
ANIMATED GIFS

Animated GIFs can bring little sparkles of animation to your websites.

To see an animated GIF, click here:

www.awdsf.com/courseware/examples/animated_gif.htm

Animated GIFs work on the same principle as old school frame-by-frame animation. Every time anything changes, a *totally separate image is downloaded*. Each image is stored inside of the main animated GIF, and is downloaded one frame at a time. So, each time the animation changes, your user has to wait for *a whole new image* to download. What this means to you is that you won't be able to go too crazy making things animated. You don't want to over animate your site, anyway. It gets real annoying. Movement draws the eye. You want people to be able to look at your site without being too distracted.

That said; if you really want to use a small animation to add to user experience, go right ahead! Animation is better used when your site first opens, or on rollover buttons. Just please, please, please, please don't overdo it, okay?

Thanks. I love you, too.

Using Frames To Animate

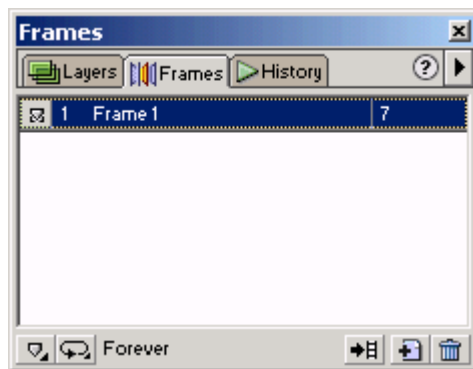
In traditional animation, artists paint pictures on frames of film. Each frame is one little picture on the filmstrip. When shown quickly one after another, animation gives the illusion of motion. Animated GIFs in Fireworks work the same way. You'll place different objects on different frames, and then play them back quickly.

Keep in mind that a *Frames Based Website*, where more than one web page is displayed at the same time, is totally different than the frames we're talking about right now. I'm sorry that the word "Frames" is being used in two different ways in web design.

Making an Animated GIF

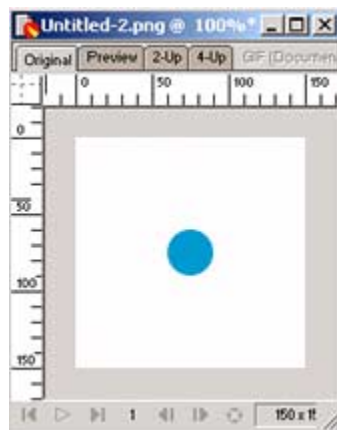
You'll use the Frames Palette to make animated GIFs.


1. Create a new image, 150 pixels by 150 pixels
2. Open the Frames Palette **WINDOW-> FRAMES**




Notice that there's only one frame, conveniently labeled "Frame 1"

3. Draw a circle in your image.



4. Add a frame by clicking the **New Frame** button on the lower left corner of the Frame Palette 

Now you'll have two Frames. Notice that your new frame is automatically selected. Clicking

the New Frame Button  automatically adds and selects a new frame to the end of the frames list.

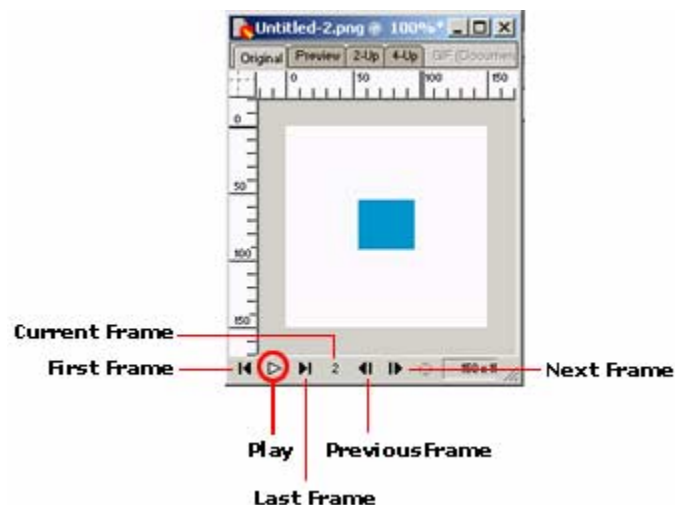
5. Draw a square in the image.

Make sure that you have Frame 2 selected on the Frames Palette. Each frame is a totally different image, and will display separately when you play the animated GIF.

You just made an animated GIF! An animated GIF is simply a collection of different frames (images) that are displayed one after another. You can click each frame and edit it separately.

To Play an Animated GIF

In the lower right corner of the image window, you'll see controls much like the ones on your CD player at home. **Click the triangle to play your animation.**




Cool, huh?

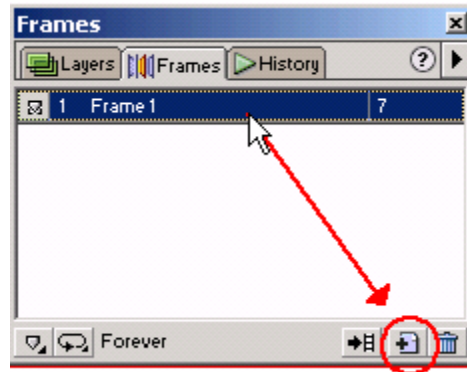
Animation, Made Easy

There are a number of cool tricks you can use to animate an image.

Copy the Current Frame and Edit the Copy

Instead of drawing a whole new frame, you can copy the current frame, and edit your new-copied frame.

To copy a frame, drag the frame you wish to copy onto the New Frame Button .



You'll get a new frame. It'll be an exact copy! Change it as you wish.

