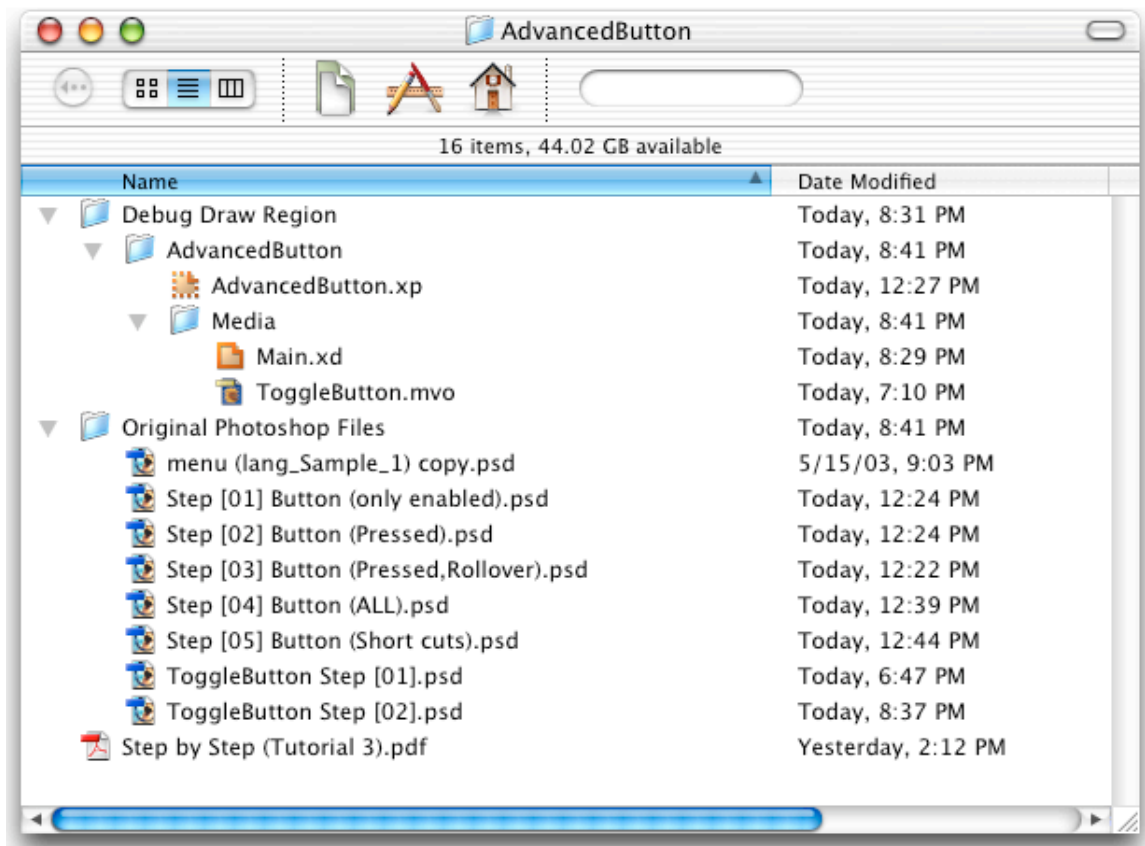


ImageLayer

Tutorial 3: Advanced Button

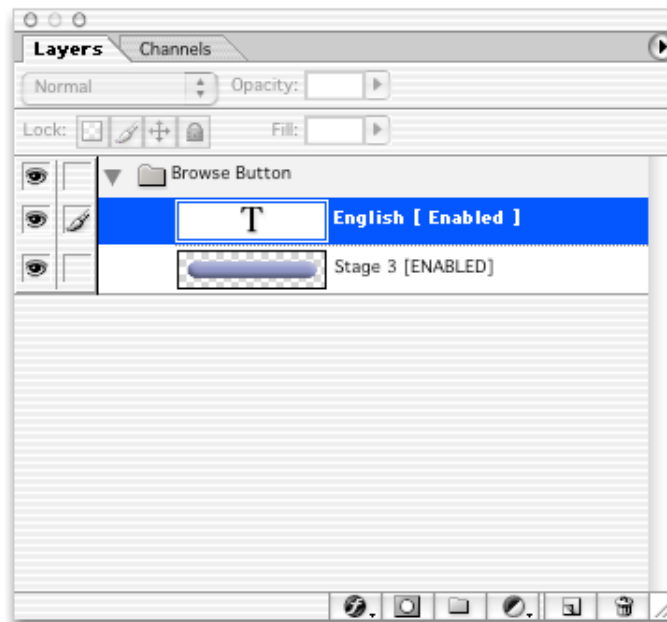
Doc version 1.0

Description:



