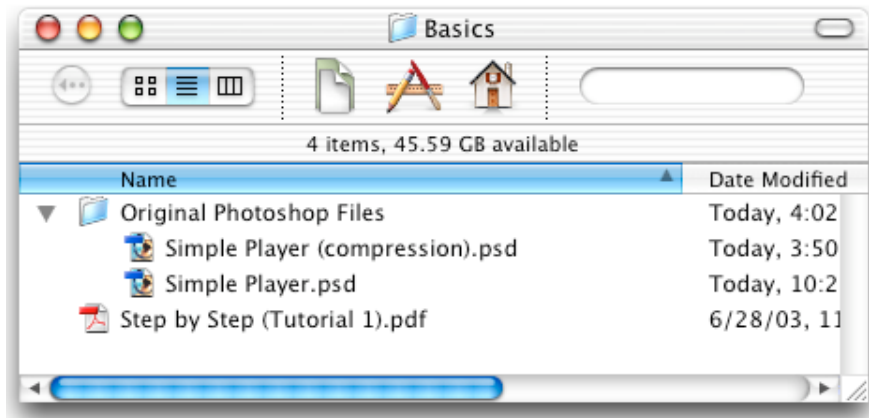


ImageLayer

Tutorial 1: Basics

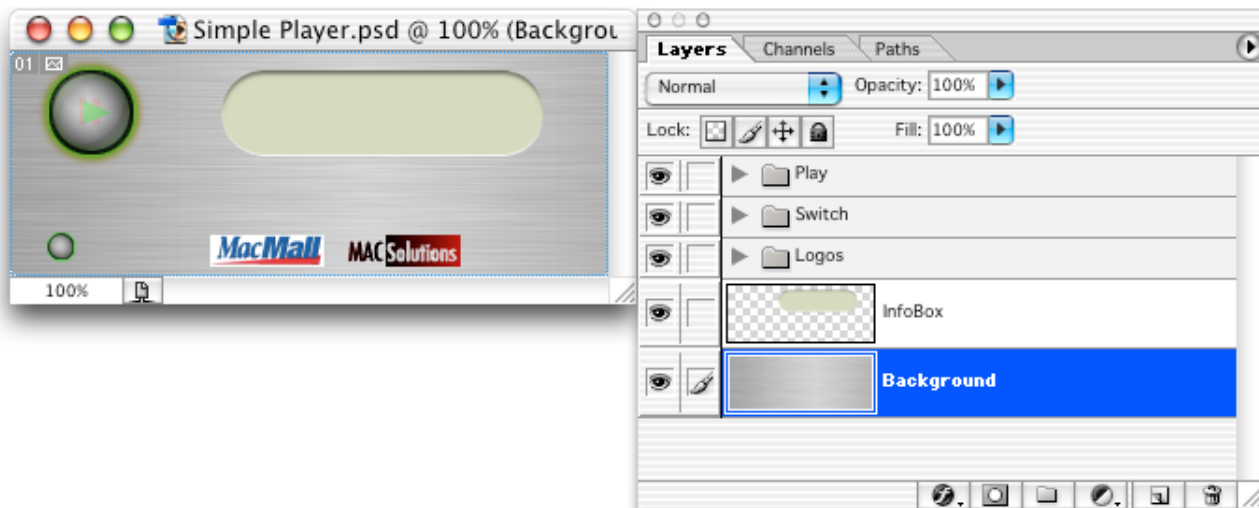
Doc version 1.0

Description:



Step 1: After downloading from our website the Tutorial you will get this folder on MacOSX.

Step 2: Now go to the folder Original Photoshop Files and open the Simple Player.psd in Photoshop, and analyze the document. You will notice that there are 3 layer sets created (Play, Switch and Logos) and it contains 2 regular layers (InfoBox and Background).



We will now go through every aspect of the Photoshop document and the way ImageLayer imports it.