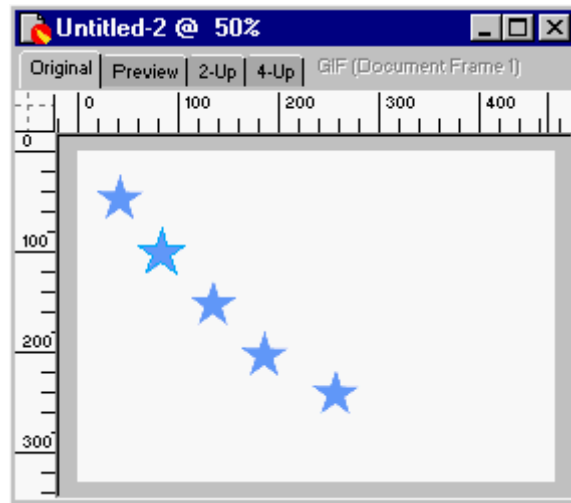
Drawing Everything On One Frame, and then Distribute Objects Across Frames

If you wanted a star to move across an image, you'd have to draw the star, copy it, create a new frame, paste on the new frame, move the star, copy the star, create a new frame paste on the new frame, ect...

That would get real old after a while.

Fireworks can help you out by doing much of the work for you.

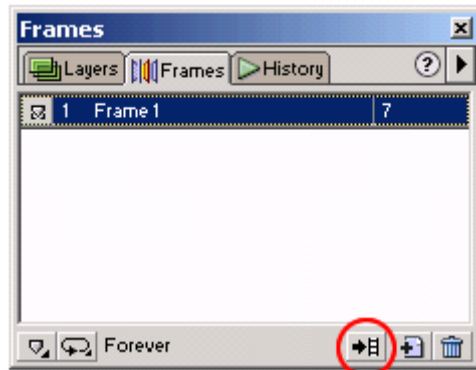
1. Create a new image, 500 x 500.
2. Draw a small star in the upper left corner.
3. Holding ALT, drag the star to copy it.
4. Copy a bunch of stars. The order in which you make them will be the order they will display on the screen, so set them up in a thoughtful fashion.



We could have drawn totally separate objects. Copying with ALT is kinda fun, though.

Now that we've got a bunch of objects on the screen, we'll place them each on a different frame.

5. Select all the stars (SHIFT+CLICK, or CTRL/CMD + A)
6. Click the **Distribute to Frames** button on the Frames Palette
The Distribute to Frames button makes a new frame for each selected object!



7. Play your animation!

You can still click each frame and edit it separately.

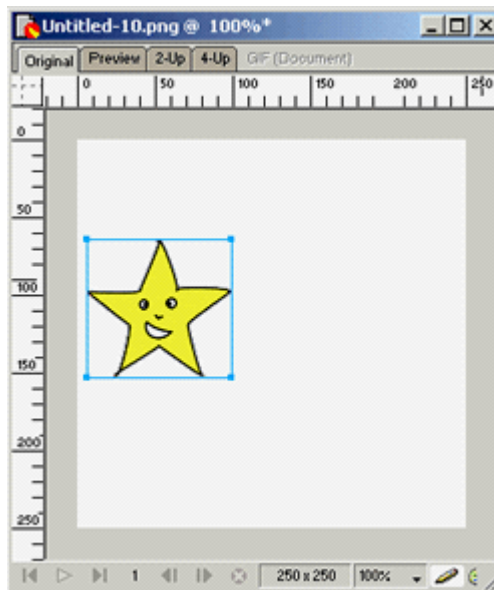
Creating Automatic Motion

You can also give Fireworks a starting point, and a finishing point, and let it do all the work. Fireworks will animate all the frames in-between.

Automatic animating will only work if you're trying to move an object, change it's color, proportionally change it's size, or fade it with opacity. You can't use automatic animation to, say, make someone smile.

Fireworks makes animation like this easy.

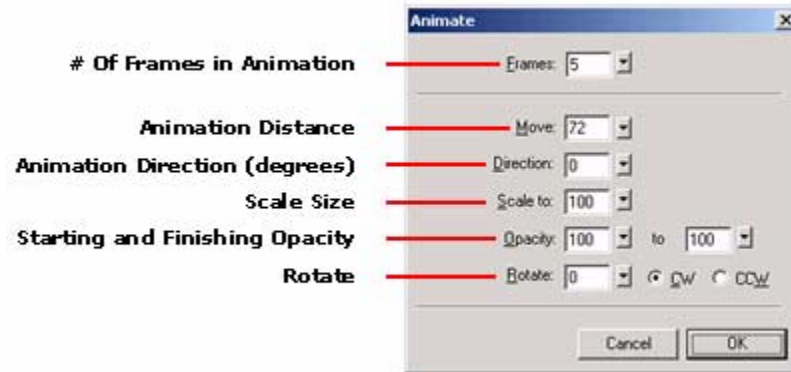
1. Create a new image 250 x 250
2. Draw a star in the left side of the image.



3. Make sure the star is selected and click:

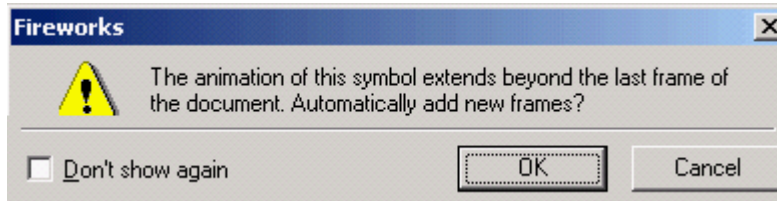
MODIFY-> ANIMATE-> ANIMATE SELECTION

The **Animate** Window should pop-up. You'll need to set the parameters for your animation. Don't worry, these settings are editable later.

