

ImageReady: Animation

Lesson 18: Introduction to Animation

What is animation?

Animation is the illusion of motion that is created by displaying a series of images or frames, each one slightly different from the last, over a brief period of time.

ImageReady lets you make animations by creating a series of frames in your graphic file and then saving those frames either as an animated GIF or as a QuickTime movie.

In this section, you will learn some basic animation techniques.

Note: In this section, several animations are used as examples; you will have to view the web version to get the full effect.

Tip: When working with animations, make sure you're in Original view (click the Original tab if it is not in front). You have limited frame-editing ability when viewing an optimized version of a graphic.

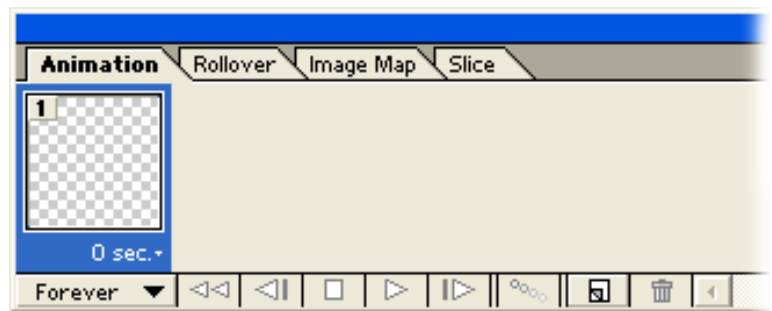
Lesson 19: Working with Frames

How do I create a frame?

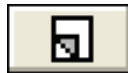
Adding frames is the first step in creating an animation. When you add a new frame, you can use the layers palette to make graphic changes to it. (See the next lesson, *Working with Layers*, to learn more.)

Frames are created in a simple process:

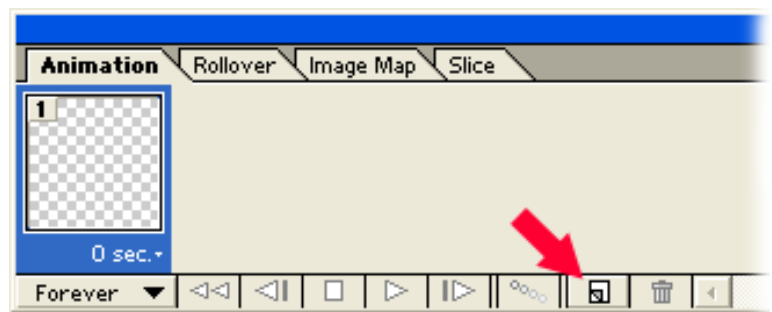
1) **Go to the Animation palette.** Pull down the **Window** menu and select **Show Animation**. The Animation palette shows you a thumbnail of the first (and initially, only) frame for the image:



2) **Decide when you want the animation to occur.** If you want the animation to happen when the web page is first loaded, make sure that the Normal state is selected in the Rollover palette. If you want the animation to happen only when a certain rollover effect occurs, select that rollover state in the Rollover palette.



3) **Create a new frame.** Click on the **New Frame** button at the bottom of the Animation palette:

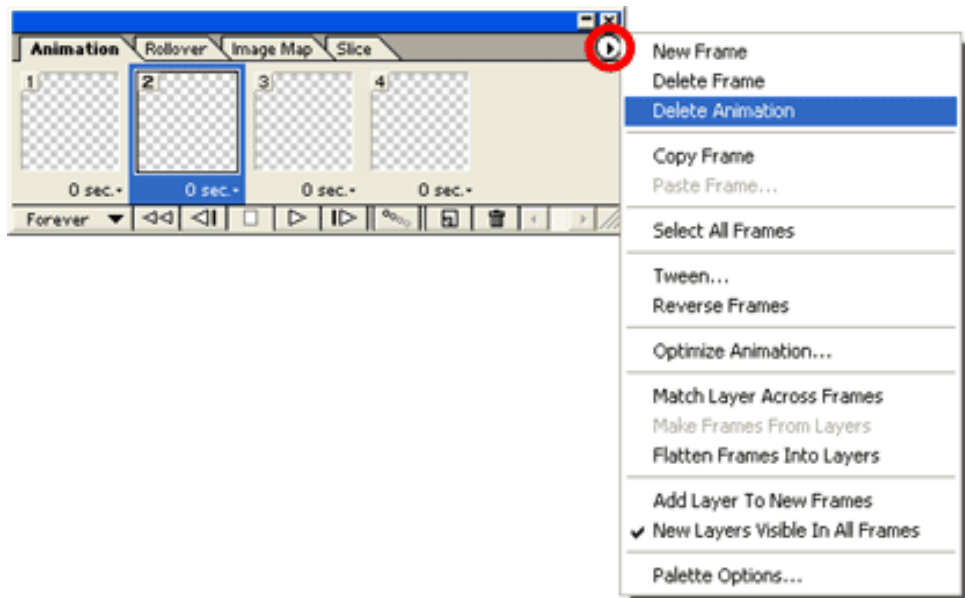


A new thumbnail representing the new frame will appear next to the first. The new frame will be a duplicate of the one before it, until you modify it (see the next lesson for details).

How do I select a frame?

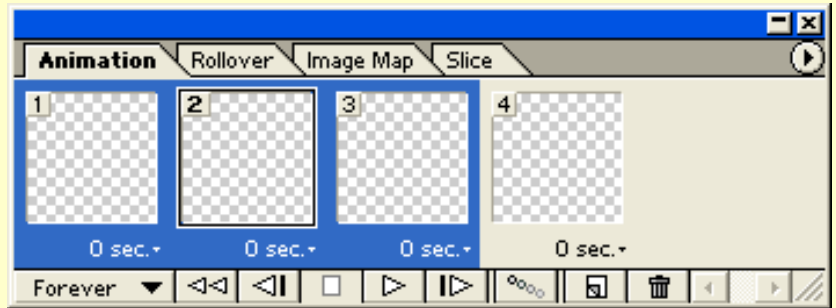
To work with a frame, you must first select it. Selected frames have a blue background. Once selected, the contents of the frame appear in the window and you can edit it. You can also select multiple frames if you want to make changes to them all at once.

- To select a frame, click its thumbnail.
- To select a series of frames that are next to each other ("contiguous"), click on the first frame's thumbnail, then hold down the Shift key and click on the last frame in the series. It and all the frames in between will be selected.
- To select frames that aren't next to each other ("discontiguous"), click on the first frame's thumbnail, then hold down the Control key and click one at a time on the other frames you wish to select. All of the clicked-on frames will be selected, while those in between will not.
- To select all the frames at once, choose the **Select All Frames** command from the Animation palette menu:



- If multiple frames are selected and you want to de-select one, hold down the Control key and click on it.

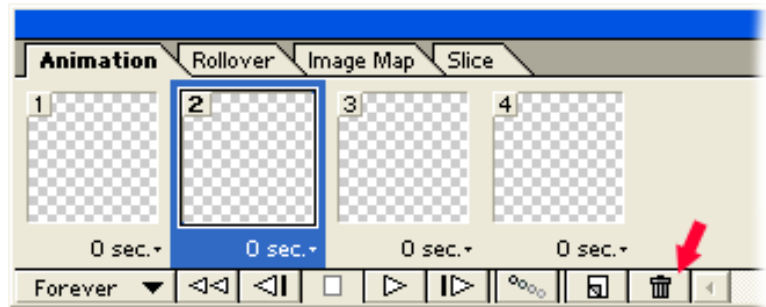
Tip: When more than one frame is selected, the contents of the current frame will appear in the document window. The current frame is the first frame selected, and it has a black outline:



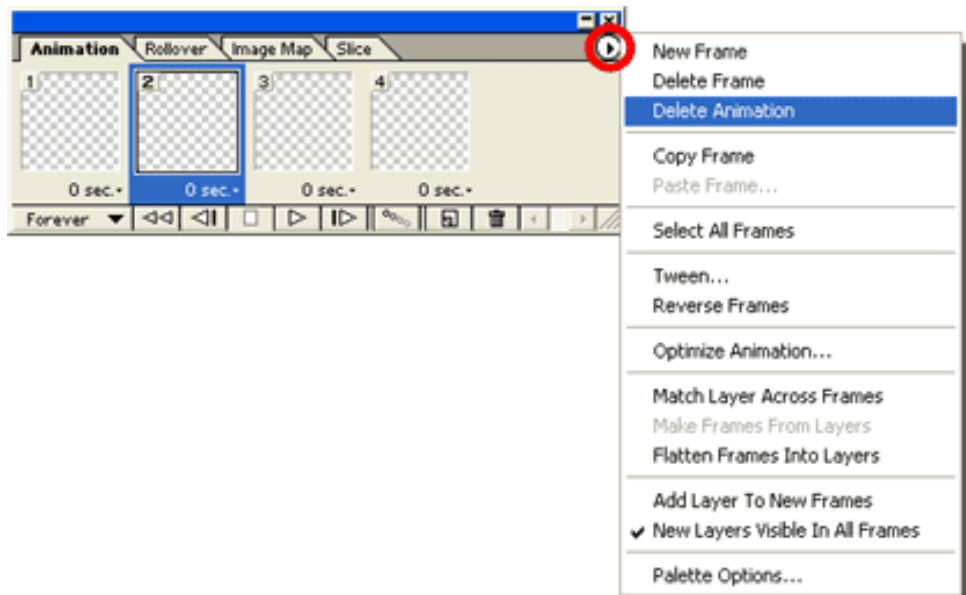
How do I delete a frame?



To delete a frame, select the frame (or frames) you want to delete, then click on the **Delete Frame** button at the bottom of the Animation palette:



To delete the entire animation, choose the **Delete Animation** command from the Animation palette menu:



Lesson 20: Working with Layers

How do I use layers to create the animation?

Working with layers is the key to creating an animation. You make changes to a frame by making changes to its layers.

Using Layer effects, you can create several types of animation effects. You can:

- hide or show a layer
- change or add layer styles
- move a layer
- change a layer's opacity
- change a layer's blending mode

However, just as with rollovers, you need to be aware that changes you make using painting and editing tools, color and tone commands, filters, type, and other image-editing commands, will have a universal or **global** effect on the layer, rather than applying to just the selected frame. If you wish your animation to incorporate some of these global effects, then you need to create an animation with multiple layers, and hide and show the layers as appropriate.

How do I create a single-layer animation?

A single-layer animation has only one layer, and uses the various layer effects to create the illusion of motion. Even with single-layer animation, you can create many kinds of effects, like moving an object, fading it in or out, making it flash, or moving through a series of layer styles. Here's how:

1) **Show the Animation and Layers palettes.** If the palettes are not already visible, pull down the **Window** menu and select **Show Layers**, then **Show Animation**. You should only have one frame in the Animation palette to start, and the layer you want to animate should be selected in the Layers palette.

2) **Decide when you want the animation to occur.** If you want the animation to happen when the web page is first loaded, make sure that the Normal state is selected in the Rollover palette. If you want the animation to happen only when a certain rollover effect occurs, select that rollover state in the Rollover palette.

3) **Create the initial graphic to be animated.** If you haven't already, create the initial graphic to be animated, and locate it where you want the animation to begin. A thumbnail of this graphic should appear in the first and only frame in the Animation palette.

4) **Make a new frame.** Create a new frame and select it (as described in the previous lesson). This new frame will be a copy of the immediately previous one.

5) **Make a slight change to the graphic.** For example, if the goal is for the graphic to move across the screen, nudge the layer in the appropriate direction. If you want the graphic to fade out, reduce the layer's opacity a little bit.