Step 1: After downloading from our website the Tutorial you will get this folder on MacOSX. In this tutorial we will explain you how to create ImageLayer Advanced Buttons. Advanced Buttons are based on the ImageLayer more advanced Flipbooks. ImageLayer allows you to control the visibility of all cells, not just one cell, like with standard iShell. With Advanced Buttons your able to build Buttons completely in Photoshop. A button can have different states: **Disabled** (when the button is not active), **Enabled** (the state where the button is active and ready to receive some mouse activity), **Rollover** (when you move the mouse cursor over the button) and **Pressed** (when you press the mouse button on top of the button).

Step 2: Now go to the folder Original Photoshop Files and open the Step [01] Button (only enabled).psd in Photoshop.

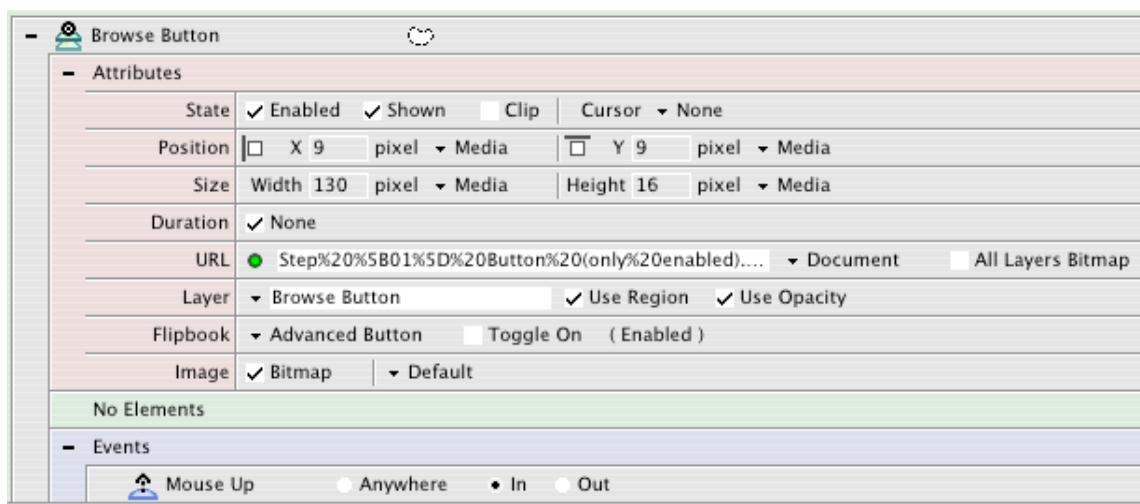


This Photoshop file contains a layer set name with Browse Button and contains 2 layers, but as you see there is an ImageLayer Option being specified **[Enabled]** in the layer name. This will specify that the layers are being used for the **Enabled** state of the advanced button.

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

Step 4: Move the Step [01] Button (only enabled).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 Step [01] Button (only enabled).psd from the Media Palette in the main.xd file. Now you can analyze what the ImageLayer element has created:

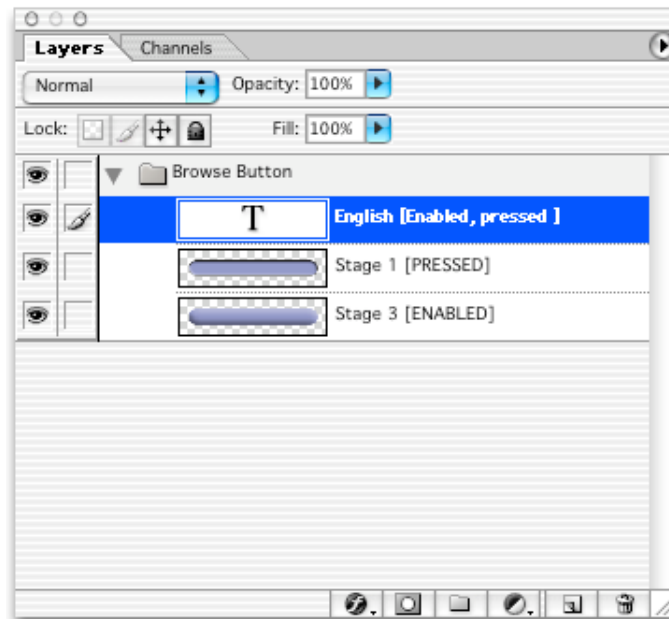


Programming View

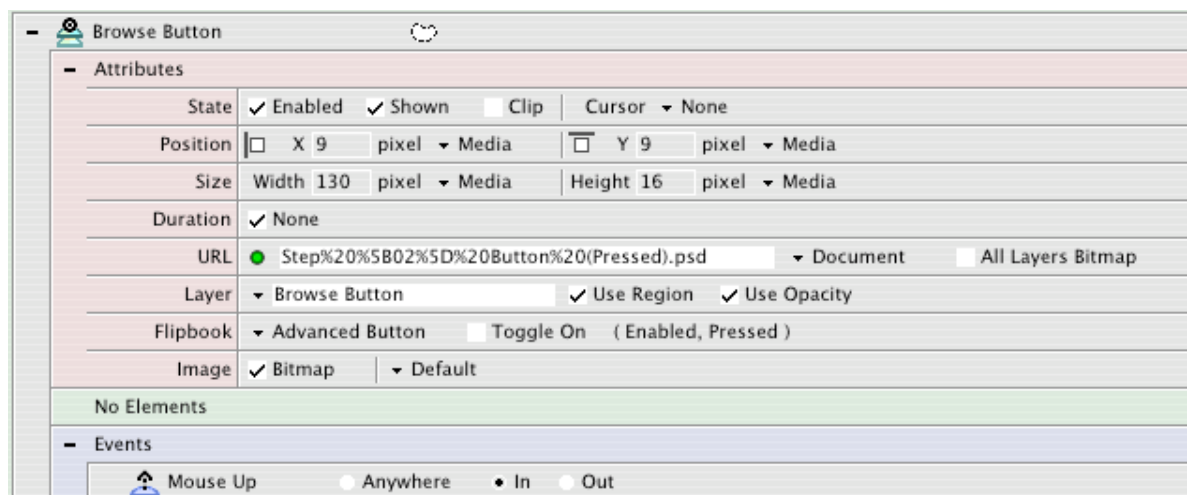
You notice that the Browse Button has the **Advanced Button** icon. Also the **Flipbook** attribute is being set to Advanced Button. This **flipbook** type has extra options: **Toggle On** we will talk later about this one.

At the end, it shows between parentheses which Advanced Buttons states are being defined. In this case **Enabled**. ImageLayer automatically adds the Mouse Up event, which is of course something you probably will need anyway. Let me remind you that Advanced Button ImageLayer element is in any means a standard iShell Element, so you can add other events like Mouse Down, Mouse Leave, Mouse Enter etc... If you want to do other extra actions during these Mouse events. But a button with just one state is a little bit boring so let's add some extra Layers to have more states:

Step 6: Open up the Photoshop document Step [02] Button (Pressed).psd:



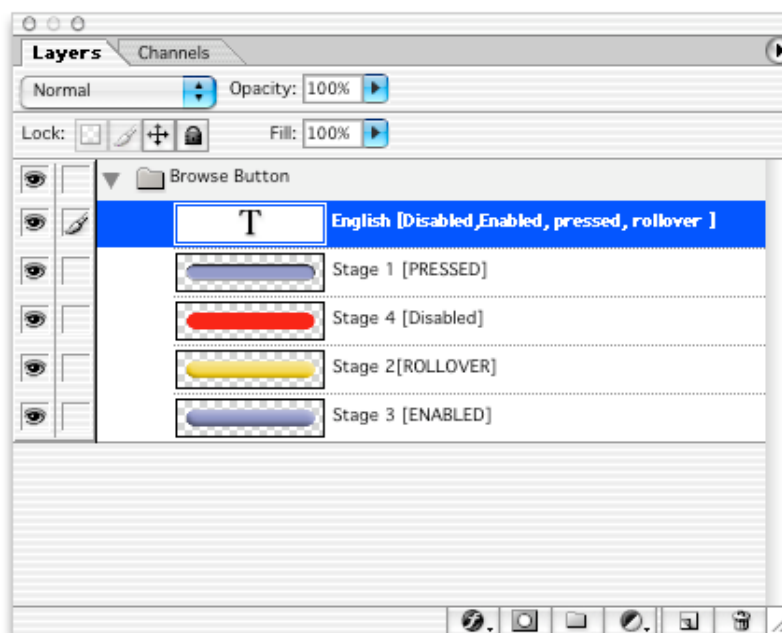
In this document we added an extra layer and gave him the ImageLayer Option **[Pressed]**. So let's go back now to iShell and drop the new Photoshop document on our main.xd file. (make sure you remove the other one from the main.xd file).



As you notice in the **Flipbook** Attribute section, **Pressed** is being added to the button states description. So now let's test this button in the iShell Runtime. (Command-T or Control-T on Windows). You see that during roll over the Enabled state is shown. Also if you turn **Enabled** checkbox off in State Attribute, you will see that again the **Enabled** Layers are shown. As you probably realize by now, that the enabled layers are being used in case one of the other button states is missing. If you press now on the iShell Button you see the other layers appearing. If you look back at the Photoshop file, you notice that the Photoshop layer **English** is part of the **Enabled** state and the **Pressed**. Yes this is possible a layer can be used in any Button state

Step 7: Open up the Photoshop document **Step [03] Button (Pressed,Rollover).psd**:

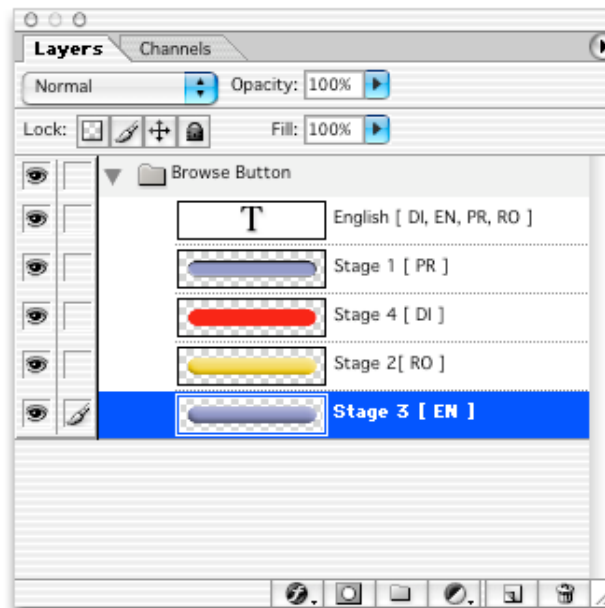
In this Photoshop document we added the **Rollover** state. Again bring this document inside iShell and try it out. The Layer **English**, now also has **rollover** state.