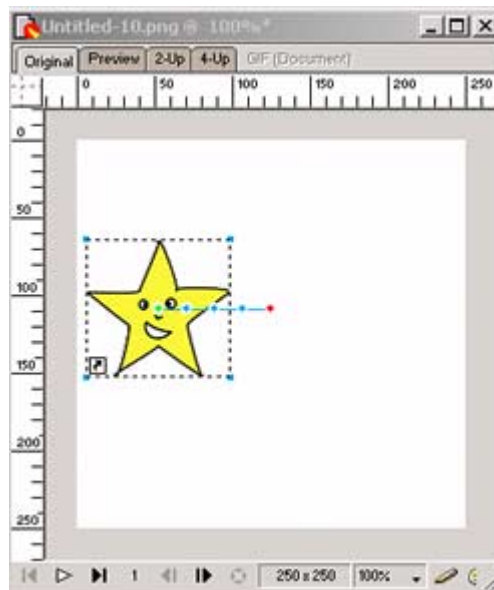


4. Choose your settings and click **OK**

Fireworks will warn you that new frames will have to be added. This is fine with you. Click **OK**.

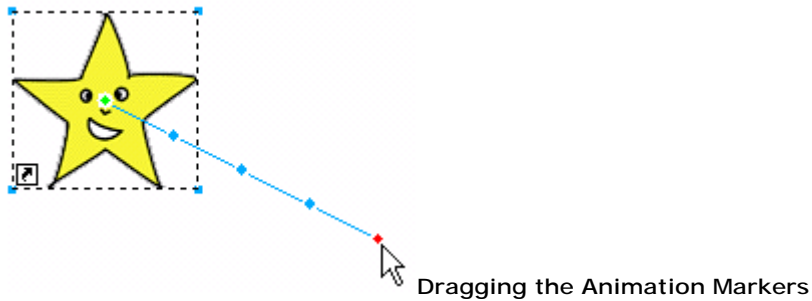


The file will display with animation marks!



5. Play your animation!

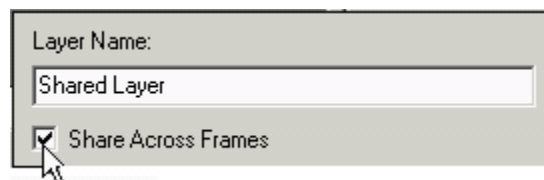
You can change your automatic animation settings by clicking **MODIFY-> ANIMATE-> SETTINGS** or by dragging the animation markers.



Making one Object Appear on All Frames in an Animation

If you've got to place text or graphics on every frame in an animation, it can get really old without this trick...

1. Make an animation.
2. On the **Layers Palette**, create a new layer. Name it "Shared Layer", or something like that. To correctly distribute an object across frames you must place it on the *Layers Palette*, not the *Frames Palette*.
3. With the new layer selected, type some text on the screen.
4. Double click the layer and choose **Share Across Frames**. Click **OK**



1. You will get a warning window telling you that if you've already created objects on this layer and placed them on different frames, they'll be deleted! Click **OK**

Everything on the shared layer will appear on every frame!

Controlling Animation Speed and Looping

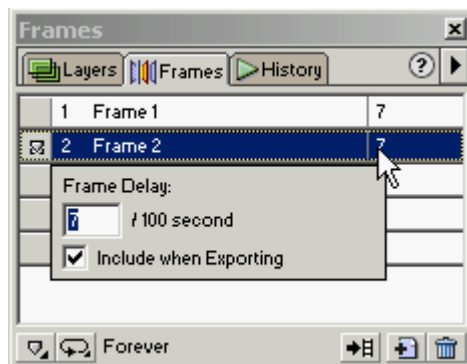
You can control the animation speed and number of times the animation loops, if at all.

Animation Speed

The faster an animation changes frames, the smoother the animation will appear, but the more frames an animation has, the longer it will take to load. Keep in mind that the frames will only display as fast as a user can download them.

On the Frames Palette, next to each frame, is a number (default 7). This number represents the frame display time in hundredths of seconds.

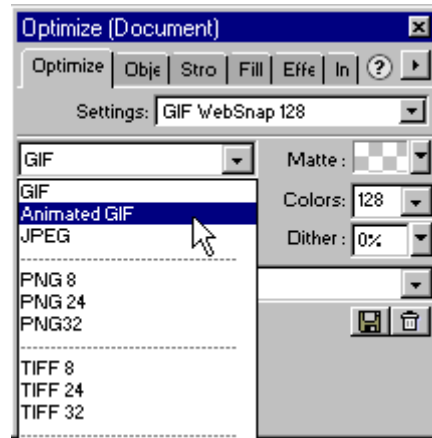
To change the frame display time, double click on the number.



To change the speed for all the frames at the same time, select them by clicking the first frame, holding SHIFT and clicking the last frame. Then double click any frame's speed.

Optimizing and Exporting an Animated GIF

- * You MUST choose **Animated GIF** on the Optimize Palette before exporting.



On the Preview Tab, you will see the total download time for the whole GIF.

- * When optimizing an animated GIF, you need only optimize one frame. All of the frames will take on the same optimization characteristics, except for transparency.
- * Transparency must be set for each frame, or you can set the transparency before you optimize as an animated GIF and the transparency will apply to the whole image.

Animation Tricks

There are a couple of tricks that might help your animations use less frames and appear smoother.

Animating with Fast Moving Frames

Remember that your animation will only display as quickly as a users computer can download it. That means if your animation has fast moving frames it will appear slow and jerky the first time around for most viewers. To get around this evil frame display problem, simply set the first frame to display for the same amount of time the whole GIF takes to download. The first frame can even be blank. You can find the total download time in the Preview Tab while optimizing.

Using Motion Blur to Simulate Speed

If something moves by us quickly, our eyes see the object as a blur. You can achieve this in an animated GIF by blurring the image yourself.