6) **Duplicate steps 4 and 5** over and over, until your graphic is completely moved across the screen, or until it is completely faded out, or whatever effect you are trying to achieve is completed.

If you want to create an even and smooth transition from beginning to end, you can use a technique called "tweening" to instantly create all of the intermediary images; you only have to create the beginning and end frames. (We will discuss "tweening" in the next lesson.) However, if you want to create an irregular or erratic animation, you will have to create the individual frames by hand.

Note: The animation will be smoother, the more frames there are in between the beginning and end. On the other hand, the more frames there are, the longer the animation will take. You must make a decision about the number of frames based upon the desired effect.

7) **Select the Normal state.** When you're done, click on the Normal thumbnail to make sure that you don't inadvertently make other changes to your animation.

An example of a simple, single-layer animation would be a single layer with a round circle, where the layer is moved from frame to frame to simulate a bouncing ball.

How do I create a multi-layer animation?

There are some animation effects that require the use of more than one layer. Image-editing tools (such as painting, editing, coloring, changing tone, using filters, and editing type) have a global effect, changing the edited layer across **all** frames. Thus, one layer cannot be used to animate such changes. For example, you cannot have text grow, or shift through all of the colors of the rainbow, without multiple layers.

Here's how to create a multi-layer animation:

1) **Show the Animation and Layers palettes.** If the palettes are not already visible, pull down the **Window** menu and select **Show Layers**, then **Show Animation**. You should only have one frame in the Animation palette to start.

2) **Decide when you want the animation to occur.** If you want the animation to happen when the web page is first loaded, make sure that the Normal state is selected in the Rollover palette. If you want the animation to happen only when a certain rollover effect occurs, select that rollover state in the Rollover palette.

3) **Create the first graphic in the series to be animated.** If you haven't already, create the initial graphic to be animated, and locate it where you want the animation to begin.

4) **Make a new frame.** Create a new frame and select it (as described in the previous lesson). This new frame will be a copy of the immediately previous one.

5) **Duplicate the previous layer.** Duplicate the previous layer, then hide the previous layer using the Layers palette.

6) **Make a slight change to the current layer.** For example, if the goal is to make some text grow, increase the font size of the text just a little bit.

6) **Duplicate steps 4, 5 and 6** over and over, until the effect you are trying to achieve is complete. Make sure that each frame has visible only the layers you want to display for that frame.

7) **Select the Normal state.** When you're done, click on the Normal thumbnail to make sure that you don't inadvertently make other changes to your animation.

Below is an example of a simple multi-layer animation where the text grows and shrinks. Each text size is on a different layer, and each frame hides the previous layer and shows the next one.

Important Tip! When you are working with your animation, always be **sure** you have selected:

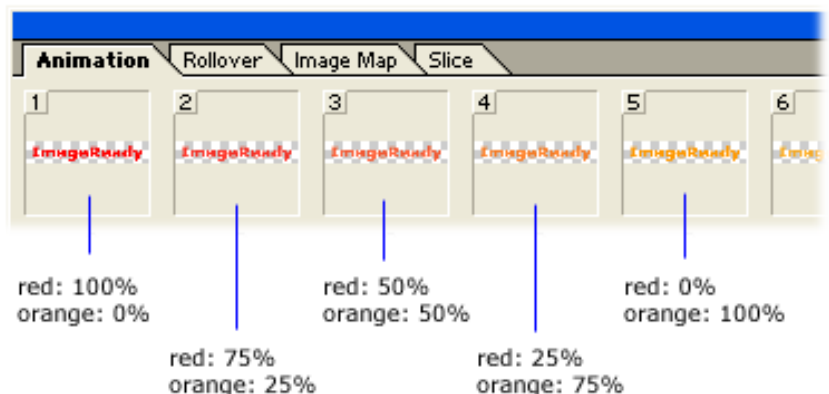
- the right frame in the Animation palette,
- the right state in the Rollover palette, and
- the right layer in the Layers palette

If you don't, you will often get surprising and undesired results!