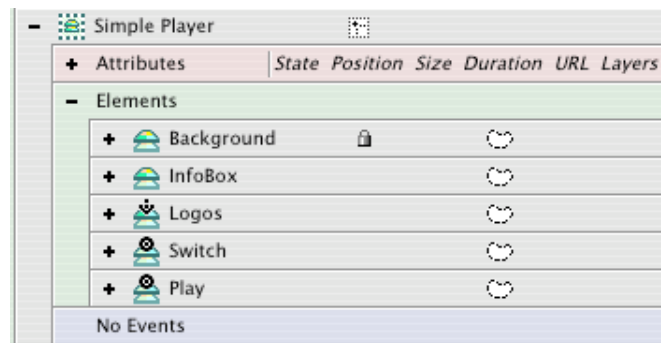
Step 3: Open up iShell Editor 3.0 (or later) and create a new project.

Step 4: Move the Simple Player.psd document to the Media folder of your new iShell Project.

Step 5: Go back to iShell and open the main.xd file from the **media palette** and drop the Simple Player.psd from the Media Palette in the main.xd file. Now you can analyze what the ImageLayer element has created.



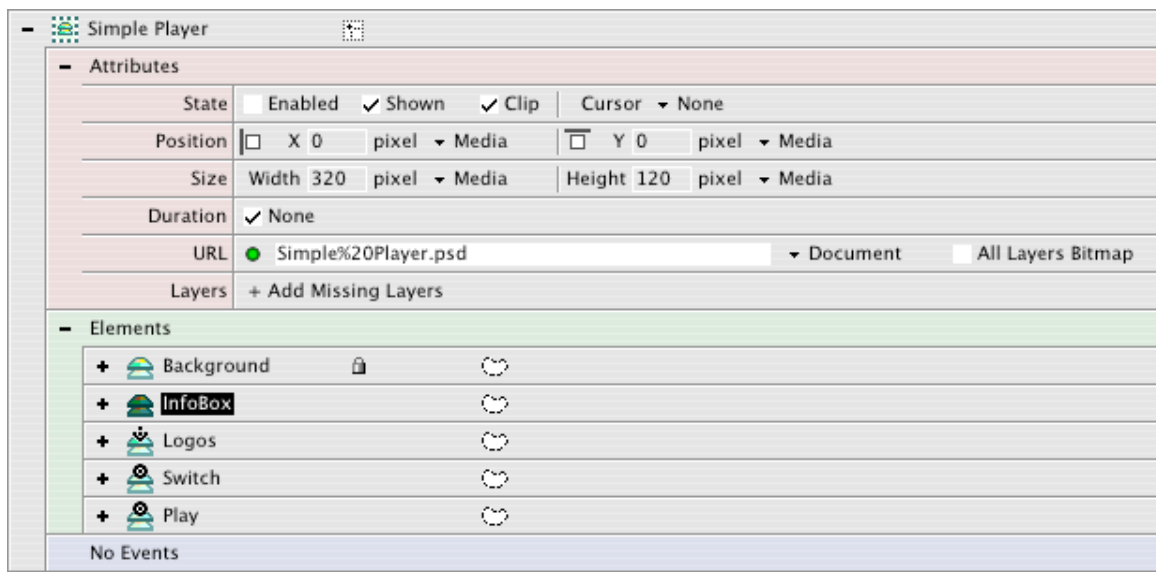
Layout View



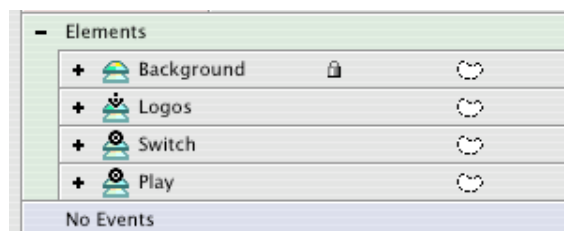
Programming View

If you look in the Programming View, click on the + in front of Simple Player, and then unfold in the same way its elements. You will notice that the names appears in the reverse order, that's because iShell draws items from the top down, instead of Photoshop draws its layer from the Bottom Up. Also you will notice that there is only one logo being drawn but we will come back to this later. The Background layer has a **Lock** symbol next to its name! Also the different elements have different icons. Simple Player: **ImageLayer Box** element icon, Background has the **Standard ImageLayer** Icon, Logos has the **Flipbook Button** icon and Switch has the **Advanced Button** icon. All that will be explained in more detail during this tutorial.