1. Open Flying_face.png from the fw_images folder. Play the animation.

Or check it out on the web at:

www.awdsf.com/courseware/examples/flyingface.htm

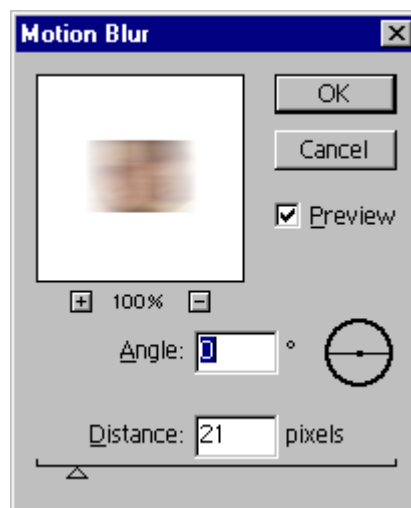
Watch the animation roll over and over. Notice how it's blurred in the middle?

The first frame is blank, and displays for one second so that the rest of the animation can load. The actual animation is made of only four frames:



You can blur an image to approximate motion using **PhotoShop's Motion Blur Filter**

1. Open your image in PhotoShop.
2. Click FILTER-> BLUR-> MOTION BLUR



3. Set the blur angle and distance (amount)

4. Copy and paste the image into Fireworks

The middle frame should blur more than the others, and the frames should slightly overlap.

Spinning Objects

If an object is symmetrical, (like a wheel) you can give the appearance that it is spinning in a full circle, by moving it a little bit and repeating the motion.

This object needs only spin this far (repeating) to simulate full rotation

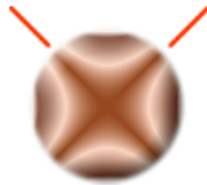


IMAGE MAPS and ROLLOVERS

Fireworks makes some fine buttons, yes sir. You can make image maps, rollover buttons, and disjointed rollovers. Fireworks is better at complicated rollovers than Dreamweaver is.

When you make a rollover or an image map, Fireworks generates HTML and JavaScript code for you. You can easily place Fireworks code in Dreamweaver.

Image Maps

You can define clickable areas on an image. Any single image may have more than one clickable area, each area linking to a different page. Coordinates laid out on the image define the clickable sections. The clickable coordinates make a map of sorts; that map is called an "Image Map".

Image maps are almost impossible to accurately define when hand coding, but Fireworks makes them easy.

To Make an Image Map:

First you'll need an image. You can use the Academy of Web Design SF sample image map image at:

www.awdsf.com/downloads/sample_buttons.htm





The above image is one file, but we will create an image map that will allow users to click on "Academy of Web Design" to go to the school's homepage. If they click on the e-mail address they'll activate a mail link.


The image Map tools are on the lower left corner of the toolbox. You can draw a clickable area, called a “hotspot”. Just like in Dreamweaver, you can draw a square, circular, or polygonal shaped hotspot.



1. To draw a clickable area, select the shape that you wish to draw. Click the shape, then drag over the desired image map area.

 Draws rectangle image map areas.

 Draws circular image map areas.

 Draws irregular shapes. Click to add a point. Click to add another point. Double click when finished.

2. Draw rectangular shapes over “Academy of Web Design, San Francisco” and “david@awdsf.com”

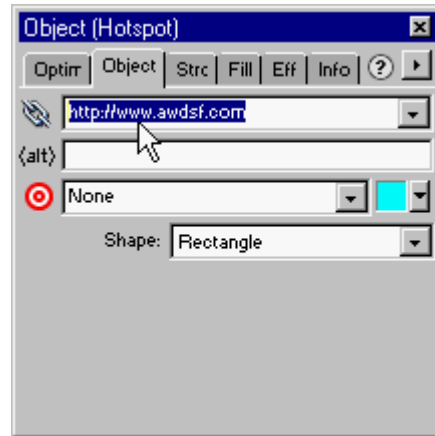
These areas will become clickable.



Take care not to overlap the images map areas.

Setting the Hotspot URLs

1. Click a green hotspot area
2. On the object palette, set the URL to jump to when the hotspot area is clicked.
3. You can test your image map in a browser by hitting **F12** on your keyboard.

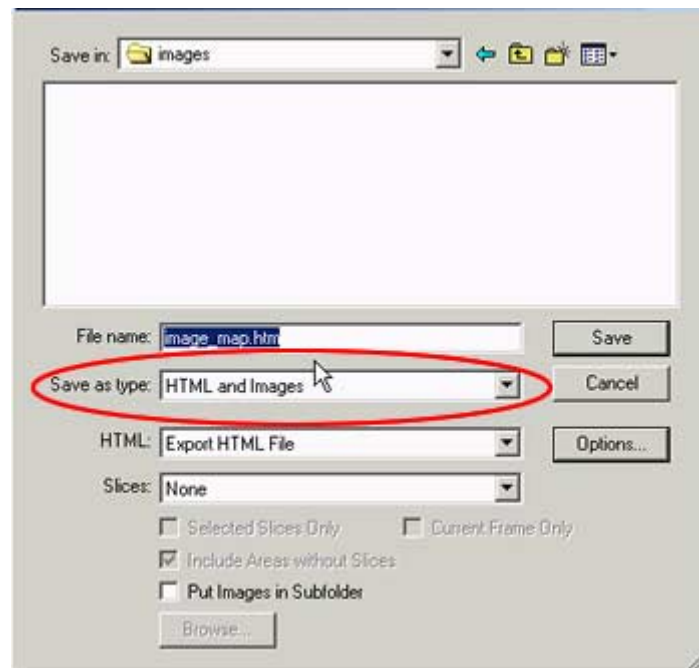


Exporting an Image Map

An image map can be a JPG or a GIF, exported to any settings.

1. After optimizing, click **FILE-> EXPORT**

Fireworks will make you the HTML code needed for an Image Map. Take note where you save the code. You'll need it later to place the image map in Dreamweaver.