The last example in this lesson is a bit more complicated. This animation uses both layer effects and multiple layers to achieve its effect:

ImageReady

The color of the text changes, going through all the colors of the rainbow, one color blending smoothly into the next. How was it done? Six frames were created (one for each of the six colors of the rainbow). Six layers were also created, and on each layer the word "ImageReady" was a different color. All of the layers were left visible in all of the frames. In the Red frame, the opacity of the Red layer was set to 100%, and the opacity of the other five layers was set to 0%. In the Orange frame, the opacity of the Orange layer was set to 100%, and the opacity of all of the other layers was set to 0%. (And so on.) Three intermediary frames were then created in-between each of the original six color frames, and the opacity of the layers were slowly shifted from the one color to the next. Here are the first five frames of the animation:



Lesson 21: The Animation Palette

What else can the Animation palette do?

Throughout this part of the course, you have been learning how to use the Animation palette to create animations. However, there are some features of the Animation palette that we have not yet touched upon, including:

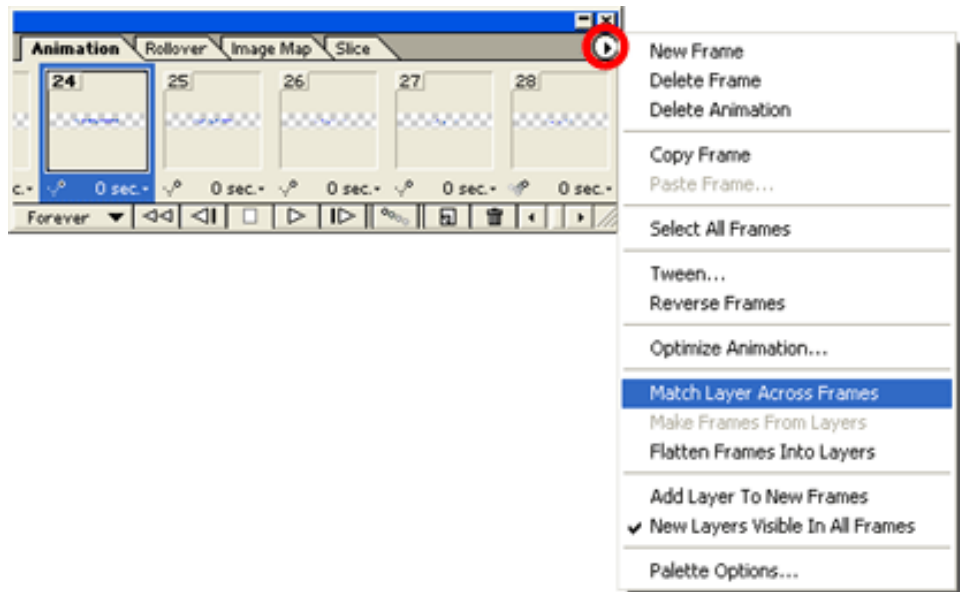
- Matching layers across frames
- Tweening
- Looping
- Delay times
- Viewing animations

We will cover these topics in this lesson.

Matching Layers

As you know, when you change a layer using layer effects, the changes only apply to the current frame of an animation. At times, however, you want the change to take effect for the entire animation. Rather than having to repeat the change one frame at a time, ImageReady lets you make the change once and then apply it to all of the frames. Here's how:

- 1) In the Layers palette, select the layer you want to match across all of the frames in the animation.
- 2) Choose the **Match Layer Across Frames** command from the Palette menu:



Tweening



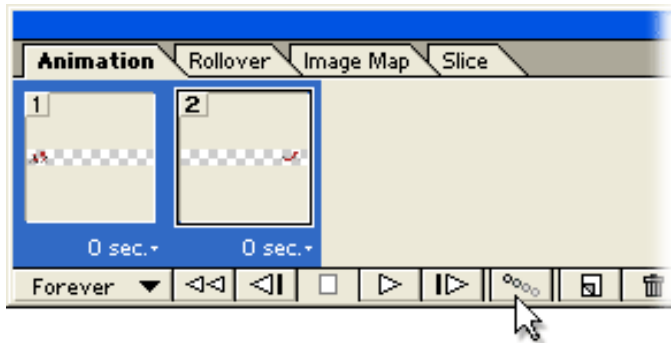
The Tween command will automatically create new frames in-between "tween" two endpoint frames. ImageReady will make incremental changes to the layer attributes (position, opacity, and/or effects) of each frame to create an even continuum of frames between the start and end points.