Step 6: Open up the Simple Player attributes:



The element has the width and height of the Photoshop document. Also **Clip** state is being turned on, this is normal because Photoshop does the same thing when layers are bigger then the actual document size they are being clipped visually (see later for how to turn this off by default). Behind the URL name there is something new **all layers bitmap**. With a standard Image element in iShell you also have the **bitmap** option, so look in the iShell documentation for a more detailed explanation. But in short, bitmaps uses more memory but draws faster. You should turn this option on in case you know all ImageLayer elements for the URL Simple Player.psd will be used as bitmaps. Because with this option turned on ImageLayer will load them faster and uses less memory. There is also a new attribute **Layers** which has a button + **Add Missing Layers**. To demonstrate this, select the element **InfoBox** and hit delete key to remove it:



Now hit the + **Add Missing Layers** button, you will notice that ImageLayer will add the removed layer **InfoBox** back into the elements list at the right order.

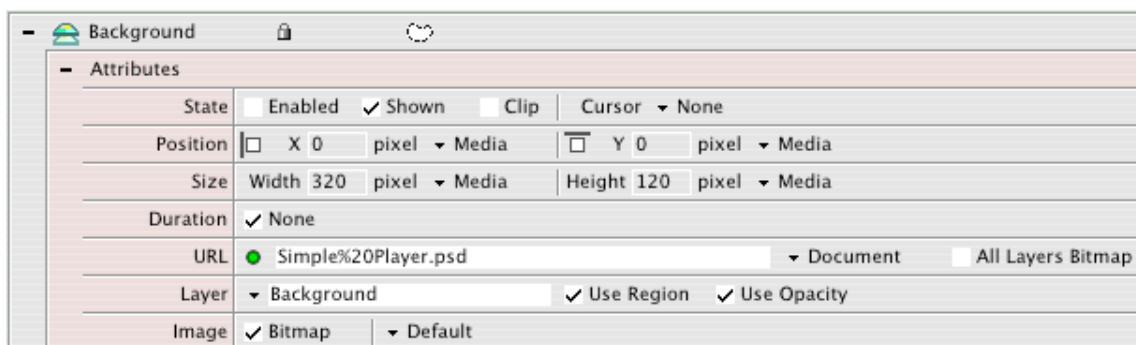


This feature is really handy when you are prototyping, when you add constantly layers or layer sets to your Photoshop document and you also need to bring them to iShell. Just click on the + **Add Missing Layers**

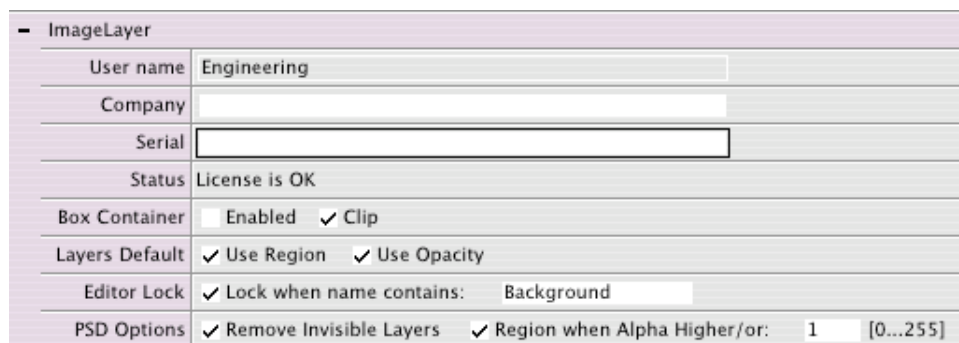
and they will be added. ImageLayer does **not** do this automatically because it can be the designer's intent to remove certain layers. But when a Layer is being placed in your iShell document, the data of that particular layer will be automatically synchronized. (See tutorial 2). One remark: layers being added to a layer set **are** being added automatically to iShell if that layer set is on screen!! There is a big difference between a regular layer and a layer that's part of a layer set. So layer sets can be used as a way to dynamically add visual layers. But to understand this better see a little bit later in the explanation of Logos layer set.