Simple Rollover Buttons

Fireworks can be used to make rollover buttons. Although it's easier to create a normal rollover button in Dreamweaver, there may be times when you won't be able to use Dreamweaver.


When rollovers get more complicated, it's usually easier to use Fireworks, and you won't be able to build a complicated rollover unless you can build a simple one.

Using Frames to Create Rollovers

You'll make a rollover by creating a two-frame image in Fireworks. The first frame will be the button in its normal, "up" state. The second frame will be the button in the "mouseover" state.

1. Create a button

You can draw or import a button. A button can be any piece of artwork.

2. Copy the button frame by dragging the Frame onto the New Frame Button 

You now have two frames with the same image. We'll have to change the second frame to represent the rollover image.

3. Click Frame 2 and change the button.

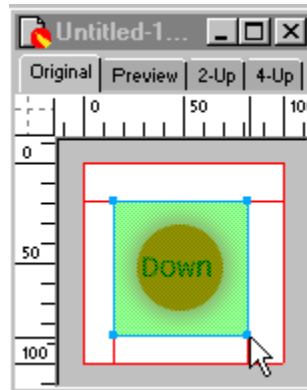
Adding a Slice

A slice is an invisible element that can control the exact rollover area. It also acts as a window, through which Frame 2 is displayed upon rollover.

It doesn't matter which frame the slice is on, but it should cover the largest state of the button. For example, if the button is glowing on Frame 2, it will probably be slightly larger than it is on Frame 1. Remember, the slice acts like a window, so if you don't make the window big enough to show the glow, it will cut off the edges of your fancy rollover.

To add a slice:

1. Click your button.
2. Click INSERT-> SLICE



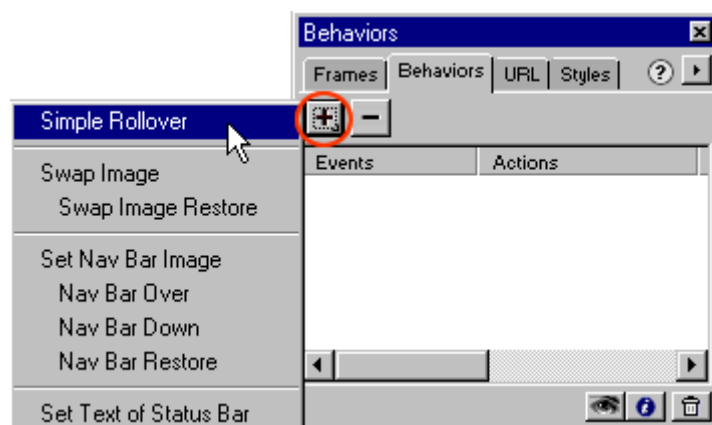
You can resize the slice by dragging it's handles.

You can delete the slice by clicking it and hitting DELETE on your keyboard.

Adding the Rollover Behavior

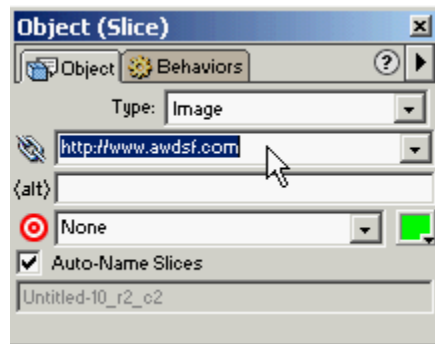
So far, we've got two buttons, and a slice. Slices can be used for a variety of different purposes. We still need to tell the slice what to do, what its behavior should be.

1. Open the Behaviors Palette
WINDOW-> BEHAVIORS
2. Select the slice
3. On the behaviors Palette, add the **Simple Rollover** Behavior.



Adding Links

You can add links to each slice on the **Object Palette**. You can add relative file path links or complete URLs. If you're planning to use Dreamweaver later, you can also add links there. Either way, Dreamweaver will keep track of links you set while using the program. That way if you move something Dreamweaver will update the link for you!

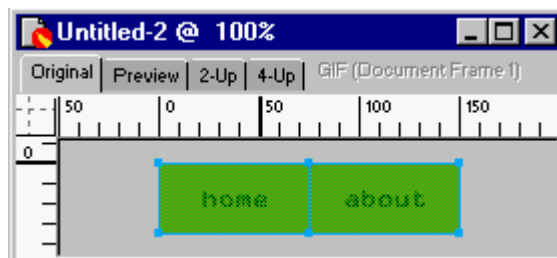


After Optimizing, click **FILE-> EXPORT**.

Again, take note where you save the file.

Multiple Rollovers in One Image

It's okay to have as many rollovers in the same image as you like. Each one gets its own slice with its own behavior (Simple Rollover). You'll need rollover images for each slice on the second frame. The slices cannot overlap, but can be right up on each other.



Rollover Recap

To make a rollover, you'll:

1. Make two objects on separate frames. (the objects must be right on top of each other)
2. Insert a slice

3. Add the Swap Image behavior to the slice.

Hide Slices

Sometimes the slices get in the way while you're trying to edit an image. You can hide slices by clicking on the hide slice button on the toolbox.



Disjointed Rollovers

Disjointed rollovers allow you to roll over one image and have another image change somewhere else on the page.

For an example of disjointed rollover images check out:

www.awdsf.com/courseware/examples/disjointed.htm

Using Frames to Set up Disjointed Rollovers

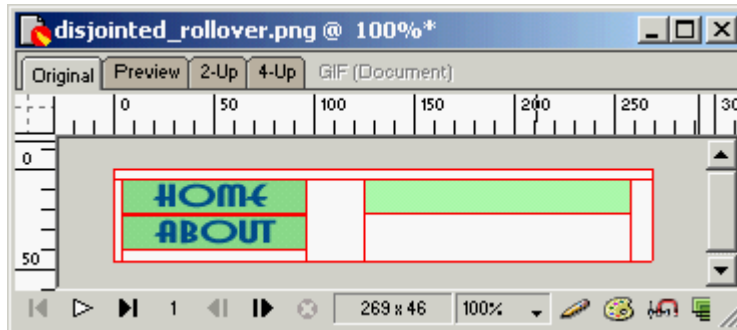
Fireworks uses frames to make disjointed rollovers. Your top frame shows upon load. You'll set lower frames to display through a slice window.