Follow the steps below to tween your frames. (We'll use the example of a bicycle crossing the screen to show how it's done.)

1) Create the starting frame and the ending frame. Set the layer attributes of each. (We created two frames. In the first frame, the bicycle is at the left of the picture. In the second frame, the same bicycle is now at the right of the picture.)

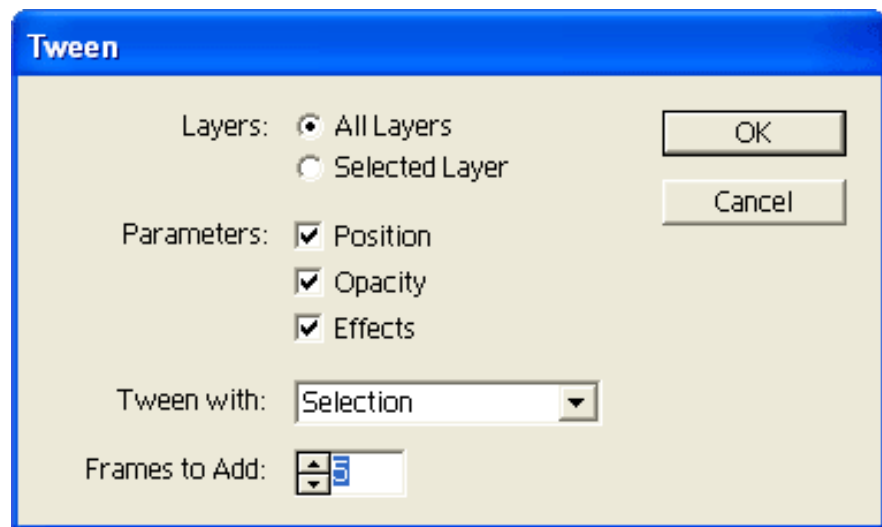
2) If you want to "tween" the layer effects only for a specific layer, select it in the Layers palette. (With our bicycle, the wheels were on a different layer from the bicycle frame, and so we wanted all layers to be tweened. We ignored the Layers palette selection.)

3) Select the two contiguous frames between which you want to insert intermediary frames:



4) Click the **Tween** button  at the bottom of the Animation palette.

5) The Tween dialog box appears:



6) If you want layer effects for all layers to change across frames, click **All Layers**; otherwise click **Selected Layer**. (In our example we wanted all layers to be tweened, so we selected **All Layers**.)

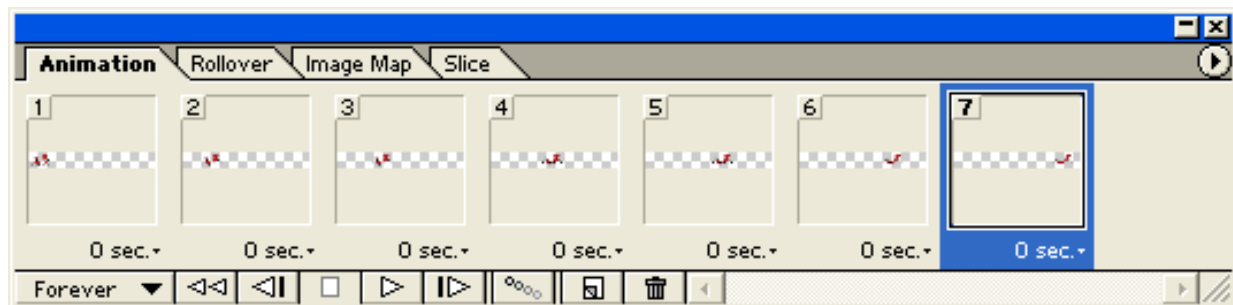
7) Check which parameters you want to change across frames: position, opacity, and/or effects. (In our example, we were only concerned with the changing position of the bicycle, so we checked Position, and un-checked Opacity and Effects.)

