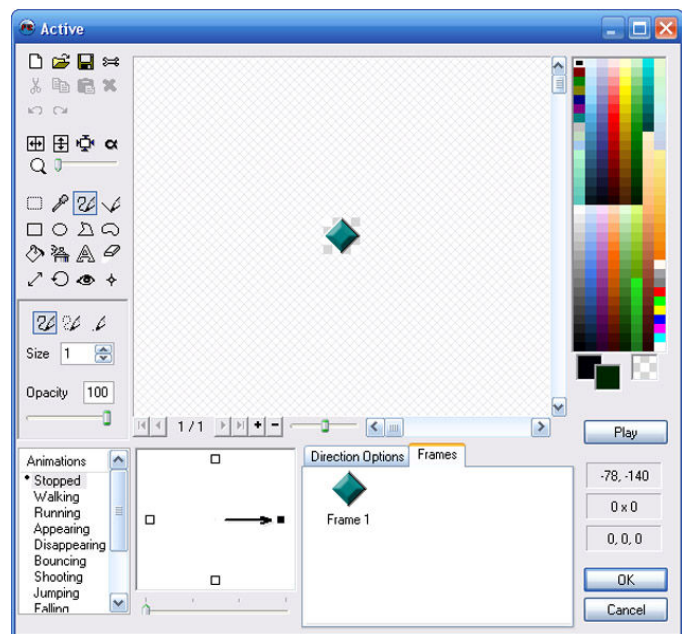
anything. You haven't erased those pixels – they're still there, they're just invisible. Their transparency is set to maximum, so you cannot see them right now – but all you need to do to bring them back is to go back to the alpha channel mode and replace that black line with a white one. And – voila! – our Droid will go back to the way he was before the “pixel surgery”.

Once you're done admiring your slice-work, just click “Cancel” to return to the Frame Editor.

Importing animations

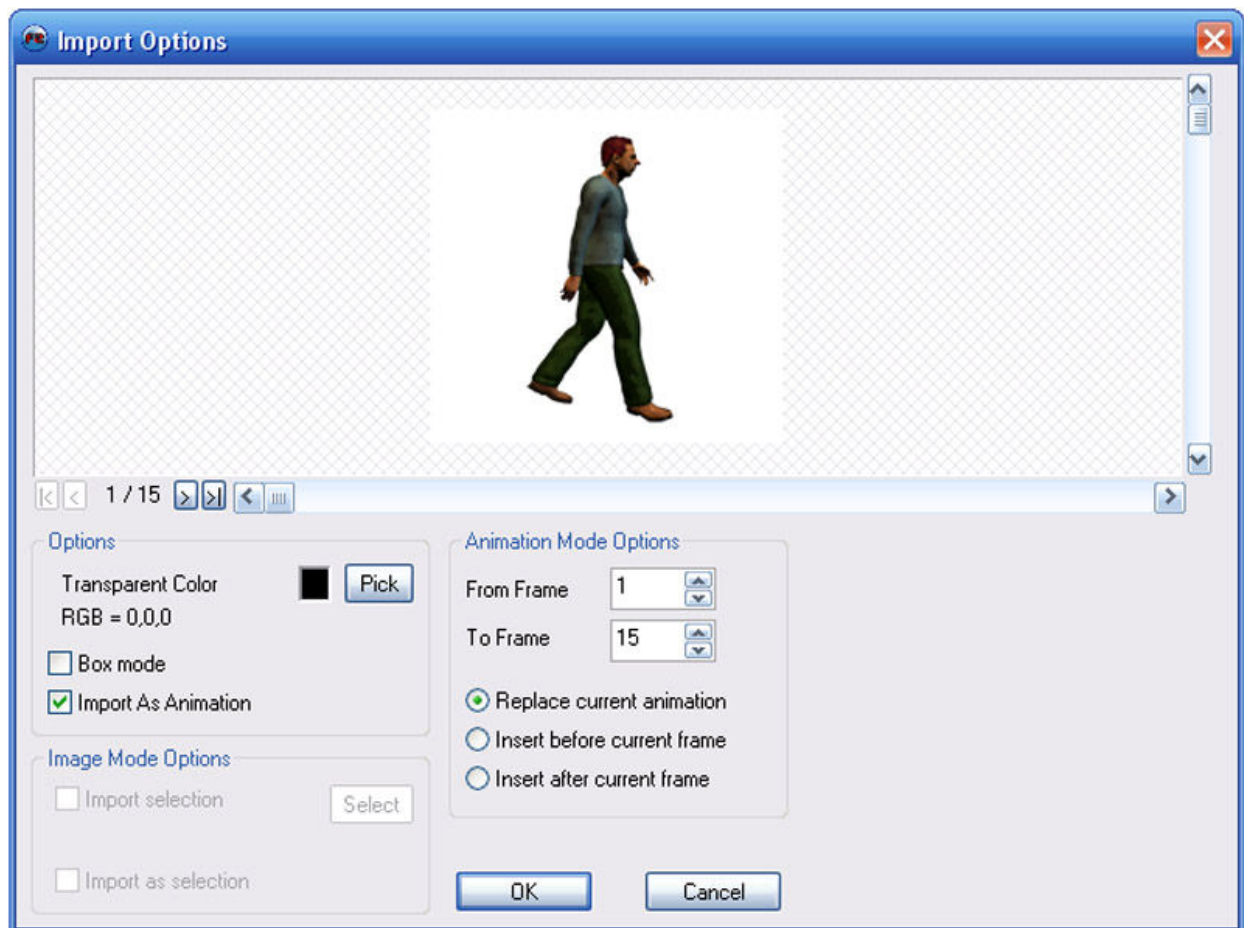
OK, so we know a thing or two about importing both normal images and alpha-blended ones... But what about animations? There are two basic ways to easily import a full animation into MMF2. The first one is by using the aforementioned **Box mode** – but you have to make sure that all the frames are stored in a single file, divided into rectangular cells. It's a lot easier (at least for me) to use the **Import As Animation** option, which enables you to quickly create a fully animated object from a series of sprites stored in different files.