You'll need to insert slices over any active part of the disjointed rollover, including the rollover buttons and the items to be displayed. If more than one display item is in the same place, they must be on different frames, but can share the same slice. Remember, you can insert a slice by selecting the desired item and choosing INSERT-> SLICE.

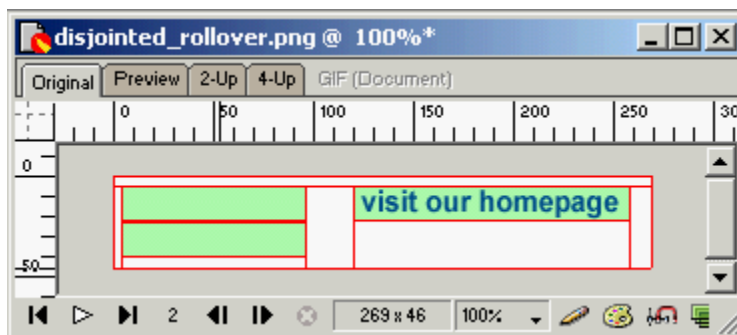
Frame 1 displays when the page loads.

In the below example, Frame 2 contains the rollover object for the Home button and Frame 3 contains the rollover display for the About Us button.

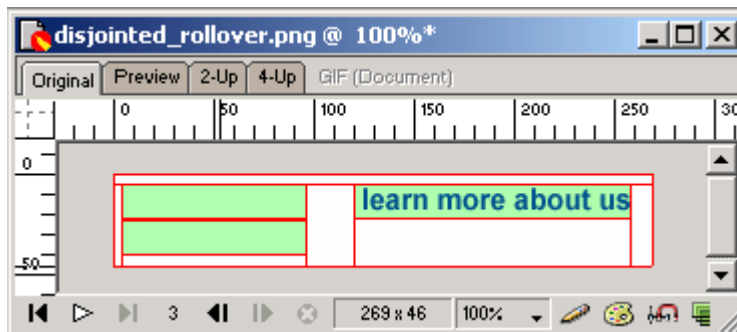
Frame 1:




Frame 2:



Frame 3:



Making disjointed rollovers is easiest if you remember that you can copy a frame by dragging it onto the New Frame button  on the Frame palette. After you copy the top frame, change it to suit your needs.

Setting Up the Rollover

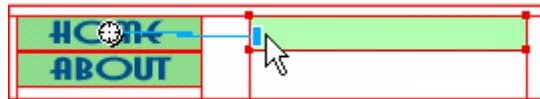
Fireworks makes disjointed rollovers easy. Each slice, when selected, displays a small target icon in the center called the *behavior controller*.



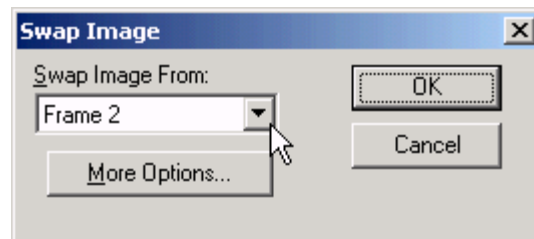
You'll use the behavior controller to set rollover status for each button.

To set a disjointed rollover:

1. Click Frame 1 and select the slice covering the rollover button.
2. Drag the behavior controller from the button slice to it's display slice.

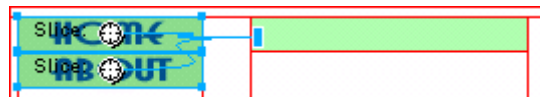


3. A pop-up window will appear asking you to choose which frame to display.



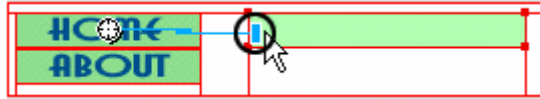
In this case, the display image for the Home button is on Frame 2, so we'll "Swap Image From" Frame 2.

4. Repeat steps 1 and 2 for each disjointed rollover in the Fireworks file.



Removing Disjointed Rollovers

To remove a rollover you set up, click on the connection point on the display slice.

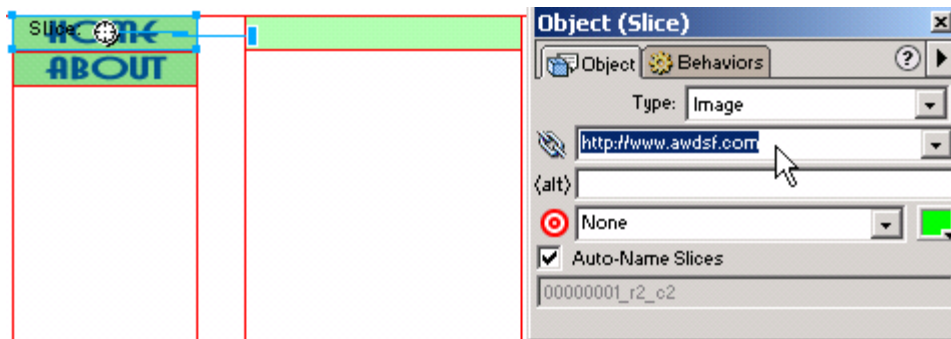


Setting Hyperlinks for Disjointed Rollover Buttons

If you're using Dreamweaver to build your final site, you're probably better off setting your hyperlinks there. Dreamweaver allows you to easily click and point to create relative (file-path) links, and also keeps track of your links if things change around.