You are also allowed to place any of the ImageLayer element outside it's container **ImageLayer Box** element (in our example Simple Player element). But we think it is more practical to keep everything more grouped together.

Step 7: Let's open up now the attributes of the Background element:



You will notice that **Enabled** is turned off and that also it has the iShell Editor **lock** symbol behind it's name. I refer you to the iShell 3 documentation to have more information on this **lock** feature. But it just prevents you from selecting the element when you are in the iShell Editor Layout view. So in our case it will select the Simple Player element and this is helpful because you can drag around then the entire Photoshop document and its elements. So how does ImageLayer know that the Background layer needs to be treated special? Open up the iShell Editor **Preferences** and look at the ImageLayer section:

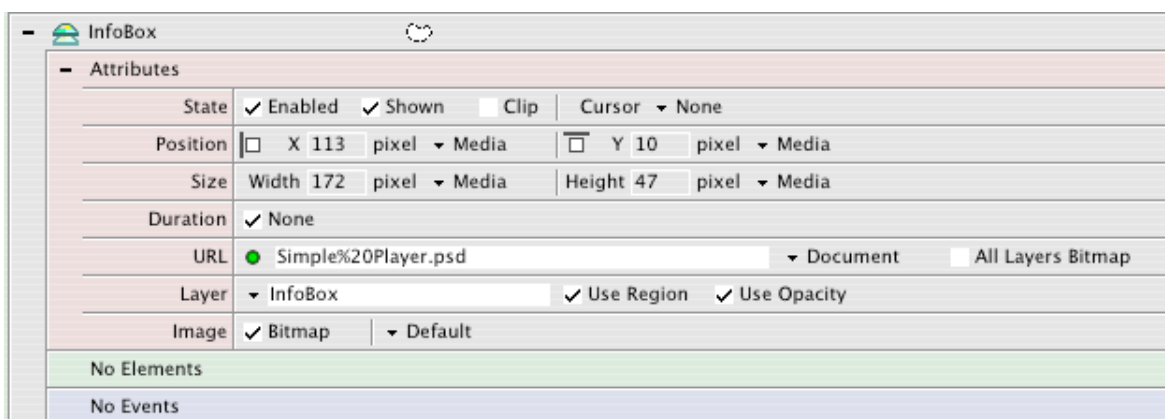


Editor Lock: is responsible for this, so when your layer contains the word Background it will see them really as a background image (non clickable item, so no button, etc...) Indeed in this case the **Enabled** state doesn't need to be turned on. So to be clear My Background layer, Background, The Background will all be recognized for Editor Lock, but not background Layer because the matching is case sensitive!

Also the **Box Container** default state values are available in the preferences so you can set them at your own personal choice. Same thing for Layers default values.