Let's see how it works. Create a new **Active object** (yup, we want it to be animated, so we need an Active, not a Backdrop) and open it up. Notice how it looks different from the Image Editor we worked with earlier, while modifying Backdrop objects – it's a bit more complicated, since Actives are more complex than Backdrops. You can move them around, control them on runtime, you can specify different directions of animations, animation speed and that kind of stuff.



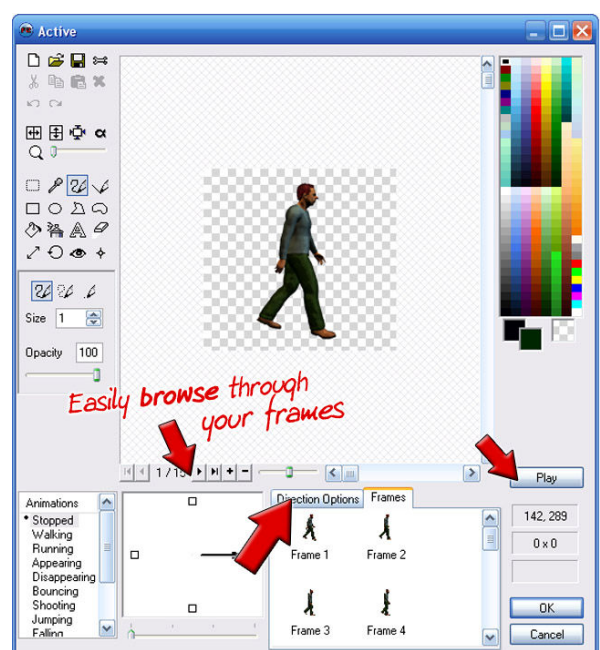
One of the most important things to remember is that a single animation consists of **multiple frames**, sprites – in other words: something similar to the Backdrop object. You can edit each and every one of them in the same manner as we did before. Yup, it can be pretty constructive to remember this: that scary thing called “animation” is just a series of individual images played really fast, something similar to a flip-book – that little thingie often drawn in your notebook's corner on boring classes. If image A differs from image B, human eye sees the difference and let's your brain now that something just moved.

Gah, I'm once again getting lost in multiple anecdotes and utterly unimportant information. Let's just import the animation, shall we? Click on the **Import** button (or press CTRL+O). Browse right into the **animation** subdirectory (it should be inside the **images** folder, you know where to look), then choose “**walk001.png**”. Now, in the Import Options window, select the **Import As Animation** check box. Notice how the “Animation Mode Options” area becomes active, enabling you to import 15 frames of animation at once.



You can now select what to do with your animation – you can specify the start-frame and end-frame, you can set it to the replace current frames of the object, or insert the new ones. As for now – just leave all these settings unchanged and click OK.

Take a look at your Image Editor – notice that you have successfully imported all of the frames we wanted in our game. You can press the **Play** button to test how your animation looks like. Do that now and... Woah, something's wrong, right? He stops walking after a second or two, and I'm pretty sure we want him to continue walking until we say to stop! No problemo, just open up the **Direction Options** tab (check out the image to the right for some visual guidance) and make sure that the **Loop** check box is set. Push Play again – and it works!