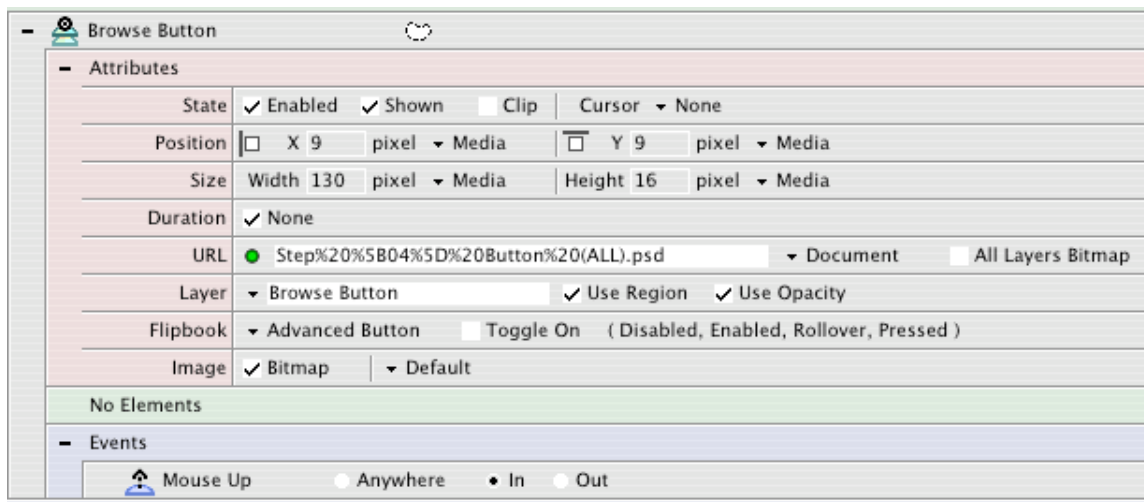
Step 8: Open up the Photoshop document **Step [04] Button (ALL).psd**:

In this Photoshop document we added the **disabled** state, this state is being used when you turn of the **Enabled** checkbox in iShell **State** attribute section. So try it out.

Step 9: Open up the Photoshop document **Step [05] Button (Short cuts).psd**:

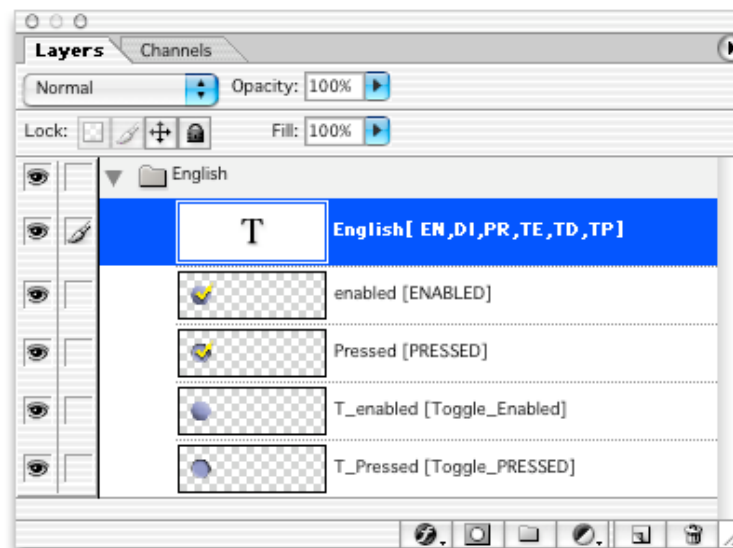


This latest Photoshop document isn't different from the previous one except that we used shortcut specifications for the buttons states, just take the first 2 letters of each state for the short cut: Enabled (**EN**), Disabled (**DI**), Pressed(**PR**), Rollover(**RO**). Remark: The ImageLayer options are case insensitive, so En, EN, en, eN, will all be recognized as **Enabled** button state.



If you take this last Photoshop file in iShell you see that behind the **Toggle On** option, all the Button states names appear this time.

Step 10: Open up the Photoshop document ToggleButton Step [01].psd:



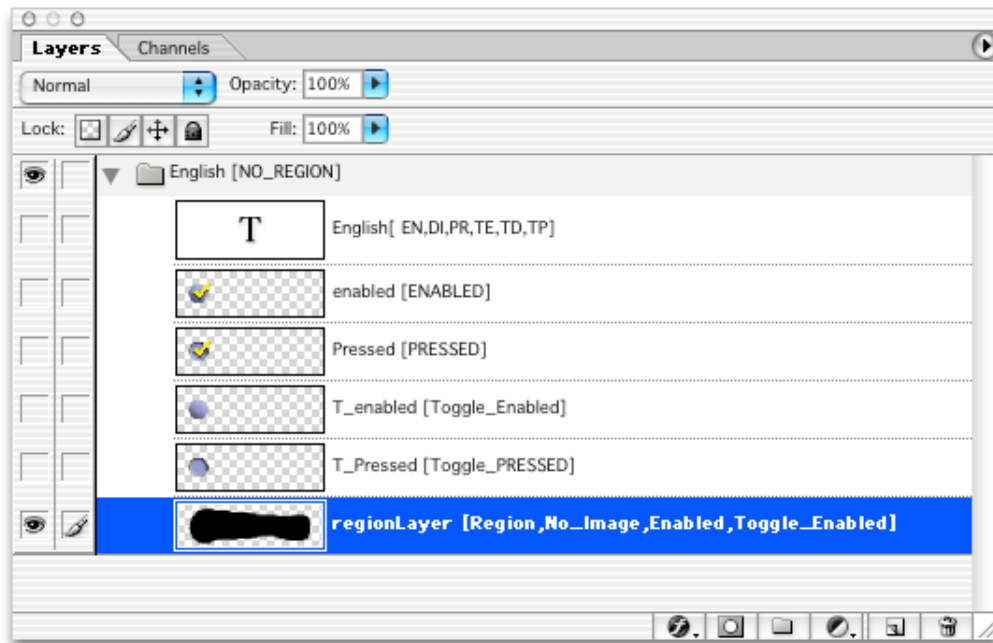
The previous sample was all about making a simple button to work, but ImageLayer goes further it also add support for making a Toggle button. Examples of Toggle button is: Check Box or a Radio Button. As you probably see by this Photoshop sample there are new ImageLayer options: Toggle_Enabled (**TE**), Toggle_Disabled (**TD**), Toggle_Rollover (**TR**), Toggle_Pressed (**TP**). Also we have defined short cuts for these commands, which are the 2 letters in bold.

Again drop the Photoshop document inside the main.xd file to try it out. Maybe you notice that clicking on the word English only works when you really click on the black part of the words English, when you click between letters it won't see it as clicking in the button. To demonstrate this we included a project that shows the Region of the button. ImageLayer Advanced Button mouse region is automatically being created by combining all the regions of regular states (Enabled, disabled, rollover, pressed) and the same thing we do for the Toggle part (Toggle_Enabled, Toggle_Disabled, Toggle_Rollover, Toggle_Pressed). To demonstrate this, ImageLayer Attribute for an ImageLayer elements allows you to show the region of the button instead of the Images. To do this, do the following: Turn **Clip** on in the iShell State Attribute section. Then add and Event Loaded and add a command Set Attribute (IL Debug Draw Region) and turn it on True. We added a sample project in the **Debug Draw Region** folder that demonstrate this.



As you see there will be a black region drawn instead of the bitmaps.

Step 11: Ok, so let's now make this button better, as usual we did this already for you. So open up the Photoshop document ToggleButton Step [02].psd:



As you notice we added an extra layer, `regionLayer`. This layer contains just an alpha channelled bitmap that does a better job in describing the mouse region contour. But we need a way to tell ImageLayer that this Layer needs to be used solely for the Region. First we add `[NO_REGION]` to the Layer set name.

Options that are specified for the Layer Set are being applied by default on all of it is containing layers so layers `English`, `Enabled`, `Pressed`, `T_Enabled` and `T_Pressed` don't have region and will be ignored for region calculations. But we want to `regionLayer`, so we added **REGION** to its ImageLayer Options. The bitmap of the `regionLayer` isn't something we gonna need, so add **NO_IMAGE** so that the bitmap data will be removed. The last step we have to tell that this layer is part of button and the toggle button. We add **Enabled, Toggle_Enabled**. As see you it is not necessary to specify the other states like `Pressed`, etc.. So bring this new Photoshop file in your `main.xd` file and try it out. You notice that the button is now more sensitive for the mouse cursor as soon you come in the area of the black region your buttons works!

Also do the **Debug Draw Region** test to see what the region now is:



As you can see ImageLayer allows you to create very professional buttons, thanks to ImageLayer advanced layer control options.

What have we learned in this tutorial:

- How to design an Advanced Button
- You are not obliged to have every state of a button, Enabled state will be used for missing states.
- A layer can be part of multiple button states
- ImageLayer also supports Toggle button
- You can specify custom mouse regions for an Advanced Button.