If you want to set a link in Fireworks:

1. Select the button slice
2. On the Object Palette, type a URL or file path.



OPTIMIZING SLICES and DREAMWEAVER INTEGRATION

Okay, so you draw yourself some nice web elements in Fireworks... How are you supposed to make sure that each part is optimized correctly? How are you supposed to get them into Dreamweaver?

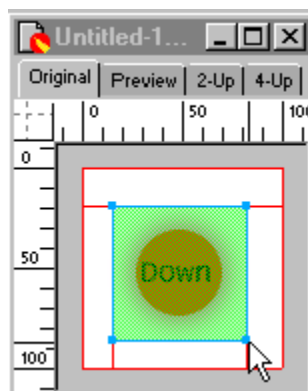
These questions and more will be answered in the next installment of...

Learning Fireworks! (or, How to See North-Eastern Azerbaijan for Only Five Manat a Day")

Creating Good Slices

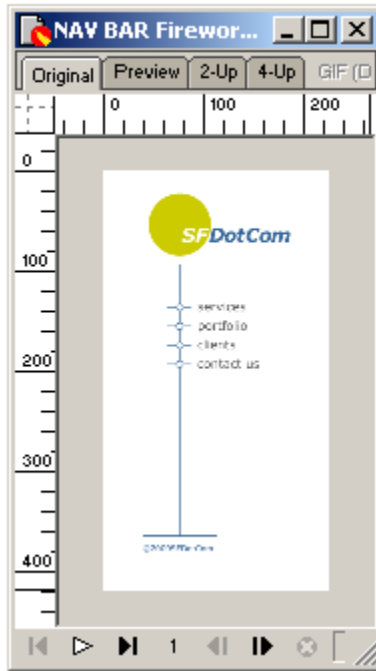
Line Slices up Correctly

Although slices can be used for creating rollovers, they can also be used to "slice up" an image and optimize each part in a different way. Slices translate directly into tables when you export them. The following image will turn into five images when exported.

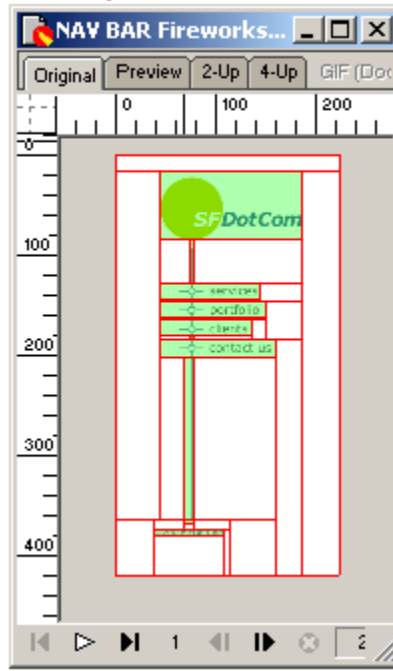


You should adjust your slices by dragging their handles (above). The slices should line up as much as possible to minimize the amount of images and table code Fireworks exports. For example:

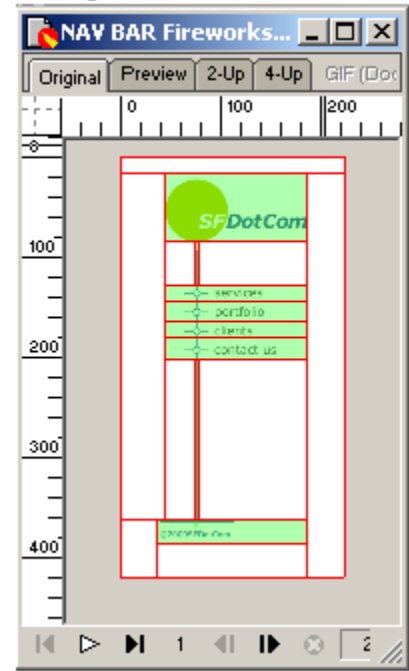
For this Nav Bar...



Too Many Slices



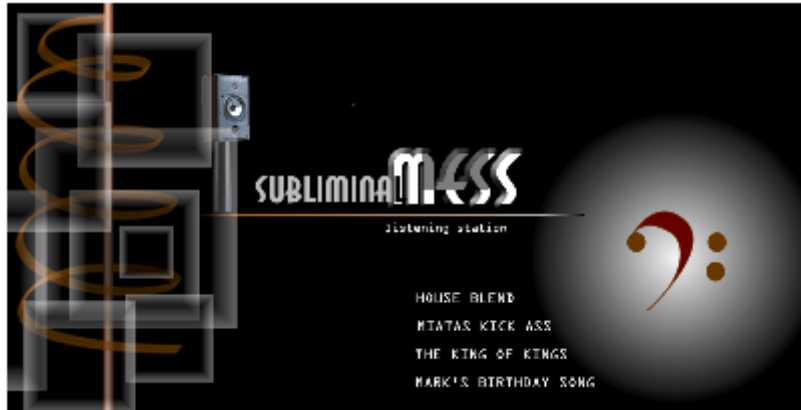
Just right.



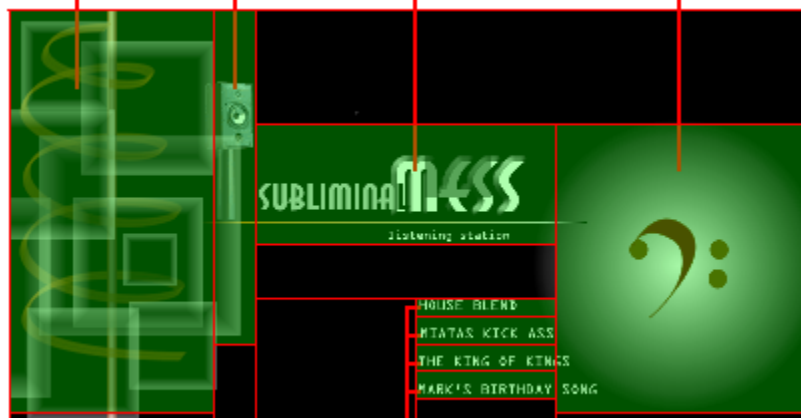
Keep in mind that Fireworks will create a table cell and an image for every slice. The right image above would contain 17 image holding cells, while the center image would contain 29. After Dreamweaver imports the Fireworks file as a table, you can click any unnecessary images (transparent GIF's or solid colored blocks) and delete them.