8) Leave **Selection** in the Tween With pop-up menu. (Since we selected the two end frames, the Tween with Selection option was automatically chosen.)

9) Specify how many frames you want to add between the two end frames. (In our case, we said five.)

10) Click **OK**.

In a few moments, ImageReady creates the new frames:



We're done! The bicycle now moves across the page from left to right.

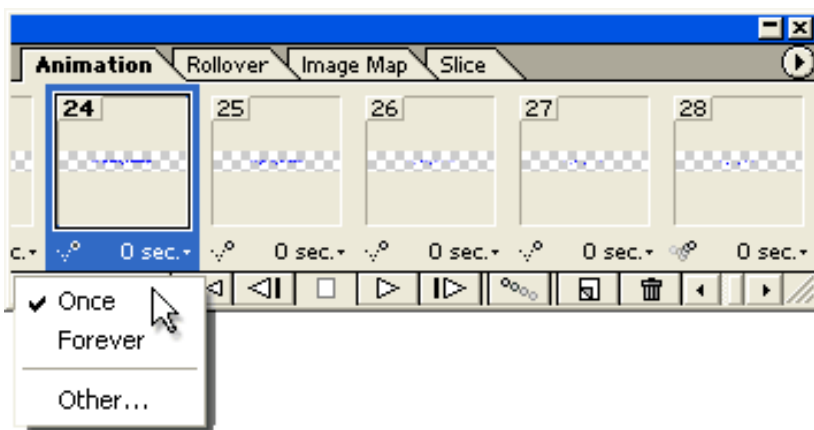


Note: In multi-layer animations, you cannot use "tweening" to create in-between layers. Tweening can make incremental changes only to layer effects.

Looping

By default, your animation plays continuously. However, you may want it to play just once and then stop, or play a specified number of times. To change this setting:

1) Pull down the Looping Option pop-up menu in the bottom left-hand corner of the Animation palette:



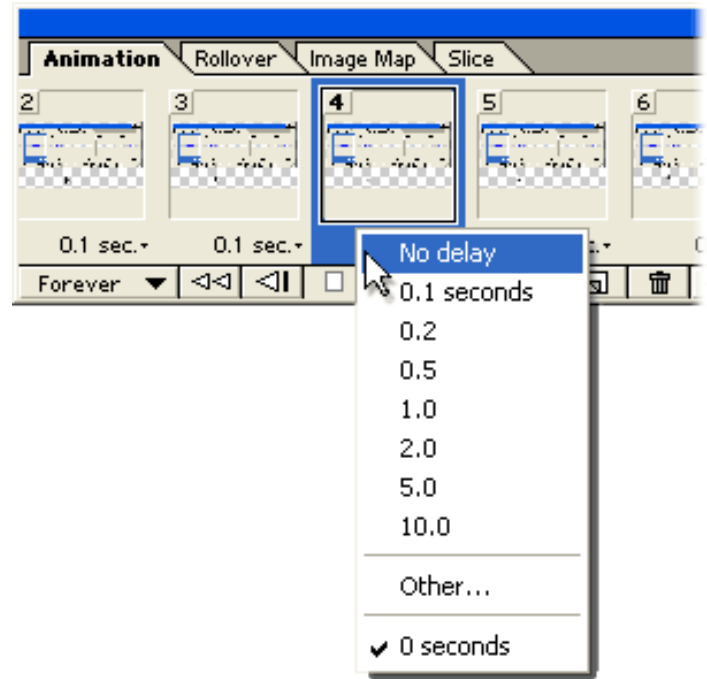
2) Make a selection from the menu: **Once**, **Forever**, or **Other**.