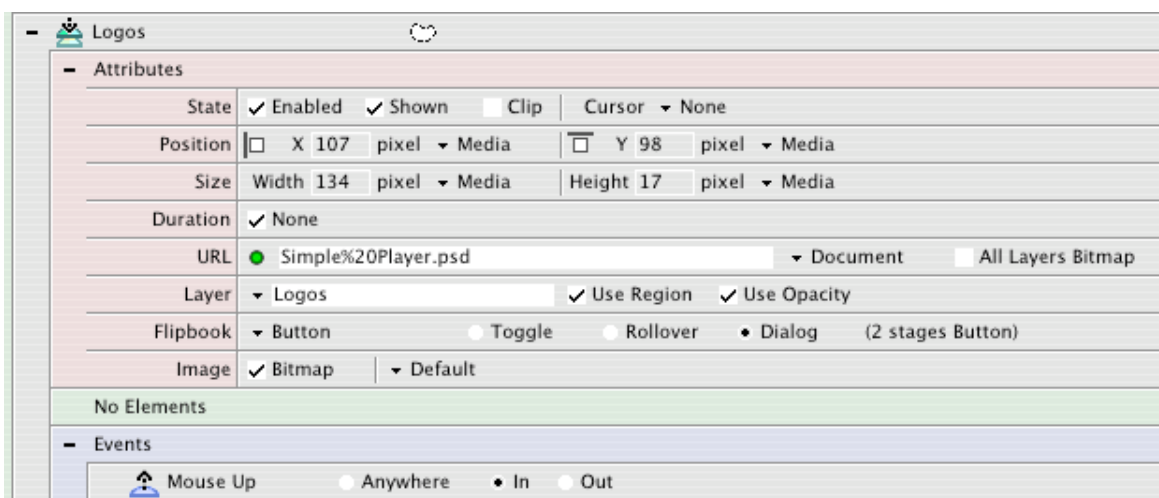
If we go back to our **Background** element in the `main.xd` file we notice a new attribute **Layer**. Here you specify which layer you want to display. The popup menu contains all the layers names (of first level) + layer sets. The **Use Region** attribute is mainly being used for buttons. It determines that the region of this element is being retrieved from the Photoshop layer (In case of an Advanced button this can be multiple layers). **Use Opacity**, if turned on will draw the layer with the opacity value that is being set in Photoshop.

Step 8: Let's open up now the attributes of the **InfoBox** element:

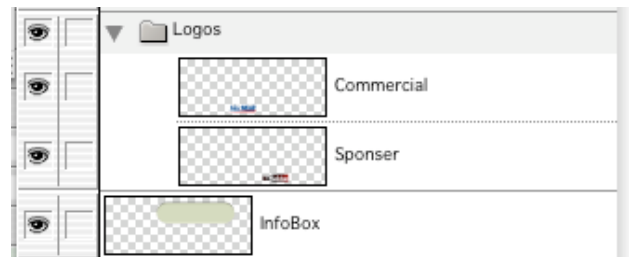


It looks similar to our **Background** element. Notice that the **X** and **Y** position are being set to the values of your Photoshop document. This is because we set the Positioning type by default to **Media** which is a new type of positioning that we introduced for **ImageLayer**. If you want to position the element your self just move it around in the **layout window** and you will see the positioning type being changed to **custom**. But from that moment on, changing it in Photoshop won't update it automatically in iShell! (More on this in Tutorial 2)

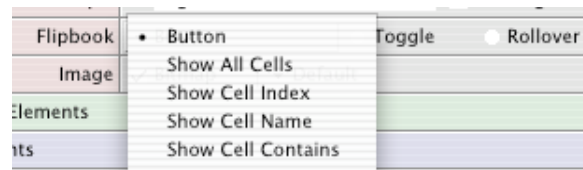
Step 9: Let's open up now the attributes of the **Logos** element:



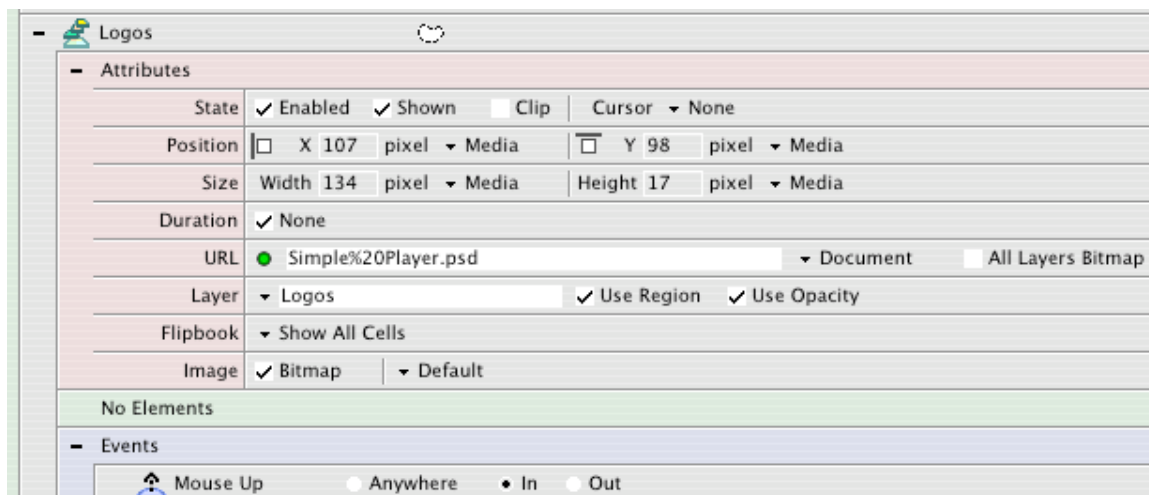
It has one extra Attribute line: **Flipbook**. This allows you to control the flipbook options. The reason why this element is a flipbook is that if you look into the Photoshop document, you will see that it is a layer set and contains 2 layers:



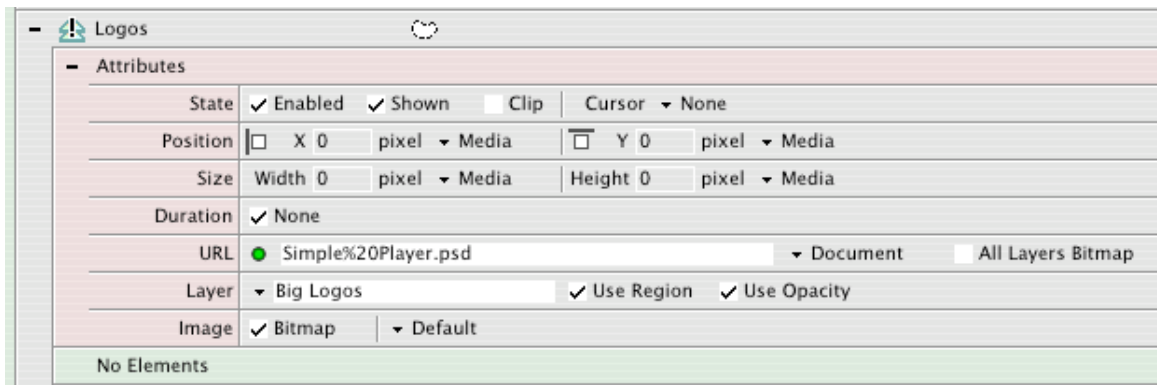
But currently only one of them is visible, that is because when a flipbook has 2 cells we automatically set it's flipbook type to Button (the standard iShell Flipbook button) that was being introduced in iShell 3. Because it is being recognized as a Button, ImageLayer automatically adds the **Mouse Up** event. By looking at the Flipbook types:



We want to choose the type **Show All Cells**, this flipbook type will display all cells of the flipbook.