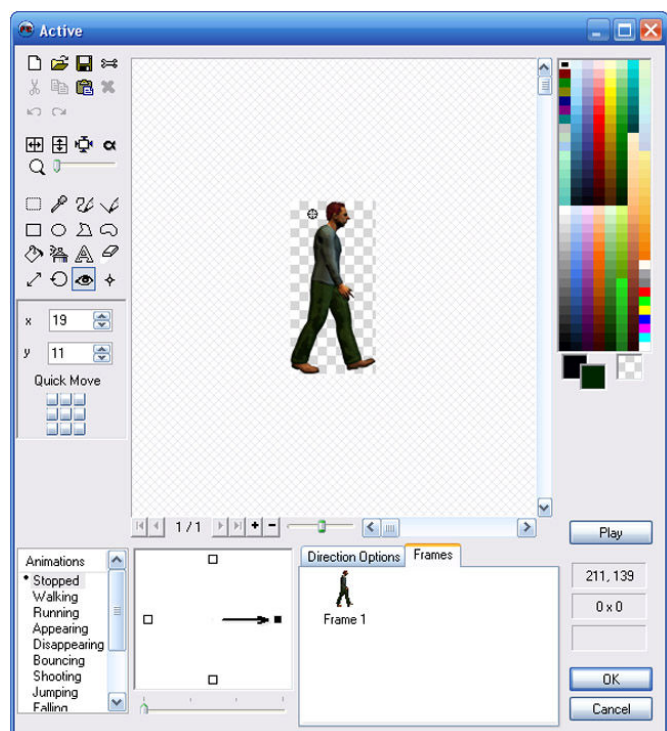


Everything looks nice, right? But there's still stuff to do before jumping on to the next item on our list. Firstly, notice that there's some blank space around every frame of our walking animation – and we surely don't want it there. Now, now, now... What should we do with it?

The answer is pretty obvious – we should **crop it**. But browsing through 15 frames of animation and pushing the Crop button in each and every one of them seems pretty mind-numbing, right? Have no fear! Clickteam thought about this too – and all you have to do is to hold the **SHIFT** key on your keyboard while clicking on the **Crop** button in the first frame. And – voila! – it's done. MMF2 automatically crops all the blank areas from every frame of our animation.

Last thing to do before wandering off – let's have a tiny talk about **Hot spots** and **Action points**. This is gonna' be pretty simple, so don't worry, It'll only take a sec. What the heck are these thingies? Well, as far as a **Hot spot** of an image is concerned – it's simple the point (pixel) which corresponds to the X and Y coordinates in your frame. It's the "anchor point", the precise spot on which your object "hangs" in virtual reality. You can easily change the position of your hot spot by selecting the **View hot spot** option (press "H" on your keyboard or click on this

button: ) and then clicking somewhere on your image. If you'll hold the ALT key when doing that – you'll change the hot spot in every each one of your animation frames.



As for the **Action point** – it's the exact pixel-position where an action occurs. For example: if we're editing an image of a shooting cop, it would be best to position his AP at the barrel of his gun – 'cause when you're gonna' pump some life into him via the Event editor, all his bullets are going to be created in the exact coordinates of the Action point you specified.

OK, that's that. You've learned all the basics you need to start working on your own graphics in Multimedia Fusion 2! OK, cadet! Go ahead and make me proud!

Homework

Yup, that's right. There's some homework for ya'! No, I'm not joking! And no, sure it's not obligatory... But always do remember: practice makes perfect! Here's a short list of thingies I want you to create... When you're done, you can send them to me, to my e-mail address, or you can just save them at your hard drive – you never know what might come in handy in some of your future projects.

- Draw something futuristic, by using MMF2's Image Editor only. It can be a starship, it can be some sort of a space-colony building, it can be an alien, a laser gun, a robot... Something – an object or a creature – from the future!
- Create a sign that says "No trespassing" by using MMF2's IE only – use the Text tool and some fancy fonts that you can find scattered all around the internet.
- Try to create some sort of a short animation. Yeah, I know, this is a real challenge, so don't worry if it's a bit too difficult for ya'. Start with some basic shape and object, then clone your first frame and slightly modify it. For example: draw a tree, clone it, change it a bit in the second frame, so that it looks like the wind is bending it vaguely. Try to keep your animation between 5 and 15 frames.

Thanks for your time and see you again soon!

Cheers!

Koobare
marchewkowy@gmail.com

*If you have any questions, suggestions or just need help –
mail me at marchewkowy@gmail.com*

You have been reading...

*Koobare's
little guide to the*
IMAGE
editor



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whatshisname

Created for Multimedia Fusion 2 & Multimedia Fusion 2: Developer

Always be sure to have your MMF2 up-to-date!