Optimize Slices in Different Ways

To minimize download time, most of your site elements should be made with HTML. For example, never use an image if you can create the same effect with a HTML background color or regular HTML text. Sometimes the situation will call for an image intensive site, in which case you'll have to make sure that every image is optimized to it's maximum capacity. You should *never* create a site that is one big image. The web page below looks like one image, but is actually a number of different images, optimized to different strengths and held in a table.



JPG, Quality: 60 JPG, Quality: 80 GIF, 32 Colors JPG, Quality: 80

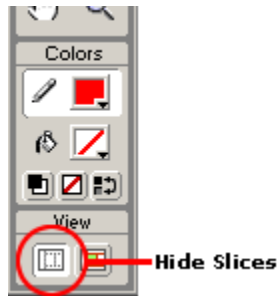


GIF, 8 Colors

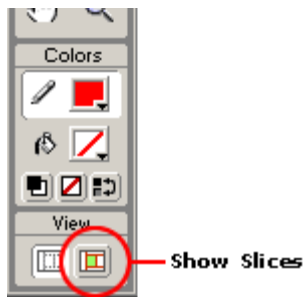
You should add a slice wherever you feel that a different optimization will do you good!

To Optimize Different Slices:

1. Add slices to elements. Adjust them so that they line up to reduce the number of image holding table cells.
2. Make sure you *DON'T* have a slice selected.
First you'll want to apply a general optimization.
3. Hide slices by clicking the Hide Slices button on the Tool Palette.



4. Click the PREVIEW tab at the top of the image window.
5. Optimize the whole image using the Optimize palette.
6. Show slices by clicking the Show Slices button on the Tool Palette.



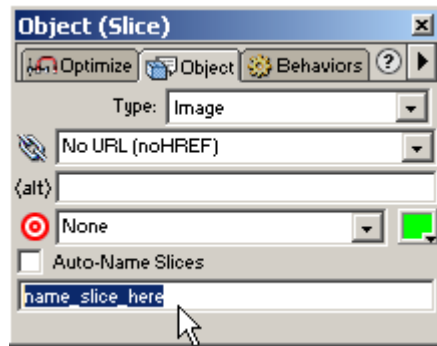
7. You can now click each slice and optimize it individually.
8. Return to the Original tab when you're finished.

Naming Slices

Each slice is exported as an image. Images must have names. If you don't name them Fireworks does. Usually Fireworks picks a great name like "400_r07_c03_f2.gif". You should name your slices so you can recognize them later and so you don't confuse your clients.

To Name Slices:

1. Click the desired slice.
2. Open the **Object Palette**.
3. **Remove** the check from "**Auto-Name Slices**" and name the slice.



Remember, no capital letters or spaces!

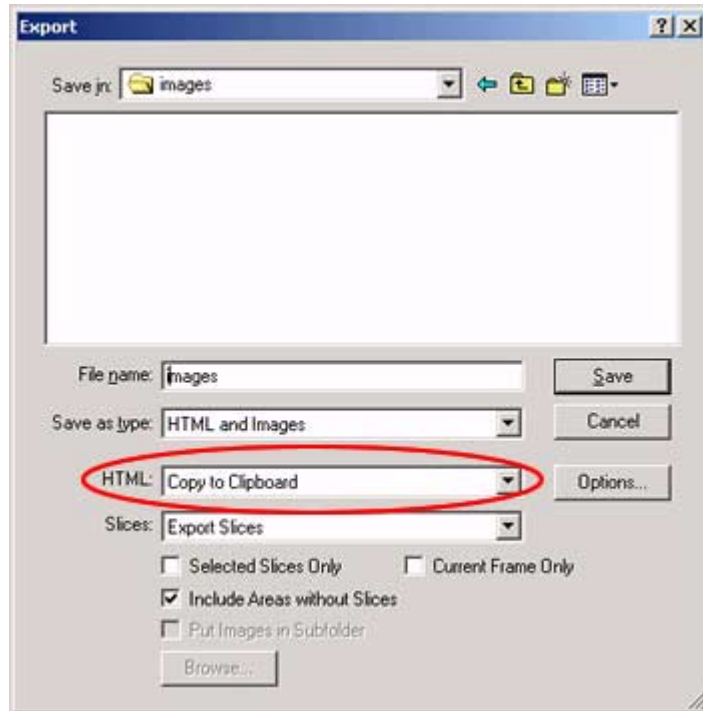
Importing Fireworks Items into Dreamweaver

It's easy to bring Fireworks items into Dreamweaver

1. After exporting your HTML and images from Fireworks open Dreamweaver.
2. In Dreamweaver, Click:
INSERT-> INTERACTIVE IMAGES-> FIREWORKS HTML
3. Navigate to and select the **HTML File** Fireworks made for you when you exported.
4. Select the **Delete File After Insertion** option to delete the Fireworks HTML file when the operation is complete. The HTML will still exist inside of your Dreamweaver document.

Ta-da!

If you'd like, you can just copy and paste the Fireworks HTML into Dreamweaver. When exporting, choose the **Copy HTML to Clipboard** command. Then, click in Dreamweaver and paste!



After you've imported to Dreamweaver, you can select and delete any unnecessary images.