This also changes the Icon of the layer element to the **ImageLayer Standard Flipbook** icon. There is one more icon where we haven't talked about yet and that is the **ImageLayer Error Layer** icon. Change the name Logos to Big Logos:

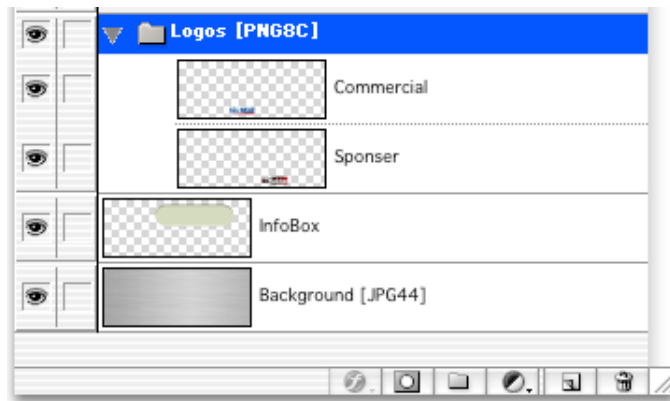


Nothing will be displayed for that element. It is the same as in standard Image iShell element when you enter an URL that doesn't exist. You also notice that it removed the **Flipbook** attributes. Because it is not longer being considered as a flipbook. Put the name `Logos` back, you will notice that ImageLayer remembers it's previous settings and it is right back to **Show All Cells** for flipbook type.

Step 10: We will not discuss the elements `Play` and `Switch`, this will be done in more detail in Tutorial 3, Advanced Buttons. If you look at flipbook type popup menu that it has an extra flipbook type **Advanced Button**.

Step 11: There is one more item we want to discuss in this tutorial. The `.mvo` file. Take the `Simple Player.psd` document and drop it on top of **ImageLayer Tool** application that came with your ImageLayer plugin.. Now you want to replace the **Simple Player.PSD** url with the `.mvo` file. But there is an easy trick to do that. Go to `Simple Player ImageLayer Box` element in the `main.xd` file and drag the `Simple Player.mvo` from the Media Palette right in the URL editable textbox. You will see that not only the URL of the `Simple Player` element will be updated but also for all the elements that are inside this `Simple Player` element. This is because it's direct sub-element, it also happen to have the same `Simple Player.psd` URL. For those that would have a different URL, no changes will taken effect. Also this trick works in the same way during iShell Runtime, by using the `switch` or `browse` command on the `Simple Player ImageLayer Box` element . This is really handy because in case you did a lot of interactive programming for your ImageLayer elements and then suddenly realize that you want to use the `.mvo` file you can easily change the URL without redoing all the programming or modifying the URL for each of the elements by yourself. Another reason why you should keep your layers elements just under the ImageLayer Box element.

Step 12: You notice that `.mvo` file is smaller then the Photoshop document but there is a way to make it even smaller. We store the layers bitmap data in PNG 32, which means no compression at all. Normally in your multimedia title, you use formats like PNG for more computer generated graphics and JPG for more for photo quality like material. We prepared a second Photoshop document:



We added behind the name `Background` the following text `[JPG44]`. The `[` means start of ImageLayer options and `]` the end of it. ImageLayer Options will not appear in the layer name in iShell, they are just ignored visually. In this case `JPG44` means JPEG format at 44 percent quality. For layer set you don't have to specify the compression settings for each layer, just add the format options to the layer set name. In our example `Logos` has been changed to `Logos [PNG8C]`, which means PNG at 8-bit color. Drop the PSD file again on the **ImageLayer Tool**, and you see that file is now instead of 60Kbytes only 40 Kbytes. For the complete list of ImageLayer options and compressing settings consult the reference manual.

Also for certain layers or layer sets you can add the `[NO_REGION]` ImageLayer option in case you don't need a region for them. Tutorial 3 will go deeper in this subject. But here the `Background` layer is a candidate.

What have we learned in this tutorial:

- How ImageLayer imports a PSD file
- Preferences settings for locking Photoshop layers.
- The different type of ImageLayer elements (Flipbook, Standard Layer, ImageLayer Box, Advanced Button, Flipbook Button and Error Layer)
- How to make a .mvo file
- How to create a more optimized ImageLayer document.