3) If you selected **Other**, a dialog box will appear. Enter the number of times you want the animation to repeat, then click **OK**.

Delay Times

You can control how long each frame of your animation displays on the screen. The default is 0 seconds, and the animation moves rapidly through the frames. However, you can change the default so that there is a longer delay before the next frame appears:

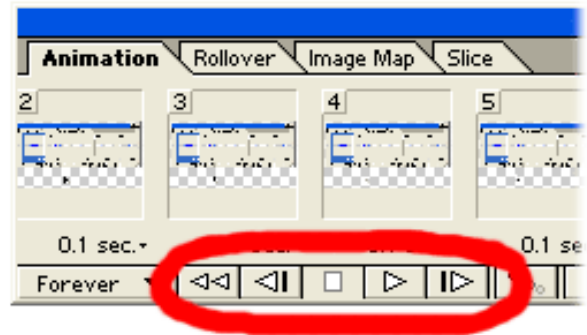
- 1) Select the frame or frames for which you want to change to delay. (The change applies to all selected frames.)
- 2) Click on the Delay value below a selected frame to see the Delay pop-up menu:



- 2) Make a selection from the menu, or choose **Other**.
- 3) If you selected **Other**, a dialog box will appear. Enter the length of the desired delay, then click **OK**.

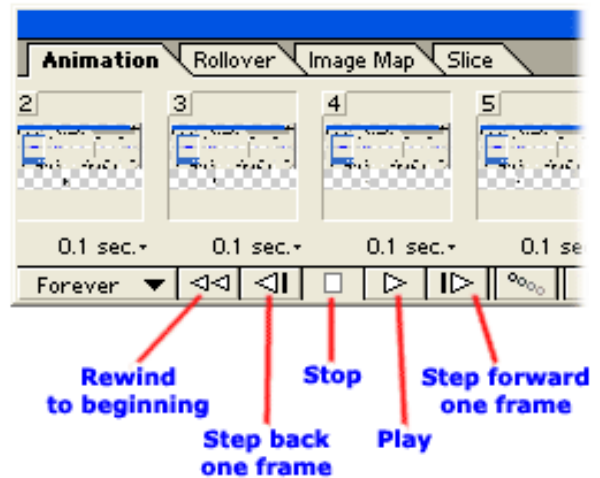
Viewing Animations


Once you are done building your animation, you will want to see how it looks. To do this, you can go into animation preview mode, which will give you a rough idea of what your animation looks like. The animation controls are across the bottom of the Animation palette:



You can use these controls to view your animation, step through it slowly, find a specific frame you want to edit, etc. Just click once on the one you want.

The controls are very similar to a tape player:



If you want to preview the animation in the default browser for your computer, click the **Preview in Default Browser** button in the toolbox . Your browser will launch and you can watch the animation.

If animation timing is critical, it's important to view the animation in one or more browsers, because ImageReady may not display the timing perfectly.

Lesson 22: Saving Animations

How do I save an animation?

ImageReady lets you save your animation in two different formats: as an animated GIF, or as a QuickTime movie.

To save an animation as an animated GIF:

- 1) Select GIF from the Optimize palette (only the GIF format supports animations).
- 2) Pull down the **File** menu and select **Save Optimized**. A dialog box will appear.
- 3) Name the file and select a location. If you choose **Images Only** in the Save as Type pop-up menu, an animated GIF will be produced. If you select **HTML and Images**, ImageReady will also create an HTML document that displays the animation.
- 4) Click **Save**.

To save an animation as a QuickTime movie:

- 1) Pull down the **File** menu and select **Export Original**. A dialog box will appear.
- 2) Name the file and select a location.
- 3) Select **QuickTime Movie** from the Format pop-up menu in the dialog box. (QuickTime must be installed on your computer for this option to be available.)
- 4) Click **Save**. A compression dialog box will appear.
- 5) Make any desired adjustments to the compression settings, then click **OK**.

End of Lesson